

RESOLUTION OF THE  
RESOURCES AND DEVELOPMENT COMMITTEE  
23<sup>rd</sup> Navajo Nation Council --- Third Year, 2017

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT; AMENDING RDCJY-04-17  
"APPROVING THE GRANT OF RIGHT-OF-WAY TO MCKINLEY COUNTY FOR THE  
COUNTY ROAD 300 (TELSTAR ROAD) LOCATED ON NAVAJO NATION TRUST  
LANDS IN CHURCHROCK CHAPTER, NAVAJO NATION (MCKINLEY COUNTY, NEW  
MEXICO) TO PROVIDE FOR THE CORRECT DESCRIPTION OF THE RIGHT-OF-  
WAY BEING GRANTED, AND WAIVES THE REQUIREMENT FOR A BOND,  
INSURANCE OR ALTERNATIVE FORM OF SECURITY PURSUANT TO 25 C.F.R  
§162(F) (2)

BE IT ENACTED:

SECTION ONE. AUTHORITY

- A. Pursuant to 2 N.N.C. Section §501 (B) (2), The Resources and Development Committee of the Navajo Nation Council has the authority to grant final approval for all land withdrawals, non-mineral leases, permits, licenses, rights-of-way, surface easements and bonding requirements on Navajo Nation lands and unrestricted (fee) land. This authority shall include subleases, modifications, assignments, leasehold encumbrances, transfers, renewals, and terminations.

SECTION TWO. FINDINGS

- A. The Resources and Development Committee of the Navajo Nation approved Resolution RDCJA-04-17 on January 3, 2017. See Exhibit "A".
- B. The Right of Way was for McKinley County, for a FEMA funded road improvement project on Telstar Road involving 8.63 acres more or less, in Churchrock Chapter.
- C. The Bureau of Indian Affairs-Crownpoint determined the 1.16 acres of the proposed Right of Way was in fact on privately held land.
- D. The Resources and Development Committee of the Navajo Nation, pursuant to the request of the applicant, finds it to be in the best interest of the Navajo Nation to amend Resolution RDCJA-04-17 as follows:

At Page 1, Section Two, Paragraph B

"The proposed right-of-way is ~~2,505.42~~ 2170.11 feet long, 150 feet wide, consisting of ~~8.63~~ 7.47 acres, more or less and located in Section 14, Township 15 North, Range 17 West, NMPM, McKinley County, New Mexico. Maps are attached hereto and incorporated herein as Exhibit "B".

### **Section Three. Approval**

- A. The Resources and Development Committee of the Navajo Nation hereby amends RDCJA-04-17 at Page 1, Section Two, Paragraph B, as follows:

"The proposed right-of-way is ~~2,505.42~~ 2170.11 feet long, 150 feet wide, consisting of ~~8.63~~ 7.47 acres, more or less and located in Section 14, Township 15 North, Range 17 West, NMPM, McKinley County, New Mexico. Maps are attached hereto and incorporated herein as Exhibit "B".

- B. The Resources and Development Committee of the Navajo Nation Council hereby waives the requirement for a bond, insurance, or alternative form of security as being in the best interest of the Navajo Nation pursuant to 25 C.F.R §162(f)(2).

### **CERTIFICATION**

I, hereby certify that the following resolution was duly considered by the Resources and Development Committee of the 23<sup>rd</sup> Navajo Nation Council at a duly called meeting at the Navajo Nation Museum, Window Rock, Navajo Nation (Arizona), at which a quorum was present and that same was passed by a vote of 3 in favor, 0 opposed, 1 abstained on this 1st day of November, 2017.



Alton Joe Shepherd, Chairperson  
Resources and Development Committee  
of the 23<sup>rd</sup> Navajo Nation Council

Motion: Honorable Jonathan Perry  
Second: Honorable Walter Phelps



RDCJA-04-17

**RESOLUTION OF THE  
RESOURCES AND DEVELOPMENT COMMITTEE  
Of the 23rd Navajo Nation Council---Third Year 2017**

**AN ACTION**

**RELATING TO RESOURCES AND DEVELOPMENT; APPROVING THE GRANT OF  
RIGHT-OF-WAY TO MCKINLEY COUNTY FOR THE COUNTY ROAD 300 (TELSTAR  
ROAD) LOCATED ON NAVAJO NATION TRUST LANDS IN CHURCHROCK CHAPTER,  
NAVAJO NATION (MCKINLEY COUNTY, NEW MEXICO)**

**BE IT ENACTED:**

**SECTION ONE. AUTHORITY**

Pursuant to 2 N.N.C. Section §501 (B)(2), The Resources and Development Committee of the Navajo Nation Council has the authority to grant final approval for all land withdrawals, non-mineral leases, permits, licenses, rights-of-way, surface easements and bonding requirements on Navajo Nation lands and unrestricted (fee) land. This authority shall include subleases, modifications, assignments, leasehold encumbrances, transfers, renewals, and terminations.

**SECTION TWO. FINDINGS**

A. McKinley County P.O. Box 70, Gallup, New Mexico 87305, has submitted a right-of-way (ROW) application for County Road 300 (Telstar Road) on, over and across Navajo Nation Trust Lands in Churchrock Chapter vicinity, McKinley County, New Mexico. The application request is attached hereto and incorporated herein as Exhibit "A."

B. The proposed right-of-way is 2,505.42 feet long, 150 feet wide, consisting of 8.63 acres, more or less, and located in Section 14; Township 15 North, Range 17 West, NMPM, McKinley County, New Mexico. Maps are attached hereto and incorporated herein as Exhibit "B."

C. The Project Review Section with the Navajo Land Department identified three grazing permittees on the proposed project site. Consent to use the land was obtained and are attached along with the Project Review Section memorandum dated July 28, 2016 are attached hereto as Exhibit "C."

D. A waiver of consideration is requested. The right-of-way project would serve a public purpose because the project will benefit Navajo residents.

E. The environmental and archaeological studies has been completed and attached hereto and made a part hereof.

### **SECTION THREE. APPROVAL**

A. The Resources and Development Committee of the Navajo Nation Council hereby approves the Grant of Right-of-Way to McKinley County for the County Road 300 (Telstar Road) on, over and across Navajo Nation Trust Lands in Churchrock Chapter vicinity, McKinley County, New Mexico. The location is more particularly described on the survey map attached hereto as Exhibit "B."

B. The Resources and Development Committee of the Navajo Nation Council hereby waives consideration for the right-of-way project because the project will benefit Navajo residents.

C. The Resources and Development Committee of the Navajo Nation Council hereby approves the right-of-way subject to, but not limited to, the following terms and conditions incorporated herein and attached as Exhibit "D".

D. The Resources and Development Committee of the Navajo Nation Council hereby authorizes the President of the Navajo Nation to execute any and all documents necessary to affect the intent and purpose of this resolution.

**CERTIFICATION**

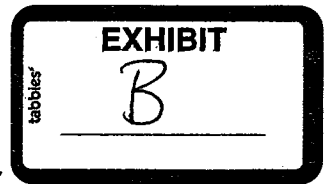
I, hereby, certify that the foregoing resolution was duly considered by the Resources and Development Committee of the 23<sup>rd</sup> Navajo Nation Council at a duly called meeting at Navajo Department of Transportation, (Navajo Nation) Tse Bonito, New Mexico, at which quorum was present and that same was passed by a vote of 3 in favor, 0 opposed, 1 abstained this 3<sup>rd</sup> day of January 2017.



**Alton Joe Shepherd, Chairperson  
Resources and Development Committee  
Of the 23<sup>rd</sup> Navajo Nation Council**

Motion: Honorable Davis Filfred  
Second: Honorable Jonathan Perry

**PERMITS WEST, INC.**  
**PROVIDING PERMITS for LAND USERS**  
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120



August 28, 2017

Shammie Begay  
Navajo Nation  
P.O. Box 9000  
Window Rock, AZ 86515

Dear Shammie:

On January 3, 2017, the Resource and Development Committee approved a road right-of-way for McKinley County (Resolution No. RDCJA-04-17) The right-of-way was for a FEMA-funded road improvement project on Telstar Road in Churchrock Chapter, totaling 8.63 acres.

In considering the application for a grant-of-easement, the BIA-Crownpoint determined that 1.16 acres of the proposed right-of-way was in fact privately-held land. Consequently, I am requesting that Item B. in the Tribal resolution be modified as follows:

2170.11 feet long, 150 feet wide, consisting of 7.47 acres, more or less and located in Section 14; Township 15 North, Range 17 West, NMPM, McKinley County, New Mexico. Maps are attached hereto and incorporated here in as Exhibit B.

I have included the following revised documents to support this request:

Right-of-Way Application  
Project Map  
Survey  
Environmental Assessment  
Archeological Report/Clearance

I appreciate your assistance in correcting this error. Given the funding deadlines McKinley County is facing with the FEMA money I hope you can understand the urgency of this request.

Sincerely,

Jeanette Reisenburg  
Agent

Cc: Edmund Yazzie

# McKinley County Telstar Road

Section 14, T15N, R17W  
County Road 300  
McKinley County, New Mexico

USGS Quad(s): Church Rock

Project Area

1:24,000

0 0.45 0.9  
Miles

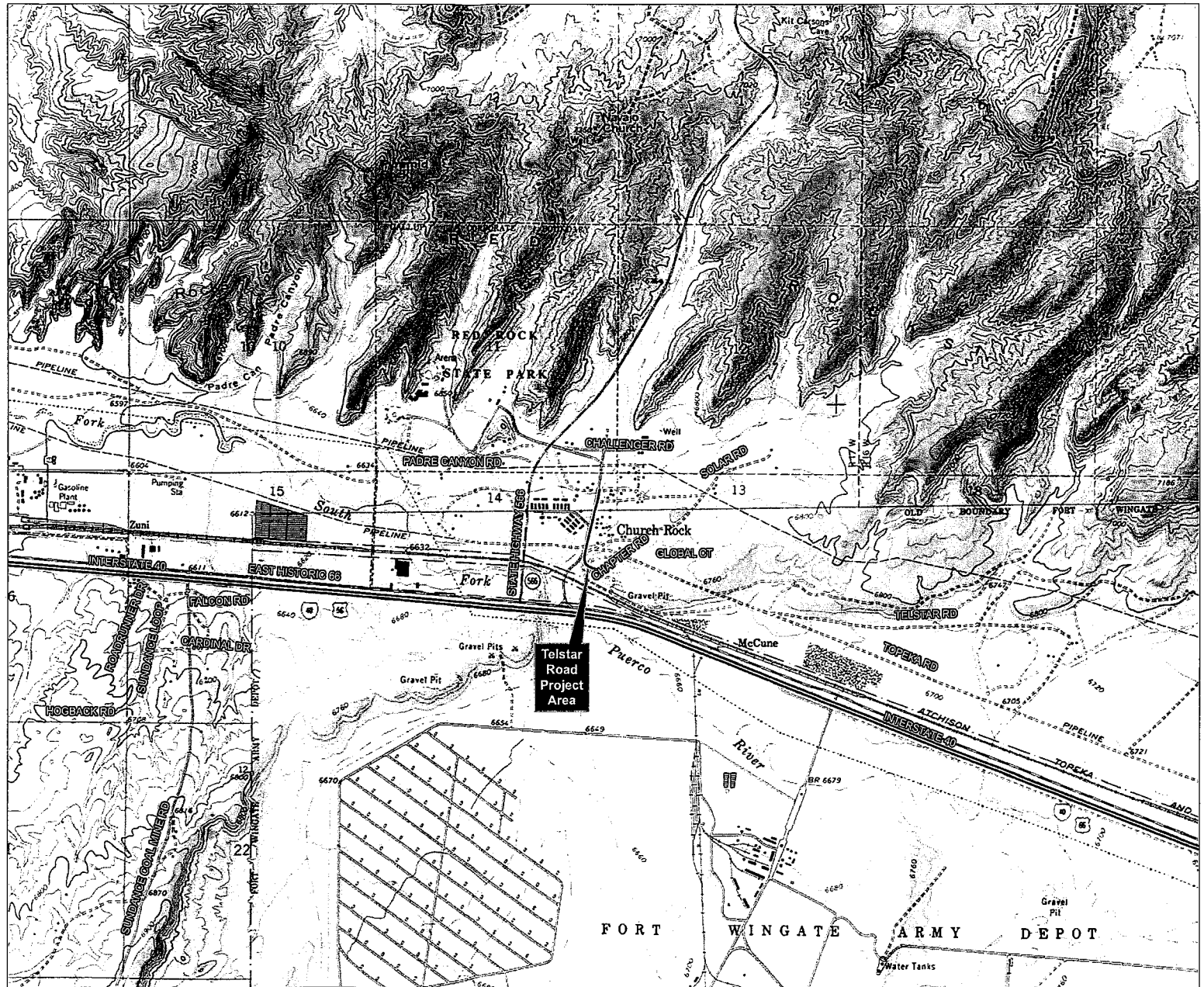
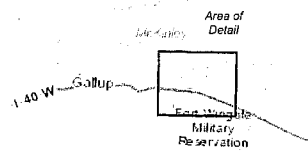
NAD 1983 New Mexico State Plane West  
FIPS 3003 Meters



PERMITS WEST  
PROVIDING PERMITS TO LAND USERS

Prepared by Permits West, Inc., August 9, 2017  
for McKinley County, New Mexico

Area of  
Detail



BLM BC (Typ.)

Navajo Tribal Trust Lands  
Sec.14  
T15N, R17W  
465.03 LF  
1.60 Ac.±

Tie to Found Pin & Cap  
N89°40'25"W 212.25'

First Pin & Cap

LOT 5

Tie to NE Cor. Sec. 14, Fd. BLM BC:  
N53°57'26"E 556.48'

3+35.31 at Lot Line  
Begin ROW

Sec.13

S 10°44'23"W 67.08'

PI 2 - 4+02.39

S 12°14'44"W 217.31'

PI 3 - 6+19.70

S 13°34'50"W 210.80'

Sec. Line Int. - 8+00.34

PI 4 - 8+30/50

Sec.13

S 14°21'32"W 719.47'

Navajo Tribal Trust Lands  
Sec.14  
T15N, R17W  
(Abandoned Fort Wingate Military Reservation)  
1705.08 LF  
5.87 Ac.±

150' R.O.W.  
25' Paved Road

PI 5 - 15+49.97

S 09°19'40"W 206.80'

S 07°58'43"W 48.86'

PI 8 - 17+56.77

S 04°08'30"W 49.54'

PI 7 - 18+05.63

S 05°12'33"E 48.04'

PI 8 - 18+55.17

PI 9 - 19+03.21

S 19°38'22"E 49.10'

PI 10 - 19+52.31'

S 36°16'55"E 46.84'

PI 11 - 20+01.15

S 49°48'28"E 50.00'

PI 12 - 20+51.75

S 60°52'14"E 50.89'

PI 13 - 21+02.30

S 69°08'41"E 52.51'

PI 14 - 21+55.14'

S 75°17'47"E 64.20'

PI 15 - 22+09.34

S 78°32'54"E 123.88'

PI 15 - 23+33.22

S 80°31'51"E 59.38'

PI 17 - 23+00.60

S 82°52'40"E 112.82'

EOL at Sec. Line - 25+05.42

Crossings

3+58 Culv.  
5+42 Pipeline  
5+55 Pipeline  
15+73 Pipeline  
15+89 Pipeline  
16+07 Pipeline  
16+90 Begin Bridge  
17+15 End Bridge

Total: 2170.11 LF  
7.47 Ac.±

I, WILLIAM E. MAHNKE II, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THE SURVEY SHOWN HEREON, AND THAT THE SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN THE STATE OF NEW MEXICO. I FURTHER CERTIFY THAT THIS IS NOT A SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS IS A SURVEY OF AN EXISTING ROAD.

**Red Skies Surveying & Mapping, Inc.**  
A Native American Owned Company  
101 Fauver Ln.  
Bloomfield, NM 87413  
Telephone (505) 632-3863 Cell: 793-5325





THE NAVAJO NATION  
HERITAGE & HISTORIC PRESERVATION DEPARTMENT  
PO Box 4950, Window Rock, Arizona 86515  
TEL: (928) 871-7198 FAX: (928) 871-7886

CULTURAL RESOURCE COMPLIANCE FORM

|  |  |
|--|--|
| ROUTE COPIES TO:                         | NNHPD NO.: <b>HPD-16-419 - REVISED</b> |
| <input checked="" type="checkbox"/> CASA | OTHER PROJECT NO.: <b>CASA 16-21</b>   |

PROJECT TITLE: Cultural Resource Inventory, McKinley County Road R-O-W Project, Telstar Road (CR 300) Church Rock Chapter, McKinley County, New Mexico

LEAD AGENCY: BIA/NR

SPONSOR: Permits West, 37 Verano Loop, Santa Fe, New Mexico 87508

PROJECT DESCRIPTION: The proposed undertaking will involve obtaining a legal right-of-way along 2,170.11-ft of County Road 300, Telstar Road. McKinley County is seeking a 150-ft wide right-of-way. The total area of effect is 7.47 acres.

|                                   |  |    |    |    |    |    |      |    |             |             |          |        |            |      |
|-----------------------------------|--|----|----|----|----|----|------|----|-------------|-------------|----------|--------|------------|------|
| LAND STATUS:                      | Navajo Tribal Trust  |    |    |    |    |    |      |    |             |             |          |        |            |      |
| CHAPTER:                          | Church Rock  |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LOCATION:                         | T.   | 15 | N. | R. | 17 | W- | Sec. | 14 | Church Rock | Quadrangle, | McKinley | County | New Mexico | NMPM |
| PROJECT ARCHAEOLOGIST:            | Mary Errickson   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| NAVAJO ANTIQUITIES PERMIT NO.:    | B16223   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| DATE INSPECTED:                   | 04/07/16   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| DATE OF REPORT:                   | 05/09/16   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| TOTAL ACREAGE INSPECTED:          | 12.45 - ac   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| METHOD OF INVESTIGATION:          | Class III pedestrian inventory with transects spaced 15 m apart. |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF CULTURAL RESOURCES FOUND: | (1) Isolated Occurrence (IO)                                     |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF ELIGIBLE PROPERTIES:      | None   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF NON-ELIGIBLE PROPERTIES:  | (1) IO   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF ARCHAEOLOGICAL RESOURCES: | None   |    |    |    |    |    |      |    |             |             |          |        |            |      |

EFFECT/CONDITIONS OF COMPLIANCE: No historic properties affected.

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], a operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7198.

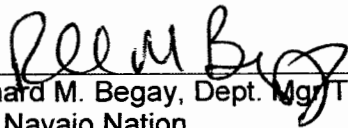
FORM PREPARED BY: **Tamara Billie**  
FINALIZED: August 16, 2017 - Revised

Notification to Proceed  
Recommended

☒ Yes ☐ No

Conditions:

☐ Yes ☒ No


  
Richard M. Begay, Dept. Mgr THPO  
The Navajo Nation  
Heritage & Historic Preservation Department

8/18/17  
Date

Navajo Region Approval

☒ Yes ☐ No

Acting

  
BIA - Navajo Regional Office

8/22/17  
Date



**COMPLETE ARCHAEOLOGICAL SERVICE ASSOCIATES**  
P.O. Box 1777 • Cortez, Colorado 81321 • (970) 565-9229

August 15, 2017

Tamara Billie  
CRCS, NNHPD  
P.O. Box 4950  
Window Rock, AZ 86515

RE: Permit B16223 Revised McKinley County Road R-O-W Project CR 300 Telstar Road Report -  
HPD 16-419 / Revised CASA 16-21

Dear Tamara,

Enclosed are two copies of revised CASA Report 16-21/HPD 16-419 for a segment of existing CR 300 Telstar Road for McKinley County for acquisition of legal ROW. The following changes have been made to the report as it has been determined that the initial 335.31 feet of roadway at the BOL is actually located on private land. This footage has been deleted from the project.

Changes:

Page 1: Length of ROW changed to 2,170.11 feet  
Area of Effect changed to 7.47 ac  
Area Surveyed changed to 12.45 ac  
UTM coordinates changed to reflect revised plat map

Page 3: Revised project area shown in Figure 2

Page 4: Revised Plat Map

Page 6: Revised UTMs for IO#1 due to typo in original report

Please let me know if you have any questions. I apologize for this inconvenience.

Sincerely,

Mary Erickson  
CASA

Enclosures: 2 copies revised report

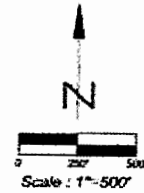
# **ARCHAEOLOGICAL INVENTORY REPORT DOCUMENTATION PAGE (HPD JAN/91)**

|  |                              |   |
|--|------------------------------|---|
| <b>1. HPD REPORT NO.</b>   | <b>2. (FOR HPD USE ONLY)</b> | <b>3. RECIPIENTS ACCESSION NO.</b>  |
| <b>4. TITLE OF REPORT:</b> Cultural Resource Inventory, McKinley County Road R-O-W Project, Telstar Road (CR 300), Church Rock Chapter, McKinley County, New Mexico (Revised)<br><br>Author(s): Mary Errickson   |                              | <b>5. FIELDWORK DATES</b><br>04/07/16   |
| <b>7. CONSULTANT NAME AND ADDRESS:</b><br>Gen'l Charge: Mary Errickson<br>Org. Name: Complete Archaeological Service Associates<br>Org. Address: P.O. Box 1777, Cortez CO 81321<br>Phone: (970) 565-9229   |                              | <b>6. REPORT DATE</b><br>August 15, 2017 (Revised)<br><b>8. PERMIT NO.</b><br>B16223<br><b>9. CONSULTANT REPORT NO.</b><br>CASA 16-21 |
| <b>10. SPONSOR NAME AND ADDRESS:</b><br>Ind. Responsible: Brian Wood, agent for McKinley County<br>Org. Name: Permits West<br>Org. Address: 37 Verano Loop, Santa Fe, NM 87508<br>Phone: 505-466-8120  |                              | <b>11. SPONSOR PROJECT NO.</b><br>McKinley County Rd. 300<br><b>12. AREA OF EFFECT:</b> 7.47 ac<br><b>AREA SURVEYED:</b> 12.45 ac     |
| <b>13. LOCATION (MAP ATTACHED):</b><br>a. Chapter: Church Rock<br>b. Agency: Eastern<br>c. County: McKinley<br>d. State: New Mexico<br>e. Land Status: Tribal Trust<br>f. UTM Center: BOL: Zone 12, 717483mE/3935224mN<br>EOL: 717558mE/3934657mN<br>g. Area: T15N, R 17W, Sec. 14, E 1/2 of the NE1/4 NMPM&B<br>h. 7.5' Map Name(s): Church Rock, NM 1979<br>i. Lead Agency: BIA  |                              |   |
| <b>14. REPORT / X/ OR SUMMARY (REPORT ATTACHED) // OR PRELIMINARY REPORT //</b><br>a. Description of Undertaking: McKinley County is proposing to acquire legal Right-Of-Way (ROW) along 2,170.11 feet of County Road 300, Telstar Road, in Church Rock, New Mexico (Figs. 1-3). McKinley County is seeking a 150 foot-wide ROW (7.47 ac) which includes 75 feet on both sides of the existing road centerline. A 250 foot-wide corridor (12.45 ac) was inventoried for a 150 foot-wide ROW (7.47 ac).<br>b. Existing Data Review: 04/06/16 at NNHPD in Window Rock, see continuation sheet.<br>c. Area Environmental & Cultural Setting: see continuation sheet<br>d. Field Methods: A Class III inventory was conducted by Mary Errickson walking multiple transects spaced no more than 15 m apart. |                              |   |
| <b>15. CULTURAL RESOURCE FINDINGS:</b><br>a. Location/Identification of Each Resource: 1 Isolated Occurrence (IO)<br>b. Evaluation of Significance of Each Resource (above): not eligible for NRHP, ARPA, or AIRFA protection  |                              |   |
| <b>16. MANAGEMENT SUMMARY (RECOMMENDATIONS):</b> A determination of "no historic properties affected" is recommended for the McKinley County Road ROW Project, Telstar Road (CR 300), at the location described in this report.  |                              |   |
| <b>17. CERTIFICATION:</b>  |                              |   |
| SIGNATURE: <u>Mary Errickson</u><br>General Charge Name: <u>Mary Errickson</u><br>SIGNATURE: <u>Mary Errickson</u><br>Direct Charge Name: <u>Mary Errickson</u>  |                              | DATE: 08/15/17<br><br><br>DATE: 08/15/17  |

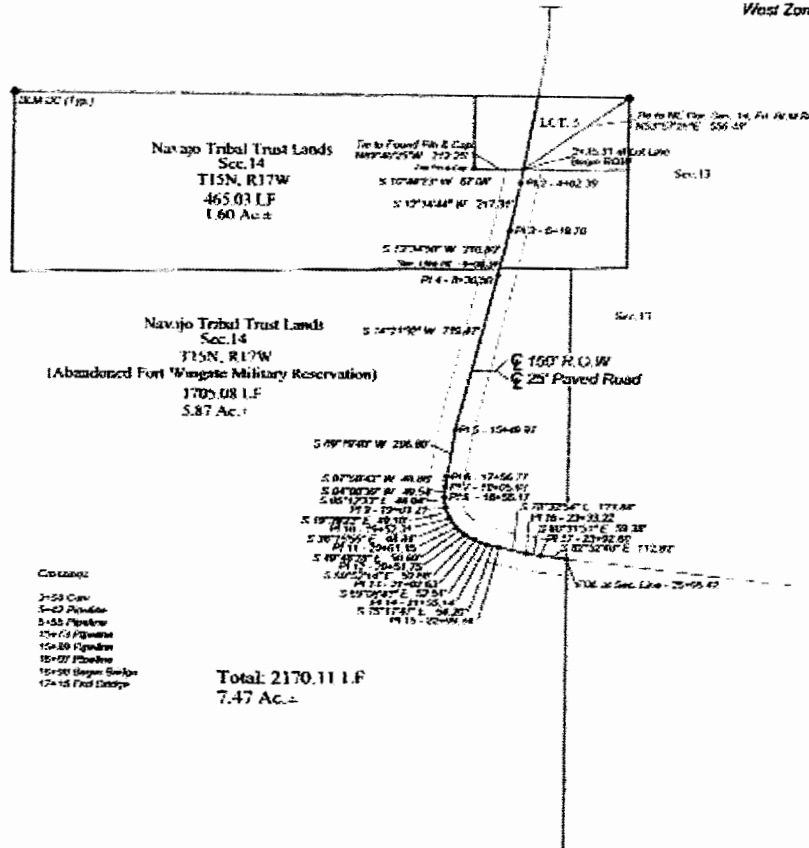




**McKinley County Road Right-of-Way Survey  
Telstar Road (CR 300)**



Basis of Bearings:  
The New Mexico Coordinate System  
West Zone



**SURVEYOR'S CERTIFICATE**

I, WILLIAM E. MAHARKE II, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THE SURVEY SHOWN HEREON, AND THAT THE SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN THE STATE OF NEW MEXICO.  
I FURTHER CERTIFY THAT THIS IS NOT A SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS IS A SURVEY OF AN EXISTING ROAD.

WILLIAM E. MAHARKE II  
NEW MEXICO P.L.S. # 8455



BY 10212-84-2017

**Red Skies Surveying & Mapping, Inc.**  
A Native American Owned Company  
101 Foyner Ln.  
Bloomfield, NM 87413  
Telephone (505) 852-3883 Cell 793-5325

Field Completion Date: 15-Apr-2015

Figure 3. Plat Map, McKinley County Road 300 Telstar Road project.

**14b. Existing Data Review.** The site and Traditional Cultural Property record searches were conducted on April 6, 2016. One site is located within 100 m of project areas. NM-Q-29-1 is a Pueblo I-II activity area (NTM 84-460).

Hundreds of sites have been recorded within the Church Rock-Puerco River Valley areas. Numerous sites have been identified during previous waterline and powerline projects (Copeland 1988; Nabahe 1992, 1993) as well as for energy exploration (Griggs and Powell 1976). A synthesis of the archaeological investigations, culture history, and ethnohistory of the general area can be found in Copeland (1988). No Paleo-Indian and few Archaic components have been identified, although a heavy Anasazi presence may mask earlier occupations. Anasazi sites range from Basketmaker III through Pueblo III, with the main occupation during the Pueblo II and early Pueblo III periods. Archaeological evidence for Navajo occupation prior to A.D. 1880 is present. Copeland (1988) identified several Fort Sumner-era sites near Milk Ranch Canyon, approximately 2 miles west of Fort Wingate. Numerous early 20th century Navajo habitations have been recorded on the higher ridges and mesas north of Red Rocks (Griggs and Powell 1976).

The record search conducted through the Traditional Cultural Property (TCP) Department indicated that one TCP is located in the vicinity of the project area. *Tse Ji'ahi* / Rock Spire / Navajo Church Rock (#504) lies 1.25 mile to the north of the Telstar road segment. The TCP Department has determined that there will be no adverse effects to the TCP as a result of this undertaking (Attachment A).

Interviews were conducted with Mr. Johnnie Henry, Jr., Church Rock Chapter President, and local residents Evelita Klad, Alvin Thompson, and Colleen Norton regarding individual TCPs, graves, or other areas of concern along or in the vicinity of CR 300. No graves, TCPs, or other areas of concern were identified by the interviewees.

**14c. Area environmental and cultural setting.** The project area lies within the southwest corner of the San Juan Basin, on and around the Zuni Uplift, a major structural feature which rings the southwest side of the Basin. Specifically, the project area lies within the Puerco subarea, a zone of broad, gently rolling alluvial plains and valleys with areas of dramatic uplifted sedimentary rocks, such as Red Rocks. The Puerco River is a southwest flowing tributary of the Little Colorado River. It is fed by numerous named and unnamed washes. Local geography within the vicinity of the project area includes mesas, vertical red rock cliffs, ridges, benches, broad valleys, and The Hogback, a rugged northern extension of the Nutria monocline. Pinyon and juniper are found on upper slopes and ridge tops, while shrubs, especially sagebrush and grasses dominate the lower slopes and rolling terrain. Soils are poorly developed in forested, broken, and rocky areas but valleys contain deep alluvium. The principal rock formations are the Wingate Sandstone, Dakota Sandstone, Mancos Shale, and Mesa Verde Group. Extensive information on the environmental setting of the project area can be found in Sullivan (1994).

The project area lies entirely within the NE 1/4 of Section 14, T 15N, R 17 W, approximately 250 m north of Interstate 40 and 100 m north of the Atchison, Topeka, and Santa Fe railroad corridor. This segment of CR 300 functions as a main road providing access to several homes, the Thompson Store, an NHA Housing Unit, and the Church Rock Chapter House. A second, fenced, NHA housing development lies along the west side of the road, north of the Thompson Store. The paved roadway measures approximately 8 m (25 feet) in width. A one-lane bridge crosses a large tributary of the Puerco River just south of Thompson Store. Much of the proposed ROW encompasses disturbed areas containing driveways, bladed areas, parking lots, and powerlines. Scattered trash and trash dumps are common along the southern side of the road near the project EOL. Three homesites lie within the eastern buffer zone of the proposed ROW.

The project area lies on a broad terrace which slopes gently southward toward the Puerco River. Soils vary from low aeolian sand dunes covering the northern portion of the project area to narrow, decomposing sandstone ridges and outcrops of reddish colluvial and residual silts/clays bearing small gravels in the southern portion. Vegetation consists primarily of russian thistle and greasewood with lesser amounts of saltbush, rabbitbrush, grasses, snakeweed, narrow leaf yucca, and juniper. Elevation is 6680 feet.

## 15. Cultural Resources

### IO No. 1:

UTM Location: Zone 12, 717555mE / 3934652mN (NAD 83)

Description: IO consists of a small trash dump along the south side of the road. Items include domestic items dating from the 1960s and 1970s.

## REFERENCES

Copeland, James M.

1988 Archaeological Survey: Residential Power Line Extensions Along the Puerco River Valley and Adjacent Areas, Church Rock, McKinley County, New Mexico. *NMCRMP* 87-212. Navajo Nation Cultural Resource Management Program, Window Rock.

Griggs, Paul S., and Nena A. Powell

1976 A Cultural Resource Investigation of Several Tracts Between Gallup and Grants, New Mexico for Homestake Mining Company. *Laboratory of Anthropology Notes* No. 238, Museum of New Mexico, Santa Fe.

Nabahe, Rolf J.

1992 An Archaeological Survey of Church Rock South, McKinley County, New Mexico. *NNAD* 91-003. Navajo Nation Archaeology Department, Window Rock.

1993 An Archaeological Survey of Church Rock North, McKinley County, New Mexico. *NNAD* 90-473. Navajo Nation Archaeology Department, Window Rock.

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**Cultural Resource Inventory**  
**McKinley County Road R-O-W Project**  
**Telstar Road (CR 300)**  
**Church Rock Chapter**  
**McKinley County, New Mexico**

**Prepared by**  
**Mary Errickson**  
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**P.O. Box 1777**  
**Cortez, Colorado 81321**

**CASA 16-22**

**ATTACHMENT A**  
**TCP RECORD SEARCH**

**Permit**  
**NNCRIP B16223**



TRADITIONAL CULTURAL PROPERTY (TCP) RECORD  
SEARCH VERIFICATION FORM

**\*\*TCP WILL NOT SIGN/APPROVE IF THIS PORTION IS LEFT BLANK\*\***

|                            |   |
|----------------------------|---|
| <b>Project Information</b> |   |
| DATE                       | 4/6/16  |
| RESEARCHER & COMPANY       | Mary Errickson CASA                                       |
| PROJECT NAME               | McKinley County Road R-O-W Project, Telstar Road (CR 300) |
| PROJECT/PERMIT NUMBER      | CASA 15-21 / Permit B16223                                |
| PROJECT LOCATION           | Church Rock, NM   |

**\*\*\*TO BE FILLED OUT & SIGNED BY AUTHORIZED NNHPD STAFF ONLY\*\*\***

|   |   |
|---|---|
| <b>A TCP record search of TCP records by NNHPD on the above date indicates the following:</b> |   |
| <input type="checkbox"/>  | There are <u>no</u> TCP(s) present within the project area and/or buffer zone. The project may proceed as proposed.   |
| <input type="checkbox"/>  | TCP(s) <u>are</u> present within the project area and/or buffer zone. Project may have the potential to adversely affect TCP(s). Please document TCP(s) as a summary (with only general location information) in the body of reports submitted for review to HPD/CRCS. Give full detail on the TCP Documentation Forms in a separate, and clearly labeled, confidential appendix. |
| <input checked="" type="checkbox"/>   | Project may proceed with the following stipulations:<br>Please include TCP # 504 in final Report.   |
| <input type="checkbox"/>  | Further consultation is required. Consult with the following:   |
| <input type="checkbox"/>  |   |
| <input type="checkbox"/>  | There are no mitigative measures. Project may not proceed.  |

NNHPD/TCP Program  
Reviewer:

*[Signature]*

Date: 4/10/16

**\*\*Return this form along with report to the NNHPD/Compliance Section\*\***

Note: In addition to the TCP Record search, the consultant must demonstrate that a good-faith effort to consult with 1.) Surface user(s): grazing-permit holder(s) (individuals whose consents for right-of-way have been sought by developer); any other residents in or within view of the proposed project area. 2. Chapter(s) within which the proposed project is located: chapter officers and/or delegate(s) of the Navajo Nation Council; at the request of any of these individuals, the developer's consulting anthropologist will also make a presentation at a meeting of general chapter membership. 3. Other knowledgeable people recommended by the present surface user(s), chapter officials, and chapter members.

**ENVIRONMENTAL ASSESSMENT**  
**FOR**

**MCKINLEY COUNTY  
RIGHT-OF-WAY ACQUISITION FOR  
ROAD, BRIDGE, AND CULVERT REPAIR AND ONGOING  
MAINTENANCE FOR THE EXISTING TELSTAR ROAD  
(CR300)**

**MCKINLEY COUNTY  
P.O. BOX 70  
GALLUP, NM**

**ON NAVAJO TRIBAL TRUST IN  
SECTION 14, T. 15 NORTH, RANGE 17 WEST,  
MCKINLEY COUNTY, NM**

**May 4, 2016  
(Revised August 15, 2017)**

**Prepared by:**

**PERMITS WEST.INC.**

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## **1. Introduction**

McKinley County proposes to apply for a 20 year Right-of-Way in order to conduct general maintenance and road improvement operations along the existing Telstar Road (CR 300) in the community of Churchrock, NM (Proposed Action). The Proposed Action is located in **Section 14, T. 15 North, R. 17 West**, within the Churchrock 7.5-Minute Quadrangle, McKinley County, NM. The Telstar Road project area proposed Right-of-Way (ROW) is **2,170.11 feet** in length and 150 feet wide. The proposed ROW crosses Navajo Tribal Trust land. The total land use for the proposed project is **7.47 acres**. The Proposed Action topographic map and detail of the project are attached as Appendix 1. This Environmental Assessment (EA) will address the Proposed Action with regards to potential impacts on the surrounding environment.

### **1.1 Purpose and Need**

The purpose of the Proposed Action is to secure a 20 year Right-of-Way so that road improvement projects and general maintenance may be conducted by McKinley County at several specific locations, and along the general length of the existing Telstar Road. Road improvement and maintenance is necessary to serve the needs of residents living in the project area as well as protect roads from future flooding or erosion events by upgrading crossings, culverts, and bridges.

### **1.2 Conformance with Applicable Land Use Plans and Other Environmental Assessments**

This EA addresses the potential impacts on surrounding resources by the Proposed Action. Impacts are presented on a site-specific basis as required by the National Environmental Policy Act (NEPA), as amended (NEPA 1969). The proposed project will not be in conflict with any local, county, or state plans. McKinley County will file a right-of-way (ROW) application with the Bureau of Indian Affairs (BIA).

### **1.3 Federal, State, or Local Permits, Licenses, or Other Consultation Requirements**

Compliance with Section 106, Responsibilities of the National Historic Preservation Act, are adhered to by following the Navajo Nation Cultural Resources Protection Act, the Bureau of Land Management (BLM) – New Mexico State Historic Preservation Officer (SHPO) protocol agreement, which is authorized by the National Programmatic Agreement between the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers, and other applicable BLM handbooks (NHPA 1966).

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The Navajo Nation Department of Fish & Wildlife (NNDFW) Natural Heritage Program has been consulted with respect to species of concern that are known to occur, or that have the potential to occur, within the area of the Proposed Action (Appendix 2). Species of concern listed by the NNDFW will be evaluated in Section 3 of this document and in the Wildlife and Plant Survey Reports attached as Appendices 3 and 4, respectively.

Complete Archeological Service Associates performed a Class III Cultural Resources Inventory of the Proposed Action area. A determination was made that no historic properties will be affected by the project. A request for archeological clearance was also submitted to the Navajo Nation Historic Preservation Department (NNHPD). The Cultural Resources Compliance Form is attached as Appendix 5.

Additionally, McKinley County is required to:

- Comply with all applicable federal, state, and local laws and regulations.
- Obtain the necessary permits for construction of the power line.

## **2. Alternatives Including the Proposed Action**

### **2.1 Alternative A - No Action**

The BLM NEPA Handbook (H-1790-1) states that in EAs for externally initiated proposed actions, the No Action Alternative generally means that the proposed activity will not take place (USDI BLM 2008). This alternative would deny approval to construct the power line and the current land and resource uses would continue to occur in the proposed project area. No mitigation measures would be required.

The No Action Alternative is presented for baseline analysis of resource impacts.

### **2.2 Alternative B - Proposed Action**

McKinley County proposes to apply for a 20 year Right-of-Way in order to conduct general road maintenance and improvement operations along an approximate 0.47 mile length of the existing Telstar Road (CR 300), in McKinley County, NM. The Telstar Road project area proposed Right-of-Way (ROW) in which the construction and maintenance projects would occur is **2,170.11 feet** (0.47 miles) in length and 150 feet wide. Total land use for the proposed ROW would be approximately **7.47 acres.**

The Proposed Action is located on Navajo Tribal Trust lands in Section 14, Township 15 North, Range 17 West as indicated on the topographic map (Appendix 1). The Telstar Road proposed ROW begins at its junction with Padre Canyon Road, northeast of the community of Churchrock and ends just before the junction of Chapter Road.

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Table 2.1 summarizes the project land use specifications. The estimated duration of the maintenance and construction projects within the ROW is “as needed” over the course of the proposed 20 ROW term.

**Table 2.1: Land Use Specifications Summary**

| <i>Land Ownership</i> | <i>Location (Telstar Road)</i> | <i>ROW Centerline Length (feet)</i> | <i>ROW Width</i> | <i>Total Land Use Area for ROW (acres)</i> |
|-----------------------|--------------------------------|-------------------------------------|------------------|--|
| Tribal Trust          | Section 14, T. 15 N., R. 17 W  | <b>2,170.11</b>                     | 150 feet         | <b>7.47</b>                                |

The project area is the community of Churchrock, New Mexico. Surrounding landscape consists of small mesas, dry washes, and buttes. Homes, schools, roads, and businesses are nearby. Vegetation consists of desert grassland and scrubland with Siberian elm (*Ulmus pumila*) along roadsides, ditches, and yards. One deeply incised wash is crossed by Telstar Road. Bank destabilization and erosion, as well as loss of soils and presence of invasive weedy species are evident along the wash.

Road improvement projects within the proposed ROW would include, but would not be limited to, culvert repair, grading, and cut and fill work. Work would be performed on an as needed basis and would be prioritized according to funding. Work would be performed with heavy equipment such as backhoes, cranes, and front end loaders. Appropriate signage and traffic coordinators would alert motorists using the ROW to pending and ongoing construction projects. All road improvement construction projects would occur within the boundaries of the proposed ROW.

Road improvement construction within the proposed ROW will only be performed when the soil is dry enough to adequately support construction equipment and vehicles. When the soil is too wet (ruts more than six inches deep), construction will be postponed until conditions improve. Maintenance will be conducted along the proposed ROW as necessary.

## **2.3 Reclamation**

Areas disturbed from construction within the proposed ROW will be restored as closely as possible to their original condition or be improved from their original condition (as in the cases of road improvement projects) upon completion of construction. Reclamation measures for natural areas (i.e., areas adjacent to the road way) within the proposed ROW will include ripping compacted and disturbed areas at least 12 inches deep on the contour, harrowing, applying a native seed mix as prescribed by the BIA or Navajo Nation, and mulching. Noxious weeds will be controlled in accordance with Navajo Nation Environmental Protection Agency (EPA) requirements.



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## **2.4 Alternatives Considered But Not Analyzed In Detail**

No other alternatives were considered for the proposed Telstar Road ROW other than the No Action alternative. The No Action alternative would mean that no road improvement or maintenance projects would be conducted by McKinley County along Telstar Road within the proposed ROW.

No significant issues were identified for the present location of the Proposed Action during the following activities:

- on-site inspections;
- Cultural Resources Inventory;
- Threatened, Endangered, and Special Status Species Survey; and
- a review of NNDFW species of concern that are known to occur in or with the potential to occur in the 7.5-Minute Churchrock, NM Quadrangle.

Therefore, no further alternatives other than the No Action Alternative were considered.

## **3. Description of Affected Environment**

This section describes the environment that would be affected by implementation of the alternatives described in Section 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Only aspects of the affected environment that are potentially impacted are described.

### **3.1 Air Resources**

The proposed project is located in McKinley County, NM on Navajo allotted land. The US Environmental Protection Agency (USEPA), Region 9, and the Navajo Nation Environmental Protection Agency Air Quality Control Program are responsible for administering air quality regulations on Navajo lands in New Mexico. The Navajo Nation Air Quality Control Program (NNAQCP) is responsible for the implementation and enforcement of the Navajo Air Pollution Prevention and Control Act (NAPPCA) (Navajo Nation Council 2004). In addition, the project area lies within the USEPA's designated Four Corners Interstate Air Quality Control Region (USEPA 1971).

Air resources include air quality and climate. The USEPA has the primary responsibility for regulating air quality, including seven nationally regulated ambient air pollutants. Air quality is determined by atmospheric pollutants and chemistry, dispersion meteorology, and terrain; and also includes applications of noise, smoke management, and visibility. Greenhouse gas (GHG) emissions, such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous

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oxide (N<sub>2</sub>O), water vapor, and several trace gases, can affect air quality (USEPA April 2013).

Climate is the composite of generally prevailing weather conditions of a particular region throughout the year, averaged over a series of years. GHGs also affect climate. Through complex interactions on a global scale, GHG emissions may cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and the burning of fossil carbon sources have caused GHG concentrations to measurably increase, and have contributed to overall climatic changes, typically referred to as global warming (NRC 2010). GHGs are not regulated by the USEPA. However, climate is important to consider because it has the potential to influence renewable and non-renewable resource management.

### **Air Quality**

The primary sources of air pollution are dust from blowing wind on disturbed or exposed soil and exhaust emissions from motorized equipment.

Air quality in the area near the proposed project is generally good and the Proposed Action is not located in an area designated by the USEPA as a “non-attainment area” for any listed pollutants regulated under the Clean Air Act (USEPA July 2013).

The USEPA’s Inventory of US Greenhouse Gas Emissions and Sinks found that total U.S. GHG emissions were over 6.7 billion metric tons and that total U.S. GHG emissions have increased by 8.4% from 1990 to 2011. Emissions decreased from 2010 to 2011 by 1.6% (108.0 million metric tons CO<sub>2</sub> Eq.). The decrease was due to a decrease in carbon intensity of fuels consumed to generate electricity (due to a substitution of natural gas for coal and an increase in hydropower use), and relatively mild winter conditions (USEPA Apr. 2013).

Since 1990, U.S. emissions have increased at an average annual rate of 0.4 percent (USEPA Apr. 2013). It is likely, then, that levels of these GHGs will continue to increase. But, it is hoped that the rate of increase will continue to slow as greater awareness of the potential environmental and economic costs associated with increased levels of GHGs result in behavioral and industrial adaptations.

### **Climate**

The average global temperature has risen about 1.4°F (0.8°C) from 1880 to 2012. The continued increase in GHG levels in Earth’s atmosphere assures a long-term rise in global temperatures. On the current course of GHG increases, scientists expect each successive decade to be warmer than the previous one (Hansen 2013).

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In 2007, the Intergovernmental Panel on Climate Change (IPCC) predicted a warming of about 0.2°C per decade for the next two decades, and then a further warming of about 0.1°C per decade (IPCC 2007). The National Academy of Sciences (NAS) believes that the need for urgent action to address climate change is now indisputable and it has called upon the G8+5 nations to seize all opportunities to coordinate their simultaneous work on the climate and economic agendas (NAS 2009).

A report on climate change by the U.S. Government Accountability Office (USGAO) found that, "federal land and water resources are vulnerable to a wide range of effects from climate change, some of which are already occurring. These effects include, among others: 1) physical effects such as droughts, floods, glacial melting, and sea level rise; 2) biological effects, such as increases in insect and disease infestations, shifts in species distribution, and changes in the timing of natural events; and 3) economic and social effects, such as adverse impacts on tourism, infrastructure, fishing, and other resource uses" (USGAO 2007). However, it is not possible to predict with any certainty, the regional or site-specific effects on climate relative to the Proposed Action and subsequent actions.

### **3.1.1 No Action Alternative**

#### **3.1.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW application for Telstar Road would not be approved and no road improvement activities would occur along the ROW. No direct or indirect impacts to air resources would occur.

### **3.1.2 Proposed Action**

#### **3.1.2.1 Direct and Indirect Effects**

##### **Air Quality**

1. During road improvement activities within the proposed ROW, there would be short-term (approximately two days to four weeks, for each project, depending on project scope) increases in dust during each construction project within the Proposed Action area. This impact would subside as disturbed areas are reclaimed.
2. There will be minor, short-term increases during project activity in local combustive emissions from operating vehicles and earth moving equipment.
3. There will be a minor long-term (20 years) impact to air quality from motorized vehicles and equipment performing periodic maintenance.
4. There will be minor and sporadic, long-term (over 20 years) fugitive dust creation during maintenance activities within the ROW.

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### **Climate**

No quantifiable impacts to the climate are anticipated as a result of the Proposed Action.

#### **3.1.2.2 Mitigation**

1. McKinley County will apply water for dust control, if necessary.
2. Surface disturbance and vehicular traffic will be limited to the approved locations to reduce combustive emissions and dust.
3. McKinley County will comply with U.S. Environmental Protection Agency's Clean Air Act, and all applicable state and local regulations.

### **3.2 Cultural Resources**

Complete Archeological Services Associates performed a Class III archaeological survey in the project area. A determination of "no historic properties affected" was made. The Cultural Resources Compliance Form is attached as Appendix 5.

#### **3.2.1 No Action Alternative**

##### **3.2.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW application for Telstar Road would not be approved and no road improvement activities would occur along the ROW. No direct or indirect impacts to cultural resources would occur.

#### **3.2.2 Proposed Action**

##### **3.2.2.1 Direct and Indirect Effects**

The potential exists to impact undiscovered or improperly inventoried cultural resources that may be discovered during road construction or maintenance activities within the proposed ROW.

##### **3.2.2.2 Mitigation**

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered during the Proposed Action by McKinley County, or any person working on their behalf, will be immediately reported to the NNHPD at (928) 871-7148, and to any other necessary agencies. McKinley County will suspend all operations in the immediate area of such discovery until

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approval to proceed is issued by the NNHPD. An evaluation of the discovery will be made by the NNHPD archaeologist to determine appropriate action to prevent the loss of significant cultural or scientific values.

### **3.3 Environmental Justice**

Executive Order 12898 requires federal agencies to assess projects to ensure there are no disproportionately high or adverse environmental, health, or safety effects on minority and low-income populations (1994). Minorities comprise a high percentage of the population residing in McKinley County.

#### **3.3.1 No Action Alternative**

##### **3.3.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW application for Telstar Road would not be approved and no road improvement activities would occur along the ROW. No direct or indirect impacts to environmental justice would occur.

#### **3.3.2 Proposed Action**

##### **3.3.2.1 Direct and Indirect Effects**

The purpose of the Proposed Action is to provide a ROW access so that McKinley County can improve and maintain Telstar Road. This would be an overall positive effect for residents that live in the vicinity of the Proposed Action. Negative direct effects to minority or low-income populations would include an increase in construction and maintenance activities, increased traffic, and noise disturbance within the ROW over a 20 year period.

##### **3.3.2.2 Mitigation**

Mitigation for construction and maintenance activities within the proposed ROW that would reduce negative impacts to low income or minority populations living in the project area include watering roads to reduce dust, notifying residents of pending construction activities, providing appropriate signage and traffic direction during construction activities, and identifying and directing motorists to alternate routes when necessary. Regarding an increase in noise disturbance, see Section 3.8.

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### **3.4 Floodplains**

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the Proposed Action crosses a Zone A flood hazard zone (1% Annual Chance of Flood Hazard). The Zone A area is a moderately sized ephemeral wash which is crossed by Telstar Road in the NE/4 of Section 14, T. 15 North, R. 17 West (USDHS FEMA 2010). The remainder of the project area is located within Zone X area of minimal flood hazard. There are no perennial or intermittent streams, riparian areas, or wetlands in the project area (USFWS 2016).

#### **3.4.1 No Action Alternative**

##### **3.4.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to floodplains would occur.

#### **3.4.2 Proposed Action**

##### **3.4.2.1 Direct and Indirect Effects**

A portion of the Proposed Action is located in the 100-year floodplain of an ephemeral wash (FEMA map Zone A). Therefore, McKinley County would need to ensure construction activities are within EPA Clean Water Act requirements. This may include 2012 Construction General Permit authorization under the Stormwater Discharges from Construction Activities portion of the National Pollutant Discharge Elimination System (NPDES), depending on the number of acres included in the construction project within the Proposed Action area (EPA 2016).

### **3.5 General Topography**

The Proposed Action area is within the community of Churchrock, New Mexico. Elevation in the project area is approximately 6700 feet. General topography surrounding the project area consists of wide valleys rimmed with mesas and buttes, and drained by sandy, ephemeral washes. Exposed sandstone bedrock is present along steep slopes, mesa rimrock, and hillsides. Ephemeral drainages with deeply incised channels indicate unstable, fine soils. The community of Churchrock is an historic uranium mining community. There are no unique habitat elements within the proposed ROW. There are no perennial or intermittent streams, riparian areas, or wetlands in the project area

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### **3.5.1 No Action Alternative**

#### **3.5.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and no construction or maintenance would be performed by McKinley County along Telstar Road. Therefore, no direct or indirect impacts to general topography would occur.

### **3.5.2 Proposed Action**

#### **3.5.2.1 Direct and Indirect Effects**

1. A direct effect to the existing topography will result from construction and maintenance activities within the proposed ROW.
2. The indirect effect of construction disturbance includes soil losses from erosion of exposed soils as well as seed bank losses.

#### **3.5.2.2 Mitigation**

1. Surface disturbance and vehicular traffic will be limited to areas approved within the proposed ROW.
2. Disturbed areas will be reclaimed pursuant to Section 2.3. Reseeding will help prevent soil loss and seed bank disturbance/loss. Successful reclamation will take two to three years.
3. Best Management Practices (BMPs) including sediment barriers, rip/rap, hay bales, or other protections to reduce erosion and soil losses will be implemented during construction and maintenance activities. Road improvement construction within the proposed ROW will only be performed when the soil is dry enough to adequately support construction equipment and vehicles. When the soil is too wet (ruts more than six inches deep), construction will be postponed until conditions improve.

## **3.6 Soils**

Most of the soils in the project area consist of eolian deposits on sandstone, with fine sandy loams throughout the proposed right-of-way.

Soils in the northern half of the proposed ROW are composed of the Zia sandy loam, 1 to 5 percent slopes. This complex consists of eolian deposits over fan and stream alluvium derived from Dakota and Gallup sandstones. The soil texture ranges from sandy loam (0 to 3 inches

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depth), sandy loam (3 to 31 inches depth), and fine sandy loam to a depth of 65 inches (NRCS 2016). These are somewhat excessively drained soils and the capacity of the most limiting layer to transmit water (Ksat) is high.

The Rizno-Tekapo-Rock outcrop complex, 2 to 45 percent slopes is found in the south half of the proposed right-of-way and is associated with structural benches and escarpments on mesas and cuestas. The complex consists of eolian deposits over residuum weather from Dakota and Gallup sandstones (Dane and Bachman 1957, NMBMGR 2003) with soil textures of sandy loam (0 to 3 inches depth), sandy loam (3 to 8 inches depth), and bedrock at 20 inches depth (NRCS 2016).

### **3.6.1 No Action Alternative**

#### **3.6.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and McKinley County would not conduct any road improvement or maintenance activities within the Telstar Road ROW. Therefore, no direct or indirect impacts to soils would occur.

### **3.6.2 Proposed Action**

#### **3.6.2.1 Direct and Indirect Effects**

1. A direct effect to soils from construction and maintenance activities within the ROW would come from mixing, blading, filling, and grading. Soils will be compacted and structurally reduced and exposed to an undetermined amount of erosion.
2. Indirect effects would come from soil losses from wind and precipitation events on soils left exposed immediately after construction or maintenance events.

### **3.6.3 Mitigation**

In the short term, direct and indirect impacts to soils exposed during and immediately after construction and maintenance activities within the proposed ROW would be mitigated by utilizing BMPs within the ROW to minimize soil loss. Reclamation and reseeding would further protect soils from long term losses from wind and precipitation events. Once vegetation is established, soils will be more stabilized. Revegetation and soil stabilization may take up to three years.



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### **3.7 Invasive, Non-native Species**

There are seventeen species listed on the BIA Navajo Noxious Weed List (USDI OSM 1999). None of these species are present in the project area. Two Class C noxious weeds, Siberian elm and Russian olive (*Elaeagnus angustifolia*), from the New Mexico Department of Agriculture Noxious Weed List (2003) were present within the project area. Several species of invasive weeds are also present within the project area. These species include Russian thistle (*Salsola tragus*) and kochia (*Bassia scoparia*).

#### **3.7.1 No Action Alternative**

##### **3.7.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and no new direct or indirect impacts from invasive or non-native species would occur. The current condition of invasive species present within the project area would remain the same.

#### **3.7.2 Proposed Action**

##### **3.7.2.1 Direct and Indirect Effects**

Noxious weeds may become established in disturbed areas within the Proposed Action area as a result of construction or maintenance activities. Bare soils are vulnerable to invasive or noxious weed species establishment.

##### **3.7.2.2 Mitigation**

1. Any disturbed areas will be reclaimed and seeded with an approved seed mix.
2. McKinley County will make every effort to ensure that noxious weeds do not spread over disturbed areas. If noxious weeds become established within the Proposed Action area, McKinley County will contact the Navajo Nation and the EPA Pesticides Program for a list of approved herbicides and applicators.

### **3.8 Land Use**

The Proposed Action is located on Navajo Tribal Trust land. Current land uses include residential living, business and school, paved and dirt roads, and vacant lots. There are no farmlands in the Proposed Action area.

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### **3.8.1 No Action Alternative**

#### **3.8.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved or constructed and no direct or indirect impacts to current land uses would occur.

### **3.8.2 Proposed Action**

#### **3.8.2.1 Direct and Indirect Effects**

Because construction and maintenance projects would be limited to smaller areas within the proposed ROW, the Proposed Action would potentially affect much less than the approximately 7.47 acres of Tribal Trust land that is included within the proposed ROW. Much of the road improvement construction and maintenance will occur within the Telstar Road footprint, which is an existing disturbance and designated land use (i.e., a road). The large width of the proposed ROW (150 feet) is necessary to accommodate the potential need for realignment at bridges and culvert crossings. At this time, it is unknown how much acreage of undisturbed land within the proposed ROW would be needed for potential re-alignment, but it would certainly be less than 7.47 acres and is likely to be closer to two or three acres. In any case, land use within the proposed ROW is primarily used residential living. Construction within these areas would result in a loss of some vegetation.

#### **3.8.2.2 Mitigation**

1. Reclamation (seeding) of the Proposed Action areas that are disturbed from construction or maintenance of the Telstar Road ROW will replace, and may even enhance, vegetative cover within the proposed ROW. Successful reclamation is expected to take two to three years.
2. If grazing permits are identified in the project area, the grazing permittees will be contacted to gain written permission for construction or maintenance within that portion of the proposed ROW that overlaps permitted grazing allotments.

## **3.9 Noise**

Noise is not currently regulated or managed by the Navajo Nation. The Proposed Action is in a rural location and is not in any BLM-designated Noise Sensitive Area. Several

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residences are located within 200 feet of the proposed ROW. Maintenance and construction activities near these homes may cause some moderate-level noise.

### **3.9.1 No Action Alternative**

#### **3.9.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect noise impacts would occur.

### **3.9.2 Proposed Action**

#### **3.9.2.1 Direct and Indirect Effects**

1. Noise will be generated as part of construction and maintenance activities associated with the proposed ROW.
2. Occasional maintenance vehicles will travel to and within the project area over a period of approximately 20 years.

#### **3.9.2.2 Mitigation**

1. Construction will be conducted during daylight hours and will be limited to approved locations within the proposed ROW.
2. Vehicular traffic will be restricted to approved areas within the ROW and will not exceed what is necessary for the construction and maintenance.
3. Noise associated with construction activities will cease after construction is completed (approximately two days to four weeks, depending on project scope). Once construction is complete, noise will return to background level except during periodic maintenance activities.

## **3.10 Public Health and Safety**

The proposed ROW occurs along a moderately traveled paved road accessing residences, a school, and businesses. During construction, residents and road users in the vicinity of construction activity may be subject to safety concerns, including increased construction traffic, temporary detours, and changing road conditions.

### **3.10.1 No Action Alternative**

#### **3.10.1.1 Direct and Indirect Effects**

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Under the No Action Alternative, the proposed ROW would not be approved and McKinley County would not be conducting road improvement or maintenance activities along Telstar Road. Therefore no direct or indirect impacts to public health and safety would occur.

### **3.10.2 Proposed Action**

#### **3.10.2.1 Direct and Indirect Effects**

Risks to the public associated with road construction and maintenance include increased traffic and potential air (dust and vehicle exhaust) emissions exposure.

#### **3.10.2.2 Mitigation**

1. Only approved areas within the ROW will be used during construction and maintenance to minimize hazards McKinley County road workers and the general public.
2. All applicable laws, regulations, and policies will be followed during construction and maintenance activities, or while responding to any emergency.
3. BMPs and appropriate Occupational Safety and Health Administration standards and guidelines will be implemented to minimize negative effects to public health and safety, including appropriate signage and use of traffic directors (flaggers) where needed.

### **3.11 Threatened, Endangered, and Special Status Species**

A wildlife biologist and botanist conducted pedestrian surveys of the project area to inspect for the potential presence of threatened, endangered, or special status species on April 12, 2016.

No federal or Navajo Endangered Species List (NESL) listed threatened, endangered, or special status species were observed during the wildlife and plant surveys. The habitat available in the project area is heavily disturbed from human activity, and only common species of wildlife and plants are expected to occur within the vicinity.

Three bird species that are protected under the MBTA were observed during the wildlife survey. These were the white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Carpodacus mexicanus*), and Say's phoebe (*Sayornis saya*). Mitigation measures outlined in Section 3.11.2.2, below, will minimize the potential take of migratory birds from the Proposed Action area.

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No plant species of concern to the Navajo Natural Heritage Program or the United States Fish and Wildlife Service will be impacted by the proposed project.

Reports addressing the wildlife and plant surveys are attached as Appendices 3 and 4.

### **3.11.1 No Action Alternative**

#### **3.11.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the ROW would not be approved and no road improvement projects along Telstar Road would occur. There would be no direct or indirect impacts to threatened, endangered, or special status species.

### **3.11.2 Proposed Action**

#### **3.11.2.1 Direct and Indirect Effects**

1. The removal of vegetation from areas proposed for construction improvements may impact nesting migratory birds within the project area and will remove potential nesting or foraging habitat.
2. The MBTA protects migratory birds from a “take”. Take is defined as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities”. A “take” does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof. Nesting migratory birds could be adversely impacted by a potential take.

#### **3.11.2.2 Mitigation**

1. Construction should not take place during migratory bird nesting season, which is generally May 1 -August 30 for the project area. If construction activities must occur during this period, surveys for nests should be conducted beforehand to identify any nests that may be impacted by construction activities.
2. McKinley County should avoid shrub removal and damage to vegetation as much as possible, cleaning up and removing any spills and/or trash from construction, and using only authorized rights-of-way and roads for construction and installation.
3. McKinley county should minimize soil disturbance during construction to reduce impacts to small mammals and reptiles.

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4. McKinley County should use of effective reclamation methods to ensure a viable native plant community at the end of reclamation efforts and monitor for invasive or noxious plant species that would hamper reclamation success.

### **3.12 Vegetation, Forestry**

Due to drought and human activity, vegetation is made up primarily of invasive species or common drought tolerant species found in disturbed areas. Siberian elm and Russian olive are present in yards and vacant lots, and along the roadsides. Rabbitbrush (*Chrysothamnus* sp.) and invasive weeds such as Russian thistle and kochia are present along the washes and road-sides. A complete inventory of plant species can be found in Appendix 4.

#### **3.12.1 No Action Alternative**

##### **3.12.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to vegetation or forestry would occur.

#### **3.12.2 Proposed Action**

##### **3.12.2.1 Direct and Indirect Effects**

The Proposed Action will affect up to 7.47 acres of Navajo Tribal Trust lands during road improvement projects along Telstar Road.

##### **3.12.2.2 Mitigation**

Reclamation, as outlined in Section 2.3, will mitigate impacts to vegetation from construction within the Proposed Action area. Reseeding will replace vegetation removed or damaged during construction. Successful reclamation is expected to take two to three years.

### **3.13 Visual Resources**

Visual resources are not currently inventoried or managed by the Navajo Nation. However, the BLM has developed a Visual Resource Management (VRM) classification system designed to maintain or enhance visual qualities and describe different degrees of modification to the landscape. There are four VRM classes (Classes I through IV), which

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identify suggested degrees of allowed human modification to a landscape. Class I allows the least modification and Class IV allows the most (USDI BLM 2003).

Due to the presence of roads, residents, and businesses, the project area most likely falls into a BLM Class IV area. Class IV areas are permitted to implement major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements of the landscape (USDI BLM 2003).

In any case, improvements to wash crossings and roads will likely enhance Visual Resources along Telstar Road rather than negatively impact them.

### **3.13.1 No Action Alternative**

#### **3.13.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to visual resources would occur.

### **3.13.2 Proposed Action**

#### **3.13.2.1 Direct and Indirect Effects**

Short-term impacts to visual resources could come from dust, truck traffic, and placement of heavy equipment during construction.

#### **3.13.2.2 Mitigation**

Short-term impacts to visual resources from construction will cease after approximately two to six weeks depending on which project is occurring within the proposed ROW.

## **3.14 Wastes, Hazardous and Solid**

As a result of the construction within the Proposed Action area, solid waste materials will be generated. These materials may include typical field waste such as charts and plats, excess concrete pieces, old culverts, scrap lumber, laths, stakes, flagging, nylon rope, lunch trash, and cardboard. Generation of hazardous waste is not expected. If hazardous waste were inadvertently generated, the proper authorities would be consulted regarding the disposal of such waste.

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### **3.14.1 No Action Alternative**

#### **3.14.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts from wastes, hazardous or solid, would occur.

### **3.14.2 Proposed Action**

#### **3.14.2.1 Direct and Indirect Effects**

Trash and unwanted materials will be generated by construction.

#### **3.14.2.2 Mitigation**

All trash will be placed in a portable trash cage and hauled to an approved landfill. There will be no burial or burning of trash. Human waste will be disposed of in chemical toilets if necessary and hauled to an approved dump station off of the reservation.

## **3.15 Water Resources**

The Colorado Plateaus aquifers underlay the northwestern portion of New Mexico. The principal aquifers and aquifer systems are the Uinta-Animas, the Mesaverde, the Coconino-De Chelly, and the Dakota-Glen Canyon. Smaller, more localized aquifers are also defined as part of the Colorado Plateaus aquifers. The San Andres Limestone-Glorieta Sandstone, Dakota-Westwater Sandstones, and the Gallup Sandstone of the Mesaverde Group at and near the project area, form aquifers that produce most of the ground water for the communities of Gallup and Rehoboth (Cooper and West 1967). The quality of water from these aquifers and systems throughout the Four Corners area has been described by the USGS as being highly variable with total dissolved solids generally measuring under 1,000 mg/L, though several areas reported concentrations as high as 35,000 mg/L (Robson and Banta 1995).

The Gallup Sandstone is recharged in its outcrop areas by infiltration of precipitation and runoff. Locally, it is recharged by downward percolation of water from the overlying unconsolidated sediments. Water from the sandstone is discharged naturally through small springs and seeps in the outcrop areas and by vertical or lateral leakage percolation into adjacent unconsolidated deposits.



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The project area receives approximately 11.08 inches of annual precipitation (WRCC 2014). However, annual groundwater recharge is limited in the Gallup region as indicated by recent and significant declines in water levels in the area's wells. In the Gallup area, the water table dropped about 200 feet between 1999 and 2009 and is not expected to meet the demands of the population by 2019 (Bushnell 2012). The chemical quality of the water in the aquifers varies widely, probably because of variations in the quality of recharge water and because of the presence locally of coal beds and carbonaceous shale within the formation (Cooper and West 1967). The city's 17 wells are located up to 10 miles from the city center and range from 300 to 3,500 feet deep. As such, they receive no recharge from surface sources (such as rain or snow) immediately above each well site.

Wells in the vicinity of the project area are similarly confined, deep, and well-protected, since they draw from the San Andres-Glorieta aquifer, a 200 ft thick aquifer, 1100 ft below the ground surface.

The hydrologic setting of the project area is characterized by several large, ephemeral drainages filled with eolian deposits and sandy alluvium. Surface flows are associated with small ephemeral flows from snow melt and summer thunderstorms. Drainages in the project area are categorized as sandy. Most discharge to alluvial channels is lost by evapotranspiration. However, some water may move laterally through the underlying sandstones as subsurface flow.

### **3.15.1 No Action Alternative**

#### **3.15.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the proposed ROW would not be approved and no road improvement construction projects would occur along Telstar Road.

### **3.15.2 Proposed Action**

#### **3.15.2.1 Direct and Indirect Effects**

1. A direct effect from construction is the increased sediment loading to the adjacent surface drainages through runoff of disturbed soils.
2. Natural surficial drainage patterns may be slightly disrupted by construction within the proposed ROW.
3. Although no hazardous substances as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) will be used during construction activities, and no Resources Conservation and Recovery Act-defined hazardous wastes will be generated during

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construction or operation, construction equipment could experience a spill of on-board fluids and/or materials that could potentially get into the surface or groundwater system.

#### **3.15.2.2 Mitigation**

1. BMPs in Section 2.2 will be implemented to prevent erosion and off-site migration of soils and other materials, and to reduce impacts to watershed and hydrology.
2. Any spilled contaminants will be cleaned up as soon as possible to prevent run-off of contaminants into surface waters or infiltration into groundwater.
3. Construction areas within the proposed ROW will be reclaimed as outlined in Section 2.3. Re-seeding will reduce sediment loading by stabilizing the soil. Successful reclamation is expected to take two to three years.

### **3.16 Wildlife**

Wildlife species occurring in the project area are typical of arid grasslands of the Great Basin Desert. Representative mammals include ground squirrels (*Spermophilus* spp.) and desert cottontails (*Sylvilagus audubonii*). Common summer resident bird species include house finch (*Carpodacus mexicanus*) and common raven (*Corvus corax*). Reptilian species include whiptail lizards (*Aspidoscelis* spp.).

A complete inventory of wildlife species observed in the project area is included in Appendix 3.

#### **3.16.1 No Action Alternative**

##### **3.16.1.1 Direct and Indirect Effects**

Under the No Action Alternative, the project would not be approved or constructed and no direct or indirect impacts to wildlife would occur.

#### **3.16.2 Proposed Action**

##### **3.16.2.1 Direct and Indirect Effects**

1. The wildlife that uses the site may die or be displaced during construction. Removal of or damage to vegetation during construction of the Proposed Action may reduce wildlife forage and cover in the area.

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2. Wildlife movement patterns may be disrupted by increased human activity in construction areas.

#### **3.16.2.2 Mitigation**

1. Reclamation of the proposed ROW road improvement and construction areas, as outlined in Section 2.3, will reduce the long-term impacts to wildlife that use the area. Reseeding disturbed areas will replace vegetation removed during construction. In some instances, there may be a benefit from successful reclamation due to an increase in vegetative cover and wildlife forage. Successful reclamation is expected to take two to three years.
2. Vehicles will be restricted to existing roads and approved temporary use or Row areas to reduce impacts to ground dwelling wildlife at the project site.
3. McKinley County workers and contractors to McKinley County will observe speed limits to reduce impacts to wildlife and domestic pets from vehicle collisions.
4. No trenches or ditches are to be left open over night to prevent wildlife or domestic pets from falling in. If leaving trenches or ditches open is necessary then an escape ramp should be constructed to allow animals to escape entrapment. Escape ramps should be at a slope of 3:1 and should be directed away from roads and traffic.

### **3.17 Cumulative Effects**

#### **3.17.1 No Action Alternative**

Under the No Action Alternative, the Telstar Road ROW would not be approved and McKinley County would not be performing road improvement projects within the ROW.

#### **3.17.2 Proposed Action**

The Proposed Action will affect up to 7.47 acres on Navajo Tribal Trust lands. Reasonably foreseeable future development in the project area may include more residences, more traffic, more businesses, and perhaps more road development and/or improvement projects. These installations would add to the cumulative disturbance in the area.

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## 4. Consultation/Coordination

This section identifies the interdisciplinary team that participated in the development of this document.

**Table 4.1: Interdisciplinary Project Team**

| Member         | Title               | Organization                                     | Onsite Inspection | Date of Inspection |
|----------------|---------------------|--|-------------------|--------------------|
| Celia Cook     | Consultant/Author   | Permits West, Inc.                               | yes               | 4/12/2016          |
| Celia Cook     | Wildlife Biologist  | Permits West, Inc.                               | yes               | 4/12/2016          |
| Robyn Tierny   | Botanist            | Permits Wes, Inc.                                | Yes               | 4/12/2016          |
| Mary Errickson | Archaeologist       | Complete Archeological Services Associates, Inc. | yes               | 4/28/2016          |
| Mike Deutsch   | Project Coordinator | Permits West, Inc.                               | yes               | 3/10/2016          |

## 5. Contact Information

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Fax: 505-466-9682

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Gallup, New Mexico  
87305

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# NNHP

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16perm104

25-March-2016

Mike Deutsch - Project Director  
Permits West, Inc  
37 Verano Loop  
Santa Fe, NM 87508

**SUBJECT: County Road Project on behalf of McKinley County**

Mike Deutsch,

NNHP has performed an analysis of your project in comparison to known biological resources of the Navajo Nation and has included the findings in this letter. The letter is composed of seven parts. The sections as they appear in the letter are:

1. **Known Species** – a list of all species within relative proximity to the project
2. **Potential Species** – a list of potential species based on project proximity to respective suitable habitat
3. **Quadrangles** – an exhaustive list of quads containing the project
4. **Project Summary** – a categorized list of biological resources within relative proximity to the project grouped by individual project site(s) or quads
5. **Conditional Criteria Notes** – additional details concerning various species, habitat, etc.
6. **Personnel Contacts** – a list of employee contacts
7. **Resources** – identifies sources for further information

Known Species lists “species of concern” known to occur within proximity to the project area. Planning for avoidance of these species is expected. If no species are displayed then based upon the records of the Navajo Nation Department of Fish and Wildlife (NNDFW) there are no “species of concern” within proximity to the project. Refer to the Navajo Endangered Species List (NESL) Species Accounts for recommended avoidance measures, biology, and distribution of NESL species on the Navajo Nation ([http://nnhp.nndfw.org/sp\\_account.htm](http://nnhp.nndfw.org/sp_account.htm)).

Potential Species lists species that are potentially within proximity to the project area and need to be evaluated for presence/absence. If no species are found within the Known or Potential Species lists, the project is not expected to affect any federally listed species, nor significantly impact any tribally listed species or other species of concern. Potential for species has been determined primarily on habitat characteristics and species range information. A thorough habitat analysis, and if necessary, species specific surveys, are required to determine the potential for each species.

Species of concern include protected, candidate, and other rare or otherwise sensitive species, including certain native species and species of economic or cultural significance. For legally protected species, the following tribal and federal statuses are indicated: NESL, federal Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Eagle Protection Act (EPA). No legal protection is afforded species with only ESA candidate, NESL group 4 status, and species listed on the Sensitive Species List. Please be aware of

these species during surveys and inform the NNDFW of observations. Reported observations of these species and documenting them in project planning and management is important for conservation and may contribute to ensuring they will not be up listed in the future.

In any and all correspondence with NNDFW or NNHP concerning this project please cite the Data Request Code associated with this document. It can be found in this report on the top right corner of the every page. Additionally please cite this code in any biological evaluation documents returned to our office.

## 1. Known Species *(NESL=Navajo Endangered Species List, FE=Federally Endangered, FT=Federally Threatened, FC=Federal Candidate)*

### Species

AQCH = *Aquila chrysaetos* / Golden Eagle NESL G3

## 2. Potential Species

### Species

AQCH = *Aquila chrysaetos* / Golden Eagle NESL G3

ATCU = *Athene cunicularia* / Burrowing Owl NESL G4

EMTREX = *Empidonax traillii extimus* / Southwestern Willow Flycatcher NESL G2 FE

ERAC = *Erigeron aconitifolius* / Acoma Fleabane NESL G3

ERRH = *Erigeron rhizomatus* / Rhizome Fleabane/zuni Fleabane NESL G2 FT

ERSI = *Erigeron sibiricus* / Sibiricus's Fleabane NESL G4

FAPE = *Falco peregrinus* / Peregrine Falcon NESL G4

LENA = *Lesquerella navajensis* / Navajo Bladderpod NESL G3

## 3. Quadrangles (7.5 Minute)

### Quadrangles

Church Rock (35108-E5) / NM

## 4. Project Summary *(EO1 Mile/EO 3 Miles=elements occurring within 1 & 3 miles., MSO=mexican spotted owl PACs, POTS=potential species, RCP=Biological Areas)*

| SITE                       | EO1MI | EO3MI | QUAD                           | MSO  | POTS   | AREAS  |
|----------------------------|-------|-------|--------------------------------|------|--|--------|
| Challenger Rd              | None  | AQCH  | Church Rock<br>(35108-E5) / NM | None | FAPE,<br>EMTREX,<br>ATCU, AQCH,<br>LENA, ERSI,<br>ERRH, ERAC | Area 3 |
| Old Church Rock<br>Mine Rd | None  | None  | Church Rock<br>(35108-E5) / NM | None | FAPE,<br>EMTREX,<br>ATCU, AQCH,<br>LENA, ERSI,<br>ERRH, ERAC | Area 3 |



| SITE               | EO1MI | EO3MI | QUAD                        | MSO  | POTS   | AREAS  |
|--------------------|-------|-------|-----------------------------|------|--|--------|
| Superman Canyon Rd | None  | AQCH  | Church Rock (35108-E5) / NM | None | FAPE, EMTREX, ATCU, AQCH, LENA, ERSI, ERRH, ERAC | Area 3 |
| Telstar Rd         | None  | AQCH  | Church Rock (35108-E5) / NM | None | FAPE, EMTREX, ATCU, AQCH, LENA, ERSI, ERRH, ERAC | Area 3 |
| Uphill Rd          | None  | AQCH  | Church Rock (35108-E5) / NM | None | FAPE, EMTREX, AQCH, LENA, ERSI, ERRH, ERAC       | Area 3 |

**5. Conditional Criteria Notes** (Recent revisions made please read thoroughly. For certain species, and/or circumstances, please read and comply)

- A. **Biological Resource Land Use Clearance Policies and Procedures (RCP)** - The purpose of the RCP is to assist the Navajo Nation government and chapters ensure compliance with federal and Navajo laws which protect, wildlife resources, including plants, and their habitat resulting in an expedited land use clearance process. After years of research and study, the NNDFW has identified and mapped wildlife habitat and sensitive areas that cover the entire Navajo Nation.  
The following is a brief summary of six (6) wildlife areas:
1. **Highly Sensitive Area** – recommended no development with few exceptions.
  2. **Moderately Sensitive Area** – moderate restrictions on development to avoid sensitive species/habitats.
  3. **Less Sensitive Area** – fewest restrictions on development.
  4. **Community Development Area** – areas in and around towns with few or no restrictions on development.
  5. **Biological Preserve** – no development unless compatible with the purpose of this area.
  6. **Recreation Area** – no development unless compatible with the purpose of this area.
- None** - outside the boundaries of the Navajo Nation  
This is not intended to be a full description of the RCP please refer to the our website for additional information at <http://www.nndfw.org/clup.htm>.
- B. **Raptors** – If raptors are known to occur within 1 mile of project location: Contact Chad Smith at 871-7070 regarding your evaluation of potential impacts and mitigation.
- o **Golden and Bald Eagles**- If Golden or Bald Eagle are known to occur within 1 mile of the project, decision makers need to ensure that they are not in violation of the Golden and Bald Eagle Nest Protection Regulations found at [http://nnhp.nndfw.org/docs\\_reps/gben.pdf](http://nnhp.nndfw.org/docs_reps/gben.pdf).
  - o **Ferruginous Hawks** – Refer to “Navajo Nation Department of Fish and Wildlife’s Ferruginous Hawk Management Guidelines for Nest Protection” [http://nnhp.nndfw.org/docs\\_reps.htm](http://nnhp.nndfw.org/docs_reps.htm) for relevant information on avoiding impacts to Ferruginous Hawks within 1 mile of project location.
  - o **Mexican Spotted Owl** - Please refer to the Navajo Nation Mexican Spotted Owl Management Plan [http://nnhp.nndfw.org/docs\\_reps.htm](http://nnhp.nndfw.org/docs_reps.htm) for relevant information on proper project planning near/within spotted owl protected activity centers and habitat.

- C. **Surveys** – Biological surveys need to be conducted during the appropriate season to ensure they are complete and accurate please refer to NN Species Accounts [http://nnhp.nndfw.org/sp\\_account.htm](http://nnhp.nndfw.org/sp_account.htm). Surveyors on the Navajo Nation must be permitted by the Director, NNDFW. Contact Jeff Cole at (928) 871-7068 for permitting procedures. Questions pertaining to surveys should be directed to the NNDFW Zoologist (Chad Smith) for animals at 871-7070, and Botanist (Andrea Hazelton) for plants at (928)523-3221. Questions regarding biological evaluation should be directed to Jeff Cole at 871-7068.
- D. **Oil/Gas Lease Sales** – Any settling or evaporation pits that could hold contaminants should be lined and covered. Covering pits, with a net or other material, will deter waterfowl and other migratory bird use. Lining pits will protect ground water quality.
- E. **Power line Projects** – These projects need to ensure that they do not violate the regulations set forth in the Navajo Nation Raptor Electrocution Prevention Regulations found at [http://nnhp.nndfw.org/docs\\_reps/repr.pdf](http://nnhp.nndfw.org/docs_reps/repr.pdf).
- F. **Guy Wires** – Does the project design include guy wires for structural support? If so, and if bird species may occur in relatively high concentrations in the project area, then guy wires should be equipped with highly visual markers to reduce the potential mortality due to bird-guy wire collisions. Examples of visual markers include aviation balls and bird flight diverters. Birds can be expected to occur in relatively high concentrations along migration routes (e.g., rivers, ridges or other distinctive linear topographic features) or where important habitat for breeding, feeding, roosting, etc. occurs. The U.S. Fish and Wildlife Service recommends marking guy wires with at least one marker per 100 meters of wire.
- G. **San Juan River** – On 21 March 1994 (Federal Register, Vol. 59, No. 54), the U.S. Fish and Wildlife Service designated portions of the San Juan River (SJR) as critical habitat for *Ptychocheilus lucius* (Colorado pikeminnow) and *Xyrauchen texanus* (Razorback sucker). Colorado pikeminnow critical habitat includes the SJR and its 100-year floodplain from the State Route 371 Bridge in T29N, R13W, sec. 17 (New Mexico Meridian) to Neskahai Canyon in the San Juan arm of Lake Powell in T41S, R11E, sec. 26 (Salt Lake Meridian) up to the full pool elevation. Razorback sucker critical habitat includes the SJR and its 100-year floodplain from the Hogback Diversion in T29N, R16W, sec. 9 (New Mexico Meridian) to the full pool elevation at the mouth of Neskahai Canyon on the San Juan arm of Lake Powell in T41S, R11E, sec. 26 (Salt Lake Meridian). All actions carried out, funded or authorized by a federal agency which may alter the constituent elements of critical habitat must undergo section 7 consultation under the Endangered Species Act of 1973, as amended. Constituent elements are those physical and biological attributes essential to a species conservation and include, but are not limited to, water, physical habitat, and biological environment as required for each particular life stage of a species.
- H. **Little Colorado River** - On 21 March 1994 (Federal Register, Vol. 59, No. 54) the U.S. Fish and Wildlife Service designated Critical Habitat along portions of the Colorado and Little Colorado Rivers (LCR) for *Gila cypha* (humpback chub). Within or adjacent to the Navajo Nation this critical habitat includes the LCR and its 100-year floodplain from river mile 8 in T32N R6E, sec. 12 (Salt and Gila River Meridian) to its confluence with the Colorado River in T32N R5E sec. 1 (S&GRM) and the Colorado River and 100-year floodplain from Nautuloid Canyon (River Mile 34) T36N R5E sec. 35 (S&GRM) to its confluence with the LCR. All actions carried out, funded or authorized by a federal agency which may alter the constituent elements of Critical Habitat must undergo section 7 consultation under the Endangered Species Act of 1973, as amended. Constituent elements are those physical and biological attributes essential to a species conservation and include, but are not limited to, water, physical habitat, and biological environment as required for each particular life stage of a species.

- I. **Wetlands** – In Arizona and New Mexico, potential impacts to wetlands should also be evaluated. The U.S. Fish & Wildlife Service's National Wetlands Inventory (NWI) maps should be examined to determine whether areas classified as wetlands are located close enough to the project site(s) to be impacted. In cases where the maps are inconclusive (e.g., due to their small scale), field surveys must be completed. For field surveys, wetlands identification and delineation methodology contained in the "Corps of Engineers Wetlands Delineation Manual" (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. NWI maps are available for examination at the Navajo Natural Heritage Program (NNHP) office, or may be purchased through the U.S. Geological Survey (order forms are available through the NNHP). The NNHP has complete coverage of the Navajo Nation, excluding Utah, at 1:100,000 scale; and coverage at 1:24,000 scale in the southwestern portion of the Navajo Nation. In Utah, the U.S. Fish & Wildlife Service's National Wetlands Inventory maps are not yet available for the Utah portion of the Navajo Nation, therefore, field surveys should be completed to determine whether wetlands are located close enough to the project site(s) to be impacted. For field surveys, wetlands identification and delineation methodology contained in the "Corps of Engineers Wetlands Delineation Manual" (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. For more information contact the Navajo Environmental Protection Agency's Water Quality Program.
- J. **Life Length of Data Request** – The information in this report was identified by the NNHP and NNDFW's biologists and computerized database, and is based on data available at the time of this response. If project planning takes more than two (02) years from the date of this response, verification of the information provided herein is necessary. It should not be regarded as the final statement on the occurrence of any species, nor should it substitute for on-site surveys. Also, because the NNDFW information is continually updated, any given information response is only wholly appropriate for its respective request.
- K. **Ground Water Pumping** - Projects involving the ground water pumping for mining operations, agricultural projects or commercial wells (including municipal wells) will have to provide an analysis on the effects to surface water and address potential impacts on all aquatic and/or wetlands species listed below. NESL Species potentially impacted by ground water pumping: *Carex specuicola* (Navajo Sedge), *Cirsium rydbergii* (Rydberg's Thistle), *Primula specuicola* (Cave Primrose), *Platanthera zothecina* (Alcove Bog Orchid), *Puccinellia parishii* (Parish Alkali Grass), *Zigadenus vaginatus* (Alcove Death Camas), *Perityle specuicola* (Alcove Rock Daisy), *Symphotrichum welshii* (Welsh's American-aster), *Coccyzus americanus* (Yellow-billed Cuckoo), *Empidonax traillii extimus* (Southwestern Willow Flycatcher), *Rana pipiens* (Northern Leopard Frog), *Gila cypha* (Humpback Chub), *Gila robusta* (Roundtail Chub), *Ptychocheilus lucius* (Colorado Pikeminnow), *Xyrauchen texanus* (Razorback Sucker), *Cinclus mexicanus* (American Dipper), *Speyeria nokomis* (Western Seep Fritillary), *Aechmophorus clarkia* (Clark's Grebe), *Ceryle alcyon* (Belted Kingfisher), *Dendroica petechia* (Yellow Warbler), *Porzana carolina* (Sora), *Catostomus discobolus* (Bluehead Sucker), *Cottus bairdi* (Mottled Sculpin), *Oxyloma kanabense* (Kanab Ambersnail)

## 6. Personnel Contacts

### Wildlife Manager

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### Zoologist

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### Botanist

Vacant

### Biological Reviewer

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### GIS Supervisor

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### Wildlife Tech

Sonja Detsoi  
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[sdetsoi@nndfw.org](mailto:sdetsoi@nndfw.org)

## 7. Resources

National Environmental Policy Act

Navajo Endangered Species List:  
<http://nnhp.nndfw.org/endangered.htm>

Species Accounts:  
[http://nnhp.nndfw.org/sp\\_account.htm](http://nnhp.nndfw.org/sp_account.htm)

Biological Investigation Permit Application  
[http://nnhp.nndfw.org/study\\_permit.htm](http://nnhp.nndfw.org/study_permit.htm)

Navajo Nation Sensitive Species List  
[http://nnhp.nndfw.org/study\\_permit.htm](http://nnhp.nndfw.org/study_permit.htm)

Various Species Management and/or Document and Reports  
[http://nnhp.nndfw.org/docs\\_reps.htm](http://nnhp.nndfw.org/docs_reps.htm)

Consultant List  
(Coming Soon)

*Dexter D Prall*

Digitally signed by Dexter D Prall  
DN: cn=Dexter D Prall, o=Navajo Nation  
Department of Fish and Wildlife,  
ou=Navajo Natural Heritage Program,  
email=prall@nndfw.org, c=US  
Date: 2016.03.25 10:48:39 -07'00'

Dexter D Prall, GIS Supervisor - Natural Heritage Program  
Navajo Nation Department of Fish and Wildlife

# **WILDLIFE SURVEY REPORT FOR MCKINLEY COUNTY TELSTAR ROAD (CR300) RIGHT-OF-WAY**

**SECTION 14, T. 15 NORTH, R. 17 WEST  
MCKINLEY COUNTY, NEW MEXICO**

## **1.0 INTRODUCTION**

Threatened, endangered and special status wildlife surveys were conducted April 12, 2016 at the location of McKinley County's proposed Telstar Road Right-of-Way (ROW). The proposed ROW would be necessary for upcoming road improvement projects at specific locations along Telstar Road. The proposed ROW is approximately 2,170.11 feet (0.41 miles) in length and 150 feet wide. The proposed ROW crosses Navajo Tribal Trust lands along its 0.41 mile length in Section 14, T. 15 North, R. 17 West, McKinley County, New Mexico. The project location is within the community of Churchrock. The ROW term would be 20 years. The total land use for the proposed ROW is approximately 7.47 acres.

## **2.0 METHODS**

Prior to the field survey, the Navajo Department of Fish and Wildlife's Navajo Natural Heritage Program (NNHP) was consulted regarding the potential for listed or special status wildlife species to occur in the project area and within the *Churchrock, NM* 7.5 minute quadrangle map. A reply (Prall 2016, 16perm104) was received from NNHP March, 25, 2016, and included pertinent information on Navajo Endangered Species List (NESL) species, Biological Resource Land Use Policies and Procedures Area designations, and federally listed species. Additional information on the potential for listed or special status wildlife species to occur in the project area was obtained from the U.S. Fish and Wildlife Service's Information, Planning, and Conservation website (IPaC, 2016).

Permits West, Inc. wildlife biologist, Celia Cook, conducted a pedestrian survey of the proposed Telstar Road ROW April 12, 2016. The purpose of the survey was to inspect for the potential presence of listed or special status wildlife species and evaluate existing habitat conditions.

Weather during surveys was partly cloudy and breezy, with temperatures in the mid-50s (°F) and winds at 7-10 miles per hour.

The surveyed area consisted of the proposed 2505.42 ft. x 150 ft. ROW, including the existing footprint of Telstar Road. Additional areas beyond this boundary were surveyed as needed. A 0.5-mile radius around the project area was surveyed with binoculars, and in some areas on foot, for structures or land formations that would

support raptor nests and other unique habitat elements that would benefit listed or special status species and wildlife in general.

### **3.0 DESCRIPTION OF EXISTING HABITAT**

The proposed ROW begins just south of the intersection of Telstar Road and Challenger Road (BOP) and ends just west of the intersection of Telstar Road and Chapter Road (EOP) within the community of Churchrock, New Mexico. Legal location is Section 14, T. 16 North, R. 17 West. The project is located within a housing area and is near a school and general store. The paved Telstar Road is moderately traveled. Alluvial deposits and small hilly bluffs are present within the project area. Vegetation consists of desert grassland and scrubland with Siberian elm (*Ulmus pumila*) along roadsides, ditches, and yards. One deeply incised wash is crossed by Telstar Road. Bank destabilization and erosion, as well as loss of soils and presence of invasive weedy species are evident along the wash. The area has been heavily impacted by human disturbance and settlement.

Existing disturbances within the project area include paved roads, bridges, home sites, schools and business, and vacant lots.

Elevation within the project area is approximately 6500 feet.

The project area is designated by NNHP as an Area 3 *Less Sensitive Area* for wildlife resources under the Navajo Biological Resource Land Use Clearance Policies and Procedures (Prall 2016).

### **4.0 THREATENED, ENDANGERED, AND SPECIAL STATUS WILDLIFE SPECIES**

According to the March 25, 2016 correspondence from the NNHP (Prall 2016) and the IPaC website (2016), the species indicated in Table 1 have the potential to occur on or near the project area.

**Table 1. Species of Concern with Potential to occur in the Project Area.**

| <b>Species</b>  | <b>Status*</b>                        | <b>Habitat</b>  | <b>Presence**</b>   |
|---|---------------------------------------|---|---|
| Golden eagle<br><i>Aquila chrysaetos</i>                            | NESL<br>Group 3,<br>MBTA, EPA         | A wide variety of open habitats, typically nests in steep cliffs typically > 30 meters in height.         | NS.<br>Closest suitable cliff habitat more than 1.0 mile from project area  |
| Burrowing owl<br><i>Athene cunicularia</i>                          | NESL<br>Group 4,<br>MBTA              | Disturbed grasslands and shrublands; often associated with prairie dog colonies.                          | NS.<br>No nest burrows observed within project area.                        |
| Southwestern willow flycatcher<br><i>Empidonax traillii extimus</i> | NESL<br>Group 2,<br>Federal E<br>MBTA | Dense cottonwood-willow or tamarisk-Russian olive habitats along streams and rivers, wetlands and marshes | NP.   |
| Peregrine falcon<br><i>Falco peregrinus</i>                         | NESL<br>Group 4<br>MBTA               | Open landscapes with cliffs; along coasts, lakes, and rivers.   | NS.<br>Closest suitable cliff habitat more than 1.0 mile from project area. |

|   |                                      |  |     |
|---|--------------------------------------|--|-----|
| Mexican spotted owl<br><i>Strix occidentalis lucida</i> | NESL<br>Group 3<br>Federal T<br>MBTA | In New Mexico, steep, forested, canyon habitats, often with riparian component.  | NP. |
| Yellow-billed cuckoo<br><i>Coccyzus americanus</i>      | NESL<br>Group 2<br>Federal T<br>MBTA | Mature closed canopy riparian woodlands with dense under stories, also orchards adjacent to river bottoms (NNHP, 2008) | NP. |

**Status\***

Federal Status: E = Endangered; T= Threatened; C= Candidate; EPA = Eagle Protection Act; MBTA= Migratory Bird Treaty Act

Tribal Status: NESL = Navajo Endangered Species List Group 1-4 (NNHP, 2008)

**Presence\*\***

K= Known, documented observation within project area.

S =Habitat suitable and species suspected to occur within or near the project area.

NS= Habitat suitable but species is not suspected to occur within the project area.

NP= Habitat not present and species unlikely to occur within the project area.

### ***Migratory Birds***

The U.S. Fish and Wildlife Service's Migratory Bird Program is a 1988 amendment to the Fish and Wildlife Conservation Act which provides a mandate for USFWS to "identify species, subspecies, and populations of all migratory nongame birds that , without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973". Birds of Conservation Concern (BCC) [USFWS, 2008] potentially occurring in the vicinity of the proposed project are presented with IPaC trust resources report (IPaC, 2016).

Additional protections for migratory birds are provided by the federal Migratory Bird Treaty Act (MBTA). Birds protected under the Act include all common songbirds, waterfowl, shorebirds, hawks, owls, eagles, ravens, crows, native doves and pigeons, swifts, martins, swallows and others, including their body parts (feathers, plumes etc.), nests, and eggs. The Act protects migratory birds from a "take". Take is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities". A "take" does not include habitat destruction or alteration, as long as these is not a direct taking of birds, nests, eggs, or parts thereof.

Several species of migratory birds were observed during the survey and are likely breeders in the project area. These species are listed in Section 6.0.

### ***Critical Habitat***

No federally designated critical habitat is located within the project area. The closest designated critical habitat is approximately ten miles south of the project area (ECOS, 2016b).

## **5.0 RESULTS**

### ***Listed Species:***

No NESL listed or federally listed species presented in Table 1 were observed during the April 12, 2016 wildlife surveys. No habitat for any listed species is present within the ROW.



***Migratory Birds and Birds of Conservation Concern:***

Several migratory bird species were observed during the survey (Section 6.0).

There is a potential for nesting migratory birds to occur within the project area, especially in the larger trees in vacant lots and yards.

***General Wildlife:***

The presence of human activity (roads and homes) likely results in most wildlife avoiding the project area. However, there is the potential for nesting migratory birds to occur within the project area.

The following species were identified during the survey by direct observation of individuals, tracks, droppings or scat, or other sign.

***Avian species observed:***

Say's phoebe  
White crowned sparrow  
House finch

*Sayornis saya*  
*Zonotrichia leucophrys*  
*Carpodacus mexicanus*

***Mammalian species observed:***

Domestic dog  
Desert cottontail

*Canis familiaris*  
*Sylvilagus audubonii*

**6.0 RECOMMENDATIONS**

It is recommended that road improvement projects and construction within the proposed Telstar Road proposed ROW be conducted outside of the breeding bird dates of May 1- August 15 to reduce impacts to migratory birds that may be nesting in the project area. Alternatively, site specific breeding bird surveys could be conducted no more than one week prior to start of construction to inspect for breeding migratory birds.

Additional recommendations include avoiding shrub and tree removal, and damage to vegetation as much as possible, cleaning up and removing any spills and/or trash from construction, and using only authorized ROW and roads for construction and installation.

**7.0 REFERENCES**

Migratory bird Treat Act (MBTA) 16 U.S.C. 703-712.

Mikesic, D.G. 2008. Species Account for *Coccyzus americanus*. Navajo Natural Heritage Program, P.O. Box 1480, Window Rock, AZ 86515. On the Web at <http://www.nndfw.org/nnhp/Animals/coam.pdf>.

Prall, Dexter. March 25, 2016. Navajo Endangered Species List (NESL) information for Sections 17, 20, and 21, T. 16 North, R. 16 West, McKinley County, New

Mexico. *Correspondence with Permits West Inc.* Navajo Department of Fish and Wildlife, Navajo Natural Heritage Program. P. O. Box 1480, Window Rock, AZ.

Navajo Natural Heritage Program-Navajo Fish and Wildlife Department (NNHP-NNFWD). 2008. Navajo Nation Division of Natural Resources Department of Fish and Wildlife Endangered Species List, September 10, 2008. P.O. Box 1480, Window Rock, Arizona, 86515.

U. S. Fish and Wildlife Service Environmental Conservation Online System (ECOS). 2016b. Critical Habitat Mapper. Web. April 2016.

<https://ecos.fws.gov/ecp/report/table/critical-habitat.html>

Information, Planning, and Conservation (IPaC). Trust Resources Report: downloaded from web April 27, 2016.

<https://ecos.fws.gov/ipac/project/RKZD6R3QLJDL5DKJHE5ULRIUQY/resources>

Migratory Bird Program. Birds of Conservation Concern. April 2016c. Web.

<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>

Division of Migratory Bird Management. 2008. *Birds of Conservation Concern 2008*. Web.

<http://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf>

**Signature of Author:**

A handwritten signature in black ink, appearing to read 'Celia A. Cook', written in a cursive style.

Celia A. Cook  
Wildlife Biologist  
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PROVIDING PERMITS for LAND USERS

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**McKinley County, FEMA Road and Bridge Repairs  
Proposed Telstar Road Right-of-Way Project  
Section 14, T. 15 N., R. 17 W., McKinley County, New Mexico**

**Plant Survey Report**

**Prepared by Robyn W. Tierney, Permits West, Inc., Santa Fe, New Mexico  
April 14, 2016**

This report discusses the potential for disturbance to Navajo Natural Heritage Program (NNHP) plant species of concern that have the potential to occur within the project area located on the Church Rock, NM, 7.5 minute quadrangle. The potential for disturbance to Zuni fleabane (*Erigeron rhizomatous*) listed as Group 2 by the NNHP (2008) and Threatened by the U.S. Fish and Wildlife Service (IPaC 2016) was evaluated. The potential for disturbance to Naturita milkvetch (*Astragalus naturitensis*), Acoma fleabane (*Erigeron acomanus*), and Navajo bladderpod (*Lesquerella navajoensis*) -- listed as NESL Group 3 (NNHP 2008), was similarly evaluated.

The potential presence/absence of Parish's alkali grass (*Puccinellia parishii*) and its habitats of wetlands or seasonally wet areas containing white alkaline conditions that are favored by the plant (Prall 2016, File#16perm 104) and Sivinski's fleabane (*Erigeron sivinskii*) in NESL Group 4 was also evaluated; though that the Navajo Natural Heritage Program (NNHP) currently does not have sufficient information to support these species being listed as endangered, but has reason to consider them in most undertakings (NNHP, 2008).

**Project Description**

The proposed project consists of obtaining a 2,170.11-foot long road right-of-way from the Navajo Nation and approval from the BIA for a portion of Telstar Road (McKinley CR 300) in Section 14, T. 15 N., R. 17 W. The right-of-way corridor would begin at the intersection of Telstar Road and Padre Canyon Road in Section 14, T. 15 N., R. 17 W. and would extend south-southeast approximately 2000 feet to a bridge crossing, then turn east and travel an additional 614 feet to its terminus.

The proposed right-of-way is located on Navajo Nation Tribal Trust lands in Sections 35 and 36, T. 16 N., R. 17 W., McKinley County, and is located in Church Rock, New Mexico, approximately 3 miles north of Rehoboth, New Mexico.

Most of the soils in the project area consist of eolian deposits on sandstone, with fine sandy loams throughout the proposed right-of-way and species such as flixweed (*Descurania sophia*) evidencing past grazing and land-use practices

Soils in the northern half of the proposed right-of-way are composed of the Zia sandy loam, 1 to 5 percent slopes. This complex consists of eolian deposits over fan and stream alluvium derived from Dakota and Gallup sandstones. The soil texture ranges from sandy loam (0 to 3 inches depth), sandy loam (3 to 31 inches depth), and fine sandy loam to a depth of 65 inches (NRCS 2016b). These are somewhat excessively drained soils and the capacity of the most limiting layer to transmit water (Ksat) is high.

The Rizno-Tekapo-Rock outcrop complex, 2 to 45 percent slopes is found in the south half of the proposed right-of-way and is associated with structural benches and escarpments on mesas and cuestas. The complex consists of eolian deposits over residuum weather from Dakota and Gallup sandstones (Dane and Bachman 1957, NMBMGR 2003) with soil textures of sandy loam (0 to 3 inches depth), sandy loam (3 to 8 inches depth), and bedrock at 20 inches depth (NRCS 2016b).

The elevation of the project area ranges from approximately 6704 feet at the north end of the proposed Telstar Road right-of-way and 6744 feet at the southeast end of the right-of-way corridor. The project corridor is located in Biological Resource Land Use Clearance Policies and Procedures Area 3 (Prall 2016, File#16perm 104) and is adjacent to housing and other roadways. Disturbances in the project area include: residences with outbuildings, power lines along the right of way; driveways, dirt roads, trails, and grazing by horses and cattle.

## **METHODOLOGY**

Prior to the survey, a data request was made to the Navajo Natural Heritage Program (NNHP) for Navajo Nation endangered species known to occur, or with the potential to occur, on the 7.5-Minute *Church Rock, NM* Quadrangle. A reply (Prall 2016, File#16perm104) to the request was received on March 25, 2016.

The proposed Telstar right-of-way corridor was surveyed on April 13, 2016, by botanist Robyn Tierney. Weather during the survey was sunny, with high temperatures in the low to mid- 70's F. Sensitive plant species listed by the Navajo Natural Heritage Program (NNHP) and the U.S. Fish and Wildlife Service (IPaC 2016) and those identified in Table 1 were the focus of the survey, although all species encountered were examined (NNHP 2008). The pedestrian survey was conducted as a zigzag transect along each side of the right-of-way centerline, covering both 150 foot-foot width of the corridor and a buffer zone of 50 feet on each side of the proposed right-of-way. The purpose of the survey was to inspect for and identify species of concern. All plants observed in the project area were identified in order to provide a more complete description of the project area environment. A list of the plants observed in the project area is included at the end of this report.

## SURVEY RESULTS

### Species of Interest to the Navajo Natural Heritage Program (NNHP) and the U.S. Fish and Wildlife

**Service (USFWS):** This report discusses the potential for disturbance to the plant species of concern identified by the NNHP and the USFWS as having the potential to occur in the project area (Prall 2016, IPaC 2016). Details of the status, habitat, and the potential to occur in the project area for each of these species are presented in the following table. Zuni milkvetch (*Astragalus missouriensis* var. *accumbens*) has been found southeast of the project area near Fort Wingate (Hazleton pers. comm. September 8, 2014), and an evaluation of the potential for its presence/absence is included below.

**Table 1. Status, habitat, and potential to occur in the Telstar Road project area.**

| SPECIES STATUS  | HABITAT  | POTENTIAL TO OCCUR IN THE PROJECT AREA*  |
|---|--|--|
| <i>Astragalus missouriensis</i> var. <i>accumbens</i><br>Zuni milkvetch         | Gravelly clay banks and knolls, in dry, alkaline soils derived from sandstone, in piñon-juniper woodlands; (6,200-7,900 ft). NMRPTC 1999, Bleakly1999).  | <b>No appropriate habitat:</b> there are no gravelly clay banks and knolls of dry, alkaline sandstone-derived soils in the project area. (NP)                |
| <i>Astragalus naturitensis</i><br>Naturita milkvetch<br>NESL Group 3            | Sand filled pockets of sandstone slickrock and rimrock pavement along canyons in the piñon juniper zone (NNHP). Sandstone ledges and rimrock along canyons in piñon-juniper woodland; 5,400-6,200 ft. (NMRPTC 1999, Roth 2001).  | <b>No appropriate habitat:</b> there are no barren detrital clay hillsides with soils derived from Chinle or Baca shale formations in the project area. (NP) |
| <i>Erigeron acomanus</i><br>Acoma fleabane<br>NESL Group 3                      | Species is a narrow substrate endemic found on sandy slopes and benches beneath sandstone cliffs of the Entrada Sandstone Formation in piñon-juniper woodland; 6,900-7,100 ft. (NMRPTC 1999).  | <b>No appropriate habitat:</b> there are no sandy slopes or benches beneath Entrada Sandstone Formation cliffs in the project area. (NP)                     |
| <i>Erigeron rhizomatus</i><br>Zuni fleabane<br>USFWS Threatened<br>NESL Group 2 | Species is found on nearly barren detrital clay hillsides with soils derived from shales of the Chinle or Baca formations (often seleniferous); most often on north or east-facing slopes in open piñon-juniper woodlands at 7,300-8,000 ft. (NMRPTC 1999, Sivinski and Lightfoot Sivinski and Tonne 1991, Sivinski and Tonne 2004, USFWS 2007, Knight 1988, Christie 2004). | <b>No appropriate habitat:</b> there are no barren detrital clay hillsides with soils derived from Chinle or Baca shale formations in the project area. (NP) |

|  |  |  |
|--|--|--|
| <i>Erigeron sivinskii</i><br>Sivinski's fleabane<br>NESL Group 4     | Chinle shale in piñon-juniper woodland and Great Basin desert scrub; 6,100-7,400 ft. (NMRPTC 1999).  | <b>No appropriate habitat:</b> there is no Chinle shale formation in the project area. (NP)  |
| <i>Lesquerella navajoensis</i><br>Navajo bladderpod<br>NESL Group 3  | Mesa rims of Todilto limestone in sparse piñon-juniper woodland; 7,200-7,600 ft. (NMRPTC 1999).  | <b>No appropriate habitat:</b> there are no mesa rims of Todilto limestone in the project area. The project area is below the known elevation range of the species. (NP) |
| <i>Puccinellia parishii</i><br>Parish's alkali grass<br>NESL Group 4 | The species requires continuously damp soils during its late winter to spring growing period and is found near white-crusts alkaline springs, seeps, and seasonally wet areas that occur at the heads of drainages or on gentle slopes at 2,600-7,200 ft. range-wide (Detsoi 2014; NMRPTC 1999). | <b>No appropriate habitat:</b> there are no white-crusts alkaline springs, seeps, or seasonally wet areas in the project area. (NP)                                      |

Status USFWS – U.S Fish and Wildlife Service (ECOS, 2014)

Endangered – An animal or plant species in danger of extinction throughout all or a significant portion of its range.

Threatened – An animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

NESL – Navajo Endangered Species List (NNHP, 2008)

Group 2 (G2) and Group 3 (G3) – Endangered: A species or subspecies whose prospects of survival or recruitment within the Navajo Nation are in jeopardy or are likely within the foreseeable future to become so.

Group 4 – Any species or subspecies for which the Navajo Nation Department of Fish and Wildlife (NNDFWL) does not currently have sufficient information to support their being listed in G2 or G3 but has reason to consider them.

Potential to Occur

K – Known, documented observation within project area.

S – Habitat suitable and species suspected to occur within the project area.

NS – Habitat suitable but species is not suspected to occur within the project area.

NP – Habitat not present and species unlikely to occur within the project area

NMRPTC - New Mexico Rare Plant Technical Council (NMRPTC 1999, updated 2015)

Although no wetlands were observed during the survey, the project area was evaluated for wetland conditions containing the white alkaline crusts that favor Parish's alkali grass (Prall 2016, File#16perm 104). No such conditions were observed in the project area, although the National Wetlands Inventory has classified or coded the dry arroyo bed within the project right-of-way as R4SBC (IPaC 2016).

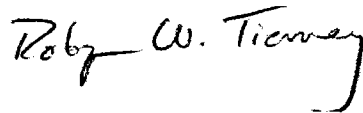
No noxious plants identified by the Bureau of Indian Affairs Navajo Area (OSM 1999), nor the State of New Mexico (Gonzales 2009) were observed in the project area.

No sensitive species were observed.

Plant species that were observed are listed in Table 2.

## DISCUSSION

No plant species of concern to the Navajo Natural Heritage Program or the U.S. Fish and Wildlife Service will be impacted by approving McKinley County's application for the Telstar Road right-of-way.



Signature of Author: \_\_\_\_\_  
Robyn W. Tierney

April 14, 2016

**Table 2. Plants observed in the vicinity of the proposed Telstar road right-of-way**

Scientific names according to USDA Plants Database (2016a). Identifications based on Ivey 2008, Heil et al, 2013, and Weber and Wittman 2012.

### Trees

|                              |               |
|------------------------------|---------------|
| <i>Eleagnus angustifolia</i> | Russian olive |
| <i>Ulmus pumilla</i>         | Siberian elm  |

### Shrubs and Subshrubs

|  |                       |
|--|-----------------------|
| <i>Atriplex canescens</i>                        | Fourwing saltbush     |
| <i>Ericameria nauseosa</i> var. <i>bigelovii</i> | Bigelow's rabbitbrush |
| <i>Gutierrezia sarothrae</i>                     | Broom snakeweed       |

### Grasses and Grass-like Plants

|                               |                  |
|-------------------------------|------------------|
| <i>Achnatherum hymenoides</i> | Indian ricegrass |
| <i>Aristida purpurea</i>      | Purple threeawn  |
| <i>Bouteloua gracilis</i>     | Blue grama       |

|                                 |                       |
|---------------------------------|-----------------------|
| <i>Pascopyrum smithii</i>       | Western wheatgrass    |
| <i>Sporobolus airoides</i>      | Alkali sacaton        |
| <b>Forbs</b>                    |                       |
| <i>Bassia scoparia</i>          | Kochia                |
| <i>Descurainia sophia</i>       | Flixweed              |
| <i>Machaeranthera bigelovii</i> | Bigelow's tansy aster |
| <i>Salsola tragus</i>           | Russian-thistle       |

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THE NAVAJO NATION  
HERITAGE & HISTORIC PRESERVATION DEPARTMENT  
PO Box 4950, Window Rock, Arizona 86515  
TEL: (928) 871-7198 FAX: (928) 871-7886

## CULTURAL RESOURCE COMPLIANCE FORM

|  |  |
|--|--|
| ROUTE COPIES TO:                         | NNHPD NO.: <b>HPD-16-419 - REVISED</b> |
| <input checked="" type="checkbox"/> CASA | OTHER PROJECT NO.: <b>CASA 16-21</b>   |

**PROJECT TITLE:** Cultural Resource Inventory, McKinley County Road R-O-W Project, Telstar Road (CR 300) Church Rock Chapter, McKinley County, New Mexico

**LEAD AGENCY:** BIA/NR

**SPONSOR:** Permits West, 37 Verano Loop, Santa Fe, New Mexico 87508

**PROJECT DESCRIPTION:** The proposed undertaking will involve obtaining a legal right-of-way along **2,170.11-ft** of County Road 300, Telstar Road. McKinley County is seeking a 150-ft wide right-of-way. The total area of effect is **7.47** acres.

|                                   |  |    |    |    |    |    |      |    |             |             |          |        |            |      |
|-----------------------------------|--|----|----|----|----|----|------|----|-------------|-------------|----------|--------|------------|------|
| LAND STATUS:                      | Navajo Tribal Trust  |    |    |    |    |    |      |    |             |             |          |        |            |      |
| CHAPTER:                          | Church Rock  |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LOCATION:                         | T.   | 15 | N. | R. | 17 | W- | Sec. | 14 | Church Rock | Quadrangle, | McKinley | County | New Mexico | NMPM |
| PROJECT ARCHAEOLOGIST:            | Mary Errickson   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| NAVAJO ANTIQUITIES PERMIT NO.:    | B16223   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| DATE INSPECTED:                   | 04/07/16   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| DATE OF REPORT:                   | 05/09/16   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| TOTAL ACREAGE INSPECTED:          | 12.45 - ac   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| METHOD OF INVESTIGATION:          | Class III pedestrian inventory with transects spaced 15 m apart. |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF CULTURAL RESOURCES FOUND: | (1) Isolated Occurrence (IO)                                     |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF ELIGIBLE PROPERTIES:      | None   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF NON-ELIGIBLE PROPERTIES:  | (1) IO   |    |    |    |    |    |      |    |             |             |          |        |            |      |
| LIST OF ARCHAEOLOGICAL RESOURCES: | None   |    |    |    |    |    |      |    |             |             |          |        |            |      |

**EFFECT/CONDITIONS OF COMPLIANCE:** No historic properties affected.

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], a operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7198.

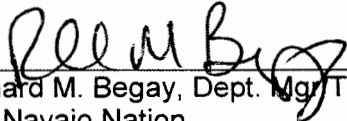
FORM PREPARED BY: **Tamara Billie**  
FINALIZED: August 16, 2017 - Revised

Notification to Proceed  
Recommended

☒ Yes ☐ No

Conditions:

☐ Yes ☒ No

  
Richard M. Begay, Dept. Mgr THPO  
The Navajo Nation  
Heritage & Historic Preservation Department  
8/18/17  
Date

Navajo Region Approval

☒ Yes ☐ No

  
Navajo Regional Office  
8/22/17  
Date

Appendix 5-1