

TDS Telecom Olinda Last Mile Underserved Broadband Project PEA Deficiencies				
No.	Reference	CPUC Requirement	Description of Deficiency	Tierra Response
Project Description				
1	PEA Section 3.1, PEA Appendix A	PEA Checklist sections 3.4, 3.7.1.1, 3.7.1.2, 3.7.1.3, 3.7.1.5, 3.7.1.7; section V(11) of the Information and Criteria List	<p>Provide project GIS (or equivalent) data layers.</p> <p>The provided project maps are required in GIS format. Additional layers are needed to complete PEA review. Provide layers, as applicable, for:</p> <ol style="list-style-type: none"> 1. Proposed route alignment and communication nodes; 2. Proposed HDD boring locations; 3. Staging areas, if applicable; 4. Soil stockpile area(s); 5. Work areas; 6. Access roads and/or spur roads to be used for construction (identified by type); 7. Areas of potential vegetation removal; 8. Areas of Cleanup and Post-Construction Restoration; 9. Project relative location with Bureau of Land Management (BLM) land. 	<ol style="list-style-type: none"> 1. GIS layers: proposed_TDS_fiber, proposed_nodes_DLCsites, existing_TDS_fiber, existing_nodes_DLCsites 2. GIS layers: bore_lines, BoreLocations 3. There are no staging areas along the project corridor. 4. Soil stockpiles will be located at next to bore pit sites within the ROW. 5. Work areas will be located within the ROW. 6. No new access roads or spur roads will be required. 7. Areas of potential vegetation removal will be located in work areas. 8. Cleanup and restoration areas will be located in all work areas. 9. GIS layer: BLM_adjacent_to_proposed_TDS_fiber_CoParcel
2	PEA Section 3.6 Construction; Pages: 5-7	PEA Checklist section 3.7.3.1; section V(11) of the Information and Criteria List	<p>Confirm that cable installation will not require asphalt/pavement removal.</p> <p>Confirm whether pavement cutting or removal will be necessary in areas with limited road shoulder space.</p>	The cable installation will not require asphalt/pavement removal; all paved areas (roads, driveways, etc.) will be directionally bored beneath.
3	PEA Section 3.6 Construction Pages: 5-7	PEA Checklist section 3.7.1.1; section V(11) of the Information and Criteria List	<p>Clarify whether staging areas will be used for the project.</p> <p>Section 3.6 states that no staging areas will be required and only describes areas that will have ground disturbance as part of the project. However, several APMs, including: APM HAZ-2, GEO-2, and GEO-6 imply that staging and stockpiling will occur, and the PEA states that staging would take place at Central Offices or at individual contractors' off-site yards.</p>	As mentioned in the PEA text, construction materials such as conduit, fiber, equipment cabinets, and splice boxes will be staged at TDS POPs and/or contractor's yards. Spoil piles may be placed in ROW, and construction vehicles may park within ROW in clear areas.

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			Clarify whether any other work areas would be required (e.g. areas for parking vehicles, space to prep for ground disturbance/excavation, area to temporarily place excavated material during node installation, etc.) and identify potential locations where staging of construction materials, equipment, and excavated spoils would be placed during construction.	
4	PEA Section 3.6.4	PEA Checklist sections 3.7.1.2 and 3.7.1.7;; section V(11) of the Information and Criteria List	<p>Describe how vegetation will be restored in disturbed areas.</p> <p>PEA section 3.6.4 states that “surface restoration would involve returning the surface contours of disturbed areas to their pre-construction condition.” State whether vegetation would be removed for trenching, plowing, or boring. Clarify whether and how vegetation will be replaced or restored in areas where vegetation has been removed during trenching or plowing.</p>	The cable installations will be within existing pre-disturbed road rights of way. Typical vegetation restoration will be to County Requirements and/or CALTRANS standards, utilizing specific seed mix for region (see OlindaSeedMix.pdf). Plowing causes minimal disturbance, typically requiring compaction and minor seeding. Directional boring may require minor grading and compaction of soil which will also be done per County requirements and/or CALTRANS standards.
5	PEA Section 3.6 Construction; Pages: 5-7	PEA Checklist section 3.7.2.3; section V(11) of the Information and Criteria List	<p>Provide more details about node and conduit installation.</p> <p>Provide the following information:</p> <ul style="list-style-type: none"> • Dimensions of the epoxy composite vault and describe how it will be buried. • Estimated amount of fill material that will remain after placement of the vault. If any excess material is anticipated, describe how it will be disposed of/removed from the site. • State whether any material, such as aggregate, will need to be imported to bury nodes and conduits. • Estimate of total ground disturbance for node installation. • Photograph or schematic of a typical communications node. 	A node/DLC site consist of an equipment cabinet installed on top of a buried epoxy vault. Epoxy vaults will be 36“deep, 30” inches wide and 48” long. The epoxy vault will rest on 12” of #2 crushed gravel (1”). Excavated material will be used for backfill. Excess material will be used as needed for compaction or hauled away and properly disposed by the contractor (see handhole, cabinet, pad, and BM20 pdfs).
6	PEA Section 3.6.6 Construction Schedule	PEA Checklist section 3.7.6; section V(11) of the Information and Criteria List	<p>Provide project schedule by component.</p> <p>Estimated total construction time is given as 2 months but estimates for individual project components are not given.</p>	A single plow crew can generally install 1,000 feet of conduit per day. A directional bore crew can typically complete 3-4 bore shots per day, inclusive of setup and

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	Page: 8		Provide the estimated duration of specific project activities including: site preparation, plowed and trenched installation, directional bore installation, node installation, and cleanup and surface restoration. Specify how many feet of conduit would be laid per day.	restoration. A bore crew can typically install up to 1,500 feet of conduit from one setup in a single day. The installation of a single cabinet site typically takes 5 days to complete. Cleanup and restorations is typically required to be completed within 24 hours of installation completion and no more than 1,000 feet of disturbance per crew is allowable at any given time. Crews are typically prohibited from disturbing more than 1000 linear feet of ground without first performing restoring on what they have already disturbed.
Air Quality				
7	PEA Section 4.15, page(s) 98	PEA Checklist section 5.3; section V (12) of the Information and Criteria List	Provide the location and types of sensitive receptors that could be impacted by the project. Provide a detailed list and GIS layer (or equivalent) that identifies location and types of sensitive receptors (e.g., schools, hospitals, and residences) located within 1,000 feet of the project proposed route, work areas, staging areas, and/or soil stockpiling areas.	Sensitive receptors (schools and residences) located within 1000 feet of the project proposed route and work areas were identified using a combination of Shasta County parcel boundary data, ESRI aerial imagery, and GoogleEarth and GoogleMaps to distinguish between residential and non-residential structures as necessary. The process of identifying sensitive receptors began by creating a 1000-ft buffer around the project corridor and then identifying all parcels and within that buffer. Sensitive receptors were then identified on aerial imagery as residential or school buildings. Each residential structure or school was identified with a point Feature Class (attribute Type res (residential) and school) placed near the center of all identified residential buildings. Multiple residences per parcel were confirmed by separate street addresses noted in GoogleMaps. Schools were

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				<p>identified by one point positioned near the center of the school campus.</p> <ul style="list-style-type: none"> • 416 of the 629 parcels identified within 1000 feet of the project corridor contain only one residential building. • 23 contain 2 residential buildings • 2 contain 3 residential buildings. <p>GIS layer: sensitive_receptors</p>
8	PEA Section 4.15, page(s) 98; PEA Appendix B	PEA Checklist section 5.3; section V (12) of the Information and Criteria List	<p>Confirm estimate of daily trips (vehicle and trucks) generated by the project.</p> <p>Appendix B of the PEA provides assumptions on trips used for the Air Quality analysis. Based on the Trips and VMT table in Appendix B, it appears the maximum number of daily trips would occur during bored conduit installation and would consist of 8 off-road equipment round trips, 8 worker round trips and 4 vendor round trips. Confirm if the maximum number of daily trips during construction would be 20 round trips, or provide clarification regarding the number of daily trips per type of vehicle.</p>	The estimated number of daily trips was a best guess based on personnel and crew numbers received from TDS.
Biological Resources				
9	PEA Section 4.4.1.2, page(s) 30	PEA Checklist section 5.4; section V(12) of the Information and Criteria List	<p>Provide GIS data for the biological resources study area.</p> <p>Provide a GIS file delineating the area studied during reconnaissance-level biological surveys.</p>	<p>The entire project area indicated as “Proposed Fiber” and “Proposed DLC Site” was included in the reconnaissance surveys.</p> <p>GIS layer: bio_resources_study_area_50ftbuffer</p>
10	PEA Section 4.4.1.3, Page 33	PEA Checklist section 5.4; section V(12) of the Information and Criteria List	<p>Provide invasive species GIS data.</p> <p>Table 4.7 provides the locations of invasive species in the Study Area. If invasive species were mapped using GPS while performing biological surveys, provide GIS data.</p>	Invasive species were not mapped during the survey.
11	PEA Section 4.4.2.2, Page 35	PEA Checklist section 5.4; section V(12) of the Information and Criteria List	<p>Clarify APM BIO-1.</p> <p>APM BIO-1 states that “all waterways and wetlands in the project area will be bored beneath and avoided during construction.” Clarify how far below these features, or at what</p>	Bores will be 4.5 feet minimum depth below roadside ditches, wetlands, and

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			depth, boring would take place.	
12	PEA Appendix C, page 9	PEA Checklist section 5.4; section V(12) of the Information and Criteria List	<p>Describe survey methodology for big-scale balsamroot.</p> <p>Provide a description of the methodology and/or survey report and GIS data for the survey completed on May 20, 2015 for big-scale balsamroot.</p>	<p>The survey methodology consisted of two biologists walking two parallel transects on each side of the western 1.8 miles of Cloverdale Road between Clear Creek and Placer Roads in areas containing potentially suitable habitat for Big-scale Balsamroot. No individuals of this species were identified during the survey, and a separate survey report was not developed. GIS layer: big scale balsamroot survey</p>
Cultural Resources				
13	PEA Section 4.5.1.2	PEA Checklist section 5.5; section 12 (V.b, V.b, XVII.a) of the Information and Criteria List	<p>Provide documentation of consultation with the 14 Native American individuals or organizations identified by the Native American Heritage Commission.</p> <p>Provide documentation that the Applicant has consulted with the 14 Native American individuals or organizations, identified by the Native American Heritage Commission, who may have knowledge of cultural resources or tribal cultural resources in the project area. Documentation includes any letters sent to those on the contact list, follow up records, phone notes, and responses from the individuals or organizations.</p>	<p>Coordination with Native American individuals and organizations is incomplete. Please advise whether CPUC would like TDS to conduct tribal consultation—it is our understanding that Ecology and Environmental will be conducting tribal consultation soon as part of CEQA. Tierra has draft letters available and can send them to the 14 tribes/individuals identified in the letter from the NAHC upon request; however, it may be confusing to have two simultaneous consultation efforts.</p>
14	PEA Section 4.5.2.2	PEA Checklist section 5.5; section 12 (V.a) of the Information and Criteria List	<p>Provide documentation for the pending California State Historic Preservation Office’s concurrence for recommended “No Adverse Effect” finding.</p> <p>Provide documentation of response received from the California State Historic Preservation Office’s on a recommended “No Adverse Effect” finding for the Happy Valley Ditch, as discussed in Impact CR-1 of the PEA.</p>	<p>The Class III cultural resources survey report has not been submitted to the SHPO’s office yet. With CPUC’s approval, Tierra will submit the complete, unredacted Class III report directly to the SHPO’s office for review.</p>

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15	PEA Appendix E	PEA Checklist section 5.5; section 12 (V.a, V.b, and V.d) of the Information and Criteria List	<p>Provide copy of confidential Class I Research conducted for the Class III Cultural Resources Survey.</p> <p>Provide documentation of the confidential Class I Research that was conducted for the Class III Cultural Resources Survey. Specifically, provide Appendix A of the Class III Cultural Resources Survey Report (this report is included in Appendix E of the PEA), marked as confidential. Send a copy of Appendix A of the Class III Cultural Resources Survey Report to the following contact and address:</p> <p><i>Natasha Snyder, Chief Cultural Resources Specialist</i> Ecology and Environment, Inc, 368 Pleasantview Drive, Lancaster, New York 14086 Phone: 716-684-8060</p>	Tierra will send a complete, unredacted copy of the Class III survey report, that includes Appendices A and B, to the address noted.
16	PEA Appendix E	PEA Checklist section 5.5; section 12 (V.a, V.b, and V.d) of the Information and Criteria List	<p>Provide copy of California Office of Historic Preservation Forms obtained for the Class III Cultural Resources Survey.</p> <p>Provide copies of the California Office of Historic Preservation (CA OHP) Forms obtained for the Class III Cultural Resources Survey. Specifically, provide Appendix B of the Class III Cultural Resources Survey Report (this report is included in Appendix E of the PEA), marked as confidential. Send a copy of Appendix B of the Class III Cultural Resources Survey Report to the following contact and address:</p> <p><i>Natasha Snyder, Chief Cultural Resources Specialist</i> Ecology and Environment, Inc, 368 Pleasantview Drive, Lancaster, New York 14086 Phone: 716-684-8060</p>	Tierra will send a complete, unredacted copy of the Class III survey report, that includes Appendices A and B, to the address noted.
Hydrology and Water Quality				
17	PEA Section 4.4.1.2, page(s) 30	PEA Checklist section 5.4; section V(12) of the Information and Criteria List	<p>Provide waterway and wetland delineation data.</p> <p>Provide the GIS data collected in the field during field delineations reported in the PEA Section 4. 4 and in Appendix D of the PEA.</p>	<p>GIS layers: wetlands waterway_crossings</p>

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Hazards and Hazardous Materials				
18	PEA Section 4.7.2.2 Page: 72	PEA Checklist section 5.7; section V(13) of the Information and Criteria List	<p>Provide estimate of hazardous waste to be generated by the project.</p> <p>Discussion under Impact HAZ-1 describes the use of small quantities of hazardous materials, such as waste oil. Confirm whether directional bore installation or any other activities would generate any additional type of hazardous waste. Provide the estimated quantity and type of hazardous waste to be generated by the project.</p>	Directional bores will be accomplished using a lubricant containing bentonite, which is not hazardous (see BORE-GEL.pdf). Fiber cable will be installed in conduit using a non-hazardous lubricant (see polywaterf_msd.pdf). Other potentially hazardous materials include oil and grease that may leak from equipment; this release will be minimized or eliminated with best management practices implemented as outlined in the project's forthcoming Stormwater Pollution Prevention Plan. Equipment fluids will not be changed within the project limits.
19	PEA Section 4.7.2.2 Page: 72	PEA Checklist section 5.15; section V(13) of the Information and Criteria List	<p>Provide more details about road control and lane closures.</p> <p>Discussion under Impact HAZ-6 describes that road control would be set up for each day and that one lane of traffic may need to be closed during work activities. Delays to motorists are estimated at 1 to 2 minutes. Specify the length of road would be closed during daily construction activity. Specify where lane closures would result in only one lane of traffic open for traffic in both directions.</p>	Generally, temporary or moving lane closures are possible throughout the project in areas where the shoulder is insufficient to safely perform construction. These closures will be limited to short durations during the day daytime hours prescribed by the jurisdictional permit authority. A traffic plan will be prepared and implemented during construction.
Land Use				
20	PEA Appendix A	<p>PEA Checklist Section 5.9; section V(12) of the Information and Criteria List</p> <p>PEA Checklist Chapter 7; section V.15 of the Information and Criteria List</p>	<p>Provide land owner information.</p> <p>Provide GIS data and Excel spreadsheet identifying all parcels within 300 feet of the project components with the following data:</p> <ul style="list-style-type: none"> • APN number, mailing address, and parcel's physical address. • Zoning designations for all parcels within 300 feet of the project component. 	See land owner spreadsheet and other information included in parceldata.zip. GIS layer: Zoning_Shasta_Co
Utilities and Service Systems				

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21	PEA Section 4.13.2, page 94	Sections V 11.b and V-13 of the Information and Criteria List	<p>Identify potential providers of water for the project.</p> <p>Impact PSU-5 indicates that water needed for dust suppression would be provided to the project contractor by local municipal water sources, such as those found in Anderson, Happy Valley, or Igo. Specify which of the three local sources would be likely used for the project, if known.</p>	<p>The municipal water sources that will be used during construction is: Clear Creek Community Service District 5880 Oak Street, Anderson CA. 96007 Phone 530-357-2121 http://clearcreekcsd.com/contact.html#</p>