RESOLUTION OF THE
RESOURCES AND DEVELOPMENT COMMITTEE
of the 24th NAVAJO NATION COUNCIL—Fourth Year, 2022

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE; APPROVING THE GRANT OF RIGHT-OF-WAY TO NEW MEXICO DEPARTMENT OF TRANSPORTATION FOR THE PURPOSES OF CONSTRUCTING, OPERATING, UPGRADING AND MAINTAINING THE EXISTING ROADWAYS, CULVERTS, DITCHES AND BRIDGES ALONG U.S. HIGHWAY 64, PROJECT NUMBERS 5101171 AND 5101172, LOCATED ON NAVAJO NATION TRUST LANDS IN BECLABITO CHAPTER, NAVAJO NATION (SAN JUAN COUNTY, NEW MEXICO)

BE IT ENACTED:

Section One. Authorities

Pursuant to 2 N.N.C. § 500 (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, right-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 New Mexico Department of Transportation has submitted a right-of-way application to construct, operate, upgrade and maintain the existing roadways, culverts, ditches and bridges along U.S. Highway 64, Project Numbers 5101171 and 5101172 located on Navajo Nation Trust Lands in Beclabito Chapter, Navajo Nation (San Juan County, New Mexico). The Terms and Conditions is attached as **Exhibit A**. The proposed right-of-way map is attached as **Exhibit B**. The application is attached as **Exhibit C**.

B. Two land users have been identified and their consent forms are attached as **Exhibit D**.

C. Beclabito Chapter Resolution No. BECL-21-02-25, "hereby, approves and supports the State of New Mexico, San Juan County, Federal and Navajo Nation Department of Transportation and Highway Safety entities to partnership to continue to seek grants and funds for improvement and reconstruction of the N.M. Highway 64 West from N.M./AZ. Stateline to Shiprock." Resolution BECL-21-02-25, additional Beclabito Chapter Resolutions BECL-19-11-07, BECL-19-10-03, BECL-17-5-28, BECL-17-05-30, BECL-15-07, BECL-15-12-07, and memorandum dated May 4, 2018 from Beclabito Chapter to NMDOT and NDOT are attached as **Exhibit E.**

D. The Navajo Nation Department of Fish and Wildlife Biological Resources Compliance Form is attached as **Exhibit F.**

E. The U.S. Department of Transportation, Federal Highway Administration memorandum dated November 3, 2020 to Mr. Richard Begay, Navajo Nation Heritage & Historic Preservation Department states "The NMDOT, on behalf of the FHWA, has determined that with the avoidance, minimization, or mitigation measures stated above, finds that the proposed undertaking, CN 5101170, Reconstruction of US 64 Between Shiprock, NM and the Arizona border (MP 0 to 20), will have no adverse effect to historic properties. Your concurrence with our findings of eligibility, effect and resolution of adverse effect is respectfully requested." The concurrence of Mr. Richard Begay, Navajo Nation Tribal Historic Preservation Officer is dated 11/10/20. The November 3, 2020 memorandum is attached as **Exhibit G.**

F. The New Mexico Department of Transportation, Environmental Assessment for the US 64 Alignment Study: Arizona Border to Shiprock, New Mexico, dated January 27, 2022 with Appendices A, B, C, are attached as **Exhibit H.**

G. The New Mexico Department of Transportation requests a waiver of valuation and waiver of bond, insurance or alternative forms of security compensation for the right-of-way.

H. A waiver of consideration for this right-of-way is requested. The Terms and Conditions document, **Exhibit A,** states that the term of the right-of-way shall be for twenty (20) years and the consideration is assessed at $102,663.36.

I. 25 CFR § 169.110 addresses how much monetary compensation must be paid for a right-of-way over or across tribal land. It states:

(a) A right-of-way over or across tribal land may allow for any payment amount negotiated by the tribe, and we will defer to the tribe and not require a valuation if the tribe submits a tribal authorization expressly stating that it:

(1) Has agreed upon compensation satisfactory to the tribe;

(2) Waives valuation; and

(3) Has determined that accepting such agreed-upon compensation and waiving valuation is in its best interest.

(b) The tribe may request, in writing, that we determine fair market value, in which case we will use a valuation in accordance with § 169.114. After providing the tribe with the fair market value, we will defer to a tribe's decision to allow for any compensation negotiated by the tribe.

(c) If the conditions in paragraph (a) or (b) of this section are not met, we will require that the grantee pay fair market value based on a valuation in accordance with § 169.114.

J. 25 CFR § 169.103 address bond, insurance or alternative forms of security. It states:

(a) You must include payment of bonds, insurance, or alternative forms of security with your application for a right-of-way in amounts that cover:

(1) The highest annual rental specified in the grant, unless compensation is a one-time payment;

(2) The estimated damages resulting from the construction of any permanent improvements;

(3) The estimated damages and remediation costs from any potential release of contaminants, explosives, hazardous material or waste;

(4) The operation and maintenance charges for any land located within an irrigation project;

(5) The restoration of the premises to their condition at the start of the right-of-way or reclamation to some other specified condition if agreed to by the landowners.
* * * *

(f) We may waive the requirement for a bond, insurance, or alternative form of security:
* * * *

(2) For tribal land, deferring, to the maximum extent possible, to the tribe's determination that a waiver of a bond, insurance or alternative form of security is in its best interest.

K. The application for the Right-of-Way has been reviewed by the Fish and Wildlife; Historic Preservation; Minerals; Navajo Nation Environmental Protection; Division of Natural Resources and the Department of Justice and "Approved" or found "Sufficient." Executive Official Review Document Number 018335 and memorandums dated July 19, 2022 and July 22, 2022 from the Navajo Nation Environmental Protection Program are attached as **Exhibit I.**

Section Three. Approval

A. The Resources and Development Committee of the Navajo Nation Council hereby approves the grant of right-of-way to New Mexico Department of Transportation to construct, operate, upgrade and maintain the existing roadways, culverts, ditches and bridges along U.S. Highway 64, Project Numbers 5101171 and 5101172, located on Navajo Nation Trust Lands in Beclabito Chapter, Navajo Nation (San Juan County, New Mexico), as described in maps attached as **Exhibit B.**

B. The Resources and Development Committee of the Navajo Nation Council hereby approves the grant of right-of-way subject to, but not limited to, the terms and conditions attached as **Exhibit A.**

C. The Resources and Development Committee of the Navajo Nation Council hereby waives the requirement for a bond, insurance or alternative form of security on the part of the Grantee, based on the determination that construct, operate, upgrade and maintain the existing roadways, culverts, ditches and bridges along U.S. Highway 64, Project Numbers 5101171 and 5101172, benefits the Navajo Nation and such a waiver is in the best interest of the Navajo Nation, pursuant to Title 25 CFR § 169.103 (f) (2).

D. The Resources and Development Committee of the Navajo Nation Council hereby waives valuation and consideration for the right-of-way. It has determined that accepting the agreed-upon compensation and waiving valuation is in its best interest of the Navajo Nation, pursuant to Title 25 CFR § 169.110.

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

CERTIFICATION

I, hereby, certify that the following resolution was duly considered by the Resources and Development Committee of the 24th Navajo Nation Council at a duly called meeting at Window Rock, (Navajo Nation) Arizona, at which quorum was present and that same was passed by a vote of 5 in favor, 0 opposed, on this 31st day of August 2022.

Rickie Nez, Chairperson
Resources and Development Committee
Of the 24th Navajo Nation Council

Motion: Honorable Mark A. Freeland
Second: Honorable Thomas Walker, Jr.

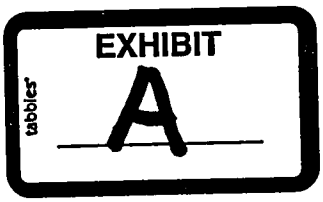


EXHIBIT "D"

NAVAJO NATION RIGHT-OF-WAY TERMS AND CONDITIONS

New Mexico Department of Transportation (NMDOT) (GRANTEE)

(NMDOT US 64 Right-of-Way Project Numbers 5101171 & 5101172: 2-CME-2, 2-CME-1, 3-1, 3-2, 3-3, 3-4, 3-5, 3-CME-1, 3-CME-2, 4-1, 4-2 ,4-3, 4-CME-1, 4-CME-2 ,5-1, 6-1, 6-2, 6-3, 6-4, 6-5, 6-CME-1, 7-1, 7-2, 7-3, 7-4, 7-5, 7-CME-1, 8-1, 8-2, 9-1, 9-2, 9-3, 9-CME-1,9-CME-2, 9-CME-3,10-CME-1,10-CME-2,10-CME-3,11-CME-1,9-ABMT-1,10-ABMT-1 and 10-ABMT-2)

1. The term of the right-of-way shall be for twenty (20) years, beginning on the date the right-of-way is granted by the Secretary of the Interior.

2. Consideration for the right-of-way is assessed at $102,663.36 and shall be paid in full to the Controller of the Navajo Nation, in lawful money of the United States, and a copy of the receipt for such payment provided to the Navajo Nation Minerals Department, or its successor, within ten (10) days of approval of and consent to the grant of the right-of-way by the Navajo Nation.

   In case consideration is waived by the Resources and Development Committee of the Navajo Nation Council, the Navajo Nation contributes the amount listed above to the project because the project serves a public purpose and will benefit Navajo residents.

3. The Grantee may develop, use, and occupy the right-of-way for the purpose(s) of constructing, operating, upgrading and maintaining the existing roadways, culverts, ditches and bridges. The Grantee may not develop, use, or occupy the right-of-way for any other purpose, nor allow others to use or occupy the right-of-way for any other purpose, without the prior written approval of the Navajo Nation and the Secretary of the Interior. The approval of the Navajo Nation may be granted, granted upon conditions, or withheld at the sole discretion of the Navajo Nation. The Grantee may not develop, use, or occupy the right-of-way for any unlawful purpose.

4. In all activities conducted by the Grantee within the Navajo Nation, the Grantee shall abide by all laws and regulations of the Navajo Nation and of the United States, now in force and effect or as hereafter may come into force and effect, including but not limited to the following:

   a. Title 25, Code of Federal Regulations, Part 169; subject to the terms of this right-of-way;

   b. All applicable federal and Navajo Nation antiquities laws and regulations, with the following additional condition: In the event of a discovery, all operations in the immediate vicinity of the discovery must cease and the Navajo Nation Historic Preservation Department must be notified immediately. As used herein, "discovery" means any previously unidentified or incorrectly identified cultural resources, including but not limited to archeological deposits, human remains, or location reportedly associated with Native American religious/traditional beliefs or practices;

   c. The Navajo Preference in Employment Act, 15 N.N.C. §§ 601 et seq., and the Navajo Nation Business Opportunity Act, 5 N.N.C. §§ 201 et seq.; and

   d. The Navajo Nation Water Code, 22 N.N.C. § 1101 et seq. Grantee shall apply for and submit all applicable permits and information to the Navajo Nation Water Resources Department, or its successor.

5. The Grantee shall ensure that the air quality of the Navajo Nation is not jeopardized due to violation of applicable laws and regulations by its operations pursuant to the right-of-way.

6. The Grantee shall clear and keep clear the lands within the right-of-way to the extent compatible with the purpose of the right-of-way, and shall dispose of all vegetation and other materials cut, uprooted, or otherwise accumulated during any surface disturbance activities.

7. The Grantee shall reclaim all surface lands disturbed related to the right-of-way, as outlined in a restoration and revegetation plan, which shall be approved by the Navajo Nation Environmental Protection Agency (NNEPA) prior to any surface disturbance. The Grantee shall comply with all provisions of such restoration and revegetation plan and shall notify the Director of the NNEPA immediately upon completion of the surface disturbance activities so that a site inspection can be made.

8. The Grantee shall at all times during the term of the right-of-way and at the Grantee's sole cost and expense, maintain the land subject to the right-of-way and all improvements located thereon and make all necessary and reasonable repairs.

9. The Grantee shall obtain prior written permission to cross existing rights-of-way, if any, from the appropriate parties.

10. The Grantee shall be responsible for and promptly pay all damages when they are sustained.

11. The Grantee shall indemnify and hold harmless the Navajo Nation and the Secretary of the Interior and their respective authorized agents, employees, land users, and occupants, against any liability for loss of life, personal injury, and property damages arising from the development, use, or occupancy or use of right-of-way by the Grantee.

12. The Grantee shall not assign, convey, transfer, or sublet, in any manner whatsoever, the right-of-way or any interest therein, or in or to any of the improvements on the land subject to the right-of-way, without the prior written consent of the Navajo Nation and the Secretary of the Interior. Any such attempted assignment, conveyance, or transfer without such prior written consent shall be void and of no effect. The consent of the Navajo Nation may be granted, granted upon conditions, or withheld at the sole discretion of the Navajo Nation.

13. The Navajo Nation may terminate the right-of-way for violation of any of the terms and conditions stated herein. In addition, the right-of-way shall be terminable in whole or in part by the Navajo Nation for any of the following causes:

    a. Failure to comply with any term or condition of the grant or applicable laws or regulations;
    b. A non-use of the right-of-way for the purpose for which it is granted for a consecutive two-year period;
    c. The use of the land subject to the right-of-way for any purpose inconsistent with the purpose for which the right-of-way is granted; and
    d. An abandonment of the right-of-way.

14. At the termination of this right-of-way, the Grantee, shall peaceably and without legal process deliver up the possession of the premises, in good condition, usual wear and tear excepted. Upon the written request of the Navajo Nation, the Grantee shall provide the Navajo Nation, at the Grantee's sole cost and expense, with an environmental site assessment of the premises at least sixty (60) days prior to delivery of the said premises. This provision 12 shall not apply to the United States as Grantee.

15. Holding over by the Grantee after the termination of the right-of-way shall not constitute a renewal or extension thereof or give the Grantee any rights hereunder or in or to the land subject to the right-of-way or to any improvements located thereon.

16. The Navajo Nation and the Secretary of the Interior shall have the right, at any reasonable time during the term of the right-of-way, to enter upon the premises, or any part thereof, to inspect the same and any improvements located thereon.

17. By acceptance of the grant of right-of-way, the Grantee consents to the full territorial legislative, executive, and judicial jurisdiction of the Navajo Nation, including but not limited to the jurisdiction of the Navajo Nation, including but not limited to the jurisdiction to levy fines and to enter judgements for compensatory and punitive damages and injunctive relief, in connection with all activities conducted by the Grantee within the Navajo Nation or which have a proximate (legal) effect on persons or property within the Navajo Nation.

18. By acceptance of the grant of right-of-way, the Grantee covenants and agrees never to contest or challenge the legislative, executive, or judicial jurisdiction of the Navajo Nation on the basis that such jurisdiction is inconsistent with the status of the Navajo Nation as an Indian nation, or that the Navajo Nation government is not a government of general jurisdiction, or that the Navajo Nation government does not possess full police power (i.e., the power to legislate and regulate for the general health and welfare) over all lands, persons, and activities within its territorial boundaries, or on any other basis not generally applicable to a similar challenge to the jurisdiction of a state government. Nothing contained in this provision shall be construed to negate or impair federal responsibilities with respect to the land subject to the right-of-way or to the Navajo Nation.

19. Any action or proceeding brought by the Grantee against the Navajo Nation in connection with or arising out of the terms and conditions of the right-of-way shall be brought only in the Courts of the Navajo Nation, and no such action or proceeding shall be brought by the Grantee against the Navajo Nation in any court of any state.

20. Nothing contained herein shall be interpreted as constituting a waiver, express or implied, of the sovereign immunity of the Navajo Nation.

21. Except as prohibited by applicable federal law, the law of the Navajo Nation shall govern the construction, performance, and enforcement of the terms and conditions contained herein.

22. The terms and conditions contained herein shall extend to and be binding upon the successors, heirs, assigns, executors, administrators, employees, and agents, including all contractors and subcontractors, of the Grantee, and the term "Grantee," whenever used herein, shall be deemed to include all such successors, heirs, assigns, executors, administrators, employees, and agents.

23. There is expressly reserved to the Navajo Nation full territorial legislative, executive, and judicial jurisdiction over the right-of-way and all lands burdened by the right-of-way, including without limitation over all persons, including the public, and all activities conducted or otherwise occurring within the right-of-way; and the right-of-way and all lands burdened by the right-of-way shall be and forever remain Navajo Indian Country for purposes of Navajo Nation jurisdiction.

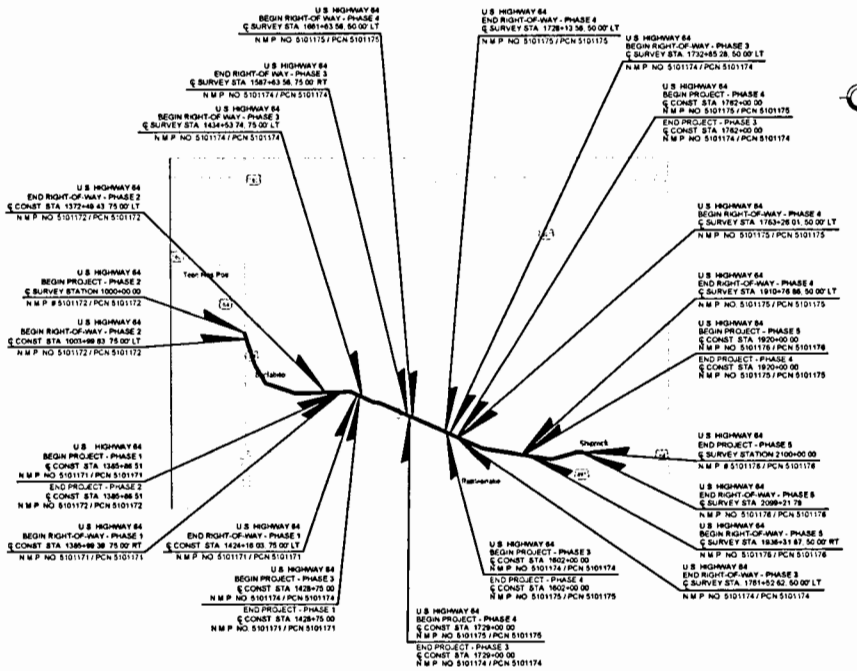
24. The Navajo Nation reserves the right to grant rights-of-way within the right-of-way referenced herein for utilities, provided that such rights-of-way do not unreasonably interfere with the Grantee's use of the right-of-way.

25. The utility conveyance construction and maintenance must not interfere with the integrity of the road prism, road ditches, road design features, and miscellaneous road appurtenances.

26. Any and all utility installations will be approved through the BIA-NRDOT permitting process.

EXHIBIT B

PHASE 1 - 5101171, PHASE 2 - 5101172, PHASE 3 - 5101174, PHASE 4 - 5101175 & PHASE 5 - 5101176
RIGHT OF WAY MAPS
U.S. HIGHWAY 64
LENGTH OF PROJECT 20.9501 MILES



LOCATION MAP
(NOT TO SCALE)

VICINITY MAP
(NOT TO SCALE)

INDEX OF SHEETS

EFFECTIVE MAY 27 20 21

Robert R. Sexton, Jr.

LANDS ENGINEERING MANAGER
FOR THE SECRETARY OF THE DEPARTMENT
OF TRANSPORTATION

FINAL MAP
DATE: MAY 27, 2021

NO	DESCRIPTION	DATE	BY
4			
3			
2	UPDATED PHASE 3, 4 & 5 PROJECT NUMBERS	2/10/22	AES
1	ADDED PHASES 3, 4 & 5 TO LOCATION MAP	2/10/22	AES

REVISIONS (OR CHANGE NOTICES)

AES/CN5101170/ROW 01 OF 22

PCN 5101171, 5101172, 5101174, 5101175 & 5101176

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 1 - 5101171, PHASE 2 - 5101172, PHASE 3 - 5101174, PHASE 4 - 5101175 & PHASE 5 - 5101176
SAN JUAN COUNTY
SHEET 1 OF 23

PARCEL BLOCK SHEET

RIGHT-OF-WAY ACQUISITION

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres	AREA REMAINDER acres	LARGER PARCEL acres
3-1	NAVAJO NATION	18,000	0.4132	>100+ AC.	>100+ AC.
3-2	NAVAJO NATION	4,500	0.1033	>100+ AC.	>100+ AC.
3-3	NAVAJO NATION	18,550	0.4258	>100+ AC.	>100+ AC.
3-4	NAVAJO NATION	3,000	0.0689	>100+ AC.	>100+ AC.
3-5	NAVAJO NATION	7,500	0.1722	>100+ AC.	>100+ AC.
4-1	NAVAJO NATION	6,250	0.1435	>100+ AC.	>100+ AC.
4-2	NAVAJO NATION	6,800	0.1561	>100+ AC.	>100+ AC.
4-3	NAVAJO NATION	4,500	0.1033	>100+ AC.	>100+ AC.
5-1	NAVAJO NATION	1,125	0.0258	>100+ AC.	>100+ AC.
6-1	NAVAJO NATION	16,000	0.3673	>100+ AC.	>100+ AC.
6-2	NAVAJO NATION	19,250	0.4419	>100+ AC.	>100+ AC.
6-3	NAVAJO NATION	5,800	0.1331	>100+ AC.	>100+ AC.
6-4	NAVAJO NATION	870	0.0200	>100+ AC.	>100+ AC.
6-5	NAVAJO NATION	3,760	0.0863	>100+ AC.	>100+ AC.
7-1	NAVAJO NATION	4,500	0.1033	>100+ AC.	>100+ AC.
7-2	NAVAJO NATION	4,677	0.1074	>100+ AC.	>100+ AC.
7-3	NAVAJO NATION	7,145	0.1640	>100+ AC.	>100+ AC.
7-4	NAVAJO NATION	2,400	0.0551	>100+ AC.	>100+ AC.
7-5	NAVAJO NATION	2,200	0.0505	>100+ AC.	>100+ AC.
8-1	NAVAJO NATION	28,000	0.6248	>100+ AC.	>100+ AC.
8-2	NAVAJO NATION	19,500	0.4477	>100+ AC.	>100+ AC.
9-1	NAVAJO NATION	13,000	0.2984	>100+ AC.	>100+ AC.
9-2	NAVAJO NATION	11,100	0.2548	>100+ AC.	>100+ AC.
9-3	NAVAJO NATION	8,000	0.1837	>100+ AC.	>100+ AC.

RIGHT-OF-WAY ACQUISITION

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres	AREA REMAINDER acres	LARGER PARCEL acres
9-4	NAVAJO NATION	102,939	2.3632	>100+ AC.	>100+ AC.
11-1	NAVAJO NATION	14,625	0.3357	>100+ AC.	>100+ AC.
11-2	NAVAJO NATION	7,500	0.1722	>100+ AC.	>100+ AC.
12-1	NAVAJO NATION	19,263	0.4422	>100+ AC.	>100+ AC.
12-2	NAVAJO NATION	10,632	0.2441	>100+ AC.	>100+ AC.
12-3	NAVAJO NATION	16,396	0.3764	>100+ AC.	>100+ AC.
14-1	NAVAJO NATION	5,000	0.1148	>100+ AC.	>100+ AC.
15-1	NAVAJO NATION	4,800	0.1102	>100+ AC.	>100+ AC.
16-1	NAVAJO NATION	5,700	0.1309	>100+ AC.	>100+ AC.
16-2	NAVAJO NATION	5,000	0.1148	>100+ AC.	>100+ AC.
16-3	NAVAJO NATION	11,500	0.2640	>100+ AC.	>100+ AC.
16-4	NAVAJO NATION	52,645	1.2086	>100+ AC.	>100+ AC.
17-1	NAVAJO NATION	21,600	0.4959	>100+ AC.	>100+ AC.
17-2	NAVAJO NATION	34,280	0.7870	>100+ AC.	>100+ AC.
17-3	NAVAJO NATION	1,900	0.0436	>100+ AC.	>100+ AC.
18-1	NAVAJO NATION	7,422	0.1704	>100+ AC.	>100+ AC.
18-2	NAVAJO NATION	5,561	0.1277	>100+ AC.	>100+ AC.
19-1	NAVAJO NATION	7,550	0.1733	>100+ AC.	>100+ AC.
20-1	NAVAJO NATION	40,000	0.9183	>100+ AC.	>100+ AC.
20-2	NAVAJO NATION	2,750	0.0631	>100+ AC.	>100+ AC.
20-3	NAVAJO NATION	4,500	0.1033	>100+ AC.	>100+ AC.
20-4	NAVAJO NATION	5,250	0.1205	>100+ AC.	>100+ AC.

NOTE:
LARGER PARCEL AREAS WERE OBTAINED FROM COUNTY RECORDS AND NEW MEXICO DEPARTMENT OF TRANSPORTATION SURVEY DATA.

NO	DESCRIPTION	DATE	BY
4			
3			
2	UPDATED PHASE 3, 4 & 5 PROJECT NUMBERS	2/10/22	AES
1	ADDED PHASE 2	8/3/21	AES
	REVISIONS (OR CHANGE NOTICES)		

FINAL MAP

DATE: MAY 27, 2021

5101170

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 1 - 5101171, PHASE 2 - 5101172, PHASE 3 - 5101174, PHASE 4 - 5101175 & PHASE 5 - 5101176
SAN JUAN COUNTY

PCN 5101171, 5101172, 5101174, 5101175 & 5101176

PARCEL BLOCK SHEET

RIGHT-OF-WAY ACQUISITION

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres	AREA REMAINDER acres	LARGER PARCEL acres
20-5	NAVAJO NATION	560	0.0129	>100+ AC.	>100+ AC.
20-6	NAVAJO NATION	14,250	0.3271	>100+ AC.	>100+ AC.
21-1	NAVAJO NATION	5,300	0.1217	>100+ AC.	>100+ AC.
21-2	NAVAJO NATION	11,065	0.2540	>100+ AC.	>100+ AC.
21-3	NAVAJO NATION	3,000	0.0689	>100+ AC.	>100+ AC.
21-4	NAVAJO NATION	3,750	0.0861	>100+ AC.	>100+ AC.
21-5	NAVAJO NATION	7,750	0.1779	>100+ AC.	>100+ AC.
21-6	NAVAJO NATION	3,600	0.0826	>100+ AC.	>100+ AC.
21-7	NAVAJO NATION	2,250	0.0517	>100+ AC.	>100+ AC.
21-8	NAVAJO NATION	1,950	0.0448	>100+ AC.	>100+ AC.
21-9	NAVAJO NATION	17,705	0.4064	>100+ AC.	>100+ AC.
21-10	NAVAJO NATION	8,400	0.1928	>100+ AC.	>100+ AC.
22-1	NAVAJO NATION	999	0.0229	>100+ AC.	>100+ AC.
22-2	NAVAJO NATION	7,112	0.1633	>100+ AC.	>100+ AC.
22-3	NAVAJO NATION	700	0.0161	>100+ AC.	>100+ AC.

ABANDONMENTS

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres	AREA REMAINDER acres	LARGER PARCEL acres
9-ABMT-1	NAVAJO NATION	34,565	0.7935	>100+ AC.	>100+ AC.
10-ABMT-1	NAVAJO NATION	15,339	0.3521	>100+ AC.	>100+ AC.
10-ABMT-2	NAVAJO NATION	29,726	0.6824	>100+ AC.	>100+ AC.
16-ABMT-1	NAVAJO NATION	38,505	0.8840	>100+ AC.	>100+ AC.
16-ABMT-2	NAVAJO NATION	38,505	0.8840	>100+ AC.	>100+ AC.

CONSTRUCTION MAINTENANCE EASEMENTS

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres	AREA REMAINDER acres	LARGER PARCEL acres
2-CME-1	NAVAJO NATION	19,000	0.4362	>100+ AC.	>100+ AC.
2-CME-2	NAVAJO NATION	5,850	0.1343	>100+ AC.	>100+ AC.
3-CME-1	NAVAJO NATION	3,400	0.0781	>100+ AC.	>100+ AC.
3-CME-2	NAVAJO NATION	1,250	0.0287	>100+ AC.	>100+ AC.
4-CME-1	NAVAJO NATION	1,500	0.0344	>100+ AC.	>100+ AC.
4-CME-2	NAVAJO NATION	1,800	0.0413	>100+ AC.	>100+ AC.
6-CME-1	NAVAJO NATION	1,750	0.0402	>100+ AC.	>100+ AC.
7-CME-1	NAVAJO NATION	2,100	0.0482	>100+ AC.	>100+ AC.
9-CME-1	NAVAJO NATION	1,000	0.0230	>100+ AC.	>100+ AC.
9-CME-2	NAVAJO NATION	4,000	0.0918	>100+ AC.	>100+ AC.
9-CME-3	NAVAJO NATION	2,100	0.0482	>100+ AC.	>100+ AC.
10-CME-1	NAVAJO NATION	664	0.0152	>100+ AC.	>100+ AC.
10-CME-2	NAVAJO NATION	19,950	0.4580	>100+ AC.	>100+ AC.
10-CME-3	NAVAJO NATION	17,734	0.4071	>100+ AC.	>100+ AC.
11-CME-1	NAVAJO NATION	3,500	0.0803	>100+ AC.	>100+ AC.
11-CME-2	NAVAJO NATION	4,000	0.0918	>100+ AC.	>100+ AC.
11-CME-3	NAVAJO NATION	1,250	0.0287	>100+ AC.	>100+ AC.
12-CME-1	NAVAJO NATION	1,917	0.0440	>100+ AC.	>100+ AC.
12-CME-2	NAVAJO NATION	3,013	0.0692	>100+ AC.	>100+ AC.
12-CME-3	NAVAJO NATION	2,241	0.0515	>100+ AC.	>100+ AC.
12-CME-4	NAVAJO NATION	7,697	0.1767	>100+ AC.	>100+ AC.

FINAL MAP

DATE: MAY 27, 2021

5101170

NO	DESCRIPTION	DATE	BY
4	UPDATED PHASE 3, 4 & 5 PROJECT NUMBERS	1/13/22	AES
3	REMOVED AN ERRONEOUS 6-CME-2 ON PARCEL 6-CME-1	1/13/22	AES
2	ADDED 10-ABMT-1, 10-CME-1 & 10-CME-3 10-ABMT-2 & 12-ABMT-2	12/23/21	AES
1	ADDED PHASE 2	8/3/21	AES

REVISIONS (OR CHANGE NOTICES)

NOTE:
LARGER PARCEL AREAS WERE OBTAINED FROM COUNTY RECORDS AND NEW MEXICO DEPARTMENT OF TRANSPORTATION SURVEY DATA.

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 1 - 5101171, PHASE 2 - 5101172, PHASE 3 - 5101174, PHASE 4 - 5101175 & PHASE 5 - 5101176
SAN JUAN COUNTY

PCN 5101171, 5101172, 5101174, 5101175 & 5101176

SHEET 1B OF 23

PARCEL BLOCK SHEET

TEMPORARY CONSTRUCTION PERMIT

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres
2-TCP-1	NAVAJO NATION	7,200	0.1653
2-TCP-2	NAVAJO NATION	9,000	0.2066
3-TCP-1	NAVAJO NATION	440	0.0101
3-TCP-2	NAVAJO NATION	360	0.0083
3-TCP-3	NAVAJO NATION	5,775	0.1326
3-TCP-4	NAVAJO NATION	4,875	0.1119
3-TCP-5	NAVAJO NATION	2,700	0.0620
3-TCP-6	NAVAJO NATION	3,500	0.0804
4-TCP-1	NAVAJO NATION	4,000	0.0918
4-TCP-2	NAVAJO NATION	1,955	0.0449
4-TCP-3	NAVAJO NATION	5,230	0.1201
4-TCP-4	NAVAJO NATION	5,010	0.1150
4-TCP-5	NAVAJO NATION	720	0.0165
4-TCP-6	NAVAJO NATION	400	0.0092
5-TCP-1	NAVAJO NATION	600	0.0138
5-TCP-2	NAVAJO NATION	720	0.0165
5-TCP-3	NAVAJO NATION	399	0.0092
5-TCP-4	NAVAJO NATION	399	0.0092
5-TCP-5	NAVAJO NATION	12,989	0.2982
6-TCP-1	NAVAJO NATION	440	0.0101
6-TCP-2	NAVAJO NATION	2,960	0.0680
6-TCP-3	NAVAJO NATION	880	0.0202
6-TCP-4	NAVAJO NATION	450	0.0103
6-TCP-5	NAVAJO NATION	450	0.0103

TEMPORARY CONSTRUCTION PERMIT

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres
6-TCP-6	NAVAJO NATION	440	0.0101
6-TCP-7	NAVAJO NATION	3,600	0.0826
6-TCP-8	NAVAJO NATION	3,750	0.0861
7-TCP-1	NAVAJO NATION	470	0.0108
7-TCP-2	NAVAJO NATION	400	0.0092
7-TCP-3	NAVAJO NATION	1,809	0.0415
8-TCP-1	NAVAJO NATION	3,397	0.0780
8-TCP-2	NAVAJO NATION	360	0.0083
8-TCP-3	NAVAJO NATION	400	0.0092
9-TCP-1	NAVAJO NATION	11,002	0.2526
9-TCP-2	NAVAJO NATION	3,700	0.0849
9-TCP-3	NAVAJO NATION	4,500	0.1033
9-TCP-4	NAVAJO NATION	2,700	0.0620
10-TCP-1	NAVAJO NATION	3,073	0.0705
11-TCP-1	NAVAJO NATION	360	0.0083
11-TCP-2	NAVAJO NATION	2,100	0.0482
12-TCP-1	NAVAJO NATION	17,278	0.3966
13-TCP-1	NAVAJO NATION	360	0.0083
13-TCP-2	NAVAJO NATION	400	0.0092
14-TCP-1	NAVAJO NATION	7,700	0.1768
14-TCP-2	NAVAJO NATION	1,500	0.0344
15-TCP-1	NAVAJO NATION	890	0.0204
15-TCP-2	NAVAJO NATION	300	0.0069
15-TCP-3	NAVAJO NATION	700	0.0161

TEMPORARY CONSTRUCTION PERMIT

PARCEL NUMBER	OWNER	AREA sq. ft.	AREA acres
15-TCP-4	NAVAJO NATION	700	0.0161
15-TCP-5	NAVAJO NATION	1,800	0.0413
15-TCP-6	NAVAJO NATION	5,300	0.1217
15-TCP-7	NAVAJO NATION	360	0.0083
16-TCP-1	NAVAJO NATION	2,400	0.0551
16-TCP-2	NAVAJO NATION	525	0.0121
16-TCP-3	NAVAJO NATION	400	0.0092
16-TCP-4	NAVAJO NATION	360	0.0083
17-TCP-1	NAVAJO NATION	4,400	0.1010
17-TCP-2	NAVAJO NATION	360	0.0083
17-TCP-3	NAVAJO NATION	1,300	0.0298
17-TCP-4	NAVAJO NATION	1,920	0.0441
17-TCP-5	NAVAJO NATION	1,645	0.0378
17-TCP-6	NAVAJO NATION	1,590	0.0365
17-TCP-7	NAVAJO NATION	1,900	0.0436
18-TCP-1	NAVAJO NATION	1,600	0.0367
18-TCP-2	NAVAJO NATION	600	0.0138
18-TCP-3	NAVAJO NATION	4,200	0.0964
18-TCP-4	NAVAJO NATION	1,479	0.0339
18-TCP-5	NAVAJO NATION	1,011	0.0232
18-TCP-6	NAVAJO NATION	5,520	0.1267

FINAL MAP

DATE: MAY 27, 2021

5101170

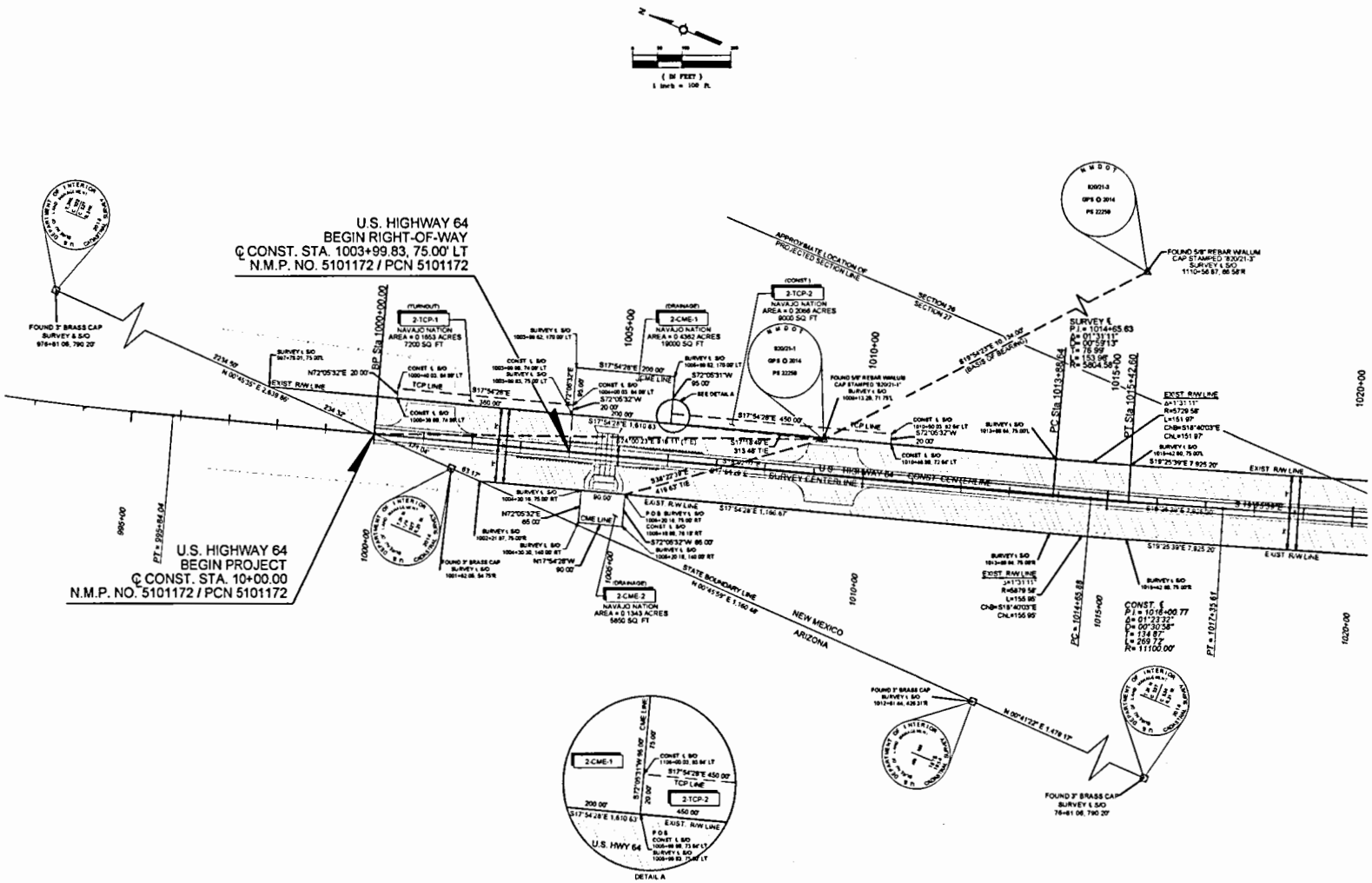
NOTE:
LARGER PARCEL AREAS WERE OBTAINED FROM COUNTY RECORDS AND NEW MEXICO DEPARTMENT OF TRANSPORTATION SURVEY DATA.

NO.	DESCRIPTION	DATE	BY
4			
3			
2	UPDATED PHASE 3, 4 & 5 PROJECT NUMBERS	2/10/22	AES
1	ADDED PHASE 2	8/3/21	AES

REVISIONS (OR CHANGE NOTICES)

PCN 5101171, 5101172, 5101174, 5101175 & 5101176

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 1 - 5101171, PHASE 2 - 5101172, PHASE 3 - 5101174, PHASE 4 - 5101175 & PHASE 5 - 5101176
SAN JUAN COUNTY



LEGEND

- △ = CONTROL MONUMENT AS NOTED
- I = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- □ = BRASS CAP FOUND AS NOTED
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP B/A-N-1(23) & N-1(6)2

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING - FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO. 5100820 & 5100821, DATED AUGUST 2015 (S19°54'23"E) FROM GPS CONTROL 820/21-1 TO GPS CONTROL 820/21-3
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO US HIGHWAY 64 SURVEY CENTERLINE AS NOTED
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR B/A-N-1(23) & N-1(6)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE N.M.D.O.T. LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO
7. BASIS OF STATIONING. STATIONING WAS RE-LABELED TO FOLLOW THE NMDOT RIGHT-OF-WAY MAP STANDARDS

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1	ADDED PHASE 2	8/3/21	AES

REVISIONS (OR CHANGE NOTICES)

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

NAVAJO INDIAN RESERVATION
PROJECTED SECTIONS 28 & 27
TOWNSHIP 31 NORTH, RANGE 21 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

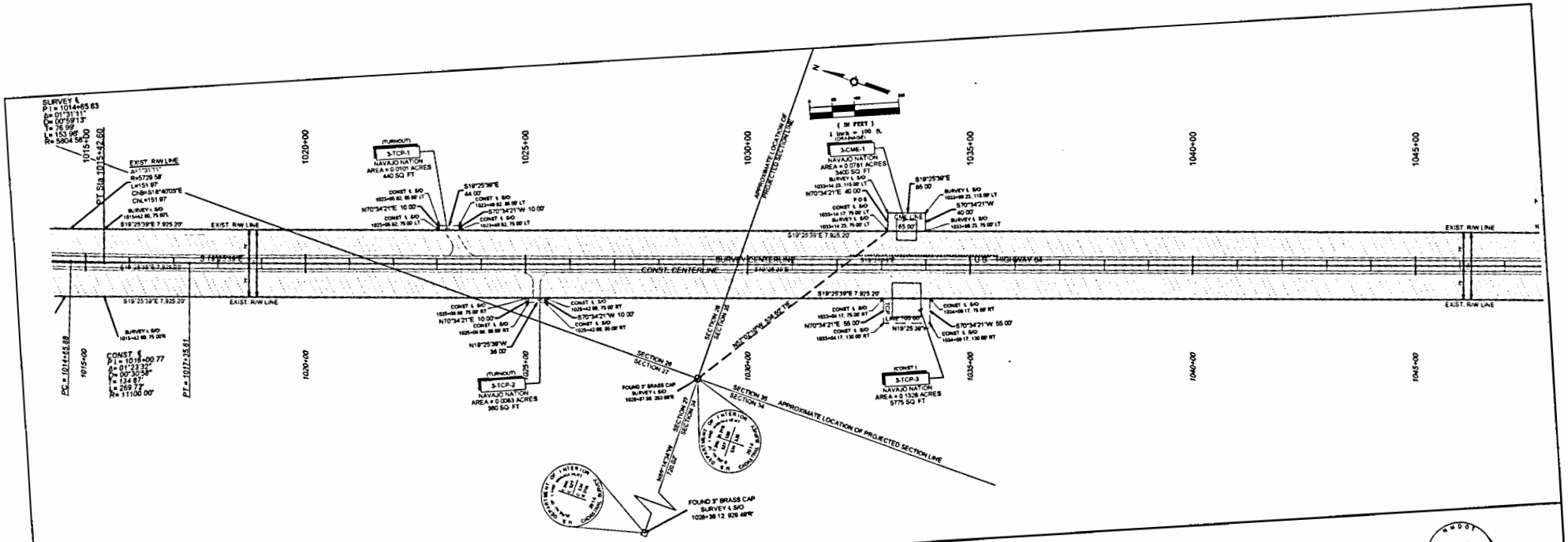
8/2/2021
JASON D. SMITH N.M.P.S. NO. 17122 DATE

NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD
SANTA FE, NM 87504-1149
(505) 827-5100

FINAL MAP
DATE: MAY 27, 2021

PCN 5101172

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 2 - 5101172
SAN JUAN COUNTY
SCALE 1"=100' SHEET 2 OF 23



LEGEND

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- I = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- □ = BRASS CAP FOUND AS NOTED
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP 9(A-N-1(23) & N-1(6)2

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING : FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO 5100820 & 5100821 DATED AUGUST 2015 (S19°54'23"E) FROM GPS CONTROL 82021-1 TO GPS CONTROL 82021-3
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO SURVEY CENTERLINE US 64 AS NOTED
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR BIA-N-1(23) & N-1(6)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO
7. BASIS OF STATIONING BASED ON NMDOT MAP TPO-084-1(22)1, STATIONING IS BASED ON END OF RIGHT-OF-WAY MAP AT 85+00.00

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

NAVAJO INDIAN RESERVATION
PROJECTED SECTIONS 26, 27, 34 & 35
TOWNSHIP 31 NORTH, RANGE 21 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

8/2/2021

JASON D. SMITH — N.M.P.S. NO. 17122 — DATE

NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD
SANTA FE, NM 87504-1149
(505) 827-5100

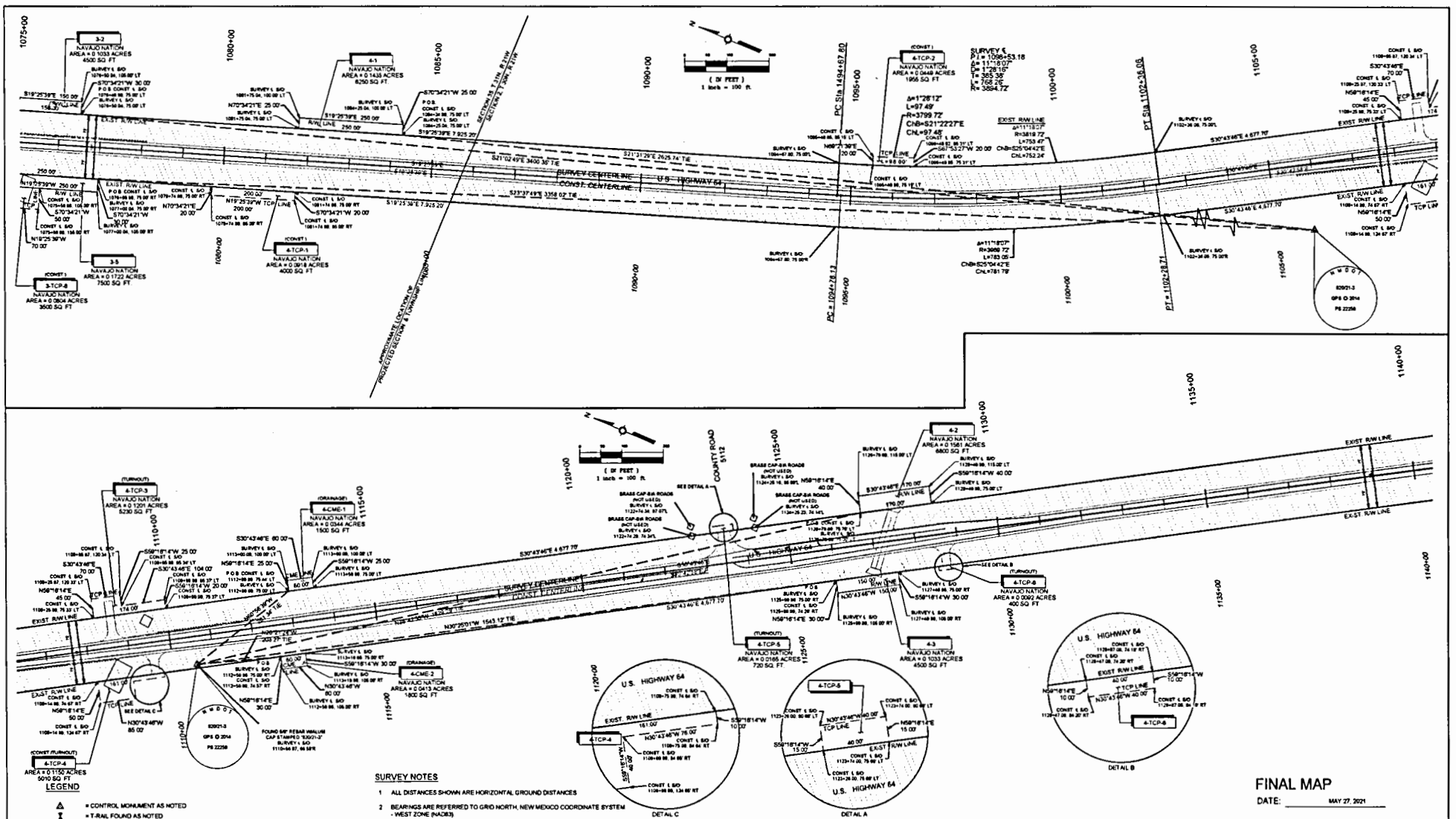
JASON D. SMITH — NEW MEXICO — 17122 — PROFESSIONAL SURVEYOR

NO	DESCRIPTION	DATE	BY
	REVISIONS (OR CHANGE NOTICES)		
1	ADDED PHASE 2	8/3/21	AES
2			
3			
4			

PCN 5101172

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 2 - 5101172
SAN JUAN COUNTY
SCALE 1"=100'
SHEET 3 OF 23

AES/5101170/ROW 03 OF 23



LEGEND

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- I = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- □ = BRASS CAP FOUND AS NOTED
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP B/A-N-1(23) & N-1(6)2

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING - FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO 5100820 & 5100821, DATED AUGUST 2015 (S19°54'23"E) FROM GPS CONTROL 82021-1 TO GPS CONTROL 82021-3
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO SURVEY CENTERLINE US 64 AS NOTED
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR BIA-N-1(23) & N-1(6)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO
7. BASIS OF STATIONING BASED ON NMDOT MAP TPO-084-1(2)21, STATIONING IS BASED ON END OF RIGHT-OF-WAY MAP AT 85+00.00

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1	ADDED PHASE 2	8/3/21	AES

REVISIONS (OR CHANGE NOTICES)

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

NAVAJO INDIAN RESERVATION
PROJECTED SECTION 35
TOWNSHIP 30 NORTH, RANGE 21 WEST, N.M.P.M.
PROJECTED SECTION 2
TOWNSHIP 31 NORTH, RANGE 21 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

8/2/2021

JASON D. SMITH — N.M.P.S. NO. 17122 — DATE

NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD
SANTA FE, NM 87504-1149
(505) 827-5100

FINAL MAP
DATE: MAY 27, 2021

PCN 5101172

NEW MEXICO DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY MAP

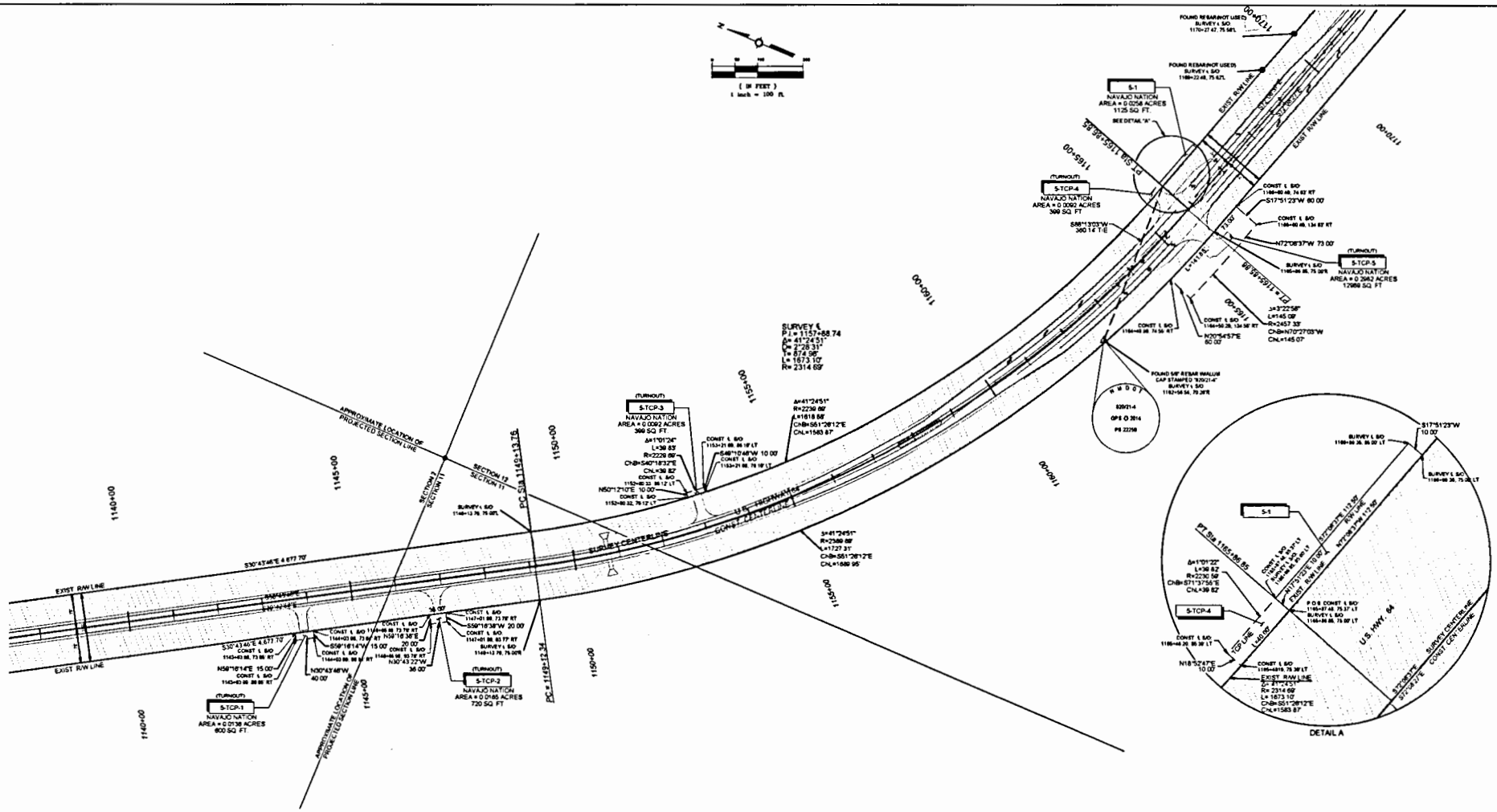
NEW MEXICO PROJECT NO.

PHASE 2 - 5101172

SAN JUAN COUNTY

SCALE 1"=100'

SHEET 4 OF 23



LEGEND

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- ⧗ = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- □ = BRASS CAP FOUND AS NOTED
- = BUILDING
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP BIA-N-1(2)3 & N-1(6)2

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING - FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO. 5100820 & 5100821, DATED AUGUST 2019 (S19°54'23"E) FROM GPS CONTROL 820/21-1 TO GPS CONTROL 820/21-3
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO SURVEY CENTERLINE US 64 AS NOTED
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR BIA-N-1(2)3 & N-1(6)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO.
7. BASIS OF STATIONING. BASED ON NMDOT MAP TPG-084-1(2)21, STATIONING IS BASED ON END OF RIGHT-OF-WAY MAP AT 65+00.00

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1	ADDED PHASE 2	8/3/21	AES

REVISIONS (OR CHANGE NOTICES)

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

NAVAJO INDIAN RESERVATION
PROJECTED SECTIONS 2, 11 & 12
TOWNSHIP 30 NORTH, RANGE 21 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

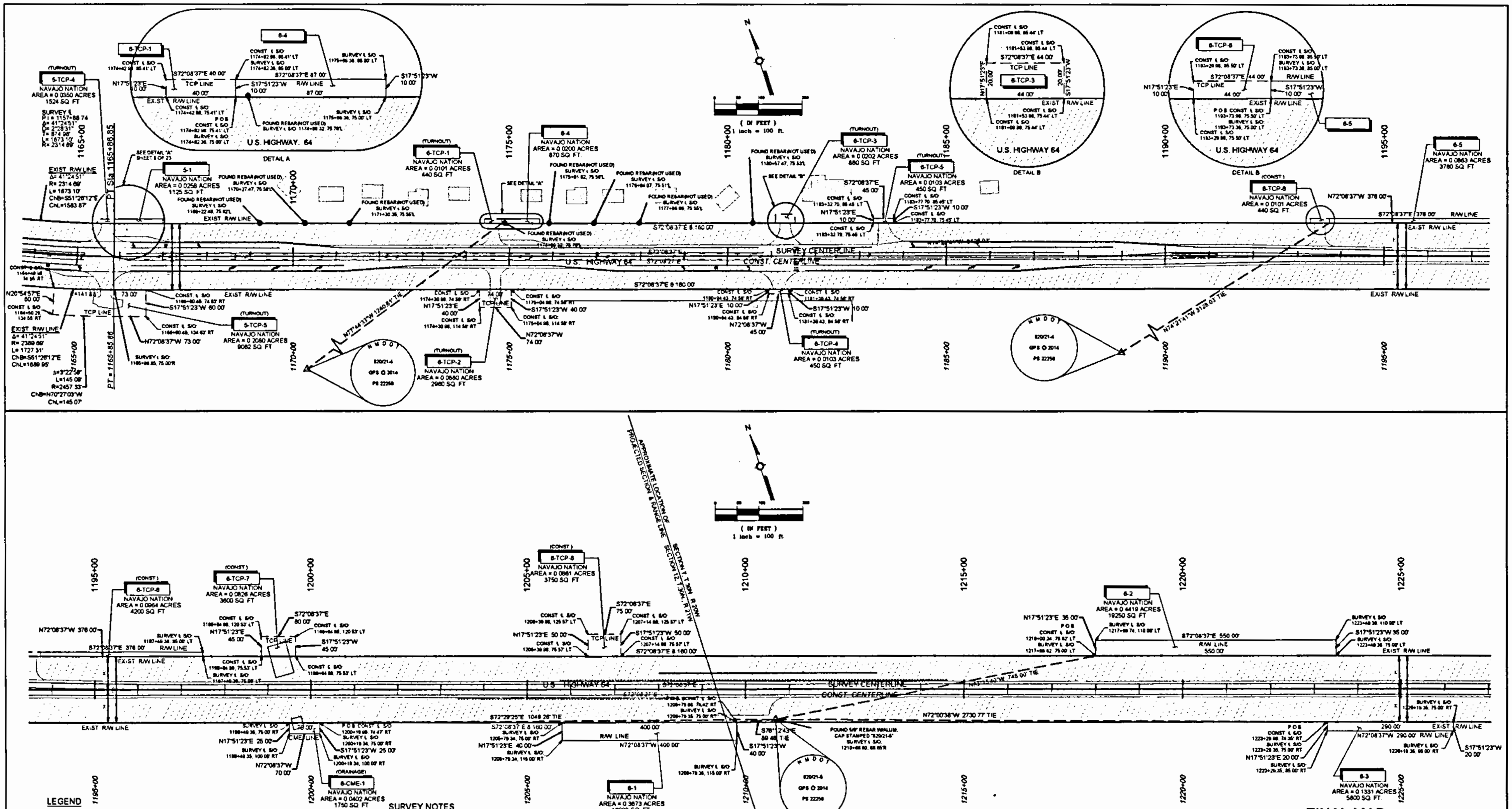
8/2/2021
DATE

JASON D. SMITH
N.M.P.S. NO. 17122
NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD
SANTA FE, NM 87504-1149
(505) 827-5100

FINAL MAP
DATE: MAY 27, 2021

PCN 5101172

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 2 - 5101172
SAN JUAN COUNTY
SCALE 1"=100' SHEET 5 OF 23



LEGEND

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- = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- ◻ = BRASS CAP FOUND AS NOTED
- = BUILDING
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP BIA-N-1(2)3 & N-1(6)2

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1	ADDED PHASE 2	8/3/21	AES

REVISIONS (OR CHANGE NOTICES)

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING - FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO 5100820 & 5100821, DATED AUGUST 2015 (S19°54'23"E) FROM GPS CONTROL 820/21-1 TO GPS CONTROL 820/21-3.
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO SURVEY CENTERLINE US 64 AS NOTED.
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR BIA-N-1(2)3 & N-1(6)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO.
7. BASIS OF STATIONING BASED ON NMDOT MAP TPO-064-1(2)21, STATIONING IS BASED ON END OF RIGHT-OF-WAY MAP AT 65+00.00.

NAVAJO INDIAN RESERVATION
PROJECTED SECTION 7
TOWNSHIP 30 NORTH, RANGE 20 WEST, N.M.P.M.
PROJECTED SECTION 12
TOWNSHIP 30 NORTH, RANGE 21 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

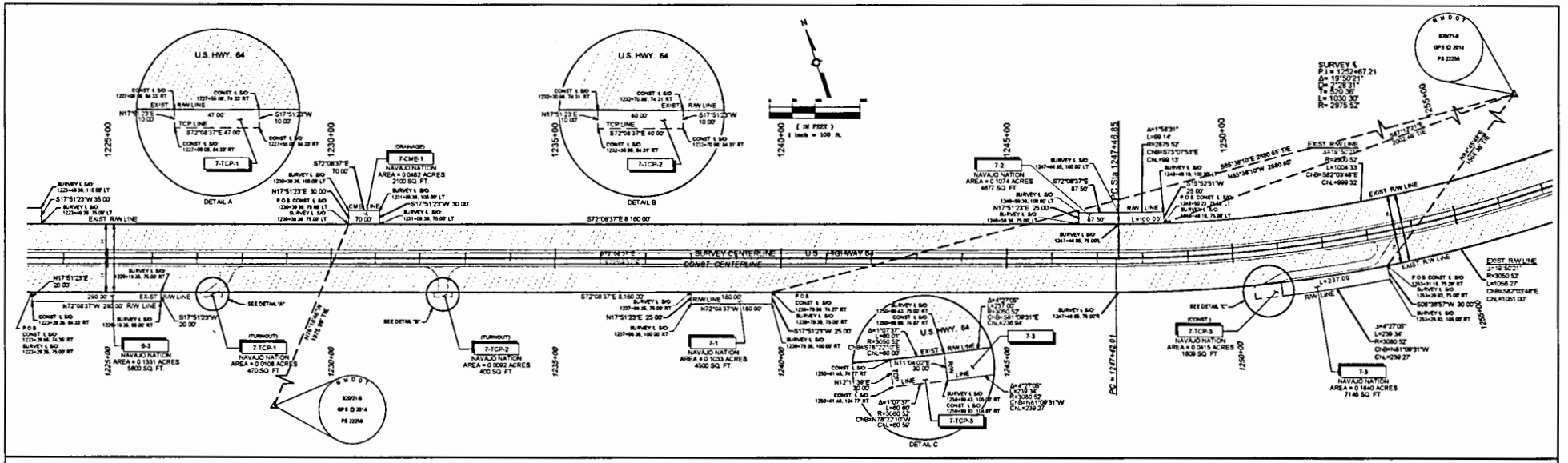
JASON D. SMITH N.M.P.S. NO. 17122 — DATE 8/2/2021
NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD.
SANTA FE, NM 87504-1149
(505) 827-5100

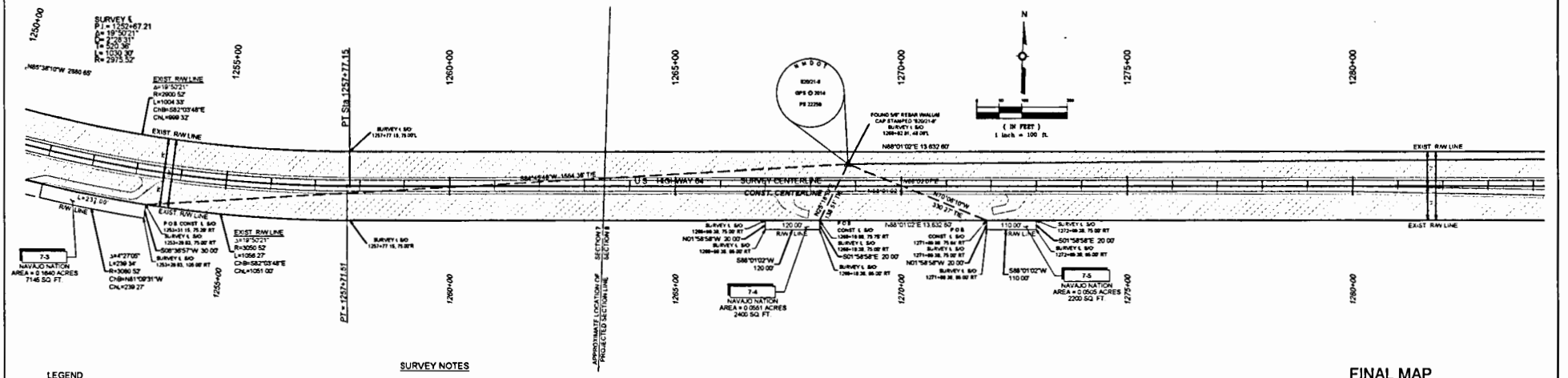
JASON D. SMITH NEW MEXICO 17122 PROFESSIONAL SURVEYOR

FINAL MAP
DATE: MAY 27, 2021

PCN 5101172

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 2 - 5101172
SAN JUAN COUNTY
SCALE 1"=100' SHEET 6 OF 23





LEGEND

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- I = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- □ = BRASS CAP FOUND AS NOTED
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP (NA N-1(2)3 & N-1(6)2

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING - FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO S100820 & S100821, DATED AUGUST 2015 (S18°54 23"E) FROM GPS CONTROL 820/21-1 TO GPS CONTROL 820/21-3
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO SURVEY CENTERLINE US 64 AS NOTED
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR BIA-N-1(2)3 & N-1(6)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO
7. BASIS OF STATIONING BASED ON NMDOT MAP TPO-084-1(2)21, STATIONING IS BASED ON END OF RIGHT-OF-WAY MAP AT 85+00.00

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1	ADDED PHASE 2	8/3/21	AES

REVISIONS (OR CHANGE NOTICES)

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

NAVAJO INDIAN RESERVATION
PROJECTED SECTIONS 7 & 8
TOWNSHIP 30 NORTH, RANGE 20 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

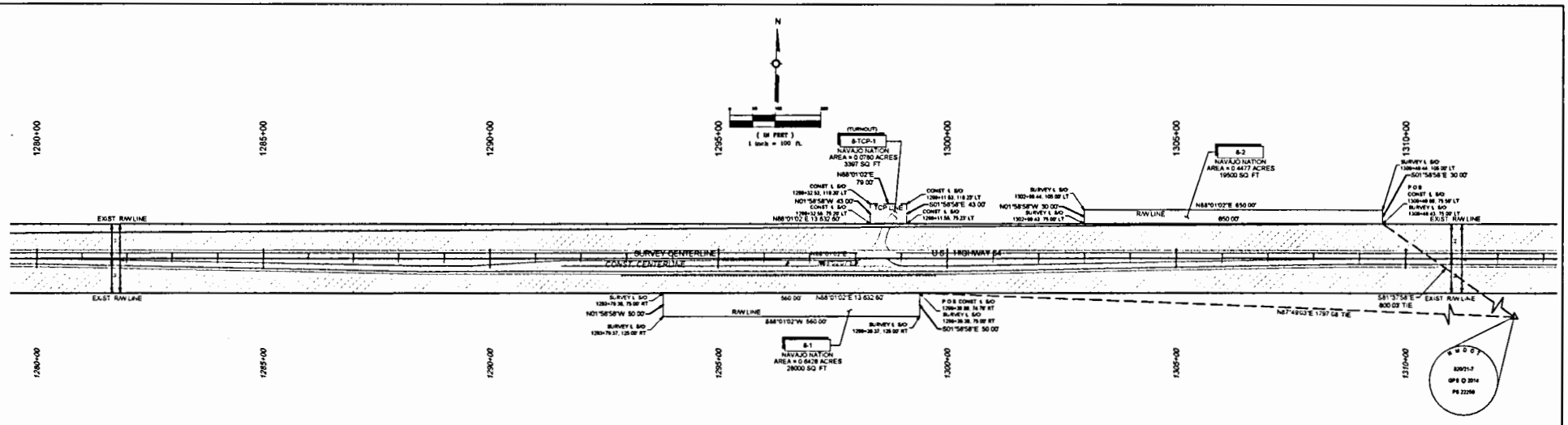
8/2/2021
JASON D. SMITH — N.M.P.S. NO. 17122 — DATE

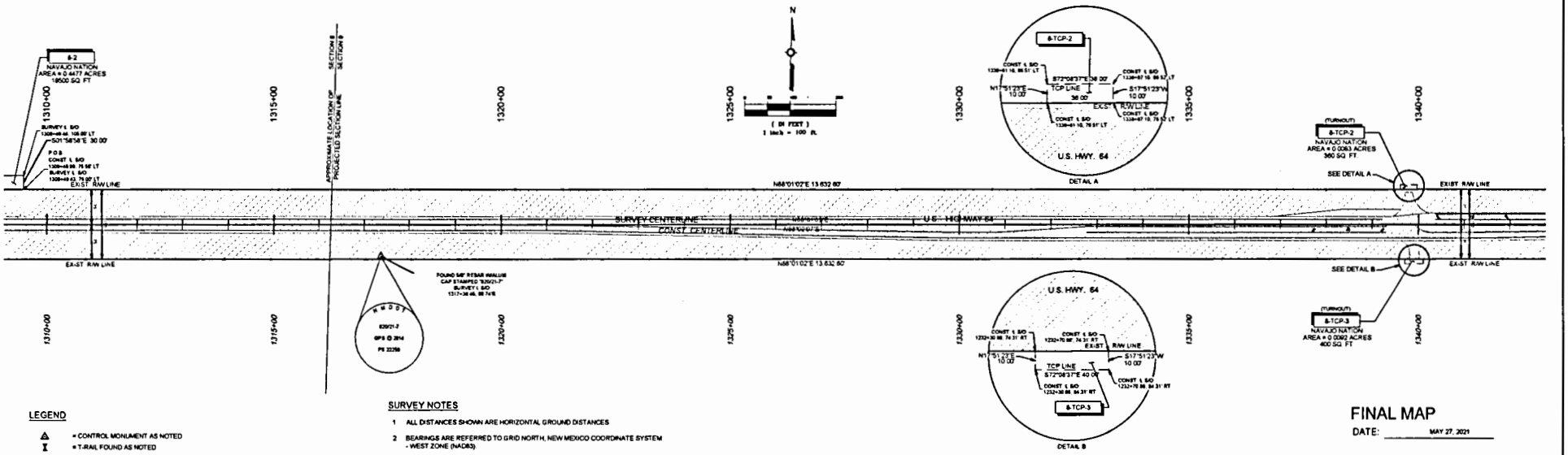
NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD.
SANTA FE, NM 87504-1149
(505) 827-5100

FINAL MAP
DATE: MAY 27, 2021

PCN 5101172

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 2 - 5101172
SAN JUAN COUNTY
SCALE 1"=100' SHEET 7 OF 23





LEGEND

- △ = CONTROL MONUMENT AS NOTED
- I = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- □ = BRASS CAP FOUND AS NOTED
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP BIA-N-1(23) & N-1(8)2

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING - FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO 5100820 & 5100821, DATED AUGUST 2015 (S19°54'23"E) FROM GPS CONTROL 629/21-1 TO GPS CONTROL 629/21-3
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO SURVEY CENTERLINE US 64 AS NOTED
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR BIA-N-1(2)3 & N-1(8)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO
7. BASIS OF STATIONING BASED ON NMDOT MAP TPO-064-1(2)21, STATIONING IS BASED ON END OF RIGHT-OF-WAY MAP AT 65+00.00

NO	DESCRIPTION	DATE	BY
4			
3			
2			
1	ADDED PHASE 2	8/3/21	AES
	REVISIONS (OR CHANGE NOTICES)		

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

NAVAJO INDIAN RESERVATION
PROJECTED SECTIONS 8 & 9
TOWNSHIP 30 NORTH, RANGE 20 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

8/2/2021

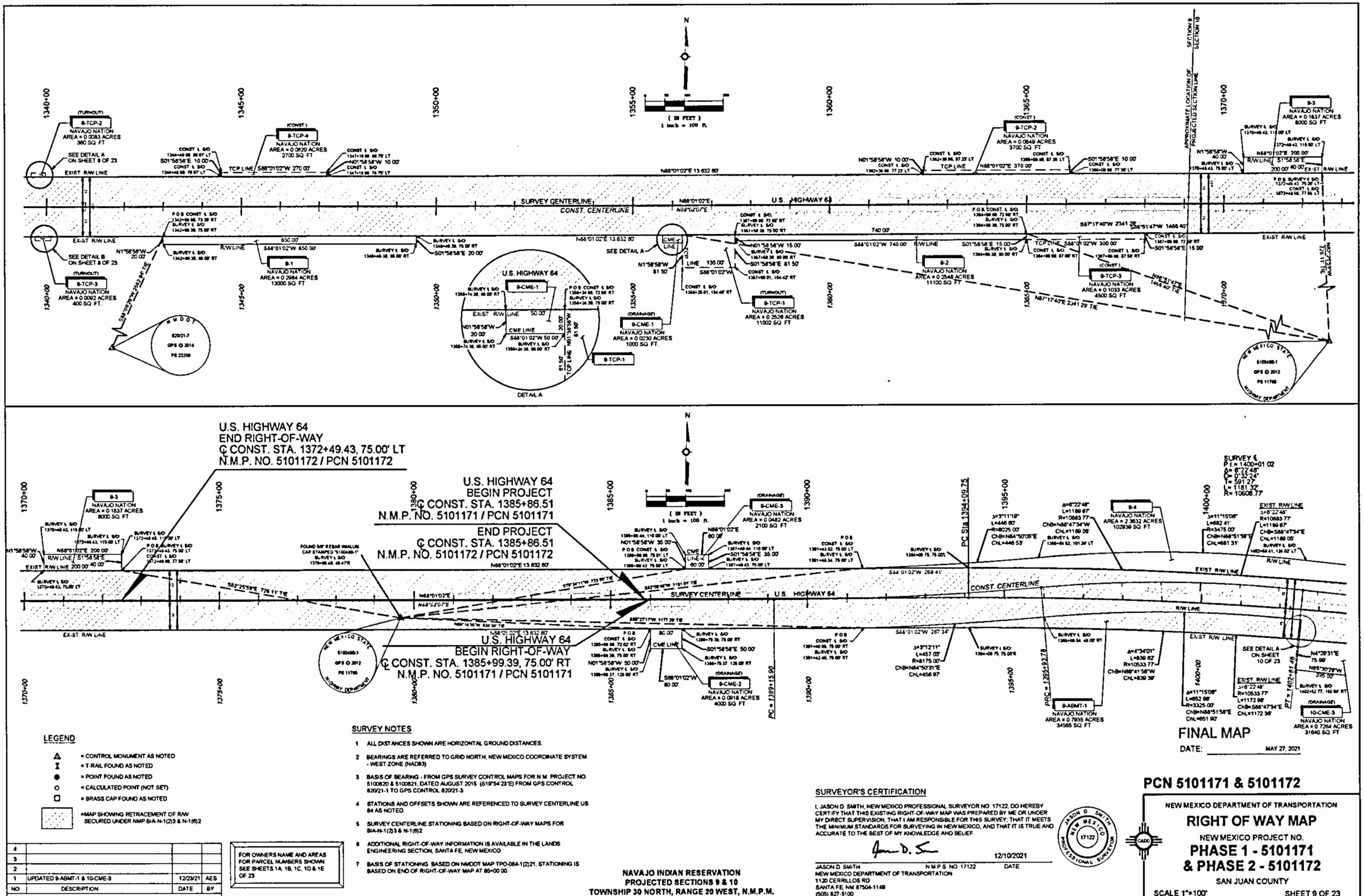
JASON D. SMITH — N.M.P.S. NO. 17122 — DATE

NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD
SANTA FE, NM 87504-1149
(505) 827-5100

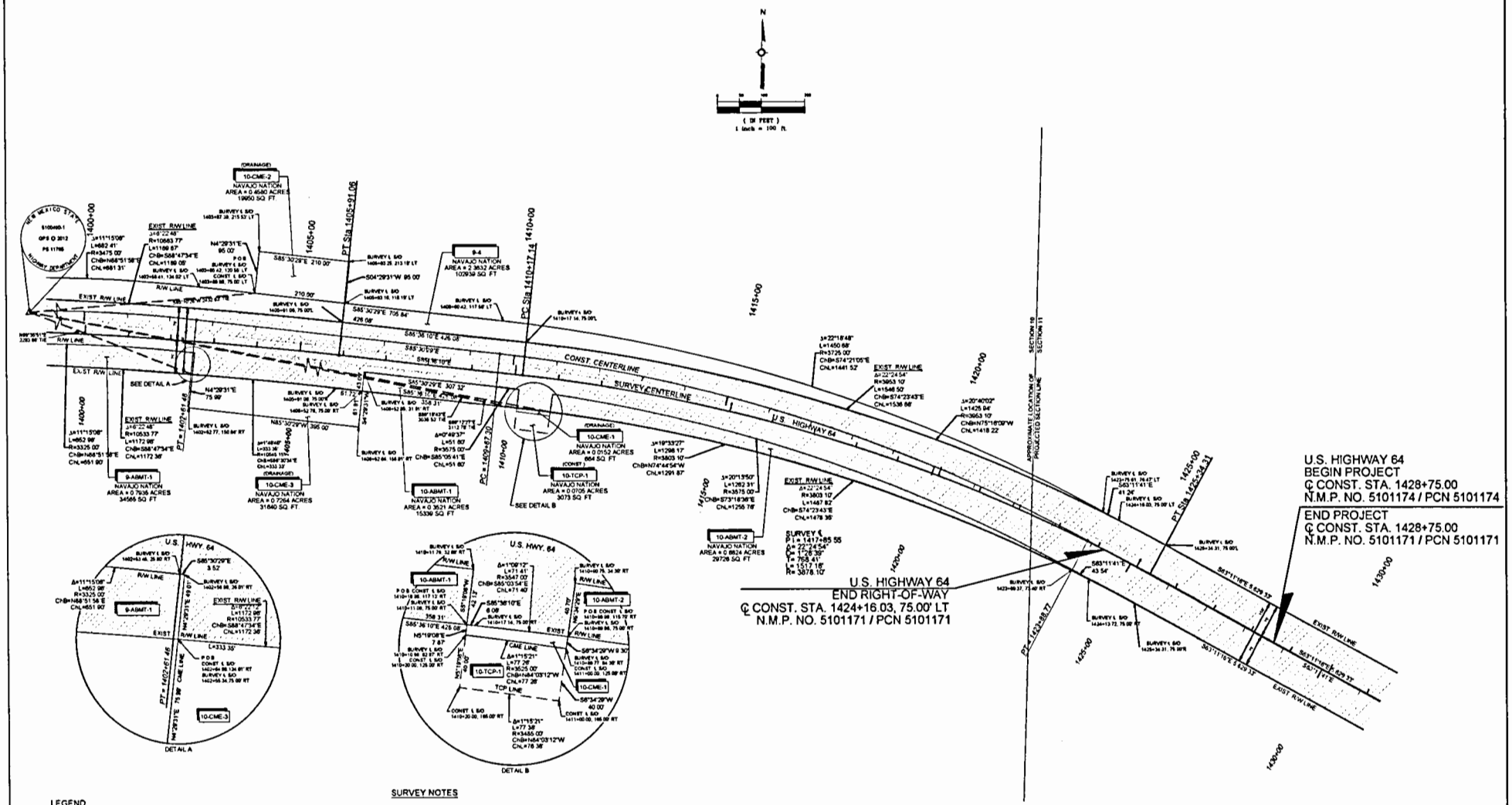
FINAL MAP
DATE: MAY 27, 2021

PCN 5101172

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 2 - 5101172
SAN JUAN COUNTY
SCALE 1"=100' SHEET 8 OF 23



AES/5101170/ROW 09 OF 23



LEGEND

- △ = CONTROL MONUMENT AS NOTED
- I = T-RAIL FOUND AS NOTED
- ● = POINT FOUND AS NOTED
- ○ = CALCULATED POINT (NOT SET)
- □ = BRASS CAP FOUND AS NOTED
- = MAP SHOWING RETRACEMENT OF R/W SECURED UNDER NMP BIA-N-1(23) & N-1(6)2

SURVEY NOTES

1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES
2. BEARINGS ARE REFERRED TO GRID NORTH, NEW MEXICO COORDINATE SYSTEM - WEST ZONE (NAD83)
3. BASIS OF BEARING - FROM GPS SURVEY CONTROL MAPS FOR N.M. PROJECT NO. 5100620 & 5100621, DATED AUGUST 2015 (S19°54'23"E) FROM GPS CONTROL 820/21-1 TO GPS CONTROL 820/21-3
4. STATIONS AND OFFSETS SHOWN ARE REFERENCED TO SURVEY CENTERLINE US 64 AS NOTED
5. SURVEY CENTERLINE STATIONING BASED ON RIGHT-OF-WAY MAPS FOR BIA-N-1(23) & N-1(6)2
6. ADDITIONAL RIGHT-OF-WAY INFORMATION IS AVAILABLE IN THE LANDS ENGINEERING SECTION, SANTA FE, NEW MEXICO
7. BASIS OF STATIONING BASED ON NMDOT MAP TPO-064-1(21), STATIONING IS BASED ON END OF RIGHT-OF-WAY MAP AT 65+00.00

NO	DESCRIPTION	DATE	BY
4			
3			
2	UPDATED PHASE 3 PROJECT NUMBER	12/23/21	AES
1	UPDATED 9-ABMT-1 & ADDED 10-ABMT-1 & 10-ABMT-2	12/23/21	AES

REVISIONS (OR CHANGE NOTICES)

FOR OWNERS NAME AND AREAS FOR PARCEL NUMBERS SHOWN SEE SHEETS 1A, 1B, 1C, 1D & 1E OF 23

NAVAJO INDIAN RESERVATION
PROJECTED SECTIONS 10 & 11
TOWNSHIP 30 NORTH, RANGE 20 WEST, N.M.P.M.

SURVEYOR'S CERTIFICATION

I, JASON D. SMITH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17122, DO HEREBY CERTIFY THAT THIS EXISTING RIGHT-OF-WAY MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT IT MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

12/10/2021

JASON D. SMITH — N.M.P.S. NO. 17122 — DATE

NEW MEXICO DEPARTMENT OF TRANSPORTATION
1120 CERRILLOS RD.
SANTA FE, NM 87504-1149
(505) 827-5100

PCN 5101171 & 5101174

FINAL MAP
DATE: MAY 27, 2021

NEW MEXICO DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
NEW MEXICO PROJECT NO.
PHASE 1 - 5101171
& PHASE 3 - 5101174
SAN JUAN COUNTY
SCALE 1"=100' SHEET 10 OF 23

EXHIBIT C

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS

RIGHT-OF-WAY APPLICATION MUST IDENTIFY [§169.102 (a)]:

1. **Applicant Name and Address:**
   New Mexico Department of Transportation, C/O Dana Garcia
   1120 Cerrillos Rd.
   Santa Fe, NM 87505
2. **Tract(s) or parcel(s) affected by the right-of-way:**
   Numerous parcels along US 64 between milepost 0 at the Arizona/New Mexico state line and MP 8.1, just east of the Red Wash bridge. Please refer to the ROW maps and associated legal descriptions included in the ROW application for CN 5101171 and CN 5101172.
3. **General Location (easement location):**
   Along US 64 between MP 0 and MP 8.1.
4. **Purpose:**
   Transportation improvements, including widened roadway shoulders, drainage improvements, replacing bridges that have exceeded their service lives. Improvements are considered a public service and a benefit to the Navajo Nation communities.
5. **Term (Renewal, if applicable):**
   Perpetual
6. **Identify ownership of permanent improvements associated with the right-of-way and the responsibility for constructing, operating, maintaining, and managing permanent improvements under §169.105:**
   New Mexico Department of Transportation, District 5

REQUIRED SUPPORTING DOCUMENTS [§169.102(b)]:

1. Accurate legal description of the right-of-way, its boundaries, and parcels associated with the right-of-way;
2. A map of definite location of the right-of-way; [169.102(b)(2)]; survey plat signed by professional surveyor or engineering showing the location, size, and extent of the ROW and other related parcels, with respect to each affected parcel of individually owned land, tribal land, or BIA land and with reference to the public surveys under 25 U.S.C. § 176, 43 U.S.C. § 2 and § 1764, and showing existing facilities adjacent to the proposed project.
3. Bond(s), insurance, and/or other security meeting the requirements of § 169.103;
4. Record that notice of the right-of-way was provided to all Indian landowners;
5. Record of consent that right-of-way meets the requirements of §169.107, or a statement documenting a request for a right-of-way without consent under §169.107(b);

6. If applicable, a valuation meeting the requirements of §§ 169.110, .112, .114;
7. With each application, if the applicant is a corporation, limited liability company, partnership, joint venture, or other legal entity, except a tribal entity, information such as organizational documents, certificates, filing records, and resolutions, demonstrating that:
   a. The representative has authority to execute the application;
   b. The right-of-way will be enforceable against the applicant; and
   c. The legal entity is in good standing and authorized to conduct business in the jurisdiction where the land is located.
8. Current environmental and archaeological reports, surveys, and site assessments, as needed to facilitate compliance with applicable Federal and tribal environmental and land use requirements;
9. If required, a statement from the appropriate tribal authority that the proposed right-of-way is in conformance with applicable tribal law.

THE APPLICANT FURTHER STIPULATES AND EXPRESSLY AGREES AS FOLLOWS:

To conform and to abide by all applicable requirements with respect to the right-of-way herein applied for. The applicant agrees to conform to and abide by the rules, regulations, and requirements contained in the *Code of Federal Regulations*, Title 25 Indians, Part 169, as amended, and by reference includes such rules, regulations and requirements as a part of this application to the same effect as if the same were herein set out in full.

Applicant Point of Contact Information:

Name: Dana Garcia

Address: 1120 Cerrillos Rd., Santa Fe

State: NM Zip: 87505

Phone: 505-231-7663

Email: Dana.Garcia@state.nm.us

Date: 2/16/22

Applicant: John Murphy (Signature)

John Murphy, NMDOT ROW Bureau Chief (Print Name)

New Mexico DEPARTMENT OF TRANSPORTATION
MOBILITY FOR EVERYONE

February 17, 2022

Navajo Nation General Land Development Department
Attn: Ms. Stevie Hudson, Leasing Agent
Division of Natural Resources
P.O. Box 69
Saint Michaels, AZ 86511

RE: US 64 ROW Request Submittal, Milepost 0 to Milepost 8.1
Project Number/Control Number: 5101171, 5101172
NMDOT District: 5
County: San Juan

Dear Ms. Hudson:

On behalf of the NMDOT, I am submitting the Rights-of-Way (ROW) request packet for the planned roadway improvements on US 64 between milepost 0 and milepost 8.1, which is from the Arizona / New Mexico state line to just east of the Red Wash Bridge. These limits cover the NMDOT's first two construction phases planned on the western US 64 corridor, project control numbers (CN) 5101171 and 5101172.

A previous alignment study of the US 64 corridor was conducted over the last few years covering limits from the AZ / NM state line to just west of Shiprock, NM, a total of 20.8 miles. An Environmental Assessment (EA) was also conducted, which included assessment of the entire 20.8 mile limits. This is the EA being submitted. I would like to point out that the limits in our ROW request are within the EA limits. As we progress design on the future construction projects, it will be the same EA submitted for the associated future ROW requests. The NMDOT plans to construct roadway improvements throughout the entire 20.8 mile corridor over the next five to seven years.

In an effort to minimize the ROW requested of the Navajo Nation, this request includes many small parcels that were deemed critical to the planned improvements. Total combined area of our ROW request in this 8.1 mile corridor is 7.6765 acres of tribal trust land, 2.5891 acres of which are simply a temporary construction permit request that will no longer be needed once construction is completed.

The NMDOT would like to respectfully request:

1) that the Navajo Nation consider granting a waiver of the bond, insurance or other security per 25 CFR 169.103(f)(2). The planned roadway improvements will serve a public purpose and will be a benefit to the Navajo Nation communities.
2) that the Navajo Nation consider granting a waiver of valuation per 25 CFR 169.110(a)(2).
3) that the grant of easement be in perpetuity as the improvements are for transportation purposes and are considered in the best interest of the tribal community. Reference is made to 25 CFR 169.201(b).

The submitted ROW packet includes:

- BIA ROW Application Form
- Letter of Application
- Legal Descriptions

CONSENT FORM 3 (Waiver of Compensation for damages)

EXHIBIT
tabbies
D

CONSENT TO USE
NAVAJO TRIBAL LANDS

TO WHOM IT MAY CONCERN:

I, **Renita Anderson**, hereby grant consent to the Navajo Nation and the Bureau of Indian Affairs, Window Rock, Arizona, to permit:

New Mexico Department of Transportation (NMDOT), General Office, Post Office Box 1149, Santa Fe, New Mexico 87504.

To use a portion of my land use area for the following purpose(s):

NM DOT Project: CN 5101171 and 5101172 - US 64 Red Wash Bridge. Road improvements on US 64 between milepost 0 and milepost 8.1, 8.1 miles length x 150 feet width/ 7.6765 acres corridors, and 2.5891 acres of temporary construction corridor. In CN#5101171 (Phase 1) Legal descriptions included: 1) Parcel 9-4: Section 10, T. 30 N., R.20., N.M.P.M, 2) Parcel 9-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 3) Parcel 10-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 4) Parcel 10-ABMT-2: Section 10, T. 30 N., R. 20 W., N.M.P.M, 5) Parcel 9-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 6) Parcel 9-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 7) Parcel 10-CME-1: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 8) Parcel 10-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 9) Parcel 10-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage). In CN# 5101172 (Phase 2) Legal Descriptions included: 1) Parcel 2-CME-1: Section 27, T. 31 N., R. 21 W., N.M.P.M, 2) Parcel 2-CME-2: Section 27, T. 31 N., R. 21 W., N.M.P.M, 3) Parcel 3-CME-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 4) Parcel 3-CME-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 5) Parcel 4-CME-1: Section 2, T. 30 N., R. 21 W., N.M.P.M, 6) Parcel 4-CME-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 7) Parcel 6-CME-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 8) Parcel 7-CME-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 9) Parcel 9-CME-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 10) Parcel 3-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 11) Parcel 3-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 12) Parcel 3-3: Section 35, T. 31 N., R. 21 W., N.M.P.M, 13) Parcel 3-4: Section 35, T. 31 N., R. 21 W., N.M.P.M, 14) Parcel 3-5: Section 35, T. 31 N., R. 21 W., N.M.P.M, 15) Parcel 4-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 16) Parcel 4-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 17) Parcel 4-3: Section 2, T. 30 N., R. 21 W., N.M.P.M, 18) Parcel 5-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 19) Parcel 6-1: Section 12, T. 30 N., R. 21 West and Section 7, T. 30 N., R. 20 W., N.M.P.M, 20) Parcel 6-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 21) Parcel 6-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 22) Parcel 6-4: Section 12, T. 30 N., R. 21 W. N.M.P.M, 23) Parcel 6-5: Section 12, T. 30 N., R. 21 W., N.M.P.M, 24) Parcel 7-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 25) Parcel 7-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 26) Parcel 7-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 27) Parcel 7-4: Section 8, T. 30 N., R. 20 W., N.M.P.M, 28) Parcel 7-5: Section 8, T. 30 N., R. 20 W., N.M.P.M, 29) Parcel 8-1: Section 8, T. 30 N., R. 20 W., N.M.P.M, 30) Parcel 8-2: Section 8, T. 30 N., R. 20 W., N.M.P.M, 31) Parcel 9-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 32) Parcel 9-2: Section 9, T. 30 N., R. 20 W., N.M.P.M, 33) Parcel 9-3: Section 10, T. 30 N., R. 20 W., N.M.P.M, all within Beclabito Chapter, Navajo Reservation, San Juan County, New Mexico.

As shown on the map showing the location of the proposed project attached.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

Remarks:

07-22-2022 x Renita Anderson Census No. _____
Date Land User Signature / Thumbprint Permit No. 12-3722, #.0369, SU 26-0
Renita Anderson Address: _____
Telephone _____

Witness: _____ _____

7/22/22 Lucinda Lee District No. 12
Date **Lucinda Lee, Grazing Committee Member**
Gadii'ahi' Chapter

ACKNOWLEDGEMENT OF FIELD AGENT

I acknowledge that the consents of this consent form was read / ✓ or fully explained / ✓ to the land user in Navajo / ✓ or English / ✓ (Check where applicable)

Belinda Chee
Field Agent Signature
Belinda Chee, Senior Right of Way Agent

CONSENT FORM 3 (Waiver of Compensation for damages)

CONSENT TO USE
NAVAJO TRIBAL LANDS

TO WHOM IT MAY CONCERN:

Tommy Nez, Jr., hereby grant consent to the Navajo Nation and the Bureau of Indian Affairs, Window Rock, Arizona, to permit:

New Mexico Department of Transportation (NMDOT), General Office, Post Office Box 1149, Santa Fe, New Mexico 87504.

To use a portion of my land use area for the following purpose(s):

NM DOT Project: CN 5101171 and 5101172 - US 64 Red Wash Bridge. Road improvements on US 64 between milepost 0 and milepost 8.1, 8.1 miles length x 150 feet width/ 7.6765 acres corridors, and 2.5891 acres of temporary construction corridor. In CN#5101171 (Phase 1) Legal descriptions included: 1) Parcel 9-4: Section 10, T. 30 N., R.20., N.M.P.M, 2) Parcel 9-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 3) Parcel 10-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 4) Parcel 10-ABMT-2: Section 10, T. 30 N., R. 20 W., N.M.P.M, 5) Parcel 9-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 6) Parcel 9-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 7) Parcel 10-CME-1: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 8) Parcel 10-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 9) Parcel 10-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage). In CN# 5101172 (Phase 2) Legal Descriptions included: 1) Parcel 2-CME-1: Section 27, T. 31 N., R. 21 W., N.M.P.M, 2) Parcel 2-CME-2: Section 27, T. 31 N., R. 21 W., N.M.P.M, 3) Parcel 3-CME-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 4) Parcel 3-CME-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 5) Parcel 4-CME-1: Section 2, T. 30 N., R. 21 W., N.M.P.M, 6) Parcel 4-CME-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 7) Parcel 6-CME-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 8) Parcel 7-CME-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 9) Parcel 9-CME-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 10) Parcel 3-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 11) Parcel 3-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 12) Parcel 3-3: Section 35, T. 31 N., R. 21 W., N.M.P.M, 13) Parcel 3-4: Section 35, T. 31 N., R. 21 W., N.M.P.M, 14) Parcel 3-5: Section 35, T. 31 N., R. 21 W., N.M.P.M, 15) Parcel 4-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 16) Parcel 4-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 17) Parcel 4-3: Section 2, T. 30 N., R. 21 W., N.M.P.M, 18) Parcel 5-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 19) Parcel 6-1: Section 12, T. 30 N., R. 21 West and Section 7, T. 30 N., R. 20 W., N.M.P.M, 20) Parcel 6-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 21) Parcel 6-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 22) Parcel 6-4: Section 12, T. 30 N., R. 21 W. N.M.P.M, 23) Parcel 6-5: Section 12, T. 30 N., R. 21 W., N.M.P.M, 24) Parcel 7-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 25) Parcel 7-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 26) Parcel 7-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 27) Parcel 7-4: Section 8, T. 30 N., R. 20 W., N.M.P.M, 28) Parcel 7-5: Section 8, T. 30 N., R. 20 W., N.M.P.M, 29) Parcel 8-1: Section 8, T. 30 N., R. 20 W., N.M.P.M, 30) Parcel 8-2: Section 8, T. 30 N., R. 20 W., N.M.P.M, 31) Parcel 9-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 32) Parcel 9-2: Section 9, T. 30 N., R. 20 W., N.M.P.M, 33) Parcel 9-3: Section 10, T. 30 N., R. 20 W., N.M.P.M, all within Beclabito Chapter, Navajo Reservation, San Juan County, New Mexico.

As shown on the map showing the location of the proposed project attached.

I hereby waive any rights I may have to compensation for the diminishment in value of my land use rights as a result of the above-referenced project as proposed.

Remarks:

7-22-22 X Tommy Yazzie Jr.
Date Land User Signature / Thumbprint

Census No. _____
Permit No. 12-3412

Address: _____
Telephone _____

Witness: _____ _____

7/22/22 Lucinda Lee
Date **Lucinda Lee, Grazing Committee Member**
Gadii'ahi' Chapter

District No. **12**

ACKNOWLEDGEMENT OF FIELD AGENT

I acknowledge that the consents of this consent form was read / ✓ or fully explained / ✓ / to the land user in Navajo / ✓ or English / ✓ (Check where applicable)

Field Agent Signature
Belinda Chee, Senior Right of Way Agent

1. List of land use/grazing permittee whose land use rights will be affected project:

Name(s):	Census No.:	Type of and Use Right:
a. Renita Anderson		**Grazing Rights**
b. Tommy Nez Jr.		**Grazing Rights**

Are all land users in the above list no. 4 with claims to the affected lands shown in the Branch of Land Operations records? **Yes** No

2. Have the Grazing Committee or Land Board Member (whichever is appropriate) for the affected area confirms the list no. 4 by signing acknowledgement form below.

ACKNOWLEDGEMENT

I acknowledge that due notice was given to the affected community of the proposed project, and according to my records and to the best of my knowledge; the list no. 4 includes all land users who have rights in the affected lands.

7/22/22 — Date

Lucinda Lee — **Lucinda Lee, Grazing Committee Member**
Gadii'ahi' Chapter

12 — District

3. Are any damages expected to individual improvements? Yes No

If yes, contact the Director of Navajo Land Administration because special arrangements will have to be made to compensate for these damages.

If no give full explanations why:
No damage is expected to individual improvement. A nominal surface/grazing damage is expected on the projects. Surface damage compensation will be paid out to the affected grazing permittees. And the disturbed grazing area will be reclaimed/reseed per Bureau of Indian Affairs regulations after the completion of the seismic.

4. List of land users where diminishment in value of land use rights is expected and/or where land use rights are expected to be enhanced as a result of the project. Specify whether or not there is diminishment or enhancement in value of land use rights. Note whether or not land users have consented and which consent forms were used. (If no expected damages, use Consent Form No. 1.)

Names	Expected Diminishment	Expected Enhancement	Did Land Users Consent? Form?
a. Renita Anderson	**None**	**None**	**Yes, consent #3**
b. Tommy Nez Jr.	**None**	**None**	**Yes, consent #3**

List again the land users from list no. 8 where land use rights value will be diminished as a result of the project. Specify if land users is to receive compensation and the monetary amount in-kind compensation to be received, and use Consent Form No. 2. Indicate whether compensation is be received is adequate for the estimated damages to land use rights. Note whether land users have consented and which consent forms used. (If waiver of compensation for damages, use Consent Form No. 3.)

Names	Compensation Amount	Is Amount Adequate	Did Land Users Consent? Form?
a. Renita Anderson	**Waived**	**Yes**	**Yes, consent #3**
b. Tommy Nez Jr.	**Waived**	**Yes**	**Yes, consent #3**

How, when and by whom will land users be paid compensation? If any, is it specified in list no. 9 above?

Surface damages compensation will be paid out accordingly to the Grazing Committee Member's recommendation.

5. Is a topographical map of the project attached? **Yes** No
6. Was the project fully explained to the land users? **Yes** No
7. Which chapter will be affected by the project? **Beclabito Chapter**
8. Are supporting chapter resolution attached? **Yes** No
9. Will chapter receive any payments or benefits from the project?

   Yes No If yes, what will be received?

Approved by:

Field Clearance Conducted by:

Utah Land Office/General Land Development Department

Belinda Chee, Senior Right of Way Agent

(GLDD approval necessary only if the Field Clearance was conducted by other than GLDD Office)

Date: July 22, 2020

GRAZING COMMITTEE RECOMMENDATION

Date: **July 21, 2022**

Project Name/Legal Description: **NM DOT Project: CN 5101171 and 5101172 - US 64 Red Wash Bridge. Road improvements on US 64 between milepost 0 and milepost 8.1, 8.1 miles length x 150 feet width/ 7.6765 acres corridors, and 2.5891 acres of temporary construction corridor. In CN#5101171 (Phase 1) Legal descriptions included: 1) Parcel 9-4: Section 10, T. 30 N., R.20., N.M.P.M, 2) Parcel 9-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 3) Parcel 10-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 4) Parcel 10-ABMT-2: Section 10, T. 30 N., R. 20 W., N.M.P.M, 5) Parcel 9-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 6) Parcel 9-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 7) Parcel 10-CME-1: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 8) Parcel 10-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 9) Parcel 10-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage). In CN# 5101172 (Phase 2) Legal Descriptions included: 1) Parcel 2-CME-1: Section 27, T. 31 N., R. 21 W., N.M.P.M, 2) Parcel 2-CME-2: Section 27, T. 31 N., R. 21 W., N.M.P.M, 3) Parcel 3-CME-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 4) Parcel 3-CME-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 5) Parcel 4-CME-1: Section 2, T. 30 N., R. 21 W., N.M.P.M, 6) Parcel 4-CME-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 7) Parcel 6-CME-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 8) Parcel 7-CME-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 9) Parcel 9-CME-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 10) Parcel 3-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 11) Parcel 3-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 12) Parcel 3-3: Section 35, T. 31 N., R. 21 W., N.M.P.M, 13) Parcel 3-4: Section 35, T. 31 N., R. 21 W., N.M.P.M, 14) Parcel 3-5: Section 35, T. 31 N., R. 21 W., N.M.P.M, 15) Parcel 4-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 16) Parcel 4-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 17) Parcel 4-3: Section 2, T. 30 N., R. 21 W., N.M.P.M, 18) Parcel 5-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 19) Parcel 6-1: Section 12, T. 30 N., R. 21 West and Section 7, T. 30 N., R. 20 W., N.M.P.M, 20) Parcel 6-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 21) Parcel 6-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 22) Parcel 6-4: Section 12, T. 30 N., R. 21 W. N.M.P.M, 23) Parcel 6-5: Section 12, T. 30 N., R. 21 W., N.M.P.M, 24) Parcel 7-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 25) Parcel 7-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 26) Parcel 7-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 27) Parcel 7-4: Section 8, T. 30 N., R. 20 W., N.M.P.M, 28) Parcel 7-5: Section 8, T. 30 N., R. 20 W., N.M.P.M, 29) Parcel 8-1: Section 8, T. 30 N., R. 20 W., N.M.P.M, 30) Parcel 8-2: Section 8, T. 30 N., R. 20 W., N.M.P.M, 31) Parcel 9-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 32) Parcel 9-2: Section 9, T. 30 N., R. 20 W., N.M.P.M, 33) Parcel 9-3: Section 10, T. 30 N., R. 20 W., N.M.P.M, all within Beclabito Chapter, Navajo Reservation, San Juan County, New Mexico.**

Pursuant to the Shiprock Agency Grazing Committee Resolution dated July 20, 2007, in determining eligibility for grazing permittee/land use permittee to receive surface damage compensation; I, Lucinda Lee, Grazing Committee Member of District 12, Gadii'ah' Chapter recommend this/these individual(s) as:

/ / Recipient(s) of the surface damage and /or nuisance compensation deriving from the above referenced project from _____ and compensation to be distributed as follows:

No.	Permittee(s)/Payee(s):	Census No.
1)	Renita Anderson	
2)	Tommy Nez Jr.	

Witnesses: .....

Remarks: .....

ACKNOWLEDGEMENT:

x Lucinda Lee 7/22/22

Lucinda Lee, Grazing Committee Member. Date
Gadii'ah' Chapter

CONCURRENCE:

Belinda Chee, Senior ROW Agent
Utah Land Office/General Land Development Dept.

Utah Land Office/GLDD/DNR
Post Office Box 410
Montezuma Creek, Utah 84534

MEMORANDUM

To: Ms. Ettie Anderson-Abasta, Department Manager
General Land Development Department
Division of Natural Resources

From: Belinda Chee, Senior Right-of-Way Agent
Utah Land Office/General Land Development Department

Date: July 22, 2022

Subject: **Field Clearances for New Mexico Department of Transportation (NMDOT)**

Pursuant to the Field Clearance requests, the Utah Land Office has completed the below cited Field Clearances with the delegated Ms. Lucinda Lee, Grazing Committee Member of Gadii'ahi' Chapter due to Mrs. Renita Anderson, Grazing Committee Member of Beclabito Chapter being the grazing permittee herself and that is in conflict of interests. Thus, the proposed projects will be forward to GLDD office in St. Michaels for further processing and approvals. The proposed projects are described below:

NM DOT Project: CN 5101171 and 5101172 - US 64 Red Wash Bridge. Road improvements on US 64 between milepost 0 and milepost 8.1, 8.1 miles length x 150 feet width/ 7.6765 acres corridors, and 2.5891 acres of temporary construction corridor. In CN#5101171 (Phase 1) Legal descriptions included: 1) Parcel 9-4: Section 10, T. 30 N., R.20., N.M.P.M, 2) Parcel 9-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 3) Parcel 10-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 4) Parcel 10-ABMT-2: Section 10, T. 30 N., R. 20 W., N.M.P.M, 5) Parcel 9-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 6) Parcel 9-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 7) Parcel 10-CME-1: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 8) Parcel 10-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 9) Parcel 10-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage). In CN# 5101172 (Phase 2) Legal Descriptions included: 1) Parcel 2-CME-1: Section 27, T. 31 N., R. 21 W., N.M.P.M, 2) Parcel 2-CME-2: Section 27, T. 31 N., R. 21 W., N.M.P.M, 3) Parcel 3-CME-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 4) Parcel 3-CME-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 5) Parcel 4-CME-1: Section 2, T. 30 N., R. 21 W., N.M.P.M, 6) Parcel 4-CME-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 7) Parcel 6-CME-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 8) Parcel 7-CME-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 9) Parcel 9-CME-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 10) Parcel 3-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 11) Parcel 3-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 12) Parcel 3-3: Section 35, T. 31 N., R. 21 W., N.M.P.M, 13) Parcel 3-4: Section 35, T. 31 N., R. 21 W., N.M.P.M, 14) Parcel 3-5: Section 35, T. 31 N., R. 21 W., N.M.P.M, 15) Parcel 4-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 16) Parcel 4-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 17) Parcel

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All of the original Field Clearance documents are attached. For any inquiries, call me at (435) 651-3504 or email at: *belindachee@navajo-nsn.gov* See the attachments. Thank you.

xc:
Dana Garcia & Raul Archuleta/NMDOT
Ettie Anderson-Abasta, Department Manager/GLDD/DNR/NN
Renita Anderson, GCM/Beclabito Chapter/NN
Lucinda Lee, Grazing Committee Member/Gadii'ahi' Chapter/NN
Bertha Spencer, Realty/BIA
File, Utah Land Office/GLDD/DNR/NN

FIELD CLEARANCE CHECKLIST

(This form covers only damages and compensation to individual land users. It does not cover consideration or other fees to the Navajo Nation. If necessary, use the back of this form for completion.)

Project Identification:

Applicant: **New Mexico Department of Transportation (NMDOT), General Office, Post Office Box 1149, Santa Fe, New Mexico 87504.**

Identification:

Purpose: **NMDOT Projects: CN 5101171 and 5101172 - US 64 Red Wash Bridge. Road improvements on US 64.**

Location (Legal Description): **In CN#5101171 (Phase 1) Legal descriptions included: 1) Parcel 9-4: Section 10, T. 30 N., R.20., N.M.P.M, 2) Parcel 9-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 3) Parcel 10-ABMT-1: Section 10, T. 30 N., R. 20 W., N.M.P.M, 4) Parcel 10-ABMT-2: Section 10, T. 30 N., R. 20 W., N.M.P.M, 5) Parcel 9-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 6) Parcel 9-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 7) Parcel 10-CME-1: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 8) Parcel 10-CME-2: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage), 9) Parcel 10-CME-3: Section 10, T. 30 N., R. 20 W., N.M.P.M (Drainage). In CN# 5101172 (Phase 2) Legal Descriptions included: 1) Parcel 2-CME-1: Section 27, T. 31 N., R. 21 W., N.M.P.M, 2) Parcel 2-CME-2: Section 27, T. 31 N., R. 21 W., N.M.P.M, 3) Parcel 3-CME-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 4) Parcel 3-CME-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 5) Parcel 4-CME-1: Section 2, T. 30 N., R. 21 W., N.M.P.M, 6) Parcel 4-CME-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 7) Parcel 6-CME-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 8) Parcel 7-CME-1: Section 7, T. 30 N., R. 20 W., N.M.P.M, 9) Parcel 9-CME-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 10) Parcel 3-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 11) Parcel 3-2: Section 35, T. 31 N., R. 21 W., N.M.P.M, 12) Parcel 3-3: Section 35, T. 31 N., R. 21 W., N.M.P.M, 13) Parcel 3-4: Section 35, T. 31 N., R. 21 W., N.M.P.M, 14) Parcel 3-5: Section 35, T. 31 N., R. 21 W., N.M.P.M, 15) Parcel 4-1: Section 35, T. 31 N., R. 21 W., N.M.P.M, 16) Parcel 4-2: Section 2, T. 30 N., R. 21 W., N.M.P.M, 17) Parcel 4-3: Section 2, T. 30 N., R. 21 W., N.M.P.M, 18) Parcel 5-1: Section 12, T. 30 N., R. 21 W., N.M.P.M, 19) Parcel 6-1: Section 12, T. 30 N., R. 21 West and Section 7, T. 30 N., R. 20 W., N.M.P.M, 20) Parcel 6-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 21) Parcel 6-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 22) Parcel 6-4: Section 12, T. 30 N., R. 21 W. N.M.P.M, 23) Parcel 6-5: Section 12, T. 30 N., R. 21 W., N.M.P.M, 24) Parcel 7-1: Section 7, T. 30 N.,R. 20 W., N.M.P.M, 25) Parcel 7-2: Section 7, T. 30 N., R. 20 W., N.M.P.M, 26) Parcel 7-3: Section 7, T. 30 N., R. 20 W., N.M.P.M, 27) Parcel 7-4: Section 8, T. 30 N., R. 20 W., N.M.P.M, 28) Parcel 7-5: Section 8, T. 30 N., R. 20 W., N.M.P.M, 29) Parcel 8-1: Section 8, T. 30 N., R. 20 W., N.M.P.M, 30) Parcel 8-2: Section 8, T. 30 N., R. 20 W., N.M.P.M, 31) Parcel 9-1: Section 9, T. 30 N., R. 20 W., N.M.P.M, 32) Parcel 9-2: Section 9, T. 30 N., R. 20 W., N.M.P.M, 33) Parcel 9-3: Section 10, T. 30 N., R. 20 W., N.M.P.M, all within Beclabito Chapter, Navajo Reservation, San Juan County, New Mexico.**

Amount of land affected: **8.1 miles length x 150 feet width/ 7.6765 acres corridors, and 2.5891 acres of Temporary Construction Corridor.**

Land status: **Trust** Fee Other:

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420-9064
Telephone: (928) 656-3265 Fax: (928) 656-3813
beclabito@navajochapters.org

June 27, 2022

TO: Belinda Chee, Navajo Nation GLDD

FROM: Renita T. Anderson, District 12 Beclabito Grazing Official Renita T. Anderson

RE: Delegation – Consent Signature

Greetings,

The NMDOT ROW Bureau has requested consent signatures for the project US 64 CN 5101171 and 5101172. I am currently a permitted holder for the consent that needs to be signed, and it will be a conflict of interest to sign the consent related to the Grazing Committee signature, I am currently the Beclabito Grazing Official. Therefore, I have delegated Ms. Lucinda Lee, the District 12 Gadii'ahi' Grazing Official to complete the signatures as required.

For additional information I can be contacted at 706-325-3048 or my email address at rbeclabito81@yahoo.com.

Thank You

Delegation: Lucinda Lee, District 12, Gadii'ahi'Grazing Official

Lucinda Lee 6/28/22
Date

Sincerely.
Renita T. Anderson, District 12 Beclabito Grazing Official

Xc: Charmaine Hosteen, Northern Agency Agent
Mr. Leo Watchman, Navajo Nation Department of Agriculture Manager
File Beclabito DGC-Renita T. Anderson
Beclabito Chapter File 2022

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420-9064
Telephone: (928) 656-3265 Fax: (928) 656-3813

EXHIBIT E

Resolution No: BECL-21-02-25

Resolution of the Beclabito Chapter

AN ACTION REAFFIRMING SUPPORT OF THE STATE OF NEW MEXICO, SAN JUAN COUNTY, FEDERAL AND NAVAJO NATION DEPARTMENT OF TRANSPORTATION ENTITIES TO CONTINUE IN PARTNERSHIP TO DEVELOP AND SEEK GRANT/FUNDING FOR IMPROVEMENT OF NEW MEXICO HIGHWAY 64 NM/AZ STATELINE TO SHIPROCK FOR HIGHWAY RECONSTRUCTION, REPLACEMENT OF BRIDGES, GUARD RAILS, REPAIR RIGHT-OF-WAY FENCING, SIGNAGE, TURN OUTS FOR SCHOOL BUSES, SAFETY CORRIDOR PULL OUT ZONES, STREET LIGHTS AND ALL NECESSARY SAFETY NEEDS OF THE HIGHWAY IMPROVEMENT PROJECT.

WHEREAS:

1. The Beclabito Chapter of the Navajo Nation acts on this resolution pursuant to the authority conferred on the chapter through Navajo Nation Code Title 26, Chapter 1, Section 1, B. Purpose which states "Through adoption of this Act, the Navajo Nation Council delegates to Chapter governmental authority with respect to local matters consistent with Navajo Law, including custom and tradition" and 26 N.N.C., Section 3 (A), the Beclabito Chapter is a duly recognized certified Chapter of the Navajo Nation Government; and

2. The Beclabito Chapter recognizes and supports the Northern Agency Council Resolution 122-061519 in making appropriate recommendations on behalf of the 19 Northern Navajo Agency Chapters for appropriate actions in the improvement and reconstruction of the N.M. State Highway 64 west from Shiprock, New Mexico to the NM/AZ Stateline; and

3. The Beclabito Chapter on behalf of the extended communities into the States of Arizona, Utah and Colorado recognizes the dire need of this highway reconstruction and much improvements, as the roadway is the main arterial route and connections to employment, education, hospitals, governmental services and economic developments at distant regional towns and cities. The roadway conditions has currently become very unsafe and dangerous for travelers, especially during inclement adverse weather conditions.

4. The Beclabito Chapter recognizes the need for Street Safety Lights between mile marker 3 and mile marker 4 and further enforcement activities for a Safety Corridor from mile marker 2 to mile marker 6.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Beclabito Chapter, hereby, approves and supports the State of New Mexico, San Juan County, Federal and Navajo Nation Department of Transportation and Highway Safety entities to partnership to continue to seek grants and funds for improvement and reconstruction of the N.M. Highway 64 West from the N.M./A.Z. Stateline to Shiprock.

CERTIFICATION

We hereby certify that the foregoing resolution was duly considered by the Beclabito Chapter at a duly called meeting in Beclabito, Navajo Nation, New Mexico at which a quorum of Chapter members were present and that the same was passed by a vote of **4** in favor, **0** opposed and **1** abstained this 16th day of **February 2021**.

Melissa Kelly, President

Hazel J. Sherman, Vice President

Susie A. John, Secretary/Treasurer

Amber K. Crotty, Council Delegate

Renita Anderson, Grazing Official

Motion by: Lenora Robinson
Second by: Hazel J. Sherman

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420-9702
Telephone: (928) 656-3265 Fax: (928) 656-3813

Resolution No: BECL-19-11-07

RESOLUTION OF BECLABITO CHAPTER

SUPPORTING AND APPROVING BECLABITO STREET LIGHTING WITHIN THE NEW MEXICO HIGHWAY 64 MILEPOST 3.0 TO 3.5 FOR SAFETY AND LIGHTING FOR PUBLIC USE, FOR PROJECT PHASE OF CONSTRUCTION MANAGEMENT AND TESTING.

WHEREAS:

1. Beclabito Chapter is a certified Chapter of the Navajo Nation pursuant to Navajo Tribal Council Resolution No. CAP-34-98 and is delegated authority with respect to local matters consistence with Navajo Nation Law, including custom, tradition, and fiscal matters; and

2. Pursuant to the Title 26, NNC, Section 1(B), Beclabito Chapter vested the governmental authority to review all matters affecting the community and to make appropriate correction when necessary and make recommendations to the Navajo Nation and the other local agencies for appropriate actions; and

3. The Beclabito Chapter is collaborating and coordinating with New Mexico Department of Transportation on guidance and development of the project and seeking to secure TAP funding to develop a safe Highway Street Lighting system along side and within the Rights of Way (ROW) of US Highway 64; and

4. Presently, there is not a safe lighted area through this public section of highway and does have a school bus loading area, a nearby convenience store, a housing subdivision and community Chapter House buildings/compound.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Beclabito Chapter hereby supports and approves an authorization for the Beclabito Chapter to submit an application for FFY18-19 New Mexico TAP Funds in the amount of 250,000.00 from the New Mexico Department of Transportation (NMDOT) on behalf of Beclabito Chapter and

2. That the Beclabito Chapter assures the NMDOT that if TAP funds are awarded, sufficient funding for the local match and for the upfront project costs are available, since TAP is a reimbursement program, and that any costs exceeding the award amount will be paid for by Beclabito Chapter.

CERTIFICATION

We, hereby, certify that the foregoing resolution was duly considered at a duly called meeting in Beclabito, Navajo Nation, New Mexico at which a quorum of Chapter members was present and that the same was passed by a vote of 17 in favor, 0 opposed and 5 abstained this 21st day of November 2018.

Raymond H. Charley, Chapter President

Hazel J. Sherman, Chapter Vice-President

Larry L. Jack, Secretary/Treasurer

Amber K. Crotty, Council Delegate

Renita Anderson, Grazing Official

Motioned by: Barbara Platero
Seconded by: Harrison Barton

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420-9702
Telephone: (928) 656-3265 Fax: (928) 656-3813
beclabito@navajochapters.org

Resolution No: BECL-19-10-03

Resolution of the Beclabito Chapter

UPDATING AND SUPPORTING THE NAVAJO DIVISION OF TRANSPORTATION SUBMISSION OF TIGER GRANT PROPOSAL FOR U.S. HIGHWAY 64 WEST OF SHIPROCK TO THE ARIZONA STATELINE ROAD RESURFACING, AND RECONSTRUCTION PROJECT; AND THAT, THE HIGHWAY SERVES AS MAIN ARTERIAL CONNECTIONS TO EMPLOYMENTS, EDUCATION, ECONOMIC DEVELOPMENTS, HOSPITALS, AND MANY GOVERNMENTAL SERVICES FOR THE PEOPLE OF THE NAVAJO NATION AND GENERAL PUBLIC

WHEREAS:

1. The Beclabito Chapter of the Navajo Nation acts on this resolution pursuant to the authority conferred on the chapter through Navajo Nation Code Title 26, Chapter 1, Section 1, B. Purpose which states "Through adoption of this Act, the Navajo Nation Council delegates to Chapter governmental authority with respect to local matters consistent with Navajo Law, including custom and tradition", and

2. Pursuant to 26 N.N.C., Section 3 (A) the Beclabito Chapter is a duly recognized certified chapter of the Navajo Nation Government, as listed 11N.N.C., part 1, Section 10, and

3. The Beclabito Chapter supports submission of the 2019 discretionary TIGER Grant that the Navajo Division of Transportation and Highway Safety Department is submitting for improvement of U.S. Highway 64 west of Shiprock, New Mexico to Arizona Stateline for approximately 23 miles; and

4. The Beclabito Chapter understands that U.S. Highway 64 is the main arterial route and connections to employment, education, hospitals, governmental services, and economic developments at regional city in Farmington, and Shiprock that serve as regional headquarter for tribal governmental series, both of two towns are located northwest corner of New Mexico or Four Corners Region; and

5. The Beclabito Chapter acknowledged that the U.S. Highway 64 serves many of disadvantage population of the rural community of New Mexico and Navajo Nation: and

6. The Beclabito Chapter is aware of that the U.S. Highway 64 is highly prioritized by the New Mexico Department of Transportation for road preservation and improvement plans, which includes widening of roadway shoulders, improving culvert and drainages, acceleration/deceleration lanes, installation of new guardrails, bus stop pullouts station, and other safety counter measures, signage and street lights.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Beclabito Chapter hereby approves and supports the Navajo Nation Division of Transportation and Department of Highway Safety in submitting the discretionary TIGER Grant application for the U.S. Highway 64 road resurfacing and reconstruction project.

CERTIFICATION

We hereby certify that the foregoing resolution was duly considered by the Beclabito Chapter at a duly called meeting in Beclabito, Navajo Nation, New Mexico at which a quorum of Chapter members were present and that the same was passed by a vote of **21** in favor **0** opposed and **2** abstained this **23rd** day of **October, 2018**.

Raymond H. Charley., President

Hazel Sherman, Vice President

Larry L. Jack, Secretary/Treasurer

Amber K. Crotty, Council Delegate

Renita Anderson, Grazing Official

Motion by: Jerry Benally
Second by: Melvin Lee

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420-9702
Telephone: (928) 656-3265 Fax: (928) 656-3813
beclabito@navajochapters.org

Resolution No: BECL-17-S-28

Resolution of the Beclabito Chapter

SUPPORTING THE NAVAJO DIVISION OF TRANSPORTATION SUBMISSION OF TIGER GRANT PROPOSAL FOR U.S. HIGHWAY 64 WEST OF SHIPROCK TO THE ARIZONA STATELINE ROAD RESURFACING, AND RECONSTRUCTION PROJECT; AND THAT, THE HIGHWAY SERVES AS MAIN ARTERIAL CONNECTIONS TO EMPLOYMENTS, EDUCATION, ECONOMIC DEVELOPMENTS, HOSPITALS, AND MANY GOVERNMENTAL SERVICES FOR THE PEOPLE OF THE NAVAJO NATION AND GENERAL PUBLIC

WHEREAS:

1. The Beclabito Chapter of the Navajo Nation acts on this resolution pursuant to the authority conferred on the chapter through Navajo Nation Code Title 26, Chapter 1, Section 1, B. Purpose which states "Through adoption of this Act, the Navajo Nation Council delegates to Chapter governmental authority with respect to local matters consistent with Navajo Law, including custom and tradition", and

2. Pursuant to 26 N.N.C., Section 3 (A) the Beclabito Chapter is a duly recognized certified chapter of the Navajo Nation Government, as listed 11N.N.C., part 1, Section 10, and

3. The Beclabito Chapter supports submission of the 2017discretionary TIGER Grant that the Navajo Division of Transportation and Highway Safety Department is submitting for Improvement of U.S. Highway 64 west of Shiprock, New Mexico to Arizona Stateline for approximately 23 miles; and

4. The Beclabito Chapter understands that U.S. Highway 64 is the main arterial route and connections to employment, education, hospitals, governmental services, and economic developments at regional city in Farmington, and Shiprock that serve as regional headquarter for tribal governmental series, both of two towns are located northwest corner of New Mexico or Four Corners Region; and

5. The Beclabito Chapter acknowledged that the U.S. Highway 64 serves many of disadvantage population of the rural community of New Mexico and Navajo Nation; and

6. The Beclabito Chapter is aware of that the U.S. Highway 64 is highly prioritized by the New Mexico Department of Transportation for road preservation and improvement plans, which includes widening of roadway shoulders, improving culvert and drainages, acceleration/deceleration lanes, installation of new guardrails, bus stop pullouts station, and other safety counter measures, signage and street lights.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Beclabito Chapter hereby approves and supports the Navajo Nation Division of Transportation and Department of Highway Safety in submitting the discretionary TIGER Grant application for the U.S. Highway 64 road resurfacing and reconstruction project.

CERTIFICATION

We hereby certify that the foregoing resolution was duly considered by the Beclabito Chapter at a duly called meeting in Beclabito, Navajo Nation, New Mexico at which a quorum of Chapter members were present and that the same was passed by a vote of 17 in favor, and 0 opposed and 1 abstained this 23rd day of May, 2017.

Raymond H. Charley., President

Hazel Sherman, Vice President

Larry L. Jack, Secretary/Treasurer

Amber K. Crotty, Council Delegate

Renita Anderson, Grazing Official

Motion by: Selina Weldon
Second by: Timothy Otis Scott Begay

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420-9702
Telephone: (928) 656-3265 Fax: (928) 656-3813

Resolution No: BECL-17-05-30

RESOLUTION OF BECLABITO CHAPTER

SUPPORTING AND RECOMMENDING THE STATE OF NEW MEXICO DEPARTMENT OF TRANSPORTATION'S TRAFFIC MANAGEMENT SECTION, TRANSPORTATION SAFETY DIVISION AND THE APPROPRIATE REGION TRAFFIC MAINTENANCE DISTRICT OFFICE TO INCREASE THE NECESSARY MAINTENANCE, MODIFICATIONS AND SAFETY NEEDS OF A STRETCH OF NM HIGHWAY 64 FROM MILE MARKER 0 TO MILE MARKER 14, BECLABITO COMMUNITY

WHEREAS:

1. Beclabito Chapter of the Navajo Nation acts on this resolution pursuant to the authority conferred on the chapter through Navajo Nation Code Title 26, Chapter 1, Section 1, B. purpose which states "Through adoption of this Act, the Navajo Nation Council delegates to Chapter governmental authority with respect to local matters consistent with Navajo law, including custom and tradition; and

2. Pursuant to Title 26, N.N.C., Section 1 (B) Beclabito Chapter vested the governmental authority to review all matters affecting the community and to make appropriate correction when necessary and make recommendations to the Navajo Nation and the local agencies for appropriate actions; and

3. Pursuant to Title 26, N.N.C., Section 3 (A) Beclabito Chapter is a duly certified Chapter of the Navajo Nation Government, as listed at N.N.C., part 1, section 10; and

4. Beclabito Chapter is requesting and is in dire need to increase New Mexico Highway 64 traffic enforcement through its community in reducing the existing speed limits to prevent the persistency of potential crashes including injuries and fatalities; and

5. To designate a safety corridor between NM State Highway 64, mile marker 0 (Stateline) to mile marker 14, with a coordination of plans for enforcement, education and engineering reviews; and including access and review of additional traffic control devices or modifications as needed; (i.e. signing, striping, pavement markings and delineation); and

6. The NM State Highway Department had recently completed construction of the Highway 64 safety project between mile marker 2.8 and 4.0, with safety signs and other traffic control measures, but drivers are parking on the safety turnouts and using it for passing at a high rate of speed creating safety hazards for the bus, students, pedestrians, and local traffic.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Beclabito Chapter, hereby, supports and recommends to the State of New Mexico and its affiliates to provide funds for this section of New Mexico Highway 64 to curtail the higher-than-expected crash rates and severity, including stricter enforcement; and

2. Beclabito Chapter has requested the Navajo Nation Law Enforcement Agency to address the persistent traffic issues and to provide a patrol emphasis within the community with no responses; and

3. Beclabito Chapter urgently request for an on-site assessment and feasibility to determine the most appropriate action in the prevention of any incidence of fatal or injury crashes.

CERTIFICATION

We, hereby, certify that the foregoing resolution was duly considered at a duly called meeting in Beclabito, Navajo Nation, New Mexico at which a quorum of Chapter members was present and that the same was passed by a vote of 17 in favor, 0 opposed and 1 abstained this 23rd day of May 2017.

Raymond H. Charley, Chapter President

Hazel Sherman, Chapter Vice-President

Larry L. Jack, Secretary/Treasurer

Amber K. Crotty, Council Delegate

Frank John Jr., Grazing Official

Motioned by: Melvin Lee
Seconded by: Jimmy Kelly

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420-9702
Telephone: (928) 656-3265 Fax: (928) 656-3813
beclabito@navajochapters.org

Resolution No: BECL-15-12-07

RESOLUTION OF BECLABITO CHAPTER

APPROVING AND SUPPORTING THE CATTLE GUARD INSTALLATION AT MILE POST 4.3 (Nancy Evans), MILE POST 6.4 (RD 9072, Felipita Charles) AND MILE POST 6.7 (RD 9074, Timothy Begay) TO THE New Mexico STATE DEPARTMENT OF TRANSPORTATION OFF HIGHWAY 64.

WHEREAS

1. The Beclabito Chapter of the Navajo Nation acts on this resolution pursuant to the authority conferred on the chapter through Navajo Nation Code Title 26, Chapter 1, Section 1, B. Purpose which states "Through adoption of this Act, the Navajo Nation Council delegates to Chapter governmental authority with respect to local matters consistent with Navajo law, including custom and tradition", and

2. Pursuant to 26 N.N.C., Section 3 (A) the Beclabito Chapter is a duly recognized certified chapter of the Navajo Nation Government, as listed 11 N.N.C., part 1, section 10; and

3. The Beclabito Chapter supports the efforts of the New Mexico Department of Transportation for the safety projects on Highway 64 in the Beclabito area; and

4. The Beclabito Chapter is impacted and concern for livestock trespassing onto the roadways creating numerous traffic accidents; and

5. The Beclabito Chapter has continuously supported curtailing related roadway hazards and incidents for travelers on this roadway.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Beclabito Chapter, hereby approves the cattle guard installation by the New Mexico Department of Transportation at mile post 4.3 mile post 6.4 (Rd 9072), and mile post 6.7 (Rd 9074); and

2. The Beclabito Chapter encourages the NMDOT to construct and maintain these cattle guards periodically.

CERTIFICATION

We, hereby, certify that the foregoing resolution was duly considered at a duly called meeting in Beclabito, Navajo Nation, New Mexico at which a quorum of Chapter members was present and that the same was passed by a vote of **22** in favor, **0** opposed and **02** abstained this **16th** day of **December, 2014**.

Raymond H .Charley, Chapter President

Jerry Benally, Chapter Vice President

Albert J. Paul, Chapter Secretary/Treasurer

Appointee, Council Delegate

Vincent Bekis, Grazing Official

Motioned by: Lela Lee
Seconded by: George Kelly Jr.

BECLABITO CHAPTER

HC 61 Box 20
Shiprock, New Mexico 87420
Telephone: (928) 656-3265 Fax: (928) 656-3813
beclabito@navajochapters.org

To: NMDOT and NDOT

From: Lenora Robinson, Chapter Manager

Re: Concerns for the US Highway 64, milepost 0 to 20.5

Date: May 4, 2018

We put together a list of concerns to consider:

1. Milepost 2 to Milepost 3.8 – Speeding and not obeying the posted signs; Reduce to a safety corridor from MP 2 to MP 14.
2. Turn Off Lane – There is a need for the west bound lane from Sinclair Convenience Store to NHA Housing.
3. Turn Off Lane – On the westbound lane, we need a turnoff before cemetery turnoff for cemetery access to Sinclair Convenience Store.
4. Turn Off Lanes – (bus) westbound uphill before N5113/Road 9040 on north and south side of Hwy 64.
5. Residential entry off Hwy 64 to north between cemetery turnoff and store.
6. Bridges – widen and/or repair gaps.
7. Bus turnoff lanes for Milepost 0 at the Stateline NM side.

Thank you and any questions email is beclabito@navajochapters.org and phone number is (928) 656-3265.

EXHIBIT
tabbies
F

NNDFW Review No. 19wsp101

BIOLOGICAL RESOURCES COMPLIANCE FORM
NAVAJO NATION DEPARTMENT OF FISH AND WILDLIFE
P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal and Federal laws protecting biological resources including the Navajo Endangered Species and Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection and National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish and Wildlife Service if a Federally-listed species is affected.

PROJECT NAME & NO.: US Highway 64 Alignment Study and Preliminary Engineering Project

DESCRIPTION: US Highway 64 improvement project between Milepost 0.0 and Milepost 20.8 in San Juan County, New Mexico. The New Mexico Department of Transportation has identified the need for major pavement improvement, addition of shoulders, sight distance/vertical alignment improvements, drainage improvements, and up to four bridge replacements. The scope of work for this project includes rehabilitation the existing roadway, improving drainage, preliminary engineering design, evaluation of traffic and environmental conditions, and cultural and biological resource investigations. Construction will be phased with $7M programmed in FY 2022 and $6M in FY 2023.

LOCATION: BETWEEN MP 0.00 AND MP 20.8 ON US HWY 64, SAN JUAN COUNTY, NEW MEXICO. 12S 674235, 4082467 TO 12S 703660, 4072295 (NAD 83)

REPRESENTATIVE: Arno Cheng, WSP USA, Inc.

ACTION AGENCY: NM Department of Transportation

B.R. REPORT TITLE / DATE / PREPARER: Biological Evaluation, US Highway 64 Alignment Study and Preliminary Engineering/May, 2021/WSP USA, Inc.

SIGNIFICANT BIOLOGICAL RESOURCES FOUND: RCP areas 1,2, and 3. Mesa Verde cactus found within project area. Potential migratory bird habitat also present.

POTENTIAL IMPACTS

NESL SPECIES POTENTIALLY IMPACTED: [1] Mesa Verde cactus (Sclerocactus mesae-verdae), G2

FEDERALLY-LISTED SPECIES AFFECTED: [1] Mesa Verde cactus (Sclerocactus mesae-verdae), Federally Threatened

OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES: NA

AVOIDANCE / MITIGATION MEASURES: I. Biological monitors will be present during construction activities in occupied Mesa Verde cactus habitat. 2. II. Work will occur outside of the reproductive season of late April to mid-June in areas where Mesa Verde cactus occurs to avoid pollination disruption. III. All equipment used shall be cleaned prior to use in order to minimize the transport of invasive plant seeds and parts. IV. Preconstruction surveys by a qualified and permitted botanist would be required if two or more years has passed since the most

recent survey within potential and occupied habitat in the Action Area. VI. At mile post 8.5, build a retaining wall to protect nearby Mesa Verde individuals from mortality versus sloping back the area to prevent erosion. VII. When individual plants cannot be avoided from destruction, cacti will be removed and transplanted prior to ground disturbing activities following NNHP transplant protocols.

CONDITIONS OF COMPLIANCE*: The undertaking shall avoid the Migratory Bird breeding season of 01 MAR - 15 AUG or surveys will be required. The survey shall include a 50 m (165 ft.) buffer outside the edge of disturbance. Removal or disturbance of nesting habitat (i.e. trees & shrubs) shall not be allowed within 50 meters of an active nest during incubation to fledging. Fencing of highway should allow for passage of wildlife by having a top and bottom wire that is smooth (i.e., without barbs). Fox burrows between mile posts 8 and 9 (page 73 of 217 in BE) should be preserved to the maximum extent possible through the use of a retaining wall.

FORM PREPARED BY / DATE: Brent Powers/21 Dec 2021

COPIES TO: (add categories as necessary)

☒ _____ ☐ _____

2 NTC § 164 Recommendation:	Signature	Date
☐Approval ☒Conditional Approval (with memo) ☐Disapproval (with memo) ☐Categorical Exclusion (with request letter)	 Gloria M. Tom, Director, Navajo Nation Department of Fish and Wildlife	12/21/2021
☐None (with memo)		

*I understand and accept the conditions of compliance, and acknowledge that lack of signature may be grounds for the Department not recommending the above described project for approval to the Tribal Decision-maker.

Representative's signature Date

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

MEMORANDUM

TO : David Mikesic, Zoologist
Department of Fish and Wildlife

FROM : _____

Gloria M. Tom, Director
Department of Fish and Wildlife

DATE : December 03, 2021

SUBJECT : **DELEGATION OF AUTHORITY**

I will be teleworking from California beginning Monday, December 06, 2021 through Friday, December 17, 2021; and on annual leave beginning Monday, December 20, 2021 through Thursday, December 30, 2021. I am hereby delegating you to act in the capacity of the Director, Department of Fish and Wildlife, effective 8:00 a.m. on Monday, December 06, 2021. This delegation shall end at 5:00 p.m. on Thursday, December 30, 2021.

Your authority will cover the review and signing off of all routine documents pertaining to the Department of Fish and Wildlife, except for issues that you feel should have the attention of the Director.

ACKNOWLEDGEMENT

David Mikesic 12/7/21

David Mikesic, Zoologist
Department of Fish and Wildlife

21 December, 2021

19wsp101
WSP USA
Arno Cheng
6100 Uptown Blvd. NE #700
Albuquerque, NM 87110

Dear Arno,

The Navajo Nation Department of Fish and Wildlife (NNDFW) reviewed WSP's Biological Evaluation for US Highway 64 Alignment Study and Preliminary Engineering. NMDOT District 5 proposes to improve US 64 in San Juan County between Milepost 0.0 and Milepost 20.8 from Shiprock, NM through Beclabito, NM. Work will include major pavement improvements, addition of shoulders, sight distance/vertical alignment improvements, drainage improvements, and up to four bridge replacements. The total duration of construction activities is anticipated to take place in five phases between 2022 and 2027, tentatively. The first two phases of construction start at the western portion of the project area. Work will occur in the Beclabito, Rattlesnake, Rocky Point, Shiprock, and Teec Nos Pas quadrangles. The purpose of this letter is to inform you that we are granting the proposed project ***Conditional Approval***.

The project area proposed intersects with ***known habitat*** for the following species on the Navajo Endangered Species List:

[1] *Sclerocactus mesae-verdae* (Mesa Verde cactus), G2, Federally Threatened

Mesa Verde cactus *(Sclerocactus mesae-verdae)* were observed in four separate locations within the project area in field surveys completed between August 13 and 20, 2019 and March 29 and April 1, 2021. A total of 57 Mesa Verde cactus were observed in four separate locations between mile post 8.5 and mile post 19.9. Some individual cacti were in early stages of bloom with flower buds formed but not yet open. Twelve Mesa Verde cacti were observed within the ROW, 45 detections were located immediately outside the project area at a distance between 3 and 150 feet beyond the proposed project limits. Mesa Verde cactus detections were associated with shale soils with cobble cover on high points in the landscape. Details of the detections are as follows:

- **Mile post 8.5:** Seven Mesa Verde cactus were observed just outside the project area along the top bank south of the ROW. The cacti observations were outside of the SSA and south of the ROW. One individual is extremely close to the extended ROW where the footprint would extend to slope back the area to reduce erosion. This extension would cause the mortality of at least one individual. NMDOT also proposes an option of building a retaining wall.

- **Mile post 14.1:** Four Mesa Verde cactus were observed inside the project area approximately north of the ROW. One individual is within the right of way and cannot be avoided.

- **Mile post 19.3:** Thirty-six Mesa Verde cactus were observed on both sides of the highway, within and immediately adjacent to the ROW. Seven of these observations occurred within the project area and the remaining 29 were located less than 100 feet outside the ROW. One individual will not be able to be avoided during construction.

- **Mile post 19.9:** Ten Mesa Verde cactus were observed within and immediately adjacent to the ROW. At least one individual will be in the footprint of the ROW fence.

Conservation Measures

For Mesa Verde cactus locations identified in the project area, the following conservation measures should be included in the proposed actions:

I. Biological monitors will be present during construction activities in occupied Mesa Verde cactus habitat and will mark individual plants for avoidance using pin flags and/or temporary fencing. Monitors will also prevent machinery from moving into flagged/fenced areas. Where Mesa Verde cactus individuals are located at or near the ROM fenceline, biological monitors will ensure that fence construction avoids impacts to a 1ft radius around individuals to the greatest extent possible.

II. Work will occur outside of the reproductive season of late April to mid-June in areas where Mesa Verde cactus occurs to avoid pollination disruption.

III. All equipment used shall be cleaned prior to use in order to minimize the transport of invasive plant seeds and parts.

IV. Preconstruction surveys by a qualified and permitted botanist would be required if two or more years has passed since the most recent survey within potential and occupied habitat in the Action Area. Survey reports shall be submitted to NNHP for review and approval prior to construction activities taking place in occupied and potential habitat if two years have elapsed since initial surveys.

V. Plants will be marked via Global Positioning System (GPS) to illustrate avoidance areas.

VI. At mile post 8.5, build a retaining wall to protect nearby Mesa Verde individuals from mortality versus sloping back the area to prevent erosion. Build a temporary fence and/or flag the individuals at this site to minimize impacts from wall construction.

VII. When, for safety reasons, individual plants cannot be avoided from destruction, cacti will be removed and transplanted prior to ground disturbing activities following NNHP transplant protocols. The transplant location shall be to the nearest occupied habitat that is far enough removed from project impacts or additional threats (such as existing development, ect).

Note* Relocation of individual plants is not a mitigation measure as survival rates are very low. Transplanting is a salvage opportunity when disturbance/destruction of individuals cannot be avoided due to safety measures.

Monitoring Guidelines:

At the time of this consultation, it appears that only two individuals of Mesa Verde cactus will be impacted to the point of needing to be transplanted. However as additional pre-construction surveys are repeated additional individuals may be found. Some or all of those individuals may need to be transplanted if the conservation measures above do not protect them. In the case that **10 or more individuals** need to be transplanted, the following monitoring and reporting would be required:

- Yearly monitoring of transplanted individuals for survival, reproductive ability, and impacts (herbivory, trampling, etc) for five years following transplant.
- Yearly monitoring reporting to the Navajo Nation heritage biologist and USFWS (report can be part of the species report that the Navajo Nation biologist shares with the service).

Transplant procedures should follow NNHP guidelines for the species (attached).

Additional Conservation Measures:

The following additional wildlife conservation guidelines shall also be applied to all phases of project activites (where applicable):

I. NNHP has determined that there is potential habitat for migratory birds within the project areas. The undertaking shall avoid the Migratory Bird breeding season of 01 MAR - 15 AUG or nest surveys will be required. The nest survey shall include a 50 m (165 ft.) buffer outside the edge of disturbance. Removal or disturbance of nesting habitat (i.e. trees & shrubs) shall not be allowed within 50 meters of an active nest during incubation to fledging.

II. Fencing of highway should allow for passage of wildlife by having a top and bottom wire that is smooth (i.e., without barbs). Ideally, the bottom wire should be raised above the ground to allow passage of deer fawns.

III. Fox burrows between mile posts 8 and 9 (page 73 of 217 in BE) should be preserved to the maximum extent possible through the use of a retaining wall. Other burrows should be visually checked prior to the start of work to ensure they are not active before they are filled in/destroyed.

Mesa Verde cactus survey reports for subsequent phases of this project need to be sent to NNHP prior to construction activities taking place. The survey contractor shall consult with the NNHP botanist and zoologist for positive identification and development of mitigation strategies if additional NESL plants and or wildlife species are found during surveys.

Please contact me via email at ntalkington@nndfw.org with any questions that you have concerning the review of this project.

Sincerely,

Nora E. Talkington, Botanist
Navajo Natural Heritage Program
Department of Fish and Wildlife

CONCURRENCE

12/21/2021

Gloria Tom, Director
Department of Fish and Wildlife

Date

xc: CONS-100-19
BIA

Mesa Verde Cactus (*Sclerocactus mesae-verdae*) Transplanting Guidelines

November 18th, 2021
Nora Talkington, Botanist
Navajo Natural Heritage Program
Adapted from BLM SCCL transplant protocol, 2012

Timing of Transplanting

- Transplanting should take place in the spring from March 1st–April 15th (Roth 1997).

Phase I – Digging up the cacti

- Mark one side of the plant to orient the plant in the direction as it was in its original location (to minimize sunburn damage to plant).
- Carefully dig out the surrounding area of the plant (~ 6-12 inches). Try to get as many roots as possible. The roots are fragile and some may be close to soil surface. Try to minimize as much disturbance to roots as possible by excavating as large of a hole as reasonable (depending on how cactus are distributed at the site) and keeping soil and roots intact to the greatest extent possible.
- Once excavated, trim off any damaged roots and place plant on its side in bucket or whatever is being used to transport cacti. Try to keep plants separated to prevent damage to roots during transport.
- Save enough soil from excavated plants to blend with soil at transplant site.

Phase II – Storage/Transporting: Previous Mesa Verde cactus transplant projects monitored by NNHP have first dipped roots in a diluted Clorox solution to kill pathogens before hardening off the roots for two weeks after digging up plants (Hazelton 2011). However, there is little evidence that root treatments and hardening-off techniques actually increase plant survival (Ballard et al. 2015). In a study comparing different transplant techniques and timing on survival of *Sclerocactus parviflorus*, Ballard et al. (2015) found no difference in survival between three different transplanting techniques (one which included hardening-off roots for 2 days), timing of transplant, or association with nurse plant. Data from a five-year monitoring report that compared various methods for transplanting *Sclerocactus cloveriae* (Clover's cactus) along a pipeline right-of-way found that directly transplanted cactus had higher survival rates than cactus whose roots were hardened off for several weeks prior to transplant (Ecosphere 2018). Therefore, NNHP recommends directly transplanting Mesa Verde cactus and soil (with root ball intact) to the transplant site, without additional root bleach treatments or hardening-off.

- Transport cactus and surrounding soil directly to the transplant site after removal, keeping excavated soil and roots intact.
- When transporting to transplant site, separate plants as much as possible to prevent root damage as the plants shift around in vehicle.

Phase III – Transplant location

- Before transplanting, choose a transplanting site that best represents the natural site where the cacti were excavated (as close as possible). This includes similar slope, aspect, habitat quality, and associated vegetation.
- The transplant site should be free from human activity (not in close proximity of O&G activity, ATV activity, roads, and other ROWs). Also keep out of areas where cattle may pose a risk, such as cattle trails, water sources, salt licks, etc.
- If possible, try to determine if transplant site is susceptible to future ground disturbing activity such as future O&G wells, pipelines, power lines, etc.
- Find a location that has an existing natural Mesa Verde cactus population. This will allow for comparing the natural cacti with the transplanted cacti during monitoring.

Phase IV – Transplanting

- Dig a hole deep and wide enough to accommodate the cactus roots and excavated soil surrounding roots from the original site.
- Place the cactus in the planting hole, aligning the plant to the direction that it was originally. Backfill the hole with the mixed soil and tamp the soil around the cactus enough to eliminate air pockets and uneven setting.
- Water judiciously to settle the soil.
- Temporally mark newly transplanted cactus with a pin flag for photo purposes (see below). Using pin flags are also important when transplanting multiple cacti so that person(s) transplanting are aware of where these cacti are (to prevent trampling).
- If monitoring will occur after transplant, mark the newly transplanted cactus with identifying tag (preferably metal). Tags should be uniformly placed such as subsequent monitoring personnel will be able to find cacti. For example, tag placed *3* inches north of all cacti.
- Also tag any natural Brack's cactus in or near transplant site. How many natural cacti are tagged will depend on how many are transplanted. We can determine this on a case by case basis.
- GPS each cactus using UTM coordinates (preferable) in NAD 27. Lat/Long is also acceptable.
- Take detailed notes during this process for your report.
- Take photos. If transplanting several cacti, photos of each cactus is not necessary. However, take photos that would best aide future monitoring. Photos of the transplant area with some type of unique landmark (trees, mountain in background, power line, etc.) are helpful.
- REMOVE PIN FLAGS WHEN DONE – Cattle (and other animals) may be attracted to colored pin flags.

Phase V - Reporting

- A Transplant Report will be required and submitted to the NNHP Botanist within 30 days of transplanting.
- The report should include an introduction to the proposed project, methodology, results, GPS info, maps, photos, and any discussion that is noteworthy.
- Please keep the report simple but thorough (no fluff). Please keep project specific.
- The most important features in the report will be the photos, GPS information, tag assignments, maps, and any other information that would aid the monitoring process.

- Monitoring of the site should occur between late April and mid-May on a yearly basis and should assess survivorship of transplanted cactus as compared to controls. Monitoring should also assess cactus growth, reproductive potential, and vigor. An annual report should be submitted to NNHP for at least five (5) years following transplant.

LITERATURE CITED:

Ballard, R., Ott, R., Novotny, T., Lincoln, A. and Rechel, E. 2015. Survival and plant vigor of *Sclerocactus parviflorus* (Clover and Jotter) following different transplanting techniques. *Western North American Naturalist*, *75*(3), pp.332-338.

Ecosphere Environmental Services. 2018. Brack's hardwall cactus 2018 monitoring report. Enterprise Products Western Expansion Project III. Prepared for Navajo Natural Heritage Program, Window Rock, AZ.

Hazelton, A.F. 2011. Mesa Verde cactus (*Sclerocactus mesae-verdae*) 10 year transplant monitoring report. Shiprock Fairgrounds 2001–2011. Navajo Natural Heritage Program, Arizona Department of Fish and Wildlife, Window Rock, AZ.

Roth, D. 1997. Mesa Verde cacti transplantation for BIA Route N57-Cudei Road monitoring report, 1997. Navajo Natural Heritage Program, Window Rock, Arizona.

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

MEMORANDUM

TO : David Mikesic, Zoologist
Department of Fish and Wildlife

FROM : _____
Gloria M. Tom, Director
Department of Fish and Wildlife

DATE : December 03, 2021

SUBJECT : **DELEGATION OF AUTHORITY**

I will be teleworking from California beginning Monday, December 06, 2021 through Friday, December 17, 2021; and on annual leave beginning Monday, December 20, 2021 through Thursday, December 30, 2021. I am hereby delegating you to act in the capacity of the Director, Department of Fish and Wildlife, effective 8:00 a.m. on Monday, December 06, 2021. This delegation shall end at 5:00 p.m. on Thursday, December 30, 2021.

Your authority will cover the review and signing off of all routine documents pertaining to the Department of Fish and Wildlife, except for issues that you feel should have the attention of the Director.

ACKNOWLEDGEMENT

David Mikesic 12/7/21

David Mikesic, Zoologist
Department of Fish and Wildlife

U.S. Department of Transportation
Federal Highway Administration

New Mexico Division

4001 Office Court Drive
Suite 801
Santa Fe, NM 87507
505-820-2021

November 3, 2020

In Reply Refer To:
ENVI 2
CN 5101170

Mr. Richard Begay
Tribal Historic Preservation Office
Navajo Nation Heritage & Historic Preservation Department
P.O. Box 4950
Window Rock, Arizona 86515

Dear Mr. Begay:

The New Mexico Department of Transportation (NMDOT in cooperation with the U.S. Department of Transportation, Federal Highway Administration (USDOT FHWA) is proposing to reconstruct US 64 from Milepost (MP) 0.0 to MP 20.8, in San Juan County, New Mexico (CN 5101170). FHWA is the lead federal agency for meeting all requirements of the National Environmental Protection Act (NEPA) and the National Historic Preservation Act (NPHA). As such, this proposed federal undertaking is subject to consideration under Section 106 (54 U.S.C. 306108) of the NHPA (54 U.S.C. 300101 et seq.), as amended through 1992 and implementing regulations (36 CFR Part 800: *Protection of Historic Properties*, as revised August 2004). FHWA (the lead federal agency), is consulting with your office on eligibility and effect as part of the regulations stated above.

The proposed road-improvement/-construction projects include pavement improvements, additions of shoulders, sight-distance/vertical-alignment improvements, drainage improvements, and up to four bridge replacements. The reasons for these improvements are many. The existing pavement condition is poor, with map cracking, raveling, rutting, and localized subgrade failures. Existing bridges are suspected to have reached their service lives (Bridge Nos. 5865, 5864, 5863, and 5862). Some existing drainage structures are experiencing negative effects from scour and corrosive soils. The existing and proposed roadside and bridge barriers need to be compliant with the *Manual for Assessing Safety Hardware* (American Association of State Highway and Transportation Officials 2016) requirements. The lack of existing shoulders creates a hazard for the traveling public whenever a vehicle makes an emergency stop.

In support of meeting the requirements stated above, please find enclosed for your review a report titled *A Cultural Resource Inventory of U.S. 64, from Milepost 0.0 at the Arizona State Line to West of Shiprock at Milepost 20.8, Navajo Nation, San Juan County, New Mexico* by Monica L. Murrell, Jennie R. Lee, Klara Kelley, Carrie J. Gregory, and Karen K. Swope. Brief descriptions of the proposed undertaking, inventory results, project administration, and recommendations are presented below for your consideration.

Eight sites, 299 isolated occurrences, 6 in-use sites/areas, four Traditional Cultural Properties (TCP), a historic roadside marker, and 4 descansos were documented during the course of the survey. Two of the sites (NM-I-9-28 and NM-I-9-29) and one TCP (TCP 3) are located within the area of Direct Effect of the proposed undertaking. FHWA finds both NM-I-28 and NM-I-29 eligible for listing in the National Register of Historic Places (NRHP) under Criterion d.

Site NM-I-9-28 is a newly recorded moderate-density lithic scatter with no discernable artifact concentrations, diagnostic artifacts, or cultural features within the U.S. 64 inventory project area at the site. Naturally occurring silicified-wood and smaller quantities of chert and quartzite gravels and cobbles are intermixed with the surface sediments. Based on the artifact assemblage and the presence of naturally outcropping lithic materials, the site likely represents a lithic-procurement locale. The proposed project

will involve introduction of fill along this portion of the existing alignment in order to improve the vertical curve of the roadway. This fill will be placed up to, but not within, the site boundary of NM-I-9-28. In order to avoid an adverse effect to this site, temporary exclusionary fencing will be placed to prevent equipment traversing or parking on the site. Thus, the proposed undertaking will have *No Adverse Effect* to NM-I-9-28.

NM-I-9-29 is a newly recorded multicomponent (Late Archaic/Basketmaker II and early to mid-twentieth century Navajo) campsite which is recommended eligible for listing in the NRHP under Criterion D. The investigators have recommended that only the earlier component retains sufficient information potential to support its significance while the historic component is ephemeral and does not retain important information that contributes to our understanding of history. FHWA/NMDOT concur with these eligibility recommendations.

The prehistoric component is on both sides of the roadway, within and outside of the ROW. The areas immediately adjacent to the current pavement are known to be disturbed, and do not retain sufficient integrity to convey the site's important information which contributes to our understanding of prehistory. On the east side of the roadway, the proposed cut slope (approximately 13 feet wide) will be confined to the disturbed area. In order to avoid an adverse effect to this portion of the site, temporary exclusionary fencing will be placed to prevent equipment traversing or parking on site.

On the west side of the roadway, the necessary cut slope (up to 30 feet wide) would extend beyond the previously disturbed areas. In order to avoid an adverse effect to this portion of the site, a low retaining wall will be constructed at the edge of the previously disturbed area and the uphill side of this wall will be backfilled with sterile sediment. This will prevent impacts to the portions of the site which have the ability to convey important information. By this effort and the exclusionary fencing on the eastern side of the roadway, the current undertaking will have *No Adverse Effect* to NM-I-9-29.

The current study documented three new TCPs (TCPs 1-3) as well as a previously documented TCP (TCP 4). The project will have no direct effect to TCPs 1, 2, and 4, but adding shoulders does have potential to affect access to these areas. NMDOT/FHWA will add an environmental commitment to the project plans that all existing fence openings and in-use parking areas will be maintained through the new design and will be kept open during construction.

TCP 3 is a juniper tree located in the Beclabito Chapter, on Tribal Trust land. This TCP is on the northwest side of the Red Wash Bridge immediately adjacent to the guardrail. The juniper tree is approximately 15 feet tall and is trimmed seasonally with decorations, gifts of hats and gloves for those who need them, and other presents Visitation to TCP 3 is obvious from foot trails, and parking is available on both sides of U.S. 64. The investigators found that TCP 3 is eligible for listing on the National Register, and NMDOT/FHWA agrees with that recommendation.

Current proposed project design (see attached page from Phase A/B study) is to build the replacement bridge to the north of the existing bridge, with about 5 feet of space between them. The existing bridge will then be demolished. NMDOT/FHWA and their contractors will attempt to protect the tree in its original location. If that is not feasible then this design will have an adverse effect to TCP 3. As a result, NMDOT/FHWA will make a good-faith effort to move the tree out of the construction area and keep it as close to its original location as possible, so it will be in the same relation to the new bridge (on the NW side of the bridge adjacent to pavement) as it has now to the existing.

The NMDOT, on behalf of the FHWA, has determined that with the avoidance, minimization, or mitigation measures stated above, finds that the proposed undertaking, CN 5101170, Reconstruction

of US 64between Shiprock, NM and the Arizona border (MP 0 to 20), will have no adverse effect to historic properties. Your concurrence with our findings of eligibility, effect and resolution of adverse effect is respectfully requested.

Sincerely,

GREGORY L HEITMANN
Digitally signed by GREGORY L HEITMANN
Date: 2020.11.04 11:21:54 -07'00'

Gregory L. Heitmann
FHWA Environmental Specialist
For: J. Don Martinez
FHWA Division Administrator

Steven Lakatos
Digitally signed by Steven Lakatos
Date: 2020.11.04 08:15:13 -07'00'

Steven A. Lakatos
NMDOT Supervisor, Cultural Resources Section
For: Michael Sandoval
NMDOT Cabinet Secretary

/sal/gnh
Enclosures
cc: Tamara Billie, Navajo Nation Heritage and Historic Preservation Department
Timothy Begay, Navajo Nation Heritage and Historic Preservation Department

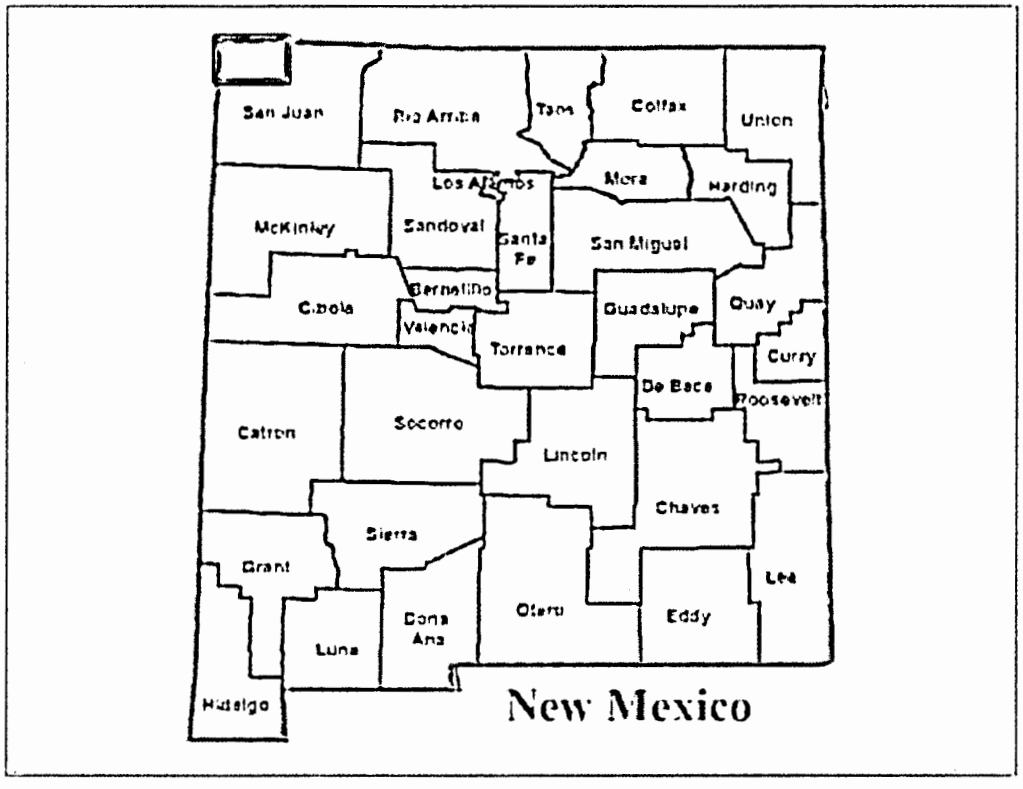
Concurrence: Tamara Billie Date 11/16/20
Mr. Richard Begay, Navajo Nation Tribal Historic Preservation Officer

NEW MEXICO DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL ASSESSMENT FOR THE US 64 ALIGNMENT STUDY:

ARIZONA BORDER TO SHIPROCK, NEW MEXICO

CN 5101170
JANUARY 27, 2022



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ENVIRONMENTAL ASSESSMENT FOR THE US 64 ALIGNMENT STUDY:

ARIZONA BORDER TO SHIPROCK, NEW MEXICO

NEW MEXICO DEPARTMENT OF TRANSPORTATION

CN 5101170

DATE: JANUARY 27, 2021

WSP USA INC.
2440 LOUISIANA BOULEVARD NE, SUITE 400
ALBUQUERQUE, NM 87110
T: +1 505-881-5357

WSP.COM

Environmental Assessment for The US 64 Alignment Study: Arizona Border to Shiprock, New Mexico

NMDOT CN:5101170
San Juan County, New Mexico

This environmental assessment has been developed under the direction of Greg Heitman, FHWA Environmental Specialist. The environmental assessment has been prepared by WSP, INC.

Submitted pursuant to 42 USC 4332(2)(c)

US Department of Transportation
Federal Highway Administration
New Mexico Division
and
New Mexico Department of Transportation

Feb 3, 2022
Date of Approval

Trent Botkin
NMDOT- Environmental Bureau Manager

Feb 3, 2022
Date of Approval

Gregory L. Heitmann
Gregory L. Heitmann (Feb 3, 2022 14:30 MST)
FHWA- New Mexico Division Administrator

The following persons may be contacted for additional information concerning this Project:

Steven Gisler, P.E.
Project Engineer
NMDOT Environmental Bureau
1120 Cerillos Rd
Santa Fe, NM 87504
(505) 792-2661

Jennifer Hyre,
Project Manager, NEPA Lead
WSP USA Inc.
2440 Louisiana Blvd NE
Albuquerque, New Mexico 87110
(505) 881-5357

Comments regarding this environmental assessment should be sent to: Jennifer Hyre, WSP, 2400 Louisiana Blvd NE, Albuquerque, NM 87110, or email: jennifer.hyre@wsp.com.

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1 PROPOSAL AND NEED FOR THE PROPOSAL

1.1 PROJECT BACKGROUND AND LOCATION

The New Mexico Department of Transportation (NMDOT), in cooperation with the Federal Highway Administration (FHWA), has conducted a study to identify corridor deficiencies, prioritize smaller construction projects within the study limits, and identify any right-of-way (ROW) easement needs from the Navajo Nation for the US Highway 64 (US 64) Alignment Study Project from US Highway 160 at Teec Nos Pos, Arizona, to US 491 in Shiprock, New Mexico. The primary focus of the study is the portion of US 64 from the Arizona state line to milepost (MP) 20.8 west of Shiprock (CN 5101170, **Exhibit 1**). This stretch of highway crosses Navajo Nation land. The majority of proposed highway improvements would be confined to the existing highway ROW easements maintained by NMDOT. However, portions of the project would extend beyond the current ROW and require approval from the Navajo Nation and the Bureau of Indian Affairs (BIA). The project is being funded using federal aid from FHWA.

US 64 begins in northeast Arizona just southwest of the Four Corners in Teec Nos Pos and continues east across northern New Mexico, Oklahoma, Arkansas, Tennessee, and terminating in Nags Head, North Carolina. Within New Mexico, US 64 begins at the Arizona border near Beclabito and passes through the communities of Shiprock, Farmington, Chama, Taos, Raton, and Clayton before exiting the state. East of Shiprock, US 64 is on the National Highway System while west of Shiprock it is classified as a rural minor arterial.

Proposed improvements for this project involve the rural, two-lane highway segment of US 64 from MP 0.0 (Beginning of Project [BOP]) at the Arizona border to the west side of Shiprock at MP 20.8 (End of Project [EOP]) totaling 20.8 miles. The highway passes through the community of Beclabito, and crosses four major bridge structures at Shoe Game Wash (Bridge #5865), Red Wash (Bridge #5864), Shiprock Wash (Bridge #5863), and Rattlesnake Wash (Bridge #5862).

The existing highway consists of two 12-foot travel lanes with shoulders of varying width. The posted speed limit is 55 miles per hour (mph) with a reduced posted speed of 45 mph from MP 3.0 to MP 3.7 in Beclabito and starting at MP 20.6 at the easterly limits of the project entering Shiprock. No climbing lanes or passing lanes exist within the project limits. No state highways or county roads intersect with US 64 within the project area but there are several local BIA road intersections. These roads provide access to Navajo Nation lands in proximity of the project.

1.2 PURPOSE AND NEED FOR ACTION

US 64 is a vital link in the region connecting Shiprock and US 491 to Arizona, the rest of the Navajo Nation, and the Four Corners region. NMDOT was approached by Navajo Nation with identified improvement needs and concerns along the corridor. The purpose of the proposed improvements to US 64 from the Arizona border to Shiprock is to rehabilitate and improve the highway to current design standards and to enhance the safety of the highway. The need for improving this highway is to address physical deficiencies and to improve access. Roadway conditions that require improvement include:

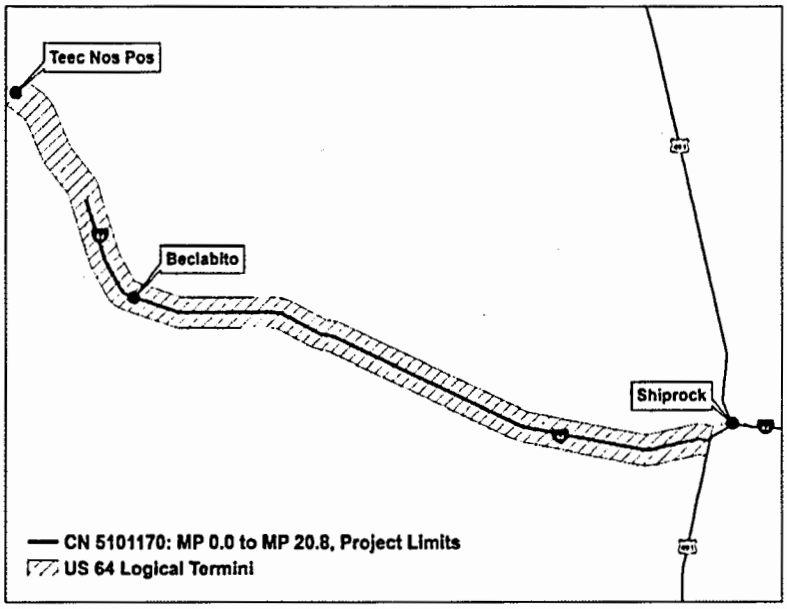
- Physical Deficiencies
  - Shoulder Width: While meeting the minimum standard of 2 feet, the existing shoulder width is inconsistent varying between two and four feet. Shoulder widths across bridges are minimal with substandard clearance to bridge railings.
  - Pavement Structure: In addition to pavement surface deterioration, segments of the highway exhibit undulations and other potential issues with the pavement subgrade.
  - Vertical Curves: There are a total of ninety-one (91) vertical curves (crest and sag) along the project corridor. Seven (7) crest vertical curves do not provide adequate stopping sight distance for the project design speed (60 MPH) and do not meet current design standards.

- Passing Sight Distance: There are six (6) crest vertical curves that do not provide adequate passing sight distance to accommodate passing zones per the AASHTO Green Book.
- Superelevation: There are several horizontal curves where the superelevation rate does not meet current design standards.
- Drainage: There are over 100 culvert crossings within the project limits. Common issues include corrosion of the culvert pipes due to age and corrosive soils, lack of erosion protection, lack of outlet protection for scour, and lack of culvert end treatments.
- Roadside Treatments: The roadside barriers (guardrails) along US 64 are not compliant with the American Association of State Highway and Transportation Officials' (AASHTO's) Manual for Assessing Safety Hardware (MASH). In addition, rumble strips are currently not provided.
- Bridge Reconstruction: There are currently four major structures designated within the project limits. Per bridge inspection reports and field observations, all four are structurally deficient. Other issues to address include scour at piers, along abutments and on the downstream side, and bridge railings that are not MASH-compliant.

- Access Improvements
  - Intersection Turn Lanes: Left-turn and right-turn speed change lanes are not provided at key intersections along the project corridor.
  - Bus Stops: Bus stops along the roadside are unimproved and/or are not properly designated.
  - Pull-outs: Several pull-out areas along the highway have open frontage and/or unmanaged access.
  - Beclabito Speed Management: Travel speeds through the community are higher than desired based on stakeholder input. Travel speeds near MP 1.5 west of Beclabito, where the posted speed limit is 55 mph, were observed to exceed the posted speed with an 85th percentile speed of 75 mph eastbound and 69 mph westbound.
  - Pedestrian Crosswalk: The pedestrian crosswalk in Beclabito is not illuminated.

A context-sensitive design approach is being implemented for flexibility in meeting current highway design guidelines. That is, improvements are proposed to be designed within current standards and guidelines but balanced to avoid and/or minimize impacts to adjacent cultural and natural resources on Navajo Nation lands. The intent is to preserve the rural setting in its natural environment to the extent practical with the concurrence of the Navajo Nation.

Exhibit 1: Project Vicinity



1.3 STATUTORY AND REGULATORY AUTHORITY

This Environmental Assessment (EA) has been prepared in cooperation with FWHA, the lead federal agency for the undertaking, and in accordance with 23 CFR Part 771, FHWA Technical Advisory T6640.8A, the current NMDOT Location Study Procedures, and the BIA NEPA Guidebook 59 IAM 3-H (BIA 2012). The purpose of this EA is to evaluate the potential environmental impacts to the human and natural environment resulting from 1) the proposed roadway and bridge improvements along US 64 and 2) granting additional ROW to NMDOT in order construct and maintain the proposed highway improvements.

Other federal regulations and laws that apply to the Proposed Action include:

- Section 106 of the National Historic Preservation Act (NHPA)
- Section 7 of the Endangered Species Act (ESA)
- Section 404/401 of the Clean Water Act (CWA)
- Clean Air Act

Pursuant to the provisions of the National Environmental Policy Act (NEPA), the ESA, and the CWA, a biological survey of the proposed project area was conducted to inventory habitat, potential presence of federally threatened and endangered species, and potential jurisdictional waters. Subsequently, a biological evaluation report was prepared (WSP 2021). The biological report provides a detailed description of the results of the biological survey including the natural resources potentially affected, potential for listed species to occur, and potentially jurisdictional waters. The biological report was approved by the NMDOT for subsequent consultation with the Navajo Nation and U.S. Fish and Wildlife Service (USFWS).

Pursuant to provisions of the NHPA, a cultural resources inventory of the proposed project area and supplemental survey areas was conducted between August 5, 2019, and March 16, 2021 (New Mexico Cultural Resources Information System [NMCRIS] #s 145224, 146252, 147631). Subsequently, NMDOT/FHWA consulted with the Navajo Nation Tribal Historic Preservation Office (THPO) and received concurrence on November 10, 2020 (Appendix A).The Navajo Nation Department of Fish and Wildlife (NNDFW) reviewed the Biological Evaluation for U.S. Highway 64 Alignment Study and Preliminary Engineering and granted the project conditional approval issuing a Biological Resources Compliance Form on December 21, 2021 A formal request for consultation with the

U.S. Fish and Wildlife Service, the Biological Opinion from the U.S. Fish and Wildlife was received January 18, 2022.

1.4 AGENCY SCOPING AND ISSUE DEVELOPMENT

The NMDOT's overall transportation program management and project delivery are accomplished through a regular annual review of infrastructure needs and issues statewide. The agency's planning includes a multi-year program in which funding for projects is identified and managed through the Statewide Transportation Improvement Program (STIP). The STIP is a collaborative state, local, regional, and tribal transportation planning effort, developed with review and comment by the public and agency stakeholders. NMDOT administers the FHWA federal aid program for transportation projects, and the STIP is reviewed by FHWA for concurrence.

Resource issues to be considered in the EA were determined following review of the cultural and biological resource reports and subsequent interagency meetings and email correspondence between NMDOT, Navajo Nation, and the BIA. Initial scoping letters were sent to pertinent agencies with regulatory authority or resources of interest within the project area, including:

- Bureau of Indian Affairs
- Navajo Nation Department of Transportation (NNDOT)
- Navajo Nation Chapter Houses, Shiprock, Beclabito, Teec Nos Pos, and Gadii'ahi/To'koi
- Navajo Nation Environmental Protection Agency
- New Mexico Environment Department
- U.S. Department of Agriculture
- U.S. Fish and Wildlife Service, New Mexico and Arizona Ecological Services Field Offices
- Arizona Department of Transportation

NMDOT/FHWA consulted with the USFWS, Navajo Nation Department of Fish and Wildlife (NNDFW), and the Navajo Natural Heritage Program (NNHP) in accordance with Section 7 of the ESA regarding potential effects and mitigation efforts on Mesa Verde cactus, a federally and tribal listed species (Appendix B and Appendix C). A Biological Assessment was prepared in May 2021 to support consultation for this undertaking. The issues presented in the EA are organized according to the guidance in the 2012 BIA's NEPA Handbook, 59 IAM 3-H. The issues presented in the EA have been developed according to the 2015 NMDOT Location Study Procedures Update and the 2012 BIA NEPA Handbook, 59 IAM 3-H.

2 PROPOSED ACTION AND ALTERNATIVES

This section describes the alternatives considered for implementation of the project. Two alternatives are considered in this EA: The No Action Alternative and the Proposed Action Alternative.

2.1 NO ACTION ALTERNATIVE

The No Action Alternative consists of the existing US 64 highway and all appurtenances. The No Action Alternative includes continued maintenance of the highway including pavement, bridge structures, drainage structures, pavement markings, signs, and other basic roadway elements. Improvements beyond normal maintenance are not included in the No Action condition. Under this alternative, the roadway deficiencies would not be corrected, and the BIA would not grant any new ROW to the applicant. The No Action Alternative provides a baseline from which to compare the potential effects of the Proposed Action.

2.2 PROPOSED ACTION ALTERNATIVE

For the subject project, the Proposed Action Alternative is the NMDOT's Preferred Alternative. The Preferred Alternative would include reconstruction of the existing two-lane highway, drainage improvements, and replacement of four bridge structures (Shoe Game Wash [Bridge #5865], Red Wash [Bridge #5864], Shiprock Wash [Bridge #5863], and Rattlesnake Wash [Bridge #5862]). The roadway would be updated to current design standards, widen shoulders, and improve sight distance through vertical alignment corrections. Utility improvements include placement of buried broadband conduit near the ROW fence on the north side (with pull boxes and manholes spaced approximately every mile). The Preferred Alternative would generally follow the existing alignment with areas of realignment for bridge reconstruction and allowing embankment tie-ins to occur outside existing ROW where needed. This approach attempts to preserve the natural environment to the extent practical and reduces the need for retaining walls and roadside barriers, thus reducing the man-made improvements in this alternative. **Table 1** provides the acreage included in the proposed new ROW and the existing ROW (collectively, the project area). **Table 2** summarizes the quantity of barriers and retaining walls proposed.

The Preferred Alternative would also realign Road 9060/Tribal Road 1754 on the south side of US 64 with Road 9060/BIA 5027 on the north side (at STA 1165+86) and provide speed change lanes at intersections where warranted. Two access drives are proposed to be closed: a driveway on the south side of US 64 at approximately STA 1176+00, and a driveway just west of Shiprock Wash at STA 1739+60.

The detailed engineering analysis supporting development of the Preferred Alternative is found in the NMDOT Phase IA/B Scoping Report titled: *US 64 Alignment Study: Arizona Border to Shiprock, CN 5101170* (WSP 2021). FHWA provided concurrence of the Phase IA/B Scoping Report on April 23, 2021.

Table 1: Proposed and Existing Right-of-Way Detail

Component	Lengths (miles)	Total ROW (acres)	Total Disturbance (acres)
Existing US 64 ROW	20.8	332.4	332.4
Proposed new ROW	(up to 636 areas adjacent to existing ROW)	19.7	19.7
Totals	20.8	352.1	352.1

Table 2: Preferred Alternative Roadside Barrier and Retaining Wall Lengths

Side of US 64	Roadside Barrier (feet)	Concrete Wall Barrier (feet)	Retaining Walls (feet)	Retaining Walls (sq. ft.)
North Side	6,500	4,500	4,500	32,300
South Side	7,500	4,600	2,400	12,800
Totals	14,000	9,100	6,900	45,100

Construction of the Preferred Alternative would be phased, and a priority plan for specific segments has been developed as part of the Phase IA/B Study. NMDOT has programmed funding to design and construct all of the project priorities, as summarized below and shown in **Exhibit 2 and Table 3**. It is anticipated that projects will be let for construction consecutively and within approximately 12 months of each other.

- Priority 1: Red Wash Bridge, MP 7.3 to 8.1; FY 2023/2024
- Priority 2: Shoe Game Wash, Beclabito Wash, and US 64 from AZ border to Red Wash Bridge, MP 0 (BOP) to 7.3; FY 2023/2024
- Priority 3: US 64 east of Red Wash, MP 8.1 to 11.4; and Shiprock Wash Bridge, MP 13.8 to 14.4; FY 2025/2026
- Priority 4: US 64 west of Shiprock Wash, MP 11.4 to 13.8; and US 64 east of Shiprock Wash, MP 14.4 to 17.5; FY 2026
- Priority 5: US 64 east and west of Rattlesnake Wash Bridge, MP 17.5 to 20.8 (EOP)

NMDOT submitted an application for funding under the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant program for the Preferred Alternative and was successful in obtaining an additional $25 million in federal aid.

Exhibit 2: Project Priority Phasing Plan

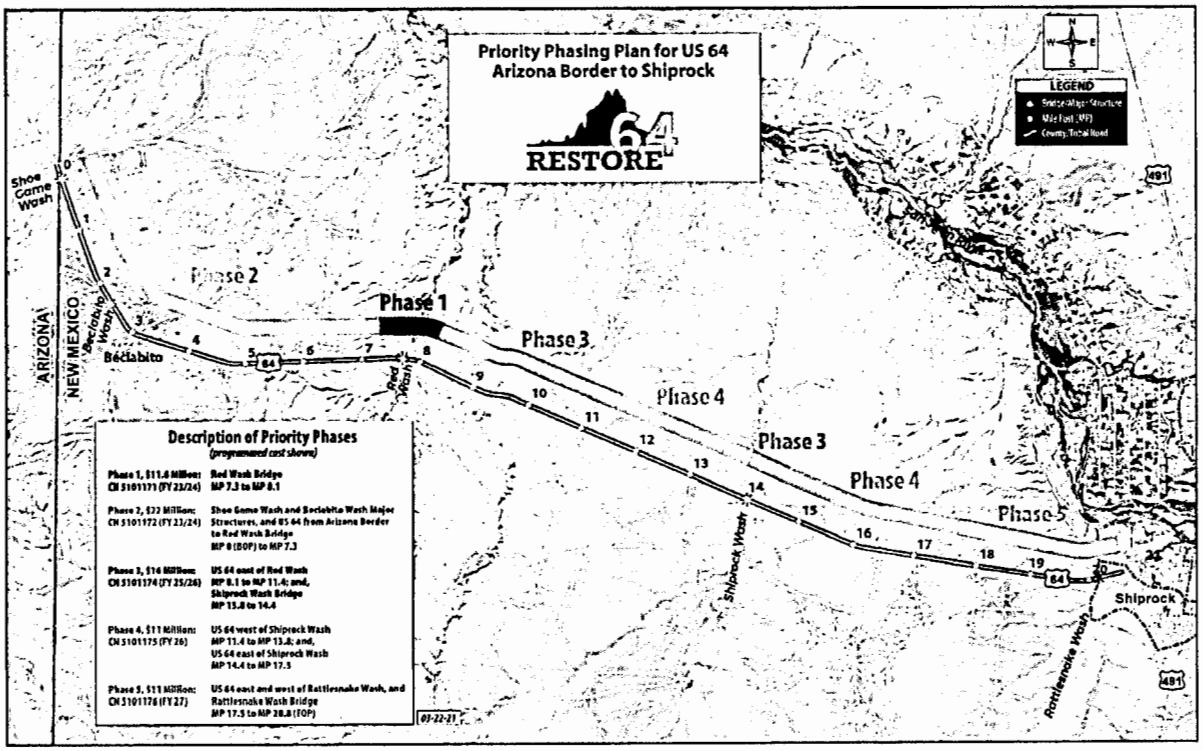


Table 3: Phase Cost and Programed Fiscal Year

Phase	CN	Fiscal Year	Cost (million)
Phase 1	5101171	23/24	$11.6
Phase 2	5101172	23/24	$22
Phase 3	5101174	25/26	$16
Phase 4	5101175	26	$11
Phase 5	5101176	27	$11

2.2.1 PROPOSED ROADWAY IMPROVEMENTS

The proposed approach to rehabilitate and upgrade the roadway to achieve current AASHTO design standards on this rural, two-lane highway segment includes:

- Widened and consistent lane and shoulder widths
- Pavement improvements
- Horizontal alignment including superelevation corrections
- Vertical alignment including vertical curve corrections and passing zone opportunities
- Access management improvements (bus stops and pull-out areas)
- Overhead Lighting at select intersections/spot locations
- Broadband utilities

The proposed pavement improvements would consist of an in-place recycling (e.g., process/place/compact) and stabilization approach for most of the corridor with full pavement reconstruction at locations where pavement subgrade failures exist, where the roadway will be built on new alignment, or where the vertical profile will be modified. The intent is to recycle as much pavement as possible.

2.2.1.1 TYPICAL ROADWAY SECTIONS - RURAL

The existing typical roadway section in the rural highway segment consists of a 12-foot driving lane and variable shoulder widths for each travel direction. Surfacing tapers are inconsistent throughout the corridor. On the bridges, shoulder widths are minimal.

Exhibit 3 shows the proposed typical sections for the rural highway segments based on the existing ROW widths. The proposed US 64 roadway driving lanes are 12-feet wide, and the roadway shoulders are 6-feet wide. For the westerly portion of the project with the 150-foot ROW, 6:1 surfacing tapers are proposed. For the easterly portion of the project with the 100-foot ROW, 4:1 surfacing tapers are proposed. Mainline US 64 shoulder widths were set at 6 feet by NMDOT for consistency throughout the corridor to enhance safety by providing additional width for disabled vehicles and non-motorized users of the facility, while reducing environmental impacts of the proposed improvements. A 6-foot shoulder is an appropriate width for this project based on FHWA standard predictive models of safety performance on rural two-lane highways. Adjacent to right-turn deceleration lanes, full shoulder width is not required; 2-foot outside shoulders are proposed to augment the 12-foot turn lane. Where left turn lanes are needed at intersections with existing connecting roads, a 12-foot left-turn lane for speed change is proposed with a 16-foot median to provide a 4-foot buffer between the turning lane and opposing driving lane.

For the major structure crossings, the shoulders are widened to 8 feet to provide an additional 2 feet of shy distance to the bridge railing. The typical sections for major structures are provided later in this chapter.

2.2.1.2 *TYPICAL ROADWAY SECTION - BECLABITO*

In Beclabito, the existing typical roadway section is a two-lane highway with left-turn and right-turn lanes at several intersections. Driving lane widths are 12 feet and shoulders are variable. Based on concerns regarding speeds and safety in this area of the project, a three-lane section with a continuous two-way-left-turn-lane is proposed to access the turnouts on both sides of the roadway (see **Exhibit 4**). The proposed driving lanes are 12-feet width, the median is 16-feet wide, and the shoulders are 6-feet wide. Raised median islands are proposed in the transition taper areas on both sides of Beclabito to aid traffic calming entering the community. Radar speed boards are proposed to complement the raised medians, and the established reduced school speed zone would also be retained.

Exhibit 3: Typical Sections for Rural Highway Segments

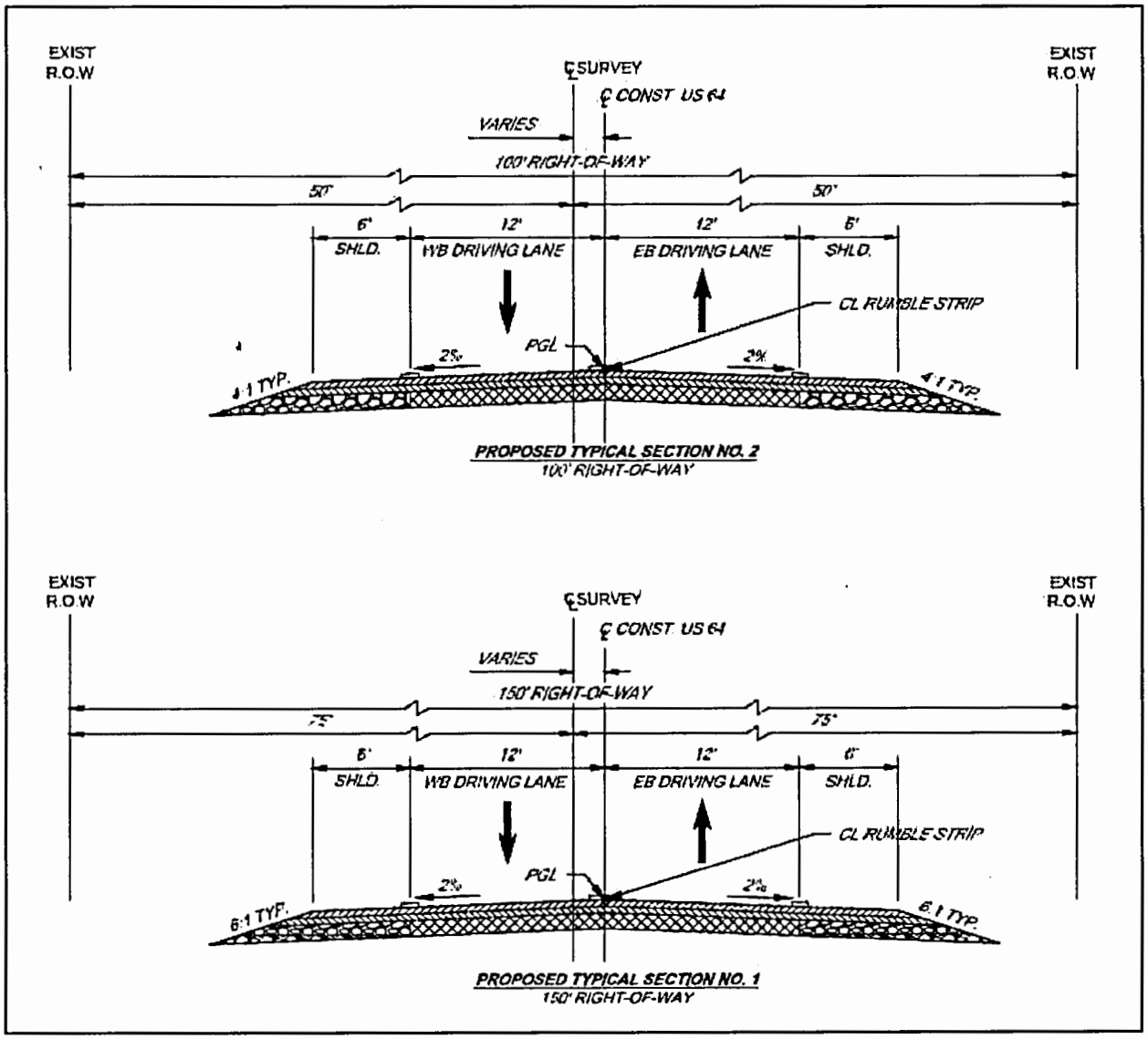
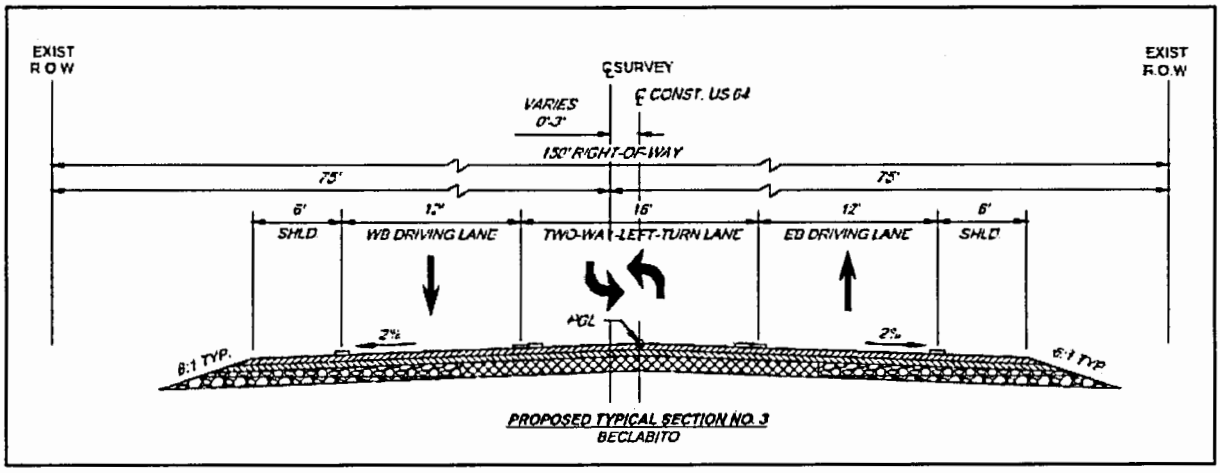


Exhibit 4: Typical Roadway Section through Beclabito



2.2.1.3 *HORIZONTAL GEOMETRY*

The existing horizontal roadway alignment was reviewed for this project to determine if the 10 existing horizontal curves satisfy current design criteria. The existing radii of the horizontal curves satisfy the minimum requirements; however, the existing superelevation rates were found to be substandard and in need of reconstruction. The superelevation of the nine horizonal curves would be reconstructed to current standards based on a design speed of 60 MPH, 5MPH greater than the posted speed, as part of the Proposed Action. The horizontal curve just west of Beclabito, where a lower design speed applies, would be maintained with a reduced speed zone in advance of the curve.

2.2.1.4 *VERTICAL ALIGNMENT*

The existing vertical roadway alignment was reviewed for this project to determine if the 91 vertical curves require improvements to current standards. This involved assessment of stopping and passing sight distance per the 2018 AASHTO Green Book. Vertical curves identified will be analyzed in final design and driver comfort criteria from the AASHTO Green Book will be met.

2.2.1.5 *PASSING ZONE OPPORTUNITIES*

The overall passing opportunities in the project corridor were assessed using the NMDOT design criteria. Currently, six (6) crest vertical curves in the project corridor do not provide adequate passing sight distance to accommodate passing zones. With the vertical crest curves corrected as proposed, both eastbound and westbound US 64 will have approximately 12 miles of passing opportunities in the 20.8-mile corridor. **Table 4** below shows a summary of the results based on a minimum passing zone length of 800 feet for a 55-mph posted speed (2018 AASHTO Green Book Table 4-5).

Table 4: Passing Zone Opportunities

Direction of Travel	Proposed Passing Length (ft.)	Proposed Passing Length (miles)	Proposed Passing % of Total Length	Reduction in Length from Existing (ft.)	Reduction in Length from Existing (miles)
Eastbound	62,880	11.91	60%	10,000	1.89
Westbound	65,105	12.33	62%	7,875	1.49

2.2.2 ACCESS MANAGEMENT

The locations of existing pull-off areas and bus stops as well as locations of proposed bus stop locations by request of the Navajo Nation are shown in **Table** 5. The turnouts and/or frontage areas are proposed to be improved under the Proposed Action. The listing will be finalized based on feedback from the Navajo Nation obtained through the public outreach and agency coordination efforts.

Table 5: Locations of Bus Stops and Pull-Off Areas

Station	Station	Mile Post	Direction	Status (Existing/ Proposed)	Notes
1000+20.00	1002+00.00	0.02	WB	Existing	Rest Area/Pull-Off Area
1008+43.72	1010+23.72	0.18	EB and WB	WB Proposed	Bus Stop
1164+79.01	1165+90.92	3.13	EB	Existing	Bus Stop
1166+11.94	1167+11.94	3.16	WB	Existing	Bus Stop
1175+02.20	1176+02.20	3.32	WB	Proposed	Bus Stop
1208+63.77	1210+93.77	3.97	EB	Existing	Rest Area/Pull-Off Area
1267+00.00	1273+00.00	5.11	EB	Existing	Rest Area/Pull-Off Area
1336+77.46	1339+44.79	6.40	WB	Proposed	Bus Stop
1554+29.58	1556+09.58	10.52	EB	Existing	Bus Stop
1584+00.00	1588+00.00	11.10	WB	Existing	Rest Area/Pull-Off Area
1585+77.33	1587+57.33	11.11	EB	Proposed	Bus Stop
1906+00.00	1909+00.00	17.19	WB	Existing	Bus Stop

2.2.3 LIGHTING FOR CONFLICT AREAS

The portion of US 64 within the project limits is an unlit rural roadway. Locations of overhead lighting were considered at intersections and bus stops. Based on input from NMDOT and the Navajo Nation, the Proposed Action includes low-level spotlighting near the community of Beclabito at four intersections, including one pedestrian crossing.

Installing or increasing the level of lighting at rural intersections has been shown to reduce nighttime vehicle crashes at these locations (University of Minnesota Center for Transportation Studies 2015). Studies have found that installing lighting at not illuminated rural intersections can significantly reduce the ratio of daytime-to-nighttime

crashes, making intersections safer for drivers and pedestrians (University of Minnesota Center for Transportation Studies 2015, Li et al. 2020).

2.2.4 BROADBAND UTILITIES

Recently NMDOT has undertaken a statewide initiative to improve public access to broadband. Currently, no broadband conduit is located in the US 64 corridor. As such, the Proposed Action would include placement of two 2-inch-diameter pipe conduits (with pull boxes and manholes located approximately every mile) parallel to the ROW fence line within the ROW on the north side of US 64. It is anticipated that construction would entail a 36-inch-deep trench to bury the conduit.

2.2.5 PROPOSED IMPROVEMENTS AT MAJOR STRUCTURES

As part of the Phase IA/B study, Bridge Type Selection (BTS) reports were prepared for the four existing major structures within the project limits (Shoe Game Wash [Bridge #5865], Red Wash [Bridge #5864], Shiprock Wash [Bridge #5863], and Rattlesnake Wash [Bridge #5862]). Detailed engineering analysis supporting development of the proposed structure improvements is found in the BTS reports. The following summarizes salient information regarding the proposed approach to each bridge under the Proposed Action. All bridge railings will be MASH-2016 compliant. Refer to the separate BTS reports for engineering analysis supporting development of the Proposed Action.

Red Wash – Bridge #5864

The existing Red Wash Bridge is a 6-span steel girder bridge founded on steel bearing piles spanning a total of 262 feet. The existing bridge has significant deterioration, and it is proposed that the existing bridge be removed and replaced. The new bridge would be offset to the north approximately 5 feet from edge of deck to edge of deck, as shown in **Exhibit 6,** to align with the waterway flow direction. Full replacement will also create adequate vertical clearance underneath the bridge to accommodate the 50-year storm event. The current structure does not meet those requirements. See Exhibit 5 for the proposed profile cross section view.

The proposed roadway on the bridge will be two 12-foot lanes, 8-foot shoulders on each side. A three-span bridge configuration is proposed to accommodate the 50-year flood flow, in addition to raising the vertical road profile approximately 1.8 feet to meet clearance requirements. An offset to the north matches the original alignment of US 64 (now abandoned) and is preferred from both horizontal and vertical alignment perspectives. The terrain/topography poses more engineering and constructability challenges for an offset alignment to the south of the existing bridge. Following construction of the new bridge, the old bridge would be demolished and removed.

Exhibit 5: Proposed 3-Span Bridge Conceptual Profile for Red Wash Bridge

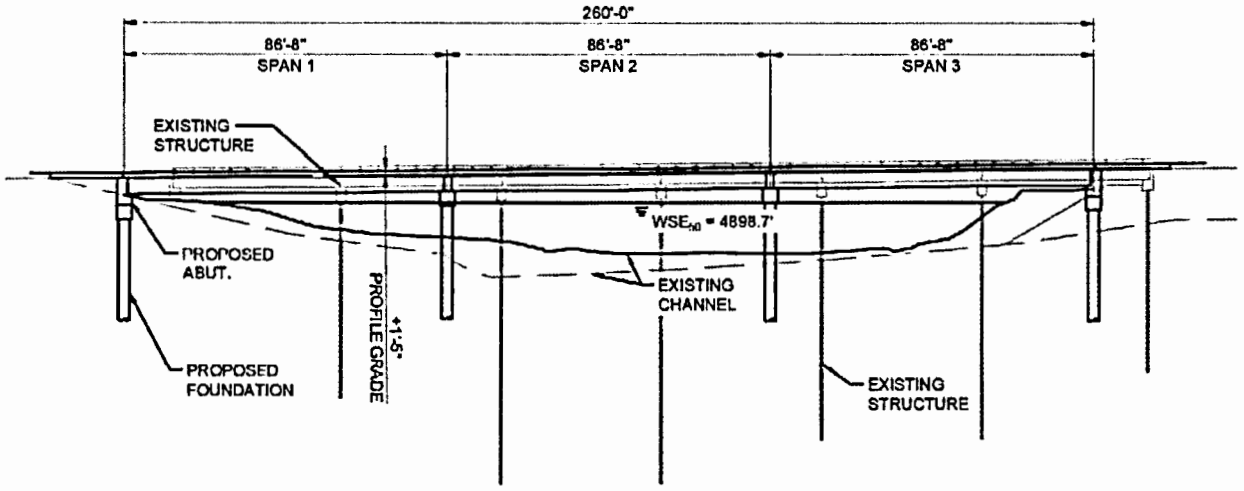
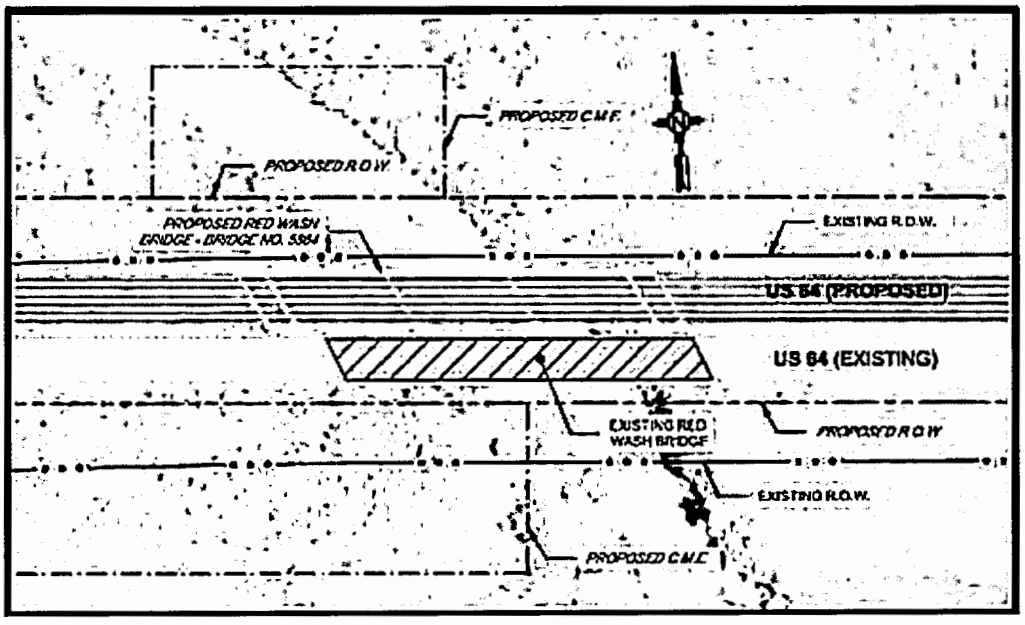


Exhibit 6: Proposed Plan View of Red Wash Bridge



Shiprock Wash – Bridge #5863

The existing Shiprock Wash Bridge is a 3-span steel girder bridge supported on five plate girders spanning a total of 208 feet. The existing bridge has significant deterioration, and it is proposed that the existing bridge be removed and replaced. The new bridge will be north of the existing bridge as shown in Exhibit 8. Offsetting the proposed alignment to the north of the existing alignment minimizes the earthwork needed east of the bridge. Also, offsetting the bridge north is ideal for the hydraulic requirements of the Shiprock Wash channel. The new bridge would be a three-span pre-stressed concrete girder bridge with two 12-foot driving lanes and 8-foot shoulders. The proposed bridge would have an overall width of 43 feet which would- accommodate two 12-foot driving lanes and 8 foot shoulders. See Exhibit 7 for the proposed profile cross section view.

Due to the grade differences between the channel and the roadway, a temporary detour is not feasible and phased construction is needed to maintain traffic through construction. Traffic will remain on both lanes of the existing roadway while a portion of the new structure is built north of the existing alignment, then traffic will be shifted as a single lane to the north onto the new structure, the existing bridge demolished, and the new bridge completed.

Exhibit 7: Proposed 3-Span Bridge Conceptual Profile for Shiprock Wash Bridge

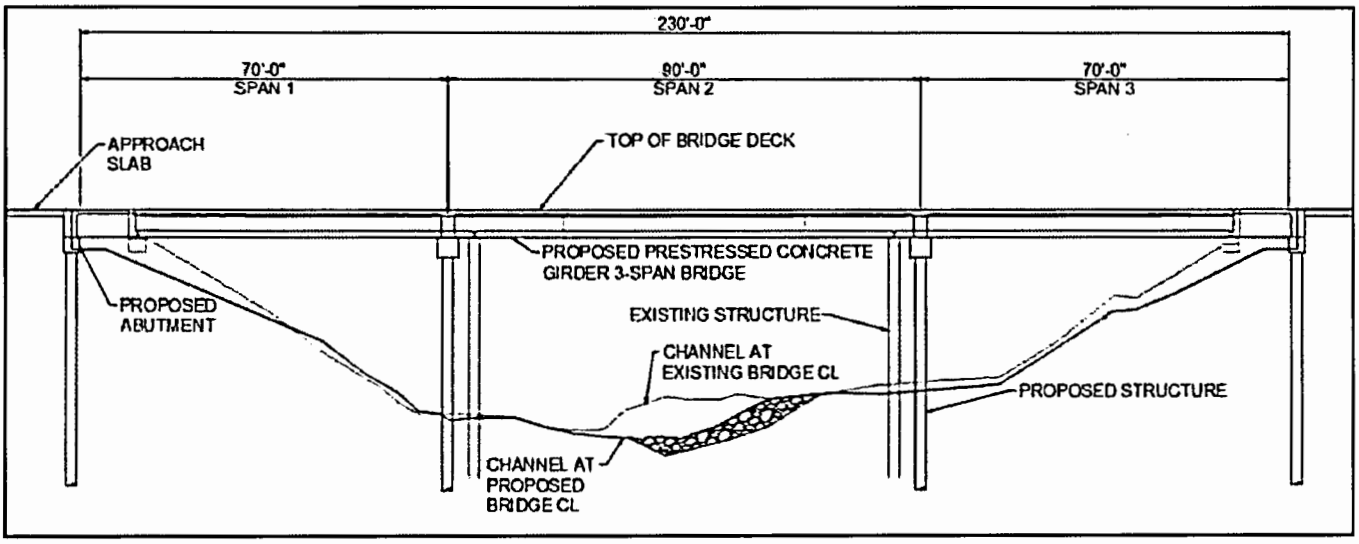
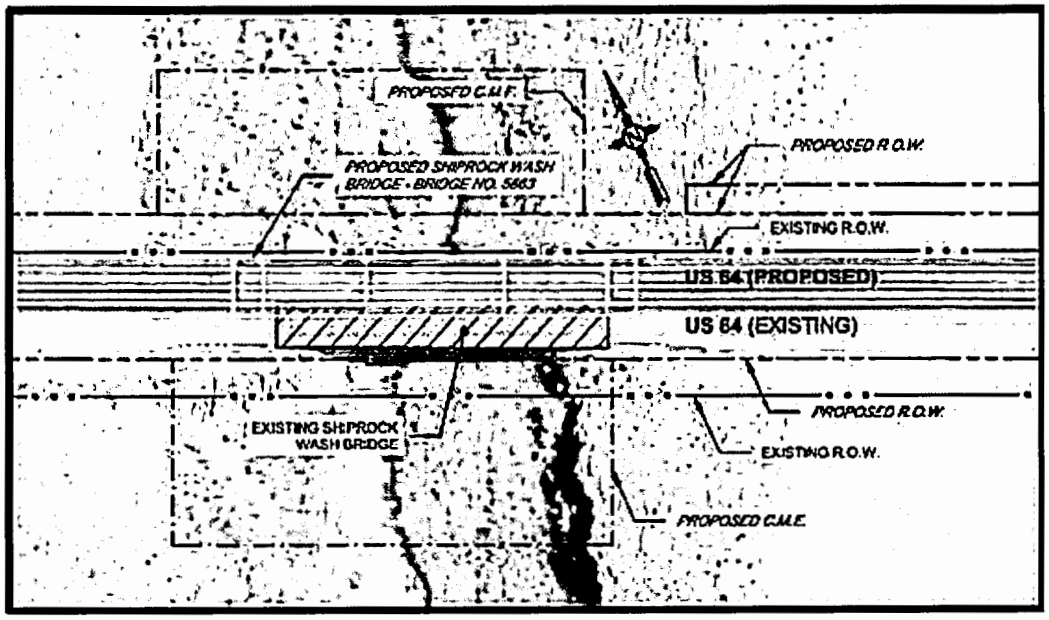


Exhibit 8: Proposed Plan View of Shiprock Wash Bridge



Rattlesnake Wash – Bridge #5862

The existing Rattlesnake Wash Bridge is a two-span box girder bridge founded on steel bearing piles. The existing bridge has significant deterioration, and it is proposed that the existing bridge be removed and replaced. Due to the skewed channel alignment there is excessive scour around the east abutment foundation and the gabion protection in place currently is damaged. The new bridge is proposed to be constructed on the same alignment of the existing bridge as shown in Exhibit 10. The new structure would be a single-span pre-stressed concrete girder bridge skewed at 15 degrees to the roadway, which would require nominal bank protection efforts in the channel. The existing roadway horizontal and vertical alignments will also be maintained with this selection. The proposed profile cross section view is shown in Exhibit 9.

The proposed bridge structure would be built in a phased construction sequence. The traffic would be detoured to the south of the existing roadway while the existing bridge is demolished. The new bridge would then be constructed along the existing alignment.

Exhibit 9: Proposed Single-Span Bridge Conceptual Profile for Rattlesnake Wash Bridge

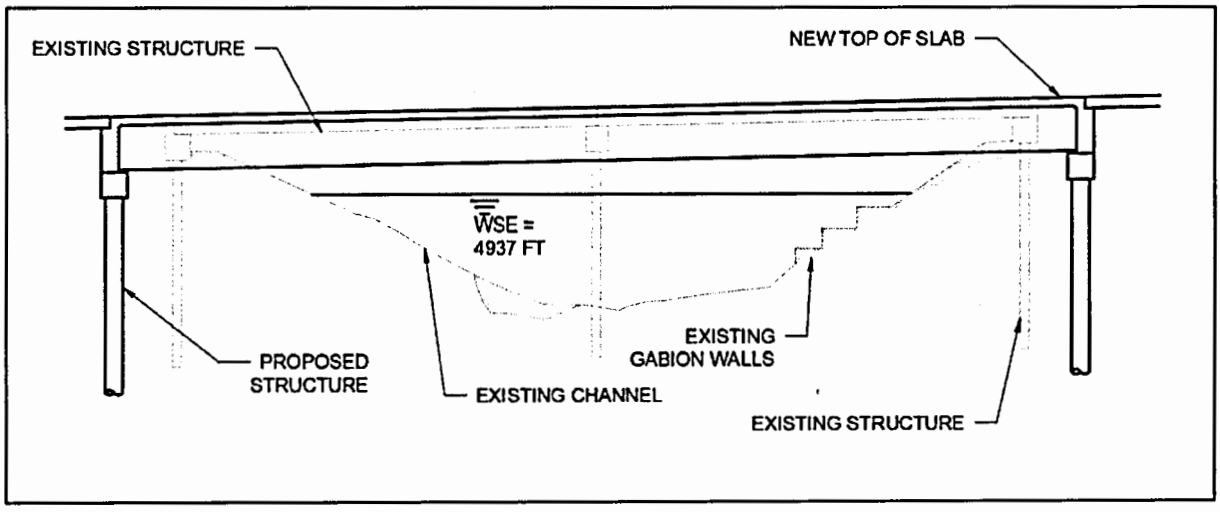
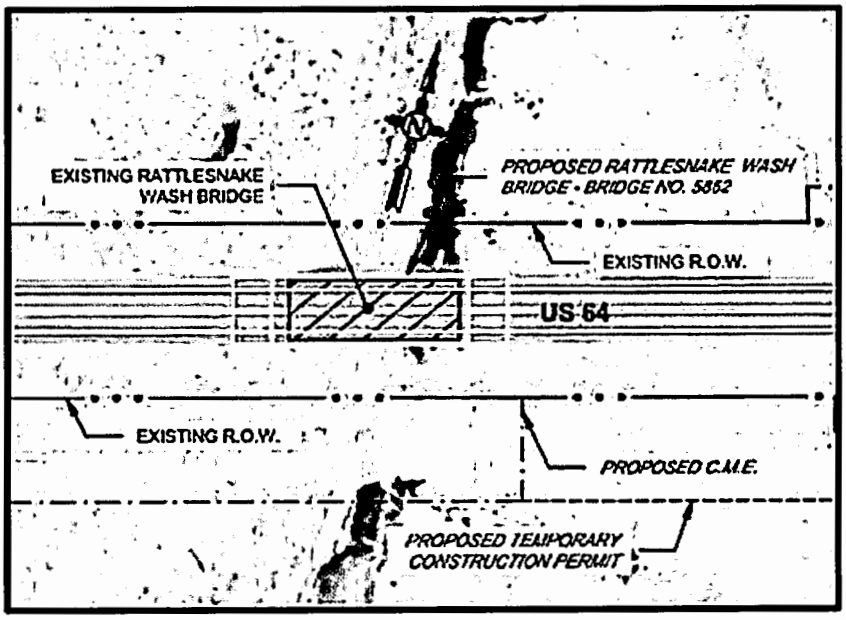


Exhibit 10: Proposed Plan View of Rattlesnake Wash Bridge



Shoe Game Wash – Bridge #5865

Constructed in 1956, the Shoe Game Wash structure is a 5 barrel 10' (span) by 8' (rise) concrete box culvert (CBC) with wingwalls and an outlet apron. The structure is approximately 50' long and 32' wide with a roadway clear width of 24' between faces of guardrail. The CBC has minimal fill over its top and it appears that the roadway pavement section may sit directly on the structure top slab. The existing bridge railing is thrie-beam guardrail bolted through the bridge top slab.

A new 4-barrel concrete box culvert (6' x 10' barrels) is proposed to replace the existing structure carrying US 64 over Shoe Game Wash. The flowline of the proposed CBC would be set approximately 6 feet below the existing flowline to mitigate scour at the outlet. An inlet flume would be required to bring the flowline down to the proposed CBC. See **Exhibit 11** for the proposed cross section view.

During construction, one lane of traffic would be maintained on the existing structure, some portion of the existing structure would be demolished, and a portion of the proposed adjacent CBC would be constructed. Traffic would be moved on to the new structure and the rest of the existing structure would be removed to allow for construction of the second half of the proposed CBC.

Exhibit 11: Proposed Section View of the Shoe Game Wash CBC Replacement

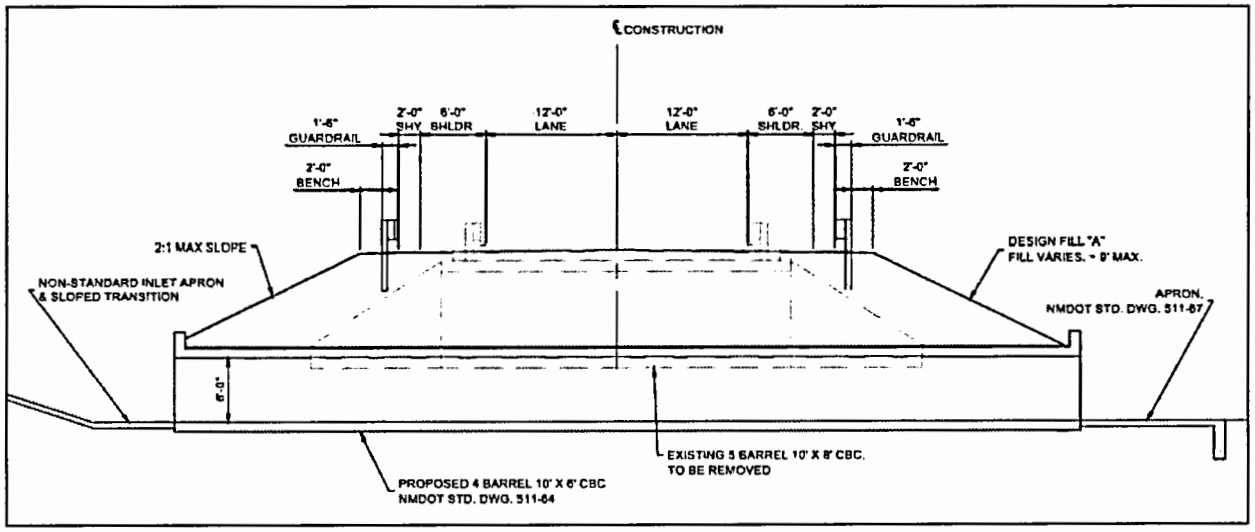
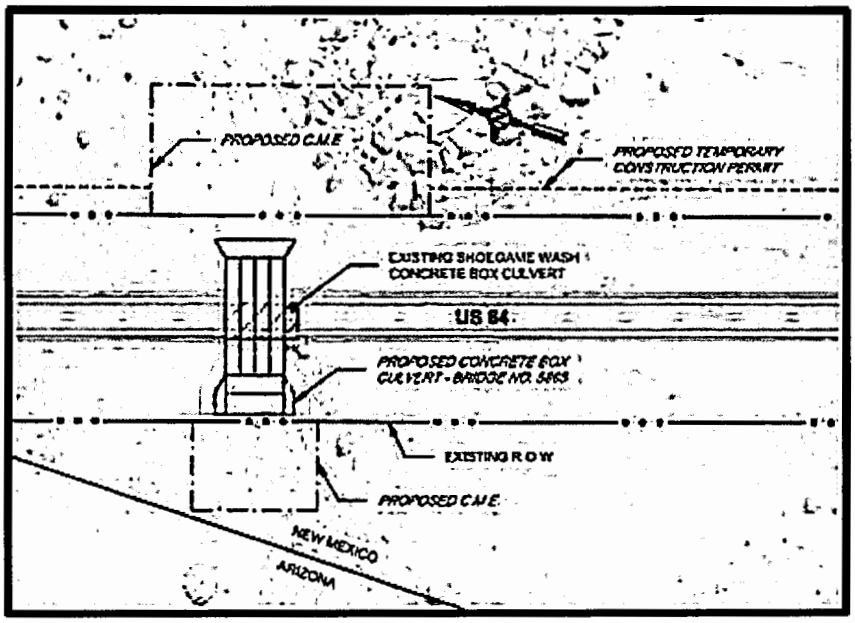


Exhibit 12: Proposed Plan View of Shoe Game Wash CBC



2.2.5.1 *DRAINAGE CULVERTS*

Most of the existing crossing culverts on this project were installed in the 1950s, over 60 plus years ago, and have served their design lives. Of the existing 104 drainage culverts within the project area, 19 culverts would be replaced because they do not provide the needed capacity and are inadequate. In addition, it is proposed that culverts with a burial depth of 8 feet or less, measured from the invert of the culvert to the surface of the road at the centerline of the survey, will be replaced with new corrugated metal pipes of the same size pipe by trenching methods. Crossings that are buried deeper than 8 feet, which involves 22 of the crossings, could either be lined or a new replacement structure could be installed by bore and jack procedures. Shoring or stacked trench boxes are not proposed for replacement of deep culvert pipes due to maintenance of traffic requirements during construction.

Standard NMDOT end treatments would be used, which consists of concrete blankets when the end of culvert is located within the roadway clear zone. Safety bars would be added for the larger diameter structures. Where the end of the culvert pipe is outside the clear zone, end sections would be installed.

Construction maintenance easements (CMEs) outside the existing ROW are being proposed at 51 locations to aid in construction and facilitate maintenance of these structures.

Roadway Drainage and Roadside ditches

Sheet flow from the highway pavement and surfacing tapers will follow existing drainage patterns with runoff flowing into adjacent ditches or adjacent land. The capacity of the proposed roadside ditches was evaluated to ensure the drainage design criteria are met. The proposed roadway typical section consists of a triangular ditch with a minimum depth of 1 foot, 6:1 slope on the highway side and a variable 4:1 to 2:1 slope on the embankment side. Most of the off-site drainage basins flow directly to the crossing culverts and do not reach the roadside ditches.

Turnout Structures

Sixteen turnout culverts were analyzed in conjunction with the roadside ditch analysis. As part of the Preferred Alternative, all turnout structures will be replaced and inlet control will be provided.

Drainage Structure #13 (DS-13)

The existing drainage crossing at MP 2.40 consists of two multi-plate culverts. Under the Proposed Action, it is proposed to replace this structure with a two-barrel CBC (12'x8') which will result in this being classified as a major structure per NMDOT specifications and will require a new bridge number for inclusion in the NMDOT Bridge Inventory.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

NMDOT coordinates with the Navajo Nation concerning infrastructure needs for facilities maintained by the agency within the Nation. Representatives from both agencies met to discuss the US 64 roadway corridor. Since the US 64 roadway traverses through tribal lands, an alternative alignment was not proposed for consideration other than where required to replace existing structures.

As part of the NMDOT Phase IA/B study process, the agency develops potential viable alternatives for evaluation. The study process concludes with a recommended alternative to be advanced for detailed analysis and engineering.

During the Phase IA/B study, a Build Alternative was considered which minimized right-of-way impacts throughout the corridor by using guardrail/barrier, steeper but allowable (3:1) side slopes for clear zone requirements and retaining walls where needed to stay within the existing right-of-way. A minimum five-foot (5') buffer between the limits of the work and the existing right-of-way fence would be used to allow the contractor room to construct the improvements. This alternative would maintain existing access points, with two exceptions where access points would be closed, and provides speed change lanes at intersections where warranted.

The alternative based on minimizing ROW impacts was not advanced because the preferred alternative would result in a more context-sensitive improved highway, has lower anticipated capital and maintenance costs, better roadside design, and had stakeholder support.

3 AFFECTED ENVIRONMENT

This chapter describes the existing setting or baseline conditions that would be potentially affected by the proposed project.

3.1 LAND RESOURCES

3.1.1 TOPOGRAPHY AND SOILS

The project area lies in the northern part of the San Juan Basin, in the physiographic region known as the Colorado Plateau Province. The project is primarily situated within the U.S Environmental Protection Agency (EPA) Level IV San Juan/Chaco Tablelands and Mesas ecoregion, which is characterized by plateaus, hogback ridges, valleys, and canyons (Griffith et al. 2006). The project area extends from the Arizona/New Mexico border along the northeastern eroded pediments of the Carrizo Mountains east to Shiprock (see **Exhibit 1**). As the highway extends east, it passes north of Beclabito Dome where the topography is characterized by rolling hills and ridges bisected by ephemeral washes. East of approximately MP 10, terrain is generally level to mildly undulating, infrequently cut by large dry arroyos, and gradually decreases in elevation. Several large ephemeral drainages occur in the project area, including Shoe Game Wash, Red Wash, Rattlesnake Wash, and Shiprock Wash. Elevation in the project area ranges from approximately 5,780 feet near the BOP to 4,940 feet at the EOP.

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) database, a total of twenty-two (22) soil units are mapped in the project area (NRCS 2021). The soils primarily consist of colluvium and alluvial/eolian deposits overlaying residuum weathered from shales and sandstones. These soils are well drained with very low to very high runoff classes. None of the soils are hydric soils. Tocito silt loam is the only soil classified as farmland of statewide importance. **Table 66** summarizes the soil types.

The soil erodibility factor, or K factor, describes the inherent erodibility of a particular type of soil, as measured by the susceptibility of soil particles to detach and be transported by precipitation and runoff. K factor values range from 0.02 to 0.69. High K factor values indicate a greater susceptibility to sheet and rill erosion by water (NRCS 2021). Soils in the project area are predominantly characterized by a low-to-moderate erosion susceptibility.

Table 6: Soil Types within Project Area

Map Unit Symbol	Map Unit Name	Erosion Factor (Kw)	Land Capability Classification (non-irrigated)	Acres in Project Area	Percentage of Project Area
113	Gyptur very fine sandy loam, 0 to 3 percent slopes	0.55	7s	10.8	3.1%
117	Badland-Rock outcrop complex	N/A	8s	8.3	2.4%
122	Blueflat-Notal association, 2 to 10 percent slopes	0.32	7c	25.0	7.1%
125	Kimbeto loamy fine sand, 0 to 4 percent slopes	0.20	7c	71.1	20.2%
135	Farb-Rock outcrop-Badland complex, 2 to 25 percent slopes	0.10	7s	11.5	3.3%

Map Unit Symbol	Map Unit Name	Erosion Factor (Kw)	Land Capability Classification (non-irrigated)	Acres in Project Area	Percentage of Project Area
137	Persayo-Cairn-Patel complex, 1 to 25 percent slopes	0.32	7s	9.8	2.8%
155	Mesa fine sandy loam, 1 to 4 percent slopes	0.28	7c	18.7	5.3%
165	Jeddito-Escavada association, 0 to 3 percent slopes	0.24	7c	4.8	1.4%
200	Tocito silt loam, 1 to 3 percent slopes[1]	0.49	7c	1.0	0.3%
205	Shiprock-Farb complex, 1 to 5 percent slopes	0.20	7c	1.5	0.4%
215	Persayo-Fordbutte association, 1 to 10 percent slopes	0.55	7s	16.8	4.8%
250	Littlehat-Persayo-Nataani complex, 1 to 15 percent slopes	0.55	7s	27.8	7.9%
260	Littlehat-Persayo-Badland complex, 3 to 45 percent slopes	0.49	7s	27.7	7.9%
265	Camac-Kimbeto-Badland association, 0 to 50 percent slopes	0.10	7e	7.4	2.1%
304	Farview-Beclabito-Rock outcrop complex, 1 to 10 percent slopes	0.10	6c	20.8	5.9%
305	Strych-Eagleye-Rock outcrop complex, 15 to 70 percent slopes	0.10	7s	0.0	0.0%
307	Bodot-Beclabito-Rock outcrop	0.05	7e	1.0	0.3%

Map Unit Symbol	Map Unit Name	Erosion Factor (Kw)	Land Capability Classification (non-irrigated)	Acres in Project Area	Percentage of Project Area
	complex, 15 to 65 percent slopes				
308	McElmo-Farview complex, 2 to 15 percent slopes	0.10	6c	3.0	0.9%
309	Rock outcrop-Rizno complex, 2 to 20 percent slopes	N/A	8s	2.7	0.8%
310	Millett-Blanding-Strych association, 2 to 50 percent slopes	0.15	6c	61.9	17.6%
312	Blanding very fine sandy loam, 2 to 8 percent slopes	0.49	6c	17.1	4.9%
315	Shoegame-Riverwash complex, 2 to 5 percent slopes	0.10	7s	3.0	0.9%

1. Farmland of statewide importance

3.1.2 GEOLOGY, MINERAL AND PALEONTOLOGICAL RESOURCES

The geology in this area consists of Cenozoic deposits, Cretaceous bedrock, Mancos Shale, Dakota Sandstone, and Triassic and Jurassic Bedrock (Craigg, 2001). The San Juan Basin, where the project is located, is a fault bounded structural basin, about 100 miles across, on the southeastern margin of the Colorado Plateau. The basin was formed 75 to 40 million years ago during the Laramide Orogeny and is regionally divided by tectonic structural features. The project area lies within the Four Corners Platform portion of the basin, a northeast trending sub-basin or bench in which the strata gently slope before diving steeply into the Central Basin portion of the San Juan Basin. The Four Corners Platform is bounded by the Hogback Monocline on the east, and various small mountain ranges formed by intrusive complexes on the west.

Most of the project area is underlain by relatively flat-lying rock strata with little structural deformation, except for:

- A gentle, low amplitude north-south-trending anticline, the Rattlesnake Anticline, the axis of which crosses the road at about MP 15.5; and,
- An eroded dome, the Beclabito Dome, the northeastern portion of which is traversed by US 64 near the Beclabito Chapter of the Navajo Nation.

Strata along the northeast portion of the dome near MP 4.6 dip to the northeast at approximately 12 degrees. A northeast-trending, high-angle fault is mapped as crossing the highway near MP 4.1 but is difficult to distinguish in the field without investigation beyond the highway ROW. The downthrown block of the fault is to the southeast.

The geology in this area consists of Cenozoic deposits, Cretaceous bedrock, Mancos Shale, Dakota Sandstone, and Triassic and Jurassic Bedrock. Little mineral development is present in areas within and adjacent to the proposed project area. See Section 3.7.4 for more information about mineral extraction activities near the project area.

Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or un-mineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. Paleontological resources include not only fossils themselves, but also the associated rocks or organic matter and the physical characteristics of the associated sedimentary matrix.

No fossils or areas of exposed bedrock and fossiliferous rock were observed during the 2019-2021 biological survey of the proposed project area. Besides an aerial photographic review of the proposed project alignment, a more extensive background paleontological analysis was not conducted for the project area.

3.2 WATER RESOURCES AND WATER QUALITY

Water resources in the project area would be managed and protected according to existing federal, state, and tribal law and policies regarding the use, storage, and disposal of these resources during construction of the project. Surface water use and protection is administered under a number of laws, most notably and relevant to the project, the CWA.

The EPA and the US Army Corps of Engineers (USACE) implement the CWA. The CWA prohibits the discharge of any pollutant from a point source, including stormwater discharges, into Waters of the United States (WOTUS), unless a permit has been obtained from the National Pollutant Discharge Elimination System (NPDES) program (CWA Section 402), or in the case of dredged or fill material, a permit from the USACE per its authority under CWA Section 404. Ground disturbing activities larger than one acre that would discharge stormwater runoff from the construction site into a municipal separate stormwater sewer system or into WOTUS must apply for a permit and comply with the CWA Section 402 NPDES. Typically, a Stormwater Pollution Protection Plan (SWPPP) is required. The New Mexico program is administered through the EPA.

The Navajo Nation Environmental Protection Agency (NNEPA) monitors and protects water quality. This authority includes certifying under Section 401 of the CWA that any such permit issued by the USACE or EPA would not violate relevant water quality standards. For discharges of dredged or fill materials into WOTUS, the USACE regulates under the CWA Section 404.

3.2.1 SURFACE WATER AND SURFACE WATER QUALITY

There are no perennial waters within or adjacent to the project area. The EOP is located approximately 1 mile south of the San Juan River which generally parallels US 64 with increasing distance as it flows west-northwest. Several large ephemeral drainages occur in the project area including Shoe Game Wash, Red Wash, Rattlesnake Wash, and Shiprock Wash. Currently, sheet flow from the highway pavement and surfacing tapers follow existing drainage erosion patterns with runoff flowing into adjacent ditches or adjacent land.

Per the National Hydrography Dataset (NHD) database, eighteen (18) drainages have been mapped in the project corridor (USGS 2021a). Additionally, there are five named drainages depicted on U.S. Geological Survey topographic maps: Shoe Game Wash, Beclabito Wash, Red Wash, Shiprock Wash, and Rattlesnake Wash. There are numerous erosion features that do not connect to a potential WOTUS and do not display a definable bed and bank [Ordinary High Water Mark (OHWM)].

Highway 64 was constructed in the 1920s and the roadway has altered the natural hydrologic drainage patterns within the project area. Existing drainage structures include bridges, concrete box culverts, and single or multiple concrete, steel, or corrugated metal pipe culverts. In addition to the NHD mapped drainages, other ephemeral drainages and erosional features were observed during the 2019-2021 biological surveys. The 2019 survey recorded thirty-six drainages that enter the ROW. The 2021 survey mapped the extension of these drainages where they also overlapped a supplemental survey area. The 2021 survey also mapped an additional 43 ephemeral drains within the supplemental survey area not previously recorded. These drains are predominantly minor run-off features associated with hillslopes and historic drainage patterns along the highway that do not show signs of recent hydrology. Many segments of the highway are elevated 15 to 20 feet or more above the surrounding terrain. Refer to the Biological Evaluation for detailed specifics about the observed ephemeral drainages (WSP 2021).

On June 22, 2020, the Navigable Waters Protection Rule (NWPR) redefined regulatory jurisdiction and eliminated non-navigable, non-relatively permanent waters from USACE jurisdiction with a significant nexus to a traditional navigable water. A 2021 decision by the U.S. District Court for the District of Arizona remanded and vacated the NWPR, which reverts the definition of federal CWA oversight authority back to the 2006 *Rapanos v. United States* case ruling and extends regulatory jurisdiction to include ephemeral waterways as Waters of the U.S. (WOTUS).

Therefore, based on the biological survey results and current interpretation of WOTUS, the ephemeral drainages within the project area would be considered jurisdictional waterways. Thus, the project would be required to receive CWA Section 404 permit authorization through USACE and CWA 401 permit authorization through the NNEPA.

As a result of the January 20, 2021 Executive Order 13990 on "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis", the USACE and EPA are reviewing the current rule. Should any rule changes occur in the future, potential Clean Water Act permitting jurisdiction pertinent to the project would be reviewed by NMDOT. The agencies' permit actions are governed by the rule in effect at the time, which may be subject to change.

Floodplains

The project area has been mapped on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Community Panel No. 35045C0525F, 35045C0550F, 35045C0575F, and 35045C0600F. The project area is in Flood Zone D—areas with possible, but undetermined, flood hazards or where flood hazard analysis has not been completed (FEMA 2021).

Wetlands

A search of the USFWS National Wetlands Inventory (NWI) indicates that there are eighteen (18) riverine drainages within the study corridor (USFWS 2021). The 2019-2021 biological investigation of the proposed project area concluded that there are no wetlands within the corridor.

3.2.1 GROUNDWATER

The project area is located within the Middle San Juan groundwater sub-basin, which contains part of a network of hydraulically interconnected aquifers in basin-fill deposits within the Middle San Juan area of Arizona, Colorado, and New Mexico. The hydrogeologic system in the San Juan Basin flows through aquifer sandstones and some vertical flow through the intercalated shale aquitards.

The project area crosses several formations containing aquifers. On the western termini of the project, near Teec Nos Pos, the project crosses the Morrison Formation, which is a major aquifer in the San Juan Structural Basin. It is a source of uranium and, as of 2010, a medium production flow rate of 30gpm based on review of 83 monitoring wells. The 2016 San Juan Basin Regional Water Plan assessed hydrographs of five monitor wells within the basin and found that water levels are decreasing in some wells and increasing in others; however, the plan notes that declining water levels are not a regional issue in the San Juan Basin (New Mexico Office of the State Engineer 2016).

3.3 AIR QUALITY AND CLIMATE

The Clean Air Act and its amendments require the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment (Public Laws 88-206, 90-148, 91-604, 95-95, and 101-549). Accordingly, the EPA has set NAAQS for six "criteria" pollutants: lead, nitrogen oxide, sulfur dioxide, carbon monoxide, particulate matter less than 10 microns in size and less, particulate matter 2.5 microns in size and less, and ozone (EPA 2021a). The Clean Air Act also allows states to adopt additional ambient air quality standards. The State of New Mexico's ambient air quality standards are more stringent for primary pollutants than the federal NAAQS.

San Juan County is classified by EPA as being in attainment of the NAAQS for all criteria pollutants. The Air Quality Bureau of the New Mexico Environment Department (NMED) performs ambient air quality monitoring in the project area. In recent years, monitoring conducted in San Juan County by the NMED Air Quality Bureau has recorded levels of ozone that have come close to, but not yet exceed, the NAAQS for ozone. The NNEPA

participates in the Four Corners Air Quality Task Force, a local consortium focused on improving air quality in the area. Visibility in the project area can decrease due to blowing sand and dust but is generally good.

The project area is located in a semiarid climate regime typified by dry, windy conditions, and limited rainfall. In Teec Nos Pos, at the western termini of the project, climate data is available from 1962 through 2016. According to Western Regional Climate Center (WRCC) (2021a), the average annual maximum temperature is 68.3 degrees Fahrenheit (°F). The average annual minimum temperature is 42.1°F. The normal annual precipitation for the project area averaged 8 inches, mostly as thunderstorms frequent during the summer months, particularly July through October.

In Shiprock, at the eastern termini of the project, climate data is available from 1926 through 2007 (WRCC 2021b). In Shiprock, the average annual maximum temperature is 69.8 °F. The average annual minimum temperature is 36.4°F. The normal annual precipitation for the project area averaged 7 inches, mostly as thunderstorms frequent during the summer months, particularly August through October.

Climate change is defined as a non-random change in climate that is measured over a period of decades or longer (National Weather Service 2009). Changes may result from natural or human causes. The most useful indicator of climate change is greenhouse gas (GhG) emissions. Human influence has been detected in warming of the atmosphere and the ocean, changes in the global water cycle, reductions in snow and ice, global mean sea level rise, and changes in some climate extremes. It is extremely likely (95%–100% probability) that human influence has been the dominant cause of the observed warming since the mid-twentieth century (Intergovernmental Panel on Climate Change 2013). The primary source of GhG emissions along NMDOT-maintained facilities includes vehicle use and construction activities. Some NMDOT activities may assist in isolating carbon emissions, such as vegetation maintenance to help build organic carbon in soils and absorb carbon dioxide.

3.4 LIVING RESOURCES

This section describes the biological resources within the affected environment, including wildlife, migratory birds, designated wildlife areas, vegetation, noxious weeds, and threatened and endangered species.

3.4.1 WILDLIFE

3.4.1.1 *GENERAL WILDLIFE*

The project area has the potential to provide foraging habitat for a variety of nesting birds, raptors and owls, and small-to-medium-sized mammals such as jackrabbit and coyote. Evidence of wildlife was observed throughout the corridor during the 2019-2021 biological investigation. Wildlife observed during the investigation included evidence of barn swallow nests, bat roosting, kangaroo rat burrow complexes, and Gunnison's prairie dog burrow complexes. A Biological Evaluation was prepared that summarizes the vegetation and wildlife detections (WSP 2021). Mule deer (*Odocoileus hemionus*) tracks and coyote (*Canis latrans*) tracks and scat were also observed in the project area. Bat guano was noted under the Shiprock Wash bridge at MP 14. The bridges have crevices and gaps that may be used for night or day roosting. A more detailed investigation could determine the amount and type of bat use of structures within the project area. Bat guano was more concentrated at the base of the main supports where the Shiprock Wash bridge ties into the channel banks. Wildlife observed in the project area are listed in **Table 7.**

Table 7. Fauna Observed in the Biological Survey Area

Fauna Type	Common Name (Scientific Name)	Indicator	Abundance
Invertebrates Observed	No invertebrate species observed		
Fish Observed	No fish species observed		
Amphibians Observed	No amphibian species observed		
Reptiles Observed	Collared lizard (*Crotaphytus collaris*)	Live animals	Few
	Earless lizard (*Holbrookia maculata*)	Live animals	Few
	Plateau striped whiptail (*Aspidoscelis velox*)	Live animals	Few
	Prairie rattlesnake (*Crotalus viridis*)	Live animals	Few

Fauna Type	Common Name (Scientific Name)	Indicator	Abundance
	Short-horned lizard (*Phrynosoma hernandesi*)	Live animals	Few
	Side-blotched lizard (*Uta stansburiana*)	Live animals	Occasional
	Western whiptail lizard (*Aspidoscelis tigris*)	Live animals	Occasional
Birds Observed	American kestrel (*Falco sparverius*)	Live animals, calls	Few
	Black-throated sparrow (*Amphispiza bilineata*)	Live animals, calls	Common
	Blue-gray gnatcatcher (*Polioptila caerulea*)	Live animals, call	Few
	Broad-tailed hummingbird (*Selasphorus platycercus*)	Calls	Few
	Canyon towhee (*Melozone fusca*)	Live animals, calls	Few
	Chipping sparrow (*Spizella passerine*)	Live animals, calls	Occasional
	Cliff swallow (*Petrochelidon pyrrhonota*)	Nest	Few
	Common raven (*Corvus corax*)	Live animals, calls	Common
	Dark-eyed junco (*Junco hyemalis*)	Live animals, calls	Few
	Eurasian collared dove (*Streptopelia decaocto*)	Live animals, calls	Occasional
	Gambel's quail (*Callipepla gambelii*)	Live animals	Occasional
	Gray vireo (*Vireo vicinior*)	**Calls**	**Few**
	Great-horned owl (*Bubo virginianus*)	Feathers	Few
	Horned lark (*Eremophila alpestris*)	Live animals, calls	Common
	House finch (*Haemorhous mexicanus*)	Live animals, calls	Few
	House sparrow (*Passer domesticus*)	Live animals, calls	Occasional
	Juniper titmouse (*Baeolophus ridgwayi*)	Live animals, calls	Few
	Lark sparrow (*Chondestes grammacus*)	Live animals, calls	Occasional
	Lesser goldfinch (*Spinus psaltria*)	Calls	Few
	Mourning dove (*Zenaida macroura*)	Live animal, calls	Common
	Pinyon jay (*Gymnorhinus cyanocephalus*)	Live animals, calls	Few
	Red-tailed hawk (*Buteo jamaicensis*)	Live animal	Few
	Rock wren (*Salpinctes obsoletus*)	Calls	Few
	Sagebrush sparrow (*Artemisiospiza nevadensis*)	Live animals, calls	Few
	Say's phoebe (*Sayornis saya*)	Live animal, calls	Few
	Spotted towhee (*Pipilo maculatus*)	Live animals, calls	Few
	Turkey vulture (*Cathartes aura*)	Live animal	Common
	Vesper sparrow (*Pooecetes gramineus*)	Live animals, calls	Few
	Western bluebird (*Sialia mexicana*)	Live animals, calls	Occasional
	Western meadowlark (*Sturnella neglecta*)	Live animals, calls	Few
Mammals Observed	Antelope squirrel (*Ammospermophilus sp.*)	Burrow complexes, calls	Common
	Bat (Order *Chiroptera*)	Guano	Few
	Black-tailed jackrabbit (*Lepus californicus*)	Live animal, tracks, scat	Common
	Coyote (*Canis latrans*)	Tracks, scat	Occasional
	Desert cottontail (*Sylvilagus audubonii*)	Live animal, tracks	Common
	Domestic cow (*Bos* sp.)	Live animals	Common
	Domestic dog (*Canis lupus familiaris*)	Live animals	Occasional

Fauna Type	Common Name (Scientific Name)	Indicator	Abundance
	Gunnison's prairie dog (*Cynomys gunnisoni*)	Burrows	Occasional
	Horse (*Equus caballus*)	Live animal	Occasional
	Kangaroo rat (*Dipodomys* sp.)	Burrow complexes	Common
	Mule deer (*Odocoileus hemionus*)	Tracks	Few
	Pocket gopher (*Thomomys* sp.)	Burrows	Occasional
	Rock squirrel (*Otospermophilus variegatus*)	Burrow	Few
	Woodrat (*Neotoma* sp.)	Middens	Few

3.4.1.2 *MIGRATORY BIRDS*

Most bird species are protected by the Migratory Bird Treaty Act (MBTA). The MBTA implements various treaties and conventions between the United States and other countries for the protection of migratory birds. During the 2019-2021 biological investigation the most frequently observed bird species were mourning dove (*Zenaida macroura*), black-throated sparrow (*Amphispiza bilineata*), horned lark (*Eremophila alpestris*) and common raven (*Corvus corax*). Red-tailed hawk (*Buteo jamaicensis*) and turkey vulture (*Cathartes aura*) were observed flying in the project area on multiple days. A gray vireo (*Vireo vicinior*) was heard calling from a wooded area outside the project limits near the BOP; gray vireo is listed as state threatened.

The project area contains wooded areas, shrublands, and grasslands that may provide nesting habitat for a variety of songbird species. Several mammal burrows in the project area may provide nesting opportunities for burrowing owls (*Athene cunicularia*), a Navajo species of concern. No burrowing owls or sign thereof were observed during the field surveys. Cliff swallow (*Petrochelidon pyrrhonota*) nests were observed on the bridge spanning Shoe Game Wash at approximately MP 0.1 and on a concrete culvert at MP 9.4. Two large stick nests were also observed—one directly underneath a bridge at approximately MP 7.7 and one approximately 650 feet west of the roadway fence line. No nests were occupied at the time of the biological investigation.

3.4.1.3 *BALD AND GOLDEN EAGLE*

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are protected under the MBTA and the Bald and Golden Eagle Protection Act. Bald eagles are found typically in association with water and nest and breed from October to July throughout the state. Golden eagles nest primarily on rock ledges or cliffs and occasionally in large trees at elevations ranging from 4,000 to 10,000 feet amsl. Golden eagles are typically found in mountainous regions of open country, prairies, arctic and alpine tundra, open wooded areas, and barren areas. Both bald and golden eagles are carnivores. Bald eagles prey on fish but also on mammals, especially prairie dogs (*Cynomys* sp.). Golden eagles feed mainly on small mammals, as well as invertebrates, carrion, and other wildlife (NMDGF 2021; Stahlecker and Walker 2010).

According to the NNDFW, bald or golden eagles are not known to occur in the project vicinity (Navajo Natural Heritage Program [NNHP] 2019). No bald or golden eagles were observed during the 2019-2021 biological investigation. Bald and golden eagles are unlikely to inhabit the project area due to the absence of trees and cliff ledges for nesting within or adjacent to the ROW corridor. Additionally, there is no nesting substrate for golden eagles in the project area. It is possible that the species may fly through or forage in the project area, but none were observed during the biological investigation.

3.4.1.4 *NAVAJO NATION WILDLIFE AREAS*

The NNDFW is responsible for managing and protecting the fish, wildlife, and plants, and their habitat within the Navajo Nation boundaries. The NNDFW has designated wildlife habitat and sensitive areas and associated Biological Resources Land Use Clearance Policies and Procedures to help direct new development to areas where impacts to wildlife and habitat would be less significant. Six wildlife areas are mapped on the Navajo Nation (Navajo Nation Council 2008), and the project intersects with three wildlife areas.

- From the BOP to approximately MP 4.2, the project area occurs in Area 2, Moderately Sensitive. Moderately Sensitive areas have a high concentration of rare, endangered, sensitive, and game species occurrences or a high potential for these species to occur throughout the landscape.
- Between approximately MP 4.2 and MP 7.2, the project area is located within Area 3, Less Sensitive. Less Sensitive areas contain low or fragmented concentrations of sensitive-status species. These species may occur on the landscape in "islands" of habitat that are well spaced and limited in number.
- From approximately MP 7.2 to MP 16.5, the area south of US 64 is classified as Moderately Sensitive, while north of the highway is classified as Area 1, Highly Sensitive. Highly Sensitive areas contain the best habitat for endangered and rare plant, animal, and game species, and the highest concentration of these species on the Navajo Nation. The project area from MP 16.5 to the EOP is classified as an Area 1 on both sides of the highway.

3.4.2 VEGETATION

The US 64 corridor is primarily situated within the U.S EPA Level IV San Juan/Chaco Tablelands and Mesas ecoregion, which is part of the larger Arizona/New Mexico Plateau region. Vegetative communities within the ecoregion include mixed desert scrub, semi-desert shrub-steppe, and semi-desert grassland (Griffith et al 2006).

During the 2019-2021 biological investigation, three vegetative communities were observed: piñon-juniper woodland, desert grassland, and Great Basin desert scrub (Dick-Peddie 1993). Piñon-juniper woodland occurs in the higher elevations of the project area from the BOP to approximately MP 5. Dominant species include piñon (*Pinus edulis*), Utah juniper (*Juniperus osteosperma*), big sagebrush (*Artemisia tridentata*), sideoats grama (*Bouteloua curtipendula*), and rubber rabbitbrush (*Ericameria nauseosa*). A few montane shrubs occur in the area including sumac (*Rhus trilobata*) and cliffrose (*Purshia mexicana*).

Desert grassland in the project area is characterized by a mixture of primarily alkali sacaton (*Sporobolus airoides*), needle and thread grass (*Hesperostipa comata*), galleta (*Pleuraphis jamesii*), and Indian ricegrass (*Achnatherum hymenoides*). Common shrubs include big sagebrush and broom snakeweed (*Gutierrezia sarothrae*).

Great Basin desert scrub in the project area is highly variable in composition and cover, with large areas of predominantly clay shale soils and minimal vegetation. Common species include shadscale (*Atriplex confertifolia*), broom snakeweed, and fourwing saltbush (*Atriplex canescens*).

Riparian vegetation in the project area is limited to Red Wash and Shiprock Wash where it occurs sparsely in narrow linear strips along the drainages. Tamarisk (non-native/invasive) is the dominant species with occasional Russian olive (non-native/invasive) intermixed with upland species such as rabbitbrush, four-winged saltbush, and greasewood. There are no cottonwood trees, willows, or other obligate riparian species.

Habitat observed within the project area was generally moderately vegetated and disturbed by roadside vehicle activity, mowing, as well as litter. The plant species observed in the project area are summarized in **Table 8Error! Reference source not found.**.

Table 8. Flora Observed in the Biological Survey Area

Common Name (Scientific Name)	Abundance
Grasses	
Alkali sacaton (*Sporobolus airoides*)	Common
Bald brome (*Bromus racemosus*)	Few
Cheatgrass (*Bromus tectorum*)	Common
Common Mediterranean grass (*Schismus barbatus*)	Occasional
Field brome (*Bromus arvensis*)	Occasional
Galleta (*Pleuraphis jamesii*)	Few
Indian ricegrass (*Achnatherum hymenoides*)	Common

Common Name (Scientific Name)	Abundance
Jointed goatgrass (*Aegilops cylindrica*)	Occasional
Needle-and-thread (*Hesperostipa comata*)	Occasional
Sand dropseed (*Sporobolus cryptandrus*)	Common
Sideoats grama (*Bouteloua curtipendula*)	Occasional
Sixweeks fescue (*Vulpia octoflora*)	Common
Smooth brome (*Bromus inermis*)	Occasional
Squirreltail (*Elymus elymoides*)	Few
Forbs	
Alfalfa (*Medicago sativa*)	Few
Bulbous spring-parsley (*Cymopterus bulbosus*)	Common
Burningbush/kochia (*Bassia scoparia*)	Occasional
Canadian horseweed (*Conyza canadensis*)	Occasional
Canaigre (*Rumex hymenosepalus*)	Few
Chicory (*Cichorium intybus*)	Occasional
Clover (*Trifolium sp.*)	Occasional
Common dandelion (*Taraxacum officinale*)	Occasional
Common horehound (*Marrubium vulgare*)	Few
Common mullein (*Verbascum thapsus*)	Few
Crescent milkvetch (*Astragalus amphioxys*)	Few
Curlycup gumweed (*Grindelia squarrosa*)	Occasional
Desert princesplume (*Stanleya pinnata*)	Few
Field bindweed (*Convolvulus arvensis*)	Common
Fendler's parsley (*Cymopterus acaulis fendleri*)	Common
Gooseberryleaf globemallow (*Sphaeralcea grossulariifolia*)	Occasional
Hoary Townsend daisy (*Townsendia incana*)	Occasional
Prickly lettuce (*Lactuca serriola*)	Occasional
Redstem stork's bill (*Erodium cicutarium*)	Common
Rock goldenrod (*Petradoria pumila*)	Few
Rush skeletonplant (*Lygodesmia juncea*)	Few
Russian knapweed (*Acroptilon repens*)	Common
Russian thistle (*Salsola tragus*)	Common
Sacred datura (*Datura wrightii*)	Few
Saltlover (*Halogeton glomeratus*)	Common
Scorpionweed (*Phacelia sp.*)	Occasional

Common Name (Scientific Name)	Abundance
Sego lily (*Calochortus nuttallii*)	Common
Small Fendler's sandmat (*Chamaesyce fendleri*)	Few
Small-leaf globemallow (*Sphaeralcea parvifolia*)	Occasional
Tall tumblemustard (*Sisymbrium altissimum*)	Common
Thistle (*Carduus sp.*)	Few
White sweetclover (*Melilotus officinalis*)	Occasional
Woolly locoweed (*Astragalus mollissimus*)	Occasional
Wright's bird's beak (*Cordylanthus wrightii*)	Common
Yellow salsify (*Tragopogon dubius*)	Occasional
Shrubs	
Big sagebrush (*Artemisia tridentata*)	Common
Broom snakeweed (*Gutierrezia sarothrae*)	Common
Cliffrose (*Purshia mexicana*)	Occasional
Common sagewort (*Artemisia campestris*)	Occasional
Douglas ragwort (*Senecio douglasii*)	Few
Fourwing saltbush (*Atriplex canescens*)	Common
Greasewood (*Sarcobatus vermiculatus*)	Common
Greene's rabbitbrush (*Chrysothamnus greenei*)	Occasional
James' buckwheat (*Eriogonum jamesii*)	Common
Mat saltbush (*Atriplex corrugata*)	Occasional
Mojave brickellbush (*Brickellia oblongifolia*)	Few
Mormon tea (*Ephedra viridis*)	Common
Pale desert-thorn (*Lycium pallidum*)	Occasional
Rubber rabbitbrush (*Ericameria nauseosa*)	Common
Shadscale (*Atriplex confertifolia*)	Common
Sumac (*Rhus trilobata*)	Few
Trees	
One-seed juniper (*Juniperus monosperma*)	Few
Piñon pine (*Pinus edulis*)	Few
Russian olive (*Elaeagnus angustifolia*)	Few
Tamarisk (*Tamarix* spp.)	Occasional
Utah juniper (*Juniperus osteosperma*)	Occasional
Succulents	
Banana yucca (*Yucca baccata*)	Few
Fendler hedgehog (*Echinocereus fendleri*)	Common

Common Name (Scientific Name)	Abundance
Mesa Verde cactus (*Sclerocactus mesae-verde*)	Few
Narrowleaf yucca (*Yucca angustissima*)	Occasional
Prickly pear (*Opuntia polyacantha*)	Common
Spinystar (*Escobaria vivipara*)	Common

3.4.3 NOXIOUS WEEDS

The Federal Noxious Weed Act of 1975 and Plant Protection Act of 2000 establish a federal program for controlling the spread of noxious weeds. The USDA designates plants as noxious weeds to control, eradicate, and prevent their spread (USDA 2021). The New Mexico's Noxious Weed Management Act of 1998 directs the New Mexico Department of Agriculture to develop a noxious weed list and target species for control or eradication of these species (New Mexico Department of Agriculture 2020). In addition, the BIA and Navajo Nation have developed an Integrated Weed Management Plan to prevent, control, reduce, and eliminate the detrimental impacts of weed infestations throughout the reservation. Navajo Nation has also developed a noxious weed list.

Noxious weeds have been identified at various locations throughout the project area, with significant clustering toward the west end. **Table 9** outlines the noxious weeds observed during the 2019-2021 biological investigation and their respective classification with the state and BIA/Navajo Nation.

Table 9: Noxious Weeds Observed

Weed Species	New Mexico Weed Class	Navajo Nation Weed Class
Tamarisk (Saltcedar)	C	A
Musk thistle	C	A
Chicory	B	—
Cocklebur	B	—
Russian knapweed	C	B
Halogeton	B	B
Cheatgrass	C	C
Field brome	—	C
Jointed goatgrass	C	C
Kochia	—	C

3.4.4 THREATENED AND ENDANGERED SPECIES

A complete list of special status species was reviewed and evaluated as a part of this project in the Biological Evaluation (WSP 2021). A data request was submitted to the USFWS through the Information for Planning and Consultation Environmental Conservation Online System (Consultation Tracking Number 02ENNM00-2020-SLI-0229) to obtain a list of federal threatened, endangered, or candidate species—as well as species proposed for listing—for San Juan County, New Mexico (USFWS 2019). An updated species list was obtained in 2021 (USFWS 2021). A data request was also submitted to the Navajo Natural Heritage Program (NNHP) for Navajo species of concern and known occurrences. An official response was received on July 15, 2019 (NNHP 2019). Additionally, a list of State of New Mexico threatened or endangered animal species for San Juan County was compiled from the

New Mexico Department of Game and Fish (NMDGF) Biota Information System of New Mexico (BISON-M) (NMDGF 2021).

A total of forty-two (42) federal, state, or Navajo Nation special status species are identified as having the potential to occur within San Juan County. There is no USFWS designated critical habitat for any federally listed species within the US 64 project corridor. The closest critical habitat is for the federal endangered Colorado pikeminnow and razorback sucker, approximately one mile north of the eastern termini and confined to the San Juan River.

The 2019-2021 biological investigation included an assessment of habitat suitability and potential occurrence of special status species within the US 64 project limits. Additionally, formal presence/absence surveys during the 2021 flowering/fruiting season were conducted to determine the presence of Mesa Verde cactus in the area of suitable habitat within the project area from approximately MP 7 to the EOP.

3.4.4.1 *SPECIAL STATUS SPECIES OBSERVED*

One state threatened bird species, gray vireo, was heard calling from a wooded area outside the project limits near the BOP.

One special status plant species, Mesa Verde cactus, was observed in the project area (**Exhibit 13**). This species is listed as federally threatened, state endangered, and Navajo endangered. A total of 57 Mesa Verde cacti were observed in four separate locations between MP 8.5 and MP 19.9, corresponding with Phases 3 and 5 of the projects. There were 12 Mesa Verde cacti observed within the project limits (ROW and additional ROW), and 45 detections located immediately outside the project area at a distance between 3 and 150 feet beyond the proposed project limits. Mesa Verde cactus detections were associated with shale soils with cobble cover on high points in the landscape. Details of the detections are as follows:

- **MP 8.5 (Phase 3):** Seven Mesa Verde cactus were observed just outside the project area along the top bank of a shale arroyo south of the ROW. The cacti observations were 5 feet outside of the supplemental survey area used in the Biological Evaluation and approximately 50 feet south of the ROW.
- **MP 14.1 (Phase 3)**: Four Mesa Verde cactus were observed inside the project area approximately 30 feet north of the ROW.
- **MP 19.3 (Phase 5)**: Thirty-six Mesa Verde cactus were observed on both sides of the highway—within and immediately adjacent to the ROW. Thirty individuals were observed on the north side of US 64 and another six on the south side. Seven of these observations occurred within the project area and the remaining 29 were located less than 100 feet outside the ROW.
- **MP 19.9 (Phase 5)**: Ten Mesa Verde cactus were observed on both sides of the highway—within and immediately adjacent to the ROW. One Mesa Verde cactus was observed within the ROW south of the highway, and nine were observed just outside the ROW on both sides of the highway.

Exhibit 13. Representative photograph of Mesa Verde cactus in the project area

3.5 CULTURAL RESOURCES

3.5.1 HISTORIC AND ARCHEOLOGICAL RESOURCES

Cultural resources are a broad category that includes sites, objects, or practices of archaeological, historic, cultural, and religious importance. These resources include prehistoric and historic archaeological sites, as well as historic buildings and structures. They refer to both human-made and natural physical features associated with human activity and, in most cases, are finite, unique, fragile, and non-renewable. A historic property is defined as a cultural resource that is included, or eligible for inclusion, in the National Register of Historic Places.

Review of the data available from the Archaeological Records Management Section (ARMS) of the New Mexico Historic Preservation Division (HPD) indicates one previously recorded archaeological site may be within the project area, but the quality of the locational information is uncertain. Generally, the area has been subject to few reported cultural resource surveys. In preparation for the current project, a cultural resource inventory was performed and eight sites were recorded, including the previously discovered one noted above. These sites include four prehistoric occupations, three historic sites, and one multicomponent site which includes both prehistoric and historic use of the same location.

Pursuant to provisions of the NHPA, the US 64 project area and pertinent supplemental areas have been subject to a cultural resources inventory at intervals between 2019 and 2021 (NMCRIS #s 145224, 146252, 147631). The following cultural resources were documented during the course of the surveys: eight sites, 299 isolated occurrences, 6 in-use sites/areas, a historic roadside marker, and 4 descansos (i.e., crosses placed at accident sites, in memoriam). Two of the sites (NM-I-9-28 and NM-I-9-29) are recommended eligible for listing in the National Register of Historic Places. NMDOT/FHWA concurs with both eligibility determinations.

Site NM-I-9-28 is a newly recorded moderate-density lithic scatter with no discernable artifact concentrations, diagnostic artifacts, or cultural features within the U.S. 64 inventory project area at the site. Naturally occurring silicified-wood and smaller quantities of chert and quartzite gravels and cobbles are intermixed with the surface sediments. Based on the artifact assemblage and the presence of naturally outcropping lithic materials, the site likely represents a lithic-procurement locale.

NM-I-9-29 is a newly recorded multicomponent (Late Archaic/Basketmaker II and early to mid-twentieth century Navajo) campsite which is recommended eligible for listing in the NRHP under Criterion D. The investigators have recommended that only the earlier component retains sufficient information potential to support its significance while the historic component is ephemeral and does not retain important information that contributes to our understanding of history. The prehistoric component is on both sides of the roadway, within and outside of the existing ROW. The areas immediately adjacent to the current pavement are known to be disturbed, and do not retain sufficient integrity to convey the site's important information which contributes to our understanding of prehistory.

3.5.2 CULTURAL, SACRED AND TRADITIONAL CULTURAL PROPERTIES

Cultural resources also refer to places that are areas of traditional religious and cultural importance. These places, which may include natural landforms, large landscapes, or small, discrete use areas. These places may be associated with sacred beings or ancestors recorded and passed down through oral histories or they may be places where community members came in the past and still come in the present, utilizing the area as a continuation of traditions, thereby maintaining community beliefs and practices. A Traditional Cultural Property (TCP) is considered a formal designation that is applied to areas central to a traditional community's cultural practice and spiritual beliefs. These important places are directly tied to a community's heritage and thereby help define and maintain cultural identity.

During ethnographic interviews supporting the cultural resources investigation, four TCPs were identified within proximity to the project area. These include two clay/mineral gathering areas, a ceremonial gathering area, and a mature juniper tree that serves as a "giving tree" to anonymously provide or receive gifts for those in need.

3.6 SOCIOECONOMIC CONDITIONS

Socioeconomic conditions include employment and income, demographic trends, lifestyle and cultural values, community infrastructure, and environmental justice. This analysis focuses on the communities of Beclabito, Gadii'ahi/To'Koi, and Shiprock, and the Navajo Nation lands.

3.6.1 EMPLOYMENT AND INCOME

There are two main sources of revenue within the Navajo Nation: internal and external. Internal sources of revenue include mining and taxes. Mining is the largest internal source of revenue for the nation. External sources of revenue include Federal, State, and private funding, and grant funding. Funding from these sources is used to promote and create business and employment opportunities in the commercial, industrial, tourism and other private sectors for the Navajo individuals residing on Navajo land (Navajo Business 2006).

In addition to those sources of funding, the Navajo Nation also focuses largely on tourism to increase funding to support Navajo Residents. The Navajo Nation Division of Economic Development largely focuses their growth efforts on recreational opportunities for tourists, including hiking tours, horseback tours, fishing, culture tours, art, history, museums, casinos, campgrounds, and others (NN DED 2021).

In San Juan County, the largest industries by employment include agriculture (4,254 persons) and construction (4,231 persons), and the most common occupations include management, business, science and arts occupations (14,288 persons), sales and office occupations (11,235 persons), service operations (9,509 persons), and production, transportation, and material moving occupations (6,544 persons) (US Census Bureau 2019). There are no major employment centers within or surrounding the study area. However, there are several employment centers within the Shiprock community to the east, outside of the project area.

As shown in **Table 10**, the average per capita income in Beclabito ($15,295), Gadii'ahi/To'Koi ($14,651), and Shiprock ($14,755) is significantly lower than that of San Juan County ($22,665) and New Mexico ($25,257) (US Census Bureau 2017). Approximately 31.6% and 39.2% of the populations of Shiprock and Gadii'ahi/To'Koi, respectively, are considered to be living below the poverty level, higher than the percentage of the population living below the poverty level in San Juan County and the state as a whole (20.8% and 20.6%, respectively). Beclabito has a lower percentage of residents living below the poverty level at 17.9%

Table 10: Demographics for the Project Area, San Juan County, and New Mexico

Characteristics	Beclabito	Gadii'ahi/ To'Koi	Shiprock	San Juan County	New Mexico
Population					
Total Population	324	528	8,295	128,221	2,084,828
Median Age	38.3	35.5	28.8	34.6	—
Percent under 18	24.6%	22.5%	32.7%	27.5%	—
Percent over 64	10.1%	11.6%	8.0%	13.1%	—
Percentage of Population Growth					
2010 to 2017 % Change	+3.8%	-4.0%	-7.5%	+0.5%	+3.5%
Race and Ethnicity (Percent)*					
White	1.9%	1.4%	1.5%	54.9%	74.2%
Native American	96.5%	96.6%	96.2%	37.2%	9.5%

Characteristics	Beclabito	Gadii'ahi/ To'Koi	Shiprock	San Juan County	New Mexico
Black	0.3%	0.0%	0.1%	0.6%	2.0%
Asian	0%	0.0%	0.2%	0.4%	1.4%
Hawaiian/Pacific Islander	0%	0.0%	0%	0%	0.1%
Other Race	0%	0.0%	0.1%	4.3%	9.5%
Two or more races	1.3%	0.5%	1.9%	2.4%	3.3%
Hispanic Ethnicity	0%	1.6%	1.6%	18.4%	48.2%
Income					
Percentage of Individuals with Income below the Poverty Level	17.9%	39.2%	31.6%	20.8%	20.6%
Per Capita Income	$15,295	$14,651	$14,755	$22,665	$25,257
Employed*	107	169	2,965	49,924	888,646
Unemployed*	30	23	616	4,755	63,458
Language Spoken at Home (percent)					
English	26.9%	27.9%	41.6%	68.4%	65%
Spanish	0%	0.4%	1.1%	9.9%	27.7%
Other Indo-European Languages	1.6%	0.0%	0.5%	0.3%	1.2%
Asian and Pacific Islander Languages	0%	0.0%	1.0%	0.3%	1.0%
Other Languages	71.5%	71.7%	55.9%	21.0%	5.2%
Access to Internet					
Households with a computer (percent)	38.9%	49.2%	53.6%	74.6%	81.7%
Households with broadband internet (percent)	17.8%	26.2%	29.7%	58.4%	69.9%

Source: 2017 American Community Survey (ACS) (US Census Bureau) 2017a - e
**Source: 2019 ACS 5-year Estimates Data Profiles (US Census Bureau) 2019a, b*

3.6.2 DEMOGRAPHIC TRENDS

Data from the US Census Bureau were reviewed to characterize economic and demographic information about the community. As shown in the **Table 10**, the Beclabito (96.5%), Gadii'ahi/To'Koi (96.6%), and Shiprock (96.2%) communities as well as San Juan County (37.2%) have a higher percentage of Native Americans when compared to the statewide average (9.5%). Similarly, the populations of Beclabito (71.5%), Gadii'ahi/To'Koi (71.7%), and Shiprock (55.9%) have a higher percentage of people who speak non-English languages (i.e., Diné) when compared to the statewide average (21.0%). From 2010 to 2018, Beclabito saw an increase in population (3.8%), while Shiprock and Gadii'ahi/To'Koi saw decreases in population (-7.5% and -4.0%, respectively). San Juan County saw a slight increase (3.5%), and New Mexico saw an increase (3.5%) (US Census Bureau 2017).

3.6.3 LIFESTYLE AND CULTURAL VALUES (RURAL, URBAN)

The Navajo Nation is the largest federally recognized tribe in the United States and is the largest reservation in the country, covering lands in Utah, Arizona, and New Mexico. The reservation is over 27,000 square miles. The term *Navajo* comes from the Spanish missionaries who refereed to the Pueblo Indians as Navajo, although many refer to themselves as the *Diné,* meaning "the people" (Haile 1949).

Today, many of the Navajo people continue to speak the native language, Diné. Navajo values are very strongly tied to family life and events that surround their lifestyle, such as games and traditions surrounding their attachment to their land. Navajo life is rich in ceremonies and rituals. Some of the most important and lengthy (9-day) ceremonies are centered around the treatment of illness, both mental and physical. Other ceremonies are shorter (4-days, 2-days, 1-day) and are centered around other events such as building of the hogán, planting crops, etc. Art is also highly important to the Navajo and often depicts cultural myths. There are currently six cultural sites within the project corridor that are still in use.

3.6.4 COMMUNITY INFRASTRUCTURE

US 64 is a critical west-east regional transportation corridor providing connectivity to local communities, schools, businesses, and recreational opportunities in the Four Corners Region, as well as connectivity to freight corridors that connect the region beyond the state border. The communities of Beclabito, Shiprock, and Teec Nos Pos are the primary residential centers within the corridor. Community facilities with nearby connection to or potential to be affected by the study include several schools, four Navajo Nation Chapter Houses (including the Gadii'ahi/To'Koi Chapter House), emergency services providers, and local businesses.

3.6.5 ENVIRONMENTAL JUSTICE

Environmental justice refers to the "fair treatment and meaningful involvement of all peoples…with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (EPA 2021b). Environmental justice has been most notably adopted at the federal level by the executive branch, specifically in Executive Order 12898, 59 Federal Register 7629, which directs federal agencies to achieve environmental justice as part of their mission, by addressing and identifying disproportionally high adverse human health or environmental effects of its activities and policies on vulnerable populations, such as low-income communities and recognized minority groups.

Accordingly, as required by the aforementioned Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," this EA must address environmental justice concerns, including disproportionately high and adverse human health or environmental effects to minority and/or low-income populations. According to the U.S. Census Bureau, tribal populations are considered minority populations. As described above, the percentage of individuals living below the poverty level in Beclabito (17.9%), Gadii'ahi/To'Koi (39.2%), and Shiprock (31.6%) does not meet the Council on Environmental Quality (CEQ) definition of a low-income population (50% or higher designated as below the poverty line).

3.7 RESOURCE USE PATTERNS

3.7.1 HUNTING, FISHING, GATHERING

The Navajo Nation supports hunting and fishing within reservation boundaries, however NMDOT does not encourage hunting and fishing within its highway ROWs. No primary hunting or fishing locations exist within the project corridor, however US 64 acts as a primary west-east transportation corridor and is used by recreationists for travel. During the ethnographic interviews supporting the overall cultural resources investigation, three traditional gathering areas were identified within proximity to the project area.

3.7.2 AGRICULTURE

One of the major occupations within the Navajo Nation is agriculture. As such, grazing lands and farming are extremely important within the community. NMDOT does not encourage agricultural production within its highway ROWs.

A search of the NRCS Web Soils Survey database indicates that approximately 4.4% of the soils present in the project area are designated as farmland of statewide importance (NRCS 2021), however, none of the soils within or adjacent to the project area are being used for agricultural production. A scoping letter has been sent to the NRCS State Soil Conservationist (on December 11, 2019) for input regarding potential farmland soils concerns within the corridor. Most of the soils within the project area are designated non-irrigation land capability class 7, which means very severe limitations make them unsuitable for cultivation.

3.7.3 MINERAL EXTRACTION

Mineral extraction in San Juan County consists of gravel mining, coal mining, and historic uranium mines. The nearest historic uranium mine, the Rocky Flats Number 2 Mine/Eastside Mines, is located approximately three miles south of MP 3.0 (minedat.org 2021). No mineral extraction sites are located within the project area.

3.7.4 RECREATION

Within Navajo Nation lands, several tribal parks and campgrounds are managed by the Navajo Department of Parks and Recreation. This segment of US 64 provides critical access to various recreation destinations in the Four Corners region, such as the Four Corners monument, the Chuska Mountains, Chaco Culture National Historic Park, Mesa Verde, Grand Canyon, and Bisti Badlands. No designated recreation zones or parks are located immediately within or adjacent to the project boundaries.

3.7.5 TRANSPORTATION NETWORKS

US 64 begins in northeast Arizona just southwest of the Four Corners in Teec Nos Pos and continues east across northern New Mexico, Oklahoma, Arkansas, Tennessee, and terminating in Nags Head, North Carolina. Within New Mexico, US 64 begins at the Arizona border near Beclabito and passes through the communities of Shiprock, Farmington, Chama, Taos, Raton, and Clayton before exiting the state. US 64 is on the National Highway System.

Proposed improvements for this project involve the rural, two-lane highway segment of US 64 from MP 0.0 at the Arizona border to the west side of Shiprock at MP 20.8 (total length of 20.8 miles). The highway passes through the community of Beclabito and has four major bridge crossings (Shoe Game Wash, Red Wash, Shiprock Wash, and Rattlesnake Wash).

The existing highway consists of two 12-foot travel lanes with shoulders of varying width. The posted speed limit is 55 mph with a reduced posted speed of 45 mph from MP 3.0 to MP 3.7 in Beclabito and starting at MP 20.6 at the easterly limits of the project entering Shiprock. No climbing lanes or passing lanes exist within the project limits. No state highways or county roads intersect with US 64 within the project area but there are several local BIA road intersections. These roads provide access to the Navajo Nation lands in the proximity of the project.

The entire project corridor is located within the Navajo Nation. Chapter House communities directly affected by the project include Beclabito, Gadii'ahi/To'Koi, and Shiprock.

- Beclabito is a census-designated place on the Navajo Nation. The Beclabito Chapter House is located here and serves Navajo Nation residents in the area. It is also part of the Trails of the Ancients Byway, a New Mexico Scenic Byway to prehistoric archaeological and geological sites of northwestern New Mexico. The main formations in the area include the Beclabito Dome with its colorful red rocks of Entrada Sandstone and the Carrizo Mountains.
- Gadii'ahi/To'Koi is a census-designated place on the Navajo Nation. The community is located 11 miles northwest of Shiprock on Indian Service Route 57. The Gadii'ahi/To'Koi Chapter House serves Navajo

Nation residents in the area. Indian Service Route 57 intersects with US 64 west of Shiprock, and US 64 is the primary arterial roadway providing access to the community.

- Shiprock is a census-designated place on the Navajo Nation that lies at the intersection of US 64 and US 491. The Shiprock Chapter House is located here and serves Navajo Nation residents in the area. It is a key road junction for truck traffic and tourists and is named after the nearby Shiprock rock formation.

Primary users of US 64 include residents and commuters from the surrounding rural area, service providers for the Navajo Nation, and tourists visiting the Four Corners, Mesa Verde, Shiprock and the Grand Canyon. Heavy commercial vehicle travel is considered low along this segment of US 64 as trucks primarily use US 491 north and south of Shiprock.

3.7.6 LAND USE PLANS

Land use adjacent to the US 64 highway corridor consists of livestock grazing and sparse residential and business development outside the highway ROW. Lands adjacent to the corridor are Navajo Nation trust lands. There are no official land use plans for the project corridor or surrounding area. Transportation facilities within the US 64 ROW are managed under NMDOT's statewide operations and maintenance planning, along with all highways in the state system.

3.8 OTHER VALUES

3.8.1 WILDERNESS

No wilderness areas occur within or adjacent to the project area.

3.8.2 NOISE AND LIGHT

The proposed project area is located in a predominantly rural setting. With the exception of US 64 itself, levels of ambient noise in the project corridor are relatively low and there are few artificial sources of light. The primary source of human-made ambient noise and light emissions are due to vehicle and truck traffic along US 64.

Lighting would consist of spotlighting near the community of Beclabito at four intersections and one pedestrian crossing based on stakeholder input. Nearby sensitive receptors include residences, a gas station, and the Beclabito Chapter House.

3.8.3 VISUAL

The vegetation surrounding the project area is comprised of piñon-juniper woodland, desert grassland, and Great Basin desert scrub. Land use in the project area is the US 64 highway corridor. Surrounding land use is generally rangeland with scattered residential homes. Much of the area is rural with a few homesites near the highway. Most development is clustered at Beclabito (MP 2.8) and near the EOP located just outside of Shiprock. Distribution lines for electricity, water, sewer, and natural gas, as well as dirt connector roads, parallel and/or intersect with US 64. Views typical of the landscape from the roadway include plateaus and mixed-desert habitat with distant hogbacks and mountains.

3.8.4 PUBLIC HEALTH AND SAFETY

The existing US 64 highway provides connection to public health facilities and providers in the Shiprock area. This two-lane roadway provides an adequate public-use travel surface but lacks adequate shoulder length to safely allow vehicles to pull off the road.

A preliminary investigation using the EPA EnviroMapper (EPA 2021b) database shows no active hazardous material locations within 200 feet of the project corridor currently reporting hazardous waste to the EPA. There are no Superfund sites located within the project area or vicinity (EPA 2021c).

3.8.5 INDIAN TRUST ASSETS

The entire project length of 20.8 miles is located within Navajo Nation land, which is an Indian Trust Asset. Some examples of Indian Trust Assets include land, minerals, water rights, hunting and fishing rights, titles, and money. Currently, NMDOT has easement agreements with Navajo Nation for the US 64 highway ROW.

3.8.6 SECTION 4(F) PROPERTIES

Section 4(f) of the Department of Transportation Act restricts transportation projects from converting or using lands for publicly owned parks, recreation areas, wildlife/wildfowl refuges, and/or significant historic properties unless there is no other feasible and prudent alternative. A significant historic property is defined as a cultural resource that is included, or eligible for inclusion, in the National Register of Historic Places.

Currently, there are no publicly owned parks, recreation areas, or wildlife/wildfowl refuges within or adjacent to the project. Two cultural resource sites (NM-I-9-28 and NM-I-9-29), recommended eligible for listing in the National Register of Historic Places, would qualify as Section 4(f) properties. The Navajo THPO has concurred with a *no adverse impact* determination to the two sites due to the mitigated use of temporary fencing during construction.

4 ENVIRONMENTAL IMPACTS

This section describes and analyzes the potential environmental impacts, or effects, that are reasonably anticipated to occur as a result of implementing the Proposed Action. Analysis of impacts from the No Action Alternative is also provided to present a baseline from which to compare the impacts from the Proposed Action. Under the No Action Alternative, the baseline conditions presented in the affected environment for each resource would continue.

Agencies are expected to fully examine all potential impacts by considering the direct, indirect, and cumulative effects of the Proposed Action on the environment, along with any connected and cumulative actions.

4.1 LAND RESOURCES

4.1.1 TOPOGRAPHY AND SOILS

No Action Alternative

Under the No Action Alternative, there would be no new surface disturbance and no impact to topography and soils because the BIA would not grant new ROW easements to the applicant, and no construction would occur. Existing problems with soil erosion and sedimentation related to highway-disruption of natural drainage patterns would persist, as they would not be addressed by the improvements in the proposed action.

Proposed Action

Under the Proposed Action, the project would result in disturbance of up to 352.1 acres of moderately vegetated ground surface.

Short-term, temporary, direct impacts would occur to soils in the project area from the clearing and potential grading of up to 352.1 acres under the Proposed Action. Direct impacts to soils include increased erosion from the removal of vegetative cover, potential contamination from accidental spills or leaks, and soil compaction from heavy equipment resulting in the loss of soil structure and porosity. These impacts can lead to increased stormwater runoff and consequently increased erosion.

Grading potentially would cause indirect impacts to soil resources, including a change in soil productivity due to mixing of topsoil with subsoil. Another indirect impact is the colonization of noxious weeds on disturbed soils. This can occur anywhere soil is disturbed. Weeds can outcompete native species due to their ability to thrive under conditions with low soil moisture content, poor nutrient availability, and coarse soil textures. In turn, weed cover as opposed to native vegetation leads to soils with greater susceptibility to wind erosion.

Reclamation of disturbed areas in the ROW not overlain with pavement would restore vegetative cover over most of the project area, and use of BMPs for erosion control would reduce soil loss during stormwater events.

Improved drainage features would accommodate the proposed roadway widening and address existing downstream scour, reducing the peak volume and velocity of stormwater runoff and ultimately reducing the amount of erosion following downpour events. Thus, the Proposed Action would have a long-term benefit on topography and soils by reducing erosion. Additionally, replacing bridges 5865, 5864, 5863, and 5862 and 22 identified culverts would address negative effects from scour and corrosive soils at or downstream of the structures. Bridge replacement, and other BMPs or drainage controls, such as silt fences, check dams, hay bales, mulch socks, and gravel/compost amendment surface treatments would result in positive long-term impacts to soils and surface water quality.

4.1.2 GEOLOGY, MINERAL, AND PALEONTOLOGICAL RESOURCES

No Action Alternative

Under the No Action Alternative, there would be no new surface disturbance and no impact to surficial geology, minerals, or paleontological resources because ROW easements would not be granted, and no construction would occur.

Proposed Action

Under the Proposed Action, the project would result in disturbance of up to approximately 352.1 acres of moderately vegetated ground surface. There is no known mineral development in the immediate vicinity of the proposed project, and no impact on mineral resources would occur as a result of the Proposed Action.

Direct impacts to surficial geology could occur during construction. The potential for subsurface paleontological resources is low, and impacts to paleontological resources are not anticipated as a result of the project.

4.2 WATER RESOURCES AND WATER QUALITY

4.2.1 SURFACE WATER

No Action Alternative

Under the No Action Alternative, there would be no new surface disturbance, and current surface water resource conditions within the project area would remain unchanged because the ROW easements would not be granted, and no construction would occur. Existing problems of drainage pattern disruptions and sedimentation would persist, as they would not be addressed by improvements in the proposed action.

Proposed Action

Under the Proposed Action, removal and reconstruction of four bridges may affect channel and bank morphology along ephemeral streams. There is the potential for increased sedimentation downstream of the structures during precipitation events. Impacts from increased sediment transfer would be of short duration (during construction) and low intensity. There would also be the potential for accidental spills of industrial materials or petrochemicals during construction. However, replacing bridges 5865, 5864, 5863, and 5862 would address negative effects from scour and corrosive soils at or downstream of the structures.

Bridges 5864 and 5862 are currently on the NMDOT's scour critical bridge list. Under Item 113 of FHWA's *Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges*, bridges 5864 and 5862 have been assessed a rating of 3, deeming these bridges to be scour critical. The suggested treatment, taking into consideration the fact that both bridges are past their design lives, is total replacement. Bridge replacement, and other BMPs or drainage controls, would result in positive long-term impacts to soils and surface water quality. New bridges will have less scour concern and reduce sediment transfer, reducing impacts to water quality over the long-term.

Improving the storm water and drainage in the project area would result in positive long-term impacts to waterways in the project area. Based on the current interpretation by USACE and EPA, the 18 mapped ephemeral drainages within the project area meet the current criteria of WOTUS. Since these drainages fall under jurisdictional oversight by the USACE, the project would be required to receive CWA 404/401 permit authorization. The USACE and EPA are reviewing the current rule, and should it be changed in the future, potential Clean Water Act permitting jurisdiction pertinent to the project would be reviewed by NMDOT. The agencies' permit actions are governed by the rule in effect at the time, which may be subject to change.

The project would disturb more than 1 acre (0.4 hectare): therefore, a SWPPP would be prepared in accordance with the provisions of the NPDES Construction General Permit issued by the EPA. Appropriate BMPs and storm water controls (as outlined in the SWPPP) would be implemented during construction to minimize or avoid impacts downstream of the proposed project.

4.2.1 GROUNDWATER

No Action Alternative

Under the No Action Alternative, current groundwater resource conditions within the project area would remain unchanged. The ROW easements would not be granted, and no construction would occur.

Proposed Action

Under the Proposed Action, direct contact with groundwater during construction is unlikely due to the nominal depth of excavation compared to the depth of groundwater. Although no well data are available along US 64 in the project area, the next closest well, Station 364536108271202 near Fruitland, New Mexico, shows a well depth of 12.7 feet (USGS 2021b). There would be some potential risk of contamination to groundwater and/or soil through improper disposal of waste, leaks from equipment, or accidental releases. Use of BMPs during construction, as outlined in the SWPPP, would reduce the potential impacts to groundwater resources. There would be no direct impacts to groundwater quality as a result of the project.

4.3 AIR QUALITY AND CLIMATE

No Action Alternative

Under the No Action Alternative, current air quality and climate conditions within the project area would remain unchanged because the ROW easements would not be granted, and no construction would occur.

Proposed Action

Under the Proposed Action, a dismissible amount of minor and temporary increase in exhaust emissions, particulate matter, and fugitive dust from large equipment and earthwork would occur. However, this would be limited to the duration of construction and would not create any measurable change to air quality compared to the existing roadway traffic in the project corridor. The Proposed Action would not contribute to an increase in GhG emissions because the project would not increase roadway capacity or contribute to an increase in traffic congestion or idling of vehicles. Air quality is not expected to be affected by the project, and no air quality investigations are planned.

4.4 LIVING RESOURCES

4.4.1 WILDLIFE

No Action Alternative

Under the No Action Alternative, there would be no impacts to wildlife, migratory birds, or bald and golden eagles. The ROW easements would not be granted, and no construction would occur.

Proposed Action

General Wildlife

Under the Proposed Action, wildlife within the proposed project would be affected by the temporary removal and/or modification of up to 352.1 acres of vegetation.

Some burrowing animals (e.g., fox, prairie dogs, gophers, kangaroo rats) may be inadvertently killed or injured during vegetation modification and construction. However, adults would likely disperse to adjacent habitat for the duration of construction. Fox burrows between mile posts 8 and 9 will be preserved to the maximum extent possible by using a retaining wall. Other measure, such as fencing of the highway will allow for passage of wildlife by having a top and a bottom wire that is smooth. The potential for direct impacts to individuals would be greater between March and May, during mammal breeding and reproduction when young may not be able to vacate the burrow. Following construction, prairie dogs and other non-listed mammals would likely return to the area.

Bat guano was noted underneath the Shiprock Wash bridge at MP 14. Non-listed bat species may be roosting under this bridge or other available bridge and culvert structures in the project area. If bridge and culvert structures are replaced when bats are present, there could be impacts to individual bats, including mortality and injury. Replacement of bridges or culverts would result in temporary habitat loss. Some long-term habitat loss could occur since aging structures contain more natural cracks and crevices. Standard bridge designs often have crevices formed by expansion joints or seams along segmented pieces. Installation of bat exclusion devices prior to demolition of structures would lessen potential impacts to bats. Moreover, installation of bat boxes underneath new bridges could offset habitat loss.

Heavy equipment use is expected to contribute the highest noise levels, exhaust fumes, and fugitive dust within the proposed project area. These impacts would be short term and localized. The proposed project would not contribute to overall habitat fragmentation, because it is located within the existing road corridor and subject to previous disturbance. Construction activities may cause wildlife to avoid the project area during those activities. Traffic levels on US 64 are not expected to increase after construction is completed; therefore, no long-term direct effects to wildlife are expected from the proposed project.

Migratory Birds

Vegetation in the ROW outside the driving surface may provide habitat to some nesting migratory birds. Impacts to migratory birds would be greater during the migratory bird nesting season, generally between April 1 and August 30. In general, no major short- or long-term effects to migratory birds are anticipated from the Proposed Action. Construction during the migratory bird breeding season would be preceded by a nesting bird survey within the project area a minimum of two weeks prior to commencement of construction activities. Impacts to migratory birds may include short-term avoidance of the project area due to increases in human activity or noise. These impacts would be limited to the duration of construction activities.

Cliff swallow mud nests were observed in two culverts at approximately MP 0.1 and MP 9.4. Work on these and other drainage structures during nesting season could result in nest destruction, abandonment, or reduced reproductive success.

NMDOT/FHWA will require the construction contractor to comply with the MBTA at all times. Following receipt of Notice-to-Proceed, the contractor will be responsible for maintaining nest-free conditions in construction-impacted areas, and in particular bridge structures, from March 15 through September 15. As an alternative to ongoing removal of unoccupied nests, the contractor may propose to prevent migratory birds from nesting by implementing techniques such as netting. NMDOT/FHWA will require the contractor to show evidence of due diligence in maintaining nest-free conditions. If a nest becomes occupied (containing eggs and/or chicks) in a construction area and nest avoidance is not feasible, related construction activities would be suspended at the contractor's expense while the process for nest relocation or removal is coordinated between the NMDOT and the USFWS. If the USFWS denies the relocation or removal permit request, project suspension shall continue until after all young have left the nest.

Bald and Golden Eagles

Although golden eagles could forage within the proposed project area during fall migration, activities in the proposed project area would not be expected to impact bald or golden eagles. Because the proposed project area lacks suitable nesting habitat, the proposed project is not anticipated to cause take of individual bald or golden eagles, their nests, or eggs. Adult eagles would not likely be directly harmed by the construction of the proposed project because of their mobility and ability to avoid areas of human activity.

4.4.2 VEGETATION

No Action Alternative

Under the No Action Alternative, there would be no impacts to vegetation. The ROW easements would not be granted, and no construction would occur.

Proposed Action

Under the Proposed Action, direct impacts to vegetation could include the temporary removal of up to 352.1 acres of vegetation and habitat, resulting in short- to long-term impacts to vegetation, including removal of piñon and juniper trees between the BOP and approximately MP 4.5.

Indirect, short-term impacts to vegetation could occur as a result of deposition of fugitive dust generated during construction, which may affect plant productivity (Eveling and Bataille 1984). Localized impacts on plant populations and communities could also occur if seed production in some plant species is reduced. BMPs to control fugitive dust, which would also minimize impacts to vegetation, are incorporated into the Proposed Action.

In the long-term, impacts to vegetation are expected to be minimal because all disturbed soils within the project limits will be revegetated using a seed mixture of native plant species that naturally occur within the ecoregion.

4.4.3 NOXIOUS WEEDS

No Action Alternative

Under the No Action Alternative, there would be no new surface disturbance within the project area to encourage the introduction and/or spread of noxious weeds. Current noxious weed management would continue.

Proposed Action

Under the Proposed Action, impacts associated with the project would include temporary soil disturbance and vegetation removal of up to 352.1 acres. There is long-term potential for noxious weeds to spread or new noxious weed species to establish in disturbed areas associated with construction activities. Any disturbed areas not overlain with pavement would be reseeded with a weed-free, native seed mix following the completion of construction activities in accordance with standard NMDOT Section 632 revegetation specifications.

During the biological investigation, 13 different noxious weed species were observed within the ROW. Noxious weed seeds could be carried to and from the project area by construction equipment and transport vehicles. Design features and BMPs would prevent the spread and propagation of noxious weed species. Examples of BMPs that may be used to reduce impacts due to noxious weeds include washing equipment before entering and leaving the project area and treating and removing New Mexico Class B and Navajo Nation Category A and B noxious weeds before project commencement.

Following construction of the Proposed Action, any resulting noxious weeds would be detected, monitored, and treated per NMDOT's newly formed statewide Integrated Roadside Vegetation Management Program.

4.4.4 THREATENED AND ENDANGERED SPECIES

No Action Alternative

Under the No Action Alternative, there would be no new surface disturbance within the project area and no impacts to threatened and endangered species.

Proposed Action

The Proposed Action may result in impacts to threatened and endangered species. Suitable habitat for Mesa Verde cactus is present within the project area, and 57 Mesa Verde cacti were identified during the 2021 presence/absence species-specific survey (WSP 2021). The Mesa Verde cacti were found in four separate locations between MP 8.5 and MP 19.9 with 12 Mesa Verde cacti observed within the project limits (ROW and additional ROW), and 45 detections located immediately outside the project area at a distance between 3 and 150 feet beyond the proposed project limits. Of the 12 Mesa Verde cacti observed within the project limits, only 2 will be impacted.

For locations where the 10 Mesa Verde cacti have been identified in the project area, but not within the ROW, the cacti will not be relocated. Instead, because of the low rates of survival of relocated Mesa Verde Cacti, mitigation efforts will be made. Mitigation will include relocation, avoidance buffers, retaining wall, a biological monitor during construction that will mark individual plants for avoidance using high visibility flagging and temporary fencing. Monitors will also prevent machinery from moving into flagged/fenced areas. To avoid pollination disruption work will occur outside of the Mesa Verde cactus reproductive season of late April to mid-June. A 1-foot buffer zone will be used to avoid disturbance. NMDOT/FHWA carried out Section 7 consultation requirements with the NNHP and USFWS to develop mitigation measures to offset impacts to this species. There is no Mesa Verde cactus within Phase 1 of the project, as currently proposed. As pre-construction surveys are repeated additional individuals may be found. If the above mitigation efforts do not protect the individual the individual may be transplanted. In the case of 10 or more individuals need to be transplanted additional reporting and monitoring would be required. Five years following transplant of individuals yearly monitoring reporting to the Navajo Nation heritage biologist and USFWS would consist of reporting on transplanted individuals survival, reproductive ability, and impacts.

Additionally, a single gray vireo was heard calling from outside the project area during the 2019-2021 biological investigation. There is ample wooded habitat available for this species outside the project area. Potential effects from the proposed project could include temporary disturbance during construction.

No other impacts to threatened or endangered species are anticipated to occur as a result of the Proposed Action.

4.5 CULTURAL RESOURCES

4.5.1 HISTORIC AND ARCHEOLOGICAL RESOURCES

No Action Alternative

The No Action Alternative would not impact historic and archaeological resources. The ROW easements would not be granted, and no construction would occur.

Proposed Action

Under the Proposed Action, two sites recommended eligible for listing in the National Register of Historic Places (NM-I-9-28 and NM-I-9-29) would be impacted by the proposed undertaking.

Site NM-l-9-28 likely represents a lithic-procurement locale. The proposed project will involve introduction of fill along this portion of the existing alignment to improve the vertical curve of the roadway. This fill will be placed up to, but not within, the site boundary of NM-l-9-28. To avoid an *adverse effect* to this site, temporary exclusionary fencing will be placed to prevent equipment traversing or parking on the site.

Site NM-1-9-29 is located on both sides of the US 64, within and outside of the existing ROW. On the east side of the roadway, the proposed cut slope (approximately 13 feet wide) will be confined to the disturbed area within the site. To avoid an *adverse effect* to this portion of the site, temporary exclusionary fencing will be placed to prevent equipment traversing or parking on site. On the west side of the roadway, the necessary cut slope (up to 30 feet wide) will extend beyond the previously disturbed areas within the site. To avoid an adverse effect to this portion of the site, a low retaining wall will be constructed at the edge of the previously disturbed area, and the uphill side of this wall will be backfilled with sterile sediment.

By implementing these efforts and proposed additional design features, the Proposed Action will have *no adverse effect* to NM-l-9-28 and NM-l-9-29.

4.5.2 CULTURAL, SACRED, AND TRADITIONAL CULTURAL PROPERTIES

No Action Alternative

The No Action Alternative would not impact cultural, sacred, and traditional cultural properties. The ROW easements would not be granted, and no construction would occur.

Proposed Action

Four TCPs have been documented within the project area: two clay/mineral gathering areas, a ceremonial gathering area, and a mature juniper tree that serves as a "giving tree." Under the Proposed Action, access to three of these sites, two clay/mineral gathering areas and a ceremonial gather area, could temporarily be restricted within the ROW during construction. NMDOT/FHWA will add an environmental commitment to the project plans that all existing fence openings and in-use parking areas will be maintained through the new design and will be kept open during construction.

The fourth TCP ("giving tree") would be directly impacted by the proposed improvements at Red Wash Bridge, which entails reconstruction on an offset alignment north of the existing bridge. NMDOT/FHWA and their contractors will attempt to protect the tree in its original location. If that is not feasible, then the Proposed Action design will have an adverse effect to this TCP. As a result, NMDOT/FHWA will make a good-faith effort to move the tree out of the construction area and keep it as close to its original location as possible, so it will be in the same relation to the new bridge (on the NW side of the bridge adjacent to pavement) as it has now to the existing bridge. NMDOT has consulted with the THPO regarding this mitigation approach and received concurrence (Appendix A).

4.6 SOCIOECONOMIC CONDITIONS

4.6.1 EMPLOYMENT AND INCOME

No Action Alternative

Under the No Action Alternative, no potential benefit or addition of opportunities for employment and income in the Navajo Nation would occur. The ROW easements would not be granted, and no construction would occur.

Proposed Action

Under the Proposed Action there would be no major impact to employment and income for the Navajo Nation. A short-term, beneficial impact on employment and income could occur if local tribal members are hired or trained to assist with any of the construction, operation, or maintenance activities related to roadway alignment. Additionally, there could be small, short-term beneficial impacts from construction crews that patronize local businesses in the Navajo Nation.

4.6.2 DEMOGRAPHIC TRENDS

No Action Alternative

The No Action Alternative would not impact demographic trends in the Navajo Nation.

Proposed Action

The Proposed Action would not impact demographic trends in the Navajo Nation.

4.6.3 LIFESTYLE AND CULTURAL VALUES

No Action Alternative

The No Action Alternative would not impact lifestyle and cultural values in the Navajo Nation because the ROW easements would not be granted, and no construction would occur.

Proposed Action

The Proposed Action would not impact lifestyle in the Navajo Nation. Three known traditional gathering areas occur within and adjacent to the project area. Depending on the timing of construction, access to these culturally valuable areas may be temporarily restricted. However, these impacts would be limited to the duration of construction and long-term impacts are not anticipated. After construction, gathering and cultural site use could continue to be practiced within the project area.

4.6.4 COMMUNITY INFRASTRUCTURE

No Action Alternative

The No Action Alternative would not impact community infrastructure in the Navajo Nation because the ROW easements would not be granted, and no construction would occur.

Proposed Action

The Proposed Action would have a beneficial impact on community infrastructure resulting from the improved roadway and bridge conditions along US 64, realignments of Road 9060/Tribal Road 1754 and Road 9060/BIA 5027 at the intersection with US 64, and addition of spotlighting within the Beclabito community.

4.6.5 ENVIRONMENTAL JUSTICE

No Action Alternative

The No Action Alternative would not disproportionately impact any minority or low-income populations in the Navajo Nation.

Proposed Action

Based on the CEQ definition of a low-income population (having higher than 50% of the population living in poverty), this part of the Navajo Nation does not qualify as a low-income population. The population surrounding the project is predominantly Navajo, which is a minority population (50% or higher) in areas of the state outside the Four Corners region. Environmental justice is not anticipated to be a major issue for the project since the undertaking is focused on improving conditions for the local population. However, environmental justice has been considered when evaluating the need for additional ROW. Overall, the demographics indicate that minorities and low-income families would not be disproportionately affected by the Proposed Action.

4.7 RESOURCE USE PATTERNS

4.7.1 HUNTING, FISHING, GATHERING

No Action Alternative

Under the No Action Alternative, there would be no change to hunting, fishing, or gathering activities within the project area because the ROW easements would not be granted, and no construction would occur.

Proposed Action

The Proposed Action would not directly impact hunting or fishing because these uses do not occur within the project area. During construction, people traveling through US 64 for these activities may experience delays in due to traffic and construction activities. Three known traditional gathering areas are within proximity to the project area. Access to gathering areas within the ROW may be temporarily restricted during construction; however, long-term impacts are not anticipated. Any associated delays would be temporary and minor and would be limited to during construction.

4.7.2 AGRICULTURE

No Action Alternative

Under the No Action Alternative, there would be no change to agricultural practices in the project vicinity because the ROW easements would not be granted, and no construction would occur.

Proposed Action

Under the Proposed Action there would be no changes to farming activities because there are no cultivated farmlands within the project area. Moreover, the NMDOT does not encourage agricultural production within the ROW because it poses a conflict to public safety. Rangeland is the primary land use on Navajo lands outside the highway ROW in this area.

Construction of the proposed project would temporarily remove up to 19.7 acres of currently available grazing resources within the new ROW easement areas. The amount of low-quality foraging habitat from widening the roadway permanently removed would be negligible due to the proximity with the existing roadway. Any surface areas temporary disturbed and not overlain with pavement would be reclaimed and reseeded following construction

The Navajo Nation's range department and/or Chapter Houses would notify cattle operators in the vicinity of the project area prior to construction, both directly by phone, mail, or in-person and indirectly via the local newsletter.

Direct impacts to livestock could occur if cattle wander into the US 64 highway, potentially causing injury. Existing ROW fences would be maintained during construction to exclude cattle from entering the ROW. As part of the project activities, areas of damaged ROW fence would be replaced.

4.7.3 MINERAL EXTRACTION

No Action Alternative

Under the No Action Alternative, there would be no change to mineral development or extraction activities within the project area.

Proposed Action

There are no known mineral extraction efforts occurring within the project area. This resource would not be impacted as a result of the Proposed Action.

4.7.4 RECREATION

No Action Alternative

Under the No Action Alternative, there would be no change to recreation activities within the area.

Proposed Action

Under the Proposed Action, there would be no impacts to recreation because the project area is not used for this purpose. People travel through the US 64 corridor to recreate in the surrounding Four Corners region. During construction, recreationists may experience delays in due to traffic and construction activities. Those delays would be temporary and minor and would be limited to the construction duration. The Proposed Action would have a long-term beneficial impact on motorist safety within the project limits.

4.7.5 TRANSPORTATION NETWORKS

No Action Alternative

Under the No Action Alternative, there would be no change to the transportation network within the area because the ROW easements would not be granted, and construction would not occur.

Proposed Action

Under the Proposed Action there would be temporary impacts to traffic during construction activities. During construction of the bridges, traffic flow will be maintained throughout the duration of construction activities. Lane closures and detours have the potential to cause traffic delays for those traveling through the area. However, these impacts will be temporary and limited to the duration of construction. Traffic levels on US 64 are not expected to increase after construction is completed; therefore, no long-term adverse impacts to traffic or transportation networks are expected as a result of this project. The Proposed Action would have a long-term beneficial impact on motorist safety within the project limits.

4.7.6 LAND USE PLANS

No Action Alternative

Under the No Action Alternative, there would be no change in land use or land use plans within the area because the ROW easements would not be granted and construction would not occur.

Proposed Action

Under the Proposed Action the current land use as a highway ROW would continue and there would be no impact to land use plans within the area.

4.8 OTHER VALUES

4.8.1 WILDERNESS

No Action Alternative

Under the No Action Alternative, there would be no impacts to designated wilderness areas because the ROW easements would not be granted and the construction would not occur.

Proposed Action

Under the Proposed Action there would be no impacts to wilderness areas because this resource is not present within the project area.

4.8.2 NOISE AND LIGHT

No Action Alternative

Under the No Action Alternative, there would be no change to the existing noise and light levels within the area because the ROW easements would not be granted, and the construction would not occur.

Proposed Action

Under the Proposed Action construction traffic and activities would result in temporary noise impacts during project construction. Noise would increase along US 64 during construction.

Significant modifications to the existing US 64 alignment are not part of the Proposed Action; therefore, the project would not be expected to result in long-term noise impacts requiring analysis and abatement of noise levels in accordance with 23 CFR Part 772 – Procedures for Abatement of Highway Traffic Noise and Construction Noise.

Proposed new lighting would be limited to spotlighting near the community of Beclabito at four intersections and one pedestrian crossing. To minimize impacts, lighting will be low-level and New Mexico Night Sky Protection Act complaint. As noted in Section 3.8.2, sensitive receptors near these locations include residences, a gas station, and the Beclabito Chapter House. The locations of the new spotlighting are being selected in consultation with the Beclabito Chapter House. Lights will be oriented downward and shielded to mitigate light trespass, which would minimize long-term impacts to sensitive receptors. Installation of new spotlighting would improve the safety of these intersections and the pedestrian crossing over the long-term, resulting in a long-term beneficial impact.

4.8.3 VISUAL RESOURCES

No Action Alternative

Under the No Action Alternative there would be no impacts to visual resources because the ROW easements would not be granted, and no construction would occur.

Proposed Action

The Proposed Action would entail earthwork for retaining walls, wall barrier, and associated slope tapers which could result in localized visual resource impacts. The existing visual context is a rural two-lane highway traversing through the natural landscape, which would not be altered as a result of the project. Additionally, the Proposed Action would not result in impacts to the larger viewscape from US 64 since the project would not significantly change the roadway horizontal or vertical profile. Temporary impacts to visual resources would occur during construction activities. However, these impacts would be short-term and temporary and limited to the duration to construction.

4.8.4 PUBLIC HEALTH AND SAFETY

No Action Alternative

Under the No Action Alternative there would be negative impacts to public health and safety because construction would not occur and the safety improvements in the Proposed Action would not be implemented.

Proposed Action

Under the Proposed Action there would be long-term beneficial impacts to public health and safety due to the proposed safety improvements, specifically the addition of sufficient shoulder width and designated bus pullouts to allow vehicles, school buses and transit to pull off the road safely. Additionally, the project would update existing guardrail and other roadway design features to current AASHTO safety standards. Connection to public health facilities and providers in the Shiprock area may temporarily be impacted by traffic delays during construction. During construction, physical hazards, such as heavy machinery, would be present.

There are no known Superfund sites or hazardous material locations within 200 feet of the project corridor that are reporting waste to the EPA. If any additional hazardous material investigations need to occur, they will be handled by the NMDOT Environmental Geology Bureau as needed.

4.8.5 INDIAN TRUST ASSETS

No Action Alternative

Because no activities would occur under the No Action Alternative, no lands that are Indian Trust Assets would be impacted.

Proposed Action

The Proposed Action would require additional ROW on Navajo Nation lands, which are Indian Trust Assets. The Navajo Nation would issue lease agreement terms and conditions to NMDOT for use of the land. Up to 19.7 acres of additional ROW would be incorporated into the NMDOT's existing US 64 roadway easements. The impact to Indian Trust Assets would be negligible due to the nominal size of additional ROW and proximity to the existing roadway.

4.8.6 SECTION 4(F) PROPERTIES

No Action Alternative

Because no activities would occur under the No Action Alternative, no Section 4(f) properties would be impacted.

Proposed Action

Currently, there are no publicly owned parks, recreation areas, or wildlife/wildfowl refuges within or adjacent to the project. To minimize potential harm to the cultural resource sites (NM-I-9-28 and NM-I-9-29) that qualify as Section 4(f) properties, temporary exclusionary fencing will be placed during construction. Through the Section 106 consultation process, the THPO has concurred with NMDOT/FHWA's determination of *no adverse effect* to these sites. Thus, the Proposed Action would result in a *de minimus* use of the Section 4(f) properties.

5 CUMULATIVE IMPACTS

The CEQ regulations that implement NEPA require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "*the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions*" (40 CFR 1508.7).

Cumulative impacts were determined by combining the impacts of the Proposed Action with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other recent, on-going or reasonably foreseeable future projects on Navajo Nation lands or in San Juan County or relevant surrounding areas. The geographic boundary for identifying reasonably foreseeable future actions is the jurisdictional boundaries of San Juan County, the county within which the proposed project would occur, as well as the Beclabito, Shiprock, and Gadii'ahi/To'Koi Navajo Nation Chapter Houses.

The temporal boundary for identification of reasonably foreseeable future projects is approximately 5 years. The 5-year boundary informs which projects may be assessed as reasonably foreseeable without speculating so far into the future that the analysis loses accuracy or veers to speculation. Projects planned within the next 5 years would potentially have overlapping impacts with the Proposed Action. Impacts from operations and maintenance of the Proposed Action are included in Chapter 4. The impacts from operations and maintenance of the Proposed action would extend up to 20 years, though it would be speculative to try to identify all future projects that might be planned and constructed in that timeframe. Therefore, the projects presented below are those that have a better-defined scope and are reasonably likely to be developed.

Given these physical and temporal parameters, the following summarizes the projects identified for the cumulative effects analysis.

5.1 REASONABLE AND FORESEEABLE ACTIONS

NMDOT US 64 from Arizona Stateline to MP 20.8 west of Shiprock, CN 5101171, 5101172, 5101174, 5101175, 5101176

NMDOT, in cooperation with FHWA, proposes to improve this approximate 20-mile segment of US 64, which is the focus of this EA. Construction along this corridor will be phased, and a priority plan for specific segments has been developed as part of the Phase IA/B Study. NMDOT has programmed funding to design and construct all of the project priorities, as summarized below. It is anticipated that projects will be let for construction consecutively and within 12 months of each other.

- Priority 1: Red Wash Bridge, MP 7.3 to 8.1; FY 2022/2023
- Priority 2: Shoe Game Wash, Beclabito Wash, and US 64 from AZ border to Red Wash Bridge, MP 0 (BOP) to 7.3; FY 2023/2024
- Priority 3: US 64 east of Red Wash, MP 8.1 to 11.4; and Shiprock Wash Bridge, MP 13.8 to 14.4; FY 2025/2026
- Priority 4: US 64 west of Shiprock Wash, MP 11.4 to 13.8; and US 64 east of Shiprock Wash, MP 14.4 to 17.5; FY 2026
- Priority 5: US 64 east and west of Rattlesnake Wash Bridge, MP 17.5 to 20.8 (EOP)

NMDOT US 64 Roadway Improvements from MP 20.6 to MP 22 in San Juan County, CN 5100821

The NMDOT has been studying existing conditions and developing roadway improvements for an approximate 2 mile segment of US 64 west of Shiprock and east of the CN 5101170 project. The schedule for these improvements is anticipated to occur in parallel with the first phase of this project.

NMDOT US 64/491 Phase A/B Corridor Study San Juan Bridge Crossing in Shiprock, CN 5101010

The NMDOT has completed a Phase IA/B Corridor Study for US 64/491 between MPs 21.78 and 23.00 in Shiprock, concluding in June 2020. There is currently $7 million programmed funds in the STIP for the Phase I construction project. The purpose of the Study was to analyze the existing conditions, verify the need for improvements, identify, and evaluate feasible alternatives that provide a reasonable solution. Alternatives to improve the corridor and bridge crossing were evaluated and recommendations made to advance into design and construction. Due to mining, agriculture, and truck traffic traveling through the Four Corners region, there is a high frequency of heavier loads than those for which the existing steel truss bridge structure was designed. The study goals include improving safety, meeting current bridge standards, and addressing physical deficiencies. The proposed recommendations included replacing the south 2-lane concrete bridge with a 4-lane steel bridge, removing vehicular traffic from the steel truss bridge, and adding enhanced signalize intersections at Hesperus Peak Blvd and San Francisco Peak Blvd.

NMDOT US 64 Phase 5 between Farmington & Bloomfield in San Juan County, CN F100112 / F100113

Recently, NMDOT completed construction of Phase 5 improvements along US 64. This was the last of a series of phased roadway improvements between Farmington and Bloomfield that were intended to improve regional mobility in a safe and efficient manner while addressing corridor access issues. The project included full road reconstruction, addition of an east bound and a west bound lane, raised medians, access management, right and left turn bays, drainage structure extensions, and a new signal for Andrea Drive.

NNDOT Route N5113 Beclabito Chapter Recycled Asphalt Project in San Juan County

Navajo Nation is completing a road reconditioning project located on Route N5113 near Beclabito Chapter for 2.5-miles total length. In partnership with the NMDOT, asphalt millings were donated and obtained from their Shiprock maintenance yard. The project began on April 26, 2021, which included subgrade preparation prior to recycled asphalt placement. The project is expected to run through May 14, 2021. Delivery and placement of asphalt cold millings for a 4" asphalt placement thickness, resulted in approximately 7,920 tons for the entire 2.5 miles. Additionally, an asphalt emulsion additive was added to the recycled millings to form a more durable and lasting product.

Existing Roadway Facilities in San Juan County

It is reasonably foreseeable that future maintenance and/or improvements to existing BIA and NNDOT facilities that adjoin US 64 would be completed. The precise location of these needs cannot be predicted and will be determined based on agency priorities and available funding.

6 CONSULTATION

6.1 SUMMARY OF SECTION 106 NHPA CONSULTATION

As the responsible lead federal agency, NMDOT/FHWA completed consultation with the Navajo Nation THPO in accordance with Section 106 of the NHPA, as amended. The THPO reviewed the cultural resource findings and recommendations and issued its concurrence on November 10, 2020 (see Appendix A). The Section 106 consultation process is complete for this undertaking.

6.2 SUMMARY OF SECTION 7 ESA CONSULTATION

The project (Phases 3 and 5) is anticipated to have an effect on Mesa Verde cactus, a federally and tribal listed species. NMDOT/FHWA consulted with the USFWS and NNDFW in accordance with Section 7 of the ESA to discuss the potential effects and determine appropriate mitigation measures. A Biological Assessment dated May 2021was sent to the FHWA which determined that the proposed project "may affect, is likely to adversely affect" Mesa Verde Cactus. A Biological Opinion (BO) was prepared by the USFWS on January 18, 2022 and a Biological Resource Compliance (BRC) was prepared by the NNDFW December 21, 2021, which concurred with the effect determination. The BO and BRC stated that the majority of the activities in the project will occur outside of Mesa Verde cactus habitat. Of the 57 individual cacti that were found, only 12 are within the right of way and only 2 will be directly impacted. The 2 impacted individuals will be transplanted. The remaining 10 will be flagged with high visibility fencing during construction and have a biological monitor to ensure avoidance. The effects of the proposed action will not jeopardize the continued existence of Mesa Verde Cactus. Regular communication between NMDOT/FHWA and the USFWS will occur before, during, and after completion of the proposed action to determine the need of any further conservation measures.

6.3 SUMMARY OF TRIBAL CONSULTATION

Initial scoping letters were sent to the Navajo Nation Chapter Houses (Shiprock, Beclabito, Gadii'ahi/To'Koi, and Teec Nos Pos) within proximity to the project corridor on August 6, 2019. On October 31, 2019, NMDOT held an in-person meeting with multiple Navajo Nation entities to discuss the project. Additional coordination with the Navajo Nation and BIA since 2019 included:

- A meeting with the Beclabito Chapter representatives on February 3, 2021, to review the 30% Plans, and
- A multi-agency ROW coordination meeting with BIA and the Navajo Nation on March 22, 2021.

During tribal consultation, the Pueblo of Acoma Pueblo requested to receive additional information regarding the project. NMDOT provided additional information to Acoma and no comments were received within the 45-day comment period. NMDOT is in the process of obtaining a resolution from the Navajo Nation Tribal Council supporting this project.

6.4 SUMMARY OF NEXT STEPS

NMDOT is coordinating with the Navajo Nation regarding proposed modification to the US 64 ROW boundaries. After developing preliminary design, NMDOT will advance the two highest priority projects to final design and construction.

We have completed an Environmental Assessment for entire corridor with intent of a Finding of No Significant Impact (FONSI) authorization for the entire corridor. Completion of the EA will allow for the ROW acquisition process with Navajo Nation to proceed. NMDOT will then move toward a completion of phase 1 final design. The Section 106 consultation covers the entire corridor as well. Additional Section 106 consultation will not be required. Section 7 ESA consultation has been completed for the entire corridor.

As subsequent design phases progress, NMDOT will monitor the project development schedule, design elements, and existing conditions to determine if a re-evaluation of the FONSI is needed.

6.5 SUMMARY OF ENVIRONMENTAL COMMITMENTS

Under the Proposed Action, the NMDOT has looked at and created contingencies and remediation efforts for land resources, water resources and water quality, air quality and climate, living resources, cultural resources, socioeconomic conditions, resource use patterns and other values.

Reclamation of disturbed areas in the ROW would occur to restore vegetative cover over most of the project area, excluding areas overlain by pavement. The use of BMPs to reduce erosion control would reduce soil loss during stormwater events. Following construction of the Proposed Action, noxious weeds will be detected, monitored and treated per NMDOT's Integrated Roadside Vegetation Management Program. A SWPPP would be prepared with the provisions of the NPDES Construction General Permit issued by the EPA. Appropriate stormwater controls would be implemented during construction to avoid downstream impacts. Adherence to BMPs will reduce the potential to impact ground water resources during construction.

Prior to construction of each phase, NMDOT/FHWA will complete any necessary permitting to comply with the Clean Water Act Section 404 Permit and Section 401 Water Quality Certification conditions. The agencies' permit actions are governed by the rule in effect at the time, which may be subject to change.

NMDOT/FHWA will require the construction contractor to comply with MBTA at all times and maintain nest-free conditions in the construction impacted areas. Existing ROW fences would be maintained during construction to exclude cattle from entering the ROW. Additional fencing of the highway will be wildlife friendly by allowing the passage of wildlife by having smooth top and bottom wires, Coordination will also occur with The Navajo Nation's range department and Chapter Houses to notify any cattle operators in the project area.

A threatened species, the Mesa Verde cactus, is located within a portion of the construction zone for the Proposed Action. There are12 Mesa Verde cacti within the project ROW, two of which will require relocation. Biological monitors will mark the other 10 individual plants for avoidance, and high visibility temporary fencing will be used to prevent machinery from moving in Mesa Verde habitat areas to avoid disturbances. Work in proximity to fenced/avoided cacti will occur outside of the April to mid-June reproductive season of the Mesa Verde cactus. Re-surveys will be conducted pre-construction to identify any additional Mesa Verde Cacti that may have occurred within the project area. If additional cacti are found mitigation efforts will be made to preserve the cacti at its current location, and if mitigation efforts are not feasible the cacti will be transplanted. In the case of 10 or more Mesa Verde cacti being transplanted additional monitoring and reporting of the transplanted cacti will be required. NMDOT/FHWA has carried out a Section 7 consultation with the NNHP and USFWS to develop mitigation efforts to offset impacts (Appendix B and Appendix C).

Four TCPs have been documented within the project area. Temporary restriction to these sites within the ROW during construction will occur. One TCP ("giving tree", a mature juniper) would be directly impacted. NMDOT/FHWA and their contractor will attempt to protect the tree at its original location; however, if that becomes not feasible a good faith effort to move the tree out of the construction area and relocate the tree as close to its original location as possible will be made.

7 List of Contributors

The following individuals participated in the drafting or review of portions of this EA.

NAME	TITLE	COMPANY
Jennifer Hyre	Project Manager, NEPA Lead	WSP
Rebecca Reints	Environmental Planner	WSP
Aaftab Jain	Senior Biologist	WSP
Jessica Forbes-Guerrero	Senior Environmental Planner	WSP
Dominic Montoya	Environmental Planner	WSP
Jim Heimann	Project Engineer	WSP
Steven Gisler	Environmental Liaison	NMDOT Environmental Bureau
Leonard Notah	Environmental Coordinator	BIA, Navajo Agency
Greg Heitmann	Environmental/Realty	FHWA

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APPENDICES

A SECTION 106 CONCURRENCE

U.S. Department of Transportation
Federal Highway Administration

New Mexico Division

4001 Office Court Drive
Suite 801
Santa Fe, NM 87507
505-820-2021

November 3, 2020

In Reply Refer To:
ENVI 2
CN 5101170

Mr. Richard Begay
Tribal Historic Preservation Office
Navajo Nation Heritage & Historic Preservation Department
P.O. Box 4950
Window Rock, Arizona 86515

Dear Mr. Begay:

The New Mexico Department of Transportation (NMDOT in cooperation with the U.S. Department of Transportation, Federal Highway Administration (USDOT FHWA) is proposing to reconstruct US 64 from Milepost (MP) 0.0 to MP 20.8, in San Juan County, New Mexico (CN 5101170). FHWA is the lead federal agency for meeting all requirements of the National Environmental Protection Act (NEPA) and the National Historic Preservation Act (NPHA). As such, this proposed federal undertaking is subject to consideration under Section 106 (54 U.S.C. 306108) of the NHPA (54 U.S.C. 300101 et seq.), as amended through 1992 and implementing regulations (36 CFR Part 800: *Protection of Historic Properties*, as revised August 2004). FHWA (the lead federal agency), is consulting with your office on eligibility and effect as part of the regulations stated above.

The proposed road-improvement/-construction projects include pavement improvements, additions of shoulders, sight-distance/vertical-alignment improvements, drainage improvements, and up to four bridge replacements. The reasons for these improvements are many. The existing pavement condition is poor, with map cracking, raveling, rutting, and localized subgrade failures. Existing bridges are suspected to have reached their service lives (Bridge Nos. 5865, 5864, 5863, and 5862). Some existing drainage structures are experiencing negative effects from scour and corrosive soils. The existing and proposed roadside and bridge barriers need to be compliant with the *Manual for Assessing Safety Hardware* (American Association of State Highway and Transportation Officials 2016) requirements. The lack of existing shoulders creates a hazard for the traveling public whenever a vehicle makes an emergency stop.

In support of meeting the requirements stated above, please find enclosed for your review a report titled *A Cultural Resource Inventory of U.S. 64, from Milepost 0.0 at the Arizona State Line to West of Shiprock at Milepost 20.8, Navajo Nation, San Juan County, New Mexico* by Monica L. Murrell, Jennie R. Lee, Klara Kelley, Carrie J. Gregory, and Karen K. Swope. Brief descriptions of the proposed undertaking, inventory results, project administration, and recommendations are presented below for your consideration.

Eight sites, 299 isolated occurrences, 6 in-use sites/areas, four Traditional Cultural Properties (TCP), a historic roadside marker, and 4 descansos were documented during the course of the survey. Two of the sites (NM-I-9-28 and NM-I-9-29) and one TCP (TCP 3) are located within the area of Direct Effect of the proposed undertaking. FHWA finds both NM-I-28 and NM-I-29 eligible for listing in the National Register of Historic Places (NRHP) under Criterion d.

Site NM-I-9-28 is a newly recorded moderate-density lithic scatter with no discernable artifact concentrations, diagnostic artifacts, or cultural features within the U.S. 64 inventory project area at the site. Naturally occurring silicified-wood and smaller quantities of chert and quartzite gravels and cobbles are intermixed with the surface sediments. Based on the artifact assemblage and the presence of naturally outcropping lithic materials, the site likely represents a lithic-procurement locale. The proposed project

will involve introduction of fill along this portion of the existing alignment in order to improve the vertical curve of the roadway. This fill will be placed up to, but not within, the site boundary of NM-I-9-28. In order to avoid an adverse effect to this site, temporary exclusionary fencing will be placed to prevent equipment traversing or parking on the site. Thus, the proposed undertaking will have *No Adverse Effect* to NM-I-9-28.

NM-I-9-29 is a newly recorded multicomponent (Late Archaic/Basketmaker II and early to mid-twentieth century Navajo) campsite which is recommended eligible for listing in the NRHP under Criterion D. The investigators have recommended that only the earlier component retains sufficient information potential to support its significance while the historic component is ephemeral and does not retain important information that contributes to our understanding of history. FHWA/NMDOT concur with these eligibility recommendations.

The prehistoric component is on both sides of the roadway, within and outside of the ROW. The areas immediately adjacent to the current pavement are known to be disturbed, and do not retain sufficient integrity to convey the site's important information which contributes to our understanding of prehistory. On the east side of the roadway, the proposed cut slope (approximately 13 feet wide) will be confined to the disturbed area. In order to avoid an adverse effect to this portion of the site, temporary exclusionary fencing will be placed to prevent equipment traversing or parking on site.

On the west side of the roadway, the necessary cut slope (up to 30 feet wide) would extend beyond the previously disturbed areas. In order to avoid an adverse effect to this portion of the site, a low retaining wall will be constructed at the edge of the previously disturbed area and the uphill side of this wall will be backfilled with sterile sediment. This will prevent impacts to the portions of the site which have the ability to convey important information. By this effort and the exclusionary fencing on the eastern side of the roadway, the current undertaking will have *No Adverse Effect* to NM-I-9-29.

The current study documented three new TCPs (TCPs 1-3) as well as a previously documented TCP (TCP 4). The project will have no direct effect to TCPs 1, 2, and 4, but adding shoulders does have potential to affect access to these areas. NMDOT/FHWA will add an environmental commitment to the project plans that all existing fence openings and in-use parking areas will be maintained through the new design and will be kept open during construction.

TCP 3 is a juniper tree located in the Beclabito Chapter, on Tribal Trust land. This TCP is on the northwest side of the Red Wash Bridge immediately adjacent to the guardrail. The juniper tree is approximately 15 feet tall and is trimmed seasonally with decorations, gifts of hats and gloves for those who need them, and other presents Visitation to TCP 3 is obvious from foot trails, and parking is available on both sides of U.S. 64. The investigators found that TCP 3 is eligible for listing on the National Register, and NMDOT/FHWA agrees with that recommendation.

Current proposed project design (see attached page from Phase A/B study) is to build the replacement bridge to the north of the existing bridge, with about 5 feet of space between them. The existing bridge will then be demolished. NMDOT/FHWA and their contractors will attempt to protect the tree in its original location. If that is not feasible then this design will have an adverse effect to TCP 3. As a result, NMDOT/FHWA will make a good-faith effort to move the tree out of the construction area and keep it as close to its original location as possible, so it will be in the same relation to the new bridge (on the NW side of the bridge adjacent to pavement) as it has now to the existing.

The NMDOT, on behalf of the FHWA, has determined that with the avoidance, minimization, or mitigation measures stated above, finds that the proposed undertaking, CN 5101170, Reconstruction

of US 64between Shiprock, NM and the Arizona border (MP 0 to 20), will have no adverse effect to historic properties. Your concurrence with our findings of eligibility, effect and resolution of adverse effect is respectfully requested.

Sincerely,

GREGORY L HEITMANN
Digitally signed by GREGORY L HEITMANN
Date: 2020.11.04 11:21:54 -07'00'

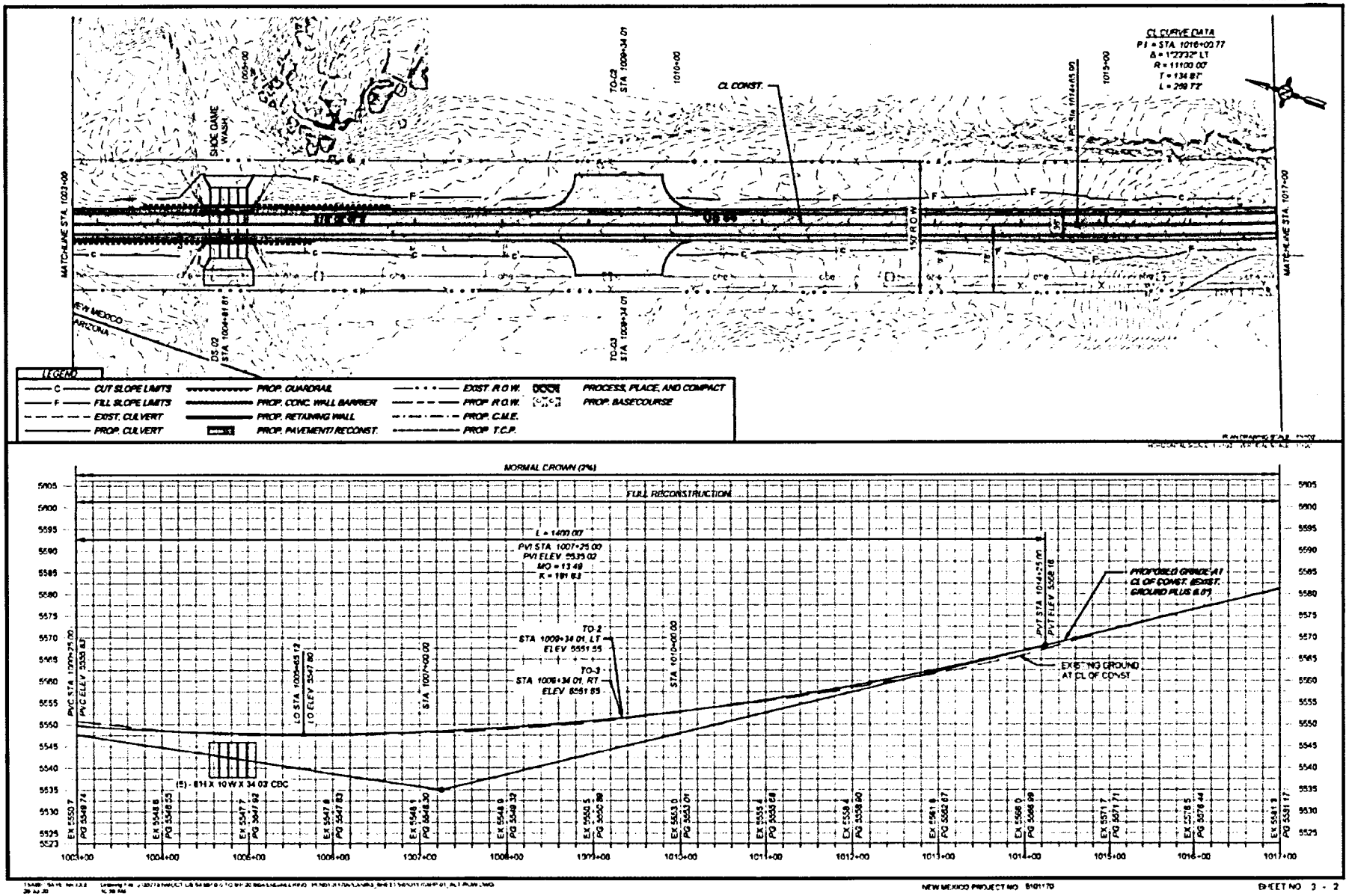
Gregory L. Heitmann
FHWA Environmental Specialist
For: J. Don Martinez
FHWA Division Administrator

Steven Lakatos
Digitally signed by Steven Lakatos
Date: 2020.11.04 08:15:13 -07'00'

Steven A. Lakatos
NMDOT Supervisor, Cultural Resources Section
For: Michael Sandoval
NMDOT Cabinet Secretary

/sal/gnh
Enclosures
cc: Tamara Billie, Navajo Nation Heritage and Historic Preservation Department
Timothy Begay, Navajo Nation Heritage and Historic Preservation Department

Concurrence: Tamara Billie Date 11/16/20
Mr. Richard Begay, Navajo Nation Tribal Historic Preservation Officer



NEW MEXICO PROJECT NO 8101170

SHEET NO 3 - 2

Red Wash - Bridge #5864

The existing US 64 Red Wash Bridge is a 6-span steel girder bridge founded on steel bearing piles spanning a total of 262'-0". The structure has a current sufficiency rating of 56.9 and a health index of 77.34. The existing bridge has major deterioration located at the expansion joints that include the steel bearings and steel girders. The bridge barrier rails have significant deterioration which include anchor bolt debonding. It is proposed that the existing bridge be removed and replaced. Full replacement will also allow for adequate vertical under clearances to be provided for required free board water surface elevations at the 50-year storm event. The current structure does not meet those freeboard requirements.

The Bridge Type Selection (BTS) report provides detailed information on the bridge options investigated and on the selected bridge type. The 5-span design alternatives that were considered include a continuous steel rolled girder option, a pre-stressed concrete girder option, a solid slab girder option, and a press-brake steel tub option.

The alternative that scored highest in the NMDOT decision matrix were both the AASHTO Type 36 and the rolled steel girder (W36). Both girder types are cheaper than the solid slab girder. Therefore, it was determined that the either the steel girder or precast girder are appropriate options at this location in a five-span configuration. The steel girder option would be continuous, and the precast girder option would be continuous for live load. The final decision will be made via input from the NMDOT District and Bridge Bureau for their preference. See **Exhibit 4-10** and **Exhibit 4-11** for proposed profile and girder cross section views, respectively.

The proposed roadway on the bridge will be 2 - 12' 0" lanes, 8' 0" shoulders on each side, and 1' 6" bridge barrier rails, for an overall width of 43'-0." The proposed skew, to meet waterway flow direction is 30 degrees. The five-span configuration was required to provide minimum two-foot freeboard requirements for the 50-year design flow. Even with the five spans and shallow girders, the roadway will require a vertical adjustment of around 1'-8" upward to meet clearance requirements. If the decision to minimize the profile grade elevation increase is determined to be more vital, then the press-brake steel tub girder option may be more appropriate for this bridge. Retaining walls will be required on the north side of the roadway approaches to the new bridge to keep roadway fills within existing right-of-way.

The proposed bridge, no matter which girder type is selected, is proposed to be offset to the north approximately 5'-0" feet from edge of deck to edge of deck, as shown in **Exhibit 4-12**. The distance from the centerline of existing to the centerline of proposed is 44'-0" which would require a 260' 0" bridge to span end-to-end.

Exhibit 4-10: Proposed 5-Span Bridge Conceptual Profile for Red Wash Bridge

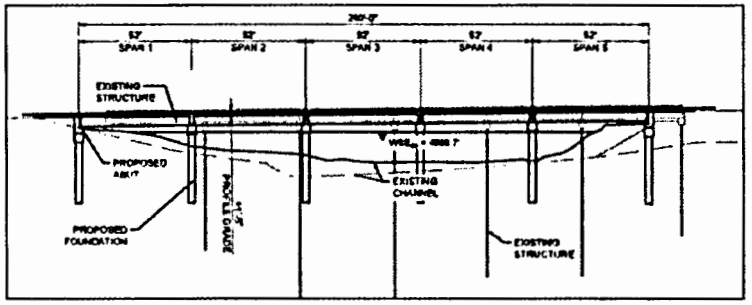
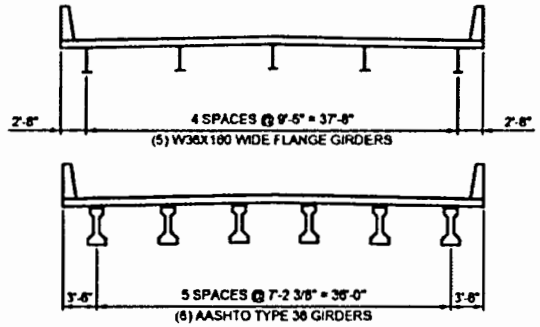
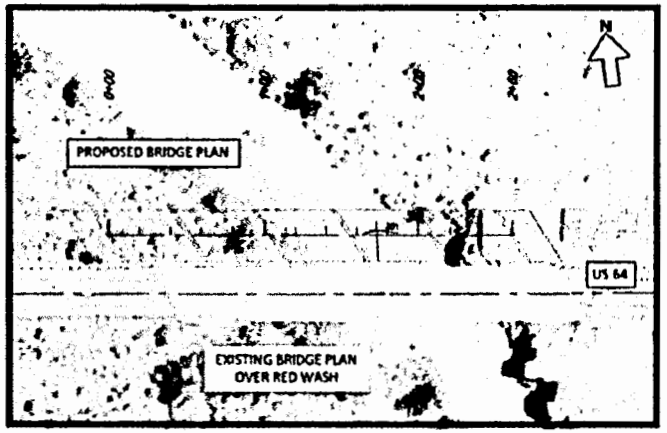


Exhibit 4-11: Proposed Typical Girder Cross Sections for Red Wash Bridge



An offset to the north matches the original alignment of the highway and is preferred from both horizontal and vertical alignment perspectives. The terrain/topography poses more engineering and constructability challenges for an offset alignment to the south of the existing bridge. A shoe-fly alternative to reconstruct the bridge in its current alignment may be viable but would not be cost effective. A Navajo traditional cultural property (TCP), a "giving tree," exists on the northwest side of the bridge at the edge of the existing pavement. Consultation with the Navajo Nation Tribal Historic Preservation Officer will determine if an offset to the north impacting the TCP is a viable option for the NMDOT.

Exhibit 4-12: Proposed Plan View of Red Wash Bridge



B U.S. FISH AND WILDLIFE SERVICE BIOLOGICAL OPINION

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office
2105 Osuna Road NE
Albuquerque, New Mexico 87113
Telephone 505-346-2525 Fax 505-346-2542
http://www.fws.gov/southwest/es/newmexico/

January 18, 2022

Gregory Heitmann
FHWA Environmental Specialist
U.S. Department of Transportation
4001 Office Court Drive, Suite 801

Dear Mr. Heitmann:

Thank you for your letter dated December 27, 2021, requesting formal consultation with the U.S. Fish and Wildlife Service (Service) pursuant to section 7 of the Endangered Species Act of 1973 (16 USC 1531 et seq.), as amended (ESA). We received your "US Highway 64 Arizona to Shiprock, NM Reconstruction Project" biological assessment (BA) dated May 2021, which evaluates impacts to the federally listed Mesa Verde cactus (*Sclerocactus mesae-verdae*).

The Federal Highways Administration (FHWA) determined that the proposed project "may affect, is likely to adversely affect" Mesa Verde cactus.

Additionally, the BA included a determination of "no effect" for the Southwestern willow flycatcher (*Empidonax trailii extimus*) or its designated critical habitat. Although the ESA does not require Federal agencies to consult with the Service if the action agency determines their action will have "no effect" on threatened or endangered species or designated critical habitat (50 CFR 402.12), we appreciate your consideration for the conservation of this species and notification of your "no effect" determinations.

The attached biological opinion is based on information provided in the BA, data in our files, information presented in the species' recovery plans, literature reviews, and other sources of information available to the Service, including the final rules to list the species and designate critical habitat and species status reviews. The Service hereby incorporates the BA and all conservation measures within it. In addition, references cited at the end of the biological opinion are not a complete bibliography of all literature available for the species addressed. A complete administrative record of this consultation is on file in the New Mexico Ecological Services Field Office located in Albuquerque, New Mexico.

We appreciate your efforts to help conserve threatened and endangered species in New Mexico. Please refer to consultation number 02ENNM00-2022-F-0122 for any further correspondence regarding this project. If you have any further questions, please do not hesitate to contact Tim Ludwick of my staff at timothy_ludwick@fws.gov or 505-346-2525.

Sincerely,

SHAWN SARTORIUS Digitally signed by SHAWN SARTORIUS
Date: 2022.01.18 13:13:47 -07'00'

Shawn Sartorius
Field Supervisor

cc: Environmental Specialist, New Mexico Department of Transportation
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Director, New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division, Santa Fe, New Mexico

BIOLOGICAL OPINION FOR U.S. HIGHWAY 64 ALIGNMENT

CONSULTATION # 02ENNM00-2022-F-0122

JANUARY 2022

SHAWN SARTORIUS

Digitally signed by SHAWN SARTORIUS
Date: 2022.01.18 13:14:24 -07'00'

Shawn Sartorius
Field Supervisor
New Mexico Ecological Services Field Office

Date

INTRODUCTION

This document constitutes the U.S. Fish and Wildlife Service's (Service) biological opinion based on our review of the realignment project on U.S. Highway 64 and its effects on the endangered Mesa Verde cactus (*Sclerocactus mesae-verdae*) in accordance with section 7 of the Endangered Species Act of 1973 (16 U.S.C. § 1531 et seq.), as amended (ESA).

A biological opinion is a document that states the opinion of the Service as to whether a federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of designated critical habitat. "*Jeopardize the continued existence of*" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02). "*Destruction or adverse modification*" is defined as a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species (50 CFR § 402.02; 84 FR 44976-45018). There is no designated or proposed critical habitat for Mesa Verde cactus.

We received a request for consultation on December 27, 2021, following a verbal request made during a November 9, 2021, meeting regarding the project. The request referred to a biological assessment (BA) dated May 2021 from the New Mexico Department of Transportation Environmental Bureau (NMDOT) District 5, in conjunction with the U.S. Department of Transportation's Federal Highway Administration (FHWA). The BA made an effects determination that the proposed action "may affect, is likely to adversely affect" the endangered Mesa Verde cactus (*Sclerocactus mesae-verdae*) and have "no affect" on the endangered Southwestern willow flycatcher (*Empidonax trailii extimus*) or its designated critical habitat. Although the Act does not require Federal agencies to consult with the Service if the action agency determines their action will have "no effect" on threatened or endangered species or designated critical habitat (50 CFR 402.12), we appreciate your consideration for the conservation of the Southwestern willow flycatcher and notification of your "no effect" determination for the species and its critical habitat.

This biological opinion (BO) is based on our review of information submitted in the May 2021 BA (NMDOT 2021), electronic mail with project staff, data in our files, literature reviews, and other sources of information available to the Service including final rules to list the species and subsequent species status reviews. The Service hereby incorporates the BA and the contents of all written communications written above. The BO is based on information provided in the May 2021 biological assessment, correspondence with your staff, data in our files, a literature review, and other sources of information. References cited in the BO are not a complete bibliography of all literature available on the species addressed or the project and its effects. A complete administrative record of this consultation is on file at the New Mexico Ecological Services Field Office.

CONSULTATION HISTORY

A detailed consultation history for the proposed action is provided in Table 1.

Table 1. Summary of the consultation history for the proposed action.

Date	Event
October 26, 2021	Email received from Nora Talkington, Navajo Nation Botanist, requesting that NMDOT include the Service in conversation about the project due to the project including Mesa Verde cactus habitat, and in the biological evaluation for the project.
November 1, 2021	Service biologist contacted Nora Talkington for additional information for Mesa Verde cactus locations.
November 8, 2021	Service biologist contacted WSP Environmental Specialist with a request for additional information and received additional information.
November 9, 2021	Virtual meeting held with involved parties to discuss the project, including a verbal request from NMDOT for consultation.
November 16, 2021	Draft conservation measures were sent to the Navajo Nation Botanist for review and coordination regarding tribal biological resources compliance for the project.
November 16, 2021	Navajo Nation responded with review and comments.
December 27, 2021	Formal letter requesting consultation sent to the Service for Federal Highway Administration.

DESCRIPTION OF THE PROPOSED ACTION

Description of the Proposed Action

The NMDOT, in cooperation with the FHWA, proposes to implement the U.S. Highway 64 (U.S. 64) Alignment Study and Preliminary Engineering Project from U.S. Highway 160 near Teec Nos Pos, Arizona, to U.S. Highway 491 in Shiprock, New Mexico (see Figure 1 below). The project involves improving the highway for physical deficiencies and improving access.

The proposed action includes the following.

- Increasing the shoulder width of the road
- Paving surface deteriorations
- Redesigning vertical curves (alteration of road and right-of-way in these areas)
- Culvert crossing improvements; improving drainage areas by removing debris or replacing culverts
- Bridge reconstruction
- Creating additional turn lanes, bus stops, pullouts, and crosswalks
- Adding passing lanes
- Adding roadside barriers and rumble strips
- Construction and maintenance of right-of-way (ROW) fence

The total duration of construction activities is anticipated to take place in five phases between 2022 and 2027, tentatively. The first two phases of construction start at the western portion of the project area. No Mesa Verde cactus habitat occurs in these sections of the project for phase one and two. Phases three, four, and five will have ground disturbing activities as described above within Mesa Verde cactus habitat.

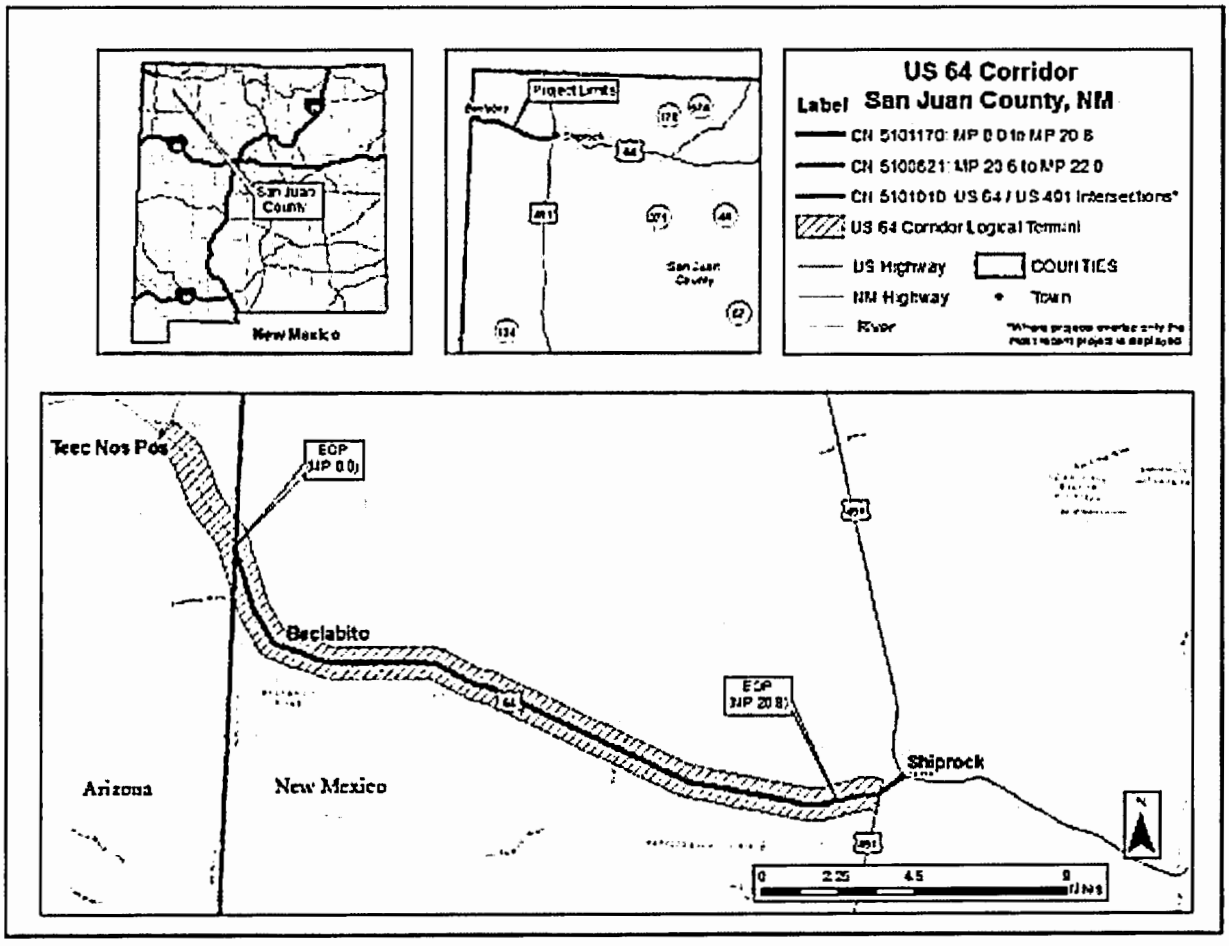


Figure 1. Action Area and U.S. 64 Corridor

Conservation Measures

For Mesa Verde cactus locations identified in the project area, the following conservation measures are included in the proposed action.

- Biological monitors will be present during construction activities in occupied Mesa Verde cactus habitat, and will mark individual plants for avoidance using high visibility flagging and/or temporary fencing. Monitors will also prevent machinery from moving into flagged/fenced areas. Where Mesa Verde cactus individuals are located at or near the ROW fence line, biological monitors will ensure that fence construction avoids impacts to a 1ft radius around individuals.

- Work will occur outside of the Mesa Verde cactus reproductive season of late April to mid-June in areas where the species occurs, to avoid pollination disruption.
- All equipment will be cleaned prior to use in order to minimize the transport of invasive plant seeds and parts.
- Preconstruction surveys by a qualified botanist will be required if two or more years has passed between construction and the most recent survey within occupied habitat in the Action Area. Plants will be marked via Global Positioning System (GPS) to delineate avoidance areas
- At milepost 8.5, a retaining wall will be constructed to protect nearby Mesa Verde cactus individuals from mortality. During construction, temporary fencing and/or high visibility flagging will be installed to mark individual plants for avoidance.
- When, for safety reasons, individual plants cannot be avoided, Mesa Verde cacti will be salvaged by removal and transplant, following established Navajo Natural Heritage Program transplant protocols, prior to ground disturbing activities. These transplant locations will be to the nearest occupied habitat that is far enough removed from the projects impacts or other impacts such as roads or existing development. Because survival of relocated Mesa Verde cacti is low, individuals that cannot be avoided and must be salvaged to avoid destruction will be moved to occupied habitat such that no disturbance to existing Mesa Verde cactus occurs.

Monitoring and Reporting Plan

At the time of this consultation, it appears that only two individuals of Mesa Verde cactus will be impacted to the point of needing to be salvaged via transplant. However, as additional pre-construction surveys are repeated, additional individuals may be found. Some or all of those individuals may need to be transplanted if the conservation measures above do not protect them. In the event that ten or more individuals need to be transplanted, the following monitoring and reporting will be required.

- Conduct yearly monitoring of transplanted individuals for survival, reproductive ability, and impacts (herbivory, trampling, etc.) for five years following transplant.
- Conduct yearly monitoring reporting to the Navajo Nation heritage biologist and Service (report can be part of the species report that the Navajo Nation biologist shares with the Service).

Description of the Action Area

The proposed action will take place on Navajo Nation lands and within San Juan County, New Mexico and Apache County, Arizona, from milepost 20.8 on U.S. 64 in San Juan County New Mexico to Teec Nos Pos, Arizona. The proposed action starts at latitude/longitude 36.872097; -109.045144, and the end of the project is at latitude/longitude 36.774587; -108.717955.

The proposed action lies completely within the lands of the Navajo Nation. The action area consists of the highway ROW and additional work areas adjacent to the ROW. The proposed project is located on the Beclabito, Rocky Point, Rattlesnake, and Shiprock, New Mexico, U.S. Geological Survey 7.5-minute quadrangles. The action area is characterized by plateaus, hogback ridges, valleys, and canyons. The action area extends from the Arizona/New Mexico

border along the northeastern eroded pediments of the Carrizo Mountains east to Shiprock. As the highway extends east, it passes north of Beclabito Dome, where the topography is characterized by rolling hills and ridges bisected by ephemeral washes. East of approximately milepost 10, terrain is generally level to mildly undulating, infrequently cut by large dry arroyos, and gradually decreases in elevation. Elevation in the project area ranges from approximately 5,780 feet near the beginning of the project to 4,940 feet at the end of the project.

Fifty-seven Mesa Verde cacti *(Sclerocactus mesae-verdae)* were observed in four separate locations between mile post 8.5 and mile post 19.9 within the action area during field surveys completed between August 13 and 20, 2019 and March 29 and April 1, 2021. Some individual cacti were in early stages of bloom with flower buds formed but not yet open. Twelve Mesa Verde cacti were observed within the ROW, and 45 detections were located immediately outside the action area at a distance between 3 and 150 feet beyond the proposed project limits. Mesa Verde cactus detections were associated with shale soils with cobble cover on high points in the landscape. Details of the detections are as follows.

- Milepost 8.5: Seven Mesa Verde cacti were observed just outside the project area along the top bank south of the ROW. The cacti observations were outside of the supplemental survey area and south of the ROW. One individual is extremely close to the ROW where the NMDOT has proposed to extend the ROW to slope back the area to reduce erosion. This extension would cause the mortality of at least one individual Mesa Verde cactus. As an alternative, NMDOT also proposed an option of building a retaining wall, which has been included above as a conservation measure.

- Milepost 14.1: Four Mesa Verde cacti were observed inside the project area in a direction north of the ROW. One individual is within the right of way and cannot be avoided. This individual will be relocated following the applicable conservation measure described above.

- Milepost 19.3: Thirty-six Mesa Verde cacti were observed on both sides of the highway—within and immediately adjacent to the ROW. Seven of these observations occurred within the project area and the remaining 29 were located less than 100 feet outside the ROW. One individual will not be able to be avoided during construction. This individual will be relocated following the specific conservation measure above.

- Milepost 19.9: Ten Mesa Verde cacti were observed within and immediately adjacent to the ROW. At least one individual will be in the footprint of the ROW fence.

- Additional pre-construction surveys will be done in all potential habitat for Mesa Verde cactus prior to construction if more than 2 years has passed since the latest survey where on ground activities have not begun.

ANALYTICAL FRAMEWORK FOR THE JEOPARDY DETERMINATION

Jeopardy Determination

In accordance with policy and regulation, the jeopardy analysis in this biological opinion relies on four components in our evaluation for each species: (1) the Status of the Species, which evaluates the species' range-wide condition, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which evaluates the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the Effects of the Action, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the species; and, (4) Cumulative Effects, which evaluates the effects of future, non-Federal activities in the action area on the species.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the species' current status, taking into account any cumulative effects, to determine if implementation of the action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the species in the wild.

The jeopardy analysis places an emphasis on consideration of the range-wide survival and recovery needs of the species and the role of the action area in the survival and recovery of the species as the context for evaluating the significance of the effects of the Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

STATUS OF SPECIES

Mesa Verde Cactus

A summary of the species and status of the cactus can be found in the Final 5-Year Review for the Mesa Verde cactus (Service 2011) and in the Final Rule published on October 30, 1979 (Service 1979). Additional information can be found in the Mesa Verde cactus Final Recovery Plan (Service 1984). These documents are hereby incorporated by reference.

Description and Life History

Mesa Verde cactus (*Sclerocactus mesae-verdae*) was listed Threatened under the Federal Endangered Species Act in 1979 (Service 1979). It is also listed Endangered in the State of New Mexico (19 NMAC 21.2). There are principally two types of threats that lead to listing of the species, destruction or modification of its habitat and direct collection. In recent years direct collection has decreased.

The Mesa Verde cactus usually has one spherical stem that is pale green in color, but it can form clusters of up to 15 stems. The stems are only 3.8 to 7.6 cm (1.5 to 3 in) tall, and they retract into the soil during drought. The stems have 8 to 11 radial spines that are straw-colored and a 0.25 to 0.5 in in length. Typically there is no central spine. The cactus blooms from late April into early June and is pollinated by a sweat bee.

Habitat Requirements and Distribution

Mesa Verde cactus habitat is the low rolling clay hills that erode easily of the Mancos and Fruitland shale formations from 4,900 to 5,500 feet. Soils are highly alkaline, gypsiferous, and have shrink-swell potentials that make them harsh for plant growth. Mesa Verde cactus is mostly found on the tops of benches and hills, though also they are occasionally found at the bottom of the slope where the ground begins to level off. Annual precipitation for these areas varies annually from 8-20 cm.

Mesa Verde cactus was first discovered near Cortez, Colorado in 1940. Formalized monitoring for Mesa Verde cactus began in 1986 (Roth 2020). Population trends appeared to be relatively stable through 2000. Since 2000, declines have been observed range wide (Ladyman 2004, Roth 2020). In 2003 recruitment was low and mortality was higher than normal for all the study areas (Service. 2011). Since the early 2000s, Colorado sites have had periodic population explosions of the native longhorn cactus beetle (*Moneilema semipunctatum*). This beetle is a predator on various cacti including Mesa Verde cactus. In New Mexico, nonnative army cutworms (*Euxoa spp.)* are the main predator. This species of moth has been observed on BLM plots (Service 2011).

Threats

Range-wide, the most serious threats to Mesa Verde cactus include highway construction, off-road vehicle use, herbivory, and illegal collections. Increased monitoring in areas where illegal collections have occurred historically, along with education, has decreased illegal collections.

Periodic severe drought conditions in the Four Corners area over the last 20 years are likely responsible for the increased herbivory observed, as these small cacti serve as the only source of moisture and green food in many of areas. Both nonnative cutworms (*Euxoa spp.)* and native longhorn cactus beetle (*Moneilema semipunctatum*) have been observed on Mesa Verde cactus individuals.

The soils of the Mancos and Fruitland shale formations are often highly erodible and lead to these areas being very susceptible to ground disturbance and compaction. This makes activities like off-road vehicle use and construction threats to the species range-wide.

ENVIRONMENTAL BASELINE

Under section 7(a)(2) of the ESA, when considering the effects of the action on federally listed species, we are required to take into consideration the environmental baseline. Regulations implementing the ESA define the environmental baseline (50 CFR 402.02) as the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in progress. The environmental baseline defines the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the

proposed action. The consequences to listed species or designated critical habitat from ongoing agency activities or existing agency facilities that are not within the agency's discretion to modify are part of the environmental baseline (84 FR 44976-45018).

STATUS OF THE SPECIES WITHIN THE ACTION AREA

Mesa Verde cactus

The action area is located within the range of Mesa Verde cactus. Occupied habitat occurs within the project area. Both current and historic occurrences exist within the project area. Surveys of the project area where suitable habitat occurred were conducted from August 13 and 20, 2019 and March 29 and April 1, 2021. During these surveys, four sites with a total of 57 individual Mesa Verde cacti were observed. Of these, only 12 individuals were observed within the ROW. An estimated two individuals of the 12 will be directly impacted. These individuals will be transplanted. Additional surveys will be necessary (see conservation measures above) prior to activities within the potential habitat.

Factors affecting the species within the action area

The existing highway likely destroyed occupied habit of Mesa Verde cactus prior to its listing under ESA. The highway currently serves as a vector for invasive weeds to the habitat that currently exists. Along with a vector for weeds, the highway also serves as a pathway for dust and waste products that can cover up individual Mesa Verde cacti and disrupt potential pollination.

EFFECTS OF THE ACTION

Effects of the action refer to the consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (84 FR 44976-45018).

Mesa Verde cactus

The majority of the activities described in this project will occur outside of Mesa Verde cactus habitat. Ground-disturbing activities have the potential to crush individual cacti if they are not well marked or moved out of the area of ground disturbance. When ground-disturbing activities are located in areas with Mesa Verde cactus, individual plants will be avoided except where safety concerns prevent this. Where individual plants cannot be avoided, they will be transplanted prior to ground disturbance into nearby occupied habitat that is free from project disturbance. It is estimated that two individuals will need to be transplanted in order to avoid crushing the plants. Subsequent surveys prior to the completion of the project may find the

existence of additional individuals that will need to be relocated in this manner. As new seedlings emerge within the ROW over the lifetime of the project, they also may be directly impacted, as these individuals will be small and may not be detected by the monitors.

Dust from construction activities may cover plants leading to making it more difficult for pollinators to access the plants. Dust and noise from construction activities may also cause pollinators to avoid the area. The proposed conservation measure to limit construction activities to the time period outside of the reproductive season will likely avoid impacts to cactus pollination. Dust, especially during construction, may also build up on the plant and temporarily decrease photosynthesis. The short duration of the actions near the Mesa Verde cactus will likely minimize this effect.

Chemicals used (or inadvertently released) during construction may also negatively impact pollinators and plants by covering plants, interrupting germination, or reducing habitat quality. Best management practices used during construction will minimize chemical use in the environment. Work window restrictions and the short duration of the construction near the cactus will limit the exposure of Mesa Verde cactus to any chemicals used during construction.

Permanent habitat loss will be limited to the small amount within the ROW necessary to complete the project. No permanent habitat loss will occur outside of the mapped ROW.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions on listed species that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA. We do not anticipate any cumulative effects in the action area from this proposed action.

CONCLUSION

After reviewing the current status of Mesa Verde cactus, the environmental baseline for the action area, the effects of the proposed action, and cumulative effects, it is the Service's biological opinion that the proposed action will not jeopardize the continued existence of Mesa Verde cactus.

The Service finds that the realignment of U.S. Highway 64, as proposed, may cause adverse effects to some individual Mesa Verde cactus plants. At least two Mesa Verde cactus will need to be relocated as a result of the proposed action. Nevertheless, the Service concludes that implementation of the proposed action will not impede survival or recovery of Mesa Verde cactus within the action area or range wide for the following reasons.

A. The majority of NMDOT activities will take place outside of occupied Mesa Verde cactus habitat.

B. When activities occur in occupied Mesa Verde cactus habitat, all extant individuals will be flagged and avoided except where safety concerns preclude avoidance. The number of

individuals impacted is expected to be less than 5% of the local population, even if additional plants are discovered during subsequent surveys.

C. Aside from habitat within the footprint of the ROW, no additional permanent habitat loss is anticipated for Mesa Verde cactus.

D. The impacts to Mesa Verde cactus from NMDOT activities will be limited to a few days per year for five years.

CONSERVATION RECOMMENDATIONS

Section 7(a) (1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The recommendations provided here relate only to the action and do not necessarily represent complete fulfillment of the agency's 7(a)(1) responsibility for these species.

1. We recommend regular communication between FHWA and the Service before, during, and after the completion of the proposed action in order to determine the necessity and applicability of any further conservation measures, which will be developed collaboratively.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION NOTICE

This concludes formal consultation for the U.S. Highway 64 alignment project. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

LITERATURE CITED

Ladyman, J. A. R. 2004. Status assessment report for *Sclerocactus mesae-verdae.* Navajo Natural Heritage Program, Window Rock, Arizona.

New Mexico Department of Transportation (NMDOT). 2021. Biological evaluation for Highway 64 alignment, San Juan County, New Mexico. Prepared by Environmental Analyst Jennifer Mullins, WSP USA Inc. New Mexico Department of Transportation Environmental Bureau, Santa Fe, New Mexico.

Roth, D. 2020. Mesa Verde cactus monitoring report from 1986-2020. New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division. Santa Fe, New Mexico.

U.S. Fish and Wildlife Service (Service). 1979. Final Rule: *Sclerocactus mesae-verdae*, a Threatened species. Federal Register 44: 62470 - 62474.

U.S. Fish and Wildlife Service (Service). 1984. Recovery plan for the Mesa Verde cactus (*Sclerocactus mesae-verdae*) Boissevain EX Hill and Salisbury) L. Benson. Prepared by K.D. Heil, Math-Science Department, San Juan College, Shiprock, New Mexico. U.S. Fish and Wildlife Service, Region 2, Albuquerque, New Mexico.

U.S. Fish and Wildlife Service (Service). 2011. Mesa Verde cactus (*Sclerocactus mesae-verdae*) 5-year review summary and evaluation. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.

C NAVAJO NATION FISH AND WILDLIFE BIOLOGICAL RESOURCE COMPLIANCE FORM

NNDFW Review No. 19wsp101

BIOLOGICAL RESOURCES COMPLIANCE FORM
NAVAJO NATION DEPARTMENT OF FISH AND WILDLIFE
P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal and Federal laws protecting biological resources including the Navajo Endangered Species and Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection and National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish and Wildlife Service if a Federally-listed species is affected.

PROJECT NAME & NO.: US Highway 64 Alignment Study and Preliminary Engineering Project

DESCRIPTION: US Highway 64 improvement project between Milepost 0.0 and Milepost 20.8 in San Juan County, New Mexico. The New Mexico Department of Transportation has identified the need for major pavement improvement, addition of shoulders, sight distance/vertical alignment improvements, drainage improvements, and up to four bridge replacements. The scope of work for this project includes rehabilitation the existing roadway, improving drainage, preliminary engineering design, evaluation of traffic and environmental conditions, and cultural and biological resource investigations. Construction will be phased with $7M programmed in FY 2022 and $6M in FY 2023.

LOCATION: BETWEEN MP 0.00 AND MP 20.8 ON US HWY 64, SAN JUAN COUNTY, NEW MEXICO. 12S 674235, 4082467 TO 12S 703660, 4072295 (NAD 83)

REPRESENTATIVE: Arno Cheng, WSP USA, Inc.

ACTION AGENCY: NM Department of Transportation

B.R. REPORT TITLE / DATE / PREPARER: Biological Evaluation, US Highway 64 Alignment Study and Preliminary Engineering/May, 2021/WSP USA, Inc.

SIGNIFICANT BIOLOGICAL RESOURCES FOUND: RCP areas 1,2, and 3. Mesa Verde cactus found within project area. Potential migratory bird habitat also present.

POTENTIAL IMPACTS

NESL SPECIES POTENTIALLY IMPACTED: [1] Mesa Verde cactus (Sclerocactus mesae-verdae), G2

FEDERALLY-LISTED SPECIES AFFECTED: [1] Mesa Verde cactus (Sclerocactus mesae-verdae), Federally Threatened

OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES: NA

AVOIDANCE / MITIGATION MEASURES: I. Biological monitors will be present during construction activities in occupied Mesa Verde cactus habitat. 2. II. Work will occur outside of the reproductive season of late April to mid-June in areas where Mesa Verde cactus occurs to avoid pollination disruption. III. All equipment used shall be cleaned prior to use in order to minimize the transport of invasive plant seeds and parts. IV. Preconstruction surveys by a qualified and permitted botanist would be required if two or more years has passed since the most

recent survey within potential and occupied habitat in the Action Area. VI. At mile post 8.5, build a retaining wall to protect nearby Mesa Verde individuals from mortality versus sloping back the area to prevent erosion. VII. When individual plants cannot be avoided from destruction, cacti will be removed and transplanted prior to ground disturbing activities following NNHP transplant protocols.

CONDITIONS OF COMPLIANCE*: The undertaking shall avoid the Migratory Bird breeding season of 01 MAR - 15 AUG or surveys will be required. The survey shall include a 50 m (165 ft.) buffer outside the edge of disturbance. Removal or disturbance of nesting habitat (i.e. trees & shrubs) shall not be allowed within 50 meters of an active nest during incubation to fledging. Fencing of highway should allow for passage of wildlife by having a top and bottom wire that is smooth (i.e., without barbs). Fox burrows between mile posts 8 and 9 (page 73 of 217 in BE) should be preserved to the maximum extent possible through the use of a retaining wall.

FORM PREPARED BY / DATE: Brent Powers/21 Dec 2021

COPIES TO: (add categories as necessary)

☒ _____ ☐ _____

2 NTC § 164 Recommendation:	Signature	Date
☐Approval ☒Conditional Approval (with memo) ☐Disapproval (with memo) ☐Categorical Exclusion (with request letter)	David Mikesic Gloria M. Tom, Director, Navajo Nation Department of Fish and Wildlife	12/21/2021
☐None (with memo)		

*I understand and accept the conditions of compliance, and acknowledge that lack of signature may be grounds for the Department not recommending the above described project for approval to the Tribal Decision-maker.

Representative's signature Trent Botkin Date Mar 24, 2022

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

MEMORANDUM

TO : David Mikesic, Zoologist
Department of Fish and Wildlife

FROM : _____
Gloria M. Tom, Director
Department of Fish and Wildlife

DATE : December 03, 2021

SUBJECT : **DELEGATION OF AUTHORITY**

I will be teleworking from California beginning Monday, December 06, 2021 through Friday, December 17, 2021; and on annual leave beginning Monday, December 20, 2021 through Thursday, December 30, 2021. I am hereby delegating you to act in the capacity of the Director, Department of Fish and Wildlife, effective 8:00 a.m. on Monday, December 06, 2021. This delegation shall end at 5:00 p.m. on Thursday, December 30, 2021.

Your authority will cover the review and signing off of all routine documents pertaining to the Department of Fish and Wildlife, except for issues that you feel should have the attention of the Director.

ACKNOWLEDGEMENT

David Mikesic 12/7/21

David Mikesic, Zoologist
Department of Fish and Wildlife

21 December, 2021

19wsp101
WSP USA
Arno Cheng
6100 Uptown Blvd. NE #700
Albuquerque, NM 87110

Dear Arno,

The Navajo Nation Department of Fish and Wildlife (NNDFW) reviewed WSP's Biological Evaluation for US Highway 64 Alignment Study and Preliminary Engineering. NMDOT District 5 proposes to improve US 64 in San Juan County between Milepost 0.0 and Milepost 20.8 from Shiprock, NM through Beclabito, NM. Work will include major pavement improvements, addition of shoulders, sight distance/vertical alignment improvements, drainage improvements, and up to four bridge replacements. The total duration of construction activities is anticipated to take place in five phases between 2022 and 2027, tentatively. The first two phases of construction start at the western portion of the project area. Work will occur in the Beclabito, Rattlesnake, Rocky Point, Shiprock, and Teec Nos Pas quadrangles. The purpose of this letter is to inform you that we are granting the proposed project ***Conditional Approval***.

The project area proposed intersects with ***known habitat*** for the following species on the Navajo Endangered Species List:

[1] *Sclerocactus mesae-verdae* (Mesa Verde cactus), G2, Federally Threatened

Mesa Verde cactus *(Sclerocactus mesae-verdae)* were observed in four separate locations within the project area in field surveys completed between August 13 and 20, 2019 and March 29 and April 1, 2021. A total of 57 Mesa Verde cactus were observed in four separate locations between mile post 8.5 and mile post 19.9. Some individual cacti were in early stages of bloom with flower buds formed but not yet open. Twelve Mesa Verde cacti were observed within the ROW, 45 detections were located immediately outside the project area at a distance between 3 and 150 feet beyond the proposed project limits. Mesa Verde cactus detections were associated with shale soils with cobble cover on high points in the landscape. Details of the detections are as follows:

- **Mile post 8.5:** Seven Mesa Verde cactus were observed just outside the project area along the top bank south of the ROW. The cacti observations were outside of the SSA and south of the ROW. One individual is extremely close to the extended ROW where the footprint would extend to slope back the area to reduce erosion. This extension would cause the mortality of at least one individual. NMDOT also proposes an option of building a retaining wall.

- **Mile post 14.1:** Four Mesa Verde cactus were observed inside the project area approximately north of the ROW. One individual is within the right of way and cannot be avoided.

- **Mile post 19.3:** Thirty-six Mesa Verde cactus were observed on both sides of the highway, within and immediately adjacent to the ROW. Seven of these observations occurred within the project area and the remaining 29 were located less than 100 feet outside the ROW. One individual will not be able to be avoided during construction.

- **Mile post 19.9:** Ten Mesa Verde cactus were observed within and immediately adjacent to the ROW. At least one individual will be in the footprint of the ROW fence.

Conservation Measures

For Mesa Verde cactus locations identified in the project area, the following conservation measures should be included in the proposed actions:

I. Biological monitors will be present during construction activities in occupied Mesa Verde cactus habitat and will mark individual plants for avoidance using pin flags and/or temporary fencing. Monitors will also prevent machinery from moving into flagged/fenced areas. Where Mesa Verde cactus individuals are located at or near the ROM fenceline, biological monitors will ensure that fence construction avoids impacts to a 1ft radius around individuals to the greatest extent possible.

II. Work will occur outside of the reproductive season of late April to mid-June in areas where Mesa Verde cactus occurs to avoid pollination disruption.

III. All equipment used shall be cleaned prior to use in order to minimize the transport of invasive plant seeds and parts.

IV. Preconstruction surveys by a qualified and permitted botanist would be required if two or more years has passed since the most recent survey within potential and occupied habitat in the Action Area. Survey reports shall be submitted to NNHP for review and approval prior to construction activities taking place in occupied and potential habitat if two years have elapsed since initial surveys.

V. Plants will be marked via Global Positioning System (GPS) to illustrate avoidance areas.

VI. At mile post 8.5, build a retaining wall to protect nearby Mesa Verde individuals from mortality versus sloping back the area to prevent erosion. Build a temporary fence and/or flag the individuals at this site to minimize impacts from wall construction.

VII. When, for safety reasons, individual plants cannot be avoided from destruction, cacti will be removed and transplanted prior to ground disturbing activities following NNHP transplant protocols. The transplant location shall be to the nearest occupied habitat that is far enough removed from project impacts or additional threats (such as existing development, ect).

Note* Relocation of individual plants is not a mitigation measure as survival rates are very low. Transplanting is a salvage opportunity when disturbance/destruction of individuals cannot be avoided due to safety measures.

Monitoring Guidelines:

At the time of this consultation, it appears that only two individuals of Mesa Verde cactus will be impacted to the point of needing to be transplanted. However as additional pre-construction surveys are repeated additional individuals may be found. Some or all of those individuals may need to be transplanted if the conservation measures above do not protect them. In the case that **10 or more individuals** need to be transplanted, the following monitoring and reporting would be required:

- Yearly monitoring of transplanted individuals for survival, reproductive ability, and impacts (herbivory, trampling, etc) for five years following transplant.
- Yearly monitoring reporting to the Navajo Nation heritage biologist and USFWS (report can be part of the species report that the Navajo Nation biologist shares with the service).

Transplant procedures should follow NNHP guidelines for the species (attached).

Additional Conservation Measures:

The following additional wildlife conservation guidelines shall also be applied to all phases of project activites (where applicable):

I. NNHP has determined that there is potential habitat for migratory birds within the project areas. The undertaking shall avoid the Migratory Bird breeding season of 01 MAR - 15 AUG or nest surveys will be required. The nest survey shall include a 50 m (165 ft.) buffer outside the edge of disturbance. Removal or disturbance of nesting habitat (i.e. trees & shrubs) shall not be allowed within 50 meters of an active nest during incubation to fledging.

II. Fencing of highway should allow for passage of wildlife by having a top and bottom wire that is smooth (i.e., without barbs). Ideally, the bottom wire should be raised above the ground to allow passage of deer fawns.

III. Fox burrows between mile posts 8 and 9 (page 73 of 217 in BE) should be preserved to the maximum extent possible through the use of a retaining wall. Other burrows should be visually checked prior to the start of work to ensure they are not active before they are filled in/destroyed.

Mesa Verde cactus survey reports for subsequent phases of this project need to be sent to NNHP prior to construction activities taking place. The survey contractor shall consult with the NNHP botanist and zoologist for positive identification and development of mitigation strategies if additional NESL plants and or wildlife species are found during surveys.

Please contact me via email at ntalkington@nndfw.org with any questions that you have concerning the review of this project.

Sincerely,

Nora E. Talkington, Botanist
Navajo Natural Heritage Program
Department of Fish and Wildlife

CONCURRENCE

Gloria Tom, Director
Department of Fish and Wildlife

12/21/2021
Date

xc: CONS-100-19
BIA

Mesa Verde Cactus (*Sclerocactus mesae-verdae*) Transplanting Guidelines

November 18th, 2021
Nora Talkington, Botanist
Navajo Natural Heritage Program
Adapted from BLM SCCL transplant protocol, 2012

Timing of Transplanting

- Transplanting should take place in the spring from March 1st–April 15th (Roth 1997).

Phase I – Digging up the cacti

- Mark one side of the plant to orient the plant in the direction as it was in its original location (to minimize sunburn damage to plant).
- Carefully dig out the surrounding area of the plant (~ 6-12 inches). Try to get as many roots as possible. The roots are fragile and some may be close to soil surface. Try to minimize as much disturbance to roots as possible by excavating as large of a hole as reasonable (depending on how cactus are distributed at the site) and keeping soil and roots intact to the greatest extent possible.
- Once excavated, trim off any damaged roots and place plant on its side in bucket or whatever is being used to transport cacti. Try to keep plants separated to prevent damage to roots during transport.
- Save enough soil from excavated plants to blend with soil at transplant site.

Phase II – Storage/Transporting: Previous Mesa Verde cactus transplant projects monitored by NNHP have first dipped roots in a diluted Clorox solution to kill pathogens before hardening off the roots for two weeks after digging up plants (Hazelton 2011). However, there is little evidence that root treatments and hardening-off techniques actually increase plant survival (Ballard et al. 2015). In a study comparing different transplant techniques and timing on survival of *Sclerocactus parviflorus*, Ballard et al. (2015) found no difference in survival between three different transplanting techniques (one which included hardening-off roots for 2 days), timing of transplant, or association with nurse plant. Data from a five-year monitoring report that compared various methods for transplanting *Sclerocactus cloveriae* (Clover's cactus) along a pipeline right-of-way found that directly transplanted cactus had higher survival rates than cactus whose roots were hardened off for several weeks prior to transplant (Ecosphere 2018). Therefore, NNHP recommends directly transplanting Mesa Verde cactus and soil (with root ball intact) to the transplant site, without additional root bleach treatments or hardening-off.

- Transport cactus and surrounding soil directly to the transplant site after removal, keeping excavated soil and roots intact.
- When transporting to transplant site, separate plants as much as possible to prevent root damage as the plants shift around in vehicle.

Phase III – Transplant location

- Before transplanting, choose a transplanting site that best represents the natural site where the cacti were excavated (as close as possible). This includes similar slope, aspect, habitat quality, and associated vegetation.
- The transplant site should be free from human activity (not in close proximity of O&G activity, ATV activity, roads, and other ROWs). Also keep out of areas where cattle may pose a risk, such as cattle trails, water sources, salt licks, etc.
- If possible, try to determine if transplant site is susceptible to future ground disturbing activity such as future O&G wells, pipelines, power lines, etc.
- Find a location that has an existing natural Mesa Verde cactus population. This will allow for comparing the natural cacti with the transplanted cacti during monitoring.

Phase IV – Transplanting

- Dig a hole deep and wide enough to accommodate the cactus roots and excavated soil surrounding roots from the original site.
- Place the cactus in the planting hole, aligning the plant to the direction that it was originally. Backfill the hole with the mixed soil and tamp the soil around the cactus enough to eliminate air pockets and uneven setting.
- Water judiciously to settle the soil.
- Temporally mark newly transplanted cactus with a pin flag for photo purposes (see below). Using pin flags are also important when transplanting multiple cacti so that person(s) transplanting are aware of where these cacti are (to prevent trampling).
- If monitoring will occur after transplant, mark the newly transplanted cactus with identifying tag (preferably metal). Tags should be uniformly placed such as subsequent monitoring personnel will be able to find cacti. For example, tag placed 3 inches north of all cacti.
- Also tag any natural Brack's cactus in or near transplant site. How many natural cacti are tagged will depend on how many are transplanted. We can determine this on a case by case basis.
- GPS each cactus using UTM coordinates (preferable) in NAD 27. Lat/Long is also acceptable.
- Take detailed notes during this process for your report.
- Take photos. If transplanting several cacti, photos of each cactus is not necessary. However, take photos that would best aide future monitoring. Photos of the transplant area with some type of unique landmark (trees, mountain in background, power line, etc.) are helpful.
- REMOVE PIN FLAGS WHEN DONE – Cattle (and other animals) may be attracted to colored pin flags.

Phase V - Reporting

- A Transplant Report will be required and submitted to the NNHP Botanist within 30 days of transplanting.
- The report should include an introduction to the proposed project, methodology, results, GPS info, maps, photos, and any discussion that is noteworthy.
- Please keep the report simple but thorough (no fluff). Please keep project specific.
- The most important features in the report will be the photos, GPS information, tag assignments, maps, and any other information that would aid the monitoring process.

- Monitoring of the site should occur between late April and mid-May on a yearly basis and should assess survivorship of transplanted cactus as compared to controls. Monitoring should also assess cactus growth, reproductive potential, and vigor. An annual report should be submitted to NNHP for at least five (5) years following transplant.

LITERATURE CITED:

Ballard, R., Ott, R., Novotny, T., Lincoln, A. and Rechel, E. 2015. Survival and plant vigor of *Sclerocactus parviflorus* (Clover and Jotter) following different transplanting techniques. *Western North American Naturalist*, *75*(3), pp.332-338.

Ecosphere Environmental Services. 2018. Brack's hardwall cactus 2018 monitoring report. Enterprise Products Western Expansion Project III. Prepared for Navajo Natural Heritage Program, Window Rock, AZ.

Hazelton, A.F. 2011. Mesa Verde cactus (*Sclerocactus mesae-verdae*) 10 year transplant monitoring report. Shiprock Fairgrounds 2001–2011. Navajo Natural Heritage Program, Arizona Department of Fish and Wildlife, Window Rock, AZ.

Roth, D. 1997. Mesa Verde cacti transplantation for BIA Route N57-Cudei Road monitoring report, 1997. Navajo Natural Heritage Program, Window Rock, Arizona.

Navajo Heritage BRCF--US64 AZ to Shiprock

Final Audit Report 2022-03-24

Created:	2022-03-24
By:	Steven Gisler (steven.gisler@state.nm.us)
Status:	Signed
Transaction ID:	CBJCHBCAABAAeM1V6WfNVW80pxK7wYGZrYjuupdPUXqo

"Navajo Heritage BRCF--US64 AZ to Shiprock" History

Document created by Steven Gisler (steven.gisler@state.nm.us)
2022-03-24 - 3:28:36 PM GMT- IP address: 164.64.74.20

Document emailed to Trent Botkin (TRENT.BOTKIN@STATE.NM.US) for signature
2022-03-24 - 3:29:28 PM GMT

Document e-signed by Trent Botkin (TRENT.BOTKIN@STATE.NM.US)
Signature Date: 2022-03-24 - 3:39:12 PM GMT - Time Source: server- IP address: 143.131.12.231

Agreement completed.
2022-03-24 - 3:39:12 PM GMT

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

Memorandum

To: Honorable Rickie Nez, Chairman
24th NNC Resources and Development Committee
Legislative Branch

From:
Steven T. Chischilly Jr.
Environmental Specialist
Navajo Nation General Land Development Department
Division of Natural Resources

Date: **May 18, 2022**

Subject: Environmental Compliance Determination for New Mexico Department of Transportation (NMDOT) Right-of-Way "US 64" Milepost 0 to Milepost 20.8 on US HWY 64, Shiprock, Beclabito and Teec Nos Pos Chapters,San Juan County, New Mexico, on Navajo Nation Trust Land

The General Land Development Department's environmental compliance determination (ECD) confirms the above mentioned Right-of-Way (ROW) application meets the environmental clearance criteria of the Navajo Nation General Leasing Regulations (16 N.N.C. § 2301 et. Seq.). The proposed ROW poses no significant impact(s) to the cultural, biological and the natural environments of the Navajo Nation.

In addition, the ECD is valid so long as the "Effect/Conditions of Compliance" out-lined on the Section 106 Concurrence Letter 11/10/20 and the "Biological Resource Compliance Form (NNDFW Review No. 19wsp101)" are implemented.

If at anytime any historical properties, archeological resources, human remains, or other cultural items not previously reported are encountered, all activity will cease and the Navajo Nation Historic and Heritage Preservation Department will be contacted immediately.

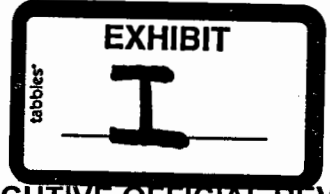
Furthermore,the aforementioned ROW applicant will also consult with the Navajo Nation EPA to ensure compliance with all Navajo Nation Environmental laws and permits (4 N.N.C. § 901 et. Seq.) that will be enforced after said ROW is consented to by the Navajo Nation.

If at any time over the duration of the ROW an environmental taking or violation occurs, the grantee may be subject to disciplinary actions and possible cancellation of the authorization.

This pertains to all Navajo Nation and Federal environmental laws, regulations and policies applicable to the proposed undertaking which include, but are not limited to the following:

- National Historic Preservation Act, 16 U.S.C. §§ 470 et seq.
- Endangered Species Act, 7 U.S.C. §136, U.S.C. §§1531 et seq.
- Farmland Protection Policy Act, 7 U.S.C. §§ 4201 et seq.
- Clean Air Act, 42 U.S.C. §§ 7401 et seq.
- Eagle Protection Act, 16 U.S.C. §§ 668-668c
- Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712
- Navajo Nation Environmental Policy Act, 4 N.N.C. §§ 901 et seq.
- Navajo Nation Cultural Resource Protection Act, 19 N.N.C. §§ 1001 et seq.
- Navajo Nation Solid Waste Act, 4 N.N.C. §§ 101 et seq.
- Navajo Nation Air Pollution Prevention and Control Act, 4 N.N.C. §§ 1101 et seq.
- Navajo Nation Prevention and Control Act, 4 N.N.C. §§ 1101 et seq.
- Navajo Nation Safe Water Drinking Water Act, 22 N.N.C. §§ 2501 et seq.
- Navajo Nation Clean Wate Act, 4 N.N.C. §§ 1301 et seq.
- Navajo Nation Underground Storage Tank Act, 4 N.N.C. §§ 1501 et seq.
- Navajo Nation Pesticide Act, 4 N.N.C. §§ 301 et seq.
- Golden and Bald Eagle Nest Protection Regulations (GBENPR)
- Navajo Endangered Species List (NESL)
- Biological Resource Land-Use Clearance Policies and Procedure (RCP)
- All other applicable Navajo Nation and Federal Laws, Regulations and Policies

If there are any questions, do not hesitate to contact me at Stchischilly@navajo-nsn.gov or at (928)-871-6447. Thank you.



Document No. 018335 Date Issued: 03/18/2022

EXECUTIVE OFFICIAL REVIEW

Title of Document: NM DOT US64 MPO-8.1ROW Contact Name: ANDERSON ABASTA, ETTIE

Program/Division: DIVISION OF NATURAL RESOURCES

Email: eaabasta@navajo-nsn.gov Phone Number: 928-871-6447

			Sufficient	Insufficient
☐ **Business Site Lease**				
1. Division:		Date:	☐	☐
2. Office of the Controller:		Date:	☐	☐
(only if Procurement Clearance is not issued within 30 days of the initiation of the E.O. review)				
3. Office of the Attorney General:		Date:	☐	☐
☐ **Business and Industrial Development Financing, Veteran Loans, (i.e. Loan, Loan Guarantee and Investment) or Delegation of Approving and/or Management Authority of Leasing transactions**				
1. Division:		Date:	☐	☐
2. Office of the Attorney General:		Date:	☐	☐
☐ **Fund Management Plan, Expenditure Plans, Carry Over Requests, Budget Modifications**				
1. Office of Management and Budget:		Date:	☐	☐
2. Office of the Controller:		Date:	☐	☐
3. Office of the Attorney General:		Date:	☐	☐
☐ **Navajo Housing Authority Request for Release of Funds**				
1. NNEPA:		Date:	☐	☐
2. Office of the Attorney General:		Date:	☐	☐
☐ **Lease Purchase Agreements**				
1. Office of the Controller: (recommendation only)		Date:	☐	☐
2. Office of the Attorney General:		Date:	☐	☐
☐ **Grant Applications**				
1. Office of Management and Budget:		Date:	☐	☐
2. Office of the Controller:		Date:	☐	☐
3. Office of the Attorney General:		Date:	☐	☐
☐ **Five Management Plan of the Local Governance Act, Delegation of an Approving Authority from a Standing Committee, Local Ordinances (Local Government Units), or Plans of Operation/Division Policies Requiring Committee Approval**				
1. Division:		Date:	☐	☐
2. Office of the Attorney General:		Date:	☐	☐
☐ **Relinquishment of Navajo Membership**				
1. Land Department:		Date:	☐	☐
2. Elections:		Date:	☐	☐
3. Office of the Attorney General:		Date:	☐	☐

Pursuant to 2 N.N.C. § 164 and Executive Order Number 07-2013

☐ **Land Withdrawal or Relinquishment for Commercial Purposes**

			Sufficient	Insufficient
1. Division:		Date:	☐	☐
2. Office of the Attorney General:		Date:	☐	☐

☐ **Land Withdrawals for Non-Commercial Purposes, General Land Leases and Resource Leases**

1. NLD		Date:	☐	☐
2. F&W		Date:	☐	☐
3. HPD		Date:	☐	☐
4. Minerals		Date:	☐	☐
5. NNEPA		Date:	☐	☐
6. DNR		Date:	☐	☐
7. DOJ		Date:	☐	☐

☐ **Rights of Way**

1. NLD		Date:	☐	☐
2. F&W		Date:	☐	☐
3. HPD		Date:	☐	☐
4. Minerals		Date:	☐	☐
5. NNEPA		Date:	☐	☐
6. Office of the Attorney General:		Date:	☐	☐
7. OPVP		Date:	☐	☐

☐ **Oil and Gas Prospecting Permits, Drilling and Exploration Permits, Mining Permit, Mining Lease**

1. Minerals		Date:	☐	☐
2. OPVP		Date:	☐	☐
3. NLD		Date:	☐	☐

☐ **Assignment of Mineral Lease**

1. Minerals		Date:	☐	☐
2. DNR		Date:	☐	☐
3. DOJ		Date:	☐	☐

☑ **ROW (where there has been no delegation of authority to the Navajo Land Department to grant the Nation's consent to a ROW)**

1. NLD		Date:	☐	☐
2. F&W		Date:	☐	☐
3. HPD		Date:	☐	☐
4. Minerals		Date:	☐	☐
5. NNEPA		Date:	☐	☐
6. DNR		Date:	☐	☐
7. DOJ (ic)	V Blanket	Date: 8/9/22	☒	☐
8. OPVP	Burnham	Date: 8/11/2022	☒	☐

☐ **OTHER:**

1.		Date:	☐	☐
2.		Date:	☐	☐
3.		Date:	☐	☐
4.		Date:	☐	☐
5.		Date:	☐	☐

NAVAJO NATION DEPARTMENT OF JUSTICE

☐ RESUBMITTAL

DOCUMENT REVIEW REQUEST FORM

RECEIVED
AUG - 2 2022
DEPARTMENT OF JUSTICE
ADMINISTRATION

8/2/22 10:10 pm
DOJ
DATE / TIME
☐ 7 Day Deadline
DOC #: 018335
SAS #:
UNIT: NRU

*** FOR NNDOJ USE ONLY - DO NOT CHANGE OR REVISE FORM. VARIATIONS OF THIS FORM WILL NOT BE ACCEPTED. ***

CLIENT TO COMPLETE

DATE OF REQUEST:	8/2/22	DIVISION:	NATURAL RESOURCES
CONTACT NAME:	Michelle Hoskie	DEPARTMENT:	GENERAL LAND DEVELOPMENT DEPARTMENT
PHONE NUMBER:	x 6447	E-MAIL:	michellehoskie@navajo-nsn.gov

TITLE OF DOCUMENT: EOR# 18335, NM DOT US64 MPO-8.1 ROW

DOJ SECRETARY TO COMPLETE

DATE/TIME IN UNIT: 8.2.22 10:30Am
REVIEWING ATTORNEY/ADVOCATE: Irvin Chee 8.11.22

DATE TIME OUT OF UNIT:

DOJ ATTORNEY / ADVOCATE COMMENTS

Document is legally sufficient Provided, ROW term is consistent w/terms & conditions

REVIEWED BY: (*Print*)	Date / Time	SURNAMED BY: (*Print*)	Date / Time
Irvine Chee	8-3-22	√ Blackhat	8-9-22 11:00 Am

DOJ Secretary ~~Called~~ Emailed: Michelle Hoskie for Document Pick Up on 8/9/22 at 130p By: JF

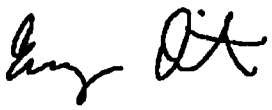
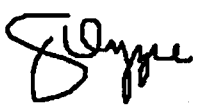
PICKED UP BY: (*Print*) DATE / TIME:

NNDOJ/DRRF-July 2013

*Called ext 6447, 6423 two Xs — NO Answers

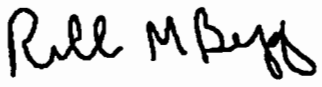
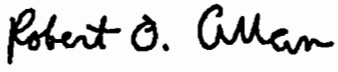
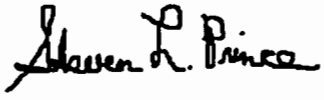
COMPLETED

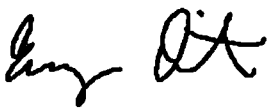
Tier 1 Document Voting Results

User Name (Facility)	Job Title	Department	Vote Cast	Comments	Replies	Vote Date	Signature
Eugenia Quintana EPA (NLTDS and GLDD)	Environmental Department Manager	Navajo Nation EPA	Approved	1. See comments. Thank you.	1. *No Reply*	22-Jul-2022	
Leanna Begay (NLTDS and GLDD)	NNDFW (Reviewer)	Navajo Nation Fish and Wildlife	Approved	1. Conditional approval: Project sponsor to follow conditions outlined in memo.	1. *No Reply*	18-Jul-2022	
Najamh Tariq (NLTDS and GLDD)	Branch Director (Reviewer)	Department of Water Resources	Approved	*no comments*	*No Reply*	15-Jul-2022	
Patrick Antonio EPA (NLTDS and GLDD)	Principal Hydrologist	Navajo Nation EPA	Approved	1. The project EA indicates 18 ephemeral washes subject to culvert and bridge work would be required to receive CWA 404/401 permit authorization. The project EA also indicates the project is subject to the federal NPDES Construction General Permit.	1. *No Reply*	18-Jul-2022	
Rebecca Gilchrist MIN (NLTDS and GLDD)	Senior Mining Engineer (Reviewer)	Minerals Department	Approved	*no comments*	*No Reply*	18-Jul-2022	
Shelby Dayzie - EPA (NLTDS and GLDD)	Remedial Project Manager	Navajo Nation EPA	Approved	1. Conditional Approval, see attached memo.	1. *No Reply*	19-Jul-2022	

Warren Roan - EPA (NLTDS and GLDD)	Environmental Department Manager	Navajo Nation EPA	Approved	1. The project may involve temporary aboveground storage tanks containing a regulated substance and must comply with the NNEPA Storage Tank Program Guidance No. 3 ASTs at Construction Sites. The document can be located at https://www.nnepa-storagetanks.org/.	1. *No Reply*	19-Jul-2022	
Yolanda Barney NNEPA (NLTDS and GLDD)	Environmental Program Manager	Navajo Nation EPA	Approved	*no comments*	*No Reply*	19-Jul-2022	

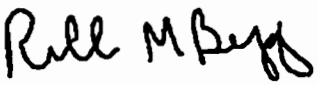
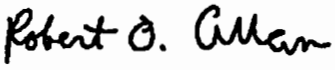
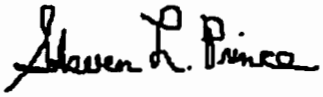
Tier 2 Document Voting Results

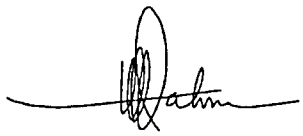
User Name (Facility)	Job Title	Department	Vote Cast	Comments	Replies	Vote Date	Signature
David Mikesic (NLTDS and GLDD)	Navajo Nation Zoologist (Approver)	Navajo Nation Fish and Wildlife	Approved	1. Project Sponsor received Conditional approval for Project and must follow conditions outlined in memo for Mesa Verde Cactus and other species.	1. *No Reply*	22-Jul-2022	
Richard Begay NNHP (NLTDS and GLDD)	Department Manager lll (Approver)	Navajo Nation Heritage and Historic Preservation Department	Approved	*no comments*	*No Reply*	25-Jul-2022	
Robert Allan DNR (NLTDS and GLDD)	Attorney (Approver)	Division of Natural Resources	Approved	*no comments*	*No Reply*	25-Jul-2022	
Steven Prince MIN (NLTDS and GLDD)	Principal Petroleoum Engineer (Approver)	Minerals Department	Approved	1. This approval is contingent on the uploaded file StandardROWTerms&Conditions-04122022.pdf being permanently included with the documents in this application packet. slp	1. *No Reply*	22-Jul-2022	
Valinda Shirley - NNEPA (NLTDS and GLDD)	Executive Director of Navajo Nation EPA	Navajo Nation EPA	Approved	1. Please see the NNEPA comments and attached memorandums outlining the conditional approval parameters for approval.	1. *No Reply*	22-Jul-2022	

W. Mike Halona (NLTDS - Admin)	NLD Department Manager III	NLD	Approved	*no comments*	*No Reply*	01-Aug-2022		
~~GLDD)~~								
Leanna Begay (NLTDS and GLDD)	NNDFW (Reviewer)	Navajo Nation Fish and Wildlife	Approved	1. Conditional approval: Project sponsor to follow conditions outlined in memo.	1. *No Reply*	18-Jul-2022		
Najamh Tariq (NLTDS and GLDD)	Branch Director (Reviewer)	Department of Water Resources	Approved	*no comments*	*No Reply*	15-Jul-2022		
Patrick Antonio EPA (NLTDS and GLDD)	Principal Hydrologist	Navajo Nation EPA	Approved	1. The project EA indicates 18 ephemeral washes subject to culvert and bridge work would be required to receive CWA 404/401 permit authorization. The project EA also indicates the project is subject to the federal NPDES Construction General Permit.	1. *No Reply*	18-Jul-2022		
Rebecca Gilchrist MIN (NLTDS and GLDD)	Senior Mining Engineer (Reviewer)	Minerals Department	Approved	*no comments*	*No Reply*	18-Jul-2022		
Shelby Dayzie - EPA (NLTDS and GLDD)	Remedial Project Manager	Navajo Nation EPA	Approved	1. Conditional Approval, see attached memo.	1. *No Reply*	19-Jul-2022		

Warren Roan - EPA (NLTDS and GLDD)	Environmental Department Manager	Navajo Nation EPA	Approved	1. The project may involve temporary aboveground storage tanks containing a regulated substance and must comply with the NNEPA Storage Tank Program Guidance No. 3 ASTs at Construction Sites. The document can be located at https://www.nnepa-storagetanks.org/.	1. *No Reply*	19-Jul-2022	
Yolanda Barney NNEPA (NLTDS and GLDD)	Environmental Program Manager	Navajo Nation EPA	Approved	*no comments*	*No Reply*	19-Jul-2022	

Tier 2 Document Voting Results

User Name (Facility)	Job Title	Department	Vote Cast	Comments	Replies	Vote Date	Signature
David Mikesic (NLTDS and GLDD)	Navajo Nation Zoologist (Approver)	Navajo Nation Fish and Wildlife	Approved	1. Project Sponsor received Conditional approval for Project and must follow conditions outlined in memo for Mesa Verde Cactus and other species.	1. *No Reply*	22-Jul-2022	
Richard Begay NNHP (NLTDS and GLDD)	Department Manager lll (Approver)	Navajo Nation Heritage and Historic Preservation Department	Approved	*no comments*	*No Reply*	25-Jul-2022	
Robert Allan DNR (NLTDS and GLDD)	Attorney (Approver)	Division of Natural Resources	Approved	*no comments*	*No Reply*	25-Jul-2022	
Steven Prince MIN (NLTDS and GLDD)	Principal Petroleoum Engineer (Approver)	Minerals Department	Approved	1. This approval is contingent on the uploaded file StandardROWTerms&Conditions-04122022.pdf being permanently included with the documents in this application packet. slp	1. *No Reply*	22-Jul-2022	
Valinda Shirley - NNEPA (NLTDS and GLDD)	Executive Director of Navajo Nation EPA	Navajo Nation EPA	Approved	1. Please see the NNEPA comments and attached memorandums outlining the conditional approval parameters for approval.	1. *No Reply*	22-Jul-2022	

W. Mike Halona (NLTDS - Admin)	NLD Department Manager III	NLD	Approved	*no comments*	*No Reply*	01-Aug-2022	

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

MEMORANDUM

TO : New Mexico Department of Transportation

FROM : Shelby Dayzie, Remedial Project Manager
Navajo Nation Environmental Protection Program

THROUGH : Valinda Shirley, Executive Director
Navajo Nation Environmental Protection Program

DATE : July 19, 2022

SUBJECT : Conditional Approval on NMDOT Road Improvements

The Navajo Nation Environmental Protection Agency (NNEPA) reviewed the supporting documents for New Mexico Department of Transportation (NMDOT) District 5 improvements US 64 in San Juan County Milepost 0.0 and Milepost 20.8 from Shiprock, NM through Beclabito, NM. Upcoming work will include major pavement improvements, addition of shoulders, sight distance/vertical alignment improvements, drainage improvements, and up to four bridge replacements. The first two phases of construction start at the western portion of the project area. Proposed work will pass through the communities of Shiprock, NM, Teec Nos Pos, AZ, and Beclabito, NM in which the highway crosses four major bridge structures. The purpose of this letter is to inform you that we are granting the proposed project ***Conditional Approval.***

The project area proposed is located in an area where there are various Abandoned Uranium Mines (AUM), the closest AUM is in Beclabito, NM; 0.15 miles from proposed work, mine site ID NA-0420 (unfunded mine), location 36.833745, -109.016592.

As stated in the Environmental Assessment report submitted in January 27, 2022, by WSP, *"the project crosses the Morrison Formation, which is a major aquifer in the San Juan Structural Basin. It is a source of uranium, ...".* With the following statement and upcoming work which will involve ground work and digging, NNEPA is suggesting for NMDOT to hire a certified Health Physicist, to conduct initial radiological scanning of the surface area in which digging or earth moving will happen and in areas in which depth will exceed six (6) feet. If radiological levels are above background, work will cease in the area and NNEPA will be contacted. By

hiring a Health Physicist, this will help prevent any substantial radioactive contamination to become expose. NNEPA is also recommending for NMDOT to conduct consistent dust control in the area

- Pursuant of Comprehensive Environmental Response Compensation, and Liability Act (CERCLA: CFR § 307.10 through 307.42) (101(25) of CERCLA).
- Pursuant of CFR § 300.1 - NMDOT is report any spills of petroleum, pollutant, contaminant or hazardous substance to the respected programs under NNEPA

If you have any immediate questions or concerns please contact Valinda Shirley by phone (928) 871-7735 or by email valinda.shirley@navajo-nsn.gov.

Thank you.

THE NAVAJO NATION

JONATHAN NEZ | PRESIDENT MYRON LIZER | VICE PRESIDENT

July 22, 2022

MEMORANDUM

TO: Environmental Reviewers

FROM: _____
Eugenia Quintana, Environmental Department Manager
Air & Toxics Department
Navajo Nation Environmental Protection Agency

SUBJECT: **EOR No. 018335, US 64 ROW Request Submittal, Milepost 0 to Milepost 8.1, Project Number/Control Number: 5101171, 501172**

Based upon review of information from the New Mexico Department of Transportation (NMDOT), as provided in the February 17, 2022 letter addressed to the Navajo Nation General Land Development Department, the Air & Toxics Department (ATD) is providing the following comments and recommendations.

According to information provided in the letter, the primary focus of the proposed project is "planned roadway improvements on US 64 between milepost 0 and milepost 8.1, which is from the Arizona/New Mexico state line to just east of the Red Wash Bridge." The Environmental Assessment provided information about the rehabilitative improvements to reach current design standards and improve highway safety by addressing physical deficiencies.

The Navajo Nation Environmental Protection Agency (NNEPA) supports road projects for the benefit of communities, emergency response, highway safety, school bus routes, and the myriad of other co-benefits related to roads infrastructure. Attention is directed to the following, as the activities anticipated to be undertaken could be/are subject to the following:

1. **Navajo Nation Air Pollution Prevention and Control Act (Navajo Clean Air Act),** 4 N.N.C. §§ 1134-40, Air Quality Control Programs. Provisions include Best Management Practices (BMPs) to control dust that would be generated during earth moving activities. Details the BMPs to control excessive amounts of particulates.

2. **Tribal Minor New Source Review Permitting Program under 40 CFR 49.152.** The type of road construction work anticipated could be subject to Tribal Minor New Source Review Permitting Program under 40 CFR 49.152, for minor sources such as hot asphalt mix plants in Indian Country. Currently, the Navajo Nation does not have a minor source program for applicable minor sources operating on the Navajo Nation Lands. The USEPA Region 9 has authority for Tribal Minor NSR for minor sources on the Navajo Nation. The NMDOT and/or its contractor(s)

can visit the USEPA, Region website at: https://www.epa.gov/caa-permitting/tribal-minor-new-source-review-permitting-region-9#general-rule.

As applicable, the NMDOT, and/or its contractor(s) should complete the appropriate documents and, if required, obtain a permit before beginning construction. The contact person at USEPA, Region 9 regarding this matter is Lisa Beckham and she can be reached at (415) 972-3811 or beckham.lisa@epa.gov. It is recommended that the NMDOT, and/or its contractors also provide NNEPA, Operating Permit program with a notice of their application to USEPA Region 9.

The Navajo Nation Air Quality Control Program (NNAQCP) is proposing the Minor Source Program Regulations, which are being promulgated pursuant to the Navajo Nation Clean Air Act, 4 N.N.C. §§ 1101-1162 and two General Permits for Oil and Natural Gas Sectors and Gasoline Dispensing Facilities. After issuing its own Minor Source Program regulations, NNAQCP will seek to implement this program in place of the federal government. Promulgation is anticipated to be finalized in 2023.

3. **Navajo Nation Pesticide Act.** The control of invasive and noxious vegetation is occasionally required during road construction. The Navajo Nation Pesticide Act describes the requirements for pesticide applications on the Navajo Nation. It is recommended that the NMDOT and/or its contractors integrate into its activities, the BIA Natural Resource, Navajo Nation Integrated Weed Management Plan for treatment of noxious weeds within highway rights-of-ways.

4. The NNEPA requests collaboration related to the fulfillment of the environmental compliance measures indicated herein. The Air Quality Control Program can be contacted at 928-729-4094, 729-4096, 729-4248. The Navajo Nation Pesticide Program can be contacted at 982-871-7810, 871-7184.

I can be contacted at eugeniaquintana@navajo-nsn.gov if there are any questions in this regard. Thank you.

Xc: NNEPA Water Quality Program
NNEPA Operating Permit Program
NNEPA Pesticide Program
Dana Garcia, P.E., New Mexico Department of Transportation, Dana.Garcia@state.nm.us

RESOURCES AND DEVELOPMENT COMMITTEE
24th NAVAJO NATION COUNCIL

FOURTH YEAR 2022

ROLL CALL
VOTE TALLY SHEET

LEGISLATION #0154-22: AN ACTION RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE; APPROVING THE GRANT OF RIGHT-OF-WAY TO NEW MEXICO DEPARTMENT OF TRANSPORTATION FOR THE PURPOSES OF CONSTRUCTING, OPERATING, UPGRADING AND MAINTAINING THE EXISTING ROADWAYS, CULVERTS, DITCHES AND BRIDGES ALONG U.S. HIGHWAY 64, PROJECT NUMBERS 5101171 AND 5101172, LOCATED ON NAVAJO NATION TRUST LANDS IN BECLABITO CHAPTER, NAVAJO NATION (SAN JUAN COUNTY, NEW MEXICO). *Sponsor: Honorable Amber Kanazbah Crotty Co-Sponsor: Honorable Thomas Walker, Jr.*

Date: August 31, 2022 – Regular Meeting (Teleconference)
Location: Resources and Development Committee also called in via teleconference from their location within the boundary of the Navajo Nation.

Main Motion:

M: Mark A. Freeland **S:** Thomas Walker, Jr. **V:** 5-0-1 (CNV)
In Favor: Thomas Walker, Jr.; Kee Allen Begay, Jr.; Herman M. Daniels; Mark A. Freeland; Wilson C. Stewart, Jr.
Opposition: None
Excuse: None
Not Voting: Rickie Nez, *Chairperson*

Honorable Rickie Nez, *Chairperson*
Resources and Development Committee

Rodney L. Tahe

Rodney L. Tahe, *Legislative Advisor*
Office of Legislative Services