

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Private Property

Resource Area -

Activity (program) - Lands and Realty

****KOP 18 Linear BPS 4 from Highway 89**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment/BPS-4 Both Alternatives		4. Location - BPS 4 from Highway 89 Township - 43S Range - 1W Section - 2	5. Location Sketch 
2. Key Observation Point KOP 18 Linear			
3. VRM Class N/A			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Rolling, moderate	Indistinct	Flat road, repeating vertical mileposts
LINE	Horizontal, undulating	Indistinct	Distinct, straight to curved
COLOR	Brown/beige, gray/white, orange, red	Deep green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray, brown/beige
TEX-TURE	Medium to coarse, striated, random	Medium-course, clumped	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	addition of flattened landforms for buildings and berms for basin	swath of vegetation removed then revegetated	partially screened addition of geometric shapes of buildings, additional thin vertical features of substation and powerlines
LINE	edges of landform disturbances noticeable	noticeable edges of pipeline disturbance	Bold, horizontal/vertical, rectangular associated with additional structures, though partially screened
COLOR	lighter where disturbed	more greens in disturbed areas	same plus solid building color
TEX-TURE	same	same	structures add additional texture

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? Yes No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			x				x			x			3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line			x				x			x						
	Color			x				x				x					
	Texture				x				x		x						
Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														Date April 2020; March 23, 2020 April 15, 2016			

This linear KOP is along HWY 89 in both directions. The facility simulated is BPS-4, including the pump station. Other facilities features are screened by landform and vegetation from KOP image. See attached facility site plan and section. Visual and restoration mitigation measure described in the POD would reduce the degree of visual contrast. The pump station building and ancillary facilities would be colored and textured to match surroundings using a non-reflective, textured surfacing in a random shape pattern and colored either a standard BLM environmental color or other custom color. Final color would be chosen by landowner prior to construction. BPS-4 would be just off HWY 89 on the east side near an existing substation and in a natural depression.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The proposed facilities are immediately adjacent to this linear KOP on the east side of HWY 89. They come into view when traveling eastbound only when about 500 feet away. For travelers going westbound, the facilities come into view from about a mile away and are intermittently visible until the facilities are passed by.

Angle of Observation: Along this linear KOP, for those traveling westbound the facilities are above them until they pass directly by it; for eastboard travelers the facilities are below them until they pass directly by. In both instances, landforms and vegetation partially screen the facilities.

Length of Time the Project Is in View: The facilities would be in view as motorists traveling at 65 MPH along HWY 89 pass through this area. From the west they would be intermittently visible from as far away as a mile and from the east from about 500 feet away.

Spatial Relationships: The structures would be located in a natural depression surrounded by landforms where another substation exists and another storage building is in the vicinity. This location with other developments and landform screening reduces the visual impact of the facilities. Being located adjacent to highway ROW would consolidate the linear disturbance of the pipeline to an already altered landscape swath.

Size/Scale: The facilities at this location are large and in the foreground but located near similar sized infrastructure. They are also located at the base of The Cockcomb, a dramatic landform that dominates the view.

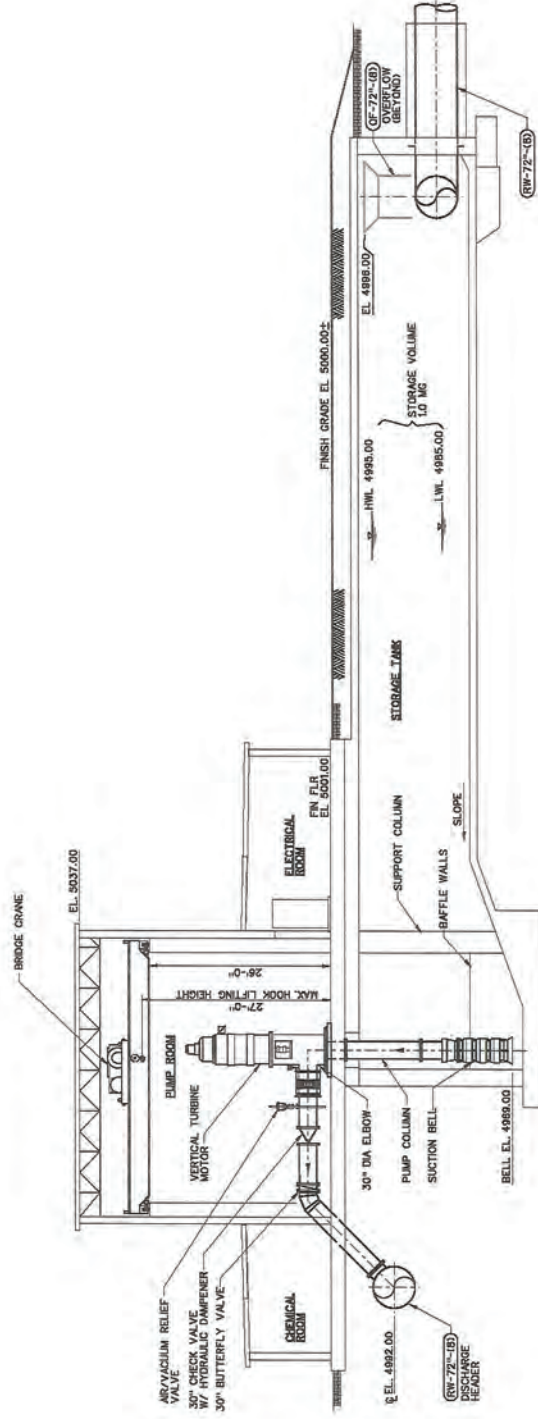
Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Conditions



Five to Ten Years Post Construction Condition



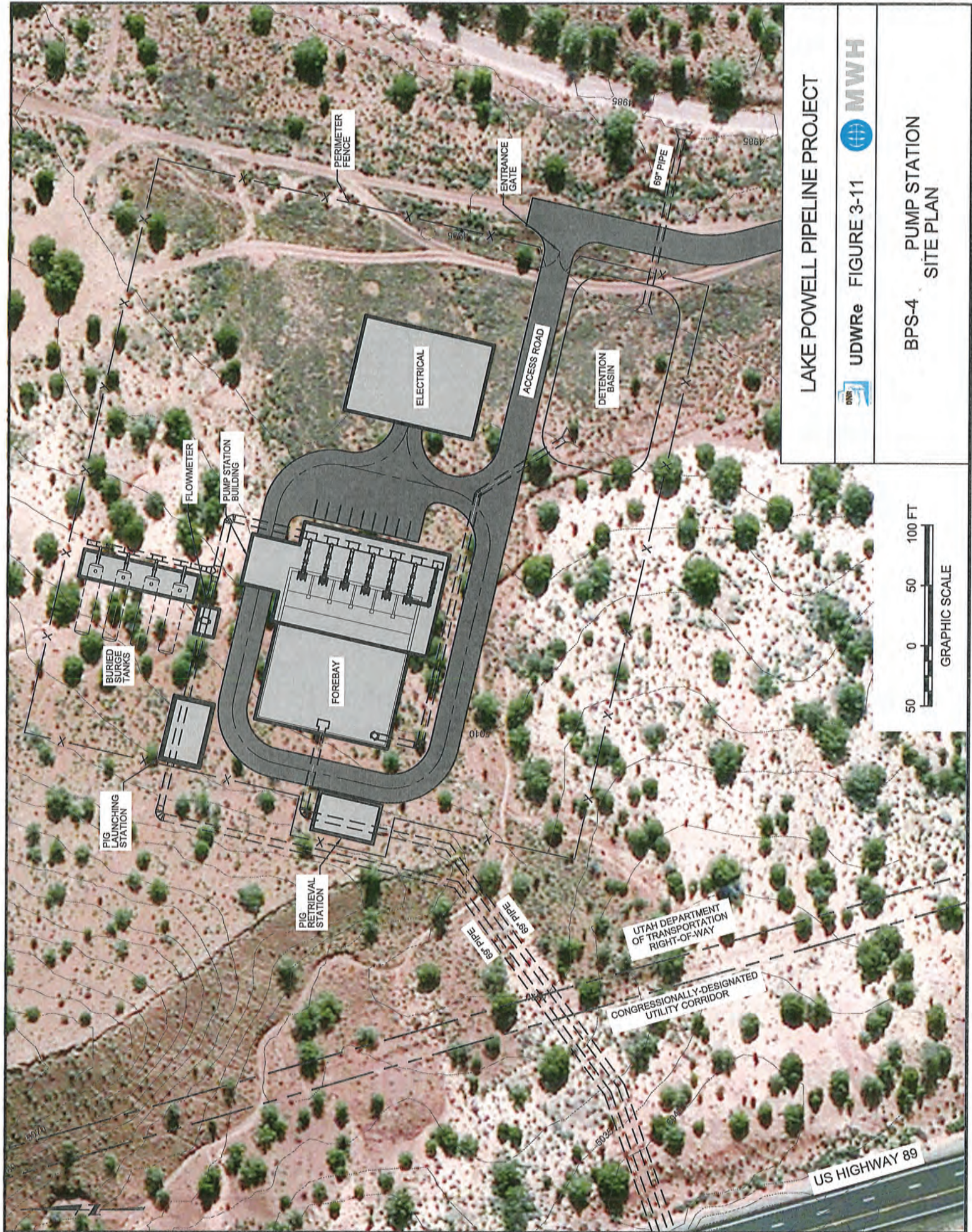
NOTE:
SEE FIGURE 3 FOR FOREBAY INLET PIPING,
ISOLATION VALVE, ETC.

SECTION
SCALE: 1/8" = 1'-0"
A 3.78


LAKE POWELL PIPELINE PROJECT

UDWR FIGURE 3.79 MWH

LAKE POWELL
BPS-4 PUMP STATION
MECHANICAL SECTION



LAKE POWELL PIPELINE PROJECT

UDWRe FIGURE 3-11  MWH

BPS-4 PUMP STATION
SITE PLAN



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VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Paria River

Resource Area - KEPA

Activity (program) - Lands and Realty

****KOP 19 Road to Paria Interpretive Site**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Both Alternatives	4. Location - Road to Paria Interpretive Site Township - 42E Range - 2W Section - 3	5. Location Sketch 
2. Key Observation Point KOP 19		
3. VRM Class 3		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling with steep cliff faces	Indistinct, low to medium	Distinct, flat roads, vertical utility poles
LINE	Horizontal, simple	Complex, indistinct	Bold, straight, repeating vertical poles and posts
COLOR	Brown/beige, gray/white, orange, vermillion red	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray, brown/beige
TEX- TURE	Fine to coarse, striated	Medium to fine, stippled to even, gradational	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same	Low	N/A
LINE	same	Broken, irregular	N/A
COLOR	Slightly lighter where disturbed	Green to blue/gray, and seasonal colors incl. green and straw/yellow, bright green in disturbed areas	N/A
TEX- TURE	same	Fine to medium, stippled to gradational	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? <input checked="" type="radio"/> Yes <input type="radio"/> No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form				X			X					X	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures Evaluator's Names Allysia Angus, BLM; Barb Santner, Diane Simpson- Colebank, Chris Bockey Date April 2020; March 23, 2020; April 15, 2016			
	Line				X			X					X				
	Color				X			X					X				
	Texture				X				X				X				

Comments from item 2.

This KOP is from the Road to Paria Interpretive Site on the north side of Highway 89 looking south across the highway toward the pipeline disturbance. No photo simulation was prepared for this KOP.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The restored and revegetated pipeline would at most create weak contrast from vegetation changes in the long term from this KOP.

RELEVANT ENVIRONMENTAL FACTORS

Viewing Distance: The pipeline would run parallel to HWY 89 across from this KOP.

Angle of Observation: KOP is straight across from pipeline disturbance.

Length of Time the Project Is in View: From this KOP the length of time in view is a few seconds because it is based on those exiting the interpretive site and turning back onto HWY 89 from the Paria Movie Set Road. Those travelers stopping at the interpretive site would focus their attention to the Vermilion Cliffs to the north, not to the south.

Spatial Relationships: Being located adjacent to highway ROW would consolidate the linear disturbance of the pipeline to an already altered landscape swath.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



View from edge of interpretive site returning to HWY 89 (blue line= pipeline alignment). (Google Earth Street View).

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Activity (program) - Lands and Realty

****KOP # 20 Linear for Hydro Station HS-1 From**

US 89**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Hydro Station HS-1 / Pipeline / Transmission System Both Alternatives		4. Location Along US 89 Township - 43S Range - 3W Section 18	5. Location Sketch
2. Key Observation Point KOP 20 Hydro Station HS-1 From US 89			
3. VRM Class 3			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Gently rolling	Stands of low to medium shrubs (sage and rabbitbrush) are interspersed with stands of pinyon juniper.	Thin utility poles and lines and fences add both vertical and horizontal elements. The highway adds a band.
LINE	Horizontal, simple	Complex, indistinct, also horizontal	Thin utility poles and lines and fencing add vertical and horizontal elements. The highway adds a slightly curving band.
COLOR	Landform is predominantly covered in vegetation but where visible it is coral colored.	Full range of green from dark juniper green to sage green to yellow green.	Grays and browns
TEX-TURE	Medium to smooth.	Medium to fine, clumped	Fine, to medium.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	addition of flattened landforms for buildings and berms for basin	Similar but removal of vegetation would create more obvious edges along edges of clearing.	Additional structures associated with substation and hydro station would add blocky forms as well as thinner vertical and horizontal ones.
LINE	Landform edge associated with clearing and grading would add horizontal lines.	The removal of vegetation will create additional edges between vegetated and not vegetated areas (ie building and driveway)	Increased amount of straight, vertical and horizontal
COLOR	Slightly lighter where disturbed.	more greens in disturbed areas	Gray/green structure; brown/beige poles; brown fence
TEX-TURE	Same.	Same.	Additional structures would increase texture to coarse - associated with building and substation.

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? <u>X Yes</u> No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			X				X			X			3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures Evaluator's Names Date Allysia Angus, BLM; April 2020; Barb Santner/Stantec Updated March 23, 2020; February, 7, 2017			
	Line			X				X			X						
	Color			X				X				X					
	Texture				X				X		X						

Comments from item 2.

For this proposed location, the KOP selected is a linear one along US 89, going in both directions. The facilities simulated are for a 138-kV substation versus the original 69 kV substation. The proposal includes constructing a hydro power station (powerhouse, substation, transmission line, transformers, metal framework structure, retention basin, security fence and driveway) using the existing Kane County access road as the facility access point. There is an existing 8-foot-tall wildlife exclusion fence along the highway right of way at the HS-1 facility site with a gate at the existing Kane County access point. There is an existing 45-foot-high wooden power pole near the gate. See attached facility site plan and section. Existing vegetation and landforms consist of sparse pinyon-juniper woodland and big sagebrush growing on gently rolling terrain. The pinyon are 12 to 15 tall and wide and the juniper are 6 to 8 feet tall. Nearby landforms consist of earthen mounds with gradual slopes ranging from 12 to 30 feet high.

Visual and restoration mitigation measures for proposed facilities described in the POD would reduce the degree of visual contrast. The HS-1 facility would be approximately 520 feet wide (along US 89) and 265 feet deep (perpendicular to US 89) with the northern edge set back approximately 120 feet south of the existing wildlife fence. The proposed security fence is a 9-foot-tall chain link with razor wire roll on top and would be located near the northern edge of the facility where it would be faintly seen behind the existing wildlife fence. Contrast from the security fence and existing gates would be reduced by using desert patina treatment to the galvanized surfaces. The powerhouse building would be bermed on the south side of an existing landform which would be preserved. The powerhouse building would be colored and textured to match surroundings such as using a non-reflective, textured surfacing in a random shape pattern and colored a BLM environmental color such as Shadow Gray. Final color will be chosen by the landowner prior to construction. The access road to the site will be on the existing Kane County road to avoid new disturbance and surface will be of a rock that matches the existing characteristic landscape. The building pad would be set approximately 14 feet below the access road elevation at US 89 reducing the visible height of the facilities. Reclamation of disturbed areas would reduce contrast by restoring color and texture that matches the characteristic landscape by using native materials or by using desert patina treatment to ground surfaces. New 55-foot-tall transmission line poles at the facility would angle at approximately 45 degree angles to connect to the linear power line to avoid clustering features near the powerhouse and substation facilities.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance – Linear KOP 20 is ½-mile long in each direction along Highway 89 approaching HS – 1. Visual contrast would increase as viewers get closer to the HS – 1 site.

Angle of Observation – From both directions the angle of observation of the Proposed Action is shallow and the facilities would be partially to moderately visible within the natural landforms and vegetation between the viewers and the facilities.

Length of Time in View – The HS-1 structures could be in the foreground view for up to 28 seconds for viewers traveling at 65 mph along Highway 89. The HS – 1 structures would be approximately ½-mile away from viewers when they first come into view.

Spatial Relationships: The structures would be located in off to the back side of a landform, providing some screening and lowering the profile. There are existing powerlines on site that reduce the naturalness. This location with existing infrastructure and landform screening reduces the visual impact of the facilities. Being located adjacent to highway ROW would consolidate the linear disturbance of the pipeline to an already altered landscape swath.

Relative size/scale –The proposed powerhouse building is 25 feet high and the portion visible from the static KOP 20 would be approximately 13 feet higher than the landform between the building and the highway. The proposed substation is located behind the powerhouse building with the overhead framework 56 feet tall and with 10-foot-tall, 6 inch wide lightning rods at the corners. The framework would be visible 31 feet higher than the top of the powerhouse building.

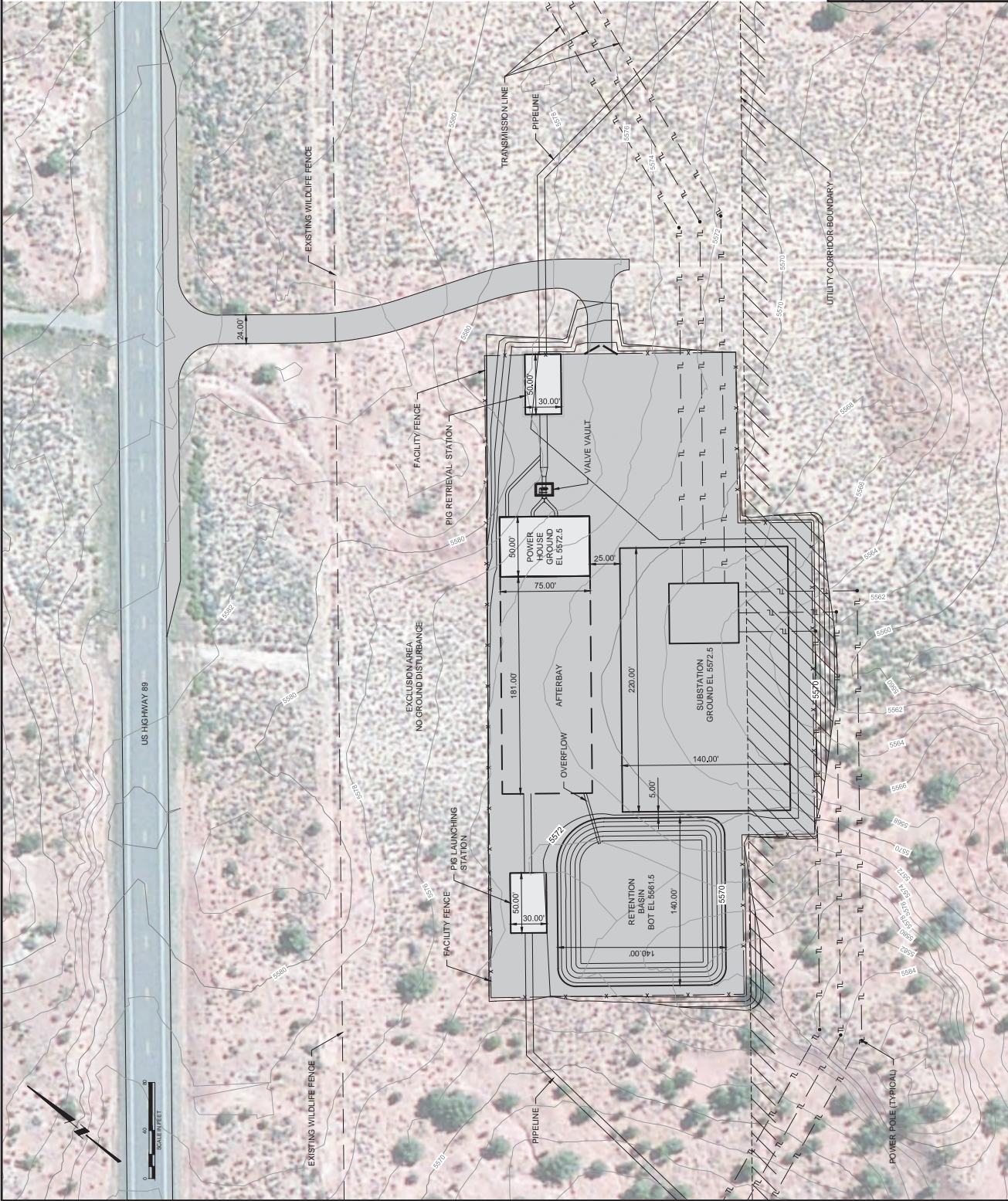
Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Conditions



Five to Ten Years Post Construction Condition



PRELIMINARY
NOT FOR
CONSTRUCTION

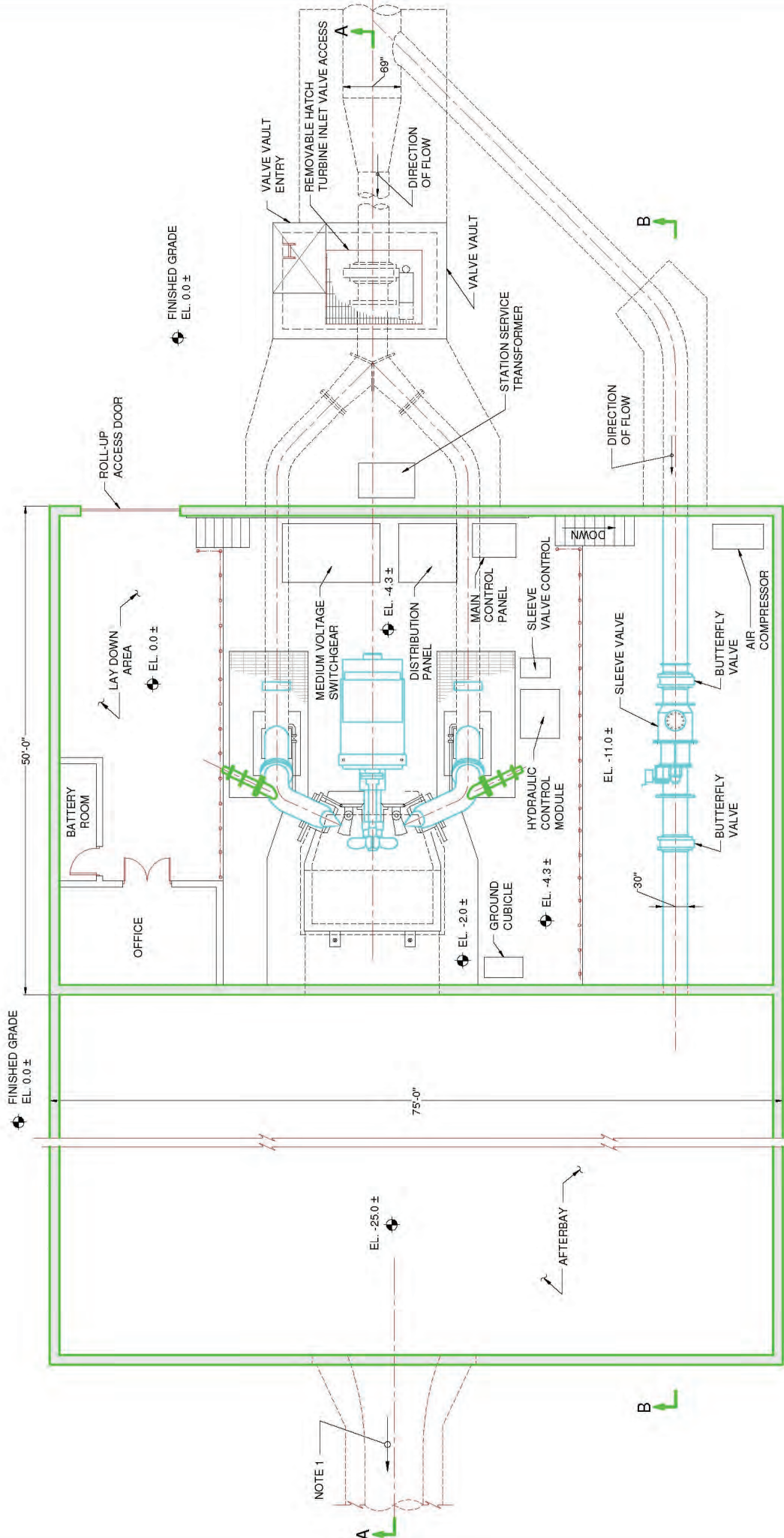
UTAH DIVISION OF WATER RESOURCES
LPP



Stantec

HS-1 RE-DESIGN
SITE PLAN

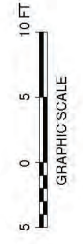
FIG 3-13A

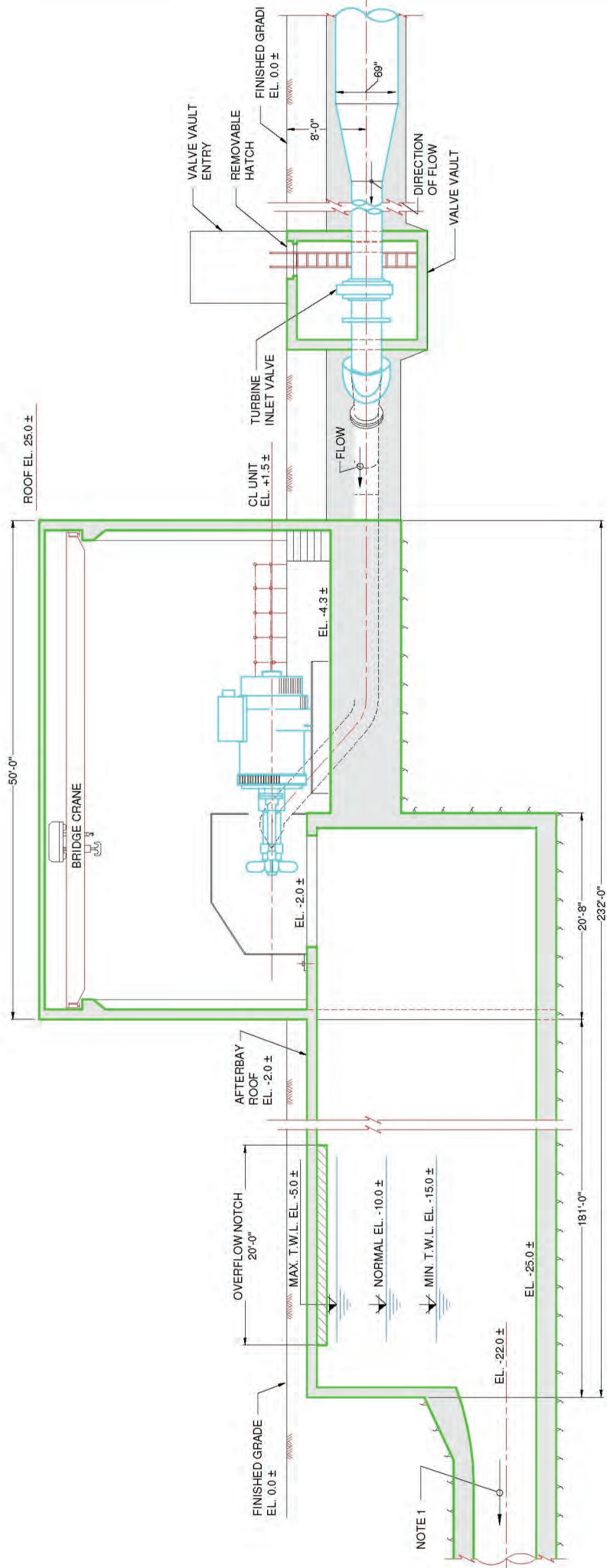


PLAN
(AT TURBINE HORIZONTAL CENTERLINE ELEVATION)

NOTE:
THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY PROJECT LAYOUT CONCEPTS FOR STUDY PURPOSES ONLY. FEATURES ILLUSTRATED ON THIS DRAWING ARE NOT TO BE USED AS A BASIS FOR DESIGN.

- NOTE:
1. BPS-3 FCS:
HS-1: TO BPS-3
HS-2: TO HS-2
HS-3: TO HS-3
HS-4: TO HS-4
 2. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.

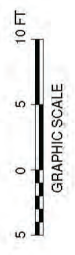




SECTION A - A

- NOTE:**
1. BPS-3 FCS:
TO BPS-3
TO HS-1
TO HS-2
TO HS-3
TO HS-4
 2. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.

NOTE:
THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY PROJECT LAYOUT CONCEPTS FOR STUDY PURPOSES ONLY. FEATURES ILLUSTRATED ON THIS DRAWING ARE NOT TO BE USED AS A BASIS FOR DESIGN.



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Activity (program) - Lands and Realty

****KOP 21 HP Reg Tank 2 from Great Western Trailhead**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline HP Reg Tank 2 / Pipeline Both Alternative	4. Location - Hydro Station HS-1 from US 89 Township - 43S Range - 3W Section - 18	5. Location Sketch 
2. Key Observation Point KOP 21 Linear		
3. VRM Class 3		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Gently rolling	Indistinct, low to medium	Vertical and horizontal fence
LINE	Horizontal, simple	Complex, indistinct	Straight, vertical and horizontal
COLOR	Brown/beige, orange	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray, brown/beige
TEX-TURE	Fine	Medium to fine, stippled to random	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Same with minor modifications for flattening areas, road, and adding berms for detention basis	More distinct swatch of vegetation removal/restoration and cleared areas for facilities	additional fencing and surface structures
LINE	similar but additional edges for disturbances	more distinct edges of disturbances	Increased amount of straight, vertical and horizontal
COLOR	lighter where disturbed	additional greens in disturbed areas	same
TEX-TURE	same	same	same

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? <input checked="" type="radio"/> Yes <input type="radio"/> No (Explain on reverse side)	
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures	
ELEMENTS	Form			X				X				X		Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson Date April 2020; March 23, 2020; April 15, 2016	
	Line			X				X				X			
	Color			X				X					X		
	Texture				X				X				X		

Comments from item 2.

This linear KOP is along HWY 89 travelling in both directions and from the Great Western Trailhead on the south side of HWY 89 viewing toward the high point regulating tank (HP Reg Tank) . The facilities simulated from trailhead parking area show the road leading to HP Reg Tank and the fence because remaining structures are buried or lower in landscape and not visible from this point. See attached facility site plan and section. The facilities, which are primarily buried and/or flush to the ground, are located partially within scattered pinyon/juniper trees and on the downslope of a small landform and in a natural basin reducing their visibility.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. Site planning for the tank and pad locates the facilities behind existing trees, curves the facility access road and preserves existing trees shielding view of the high point regulating tank from the trailhead. A portion of the facility fence is weakly visible in the foreground of the visualization. The facilities would be more visible to those traveling along the highway than those using the trailhead.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The proposed facilities are immediately adjacent to this linear KOP on the side side of HWY 89 and to the west of the Great Western Trail Trailhead. From the highway traveling in both directions, the viewing distance is between 500 and 1000 feet because the facilities only come into view when in close proximity due to landform and vegetation screening. The access road comes off the trailhead entrance, and the fence is about 30 feet from the trailhead.

Angle of Observation: From the highway traveling in both directions the facilities are slightly below viewers. From the trailhead they are straight across and below viewing level.

Length of Time the Project Is in View: The facilities would be in view for a few seconds as motorists traveling at 65 MPH along HWY 89 pass by in either direction. From the trailhead the viewing time would extend as long as users choose to spend there but likely less than 10 minutes, and even then they wouldn't likely be focusing attention on the facilities.

Spatial Relationships: The structures would be located in a natural depression surrounded by landforms and some scattered trees. There is a length of wildfence along the highway ROW here and powerlines. This location in a depression with other developments and landform and vegetation screening reduces the visual impact of the facilities. Being located adjacent to highway ROW would consolidate the linear disturbance of the pipeline to an already altered landscape swath.

Size/Scale: Most facilities here are buried or flush to the ground. The fence is similar to what exists.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



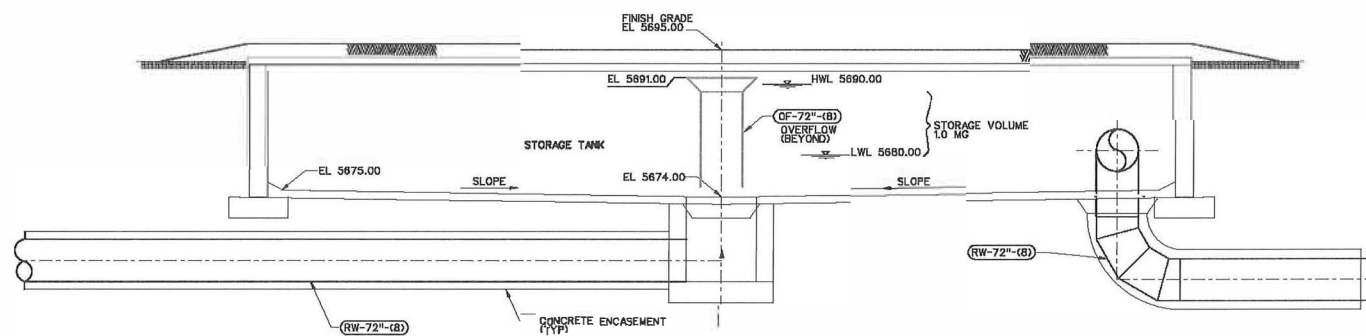


Existing Conditions



Five to Ten Years Post Construction Condition

Figure 3.91 – Lake Powell Reg Tank - Mechanical Section



NOTE:
SEE FIGURE 1 FOR FOREBAY INLET PIPING,
ISOLATION VALVE, ETC.

SECTION — A —
SCALE: 1/8" = 1'-0" FIG. 3.91

Regulating Tank Section

US HIGHWAY 89

ACCESS ROAD

UTAH DEPARTMENT
OF TRANSPORTATION
RIGHT-OF-WAY

PERIMETER FENCE

PIG LAUNCHING
STATION

REG TANK - 2
130' I.D.
HWL = 5690.0

OVERFLOW
PIPE

69" PENSTOCK

SPILLWAY

DETENTION BASIN

PARKING AREA

ENTRANCE GATE

PIG RETRIEVAL
STATION

69" PIPE

CONGRESSIONALLY-DESIGNATED
UTILITY CORRIDOR

LAKE POWELL PIPELINE PROJECT



UDWRre FIGURE 3-12



MWH

50 0 50 100 FT

GRAPHIC SCALE

REGULATING TANK
SITE PLAN

C:\pwworkdir\10296809\PC-REG TANK-2 Fig-3012.dwg 9/21/2015 10:07:59 AM

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****KOP 24 Highway 89 near Pioneer Gap**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Highway Alternative		4. Location - Highway 89 near Pioneer Gap Township - 43S Range - 4W Section - 30	5. Location Sketch 
2. Key Observation Point KOP 24			
3. VRM Class 3			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling with some rocky outcrops on edges of landforms	Indistinct, low to medium	Rectangular/trapezoidal, distinct
LINE	Horizontal, simple	Complex, indistinct	Horizontal road, repeating vertical posts and poles
COLOR	Brown/beige, reddish	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray, brown/beige
TEX-TURE	Fine	Fine to coarse, random	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	similar with modest changes to landform where pipeline would be installed	More distinct and uniform band where vegetation is removed for alignment	N/A
LINE	slightly more noticeable where pipeline trench cuts through landforms	more distinct with noticeable edges of disturbance - removal of trees in a feather-edged band	N/A
COLOR	lighter where disturbed	more greens in disturbed areas	N/A
TEX-TURE	same	same	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			X				X					X	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line			X				X					X				
	Color			X				X					X				
	Texture				X				X				X				
Evaluators' Names Allysia Angus, BLM; Barb Santner/ Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														Date April 2020; March 23, 2020; April 15, 2016			

Comments from item 2.

This linear KOP is along Highway 89 near Seaman's Wash going in both directions. The pipeline would be on the south side of the highway. The pipeline would pass up and through a landform with rock outcropping in this area. This is also where public and private lands transition. Visual and restoration mitigation measures in the POD would reduce the degree of visual contrast. Restoration over ten years post construction would reduce contrast greater than depicted on the five to ten year post construction condition photo simulation.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The pipeline would run parallel and immediately adjacent to the linear KOP for 0.5 miles in both directions.

Angle of Observation: KOP is often at direct viewing angle in some locations the pipeline goes up or down slight hills. The contrast it would create would be most visible when it goes uphill from the viewer, as is the case when heading west.

Length of Time the Project Is in View: The facilities would be in view the entire time that motorists traveling at 55-65 MPH along HWY 89.

Spatial Relationships: Being located adjacent to highway ROW would consolidate the linear disturbance of the pipeline to an already altered landscape swath.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



View eastbound along HWY 89 (pipeline alignment on right/south side). (Google Earth Street View).



View westbound along HWY 89 (pipeline alignment on right/south side) where pipeline would pass through rocky landform. (Google Earth Street View)

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Arizona Strip

Resource Area - Arizona Strip FO

Activity (program) - Lands and Realty

****KOP 26 Shinarump Cliffs Overlook**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alingment Southern Alternative		4. Location - Shinarump Cliffs Overlook Township - 42N Range - 10E Section - 32	5. Location Sketch 
2. Key Observation Point KOP 26			
3. VRM Class 2/3/4			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling, wide valley	Indistinct, low to medium	Trapezoidal utility towers
LINE	Horizontal, simple	Complex, indistinct	Straight, repeating vertical/horizontal/angular
COLOR	Brown/beige, white/gray, orange	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray
TEX-TURE	Fine	Medium to fine, stippled to even	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling, wide valley	More distinct, low to medium	N/A
LINE	Horizontal, simple	Complex, more distinct	N/A
COLOR	Brown/beige, white/gray, orange, lighter where disturbed	Green to blue/gray, and seasonal colors incl. green and straw/yellow, green in disturbed areas	N/A
TEX-TURE	Fine	Medium to fine, stippled to even	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? <input checked="" type="radio"/> Yes <input type="radio"/> No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form				X				X				X	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line				X			X					X				
	Color				X			X					X				
	Texture				X				X				X				
EVALUATOR'S NAMES														Date			
Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														April 2020; March 23, 2020; April 15, 2016			

This KOP is from an informal viewing location on the edge of the Shinarump Cliffs looking southeast at the pipeline and permanent access road. The photo simulation is of the restored and revegetated pipeline trench and permanent access road.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The permanent access road surface will consist of gravel selected for color to match surrounding, native ground. The restored water pipeline trench and permanent access road would be noticeable, with the access road being more so.

RELEVANT ENVIRONMENTAL FACTORS

Viewing Distance: The pipeline would run across the view perpendicular to the KOP and is about 1 mile away.

Angle of Observation: KOP is about 400 feet elevation higher than pipeline and road, allowing the scars they create to be seen.

Length of Time the Project Is in View: The facilities would be in view as long a viewer chooses to scan the landscape. It is assumed that if dispersed recreationists are exploring this area, they would be drawn to the cliff edge and spend extended periods looking out across the views.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Conditions



Five to Ten Years Post Construction Condition

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Arizona Strip

Resource Area - Arizona Strip FO

Activity (program) - Lands and Realty

****KOP 27 Dominguez-Escalante Historic Trail Crossing**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Southern Alternative	4. Location -Dominguez- Escalante Historic Trail Crossing Township - 41N Range - 10E Section - 7	5. Location Sketch 
2. Key Observation Point KOP 27		
3. VRM Class 2		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to gently rolling, wide valley	Indistinct, low to medium	Trapezoidal utility towers
LINE	Horizontal, simple	Simple, more distinct	Straight, repeating vertical/horizontal/angular
COLOR	Brown/beige, orange	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray
TEX- TURE	Fine	Medium to fine, even low scrub with scattered pinyon	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same	similar but noticeable swath of vegetation removed then revegetated	N/A
LINE	same	similar but with noticeable edges where vegetation would be removed and revegetated	N/A
COLOR	lighter where disturbed	Additional greens in disturbed areas	N/A
TEX- TURE	same	same	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? (Explain on reverse side)	
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				3. Additional mitigating measures recommended? <input type="checkbox"/> Yes No (Explain on reverse side)	
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Contrast rating takes into account Environmental Protection and Mitigation Measures	
ELEMENTS	Form				X			X					X	Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson Date April 2020; March 23, 2020 April 15, 2016	
	Line				X			X					X		
	Color			X				X					X		
	Texture				X				X				X		

Comments from item 2.

This KOP is on the Dominguez-Escalante Historic Trail where the pipeline and permanent access road cross it. This is not a location that many people visit. No photo simulation was prepared for this KOP.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The permanent access road surface will consist of gravel selected for color to match surrounding, native ground. The restored pipeline trench and permanent access road would be noticeable.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The pipeline would cross the trail perpendicular to it and extend in both directions, so this KOP is on the pipeline.

Angle of Observation: KOP is level with pipeline and road.

Length of Time the Project Is in View: This trail is not regularly traveled by foot or otherwise. This KOP was selected to show landscape character where the trail and pipeline intersect.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



View Southwest from Whitesage Wash Near Shinarump Cliffs Overlook



View West from Whitesage Wash to the West of the Dominguez-Escalante Historic Trail Crossing

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Arizona Strip

Resource Area - Arizona Strip FO

Activity (program) - Lands and Realty

****KOP 28 Kanab Creek (ACEC)**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Southern Alternative		4. Location - Kanab Creek Township - 39N Range - 3W Section -	5. Location Sketch 
2. Key Observation Point KOP 28			
3. VRM Class 2/3/4			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FOR	Flat to rolling with deeply cut wash/cliff faces	Indistinct, low to medium	Trapezoidal utility towers
LINE	Horizontal, irregular, complex	Complex, indistinct	Straight, repeating vertical/horizontal/angular
COLOR	Brown/beige, gray/white, orange, red	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray
TEXTURE	Fine to coarse, striated	Medium to fine, stippled to even	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FOR	Similar but pipeline trenching would alter cliff faces.	swath of removed then revegetated vegetation associated with pipeline installation	N/A
LINE	similar but discernible lines associated with landform cuts for pipeline	additional lines along edges of cleared then revegetated swath	N/A
COLOR	lighter where disturbed	Additional greens in disturbed areas	N/A
TEXTURE	similar but increased fine texture	same	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. REE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? (Explain on reverse side) <input checked="" type="radio"/> Yes <input type="radio"/> No	
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
		Strong	moderate	Weak	None	Strong	moderate	Weak	None	Strong	moderate	Weak	None	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes (Explain on reverse side) <input checked="" type="checkbox"/> No Contrast rating takes into account Environmental Protection and Mitigation Measures Evaluator's Names Allysia Angus, BLM Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson ate April 2020; March 23, 2020; April 15, 2016	
ELEMENTS	Form			X				X					X		
	Line			X				X					X		
	Color			X				X					X		
	Texture			X				X					X		

Comments from item 2.

This KOP is from the Kanab Creek canyon rim viewing southeast toward the proposed pipeline alignment. This is not a portion Kanab Creek that is not regularly visited. It is about 10 miles north of the location where most people enter to hike in the canyon and about 5 straight miles south of HWY 389. No photo simulation was prepared for this KOP. There are fence lines and a large transmission line in this area but otherwise it is undeveloped.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The restored pipeline trench would be visible on the slope above the creek. Disturbed slopes would be graded and shaped to replicate existing, nearby landforms. Boulders would be salvaged and replaced to replicate existing boulder features and landforms. Desert varnish would be used on soil, rock and boulders to replicate existing feature colors.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The pipeline alignment would be about 1500 feet from the KOP, but for casual observers this is a location unlikely to be seen by many.

Angle of Observation: KOP is directly across from and above the pipeline alignment as it goes into canyon.

Spatial Relationship: Being located near powerlines consolidates disturbances to the natural landscape in one corridor.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Condition Image With Proposed Pipeline Alignment

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Arizona Strip

Resource Area - Arizona Strip FO

Activity (program) - Lands and Realty

****KOP 29 Bitter Seeps Wash (ACEC)**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Southern Alternative		4. Location - Bitter Seeps Wash Township - 40N Range - 3W Section - 34	5. Location Sketch 
2. Key Observation Point KOP 29			
3. VRM Class 4			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling with deeply cut wash/steep vertical slopes and outcrops	Indistinct, low	Trapezoidal utility towers
LINE	Horizontal, irregular, complex	Complex, indistinct	Straight, repeating vertical/horizontal/angular
COLOR	Brown/beige, orange, red	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray
TEX-TURE	Medium to coarse, blocky	Medium to fine, stippled to even	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	similar but pipeline trenched would alter cliff faces	swath of removed then revegetated vegetation associated with pipeline installation	N/A
LINE	similar be discernible lines associated with landform cuts for pipeline	additional lines along edges of cleared then revegetated areas	N/A
COLOR	lighter where disturbed	Additionalgreens in disturbed areas	N/A
TEX-TURE	similar but increased fine texture	same	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? <input checked="" type="radio"/> Yes <input type="radio"/> No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			x				x					x	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/ Logan Simpson Date April 2020; March 23, 2020; April 15, 2016			
	Line			x				x					x				
	Color			x				x					x				
	Texture			x					x				x				

Comments from item 2.

This KOP is from the Bitter Seeps Wash canyon rim viewing toward the proposed pipeline alignment. Bitter Seeps Wash is not regularly visited by the general public. It is about 1.5 miles from Mt Trumbull Road and about 5 straight miles south of HWY 389. No photo simulation was prepared for this KOP. There are fence lines and a large transmission line in this area but otherwise it is undeveloped.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The restored pipeline trench would be visible on the slope above the creek. Disturbed slopes would be graded and shaped to replicate existing, nearby landforms. Boulders would be salvaged and replaced to replicate existing boulder features and landforms. Desert varnish would be used on soil, rock and boulders to replicate existing feature colors.

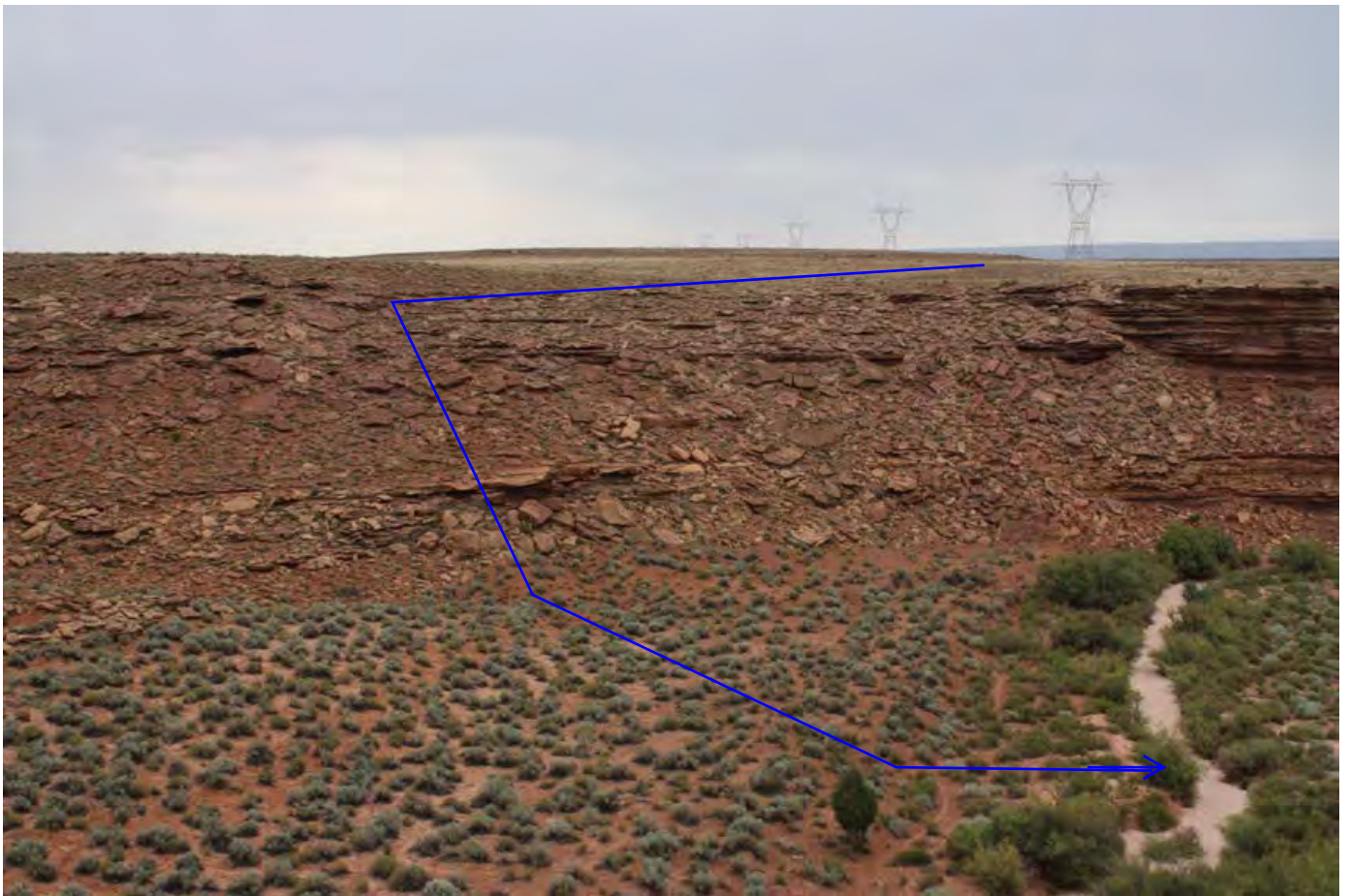
RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The pipeline alignment would be about 600 feet from the KOP, but for casual observers this is a location unlikely to be seen by many.

Angle of Observation: KOP is directly across from and above the pipeline alignment as it goes into canyon.

Spatial Relationship: Being located near powerlines consolidates disturbances to the natural landscape in one corridor.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Condition Image With Proposed Pipeline Alignment

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Arizona Strip

Resource Area - Arizona Strip FO

Activity (program) - Lands and Realty

****KOP 30 Mount Trumbull Road**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Southern Alternative		4. Location - Mount Trumbull Road Township - 39N Range - 4W Section - 1	5. Location Sketch 
2. Key Observation Point KOP 30			
3. VRM Class 4			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to gently rolling	Indistinct, low	Trapezoidal utility towers
LINE	Horizontal, simple	Complex, indistinct	Straight, repeating vertical/horizontal/angular
COLOR	Brown/beige, orange	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray
TEX-TURE	Fine, Even	Medium to fine, stippled to even	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same	swatch of removed then revegetated vegetation associated with pipeline installation	N/A
LINE	same	additional lines along edges of cleared then revegetated areas	N/A
COLOR	lighter where disturbed	additional greens in disturbed areas	N/A
TEX-TURE	same	same	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? <input checked="" type="radio"/> Yes <input type="radio"/> No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form				X			X					X	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/ Logan Simpson Date April 2020; March 23, 2020 April 15, 2016			
	Line				X			X					X				
	Color			X				X					X				
	Texture				X				X				X				

SECTION D. (Continued)

Comments from item 2.

This KOP is on Mt Trumbull Road where the pipeline crosses. This road is used by recreationists going to Toroweap above the Colorado River in Grand Canyon and other canyons that lead into the Grand. This KOP is almost 5 straight miles south of HWY 389. No photo simulation was prepared for this KOP. There is a large transmission line here but otherwise it is undeveloped.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The pipeline alignment would intersect with this KOP.

Spatial Relationship: Being located near powerlines consolidates disturbances to the natural landscape in one corridor.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Conditions



Five to Ten Years Post Construction Condition

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020

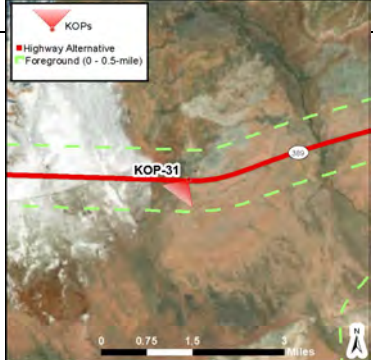
District -

Resource Area - Kaibab Indian Reservation

Activity (program) - Lands and Realty

****KOP 31 Kaibab-Paiute Tribal Headquarters**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Highway Alternative	4. Location - Kaibab-Paiute Tribal Headquarters Township - 40N Range - 4W Section - 21	5. Location Sketch 
2. Key Observation Point KOP 31		
3. VRM Class N/A		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to sloped, adjacent cliffs	Indistinct, low to medium	Rectangular, distinct, contrasting, horizontal roads, vertical utility poles/towers, signs and fences
LINE	Horizontal, simple	Simple, indistinct	Bold, straight, geometric, horizontal and repeating vertical
COLOR	Brown/beige, orange, red	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray, brown/beige
TEX-TURE	Fine, even	Medium to fine, stippled to even	Fine to medium

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same	noticeable swath of vegetation removed then re-vegetated	N/A
LINE	same	more distinct edges where vegetation would be removed then revegetated	N/A
COLOR	lighter where disturbed	additional greens in disturbed areas	N/A
TEX-TURE	same	same	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? Yes No N/A on reservation land. (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form				X			X					X	3. Additional mitigating measures recommended? <input type="checkbox"/> Yes No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line				X			X					X				
	Color			X				X					X				
	Texture				X				X				X				
Evaluator's Names														Date			
Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														April 2020; March 23, 2020; April 15, 2016			

Comments from item 2.

This KOP is next to the Kaibab-Paiute Tribal Headquarters just off and to the north of Highway 389 and analyzes the proposed pipeline. The photo simulation prepared is for the restored pipeline trench.

Visual and restoration mitigation measures for proposed facilities described in the POD would reduce the degree of visual contrast. The restored pipeline trench would create weak contrast associated with the vegetation.

RELEVANT ENVIRONMENTAL FACTORS

Viewing Distance: The pipeline would run parallel to the highway in either direction of this KOP.

Angle of Observation: KOP is straight on view of pipeline alignment.

Length of Time the Project Is in View: The pipeline disturbance would be in view the entire time that motorists traveling at 65 MPH along HWY 389.

Spatial Relationships: Being located adjacent to highway ROW lined with transmission lines would consolidate the linear disturbance of the pipeline to an already altered landscape swath.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Westbound view along pipeline alignment on north side of highway between headquarters and highway. (Google Earth Street View).



Eastbound view along pipeline on north side of highway between gas station and highway. (Google Earth Street View).



Existing Conditions



Five to Ten Years Post Construction Condition

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020

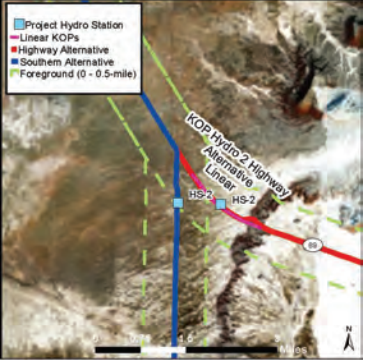
District -

Resource Area - Private Property

Activity (program) - Lands and Realty

****KOP 32 HS-2 Highway WB**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Highway Alternative		4. Location - HS-2 Highway EB and WB Township - 39N Range - 4W Section - 1	5. Location Sketch 
2. Key Observation Point KOP 32			
3. VRM Class N/A			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to gently rolling	Indistinct, low	Vertical utility poles, flat road
LINE	Horizontal, simple	Complex, indistinct	Geometric, straight, repeating vertical/horizontal, parallel
COLOR	Brown/beige	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray
TEX-TURE	Fine, even	Medium to fine, stippled to even	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same but with addition of a berm	more distinct in clearings	Addition of large, geometric forms, additional repeating thin vertical elements
LINE	same but with added lines associated with berm	more distinct along edges of clearings	Addition of bold, straight, horizontal and repetitious vertical lines.
COLOR	lighter where disturbed	additional green sin disturbed areas	same plus solid building color
TEX-TURE	same	same	Addition of rigid building structures clustered with thin jagged metal frames into a flat to gently rolling, finely textures landscape

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? Yes No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			X				X		X				3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line			X				X		X							
	Color			X				X				X					
	Texture				X				X	X							
Evaluator's Names														Date			
Allysia Angus, BLM;														April 2020;			
Barb Santner/Stantec; Diane Simpson-														March 23, 2020			
Colebank, Chris Bockey/Logan Simpson														April 15, 2016			

Comments from item 2.

For this proposed location, the KOP selected is a linear one along Highway 389, for a total of approximately 1-1/4 miles. The photo simulation is centered in the linear KOP on Highway 389 viewing westbound. The facilities simulated are for a power house, substation, access road, existing transmission line, 10' facility fence and pipeline alignment. See attached facility site plan and section.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The power house structure and ancillary facilities would be colored and textured to match surroundings such as using a non-reflective, textured surfacing in a random shape pattern and colored a BLM environmental color or custom natural landscape color.

HS-2 (HWY) would be just off HWY 389 on the north side.

RELEVANT ENVIRONMENTAL FACTORS

Viewing Distance: The proposed facilities are immediately adjacent to this linear KOP. From the east they come into view about 0.5 mile away but from the west they would be intermittently visible from 5+ miles away.

Angle of Observation: KOP is at straight on viewing angle or slightly below.

Length of Time the Project Is in View: The facilities would be in view as motorists traveling at 65 MPH along HWY 89 pass through this area. It would also be visible to those traveling north on Mt Trumbull Road.

Spatial Relationships: Except for the powerlines and fences, these structures would be located in an area away from other development, thus drawing more attention. Being located adjacent to highway ROW and transmission lines would consolidate the linear disturbance of the pipeline to an already altered landscape swath.

Size/Scale: The facilities at this location are large and in the foreground thus creating strong contrast with the natural landscape into which they would be constructed.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



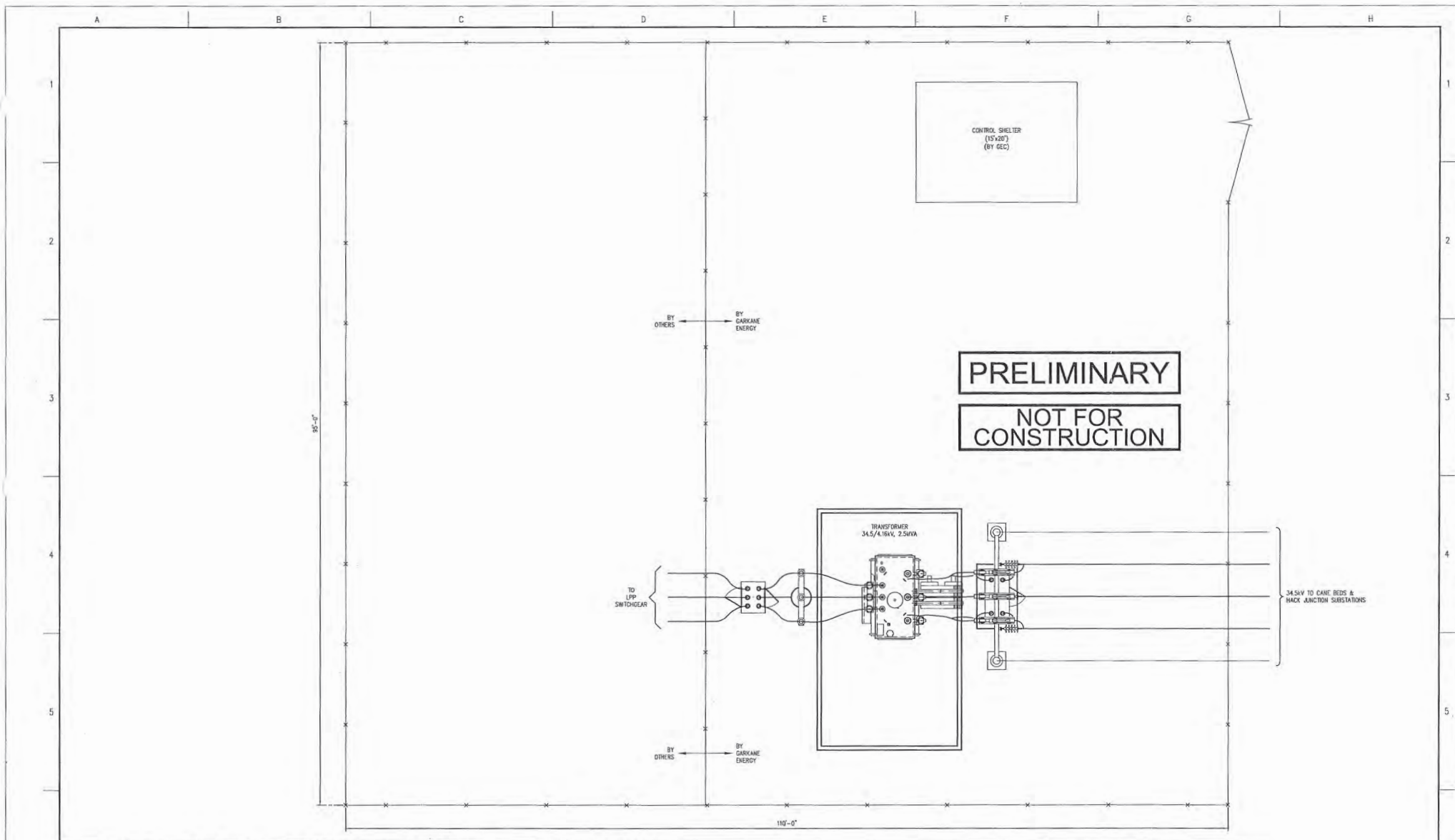
Eastbound view along highway (facilities would be at blue line) (Google Earth Street View).



Existing Conditions



Five to Ten Years Post Construction Condition



FILE LOCATION: L:\GARKANE ENERGY\GARDOL LAKE POWELL PIPELINE\WORKING\GENERAL\HS2 SUBSTATION GA.DWG LAST SAVED BY: lapuchinski 12/30/2010 2:01 PM PLOTTED BY: Loretta Pacholinski 12/30/2010 2:01 PM Tab:Layout1



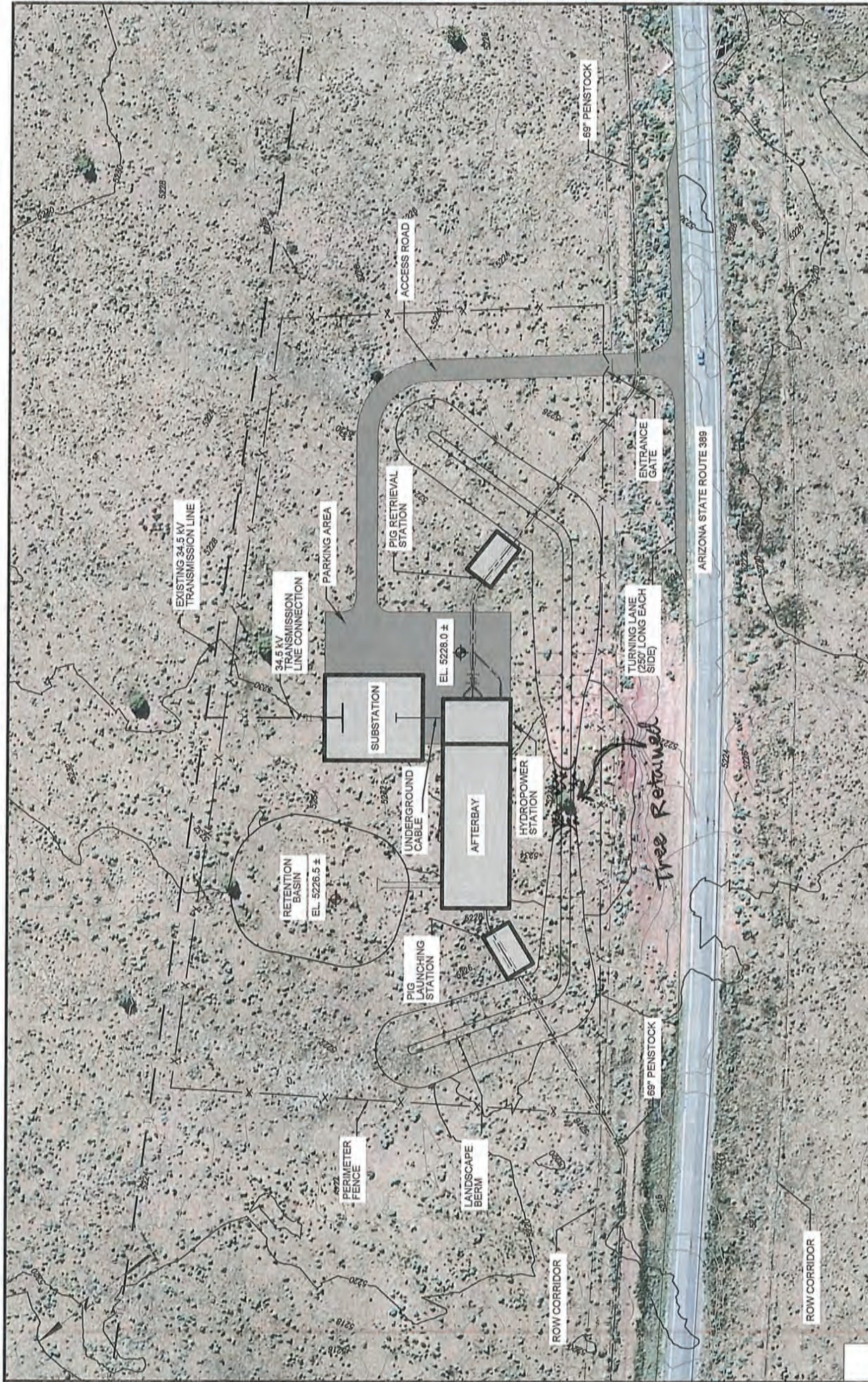
NO	REVISION	DATE	BY	APP
A	REVISED FOR DESIGN REVIEW COMMENTS	12/29/10	LEP	DRM



ENGINEERING RECORD		DATE
DRAWN	DBE	3/11/10
DESIGNED	DBE	3/11/10
CHECKED	DRM	3/11/10
APPROVED	DRM	3/11/10

DWG SCALE: 3/16"=1'-0" PLOT SCALE: 1:1

LAKE POWELL PIPELINE 34.5/4.16kV HS2 SUBSTATION GENERAL ARRANGEMENT	
DWG. NAME: HS2 SUBSTATION	REVISION NO.: A



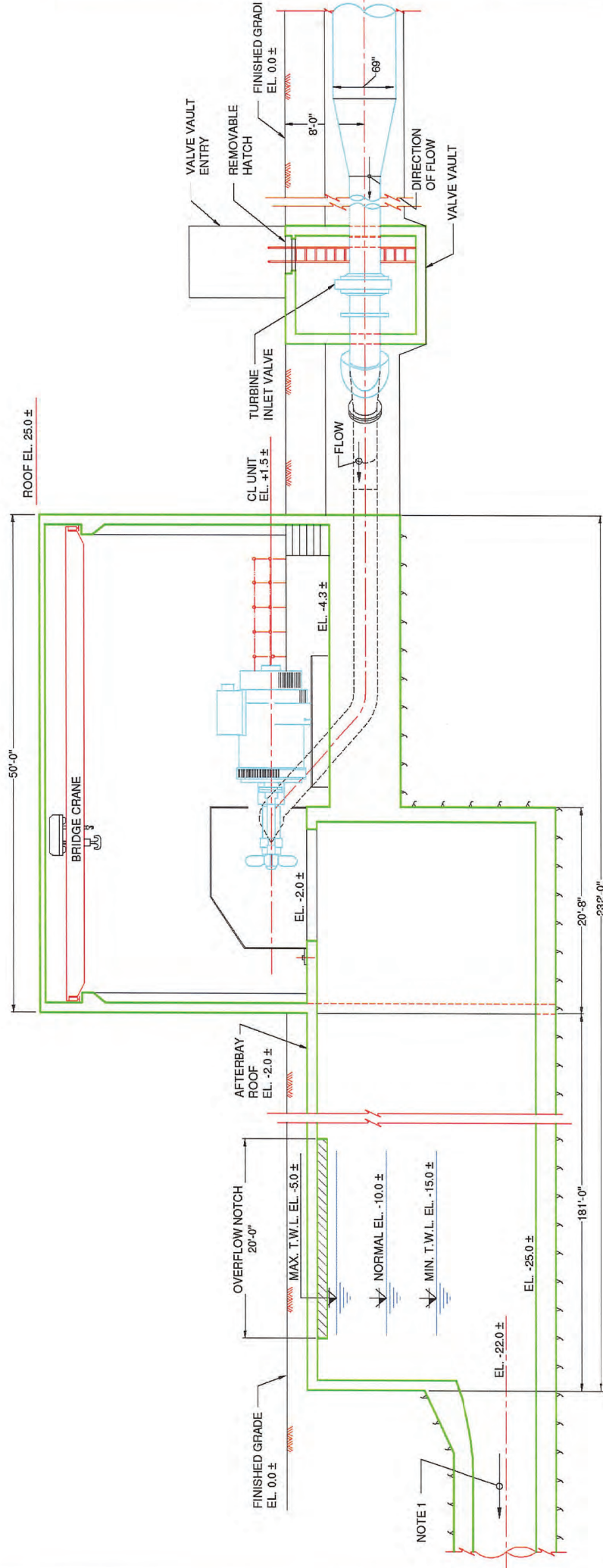
LAKE POWELL PIPELINE PROJECT

UDWre  FIGURE 3-40  MWH

IN-LINE HYDROPOWER STATION
HS-2 HIGHWAY ALTERNATIVE
SITE PLAN



Spatial Reference
STATE PLANE COORDINATE SYSTEM UTAH SOUTH,
NAD 83, US FEET.



NOTE:

1. BPS-3 FCS:
HS-1:
HS-2:
HS-3:

TO BPS-3
TO HS-2
TO HS-3
TO HS-4

2. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.

NOTE:

THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY PROJECT LAYOUT CONCEPTS FOR STUDY PURPOSES ONLY. FEATURES ILLUSTRATED ON THIS DRAWING ARE NOT TO BE USED AS A BASIS FOR DESIGN.



LAKE POWELL PIPELINE PROJECT

UDWR FIGURE 4.108 MWH

IN-LINE HYDROPOWER STATION
HS-2
POWERHOUSE SECTION
THROUGH GENERATING UNIT

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020

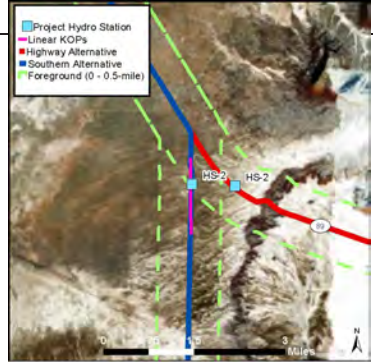
District -

Resource Area - Private Property

Activity (program) - Lands and Realty

****KOP 33 Hydro Station 2- South from Co. Rd 239**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment/HS-2 Both Alternatives		4. Location - Hydro Station 2- South from Co. Rd 239 Township - 39N Range - 4W Section - 1	5. Location Sketch 
2. Key Observation Point KOP 33			
3. VRM Class N/A			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to gently rolling	Indistinct, low	Vertical fence/posts, flat road
LINE	Horizontal, simple	Complex, indistinct	Geometric, straight, repeating vertical/horizontal, parallel
COLOR	Brown/beige	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Gray, brown
TEX-TURE	Fine, even	Medium to fine, stippled to even	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same but with berm	more distinct in clearings	Addition of large, geometric forms, additional repeating thin vertical elements
LINE	same but with additional lines associated with berm	more distinct along edges of clearings	Addition of bold, straight, horizontal and repetitious vertical lines.
COLOR	lighter where disturbed	additional greens in disturbed areas	same plus solid building color
TEX-TURE	same	same	Addition of rigid building structures clustered with thin jagged metal frames into a flat to gently rolling, finely textures landscape

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? Yes No N/A on private land (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			x				x		x				3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line			x				x		x							
	Color			x				x				x					
	Texture				x				x	x							
Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														Date April 2020; March 23, 2020 April 15, 2016			

Comments from item 2.

For the HS-2 (Southern) location, the KOP selected is linear along Mt Trumbull Road for approximately 1-1/4 miles. The facilities include a hydro-station, berm, access road, substation, transmission line, 10' facility fence and pipeline alignment. See attached facility site plan and section.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The power house structure and ancillary facilities would be colored and textured to match surroundings such a surfacing in a random shape pattern and colored a BLM environmental color or custom natural landscape color.

HS-2 (Southern) would be just off Mt Trumbull Road on the east side.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The proposed facilities are immediately adjacent to this linear KOP. The facilities would be intermittently visible to those traveling the highway or road out to 5+ miles.

Angle of Observation: KOP is at straight on viewing angle.

Length of Time the Project Is in View: The facilities would be in view as motorists traveling at 30 MPH along along pass through this area. It would also be visible to motorists traveling along HWY 389.

Spatial Relationships: These structures would be located in an area away from other development, thus drawing more attention. Being located adjacent to a road would consolidate the linear disturbance of the pipeline to a slightly altered landscape swath.

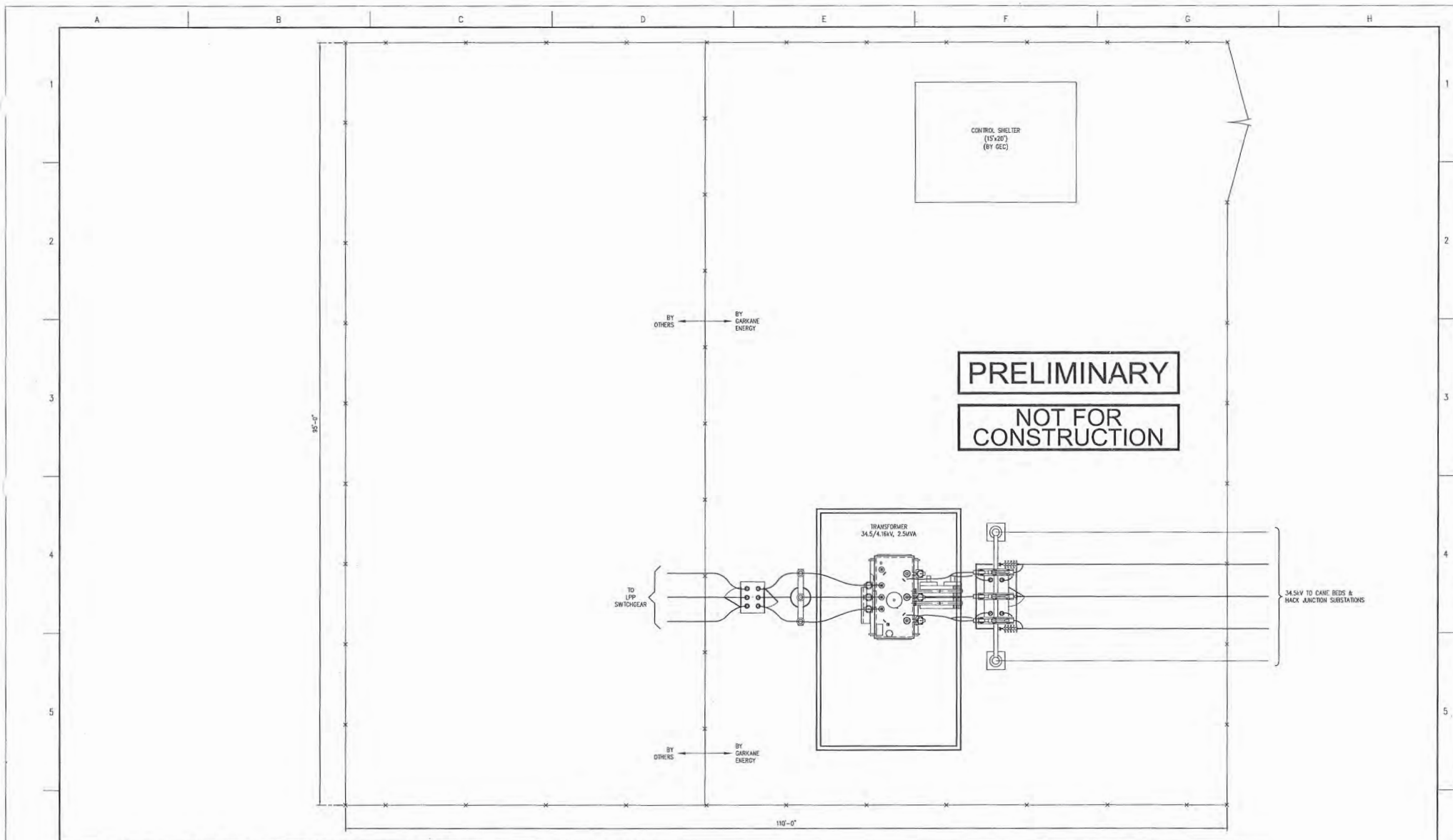
Size/Scale: The facilities at this location are large and in the foreground thus creating strong contrast with the natural landscape into which they would be constructed.



View to South from Yellowstone Road near HS-2



View to North from Yellowstone Road near HS-2



FILE LOCATION: L:\GARKANE ENERGY\GARDOS LAKE POWELL PIPELINE\WORKING\GENERAL\HS2 SUBSTATION GA.DWG LAST SAVED BY: jayuchinski 12/30/2010 2:01 PM PLOTTED BY: Lancia Pacholinski 12/30/2010 2:01 PM Tab:Layout1



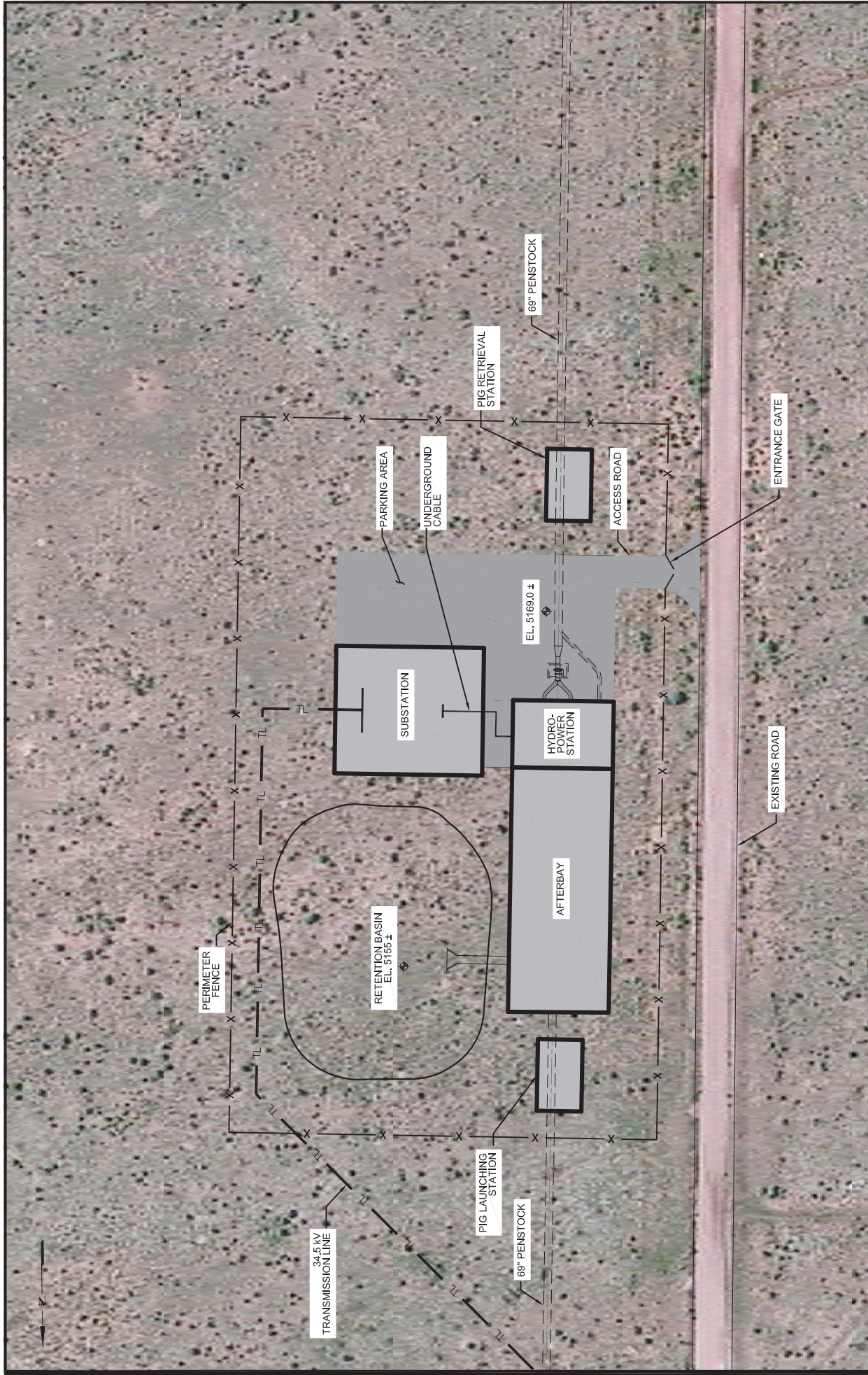
NO.	REVISION	DATE	BY	APP.
A	REVISED FOR DESIGN REVIEW COMMENTS	12/29/10	LEP	DRM




ENGINEERING RECORD		DATE
DRAWN	DBE	3/11/10
DESIGNED	DBE	3/11/10
CHECKED	DRM	3/11/10
APPROVED	DRM	3/11/10

DWG SCALE: 3/16"=1'-0" PLOT SCALE: 1:1

LAKE POWELL PIPELINE 34.5/4.16kV HS2 SUBSTATION GENERAL ARRANGEMENT	
DWG. NAME: HS2 SUBSTATION	REVISION NO.: A

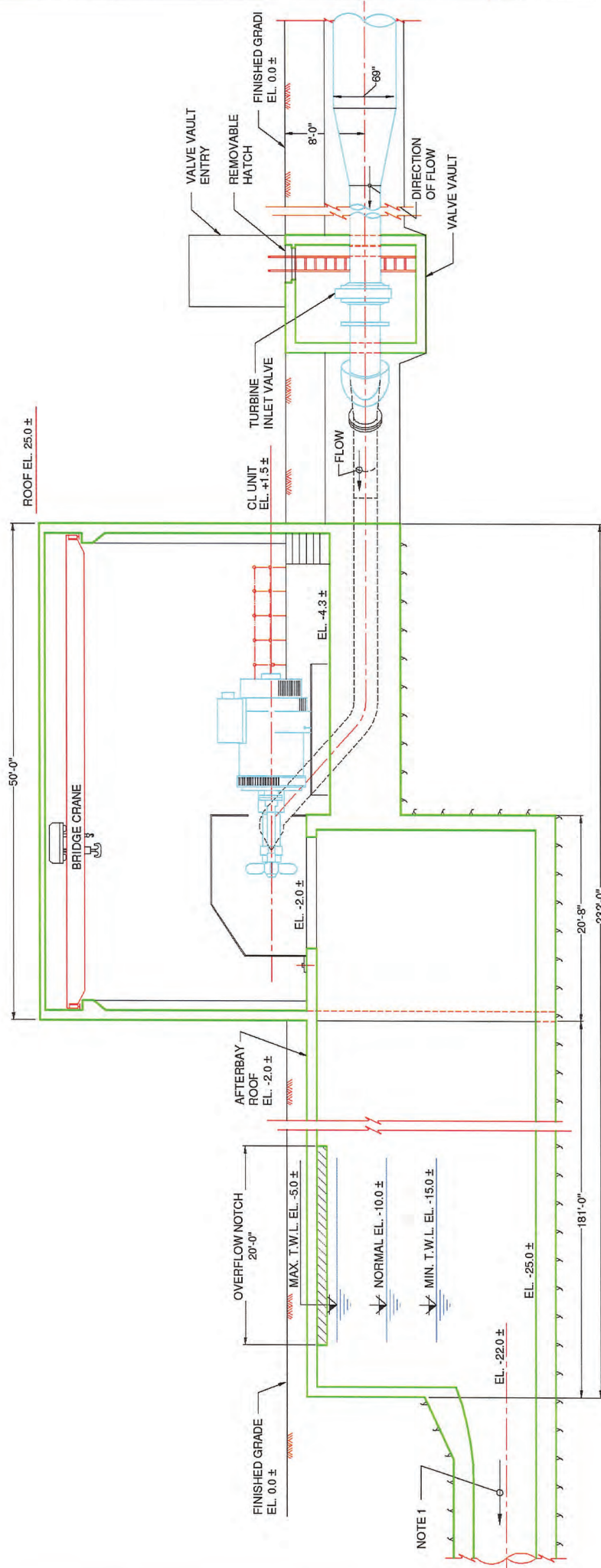


LAKE POWELL PIPELINE PROJECT

 **UDWR**  **FIGURE 3-17**

IN-LINE HYDROPOWER STATION
HS-2 SOUTH ALIGNMENT
SITE PLAN





SECTION A - A

NOTE:

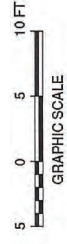
1. BPS-3 FCS:
TO HS-2
TO HS-3
TO HS-4
2. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.

LAKE POWELL PIPELINE PROJECT

UDWR FIGURE 4.106 MWH

IN-LINE HYDROPOWER STATION
HS-2
POWERHOUSE SECTION
THROUGH GENERATING UNIT

NOTE:
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District -

Resource Area - Private Property

Activity (program) - Lands and Realty

****KOP 34 Hydro Station 3 from Uzona Avenue**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment/HS-3 Both Alternatives		4. Location - Hydro Station 3 from Uzona Avenue Township - 43S Range - 10W Section - 32	5. Location Sketch 
2. Key Observation Point KOP 34			
3. VRM Class N/A			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat with backdrop of tall vertical cliff faces	Indistinct, low to medium	Rectangular, distinct, contrasting, horizontal roads, vertical utility poles/towers
LINE	Horizontal, diverse	Complex, indistinct	Distinct, straight, horizontal and repeating vertical
COLOR	Brown/beige, gray/white, orange, vermillion red	Blue/gray to green, and seasonal colors incl. green and straw/yellow	White, gray, brown/beige
TEX-TURE	Fine to coarse, striated, random	Medium, random	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same	same	similar but additional large facilities with geometric and linear forms
LINE	same	same	additional lines of a variety
COLOR	slightly lighter where disturbed	same	same plus solid building color
TEX-TURE	same	same	similar but additional texture from more structures

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? Yes No N/A on GCNRA Land. (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form				X				X			X		3. Additional mitigating measures recommended? <input type="checkbox"/> Yes No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line				X				X			X					
	Color				X				X			X					
	Texture				X				X			X					
Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														Date April 2020; March 23, 2020; April 15, 2016			

Comments from item 2.

This KOP is from Uzona Avenue viewing east toward hydro station -3 (HS-3). The proposed facilities are HS-3 and the pipeline alignment. The facilities simulated are for a power house, substation, access road, transmission line, 10' facility fence and the pipeline alignment. See attached facility site plan and section. Facilities are located on the western side of Colorado City/Hildale and are within 0.25 mile of numerous similar structures

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The power house structure and ancillary facilities would be colored and textured to match surroundings using a non-reflective, textured surfacing in a random shape pattern and colored either a standard BLM environmental color or a custom color.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: HS-3 is immediately adjacent to Uzona Road and within 0.25 mile of the edge of Colorado City/Hildale. It is also about 0.5 mile from HWY 389.

Length of Time the Project Is in View: Facilities would be in view constantly for those living and working nearby. It would be in view for however long it takes motorists to drive by on the road or highway at the slower travel speeds.

Relative Size or Scale: HS-3 would be similar in size to existing structures located nearby.

Spatial Relationships: Being located in close proximity to existing structures of similar size and shape would allow for visual absorption of this facility.



Existing Conditions -1



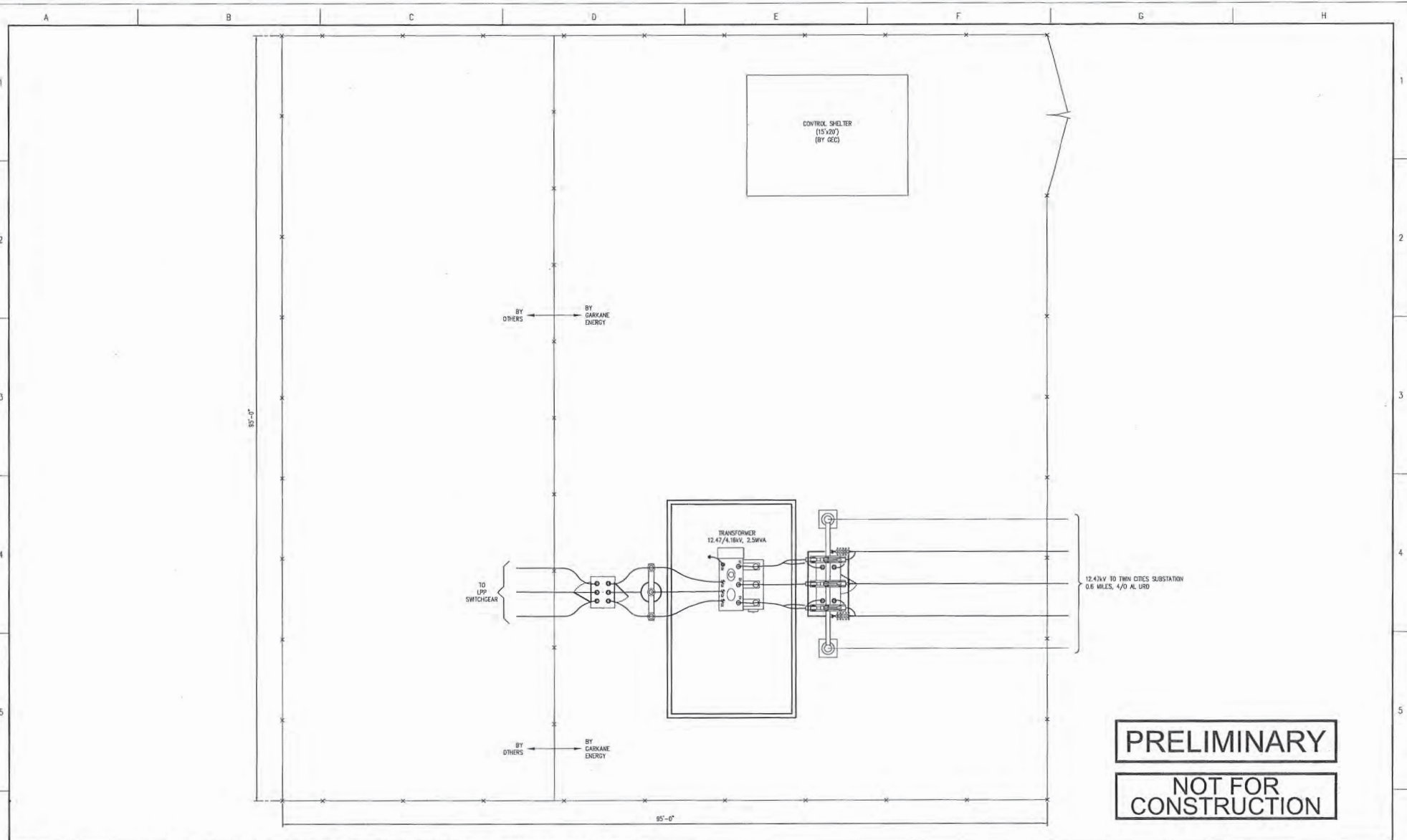
Five to Ten Years Post Construction Condition-1



Existing Conditions - 2



Five to Ten Years Post Construction Condition-2



FILE LOCATION: L:\GARKANE ENERGY\GARD03 LAKE POWELL PIPELINE\WORKING\GENARR\HS3 SUBSTATION GADWG LAST SAVED BY: Ispuchinski 12/30/2010 2:06 PM PLOTTED BY: Lennie Puchalski 12/30/2010 2:08 PM Tab:Layout1



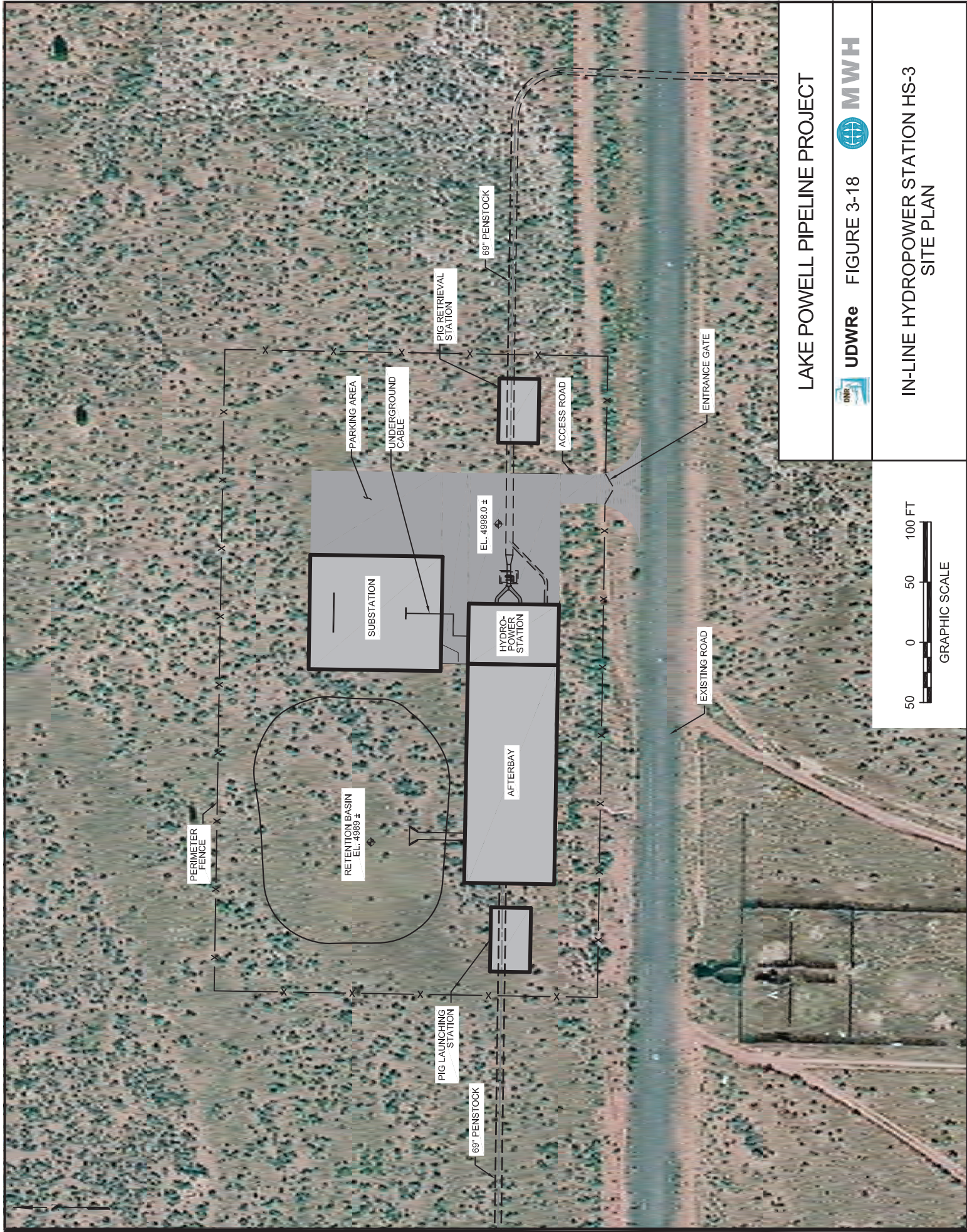
NO.	REVISION	DATE	BY	APP.
A	REVISED PER DESIGN REVIEW COMMENTS	12/29/10	LEP	DRW



ENGINEERING RECORD		DATE
DRAWN	DBE	3/11/10
DESIGNED	DBE	3/11/10
CHECKED	DRM	3/11/10
APPROVED	DRM	3/11/10

DWG SCALE: 3/16"=1'-0" PLT SCALE: 1:1

LAKE POWELL PIPELINE 12.47/4.16kV HS3 SUBSTATION GENERAL ARRANGEMENT	
DWG. NAME: HS3 SUBSTATION	REVISION NO.: A



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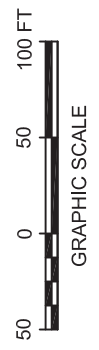
LAKE POWELL PIPELINE PROJECT



FIGURE 3-18



IN-LINE HYDROPOWER STATION HS-3
SITE PLAN



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Cedar

Resource Area -St George FO

Activity (program) - Lands and Realty

****KOP 35 Linear Uzona Avenue-Canaan Wash**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment Both Alternatives	4. Location - from Uzona Avenue-Canaan Wash Township - 42N Range - 7W Section - 33	5. Location Sketch 
2. Key Observation Point KOP 35 Linear		
3. VRM Class 3		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Wash/valley w/ sloped to vertical valley walls	Indistinct, low to medium	Flat road and trails
LINE	Horizontal to vertical, irregular, complex	Complex, indistinct	Gently curving
COLOR	Brown/beige, orange, red	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Beige/brown/red
TEX-TURE	Fine to coarse, blocky	Fine to medium, stippled to even	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	disruption to landforms in pipeline disturbance	swatch of vegetation removed then revegetated	N/A
LINE	edges of disturbance to landforms	additional lines along vegetation disturbances and revegetation edges	N/A
COLOR	lighter where disturbed	more greens in disturbed areas	N/A
TEX-TURE	same	same	N/A

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? <input checked="" type="radio"/> Yes <input type="radio"/> No (Explain on reverse side)		
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures		
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None			
ELEMENTS	Form			x				x						x	Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simipson	Date April 2020; March 23, 2020 April 15, 2016
	Line			x				x						x		
	Color			x				x						x		
	Texture				x				x					x		

Comments from item 2.

This KOP is located along Uzona Avenue near the intersection of Uzona Avenue and Canaan Wash. The proposed pipeline alignment follows the road and wash.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The restored pipeline alignment trench would be visible between the existing gravel road and existing cut bank. Disturbed slopes would be graded and shaped to replicate existing, nearby landforms. Boulders would be salvaged and replaced to replicate existing boulder features and landforms. Desert varnish would be used on soil, rock and boulders to replicate existing feature colors.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: The pipeline would follow the road and wash and immediately adjacent.

Angle of Observation: KOP is often at direct viewing angle in some locations the pipeline goes up or down slight hills.

Length of Time the Project Is in View: The facilities would be in view when motorists travel slowing along the road.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Conditions



Five to Ten Years Post Construction Condition

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Cedar

Resource Area St George GO

Activity (program) - Lands and Realty

****KOP 37 Little Creek Overlook**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Pipeline Alignment/HS-4/ Transmission Lines Both Alternatives		4. Location - Little Creek Overlook Township - 43S Range - 12W Section - 19	5. Location Sketch 
2. Key Observation Point KOP 37			
3. VRM Class 4			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling w/ variety of diverse vertical land forms	Indistinct, low, amorphous	Indistinct
LINE	Horizontal, irregular, complex, diverse	Complex, indistinct	Indistinct, weak
COLOR	Brown/beige, orange, red; deep blue water	Green, and seasonal colors incl. green and straw/yellow	White, gray, black
TEX-TURE	Medium to fine; smooth water	Fine, scattered to stippled	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same	same	blocky structure and band of powerlines attract attention
LINE	same	same	lines of powerlines and roads attraction attention
COLOR	same	thin line of removed/revegetated vegetation visible	solid colors and glinting metal woulc attract attention
TEX-TURE	same	same	buildings and transmission lines add more texture

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form				X				X		X			3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line				X			X			X						
	Color				X				X			X					
	Texture				X				X			X					
Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														Date April 2020: March 23, 2020; April 15, 2016			

Comments from item 2.

This KOP is from an informal viewing location on the edge of Little Creek Mountain looking south and west at the pipeline and HS-4 and powerlines. Sand Hollow Reservoir and Hurricane development are visible in back ground, a water catchment is visible in front of HS-4 but the fore and mid-ground are mostly undeveloped.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The power line structure and ancillary facilities would be colored and textured to match surroundings using a non-reflective, textured surfacing in a random shape pattern and colored either a standard BLM environmental color or a custom color.

RELEVANT ENVIRONMENTAL FACTORS

Viewing Distance: The pipeline would run across the valley along a dirt road, below the KOP about 1.25 miles away. HS-4 would be able 2.5 miles to the west.

Angle of Observation: KOP is high above the project features allowing them and ground disturbance to be seen.

Length of Time the Project Is in View: The facilities would be in view as long a viewer chooses to scan the landscape. It is assumed that if dispersed recreationists are exploring this area, they would be drawn to the cliff edge and spend extended periods looking out across the views.

Recovery Time: The landform reconstruction and staining where needed would occur immediately after pipeline is in place; the revegetation out ten years post-construction is estimated to create weak contrast in form, line and color.



Existing Conditions



Five to Ten Years Post Construction Condition

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020

District - Cedar

Resource Area - St. George FO

Activity (program) - Lands and Realty

****KOP 38 Hydro Station 4 Transmission line from Frog Hollow Road**

SECTION A. PROJECT INFORMATION

1. Project Name
**Lake Powell Pipeline
HS-4 /Transmission Line
Both Alternatives**

2. Key Observation Point
KOP 38

3. VRM Class
4

4. Location - Hydro Station
4 from Frog Hollow Road

Township - 43S

Range - 13W

Section - 13

5. Location Sketch



SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling with small irregular landforms and vertical cut faces along road	Indistinct, low to medium	Flat Road
LINE	Horizontal, flowing	Complex, indistinct	Straight to curving road
COLOR	Brown/beige, orange	Green to blue/gray, and seasonal colors incl. green and straw/yellow	Beige to gray
TEXTURE	Fine, even	Medium to fine, random	Fine

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	landform would be manipulated for pipeline and facilities including retention basin	swath and patch of vegetation removed then vegetated	addition of large facilities with geometric and linear forms.
LINE	edges of disturbance for pipeline and facilities	edges of vegetation disturbance and revegetation	additional lines of a variety of types as well as repetitive powerpoles and lines
COLOR	lighter where disturbed	Additional greens in disturbed areas	same plus solid building color
TEXTURE	same	same	similar but with additional texture from structures

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? (Yes) No (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			X				X		X				3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line			X				X		X							
	Color			X				X				X					
	Texture				X				X	X							
Evaluator's Names														Date			
Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson														April 2020; March 23, 2020; April 15, 2016			

Comments from item 2.

This is a linear KOP along Frog Hollow Road. The visualizations are from Frog Hollow Road almost a mile from HS-4 viewing northwest in one direction toward the hydro station - (HS- 4))and transmission line, only the transmission lines are visible here. See attached facility site plan and section.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. HS-4 is located behind a land form and is unseen from the KOP. The power house and ancillary facilities would be colored and textured to match surroundings using a non-reflective, textured surfacing in a random shape pattern and colored either a standard BLM environmental color such as Carlsbad Canyon or a custom color.

Another dirt road passes immediately by HS-4 and from that location, the facility would be highly visible.

RELEVANT ENVIROMENTAL FACTORS

Viewing Distance: HS-4 would be approximately 1 mile from Frog Hollow Road which is more traveled than the road going adjacent to the facility.

Relative Size or Scale: HS-4 would be a large complex of structures in a mostly undeveloped landscape.

Spatial Relationships: HS-4 is about 3 miles from the southernmost developed area of Hurricane and about 5 miles from Sand Hollow Reservoir so it's distance from structures associated with those is too far away to blend. It is however located at the base of a cliff and is somewhat tucked into a less visible location that is not often visited for recreational purposes.



Existing Conditions -1



Five to Ten Years Post Construction Condition-1



Existing Conditions -2

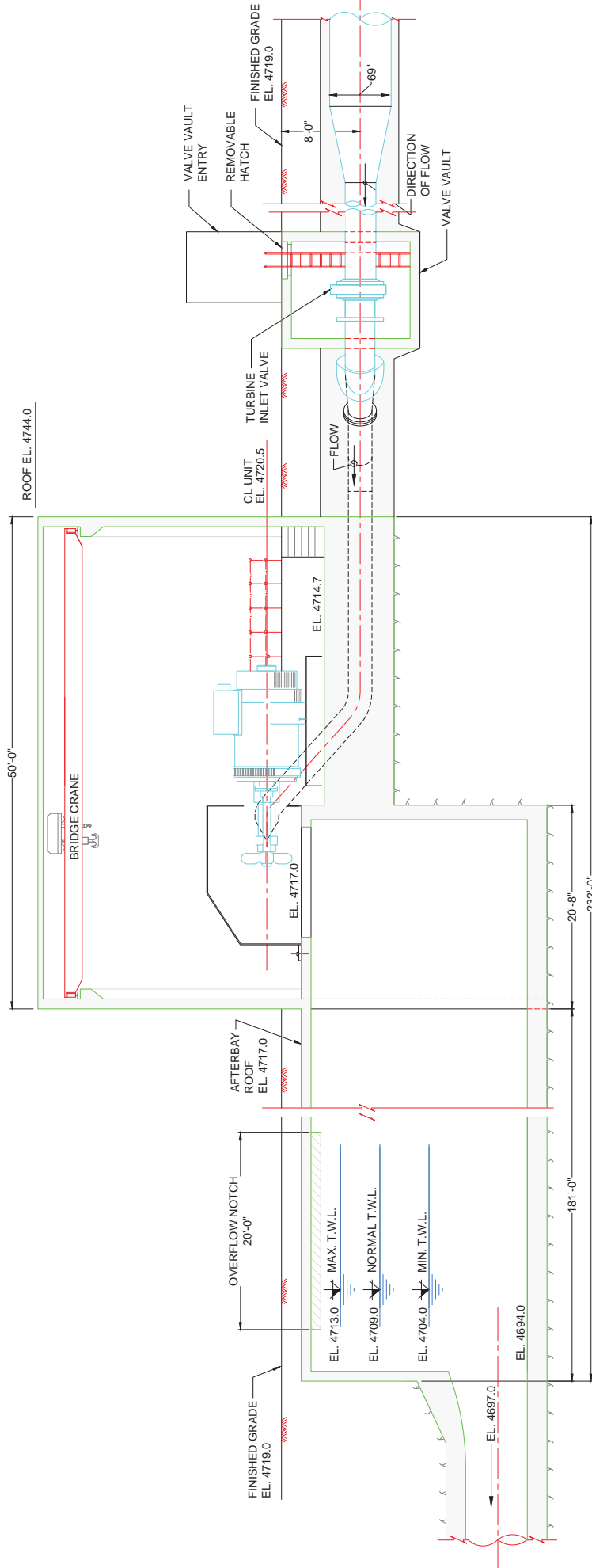


Five to Ten Years Post Construction Condition-2



1. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.

NOTE:
THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY
PROJECT LAYOUT CONCEPTS FOR STUDY PURPOSES
ONLY. FEATURES ILLUSTRATED ON THIS DRAWING ARE
NOT TO BE USED AS A BASIS FOR DESIGN.

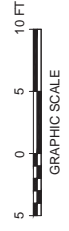


SECTION A - A

NOTE:

1. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.
2. T.W.L. = TAIL WATER LEVEL

NOTE:
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CONSTRUCTION. ONLY FEATURES ILLUSTRATED ON THIS DRAWING ARE
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LAKE POWELL PIPELINE PROJECT

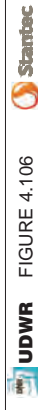


FIGURE 4.106

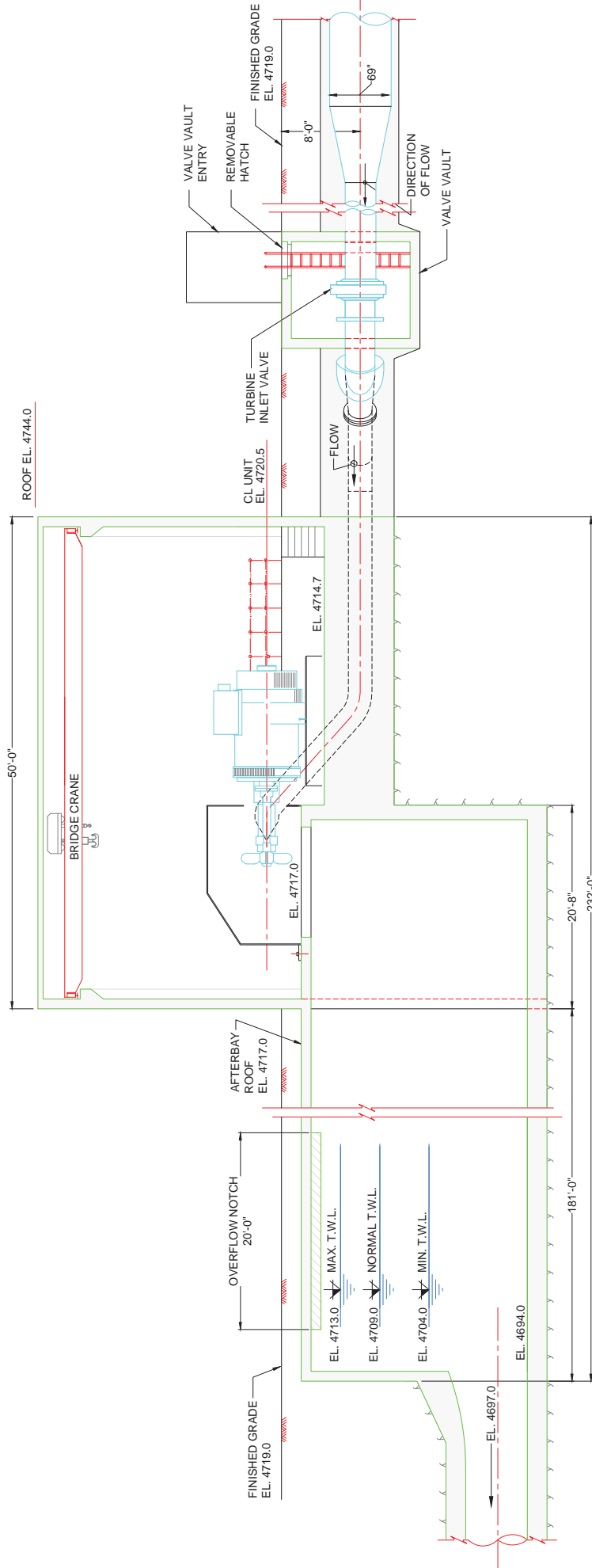
IN-LINE HYDROPOWER STATION
HS-4 POWERHOUSE
SECTION THROUGH GENERATING UNIT



2. T.W.L = TAIL WATER LEVEL

THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY PROJECT LAYOUT CONCEPTS FOR STUDY PURPOSES ONLY. FEATURES ILLUSTRATED ON THIS DRAWING ARE NOT TO BE USED AS A BASIS FOR DESIGN.





SECTION A - A

NOTE:

1. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.
2. T.W.L. = TAIL WATER LEVEL

NOTE:
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DESIGN CONCEPTS AND IS NOT TO BE USED FOR CONSTRUCTION.
ONLY FEATURES ILLUSTRATED ON THIS DRAWING ARE
NOT TO BE USED AS A BASIS FOR DESIGN.



LAKE POWELL PIPELINE PROJECT

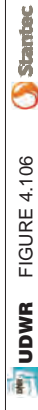


FIGURE 4.106

IN-LINE HYDROPOWER STATION
HS-4 POWERHOUSE
SECTION THROUGH GENERATING UNIT



2. T.W.L = TAIL WATER LEVEL

THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY PROJECT LAYOUT CONCEPTS FOR STUDY PURPOSES ONLY. FEATURES ILLUSTRATED ON THIS DRAWING ARE NOT TO BE USED AS A BASIS FOR DESIGN.

IN-LINE HYDROPOWER STATION
HS-4 POWERHOUSE
SECTION THROUGH BYPASS VALVE



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District - Cedar

Resource Area - St George FO

Activity (program) Lands and Realty

****KOP 39 Linear Hurricane Cliffs Road**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline HS-5 and Transmission Line Both Alternatives		4. Location - Hurricane Cliffs Road, view to south Township - 43S Range - 13W Section - 9	5. Location Sketch 
2. Key Observation Point KOP 39 Linear			
3. VRM Class 4			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Wide, flat valley w/ gentle slopes up to vertical land forms and cliffs	Indistinct, low	-
LINE	Horizontal to vertical and angled, simple	Complex, indistinct	-
COLOR	Gray, brown/beige, red/orange soils to south	Green, and seasonal colors incl. green and straw/yellow	-
TEX-TURE	Fine to coarse	Medium to fine, stippled to gradational	-

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Wide, flat valley w/ gentle slopes up to vertical land forms and cliffs; cut/fill bench for re-aligned road	swath and large patch cleared for pipeline and facilities	Addition of large, geometric forms and repeating thin vertical features
LINE	Horizontal to vertical and angled, simple; straight to curved lines of cut/fill for re-aligned road	additional on edges of disturbances	additional of bold, straight, horizontal and repetitious vertical lines
COLOR	Gray, brown/beige, lighter where disturbed	more greens in disturbed areas	Brown, gray, beige, khaki
TEX-TURE	same	Same	coarse from addition of rigid buildings and structures along with jagged metal frames and repeating vertical elements of powerpoles

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1.	DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource? management objectives? <input checked="" type="radio"/> Yes <input type="radio"/> No (Explain on reverse side)		
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)						
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	*Strong	Moderate	Weak	None			
3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)																
Contrast rating takes into account Environmental Protection and Mitigation Measures																
ELEMENTS	Form			X					X		X				Evaluator's Names Allysia Angus, BLM; Barb Santner/Stantec; Diane Simpson-Colebank, Chris Bockey/Logan Simpson	Date April 2020; March 23, 2020 April 15, 2016
	Line			X					X		X					
	Color			X					X				X			
	Texture				X					X	X					

* denotes very strong contrast

Comments from item 2.

This linear KOP is along Hurricane Cliffs Road going in both directions. The facilities simulated are the pipeline and HS-5 and transmission lines, including the hydrostation (which here is ~85 ft high), substation, access road, fence, and a large bern to protect the structures from rockfalls. See attached facility site plan and section.

Visual and restoration mitigation measure described in the POD would reduce the degree of visual contrast. The hydro station building and ancillary facilities would be colored and textured to match surroundings using a non-reflective, textured surfacing in a random shape pattern and colored either a standard BLM environmental color or other custom color.

HS-5 would be just off Hurricane Cliffs Road on the east side.

RELEVANT ENVIRONMENTAL FACTORS

Viewing Distance: The proposed facilities are immediately adjacent to this linear KOP. HS-5 would be blocked from view by landform to the north where most casual observers would be. It would be visible primarily to the south.

Angle of Observation: KOP is at straight across from HS-5 but powerlines go up hill to the west.

Length of Time the Project Is in View: The facilities would be in view as motorists traveling at 65 MPH along HWY 89 pass through this area. Taller structures would be intermittently visible on the approaches from miles away to the east and from about a quarter mile away from the west.

Spatial Relationships: The structures would be located in an area away from other development, thus drawing more attention. Being located adjacent to high, jagged cliffs allows for absorption of some of the visual contrast.

Size/Scale: The facilities at this location are quite large and in the foreground thus creating strong contrast with the natural landscape into which they would be constructed.



Existing Conditions -1



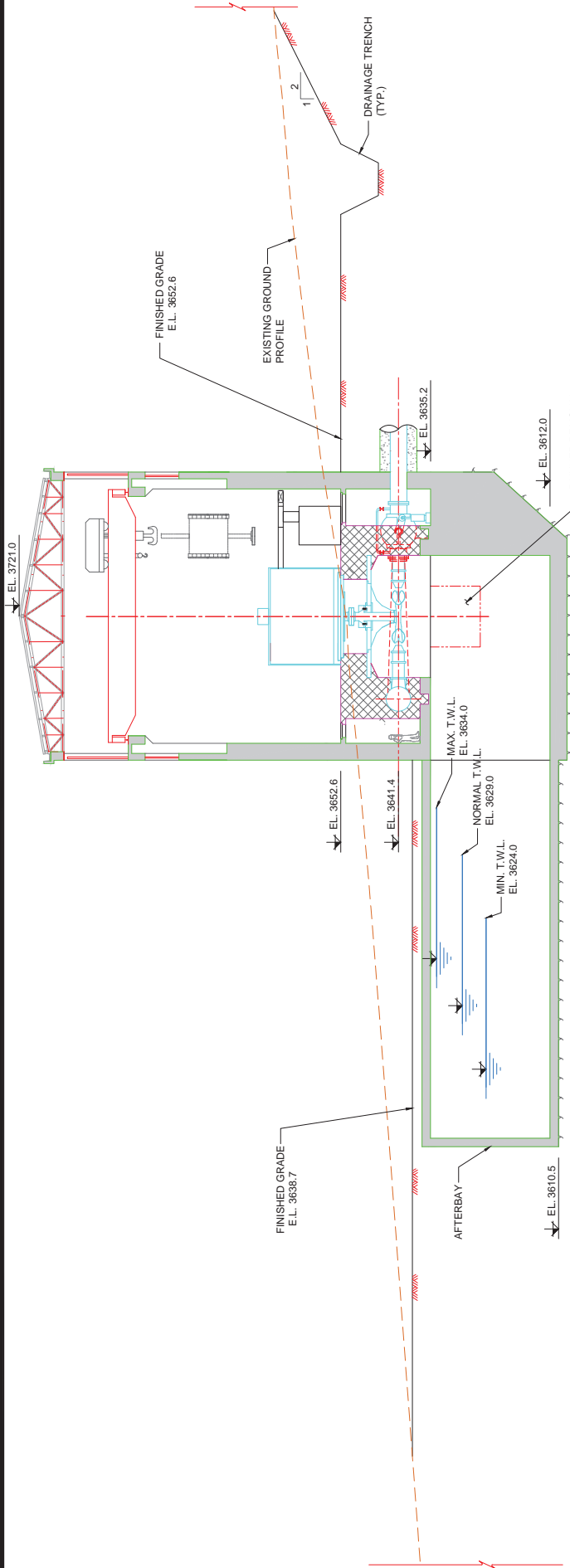
Five to Ten Years Post Construction Condition - 1



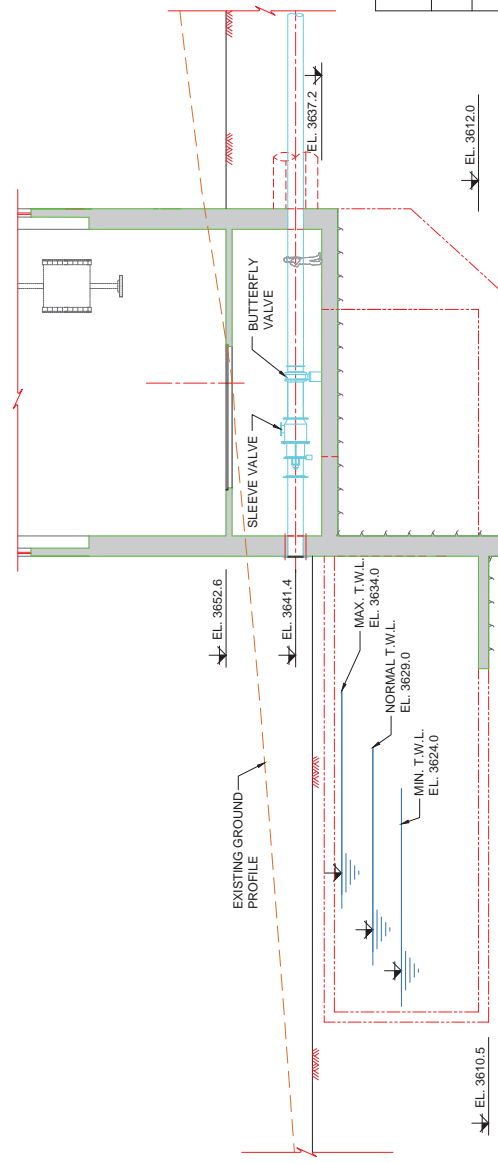
Existing Conditions - 2



Five to Ten Years Post Construction Condition - 2



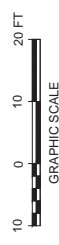
SECTION A - A



SECTION B - B

NOTE:

1. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.



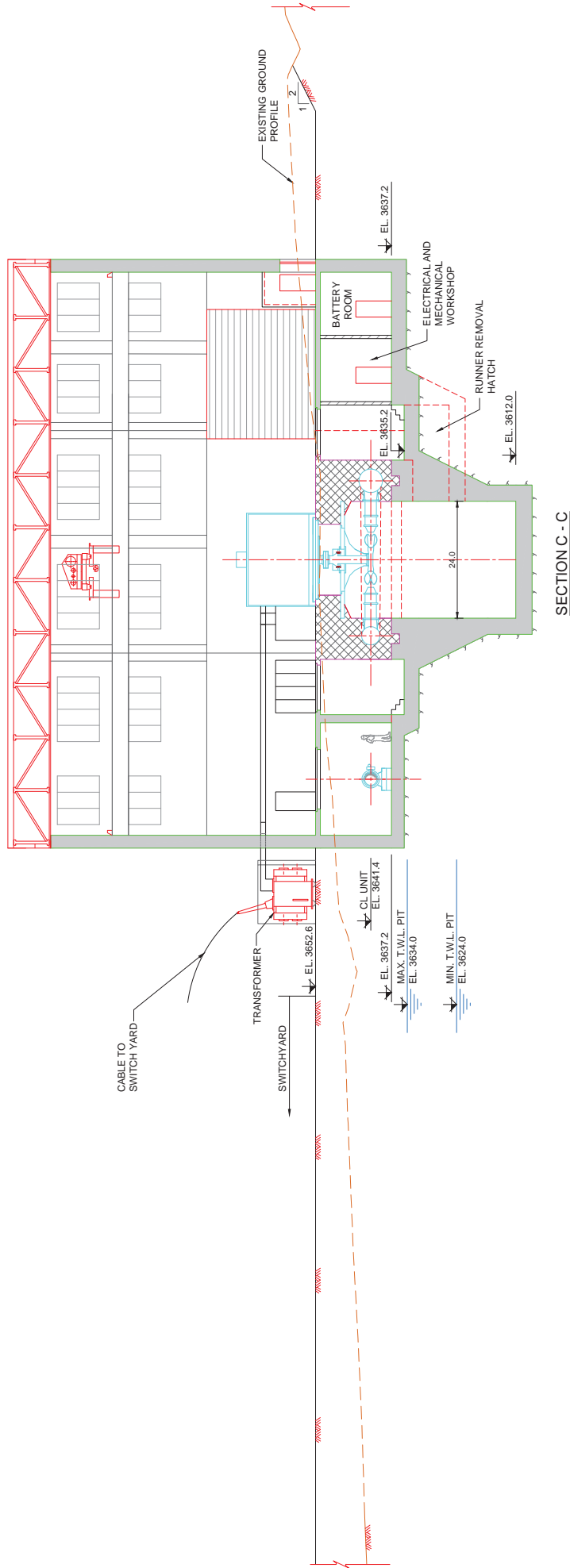
NOTE:
THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY
DESIGN CONCEPTS. ONLY FEATURES ILLUSTRATED ON THIS DRAWING ARE
NOT TO BE USED AS A BASIS FOR DESIGN.

LAKE POWELL PIPELINE PROJECT

UDWR FIGURE 4.162

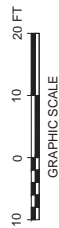
HURRICANE CLIFFS HS-5
POWERHOUSE SECTIONS
SHEET 4 OF 5



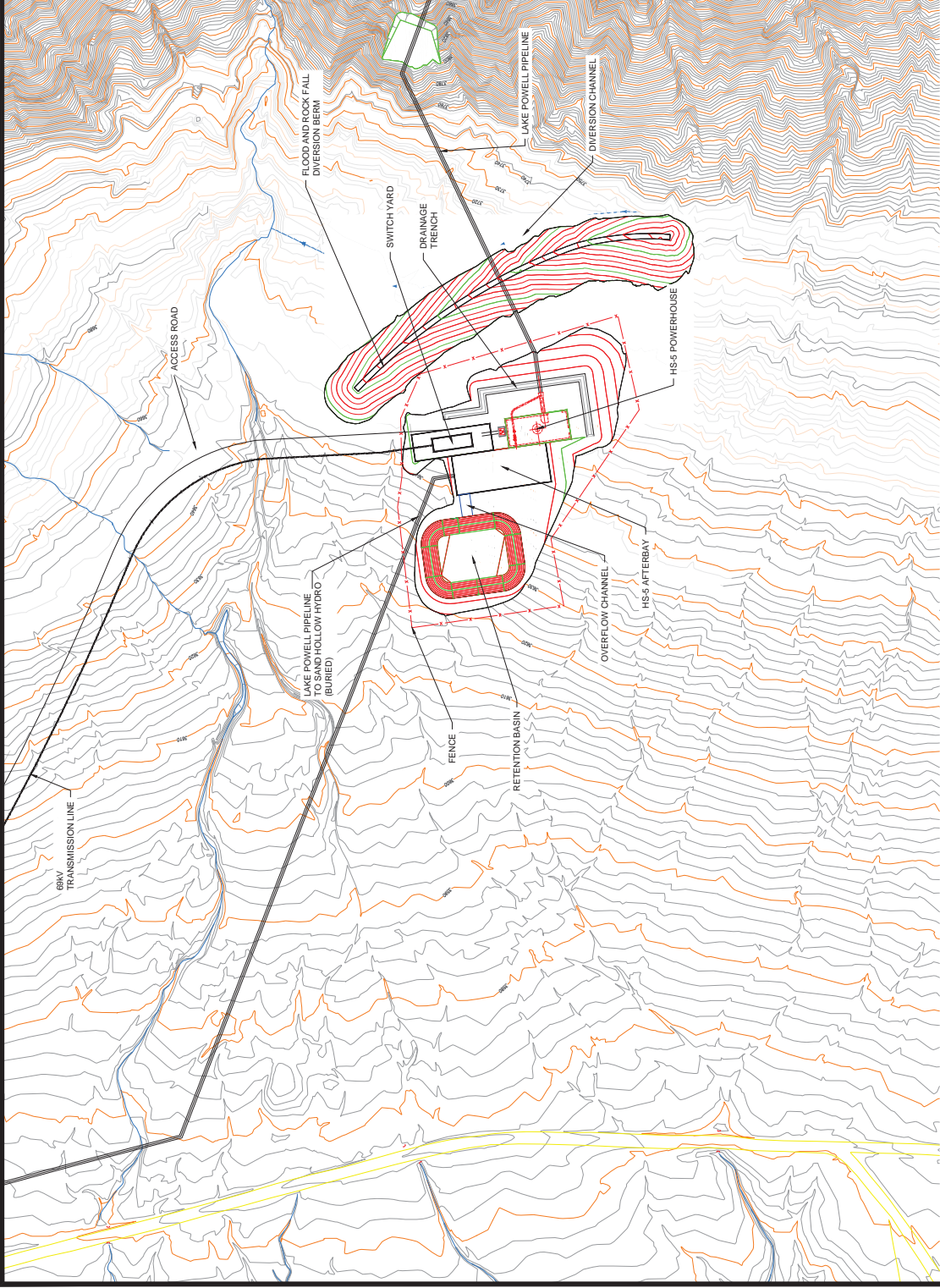


SECTION C - C

NOTE:
 1. ELEVATIONS SHOWN IN THE PLANS AND SECTIONS REFER TO A LOCAL DATUM SET AT THE APPROXIMATE GROUND SURFACE ELEVATION AT THE HYDROPOWER STATION.



NOTE:
 THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY DESIGN CONCEPTS FOR THE PROJECT. ONLY FEATURES ILLUSTRATED ON THIS DRAWING ARE NOT TO BE USED AS A BASIS FOR DESIGN.

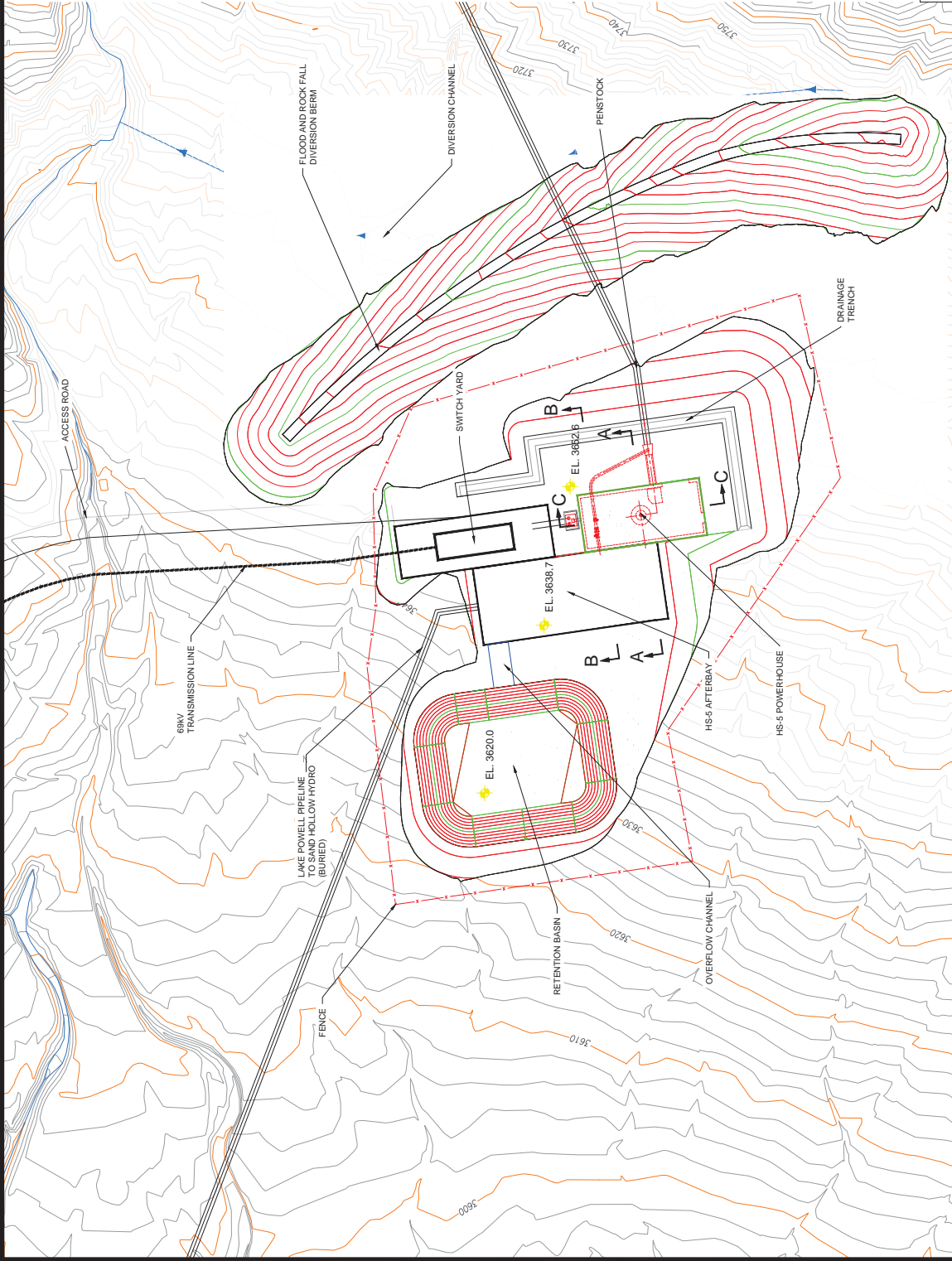


NOTE:
THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY
DESIGN CONCEPTS ONLY. THE LOCATION AND
ONLY FEATURES ILLUSTRATED ON THIS DRAWING ARE
NOT TO BE USED AS A BASIS FOR DESIGN.

LAKE POWELL PIPELINE PROJECT

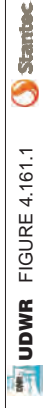
UDWR FIGURE 4.160

HURRICANE CLIFFS
HS-5 IN-LINE HYDRO STATION



NOTE:
THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY
DESIGN CONCEPTS ONLY. THE EXACT LOCATION AND
FEATURES ILLUSTRATED ON THIS DRAWING ARE
NOT TO BE USED AS A BASIS FOR DESIGN.

LAKE POWELL PIPELINE PROJECT



UDWR FIGURE 4.161.1

HURRICANE CLIFFS
HS-5 IN-LINE HYDRO STATION
KEY PLAN
SHEET 1 OF 5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date - March 23, 2020


District -

Resource Area - State Park

Activity (program) - Lands and Realty

****KOP 41 Sand Hollow HS and Transmission Line**

SECTION A. PROJECT INFORMATION

1. Project Name Lake Powell Pipeline Sand Hollow HS and Transmission Line Both Alternatives		4. Location - Sand Hollow State Park Township - 42S Range - 14W Section - 25	5. Location Sketch 
2. Key Observation Point KOP 41			
3. VRM Class N/A			

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	Flat in foreground, rolling hills and flat mesas, flat water surface	Low, indistinct, irregular	Rectangular vehicle in foreground, few rectangular, distinct in background
LINE	Horizontal foreground, curving, angled, angled in background	Indistinct	Horizontal, vertical, regular, distinct in background
COLOR	Brown to reddish tan, light to dark gray in background	Gray/green	White vehicle in foreground, few white to gray in background
TEX-TURE	Fine to medium	Fine to medium in foreground, stippled	Few smooth to coarse in background

SECTION C. PROPOSED ACTIVITY DESCRIPTION

1. LAND/WATER		2. VEGETATION	3. STRUCTURES
FORM	same with additional landform changes associated with pipeline and facility site including berm	swath and patch of cleared vegetation / re-vegetated area	Rectangular building, cylindrical poles, repetitious vertical elements
LINE	additional lines associated with disturbances and berm edges	edges of vegetation disturbances/revegetation band	variety of lines including edges of building, substation, and transmission lines
COLOR	lighter in disturbed areas	additional greens in disturbed areas	solid colors and reflective materials
TEX-TURE	same	same	additional coarse items on less developed side of reservoir

SECTION D. CONTRAST RATING SHORT TERM - X LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource? management objectives? Yes No N/A on State land (Explain on reverse side)			
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)							
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None				
ELEMENTS	Form			X				X		X				3. Additional mitigating measures recommended? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side) Contrast rating takes into account Environmental Protection and Mitigation Measures			
	Line			X				X			X						
	Color			X				X				X					
	Texture				X				X		X						
Evaluator's Names														Date			
Allysia Angus, BLM;														April 2020;			
Barb Santner/Stantec														March 23, 2020			

Comments from item 2.

The KOP is from a Sand Hollow State Park campground looking northeast. The proposed facilities are a hydrostation (HS) and a transmission line. The facilities would include a power house, substation, access road, transmission line, 10' facility fence, berm and pipeline alignment. Refer to attached site plan and section.

Visual and restoration mitigation measures of proposed facilities described in the POD would reduce the degree of visual contrast. The power house structure and ancillary facilities would be colored and textured to match surroundings using a non-reflective, textured surfacing in a random shape pattern and colored either a standard BLM environmental color or a custom color.

Sand Hollow HS would be on the southeastern edge of the reservoir just east of the Sandpit Campground. The transmission lines would wrap around the campground and reservoir on the south side before swinging north toward the subdivision.

RELEVANT ENVIRONMENTAL FACTORS

Viewing Distance: The proposed facilities are 0.25 mile from the campground and right on the edge of the water. It would be about 1.5 miles across the reservoir from the main parking area.

Angle of Observation: KOP is at straight on viewing angle.

Length of Time the Project Is in View: The facilities would be in view for extended periods of time for those recreating at the state park.

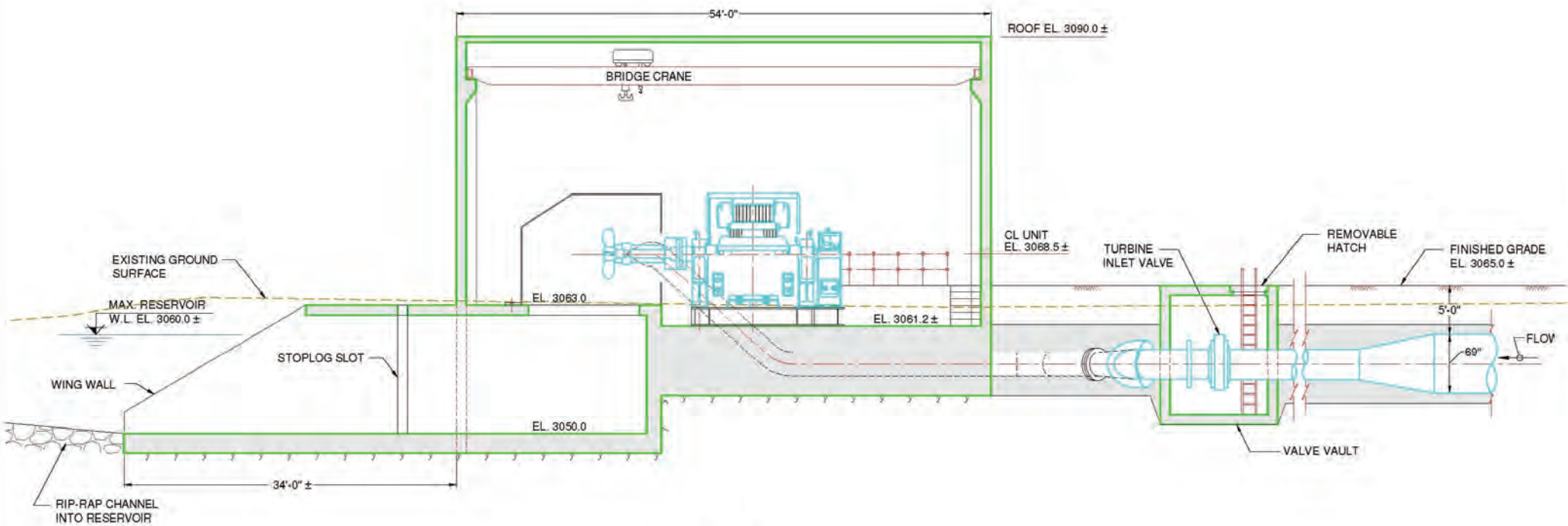
Spatial Relationships: The structures would be near the Sandpit Campground but away from the more developed part of the state park. The broader area is quite close to residential development to the north and west.



Existing Conditions



Five to Ten Years Post Construction Condition



SECTION A - A

NOTE:

THIS DRAWING IS INTENDED TO ILLUSTRATE PRELIMINARY PROJECT LAYOUT CONCEPTS FOR STUDY PURPOSES ONLY. FEATURES ILLUSTRATED ON THIS DRAWING ARE NOT TO BE USED AS A BASIS FOR DESIGN.



LAKE POWELL PIPELINE PROJECT

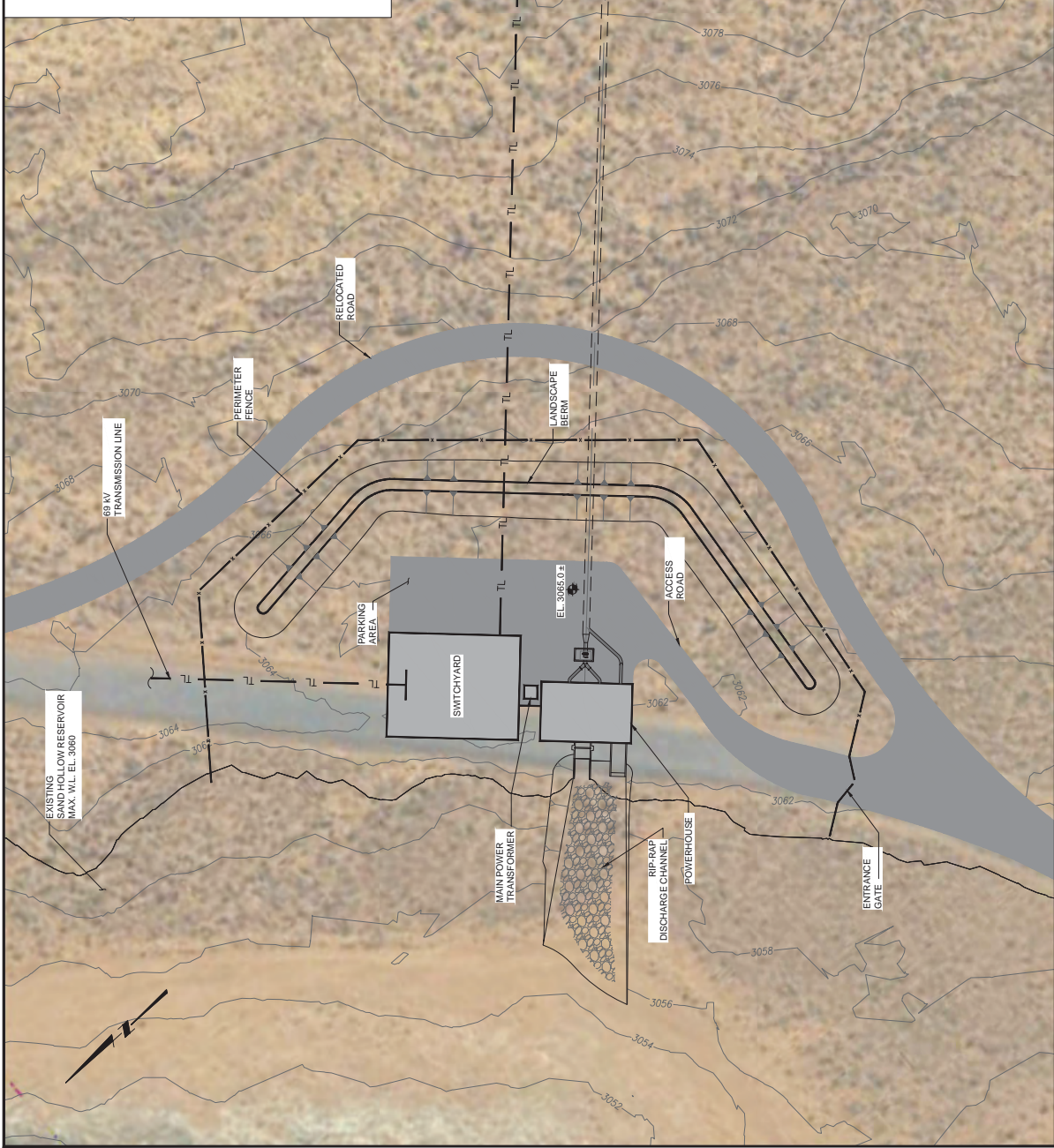
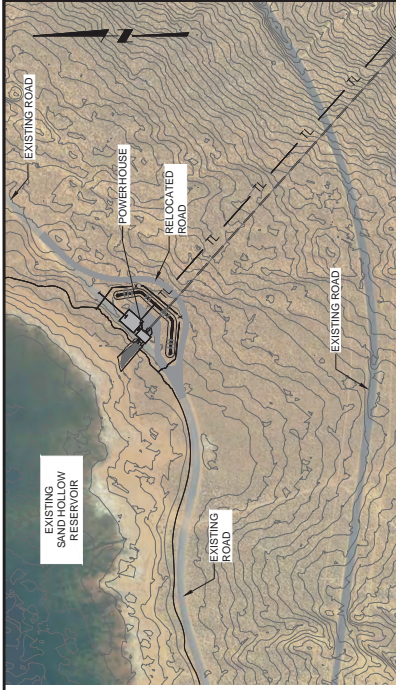


UDWR FIGURE 4.196



MWH

SAND HOLLOW HYDROPOWER STATION
SECTION THROUGH GENERATING UNIT



SPATIAL REFERENCE:
STATE PLANE COORDINATE SYSTEM UTAH SOUTH,
NAD 83, US FEET.



LAKE POWELL PIPELINE PROJECT



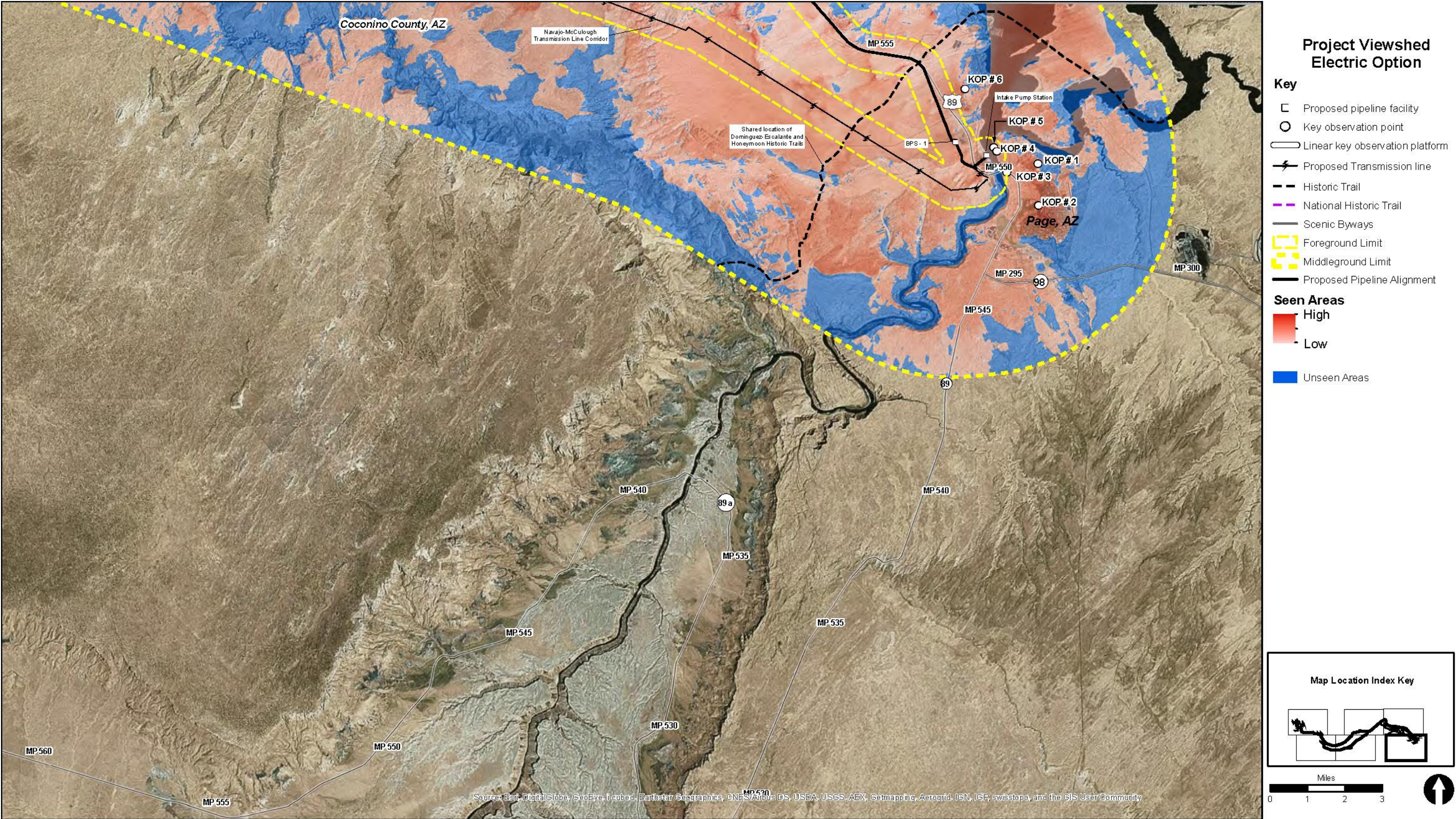
FIGURE 3-29

SAND HOLLOW HYDROPOWER
STATION SITE PLAN

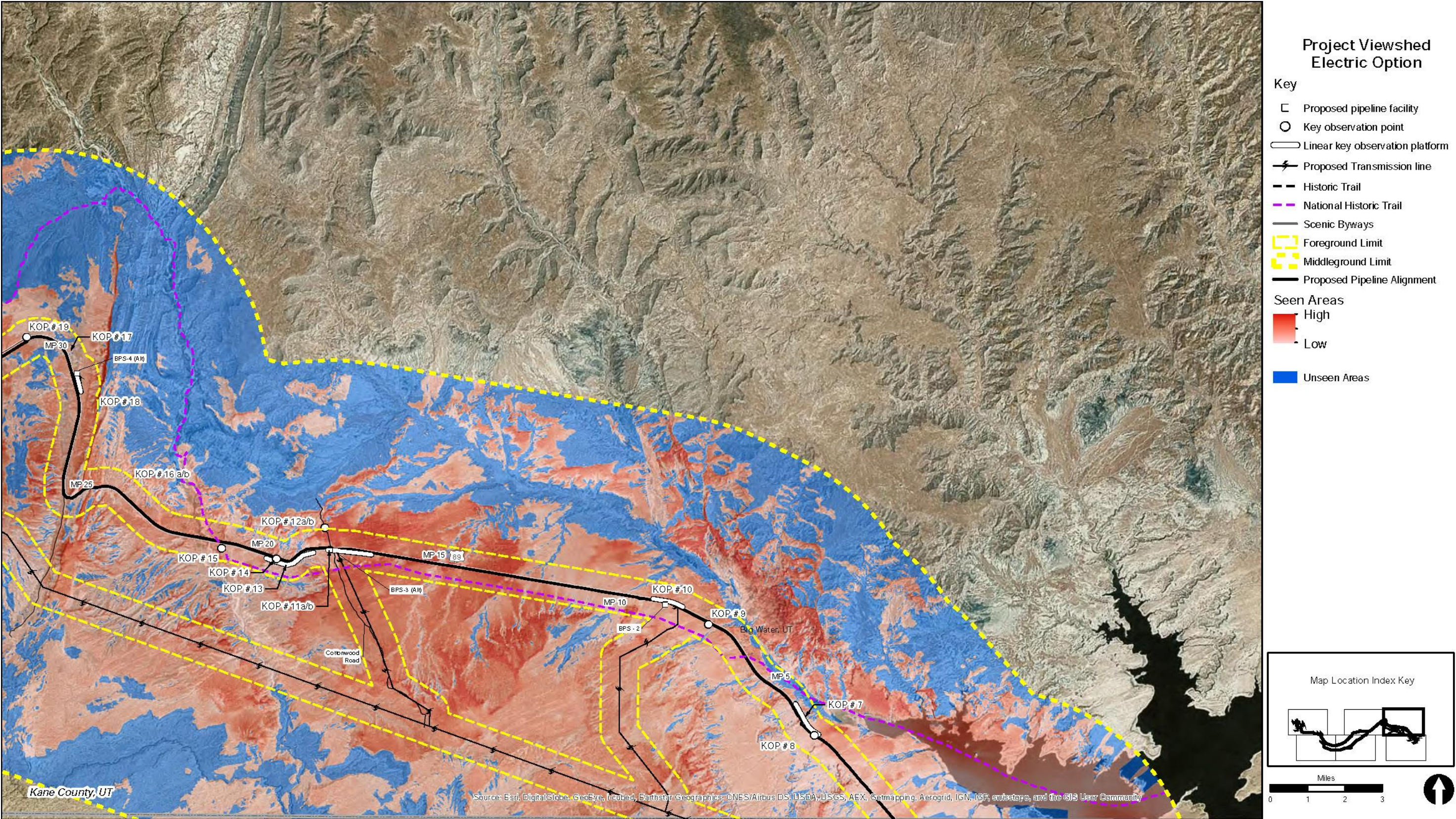
Appendix B.1

Visibility Analysis Maps - Electric Transmission Systems Alignments

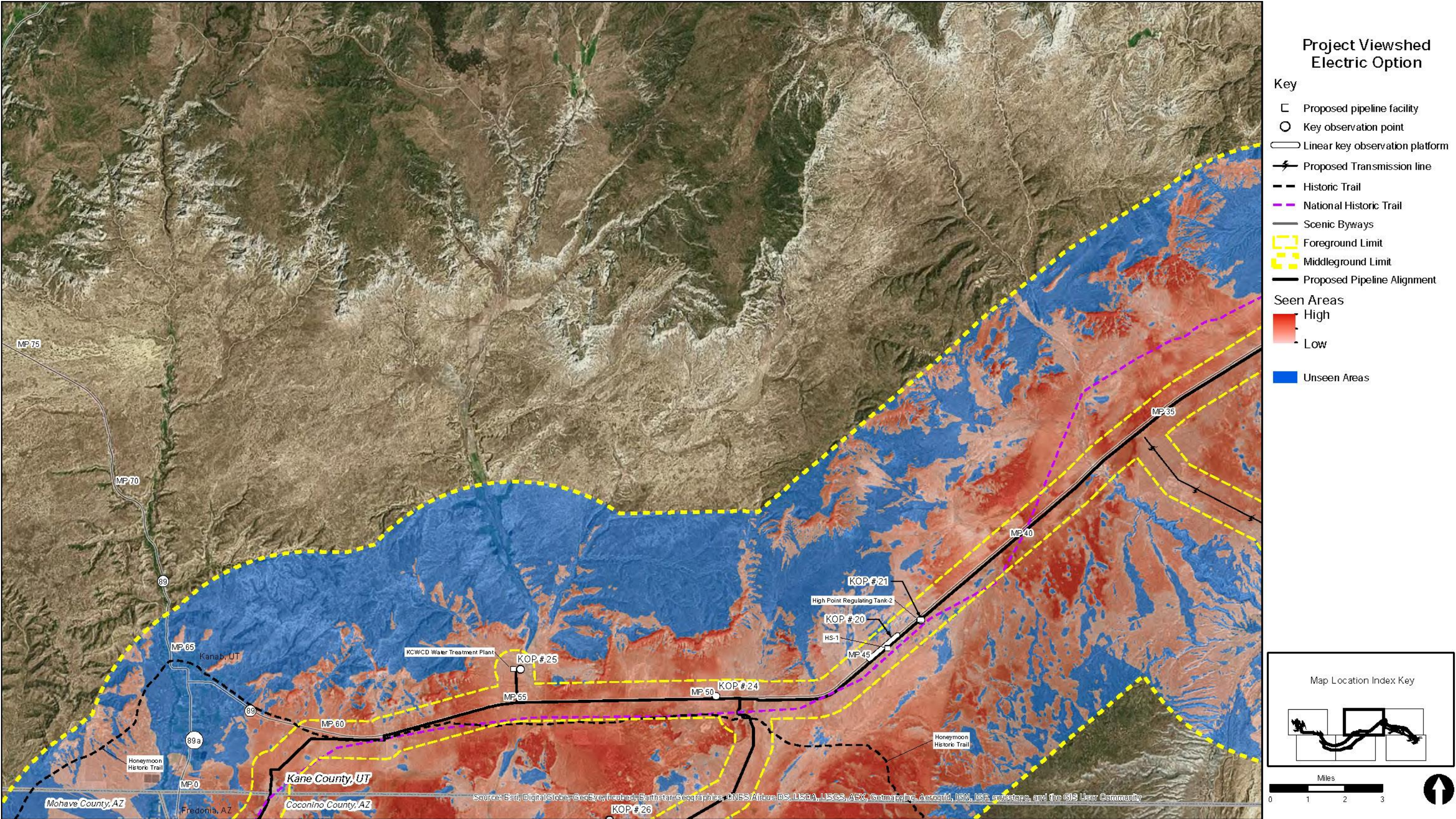
DISCLAIMER: The Visibility Analysis Maps - Electric Transmission Systems include project features and alignments that have been adjusted since 2016, primarily on the western side of project area. They also include some Key Observations Points that have been eliminated from analysis or slightly adjusted in location.



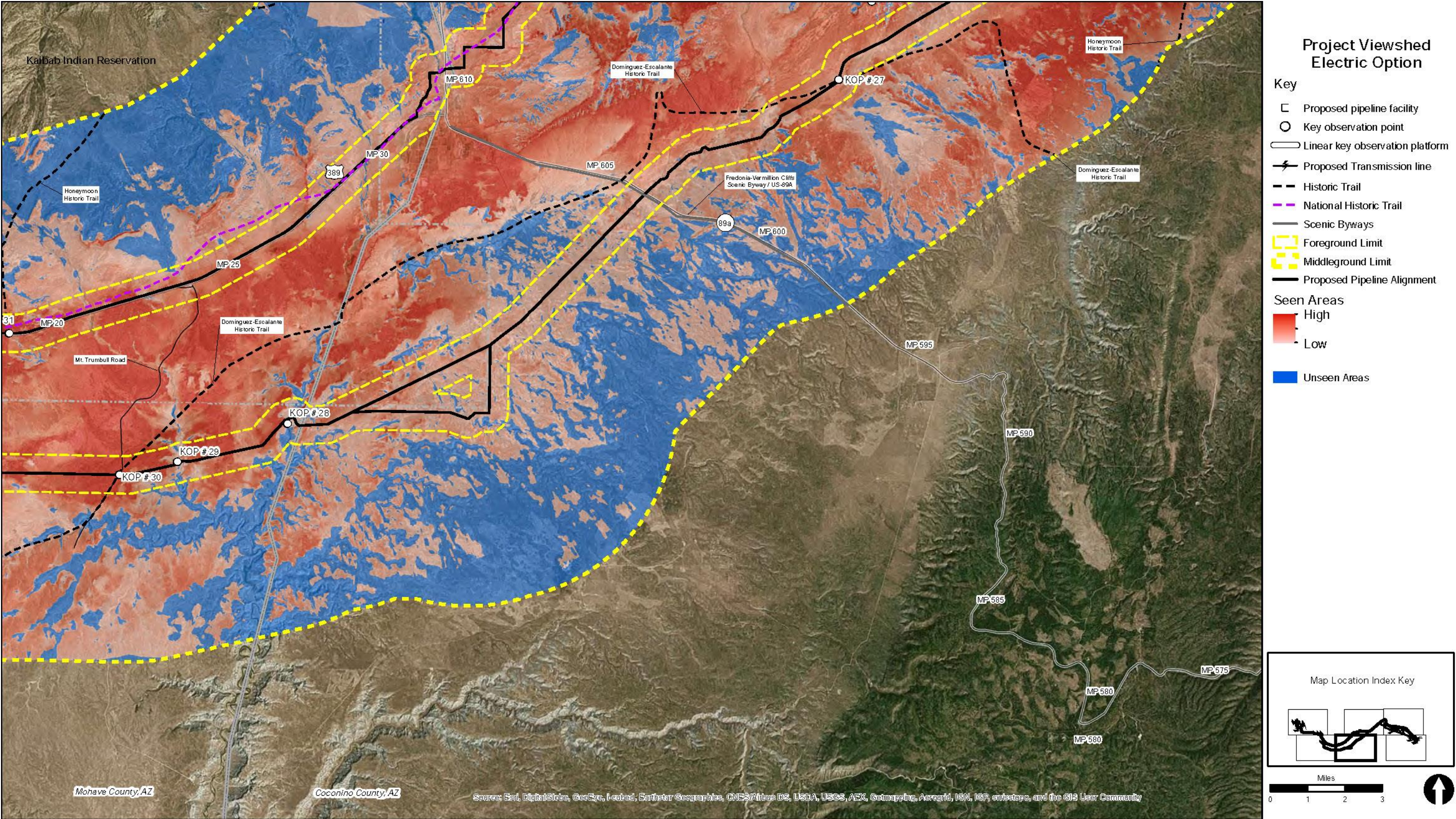
Map 1- Electric Transmission System



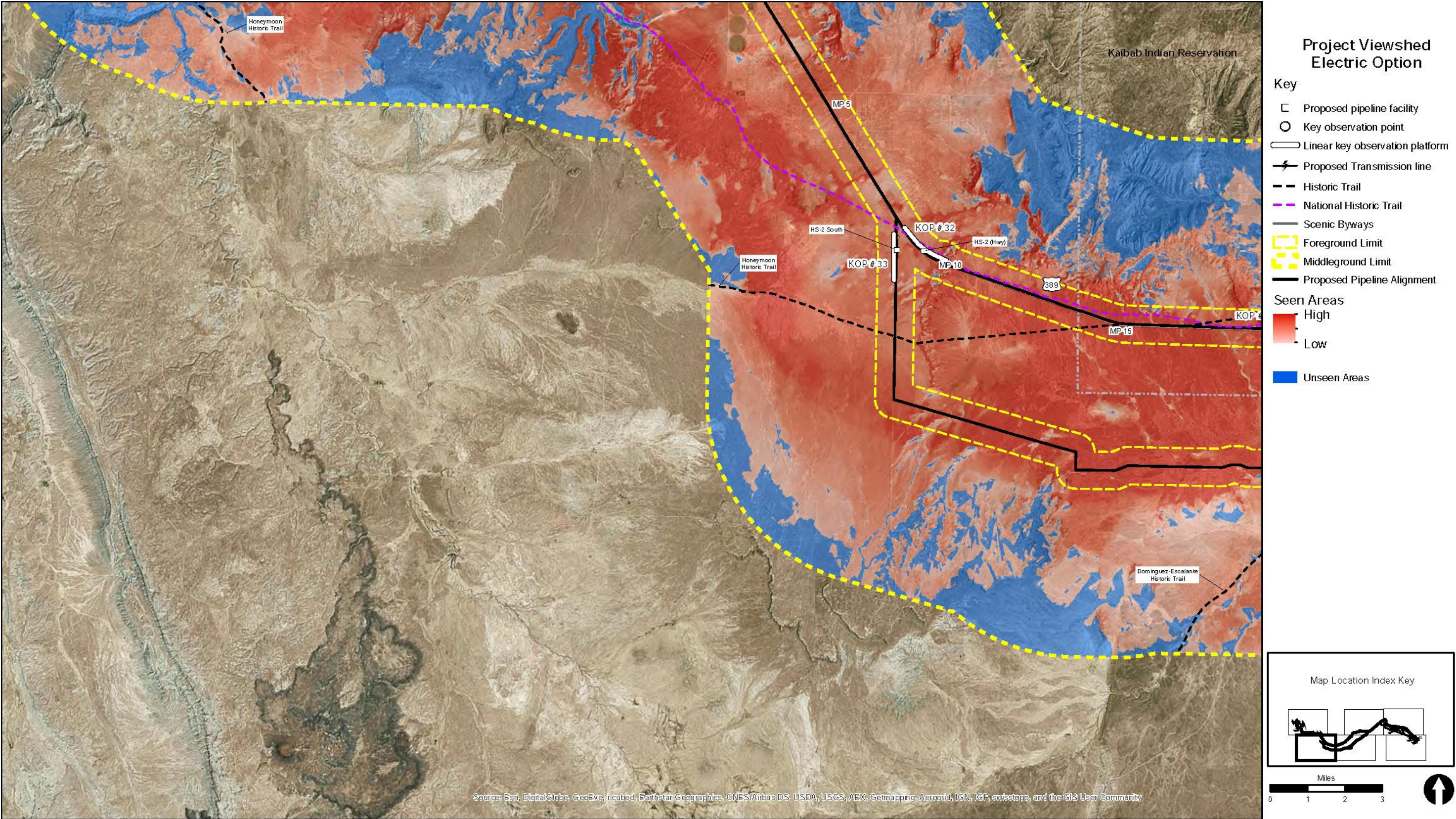
Map 2 - Electric Transmission System



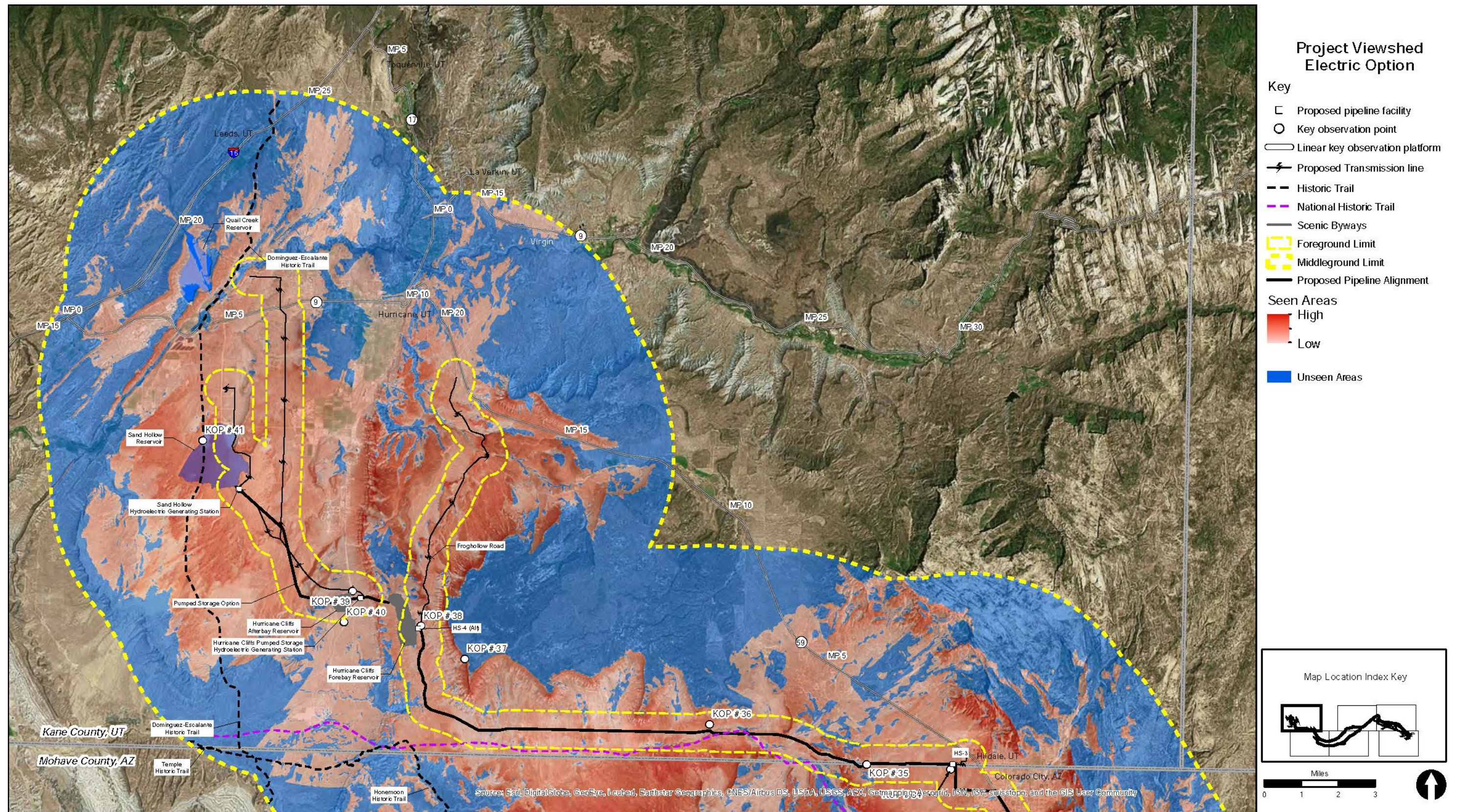
Map 3 - Electric Transmission System



Map 4- Electric Transmission System



Map 5- Electric Transmission System



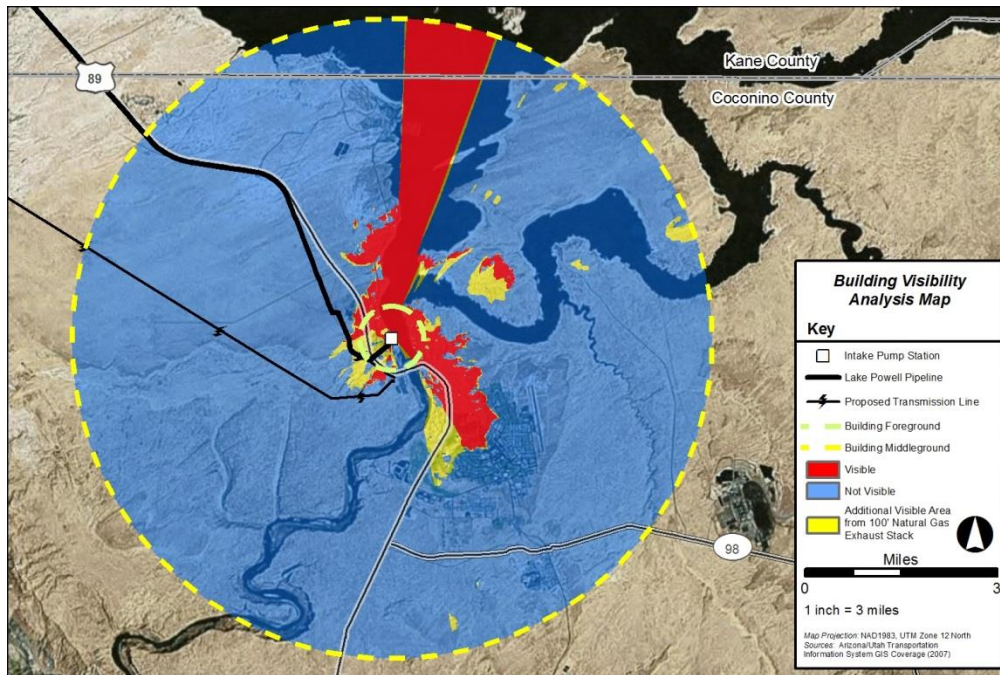
Map 6 - Electric Transmission System

Appendix B.2

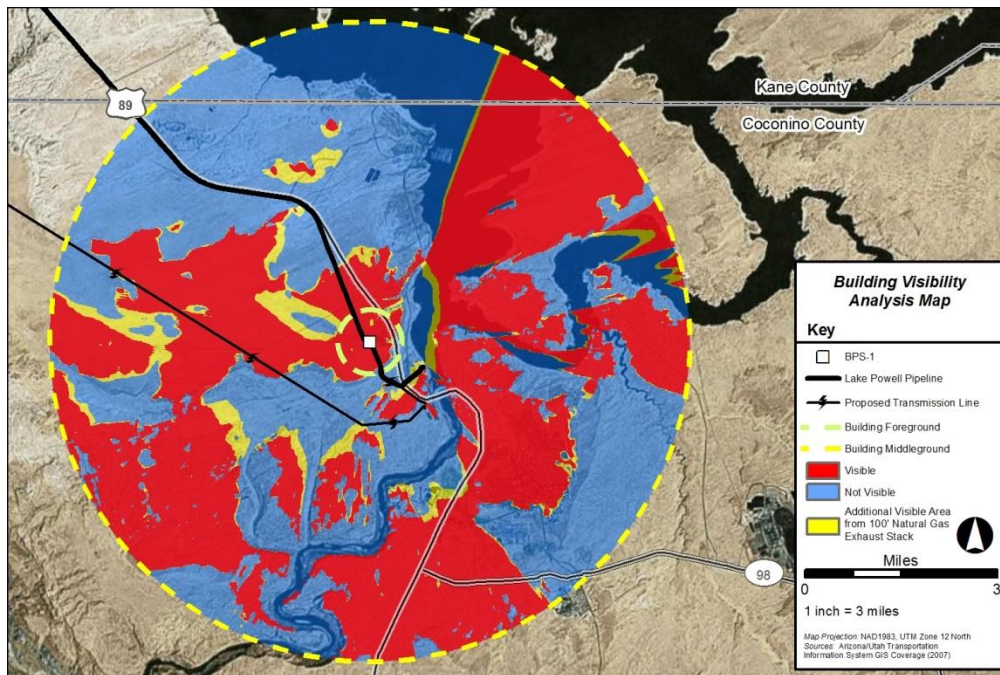
Visibility Analysis Maps—Proposed Buildings

DISCLAIMER: The Visibility Analysis Maps - Proposed Buildings include the visibility of the previously proposed 100' high natural gas exhaust stacks on the booster pump stations (in yellow). Those features are no longer part of the project proposal.

PROPOSED BUILDING VISIBILITY MAPS

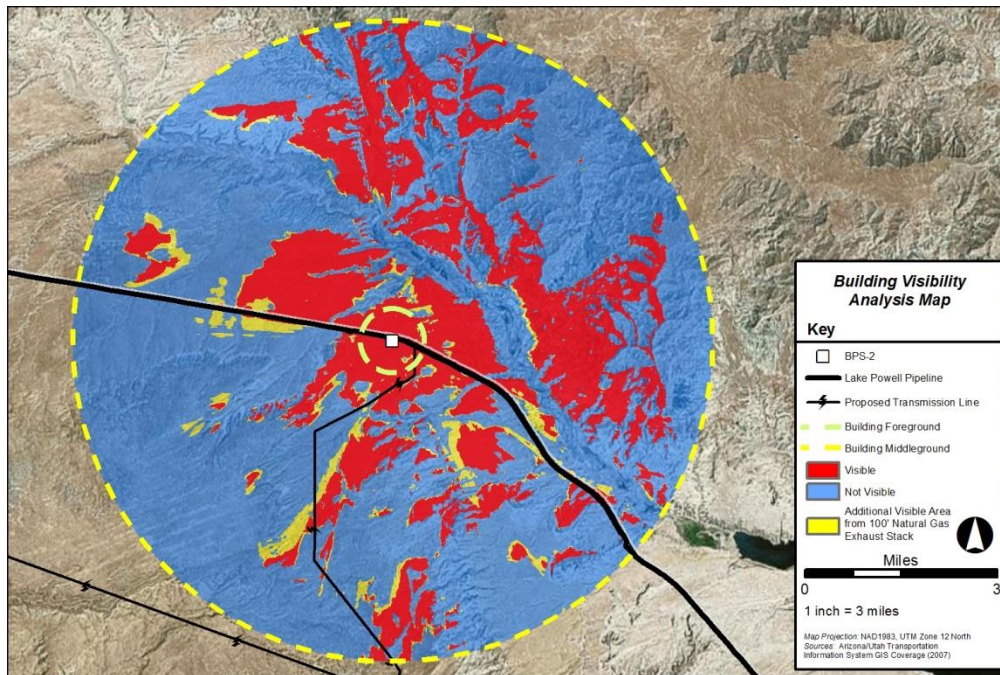


Visibility from Building at Intake Pump Station Facility

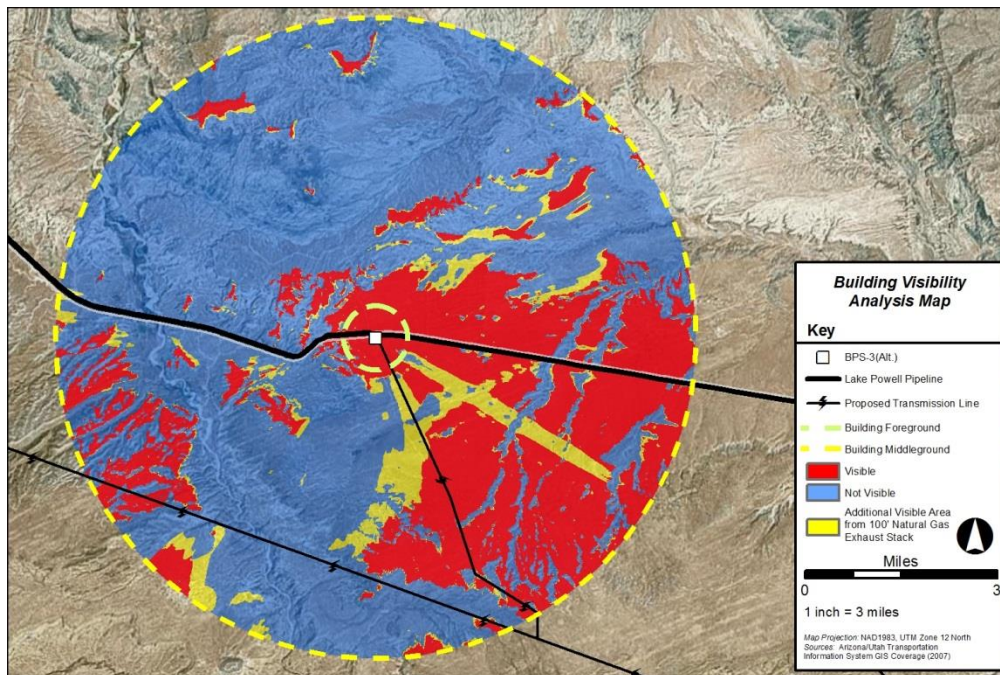


Visibility from Building at BPS-1 Facility

PROPOSED BUILDING VISIBILITY MAPS

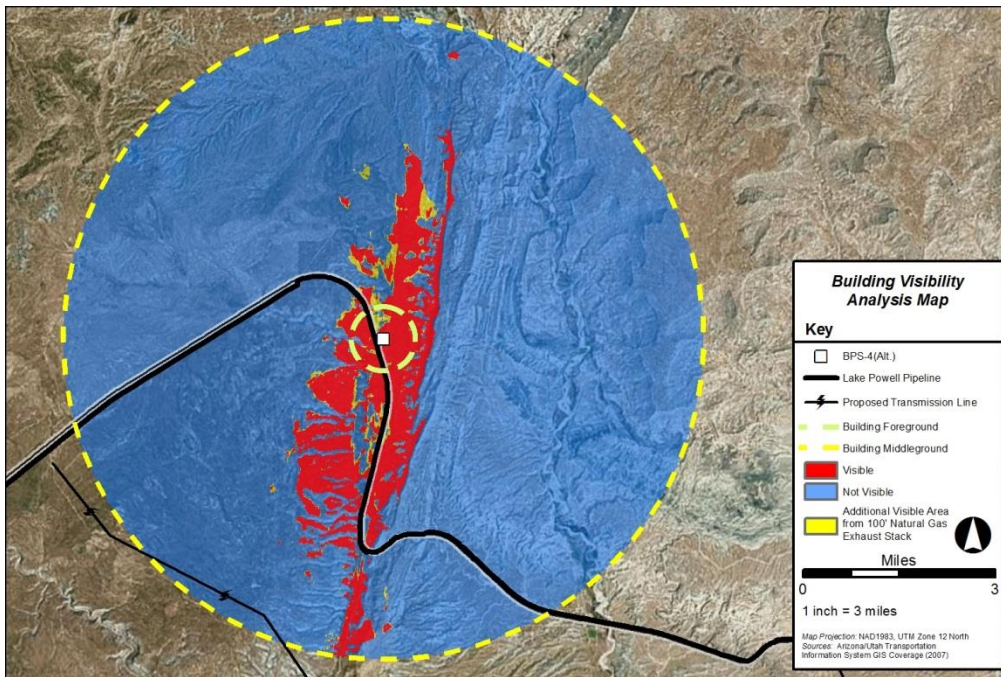


Visibility from Building at BPS-2 Facility

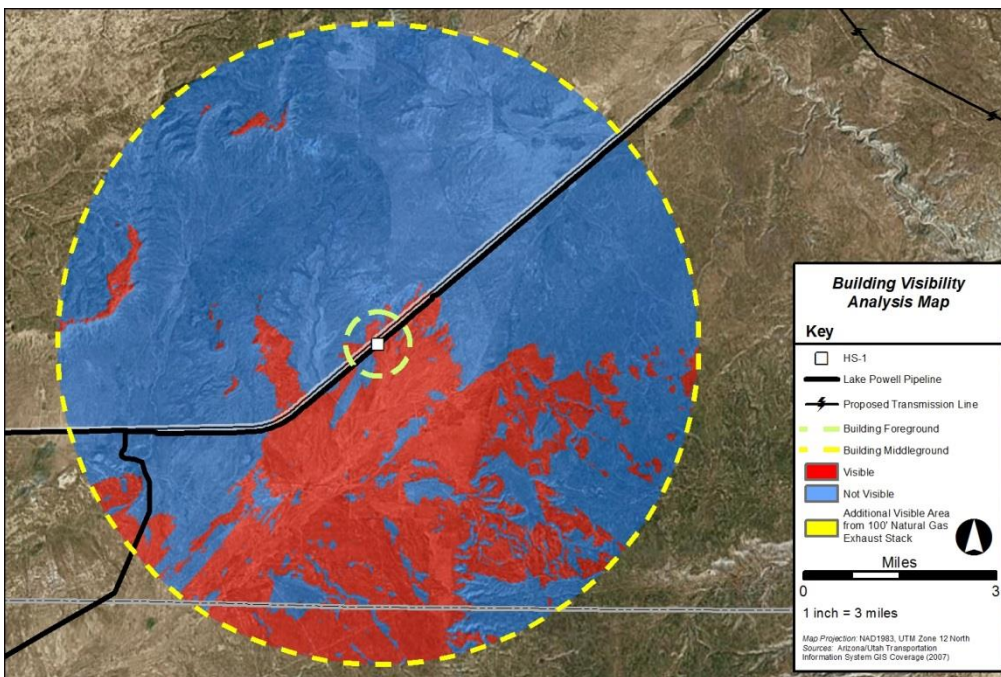


Visibility from Building at BPS-3 Facility

PROPOSED BUILDING VISIBILITY MAPS

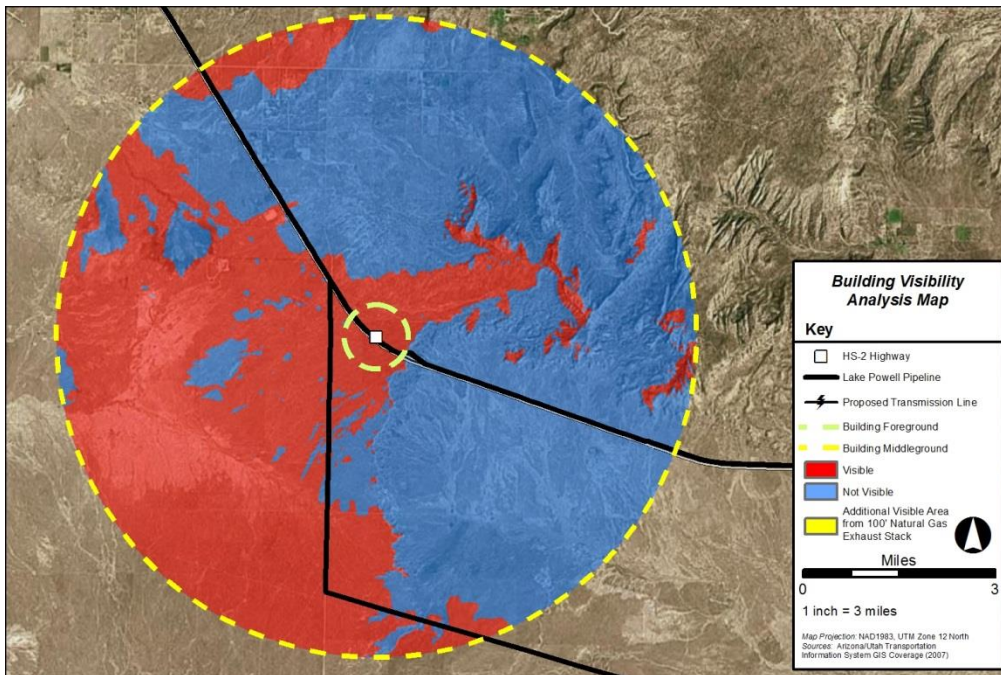


Visibility from Building at BPS-4 Facility

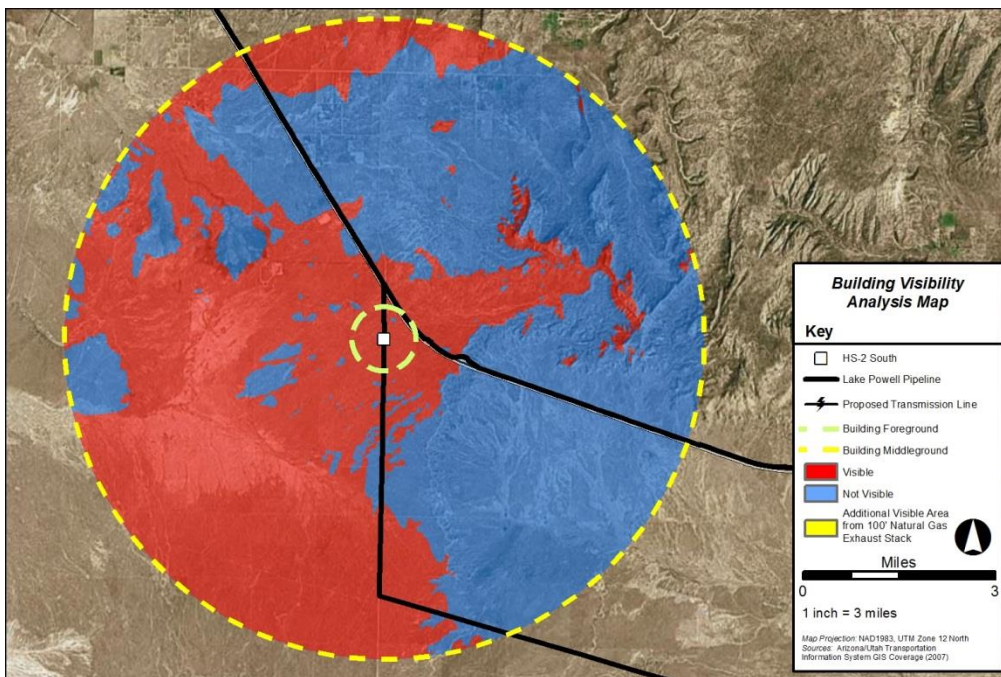


Visibility from Building at HS-1 Facility

PROPOSED BUILDING VISIBILITY MAPS

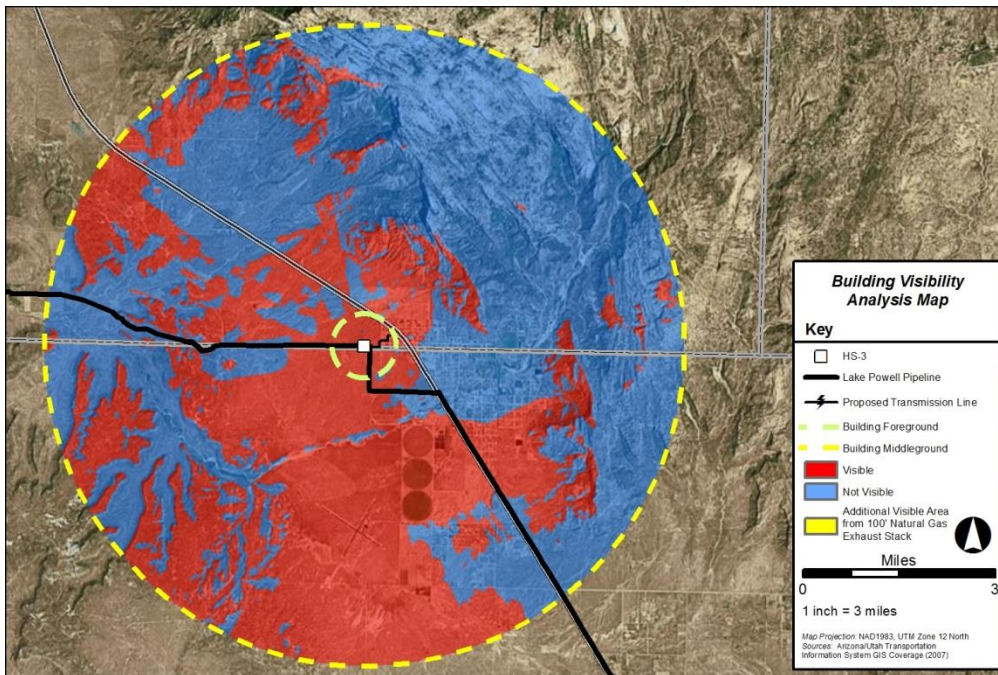


Visibility from Building at HS-2 (Highway) Facility

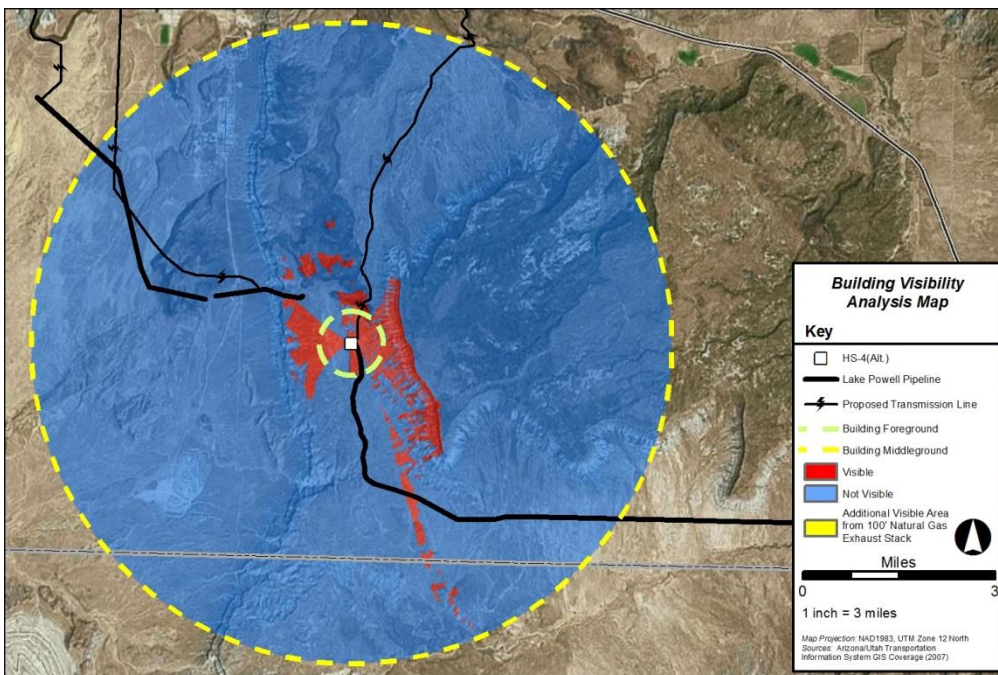


Visibility from Building at HS-2 (Southern) Facility

PROPOSED BUILDING VISIBILITY MAPS



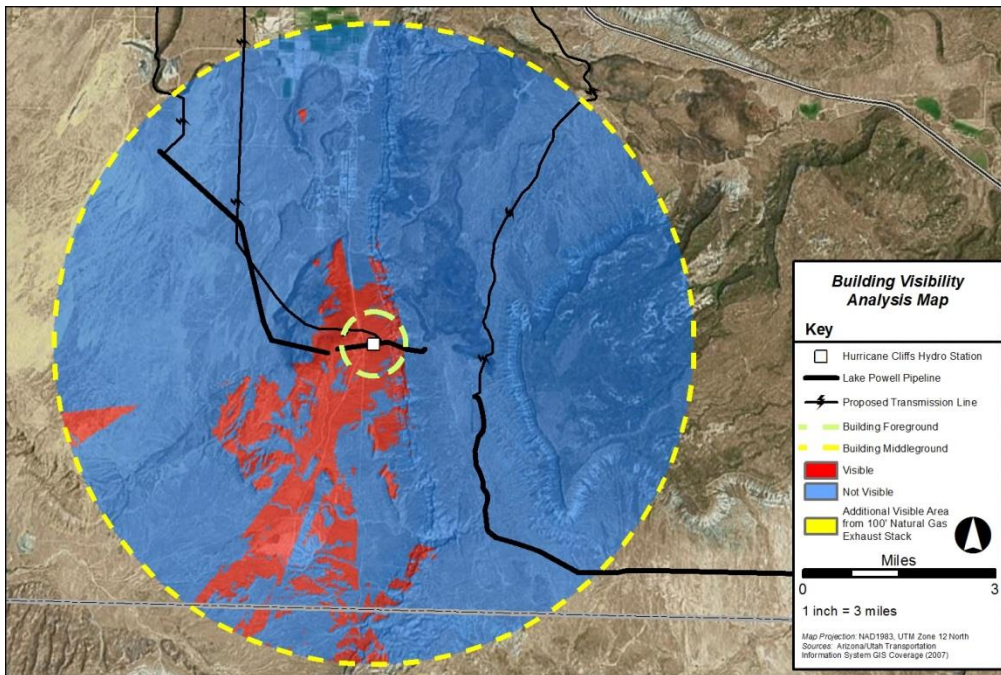
Visibility from Building at HS-3 Facility



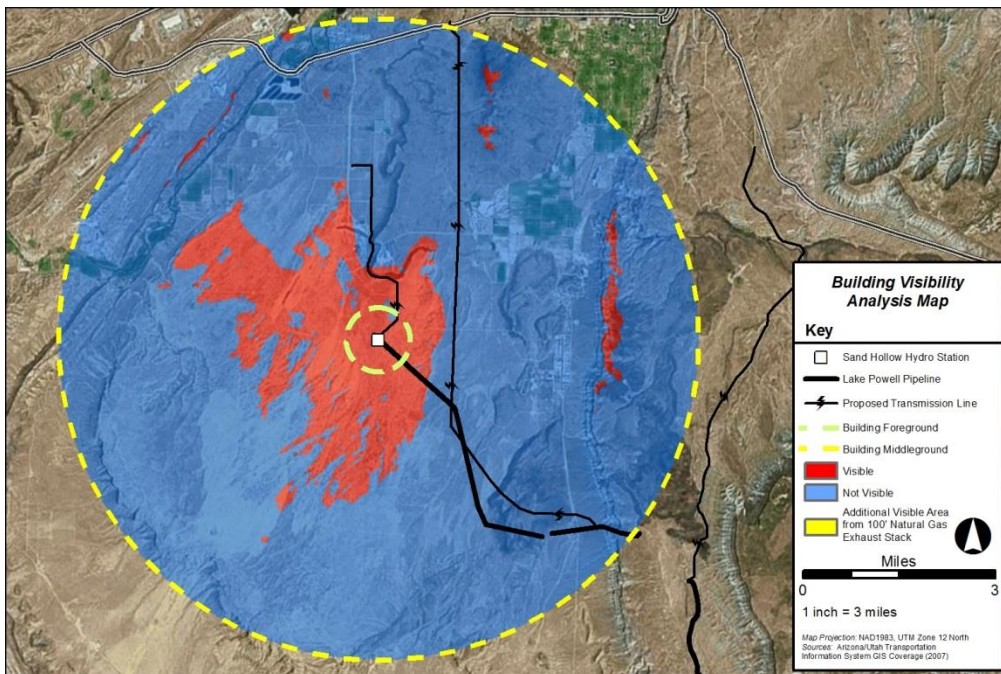
Visibility from Building at HS-4 Alt. Facility

DISCLAIMER: The proposed location for HS-4 is now almost 1 mile north of what is analyzed on this map. A visibility map for that location has not been prepared.

PROPOSED BUILDING VISIBILITY MAPS



Visibility from Building at HS-5 Facility

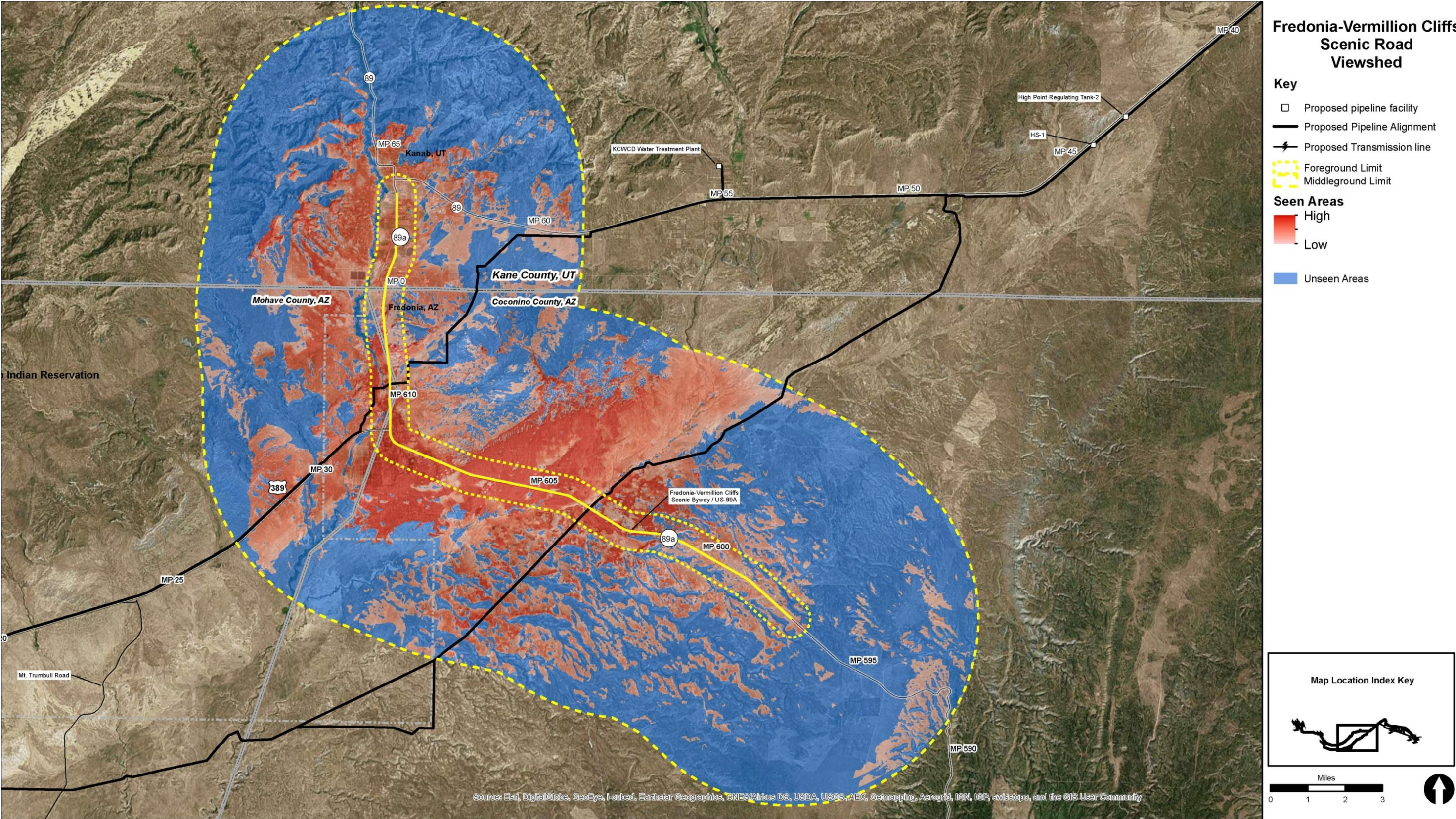


Visibility from Building at Sand Hollow Terminal Station Facility

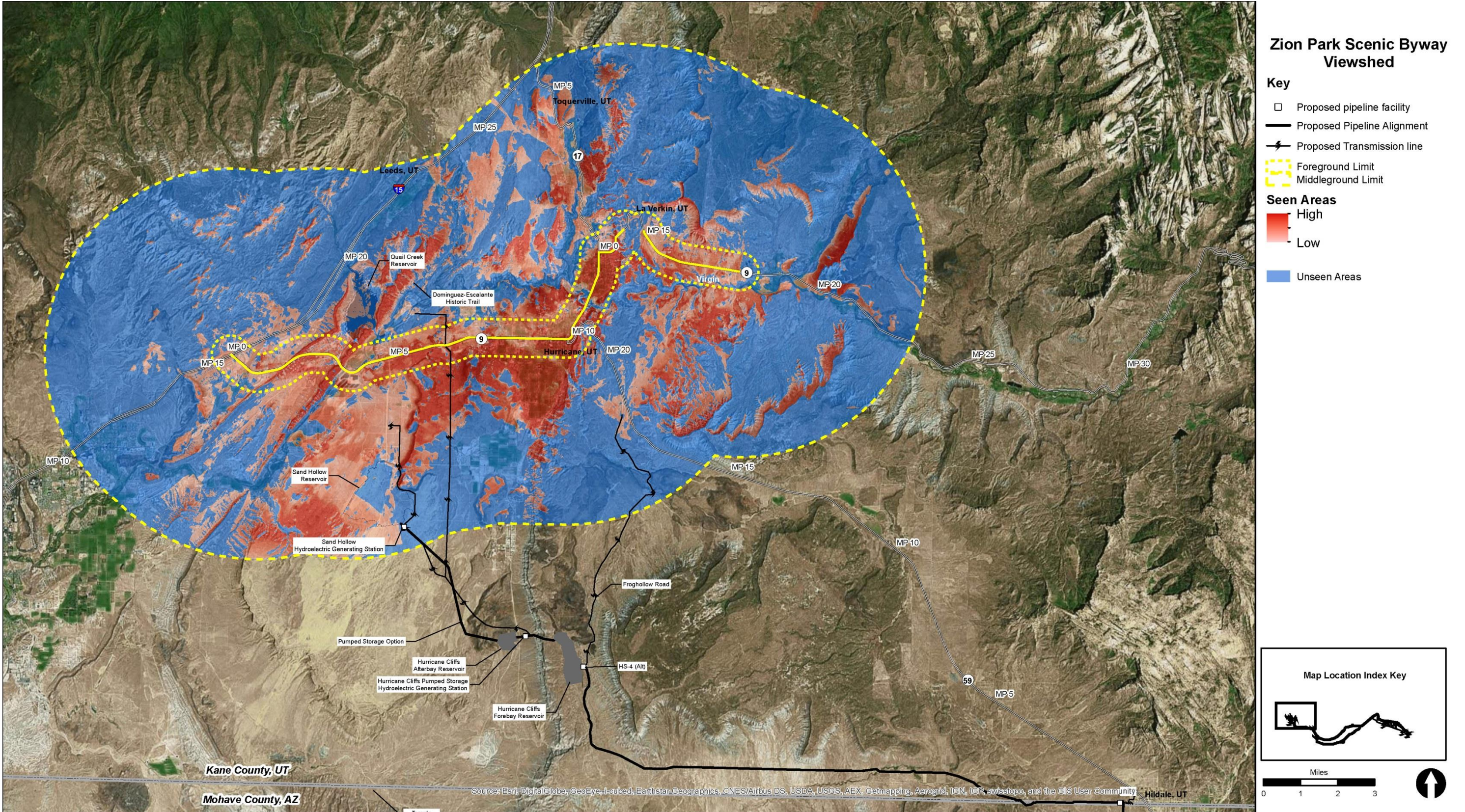
Appendix B.3

Visibility Analysis Maps—Sensitive Linear KOPs

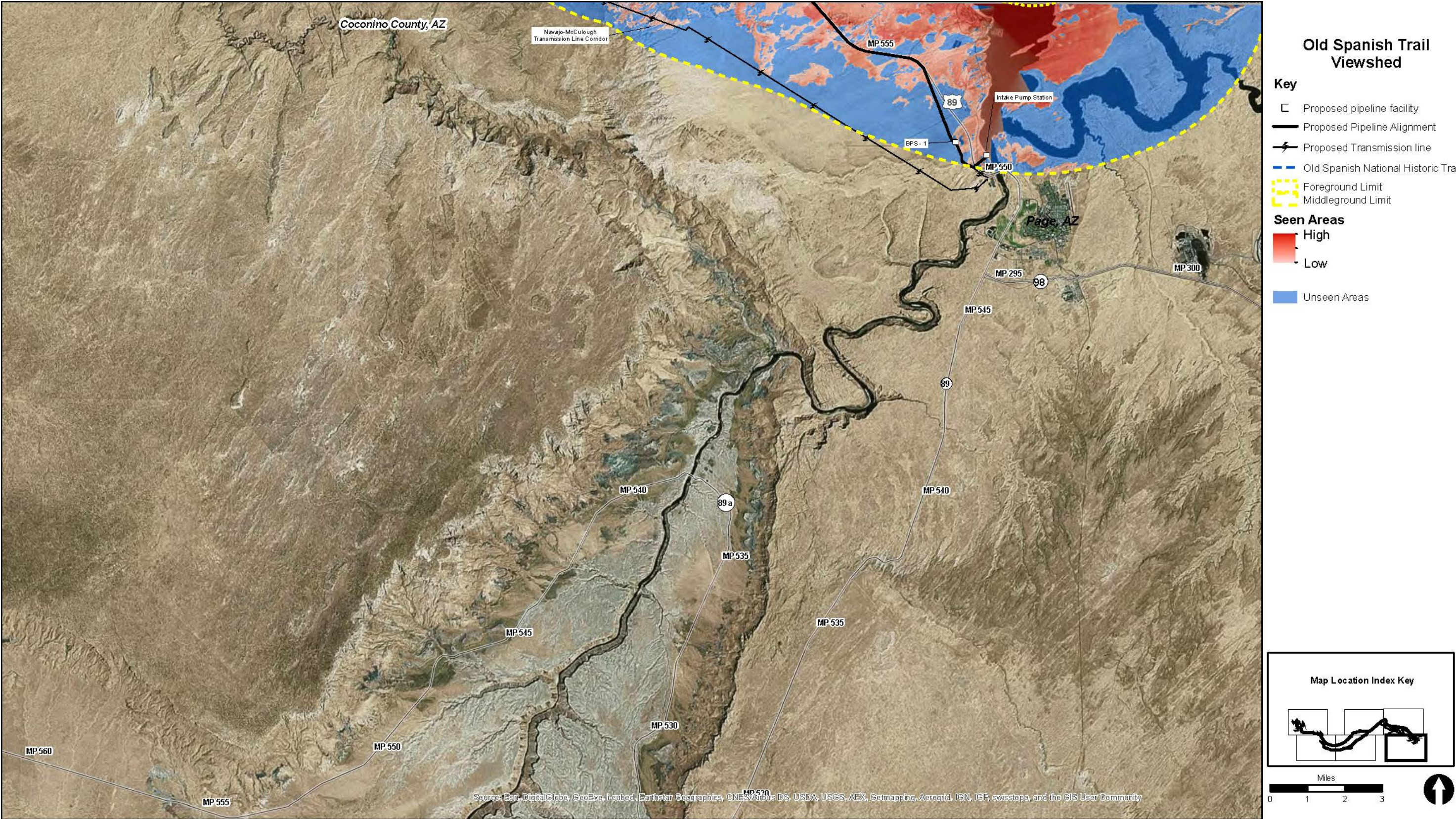
DISCLAIMER: The Visibility Analysis Maps - Power Generating Alternatives include project features and alignments that have been adjusted since 2016, primarily on the western side of project area. They also include some Key Observations Points that have been eliminated from analysis or slightly adjusted in location.



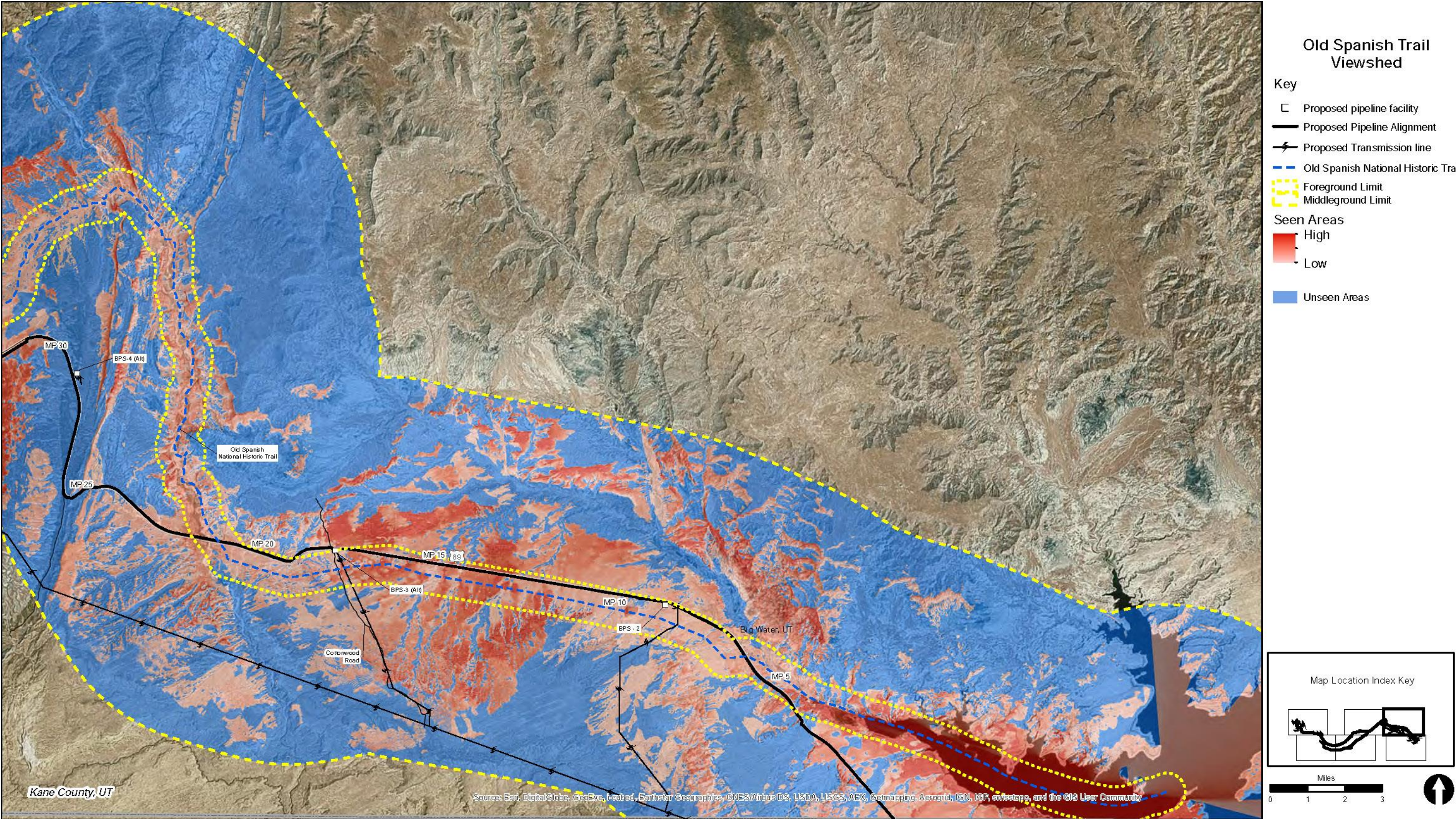
Visibility of Project from Fredonia – Vermillion Cliffs Scenic Road / US 89A



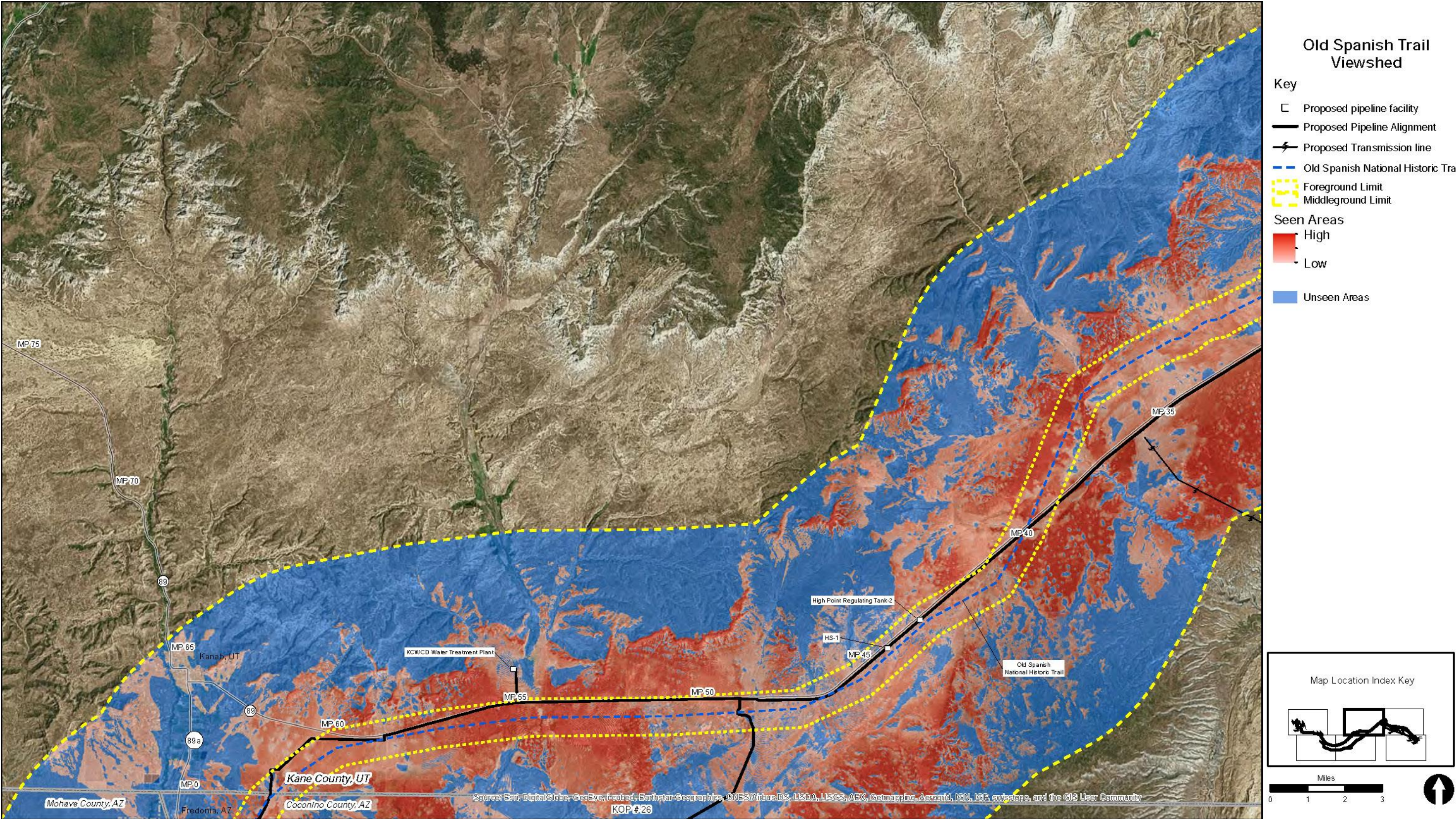
Visibility of Project from Zion Park Scenic Byway



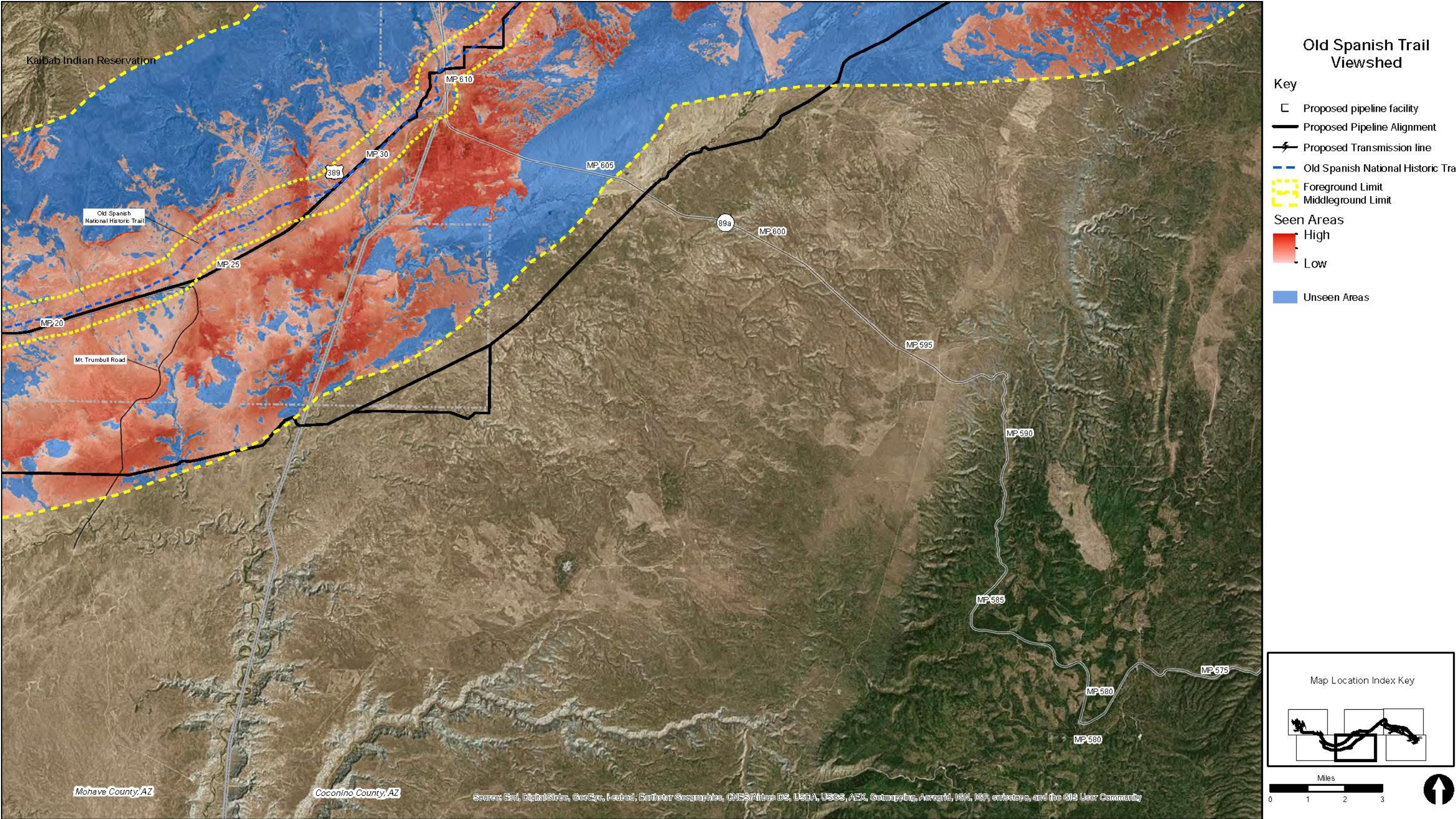
Visibility of Project from Old Spanish National Historic Trail, Map 1



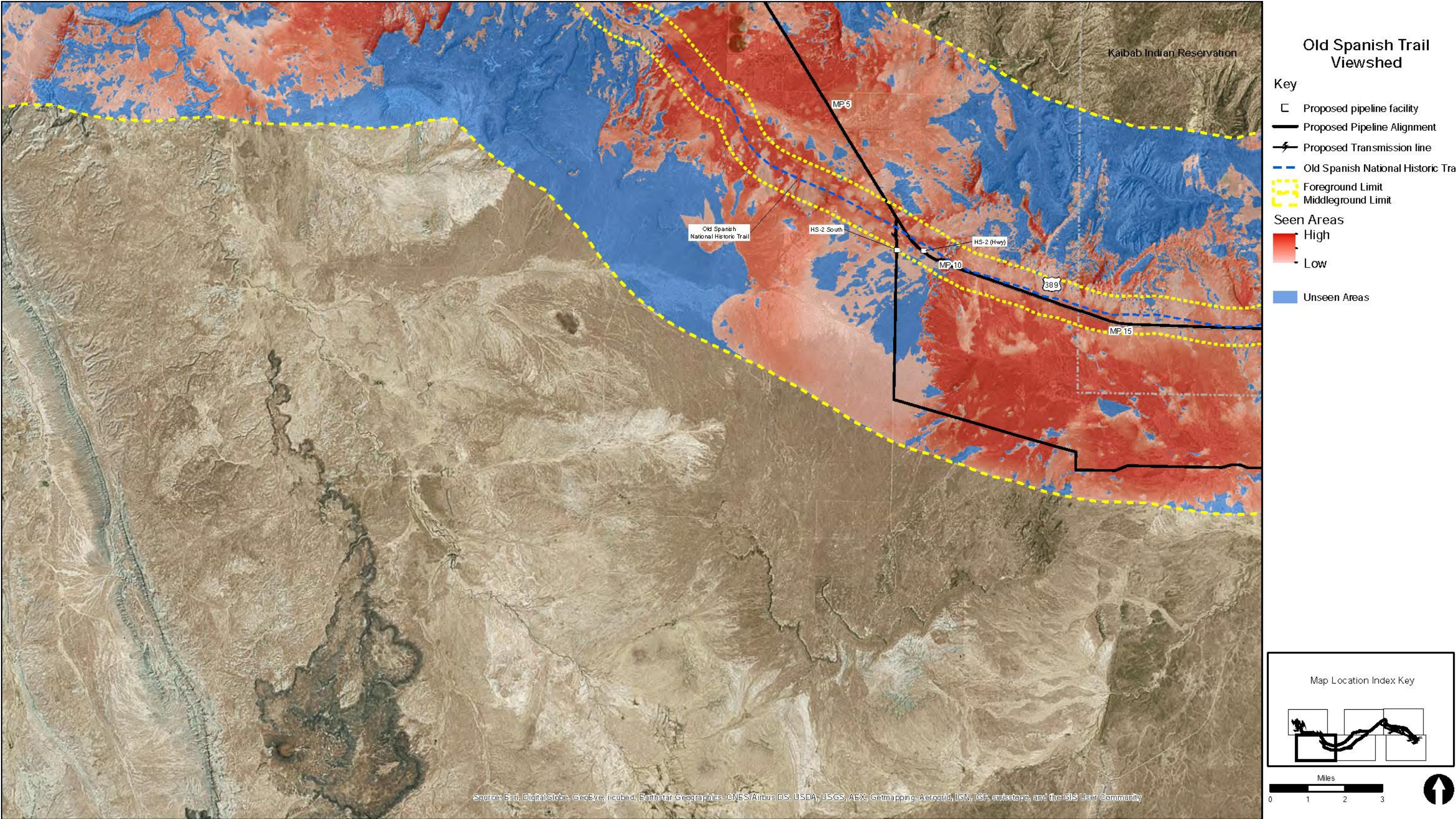
Visibility of Project from Old Spanish National Historic Trail, Map 2



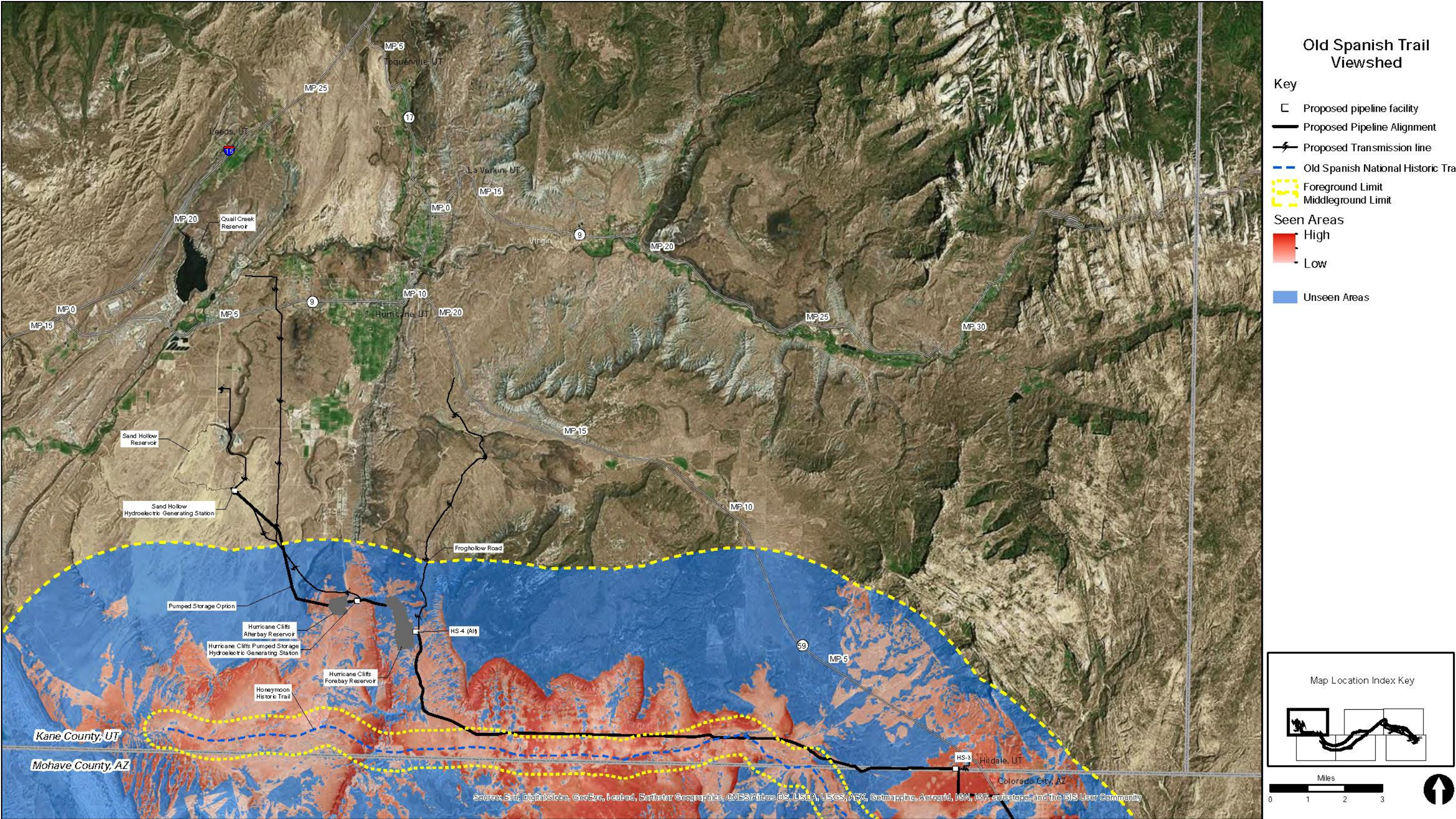
Visibility of Project from Old Spanish National Historic Trail, Map 3



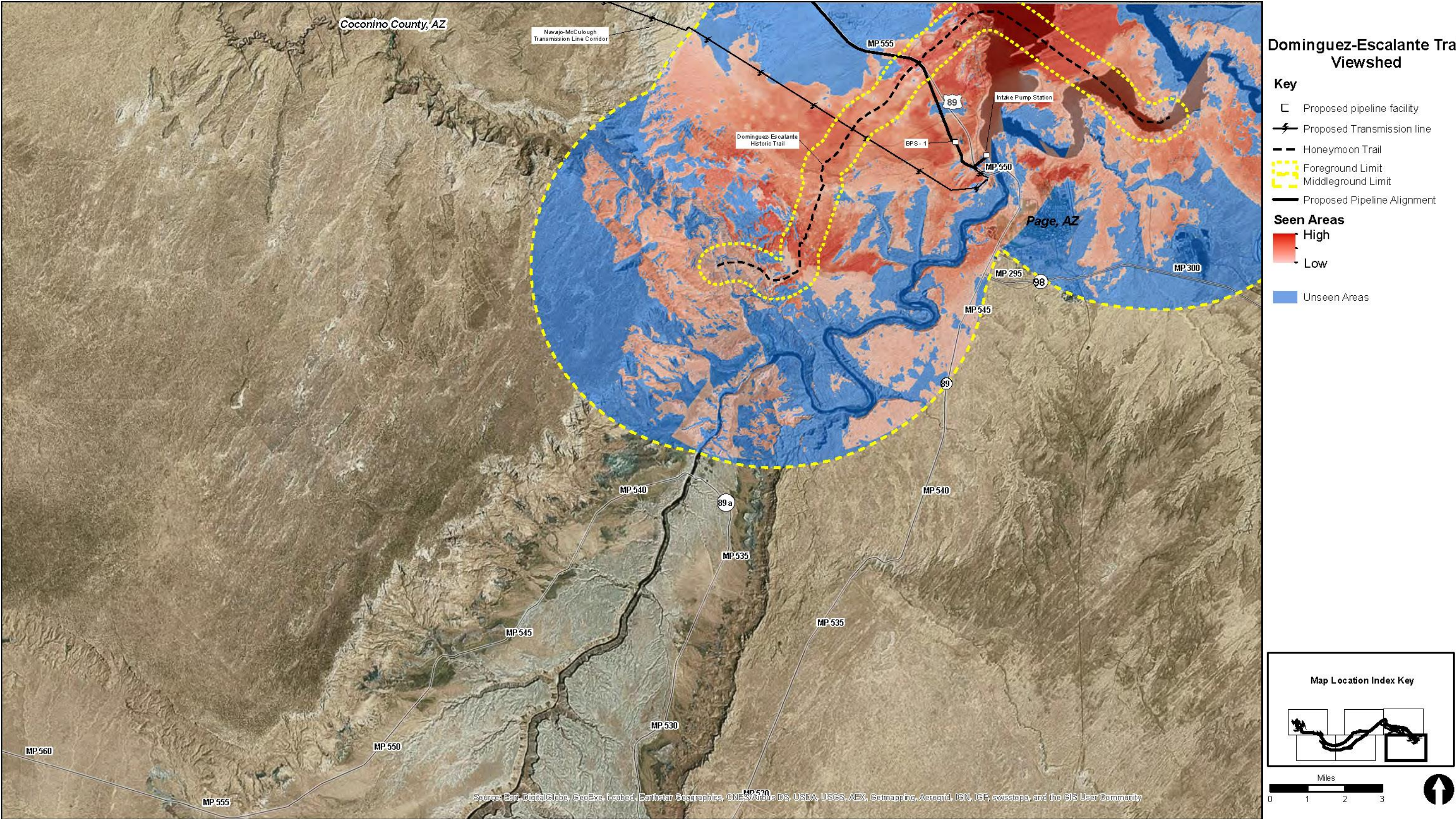
Visibility of Project from Old Spanish National Historic Trail, Map 4



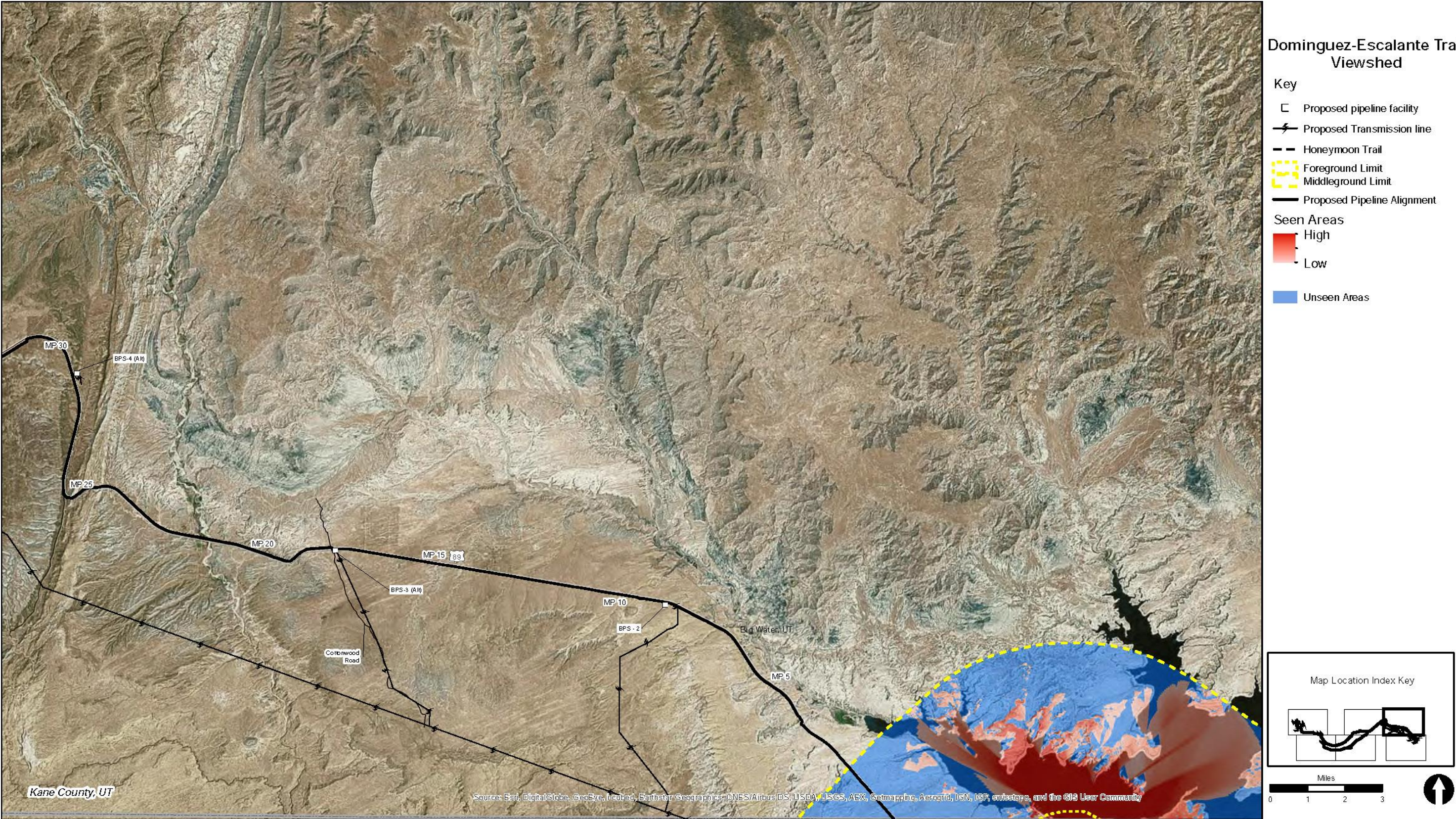
Visibility of Project from Old Spanish National Historic Trail, Map 5



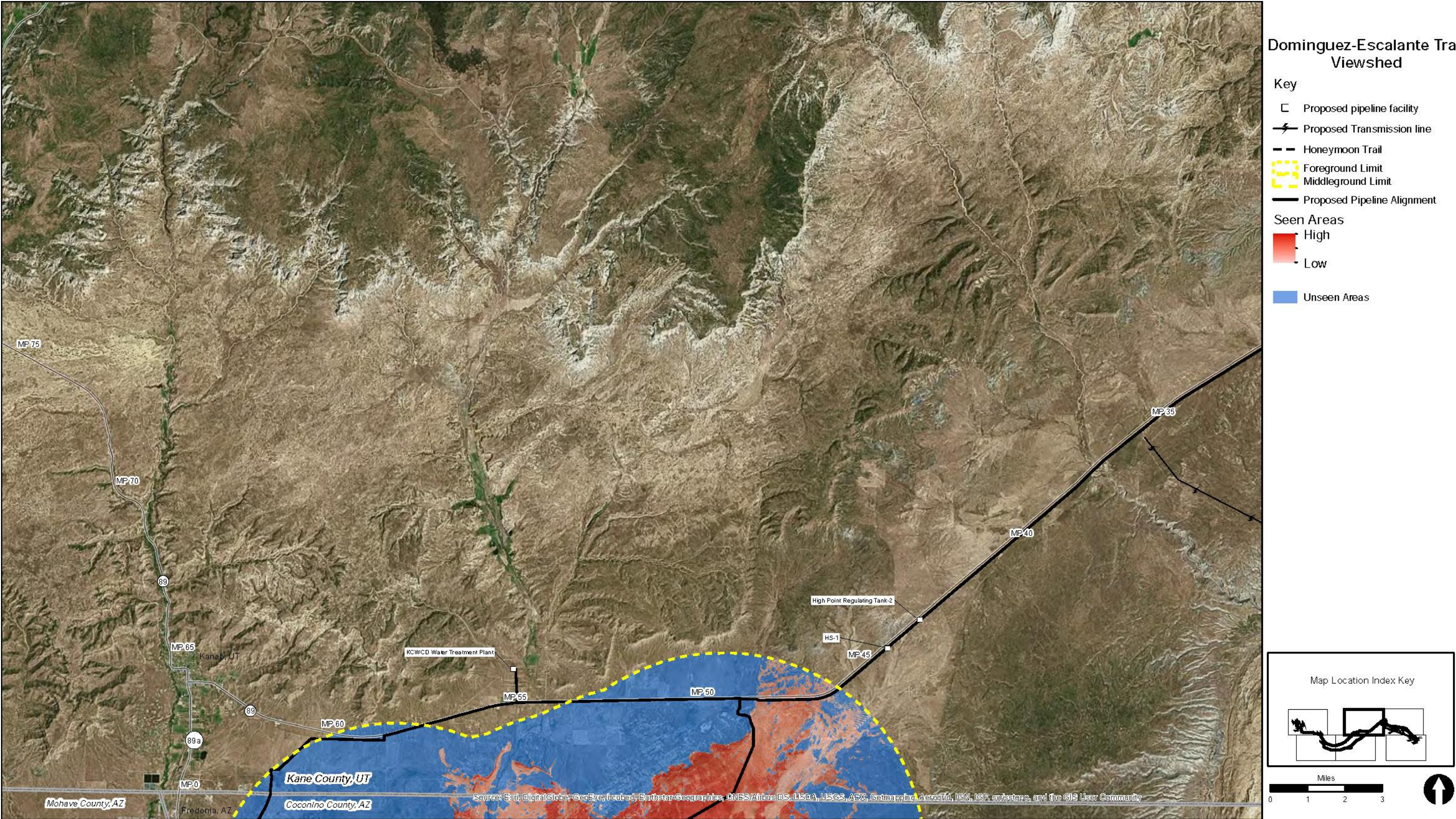
Visibility of Project from Old Spanish National Historic Trail, Map 6



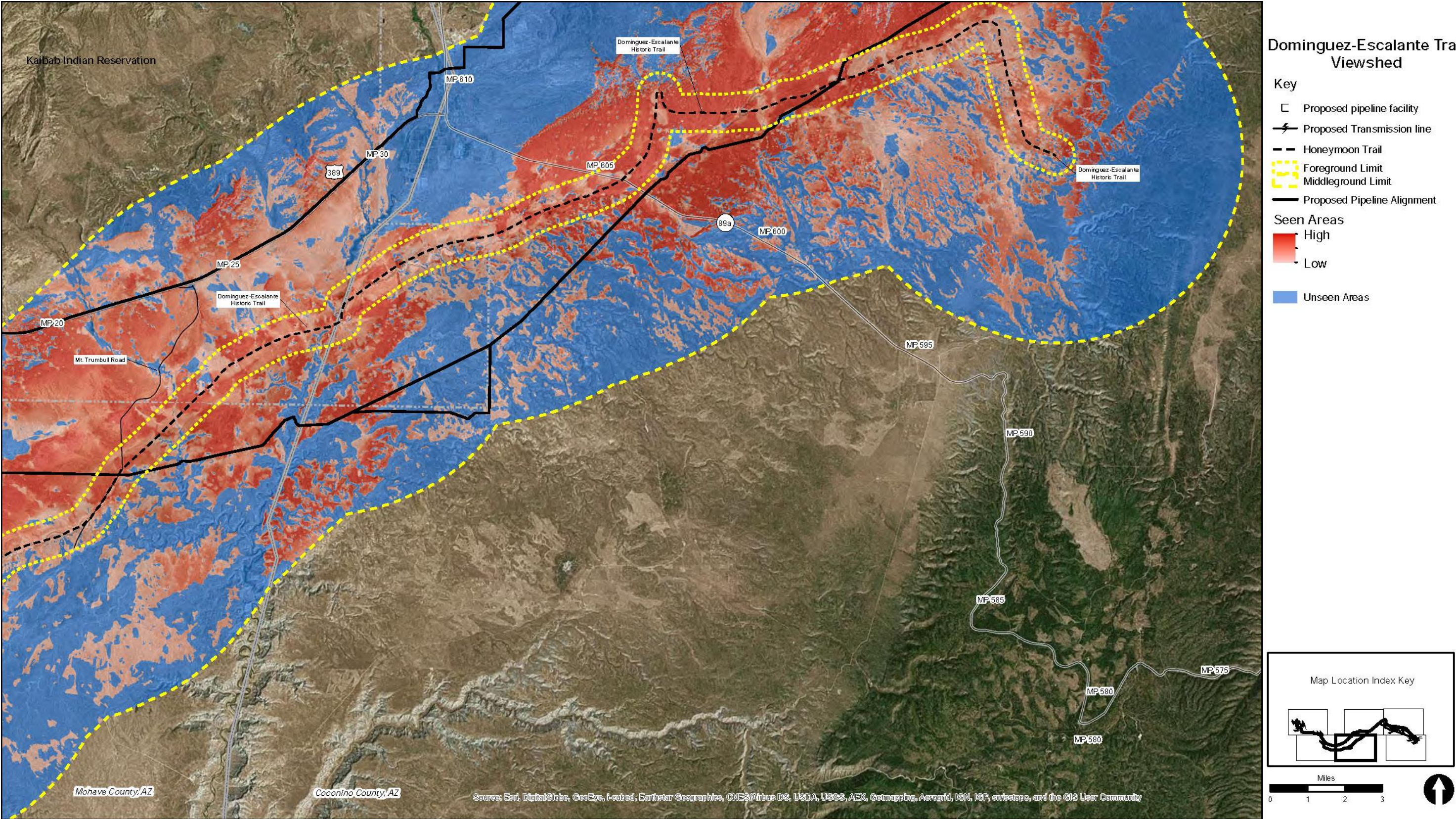
Visibility of Project from Dominguez-Escalante Historic Trail, Map 1



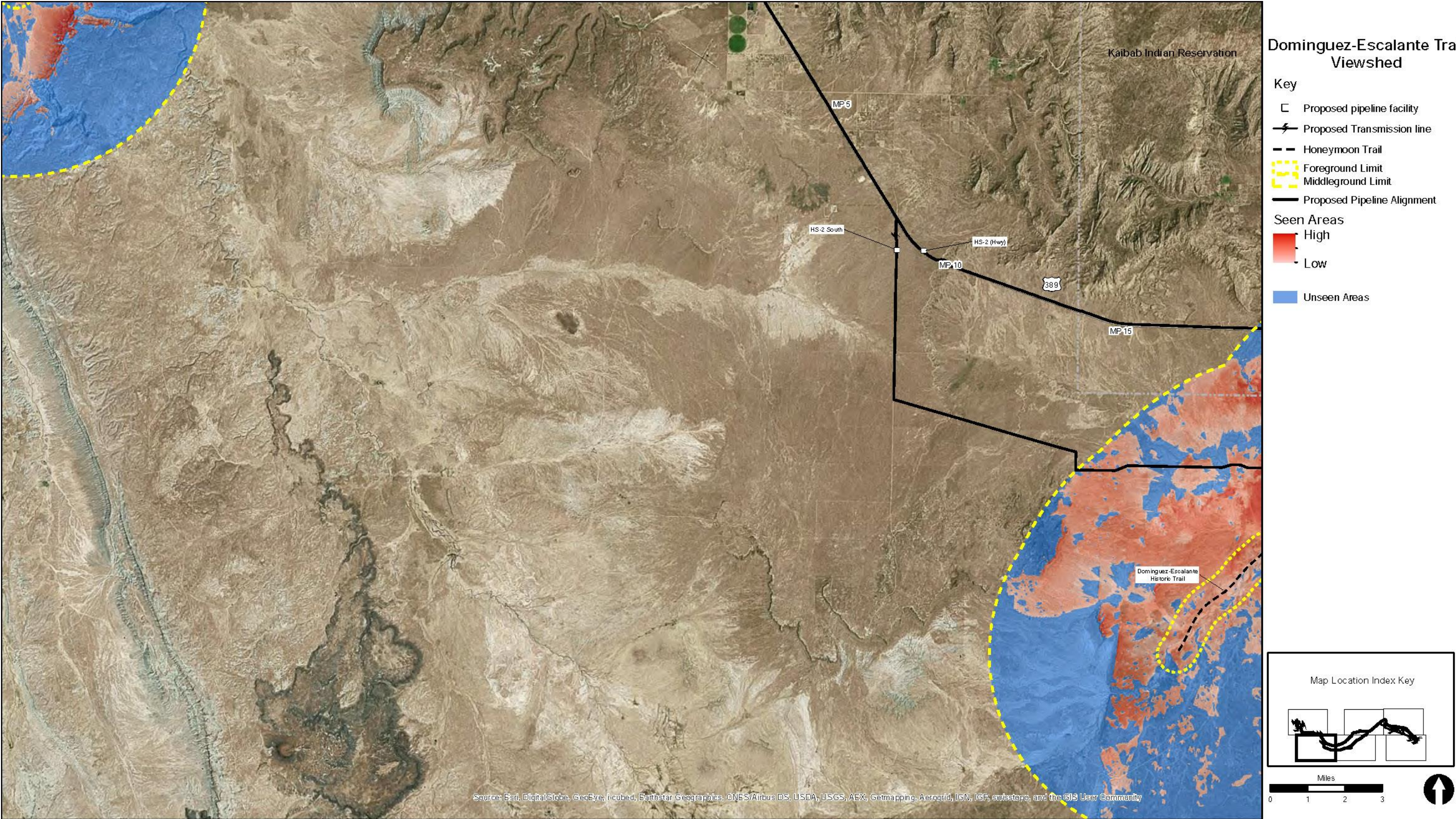
Visibility of Project from Dominguez-Escalante Historic Trail, Map 2



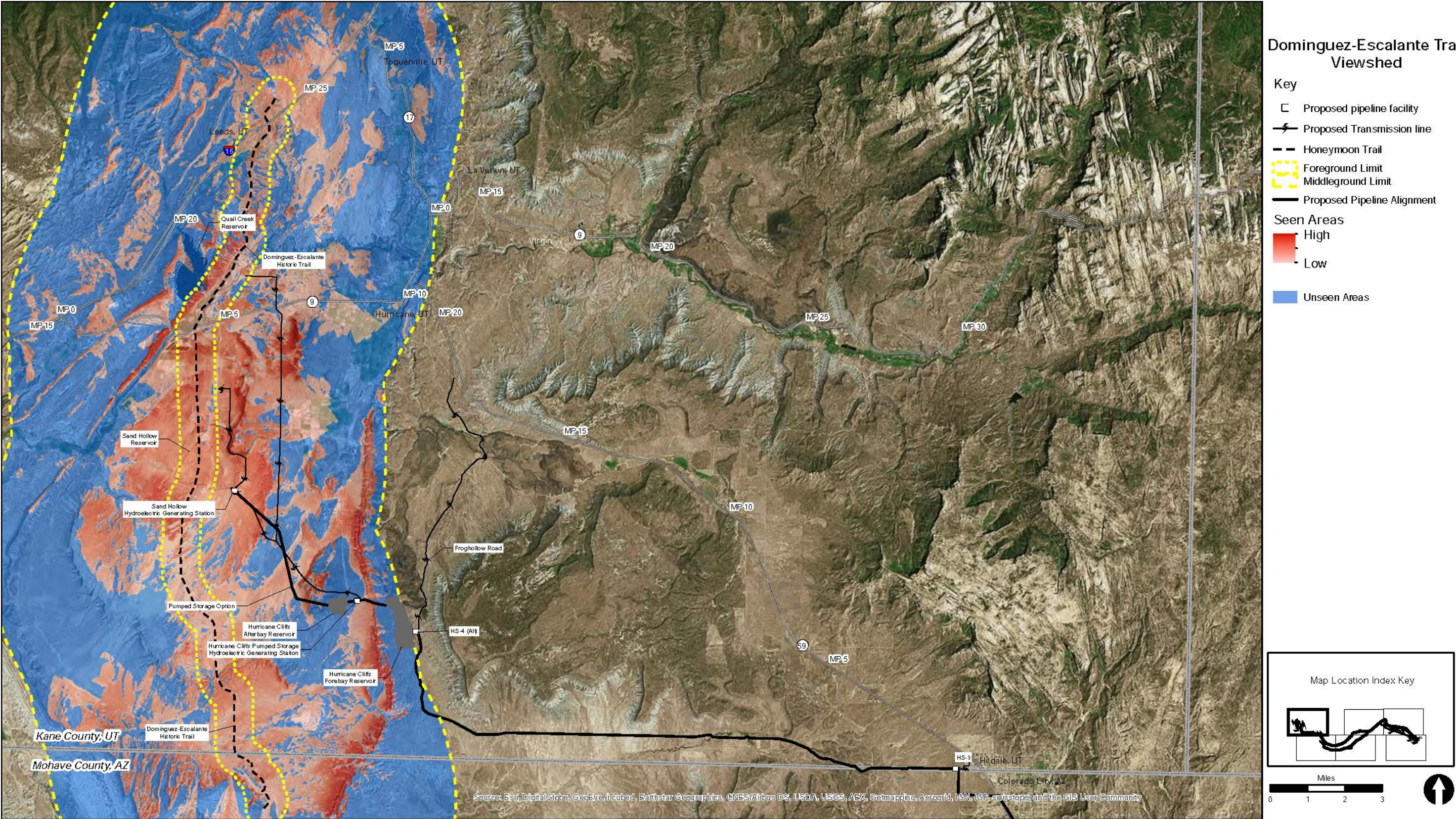
Visibility of Project from Dominguez-Escalante Historic Trail, Map 3



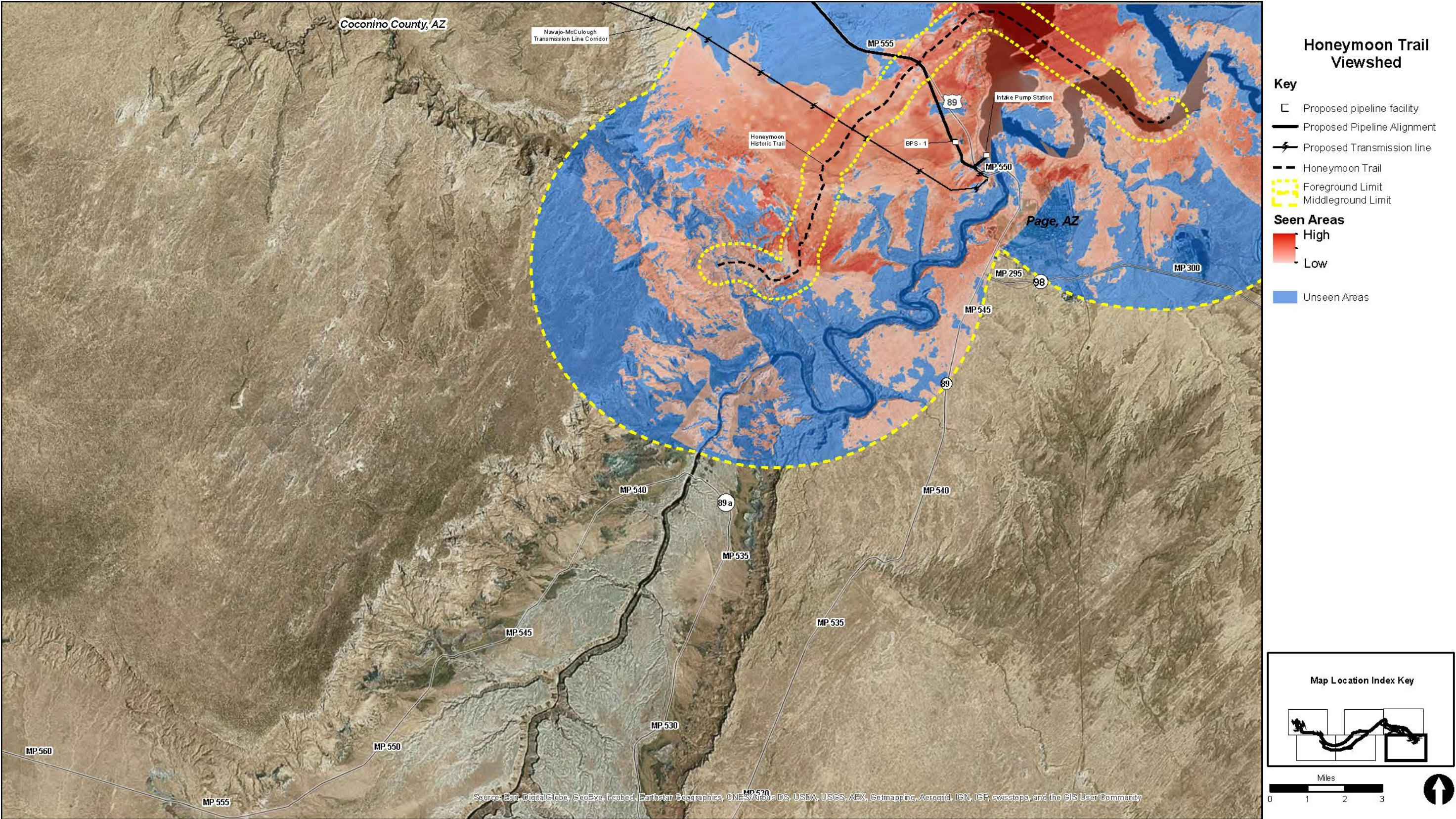
Visibility of Project from Dominguez-Escalante Historic Trail, Map 4



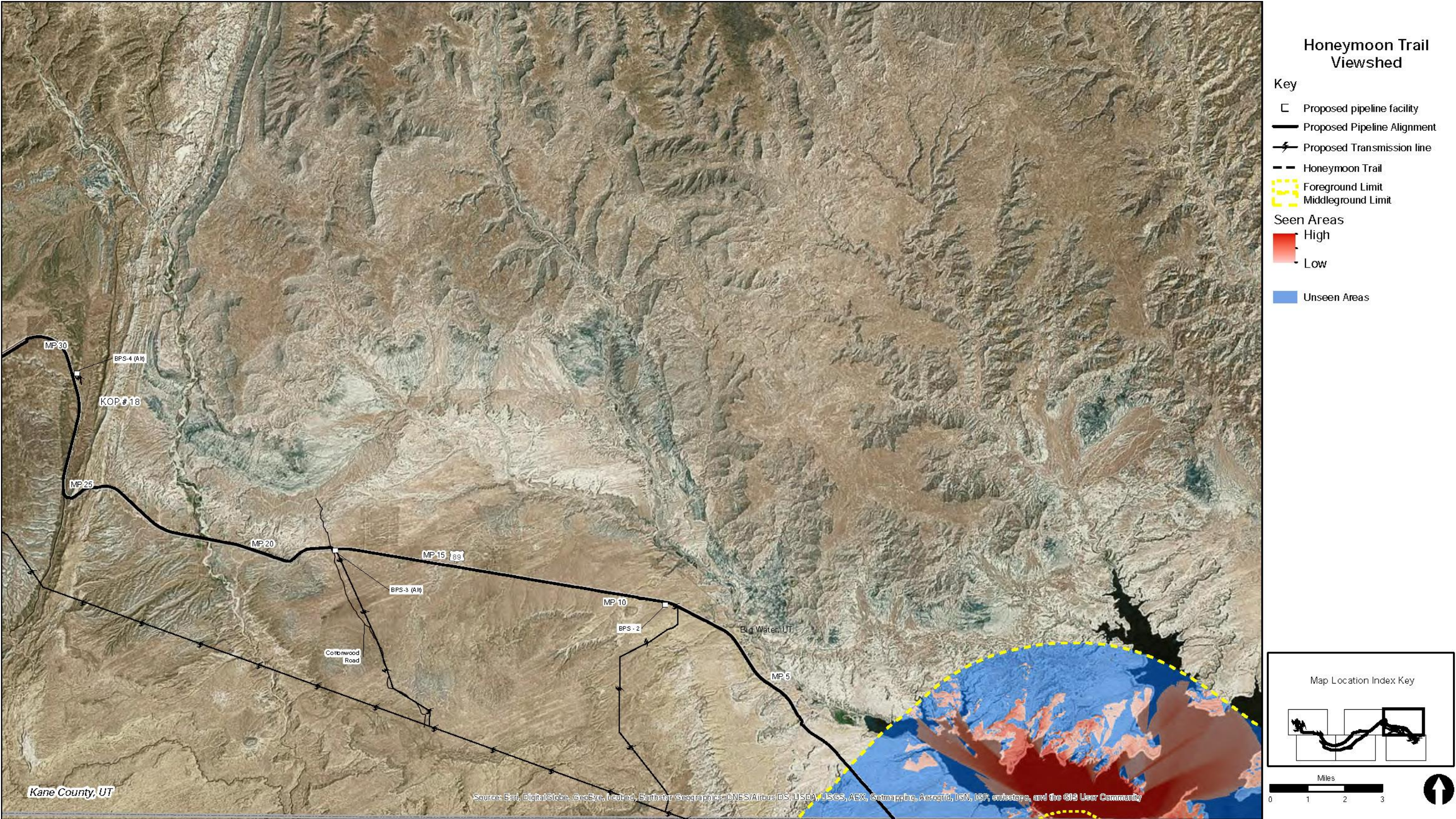
Visibility of Project from Dominguez-Escalante Historic Trail, Map 5



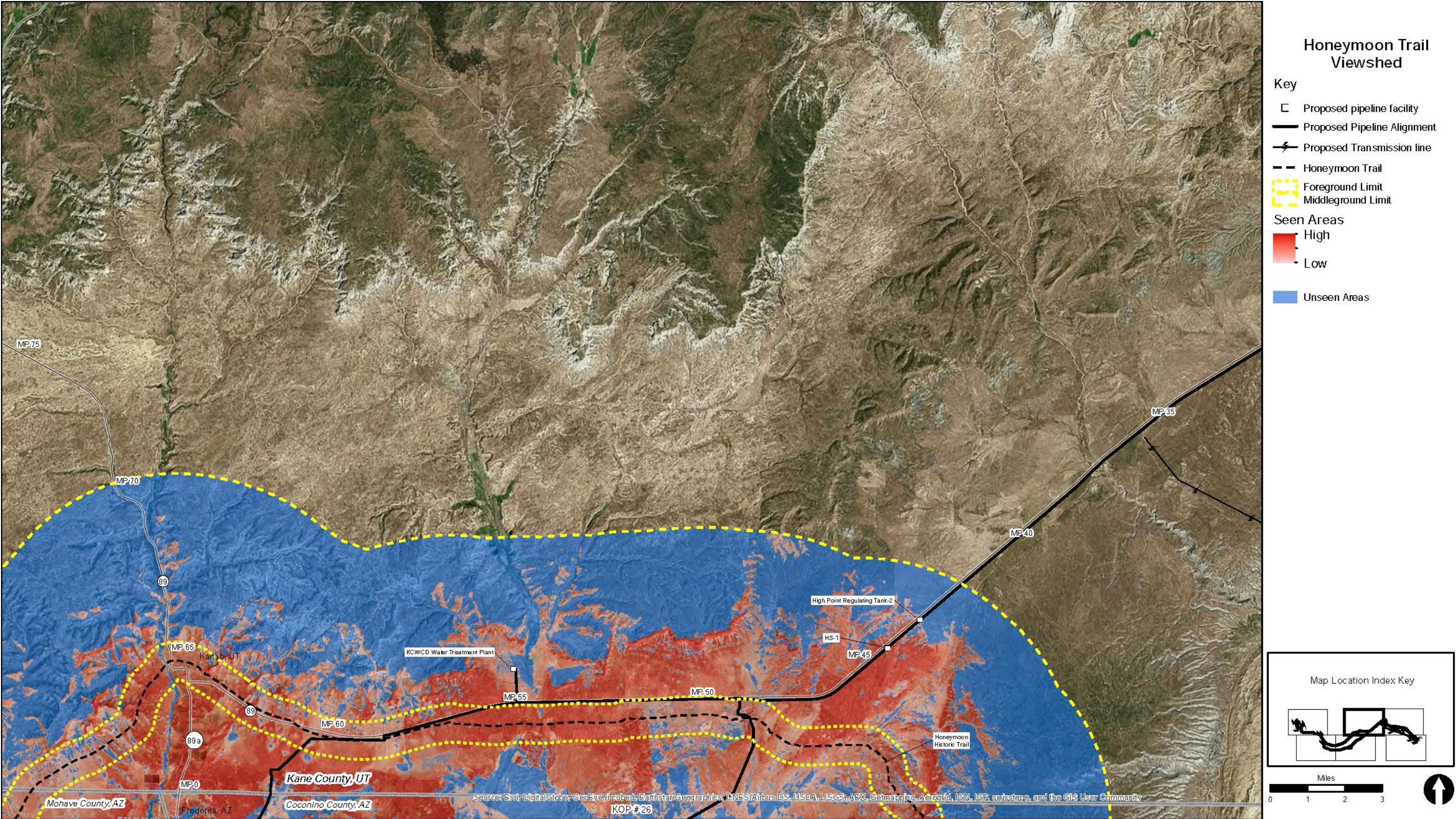
Visibility of Project from Dominguez-Escalante Historic Trail, Map 6



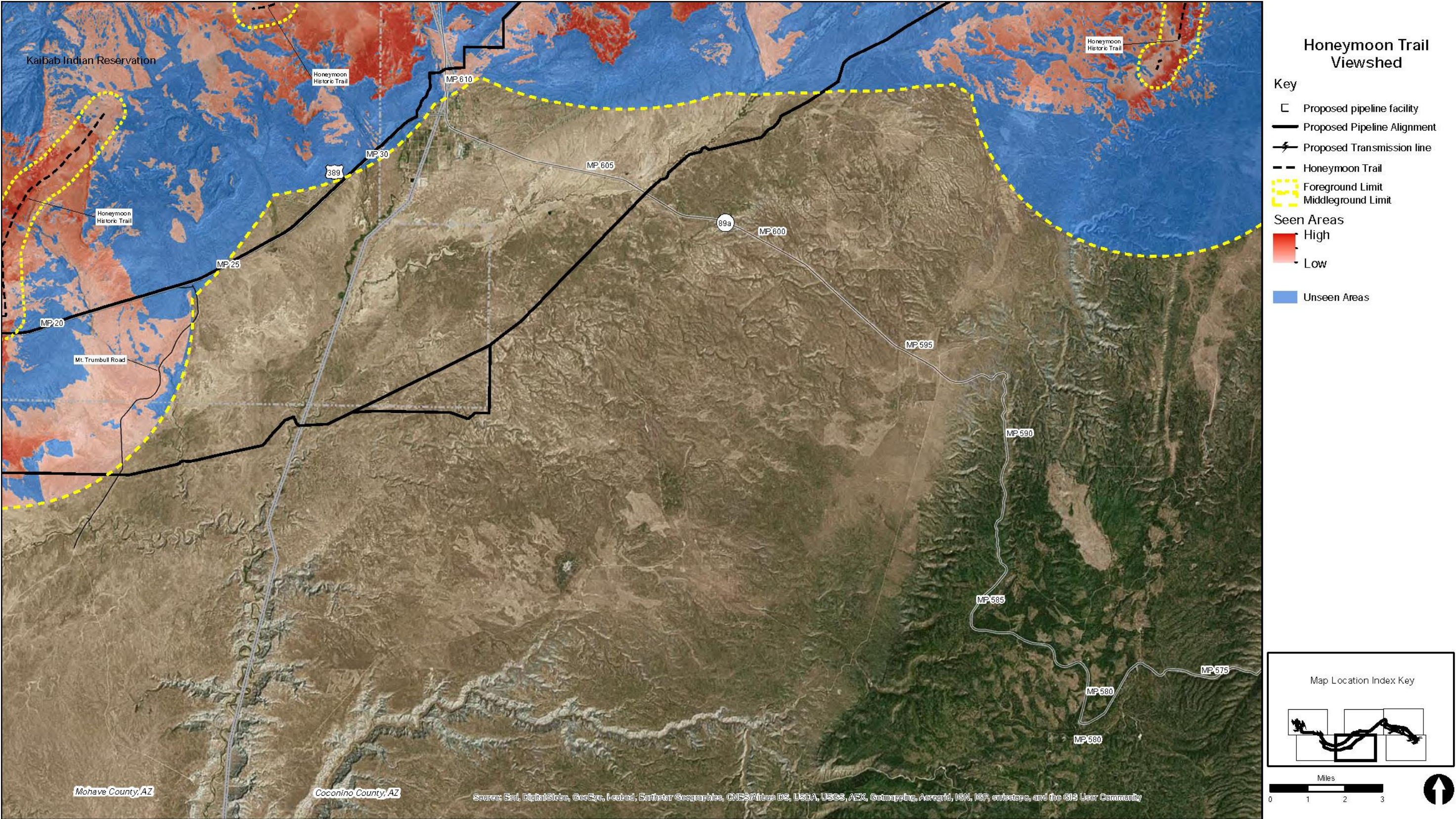
Visibility of Project from Honeymoon Historic Trail, Map 1



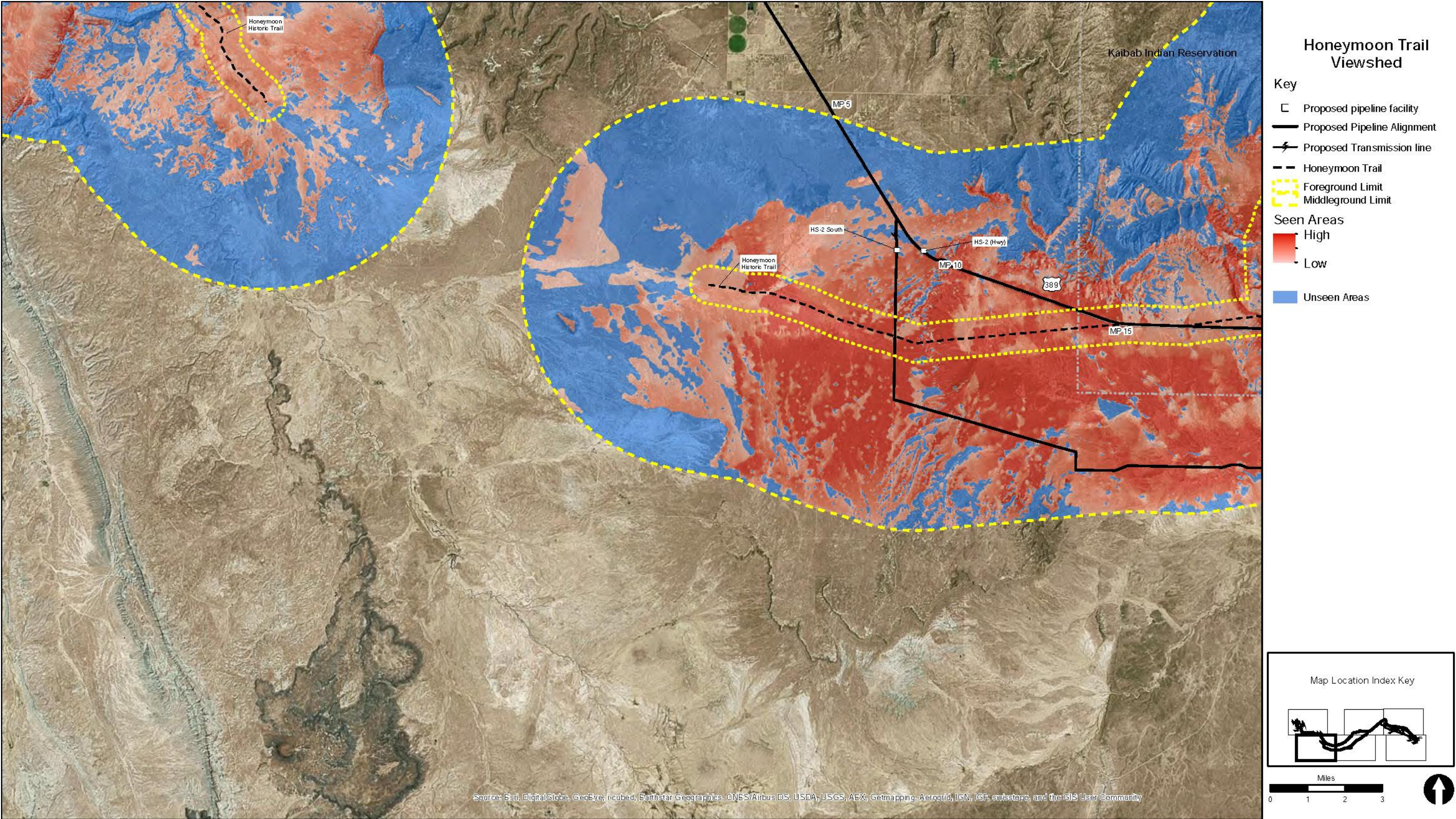
Visibility of Project from Honeymoon Historic Trail, Map 2



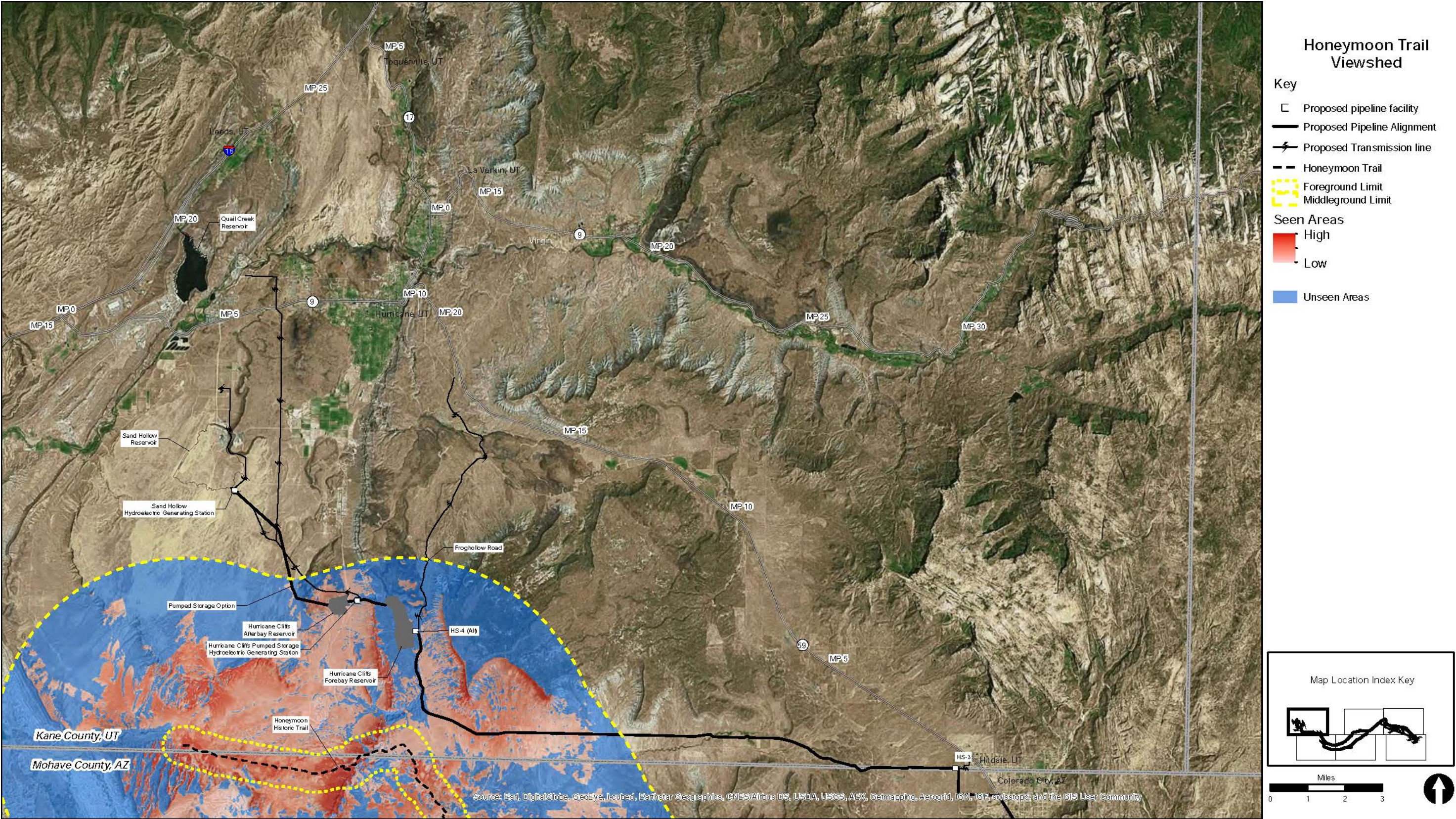
Visibility of Project from Honeymoon Historic Trail, Map 3



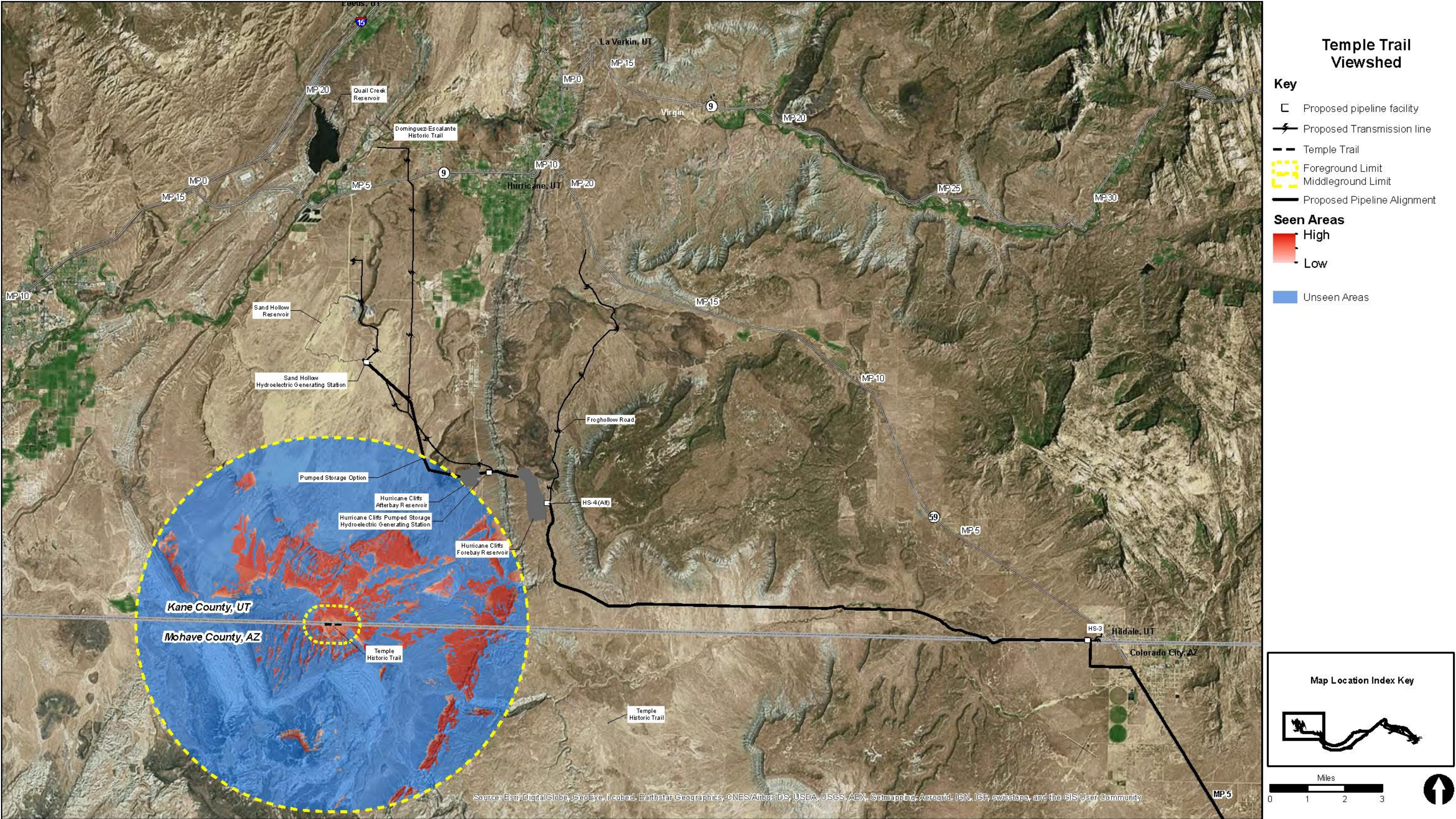
Visibility of Project from Honeymoon Historic Trail, Map 4



Visibility of Project from Honeymoon Historic Trail, Map 5



Visibility of Project from Honeymoon Historic Trail, Map 6



Visibility of Project from Temple Historic Trail