



WATER-RIGHT DOCKET

Theodore Roosevelt National Park

Docket No: 14

ROUND UP HORSE CAMP WELL

State Water Rights Documentation

08-19-1996: Letter to THRO Superintendent from State Engineer regarding Transmittal of Conditional Water Permit, No. 5017



Office of the State Engineer
WATER APPROPRIATION DIVISION
(701) 328-2754

RECEIVED	
AUG 21 1996	
Mr. Noel R. Poe	Superintendent
U.S. Department of the Interior	National Park Service
Theodore Roosevelt National Park	PO Box 7
Medora, ND 58645	
X	

August 19, 1996

Mr. Noel R. Poe, Superintendent
U.S. Department of the Interior
National Park Service
Theodore Roosevelt National Park
PO Box 7
Medora, ND 58645

Dear Mr. Poe:

Re: SWC Water Permit No. 5017
Transmittal of Conditional Water Permit

On August 19, 1996, your application for a permit to appropriate water from was ground water considered. The application was approved by the State Engineer to appropriate 4.0 acre-feet of water annually, at an authorized pumping rate of 20 gallons per minute, for recreation use. The remaining 12.0 acre-feet of water initially applied for has been denied. The conditional water permit and the map are enclosed. Also enclosed is a copy of the findings and conclusions upon which it is based.

Approval of the application permits you to use water for the purpose stated therein, subject to existing prior permits. In the event of a shortage of water in the source of supply, the right to divert and use water will be based upon priority of time of application. The first applicant will have first claim to the use of the water.

A conditional water permit to divert water is not a water right. It is a temporary permit which protects your priority to the use of water until you have actually completed your project and diverted water for the beneficial use approved.

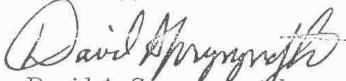
The State Engineer should be notified when you are applying water to a beneficial use. An inspection will then be made. When statutory requirements have been met, a perfected water permit, which becomes appurtenant to your land, will then be issued.

Water Permit No. 5017
August 19, 1996
Page 2

In the event you are unable to apply water to a beneficial use within the time limit stated on the reverse side of your conditional water permit, please notify this office prior to such date and an extension of time will be considered. If you need assistance or guidance in your undertaking, please notify the State Engineer.

You are hereby advised that those people who submitted written testimony and/or presented testimony at the hearing for water permit application No. 5017 are being provided a copy of the conditional water permit and a copy of the findings and conclusions upon which it is based. Any person aggrieved by this decision may seek relief in accordance with North Dakota Century Code chapter 28-32.

Sincerely,


David A. Sprynczynatyk
State Engineer

DAS:sl

Encis.

CERTIFIED LETTER NO. Z 711 563 049 - RETURN RECEIPT REQUESTED

N. D. STATE WATER COMMISSION		020246
State Office Building Phone 701 - 224-2750 Bismarck, North Dakota 58505		Date <u>Aug 1</u> 1996
Pay to the order of <u>U.S. Treasury Philadelphia, PA</u>		
The sum of <u>Two Hundred Dollars and 00/100 Dollars \$ 200</u>		
for <u>Water Permit Filing Fee</u>		
#2038 2462468 8348		
THANK YOU!		
By <u>Shirley Jackson</u>		
Check ☒ M.O. ☐ Credit Card ☐		

**STATE OF NORTH DAKOTA
CONDITIONAL WATER PERMIT**

Permit No. 05017

This conditional water permit authorizes permittee to construct the necessary diversion facilities and to appropriate the water specified below.

1. Name of Applicant: **U.S. NATIONAL PARK SERVICE**
 Mailing Address: **% SUPERINTENDENT, TR NATL PARK BOX 7**
 City: **MEDORA** State: **ND** Zip: **58645**
2. Priority Date: **May 22, 1996**
3. Nature of use: **Commercial Recreation**
4. Source of Water Supply: **Ground Water**
5. (a) Point(s) of Diversion:
 (1) **NE 1/4 of Section 29 Township 141 N., Range 101 W., Billings County**
6. Amount of water authorized, rate at which it may be diverted at the points listed and period of use:

Annual Use (Ac-Ft)	Rate (gpm)	Storage (Ac-Ft)		
(1) 4	20	0	from	April 26 to October 15 inclusive
Totals	4	20	0	
7. Description of land to be irrigated: **Not Applicable**
8. Conditions, limitations, restrictions, and terms of permit: **See Attachment A**
9. Water shall be beneficially used on or before: **September 1, 1999**
10. The remaining 12 acre-feet shall be denied

A perfected permit will be issued after the facilities have been properly constructed and inspected. A water right accrues upon placing the water to beneficial use, as authorized herein.

SEAL


 DAVID A. SPENCZYNATYK
 North Dakota State Engineer

Date: August 19, 1996

STATE OF NORTH DAKOTA
CONDITIONAL WATER PERMIT

Permit No. 05017

Attachment A - Conditions, Limitations, and Restrictions:

- 1) The well(s) shall be placed in such a location, constructed to such a depth, have such an efficiency, and pumped at such a rate that will not unreasonably restrict further development of the aquifer system;
- 2) Prior to the beneficial use of water, instrumentation shall be installed from which the quantity of water pumped can be determined. The instruments are subject to approval by the State Engineer and shall be available for inspection by representatives of the State Engineer; and
- 3) Failure to comply with any order of the State Engineer may result in forfeiture of this water permit.

SEAL



DAVID A. SERKCYNYATYK
North Dakota State Engineer

Date: August 19, 1996

North Dakota State Water Commission
Office Memo

To: David Sprynczynatyk, State Engineer, through *MOJ*
Milton O. Lindvig, Director, Water Appropriations Division
From: Alan Wanek, Hydrologist
Subject: DOI, National Park Service, Theodore Roosevelt National
Park water permit application #5017
Date: 9 August 1996

Application:

Theodore Roosevelt National Park has applied for 16 acre-feet of water per year at a maximum pumping rate of 20 gallons per minute for use at a new "Rough Rider Horse Camp." The priority date is 22 May 1996. The hearing of the application took place on 31 July 1996. There were no objections filed with the application. No one appeared at the hearing.

The proposed point of diversion is the NE1/4 Section 29, T. 141 N., R. 101 W., six miles north of Medora at the north end of the South Unit of the park, along a tributary draw to Government Creek, about 1.5 miles southeast up the draw from the Little Missouri River Valley and about 150 feet vertically above the valley floor.

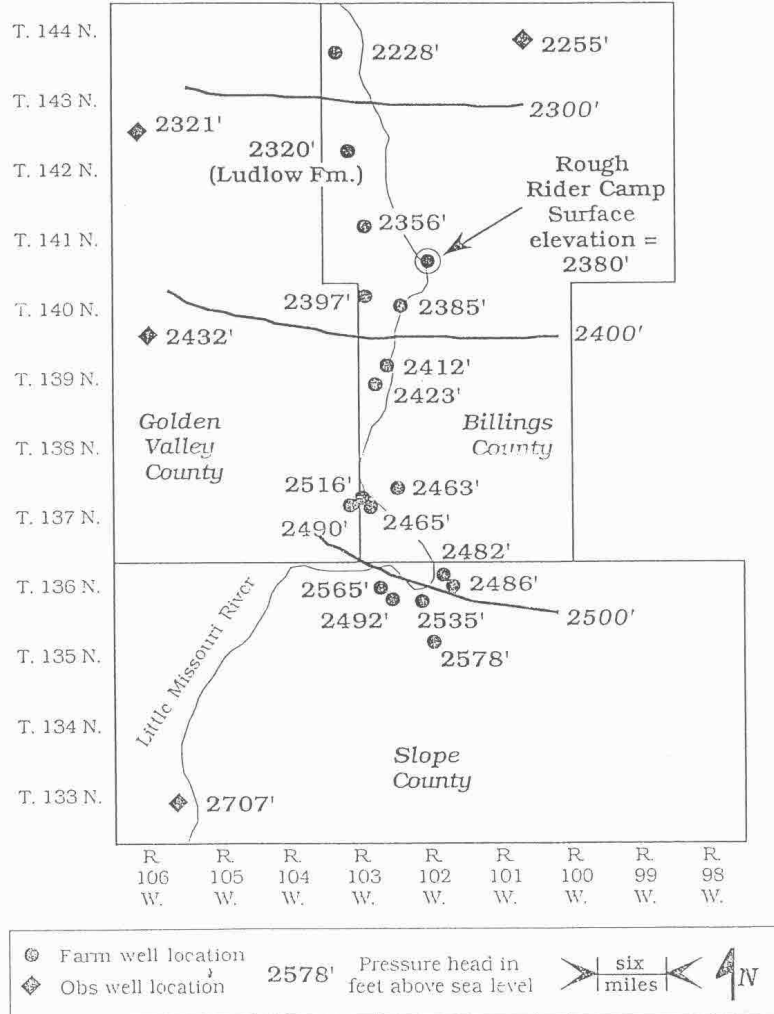
Proposed water source:

The Fox Hills-Hell Creek aquifer is the proposed water source. The aquifer is expected to be found about 1350-1450 feet below land surface at the proposed point of diversion. Land surface elevation at the proposed location is 2380 feet. The Fox Hills-Hell Creek aquifer is expected to have a pressure head about 10 feet below land surface at the proposed well site, as shown on the map on the following page.

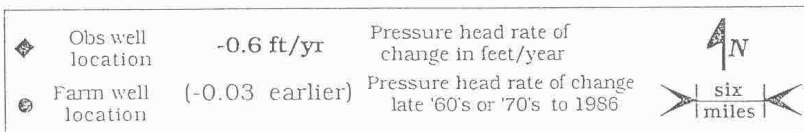
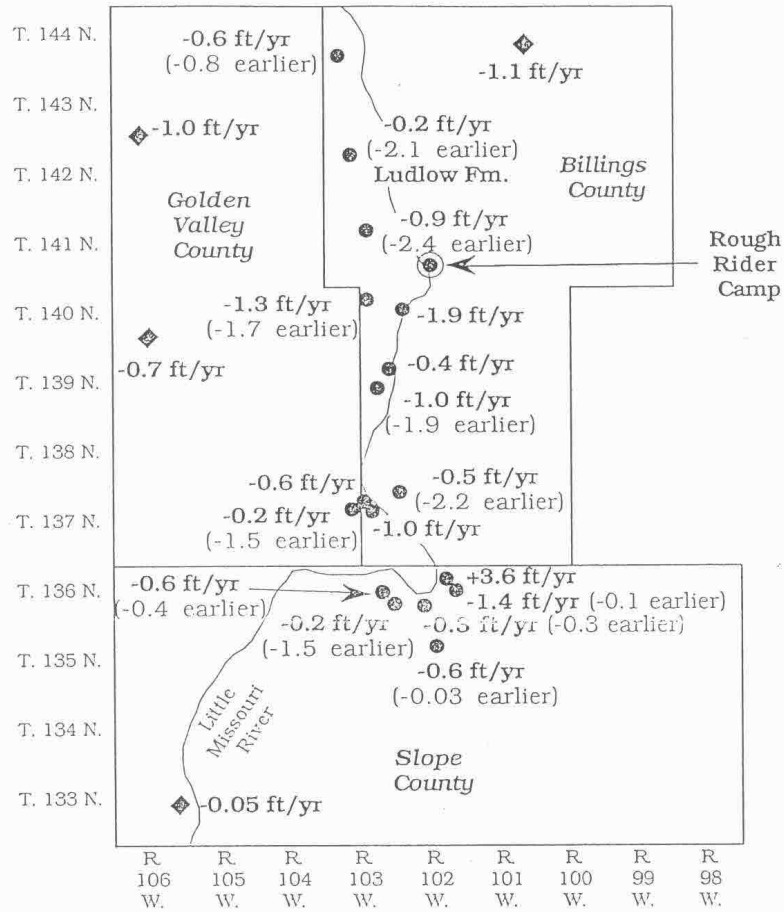
The Fox Hills-Hell Creek aquifer is used along the Little Missouri River valley as a stock water source. Because of the flowing pressure head an electric power source is not required at watering sites in remote

pastures. Extraction of water from the Fox Hills-Hell Creek aquifer is causing the pressure head of the aquifer to decline at a rate of about one foot per year, as shown on the map on page 3.

Elevation pressure head in Fox Hills wells - June 1995



Rate of pressure head change in Fox Hills wells -
December 1986 to June 1995



Projected effects of pumping:

A Theis analysis was made of the effect on the pressure head of the aquifer from pumping the proposed well at the requested rate averaged over a full year. Assumptions were:

Transmissivity:	150 ft ² /day - from the Ground Water Resources of Billings et. al. Counties (Anna 1981) and a test of the park headquarters well
Storativity:	0.0001 - typical for a confined aquifer
Pumping rate:	10 gpm - the quantity requested averaged over one year at constant pumping
Distance:	1, 2, 3, and 10 miles
Time:	10 years

A pressure head decline of 6.2 feet at one mile, 4.8 feet at two miles, 4.0 feet at three miles and 1.6 feet at ten miles was projected by the Theis model after ten years of constant pumping at 10 gallons per minute. Reducing the pumping rate to 2.5 gpm reduces the projected pressure head decline to 1.6 feet at one mile, 1.2 at two miles, 1.0 feet at three miles and 0.4 feet at ten miles.

Senior water rights:

Other use of ground water in the area of the application is from rural domestic and stock wells, the City of Medora, and the applicant. Nearby known wells completed in the Fox Hills-Hell Creek aquifer are located one mile northeast, two miles east, and three miles east of the proposed development. The pressure heads in the wells at one, two and three miles were 94 feet above surface in 1967 in the one mile distant well, 35 feet above surface in 1986 in the two miles distant well, and 23 feet above surface in 1976 in the three mile distant well.

The Theis modeling suggests a ten year pressure head decline in the range of four to six feet in ten years may occur at the nearby Fox Hills wells from the proposed water use if the full 16 acre-feet per year are used. The pressure head decline would be in addition to the approximate one foot per year head decline currently taking place.

Criteria for issuance of a permit:

Section 61-04-06 of the North Dakota Century Code lists the criteria to be considered when evaluating a water permit application. As stated in Section 61-04-06, "*The state engineer shall issue a permit if he finds all of the following:*"

1. *The rights of a prior appropriator will not be unduly affected.*

The proposed water use will add to the rate of aquifer pressure head decline, reducing the time when the pressure head declines below land surface causing wells to stop flowing. The quantity to be granted will therefore be reduced to nearer the quantity actually expected to be needed at the camp.

2. *The proposed means of diversion or construction are adequate.*

The applicant proposes to construct a well. The well construction must meet the requirements of the North Dakota administrative rules for water well construction. Additionally, the applicant has drawn up a set of specifications for the proposed well completion, including cementing in of the casing. The applicant will send a copy of the specifications to the State Engineer's Office. Also, the contractor's completion technique for Fox Hills wells is to cement in the casing using a tremmie line installed to near the completion zone.

3. *The proposed use of water is beneficial.*

The water is to be used as part of the national park operation, a beneficial recreational use.

4. The proposed appropriation is in the public interest. In determining the public interest, the state engineer shall consider all of the following:

a. The benefit to the applicant resulting from the proposed appropriation.

The proposed appropriation will allow the applicant to meet the water needs at the horse camp. The camp is expected to serve 20 people per day and 20 horses per day.

b. The effect of the economic activity resulting from the proposed appropriation.

The camp is expected to enhance the marketability of the national park.

c. The effect on fish and game resources and public recreational opportunities.

No effect on fish and game resources is expected. A positive effect on public recreational opportunities is expected.

d. The effect of loss of alternate uses of water that might be made within a reasonable time if not precluded or hindered by the proposed appropriation.

Possible alternative water uses are not expected to be affected. Adequate water exists in the Fox Hills-Hell Creek aquifer to meet both the needs of the applicant and other possible future needs.

e. Harm to other persons resulting from the proposed appropriation.

Any added water use from the aquifer will increase the rate of pressure head decline and shorten the time when wells completed in the aquifer cease to flow. It is therefore in the public interest that flow from the Fox Hills-Hell Creek aquifer be minimized. It is not in the overall public interest, however, that additional water use from the aquifer be eliminated.

f. The intent and ability of the applicant to complete the appropriation.

The applicant has the ability to complete the proposed well. The well driller selected is experienced at completing wells in the Fox Hills-Hell Creek aquifer.

The public interest criteria have therefore been met.

Quantity to be recommended to be granted:

The application is for 16 acre-feet of water at a pumping rate of 20 gallons per minute to be used between 26 April and 15 October of each year. By way of comparison, the quantity of water reported used at Cottonwood Campground in the park in 1995 was 1.4 acre-feet. The quantity of water reported used at the Burning Hills Amphitheater in 1995 was 1.0 acre-feet of water.

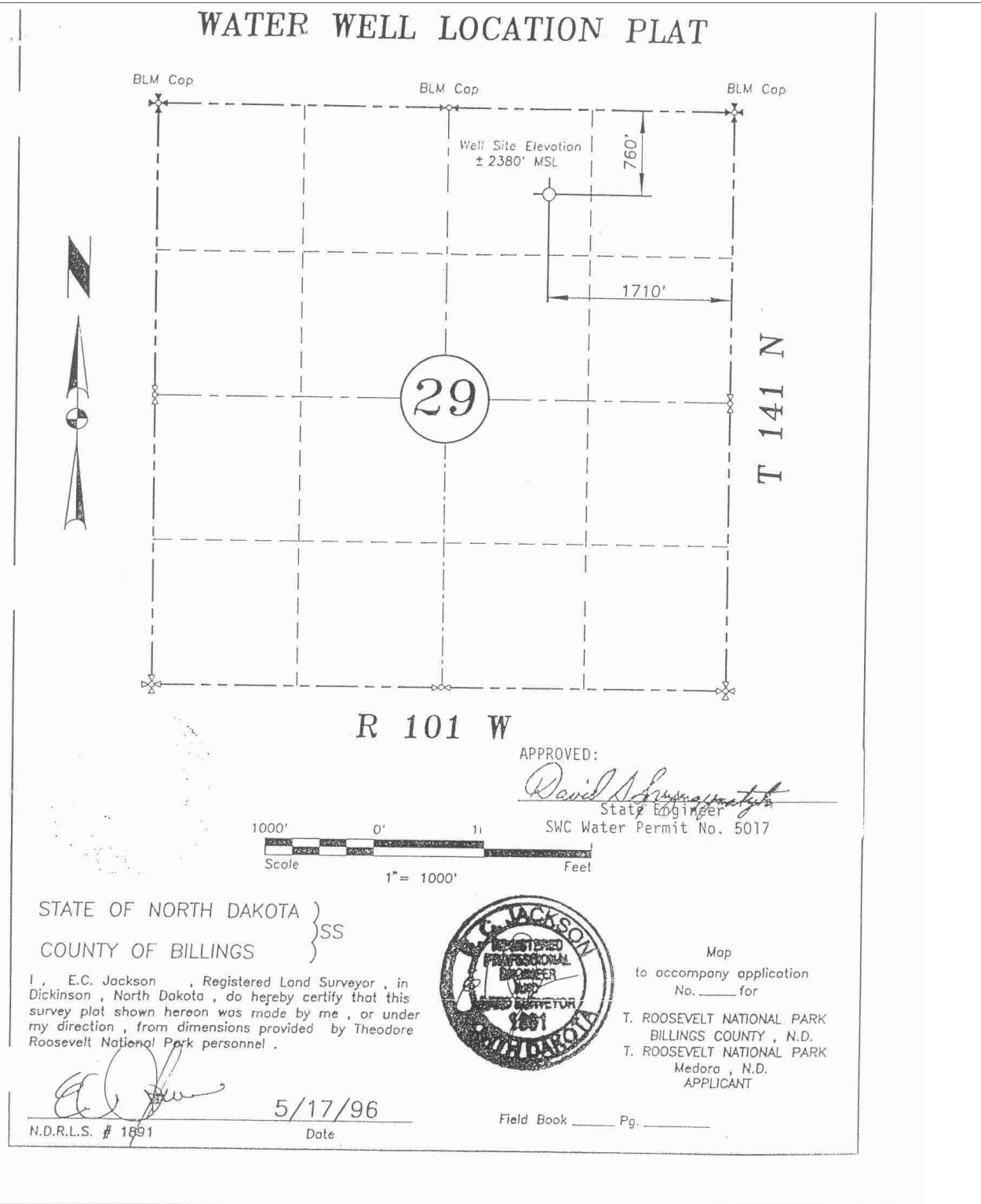
In a telephone conversation on 9 august 1996 Keith Butler with the park said water use at the camp is expected to be similar to that at Cottonwood Campground, which has ranged between 1.3 and 1.5 acre-feet per year for the past five years. Mr. Butler was agreeable to a reduction in the quantity of water to nearer the range expected to be used.

Recommendation:

It is recommended that 4 acre-feet of water per year be granted at a maximum pumping rate of 20 gallons per minute. Standard conditions shall apply with the exception that the measuring port and aquifer test conditions be deleted. The beneficial use date shall be 1 September 1999. The remaining 12 acre-feet shall be denied.

A handwritten signature in cursive script, appearing to read "Alan Wanek".

Alan Wanek, Hydrologist



Supporting Hydro Data

Drillers Log - Roundup House Camp Well - T HAO

well casing used

#1 - 24' 10"	#25 - 24' 11"
2 24 - 10	28 - 25 - 0
3 24 - 10 $\frac{1}{2}$	29 - 25 - 0
4 24 - 11	30 - 25 - 0
5 24 - 11	31 - 25 - $\frac{1}{2}$
6 24 - 11	32 - 25 - $\frac{1}{2}$
7 24 - 11	33 - 25 - 1
8 24 - 11	34 - 24 - 11 $\frac{1}{2}$
9 24 - 10	35 - 25 - 0
10 24 - 10	36 - 25 - 1
11 24 - 10 $\frac{1}{2}$	37 - 25 - 0
12 24 - 10	38 - 25 - $\frac{1}{2}$
13 24 - 11	39 - 25 - $\frac{1}{2}$
14 24 - 10	40 - 25 - 0
15 24 - 10 $\frac{1}{2}$	41 - 25 - 1
16 24 - 10 $\frac{1}{2}$	42 - 25 - 1
17 24 - 11	43 - 25 - $\frac{1}{2}$
18 24 - 11	44 - 24 - 11 $\frac{1}{2}$
19 24 - 10	45 - 25 - 1
20 24 - 10	46 - 25 - 1
21 24 - 10 $\frac{1}{2}$	47 - 25 - 1
22 24 - 10	48 - 25 - $\frac{1}{2}$
23 25 - 1	49 - 24 - 11 $\frac{1}{2}$
24 24 - 11	50 - 25 - 0
25 25 - 0	51 - 25 - 0
26 25 - 0	

5-21-96

started work 7^{AM}stopped work 5³⁰ PMlunch 12 to 12³⁰ PM

drilling 7 1/2" hole

3-21 brown sand and clay

1-52 gray clay

2-55 coal

5-79 gray clay

9-80 coal

20-92 gray clay

2-94 coal

4-135 gray clay

35-141 coal

1-153 gray clay

3-161 coal

1-180 gray sandy clay

0-193 layers of coal

3-202 gray clay

2-230 sandy

10-283 gray clay

83-330 gray sandy clay

30-335 coal

35-388 gray clay

8-390 sandstone

10-395 gray clay

5-397 sandstone

17-414 gray clay

4-417 sandstone

7-432 gray clay

8-22-96

start work 7³⁰ AMstart rig 7⁴⁵

fluid level 3' - heavy mud

32-489 gray clay - layers of coal

89-503 sandy

03-506 sandstone

26-512 sandy - layers of sandstone

12-515 sandy

75-576 sandstone

16-570 gray clay

70-598 sand

98-601 sandstone

01-610 sandy

10-611 sandstone

11-735 sandy clay 1" 51

tipped out of the hole

bottom of 7¹/₂" holestopped drilling 4^{PM}

having trouble with the hole -

went to camp to rework drill bit

8-23-96

start rig 7^{AM}

cleaned hole - ran in new bit (7")
 fluid at 115'

35-760 gray clay
 50-762 sandstone
 62-910 gray clay - layers of sandstone
 10-926 sandy
 26-928 sandstone
 28-957 sandy - layers of sandstone

tripped out of hole again to change
 bits

stopped work 5³⁰ PM

8-24-96 and 8-25-96 off

-19-96 - moved equipment
-20-96 - moved in backhoe - held work conference.
dug pit for drill mud - set up rig
at work site 12³⁰ PM - worked to 5³⁰ PM

2-26-96
 started rig 8 AM
 triped into hole with new bit
 started drilling 10³⁰ AM

957-987 gray clay

87-989 sandstone

89-1041 sand

41-1042 sandstone

42-1195 gray clay

95-1261 sandy gray clay

stopped 5³⁰ PM

8-27-96

start work 7⁰⁰ AM - started rig 8⁰⁰ AM
 tripped into the hole - circulated 8⁰⁰ to 9 AM
 started drilling 9 AM

01 to 1259' 6" sandy clay
 59' 6" to 1261' sandstone

bottom of 4" hole

tripped out to run 4" casing
 ran in 1261' 4" steel casing
 stopped work 6 PM

2 helpers

8-28-96

start work 7^{AM}

set up cement mixing equipment -
sent truck to Beach to pickup cement - returned
at 11³⁰ AM.

1/2 hr off for lunch

started mixing cement 12 PM

mixed 200 sacks of cement -

pumps air locked while pumping cement -
cement locked in hole -

pumped in about 1/2 of cement

worked to 6^{PM}

2 helpers

8-29-96

no work at well site - locating more cement

30

8-~~29~~ 96

drilled out 1230' of cement

2 helpers

8-31-96

ran in 1" cement pipe - hit cement at 806

pumped in 150 sacks of cement

7 AM to 2³⁰ PM

2 helpers

9-1-96 and 9-2-96 off

9-3-96

started rig 10³⁰ AM stopped work 6³⁰ PM
 tripped into the hole - drilled out 30' of cement
 and cement shoe.

61-1263 sandstone

63-1275 sandy clay

65-1302 gray clay

62-1382 sand (water)

22-1325 gray shale

ran 63' air line to test for water
 should get water out of the pit

9-4-96

started rig 7^{PM}

motor went out on the rig 8⁴⁵ AM

stand shut down for repairs

9-5-96 and 9-6-96 rig down for repairs

9-7-96

started rig 10⁴⁵ AM

washed out hole - ran in screen and sand pack

screen set from 1295 to 1325

84' 2" black pipe stand pipe 1211 to 1295'

2' of screen on top of 2" stand pipe 1209-1211

used 12 sacks silica sand

stopped work 5^{PM}

9-8-96 off

9-9-96

start rig 9:30 AM

pulled pipe back to 588'

started testing

stopped rig 4 PM

1 helper

9-10-96

hauled in backhoe - ~~and~~ dug out for piller unit -
man hole - water line - covered pit - pumped, tested

1 helper

12 PM to 5:30 PM

Other Supporting Information

ORDER FOR SUPPLIES OR SERVICES				PAGE 1	OF 26	
IMPORTANT: Mark all packages and papers with contract and/or order numbers.						
1. DATE OF ORDER 08-14-96		2. CONTRACT NO. (If any) OPEN MARKET		3. ORDER NO. FX1540-6-0214		
4. REQUISITION/REFERENCE NO. MS239		5. SHIP TO: (Consignee and address, ZIP Code) SEE SPECIFICATIONS AND SPECIAL CONDITIONS SHIP VIA: YOUR COMPANY TRUCK				
6. SENDING OFFICE (Address correspondence to) THEODORE ROOSEVELT NATIONAL PARK (TE#:05329) POB 7, 315 SECOND AVE., MEDORA, ND 58645		7. TO: CONTRACTOR (Name, address and ZIP Code) BOYCE DRILLING INC POB 56 SIDNEY MT 59270 406-482-4143				
8. TYPE OF ORDER ☒ A. PURCHASE — Reference your QUOTE BY TED J. BOYCE 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 FAX #115 ☐ 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.		9. ACCOUNTING AND APPROPRIATION DATA 1540-MEB-6-255R-6-31075.00				
10. REQUISITIONING OFFICE C12 THRO CHIEF OF MAINTENANCE		11. BUSINESS CLASSIFICATION (Check appropriate box(es)) ☐ SMALL ☐ OTHER THAN SMALL ☐ DIS-ADVANTAGED ☐ WOMEN-OWNED				
12. F.O.B. POINT DESTINATION		13. PLACE OF INSPECTION AND ACCEPTANCE DESTINATION		14. GOVERNMENT B/L NO. N/A		
15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) AUG. 30, 1996		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.	PER THE TERMS, CONDITIONS, PROVISIONS AND SPECIFICATIONS OF RFQ1540-6-0012 PROVIDE ALL EQUIPMENT, SUPPLIES, MATERIALS, PERMITS, LABOR AND MILEAGE/TRANSPORTATION COST TO DRILL, CASE AND GROUT ONE WATER WELL LOCATED IN THEODORE ROOSEVELT NATIONAL PARK, BILLINGS COUNTY, NORTH DAKOTA.	1500	L.F.	20.15	30,225.00	
2.	PROVIDE AND INSTALL APPROPRIATE PITLESS FLOWING OR NON-FLOWING WELL. Contact Keith Butler, Chief of Maintenance to arrange time and date of the Pre-construction Conference before any work is performed. Taxpayer's Identification Number (TIN) is required on all invoices.	1	LS	850.00	850.00	
18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(H). TOT. (Cont. pages)
21. MAIL INVOICE TO: (Include ZIP Code) THEODORE ROOSEVELT NATIONAL PARK (TE#:05329) POB 7, 315 SECOND AVE., MEDORA, ND 58645				21,075.00		17(I). GRAND TOTAL
UNITED STATES OF AMERICA BY (Signature) 		22. NAME (Typed) LARGANKA, R. HURT/RM-IIC-142 701/623-4466				
		TITLE: CONTRACTING/ORDERING OFFICER				

NATIONAL PARK SERVICE

NPS FORM 10-3470 (3-92)

REQUEST FOR QUOTATIONS (This is not an order)		The Notice of Small Business-Small Purchase Set-Aside on page 3 of this form ☒ is ☐ is not applicable.		Page of Pages 1 24	
1. REQUEST NO.	2. DATE ISSUED	3. REQUISITION/PURCHASE REQUEST NO.	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1->	RATING	
RFQ1540-6-0012	07/17/96	MS239 DRILL WATER WELL			
5A. ISSUED BY Theodore Roosevelt National Park 315 Second Ave. P.O. Box 7 Medora, ND 58645			6. DELIVER BY (Date) 08/15/96		
5B. FOR INFORMATION CALL: (Name and phone no.) (No collect calls) BARBARA A. HURT/RM-IIC-142 701/623-4466 fax 4840			7. DELIVERY ☒ FOB DESTINATION ☐ OTHER (See Schedule)		
8. TO: NAME AND ADDRESS, INCLUDING ZIP CODE <i>Roundup Horse Camp Well</i>			9. DESTINATION (Consignee and address, including ZIP Code) See specifications and Special Conditions.		
10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE ON OR BEFORE CLOSE OF BUSINESS (Date) 07/31/96			11. BUSINESS CLASSIFICATION (Check appropriate boxes) other dis- women- ☐ small ☐ than small ☐ advantaged ☐ owned		

IMPORTANT: This is a request for information, and quotations furnished are not offers. If you are unable to quote, please so indicate on this form and return it. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or services. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for quotations must be completed by the quoter.

Ask about FRINGE BENEFITS Ws. RATE
106- 489-0214

A53A-

REQUEST FOR QUOTATIONS
(This is not an order)

1. REQUEST NO. RFQ1540-6-0012	2. DATE ISSUED 07/17/96	3. REQUISITION/PURCHASE REQUEST NO. MS239 DRILL WATER WELL	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1->	RATING
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12. SCHEDULE (Include applicable Federal, State and local taxes)

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
	Provide all equipment, supplies, materials, permits, labor and mileage/transportation cost to drill, case and grout one water well located in Theodore Roosevelt National Park, Billings County, North Dakota per the attached terms, conditions, provisions and specifications: Submit bid on the attached Contract Bid Schedule.				

13. DISCOUNT FOR PROMPT PAYMENT ->	10 CALENDAR DAYS %	20 CAL. DAYS %	30 CAL. DAYS %	CAL. DAYS %
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NOTE: Page 3 must also be completed by the quoter.

14. NAME AND ADDRESS OF QUOTER (Street, city, county, State and ZIP Code)	15. SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION	16. DATE OF QUOTATION
	17. NAME AND TITLE OF SIGNER (Type or print)	18. TELEPHONE NO. (Include area code)

NSN 7540-01-152-8084

PREVIOUS EDITION NOT USABLE

18-118

STANDARD FORM 18 (REV. 10-83)

Prescribed by GSA

FAR (48 CFR) 53.215-1(a)

NATIONAL PARK SERVICE

1
 REQUEST FOR QUOTATIONS
 This is not an order)

1. REQUEST NO.	2. DATE ISSUED	3. REQUISITION/PURCHASE REQUEST NO.	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1->	RATING
FQ1540-6-0012	07/17/96	MS239 DRILL WATER WELL		

REPRESENTATIONS, CERTIFICATIONS, AND PROVISIONS

The following representation applies when the contract is to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia.

52.219-1 SMALL BUSINESS CONCERN REPRESENTATION (Jan 1991)

The offeror represents and certifies as part of its offer that it ☐ is, ☐ is not a small business concern and that ☐ all, ☐ not all end items to be furnished will be manufactured or produced by a small business concern in the United States, its territories or possessions, Puerto Rico, or the Trust Territory of the Pacific Islands. "Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

The following provision is applicable if required on page 1 of the form:

52.219-4 Notice of Small Business-Small Purchase Set-Aside (Aug 1988)

Quotations under this acquisition are solicited from small business concerns only. If this purchase is for supplies, it will be made only from a small business concern furnishing its own manufactured product, or from a small business concern providing the product of another manufacturer. In either case, such product must be manufactured or produced in the United States, its territories or possessions, Puerto Rico, or the Trust Territory of the Pacific Islands. Quotations that are not from a small business shall not be considered and shall be rejected.

SPECIAL PROVISIONS

SP-1. SITE INSPECTION: Prospective offerors are encouraged to inspect the work site prior to submitting an offer.
NOTE: Exact measurements are the responsibility of the contractor.
THE GOVERNMENT IS NOT RESPONSIBLE FOR ERRORS.

For information concerning availability of site inspection, contact: Keith Butler, Chief of Maintenance, at 701/623-4466.

SP-2. JOBSITE LOCATION: The work shall be performed at:
Theodore Roosevelt National Park, Billings County, North Dakota.

SP-3 DESIGNATED BILLING OFFICE (RMR) (JAN 1988)
Submit payment requests to the address shown in block 21 of the Purchase Order.

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE
(JUN 1988)

This solicitation incorporates one or more solicitation provisions 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.

52.222-21 CERTIFICATION OF NONSEGREGATED FACILITIES (APR 1984)
(Applicable to \$10,000 or more)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (June 88)
This contract incorporates one or more 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.

FEDERAL ACQUISITION REGULATIONS (48 CFR CHAPTER 1) CLAUSES

- 52.203-3 GRATUITIES (APR 1984)
- 52.212-9 VARIATION IN QUANTITY (APR 84) (IN THE PRECEDING CLAUSE, THE PERMISSIBLE VARIATIONS ARE STATED IN THE SCHEDULE)
- 52.213-2 INVOICES (APRIL 84)
- 52.213-3 NOTICE TO SUPPLIER (APRIL 84)
- 52.222-3 CONVICT LABOR (APR 1984)
- 52.222-6 DAVIS-BACON ACT (NOV 1992)
- 52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)
- 52.222-26 EQUAL OPPORTUNITY (APR 1984)
- 52.222-36 AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS (APR 1984)
- 52.222-40 SERVICE CONTRACT ACT OF 1965, AS AMENDED, CONTRACTS \$2500 OR LESS (MAY 89)
- 52.222-41 SERVICE CONTRACT ACT OF 1965, AS AMENDED (MAY 89)
- 52.225-3 BUY AMERICAN ACT-SUPPLIES (JAN 95)
- 52.232-1 PAYMENTS (APR 84)
- 52.232-8 DISCOUNTS FOR PROMPT PAYMENT (APR 89)
- 52.232-25 PROMPT PAYMENT (MAR 94)
- 52.232-28 ELECTRONIC FUNDS TRANSFER PAYMENT METHODS (APR 89)
- 52.233-1 DISPUTES (MAR 94)
- 52.237-2 PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION (APR 1984) (SERVICE)

- 52.243-1 CHANGES-FIXED PRICE (AUG 87)
- 52.249-1 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SHORT FORM) (APR 1984)
- 52.204-3 TAXPAYER IDENTIFICATION (MAR 1994)

(a) Definitions.

"Common parent" as used in this solicitation provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"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) All offers are 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 Federal, 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 _____

52.219-19 SMALL BUSINESS CONCERN REPRESENTATION FOR THE SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (JUL 1991)

(a) Definition.

"Emerging small business" as used in this solicitation means a small business concern whose size is no greater than 50 percent of the numerical size standard applicable to the standard industrial classification code assigned to a contracting opportunity.

(b) (Complete only if the Offeror has certified itself under the provision at 52.219-1 as a small business concern under the size standards of this solicitation.)

The Offeror represents and certifies as part of its offer that it ☐ is, ☐ is not an emerging small business.

(c) (Complete only if the Offeror is a small business or an emerging small business, indicating its size range.)

Offeror's number of employees for the past 12 months (check this column if size standard stated in solicitation is expressed in terms of number of employees) or Offeror's average annual gross revenue for the last 3 fiscal years (check this column if size standard stated in solicitation is expressed in terms of annual receipts). (Check one of the following.)

No. of Employees	Ave. Annual Gross Revenues
☐ 50 or fewer	☐ \$1 million or less
☐ 51-100	☐ \$1,000,001 - \$2 million
☐ 101-250	☐ \$2,000,001 - \$3.5 million
☐ 251-500	☐ \$3,500,001 - \$5 million
☐ 501-750	☐ \$5,000,001 - \$10 million
☐ 751-1,000	☐ \$10,000,001 - \$17 million
☐ Over 1,000	☐ \$Over 17 million

52.219-22 SIC CODE AND SMALL BUSINESS SIZE STANDARD (JAN 1991)

(a) The standard industrial classification (SIC) code for this acquisition is 1781.

(b) (1) The small business size standard is \$7,000,000.00.

(2) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (APR 1984)

The offeror represents that--

(a) It ☐ has, ☐ has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 11114;

(b) It ☐ has, ☐ has not, filed all required compliance reports; and,

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

CONTRACT BID SCHEDULE
THEODORE ROOSEVELT NATIONAL PARK, SOUTH UNIT

<u>Item No.</u>	<u>Description</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Drill, case as is appropriate, grout and furnish sand pack w/proper liner and screening a typical potable water well with an approximate GPM of 20 gal.	1500'	l.f. \$	
2.	Provide and install appropriate pitless for flowing or non flowing well.	1	LS \$	

Contractor will employ prevailing standards of the industry, with the goal of producing a well that meets the present state standards for development and production of a typical agriculture industry livestock well.

Submit bid for all items. Insert a bid price in the Contract Bid Schedule opposite each item for which a quantity appears.

It is the intention of the Government, that all the work be performed by one contractor. Therefore, award will be made to a single contractor for all bid items.

Quantities of unit price bid items are estimated, but payment will be made only for actual quantities delivered. Proof of quantities will be required .

Contracting Officer approval must be obtained prior to completing any additional quantities of work.

Work must be completed no later than August 15, 1996.

SPECIAL CONDITIONS

These Special Conditions cover additions and revisions to the General and Supplemental Conditions as required to cover situations peculiar to an individual project. If there is a conflict between the General or Supplemental Conditions, the Special Conditions shall control.

1. **General Description of Work:** The work to be performed under this Contract includes the furnishing of all materials, labor, transportation, equipment and Contractor's plant, required to drill, complete, develop and test one artisan potable water well within the South Unit, Theodore Roosevelt National Park, Billings County, (NW 1\4, NE 1/4, Section 29., Township 141N, Range 101W), North Dakota. Drilling depth is estimated to range from 1200 to 1600 feet.
2. **Plans and Specifications:** These specifications are intended to provide the information necessary for all parties concerned with the Contract to know the nature and amount of equipment, materials and the work required to successfully complete the project. All work shall be constructed in accordance with the enclosed plans and specifications.

The text may refer to the provisions of specifications such as the American Society of Testing and Materials, United States of America Standards Institute, American Concrete Institute, and other similar organizations in an attempt to reduce the bulk of the specifications. Reference to such specifications shall be taken to indicate that the specifications have been made a part of this document, and the provisions of those specifications shall be as if they were actually written herein.

All construction shall conform to the applicable rules, laws and regulations of Federal, State and Local agencies.

3. **Completion Requirements:** The Contractor shall be responsible for all work contained in the drawings and specifications unless otherwise noted.
4. **Equal to or Better than Specifications:** Whenever, in any section of the plans and specifications, any article, material, or equipment is defined by describing a propriety product, or by using the name of a manufacturer or vendor, the term "or equal," if not inserted shall be understood as indicating the type, function, minimum standard of design, efficiency, and quality desired and shall not be construed in such a manner as to exclude manufacturer's products of comparable quality, design and efficiency.
5. **Boundaries of Work:** The Government shall provide land or rights-of-way for the work specified in this Contract and make suitable provisions to ingress and egress, and the Contractor shall not enter on or occupy with employees, tools, equipment, or material, any ground outside the right-of-way without the written consent of the Government of such ground. Other Contractors and employees or the Government may for all necessary purposes, enter upon the work and premises used by the Contractor, the Contractor shall conduct his work so as not to impede unnecessarily any work being done by others on or adjacent to the site.

6. **Protection of Site:** Except as otherwise provided herein, the Contractor shall protect all structures, walks, property markers, fences, pipelines, trees, and shrubbery, during the progress of his work, restore the site as nearly as possible to its original condition, including the replacement, at the Contractor's expense, of any facility or landscaping which has been damaged beyond restoration.
7. **Permits, Certificates, Laws and Ordinances:** The Contractor shall, at their own expense, procure all permits, certificates, and licenses required of them by law for the execution of their work, with the exception of the well permit itself, which will be the responsibility of the Government and Project Supervisor. Contractor shall comply with all Federal, State or Local laws, ordinances, rules and regulations relating to the performance of the work. No field operations shall commence until all necessary permits have been obtained.
8. **Submittals for Approval:** The Contractor shall promptly upon request, submit to the Project Supervisor for his approval, the name of the manufacturer of materials, machinery and the equipment when it is to be installed in the system, complete with their performance capabilities and other pertinent information.
9. **Field Facilities:** The Contractor shall provide those facilities required for field sanitation. The Contractor may provide a field office adequate to suit his own requirements.
10. **Facilities or Material to be Furnished by Government:** The Government does not intend to furnish to the Contractor any facilities or material for the performance of this Contract.
11. **Materials and Equipment Furnished by Contractor:** All materials and equipment to be used or incorporated into the permanent system shall be approved by the Project Supervisor before being installed. The Contractor will make an exact determination of the quantities and classes of materials needed before placing a final order. The quantities shown on the Proposal are estimates only and are subject to change during actual construction of the project. Unless otherwise stipulated in the Specifications, all workmanship, equipment, materials, and articles incorporated in the work are to be new and of the best grade of their respective kinds for purpose. When applicable specifications are available, materials and equipment shall at least meet the latest minimum requirements as set forth by agencies such as the AWWA, ASTM, and E.P.A.
12. **Award of Bid Items and Changes in Bid Quantities:** The Government may delete any Bid Item prior to awarding the Contract. After the Contract is awarded, the Government may increase or decrease any item or items 15 percent of the total Contract price without further negotiation with the Contractor.

All quantities are used for the purpose of obtaining comparative bids. These quantities are subject to change and the Contractor will be responsible for determining the required quantities of each item prior to placing the final order for materials.
13. **Location of Work:** All work is located in Billings County, North Dakota, within the South Unit, Theodore Roosevelt National Park. The

site is located approximately 12 miles north of Medora, ND. NW1/4, NE1/4, Section 29, T.141N., R.101W Billings County. All work is on public lands with rights-of-way furnished.

14. **Scope of Work:** The work to be done hereunder includes the furnishings of all labor, material, transportation, tools, supplies, plant equipment and appurtenances, unless hereunder specifically excepted, necessary for the complete and satisfactory construction and testing for quantity of one deep artisan well, tapping the Fox Hills Sandstone at an approximate depth of 1400 feet.

The completed well shall conform to the applicable rules of the North Dakota Department of Health and the North Dakota State Engineer. The well shall be constructed such that all formations that are, or may be contaminated and formations that have undesirable characteristics above the production zone shall be sealed off by grouting. No openings shall be allowed between the ground surface and the water bearing formation other than that through which the water is produced. Materials and equipment that will become a permanent part of the completed well shall be structurally sound, durable, and in good sanitary condition.

Disinfection of the wells is included as a part of this Contract. Disinfection shall be accomplished in accordance with the technical specifications.

15. **Sales Tax:** Contractor's must pay all applicable sales taxes. No waivers of sales tax.
16. **Bonds:** Performance Bonds and Payment Bonds will not be required by this Contract.
17. **Contract Time:** It is the intent of this Contract that the well will be completed in as timely a manner as possible. Maximum completion time for bidding purposes will be 15 days from the Date of Notice to Proceed.

TECHNICAL SPECIFICATIONS

A. TYPE OF WELL

1. **Location and Depth:** The well shall be constructed at the location staked by the Project Supervisor and shall extend from the ground surface approximately 1400 feet into a consolidated Fox Hill Sandstone aquifer. Final depth of the well will be determined by the cuttings, drilling logs and quantity/quality of water encountered. Waste materials from drilling operations shall be disposed of in a manner approved by the Project Supervisor.
2. **Diameter:** The completed well shall consist of a casing of minimum outside diameter of 4.500 inches to accommodate a 4 inch submersible pump and shall extend from the surface of the ground to such point as directed near the top of Fox Hills Sandstone and furnishes minimum quantities and quality required to establish a suitable potable water well.
3. **Method of Construction:** This section of the specifications is intended to describe the condition of the complete well and is intended to allow Contractor to use air and/or hydraulic rotary methods in constructing the well. Drilling fluids used in the drilling of this well shall be industry standard for the development of a potable water well.

The well construction shall be such that the upper sections of the well will be cased off to prevent possible pollution from surface water and shallow ground water. The lower sections of the well shall be screened to develop maximum yield from the water bearing formation. If necessary, undesirable strata, shall be blocked off by installing sections of impervious casing opposite such formations.

4. **Geology:** It shall be the sole responsibility of the Contractor to ascertain the geological and drilling conditions at the well sites.

B. SAMPLES

1. **General:** During the drilling of the well, a careful and accurate log shall be maintained which shall indicate the depth at which formations or strata types are encountered, including a description of the formation penetration rates, pump pressures, and any unusual conditions encountered.

It is the Contractor's sole responsibility to secure, protect and deliver all selected formation and water samples collected from the well to the Project Supervisor. The samples to be tested are those from aquifers. Other samples of materials penetrated are for stratigraphic correlation.

2. **Formation Samples:** The Contractor shall keep an accurate record of the depths to which each formation is encountered and top and bottom of each stratum penetrated, and shall collect and deliver to the Project Supervisor a properly identified formation sample take from each five (5) feet of drilling and at every change of formation beginning at ground surface. Formation samples shall be collected and handled in a manner selected by the Contractor and approved by the Project Supervisor. The sample shall be enclosed in a suitable

container furnished by the Contractor, plainly labelled with the depth of the top and bottom of the sample.

3. **Water Samples:** For the purposes of verification, a one gallon water sample shall be drawn from the well upon completion of development.

Water samples selected by the Project Supervisor shall be sent to an approved laboratory for analysis.

C. WELL CASINGS

1. **Purpose:** Well casings and liners have the dual purpose of sealing out contaminated and other undesirable water and of maintaining the opening from the surface to the water-bearing formations. The well casing shall extend a minimum of 12 inches above the surface of the ground.
2. **Casing Materials:** Casing to be used hereunder as a part of the permanent well shall be of new black steel material and conform to appropriate AWWA Standards, origin of manufacture will be the U.S.A. and conform to A.P.I. H-40 or J-55 classification.
3. **Temporary Casing:** The selection of the weight and type of temporary casing needed only as a construction item and which will be removed prior to the completion of the well shall be left to the discretion of the Contractor.
4. **Casing Size:** The following minimum weights and dimensions shall be used for steel pipe well casings:

NOMINAL SIZE INCHES	EXTERNAL DIAMETER INCHES	INTERNAL DIAMETER INCHES	THICKNESS INCHES	WEIGHT PER FOOT POUNDS
4	4.500	4.026	0.327	10.79

5. **Casing Joints:** Well casings used as a part of the permanent well shall have threaded joints. Joints shall be inspected and approved by the Project Supervisor before they are lowered into the well. The materials may not be used in the work until they have been inspected and approved by the Project Supervisor.

D. WELL SCREENS

1. **Purpose:** The well screens have the purpose of allowing water from the aquifer to enter the well while at the same time they support the water-bearing formation and prevent the well from collapsing. The well screens specified hereunder are intended to reduce the quantity of sand which may enter the well cavity. It may be necessary to separate screen sections of proper diameter black steel casing to properly locate the screen for maximum production.
2. **Screen Materials:** The well screens shall be fabricated entirely of stainless steel. For the purpose of bidding, type 304 S.S. shall be used.

3. **Screen Type:** The screen shall be of the continuous slot, wire wound type such as manufactured by UOP Johnson Division or equal.
 4. **Openings:** The size of aperture openings shall be determined in accordance with the effective size and uniformity coefficient of the sands in the water-bearing strata. The screen openings shall be such that the finer particles of sand will pass through the screen during development, leaving the coarser particles adjacent to and outside the screen. The openings shall be so designed as to prevent clogging and shall be free of jagged edges, irregularities, or anything that will accelerate or contribute to clogging or corrosion.
 5. **Strength:** The screen shall have adequate strength to resist external forces applied to it after installation and to minimize the likelihood of damage during installation. The screen must have no change of alignment to any joint after installation. The Contractor shall submit to the Project Supervisor for approval drawings and other information showing the design and method of construction of the screen. The screen will have a minimum calculated collapse pressure of 600 p.s.i. at 0 slot. Longitudinal strength will be adequate to withstand setting of the screen utilizing a 2-7/8 inch bit.
 6. **Screen Placement:** The well screen assembly (the screen and its top and bottom fittings) shall be properly joined and will be lowered via drill pipe or other setting string of pipe, attached with appropriate couplings for release when in place.
 7. **Fittings:** The screen shall be provided with welding ring fittings as are necessary to attach to the casing. Intermediate screen sections shall be joined by welding; welding rod shall be made of material suitable for joining corrosion resistant material in order not to reduce the corrosion resistance.
- E. GRAVEL PACKING AND PROCEDURES
1. **Material:** Select silica sand, typically used in oil field operations, will be used for gravel pack. The sand will be 90% plus silica; round, washed clean of fines, and be maintained in a clean condition until placement in the well. Lead packing may not be used.
- F. DRILLING FLUIDS
1. **Material:** In order to prevent caving of shales, swelling of clays, and control the anticipated positive artesian head, bentonite gel drilling fluids will be approved for drilling surface casing. Drilling out of the cement shoe and the production hole will be with fresh bentonite gels. All gels used will meet state specifications for potable wells.
 2. **Conditioning:** It will be the responsibility of the Contractor to utilize a minimum of additives, particularly caustic or hazardous. The hole should be kept as clean as possible at all times and when in the production zone, mud invasion should be minimized. Use of de-silters and de-sanders is recommended to prevent excess weight and cuttings in the mud. Appropriate pits will be constructed by the Contractor to mix, control and contain all drilling fluids.

3. **Disposal:** After well construction all drilling fluids and cuttings will be disposed of in a manner approved by the Project Supervisor.

G. GROUTING AND SEALING

1. **Grouting Material:** The annular space between the surface or outer casing and inner casing shall be filled with concrete grout. The grout shall be proportioned of one sack of Portland cement and the maximum quantity of 5.5 gallons of water to give the mixture such consistency that it can be forced through grout pipes. The mixture method of mixing and consistency of grout shall be approved by the Project Supervisor. In no case shall over 5.5 gallons of water per bag (one cubic foot or 94 pounds) of cement be used in mixing the grout. The use of chlorides or bentonite (up to 4% by weight of cement) to reduce shrinkage or to reduce permeability, increase fluidity, and/or control time of set must be approved by the project supervisor. All static water level measurements will be recorded as well as description of all materials encountered and their location in the well. This record along with the time measurements were made will be given to the Project Supervisor at the conclusion of drilling.
2. **Record of Casing and Screen:** The Contractor shall keep an exact record of the order in which each piece of casing pipe and well screen location record will be given to the Project Supervisor. This will show the lengths of each diameter of casing and screen used and the locations of packers, plugs, and seals.
3. **Record of Material Removed During Development:** The total number of cubic feet of material removed from the well as a result of developing the wells shall be recorded by the Contractor.
4. **Pumping Test Records:** Pumping test data will be supplied to the Project Supervisor from all pumping tests conducted on the well. They will show dates, water levels, discharge rates, and times of starting and stopping the pump.
5. **Daily Report:** The Contractor shall also submit a daily report describing the nature of material encountered, the work done during each day, including such items of work accomplished as depth drilled, casing set, the water level in the well at the beginning and end of each shift, and such other pertinent data as he is requested to record by the Project Supervisor.
6. **Liquidated Damages:** Failure on the part of the Contractor to obtain, preserve and deliver samples or records to the Project Supervisor shall be considered an actual damage to the Owner and shall authorize the Owner to retain from monies due or to become due under the Contract the sum of \$100 dollars as liquidated damages for each sample that the Contractor shall fail to obtain, preserve, and deliver, or for each length of pipe not properly measured and recorded in the order in which it was placed in the well.

H. TESTING FOR PLUMBNESS AND ALIGNMENT

1. **Requirement to Test:** All holes shall be constructed and all casing and liners set round, plumb, and true to line as defined herein. To demonstrate the compliance of his work with this requirement the Contractor shall furnish all labor, tools and equipment and shall make

the tests described herein in the manner prescribed by, and to the satisfaction of, the Project Supervisor. Tests for plumbness and alignment must be made after the complete construction of the well and before acceptance. Additional tests, however, may be made by the Contractor during the performance of the work.

Plumbness and alignment shall be tested by lowering into the well to the lowest anticipated pump setting a section of pipe 40 feet long. The outer diameter of the plumb shall not be more than 1 inch smaller than the diameter of that part of the casing or hole being tested.

2. **Requirements for Plumbness and Alignment:** Should the plumb fail to move freely throughout the length of the casing or hole to a depth of the lowest anticipated pump setting or should the well vary from the vertical in excess of 1 1/2 degrees at any point, the plumbness and alignment of the well shall be corrected by the Contractor at his own expense. Should the Contractor fail to correct any faulty alignment or plumbness, the Contracting Officer may refuse to accept the well. The Project Supervisor may waive the requirements of this paragraph for plumbness if, in his judgment: (a) the Contractor has exercised all possible care in constructing the well and the defect is due to circumstances beyond his control; (b) the utility of the completed well will not be materially affected; and/or (c) the cost of necessary remedial measures will be expensive. In no event will the provisions of this paragraph with respect to alignment be totally waived.

I. TESTING FOR YIELD AND DRAWDOWN

1. **Time of Test:** After the well has been completely constructed and cleaned out and its depth accurately measured, the Contractor shall test for the following per industry standards and the North Dakota State Department of Health.:
 1. pump and yield
 2. drawdown
 3. specific capacity
 4. shut in tests

Shut in tests will run to determine maximum artisan head at the site. Any leaks detected in casing, grout or surface pipe will be immediately corrected by the Contractor at no expense to the Government.

After recovery from the shut-in test is complete, estimated at four hours, an open flow test shall be conducted by open discharge at a maximum yield for a period of not less than 12 hours and until the flow rate remains constant for at least four hours or until the Project Supervisor terminates the test.

Measurements: The discharge during the test will be measured via an approved meter or flume. Measurements of the flowing pressure will be made by a 100 p.s.i. gauge attached to the well head at appropriate times.

A one gallon water sample should be obtained about five minutes before shutting the well in after testing. After the well is shut in, a recovery pressure measurement will be taken.

Auxiliary equipment: The Contractor shall furnish all necessary discharge piping for the pumping unit, which shall be of sufficient size and length to conduct the water being pumped a distance of at least a 100 feet from the well.

J. PROTECTION OF QUALITY OF WATER

1. **Precautions:** The Contractor shall take such precautions as are necessary or as may be required to permanently prevent contaminated water or water having undesirable physical or chemical characteristics from entering, through the opening made by the Contractor in drilling the well, the stratum from which the well is to draw its supply. He shall also take all necessary precautions during the construction period to prevent contaminated water, gasoline, or any other contaminant from entering the well, either through the opening or by seepage through the ground surface. The Contractor shall be responsible for any objectionable material that may fall into the well and its consequences until the completion and acceptance of the work.
2. **Corrective Work:** In the event that the well becomes contaminated or that water having undesirable physical or chemical characteristics enters the well because of the neglect of the Contractor, he shall, at his own expense, perform such work or supply such casing, seals, sterilizing agents or other materials as may be necessary to eliminate the contamination or shut off the undesirable water.
3. **Freedom from Sand and Turbidity:** The Contractor shall exercise care in the performance of his work in order to prevent the breakdown or caving in of strata overlying that from which the water is to be drawn. He shall develop, pump, or bail the well by appropriate standard until the water pumped from the well shall be substantially free from sand and until the turbidity is less than one mg/l.
4. **Temporary Capping:** At all times during the progress of the work, Contractor shall protect the well in such a manner as effectively to prevent either tampering with the well, or the entrance of foreign matter into it. Upon completion of the well, the Contractor shall provide and set a 3/8 inch thick screwed, flanged, or welded cap. The ground immediately surrounding the top of the well casing shall be sloped away from the well. There shall be no openings in the casing wall below its top.
5. **Abandonment of Well:** In the event that the Contractor shall fail to sink the well to the depth specified or to such lesser depth as ordered by the Contracting Officer, or should abandon the well because of loss of tools, or for any other reason the well fails to conform to these specifications and the Contractor is unable to correct the condition at his own expense or negotiate a mutually acceptable cost reduction for specification deviations, it shall be considered an abandoned hole, and the Contractor shall immediately start a new well.

The abandoned hole shall be filled and sealed in accordance with the directives of the State Engineer's Office.

The Contractor may salvage as much casing and screen from the initial well as possible and use it in a new well if not damaged. All salvaged material shall remain the property of the Contractor.

K. DISINFECTION

1. **Scheduling Disinfection:** The Contractor shall provide for disinfection as soon as construction of the well and cleaning procedures have been completed. The Contractor shall carry out adequate cleaning procedures immediately preceding disinfection where evidence indicates that normal well construction and development work have not adequately cleaned the well. All oil, grease, soil, and other materials, which could harbor and protect bacteria from disinfectants, shall be removed from the well.
2. **Disinfectants:** Chlorine or other compounds approved by state or local regulatory agencies shall be used as disinfectants. The disinfectants shall be delivered to the site of the work in original container with original label indicating the percentage of available chlorine. The disinfectant shall be recently purchased. Chlorine compounds in dry form shall not be stored for more than one year and storage of liquid compounds shall not exceed 60 days. During storage, disinfectants shall not be exposed to the atmosphere or to direct sunlight. The quantity of chlorine compounds used for disinfection shall be according to state regulation.
3. **Interim Disinfection:** Should a delay of three days or more be anticipated between the completion of the well and the regularly scheduled well disinfection, an interim disinfection may be required of the Contractor. The disinfecting agent shall be applied through the drill pipe which is to be raised and lowered, to achieve uniform distribution of the solution throughout the well.
4. **Disinfection Procedure:** Unless otherwise modified - due to problems involved with the specific well or conflicts with local, state or federal government regulatory agency requirements - disinfection procedure shall include, but not be limited to the following:

Provide reliable means for insuring that the disinfecting agent is uniformly applied throughout the entire water depth of the well without relying on subsequent mechanical or surging action for dispersing the disinfectant; the dispersion of the disinfectant shall be assisted by pumping into the well a volume of water equal to the volume of screen, after the disinfectant has been emplaced. This will cause the disinfectant to flow out of the well into the area adjacent to the screen.

The disinfecting agent shall be left in the well for a period of at least 12 hours. After a 12 hour, or longer, contact period the well is to be pumped to clear it of the disinfecting agent. The disposal point for the purged water shall be selected so as to minimize potential damage to aquatic life or vegetation.

GENERAL DECISION ND960002 03/15/96 ND2
General Decision Number ND960002

Superseded General Decision No. ND950002

State: North Dakota

Construction Type:
HIGHWAY

County(ies):
STATEWIDE

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	03/15/1996

COUNTY(ies):
STATEWIDE

ELEC0714B 07/01/1995

	Rates	Fringes
ADAMS, BILLINGS, BOTTINEAU, BOWMAN, BURKE, BURLIEGH, DIVIDE, DUNN, EMMONS, GOLDEN VALLEY, GRANT, HETTINGER, MCHENRY, MCKENZIE, MCLEAN, MERCER, MORTON, MOUNTRIAL, OLIVER, PIERCE, RENVILLE, ROLLETTE, SHERIDAN, SOIUX, SLOPE, STARK, WARD, & WILLIAMS COUNTIES:		

ELECTRICIANS:

ELECTRICIAN	16.20	10.5%+a
CABLE SPLICER	16.60	10.5%+a

FOOTNOTE;

a. \$3.70 per hour.

ELEC0714C 10/01/1995

	Rates	Fringes
LINE CONSTRUCTION:		
LINEMAN	20.71	2.00+12.75%
CABLE SPLICER	20.71	2.00+12.75%
LINE EQUIPMENT OPERATOR	18.64	2.00+12.75%
GROUNDMAN	11.49	2.00+12.75%

ELEC1426C 06/01/1993

	Rates	Fringes
BARNES, BENSON, CAVALIER, DICKY, EDDY, FOSTER, GRAND FORKS, GRIGGS, KIDDER, LAMOURE, LOGAN, MCINTOSH, NELSON, PEMBINA, RAMSEY, RANSOM, RICHLAND, SARGENT, STEELE, STUTSMAN, TOWNER, TRAILL, WALSH, & WELLS COUNTIES:		

ELECTRICIANS:

ELECTRICIAN	14.70	2.95+11.5%
CABLE SPLICER	15.45	2.95+11.5%

ENGI0049B 11/01/1995

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	13.50	4.00
GROUP 2	13.35	4.00
GROUP 3	13.10	4.00
GROUP 4	12.95	4.00
GROUP 5	12.10	4.00
GROUP 6	10.80	4.00

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1:

All Terrain Vehicle Cranes 80 tons and over and Hydro Cranes 80 tons and over Crane Operator with 135' Boom and over Derrick (Guy & Stiff Leg) Gantry Crane Operator Helicopter Operator (Construction Work Only) Mole Operator, or Tunnel Mucking Machine Power Shovel and /or other Equipment with Shovel Type Controls 3-1/2 Cu. Yd. Mfg. Rated Capacity & Over Travelling Tower Crane

GROUP 2:

All Terrain Vehicle Cranes over 20 tons and up to 80 tons and Hydro Cranes 20 tons up to 80 tons Dredge Operator over 12" Finish Motor Grader Creter Crane Crane Operator up to 135' boom Master Mechanic: The inclusion of the classification of Master Mechanic in this Agreement does not mean that a Master Mechanic must be employed, but if employed, that he shall perform manual work Equipment Dispatcher Power Shovels up to 3-1/2 cu. yd. Mon-O-Rail Hoist Operator Front End Loader Operator over 8 cu. yd. Tugboat Backhoe Operator 3 cu. yds. and over

GROUP 3:

All Terrain Vehicle Cranes - thru 20 tons and Hydro Cranes thru 20 tons Drill Rigs, Heavy Duty Rotary or Churn or Cable Drill Front End Loader Operator 3 cu. yd. up thru 8 cu. yd. Locomotive, all types. Mechanic, Heavy Duty. Pipeline Wrapping, Cleaning & Bending Machine Operator. Power Actuated Horizontal Boring Machine Over 6" Operator. Refrigeration Plant Engineer. Slip Form Operator (Paving) (Concrete). Tandem Pushed Quad 9 or similar. Asphalt Paving Machine Operator. Asphalt Plant Operator. Motor Grader Operator. Crushing Plant Operator, Gravel Washing, and Screening Plant Operator Automated Grade Trimmer. Backhoe Operator over 1/2 cu. yd. up to 3 cu. yd. Boom Truck, Hydraulic - 8 tons and over. Cableway Operator

Roto Milling Machine (surface planer) 43" and over.
 Concrete Batch Plant Operator Concrete Mixer Paving Machine
 Operator Concrete Paver - Bridge Decks Concrete Pump, Concrete
 Belt Placer, Dozer Operator Scraper Operator Tractor with boom
 attachment, Trenching Machine Operator, over 100 H.P. Dredge
 Operator or Engineer up thru 12" Paving Breaker - Non Hydro
 Hammer Type Power Actuated Horizontal Boring Machine over 6"
 Operator

GROUP 4:

Asphalt Paving Screed Operator concrete Spreader Operator,
 Backhoe up thru 1/2 cu. yd. Greaser Motor Grader
 Operator (Haul Road) Paving Breaker Hydro Hammer Type
 Console Board Operator Push Tractor Roller, Steel, and Rubber on
 Hot Mix Asphalt Paving Rotomill Operator (up to 42")
 Self-Propelled Traveling Soil Stabilizer Slip Form, Curb and

Gutter Operator Distributor Operator (bituminous)
 Traeching Machine Operator. 40 H.P. - 100 H.P. Truck Mechanic
 Forklift Operator Sheepsfoot Packer with Dozer Attachment - 100
 H.P. and over Front End Loader 1-1/2 cu. yds. up to 3 cu. yds.
 (Standard Mfg. Rating) Gravel Screeding Plant Operator (not
 crushing or washing) Logitudinal Float and Spray Operator
 Pugmill Operator Shouldering Machine Tamping Machine Operator
 Tie Tamper and Ballast Machine Well Points

GROUP 5:

Boom Truck A-Frame or Hydraulic 3 to 8 tons broom - Self-
 Propelled Concrete Saw (Power Operated) Front End Loader Operator
 up to 1-1/2 cu. yds. Mobile Cement Mixer Off Road Hauler
 Power Actuated Augers and Boring Machine Operator - Up thru 6"
 Roller, (on other than Hot Mix Asphalt Paving) Sand and Chip
 Spreader - Self Propelled Truck Crane Oiler Vibrating Packer
 Operator (Pad type) (Self-propelled) Water Spraying Equipment -
 Self Propelled Sheepsfoot Roller on Compactor - Self Propelled

GROUP 6:

Brakeman or Switchman Form Trench Digger (power)
 Crane Oiler Gunite Operator Gunall Pick-up Sweeper, 1 yd. and
 Over Hopper Capacity Tractor Pulling Compaction or Areating
 Equipment Scissor Jack (self-propelled), Platform Lift
 Trenching Machine Operator, Under 40 H.P. Curb Machine Operator
 (Manual) Dredge or Tugboat Deck Hand Paint Machine Striping
 Operator Stump Chipper Operator Straw Mulcher and Blower

SUND3001A 08/19/1994

	Rates	Fringes
CARPENTERS	12.25	
CEMENT MASON	11.15	
ELECTRICIANS:		
CASS COUNTY	14.72	3.40

LABORERS:

GROUP 1:	7.68
GROUP 2:	7.99
GROUP 3:	8.14
GROUP 4:	8.89
FLAGGERS	6.41

LABORERS CLASSIFICATIONS

GROUP 1: General Construction Laborers: Sack Shaker (cement and mineral filler): Pipe Handler: Drill Runner Tender: Salamander Heater and Blower Tender.

GROUP 2: Semi Skilled Laborer: Bulk Cement Handler: Conduit Layer, Telephone or Electrical: Form Setter (pavement): Gas Electric or pneumatic tool operator: Chipping Hammer,

Grinders and Paving Brakers (tamper-drit) Concrete Vibrator Operator: Chain Saw Operator: Concrete Saw Operator: Concrete Curing Man (not water): Bituminous worker (Shoveler, Dumper, Raker and Floated): Kettleman (bituminous or lead): Concrete Bucket Signlman: Power Buggy Operator: Brick and Mason Tender: Multiplate Pipelayer: Culvert Pipe Layers: Concrete Finishers Tender. Carpenters Tenders.

GROUP 3: Caisson Worker: Bottom Man (sanitary sewer, storm sewer water and gas liners): Concrete Mixer Operator (one bag capacity): Mortar Mixer.

GROUP 4: Pipe Layers (sanitary sewer, storm sewer, water and gas lines): Drill runner (includes Wagon Churn or Air Track) Powderman, Guniting and Sandblast, (Nozzleman, Reinforcing Steel Setters/Tiers.

TEAM0082A 11/01/1995

	Rates	Fringes
TRUCK DRIVER:		
Single Axle	12.22	3.20
Tandem Tri/Axle Truck	12.34	3.20
Tandem Tri/Axle Semi	12.65	3.20
Lowboy	12.65	3.20
Off Road Heavy Duty End Dumps		
20 Yards And Under	12.65	3.20
Euclid, Over 20 Yards	13.42	3.20

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses

(29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

END OF GENERAL DECISION

SAFETY

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS, INCLUDING THOSE INVOLVING MACHINERY AND SELF-PROPELLED VEHICLES AND EQUIPMENT, SO AS TO PREVENT ACCIDENTS, INJURIES AND DAMAGES; SHALL OBSERVE ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" AS PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA; AND SHALL OTHERWISE FURNISH AND EMPLOY SUCH ADDITIONAL SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT AND MEASURES; AS THE CONTRACTING OFFICER MAY DETERMINE TO BE NECESSARY FOR THE PROTECTION OF PROPERTY AND FOR THE LIFE AND HEALTH OF PERSONNEL.

CLEAN-UP

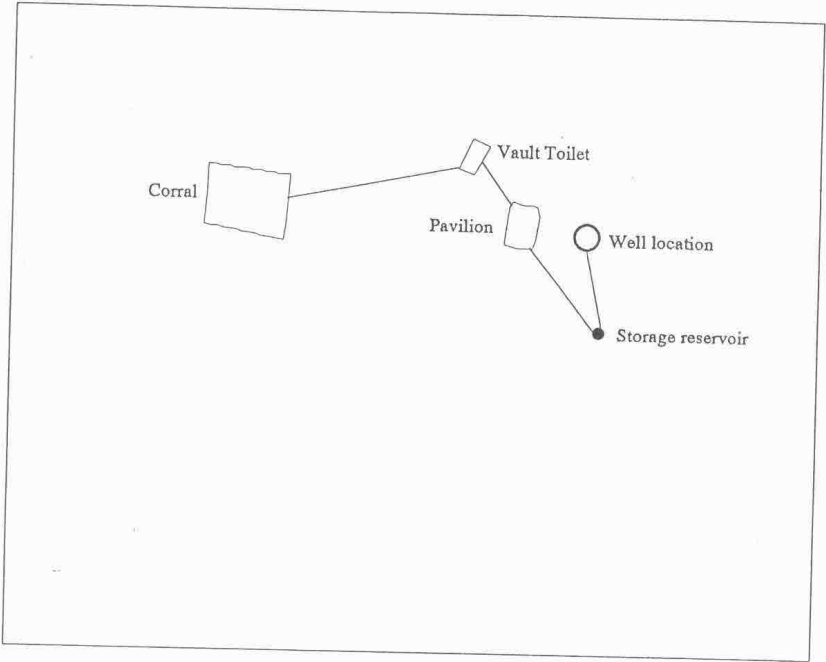
AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT, TOOLS, SURPLUS MATERIALS AND RUBBISH TO A LOCATION OUTSIDE THE EXTERIOR BOUNDARIES OF:
Theodore Roosevelt National Park, Billings County, North Dakota.

FINAL INSPECTION AND ACCEPTANCE OF WORK

WHEN ALL WORK OF THE CONTRACT HAS BEEN COMPLETED, INCLUDING CLEAN-UP AND RESTORATION, THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER, AND THE CONTRACTING OFFICER WILL THEN MAKE FINAL INSPECTION. WHEN DEFECTS, ERRORS AND OMISSIONS DISCLOSED BY THE FINAL INSPECTION HAVE BEEN CORRECTED, ACCEPTANCE WILL BE GIVEN IN WRITING; BUT UNTIL SUCH ACCEPTANCE, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE WORK COVERED BY THE CONTRACT. AT THE OPTION OF THE CONTRACTING OFFICER, ACCEPTANCE MAY BE GIVEN PRIOR TO THE CORRECTION OF SUCH DEFECTS, ERRORS, AND OMISSIONS WHICH DO NOT PRECLUDE THE OPERATION AND USE OF THE FACILITY; HOWEVER, IN THIS EVENT, FINAL PAYMENT WILL BE WITHHELD UNTIL ALL CORRECTIONS HAVE BEEN MADE.

PAYMENT

PAYMENT WILL BE MADE UPON COMPLETION OF THE WORK IN A SATISFACTORY MANNER, AND UPON RECEIPT BY THE PAYING OFFICE OF PROPERLY EXECUTED INVOICING DOCUMENTS.

GROUND WATER SOURCE AND DISTRIBUTION	
	
Scale 1" = 123'	
Legal description: NE 29 T141N R101W	
APPROVED _____	
State Engineer	
STATE OF NORTH DAKOTA)) SS COUNTY OF GRANT)	
I, _____ of _____ do hereby certify that this map was prepared from information obtained from field surveys and that it represents the well location for the ccompanying application.	MAP To accompany application NO. _____ for T. ROOSEVELT NATIONAL PARK BILLINGS COUNTY, ND T. ROOSEVELT NATIONAL PARK Medora, ND APPLICANT
_____ Surveyor	

Docket Information

Number of Documents in Docket 50

Documents Dated from 7/17/1996 to 9/18/1996

Docket Compiled: 12/15/2011