Corridor 39-113

East Apex/Mormon Mesa to St. George

Corridor Rationale

This energy corridor provides a connection from the north, through Utah, to the Las Vegas area and was determined necessary by multiple number of proposals during the WWEC PEIS. Input regarding alignment from the Frontier Line, National Grid, Rocky Mountain Area Transmission Study, the Seams Steering Group-Western Interconnection, and the Western Utility Group during the WWEC PEIS suggested following this route. The Platts data indicate one planned 345-kV electric transmission line that generally follows the path of the corridor within Region 3. Currently, there are five pending ROWs within the corridor. One authorized transmission line intersects the corridor.

Corridor location (Region 3 portion):
Nevada (Lincoln Co.)
BLM: Caliente Field Office
Regional Review Region(s): Region 1 and Region 3

Corridor width, length (Region 3 portion):
Width 3,500 ft
10.1 miles of designated corridor
10.1 mile-posted route, no gaps

Sec 368 energy corridor restrictions: (N)
- corridor is multi-modal

Corridor of concern (Y) (Region 3 portion)
- Black Mountain Desert Tortoise habitat.

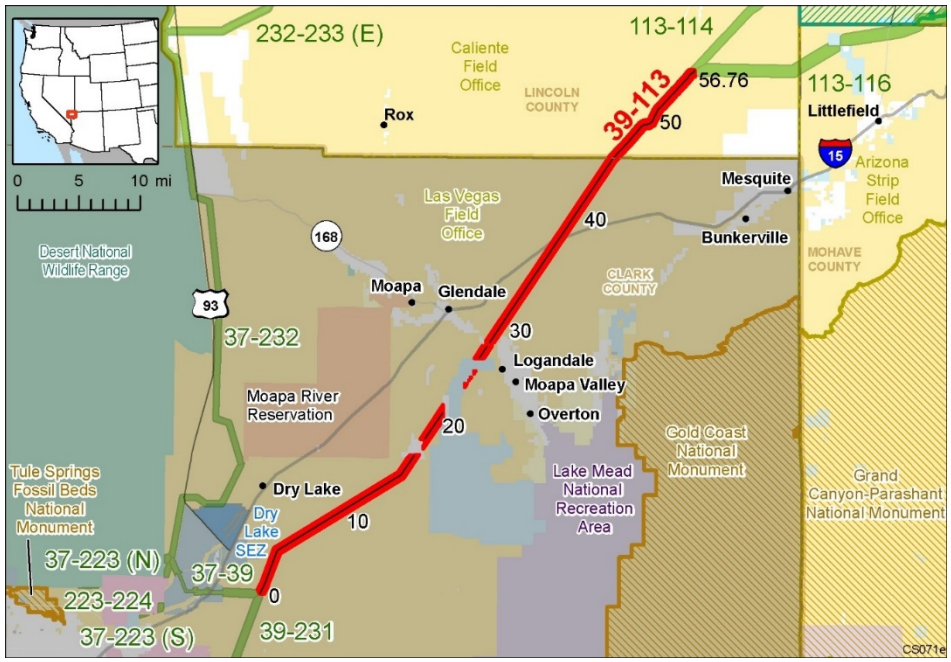
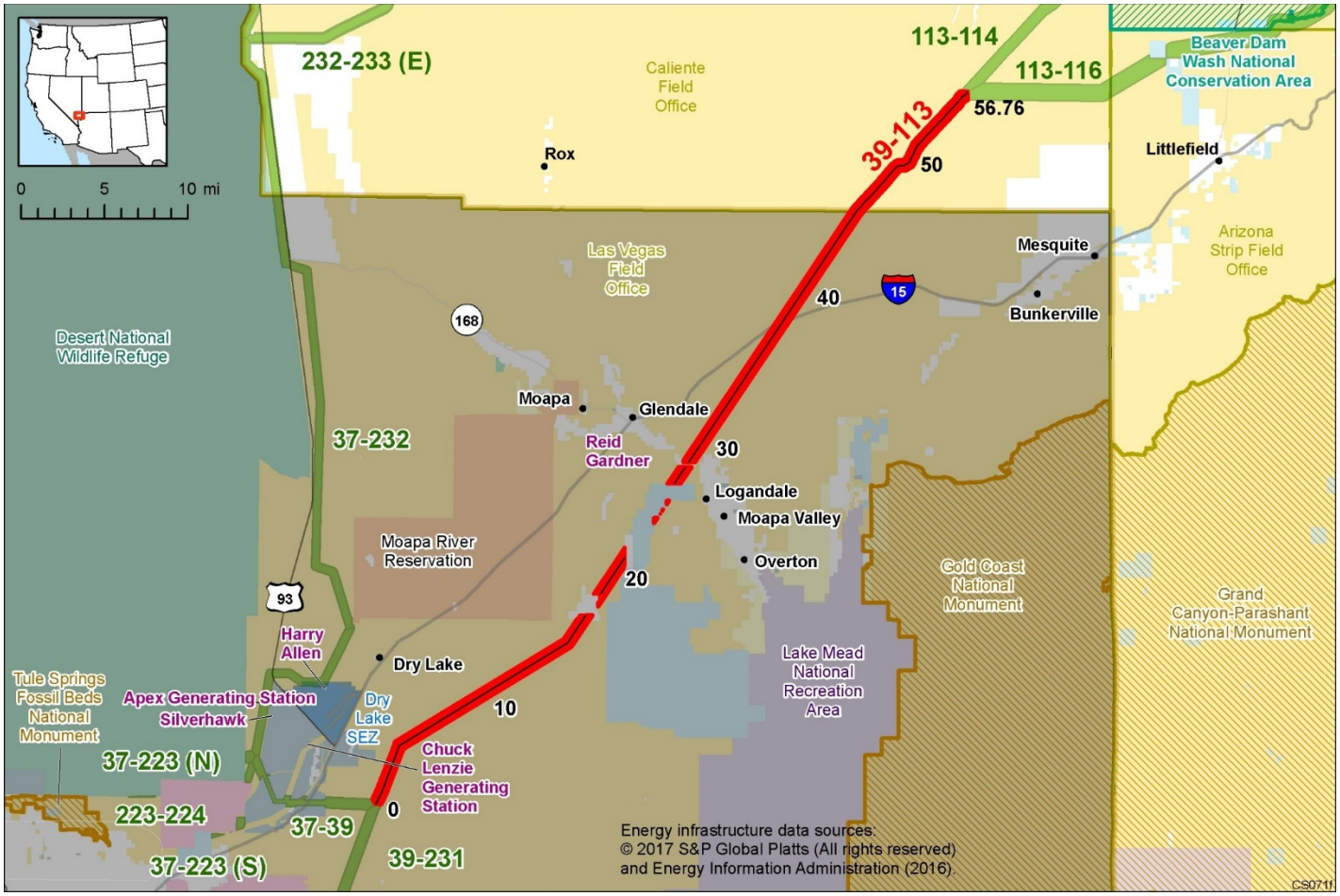
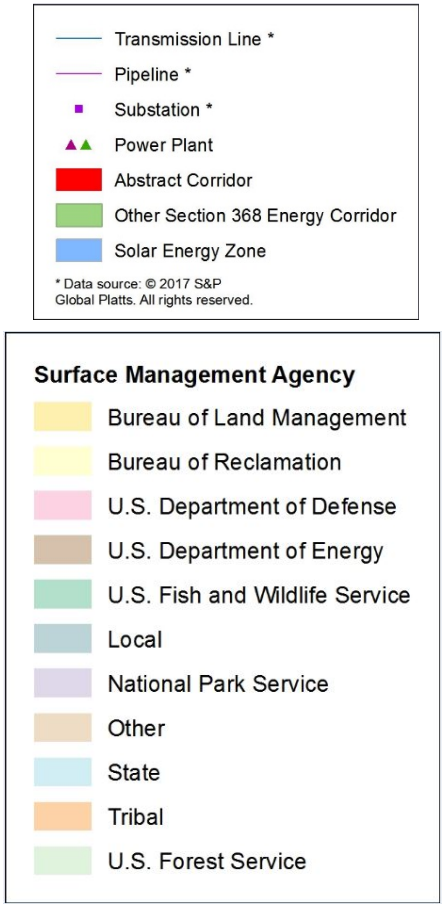


Figure 1. Corridor 39-113

Corridor history:
- Locally designated corridor prior to 2009 (N)
- Existing infrastructure prior to 2009 (Y)
  - Electric transmission:
    - 345 kV, 500 kV, and 1,000 kV (MP 47 to MP 57)
  - Pipelines:
    - 2 natural gas (MP 47 to MP 57)
- Energy development near the corridor (N)
- Corridor changes since 2009 (N)





Keys for Figures 1 and 2

Figure 2. Corridor 39-113 and nearby electric transmission lines and pipelines (grayed out area outside of Region 2 and 3 Review)

Conflict Map Analysis

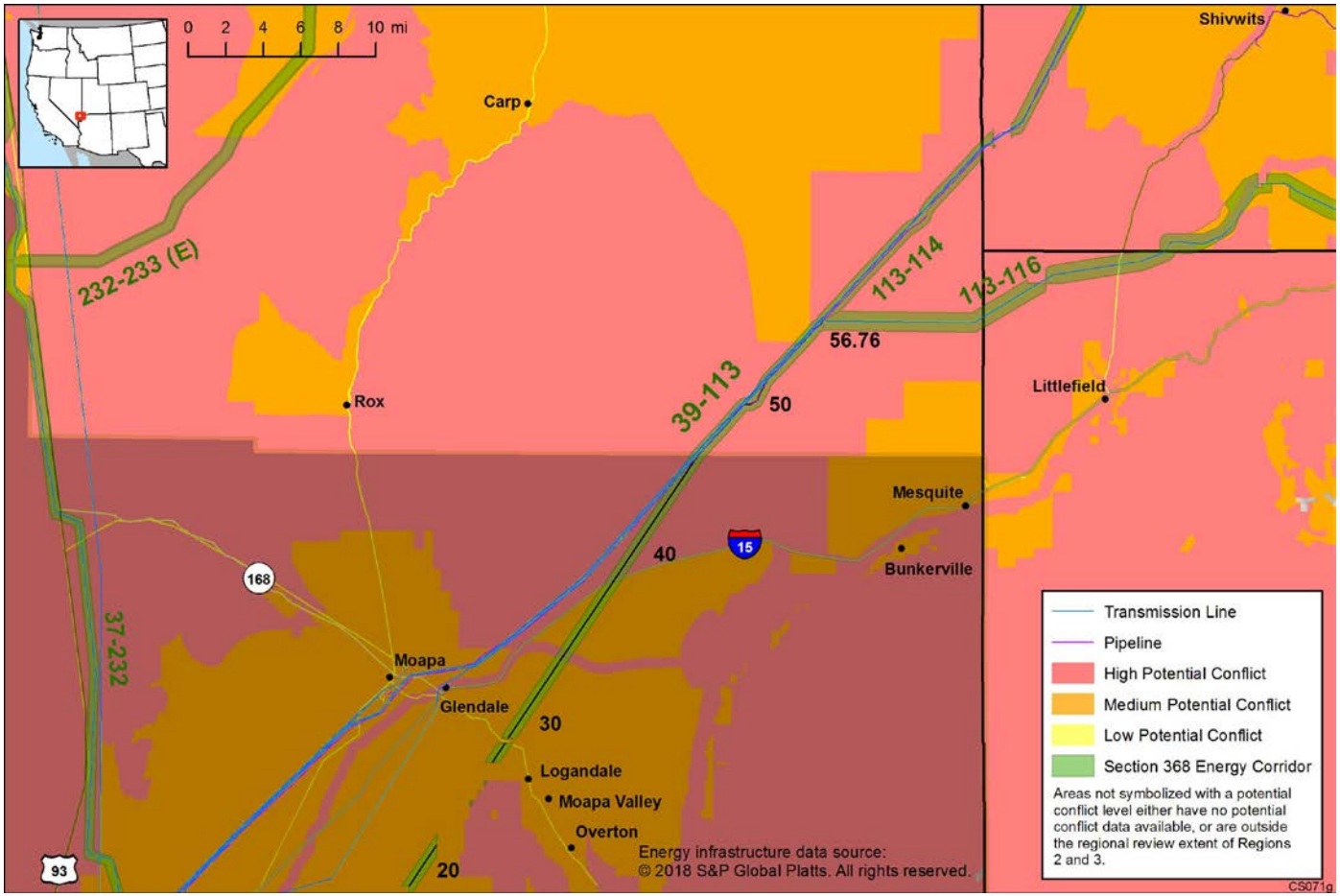


Figure 3. Map of Conflict Areas in Vicinity of Corridor 39-113

Figure 3 reflects a comprehensive resource conflict assessment developed to enable the Agencies and stakeholders to visualize a corridor's proximity to environmentally sensitive areas and to evaluate options for routes with lower potential conflict. The potential conflict assessment (low, medium, high) shown in the figure is based on criteria found on the WWEC Information Center at www.corridoreis.anl.gov. To meet the intent of the Energy Policy Act and the Settlement Agreement siting principles, corridors may be located in areas where there is potentially high resource conflict; however, where feasible, opportunity for corridor revisions should be identified in areas with potentially lower conflict.

Visit the 368 Mapper for a full view of the Potential conflict map (https://bogi.evs.anl.gov/section368/portal/)

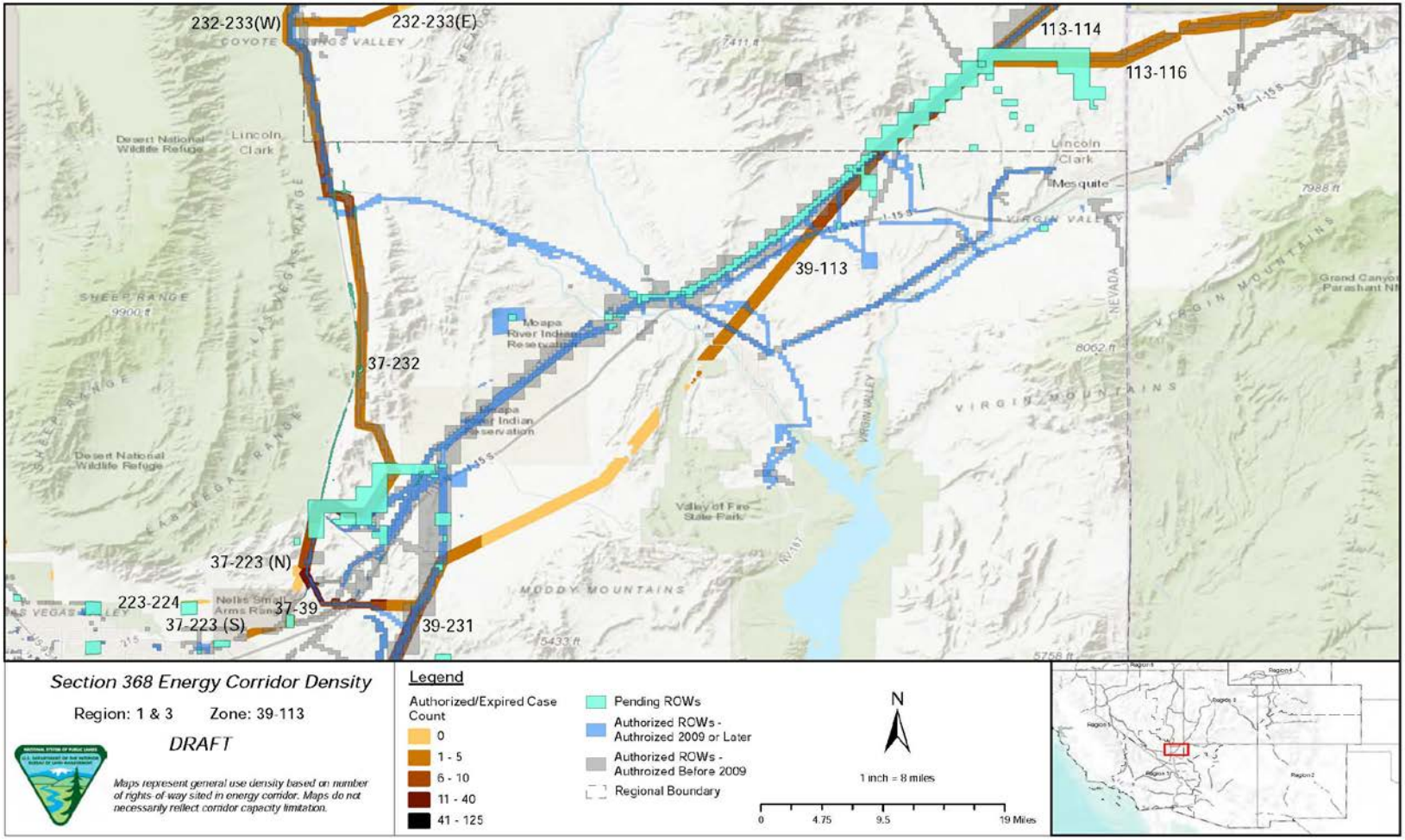


Figure 4. Corridor 39-113, Corridor Density Map

Figure 4 shows the density of energy use to assist in evaluating corridor utility. ROWs granted prior to the corridor designation (2009) are shown in grey; ROWs granted after corridor designation are shown in blue; and pending ROWs under current review for approval are shown in turquoise. Note the ROW density shown for the corridor is only a snapshot that does not fully illustrate remaining corridor capacity. Not all ROWs have GIS data at the time this abstract was developed. BLM and USFS agencies are currently improving their ROW GIS databases and anticipate more complete data in the near future.

General Stakeholder Feedback on Corridor Utility

Stakeholders did not provide specific input on corridor utility.

Corridor Review Table

The table below captures details of the Agencies' review of the energy corridor. Consideration of the general corridor siting principles of the 2012 Settlement Agreement framed each corridor review, to identify potential improvements to maximize corridor utility and minimize impacts on the environment. Initial Agency analysis is provided to facilitate further discussion during stakeholder workshops.

CORRIDOR 39-113 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
ENVIRONMENTAL RESOURCE ISSUES							
Specially Designated Areas							
39-113 .001	BLM	Caliente FO	Lincoln, NV	Mormon Mesa ACEC	MP 47 to MP 57	GIS Analysis: ACEC intersects corridor.	The Ely RMP states that all ACECs including Mormon Mesa ACEC are avoidance or exclusion areas. However, for avoidance areas, ROWs may be granted if there is minimal conflict with identified resource values and impacts can be mitigated. This conflict must be resolved. There is an opportunity to revise the corridor or revise the ACEC boundary or management prescriptions. (2)
39-113 .002	BLM	Caliente FO	Lincoln, NV	OSNHT	MP 0 to MP 2, MP 6 to MP 7, MP 34	GIS Analysis: OSNHT intersects corridor. Comment on abstract: OSNHT is not acknowledged in abstract.	There is an opportunity for the Agencies to consider adding an IOP for NSTs and NHTs as well as adding an IOP related to Visual Resources to ensure appropriate consideration occurs with proposed development within the energy corridor. (2)
Ecology							
39-113 .003	BLM	Caliente FO	Lincoln, NV	Desert Tortoise habitat (ESA-listed: threatened)	Entire length of corridor in Region 3	Settlement Agreement. RFI: reroute to avoid siting new facilities in TCAs, Priority 1 and 2 connectivity habitat, and Desert Tortoise habitat without existing transmission, and minimize	Protection of ESA-listed species habitat is important. The preferred methodology to mitigate undue degradation of resources is to collocate future energy infrastructure across public land with existing infrastructure

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						additional transmission siting in these areas. Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within 4 mi of TCAs and P1 & P2 habitat. Consult with USFWS to avoid adverse modification to Desert Tortoise designated critical habitat. Delete corridor to avoid Desert Tortoise habitat.	to the extent feasible. As such, the current location appears to best meet the siting principles based on the settlement agreement, since any alternative route would go through areas of ESA-listed critical habitat and would not lend-itself to collocation and would further fragment critical habitat. (1)
					Entire corridor	GIS Analysis: critical habitat and connectivity areas intersect corridor.	There is an opportunity to consider the addition of an Agency Coordination IOP with DoD to mitigate potential impacts pre-emptively by coordinating at early stages of energy infrastructure proposals to avoid adverse impacts to training activities. (2)
					MP 47 to MP 51	Comment on abstract: impacts to sensitive Desert Tortoise habitat has the potential to adversely impact use of MCAGCC Twentynine Palms and Barry M. Goldwater Range for ground-to-ground, air-to-ground, and maneuver training, as well as use of transit routes near, around, or between DoD ranges.	
				Least cost corridor for Desert Tortoise connectivity from Mormon Mesa to Lake Mead NRA		GIS Analysis: least cost corridor intersects corridor. Comment on abstracts: Re-route to avoid TCAs and critical habitat.	
Visual Resources							
39-113 .004	BLM	Caliente FO	Lincoln, NV	VRM Class II	MP 47 to MP 51 MP 47 to MP 57	GIS Analysis: VRM Class II area is on north/south edges of corridor.	Future development within the corridor could be limited as VRM Class II allows for low level of change to the characteristic landscape. Management activities may be seen,

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						Agency Input: corridor crosses Mormon Mesa ACEC, designated to protect historic, cultural, and scenic values; existing 345-kV, 500-kV, and 1000-kV transmission lines in corridor.	but should not attract the attention of the casual observer. (3)
39-113 .005	BLM	Caliente FO	Lincoln, NV	VRM Class III	MP 47, MP 51 to MP 54 MP 47 to MP 57	GIS Analysis: VRM Class III area is adjacent to corridor. Agency Input: corridor crosses Mormon Mesa ACEC, designated to protect historic, cultural, and scenic values; existing 345-kV, 500-kV, and 1000-kV transmission lines in corridor.	VRM Class III allows for moderate change to the characteristic landscape, although minimizing visual contrast remains a requirement. Management activities may attract the attention of the casual observer, but shall not dominate the view. (1)
39-113 .006	BLM	Caliente FO	Lincoln, NV	VRM Class IV	MP 47 to MP 57	GIS Analysis: VRM Class IV areas and corridor intersect.	The existing corridor location best meets the siting principles. (1)
Tribal Concerns							
39-113 .007	BLM	Caliente FO	Lincoln, NV	Traditional Use Areas	Scattered throughout corridor	Agency Input: Clark, Lincoln, and White Pine County Groundwater Development Project Final Ethnographic Assessment	The BLM is aware of the existence of traditional use areas but will defer to the tribes for exact locations. Analysis of traditional use areas is not a consideration for corridor-level planning. The Agencies would consult with the tribes, as required for any proposed project in the corridor. (3)
Land Use Concerns							
Military and Civilian Aviation							
39-113 .008	BLM	Caliente FO	Lincoln, NV	MTR – VR	Entire length of corridor	GIS Analysis: VR intersects corridor. Comment on abstract: Corridor is adjacent to the Nevada Test and Training Range Operations. All Restricted Airspace needs to be avoided due to hazardous operations and access to any sites. Height should be no higher	The concern related to MTRs is noted and the adherence to existing IOP regarding coordination with DoD would be required to ensure this potential conflict is considered at the appropriate time. In addition, there is an opportunity to consider a revision to the existing IOP to include height restrictions for corridors in the vicinity of DoD training routes. (2)

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					MP 47 to MP 57	than existing structures if outside the Restricted Airspace. Comment on abstract: MTR VR-209, Floor of 200-ft AGL.	DoD recommends the height of any proposed transmission structures not exceed height of any existing infrastructure in the ROW. Taller structure will require further analysis for operational impact.
39-113 .009	BLM	Caliente FO	Lincoln, NV	MTR – IR	MP 53 to MP 57	GIS Analysis: IR intersects corridor.	

[1] Projects proposed in the corridor would be reviewed during their ROW application review process and would adhere to Federal laws, regulations, and policy.

[2] (1) = confirm existing corridor best meets siting principles; (2) = identify opportunities to improve corridor placement or IOPs; (3) = acknowledge concern not easily resolved or avoided by corridor-level planning.

Abstract Acronyms and Abbreviations

ACEC = Area of Critical Environmental Concern; AGL = Above Ground Level; BLM = Bureau of Land Management; DoD = Department of Defense; ESA = Endangered Species Act; FO = Field Office; GIS = geographic information system; IOP = interagency operating procedure; IR = Instrument Route; MCAGCC = Marine Corps Air Ground Combat Center; MP = milepost; MTR = Military Training Route; NHT = National Historic Trail; NST = National Scenic Trail; NRA = National Recreation Area; OSNHT = Old Spanish National Historic Trail; PEIS = Programmatic Environmental Impact Statement; RFI = request for information; RMP = Resource Management Plan; ROW = right-of-way; TCA = tortoise conservation area; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; VR = Visual Route; VRM = Visual Resource Management; WWEC = West-wide Energy Corridor.