



# WATER-RIGHT DOCKET

## Effigy Mounds National Monument

Docket No: 2

ASHCROFT WELL.

State Water Rights Documentation

00-00-0000: application for permit to install utility facilities within public right of way

Form MP-2  
2-15-61

4246

### APPLICATION FOR PERMIT TO INSTALL UTILITY FACILITIES WITHIN PUBLIC RIGHT OF WAY

TO: STATE HIGHWAY COMMISSION  
P. O. Box 1641  
Santa Fe, New Mexico

☐ Renewal Permit  
☒ Original Permit  
(Check one)

1. The undersigned National Park Service

address; Region Three Office, P. O. Box 1728, Santa Fe, New Mexico

herewith makes application to install the following utility facility:

4" conduit for installation of 2" water line to cross State Road 53  
near El Morro, New Mexico.

(water, sewer, oil, gas, steam, electric, telephone or other)

(Also give voltage, pressure, type of liquid if other than water or sewage)  
in the following location: NE 1/4 Sec. 6, T. 9 N., R. 14 W., N.M.P.M. and crosses the  
centerline of State Road 53 at Station 6940+55.

(Give County, number and name of highway, highway engineering stations, section, township, range or other information so location can be readily ascertained.)

2. For the purposes of this application "Within" shall be construed as meaning "on, over, across, under, above and along."

a. "Chief Highway Engineer" shall be construed as meaning the "Chief Highway Engineer or his representative," hereinafter referred to as Engineer.

b. "State" shall be construed as meaning: the "State of New Mexico, all governmental subdivisions, boards, commissions, agencies, officers and employees thereof."

c. "Applicant" shall be construed as meaning: the "Individual, firm, corporation, association, governmental subdivision, or other organizations making this application, or the successors of any of the above."

d. "Commission" shall mean State Highway Commission.

e. "Utility facility" shall be construed as meaning, but not limited to, any publicly, privately cooperatively, municipally or governmentally owned facility used for carriage, distribution or transmission of water, gas or electricity, either for power, or communications, oil and products derived therefrom, sewage, steam and other products carried by means of pipelines, conduits, wires, culverts, ditches or conveyors or other methods.

3. This application is for a crossing subsurface

(Crossing or parallel) (Subsurface or overhead)

installation.

A "crossing installation" is one where the smaller angle of intersection between the utility line and the center line of the highway is greater than 45°; where the angle of intersection is less than 45° the installation will be deemed parallel.

4. If application is for a parallel installation, justification as to why the utility facility cannot be located on private right of way must be furnished. (Use blank space below paragraph 27.)

5. Applicant proposes to install parallel utility facility:

feet inside the \_\_\_\_\_ right of way line.  
(north, south, east, west)

If it is proposed to install overhead utility facility more than two (2) feet or subsurface utility facility more than six (6) feet inside right of way line, give reasons for doing so: (Use blank space below paragraph 27.)

6. The top of all sub-surface crossing installations of utility facilities must be at least thirty-six (36) inches below lowest point of the highway cross-section along the alignment of the utility installation.

The top of all parallel utility installations must be at least thirty-six (36) inches below grade along the alignment of the utility installation.

If applicant proposes installation at lesser depth, give reasons. (Use blank space below paragraph 27.)

7. Applicant proposes to cross right of way which has a finished permanent type surface pavement —asphalt, concrete or similar paving, by \_\_\_\_\_

(Jacking, boring, tunneling or pavement cut)

with memo of May 16, 1961  
from Asst Reg. Dir. Miller Co

Form MP-2

a. If applicant desires to cross by making a pavement cut, give reasons for doing so: \_\_\_\_\_

(Use blank space below paragraph 27)

Where application for paving cut is justified the application will be held in abeyance pending receipt of cash bond in an amount to be fixed by the Engineer to insure replacement of paving and compaction of soil in a satisfactory manner. Bond may be waived and the amount will be based on type and age of paving to be cut and the total area involved. Maximum bond will be \$250.00.

8. There is attached hereto a diagrammatic or dimensioned drawing showing the location of proposed installation, width of right of way, height or depth of utility facility above or below grade, survey ties and other pertinent features. If application is for a parallel installation, the general status of land abutting right of way should be indicated as to buildup, irrigated, grazing, residential, commercial and setbacks, etc. Installations on bridges or other highway structures require special detail drawings.

9. Applicant desires this permit to be in effect for 25 years.

Permit will not be issued for a period longer than 25 years; must be renewed by Applicant upon expiration and the burden of timely renewal is on the Applicant.

10. The signing of the application by the Engineer and return to Applicant shall validate this application as a permit.

#### OVERHEAD INSTALLATIONS:

11. Applicant proposes to install the crossing utility facility so that lowest member or portion of facility will be at least eighteen (18) feet above main traveled portion of highway. All installations, including parallel facilities, shall comply with the current National Electric Safety Code.

12. All permits are granted subject to the following express conditions and by signing this application the Applicant signifies that Applicant has read, understands and will abide these conditions.

13. That no permit granted hereunder shall be construed as granting any easement or property right, but shall merely constitute the granting of a revocable license.

14. That the construction work to be undertaken pursuant to the permit herein applied for will be commenced not later than May 5, 1961, and completed not later than

May 20, 1961. Notice of the actual commencement of construction shall be given to District Three Office, State Highway Department, 2400 Broadway, Albuquerque, New Mexico  
(appropriate District Office)

not less than three (3) days prior to commencement of construction unless waived by notation to this effect on the application.

15. That installation of utility facilities within the right of way shall be in strict conformity with this application and drawings as the same may be modified by the Engineer and no departure therefrom may be made without the written consent of the Engineer and all construction shall be subject to the supervision of the Engineer. All facilities shall be so placed that they will not interfere with or endanger any existing utility facility already in right of way or any highway structure.

16. That all construction work undertaken pursuant to this application will be so carried on that danger, inconvenience and delay to the traveling public will be held to a minimum and where interference with traffic is unavoidable, traffic control and safety precautions shall be in accordance with any safety code adopted by the Commission.

17. That the Applicant will, except as otherwise ordered by the Engineer, restore the highway right of way, and all bridges or other structures thereon or adjacent thereto which have been altered or affected by construction work performed hereunder, in accordance with sound construction practices and Commission specifications applicable to such work of restoration and shall cause the work to be done in a workmanlike manner.

18. That if any damage is caused to the highway right of way or to any bridge, structure or improvement thereon or adjacent thereto by reason of the installation, maintenance, alteration or removal of the facilities or other appurtenances of the Applicant, the Applicant will reimburse Commission the full amount thereof promptly upon demand by the Engineer; provided, however, that the obligations imposed under this paragraph shall not apply in the event the damage resulted from causes beyond the control of the Applicant.

~~19. That the Applicant will at all times indemnify and save harmless the State from any and all claims of every kind or character caused by or incident to the installation, maintenance, alteration, removal or condition of the utility facilities in the right of way and will promptly reimburse the State for any and all expenses incurred by the State in resisting any such claim or claims.~~

~~Nothing herein shall be construed to mean that the Applicant hereunder will indemnify and save harmless the State from any claim caused by or incident to any neglect, carelessness or breach of duty on the part of the State.~~

20. That all such utility facilities installed within the right of way shall at all times be kept in such repair so as not to damage the highway, inconvenience or endanger the traveling public and shall be kept free from advertisements, posters and the like.

21. That if the Applicant should at any time fail to promptly and fully perform any of the obligations imposed upon Applicant hereby, and after notice thereof, the Engineer may, at his option, (a) cause the obligations to be fully carried out and performed, and the Applicant will promptly reimburse the commission for all costs and expenses incident thereto, (b) may summarily order the removal of such utility facility and if Applicant fails to comply within a reasonable time, the Engineer may direct the removal of the utility facility with all costs and expenses incident thereto to be borne by Applicant.

Form MI-2

4246

22. That if by reason of any change in the location, construction, grade or any other matter affecting the highway upon which any utility facility is located because of changing traffic conditions or otherwise, it shall become advisable in the opinion of the Engineer that said utility facility be removed, relocated or otherwise modified, the Applicant, upon written notice from the Engineer, shall remove, relocate or modify such utility facility without undue delay and in such manner as the Engineer may direct or approve at the Applicant's expense and without expense to the State.

23. All utility facilities to be installed on public right of way under the dual jurisdiction of the State and a subordinate governmental entity shall comply with all applicable rules and regulation of such subordinate government entity properly and lawfully in force and including provisions of local franchises not in conflict with the rules and regulations of the Commission.

24. The Commission makes no warranty either express or implied as to the continued existence of any highway in any particular location and expressly assumes no obligation with regard to the utility facility upon change, vacation or abandonment of any highway or portion thereof.

25. Neither the making of this application nor anything herein contained shall constitute a waiver on the part of the Applicant of any rights or claims had or made by Applicant with respect to the occupancy of the streets and highways under the Constitution and Laws of the State of New Mexico nor shall anything herein contained in anywise prejudice or impair any rights or claims existing independently of this application with respect to the construction, operation and maintenance of the Applicant's utility system in the State of New Mexico.

26. This application is hereby granted subject to the following special provisions changes or amendments:

27. Applicant shall notify Engineer of removal or discontinuance of use of utility facility or any portion thereof.

**28. Nothing herein contained shall be construed as binding the National Park Service to expend in any one fiscal year any sum in excess of appropriations made by Congress for that fiscal year or to involve the United States in any contract or other obligations for the further expenditures of money in excess of such appropriations.**

**29. No member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom.**

Executed at Santa Fe, New Mexico, this 2nd day of May, 19 61.

**United States of America**  
**National Park Service**

By

*Thomas J. Allen*  
**Thomas J. Allen**  
**Regional Director**  
(Title)

APPROVAL of this permit is hereby given this 2nd day of May, 19 61.

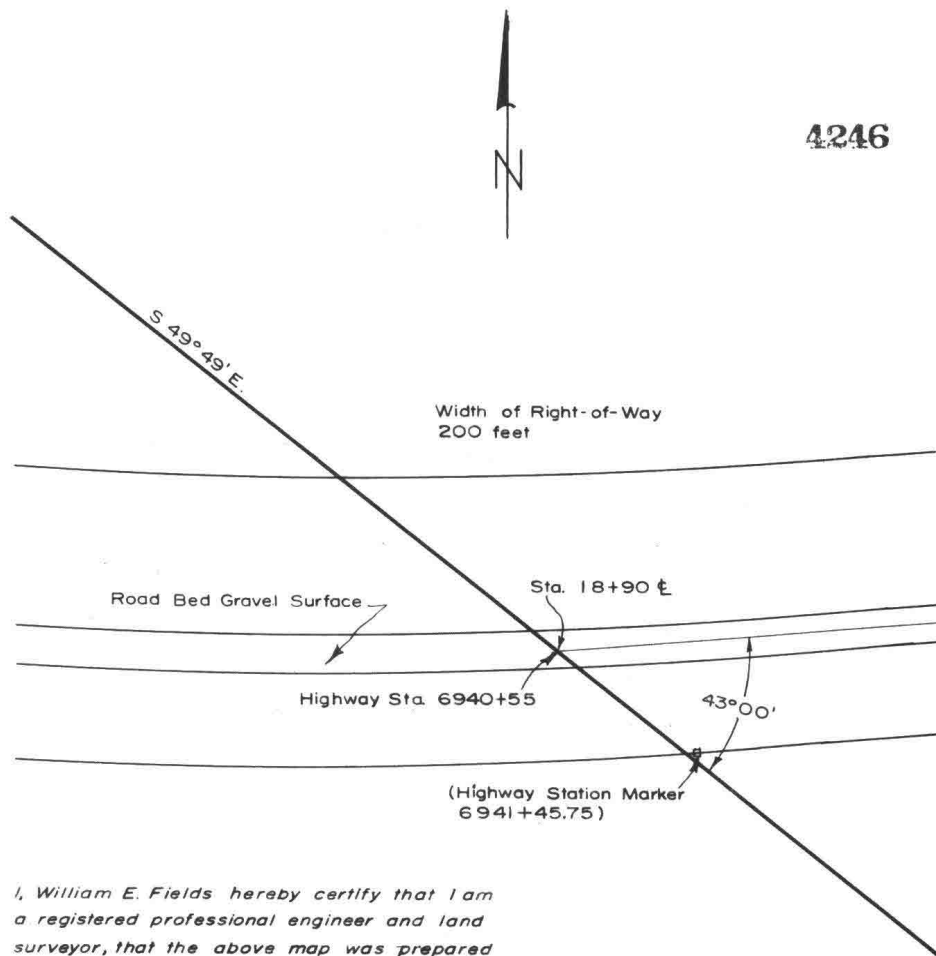
STATE HIGHWAY COMMISSION OF NEW MEXICO

**T. B. WHITE**

Chief Highway Engineer

By:

*W. A. Bennett*  
Maintenance Engineer



I, William E. Fields hereby certify that I am  
a registered professional engineer and land  
surveyor, that the above map was prepared  
from field note of an actual survey made  
by me and that the same is true and correct  
to the best of my knowledge and belief.

William E. Fields  
William E. Fields  
P.E. & L.S. No. 1403  
May 2, 1961

SKETCH SHOWING PROPOSED CROSSING OF S.R. 53 BY  
2" WATER LINE TO BE INSTALLED BY NATIONAL PARK  
SERVICE TO EL MORRO NATIONAL MONUMENT.

NM-EM-7108

By C. Arquero

Land History

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

The within deed is accepted on behalf of the United States as of January 17, 1962, under the authority contained in the Department of the Interior and Related Agencies Appropriation Act, 1961 (74 Stat. 1041), and delegated by sections 1 and 7 of Departmental Order No. 2540, as amended, delegating authority to Assistant Directors of this Service to accept deeds.

*Henry A. Tolson*  
Assistant Director

SP SHORT FORM WARRANTY DEED

11-59-New Mexico Statutory Form

## WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS; THAT WE, RULON A. ASHCROFT and  
 IVY M. ASHCROFT, husband and wife, of the County of Valencia, State of New Mexico,  
 For and in consideration of EIGHTEEN THOUSAND DOLLARS (\$18,000) ~~for and in consideration of~~ paid, grant  
 to THE UNITED STATES OF AMERICA and its assigns

the following described real estate in Valencia County, New Mexico:

The North half of the Northwest quarter (N $\frac{1}{2}$ NW $\frac{1}{4}$ ) of  
 Section Six (6) consisting of Lot 1 and the Northeast  
 quarter of the Northwest quarter (NE $\frac{1}{4}$ NW $\frac{1}{4}$ ) of Township  
 Nine (9) North, Range Fourteen (14) West, New Mexico  
 Principal Meridian, containing 79.12 acres more or less.

TOGETHER with all water and water rights thereon or appurtenant  
 thereto, of whatsoever nature, that may be owned, claimed,  
 or subject to use by the vendors and wife, may remain  
 to, or be used in connection with, the above described  
 lands.

This conveyance is made with warranty covenants, except:  
 SUBJECT TO a right-of-way for New Mexico Highway, State  
 Route No. 53, which is described in Grant of Right of Way  
 Easement dated May 20, 1950, and filed for record June 7, 1950, in  
 Book R/W 1, page 200 Records, Valencia County, New Mexico.

AND subject to reservations as contained in patent number  
 1011438, dated February 1, 1928, from the United States  
 of America.

with warranty covenants.

WITNESS our hands and seals this 12th day of January, 1962.

(Seal) Rulon A. Ashcroft (Seal)

(Seal) IVY M. Ashcroft (Seal)

## ACKNOWLEDGMENT FOR NATURAL PERSONS

STATE OF NEW MEXICO

COUNTY OF

The foregoing instrument was acknowledged before me this day of

by (Name or Names of Person or Persons) and

My commission expires

(Seal)

FOR RECORDERS USE ONLY

STATE OF NEW MEXICO  
 COUNTY OF VALENCIA  
 This instrument was recorded on 12-17-62 at 4:00 PM  
 Recorder's Office  
 County Clerk  
 Fee

50 CENTS 10 5

THE VALLIANT CO. BUDGETON N. M. 87401

Supporting Hydro Data

C  
O  
P  
Y

1. Location of well (as close as possible, marked on attached sketch)
2. Total depth of well 205 ft
3. Formations encountered in drilling (depth of each formation encountered)
  - A. 0. to 5 Feet Top Soil
  - B 5 to 200 Feet Lava
  - C 200 to 205 Feet Sand
4. Diameter of well Drilled with Quick Bit  
Size of casing Short 8 In. Stub in Top  
Amount of perforation in feet None
5. Production in gallons per minute \_\_\_\_\_  
By pump test \_\_\_\_\_  
or  
Bail test 38 Gal. per Minute  
Length of test \_\_\_\_\_ hours
6. Name of driller Roy Reynolds  
Date drilled 12-5-59

I am not sure as 38 gal. is all the well will pump - that is all the bailer would take out. The water stands at 150 ft. from the top. There was a small seep at 165 ft. - just enough to drill with and the water come in at 200 ft.

The well is located close to this N W corner of my property.

Form 10-174  
(Rev. 8-55)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
COMPLETION REPORT OF CONSTRUCTION PROJECT

|                                                                                                 |                                           |                                                                                              |                                      |
|-------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------|
| REGION<br><b>Three</b>                                                                          | AREA<br><b>El Morro National Monument</b> | COUNTY<br><b>Valencia</b>                                                                    | STATE<br><b>New Mexico</b>           |
| PROJECT OR JOB TITLE<br><b>Water Supply &amp; Dist'n. Sys., V.C., Res.-Util. Areas</b>          |                                           | PCP NO.<br><b>U-9-1</b>                                                                      |                                      |
| LOCATION IN AREA<br><b>Sewage Disposal Sys.: Septic Tank, Disposal Field, Lines</b>             |                                           | MASTER PLAN NO.                                                                              | BUILDING NO.<br><b>U-10-1 U-13-1</b> |
| WORKING DRAWING NO. AND TITLE<br><b>NM-3113 (8 sheets) &amp; 3114, Water and Sewer Systems</b>  |                                           |                                                                                              |                                      |
| APPROPRIATION TITLE AND SYMBOL<br><b>Construction, National Park Service, 14x1035</b>           |                                           | WORK ORDER NO.<br><b>B-2 ELMO</b>                                                            |                                      |
| CONTRACT NO.<br><b>14-10-0333-642, 804 &amp; 811</b>                                            |                                           | DATE WORK COMPLETED<br><b>Nov. 17, 1961</b>                                                  |                                      |
| NAME OF CONTRACTOR<br><b>E.M. Silver<br/>B &amp; W Drilling Co.<br/>Martin Construction Co.</b> |                                           | DATE WORK STARTED<br><b>July 18, 1960</b>                                                    |                                      |
|                                                                                                 |                                           | ADDRESS<br><b>Albuquerque, New Mexico<br/>Gallup, New Mexico<br/>Albuquerque, New Mexico</b> |                                      |

## COST ANALYSIS

| CONSTRUCTION ITEMS                    | QTY. | UNIT COST IN PLACE | TOTAL COST IN PLACE |
|---------------------------------------|------|--------------------|---------------------|
| <b>Contract</b>                       |      |                    |                     |
| Water System - E.M. Silver            |      |                    | \$32,111.91         |
| B & W Drilling Co.                    |      |                    | 3,793.00            |
| Martin Construction Co.               |      |                    | 23,672.12           |
| <b>Day Labor</b>                      |      |                    | 920.97              |
| Total - Water System                  |      |                    | 60,498.00           |
| <b>Contract</b>                       |      |                    |                     |
| Sewage Disposal System - E.M. Silver  |      |                    | 10,757.50           |
| Construction Costs                    |      | \$ 71,255.50       |                     |
| Plus PS & S Costs 19.06%              |      | 13,581.30          |                     |
| Total Project Costs                   |      | 84,836.80          |                     |
| FIELD FINANCE OFFICE CLEARANCE:       |      |                    |                     |
| <i>Henry Alarid Jr.</i>               |      |                    |                     |
| Henry Alarid Jr., Regional Accountant |      |                    |                     |
| March 12, 1962                        |      |                    |                     |
| TOTAL                                 |      |                    | \$71,255.50         |

## SUMMARY OF EXPENDITURES

|                                                                                                                    |                      |                        |
|--------------------------------------------------------------------------------------------------------------------|----------------------|------------------------|
| PERSONAL SERVICES                                                                                                  | EQUIPMENT            | MATERIALS AND SUPPLIES |
|                                                                                                                    |                      | \$88.81                |
| OTHER                                                                                                              |                      |                        |
| \$71,166.69                                                                                                        |                      |                        |
| CHANGE ORDERS                                                                                                      |                      |                        |
| ORIGINAL CONTRACT AMOUNT                                                                                           | FIRST 2,011.00       | SECOND Over-runs       |
| <del>72,733.59</del> 72,733.59                                                                                     | <del>13,068.00</del> | \$53.00                |
| FINAL CONTRACT AMOUNT                                                                                              | Under-runs           | SIXTH                  |
| \$70,334.53                                                                                                        | <del>14,163.06</del> |                        |
| THIS PROJECT OR JOB HAS BEEN COMPLETED IN ACCORDANCE WITH<br>APPROVED DRAWINGS, SPECIFICATIONS, AUTHORIZED CHANGES |                      |                        |
| SUBMITTED BY (Name and title)                                                                                      | DATE                 |                        |
| APPROVED BY (Name and title) <i>Irving McNeil, Jr.</i>                                                             | DATE                 |                        |
| Irving McNeil, Jr., Supt.                                                                                          | February 8, 1962     |                        |

(ATTACH NARRATIVE STATEMENT, PHOTOGRAPHS, AND "AS BUILT" DRAWINGS TO THIS FORM)

Form 19-174  
(Rev. 8-56)UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
COMPLETION REPORT OF CONSTRUCTION PROJECT

|                                                                                         |                                           |                                                          |                                             |
|-----------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------|---------------------------------------------|
| REGION<br><b>Three</b>                                                                  | AREA<br><b>El Morro National Monument</b> | COUNTY<br><b>Valencia</b>                                | STATE<br><b>New Mexico</b>                  |
| PROJECT OR JOB TITLE<br><b>Water Supply &amp; Distribution System</b>                   |                                           | PCP NO.<br><b>U-9-1</b>                                  |                                             |
| LOCATION IN AREA<br><b>Visitor Center, Res.-Util. Areas</b>                             |                                           | MASTER PLAN NO.                                          | BUILDING NO.                                |
| WORKING DRAWING NO. AND TITLE<br><b>NM-EM 3113 (8 sheets) Water &amp; Sewer Systems</b> |                                           | WORK ORDER NO.<br><b>B-2 ELMO</b>                        |                                             |
| APPROPRIATION TITLE AND SYMBOL<br><b>Construction, National Park Service, 14X1035</b>   |                                           | DATE WORK STARTED<br><b>July 18, 1960</b>                | DATE WORK COMPLETED<br><b>Oct. 10, 1960</b> |
| CONTRACT NO.<br><b>14-10-0333-642</b>                                                   |                                           | ADDRESS<br><b>P.O. Box 1062, Albuquerque, New Mexico</b> |                                             |
| NAME OF CONTRACTOR<br><b>E.M. Silver</b>                                                |                                           |                                                          |                                             |

## COST ANALYSIS

| CONSTRUCTION ITEMS                       | QTY.      | UNIT COST<br>IN PLACE | TOTAL COST<br>IN PLACE |
|------------------------------------------|-----------|-----------------------|------------------------|
| 6" Class 200 Asbestos Cement Pipe        | 1771 ft.  | 3.00                  | \$ 5,313.00            |
| 6" Class 150 Cast Iron Pipe              | 603.9 ft. | 12.00                 | 7,246.80               |
| 4" Cement Lined Class 150 Cast Iron Pipe | 48.3 ft.  | 3.85                  | 185.96                 |
| Concrete Valve Boxes and Valves          | 3 ea.     | 825.00                | 2,475.00               |
| Fire Hydrants                            | 5 ea.     | 350.00                | 1,750.00               |
| Two-Conductor No. 10 Cable               | 2396 ft.  | 0.25                  | 599.00                 |
| 50,000 Gallon Steel Reservoir            | Lump sum  | 12,500.00             | 12,500.00              |
| 2" Galv. Iron Pipe Drains                | 110 ft.   | 1.62                  | 178.20                 |
| 18" CMP Valve Boxes & Valves             | 6 ea.     | 80.00                 | 480.00                 |
| 1" Galv. Steel Pipe                      | 334 ft.   | 1.30                  | 434.20                 |
| Change Order No. 1                       |           |                       | 949.75                 |
|                                          |           | TOTAL                 | \$32,111.91            |

## SUMMARY OF EXPENDITURES

| PERSONAL SERVICES | EQUIPMENT | MATERIALS AND SUPPLIES |
|-------------------|-----------|------------------------|
|                   |           |                        |

Form 10-174  
(Rev. 8-56)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
COMPLETION REPORT OF CONSTRUCTION PROJECT

|                                                         |                             |                     |                |
|---------------------------------------------------------|-----------------------------|---------------------|----------------|
| REGION                                                  | AREA                        | COUNTY              | STATE          |
| Three                                                   | El Morro National Monument  | Valencia            | New Mexico     |
| PROJECT OR JOB TITLE                                    | MASTER PLAN NO.             |                     | PCP NO.        |
| Water Supply (Reaming and Development of Ashcroft Well) |                             |                     | U-9-1          |
| LOCATION IN AREA                                        | BUILDING NO.                |                     |                |
| Headquarters                                            |                             |                     |                |
| WORKING DRAWING NO. AND TITLE                           |                             |                     |                |
| APPROPRIATION TITLE AND SYMBOL                          |                             |                     | WORK ORDER NO. |
| Construction, National Park Service, 14X1035            |                             |                     | B-2 EIMO       |
| CONTRACT NO.                                            | DATE WORK STARTED           | DATE WORK COMPLETED |                |
| 14-10-0333-804                                          | Aug. 29, 1961               | Oct. 7, 1961        |                |
| NAME OF CONTRACTOR                                      | ADDRESS                     |                     |                |
| B & W Drilling Co.                                      | P. O. Box 967, Gallup, N.M. |                     |                |

## COST ANALYSIS

[illegible]

### SUMMARY OF EXPENDITURES

| PERSONAL SERVICES | EQUIPMENT | MATERIALS AND SUPPLIES |
|-------------------|-----------|------------------------|
| OTHER             |           |                        |

Form 10-174  
(Rev. 8-56)UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

## COMPLETION REPORT OF CONSTRUCTION PROJECT

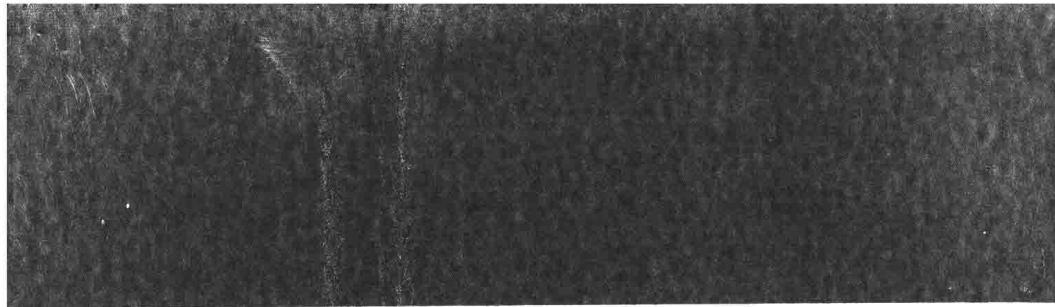
|                                                                                       |                                           |                                                   |                            |
|---------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------|----------------------------|
| REGION<br><b>Three</b>                                                                | AREA<br><b>El Morro National Monument</b> | COUNTY<br><b>Valencia</b>                         | STATE<br><b>New Mexico</b> |
| PROJECT OR JOB TITLE<br><b>Construction of Water Supply</b>                           |                                           | PCP NO. <b>U-9-1</b><br><b>U-13-1</b>             |                            |
| LOCATION IN AREA<br><b>Headquarters, Res.-Util. Areas, Picnic Area</b>                |                                           | MASTER PLAN NO.                                   | BUILDING NO.               |
| WORKING DRAWING NO. AND TITLE<br><b>NM-EM 3114 (7 sheets)</b>                         |                                           | WORK ORDER NO.<br><b>B-2 ELMO</b>                 |                            |
| APPROPRIATION TITLE AND SYMBOL<br><b>Construction, National Park Service, 14X1035</b> |                                           | DATE WORK COMPLETED<br><b>Nov. 24, 1961</b>       |                            |
| CONTRACT NO.<br><b>14-10-0333-811</b>                                                 |                                           | DATE WORK STARTED<br><b>Sept. 9, 1961</b>         |                            |
| NAME OF CONTRACTOR<br><b>Martin Construction Co.</b>                                  |                                           | ADDRESS<br><b>506 Aliso NE, Albuquerque, N.M.</b> |                            |

## COST ANALYSIS

| CONSTRUCTION ITEMS                        | QTY.     | UNIT COST<br>IN PLACE | TOTAL COST<br>IN PLACE |
|-------------------------------------------|----------|-----------------------|------------------------|
| <b>MAIN BID</b>                           |          |                       |                        |
| Pump House, Pumping Plant                 | Lump-Sum | 3,000.00              | \$ 3,000.00            |
| Electrical Work                           | Lump-Sum | 5,000.00              | 5,000.00               |
| 24" CMP Boxes and Air Relief Valve        | 3 ea.    | 90.00                 | 270.00                 |
| 6" Asbestos-cement Conduit Pipe           | 30'      | 3.00                  | 90.00                  |
| 2" Galvanized Steel Pipe                  | 6387'    | 1.12                  | 7,153.44               |
| 1" Galvanized Steel Pipe                  | 669'     | 1.00                  | 669.00                 |
| 2" Gate Valve w/Cast-iron Valve Box       | 1 ea.    | 50.00                 | 50.00                  |
| 2" Service Connection to 6" Main          | 1 ea.    | 150.00                | 150.00                 |
| Force Account Work                        | Lump-Sum | 170.00                | 170.00                 |
| 5/8" Water Meter and Gate Valve           | 4 ea.    | 100.00                | 400.00                 |
| 1" Drain Valve and Box on 2" Line         | 2 ea.    | 40.00                 | 80.00                  |
| 1" Water Meter in CMP Box                 | 1 ea.    | 130.00                | 130.00                 |
| 3/4" Pressure Reducing Valve              | 1 ea.    | 260.00                | 260.00                 |
| 1" Stop-Waste Cocks and Cast-iron Boxes   | 4 ea.    | 35.00                 | 140.00                 |
| TOTAL Main Bid                            |          |                       | \$17,562.44            |
| ALTERNATE BID (See Reverse for Breakdown) |          |                       | 6,109.68               |
| TOTAL                                     |          |                       | \$23,672.12            |

## SUMMARY OF EXPENDITURES

|                   |           |                        |
|-------------------|-----------|------------------------|
| PERSONAL SERVICES | EQUIPMENT | MATERIALS AND SUPPLIES |
| OTHER             |           |                        |
| CHANGE ORDERS     |           |                        |



|                                                |          |        |                   |
|------------------------------------------------|----------|--------|-------------------|
| 2" Connection to 6" Pipe                       | 1 ea.    | 120.00 | 120.00            |
| Water Hydrant                                  | 3 ea.    | 35.00  | 105.00            |
| 2" Galvanized Steel Pipe                       | 4614 ft. | 1.12   | 5,167.68          |
| 1" Galvanized Steel Pipe                       | 237 ft.  | 1.00   | 237.00            |
| 1" Air Relief & Vacuum Valve w/Box             | 3 ea.    | 120.00 | 240.00*           |
| Drain Valve and Box                            | 3 ea.    | 40.00  | 80.00*            |
| 1" Water Meter in CMP Meter Box                | 1 ea.    | 130.00 | 130.00            |
| Add to Item 1 (2" Connection to 6" Pipe): Curb |          |        |                   |
| Stop and Box                                   | 1 ea.    | 30.00  | 30.00             |
| TOTAL Alternate Bid                            |          |        | <u>\$6,109.68</u> |

\* One each Air Relief Valve and Drain Valve were provided by Contractor at no cost.

NARRATIVE REPORT

Construction of Water System  
El Morro National Monument

Contract #14-10-0333-642 awarded to E.M. Silver, P.O. Box 1062, Albuquerque, New Mexico, June 30, 1960.

Notice to proceed dated July 6, 1960.

Water System

Water storage and distribution consists of buried fifty thousand gallon steel reservoir twenty-eight feet in diameter by twelve feet in height, six hundred feet of six inch cast iron pipe main in rock trench, one thousand seven hundred seventy feet of six inch asbestos-cement pipe main, in earth trench, five fire hydrants, and service connections to two new residences. The service connections, added by Change Order No. 1, make this a usable water system.

Water tank excavation and drilling for rock trench started July 18, 1960. Pipe laying was started at junction of cast iron and cement asbestos pipe during first week in August. First concrete in valve boxes was placed August 22.

Water tank arrived August 23, erection was started the following day, and erection was completed the following week.

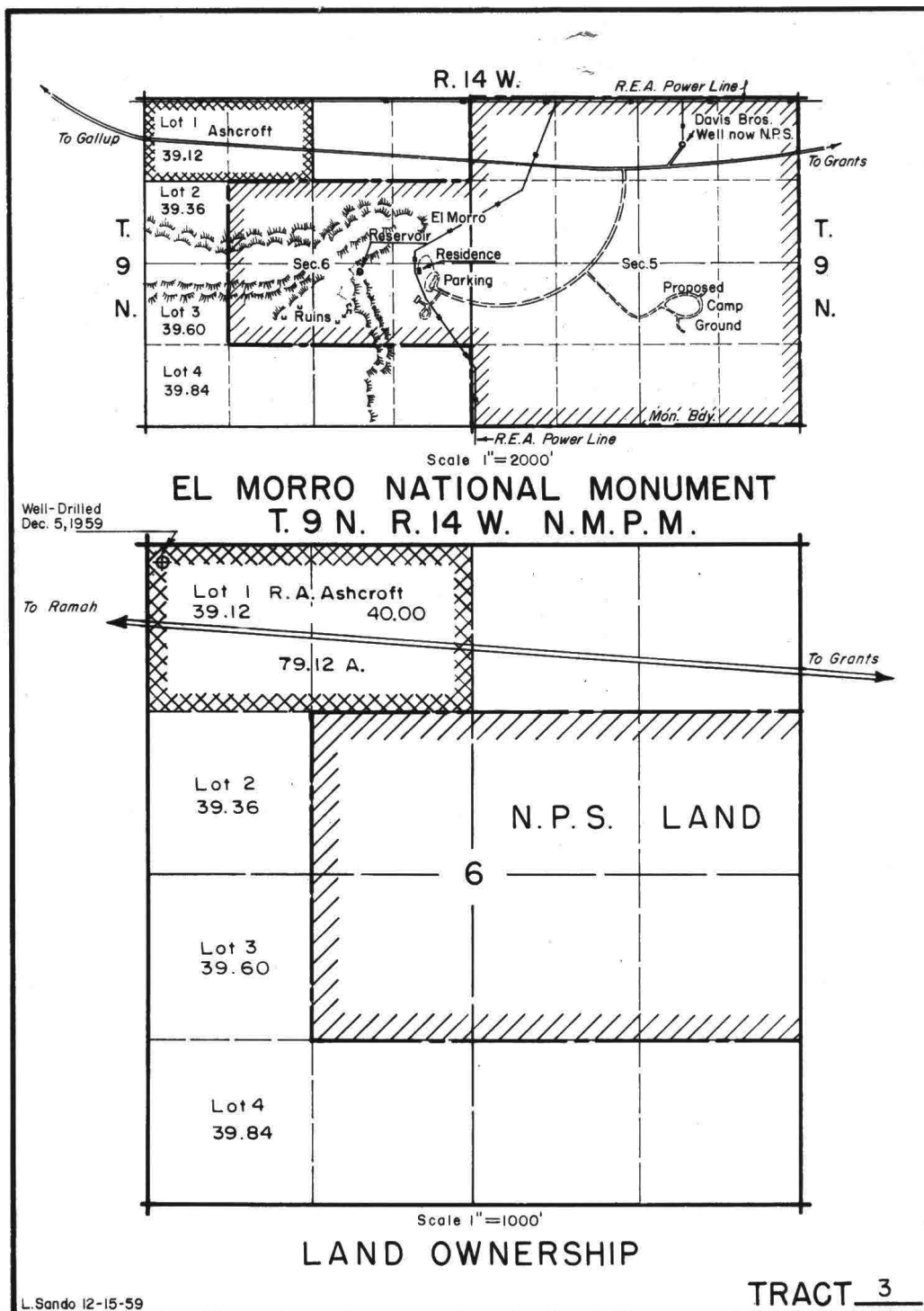
Chlorination was started September 6 on first one thousand three hundred feet of main from reservoir, and test of that section was accepted September 12, 1960. Remainder of main was chlorinated September 14 and test was accepted September 19, 1960. Water tank was chlorinated by scrubbing, in accordance with Change Order of September 17, and water was wasted. Chlorination and testing of water service connections to houses was completed October 4. Water samples were taken from each of two houses and one fire hydrant October 6, 1960. Report from State Public Health Laboratory, Albuquerque, New Mexico, states that water conforms with standard bacteriological requirements, October 10.

Explanations of differences between contract quantities and final quantities:

- Item 1      6" Class 200 Asbestos Cement Pipe, underrun of 175 linear feet. To avoid large groups of trees, valve box and water line were relocated closer to water tank. This relocation which required less pipe will still serve future construction needs. Fire hydrant for future Visitor Center was relocated nearer the main.

- Item 2 2" Galvanized Iron Pipe, overrun of 33 linear feet. Drain line was increased by the relocation of valve box mentioned above. Net result was still a decrease in cost.
- Item 10 1" Galvanized Steel Pipe, overrun of 216 linear feet. Preliminary survey did not establish length of drain lines.

#### Maps and Miscellaneous Information



|                               |           |    |          |
|-------------------------------|-----------|----|----------|
| Number of Documents in Docket | 16        |    |          |
| Documents Dated from          | 4/24/1920 | to | 2/8/1962 |
| Docket Compiled:              | 3/10/2011 |    |          |