



EAST COUNTY SUBSTATION PROJECT

MINOR PROJECT REFINEMENT REQUEST FORM

Date Submitted:	05-17-13 (Originally Submitted) 06-12-13 (Resubmittal) 06-25-13 (Resubmittal)	Request #:	4	
Date Approval Required:	06-28-13	Landowner:]Vj ku'lphto cvkqp'j cu'dggp" tgf cevgf 'f wg'vq'ku'eqphk' gpvkn' pcwtg_"	
APN:]Vj ku'lphto cvkqp'j cu'dggp'tgf cevgf 'f wg'vq'ku'eqphk' gpvkn'pcwtg_			
Refinement from (check all that apply):				
<input type="checkbox"/> Mitigation Measure	<input type="checkbox"/> APM	<input checked="" type="checkbox"/> Project Description	<input type="checkbox"/> Drawing	<input type="checkbox"/> Other
Identify source (mitigation measure, project description, etc.):				
<p>Page C-26 and Figure C-4B in Section C. Alternatives of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the East County (ECO) Substation Project (Project) describe and depict the alignment of the main access road to be constructed from Old Highway 80 southeast to the ECO Substation, which is now referred to as the Southern Access Road. Figure C-4B of the Final EIR/EIS depicts the 138 kilovolt (kV) Overhead Transmission Line between the ECO Substation and Old Highway 80, which is described on Page B-13 and Page C-25 of the Final EIR/EIS. The information in this Minor Project Refinement (MPR) request describes proposed refinements associated with the Southern Access Road, the portion of the 138 kV Overhead Transmission Line located between the ECO Substation and Old Highway 80, and an approximately 1,000-foot-long portion of the 138 kV Underground Transmission Line located along Old Highway 80. A description of the refinements is provided on page 2 of this MPR request.</p>				
Attachments (check all that apply):				
<input checked="" type="checkbox"/> Refinement Screening Form (provided as Attachment A: Minor Project Refinement Request Screening Form)	<input checked="" type="checkbox"/> Photos (provided as Attachment B: Photographs)	<input checked="" type="checkbox"/> Maps (provided as Attachment C: Site Maps)	<input checked="" type="checkbox"/> Other (Attachment D: Refinement Areas Table; Attachment E: EIR/EIS Study Area Table; Attachment F: Updated LU-2 Letter Report; Attachment G: County Correspondence and Line-of-Sight Documentation; and Attachment H: USACE Consultation Documentation)	
<p>Under Order 3 of the Decision Granting SDG&E Permit to Construct the East County Substation Project (D.12-04-022), the CPUC may approve minor project refinements under certain circumstances. In accordance with Order 3 of the Decision, respond “yes” or “no” to the following questions (a) through (d).</p>				
<p>(a) Is the proposed refinement outside the geographic boundary of the EIR/EIS study area? No. The proposed Southern Access Road and 138 kV Overhead Transmission Line refinements are located within the geographic extent of the EIR/EIS study area, which is summarized in Attachment E: EIR/EIS Study Area Table. Biological, drainage, and cultural surveys of the Southern Access Road were included in the Final EIR/EIS analysis. In addition, supplemental biological and jurisdictional drainage surveys of an approximately 0.2-acre area at the modified entrance where the Southern Access Road will connect to Old Highway 80 were conducted</p>				

on June 28, 2011. Figure 1: Southern Access Road Refinement – Requested and No Longer Required Areas in Attachment C: Site Maps depicts the approved Southern Access Road alignment, as well as the proposed Southern Access Road and transmission line refinements, distinguished by requested and no longer required Project areas. Figure 2: Southern Access Road Refinement – Survey Results in Attachment C: Site Maps depicts the boundaries of the areas that were surveyed for various resources in the Project vicinity.

(b) Will the proposed refinement result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the EIR/EIS? No. See Attachment A: Minor Project Refinement Request Screening Form for the detailed assessment.

(c) Does the proposed refinement conflict with any mitigation measure or applicable law or policy? No.

(d) Does the proposed refinement trigger an additional permit requirement? No. The construction of the 138 kV Underground Transmission Line and utilization of the Southern Access Road was contemplated in Section C. Alternatives of the Final EIR/EIS; therefore, no additional permits will be required that were not already considered through the approval of the Southern Access Road alternative. A few special-status wildlife species, such as loggerhead shrike (*Lanius ludovicianus*) and long-eared owl (*Asio otus*), have the potential to occur within the requested refinement areas; however, all of these species were formerly identified and analyzed in previous wildlife surveys conducted for the Project. In addition, no sensitive plant species were identified in the requested refinement areas during any of the previous rare plant surveys. Although impacts to jurisdictional drainages will be reduced overall as a result of this MPR request, SDG&E has initiated consultation with the United States Army Corps of Engineers (USACE) and the California Department of Fish and Wildlife (CDFW) and will notify the Colorado River Basin Regional Water Quality Control Board (RWQCB) to inform them of the changes that will occur to individual drainages and the drainages that will no longer be impacted as a result of this MPR. SDG&E will amend and modify, as appropriate, the permits for the Project once the final design has been completed and the overall Project impacts to jurisdictional resources have been determined.

Describe refinement being requested (attach drawings and photos as needed):

The Southern Access Road was described on Page C-26 and depicted on Figure C-4B in Section C. Alternatives of the Project’s Final EIR/EIS as part of the ECO Substation Alternative site. The description states that the road would be constructed along the west and southern side of the ECO Substation site. As part of this MPR request, SDG&E proposes to shift the entrance to the Southern Access Road approximately 70 feet to the northeast of its originally proposed location on Old Highway 80. In addition, minor adjustments have been made to the road alignment.

The requested shift of the entrance to the Southern Access Road, as well as minor adjustments to the alignment, include a total of approximately 0.39 acre outside of the approved Southern Access Road alignment, which was established along the centerline of an existing unpaved access road. Figure 1: Southern Access Road Refinement – Requested and No Longer Required Areas in Attachment C: Site Maps depicts the locations of the approved and requested Southern Access Road alignment.

In addition, SDG&E proposes to reroute a portion of the approved 138 kV Transmission Line between the ECO Substation and Old Highway 80. The proposed rerouted section will begin at the entrance to the Southern Access Road at Old Highway 80 and travel underground within the footprint of the Southern Access Road toward the ECO Substation. The 138 kV Underground Transmission Line will then be converted to overhead through relocated steel pole- (SP-) 105A, which is a riser pole located approximately 1,000 feet southeast of Old Highway 80 within the permanent footprint of the Southern Access Road. From SP-105A, an approximately 1,200-foot-long northeast overhead span will connect to SP-108A, which will be relocated to within the ECO Substation.

The overhead reroute of the transmission line also includes the relocation of SP-105B from its originally proposed location immediately adjacent to Old Highway 80 to the Southern Access Road. The three relocated steel poles— SP-105A, SP-105B, and SP-108A—will each be approximately 160 to 170 feet tall. The relocation of SP-105A, SP-105B, and SP-108A to approved graded areas in the permanent footprint of the ECO Substation site and the Southern Access Road, respectively, will eliminate the permanent work areas originally associated with these three poles. The reroute will also eliminate SP-106, SP-107, and SP-108, thus eliminating a total of three steel poles and their associated permanent work pads, pull sites, and access roads from the approved Project design. A gate originally proposed at the entrance of a proposed access road at Old Highway 80 will also be eliminated as the access road will no longer be required. Lastly, the reroute will eliminate approximately 1,000 feet of underground transmission line along Old Highway 80 north of the Southern Access Road entrance.

The refinements will relocate structures SP-105A and SP-105B, as well as the originally proposed gate at Old

Highway 80, off of Bureau of Land Management- (BLM-) administered land, as well as remove a permanent work pad, vaults, and approximately 1,000 feet of underground transmission line that were previously placed on BLM-administered land. This totals approximately 1.5 acres of Project components that will be relocated off of BLM-administered land through implementation of the requested refinements. Attachment B: Photographs and Attachment C: Site Maps depict the locations of the approved and requested Southern Access Road alignment and 138 kV Transmission Line alignment. Once this MPR request has been approved by the California Public Utilities Commission (CPUC), SDG&E will submit a Level 1 Variance Request to inform the BLM that no facilities will be constructed on approximately 1.5 acres of land in the Jacumba and Tierra Del Sol 7.5' x 7.5' Quadrangles, Township 18 S, Range 8 E, Section 2, as described in the Right of Way (ROW) Grant. No additional ROW will be required, and SDG&E does not intend to relinquish the ROW that will no longer be required; therefore, any changes to the ROW Grant will be administrative and will not result in changes to land rights.

The activities associated with the construction and utilization of the requested refinement areas will be consistent with those described in the Final EIR/EIS for construction, operation, and maintenance of the Project. In addition, as described in Attachment A: Minor Project Refinement Request Screening Form, the requested refinements will result in reduced impacts to visual resources, biological resources, cultural and paleontological resources, water resources, land use, and transportation and traffic. Therefore, impacts to sensitive resources will be reduced as a result of the requested refinements.

Provide need for refinement (attach drawings and photos as needed):

The Southern Access Road alignment was originally established along the centerline of an existing unpaved access road to limit environmental impacts. However, during the final design of the Southern Access Road, it was determined that the entrance to the Southern Access Road would not meet San Diego County line-of-sight distance requirements. Therefore, the requested shift of the entrance to the Southern Access Road is required to comply with San Diego County line-of-sight distance requirements, as described in more detail in the paragraph that follows.

SDG&E submitted copies of the ECO Substation construction plans to San Diego County for review on September 13, 2012. On October 9, 2012, San Diego County requested that an engineer certify that the sight distance would be unobstructed from both directions at the entrance to the Southern Access Road based upon the prevailing operating traffic speed on Old Highway 80, per the Design Standards of Section 6.1.E of the San Diego County Public Road Standards (March 2012). The originally proposed entrance was determined based upon the posted speed limit on Old Highway 80, which is 55 miles per hour. During consultation with San Diego County, SDG&E was advised that the prevailing operating traffic speed on Old Highway 80 is approximately 60 miles per hour. San Diego County Public Road Standards require a minimum corner intersection sight distance of 600 feet for a design speed of 60 miles per hour. SDG&E determined that the originally approved entrance to the Southern Access Road would only provide approximately 523 feet of sight distance in one direction and would not meet San Diego County line-of-sight distance requirements associated with safe entrance onto public roadways. In order to comply with San Diego County Public Road Standards, SDG&E recalculated the location of the entrance and shifted it approximately 70 feet to the northeast to provide the required sight distance and safe access onto the public road. SDG&E then submitted a sight distance letter and exhibit to San Diego County on November 13, 2012, demonstrating compliance with the line-of-sight requirements. Documentation of correspondence with the county, as well as construction plans demonstrating compliance with line-of-sight requirements, is provided as Attachment G: County Correspondence and Line-of-Sight Documentation.

In addition to the changes required due to the line-of-sight requirements, a final hydrology study completed as part of the final design—which included an analysis for 100-year storm events—indicated that changes to the final design of the access road were necessary to slow the flow of water through the site. These changes included increases in the size of three swales and one rip-rap dissipater. With the exception of the rip-rap dissipater, the additional workspace shown as requested refinement areas along the road are temporary work areas needed to construct the drainage features. These swales and dissipaters along the Southern Access Road were depicted on the construction plans submitted to the USACE on November 6, 2012, and approved by the USACE on November 11, 2012. These temporary work areas will be restored in compliance with the Project's Habitat Restoration Plan.

Seven new impact areas are identified on Figure 1: Southern Access Road Refinement – Requested and No Longer Required Areas in Attachment C: Site Maps. An overview of the need, activities, and temporary and permanent impact calculations associated with each of these refinement areas is provided in Attachment D:

Refinement Areas Table.

Lastly, during the final design of the 138 kV Overhead Transmission Line connecting the underground to the ECO Substation, it was determined that sufficient temporary grading limits were not accounted for around the overhead pole foundation pads and associated access roads. Without sufficient workspace, the cut and fill slopes needed to construct the roads and pads would not be constructible. Using the original approved workspace would have reduced the pads to less than the minimum sizes necessary to accommodate the crane needed to set transmission poles, and the reduced road widths would not have allowed access for auger trucks needed to drill pier foundations or accommodate the safe passage of trucks and trailers transporting rebar and the steel poles. For these reasons, the 138 kV Overhead Transmission Line exiting the ECO Substation could not be constructed without requesting additional workspace from the CPUC within a sensitive cultural resources area. Upon further review, by adjusting the alignment into the access road, SDG&E determined that impacts to biological resources, cultural resources, and water resources could be reduced. Since a change to the alignment from the preliminary design was necessary for the final design and further CPUC and other agency approvals would have been required regardless, SDG&E chose the route that would further minimize environmental impacts.

Date refinement is expected to be implemented:	07-01-13
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SDG&E Approvals

Title	Name	Approval Initials	Date	Conditions (see attached)	
Project Manager	Don Houston	DH	05/16/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Manager	Kirstie Reynolds	KR	05/16/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Construction Manager	Molly Amendt	MA	05/16/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Construction Manager	Brian Telesmanic	BT	05/16/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Field Supervisor	Jeffrey Coward	JC	05/08/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Cultural Resource Specialist	Brian Williams	BW	05/08/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Land Advisor	Pete McMorris	PM	05/16/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Landowner Approval (if required)

Landowner Name	Signature or Other Consent
[This information has been redacted due to its confidential nature]	[This information has been redacted due to its confidential nature]
[This information has been redacted due to its confidential nature]	[This information has been redacted due to its confidential nature]
[This information has been redacted due to its confidential nature]	[This information has been redacted due to its confidential nature]

Resource Agency Coordination					
Resource Agency	Name	Action Required	Date	Documentation (see attached if yes)	
CDFW	Eric Weiss	Notification or Minor Amendment	To Be Determined (TBD)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No Documentation will be provided separately
USACE	Shanti Santulli	Notification or Minor Amendment	Consultation initiated on 06/07/13	<input checked="" type="checkbox"/> Yes (see Attachment H: USACE Consultation Documentation)	<input type="checkbox"/> No
Colorado River Basin RWQCB	Jay Mirpour	Notification or Minor Amendment	TBD	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No Documentation will be provided separately

ATTACHMENT A: MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

RESOURCE EVALUATION

The proposed Minor Project Refinement (MPR) was evaluated to verify that it will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The following table provides a brief summary of the potential impact for each resource area analyzed in the Final EIR/EIS.

EIR/EIS Section	Summary of Potential Impacts
Visual Resources	<p><i>Reduced Impact.</i> The approved Southern Access Road entrance does not currently meet San Diego County line-of-sight distance requirements for safe access to Old Highway 80 due to the prevailing speed of the vehicles traveling along the road. The requested location of the entrance to the Southern Access Road will comply with San Diego County requirements. Approximately 0.13 acre of additional permanent impacts to vegetation will be required due to the shifted entrance to the Southern Access Road as well as the minor modifications to the road alignment. However, installation of the proposed 138 Kilovolt (kV) Underground Transmission Line within the Southern Access Road will result in the removal of steel pole (SP-) 106, SP-107, SP-108, and their associated permanent work pads, pull sites, and access roads. In addition, the relocation of SP-108A will eliminate the need for an originally proposed permanent work pad, pull site, and access road. The elimination of SP-106, SP-107, and SP-108 and the relocation of SP-105A, SP-105B, and SP-108A will reduce land scar impacts resulting from vegetation removal through the elimination of approximately 1.59 acres of permanent impacts to vegetation. Therefore, a total of approximately 1.46 acres of permanent impacts to vegetation will be eliminated as a result of the requested refinements, and overall impacts to visual resources associated with vegetation removal will be reduced.</p> <p>The three relocated poles—SP-105A, SP-105B, and SP-108A—will each be approximately 160 to 170 feet tall. The Final EIR/EIS states that the height of the steel poles associated with the 138 kV Transmission Line would vary by location up to a maximum height of 150 feet. The increase in height of these three poles is required to maintain minimum clearances and wire sag as required by General Order (GO) 95 in light of the slope and terrain at these specific pole locations. The increase in height to approximately 170 feet remains less than the height of the existing Southwest Powerlink (SWPL) 500 kV transmission line structures in the vicinity of the relocated SP-105A, SP-105B and SP-108A. Moreover, the heights of the monopoles going into the substation that will be constructed as part of the Energia Sierra Juarez United States (U.S.) Generator-Tie (ESJ Gen-Tie) Project are approved at 170 feet as per B-93 in Section B.5.1.1 500 kV or 230 kV Gen-Tie Support Structures of the Final EIR/EIS. In addition, the elevations at the top of the existing SWPL towers are approximately 3,250 feet, which is higher than the proposed pole refinements, which will be 3,150 feet to 3,190 feet at their highest points. Therefore, in accordance with page 54 of Section D.3.3.3 of the Final EIR/EIS, the 138 kV overhead poles will remain the same or smaller in scale and industrial character and will not create a strong contrast in the landscape.</p> <p>In addition, the increase in tower height will reduce electromagnetic fields at no to low cost in accordance with GO 131-D and the California Public Utility Commission’s (CPUC’s) electromagnetic field policy. The elimination of SP-106, SP-107, and SP-108 will also reduce the number of overhead structures being installed and reduce the length of new overhead conductor by approximately 700 feet. The removal of additional overhead structures and an increase in the undergrounding of the 138 kV Transmission Line will further reduce scenic vista impacts consistent with the conclusion in Section D.3.4.2 ECO Partial Underground 138 kV Transmission Route Alternative of the Final EIR/EIS.</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>Reducing the number of steel poles required for the approved 138 kV Overhead Transmission Line, converting a portion of the transmission line from overhead to underground, and relocating SP-105A, SP-105B, and SP-108A to previously disturbed areas will reduce visual disturbance associated with the ECO Substation Project (Project). No modifications to the design of the ECO Substation will be required as a result of the requested refinements. Therefore, the activities associated with the construction and utilization of the requested refinement areas will be consistent with those described in the Final EIR/EIS for construction of the 138 kV Transmission Line, ECO Substation, and Southern Access Road. Due to the reduced visual impacts associated with the removal of SP-106, SP-107, and SP-108; relocation of SP-105A, SP-105B, and SP-108A; and converting a portion of the transmission line from overhead to underground, impacts to visual resources will be reduced as a result of the requested refinements. Therefore, the requested refinements will not result in a new, significant impact or in a substantial increase in the severity of a previously identified impact to visual resources, which was evaluated as significant and unmitigable in the Final EIR/EIS.</p>
Agriculture	<p><i>No Change.</i> The activities associated with the requested Southern Access Road and 138 kV Transmission Line refinements will not encroach onto agricultural land, nor will they restrict any agricultural activities on or near agricultural land. Therefore, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to agriculture, which was evaluated as less than significant in the Final EIR/EIS.</p>
Air Quality	<p><i>No Change.</i> Activities associated with construction and utilization of the requested refinement areas will be consistent with those discussed in the Final EIR/EIS for construction of the 138 kV Transmission Line and Southern Access Road. As described in Impact AIR-1 for the partial underground alternative and the Old Highway 80 underground alternative in the Final EIR/EIS, additional trenching activity and soil disturbance would slightly increase construction-generated emissions for criteria pollutants when compared to the overhead line, resulting from both trenching equipment emissions and an increase in fugitive dust levels. Further, the Final EIR/EIS states that identified impacts would be unavoidable and adverse under the National Environmental Policy Act (NEPA), as the significance thresholds could be exceeded. While mitigation measures would be implemented, impacts were determined to be significant (Class I).</p> <p>Overall, there will be a reduction of approximately 1.46 acres of grading associated with the requested refinements, where approximately 0.13 acre of additional grading will be required as a result of the requested refinement areas and approximately 1.59 acres of grading will be eliminated due to the removal of SP-106, SP-107, and SP-108 and the relocation of SP-105A, SP-105B, and SP-108A. In addition, the removal of SP-106, SP-107, and SP-108 will also eliminate the need for excavation and construction of three pole foundations, as well as associated permanent access roads and pull sites. Installation of the underground section within the Southern Access Road is anticipated to require an excavator, dump trucks, concrete trucks, a small crane, and a compactor. Saw-cutting and asphalt grinding equipment will not be required for the approximately 2,000 feet of underground line that will no longer be installed in Old Highway 80 as a result of this MPR request. The reduction in equipment and activities associated with grading, excavation, foundation construction, and pole installation will result in less fugitive dust and vehicle emissions being generated by the Project. While additional trenching will be required along approximately 2,000 feet of the Southern Access Road to place the proposed 138 kV Underground Transmission Line within an underground duct bank, approximately 1,000 feet of trenching along Old Highway 80 will also be eliminated. As a result, only approximately 1,000 feet of new trenching will be required. This trenching will occur</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>along the Southern Access Road within areas that were previously approved for road improvements.</p> <p>While the addition of approximately 1,000 feet of trenching will be largely offset by the reduction in grading, excavation, and foundation construction associated with SP-106, SP-107, and SP-108, the impact to air quality will remain significant and unmitigable, as described in the Final EIR/EIS. The additional area of disturbance (approximately 0.13 acre) and resulting emissions will not substantially increase the already identified significant impact. No additional equipment is anticipated to be required for the underground work. Therefore, equipment emissions and objectionable odors as a result of the refinement would also not exceed those described in the Final EIR/EIS.</p> <p>The expected construction duration associated with the refinements in this MPR request will be similar to the schedule anticipated for construction of the originally approved Project. The requested refinements will be located immediately adjacent to the approved Southern Access Road alignment and will not be located in closer proximity to any residences or sensitive receptors than what was analyzed in the Final EIR/EIS for the ECO Substation site and 138 kV Underground Transmission Line. The Project-specific Dust Control Plan and mitigation measures AQ-1 and AQ-2—including fugitive dust control measures, reduced idling times for construction equipment, cleaner engine technology, and appropriate transport of fill materials—will be implemented for these activities; thus, the total emissions for the requested refinements will be consistent with what was analyzed in the Final EIR/EIS. As a result, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to air quality, which was evaluated as significant and unmitigable in the Final EIR/EIS.</p>
Climate Change	<p><i>No Change.</i> Activities associated with construction and utilization of the requested refinement areas will be consistent with those discussed in the Final EIR/EIS for construction of the 138 kV Transmission Line and Southern Access Road. As previously discussed, a total of approximately 1.46 acres of grading will not be required as a result of the requested refinements. An additional approximately 1,000 feet of trenching overall will be required due to the requested refinements; however, as previously discussed in the Air Quality section of this MPR request, the addition of trenching activities will be offset by the reduction in grading, excavation, foundation construction, and pole installation activities associated with the removal of SP-106, SP-107, and SP-108, along with the placement of the 138 kV Underground Transmission Line within the Southern Access Road.</p> <p>The Climate Change section of the Final EIR/EIS calculates the maximum annual construction-related greenhouse gas emissions to be approximately 9,000 metric tons of carbon dioxide equivalent (MTCO₂E) per year, which is well under the NEPA threshold of 25,000 MTCO₂E per year. The additional emissions associated with approximately 1,000 feet of trenching activities (less than 200 MTCO₂E) will not trigger an exceedance of this threshold. As discussed in the Final EIR/EIS, additional trenching activities associated with construction of the 138 kV Underground Transmission Line could result in increased greenhouse gas emissions; however, these impacts will be less than significant. Therefore, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to climate change, which was evaluated as less than significant in the Final EIR/EIS.</p>

EIR/EIS Section	Summary of Potential Impacts
Biological Resources	<p><i>Reduced Impact.</i> The requested refinement areas were included in vegetation, wildlife, and rare plant surveys that were previously conducted for the Project. A few special-status wildlife species, such as loggerhead shrike (<i>Lanius ludovicianus</i>) and long-eared owl (<i>Asio otus</i>), have the potential to occur within the requested refinement areas; however, all of these species were formerly identified and analyzed in previous wildlife surveys conducted for the Project. In addition, as shown in Figure 2: Southern Access Road Refinement – Survey Results in Attachment C: Site Maps, no sensitive plant species were identified in the requested refinement areas during any of the previous rare plant surveys. Overall, temporary impacts to mixed desert scrub vegetation will increase by approximately 0.02 acre due to the requested refinements. However, overall temporary impacts to juniper woodland vegetation will decrease by approximately 1.01 acres and permanent impacts will decrease by approximately 1.46 acres as a result of the requested refinements. All temporarily impacted areas will be restored following construction in accordance with the Project’s Habitat Restoration Plan.</p> <p>The length of overhead conductor will be reduced from approximately 1,900 feet to the new proposed alignment of approximately 1,200 feet between the proposed locations of SP-105A and SP-108A. The potential for avian strikes will be consistent with what was analyzed in the Final EIR/EIS, if not slightly reduced as a result of the reduction in length of overhead conductor and removal of SP-106, SP-107, and SP-108. Therefore, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to biological resources, which was evaluated as significant and unmitigable in the Final EIR/EIS.</p>
Cultural and Paleontological Resources	<p><i>Reduced Impact.</i> The refinement areas were surveyed for archaeological materials during both pre-construction and cultural resources inventory work for the 2010 Final Report, Prehistoric Artifact Scatters, Bedrock Milling Stations, and Tin Can Dumps: Results of a Cultural Resources Study for the SDG&E East County Substation Project (Berryman and Whitaker, 2010), as well as the letter report titled East County Substation Access Road Cultural Resource Survey Results (Cook, 2010), which included a supplemental cultural resources survey for the redesign of the Southern Access Road alignment. In addition, a cultural resources evaluation to assess the eligibility of cultural sites along the Southern Access Road was conducted on February 28 and March 1, 2013. No eligible or potentially eligible cultural resources were identified within the Southern Access Road footprint during the 2010 surveys. In addition, no eligible cultural resources were identified within the modified Southern Access Road alignment during the 2013 evaluation, as confirmed by the CPUC and Bureau of Land Management (BLM) on March 27 and April 1, 2013, respectively. As a result, the requested refinement areas will not impact any National Register of Historic Places- or California Register of Historical Resources-eligible sites. Figure 2: Southern Access Road Refinement – Survey Results in Attachment C: Site Maps depicts the requested refinement areas, and notes that no eligible cultural resources are located within the requested refinement areas.</p> <p>The original 138 kV Transmission Line and the requested refinements have been placed in cultural site areas that have already been formally evaluated for California Register of Historical Resources/National Register of Historic Places eligibility and determined to be ineligible. As a result of the requested refinements, potential impacts to cultural resource sites will be avoided in an approximately 1.81-acre area due to the elimination of three steel poles; relocation of SP-105A, SP-105B, and SP-108A; and the shifted Southern Access Road entrance, which will reduce the potential for encountering previously unidentified cultural resources. No additional cultural Environmentally Sensitive Areas (ESAs)—aside from those already approved for construction of the Southern Access Road—will be required or established to comply with the Project’s Memorandum of</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>Agreement (August 2012). The site avoidance also demonstrates SDG&E’s commitment to reduce potential impacts to known cultural sites, which meets the commitment stated in the Project’s Memorandum of Agreement (“The BLM will continue to seek and analyze alternatives that avoid adverse effects to cultural resources.”). In addition, an archaeological monitor will be present during all ground-disturbing activities associated with the proposed refinements, including installation of the proposed 138 kV Underground Transmission Line and the installation of SP-108A, SP-105A, and SP-105B to ensure that impacts to cultural resources are minimized and designated ESAs are avoided. Therefore, potential overall impacts to cultural resources will be reduced as a result of the proposed refinements.</p> <p>Based on published geologic mapping for the area, as shown on the United States Geological Survey Preliminary Geologic Map of the El Cajon 30’ x 60’ Quadrangle (Todd, 2004), the Anza Formation is mapped at the surface within portions of the ECO Substation as well as a portion of the Southern Access Road east of the proposed locations for SP-105A and SP-105B. The Anza Formation is designated as High Potential (Class 4) in the BLM’s Potential Fossil Yield Classification System. The proposed refinements are located within the same geological formation as the original 138 kV Transmission Line and Southern Access Road alignment that was analyzed in the EIR/EIS. The paleontological monitoring requirements at the requested refinement areas will remain unchanged. As a result, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to cultural resources, which was evaluated as significant and unmitigable in the Final EIR/EIS.</p>
<p>Geology, Mineral Resources, and Soils</p>	<p><i>No Change.</i> The requested refinement areas were included in the evaluation of geology, mineral resources, and soils in the Project area as part of the Southern Access Road and ECO Substation site, and will not result in new impacts. An additional approximately 1,000 total feet of trenching associated with the requested refinements will be required to prepare the underground duct banks and work pad for SP-105A and SP-105B. However, construction of the Southern Access Road and proposed 138 kV Underground Transmission Line will be conducted in accordance with the best management practices provided in the ECO Substation Storm Water Pollution Prevention Plan (SWPPP) for the Project to reduce the potential for erosion.</p> <p>As described in the Project’s Final EIR/EIS, there are no identified mines located within the requested refinement areas. The ground-disturbing activities that will be required to construct the Southern Access Road and 138 kV Underground Transmission Line will include grading, paving, and excavation of the existing soil, which is consistent with the activities that described in the Project’s Final EIR/EIS. As a result, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to geology, mineral resources, and soils, which was evaluated as less than significant with mitigation in the Final EIR/EIS.</p>
<p>Public Health and Safety; Fire and Fuels Management</p>	<p><i>No Change.</i> The activities performed and the materials utilized during construction of the requested refinement areas will occur in accordance with the description of uses provided in the Project’s Final EIR/EIS. The requested refinement areas will not create new hazards; rather, the new location of the Southern Access Road entrance will ensure compliance with San Diego County’s line-of-sight distance requirements for safe access to Old Highway 80. Construction of the requested refinement areas will include use of materials listed in Table D-10.2 of the Project’s Final EIR/EIS and Table 1: Hazardous Materials and Uses of the Project’s Hazardous Materials and Waste Management Plan. These materials were previously included in the Final EIR/EIS analysis, and all hazardous materials that will be used will be handled and disposed of in accordance with the Project’s Hazardous Materials and Waste Management Plan and with the Health and Safety</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>Program. As discussed in the Final EIR/EIS, the presence of overhead transmission lines present an ongoing source of potential wildfire ignitions; therefore, converting a portion of the 138 kV Transmission Line from overhead to underground within the Southern Access Road will decrease potential impacts associated with fire and fuels management. In addition, the construction of the 138 kV Underground Transmission Line and Southern Access Road will be conducted in accordance with the Project’s Construction Fire Prevention Plan.</p> <p>As a result, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to public health and safety or fire and fuels management, which was evaluated as significant and unmitigable in the Final EIR/EIS.</p>
Water Resources	<p><i>Reduced Impact.</i> The approved Southern Access Road alignment and requested minor adjustments were surveyed for drainages during the initial jurisdictional surveys that were conducted for the ECO Substation site. The location of the requested shift of the Southern Access Road entrance was surveyed for drainages during the supplemental jurisdictional surveys conducted in June 2011.</p> <p>As discussed in the Final EIR/EIS, water resource impacts would be considered significant under the California Environmental Quality Act (CEQA) if the Project would violate any water quality standards or waste discharge requirements; substantially change the existing drainage patterns; create or contribute substantially to runoff water that exceeds the existing or planned storm water system; cause substantial flooding, erosion, or siltation; substantially degrade water quality; or substantially degrade or deplete ground water resources. The requested refinement areas were included in the analysis of impacts associated with the ECO Substation and 138 kV Transmission Line in Chapter D.12 Water Resources of the Final EIR/EIS and will not result in new significant impacts. The elimination of SP-106, SP-107, and SP-108—as well as the relocation of SP-108A, SP-105A, and SP-105B to approved graded areas in the permanent footprint of the ECO Substation site and the Southern Access Road—will eliminate the permanent work areas originally associated with these poles, thereby reducing alterations to existing drainage and storm water runoff patterns. Because the 138 kV Underground Transmission Line alignment will be located within the Southern Access Road, it will not result in any temporary or permanent impacts to runoff and/or drainage patterns beyond that which was already analyzed and described in the Final EIR/EIS. In addition, construction of the requested refinements will incorporate the same mitigation measures detailed in the Final EIR/EIS, and the best management practices provided in the ECO Substation SWPPP will be implemented to reduce the potential for storm water runoff, erosion, sedimentation, and significant alterations to drainage patterns.</p> <p>Overall, the requested refinements associated with the Southern Access Road and 138 kV Transmission Line will reduce temporary impacts to California Department of Fish and Wildlife- (CDFW-) jurisdictional drainages by approximately 0.04 acre and permanent impacts by approximately 0.03 acre. The requested refinements will also reduce temporary impacts to U.S. Army Corps of Engineers- (USACE-) jurisdictional drainages by approximately 0.02 acre and permanent impacts by approximately 0.02 acre. Although impacts to jurisdictional drainages will decrease overall, impacts to individual drainages</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>will increase slightly in the refinement areas along the Southern Access Road due to the shifted entrance and minor adjustments associated with the Southern Access Road.¹ No new drainages will be impacted. However, the removal of three steel poles and relocation of SP-105A, SP-105B, and SP-108A will avoid impacts to 23 drainages, thereby reducing both temporary and permanent impacts to CDFW-jurisdictional drainages by approximately 0.06 acre for each pole removal, resulting in a decrease of approximately 0.18 acre of impacts to CDFW-jurisdictional drainages. Temporary impacts to USACE-jurisdictional drainages will be reduced by approximately 0.02 acre and permanent impacts will be reduced by approximately 0.03 acre, which will more than offset the minor increases associated with the Southern Access Road refinements. Potential impacts associated with water quality, flooding, erosion, or siltation will also be reduced through the avoidance of impacts to 23 drainages.</p> <p>Further, the requested refinements to accommodate drainage features along the Southern Access Road will not alter drainage patterns accounted for in the original approved access road design. Also, drainage features along the access road were designed to direct water into pre-existing drainage areas and balance post-construction off-site water flow with pre-construction calculations. These drainage features were depicted on the construction plans submitted to the USACE on November 6, 2012, and approved by the USACE on November 11, 2012.</p> <p>Overall, the requested refinements associated with the Southern Access Road and 138 kV Transmission Line will reduce temporary impacts to CDFW-jurisdictional impacts by approximately 0.04 acre and permanent impacts will be reduced by approximately 0.03 acre. The requested refinements will also reduce temporary impacts to USACE-jurisdictional drainages by approximately 0.02 acre and permanent impacts by approximately 0.02 acre. Thus, reduced impacts to water resources are anticipated from the proposed refinements. As a result, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to water resources, which was evaluated as less than significant with mitigation in the Final EIR/EIS.</p> <p>Although impacts to jurisdictional drainages will be reduced overall as a result of this MPR request, SDG&E has initiated consultation with the USACE and CDFW and will notify the Colorado River Basin RWQCB regarding the changes. SDG&E will amend and modify, as appropriate, the permits for the Project once the final design has been completed and the overall Project impacts to jurisdictional resources have been determined.</p>

¹ SDG&E has initiated consultation with the USACE and the CDFW and will notify the Colorado River Basin RWQCB regarding the changes in impacts to individual jurisdictional resources, which have been reduced overall as a result of this MPR request, and will initiate permit amendments and modifications, as appropriate, after the final design for the Project has been completed and the associated impacts for the Project overall have been determined.

EIR/EIS Section	Summary of Potential Impacts
Land Use	<p><i>Reduced Impact.</i> As discussed in the Final EIR/EIS, land use impacts would be significant under CEQA if the Project results in a conflict with an applicable land use plan, policy, or regulations and/or results in a division of an established community or disrupts a recently approved land use. As indicated in the Final EIR/EIS, the land on which the ECO Substation and Southern Access Road are located is designated as Multiple Rural Use in the County of San Diego General Plan and is currently undeveloped. The requested refinement areas will also be located on land designated as Multiple Rural Use in the County of San Diego General Plan. As a result, the construction and operation of the requested refinement areas will be consistent with the analysis in the Final EIR/EIS and will not conflict with any land use plans, policies, or regulations. The landowners of the requested refinement areas have been notified of the proposed uses, and the appropriate rights to construct the Southern Access Road and install the 138 kV Underground Transmission Line within the road have been obtained.</p> <p>The elimination of approximately 1,000 feet of underground transmission line and the relocation of SP-105A and SP-105B will remove Project components from their previously proposed locations on BLM-administered land. Therefore, the requested refinements will also reduce impacts to public, BLM-administered land. As a result, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to land use, which was evaluated as less than significant with mitigation in the Final EIR/EIS.</p>
Noise	<p><i>No Change.</i> Rerouting the 138 kV Underground Transmission Line will result in additional construction-related noise during trenching and installation of the underground duct bank; however, removal of SP-106, SP-107, and SP-108 will reduce noise associated with foundation excavation, which would have occurred during installation of the steel poles. As discussed in the Air Quality section of this MPR request, the types and quantity of equipment and number of trips required to construct the 138 kV Underground Transmission Line within the Southern Access Road will be less than that which would have been required to construct the approved SP-106, SP-107, and SP-108 due to the removal of permanent access roads, foundations, and pole installation activities associated with these three poles. There are no known differences in the geology of the Southern Access Road identified in the geotechnical studies conducted for the Project that would require additional noise-generating activities or heavy equipment to construct the 138 kV Underground Transmission Line aside from that which was analyzed in the Final EIR/EIS. Although the duration of construction will be greater for the installation of the 138 kV Underground Transmission Line, the overall construction schedule will not be affected. Therefore, the impacts from noise will be similar to those analyzed for construction of the Southern Access Road and 138 kV Transmission Line in the Final EIR/EIS. Thus, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact related to noise, which was classified as significant and unmitigable.</p>
Social and Economic Conditions	<p><i>No Change.</i> The requested refinement areas will be utilized in accordance with the description of uses provided in the Project's Final EIR/EIS. The Southern Access Road and requested refinement areas will only be used to provide SDG&E personnel with access to the ECO Substation site and will be gated to prevent public access. The nearest residence—a mobile home—is located approximately 0.24 mile from the requested refinement areas and will not be displaced by the implementation of the requested refinements. The requested refinements will not require additional employment of construction personnel beyond what was analyzed in the Final EIR/EIS. Therefore, the requested refinements to the Southern Access Road and 138 kV Transmission Line will not induce population growth or displace people or existing housing. As a result, the requested</p>

EIR/EIS Section	Summary of Potential Impacts
	refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to social and economic conditions, which was classified as less than significant in the Final EIR/EIS.
Public Services and Utilities	<p><i>No Change.</i> The requested refinement areas will be utilized in accordance with the description of uses provided in the Project’s Final EIR/EIS. An additional approximately 1,000 feet of trenching will be required to install the 138 kV Underground Transmission Line within the Southern Access Road, which will likely require water for dust control and soil compaction. However, the removal of SP-106, SP-107, and SP-108 will eliminate the need for water originally required for foundation excavation and pole installation activities, as well as construction of associated permanent work pads, access roads, and pull sites. In addition, SP-105A, SP-105B, and SP-108A will be relocated to areas already approved for grading. As discussed in the Air Quality section of this MPR request, the types and quantities of equipment and number of trips required to construct the 138 kV Underground Transmission Line within the Southern Access Road will be generally the same or less than that which would have been required to construct the approved SP-106, SP-107, and SP-108 due to the removal of permanent access roads, foundations, and pole installation activities associated with these three poles. Although the duration of construction will be greater for the installation of the 138 kV Underground Transmission Line, the overall construction schedule will not be affected, and no additional water trucks will be required beyond those anticipated for construction of the ECO Substation, 138 kV Transmission Line, and the Southern Access Road. Therefore, the addition of approximately 1,000 feet of trenching will not require substantially more water than was identified in the Final EIR/EIS for construction of the Project.</p> <p>SDG&E has communicated with Century Lin, Level 3, AT&T fiber, AT&T, Telco, Metropolitan Transit System, and San Diego County to address potential conflicts with existing utilities. The only existing utility potentially affected by work associated with the requested refinements is a fiber optic line located within the Southern Access Road. A fiber optic line also exists within the shoulder of Old Highway 80, near the originally proposed location of the 138 kV Underground Transmission Line. SDG&E has obtained a curb/grade permit for work along Old Highway 80, which was issued by San Diego County on May 16, 2013 and indicates their approval that the shift of the entrance to the Southern Access Road complies with the San Diego County’s line-of-sight distance requirements. SDG&E will contact Underground Service Alert to identify existing utilities prior to performing any subsurface work at the Southern Access Road entrance, in accordance with the curb/grade permit. In addition, as discussed in the Final EIR/EIS, SDG&E has and will continue to implement Mitigation Measures PSU-1a, PSU-1b, and PSU-1c, which include coordination with utility providers, which will ensure that impacts remain less than significant. Therefore, no impacts to existing utility providers are anticipated.</p> <p>Construction of the requested refinements will generate similar types and volumes of waste as that which was analyzed in the Final EIR/EIS for construction of the Project. Therefore, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to public services and utilities, which was classified as less than significant with mitigation in the Final EIR/EIS.</p>
Wilderness and Recreation	<p><i>No Change.</i> The requested work areas, trench, and relocated SP-108A, SP-105A, and SP-105B will be located immediately adjacent to or within the approved alignment of the Southern Access Road or the approved ECO Substation permanent footprint. As provided in the Final EIR/EIS, the nearest wilderness area to the ECO Substation site is the Table Mountain Area of Critical Environmental Concern, which is located approximately 0.5 mile northwest of the substation, north of Interstate (I-) 8. The nearest recreational area to the ECO Substation site is In-Ko-Pah Park, which is located approximately 1.8 miles</p>

EIR/EIS Section	Summary of Potential Impacts
	<p>northeast of the requested refinement areas, on the north side of I-8. The requested refinements will not be located in closer proximity nor obstruct access to any wilderness or recreational areas. As a result, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to wilderness and recreation, which was classified as less than significant with mitigation in the Final EIR/EIS.</p>
<p>Transportation and Traffic</p>	<p><i>Reduced Impact.</i> The location of the requested work areas, trench, and relocated SP-108A, SP-105A, and SP-105B will be immediately adjacent to or within the approved Southern Access Road alignment or the approved ECO Substation permanent footprint. By reducing the length of the section of the 138 kV Underground Transmission Line located along Old Highway 80 by approximately 1,000 feet, temporary disruption to public roads will decrease from that which was described in the Final EIR/EIS. The only construction vehicles and heavy equipment that will be used for the addition of the requested refinements are those that were already required for clearing, grading, and paving of the approved Southern Access Road alignment and the construction of the 138 kV Underground Transmission Line along Old Highway 80. In addition, all construction activities associated with the requested refinements will be conducted in accordance with the ECO Substation Traffic Control Plan. Therefore, the requested refinements will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to transportation and traffic, which was classified as less than significant with mitigation in the Final EIR/EIS.</p>

ATTACHMENT B: PHOTOGRAPHS

ATTACHMENT B: PHOTOGRAPHS



Photograph 1: View of the refinement area at the Southern Access Road entrance to Old Highway 80, facing south



Photograph 2: View of the refinement area at the Southern Access Road entrance to Old Highway 80, facing west



Photograph 3: View of the requested riser pole location within the Southern Access Road shoulder, facing southwest



Photograph 4: View of the requested riser pole location within the Southern Access Road shoulder, facing west

ATTACHMENT C: SITE MAPS

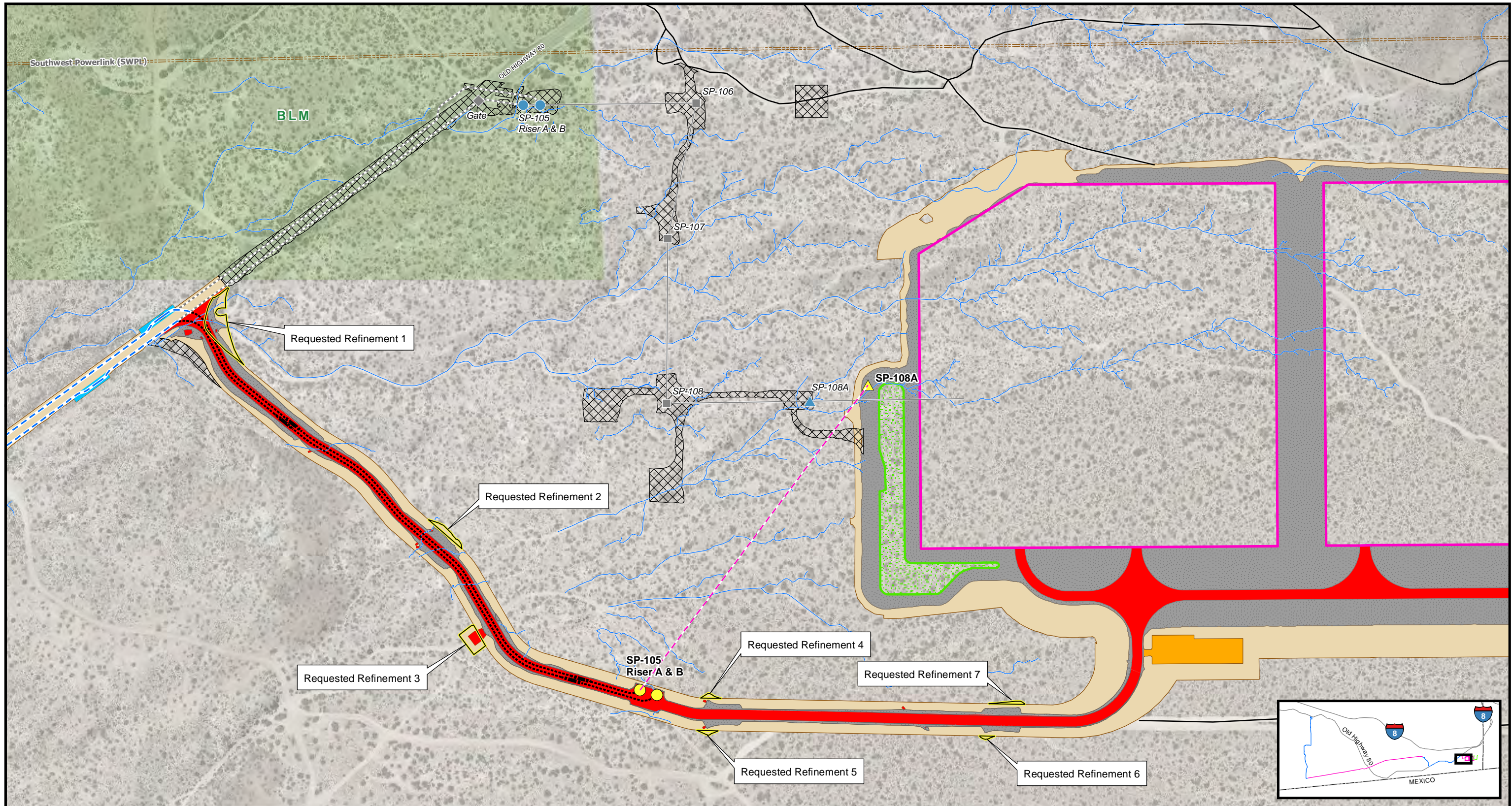
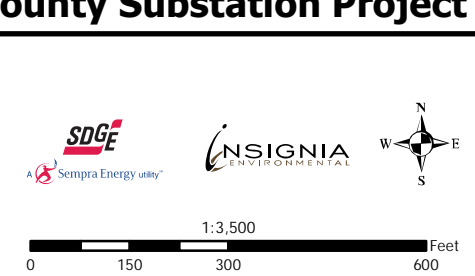
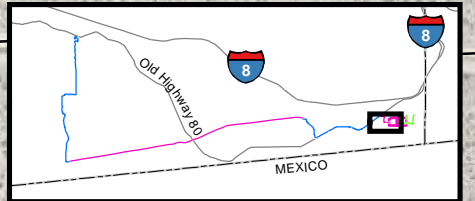
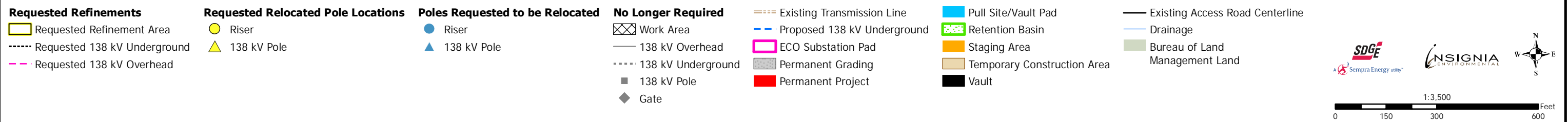


Figure 1: Southern Access Road Refinement – Requested and No Longer Required Areas

East County Substation Project



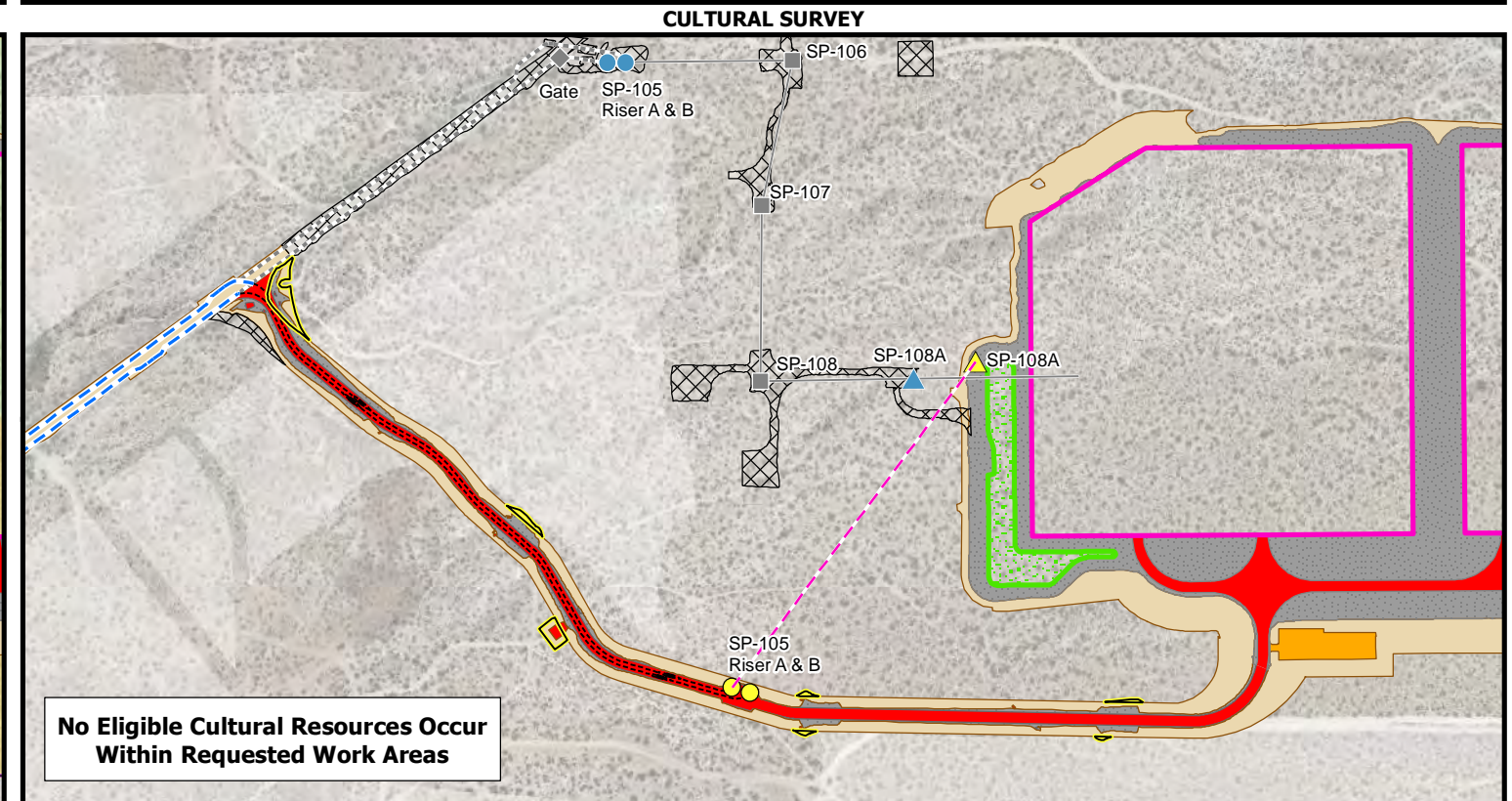
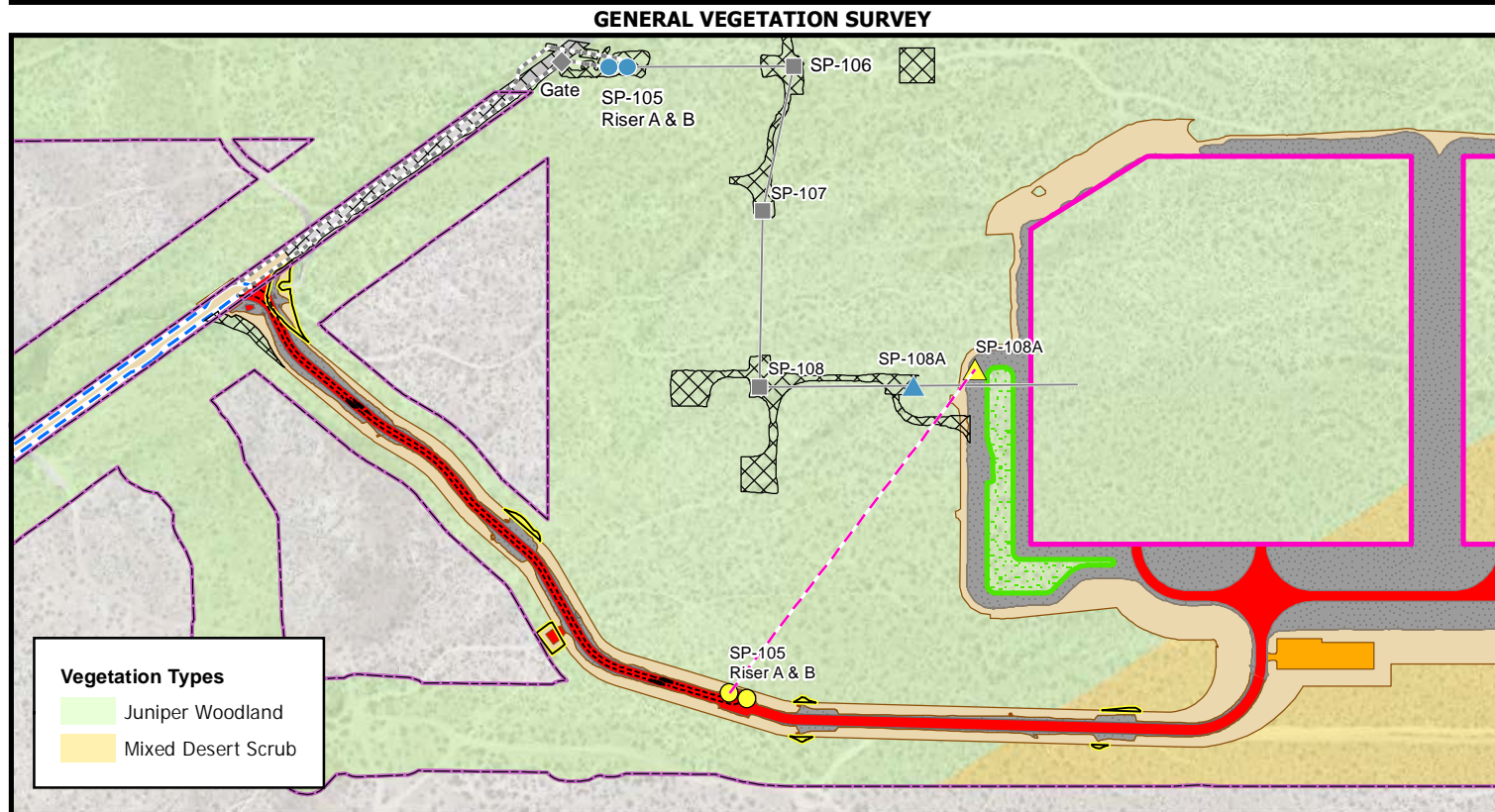
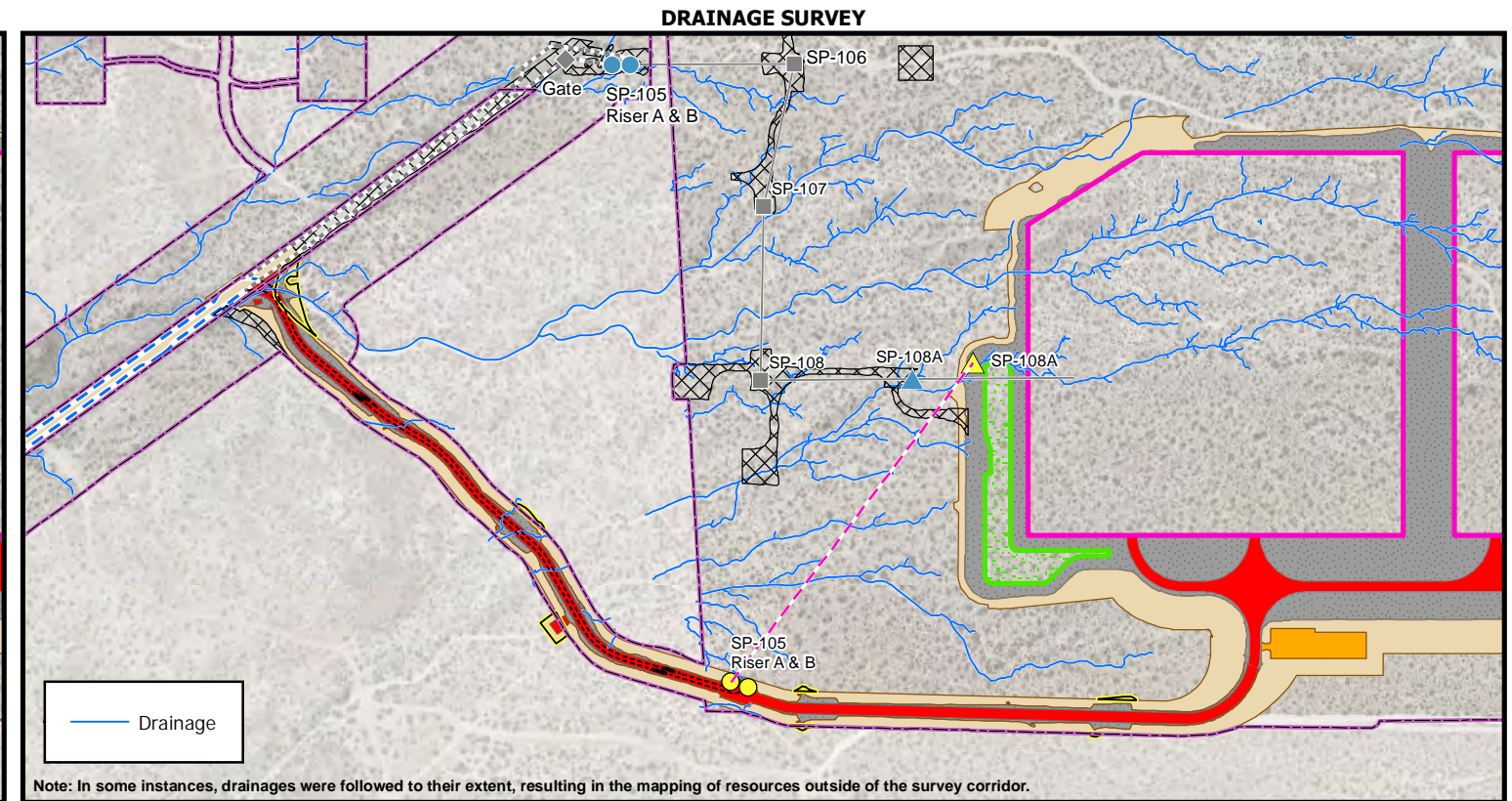
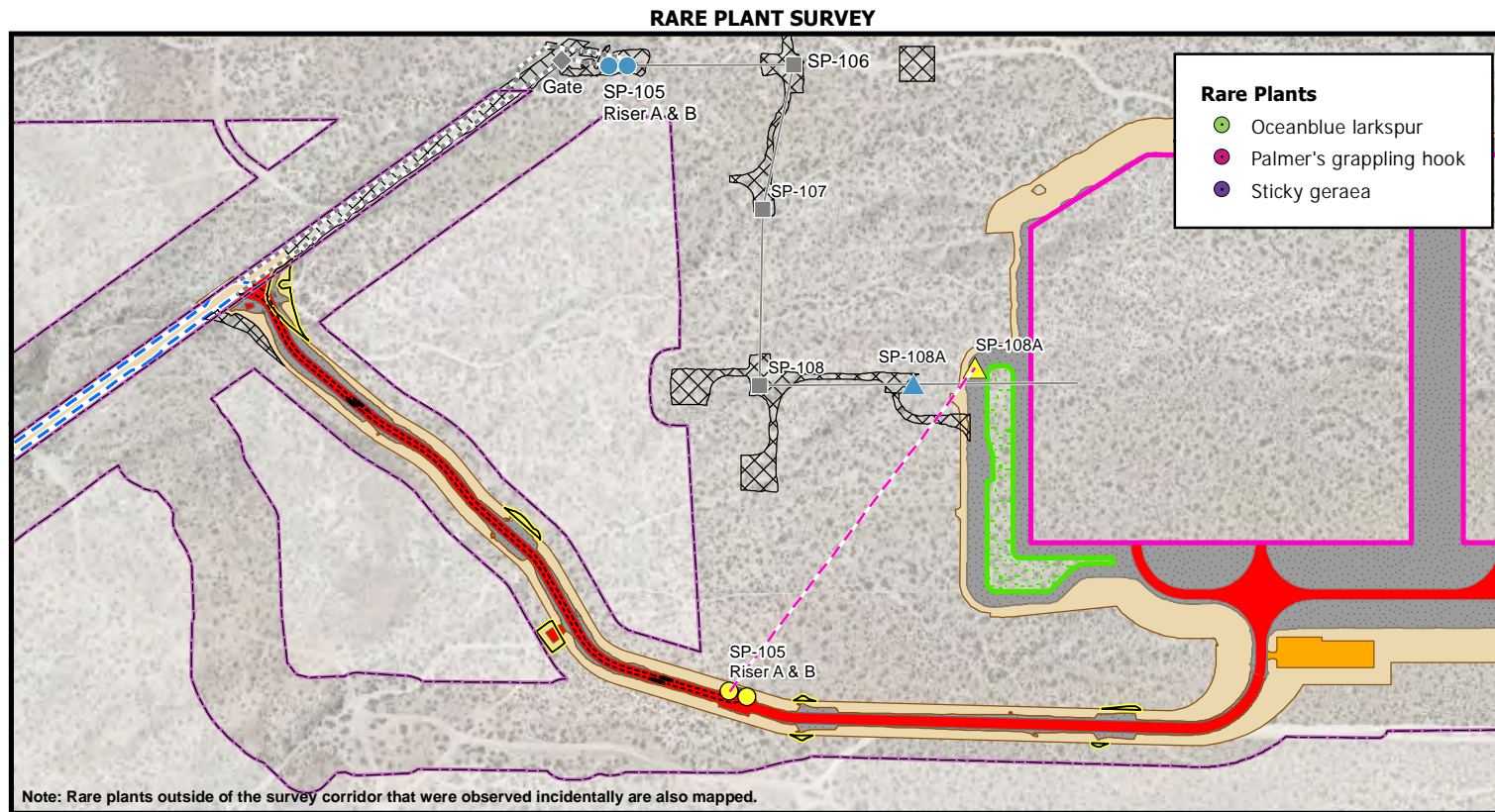
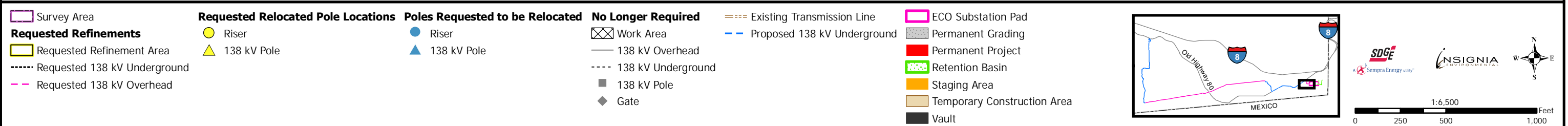


Figure 2: Southern Access Road Refinement – Survey Results

East County Substation Project



ATTACHMENT D: REFINEMENT AREAS TABLE

ATTACHMENT D: REFINEMENT AREAS TABLE

Refinement Area	Proposed Activities/Improvements	Approximate Dimensions (feet)	Temporary Impacts	Permanent Impacts
1	The shifted entrance to the Southern Access Road is required in order to comply with San Diego County line-of-sight distance requirements.	230 by 70	0.01	0.12
2	During final engineering, the results of a hydrology study determined that minor adjustments to the road alignment will be required to accommodate installation of a larger drainage feature.	130 by 15	0.04	--
3	During final engineering, the results of a hydrology study determined that minor adjustments to the road alignment will be required to accommodate installation of a larger rip-rap dissipater.	75 by 50	0.06	0.02
4	During final engineering, the results of a hydrology study determined that additional temporary workspace adjacent to the road will be required to accommodate installation of a larger drainage feature.	60 by 10	0.01	--
5	During final engineering, the results of a hydrology study determined that additional temporary workspace adjacent to the road will be required to accommodate installation of a larger drainage feature.	60 by 10	0.01	--
6	During final engineering, the results of a hydrology study determined that installation of additional temporary workspace adjacent to the road will be required to accommodate a larger drainage feature.	40 by 10	0.01	--
7	During final engineering, the results of a hydrology study determined that additional temporary workspace adjacent to the road will be required to accommodate installation of a larger drainage feature.	100 by 7	0.01	--

ATTACHMENT E: EIR/EIS STUDY AREA TABLE

ATTACHMENT E: EIR/EIS STUDY AREA TABLE

Environmental Impact Report/Environmental Impact Statement (EIR/EIS) Study Area Table

Resource	Study Area from Final EIR/EIS	Location in Final EIR/EIS
Biological Resources	<ul style="list-style-type: none"> • Six parcels (498 acres total) on which the East County (ECO) Substation/Southwest Powerlink (SWPL) loop-in are located • 400-foot-wide corridor along the originally proposed 13.3-mile-long 138 kilovolt (kV) overhead transmission alignment, between the proposed ECO and Boulevard substation sites • Existing Boulevard Substation (within the fenced limits) • 8.5-acre Boulevard Substation Rebuild site • 377-acre alternative ECO Substation site¹ • 40 feet from the edge of the disturbed road on each side of the Old Highway 80 – Carrizo Gorge Road underground transmission line route alternative (ECO Partial Underground 138 kV Transmission Route Alternative) • 60-foot-wide corridor along the SWPL to Boulevard portion of the ECO Partial Underground 138 kV Transmission Route Alternative 	<ul style="list-style-type: none"> • Page D.2-3 • Figures D.2-1 through D.2-3 • Proponent’s Environmental Assessment (PEA) Page 4.4-3 • Page C-25 • Old Highway 80 – Carrizo Gorge Road Reroute Biological Resources and Jurisdictional Drainages Surveys Summary Report • Figure A-3 of San Diego Gas & Electric Company’s comments on the Draft EIR/EIS
Visual Resources	Within five miles of the ECO Substation Project (Project) components and alternatives	Page D.3-3
Land Use	Land underlying and directly adjacent to the Project components and alternatives	Page D.4-1
Wilderness and Recreation	Recreation areas and facilities in southeastern San Diego and southwestern Imperial counties	<ul style="list-style-type: none"> • Page D.5-1 • Figure D.5-1B
Agriculture	All California Department of Conservation Farmland Mapping and Monitoring Program agricultural land in San Diego County	Pages D.6-1 and D.6-2

¹ The approved ECO Substation site is located approximately 700 feet east of the originally proposed location on three parcels totaling 377 acres. Additional information regarding the ECO Substation Alternative Site is provided on page C-25 of the Final EIR/EIS.

Resource	Study Area from Final EIR/EIS	Location in Final EIR/EIS
Cultural and Paleontological Resources	0.5-mile radius from Project components and approved alternatives ²	<ul style="list-style-type: none"> • Pages D.7-2 through D.7-4 regarding information used (distance provided in the PEA section) • Pages C-25 through C-27
Noise	<ul style="list-style-type: none"> • Distance from closest property line or sensitive receptor from each Project component, including the following: <ul style="list-style-type: none"> - Approximately 500 feet from ECO Substation site - Approximately 1,320 feet from SWPL Loop-in site - Approximately 235 feet from the 138 kV transmission line - Approximately 500 feet from the Boulevard Substation site 	Pages D.8-4 and D.8-5
Transportation and Traffic	<ul style="list-style-type: none"> • Roads in the Project vicinity, including the following: <ul style="list-style-type: none"> - Interstate 8 - State Route 94 - Old Highway 80 - Ribbonwood Road - McCain Valley Road - Tule Jim Lane - Jacumba National Cooperative - Carrizo Creek Road - Carrizo Gorge Road - Jewel Valley Road - Several unnamed dirt roads throughout the Project area • San Diego and Arizona Eastern Railway • Jacumba Airport and Empire Ranch airstrip • San Diego Metropolitan Transit Service Bus Route 888, providing service between El Cajon and Jacumba, California 	Figures D.9-1A and D.9-1B

² The approved alternatives include the ECO Substation Alternative Site, as well as the ECO Partial Underground 138 kV Transmission Route Alternative alignments. Additional information regarding the approved alternative areas is provided on pages C-25 through C-27 of the Final EIR/EIS.

Resource	Study Area from Final EIR/EIS	Location in Final EIR/EIS
Public Health and Safety	Within two miles of the ECO Substation site and approximately 14-mile-long overhead transmission line alignment	<ul style="list-style-type: none"> • Page D.10-2 • Page ES-1 of the Phase I Environmental Site Assessment of the 377-acre ECO Substation site parcels • Page 5 of the Limited Phase I Environmental Site Assessment for the transmission alignment
Air Quality	San Diego Air Basin	Page D.11-6
Water Resources	Colorado River Basin	Page D.12-2
Geology, Mineral Resources, and Soils	<ul style="list-style-type: none"> • Within 40 miles for faults • Within 0.5 mile of land underlying Project components and alternatives 	Page D.13-1, Figure D.13-1
Public Services and Utilities	<ul style="list-style-type: none"> • Within 60 miles for landfills • Within five miles for all other public services and utilities 	Page D.14-27
Fire and Fuels Management	Greater eastern San Diego County	Page D.15-1, Figures D.15-1A and D.15-1B
Social and Economic Conditions	Mountain Empire Subregion (Jacumba, Boulevard, Tecate, Potrero, and Campo)	Page D.16-2
Environmental Justice	Mountain Empire Census County Division	Page D.17-1
Climate Change	California	Page D.18-2

ATTACHMENT F: UPDATED LU-2 LETTER REPORT



Don Houston
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May 17, 2013

Ms. Amy Baker
Project Manager
California Public Utilities Commission
505 Van Ness Avenue, 4th Floor
San Francisco, CA 94102

**Re: Mitigation Measure LU-2 for the East County Substation Project Components:
East County Substation Site and Access Road**

Dear Ms. Baker:

San Diego Gas & Electric Company (SDG&E) has prepared this letter report to demonstrate compliance with Mitigation Measure (MM) LU-2 as required by the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) for the East County Substation Project (Project). Specifically, this letter report addresses landowners affected by the East County Substation site and the associated access road components of the Project. As required by MM LU-2, SDG&E notified landowners with property through which the substation and access road would pass and this letter report summarizes communications with those affected property owners.

MM LU-2 has been inserted below for your reference:

LU-2. Revise project elements to minimize land use conflicts. At least 90 days prior to completing final transmission line design for the approved route, SDG&E shall notify landowners of parcels through which the alignment would pass regarding the specific location of the ROW, individual towers, staging areas, access roads, or other facilities associated with the project that would occur on the subject property. The notified parties shall be provided at least 30 days in which to identify conflicts with any planned development on the subject property and to work with SDG&E to identify potential reroutes of the alignment that would be mutually acceptable to SDG&E and the landowner. Property owners whose land may be divided into potentially uneconomic parcels shall be afforded this same opportunity, even if development plans have not been established. SDG&E shall endeavor to accommodate these reroutes only to the extent that they are reasonable and feasible, do not create a substantial increase in cost, and do not create adverse impacts to resources or to other properties that would be greater in magnitude than impacts that would occur from construction and operation of the alignment as originally planned.

SDG&E shall provide a written report to the CPUC/BLM providing evidence of the notice to landowners and copies of any responses to the notice within 30 days of the notice closing

date for responses. SDG&E shall also identify in the documentation submitted to the CPUC and BLM whether reroutes recommended by the landowner or SDG&E can be accommodated. Where they cannot be accommodated, the reasons shall be provided. SDG&E shall provide information sufficient for the CPUC and BLM to determine that the reroute creates no more adverse impact than the originally planned alignment location. SDG&E shall include environmental information consistent with that required for a variance. Where a reroute is proposed, the CPUC or BLM will review and agree to accept or reject individual reroutes. The CPUC or BLM may also recommend compromise reroutes for any of the parcels for which responses were provided in a timely fashion.

Typically, notification to landowners was delivered using a standardized letter that was sent by certified mail, Federal Express, or hand delivered. The notification letter included a map showing the landowner’s property, the proposed right-of-way, tower locations, and other Project facilities. The landowners were given 30 days or more to make comments and request changes. A notification letter template is included as Attachment A: Notification Letter Template for reference purposes.

Any comments or change requests from the landowner, known as Landowner Requests (LORs), were submitted to SDG&E’s Right-of-Way Agents via face-to-face meetings, written correspondences, and telephone calls. An initial feasibility review was performed by SDG&E managers of the Land, Environmental, and Engineering Departments using the screening criteria described below.

Screening Criteria
1. Adds new property owner crossings
2. Adds new angles
3. Increases existing line angles
4. Requires moving existing angle structures
5. Increases impacts to land use and environmental resources
6. Increases or transfers visual impacts
7. Increases property impacts to cause full-takes
8. Increases business impacts
9. Increases costs
10. Eliminates unnecessary access to facilities
11. Jeopardizes future transmission structure positions within right-of-way
12. Moves alignment closer to existing residences/businesses
13. Results in a non-compliance with agency requirements

If the LOR passed the screening criteria, it was then recommended to the SDG&E Engineering Team for inclusion into the final Project design. If the LOR was deemed infeasible, the landowner was informed and the decision was documented.

As depicted in Attachment B: Project Map, three landowners are associated with the substation site and access road; SDG&E, Energia Sierra Juarez U.S. Transmission LLC (ESJ), and David Living Trust. Since SDG&E owns the substation site, notification was not required. The access road is partially owned by ESJ, a co-applicant with SDG&E in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Project. ESJ has entered into a “Reciprocal Road Easement” (Easement) with SDG&E. Negotiations for the Easement began on August 6, 2012, and a final agreement was executed on January 23, 2013. No design changes were necessary to satisfy the ESJ easement acquisition.

The third landowner—David Living Trust—owns a parcel through which a portion of the access road also passes. On June 9, 2011, a notification letter was sent to David Living Trust and communications continued with the property owner until August 2012, at which time an easement agreement was executed. Three LORs were received from the landowner during this time period. Each LOR was received, evaluated, and determined to be infeasible using the Screening Criteria described in the above table. All three LORs involved moving the substation access road to an area that has not been previously disturbed, which would have increased the biological and cultural impacts discussed in Screening Criteria 5. LORs #2 and #3 also triggered Screening Criteria 1 because movement of the road would have caused a new landowner to be affected by the Project. The increased costs associated with acquiring the land necessary to satisfy LOR #3 also contributed to the request being infeasible, as per Screening Criteria 9. A summary of the LORs for this property owner are included in Attachment C: Landowner Request Summary. A copy of the complete acquisition log for this property is included as Attachment D: David Living Trust Acquisition Log.

An Option to Purchase Agreement on the David Living Trust property is currently owned by Aries Solar Holding, LLC, which became effective on December 21, 2012. The option was previously owned by BP Solar Energy North America and Bakersfield Fuel and Oil Company. No LORs were received from Aries Solar Holding, LLC in association with the Minor Project Refinement #4 changes. David Living Trust granted an easement for the Project on May 6, 2013, for which Aries Solar Holding, LLC previously provided consent on April 24, 2013.

As demonstrated by this letter report and attachments, SDG&E has met the requirements of MM LU-2 for the Project's ECO Substation site and access road by providing adequate notice to landowners and accommodating any LORs to the extent that they are reasonable and feasible, do not create a substantial increase in cost, and do not create adverse impacts to resources or to other properties that would be greater in magnitude than impacts that would occur from construction and operation of the Project as originally planned.

Sincerely,



Don Houston
Environmental Project Manager
San Diego Gas & Electric Company

Enclosed: Attachment A: Notification Letter Template
Attachment B: Project Map
Attachment C: Landowner Request Summary
Attachment D: David Living Trust Acquisition Log

cc: Anne Marie McGraw, Insignia Environmental
Jeffrey Coward, Insignia Environmental
Kirstie Reynolds, San Diego Gas & Electric Company
David Hochart, Dudek

ATTACHMENT A: NOTIFICATION LETTER TEMPLATE



[Agent's name]
Right of Way Agent

San Diego Gas & Electric Company (SDG&E)
Land Services
8335 Century Park Ct., CP 11D
San Diego, CA 92123-1582

Tel: xxx-xxx-xxxx
Fax: xxx-xxx-xxxx
[Agent's email]

Date: _____

VIA FEDERAL EXPRESS [or, VIA CERTIFIED MAIL, VIA HAND DELIVERY]

[Addressee]

SUBJECT: Electric Transmission Line 13844 for the East County Substation Project (ECO) –
Offer of compensation for easement; your Assessors Parcel Number _____

Dear _____:

As you are aware, San Diego Gas & Electric (SDG&E) is proposing to acquire easements for the construction of the above-referenced electric transmission line project. This will require the acquisition of an easement over a portion of your property.

This project will provide access to renewable energy and improve electric grid reliability and reduce the potential for outages in communities such as Jacumba, Boulevard and Campo.

You were previously contacted during the appraisal phase of this project and were offered an opportunity to meet with SDG&E's independent appraiser during the inspection of the property. A market-value appraisal has now been completed. Based on that appraisal and by this letter SDG&E makes its offer to purchase an easement from you in the amount of \$_____.

The following documents are enclosed for your review and action:

1. One copy of a surveyed map for your information, which shows the location/area of SDG&E's proposed easement acquisition
2. One original and one copy of an Easement, by which you convey this property interest to SDG&E
3. One copy of the Summary of the Basis of the Amount Established as Just Compensation for your information
4. Two originals and one copy of the Easement Contract, which establishes terms and conditions primarily related to the payment of compensation for the easement
5. One copy of a brochure entitled Property Owner's Information Pamphlet on Use of Eminent Domain in California

However, please note that it is our desire to reach a settlement without the use of eminent domain. The pamphlet is being provided for information purposes.

6. Request for Taxpayer Identification Number and Certification (W-9)

7. Statement of Information

8. Certification of Trust *[If applicable]*

Separate instructions are also enclosed to assist you in completing certain of these documents (Attachment 1).

It is SDG&E's sincere hope that this offer is acceptable and we can proceed with the easement acquisition. If you are not satisfied with the offer of compensation, you will be given a reasonable opportunity to present relevant material, which will be carefully considered.

Project construction requires that easement acquisitions be completed promptly. A response to this offer would be appreciated as quickly as possible, but no later than fifteen (15) days from date of letter. Otherwise, I will contact you to further discuss this matter.

If you have any questions or concerns, do not hesitate to call me at the number above.

Thank you for your cooperation.

Sincerely,

Enclosures

ATTACHMENT 1

Instructions for Completing Documents

Easement Contract

1. Sign and date the original and one copy of the contract where indicated by a signature tag.
2. Return these to the right of way agent named in the transmittal letter. The third copy is for your records. At the time the contract is approved by SDG&E, you will be provided a fully executed copy for your files.

Easement

1. In the presence of a notary public, sign the “Original” Easement on the tagged signature page, and enter the date you sign on the line above the signature block.

If it is inconvenient for you to arrange for a notary, please inform the right of way agent (also a notary public), who can meet with you and notarize the document.
2. Return the original notarized Easement to the right of way agent. The copy is for your records.

Please return the following documents to the right of way agent in the enclosed envelope:

1. A signed original and duplicate copy of the Easement Contract
2. Original signed and notarized Easement
3. Original completed and signed W-9 form, a requirement of our Accounting Dept.
4. Original completed and signed Statement of Information, which is a title company requirement (Please note that additional title company requirements may apply.)

[If applicable]:

5. Certification of Trust- as your property is held in a trust, this is a title company requirement in order to verify the existence and status of the trust.

Attachments B through D of Attachment F: Updated LU-2 Letter Report have been redacted due to their confidential nature.

**ATTACHMENT G: COUNTY CORRESPONDENCE AND LINE-OF-SIGHT
DOCUMENTATION**



County of San Diego

MARK WARDLAW
Director

PLANNING & DEVELOPMENT SERVICES

BETH MURRAY
Assistant Director

5510 OVERLAND AVENUE, SUITE 110, SAN DIEGO, CALIFORNIA 92123
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017
www.sdcounty.ca.gov/pds

October 9, 2012

San Diego Gas & Electric Company (SDG&E)
c/o: Matt Huber, SDG&E Construction Manager
1010 Tavern Road
Alpine, CA 91901
Tel # (858) 654-1651
E-mail: mhuber@semprautilities.com

Dear Mr. Huber:

SDG&E EAST COUNTY SUBSTATION ("ECO") CONSULTATION REVIEW OF GRADING & ACCESS ROAD, PURSUANT TO CALIFORNIA PUBLIC UTILITIES COMMISSION, GENERAL ORDER 131-D.; CG-4794; COMMUNITY OF JACUMBA

This guidance document is intended to help our customers navigate through the consultation process and conform to County San Diego (County) codes. Staff will be available to meet or discuss plan comments and provide guidance as needed throughout the review process to enable this goal to be met.

1st REVIEW COMMENTS/RECOMMENDATIONS:

1. Please see "redline" comments on plans.
2. Fire Agency approval for proposed private access road(s) shown on plans, i.e. assessment of adequate access to the project site coordinated with the local fire protection district and where warranted, other emergency response agencies such as the Sheriff and California Highway Patrol.
3. Private Road Maintenance Agreement to assure the private road to the substation is maintained.
4. Recommended that a Landscape and Irrigation ("L&I") plan be incorporated to address water conservation issue; County Ordinance 10032.

5. Geotechnical Investigation Report to cover entire site including staging area, pads and all private access roads. Analysis and certification for local and global slope stability against failure, addressing all newly created slopes, pads, and access roads.
6. Provide an issue specific traffic study showing truck routing plan for the imported 30,000 cubic yards from the Boulevard Substation, the Imported 43,100 cubic yards of Class II Base, and the export of 8,000 cubic yard to nearby tower sites over County maintained roads.
7. A Registered Civil Engineer, Registered Traffic Engineer, or Licensed Land Surveyor shall provide a certified signed statement that, "Physically, there is a minimum unobstructed sight distance in both directions along Old Highway 80 from the private access road serving the substation, for the prevailing operating traffic speed on Old Highway 80 per the Design Standards of Section 6.1.E of the County of San Diego Public Road Standards (dated March 2012), to the satisfaction of the Director of Public Works. If the lines of sight fall within the existing public road right-of-way, the engineer or surveyor shall further certify that, "Said lines of sight fall within the existing right-of-way and a clear space easement is not required."

DRAINAGE STUDY:

1. See redline comments on drainage report dated August 24, 2012.
2. Prepare drainage report per Fig. 1-8 format (San Diego County Hydrology Manual, June 2003).
3. Provide "Declaration of Responsible Charge" per sample Fig 1-9 in "Hydrology Manual" June 2003.
4. Label Q_{100} and V_{100} at all drainage outfall/concentration locations and provide summary table on "Proposed Hydrology Exhibits."
5. Show access to maintain drainage facilities, where appropriate.
6. Rip Rap shall be sized based on these values per D-40 and "Greenbook" specifications. Show Q_{100} inundation boundary for all drainage basin greater than 100-acres.
7. Show all proposed drainage facilities; convey system with Q_{100} , V_{100} at concentrate points. Provide a summary table on "Drainage Map Exhibit".
8. Include a summary table for pre-development versus post-development drainage showing all points of concentration (on-site and off-site) and data. Include Q_{100} peak runoff rates (cubic feet per second) and velocities (feet per second) for pre-

development and post development. The comparisons should be made for the same discharge points for each drainage basin affecting the site.

9. Include a narrative on the adequacy of all drainage facilities impacted directly by proposed design.
10. Ratio of Q100 (164 cfs) and drainage basin area for basin "100" (251 acres) is 0.65, which is lower than normal range of 1.6 to 2.4; and needs to be verified. The same ratio result applies to basins "200" and "300".
11. See "Requirement for using HDPE" attached at end. Comply with design requirements or choose replacement pipe material for drainage facility design.

For Hydraulic Calculation:

12. Provide in Drainage Report summary tables and exhibits showing location of all calculation, and proposed Q_{100} and V_{100} :
 - a.) at downstream end of proposed drainage facilities including energy dissipation structures.
 - b.), for all drainage terrace and earthen swale permissible average velocity. (Provide treatment by checking V_{50} per Table 5-13). All calculations should correspond to the designated nodes on exhibits.
13. Show adequacy of all on-site proposed drainage facilities.
14. Provide properly scaled exhibits, i.e. reduced exhibits provide are illegible.

STORMWATER MANAGEMENT PLAN (SWMP):

1. SDG&E is developing and implementing of a Storm Water Pollution Prevention Plan (SWPPP), pursuant to the State of California Water Board General Permit for Discharges of Storm Water Associated with Construction Activity.

NEXT SUBMITTAL:

Comply with all above, call for a review meeting with PDCI and DPLU to discuss next submittal requirements.

Minimum submittal required:

1. 2-sets of full size updated prints
2. Previous redline check prints
3. 2-Updated Drainage Reports and Previous redline drainage report


KENNETH J. BRAZELL, Project Manager
Department of Planning & Development Services

Shou-Tai An, DPW Civil Engineer
Attachment (1)



PROJECT MEMO

TO: KEN BRAZELL
COUNTY OF SAN DIEGO DEPT OF PUBLIC WORKS

DATE: 11/13/2012

BY: JOE LOEFFELHOLZ,
Beta Project Engineer – ECO Substation

SUBJECT: ECO SUBSTATION PROJECT
RESPONSE TO COUNTY OF SAN DIEGO PLAN REVIEW COMMENTS
DATED 10/09/12

- **GENERAL DESCRIPTION OF SUBMITTAL AND RESPONSE TO COMMENTS**

SDG&E submitted copies of the ECO Substation construction plans for review by the County of San Diego on September 13, 2012. Through our discussions when the plans were submitted, the County indicated that their review of the plans would be general and that their comments could be considered as suggestions to improve and clarify the plan set. Some of the comments received from the review dated October 9, 2012 will require a plan revision or a response to adequately address issues raised by the plan review. A statement was added to the plans that states that General Order No. 131-D of the California Public Utilities Commission has been satisfied.

- **1st REVIEW COMMENTS/RECOMMENDATIONS**

1. **Redline comments.** - See description of redline revisions below.
2. **Fire Agency approval of access road.** – Fire agency approval is required to comply with the EIR mitigation measure FF-1, so signature block is not necessary.
3. **Private Road Maintenance Agreement.** – A Private Road Maintenance Agreement is not required because the road easement agreement requires SDG&E to maintain the access road.
4. **Water Conservation Issues for Landscape plans.** – The landscape plans for ECO are not yet complete, however any re-vegetation that is to take place will be required to use plant species native to the area (per EIR), not requiring irrigation beyond the initial establishment period. No irrigation system is planned for this site.
5. **Geotechnical report.** The geotechnical investigation report dated January 24, 2011 and stamped by a geotechnical engineer and engineering geologist, calls out that the proposed cut and fill slopes (which are 2:1 max) should be stable under normal conditions (sec. 4.3.4). The plans themselves will be certified by a geotechnical engineer stating that they have been reviewed and found to be in conformance with the recommendations of the report.

6. **Traffic Study for Importing Dirt and Class II Base.** - A traffic analysis was included in the EIR/EIS CEQA document (see Section D.9 of the final EIR/EIS). As the lead agency, the CPUC developed mitigation measures that address traffic impacts. As part of the mitigation requirements SDGE's contractor videotaped the County roads in the construction area between Boulevard and the ECO Substation (including Old Highway 80, Carrizo Gorge Road, and Jewel Valley Road) to document the condition prior to construction.
7. **Sight Distance.** - Sight distance letter and exhibit is being submitted with this plan set.

- **CURB GRADE PLANS**

A revised set of Curb Grade plan is being submitted.

Regarding a redline comment (on sheet 4 of the previously submitted plan set) to label the existing improvement plan for Old 80, no existing improvement plans could be found at the county's cartography archive. There was a record of survey (ROS 1181) which called out existing stationing along Old 80, so we matched our stationing to that.

- **DRAINAGE STUDY**

Comments will be addressed in revised drainage study.

Regarding comment #5, the main drainage facilities that are not easily accessible are located on the west side of the proposed detention basin. This has been internally discussed, and graded access to these facilities has been determined to be not feasible due to severe grading restrictions in this area. Access will be obtained from outside the graded slopes.

- **HYDRAULIC CALCULATIONS**

Comments are addressed in revised drainage study.

- **STORMWATER MANAGEMENT PLAN (SWMP)**

SDG&E is in the process of developing a Storm Water Pollution Prevention Plan (SWPPP) pursuant to the State of California Water Board General Permit for Discharges of Storm Water Associated with Construction Activity.

- **REDLINE COMMENTS ON EACH PLAN SHEET**

Sheet 900 (renumbered as 900.1) – All comments have been addressed except for the geotechnical engineering stamps and the WDID number for the SWPPP, which has not been issued yet.

Sheet 901 – APN's and existing SWPL right of way document are now shown.

Typical for sheets 903.0 thru 903.4 and 903.6 thru 903.9

- Slope symbols have been made darker.
- The 100 year flow rate and velocity for the drainage features has been shown.
- The road swale sections have been labeled.
- Flow line slopes have been labeled.
- Riprap type and width are labeled.
- Additional spot elevations have been added.
- Internal substation pipes have remained as HDPE as these are not critical for substation access or drainage of the overall drainage basin. (All HDPE for the access road, however, has been changed to RCP. See sheets 904.2 thru 904.10.)

Sheet 903.3 – The 3' x 3' drainage inlet is for an overflow pipe located nearby on the water storage tank, so there is no 100 year flow rate. There should not be a ponding issue at the drainage ditch south of the 500 kV yard as the 18" storm pipe is adequately sized to drain the ditch. Regarding the "show design" comment for the 18" pipe and the downstream ditch, both the pipe information (18"Ø x 143' RCP storm pipe) and the ditch detail (drainage ditch 'H', sheet 903.12) are called out. A profile of both is shown in profile 'B' on sheet 901.1. The riprap at the 36" spillway off of the access road was not extended to the center of the ditch as this area is already showing riprap from the ditch (see detail 'H', sheet 903.12).

Sheet 903.7 – The water line information has been left on this sheet as this (and sheet 903.9) is the only location showing the portion of the water line within the substation pad.

Sheet 903.11 – Rebar shown in 'Brow Ditch Catch Basin Detail'.

Sheet 903.12 – The designation of light riprap has been removed. Only #2 backing is required.

Typical for sheets 904.2 thru 904.10

- The 100 year flow rate and velocity for the drainage features has been shown.
- Riprap type and width are labeled.

- HDPE has been changed to RCP for all portions of the access road.
- Scale for plan view has remained the same. Please see lower right hand corner of profile for vertical scale.
- Q100 inundation analysis to be addressed in drainage report.

END WRITTEN RESPONSE TO ECO SUBSTATION PLAN REVIEW COMMENTS

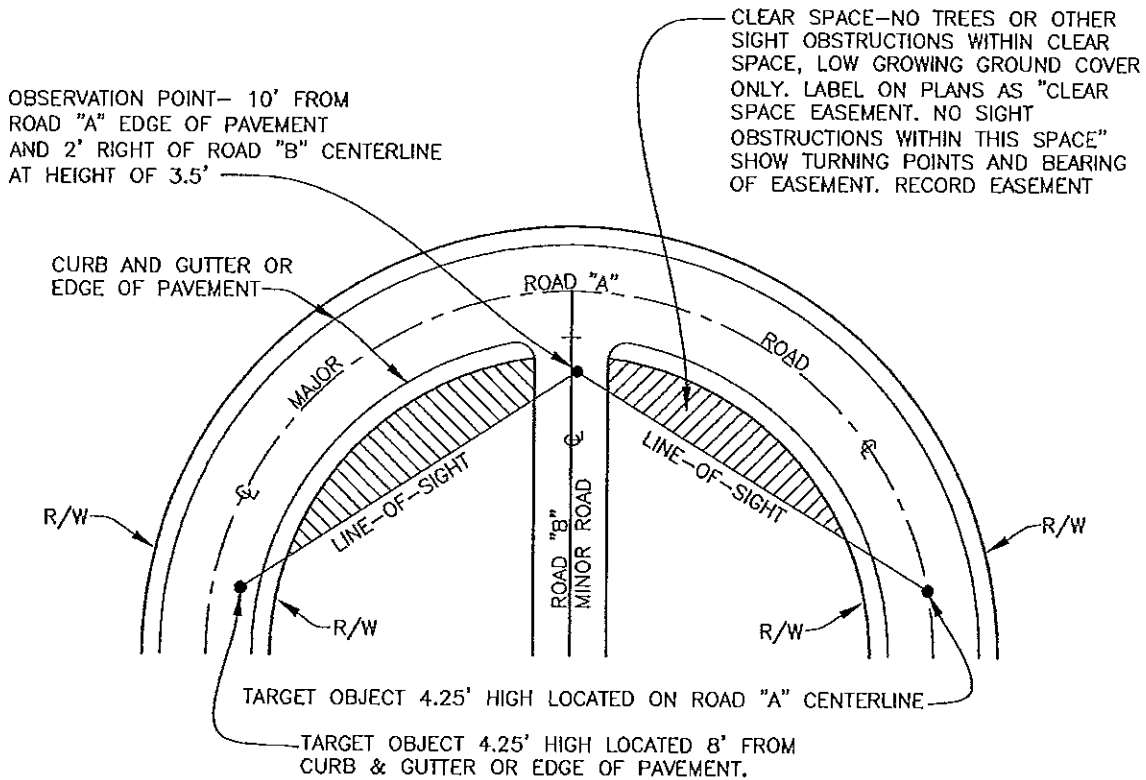
SAN DIEGO COUNTY DESIGN STANDARDS

SIGHT DISTANCE REQUIREMENTS AT ALL INTERSECTIONS SHALL CONFORM TO THE INTERSECTIONAL SIGHT DISTANCE CRITERIA AS PROVIDED BELOW

REQUIRED SIGHT DISTANCE (FT) = ROAD "A" DESIGN SPEED (MPH) X 10FT/MPH

REFERENCE: COUNTY OF SAN DIEGO PUBLIC ROAD STANDARDS (TABLE # 5, PAGE 34)	
DESIGN SPEED MPH	MINIMUM CORNER INTERSECTION SIGHT DISTANCE (FEET)*
60	600
50	500
40	400
30	300
20	200

*CORNER SIGHT DISTANCE IS MEASURED FROM AN OBSERVATION POINT 2 FEET RIGHT OF ROAD "B" CENTERLINE AND 10 FEET BACK FROM ROAD "A" EDGE OF PAVEMENT MEASURED FROM A HEIGHT OF 3.5 FEET TO AN OBJECT HEIGHT OF 4.25 FEET



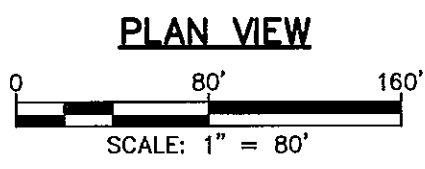
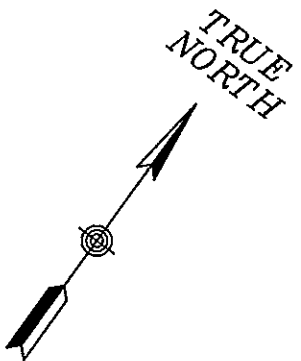
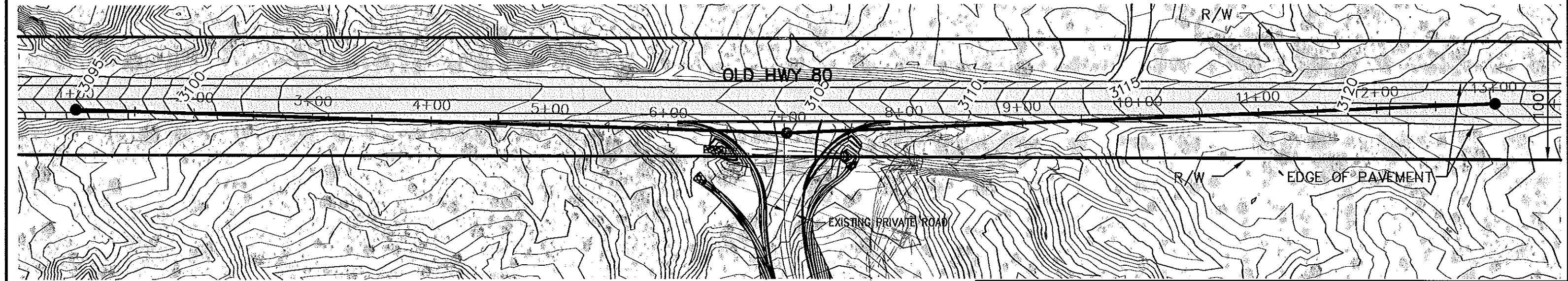
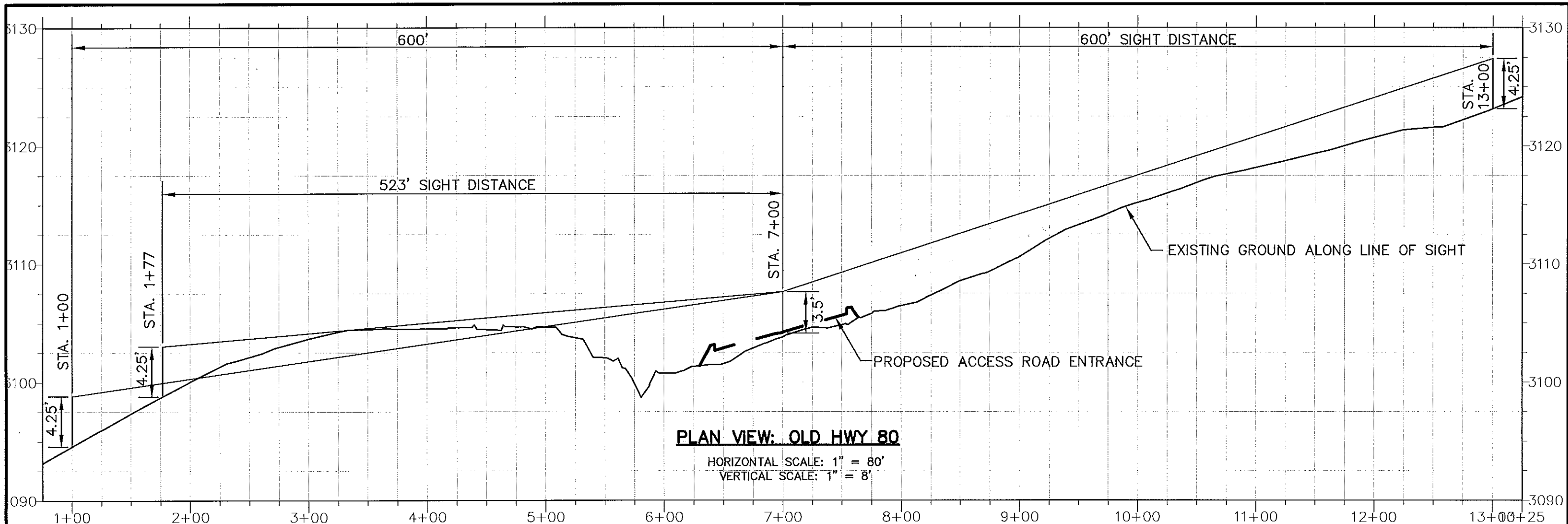
INTERSECTION SIGHT DISTANCE

NO SCALE

NOTE: THE REQUIRED SIGHT DISTANCE APPLIES TO BOTH HORIZONTAL AND VERTICAL OBSTRUCTIONS.

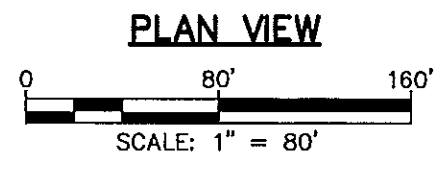
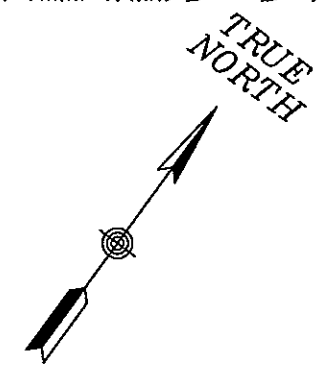
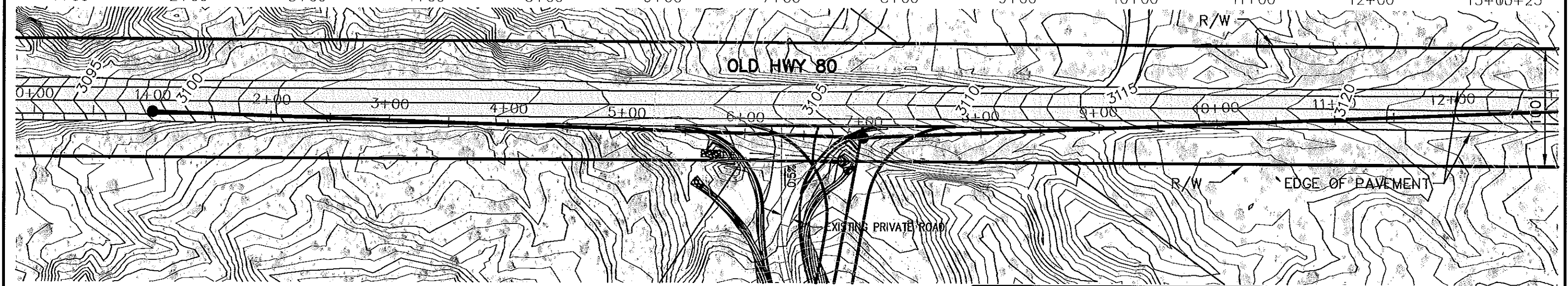
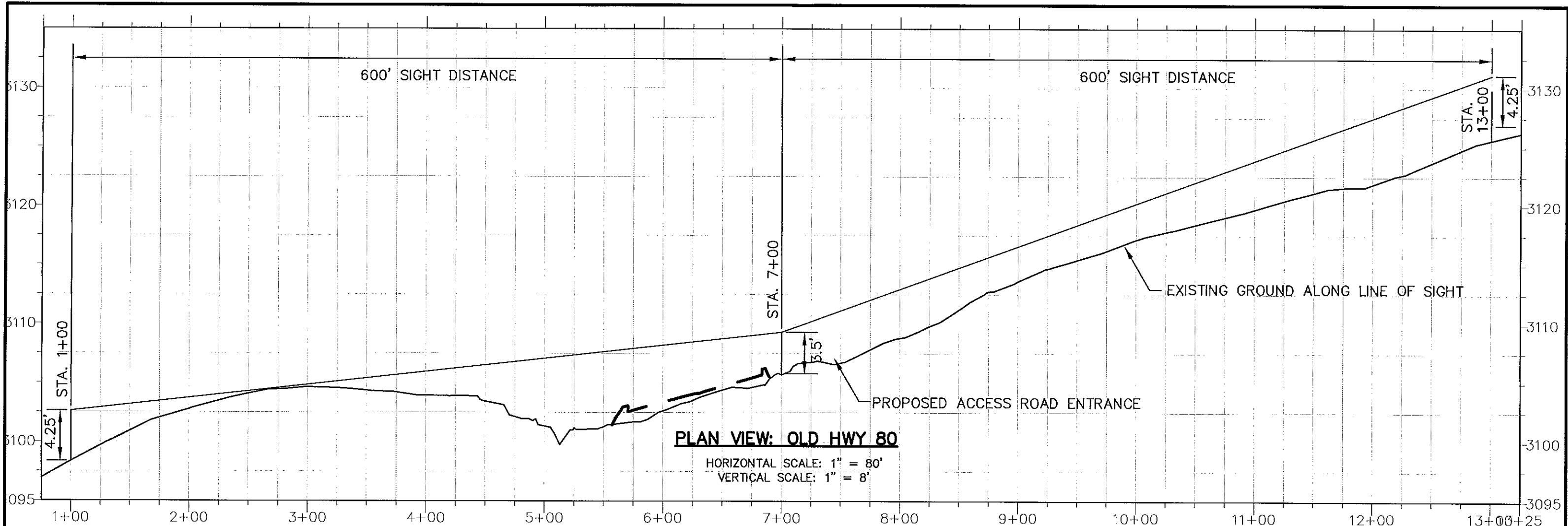
DRAWN BY: SS	CHECKED BY: JMC	SAN DIEGO COUNTY DESIGN STANDARD	REVISION	APPROVED	DATE
RECOMMENDED BY: JEFF S. MOODY					
APPROVED BY: <i>[Signature]</i>		CLEAR SPACE EASEMENT TYPE A			
DOUGLAS M. ISBELL, COUNTY ENGINEER					
RCE # 18634 EXP. 06/2007			DRAWING NUMBER DS-20A		

SIGHT DISTANCE STUDY – INITIAL



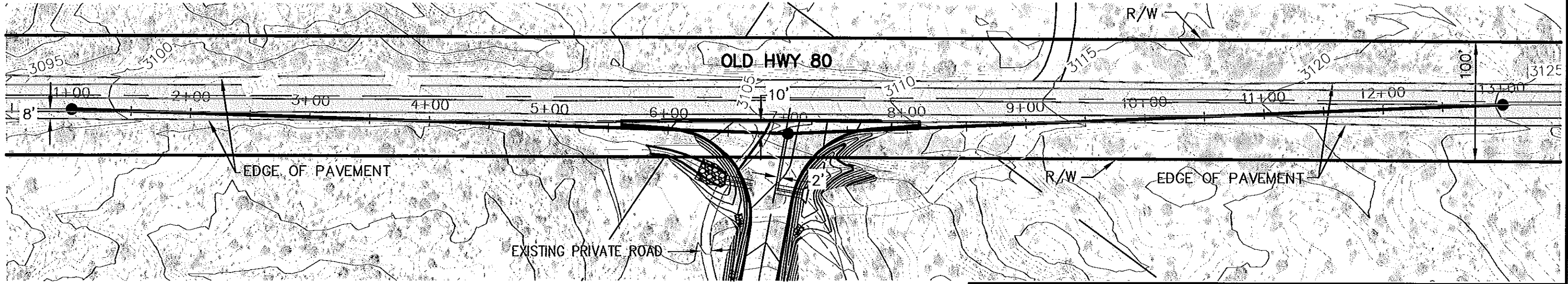
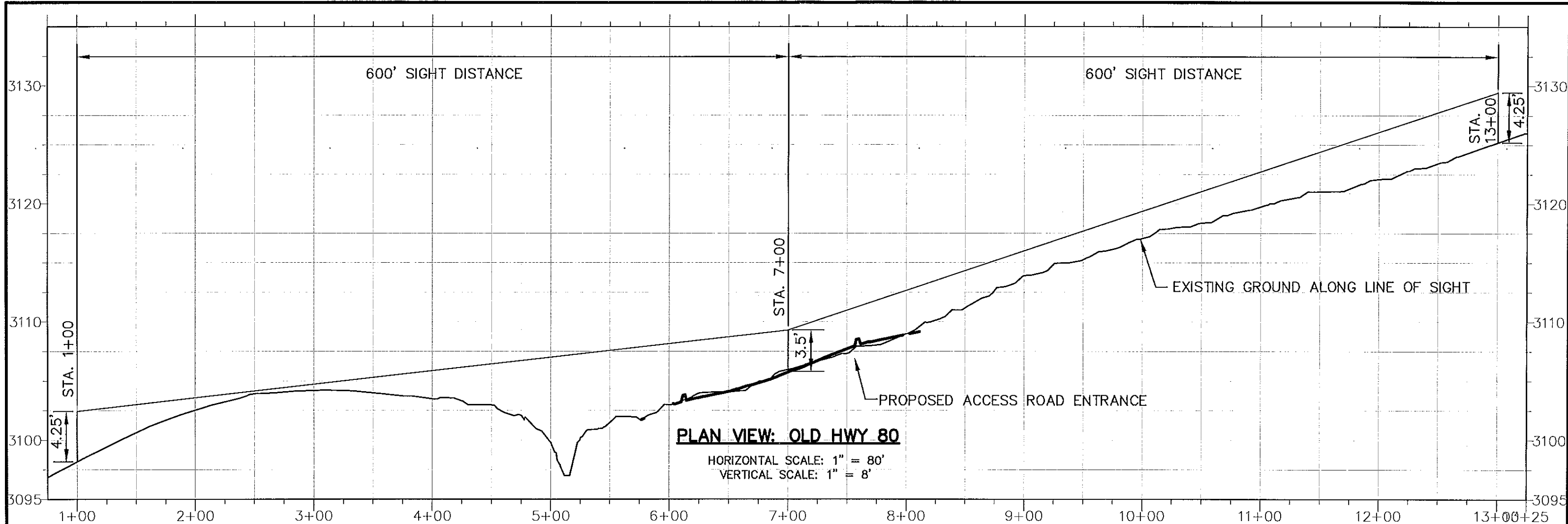
		BETA ENGINEERING PINEVILLE, LOUISIANA		
EAST COUNTY SUBSTATION				
ECO ACCESS ROAD AND OLD HWY 80 CORNER SIGHT DISTANCE				
DRAWN BY:	JAL	DATE:	05/31/11	HOR. SCALE: 1"=80'
CHECKED BY:	---	DATE:	06/ /11	VER. SCALE: 1"=8'
APPROVED BY:	---	DATE:	06/ /11	SHEET 1 OF 1
CAD NO.:	ECOSD1	PLOT SCALE:	1 = 1	
				W.O.: -
				REV.: 0
				ECO-CP-1

SIGHT DISTANCE STUDY – PROPOSED CHANGE



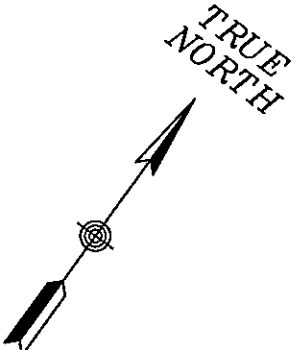
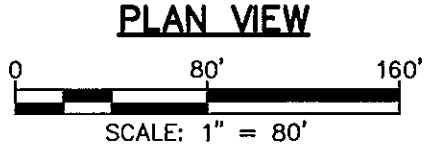
		BETA ENGINEERING PINEVILLE, LOUISIANA		
EAST COUNTY SUBSTATION				
ECO ACCESS ROAD AND OLD HWY 80 CORNER SIGHT DISTANCE				
DRAWN BY:	JAL	DATE:	05/31/11	HOR. SCALE: 1"=80'
CHECKED BY:	---	DATE:	06/ /11	VER. SCALE: 1"=8'
APPROVED BY:	---	DATE:	06/ /11	SHEET 1 OF 3
CAD NO.:	ECOSD1	PLOT SCALE:	1 = 1	
				W.O.: - REV.: 0
				ECO-CP-1

SIGHT DISTANCE STUDY - FINAL



TOPOGRAPHY

SITE TOPOGRAPHY BASED ON AERIAL SURVEY PERFORMED BY INLAND AERIAL SURVEYS, INC. (PROJECT NO. 08-77231) FOR NOLTE & ASSOCIATED DATED FEBRUARY 28, 2008 AND JANUARY 12, 2012.



BETA ENGINEERING
PINEVILLE, LOUISIANA

EAST COUNTY SUBSTATION
ECO ACCESS ROAD AND OLD HWY 80 CORNER SIGHT DISTANCE

DRAWN BY: JAL	DATE: 11/13/12	HOR. SCALE: 1"=80'	W.O.:	REV.: 0
CHECKED BY: ---	DATE:	VER. SCALE: 1"=8'	ECO-SD-1	
APPROVED BY: ---	DATE:	SHEET 1 OF 2		
CAD NO.: ECOSD1	PLOT SCALE: 1 = 1			

ATTACHMENT H: USACE CONSULTATION DOCUMENTATION

Attachment H: USACE Consultation Documentation has been redacted due to its confidential nature.