

# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

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## VISUAL SIMULATION



# **GOLDEN VALLEY**

*230 kV Transmission Line Project*

## **SIMULATION 01**

## SIMULATION 01

Camera

- Camera: Canon t2i Rebel
  - Sensor: APS-C, 22.3 mm x 14.9 mm
  - Lens: Canon 18-55 mm
  - Focal length: 35 mm
  - 35 mm equivalent focal length: 48 mm
  - Camera height: 5 ft
  - F-stop: 8
  - ISO: 100

10

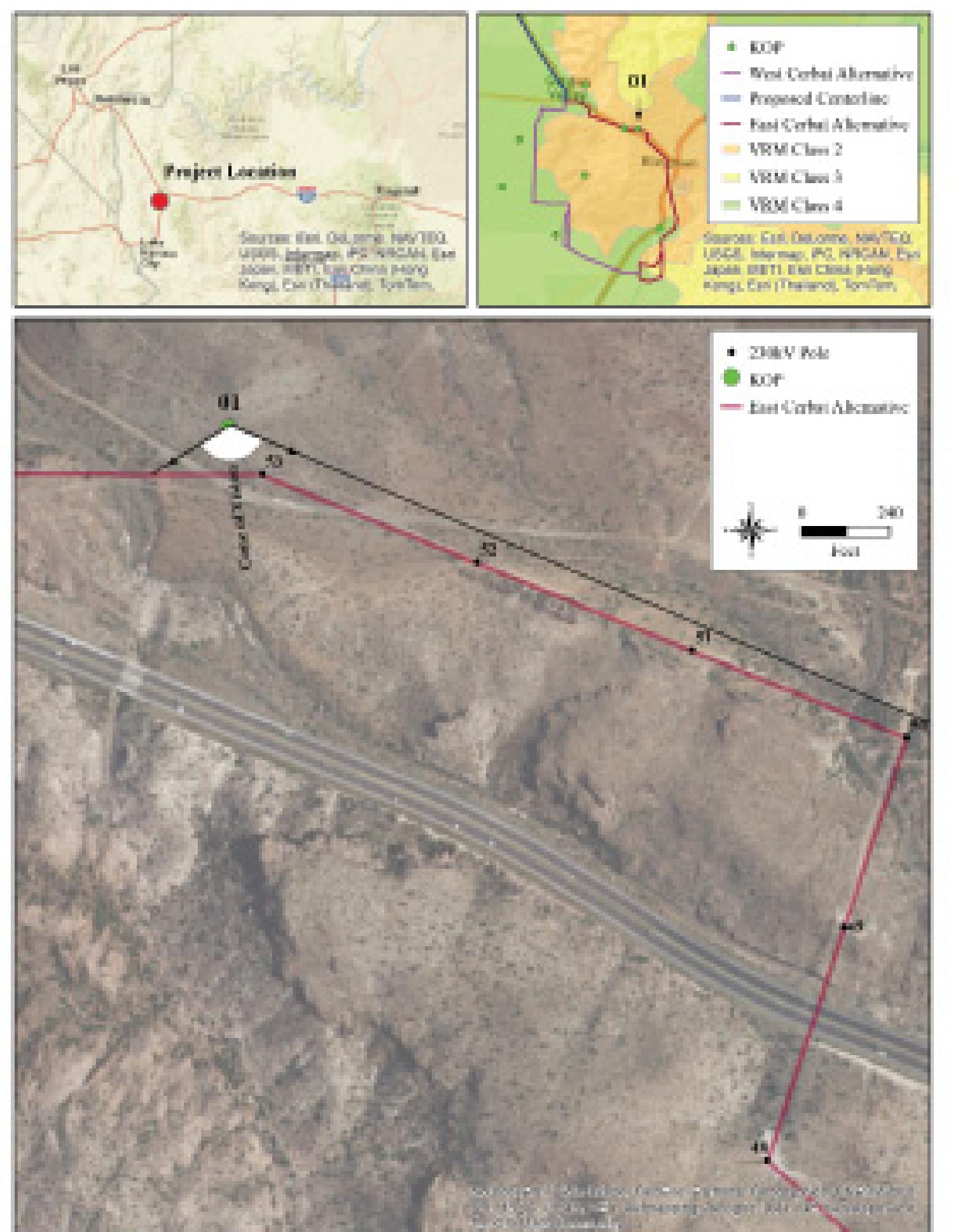
- Representative of view for: Non-motorized trail users
  - Location: Rattler trail located within the Coeur d'Alene Foothills Recreation Area north of US 93
  - Latitude: 49.204830, Longitude: -114.939980
  - View Point Elevation at Eye Level: 3,649 ft.
  - Looking: South
  - Points Depicted on Map within Cone of Vision: Trail Corridor Alternative points 48, 51

## Simulation Notes

- Photo taken 6/4/2016, 12:16
  - The fence image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
  - This view is approximately 130 feet northwest of the center pole portrayed in the simulation.
  - Six poles and corresponding conductors in whole or part are visible in the simulation.
  - New poles and conductors would replace existing poles and conductors.
  - The simulation is based on the best information available 6/14/2016. Preliminary and subject to change based on final engineering and other factors.
  - The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



#### **Recommended Viewing Configuration**



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

## VISUAL SIMULATION



### GOLDEN VALLEY 230kV Transmission Line Project

#### SIMULATION 02

##### Camera

- Camera: Canon 6D Rebel
- Sensor: APS-C, 22.3 mm x 14.9 mm
- Lens: Canon 18-55 mm
- Focal length: 33 mm
- 35 mm equivalent focal length: 55 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

##### KOP

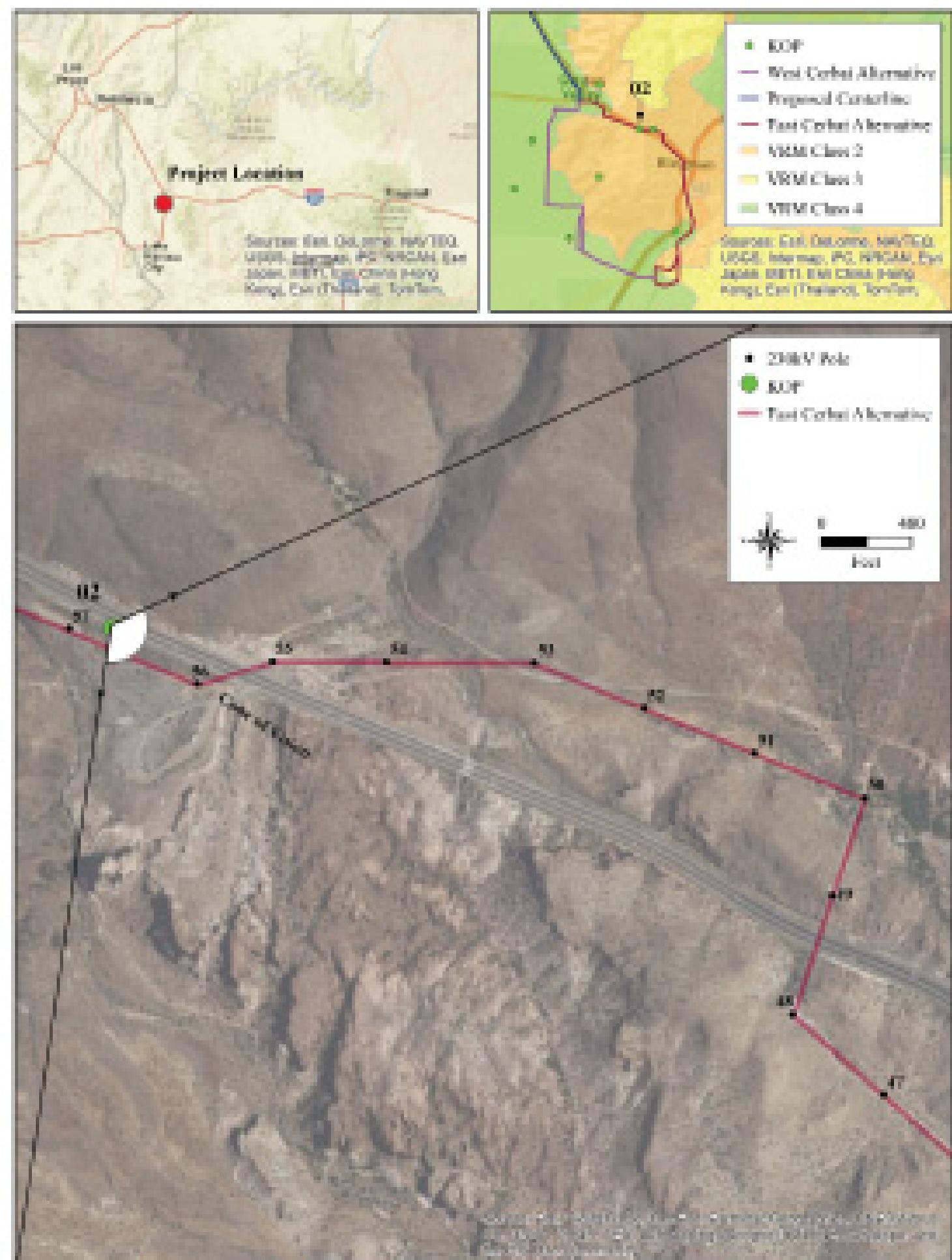
- Representative of view for: Southbound travel on US 93
- Location: US 93 west northeast of Kingman, AZ
- Latitude: 35.208739, Longitude: -114.097399
- View Point Elevation at Eye Level: 3,724 ft
- Looking: east southeast
- Poles Depicted on Map within Core of Vision: East Corridor Alternative poles 47-56

##### Simulation Notes

- Photo taken 6/3/2016, 13:15
- The base image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
- This view is approximately 540 feet northwest of the nearest pole portrayed in the simulation.
- Eight poles and corresponding conductors (in whole or part) are visible in the simulation.
- New poles and conductors would replace existing poles and conductors.
- The simulation is based on the best information available 6/14/2016. Preliminary and subject to change based on final engineering and other factors.
- The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



Recommended Viewing Configuration



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

## VISUAL SIMULATION



### GOLDEN VALLEY 230kV Transmission Line Project

#### SIMULATION 03 East Cerbat Alternative

##### Camera

- Camera: Canon 6D Rebel
- Sensor: APS-C, 22.3 mm x 14.9 mm
- Lens: Canon 18-55 mm
- Focal length: 32 mm
- 35 mm equivalent focal length: 51 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

##### KOP

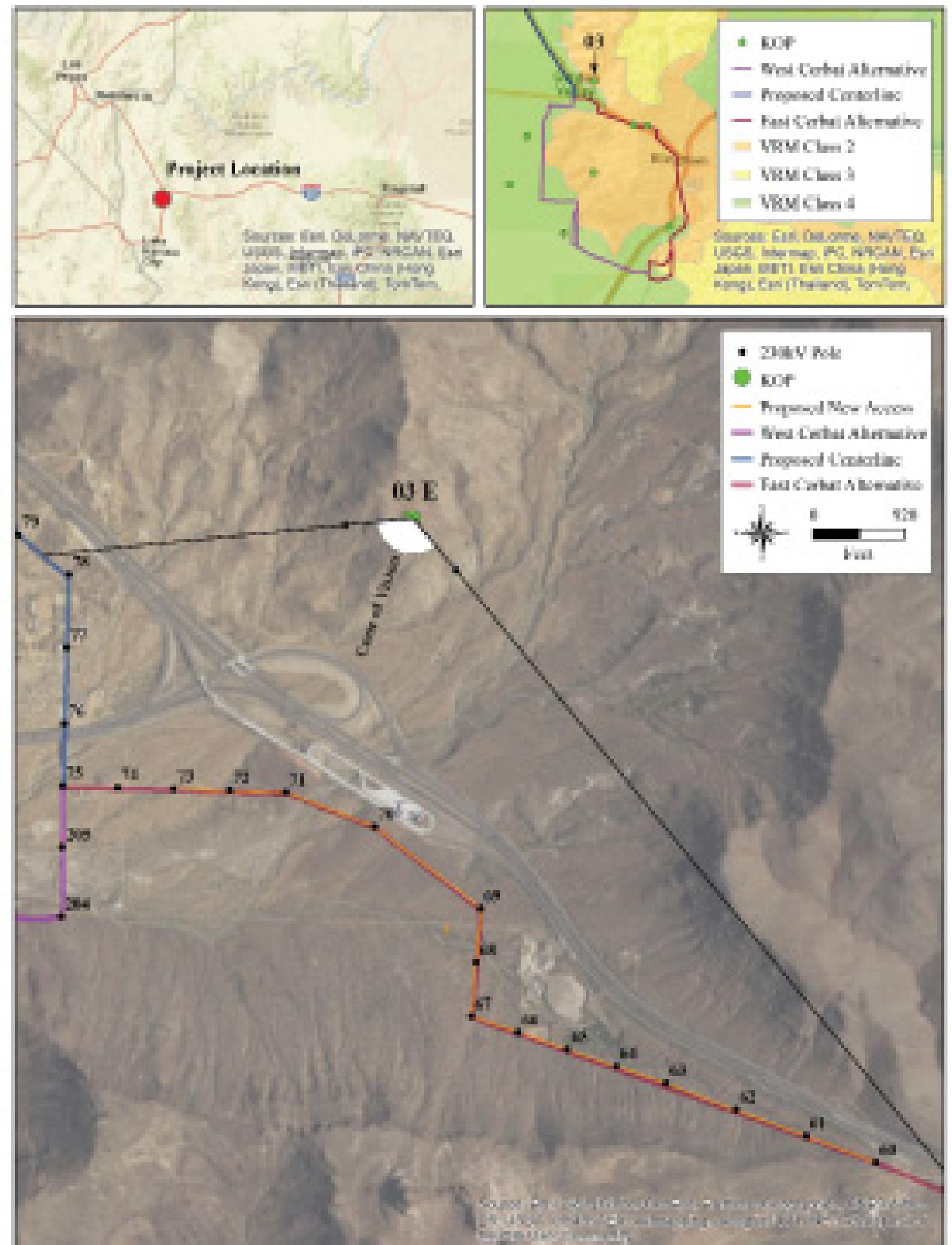
- Representative of view for Non-motorized trail users hiking along the trail
- Location: Overlook on Badger Trail northeast of US 83 and SR 66 within the Cerbat Foothills Recreation Area
- Latitude: 35.228130, Longitude: -114.122090
- View Point Elevation of Eye Level: 3,778 ft
- Looking: Southwest
- Poles Depicted on Map within Core of Vision: East Cerbat Alternative poles 60-78

##### Simulation Notes

- Photo taken 6/4/2016, 13:03
- The base image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
- This view is approximately 3,000 feet northeast of the nearest pole portrayed in the simulation.
- The locations of nineteen poles are indicated in the simulation. Two poles in the background and portions of new access roads are also not visible.
- New poles and conductors would replace existing poles and conductors.
- The simulation is based on the best information available 6/4/2016. Preliminary and subject to change based on final engineering and other factors.
- The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



Recommended Viewing Configuration



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

## VISUAL SIMULATION



### GOLDEN VALLEY 230kV Transmission Line Project

#### SIMULATION 03 West Cerbat Alternative

##### Camera

- Camera: Canon 6D Rebel
- Sensor: APS-C, 22.3 mm x 14.9 mm
- Lens: Canon 18-55 mm
- Focal length: 32 mm
- 35 mm equivalent focal length: 51 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

##### KOP

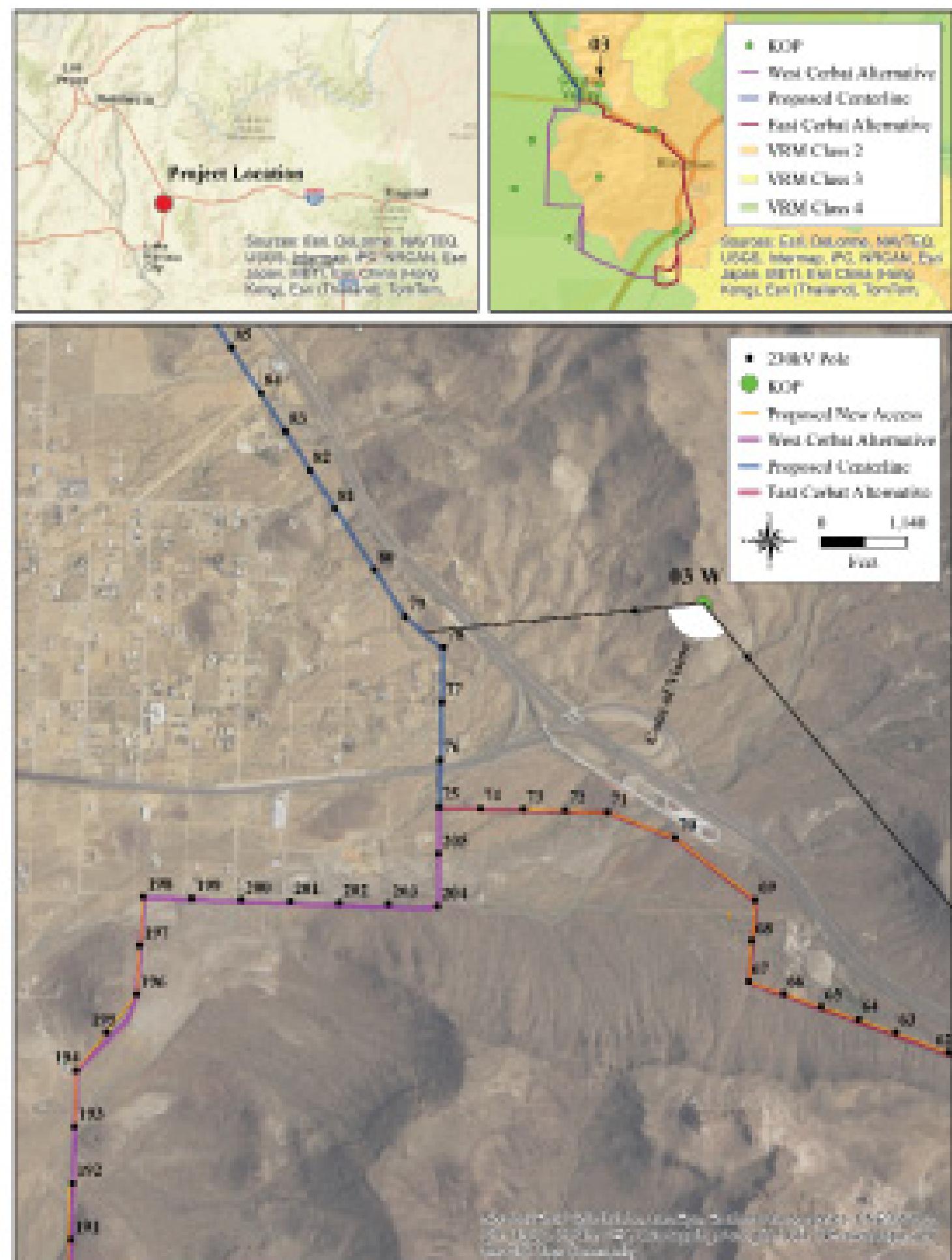
- Representative of view for Non-motorized trail users hiking along the trail
- Location: Overlook on Badger Trail northeast of US 93 and SR 66 within the Cerbat Foothills Recreation Area
- Latitude: 35.228130, Longitude: -114.122090
- View Point Elevation of Eye Level: 3,778 ft
- Looking: Southwest
- Poles Depicted on Map within Core of Vision: West Cerbat Alternative poles 191-205, 75-78

##### Simulation Notes

- Photo taken 6/4/2016, 13:03
- The base image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
- This view is approximately 3,000 feet east of the nearest pole portrayed in the simulation.
- Mastion poles are visible in the simulation. Portions of access roads are somewhat visible.
- The simulation is based on the best information available 6/4/2016. Preliminary and subject to change based on final engineering and other factors.
- The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



Recommended Viewing Configuration



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

## VISUAL SIMULATION



### GOLDEN VALLEY 230kV Transmission Line Project

#### SIMULATION 04

##### Camera

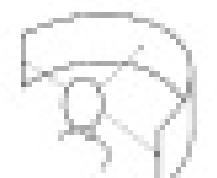
- Camera: Canon 6D Rebel
- Sensor: APS-C, 22.3 mm x 14.9 mm
- Lens: Canon 18-55 mm
- Focal length: 32 mm
- 35 mm equivalent focal length: 51 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

##### KOP

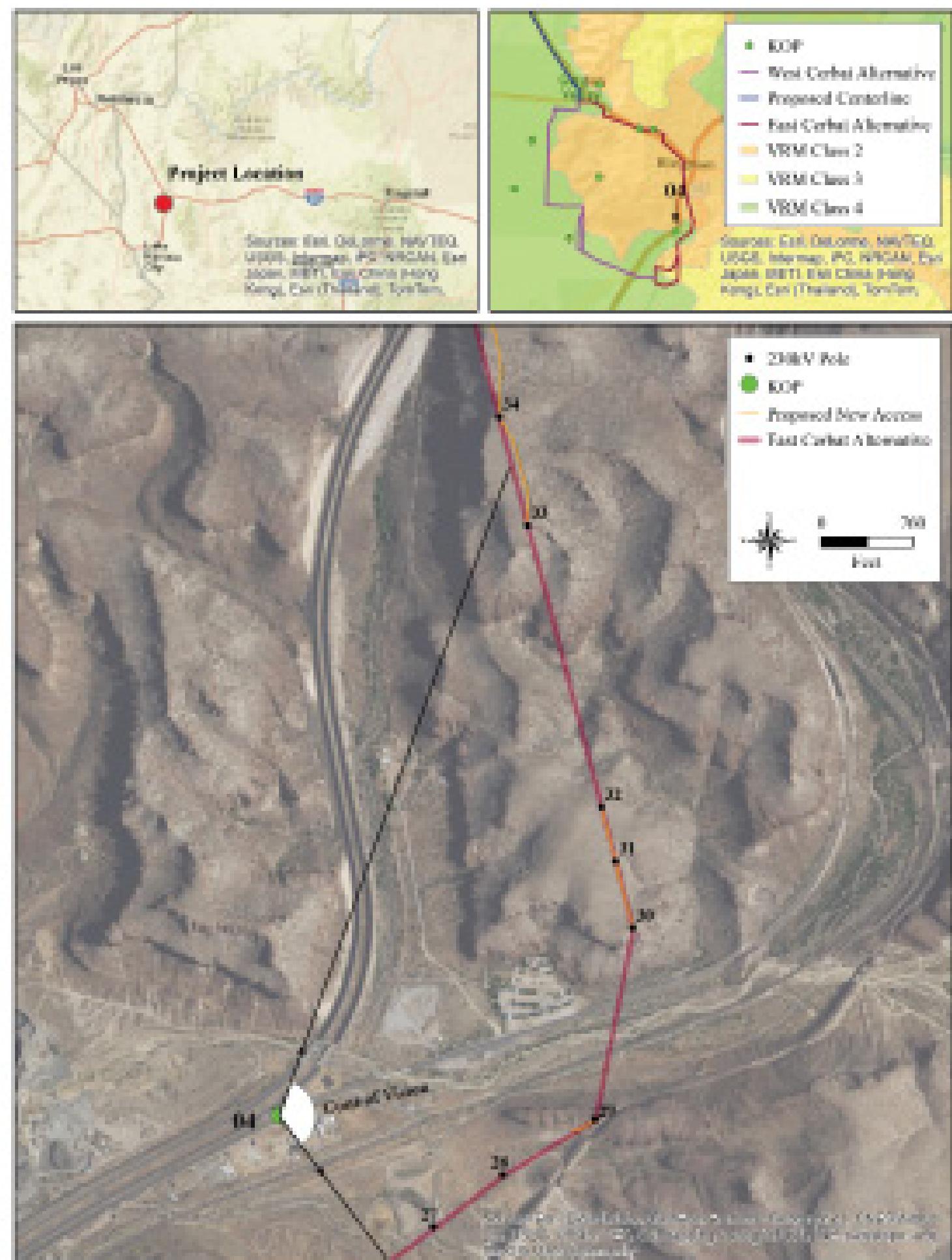
- Representative of view for Northbound travel on US 93 or US 66, and local commercial facilities
- Location: Interstate 40 and US 66 south of Kingman, AZ.
- Latitude: 35.160970, Longitude: -114.078190
- View Point Elevation of Eye Level: 3,069 ft
- Looking: East
- Poles Depicted on Map within Core of Vision: East Corridor Alternative poles 27-33

##### Simulation Notes

- Photo taken 6/4/2016, 11:33
- The base image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
- This view is approximately 1,500 feet northwest of the nearest pole portrayed in the simulation.
- The top portions of seven poles are visible in the simulation. Conductors are difficult to see.
- The simulation is based on the best information available 6/4/2016. Preliminary and subject to change based on final engineering and other factors.
- The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



Recommended Viewing Configuration



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

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## VISUAL SIMULATION



# **GOLDEN VALLEY**

*230 kV Transmission Line Project*

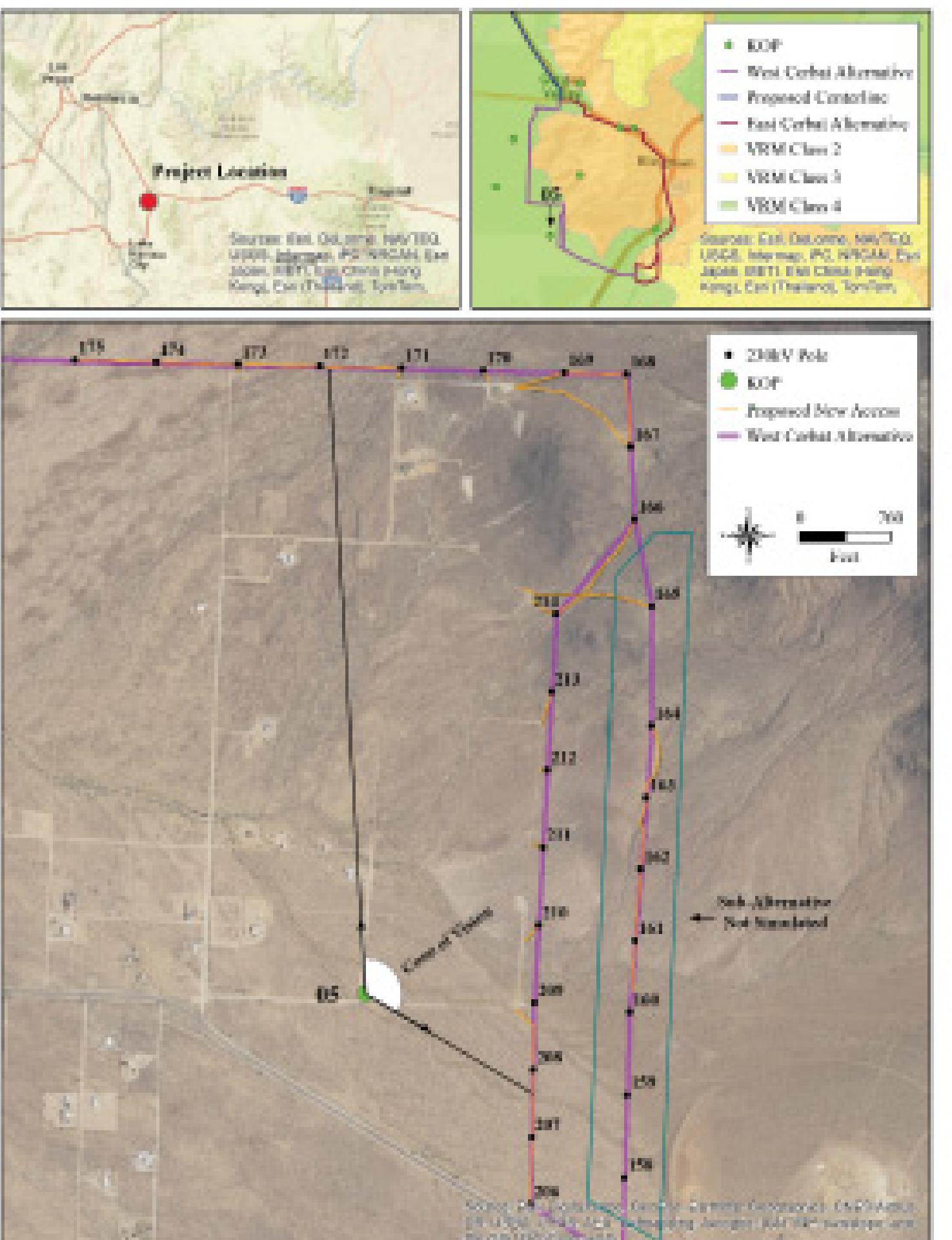
### Camera

- Camera: Canon EOS 5D
- Sensor: APS-C, 22.3 mm x 14.8 mm
- Lens: Canon 18-55 mm
- Focal length: 32 mm
- 35 mm equivalent focal length: 51 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

**KOP**

- Representative view for: Residences in the area that are approximately a quarter mile from the project.
- Location: Private property north of Shiningay Drive.
- Latitude: 39.156390, Longitude: -114.134070
- View Point Elevation at Eye Level: 2,743 ft.
- Looking: East southeast
- Points Depicted on Map within Cone of Vision: West Cedar Alternative poles 208-214, 166-171

- Photo taken 4/3/2016, 15:29
- The fence image is multiple stitched images intended to show the full extent of the fence.
- This view is approximately 1,380 feet west of the nearest intersection.
- Eleven poles and portions of new access roads are visible. Other poles are not visible from this angle.
- The sub-alternative (parallel) line to the right is the real fence.
- The simulation is based on the best information available, engineering and other factors.
- The simulation should be held approximately 23 inches from your eye. Measure the width of the image in inches and divide by 23 to get the scale factor.



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

## VISUAL SIMULATION



### GOLDEN VALLEY 230kV Transmission Line Project

#### SIMULATION 06

##### Camera

- Camera: Canon 6D Rebel
- Sensor: APS-C, 22.3 mm x 14.9 mm
- Lens: Canon 18-55 mm
- Focal length: 32 mm
- 35 mm equivalent focal length: 51 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

##### KOP

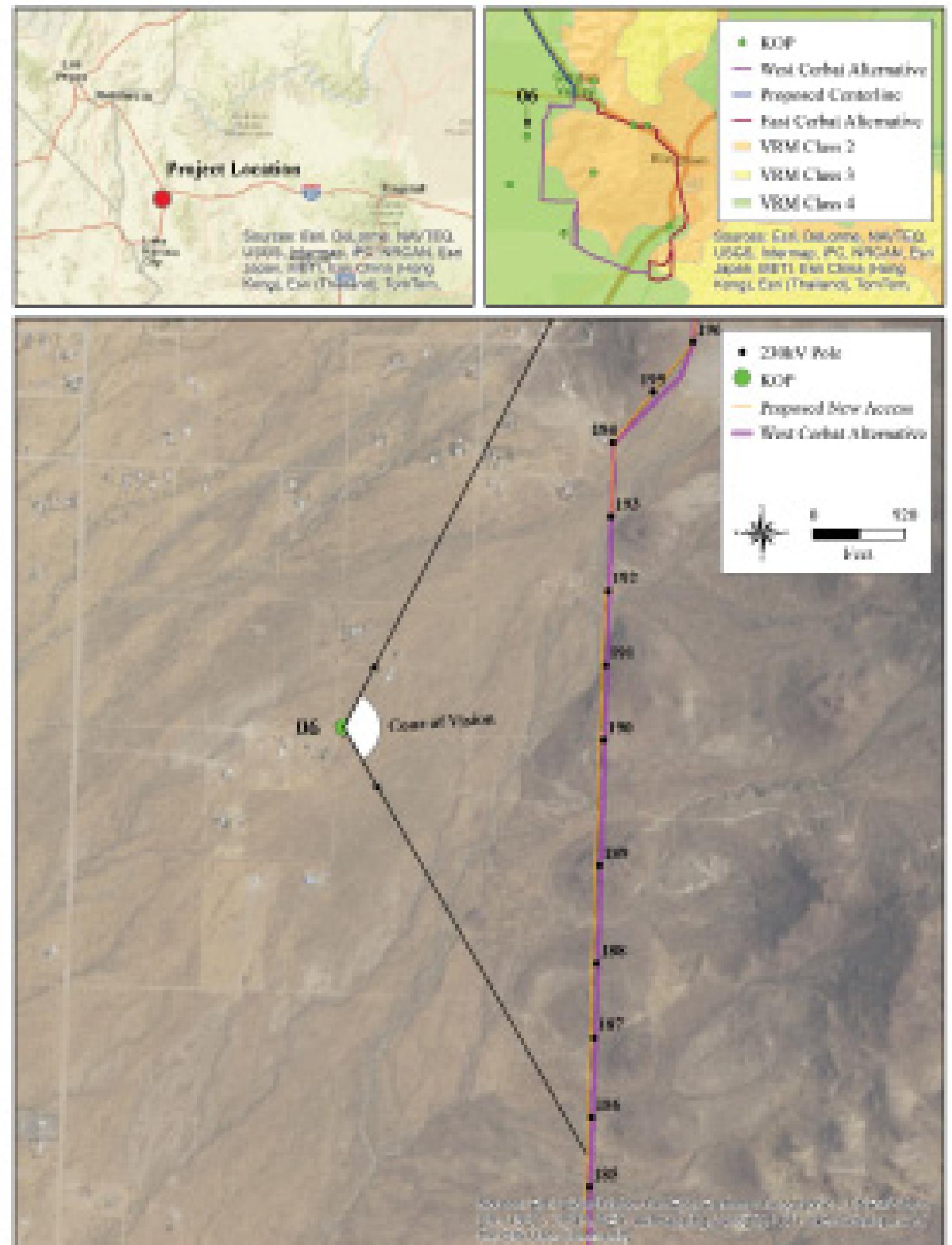
- Representative of view for: Residences in the area that are approximately a half mile from the project.
- Location: Private property east of Bacchi Road
- Latitude: 35.199880, Longitude: -114.158110
- View Point Elevation of Eye Level: 3,894 ft
- Looking: East
- Poles Depicted on Map within Core of Vision: West Corridor Alternative poles 186-196

##### Simulation Notes

- Photo taken 6/3/2016, 14:03
- The base image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
- This view is approximately 2,500 feet northeast of the nearest pole portrayed in the simulation.
- Distant poles and portions of new access roads are visible in the simulation. Conductors are difficult to see.
- The simulation is based on the best information available 6/14/2016. Preliminary and subject to change based on final engineering and other factors.
- The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



Recommended Viewing Configuration



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

## VISUAL SIMULATION



### GOLDEN VALLEY 230 kV Transmission Line Project

#### SIMULATION 07

##### Camera

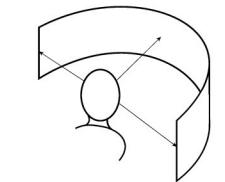
- Camera: Canon t2i Rebel
- Sensor: APS-C, 22.3 mm x 14.9 mm
- Lens: Canon 18-55 mm
- Focal length: 32 mm
- 35 mm equivalent focal length: 51 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

##### KOP

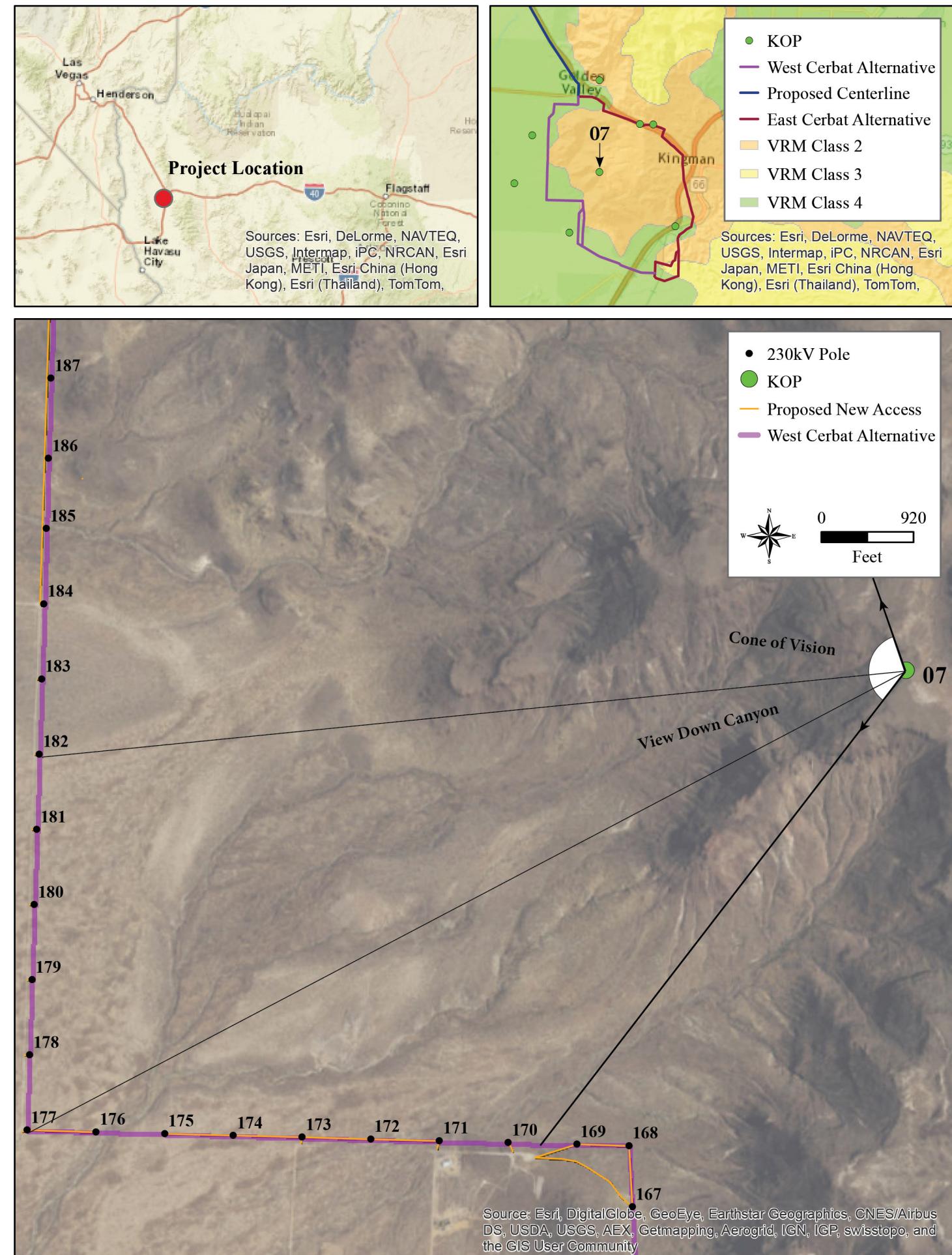
- Representative view for: Trail users hiking cross-country or brief glimpses from the non-motorized Foothills Rim Trail
- Location: Cerbat Foothills Recreation Area
- Latitude: 35.184310, Longitude: -114.118740
- View Point Elevation at Eye Level: 3,923 ft
- Looking: West
- Poles Depicted on Map within Cone of Vision: West Cerbat Alternative poles 170-187
- Poles Depicted on Map within View down the Canyon: West Cerbat Alternative poles 177-183

##### Simulation Notes

- Photo taken 6/4/2016, 10:00
- The base image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
- This view is approximately 8,600 feet east southeast of the nearest pole portrayed in the simulation.
- Six poles are nearly invisible in this simulation. Work sites will be accessed via short spurs off of an existing road that is not visible in the photograph from this angle. Other poles depicted in the map are not visible.
- The simulation is based on the best information available 6/14/2016. Preliminary and subject to change based on final engineering and other factors.
- The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



Recommended Viewing Configuration



# GOLDEN VALLEY 230kV TRANSMISSION LINE PROJECT

## VISUAL SIMULATION



### GOLDEN VALLEY 230 kV Transmission Line Project

#### SIMULATION 08

##### Camera

- Camera: Canon 6D Rebel
- Sensor: APS-C, 22.3 mm x 14.9 mm
- Lens: Canon 18-55 mm
- Focal length: 32 mm
- 35 mm equivalent focal length: 51 mm
- Camera height: 5 ft
- F-stop: 8
- ISO: 100

##### KOP

- Representative of view for: Residential and auto traffic approximately one mile from the project
- Location: Intersection of Bacchus Road and Clear Drive
- Latitude: 35.178033, Longitude: -114.165399
- View Point Elevation of Eye Level: 2,677 ft
- Looking: East
- Poles Depicted on Map within Core of Vision: West Corridor Alternative poles 154-157, 206-214, 166-204

##### Simulation Notes

- Photo taken 6/4/2016, 11:12
- The base image is multiple stitched images intended to represent an approximately 124 degree horizontal field of view.
- This view is approximately 5,370 feet northeast of the nearest pole portrayed in the simulation.
- Arrows are pointing to structures visible in this simulation. Many structures are faintly visible on the north and south ends. Portions of some access roads in steeper terrain are also visible.
- The simulation is based on the best information available 6/14/2016. Preliminary and subject to change based on final engineering and other factors.
- The simulation should be held approximately 23 inches from face when printed on 11x17 paper. If viewed digitally, measure the width of the image in inches and divide by 0.7 to determine viewing distance.



Recommended Viewing Configuration

