

LOS ALAMOS CANYON FIBER OPTIC EXTENSION

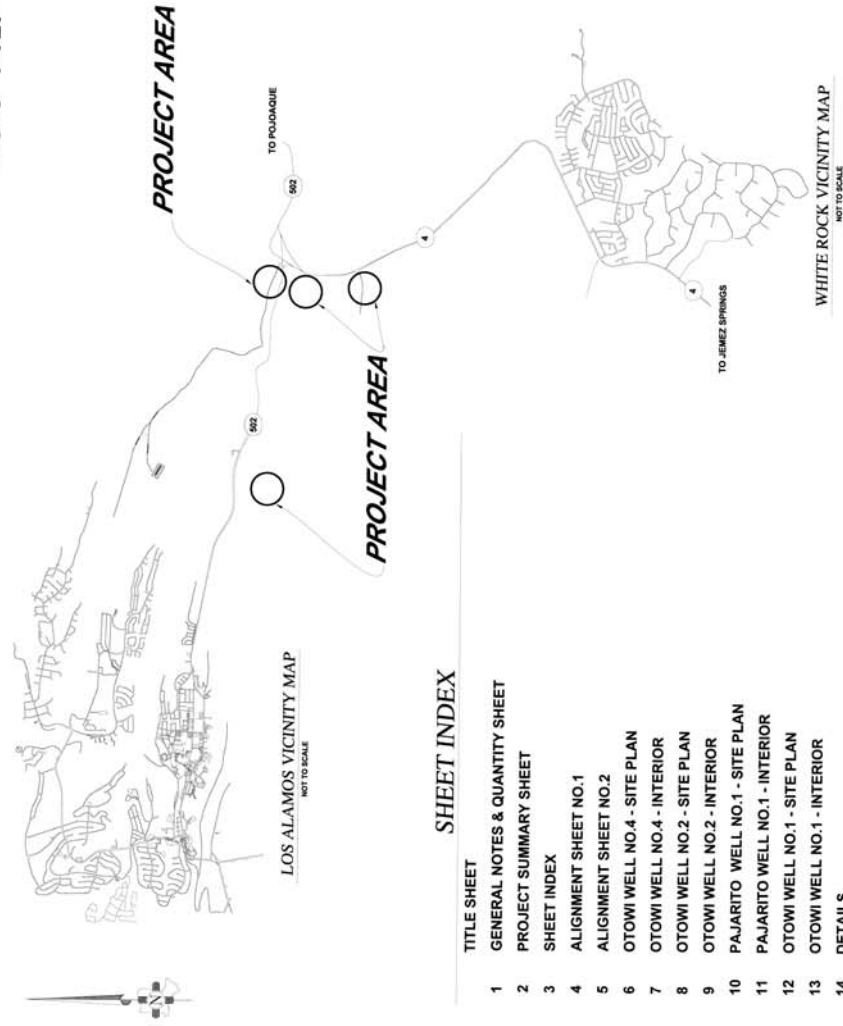
IFB-2025-33

LOS ALAMOS COUNTY - NEW MEXICO

NMED CPB FUNDING NUMBER DW-6368

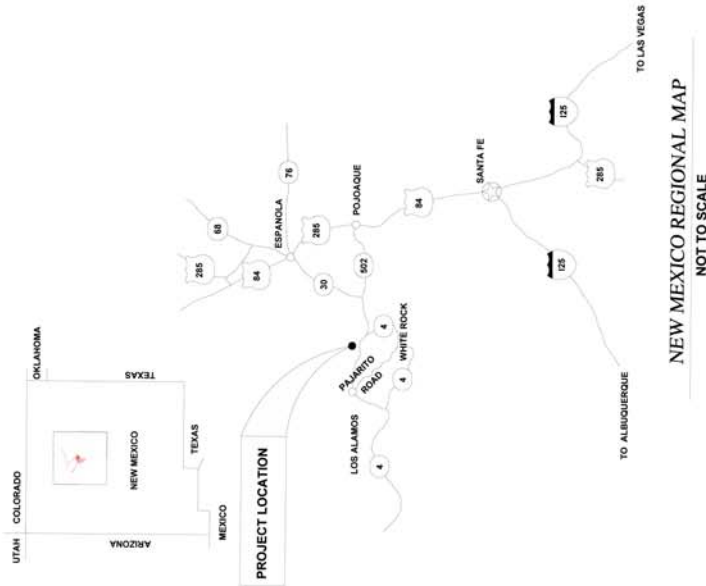


LOS ALAMOS



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APPROVED BY: _____ DATE 12/14/2024

DEPARTMENT OF PUBLIC UTILITIES PROJECT ENGINEER

DATE 12/14/2024

DEPARTMENT OF PUBLIC UTILITIES ENGINEERING ASSOCIATE

DEPARTMENT OF PUBLIC UTILITIES CONSTRUCTION NOTES

DEPARTMENT OF ENERGY / LOS ALAMOS NATIONAL LABORATORY JURISDICTION

1. THE WORK IS LOCATED ON LANDS OWNED BY THE DEPARTMENT OF ENERGY. THE FOLLOWING PROVISIONS APPLY TO WORK IN THIS AREA.
2. THE CONTRACTOR IS RESTRICTED TO USE THE EXISTING MAINTENANCE ROADS AND PREVIOUSLY DISTRIBUTED UTILITY CORRIDORS TO ACCESS THE OVERHEAD UTILITY POLES DURING CONSTRUCTION OF THE FIBER OPTIC LINE. NO EXCEPTIONS.
3. LANL BADGE REQUIREMENT. CONTRACTOR'S STAFF IS REQUIRED TO SECURE A LOS ALAMOS NATIONAL LABORATORY (LANL) IDENTIFICATION BADGE AND HAVE ON THEIR PERSON AT ALL TIMES WHILE WORKING.
4. COMPLETE AND RETURN THE BADGE REQUEST PAPERWORK TO OBTAIN A LANL BADGE THREE WEEKS PRIOR TO ARRIVAL ON-SITE.
5. IF AN INDIVIDUAL HAS NOT PREVIOUSLY HELD A BADGE AT LANL, THEY WILL NEED TO PROVIDE PROOF OF U.S. CITIZENSHIP BY PRESENTING A VALID U.S. PASSPORT OR AN OFFICIAL STATE SEALED BIRTH CERTIFICATE.
6. AN INDIVIDUAL MUST PROVIDE PROOF OF IDENTITY TO PICK UP THEIR BADGE BY PRESENTING A VALID STATE ISSUED DRIVER'S LICENSE OR A U.S. PASSPORT.
7. CONTRACTOR'S STAFF SHALL BE AMERICAN CITIZENS.
8. CONTRACTOR SHALL HAVE A STAFF MEMBER ON-SITE AT ALL TIME WHO HAS COMPLETED THE LANL EXCAVATION SAFETY TRAINING. A LANL BADGE AND Z NUMBER IS REQUIRED TO TAKE THE TRAINING. THE TRAINING IS COMPUTER BASED AND HELD IN WHITE ROCK, NM. THE TEST TAKES LESS THAN AN HOUR.
9. THE CONTRACTOR, WITH ASSISTANCE FROM THE COUNTY'S PROJECT MANAGER, WILL SUBMIT AN APPLICATION FOR A LANL EXCAVATION PERMIT FOR GROUND DISTURBING ACTIVITIES. THE APPLICATION SHALL BE SUBMITTED ONE MONTH PRIOR TO SCHEDULED GROUND DISTURBING ACTIVITIES TO AVOID DELAYS. INSTALLATION OF PULL BOXES, GUY WIRE ANCHORS AND UNDERGROUND CONDUIT TRENCHING ARE THE GROUND DISTURBING ACTIVITIES THAT APPLY.
10. LANL'S EXCAVATION PERMIT PROCESS IS THE PROCESS TO HAVE LANL LOCATE THEIR UNDERGROUND UTILITIES.

TRAFFIC CONTROL

1. THE ONLY WORK REQUIRING TRAFFIC CONTROL WILL BE THE AERIAL CROSSING OF STATE HIGHWAY 502. THE FIBER OPTIC LINE MUST BE 25' ABOVE TRAFFIC LANES.
2. A UTILITY PERMIT MUST BE SECURED FROM NMDOT DISTRICT 5 PRIOR TO BEGINNING WORK ON THE NM-502 CROSSING. CONTRACTOR SHALL ALSO SUBMIT TRAFFIC CONTROL PLAN TO LOS ALAMOS COUNTY TRAFFIC DIVISION.
3. NMDOT REQUIREMENTS:
 - a. AN APPLICATION FOR PERMIT TO INSTALL UTILITY FACILITIES WITHIN THE RIGHT OF WAY. PREPARED BY OWNER AND CONTRACTOR.
 - b. NMDOT ENVIRONMENTAL CLEARANCE PREPARED BY OWNER AND CONTRACTOR.
 - c. LOCATION MAP OF THE WORK AREA PREPARED BY OWNER
 - d. PLAN & PROFILE TO INCLUDE TRENCH AND/OR BORE DETAILS, AERIAL VERTICAL CLEARANCES PREPARED BY OWNER
 - e. TRAFFIC CONTROL PLAN SEALED BY PROFESSIONAL ENGINEER, BY CONTRACTOR.
 - f. TRAFFIC CONTROL SUPERVISOR CERTIFICATION(S), BY CONTRACTOR.
 - g. CERTIFICATE OF INSURANCE WITH THE NMDOT LISTED AS ADDITIONAL INSURED FROM CONTRACTOR AND OWNER.
 - h. ONCE THE AUTHORIZATION TO PROCEED HAS BEEN ISSUED, THE TRAFFIC CONTROL/ROADWAY WORK PERMIT SHALL BE SUBMITTED WITH THE WORK DATES AND TIMES OF THE PROJECT. TIMES AND DATES ARE SUBJECT BY THE NMDOT TO THE LOCATION.

GENERAL NOTES

1. THE NEW FIBER OPTIC LINES WILL BE UNDERHUNG ON AN EXISTING 12.2KV POWERLINE. CONTRACTOR SHALL COMPLY WITH THE NATIONAL ELECTRIC SAFETY CODE (NEC) AND OTHER APPLICABLE CODES IN PERFORMING WORK.
2. THE NEW FIBER OPTIC LINE WILL SPLICE INTO A FIBER OPTIC LINE OWNED BY LOS ALAMOS COUNTY. TWO WEEKS PRIOR TO SPLICING THE ACTIVE FIBER OPTIC LINE THE CONTRACTOR SHALL PARTICIPATE IN A COORDINATION MEETING WITH THE PROJECT MANAGER AND A REPRESENTATIVE OF THE LOS ALAMOS COUNTY INFORMATION MANAGEMENT DIVISION WHO OPERATES THE FIBER OPTIC SYSTEM.
3. ALL TESTING OF THE NEW FIBER OPTIC LINE SHALL BE WITNESSED BY THE OWNER.

QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
1	144 - Strand ADSS Single Mode Fiber Optic Cable	LF	13,750
2	12 - Strand ADSS Single Mode Fiber Optic Cable	LF	11,000
3	144 - Strand Aerial Splice Box, Complete in Place	EA	3
4	35' Wood Pole, CJP	EA	1
5	4' RGC Pole Riser, Including all Connections	LF	20
6	4' x 4' x 4' Pull Box, CJP	EA	2
7	4" PVC Conduit Including Trench, Backfill, Compaction and Locate Wire	LF	200
8	Furnish and Install Multimode Fiber Distribution Box, Fiber Terminations, Conduits and Other Incidental Work Inside Well House.	EA	4
9	Fiber Drop to Well, Attached to existing Mast, Conduit, Wall Penetration and Other Incidental Work.	EA	3

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DESIGNED BY:	SH
DRAWN BY:	SH
APPROVED BY:	JJA
DATE:	10/24/2024
SCALE:	N/A

LOS ALAMOS CANYON FIBER OPTIC EXTENSION

GENERAL NOTES



INCORPORATED COUNTY OF LOS ALAMOS

DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 100
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8150 FAX: (505) 662-8100

SHEET **1**



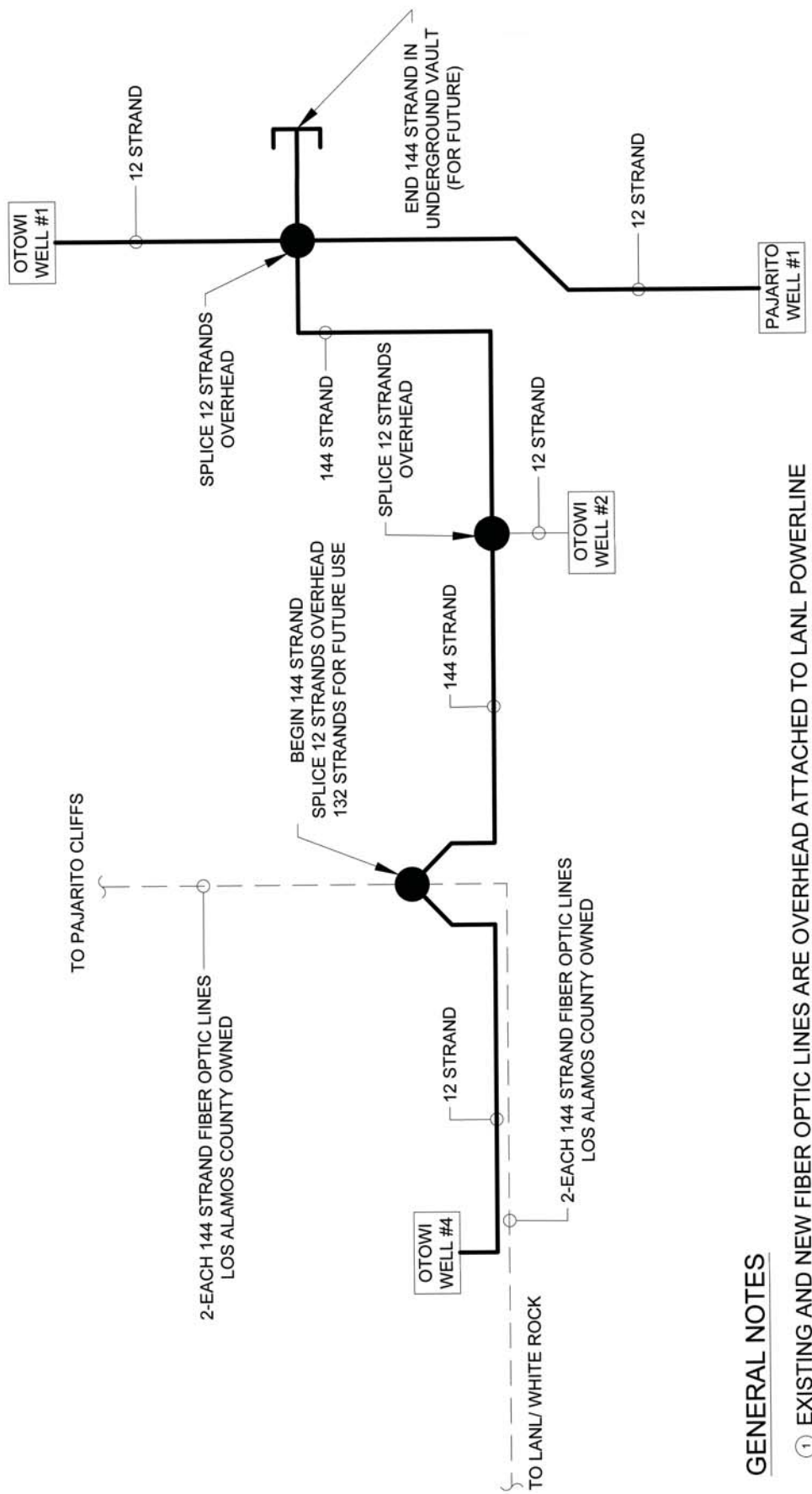
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DESIGNED BY: SH
 DRAWN BY: JJA
 DATE: 10/24/2024
 SCALE: NOT TO SCALE

LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 PROJECT SUMMARY SHEET



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE., SUITE 130
 LOS ALAMOS, NEW MEXICO 87544
 FAX: (505) 662-8109
 (505) 662-8100



- GENERAL NOTES**
- EXISTING AND NEW FIBER OPTIC LINES ARE OVERHEAD ATTACHED TO LANL POWERLINE
 - 12 STRANDS WILL BE PLACED IN SERVICE DEDICATED TO WATER PRODUCTION SCADA SYSTEM
 - FIBER OPTIC LINES ARE OWED BY LOS ALAMOS COUNTY

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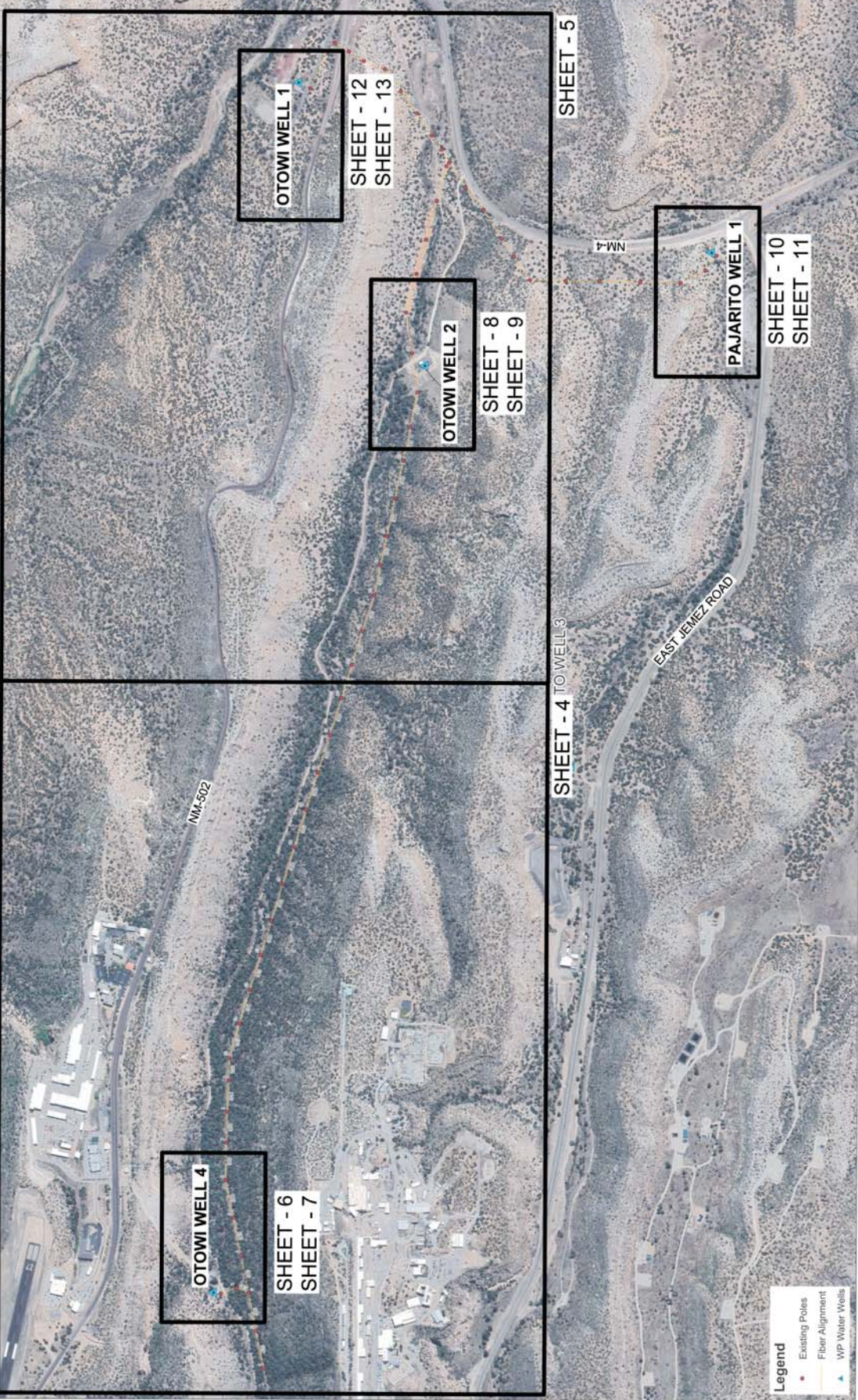
LOS ALAMOS CANYON FIBER
 OPTIC EXTENSION
 SHEET INDEX



INCORPORATED COUNTY
 OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE., SUITE 100
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-8100 FAX: (505) 662-8109

SHEET
3

LOS ALAMOS



- Legend**
- Existing Poles
 - Fiber Alignment
 - WPP Water Wells



NO.	REVISION DESCRIPTION
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LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 ALIGNMENT SHEET 1



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE., SUITE 130
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-8100 FAX: (505) 662-8109

SHEET 4



- KEYED NOTES
- 1 EXISTING POWERLINE AND 2-EA. 144 STRAND FIBER OPTIC LINES
 - 2 SPLICE LOCATION ON POLE WITH SLACK LOOP ON EXISTING 144 STRAND FIBER. 12 STRAND FIBER WEST TO OW#4. END
 - 3 NEW 144 STRAND FIBER CONNECTION IN AERIAL SPLICE BOX.
 - 3 CONSTRUCT GUY WIRE PER DETAIL A/14

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 DRAWN BY: SH
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LOS ALAMOS CANYON FIBER
 OPTIC EXTENSION
 ALIGNMENT SHEET 2

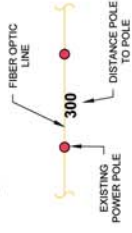


INCORPORATED COUNTY
 OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVENUE SUITE 1300
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-8150 FAX: (505) 662-8109

SHEET
5



Legend



○ KEYED NOTES ○

- ① CONSTRUCT GUY WIRE PER DETAIL A/14
- ② SPLICE POINT TO OW#2. OVERHEAD SPLICE 12 STRANDS TO OW#2
- ③ END 144 STRAND FOR FUTURE IN UNDERGROUND VAULT PER DETAIL F/14. SPLICE POINT 12 STRANDS OVERHEAD AND CONTINUE 12 STRAND FIBER NORTH TO OW#1 AND SOUTH TO PW#1.

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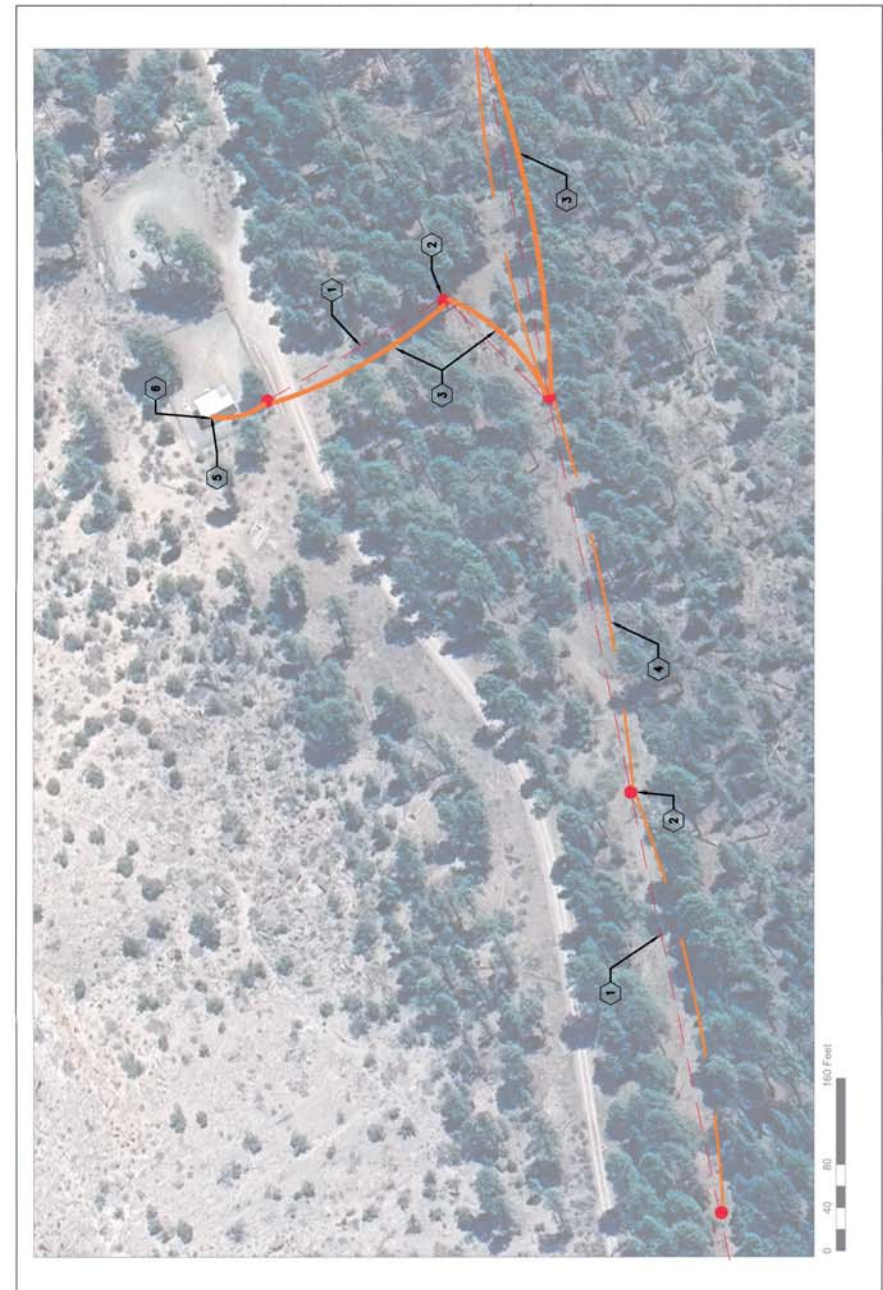
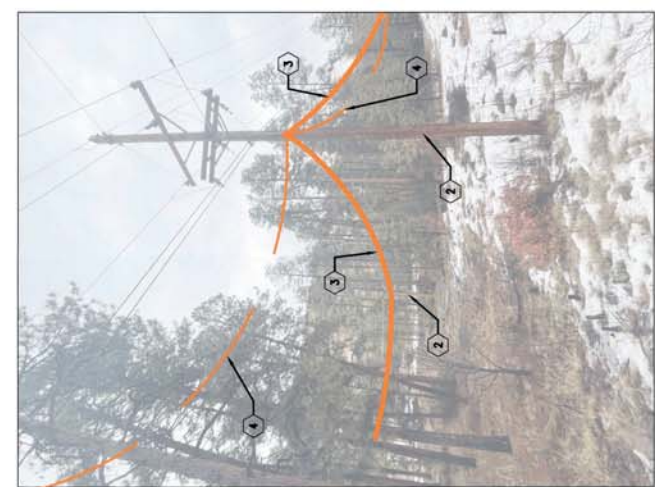
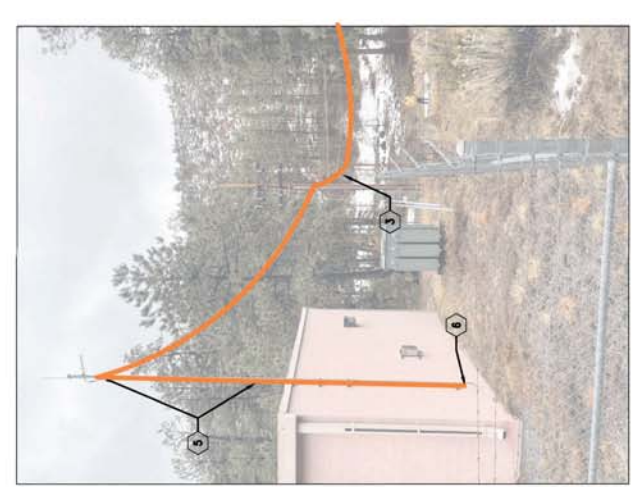
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 APPROVED BY: JJA
 DATE: 10/24/2024



INCORPORATED COUNTY
 OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE., SUITE 130
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-8150 FAX: (505) 662-8100

SHEET
6

LOS ALAMOS CANYON FIBER
 OPTIC EXTENSION
 OTOWI WELL NO. 4 - SITE PLAN



KEYED NOTES

- ① EXISTING OVERHEAD ELECTRIC
- ② EXISTING WOODEN UTILITY POLE (TYPICAL).
- ③ NEW 12 STRAND FIBER LINE
- ④ EXISTING 2-EACH 144 STRAND FIBER OPTIC CABLES.
- ⑤ CONNECT NEW 12 STRAND FIBER LINE TO EXISTING SCADA POLE VIA SAG LINE. INSTALL 12 STRAND FIBER IN 1" RGS CONDUIT ATTACHED TO EXISTING POLE.
- ⑥ CONDUIT ENTERS BUILDING THROUGH NEW WALL PENETRATION.



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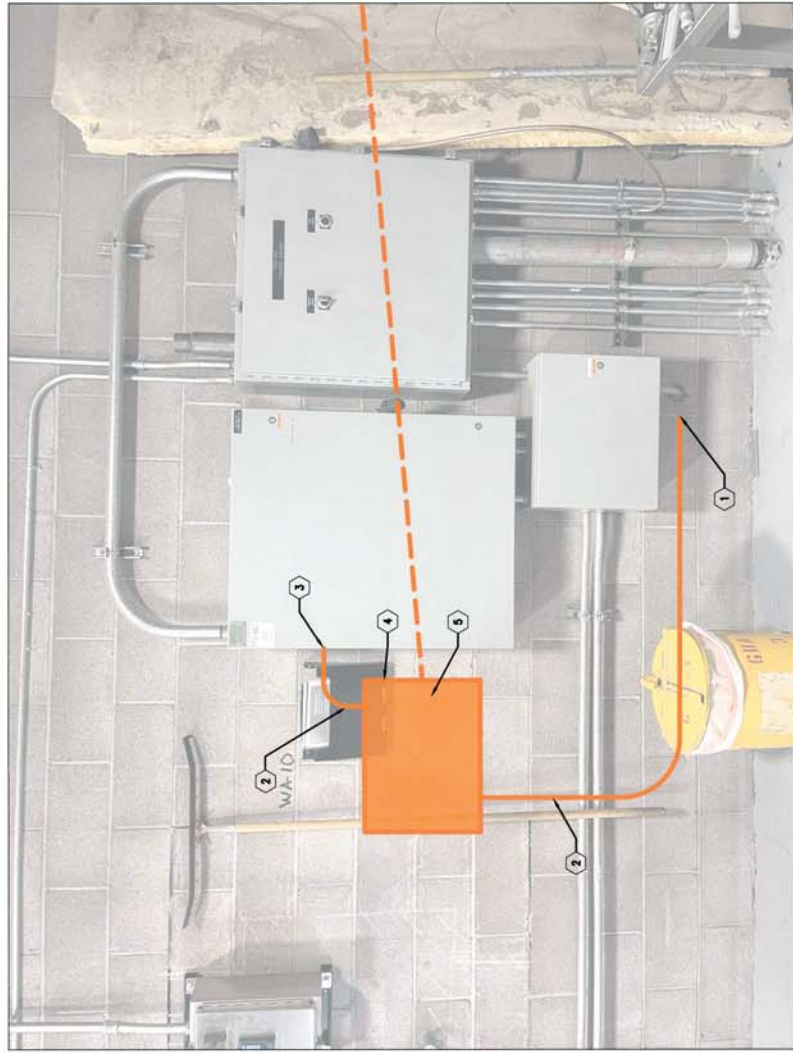
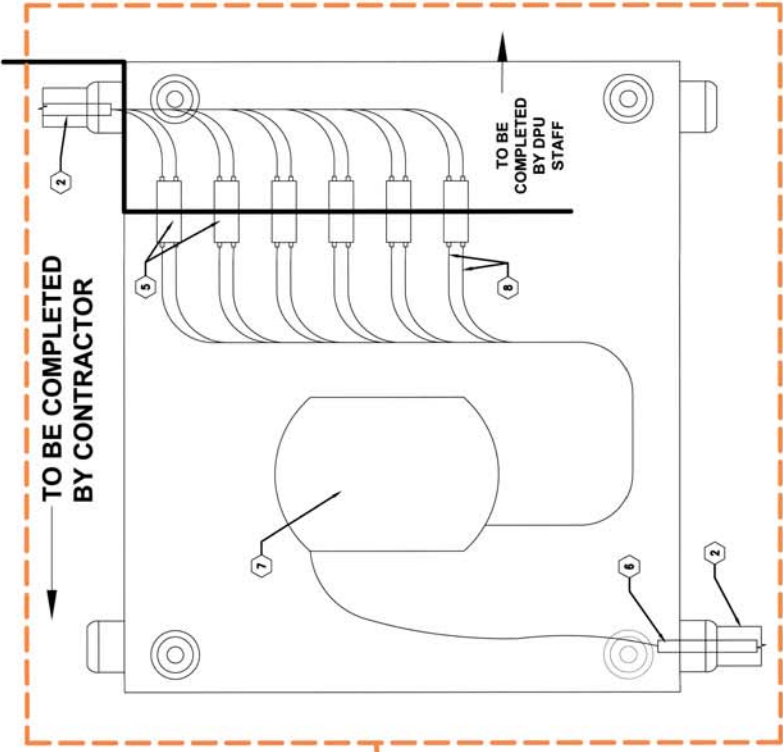
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 DRAWN BY: SH
 APPROVED BY: JJA
 DATE: 10/24/2024
 SCALE: NOT TO SCALE

LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 OTOWI WELL NO. 4 - INTERIOR



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE. SUITE 130
 LOS ALAMOS, NM MEXICO 87544
 (505) 662-8150 FAX: (505) 662-8100

SHEET 7



KEYED NOTES

- ① NEW WALL PENETRATION
- ② NEW 1" RIDGED CONDUIT WITH LONG SWEEP 90° FITTINGS
- ③ NEW PENETRATION INTO EXISTING RTU BOX
- ④ WALL MOUNT PATCH PANEL - MULTILINK FWM-4X-D INCLUDING 12 STRAND SPLICE TRAY
- ⑤ TERMINATE FIBER CABLES INTO DUPLEX ADAPTERS AND ATTACH TO FIXING PLATES PER MANUFACTURER'S SPECIFICATIONS
- ⑥ FIBER CABLE INPUT
- ⑦ 12 STRAND SPLICE TRAY.
- ⑧ FIBER CABLE WITH LC/UPC PIGTAIL

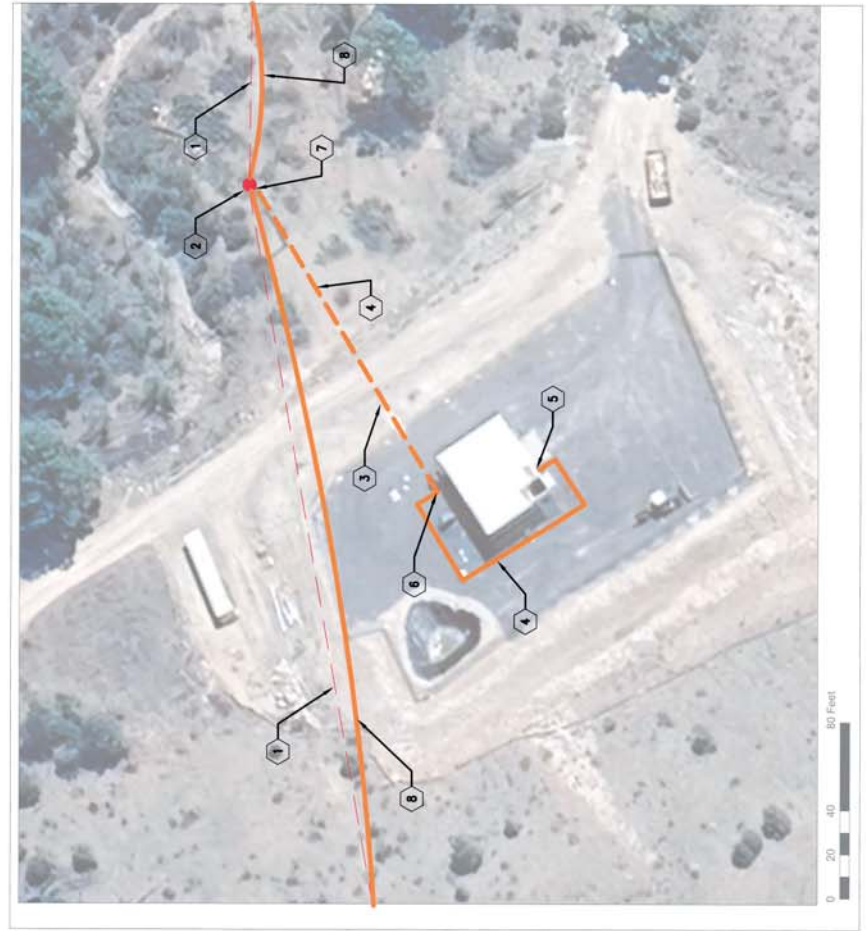
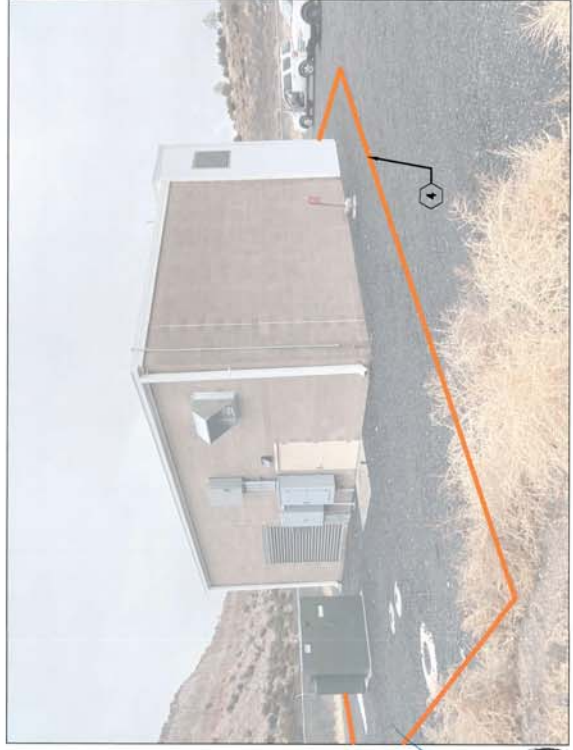
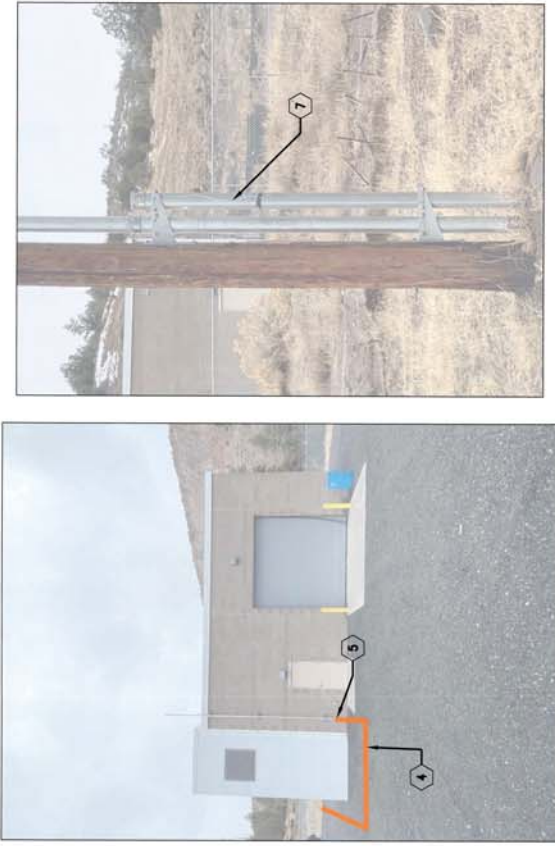
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LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 OTOWI WELL NO. 2 - SITE PLAN



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1800 CENTRAL AVE., SUITE 130
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-8150 FAX: (505) 662-8109



KEYED NOTES

- 1 EXISTING OVERHEAD ELECTRIC
- 2 EXISTING WOODEN UTILITY POLE
- 3 EXISTING 4" UG CONDUIT - USE FOR NEW 12 STRAND FIBER LINE
- 4 NEW 12 STRAND UG FIBER LINE
- 5 EXISTING CONDUIT PENETRATION - TO BE USED FOR NEW FIBER LINE
- 6 PULL BOX INTERCEPT - END EX. CONDUIT, START NEW 4" CONDUIT. INSTALL PER TRENCH DETAIL A/15. NEW FIBER OPTIC PULL BOX PER DETAIL B/15.
- 7 EXISTING 4" CONDUIT RISER - 6' ABOVE FINISHED GRADE. CONNECT TO NEW 12 STRAND FIBER LINE PER DETAIL C/14. SPLICE 12 STRANDS AND EXTEND TO WELL.
- 8 NEW 144 STRAND OVERHEAD FIBER LINE.



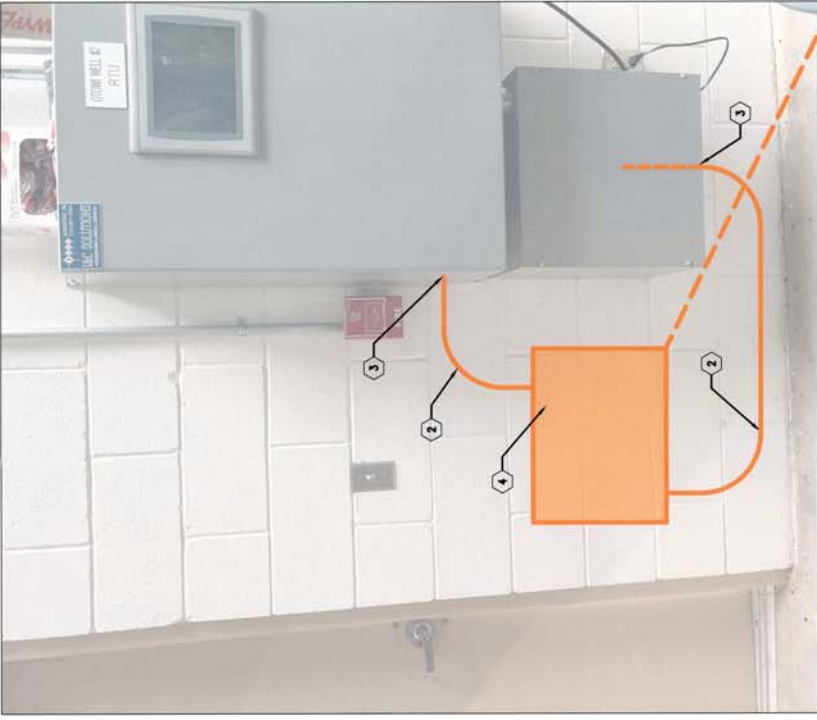
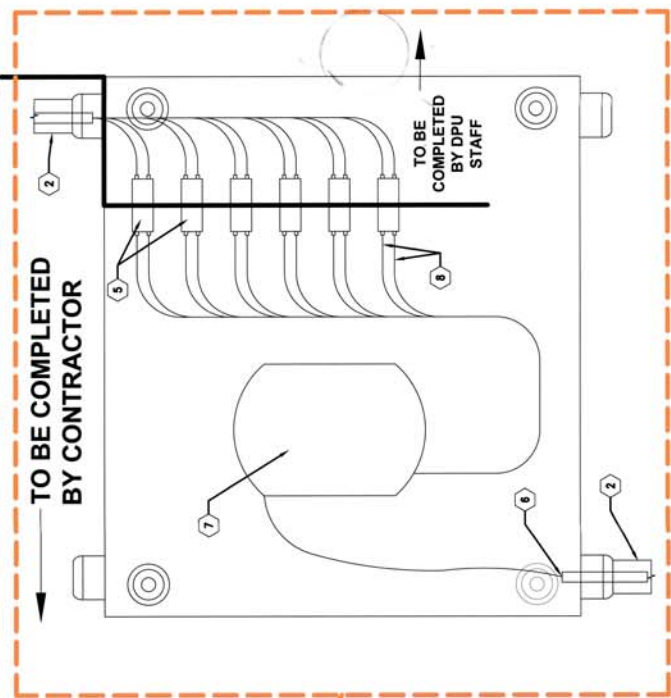
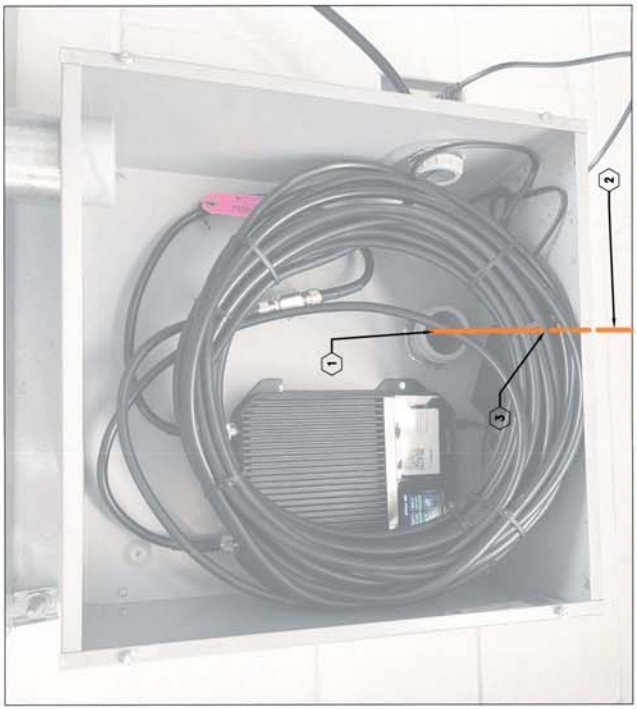
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LOS ALAMOS CANYON FIBER
 OPTIC EXTENSION
 OTOWI WELL NO. 2 - INTERIOR



INCORPORATED COUNTY
 OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1500 CENTRAL AVE. SUITE 130
 LOS ALAMOS, NM MEXICO 87544
 FAX: (505) 662-8150
 (505) 662-8150



KEYED NOTES

- 1 PULL 12 STRAND FIBER CABLE THROUGH EXISTING WALL PENETRATION
- 2 NEW 1" RIDGED CONDUIT WITH LONG SWEEP 90° FITTINGS
- 3 NEW PENETRATION INTO EXISTING RTU BOX
- 4 WALL MOUNT PATCH PANEL: MULTILINK FWM-4X-D INCLUDING 12 STRAND SPLICE TRAY
- 5 TERMINATE FIBER CABLES INTO DUPLEX ADAPTERS AND ATTACH TO FIXING PLATES PER MANUFACTURER'S SPECIFICATIONS
- 6 FIBER CABLE INPUT
- 7 12 STRAND SPLICE TRAY.
- 8 FIBER CABLE WITH LC/UPC PIGTAIL



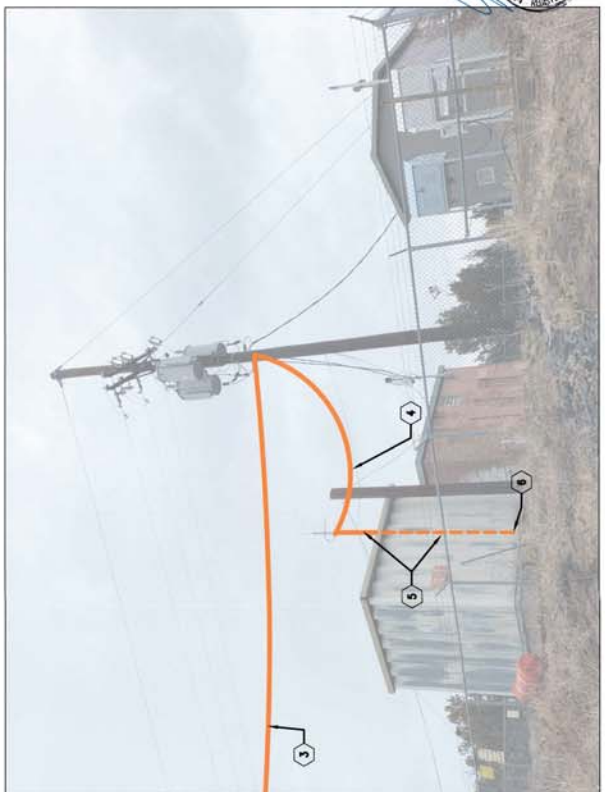
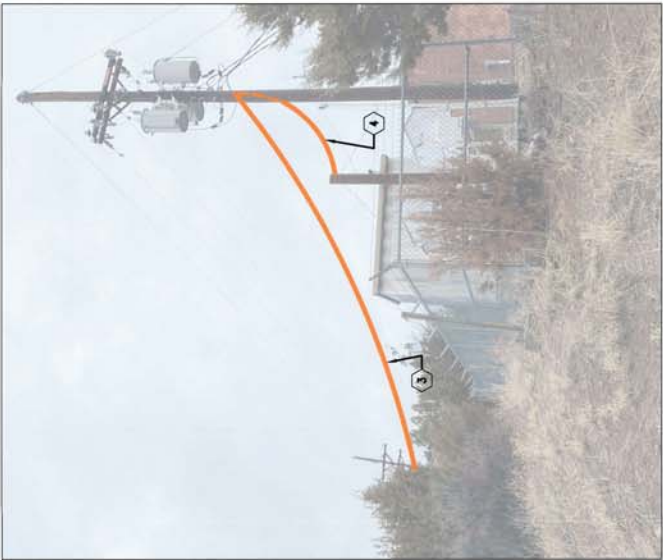
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LOS ALAMOS CANYON FIBER
 OPTIC EXTENSION
 PAJARITO WELL NO. 1 - SITE PLAN



INCORPORATED COUNTY
 OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE., SUITE 130
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-8150 FAX: (505) 662-8100



KEYED NOTES

- ① EXISTING OVERHEAD ELECTRIC
- ② EXISTING WOODEN UTILITY POLE.
- ③ NEW 12 STRAND FIBER LINE
- ④ NEW FIBER SAG LINE FROM NEW FIBER POLE TO EXISTING 2" SCADA MAST.
- ⑤ NEW 1" FIBER CONDUIT ATTACHED TO EXISTING 2" SCADA MAST
- ⑥ NEW WALL PENETRATION



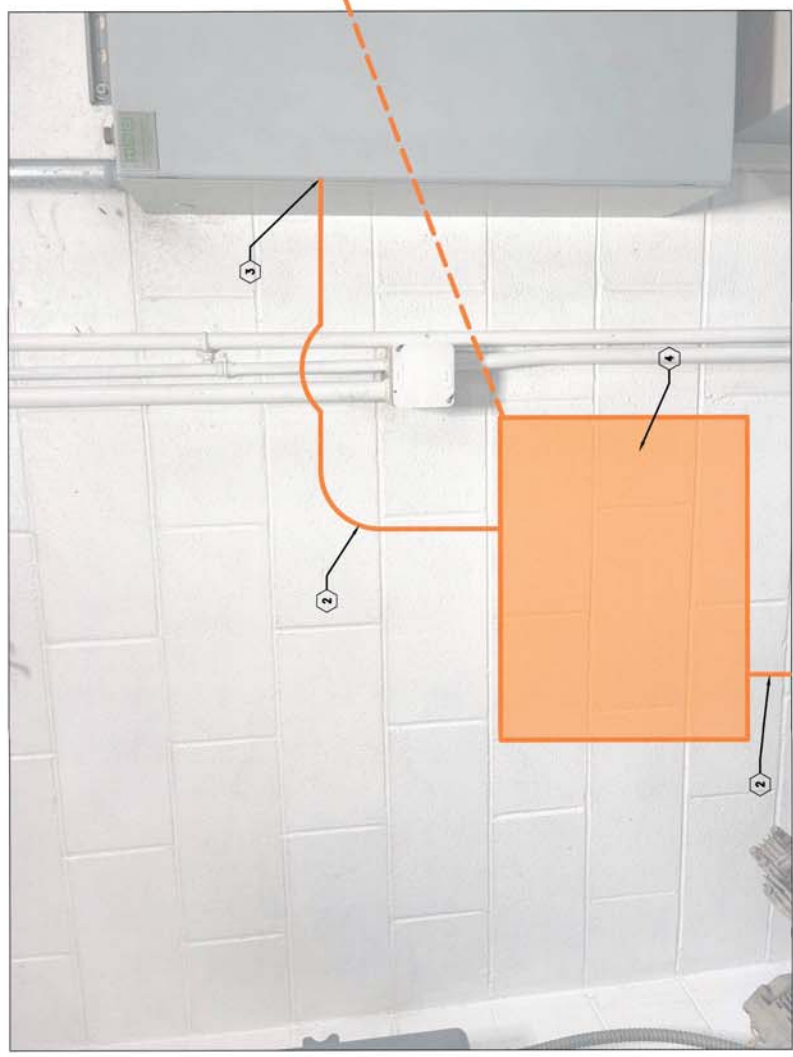
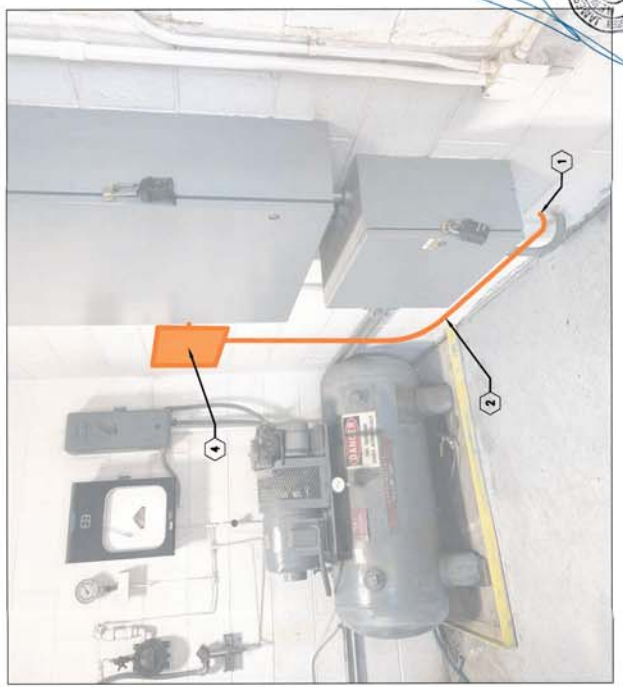
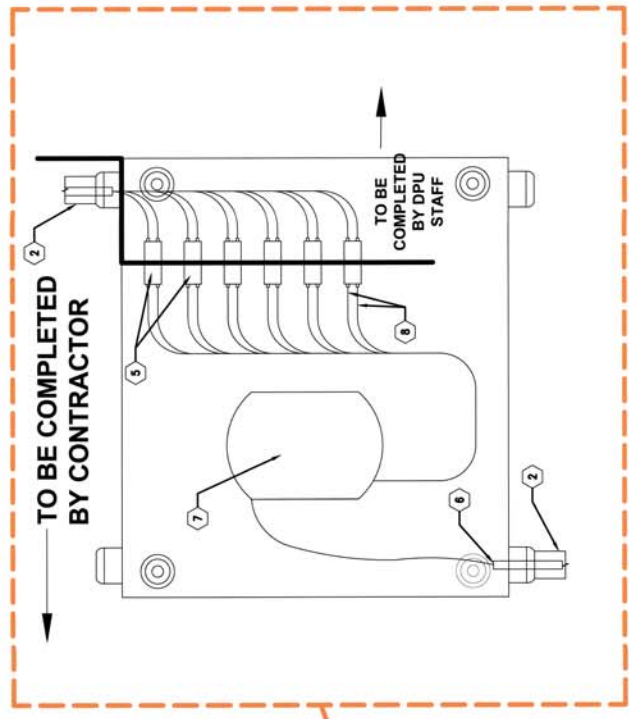
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LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 PAJARITO WELL NO. 1 - INTERIOR



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE., SUITE 110
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-0150 FAX: (505) 662-0100



KEYED NOTES

- ① NEW WALL PENETRATION
- ② NEW 1" RIDGED CONDUIT WITH LONG SWEEP 90° FITTINGS
- ③ NEW PENETRATION INTO EXISTING RTU BOX
- ④ WALL MOUNT PATCH PANEL: MULTILINK FWM-4X-D INCLUDING 12 STRAND SPLICE TRAY
- ⑤ TERMINATE FIBER CABLES INTO DUPLEX ADAPTERS AND ATTACH TO FIXING PLATES PER MANUFACTURER'S SPECIFICATIONS
- ⑥ FIBER CABLE INPUT
- ⑦ 12 STRAND SPLICE TRAY.
- ⑧ FIBER CABLE WITH LC/UPC PIGTAIL



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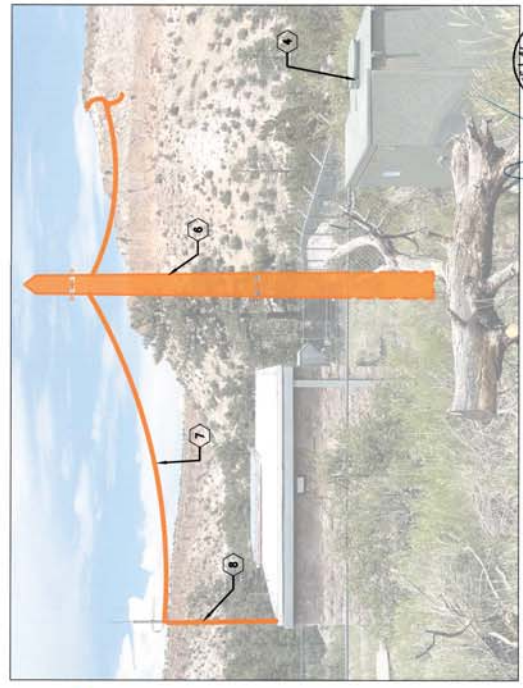
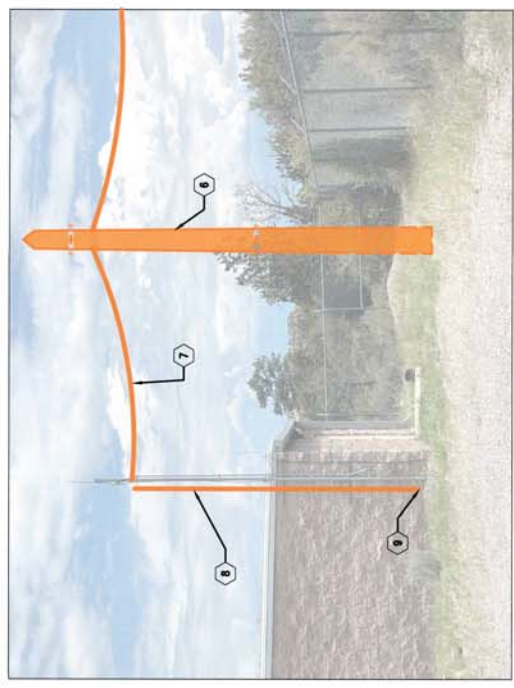
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LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 OTOWI WELL NO. 1 - SITE PLAN



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE., SUITE 100
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-8150 FAX: (505) 662-8100

12
 SHEET



KEYED NOTES

- ① EXISTING OVERHEAD ELECTRIC
- ② EXISTING WOODEN UTILITY POLE
- ③ EXISTING UNDERGROUND ELECTRIC
- ④ EXISTING ELECTRIC TRANSFORMER
- ⑤ NEW 12 STRAND FIBER LINE
- ⑥ NEW 35' WOOD POLE
- ⑦ NEW FIBER SAG LINE FROM NEW FIBER POLE TO EXISTING 2" SCADA MAST.
- ⑧ NEW 1" RGS FIBER CONDUIT ATTACHED TO EXISTING SCADA MAST.
- ⑨ NEW WALL PENETRATION

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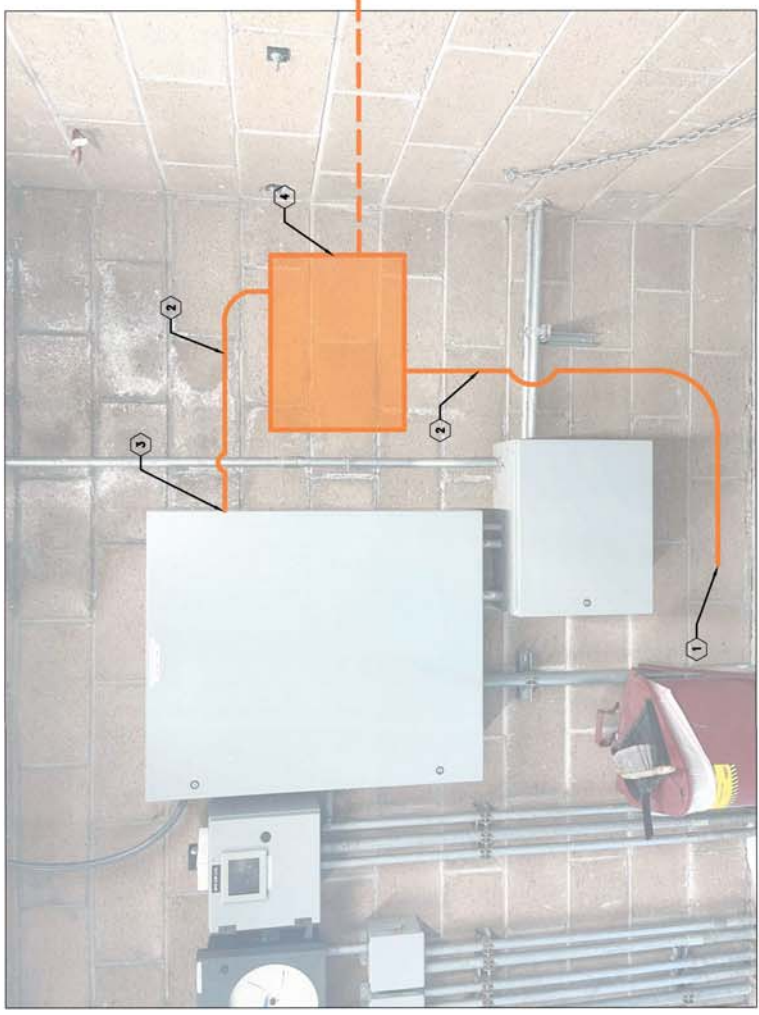
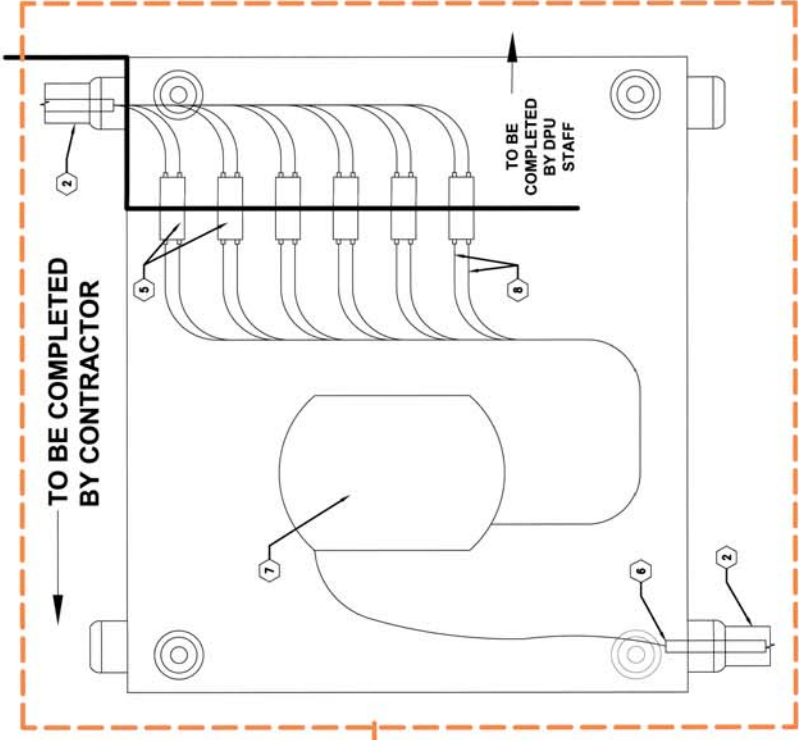
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LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 OTOWI WELL NO. 1 - INTERIOR



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 1000 CENTRAL AVE. SUITE 100
 LOS ALAMOS, NEW MEXICO 87544
 (505) 662-0150 FAX: (505) 662-0100

SHEET 13



KEYED NOTES

- ① NEW WALL PENETRATION
- ② NEW 1" RIDGED CONDUIT WITH LONG SWEEP 90° FITTINGS
- ③ NEW PENETRATION INTO EXISTING RTU BOX
- ④ WALL MOUNT PATCH PANEL: MULTILINK FWM-4X-D INCLUDING 12 STRAND SPLICE TRAY
- ⑤ TERMINATE FIBER CABLES INTO DUPLEX ADAPTERS AND ATTACH TO FIXING PLATES PER MANUFACTURER'S SPECIFICATIONS
- ⑥ FIBER CABLE INPUT
- ⑦ 12 STRAND SPLICE TRAY.
- ⑧ FIBER CABLE WITH LC/UPC PIGTAIL

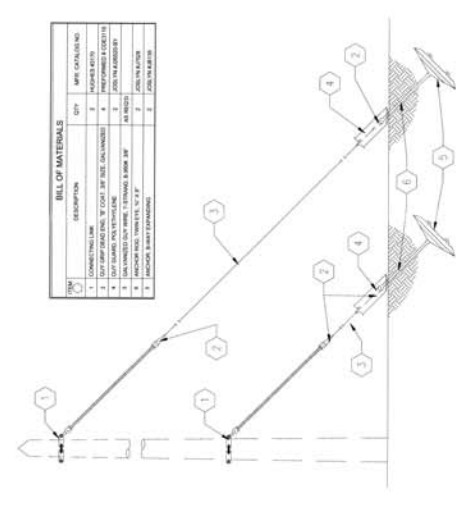
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DETAILS
LOS ALAMOS CANYON FIBER OPTIC EXTENSION

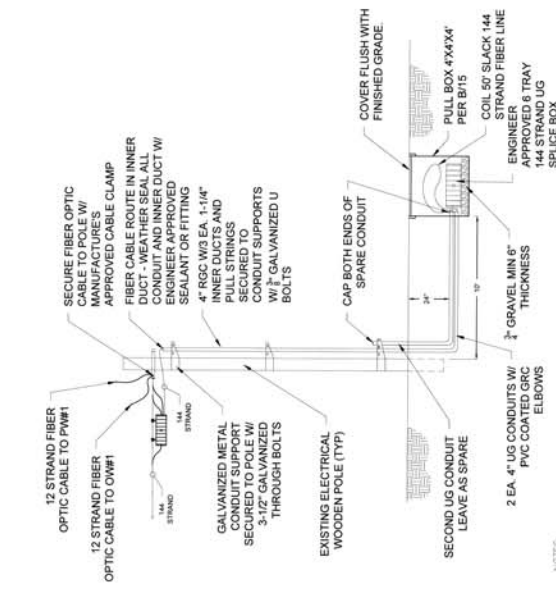


INCORPORATED COUNTY
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1000 CENTRAL AVE., SUITE 130
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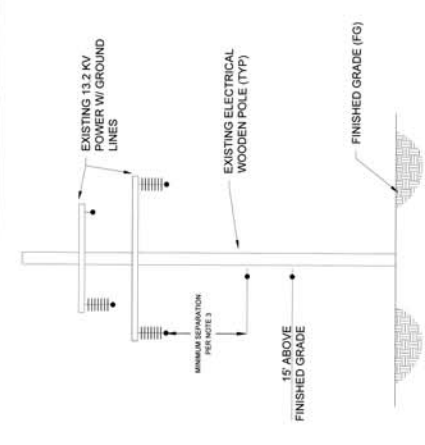
SHEET
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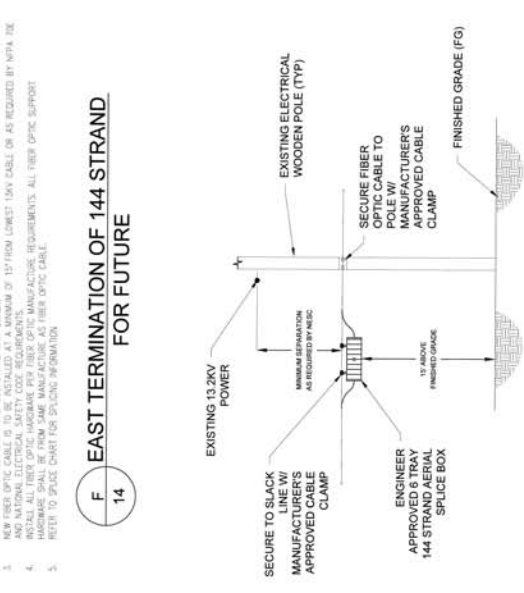
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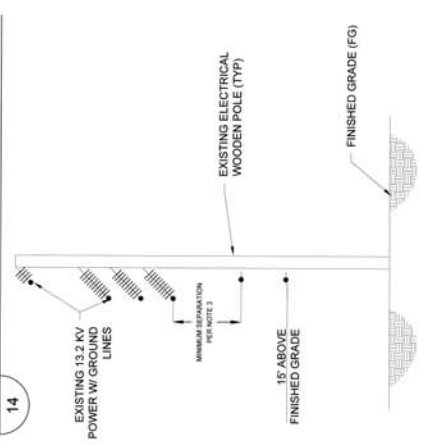
F EAST TERMINATION OF 144 STRAND FOR FUTURE
14



B FIBER OPTIC PLACEMENT - TYPE 1
14



E AERIAL SPLICE BOX
14



D FIBER OPTIC PLACEMENT - TYPE 2
14

- NOTES:**
1. ALL EXISTING POLE AND LINE DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND DOCUMENT ON PROJECT AS-BUILT DRAWINGS.
 2. ALL 15 KV LINES ARE ENERGIZED. CONTRACTOR SHALL INSTALL NEW FIBER OPTIC CABLE PER ALL NFPA 70E AND INDUSTRY SAFETY CODES. IF CONTRACTOR REQUIRES DE-ENERGIZATION OF LINES DURING INSTALLATION OF FIBER OPTIC CABLE, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH OWNER.
 3. NEW FIBER OPTIC CABLE IS TO BE INSTALLED AT A MINIMUM OF 15' FROM LOWEST 15KV CABLE OR AS REQUIRED BY NFPA 70E AND NATIONAL ELECTRICAL SAFETY CODE REQUIREMENTS.
 4. HARDWARE SHALL BE FROM SAME MANUFACTURE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.

- NOTES:**
1. ALL EXISTING POLE AND LINE DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND DOCUMENT ON PROJECT AS-BUILT DRAWINGS.
 2. ALL 15 KV LINES ARE ENERGIZED. CONTRACTOR SHALL INSTALL NEW FIBER OPTIC CABLE PER ALL NFPA 70E AND INDUSTRY SAFETY CODES. IF CONTRACTOR REQUIRES DE-ENERGIZATION OF LINES DURING INSTALLATION OF FIBER OPTIC CABLE, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH OWNER.
 3. NEW FIBER OPTIC CABLE IS TO BE INSTALLED BELOW LOWEST 15KV CABLE AS REQUIRED BY NFPA 70E AND NATIONAL ELECTRICAL SAFETY CODE REQUIREMENTS.
 4. HARDWARE SHALL BE FROM SAME MANUFACTURE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.



C OVERHEAD TO UNDERGROUND TRANSITION
14

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NO.	REVISION DESCRIPTION

DESIGNED BY:	SH
DRAWN BY:	SH
APPROVED BY:	JJA
DATE:	10/24/2024
SCALE:	N/A

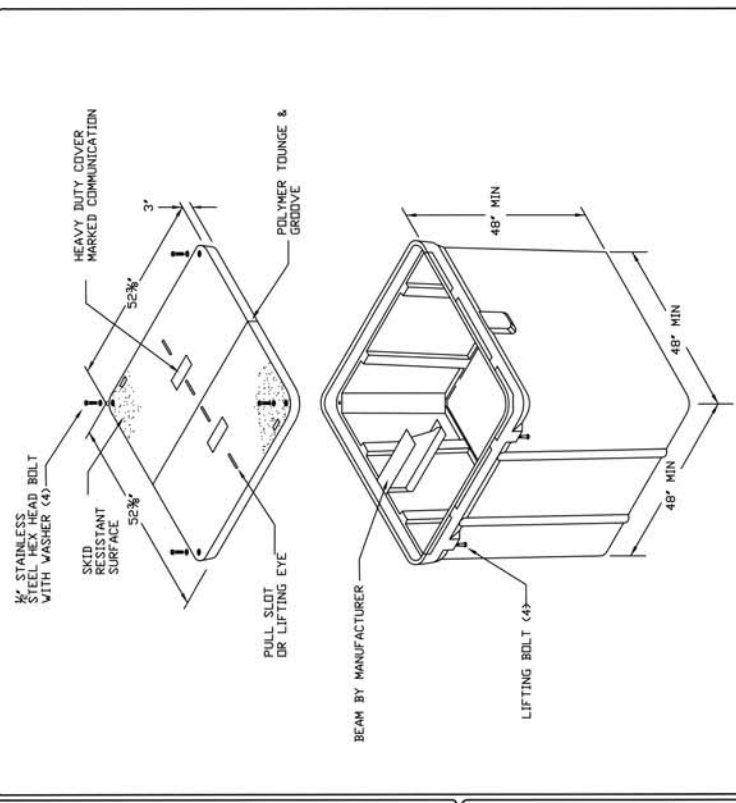
LOS ALAMOS CANYON FIBER OPTIC EXTENSION DETAILS



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 LOS ALAMOS, NM 87545
 DEPARTMENT OF PUBLIC UTILITIES
 INCORPORATED COUNTY OF LOS ALAMOS

15
SUBJECT

UTILITY CONSTRUCTION STANDARDS - UTILITY SERVICES
 48" x 48" x 48"
 OPEN BOTTOM POLYMER CONCRETE VAULT
 SECTION 4000
 4038



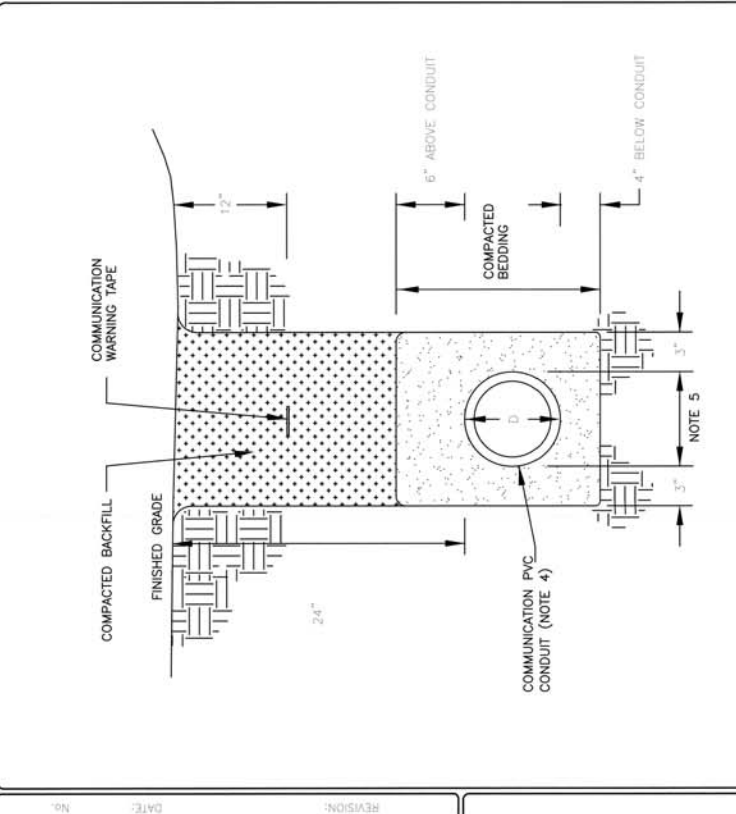
- VAULT CONSTRUCTION NOTES**
- 1.) VAULT TO BE USED FOR H-20 TRAFFIC DESIGN. ALL LIVE LOADS SHALL BE FOR HS-20-44 (MS-1B) AS PER AASHTO STANDARD SPECIFICATION, DIV 1, SEC. 3
 - 2.) VAULT EXCAVATION AND BACKFILL TO CONFORM TO LOS ALAMOS COUNTY UTILITIES SPECIFICATIONS
 - 3.) BUTYL RUBBER OR NEOPRENE GASKET SEAL REQUIRED BETWEEN VAULT SECTION AND DR EXTENSIONS
 - 4.) LIDS TO BE MARKED "COMMUNICATION"
 - 5.) ALL WEIGHTS TO BE CLEARLY MARKED
 - 6.) DELIVERY OF THE VAULT REQUIRES COORDINATION WITH LOS ALAMOS COUNTY UTILITIES ENGINEERING
 - 7.) POLYMER CONCRETE VAULTS SHALL COMPLY WITH LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 401. UNDERGROUND DUCTBANK SYSTEMS.
 - 8.) FIELD CUT BOX AS NEEDED TO RECEIVE CONDUITS.

NO.	DATE:	REVISION:	APPROVED BY:	DATE: APRIL 2018
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B PULL BOX DETAIL
15

UTILITY CONSTRUCTION STANDARDS - UTILITY SERVICES
 COMMUNICATION TRENCH DETAIL
 SECTION 4000
 4030



- NOTES:**
- 1.) 95% COMPACTION REQUIRED UNDER PAVED ROADS, SIDEWALK AND CURB, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 202.
 - 2.) 85% COMPACTION REQUIRED AT ALL LOCATIONS NOT IN NOTE 1, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 202.
 - 3.) CONDUIT PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 401.
 - 4.) NUMBER AND SIZE OF CONDUITS AS SHOWN ON PLANS.
 - 5.) TRENCH WIDTH SHALL BE DISTANCE FROM OUTSIDE FACE OF OUTER MOST CONDUITS PLUS 6 INCHES.

NO.	DATE:	REVISION:	APPROVED BY:	DATE: APRIL 2018
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A TRENCH DETAIL
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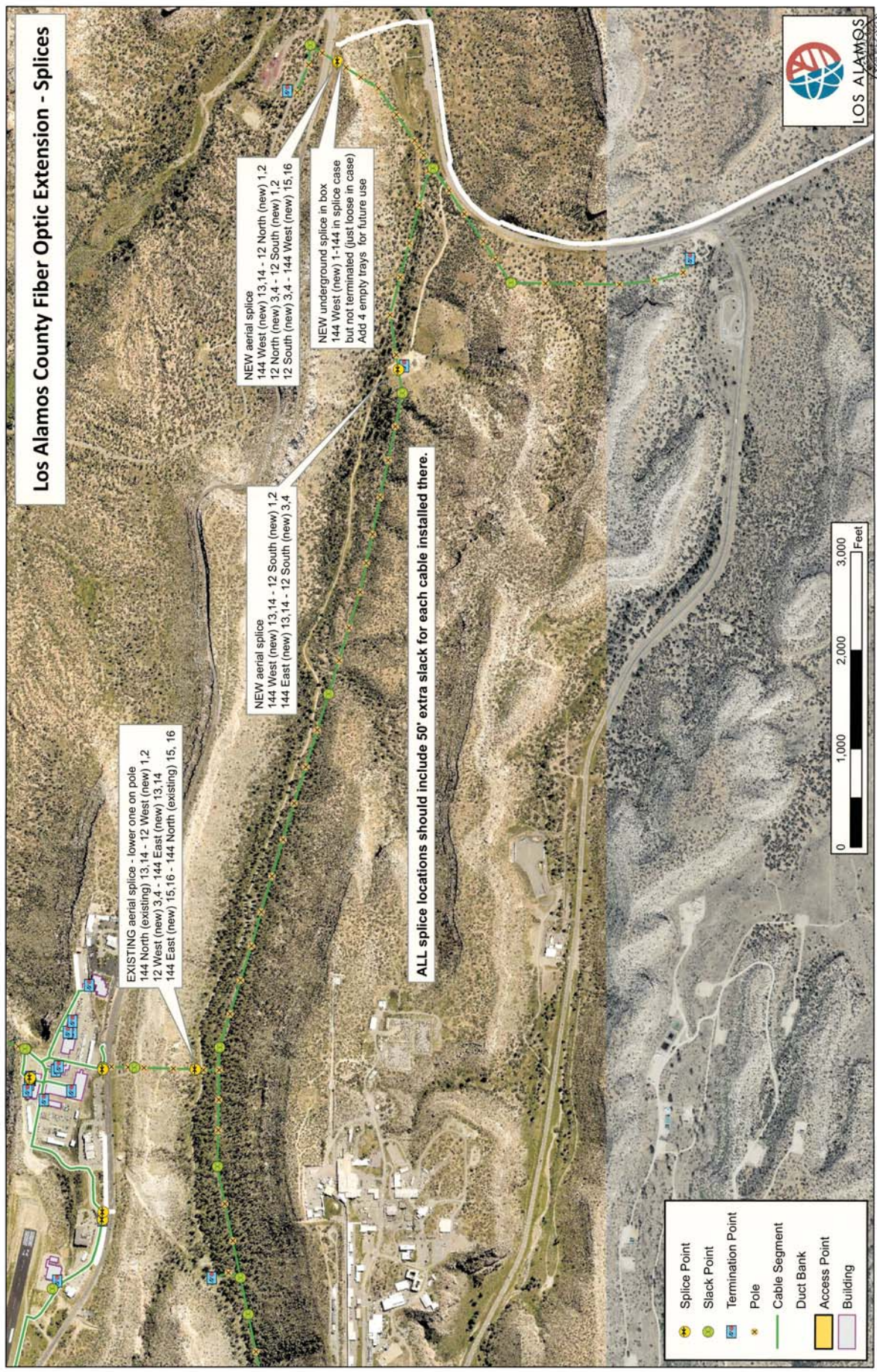
DESIGNED BY:	SH
DRAWN BY:	SH
APPROVED BY:	JJA
DATE:	10/24/2024
SCALE:	N/A

**LOS ALAMOS CANYON FIBER OPTIC EXTENSION
SPLICE LOCATIONS**



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1000 CENTRAL AVENUE, SUITE 130
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Los Alamos County Fiber Optic Extension - Splices



EXISTING aerial splice - lower one on pole
144 North (existing) 13,14 - 12 West (new) 1,2
12 West (new) 3,4 - 144 East (new) 13,14
144 East (new) 15,16 - 144 North (existing) 15, 16

NEW aerial splice
144 West (new) 13,14 - 12 South (new) 1,2
144 East (new) 13,14 - 12 South (new) 3,4

NEW aerial splice
144 West (new) 13,14 - 12 North (new) 1,2
12 North (new) 3,4 - 12 South (new) 1,2
12 South (new) 3,4 - 144 West (new) 15,16

NEW underground splice in box
144 West (new) 1-144 in splice case
but not terminated (just loose in case)
Add 4 empty trays for future use

ALL splice locations should include 50' extra slack for each cable installed there.

- Splice Point
- Slack Point
- Termination Point
- Pole
- Cable Segment
- Duct Bank
- Access Point
- Building



NO.	REVISION DESCRIPTION
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DESIGNED BY: SH
 DRAWN BY: SH
 APPROVED BY: JJA
 DATE: 10/24/2024
 SCALE: N/A

LOS ALAMOS CANYON FIBER OPTIC EXTENSION
 SLACK LOOP LOCATIONS



INCORPORATED COUNTY OF LOS ALAMOS
 DEPARTMENT OF PUBLIC UTILITIES
 100 CENTRAL AVE., SUITE 150
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