

operated by Alpine Silica, Atlas Energy Solutions, Badger Mining Corporation, LLC, Black Mountain Sand, Covia, Freedom Proppant, and High Roller Sand within the study area. Related infrastructure includes Atlas Energy Solutions' Dune Express, a 42-mile conveyor that carries sand from Atlas Energy Solutions' mine northwest to New Mexico. The Dune Express is believed to be the second longest conveyor belt in the world (Texas Monthly, 2025). These facilities are shown on **Figures 3-1A and 3-1B** in **Appendix F**.

3.7.5 Aesthetics

Aesthetics is included as a factor for consideration in the evaluation of transmission facilities in PURA § 37.056(c)(4). The term aesthetics refers to the subjective perception of natural beauty in the landscape, and this section of the document attempts to define and measure the study area's scenic qualities.

Consideration of the visual environment includes a determination of aesthetic values where the major potential effect of the Proposed Project on the resource is considered aesthetic, or where the location of a transmission line could affect the scenic enjoyment of a recreational area.

The aesthetic analysis considers potential visual impacts on the public. Areas visible from major roads and highways, or publicly owned or accessible lands (for example, parks or privately owned recreational areas open to the public) were analyzed. Several factors are taken into consideration when attempting to define the potential impact on a scenic resource that would result from the construction of the proposed transmission line. Among these are:

- topographical variation (hills, valleys, etc.);
- prominence of water in the landscape;
- vegetation variety (forests, pasture, etc.);
- diversity of scenic elements;
- degree of human development or alteration; and
- overall uniqueness of the scenic environment compared to the larger region.

The majority of the study area is dominated by shrubland with areas of bare ground and grassland. The eastern portion of the study area includes grass and shrubland atop deep sandy soils and dune areas. The study area lacks major perennial water features, although some areas may include wetland characteristics during wet seasons. Field reconnaissance and review of the helicopter flight video (North Texas Helicopters, Inc.) confirmed that the named streams (Rudd Draw, Cheyenne Draw, and Monument Draw) and several other unnamed streams within the study area do not contain perennial flow and are typically dry. Commercial and residential development is primarily limited to the city of Kermit. Significant oil/gas

infrastructure defines the overall aesthetic of the study area, while large-scale mining operations are transforming the eastern portion of the study area.

The THC established the Texas Heritage Trails Program (THTP), a statewide heritage tourism program that defined 10 regions across the state that enable visitors and residents to learn about local customs, culture, and history through experience of cultural, historical, and natural sites unique to each region. The study area is located within the Texas Pecos Trail Region, which showcases a 22-county region of approximately 35,000 square miles. No segments of the suggested driving trail for this region cross the study area (THC, 2025).

In 1998, TxDOT published a list of some of the best “Scenic Overlooks and Rest Areas” in Texas, each of which presented particularly strong aesthetic views or settings. A review of this list found that none of the highlighted scenic overlooks or rest areas are located within the study area (TxDOT, 1998). No other outstanding aesthetic resources, designated scenic views, or unique visual elements were identified from the literature review or from ground reconnaissance of the study area.

Based on these criteria, the study area exhibits a degree of aesthetic quality typical for the region. The majority of the study area is shrubland. The landscape has experienced a moderate degree of alteration by the oil and gas industry, existing electric transmission facilities, wind and solar development, large-scale mining operations, and road and rail transportation corridors.

3.7.6 Transportation and Aviation

Eight state-maintained highways and roadways are located within the study area as listed below:

<u>State Highways (SH)</u>	<u>Farm-to-Market Roads (FM)</u>
SH 18	FM 181
SH 115	FM 874
SH 128	FM 1218
SH 302	FM 2019

The larger facilities listed above are supplemented by a network of city roads within Kermit, county roads, and many private roads that provide access to oil and gas leases and private ranches within the study area (TxDOT, 2025a).

The TxDOT Odessa District stated via letter that they could not offer specific comments regarding potential impacts within or near the study area. TxDOT also provided guidelines for coordinating

construction activities, specifically regarding utility crossings and driveway access construction across state highways (see **Appendix A**).

Review of TxDOT's "Project Tracker," an online database of TxDOT's active and proposed highway projects, identified over 30 separate projects of varying size that are currently underway, planned, or under review within the study area.

Major TxDOT construction projects that are underway or planned include:

- SH 302 is to be widened within the next 5-10 years from the City of Kermit east into Ector County, and within the next 10+ years from the City of Kermit west into Loving County.
- SH 115 is planned for upgrade within the next four years from an existing two-lane highway to a Super 2 Highway, which adds a periodic passing lane to rural highways for improved safety and traffic flow. These upgrades span from the City of Kermit northeast to the northern study area boundary, across Winkler and Andrews Counties.
- The reconstruction of the interchange at SH 115 and SH 302 is currently or will be constructed.
- Construction on railroad highway crossing signals or structures is planned to begin within the next four years at the intersections of the Texas-New Mexico Railway and SH 18 and SH 302, on the north and west sides of the City of Kermit.

Additionally, several minor maintenance projects such as sealcoating or resurfacing were listed for state-maintained roadways throughout the study area (TxDOT, 2025b).

A review of the U.S. Department of Transportation (USDOT) Federal Railroad Administration (FRA) Safety Map identified one railroad within the study area. The Texas-New Mexico Railway (TNMR) runs generally north-south through the center of the study area from the New Mexico state line, paralleling SH 18 to the City of Kermit where it angles to the southwest. The TNMR primarily serves the Permian Basin oil and gas industry (USDOT, 2025).

A review of: the FAA South Central U.S. Chart Supplement (formerly known as the Airport/Facility Directory) (FAA, 2025a); the El Paso, Albuquerque, and San Antonio Sectional Aeronautical Charts (FAA, 2025b); the TxDOT Airport Directory (TxDOT, 2025c); aerial imagery; USGS maps; AirNav (2025); and field reconnaissance identified one FAA-registered airport with at least one runway greater than 3,200 feet within 20,000 feet of the study area. The Winkler County Airport (FAA Identifier INK) is located approximately 15,400 feet south of the study area. It is owned and managed by Winkler County

and is open to the public. Although historical USGS topographic maps identify one private landing strip located in the far southwest corner of the study area, a review of recent aerial imagery suggests that the landing strip has not been maintained and may no longer be in use. Additionally, the privately owned Winkler County Memorial Hospital Heliport (FAA Identifier 4XA8) is located at the Winkler County Memorial Hospital in the city of Kermit. No other aircraft landing facilities of any type were identified within 20,000 feet of the study area.

3.7.7 Communication Towers

A review of the Federal Communications Commission (FCC) website, Homeland Infrastructure Foundation-Level Data (HIFLD), other online databases, recent aerial imagery, and field reconnaissance identified 90 communication towers within the study area. No AM or FM radio transmitters were identified within the study area. No AM radio transmitters were located within 10,000 feet of the study area and no FM radio transmitters were located within 2,000 feet of the study area. The 90 communication towers identified in the study area include one Very High Frequency (VHF) Omnidirectional Range/Tactical Air Navigation (VORTAC), which is a radio-based navigational aid for military and civilian aircraft, microwave service towers, land mobile private transmission towers, cellular phone towers, microwave towers, and other electronic installations, and are shown on **Figures 3-1A and 3-1B** in **Appendix F** (U.S. Department of Homeland Security [USDHS], 2024; FCC, 2024; AntennaSearch, 2025; FAA, 2025b).

3.8 Cultural Resources

3.8.1 Records Review

Burns & McDonnell reviewed the Texas Historical Commission's (THC's) Texas Archeological Sites Atlas (Atlas) to identify previously recorded archeological sites, National Register of Historic Places (NRHP)-listed properties and districts, State Antiquities Landmarks (SALs), National Historic Landmarks (NHLs), historic-age cemeteries, and Official Texas Historical Markers (OTHMs), including Registered Texas Historical Landmarks (RTHLs), within the study area. The review also identified previously conducted cultural resources investigations within the study area. The review was undertaken to assess the potential for impacts on cultural resources within the study area.

3.8.1.1 Previous Archeological Investigations

Sixty-four previous cultural resources investigations are reported within the study area on the Atlas, as shown in **Table 3-6** (THC, 2024a). Previous investigations within the study area have been predominately

linear archeological surveys of pipeline, roadway, and electric transmission line projects and block surveys of municipal and University Lands under the Antiquities Code of Texas.

Table 3-6: Previous Archeological Surveys Within the Study Area

Atlas ID	Date	TAC Permit	Investigating Firm	Sponsor
8400004680	1991	-	-	-
8400004681	1992	-	-	-
8400004684	1986	-	-	-
8400004685	1986	-	-	-
8400004686	1986	-	-	-
8400005685	1976	-	-	-
8400009656	2000	-	-	-
8400009657	2000	-	-	-
8400009658	2000	-	-	-
8400009661	2000	-	-	-
8400009827	2000	-	-	-
8400009828	2000	-	-	-
8400009829	2000	-	-	-
8400010499	-	-	Horizon Environmental Services	Federal Energy Regulatory Commission (FERC)
8400010740	-	-	Horizon Environmental Services	FERC
8500005133	1991	-	-	FERC
8500005134	1991	-	-	FERC, El Paso Natural Gas
8500006803	1991	-	-	FERC
8500010398	2000	-	-	General Land Office
8500010414	1999	-	-	Bureau of Land Management (BLM)
8500010415	1999	-	-	BLM
8500011216	2002	-	Horizon Environmental Services	FERC
8500011815	1991	-	-	FERC
8500011816	1990	-	-	FERC
8500011817	1976	-	-	FERC
8500011818	1976	-	-	FERC
8500012124	2004	-	PBS&J	FERC
8500012926	2002	-	Horizon Environmental Services	FERC
8500014630	2007	-	Environmental Planning Group	FERC
8500059988	2013	6493	Cox McLain Environmental Consulting, Inc.	Loving County
8500060614	2014	6927	TAS, Inc.	University Lands
8500063873	2014	-	SRI Inc.	BLM
8500065919	2015	-	SRI Inc.	BLM
8500066434	2015	7271	HDR	City of Kermit
8500073340	2015	-	SWCA Environmental Consultants	BLM
8500073341	2015	7152	SWCA Environmental Consultants	University Lands

Table 3-6: Previous Archeological Surveys Within the Study Area (Continued)

Atlas ID	Date	TAC Permit	Investigating Firm	Sponsor
8500076586	2015	-	SWCA Environmental Consultants	BLM
8500079874	2015	7269	SWCA Environmental Consultants	University Lands
8500079938	2016	-	Lone Mountain Archeological Services	BLM
8500080103	2017	-	SWCA Environmental Consultants	BLM
8500080555	2018	-	Goshawk Environmental Consulting, Inc.	BLM
8500080593	2018	-	-	BLM
8500080821	2018	-	Goshawk Environmental Consulting, Inc.	BLM
8500080884	2018	8594	SWCA Environmental Consultants	City of Midland
8500081160	2016	-	Goshawk Environmental Consulting, Inc.	USACE
8500081180	2019	-	APAC	BLM
8500081221	2019	9002	Horizon Environmental Services	City of Midland
8500081357	2019	-	-	-
8500081398	1992	1122	Texas Archeological Research Laboratory	Southwestern Public Service Company
8500081571	2018	9015	ENERCON	City of Midland
8500081624	2018	8417	ENERCON	City of Midland
8500081845	2020	9321	Terracon Consultants, Inc.	Ector County Sheriff's Office
8500081979	2020	9417	Turpin and Sons	University Lands
8500082014	2021	30150	SWCA Environmental Consultants	City of Midland
8500082026	2017	8229	ENERCON	City of Midland
8500082048	2021	30241	TAS, Inc.	University Lands
8500082068	2021	30059	Blanton & Associates, Inc.	University Lands
8500082179	2022	-	PaleoWest Solutions	FERC
8500082180	2022	-	PalcoWest Solutions	FERC
8500082235	-	-	Tetra Tech, Inc.	Stephen R. Anderson
8500082320	2020	9249	American Archacology Group, LLC	City of Midland
8500082364	2023	31079	American Archacology Group, LLC	City of Midland
8500082434	2023	31246	Perennial Environmental, LLC	University Lands
8500082682	2024	31557	Sphere 3 Environmental, Inc.	City of Midland

Source: THC (2024a)

3.8.1.2 Previously Recorded Archeological Sites

A total of 135 archeological sites have been previously recorded within the study area. Four sites (41LV11, 41LV20, 41WK53, and 41WK65) have been determined eligible for listing in the NRHP and one eligible site (41LV11) has been designated a SAL (Table 3-7) (THC, 2024a).

Table 3-7: Archeological Sites Recorded in the Study Area

Trinomial	Cultural Affiliation	Site Type	NRHP Eligibility
41AD17	Unknown Prehistoric	Lithic scatter	Unknown/Undetermined
41AD18	Unknown Prehistoric	Temporary camp	Unknown/Undetermined
41AD19	Unknown Prehistoric	Temporary camp	Unknown/Undetermined
41AD20	Unknown Prehistoric	Temporary camp/Lithic workshop	Unknown/Undetermined
41AD21	Prehistoric- Jornada	Temporary camp	Unknown/Undetermined
41AD22	Unknown Prehistoric	Temporary camp	Unknown/Undetermined
41AD23	Unknown Prehistoric	Temporary camp/Lithic scatter	Unknown/Undetermined
41AD24	Unknown Prehistoric	Temporary camp	Unknown/Undetermined
41AD27	Unknown Prehistoric	Temporary camp	Unknown/Undetermined
41AD30	Historic- post-WWI; isolated prehistoric	Ranch/homestead	Unknown/Undetermined
41AD31	Unknown Prehistoric	Open campsite	Unknown/Undetermined
41AD32	Unknown Prehistoric	Campsite with lithic scatter	Unknown/Undetermined
41AD33	Prehistoric- Late Prehistoric	Campsite with lithic scatter	Unknown/Undetermined
41AD34	Unknown Prehistoric	Campsite with lithic scatter	Unknown/Undetermined
41AD35	Unknown Prehistoric	Campsite with lithic scatter	Unknown/Undetermined
41AD36	Unknown Prehistoric	Unknown	Unknown/Undetermined
41AD37	Unknown Prehistoric	Lithic scatter	Unknown/Undetermined
41AD38	Unknown Prehistoric	Lithic reduction and possible campsite	Unknown/Undetermined
41AD39	Unknown Prehistoric	Open campsite	Unknown/Undetermined
41AD40	Unknown Prehistoric	Lithic reduction, plant processing, and animal butchery	Unknown/Undetermined
41AD41	Unknown Prehistoric	Open campsite	Unknown/Undetermined
41AD55	Unknown Prehistoric	Lithic and faunal remains scatter	Unknown/Undetermined
41AD56	Unknown Prehistoric	Lithic surface scatter	Unknown/Undetermined
41AD57	Unknown Prehistoric	Lithic surface scatter	Unknown/Undetermined
41AD58	Unknown Prehistoric	Lithic surface scatter	Unknown/Undetermined
41AD74	Unknown Prehistoric	Lithic scatter	Ineligible
41AD75	Historic- Mid-20 th Century	Concrete foundations	Ineligible
41AD96	Historic- Mid-20 th Century	Commercial/Residential Complex	Undetermined
41EC1	Unknown Prehistoric	Unknown	Unknown/Undetermined
41EC2	Unknown Prehistoric	Rock art in shelters	Unknown/Undetermined
41EC17	Unknown Historic	Unknown	Ineligible
41EC18	Unknown Historic	Unknown	Ineligible
41EC19	Unknown Prehistoric	Unknown	Undetermined
41EC20	Unknown Historic	Unknown	Ineligible

Table 3-7: Archeological Sites Recorded in the Study Area (Continued)

Trinomial	Cultural Affiliation	Site Type	NRHP Eligibility
41LV8	Prehistoric- Late Prehistoric (800-1200 A.D.)	Isolated Bonham Projectile Point	Unknown/Undetermined
41LV11	Prehistoric- Archaic, Late Prehistoric	Open campsite; hearth field	Eligible
41LV12	Unknown Prehistoric	Lithic scatter and bedrock mortars	Ineligible
41LV13	Prehistoric- Formative (Late Prehistoric)	Prehistoric artifact scatter with features	Undetermined
41LV14	Unknown Prehistoric	Prehistoric artifact scatter with features	Undetermined
41LV15	Unknown Prehistoric	Prehistoric artifact scatter with features	Undetermined
41LV17	Unknown Prehistoric	Prehistoric artifact scatter with features	Undetermined (2000); Ineligible within ROW (2020)
41LV19	Prehistoric- Late Archaic to Late Prehistoric (Early Ceramic)	Prehistoric lithic scatter	Unknown/Undetermined
41LV20	Prehistoric- Late Prehistoric	Prehistoric debitage, ground stone, fire-cracked rock, and ceramic scatter; hearths with artifact scatter	Eligible
41LV24	Unknown Prehistoric	Prehistoric artifact scatter	Undetermined
41LV25	Prehistoric- Middle Archaic	Prehistoric artifact scatter	Undetermined
41LV26	Prehistoric- Formative/Ceramic	Lithic scatter; ash stain	Undetermined
41LV27	Unknown Prehistoric	Lithic scatter	Ineligible
41LV28	Prehistoric- Ceramic	Lithic scatter	Undetermined
41LV29	Prehistoric- Ceramic	Lithic scatter	Ineligible
41LV30	Prehistoric- Ceramic	Lithic scatter	Ineligible
41LV31	Prehistoric- Ceramic	Lithic scatter	Undetermined
41LV46	Prehistoric- Jornada Mogollon (200-1450 A.D.)	Prehistoric artifact scatter	Ineligible
41LV56	Prehistoric- Transitional Archaic	Lithic scatter	Unknown/Undetermined
41LV57	Prehistoric- Transitional Archaic	Lithic scatter/campsite	Unknown/Undetermined
41LV58	Unknown Prehistoric	Lithic scatter	Unknown/Undetermined
41LV59	Prehistoric- Early to Transitional Archaic	Camping, hunting, and procurement site	Unknown/Undetermined
41LV60	Unknown Prehistoric	Lithic artifact scatter	Unknown/Undetermined
41LV95	Unknown Prehistoric	Hearth field	Unknown/Undetermined
41LV96	Unknown Prehistoric	Hearth field	Unknown/Undetermined
41LV97	Unknown Prehistoric	Hearth field	Unknown/Undetermined
41LV98	Prehistoric- Late Prehistoric	Hearth field	Unknown/Undetermined

Table 3-7: Archeological Sites Recorded in the Study Area (Continued)

Trinomial	Cultural Affiliation	Site Type	NRHP Eligibility
41LV99	Unknown Prehistoric	Hearth field	Unknown/Undetermined
41LV100	Unknown Prehistoric	Hearth field	Unknown/Undetermined
41LV103	Unknown Prehistoric	Prehistoric campsite	Unknown/Undetermined
41LV104	Unknown Prehistoric	Prehistoric campsite	Unknown/Undetermined
41LV105	Unknown Prehistoric	Hearth field	Unknown/Undetermined
41LV106	Unknown Prehistoric	Prehistoric campsite	Unknown/Undetermined
41LV107	Unknown Prehistoric	Prehistoric campsite; hearth	Unknown/Undetermined
41LV108	Unknown Prehistoric	Hearth field	Unknown/Undetermined
41LV109	Prehistoric- Late Prehistoric	Pottery and lithic scatter	Unknown/Undetermined
41LV114	Unknown Prehistoric	Lithic scatter	Ineligible within ROW (2019); Ineligible within ROW (2019)
41LV116	Unknown Prehistoric	Lithic scatter	Unknown/Undetermined
41LV117	Historic- Mid-20 th century, unknown Historic; Prehistoric- Late Archaic	Lithic scatter, historic scatter	Ineligible in ROW (2024)
41LV130	Unknown Prehistoric	Open campsite	Unknown/Undetermined
41LV190	Historic	Historic artifact scatter and fence post	Ineligible in ROW (2022); Ineligible (2022)
41LV191	Historic	Historic can scatter	Ineligible in ROW (2022); Ineligible in ROW (2022)
41LV196	Prehistoric- Middle Archaic	Lithic scatter	Ineligible in ROW (2024)
41LV197	Prehistoric- Late Prehistoric	Lithic scatter, occupation	Undetermined
41WK1	Prehistoric- Folsom Paleoindian to Middle/Late Archaic	Lithic artifacts, mammoth/mastodon bones	Unknown/Undetermined
41WK4	Unknown Prehistoric	Rock shelter, pictograph, boat-shaped mortars	Unknown/Undetermined
41WK6	Unknown	Unknown	Unknown/Undetermined
41WK7	Unknown	Unknown	Unknown/Undetermined
41WK8	Unknown	Unknown	Unknown/Undetermined
41WK21	Prehistoric- Folsom Paleoindian	Open campsite and possible bison kill	Unknown/Undetermined
41WK22	Unknown Prehistoric	Campsite	Unknown/Undetermined
41WK23	Prehistoric- Late Prehistoric (900-1300 A.D.)	Campsite	Unknown/Undetermined
41WK27	Unknown Prehistoric	Open campsite	Unknown/Undetermined
41WK28	Prehistoric- Late Prehistoric (Late Hueco/Early Querecho)	Open campsite	Unknown/Undetermined
41WK29	Unknown Prehistoric	Open campsite	Unknown/Undetermined

Table 3-7: Archeological Sites Recorded in the Study Area (Continued)

Trinomial	Cultural Affiliation	Site Type	NRHP Eligibility
41WK30	Unknown Prehistoric	Open campsite	Unknown/Undetermined
41WK43	Unknown	Unknown	Unknown/Undetermined
41WK44	Unknown Prehistoric	Unknown	Undetermined
41WK45	Unknown Prehistoric	Unknown	Undetermined
41WK46	Unknown Prehistoric	Unknown	Undetermined
41WK47	Unknown Prehistoric	Unknown	Ineligible
41WK48	Prehistoric- Late Prehistoric	Campsite; burial	Unknown/Undetermined
41WK51	Unknown Prehistoric	Lithic scatter	Ineligible (2002); Ineligible (2002)
41WK52	Unknown Prehistoric	Lithic scatter	Ineligible (2002); Ineligible (2002)
41WK53	Unknown Prehistoric	Lithic scatter	Undetermined (2002); Eligible (2002)
41WK54	Unknown Prehistoric	Lithic scatter	Ineligible (2002); Ineligible (2002)
41WK55	Unknown Prehistoric	Lithic scatter	Ineligible (2002); Undetermined (2002)
41WK56	Prehistoric- Archaic	Lithic scatter	Undetermined
41WK57	Unknown Prehistoric	Lithic scatter	Undetermined
41WK58	Unknown Prehistoric	Lithic scatter	Undetermined
41WK59	Unknown Prehistoric	Lithic scatter	Undetermined
41WK60	Unknown Prehistoric	Open camp	Undetermined
41WK61	Unknown Prehistoric	Lithic scatter	Undetermined
41WK62	Unknown Prehistoric	Lithic scatter	Undetermined
41WK63	Unknown Prehistoric	Open camp	Undetermined
41WK64	Unknown Prehistoric	Lithic scatter	Undetermined
41WK65	Unknown Prehistoric	Open camp	Eligible
41WK66	Unknown Prehistoric	Lithic scatter	Undetermined
41WK67	Unknown Prehistoric	Lithic scatter	Undetermined
41WK68	Unknown Prehistoric	Lithic scatter	Undetermined
41WK69	Unknown Prehistoric	Lithic scatter	Undetermined
41WK70	Unknown Prehistoric	Lithic scatter	Undetermined
41WK71	Unknown Prehistoric	Lithic scatter	Undetermined
41WK72	Unknown Prehistoric	Lithic scatter	Undetermined
41WK73	Unknown Prehistoric	Lithic scatter	Ineligible
41WK74	Prehistoric- Late Prehistoric	Lithic scatter	Ineligible
41WK75	Unknown Prehistoric	Lithic scatter	Ineligible
41WK78	Prehistoric- Late Prehistoric	Burial site	Unknown/Undetermined
41WK82	Prehistoric- Late Prehistoric	Lithic scatter	Unknown/Undetermined
41WK88	Historic- Modern (1901-Present)	Historic dump	Ineligible

Table 3-7: Archeological Sites Recorded in the Study Area (Continued)

Trinomial	Cultural Affiliation	Site Type	NRHP Eligibility
41WK125	Historic- Modern (1901-Present)	Historic artifact scatter	Unknown/Undetermined
41WK126	Historic- Modern (1901-Present)	Historic artifact scatter	Unknown/Undetermined
41WK127	Historic- Modern (1901-Present)	Historic artifact scatter	Unknown/Undetermined
41WK129	Unknown Prehistoric	Lithic scatter	Unknown/Undetermined
41WK134	Historic- Modern (1901-Present)	Agricultural structures, trash/equipment scatter	Unknown/Undetermined
41WK135	Unknown Prehistoric	Lithic scatter	Unknown/Undetermined
41WK136	Unknown Prehistoric; Historic- Modern (1901-Present)	Lithic scatter; historic trash scatter	Ineligible
41WK137	Historic- Modern (1901-Present)	Farmstead	Unknown/Undetermined
41WK138	Unknown Prehistoric	Lithic scatter	Ineligible in ROW
41WK139	Prehistoric- Paleoindian, Early Archaic, Middle Archaic	Lithic scatter	Ineligible
41WK140	Unknown Prehistoric	Lithic scatter	Ineligible

Source: THC (2024a)

3.8.1.3 Historic Resources

No NRHP-listed districts or properties or NHLs were identified in the study area (THC, 2024a). Two historic-age cemeteries (Kermit Cemetery [WK-C001]; Shady Davis Cemetery [LV-C001]) have been identified in the study area. Both are designated Historic Texas Cemeteries (THC, 2024a). Thirteen OTHMs are reported within the study area (Table 3-8). Five of the markers commemorate designated RTHLs (The Community Church, Kermit's Oldest Home, The Sand Hills, Texas Territorial Compromise of 1850, and Winkler County Courthouse) (THC, 2024a).

Table 3-8: OTHMs Within the Study Area

OTHM Number	Marker Title	RTHL?
439	Blue Mountain	No
958	Colonel C. M. Winkler	No
1005	The Community Church	Yes
2927	Kermit	No
2928	Kermit's Oldest Home	Yes
3465	Moorhead Cable Tool Rig	No
3617	Notrees	No
3723	Old Duval Townsite	No
3835	Old Wink Cemetery	No
4561	The Sand Hills	Yes
5274	Texas Territorial Compromise of 1850	Yes
5866	Winkler County	No
5867	Winkler County Courthouse	Yes

Source: THIC (2024a)

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4.0 IDENTIFICATION OF PRELIMINARY ALTERNATIVE ROUTE LINKS

As described in **Section 2.4**, once the various data collection activities and constraints mapping process were completed, the next step for the Proposed Project was to delineate preliminary alternative routes to connect Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas. Potential preliminary alternative route links were plotted on recent aerial imagery (USDA NAIP, 2024) based on the findings of the reconnaissance surveys, the findings from the various data collection activities, the environmental and land use constraints map, and property boundary maps. The initial property boundary data used to locate apparent property boundaries included GIS data from county tax offices and appraisal districts. Digital gas and petroleum pipeline data obtained from the RRC (2024) were used to identify pipeline corridors and other oil and gas facilities (e.g., natural gas pads, individual well sites, etc.). Where practical, Burns & McDonnell verified the location of some of the pipelines and aboveground oil and gas facilities by reviewing aerial imagery or during field reconnaissance but did not alter the RRC digital data. The environmental and land use constraints maps (**Figures 3-1A and 3-1B, Appendix F**) show the locations of pipelines and oil and gas well sites, based on the data received from the RRC. Oncor provided information on its transmission line system; other transmission lines were identified from review of aerial imagery and field reconnaissance.

During the development of preliminary alternative links, Burns & McDonnell considered existing corridors (e.g., existing utility ROW, existing transmission lines, public roadways) and apparent property and land use boundaries, in accordance with the provisions of PUCT Substantive Rules Section 25.101. Pipelines were not considered as existing compatible corridors. Aerial imagery (2021–2023 ESRI World Imagery; 2024 USDA NAIP; Bing; and Google Earth) revealed a variety of potential topographic constraints that were also considered. Ultimately, Burns & McDonnell identified numerous preliminary alternative route links that, when combined, could form numerous preliminary alternative routes to connect the Proposed Project endpoints.

Oncor defined a specific point of origin from each terminal station from which each terminal link would connect. The layout of the station defines each point of origin and the general route link progression from the station (e.g., all preliminary links connect to the north side of the planned Border Switch and the north side of the existing Clearfork Switch). A link is defined as a route segment that extends in a generally forward progressing direction, prior to diverging, or branching, in at least two different directions, or new links. Each branch vertex is defined as a node.

As shown on **Figure 3-1A and 3-1B (Appendix F)**, state highways and existing transmission lines provided corridors for developing preliminary routes. Although less evident on the imagery, existing distribution lines that otherwise crossed open landscape were considered land use features that also factored in route development. Constraints included oil and gas facilities and sand mining throughout the study area, the city of Kermit, and a wind farm in the eastern portion of the study area. The preliminary link network included multiple corridors. In the western portion of the study area, these corridors are aligned west to east, with a series of interconnecting south-to-north links to increase routing opportunities, while in the eastern portion of the study area, the corridors are more north-south, with west-east interconnections.

Oncor presented the preliminary links at a public participation meeting, as discussed further in **Section 5.0**. After the public participation meeting, Burns & McDonnell made modifications to the preliminary route links considering information provided by landowners during the meeting and in submitted questionnaires, review of the March 2025 helicopter flight video, and guidance received from Oncor. **Section 6.0** provides a detailed description of the modifications to the preliminary route links that were made following the public participation meeting.

5.0 PUBLIC INVOLVEMENT PROGRAM

The various data collection activities utilized in the development of a constraints map (**Figures 3-1A and 3-1B in Appendix F**) and in the ultimate selection of preliminary alternative route links were presented at an in-person public participation meeting as described in **Section 2.5**. The public participation meeting was held on February 13, 2025, from 5:00 to 7:00 pm at Poor Daddy's Smokehouse in Kermit, Texas. **Appendix B** presents figures that depict the location of the preliminary alternative route links that were presented at the public participation meeting, general information about the Proposed Project, and a questionnaire soliciting input from notified landowners. Six people signed the attendee list.

Burns & McDonnell reviewed and evaluated each questionnaire that was submitted at the public participation meeting or that was received by Oncor after the meeting. Of the six people that signed in at the public participation meeting, four submitted questionnaires the evening of the meeting. One additional questionnaire was received by Oncor from an individual after the meeting. The questionnaire solicited comments on landowner and citizen concerns as well as an evaluation of the information presented during the meeting. While five completed questionnaires were received by Oncor, not all respondents answered every question. The following is a summary of questionnaire responses received by Oncor.

Questionnaire Results

A review of the questionnaires indicated that all five respondents agreed that the need for the Project had been adequately explained and that the exhibits and explanations for the need for the Project were helpful, and that three thought the information presented was helpful to them in understanding the Project. Three respondents indicated that the features on the Land Use and Environmental Constraints Map were accurately plotted, while two respondents indicated that they were not aware of any missing or incorrectly located features on the Land Use and Environmental Constraints Map.

The questionnaire solicited comments relating to typical transmission line routing factors, such as land use, paralleling existing corridors, and community values/resources. The questionnaire first asked the respondents to rank the factors from 1 (most important) to 8 (least important) from a list of features to minimize routing: the overall length of the line; length across cultivated land; length across pastureland; length across road frontage; length across residential areas; length along wooded areas; visibility of the line; and other concerns. The factors ranked most important to least important were minimizing length across pastureland, minimizing the length across residential areas, minimizing the overall length of the line, minimizing the visibility of the line, and utilizing existing right-of-way. No additional factors were ranked on the questionnaires.

The questionnaire then requested that attendees rank a list of existing land use corridors from 1 (most important) to 5 (least important) that they would prefer the new transmission line to parallel or use. The features included: existing transmission line corridors; existing roadway corridors; existing railroad corridors; existing property boundaries; and other. The features given most importance for consideration include existing transmission line corridors, existing roadway corridors, existing property boundaries, and maximizing the distance along existing railroad corridors. Additionally, one attendee responded with “other,” noting that they didn’t want the transmission line to be anywhere on their property.

The next question asked attendees to rank the importance of distance from a transmission line to different types of habitable structures and community resources. Respondents were asked to rank from 1 (most important) to 9 (least important) the features they would prefer to maximize distances from: residences; commercial structures; churches; hospitals; nursing homes; schools; parks/recreational areas; historical and archeological sites; or other. Respondents ranked residences, commercial structures, and historical and archeological sites as the features with the most importance to maximize distances from a proposed transmission line.

The next question asked the attendees, if in their opinion, there are any other factors or features that should be considered in evaluating the location of the proposed transmission line, and if so, to list them. Three respondents answered “no,” while two answered “yes,” which included following SH 115, access issues are best along existing ROW, and the proposed line should be the shortest distance possible.

The questionnaire then asked the attendees how they learned about the public participation meeting. Of the four respondents, two said that they had received a letter as well as seeing it in the newspaper, one via letter, and the fourth through the newspaper.

The questionnaire then requested that attendees check which of the following applies to their situation: preliminary route is near my home, near my business, on my land, or other. All five respondents stated that a preliminary route was on their land. Additionally, one respondent stated that a preliminary route was near their business.

The final question asked attendees if they had any general remarks or comments. Three of the respondents wrote comments that included: paralleling the existing transmission line on SH 115 would be a preferred route; the proposed transmission line should stay north of SH 115 and avoid property with sand leases and livestock corrals and watering facilities.

6.0 MODIFICATION OF ALTERNATIVE ROUTE LINKS

As noted in **Section 2.2.2**, Burns & McDonnell conducted ground reconnaissance surveys of the Study Area in November 2024 and in February 2025. The February 2025 surveys were conducted during the week of the public participation meeting. Additionally, Oncor contracted with North Texas Helicopters, Inc. to obtain video of the alternative route alignments from helicopter in March 2025. The video provided verification of potential constraints that were not located on older aerial imagery sources or visible from public rights-of-way during field reconnaissance. After Burns & McDonnell and Oncor considered: (1) environmental constraints information gathered during reconnaissance surveys; (2) information provided by landowners during the public participation meetings and in submitted questionnaires; (3) subsequent desktop reviews; and (4) review of the March 2025 video provided by Oncor, several preliminary links were deleted or modified. These changes are described in detail below; all referenced figures are provided in **Appendix C**. Numerous minor route link modifications and slight adjustments that were made to better parallel property boundaries or compatible ROW, based on more specific information, were not included in the following list.

Link A4

- **Figure 6-1** – The northern portion of Link A4 was shifted east to avoid a newly constructed oil/gas pad site identified during review of the North Texas Helicopters, Inc. March 2025 helicopter flight video.

Link B1

- **Figure 6-2** – The eastern portion of Link B1 was shifted to the south based on engineering considerations in order to accommodate alternative alignments of another proposed transmission line project in the immediate vicinity.

Link B4

- **Figure 6-3** – The eastern portion of Link B4 was adjusted to the north in order to avoid two newly constructed oil/gas pad sites identified during review of the North Texas Helicopters, Inc. March 2025 helicopter flight video.

Link B6

- **Figure 6-4** – The western portion of Link B6 was shifted to the south based on engineering considerations in order to accommodate alternative alignments of another proposed transmission line project in the immediate vicinity.

Link C6

- **Figure 6-5** – Portions of Link C6 were moved south based on engineering considerations in order to accommodate alternative alignments of another proposed transmission line project in the immediate vicinity.

Links E1, E6, E7, E8, G2, and G3

- **Figure 6-6** – Link E7 and Link E8 were shifted to the east to avoid electric distribution facilities. This modification slightly increased the length of Link E1 and Link E6, and shortened the length of Link G2 and Link G3.

Link G2 was also shifted to the north side of County Road 103 to avoid an old abandoned structure identified during review of the North Texas Helicopters, Inc. March 2025 helicopter flight video.

Links F3, F5, and E5

- **Figure 6-7** – Link F3 was shifted to the south slightly for engineering considerations associated with crossing the existing transmission line east of FM 874. This modification extended the southern portion of Link E5.

Link F5 was shifted to the south to avoid electric distribution facilities and a pipeline easement located on the west side of County Road 107, and to align with modified Link F3.

Link F6

- **Figure 6-8** – The western portion of Link F6 was modified for engineering considerations associated with crossing an existing transmission line located on the south side of SH 302.

Links H2, H5, H7, I1, and I2

- **Figure 6-9** – Link H2 was shifted north to avoid overlap with a pipeline easement adjacent to SH 302. Link H7 and Link I2 were modified to avoid oil and gas pipelines and electric distribution facilities located adjacent to the north side of SH 302. The adjustments to Link H2 and Link H7 shortened the southern portion of Link H5. Link I2 was modified to align with the adjustments to Link H7 and decrease overall length.

Also shown on **Figure 6-9** is the deletion of Link I1, which was removed after the public participation meeting based on information provided by a landowner regarding soil conditions and sand mining leases on their parcels as well as the sufficiency of Links H5 and I2.

Links J1, J4, and J5

- **Figure 6-10** – Link J1 was shifted north to avoid a newly constructed oil/gas pad site identified during review of the North Texas Helicopters, Inc. March 2025 helicopter flight video. The adjustment to Link J1 resulted in a modification that shifted Link J5 northward and also shortened the length of Link J4.

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7.0 EVALUATION OF THE ALTERNATIVE ROUTES

The environmental evaluation presented in this section addresses impacts on the environment in consideration of the requirements of Section 37.056(c)(4)(A)-(D) of the Texas Utilities Code; the PUCT's Substantive Rule 25.101, including the PUCT's policy of prudent avoidance; public comments received from the public participation meetings; reconnaissance surveys; and the information and responses received from federal and state agencies and local officials. Measurements of the environmental factors were primarily taken from recent aerial imagery: ESRI World Imagery (2021–2023); USDA NAIP (2024); Bing Imagery (2020–2022); Google Earth Imagery (2023–2024); and from available digital resource layers using GIS software.

Burns & McDonnell professionals with proficiency in different environmental disciplines (terrestrial and aquatic ecology, land use and planning, cultural resources, and GIS) evaluated the alternative routes based upon environmental conditions present along each route and the general routing criteria developed by Oncor and Burns & McDonnell. Each Burns & McDonnell evaluator independently analyzed the routes defined in **Table 7-1 (Appendix D)**, and the environmental and land use data presented by route in **Table 7-2** and by link in **Table 7-3** for each technical discipline (**Appendix E**). Burns & McDonnell's evaluation of the potential impacts on natural, human, and cultural resources resulting from the Proposed Project are discussed below.

7.1 Impact on Physiography and Geology

Construction of the Proposed Project will have no significant effect on the physiographic or geologic features or mineral resources of the area. Erection of the structures would require the removal or minor disturbance of small amounts of near-surface materials but would have no measurable impact on the geologic resources/features or mineral resources along any of the alternative routes, and no geologic hazards are anticipated.

7.2 Impact on Soils

7.2.1 Soil Associations

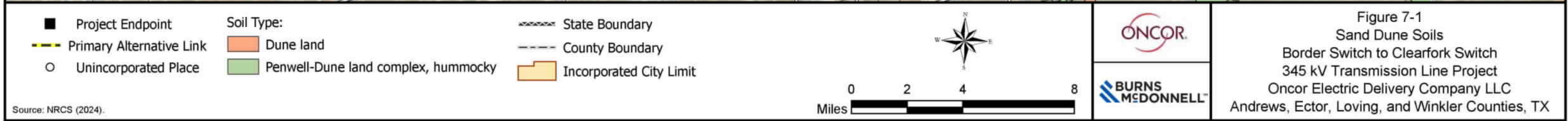
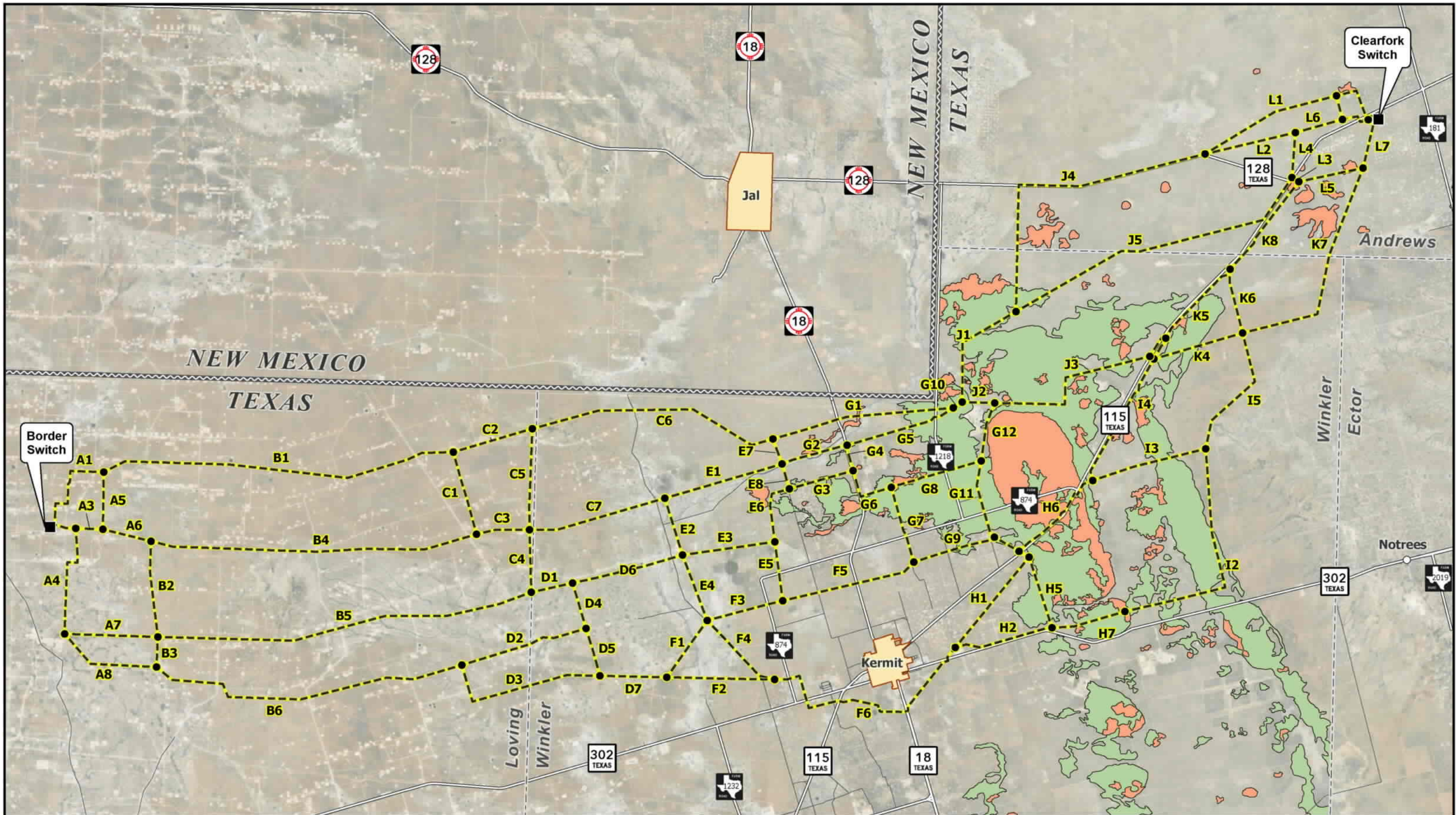
The construction and operation of transmission lines normally create very few long-term adverse impacts on soils. Transmission lines do not normally cause a conversion of farmland/pastureland because the site can still be used in this capacity after construction. The major potential impact upon soils from any transmission line construction would be erosion and soil compaction. The potential for soil erosion is generally greatest during the initial clearing of the ROW; however, Oncor employs erosion control

measures during the clearing and construction process. Where existing land cover includes woody vegetation within the ROW, much of this vegetation will be removed to provide adequate space for construction activities and to minimize corridor maintenance and operational problems. In these areas, only the leaf litter and a small amount of herbaceous vegetation would remain, and both would be temporarily disturbed by the necessary movement of heavy equipment.

The potential for soil erosion is especially high in sand dune communities, which are common within the eastern portion of the study area. Although plants stabilize many of the dunes, some dunes are active and grow and change shape in response to clearing, seasonal prevailing winds, climate, and grazing. While routing the transmission line, consideration was taken to minimize the distance across sand dune soils when practical; however, due to their presence throughout the eastern portion of the study area, it was unavoidable that some sand dune soils would be crossed. Links generally cross sand dune soils in a manner to minimize length of disturbance, or by paralleling existing transmission lines or other features that cross sand dune soils (**Figure 7-1**). **Table 7-2** and **Table 7-3 (Appendix E)** include the route and links that are known to cross sand dune soils, respectively, according to the NRCS Web Soil Survey (NRCS, 2024).

Construction of the transmission line would require minimal amounts of clearing in areas that have already been cleared for crops, pastures, and existing road, transmission line, and pipeline ROW. The most important factor in controlling soil erosion associated with construction activity is to revegetate areas that have potential erosion problems in a timely manner following construction. Natural succession would revegetate most of the ROW. Critical areas, such as steep slopes, sand dunes, and areas of shallow topsoil, may similarly require erosion control blankets and additional seeding to maintain soil stability. However, TPWD (2024g), recommends the use of no-till drilling, hydromulching, or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting and hydromulch containing microplastics should be avoided.

The ROW will be inspected both during and after construction to ensure that problem erosion areas are identified. In addition, Oncor will develop a Storm Water Pollution Prevention Plan (SWPPP), if required, which will detail measures to minimize impacts associated with potential soils erosion and downstream sedimentation, as well as measures to be taken following construction to revegetate disturbed areas. Construction of the Proposed Project will likely have no significant impact on area soils.



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7.2.2 Prime Farmland

Prime farmland soils, as defined by the NRCS, are soils that are best suited for producing food, feed, forage, or fiber crops. The USDA recognizes the importance and vulnerability of prime farmlands throughout the nation and encourages the wise use and conservation of these soils where possible. The Proposed Project would not cross prime farmland soils or prime farmland, if irrigated. In addition to construction-related impacts described above, the major impact of the Proposed Project on soils would be the physical occupation of small areas by the actual support structures. However, most of the ROW would be available for agricultural use once construction of the transmission line is completed. Therefore, the Proposed Project will likely have no significant effect on farmland.

7.3 Impact on Water Resources

7.3.1.1 Surface Water and Floodplains

The study area lacks perennial surface water resources, such as streams or open water lakes. Ephemeral surface water resources within the study area, including three named draws (Rudd, Cheyenne, and Monument), and playa-like depressions, were dry during field reconnaissance; therefore, construction of the Proposed Project is unlikely to have significant impact on surface water resources in the study area. All proposed alternative routes would cross streams; however, no supporting structures would be placed in any streambed. If it becomes necessary to locate transmission line structures within a floodplain of these features, the structures would be designed and constructed so as not to impede the flow of water or create any hazard during flooding. Construction of the Proposed Project should have no significant impacts on the function of floodplains, nor adversely affect adjacent or downstream properties.

The main potential impacts on surface waters and floodplains by any major construction project are siltation resulting from erosion and pollution from spillage of petroleum products (e.g., fuel or lubricants) or other chemicals. Vegetation removal could result in increased erosion potential of the affected areas, so that slightly higher than normal sediment yields may be delivered to the area's water features following a heavy rainfall. However, these short-term effects should be minor, as a result of: the relatively small area to be disturbed at any particular time; the short duration of the construction activities; preservation of vegetation along draws where practical; Oncor's efforts to manage runoff from construction areas through the use of industry-standard best management practices (BMPs); and implementation of the SWPPP, if required.

The USACE regulates the discharge of dredged and fill material into WOTUS, including wetlands, under Section 404 of the CWA (Section 404). USACE regulations implementing Section 404 include specific

authorization under Nationwide Permit (NWP) 57 - *Electric Utility Line and Telecommunications Activities*. NWP 57 authorizes the construction, maintenance, or repair of utility lines (including overhead transmission lines), associated foundations, access roads, and substations, in all jurisdictional water features. An overhead transmission line must not result in a loss greater than 0.5-acre of waters of the United States. Generally, transmission lines are designed to span stream or wetland crossings in most instances, thereby minimizing impacts on WOTUS. NWP 57 specifies certain conditions that necessitate filing a pre-construction notification (PCN) to the USACE and obtaining written approval before construction activities may begin. NWP 57 requires the submittal of a PCN to the USACE if either a Section 10 permit is required, or the discharge will result in the loss of greater than 0.1 acre of WOTUS. Both the Albuquerque and Fort Worth Districts of the USACE responded via email (**Appendix A**) and assigned a USACE project number for the Proposed Project.

Field verification will be required to determine if any potential wetland features meet wetland criteria under the Section 404 program. If wetlands are cleared during construction for the Proposed Project, no change in pre-construction contours or local drainage patterns should occur, and wetlands should eventually re-establish within the ROW. Oncor will implement a SWPPP, if required, and will seek to minimize impacts on surface waters during construction of the Proposed Project. Oncor will also comply with any compensatory mitigation requirements that may be required as part of the Section 404 permitting process. From a water resources perspective, the Proposed Project should have no significant impacts on surface water.

7.3.2 Groundwater/Aquifers

No adverse impacts on groundwater are expected to occur from the construction and operation of the proposed transmission line. The amount of recharge area that would be disturbed by construction is minimal when compared with the total amount of recharge area available for the aquifer systems in the region. Additionally, if accidental spillage of fuel, lubricants, or other petroleum products from normal operation of heavy equipment during construction activities occurred, it would be unlikely to result in any groundwater contamination. Any accidental spills would be promptly handled in accordance with state and federal regulations. Oncor will take necessary precautions to avoid and minimize the occurrence of such spills.

7.4 Impact on Ecosystems

7.4.1 Vegetation

7.4.1.1 Terrestrial Vegetation

Impacts on vegetation resulting from the construction and operation of transmission lines are primarily associated with the removal of existing woody vegetation within the ROW. The amount of vegetation cleared from the transmission line ROW would be dependent upon the type of vegetation present. For example, the greatest amount of vegetation clearing would occur in wooded areas, whereas cropland and grassland would require little to no removal of vegetation. In its December 18, 2024, response letter, the TPWD (2024g) recommended that the removal of native vegetation during construction be minimized to the extent feasible and that vegetation that is removed should be mitigated by revegetating disturbed areas with site-specific native plant species when possible. The linear extent of plant communities crossed by the proposed alternative routes was determined using digital aerial photography.

All alternative routes would require some clearing of woody vegetation. As shown in **Table 7-2 (Appendix E)**, the great majority of any route crosses what is classified as pastureland/rangeland, which consists of a mixture of upland grasses and shrub growth, but insufficient woody structure to provide a canopy that would be generally associated with a forested type. Therefore, minimal clearing would be necessary for construction of the Proposed Project along any alternative route. Vegetation community types intersected by the alternative routes were verified in the field, where possible.

Construction of the facility within the ROW would be performed in such a way as to minimize adverse impacts on vegetation and to retain existing ground cover when practicable. Where necessary, soil conservation practices will be undertaken to protect local vegetation and ensure successful revegetation for areas disturbed during construction. Therefore, the Proposed Project is unlikely to have any significant long-term effect on terrestrial vegetation within the Proposed Project's ROW.

7.4.1.2 Aquatic/Hydric vegetation

Removal of vegetation in wetlands increases the potential for erosion and sedimentation, which can be detrimental to downstream aquatic life and plant communities. Any placement of fill material within WOTUS would represent a permit action that may require notification to the USACE. More-detailed field studies would be required to verify the location and amount of jurisdictional wetlands that may be within the ROW of the PUCT-approved route. Precautions would be taken throughout the construction process to avoid and minimize impacts on wetlands. Depending on the size and vegetation type (shrub/scrub or

herbaceous), these areas can be spanned in many instances, although they cannot always be avoided by construction equipment. Implementation of approved BMPs for construction and minimization of erosion in disturbed areas would help dissipate the flow of runoff. Placement of silt fences or hay-bale dikes between streams and disturbed areas would also help prevent siltation into the waterway. After construction is complete, impacted herbaceous wetlands are likely to recover relatively quickly.

Sensitive plant communities, such as those found along riparian corridors and in wetlands, can often be spanned without the need for clearing. No riparian vegetation providing a canopy that would generally be associated with a riparian woodland/bottomland forested type exists in the study area; however, riparian areas constitute a small portion of the study area and are associated with ephemeral and intermittently flooded NWI riverine wetlands. Potential impacts on sensitive plant communities by the Proposed Project are expected to be minor due to the ephemeral nature of most streams being crossed. The length across potential wetlands by link was determined using USFWS NWI maps (**Table 7-3, Appendix E**).

Activities associated with electrical transmission facilities in jurisdictional wetlands are regulated by the USACE under the CWA. The USACE – Fort Worth District responded to a November 5, 2024, solicitation via email on November 7, 2024, stating that the Proposed Project has been assigned Project Number SWF-2024-00544 and that a regulatory project manager had been assigned. Additionally, USACE – Albuquerque District responded via email on November 15, 2024, stating that the Proposed Project has been assigned Project Number SPA-2024-00460 and that a regulatory project manager had been assigned (**Appendix A**).

If necessary, Oncor will coordinate with the USACE prior to clearing and construction to ensure compliance with Section 404 of the CWA to avoid, minimize, or mitigate unavoidable impacts on WOTUS, including wetlands. Therefore, the Proposed Project is unlikely to have any significant impact on aquatic/hydric vegetation.

7.4.1.3 Commercially or Recreationally Important Vegetation

Commercially important vegetation within the study area includes forage and row crops; however, very little occurs in the study area. None of these areas will be crossed by the Proposed Project, and impacts on these resources are not anticipated.

7.4.1.4 Endangered and Threatened Plant Species

One state-listed plant species, the dune umbrella-sedge, may occur within appropriate habitat within Andrews and Winkler Counties within the study area. Two TPWD (2024d) records for the species occur in the vicinity of Links G1 and F6; however, they were last observed in 1969 and 1950, respectively. This

species may be adversely affected by the Proposed Project if present in suitable habitat. If suitable habitat is present, Oncor will take necessary precautions to avoid and minimize disturbance, if any, during construction. In its December 18, 2024, response letter, the TPWD recommended surveying the PUCT-selected route where suitable habitat may be present prior to construction (TPWD, 2024g).

7.4.2 Fish and Wildlife

7.4.2.1 Terrestrial Wildlife

The potential impacts of transmission lines on wildlife include short-term effects resulting from physical disturbance during construction, as well as long-term effects resulting from habitat modification, fragmentation, or loss. The net effect from transmission line construction on local wildlife is typically minor. The following section provides a general discussion of the potential effects of transmission line construction and operation on terrestrial wildlife, followed by a discussion of the possible impact of the alternative routes.

Any required clearing or other construction-related activities could directly and/or indirectly affect most animals that reside within or traverse the transmission line ROW. Heavy machinery may adversely affect smaller, low-mobility species, particularly amphibians, reptiles, and small mammals.

If construction occurs during the breeding season (generally spring to fall), construction activities may adversely affect the young of some species. Heavy machinery may cause soil compaction, which may adversely affect fossorial animals (i.e., those that live underground). Mobile species, such as birds and larger mammals, may avoid initial clearing and construction activities and move into adjacent areas outside the ROW. Construction activities may temporarily deprive some animals of cover and, therefore, potentially subject them to increased natural predation. Wildlife in the immediate area may experience a slight loss of browse or forage material during construction. However, the prevalence of similar habitats in adjacent areas and vegetation succession in the ROW following construction would minimize these effects. To comply with the MBTA, TPWD (2024g) provided recommendations corresponding with the MBTA such as avoiding vegetation clearing between mid-March and mid-September. If clearing activities are unavoidable during this time, TPWD recommends surveying the area proposed for disturbance to ensure that no nests with eggs or young will be disturbed by construction. TPWD generally recommends a 100-foot radius buffer of vegetation remain around active nests until the eggs have hatched and the young have fledged (TPWD, 2024g).

The increased noise and activity levels during construction could potentially disturb the daily activities (e.g., breeding, foraging) of species inhabiting the areas adjacent to the ROW. Dust and gaseous

emissions should have only minimal effects on wildlife. Although construction activities may disrupt the normal behavior of many wildlife species, little, if any, permanent damage to these populations should result. Periodic clearing along the ROW, while producing temporary negative impacts on wildlife, can improve the habitat for ecotonal or edge species through the increased production of small shrubs, perennial forbs, and grasses.

Transmission line structures will be designed in compliance with the Avian Power Line Interaction Committee (APLIC) standards, as defined in *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC, 2012). As such, the danger of electrocution to birds from this Project is anticipated to be insignificant since the distance between conductors, or between conductor and ground wire on 345-kV transmission lines, is greater than the wingspan of any bird in the area (i.e., greater than 8 feet). Also, it is Oncor's standard practice to install devices at the appropriate locations to deter bird landings on the insulator between the conductor and structure. This standard practice is consistent with agency-recognized guidelines for minimizing bird collision risks (APLIC, 2006; 2012).

The transmission line (both structures and wires) could present a hazard to flying birds, particularly when flying through a migratory pathway or stopover site (National Audubon Society [NAS], 2025). Collision may result in disorientation, crippling, or mortality. Mortality is directly related to an increase in structure height; number of guy wires, conductors, and ground wires; and use of solid or pulsating red lights (an FAA requirement on some structures or structures over 200 feet in height) (Erickson et al., 2005). Collision hazards are greatest near habitat "magnets" (e.g., wetlands, open water, edges, and riparian zones) and during the fall when flight altitudes of dense migrating flocks are lower in association with cold air masses, fog, and inclement weather. The greatest danger of mortality exists during periods of low ceiling, poor visibility, and drizzle when birds are flying low – perhaps commencing or terminating a flight – and when they may have difficulty seeing obstructions (Electric Power Research Institute, 1993). Most migrant species known to occur in the Study Area, including passerines, should be minimally affected during migration, since their normal flying altitudes are much greater than the heights of the proposed transmission structures (Willard, 1978; Gauthreaux, 1978).

Negative edge effects can be reduced through native revegetation of disturbed construction areas where necessary and appropriate for safe and reliable operation. Additionally, nest management through platform design (if required), equipment protection, and other physical disincentives to bird use and nesting can avoid negative impacts on birds and power reliability (APLIC, 2006).

In general, the greatest potential impact on wildlife typically results from the loss and fragmentation of woodland and wetland habitats. Woodlands, particularly, are relatively static environments that require greater regenerative time compared with cropland or emergent wetlands. In most cases, wetlands and small waterbodies can be spanned with little or no resulting impact on wildlife. The routing constraints for the Proposed Project attempted to minimize impacts on woody and riparian vegetation, to the extent practicable, and subsequently also minimizing impacts on wildlife habitat.

None of the alternative links cross upland woodland or bottomland/riparian woodland; however, small amounts of brushland exist throughout the pastureland/rangeland contained within the study area. The greatest potential to impact wildlife would include the clearing areas that parallel within 100 feet of streams, clearing of vegetation within the ROW (pastureland/rangeland), crossing wetlands, and the length of the alternative routes, which would present the potential for wire strikes to both migrant and resident birds. Direct impacts on wildlife and habitat fragmentation are greatly reduced by utilizing or paralleling existing ROW to the greatest practical extent.

After construction is completed and grasses, forbs, and shrubs can recover, many forms of wildlife are anticipated to re-occupy the ROW area. Periodic vegetation maintenance within the ROW may temporarily cause some negative impacts on wildlife habitat. Maintenance clearing activities during the breeding season may destroy some nests and broods. With the increase in sunlight penetration to a previously dense shrub stratum, more perennial forbs and grasses would be expected to germinate. Such edge habitats are preferred by many species, such as the eastern cottontail, white-tailed deer, and northern bobwhite quail. Species like the white-tailed deer that require open areas and dense cover may also use the ROW.

Some avian species may use transmission line structures or wires for perching and roosting; however, this is not the designed intent of those facilities. Additionally, edge-adapted species (e.g., some flycatchers, northern cardinal [*Cardinalis cardinalis*], northern bobwhite [*Colinus virginianus*], Cooper's hawk [*Accipiter cooperii*], brown-headed cowbird [*Molothrus ater*], and northern mockingbird [*Mimus polyglottos*]) may select the edge habitat created along the changed vegetation areas adjacent to the transmission line ROW (Rochelle et al., 1999).

7.4.2.2 Fish and Aquatic Wildlife

Impacts on aquatic ecosystems from transmission line construction are generally minor. Aquatic features, such as lakes, streams, and ponds, are limited in the study area and can generally be spanned. The implementation of sedimentation controls, as prescribed in a Project-specific SWPPP (if required), during

construction will help to minimize erosion and sedimentation of area streams. Potential impacts on fish and aquatic wildlife by transmission line construction activities involve mainly the effects of increased erosion and sedimentation. Physical habitat loss or modification could result whenever access road crossings intercept a drainage system, through sedimentation due to erosion, increased suspended solids loading, or accidental petroleum spills directly into a creek, lake, or other aquatic feature. Erosion results in siltation and increased suspended solids entering streams, creeks, or lakes, which in turn may negatively affect many aquatic organisms at many trophic levels. Since most of the aquatic features of the area typically exhibit relatively high turbidities during and following runoff events, small increases in suspended solids during the construction phase are unlikely to have any discernible adverse impact.

In evaluating impacts on aquatic systems, factors taken into consideration include the amount of potential wetlands crossed, the amount of ROW within 100 feet of streams, the number of stream crossings, and the amount of open water crossed. Although streams and wetlands can usually be spanned, increased sedimentation and turbidity could result during rainfall. A route parallel to and within 100 feet of a stream could have a similar effect. The proposed alternative routes do not cross any open water features or emergent wetlands, although some routes do parallel a stream within 100 feet. It should be noted that the stream crossings listed for each alternative route in **Table 7-2 (Appendix E)** represent ephemeral drainages, including the Rudd, Cheyenne, and Monument Draws, and do not contain perennial or intermittent flow. Because of the avoidance measures used to plan and construct the Proposed Project, no significant impact on the study area aquatic resources is anticipated.

7.4.2.3 Commercially or Recreationally Important Fish and Wildlife Species

Construction of the proposed transmission line is not expected to have significant impacts on commercially or recreationally important fish and wildlife species in the study area. Game species such as the white-tailed deer, mule deer, mourning dove, and scaled quail are very mobile and will leave the immediate vicinity during the initial construction phase. Wildlife in the immediate area may experience a temporary loss of browse or forage vegetation during construction; however, the prevalence of similar habitats in adjacent areas will minimize the effect of the loss. The Proposed Project would have little or no impact on game fish, waterfowl hunting, or recreational fishing, and no significant commercial fishing occurs in the study area.

7.4.2.4 Endangered and Threatened Fish and Wildlife Species

In its December 18, 2024, response letter, the TPWD recommended reviewing the TPWD county lists for the study area counties, as rare and protected species could be present, depending upon habitat availability. The agency also recommended that personnel involved in the construction of the Proposed

Project be informed of the potential presence of rare species and how to avoid their potential habitat. The TPWD further recommended planting native plants (e.g., milkweed and other nectar plants to contribute to pollinator conservation efforts) in the ROW (TPWD, 2024g).

According to USFWS (2025) and TPWD (2024c), one state-listed fish species, the Pecos pupfish, is of potential occurrence in the study area counties, although its restricted range lies outside the study area. One federally listed endangered aquatic mollusk species, the Texas hornshell, is of potential occurrence in the study area counties; however, it does not occur in the study area due to its restricted range and a lack of suitable habitat within the study area. Additionally, any aquatic habitat is expected to be spanned to avoid potential impacts. Overall, the Proposed Project should not adversely affect any endangered or threatened fish and other aquatic species.

The federally listed endangered dunes sagebrush lizard and the state-listed threatened Texas horned lizard are the only terrestrial wildlife listed species of potential occurrence in the study area that are likely to occur as permanent residents where potential habitat is present. These species may experience temporary disruptions during construction efforts.

Efforts to map potential habitat of the dunes sagebrush lizard in Texas have been constrained due to restricted land access to private property and the species patchy distribution across apparently suitable habitat (Hardy et al., 2018). Potential habitat for the dunes sagebrush lizard may occur within the deep sandy soil types in the eastern portion of the study area as shown on **Figure 7-1**. In its December 18, 2024, response letter, the TPWD (2024g) recommended surveying the PUCT-selected route for suitable dunes sagebrush lizard habitat and avoiding adverse impacts on the species and its habitat during construction, operation, and maintenance of the proposed transmission line. In addition, TPWD recommended contractor training for protected species to be able to identify Texas horned lizards and their habitat to avoid impacts, and that a biological monitor be present, if possible, during construction to identify and relocate Texas horned lizards. Upon PUCT approval, Oncor will conduct field surveys to evaluate the presence of federal-or-state-listed threatened or endangered species or suitable habitat that may be present along the approved route.

The federally listed endangered lesser prairie-chicken and the federally listed threatened western yellow-billed cuckoo would not be expected due to their current ranges lying outside the study area. Additional avian species protected under the ESA that may migrate through the study area, such as the northern aplomado falcon, piping plover, and red knot, as well as other bird species that receive protection under provisions of the BGEPA and the MBTA, such as the bald eagle and white-faced ibis, may be affected by

the presence of transmission lines. These species may be susceptible to wire strikes. Larger birds are more prone to transmission line collisions because their large wingspans and lack of maneuverability make avoiding obstacles more difficult (APLIC, 1994). However, the normal flying altitudes of most migrant species are greater than the heights of the proposed transmission structures (Gauthreaux, 1978; Willard, 1978). Additionally, the Proposed Project will be designed following APLIC standards (APLIC, 2012), which will minimize the attractiveness of the structures for perching and nesting.

Monarch butterflies are likely to occur in the study area during fall and spring migration; however, any impacts on the species from the Proposed Project would be expected to be discountable and insignificant. Additionally, at the time of this report, the monarch butterfly is proposed for listing as threatened, and therefore, is not currently provided protection under the ESA.

According to USFWS (2025) no critical habitat has been designated in the study area for any federally listed threatened or endangered species included under the ESA. Therefore, no critical habitat will be impacted by the Proposed Project, and appropriate measures will be taken to avoid or mitigate potential adverse impacts to threatened or endangered species.

Furthermore, TPWD (2024g) recommends reviewing the county lists (TPWD, 2024c) for the study area, to determine the potential for habitat of SGCN species within the study area, and to evaluate and minimize impacts on SGCN and their habitat to reduce the likelihood of endangerment and preclude the need to list as threatened or endangered in the future.

7.5 Summary of Impact on Natural Resources

Several natural resource areas have been evaluated to determine the relative ecological impacts of the alternative routes. For the Proposed Project, these areas primarily included potential impacts on vegetation and wildlife. Although all the alternative routes have the potential to impact natural resources, likely impacts from the Proposed Project are not anticipated to be significant, and any adverse impacts will be mitigated through appropriate measures.

7.6 Impact on Community Values and Community Resources

Adverse effects upon community values are defined as aspects of the Proposed Project that would significantly and negatively alter the use, enjoyment, or intrinsic value attached to an important area or resource by a community. This definition assumes that community concerns are identified with the location and specific characteristics of the Proposed Project and do not include possible objections to electric transmission lines in general.

Impacts on community values can be organized into two categories: (1) direct effects, or those effects that would occur if the location and construction of a transmission line results in the removal or loss of public access to a valued resource; and (2) indirect effects, or those effects that would result from a loss in the enjoyment or use of a resource due to the characteristics (primarily aesthetic) of the Proposed Project, structures, or ROW. Impacts on community values, whether direct or indirect, can be more accurately gauged as they affect recreational areas, recreational resources, or the visual environment of an area (aesthetics). The sections that follow discuss impacts on community values and community resources.

7.7 Impact on Land Use

Land use impacts from transmission line construction are determined by the amount of land (of varying use) displaced by the actual ROW and by the compatibility of electric transmission line ROW with adjacent land uses. During construction, temporary impacts on land uses within the ROW could occur due to the movement of workers and materials through the area. Construction noise and dust, as well as temporary disruption of traffic flow, may also temporarily affect residents and businesses in the area immediately adjacent to the ROW. Coordination among Oncor, its contractors, and landowners regarding access to the ROW and construction scheduling would minimize these disruptions. Most existing land uses may continue during construction.

The primary factors considered in measuring potential land use impacts from the Proposed Project include proximity to habitable structures, potential impacts on park/recreational areas, agricultural activities, aesthetics, transportation/aviation, and communication towers, as discussed below.

7.7.1 Urban/Residential

Generally, one of the most important measures of potential land use impact is the number of habitable structures located within a specified distance of a route centerline. Burns & McDonnell staff determined the number and distance of habitable structures located within 500 feet of the centerline of each alternative route using GIS software, interpretation of aerial imagery, and verification during field reconnaissance, where possible. To account for the margin of error in horizontal accuracy of aerial imagery, Burns & McDonnell identified all habitable structures within a measured distance of 520 feet of the alternative route centerlines. The few habitable structures within the study area near the alternative route links primarily consist of commercial business offices concentrated near major roadways. A total of nine habitable structures were identified within 520 feet of the Proposed Project, as shown on **Figures 3-1A and 3-1B (Appendix F)**. **Table 7-2 and Table 7-3 (Appendix E)** present the number of habitable structures located within 520 feet of each alternative route and each alternative route link,

respectively. **Table 7-4** provides the distance and direction of each habitable structure identified within 520 feet of the alternative route links.

PUCT Substantive Rules Section 25.101(b)(3)(B) requires, among other things, that the PUCT consider whether new transmission line routes parallel existing compatible ROW, property lines, or other natural or cultural features in selection of a route. The length of alternative routes parallel to existing corridors (including apparent property boundaries) ranges between 10.6 percent and 47.5 percent of the total route length for the Proposed Project. Larger percentages are achieved through paralleling existing transmission lines, roadways, and apparent property boundaries. Given the general isolation of the study area from urban centers, the Proposed Project would have no impacts on urban or residential areas.

Table 7-4: Habitable Structures^a Within 500 Feet^b of Alternative Links

Habitable Structure ID ^c	Distance (Feet)	Description	Direction ^d	Link
1	453	Field office	S	B5
2	154	Field office	W	F6
3	281	Kinder Morgan Main Office	N	G6
4	481	Kinder Morgan office	N	G6
5	250	Kinder Morgan office	N	G6
6	466	Kinder Morgan Industrial Building	N	G6
7	301	Workshop	N	G9
8	512	Atlas Warehouse	NW	H6
9	331	Single-family Residence (SFR)	N	M2

(a) Single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis.

(b) Due to the potential horizontal inaccuracies of the aerial photography and data utilized, all habitable structures within 520 feet have been identified.

(c) All habitable structures are located on Figures 3-1A and 3-1B (Appendix F).

(d) Direction represents the distance beginning at the nearest point of the identified link to the habitable structure.

7.7.2 Recreational Areas

As noted at the bottom of **Tables 7-2** and **7-3** (Appendix E), parks and recreational areas are identified as areas owned by a governmental body or an organized group, club, or church. Potential impacts on recreational land would include the disruption or preemption of recreational activities. None of the alternative route links cross parks or recreational land within the study area, and no alternative route link is located within 1,000 feet of a park or recreational area. No impacts on parks or recreational land is expected from the Proposed Project.

7.7.3 Agriculture

Potential impacts on agricultural land use typically include the disruption or preemption of farming activities. Impacts on agricultural land uses can generally be ranked by degree of potential impact. Forested land (e.g., orchards or land used for commercial timber) has the highest degree of impact, followed by cultivated cropland. Areas where cultivation is not the primary use (pastureland/rangeland) have the least degree of potential impact.

Given that agriculture is the predominant land use for areas not in oil and gas production, the alternative routes cross a substantial length of pastureland/rangeland. Due to the relatively small area affected beneath the structures, and the short duration of construction activities at any one location, such impacts should be temporary and minor. Furthermore, the proposed line does not cross any agricultural land irrigated by traveling irrigation systems (rolling or center-pivot or other aboveground mechanical means). Because Oncor will not fence the ROW for the Proposed Project or otherwise separate the ROW from adjacent lands, no long-term or significant displacement of farming or grazing activities would occur. Most existing land uses may be resumed following construction. **Table 7-2 and Table 7-3 (Appendix E)** present the overall length of pastureland/rangeland crossed by each alternative route and link, respectively.

7.7.4 Aesthetics

Aesthetic impacts, or impacts upon visual resources, exist when the ROW, lines, or structures of a transmission line system create an intrusion into, or substantially alter the character of, an existing scenic view. The significance of the impact is directly related to the quality of the view, in the case of natural scenic areas, or to the importance of the existing setting in the use or enjoyment of an area, in the case of valued community resources and recreational areas.

Construction of the Proposed Project could have both temporary and permanent aesthetic effects. Temporary impacts would include views of the actual construction activities and materials, including assembly and erection of the structures, and any additional clearing of the ROW, as discussed in **Section 1.3.3 (Clearing Requirements)**. Where limited clearing is required, the brush and wood debris could have a temporary negative impact on the local visual environment. Permanent impacts from the Proposed Project would include the views of the structures and lines themselves.

To evaluate aesthetic impacts, field reconnaissance was conducted to determine the general aesthetic character of the area and the degree to which the Proposed Project would be visible from selected areas. These selected areas generally include: those of potential community value; parks and recreational areas;

scenic vistas; and the SH and FM roads that traverse the study area. Measurements were taken to estimate the length of the Proposed Project that would fall within recreational or major highway foreground visual zone (FVZ). A transmission line (structures and wires) is within the FVZ if it is visible (i.e., not obstructed by terrain, trees, buildings, etc.) within 0.5 miles of an observer. The determination of the visibility of the Proposed Project from various points was calculated using USGS maps and aerial digital imagery.

Burns & McDonnell's evaluation of potential aesthetic impacts includes the alternative route links that would be within the FVZ of the state highways and FM roads within the study area. All 3,648 alternative routes have portions that fall within the FVZ of state highways and FM roads as shown in **Tables 7-2 and 7-3 (Appendix E)**.

The evaluation of potential aesthetic impacts also includes the proximity of the Proposed Project within the FVZ of public parks and recreational areas and whether the Proposed Project would affect aesthetic views from these areas. Link F2 is the only link located within the FVZ of a park/recreational area (the Winkler County Golf Course). The estimated length of ROW within the FVZ of parks and recreational areas is presented in **Table 7-2** by route and in **Table 7-3** by link (**Appendix E**).

7.7.5 Transportation/Aviation

Potential impacts on transportation may include temporary disruption of traffic and conflicts with proposed roadway or utility improvements as well as increased traffic during construction. However, such impacts are usually temporary and short-term. State road crossing permits or access permits may be required prior to construction for state-maintained roads listed in **Section 3.7.6**. Although transportation may be temporarily impacted during construction, no permanent impacts on transportation infrastructure are anticipated as a result of the Proposed Project.

Typical transmission line structure heights will be approximately 90 to 140 feet with maximum height of 180 feet. According to Federal Aviation Regulations (14 CFR Part 77), notification of the construction of the Proposed Project is required if structure heights exceed the height of an imaginary surface extending outward and upward at a slope of: 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of a public or military airport having at least one runway longer than 3,200 feet in length; 50 to 1 for a horizontal distance of 10,000 feet from the nearest runway of a public or military airport where all runways are less than 3,200 feet in length; or 25 to 1 for a horizontal distance of 5,000 feet for heliports (FAA, 2011).

As stated in **Section 3.7.6** (Transportation/Aviation), Burns & McDonnell's review of aviation facilities data from federal and state aviation/airport maps and directories, aerial photo interpretation, and reconnaissance survey identified:

- no FAA-registered airport with at least one runway greater than 3,200 feet in length within 20,000 feet of any alternative route for the Proposed Project;
- no FAA-registered airport with all runways less than 3,200 feet in length within 10,000 feet of any alternative route for the Proposed Project; and
- no heliport within 5,000 feet of any alternative route for the Proposed Project.

The Rudd Draw historical USGS topographic map (USGS, 1969) identifies a private landing strip located within 10,000 feet of multiple links. Recent aerial photography (USDA NAIP, 2024; ESRI World Imagery, 2021-2023) indicates that portions of the landing strip have not been maintained and is likely no longer in use. Because some features of the airstrip remain, this feature was recorded in **Tables 7-2 and 7-3 (Appendix E)** and summarized below. The private landing strip's location is shown on **Figure 3-1A (Appendix F)**. The private landing strip is located approximately 9,240 feet south of Link A7; approximately 3,199 feet south of Link A8; approximately 7,137 feet southwest of Link B3; and approximately 7,137 feet southwest of Link B6. No significant impacts to aviation facilities are anticipated as a result of the Proposed Project.

7.7.6 Communication Towers

As noted in **Section 3.7.7**, a total of 90 communication towers were identified within the study area. No commercial AM radio transmitters were identified within the study area, and no alternative route for the Proposed Project is located within 10,000 feet of any AM radio transmitter. No FM radio transmitters were identified in the study area, and no alternative route for the Proposed Project is within 2,000 feet of any FM radio transmitter. Refer to **Table 7-5**, below, for a summary of communication tower distances in relation to alternative route links. As mentioned in **Section 3.7.6**, one VORTAC, which is a radio-based navigational aid for military and civilian aircraft, is located within the study area. Links F1 and E4 are the nearest links to the VORTAC. Link F1 is located approximately 8,385 feet southeast of the VORTAC and Link E4 is located approximately 9,340 feet east of the VORTAC. No significant impacts to communication towers are anticipated as a result of the Proposed Project.

Table 7-5: Communication Towers Within 2,000 Feet of Alternative Links

Map ID ^a	Ownership	Distance (Feet)	Direction ^b	Link
Tower 1	ConocoPhillips Communications Inc.	505	S	B5
Tower 2	Oryx Delaware Oil Transport LLC	1,759	N	B5
Tower 3	Isaac Diaz property tower	1,965	N	F6
Tower 4	HARI OM LLC property tower	951	NW	F6
Tower 5	KWES Television, LLC	1,724	E	I5
Tower 6	American Towers LLC	469	NW	I4
Tower 7	Hilcorp Energy Company / Apache Corporation	1,578	S	L6

Sources: USDHS, (2024), Antenna Search (2025).

(a) All communication towers are located on **Figures 3-1A** and **3-1B**.

(b) Direction represents the distance beginning at the nearest point of the identified link to the communication tower.

7.8 Impact on Cultural Resources

Construction activity has the potential to adversely impact cultural resources. According to the Secretary of the Interior's Guidelines for protection of historical and archeological resources (36 CFR 800), adverse impacts may occur directly or indirectly when an undertaking alters the integrity of location, design, setting, materials, construction, or association that contribute to resource's historical or archeological significance. As discussed in 36 CFR Part 800, adverse impacts on the NRHP or NRHP-eligible properties may occur under conditions that include, but are not limited to:

- destruction or alteration of all or part of a property;
- isolation from or alteration of the property's surrounding environment (setting); and
- introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting.

Under the National Historic Preservation Act direct impacts refer to the causality, and not the physicality, of the effect to historic properties. This means that if the impact comes from the undertaking at the same time and place with no intervening cause, it is considered direct regardless of whether it is visual, physical, auditory, etc. Indirect impacts on historic properties are those caused by the undertaking that are later in time or farther removed in distance but are still reasonably foreseeable.

The preferred form of mitigation for impacts on cultural resources is avoidance. Alternative forms of mitigation for direct impacts can be developed for archeological and historical sites and properties through the implementation of an appropriate data recovery program. Impacts on historically significant properties and landscapes can be lessened through careful design choices and landscaping considerations. In some situations, the relocation of historic structures may be another possible form of mitigation.

The study area contains areas with a high probability of containing cultural resource sites; therefore, the proposed transmission line construction does have the potential to impact previously unrecorded cultural resource sites. To assess this potential, areas with a high probability of containing cultural resources (High Probability Areas or HPAs) were identified along the route. An HPA is an area considered to have a high potential for containing previously unrecorded cultural resources. When identifying HPAs, the topography and the availability of water and subsistence resources are taken into consideration, as well as the effects of geological processes on archeological deposits. Locations that are usually identified as HPAs for the occurrence of prehistoric sites include water crossings, stream confluences, drainages, alluvial terraces, wide floodplains, playa lakes, upland knolls, and areas where lithic or other subsistence resources could be found. Historic sites would be expected to be adjacent to historic roadways or railways and in areas where structures appear on historic-age maps. HPAs for the Proposed Project were identified on TxDOT's Potential Archeological Liability Maps (PALM) (TxDOT, 2024). The length of HPA identified for each alternative route link is included in **Table 7-3 (Appendix E)**. A detailed investigation of the route was not performed by an archeologist. Therefore, some of the designated HPAs (as well as the direct and indirect impacts) may change if field archeologists conduct a visual reconnaissance or survey the route.

As a formal cultural resources survey has not been conducted for any of the alternative routes, the possibility of affecting unknown archaeological sites exists. Correspondence from THC dated November 25, 2024 (THC, 2024b) stated that “the potential for the proposed transmission line to affect cultural resources within the proposed study area is high and an archeological survey is warranted prior to breaking ground.”

7.8.1 Historical Summary

As noted in **Section 3.8.1.3**, no NRHP-listed districts or properties or NHLs were identified in the study area. None of the identified historic-age cemeteries or OTHMs are within 1,000 feet of any of the alternative route links. In a letter dated November 25, 2024, the THC (2024b) stated no historic resources are known in the study area and should the Proposed Project ultimately include federal involvement, additional consultation with their office would be required.

7.8.2 Archeological Summary

The results of the literature and records review indicated that 135 archeological sites have been recorded in the study area. **Table 7-6** provides the distance and direction of the 22 archeological sites crossed by, or within 1,000 feet of an alternative route link. Site 41WK65 has been determined eligible for NRHP inclusion. Sites 41LV12, 41WK73, and 41WK75 have been determined ineligible for NRHP inclusion and 41LV191 has been determined ineligible in the ROW in which it was previously evaluated. The remaining

17 sites have unknown or undetermined NRHP eligibility. With careful design considerations, most sites can be avoided or spanned by the Proposed Project's transmission line.

Table 7-6: Cultural Resource Sites Within 1,000 Feet of Alternative Route Links

Cultural Resource Site	Distance From Link Centerline	Direction From Link Centerline	Link
41LV26	318	N	B1
41AD57	903	N	L5
41AD58	525	N	L5
41WK126	9	N	F5
41WK82	270	N	E1
41WK56	881	NW	I4
41WK64	810	NW	I4
41WK66	813	NW	I4
41WK65	999	NW	I4
41AD22	590	E	K7
41LV191	223	E	A4
41LV95	0	N/A	B5
41LV105	0	N/A	B5
41LV60	856	S	B5
41LV96	614	S	B5
41LV12	273	S	B5
41AD38	719	S	J5
41WK73	655	S	I3
41WK75	990	S	I4
41AD32	788	E	K7
41WK7	881	E	I5
41AD41	509	E	J4

As previously mentioned in **Section 7.8**, in a letter dated November 25, 2024, the THC (2024b) stated the potential for the proposed transmission line to affect cultural resources within the study area is high and an archeological survey is warranted because numerous archeological sites have been previously recorded within the study area and the study area overlaps named drainages, such as Rudd, Cheynne, and Monument Draws, as well as playa lakes, that would have attracted indigenous and historic-age occupation. Several links pass through HPAs. **Table 7-3** in **Appendix F** summarizes HPAs in relation to link crossings.

Following PUCT approval of a route for the Proposed Project, a cultural resources survey will be conducted in accordance with the pre-approved research design developed by Oncor and THC for new transmission line studies. Any cultural resources discovered during this initial survey will be mitigated, if required, through consultation with the THC. In the event Oncor or its contractors encounter any archeological materials or other cultural resources during construction of the Proposed Project, Oncor will

cease work in the immediate vicinity of the resource and report the discovery to the THC. It is anticipated that the Proposed Project will have no substantial impacts on cultural resources.

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8.0 LIST OF PREPARERS

This Environmental Assessment and Alternative Route Analysis was prepared for Oncor by Burns & McDonnell; **Table 8-1** provides a list of the project team with primary responsibilities for the preparation of this document.

Table 8-1: List of Preparers

Responsibility	Name	Title
Project Manager	Thomas Adamski	Sr. Project Manager
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Name	Date	Scale
Amburgey Ranch	1971	1:24,000
Bedford Ranch	1971	1:24,000
Brunson Ranch	1970	1:24,000
Cheyenne Draw	1970	1:24,000
Cheyenne Draw SE	1970	1:24,000
Cheyenne Draw SW	1969	1:24,000
Coyote Corner	1968	1:24,000

Figure Seven Ranch	1971	1:24,000
Jal NE	1969	1:24,000
Jal SE	1969	1:24,000
Kermit	1970	1:24,000
Kermit NW	1970	1:24,000
Kyle Ranch	1969	1:24,000
Lindley Ranch	1961	1:24,000
North Cowden NW	1968	1:24,000
Notrees	1971	1:24,000
Notrees NW	1971	1:24,000
Red Lakes	1964	1:24,000
Rudd Draw	1969	1:24,000
Rudd Draw NE	1969	1:24,000
Sand Ranch	1971	1:24,000
Turnbaugh Corner	1964	1:24,000
Vesrue	1970	1:24,000
Wheeler Ranch	1971	1:24,000
Wink North	1970	1:24,000
YT Ranch	1971	1:24,000

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APPENDIX A
AGENCY CORRESPONDENCE

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APPENDIX A

AGENCY CORRESPONDENCE

Proposed Oncor Border Switch to Clearfork Switch 345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties, Texas

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November 4, 2024

Obstruction Evaluation Group
Federal Aviation Administration
Southwest Region
10101 Hillwood Parkway
Fort Worth, TX 76117-1524

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Obstruction Evaluation Group:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

Burns & McDonnell is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. Burns & McDonnell is currently in the process of collecting and evaluating information to identify environmental, cultural, and land use constraints that exist in the study area. Burns & McDonnell will consider and evaluate these constraints when developing and evaluating potential alternative routes between the Project's endpoints. As part of this effort, we are asking that your agency or office communicate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:

- Land use (current or proposed land development projects, park/recreation areas, etc.)
- Aesthetics

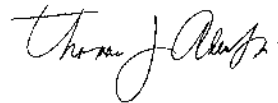
Obstruction Evaluation Group
Federal Aviation Administration

Page 2

- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomic factors (population, employment, growth, current/future development, etc.)
- Cultural resources (*e.g.*, historic and archeological sites)
- Transportation and roads (proposed airport and roadway expansions, construction, operations, maintenance, etc.)

Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,



Thomas J. Ademski
Project Manager

Attachment (1)



November 4, 2024

Tony Robinson
Regional Administrator
Region VI
Federal Emergency Management Agency
FRC 800 North Loop 288
Denton, TX 76209-3698

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Tony Robinson:

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Tony Robinson
Federal Emergency Management Agency

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- Aesthetics
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- Soils and geology
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Sincerely,



Thomas J. Ademski
Project Manager

Attachment (1)

Ademski, Thomas J (Tommy)

From: Dracoulis, Danielle <danielle.dracoulis@fema.dhs.gov>
Sent: Friday, November 8, 2024 5:23 PM
To: Ademski, Thomas J (Tommy)
Cc: cotreasurer@co.loving.tx.us
Subject: FW: RA # 24-11-127271 IMS Item logged to Mitigation for action
Attachments: 24-11-127271_Oncor Electric Delivery Company LLCs Proposed Border Switch to Clearfork Switch.pdf; IMS 127271 Onco Clearfork Switch.pdf

Attached please find formal response from FEMA Region 6.
Thank you!

Danielle Dracoulis

Program Support Assistant
| Mitigation Division | Region 6
Federal Emergency Management Agency (FEMA)
800 North Loop 288 | Denton, TX 76209-3698
Phone: (940) 231-6845 | Email: Danielle.dracoulis@fema.dhs.gov



FEMA

The best teams are made up of nobodies, who love everybody, and serve anybody and don't care about becoming somebody.

U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, TX 76209-3698



FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
MITIGATION DIVISION

RE: Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearkfork Switch
345kW Transmission Line Project in Andrews, Ector, Loving and Winkler Counties,
Texas

NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

☐ We have no comments to offer. ☒ We offer the following comments:

**WE WOULD REQUEST THAT THE COMMUNITY FLOODPLAIN
ADMINISTRATOR BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT
REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD
REQUEST PROJECT TO BE IN COMPLIANCE WITH EO11988 & EO 11990.**

County Contact:

Regina Wilkenson, Floodplain Administrator
(432) 377-2311
cotreasurer@co.loving.tx.us
Loving County, Texas

REVIEWER:

Charles Cook
Floodplain Management and Insurance Branch
Mitigation Division
Charles.Cook4@fema.dhs.gov
(940) 898-5400

DATE: November 11, 2024

RA # 24-11-127271



November 4, 2024

Tony Robinson
Regional Administrator
Region VI
Federal Emergency Management Agency
FRC 800 North Loop 288
Denton, TX 76209-3698

Date Rec'd:	11/8/24	
Rec'd by:	Tharika	
	Action	Info
RA		
Deputy RA		
XA		
Analyst		
RES		
REC		
MIT	✓	
MSD		
NP		
Grants		
File		
Suspense Date:	11/22/24	

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Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:

- Land use (current or proposed land development projects, park/recreation areas, etc.)

Tony Robinson
Federal Emergency Management Agency

Page 2

- Aesthetics
- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomic factors (population, employment, growth, current/future development, etc.)
- Cultural resources (e.g., historic and archeological sites)
- Transportation and roads (proposed airport and roadway expansions, construction, operations, maintenance, etc.)

Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,

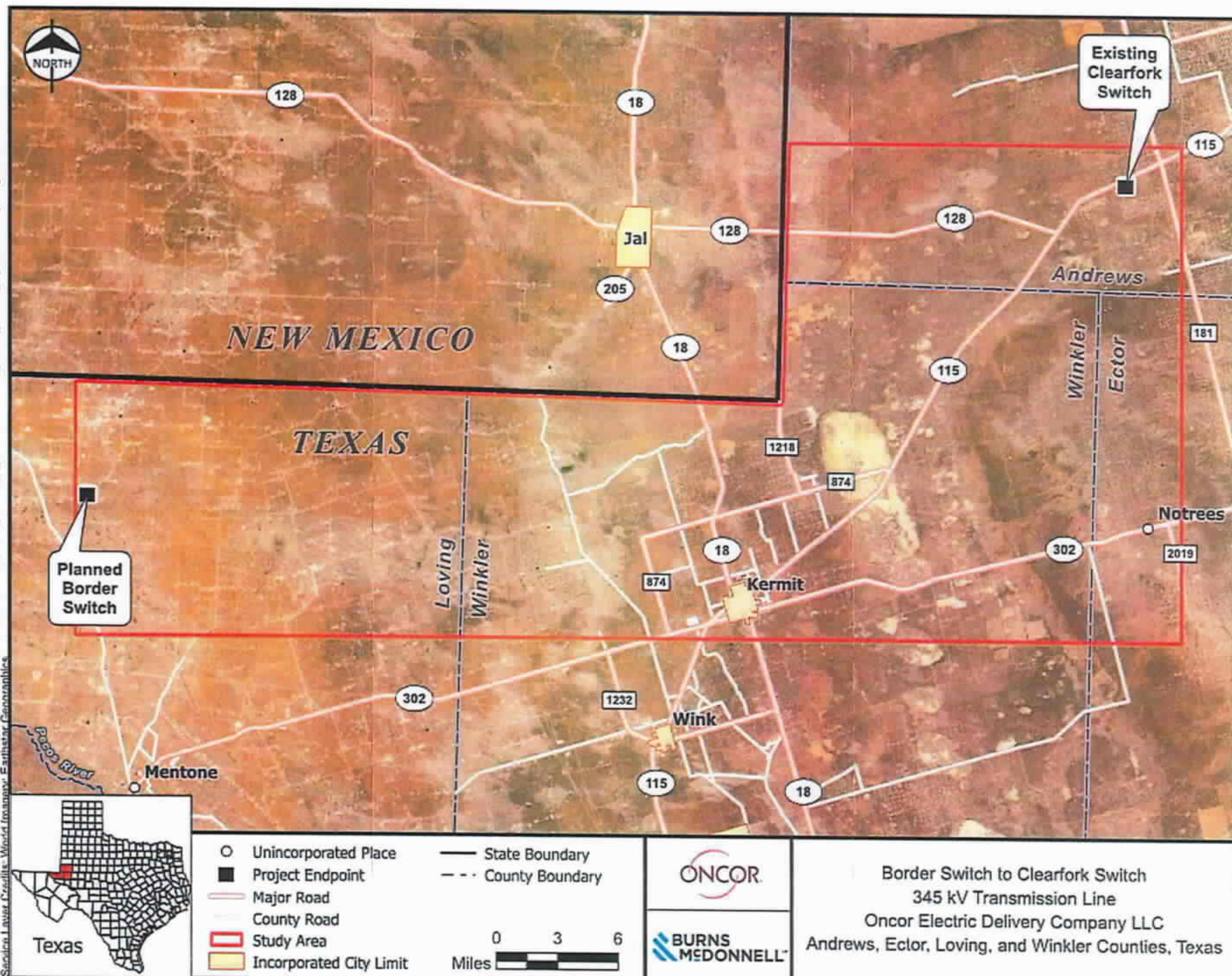


Thomas J. Ademski
Project Manager

Attachment (1)

A-10

Path: C:\Users\gacox\OneDrive - Burns & McDonnell\Texas GIS\Austin\176847_Oncor_Border_to_Clearfork\176847_Oncor_Border_to_Clearfork.aprx gacox 10/22/2024
 Section Layer Credits: World Imagery, Earthstar, Communities



Source: ESRI, TxDOT, NMDOT

Issued: 10/22/2024



November 4, 2024

Kristy Oates
State Conservationist
Natural Resources Conservation Service
101 South Main St.
Temple, TX 76501

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Kristy Oates:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

Burns & McDonnell is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. Burns & McDonnell is currently in the process of collecting and evaluating information to identify environmental, cultural, and land use constraints that exist in the study area. Burns & McDonnell will consider and evaluate these constraints when developing and evaluating potential alternative routes between the Project's endpoints. As part of this effort, we are asking that your agency or office communicate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:

- Land use (current or proposed land development projects, park/recreation areas, etc.)
- Aesthetics

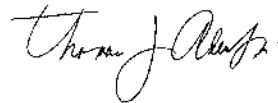
Kristy Oates
Natural Resources Conservation Service

Page 2

- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomic factors (population, employment, growth, current/future development, etc.)
- Cultural resources (*e.g.*, historic and archeological sites)
- Transportation and roads (proposed airport and roadway expansions, construction, operations, maintenance, etc.)

Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,



Thomas J. Ademski
Project Manager

Attachment (1)



November 4, 2024

Claude Ross
Assistant State Conservationist
Administrative Zone 2 – San Angelo Office
Natural Resources Conservation Service
3878 West Houston Harte
San Angelo, TX 76901

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Claude Ross:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

Burns & McDonnell is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. Burns & McDonnell is currently in the process of collecting and evaluating information to identify environmental, cultural, and land use constraints that exist in the study area. Burns & McDonnell will consider and evaluate these constraints when developing and evaluating potential alternative routes between the Project's endpoints. As part of this effort, we are asking that your agency or office communicate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:

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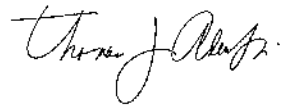
Claude Ross
Natural Resources Conservation Service

Page 2

- Aesthetics
- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
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Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,



Thomas J. Ademski
Project Manager

Attachment (1)



November 4, 2024

Christina L. Schroeder
New Mexico/West Texas Branch Chief
Albuquerque District
U.S. Army Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, NM 87109
CESP-RD-TX@usace.army.mil

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Christina L. Schroeder:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

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Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:



Christina L. Schroeder
U.S. Army Corps of Engineers

Page 2

- Land use (current or proposed land development projects, park/recreation areas, etc.)
- Aesthetics
- Water quality and wetlands
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Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas J. Ademski".

Thomas J. Ademski
Project Manager

Attachment (1)

Ademski, Thomas J (Tommy)

From: SPA-RD-NM <SPA-RD-NM@usace.army.mil>
Sent: Friday, November 15, 2024 8:08 AM
To: Ademski, Thomas J (Tommy)
Cc: Crosson, Steven B (Brad) CIV USARMY CESPA (USA)
Subject: SPA-2024-00460 (previously SWF-2024-00544)

Good morning,

Thank you for requesting comments from our office regarding the proposed subject project(s) or activity (ies) that may have the potential to impact aquatic resources. We appreciate that you are considering our potential regulatory role in the project, but we do not currently have the ability to provide project-specific comments for these types of requests. If the activity should have the potential to result in the discharge of dredged or fill material into waters of the United States, then the project proponent should work directly with our office to acquire necessary Department of the Army permits, if applicable, as described in the following general comment:

Section 404 of the Clean Water Act requires a permit from us for the discharge of dredged or fill material into waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, lakes, ponds, wetlands, wet meadows, seeps, and some irrigation ditches. To ascertain the extent of waters on the project site, the applicant should prepare a delineation of aquatic resources, in accordance with the applicable standards, including the 1987 Wetland Delineation Manual and appropriate regional supplements. These standards can be found on our website at: <https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/Jurisdiction/>.

An aquatic resource delineation should be evaluated prior to designing a project to ensure the project proponent avoids and minimizes impacts to waters of the United States to the greatest practicable extent. The range of alternatives considered for this project should include alternatives that avoid and minimize impacts to wetlands, streams, or other waters of the United States. Every effort should be made to avoid project features which require the discharge of dredged or fill material into waters of the United States. In the event it can be clearly demonstrated there are no practicable alternatives to discharging dredged or fill material into waters of the United States, compensatory mitigation may be required.

For more information about our program or to locate a list of consultants that prepare aquatic resource delineations and permit application documents, please visit our website at <https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits>.

Your project has been assigned DA# SPA-2024-00460 and been assigned to Shawn Uitvlugt.

Good morning,

Thank you for requesting comments from our office regarding the proposed subject project(s) or activity (ies) that may have the potential to impact aquatic resources. We appreciate that you are considering our potential regulatory role in the project, but we do not currently have the ability to provide project-specific comments for these types of requests. If the activity should have the potential to result in the discharge of dredged or fill material into waters of the United States, then the project proponent should work directly with our office to acquire necessary Department of the Army permits, if applicable, as described in the following general comment:

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applicant should prepare a delineation of aquatic resources, in accordance with the applicable standards, including the 1987 Wetland Delineation Manual and appropriate regional supplements. These standards can be found on our website at: <https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/Jurisdiction/>.

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For more information about our program or to locate a list of consultants that prepare aquatic resource delineations and permit application documents, please visit our website at <https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits>.

Your project has been assigned DA# SPA-2024-00460, please reference this number in all future correspondence. Shawn Uitvlugt has been assigned as Project manager and can be reached at Shawn.F.Uitvlugt@usace.army.mil or by phone at 505-315-5859.

Thank you,

U.S. Army Corps of Engineers
Albuquerque District - Regulatory Division
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435



<https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/>

RRS REGULATORY
beta REQUEST
SYSTEM

Streamline the permitting process with the
Regulatory Request System (RRS) — your new
online platform for permit applications.

rrs.usace.army.mil



November 4, 2024

Brandon W. Mobley
Chief, Regulatory Division
Fort Worth District
U.S. Army Corps of Engineers
819 Taylor Street
Fort Worth, TX 76102
CESWF-Permits@usace.army.mil

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Brandon W. Mobley:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

Burns & McDonnell is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. Burns & McDonnell is currently in the process of collecting and evaluating information to identify environmental, cultural, and land use constraints that exist in the study area. Burns & McDonnell will consider and evaluate these constraints when developing and evaluating potential alternative routes between the Project's endpoints. As part of this effort, we are asking that your agency or office communicate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:



Brandon W. Mobley
U.S. Army Corps of Engineers

Page 2

- Land use (current or proposed land development projects, park/recreation areas, etc.)
- Aesthetics
- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomic factors (population, employment, growth, current/future development, etc.)
- Cultural resources (*e.g.*, historic and archeological sites)
- Transportation and roads (proposed airport and roadway expansions, construction, operations, maintenance, etc.)

Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas J. Ademski".

Thomas J. Ademski
Project Manager

Attachment (1)

Ademski, Thomas J (Tommy)

From: Gray, Natasha A CIV USARMY CESWF (USA) <Natasha.A.Gray@usace.army.mil>
Sent: Thursday, November 7, 2024 10:26 AM
To: Ademski, Thomas J (Tommy)
Cc: Sewell, Valerie A CIV USARMY CESWF (USA)
Subject: SWF-2024-00544 (Border Switch to Clearfork Switch 345 kV Transmission Line)

Dear Mr. Ademski:

Thank you for your letter received November 5, 2024, concerning a proposal for the construction of a 345 kilovolt transmission line located in Andrews, Ector, Loving, and Winkler Counties, Texas. The project has been assigned Project Number SWF-2024-00544, please include this number in all future correspondence concerning this project.

Ms. Valerie Sewell has been assigned as the regulatory project manager for your request and will be evaluating it as expeditiously as possible.

You may be contacted for additional information about your request. For your information, please refer to the Fort Worth District Regulatory Division homepage at <http://www.swf.usace.army.mil/Missions/regulatory> and particularly guidance on submittals at <https://swf-apps.usace.army.mil/pubdata/enviro/regulatory/introduction/submittal.pdf> and mitigation at <https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Mitigation> that may help you supplement your current request or prepare future requests.

If you have any questions about the evaluation of your submittal or would like to request a copy of one of the documents referenced above, please refer to our website at <http://www.swf.usace.army.mil/Missions/Regulatory> or contact Ms. Valerie Sewell by telephone (817) 886-1782, or by email valerie.sewell@usace.army.mil, and refer to your assigned project number. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

Please help the regulatory program improve its service by completing the survey on the following website: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Brandon W. Mobley
Chief, Regulatory Division

RRS REGULATORY REQUEST SYSTEM



Please assist us in better serving you by completing the survey at the following website:
<https://regulatory.ops.usace.army.mil/customer-service-survey/>



November 4, 2024

Department of Defense
Military Aviation and Installation Assurance Siting Clearinghouse
3400 Defense Pentagon, Room 5C646
Washington, DC 20301-3400

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Department of Defense:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

Burns & McDonnell is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. Burns & McDonnell is currently in the process of collecting and evaluating information to identify environmental, cultural, and land use constraints that exist in the study area. Burns & McDonnell will consider and evaluate these constraints when developing and evaluating potential alternative routes between the Project's endpoints. As part of this effort, we are asking that your agency or office communicate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:

- Land use (current or proposed land development projects, park/recreation areas, etc.)
- Aesthetics
- Water quality and wetlands


Department of Defense
Military Aviation and Installation Assurance Siting Clearinghouse

Page 2

- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomic factors (population, employment, growth, current/future development, etc.)
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- Transportation and roads (proposed airport and roadway expansions, construction, operations, maintenance, etc.)

Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,



Thomas J. Ademski
Project Manager

Attachment (1)

Ademski, Thomas J (Tommy)

From: Ademski, Thomas J (Tommy)
Sent: Monday, November 4, 2024 3:20 PM
To: osd.dod-siting-clearinghouse@mail.mil
Subject: Oncor Border Switch to Clearfork Switch 345 kV Transmission Line Project
Attachments: Oncor Border-Clearfork 345kV Project - DoD.pdf; Border to Clearfork 345kV Study Area.kmz; DOD_Siting_Clearinghouse_Informal_Request_Form_2023_1_B-CF_TO BE COMPLETED_PHP 10-4 (Nov 4-2024).pdf; Oncor Typical Structure (89190).pdf

Good Afternoon,

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line in portions of Andrews, Ector, Loving, and Winkler Counties, Texas. More information regarding the project is included in the attached letter.

The consultant for this project, Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. As part of this effort, we are asking that you review the information and relate any concerns that you may have regarding the siting and potential effects from the construction of the proposed electric transmission line in the designated study area.

Attachments to this email include:

- Letter request for information (with map)
- KMZ file of the study area boundary for your reference
- Completed DoD Siting Clearinghouse Informal Review Request Form
- Diagram of the typical structure proposed for the Project

Please contact me if you have any questions or require additional information.

Thank you,

Thomas Ademski
Project Manager, Environmental Services
Burns & McDonnell
6200 Bridge Point Parkway
Building 4, Suite 400
Austin, TX 78730
Direct: (737) 236-0106
Cell: (512) 731-1526
tjademski@burnsmcd.com
www.burnsmcd.com



DOD Military Aviation and Installation Assurance Siting Clearinghouse



DOD Siting Clearinghouse – Informal Review Request Form

To request an informal review, please fill out this form with all the available information for your project(s) and email this [form](#), a [shapefile](#) and/or KMZ file of the proposed location, and any relevant documentation to the Clearinghouse at osd.dod-siting-clearinghouse@mail.mil. If necessary, you may also submit coordinates in Decimal Degrees (preferred) or DMS (Degrees, Minutes, Seconds) for each component of the project (e.g., each wind turbine or transmission line tower) in Excel format.

Date of Request:

PROJECT POINT OF CONTACT					
First Name	Thomas	Last Name	Ademski		
Organization	Burns & McDonnell				
Address	6200 Bridge Point Parkway, Building 4, Suite 400				
City	Austin	State	Texas	Zip Code	78730
Email	tjademski@burnsmcd.com		Phone Number	(737) 236-0106	

PROJECT DETAILS			
Project Name	Border Switch - Clearfork Switch 345 kV Transmission Line		
Project Developer	Oncor Electric Delivery Company		
Project County and State	Andrews, Winkler, Loving counties, Texas		
Type of Project [Select all that apply]			
Transmission, Utility, or Po	Project Type #2	Project Type #3	Project Type #4

For the following questions, please fill out **ONLY** the sections applicable to the project type. If the project does not yet have a defined layout, please provide coordinates to indicate the general footprint, such as boundary corners.

WIND TURBINE	
Number of Structures	Turbine Type
Hub Height (ft)	Maximum Blade Tip Height at Top of Rotation (ft)
Associated Meteorological Evaluation Towers (if applicable). Please provide the structure heights and coordinates of the METs if not they are not already included in the KMZ provided for your project. Please provide information on the types of sensors that will be used.	
Turbine Farm boundary corner coordinates boundary corner coordinates (if a shapefile and/or KMZ file cannot be provided)	

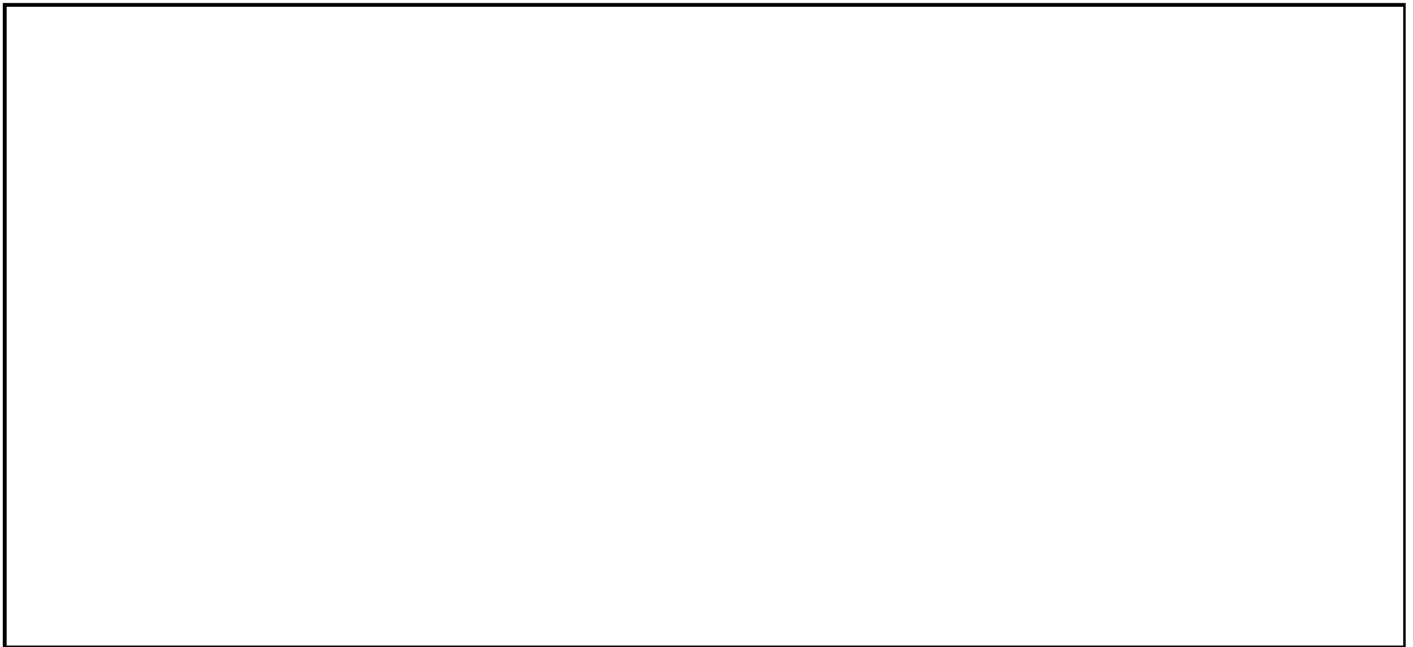
SOLAR		
Solar Technology (e.g., photovoltaic, concentrated solar power)		
Solar Panel Height (at maximum tilt) or Tower Height (ft)		
Acreage	Axis Tracking? <input type="checkbox"/>	Anti-Reflective Panels? <input type="checkbox"/>
Solar Panel or Heliostat Array boundary corner coordinates (if a shapefile and/or KMZ file cannot be provided)		
Associated Transmission Infrastructure (if applicable)		
Maximum Pole Height (ft)	Grid Point of Interconnection Coordinates	Rate Voltage of Line (kV)

GEOTHERMAL	
Acreage	Structure Height (ft)
Geothermal Layout boundary corner coordinates (if a shapefile and/or KMZ file cannot be provided)	

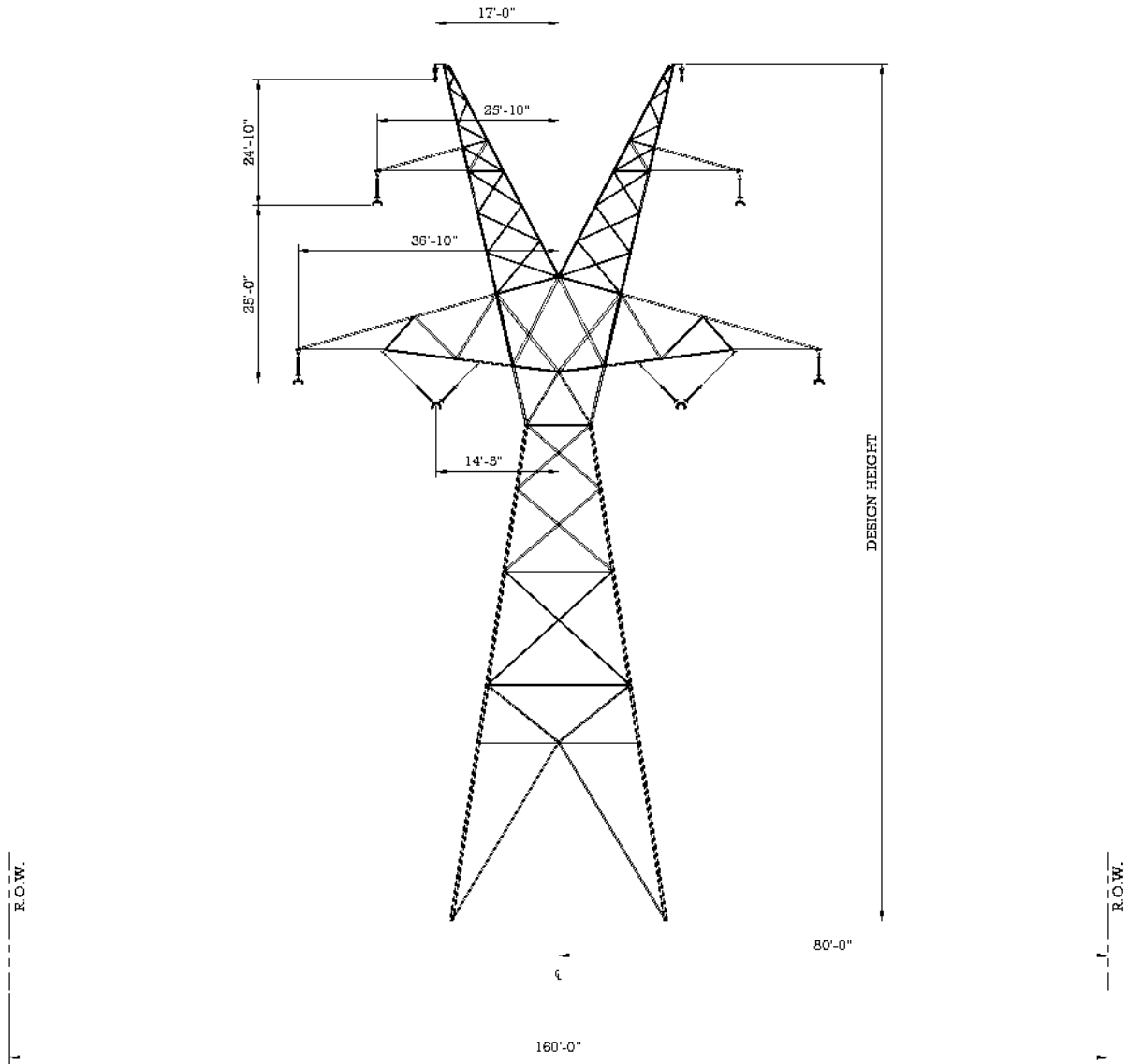
ENERGY STORAGE		
Acreage	Structure Height (ft)	
Project boundary corner coordinates (if a shapefile and/or KMZ file cannot be provided)		
Associated Transmission Infrastructure (if applicable)		
Maximum Pole Height (ft)	Grid Point of Interconnection Coordinates	Rate Voltage of Line (kV)

TRANSMISSION, UTILITY, OR POWER LINES	
Type of structure (wood, concrete, steel etc.):	Steel Lattice Towers
Height (ft) 90-180	Length of Line (ft) 301,074 - 359,176 (57-68 miles)
Substation Tie-In	Border Switch and Clearfork Switch
Rated Voltage of Line (kV)	345
Transmission Tower and Terminal Point Coordinates. PROPRIETARY & BUSINESS SENSITIVE Border Switch - Station Structure End Point: 31° 55' 0.52"N, 103° 38' 34.98"W Clearfork Switch - Station Structure End Point: 32° 9' 57.54"N, 102° 46' 40.42"W Other Line Structure Locations: To Be Determined <i>Please include a map of the transmission route (if shapefile and/or KMZ file is not provided)</i>	

Any additional information about your project you wish to disclose?

A large, empty rectangular box with a thin black border, intended for the user to provide additional information about their project.

If the request for an informal review includes trade secrets or otherwise commercial information that is proprietary or competition sensitive, we encourage that the documents be marked accordingly. Documents should be marked as "Proprietary" or "Business Sensitive" to help ensure they are properly safeguarded upon receipt. Do not mark documents as "Confidential," as that can be easily mistaken for a national security classification. Proprietary information which is customarily and actually treated as private will be protected under Exemption 4 to the Freedom of Information Act (FOIA) to the extent permitted by law. Requests are not otherwise shared outside of DoD and will only be used to assess potential impacts on military missions.



TYPICAL 345 KV TANGENT DOUBLE
CIRCUIT "V" TOWER



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

3400 DEFENSE PENTAGON
WASHINGTON, DC 20301-3400

ENERGY, INSTALLATIONS
AND ENVIRONMENT

December 20, 2024

Thomas Ademski
Burns & McDonnell
6200 Bridge Point Parkway Building 4, Suite 400
Austin, TX 78730

Dear Mr. Ademski,

As requested, the Military Aviation and Installation Assurance Siting Clearinghouse coordinated within the Department of Defense (DoD) an informal review of the Border Switch - Clearfork Switch 345 kV Transmission Line Project. The results of our review indicated that the transmission line project, located in Andrews, Winkler, Loving Counties, Texas, as proposed, will have minimal impact on military operations conducted in the area.

Please note that this informal review by the DoD Military Aviation and Installation Assurance Siting Clearinghouse does not constitute an action under 49 United States Code Section 44718 and that the DoD is not bound by the conclusion arrived at under this informal review. To expedite our review in the Obstruction Evaluation Airport Airspace Analysis (OE/AAA) process, please add the project number 2024-11-T-DEV-03 in the comments section of the filing. If you have any questions, please contact Ms. Robbin Beard, Deputy Director, at robbin.e.beard.civ@mail.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven J. Sample", is located below the word "Sincerely,".

Steven J. Sample
Executive Director
Military Aviation and Installation
Assurance Siting Clearinghouse



November 4, 2024

Earthea Nance
Regional Administrator
Region 6 – South Central
U.S. Environmental Protection Agency
1201 Elm Street, Suite 500
Dallas, TX 75270

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Earthea Nance:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

Burns & McDonnell is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. Burns & McDonnell is currently in the process of collecting and evaluating information to identify environmental, cultural, and land use constraints that exist in the study area. Burns & McDonnell will consider and evaluate these constraints when developing and evaluating potential alternative routes between the Project's endpoints. As part of this effort, we are asking that your agency or office communicate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:

- Land use (current or proposed land development projects, park/recreation areas, etc.)

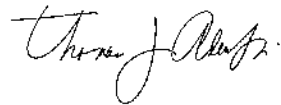
Earthea Nance
U.S. Environmental Protection Agency

Page 2

- Aesthetics
- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomic factors (population, employment, growth, current/future development, etc.)
- Cultural resources (*e.g.*, historic and archeological sites)
- Transportation and roads (proposed airport and roadway expansions, construction, operations, maintenance, etc.)

Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,



Thomas J. Ademski
Project Manager

Attachment (1)



November 4, 2024

Karen Myers
Field Supervisor
Austin Ecological Services Field Office
U.S. Fish and Wildlife Service
1505 Ferguson Lane
Austin, TX 78754

Re:

Oncor Electric Delivery Company LLC's Proposed Border Switch to Clearfork Switch
345 kV Transmission Line Project in Andrews, Ector, Loving, and Winkler Counties,
Texas

Dear Karen Myers:

Oncor Electric Delivery Company LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between Oncor's planned Border Switch in Loving County, Texas, and Oncor's existing Clearfork Switch in Andrews County, Texas (Project). The planned Border Switch will be located approximately 6.0 miles south of the Texas-New Mexico border, and the existing Clearfork Switch is located approximately 2.0 miles southwest of the intersection of State Highway 115 and Farm-to-Market Road 181. Please refer to the attached map for the location of the Project study area, endpoints, and the regional road network and landmarks.

Burns & McDonnell is preparing an environmental assessment and alternative route analysis to support Oncor's application to amend its Certificate of Convenience and Necessity with the Public Utility Commission of Texas (PUC) for the Project. Burns & McDonnell is currently in the process of collecting and evaluating information to identify environmental, cultural, and land use constraints that exist in the study area. Burns & McDonnell will consider and evaluate these constraints when developing and evaluating potential alternative routes between the Project's endpoints. As part of this effort, we are asking that your agency or office communicate any environmental or land use concerns that you may have regarding the siting and potential environmental effects from the construction of these facilities within the designated study area.

Upon certification of the Project, Oncor will determine the need for other approvals or permits. We appreciate any information you can provide related to any permits, easements, or other approvals that your agency or office requires. If permits or approvals are required from your office, Oncor will contact your office following route approval and certification from the PUC. Burns & McDonnell also requests that you provide information related to any major proposed development or construction projects that your agency or office may be planning, or is aware of, within the study area. Your input on any of the following study area characteristics as they relate to your agency or office will assist in evaluation of the Project:

- Land use (current or proposed land development projects, park/recreation areas, etc.)

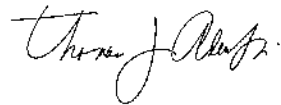
Karen Myers
U.S. Fish and Wildlife Service

Page 2

- Aesthetics
- Water quality and wetlands
- Soils and geology
- Wildlife, vegetation, and fisheries (including threatened and endangered species)
- Socioeconomic factors (population, employment, growth, current/future development, etc.)
- Cultural resources (*e.g.*, historic and archeological sites)
- Transportation and roads (proposed airport and roadway expansions, construction, operations, maintenance, etc.)

Thank you in advance for your comments, which provide us with a more comprehensive understanding of the study area as we assess potential environmental and land use impacts of the Project. If you have any questions concerning the Project or this request for information, please contact me at (737) 236-0106. Electronic data or responses can also be shared at tjademski@burnsmcd. Your earliest reply will be appreciated.

Sincerely,



Thomas J. Ademski
Project Manager

Attachment (1)



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Austin Ecological Services Field Office

1505 Ferguson Lane

Austin, TX 78754-4501

Phone: (512) 937-7371



In Reply Refer To:

03/27/2025 14:41:36 UTC

Project Code: 2025-0006552

Project Name: Border Switch to Clearfork Switch 345-kV Transmission Line Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Austin Ecological Services Field Office

1505 Ferguson Lane

Austin, TX 78754-4501

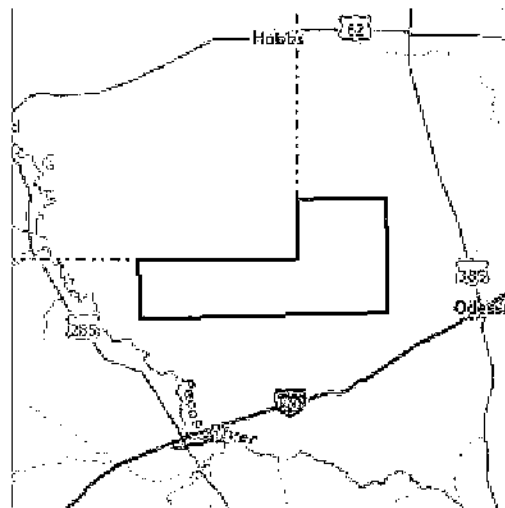
(512) 937-7371

PROJECT SUMMARY

Project Code: 2025-0006552
Project Name: Border Switch to Clearfork Switch 345-kV Transmission Line Project
Project Type: Transmission Line - New Constr - Above Ground
Project Description: Oncor Electric Delivery Company, LLC (Oncor) proposes to construct a 345 kilovolt (kV) transmission line between the proposed Border Switch in Loving County, Texas, and the existing Clearfork Switch in Andrews County, Texas (Project). The proposed Border Switch will be located approximately 6.0 miles south of the Texas/New Mexico border, and the Clearfork Switch is located approximately 2.0 miles southwest of the State Highway 115 and Farm-to-Market Road 181 intersection. The length of the proposed Project will be approximately 60 miles.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@32.0041229,-102.8935553,2269612,14z>



Counties: Texas

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> Population: Wherever found, except where listed as an experimental population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1923	Endangered
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none">▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Rufa Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none">▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

REPTILES

NAME	STATUS
Dunes Sagebrush Lizard <i>Sceloporus arenicolus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6631	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Burns & McDonnell
Name: Gary Newgord
Address: 6200 Bridgepoint Parkway
Address Line 2: Building 4, Suite 400
City: Austin
State: TX
Zip: 78730
Email: genewgord@burnsmcd.com
Phone: 5129231969