

**INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO
AND
U.S. DEPARTMENT OF ENERGY,
NATIONAL NUCLEAR SECURITY ADMINISTRATION**

**TEMPORARY CONSTRUCTION EASEMENT AND
PERMANENT UTILITY EASEMENT**

PROJECT: DOE/NNSA MSTs Building Fiber Conduit Project

NOW COMES, the INCORPORATED COUNTY OF LOS ALAMOS, NEW MEXICO (“Grantor” or “County”) having determined that the granting of this instrument on the terms and conditions herein stated is not incompatible with the public interest, hereby grants to the UNITED STATES OF AMERICA, acting by and through the DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY ADMINISTRATION (hereafter “DOE/NNSA” or “Grantee”), its successors and assigns, collectively the “Parties.”

PURPOSE. The purpose in grant of the easement(s) by Grantor is to provide to Grantee the right of access and use of County-owned lands to install an underground telecommunication conduit including any and all fiber or communication lines and related appurtenances across Grantor's property, all as shown and provided on **Exhibit A**. The project as described and approved in **Exhibit B** (hereafter “Work” or “Project”), is hereafter generally referenced as the “DOE/NNSA MSTs Building Fiber Conduit Project”.

SECTION. 1. GRANT OF EASEMENTS.

A. **UTILITY EASEMENT.** Grantor grants to Grantee a permanent utility easement (hereafter “Utility Easement”) for use and access to County-owned lands, together with ingress and egress, above and below ground, for the purposes of construction, installation, operation, inspection, testing, maintenance, and repair of required telecommunication infrastructure(s) as follows:

1. Installation of one (1) four (4) inch conduits across the County’s property as shown in **Exhibit A** (hereafter “Premises”), below grade by trench from the County owned telecommunication fiber pull and junction box and related appurtenances (hereafter “Pull Box”) to the CenturyLink® pull box as more clearly shown on **Exhibit A** and included in **Exhibit B**, the approved Project and Work; and
2. Access by Grantor to Grantee to the County’s Pull Box, pursuant to the following terms and conditions:
 - i. LANL, their authorized agent, or contractors shall provide at minimum five (5) business days’ notice to County’s Information Management Division prior to accessing or performing work within the County’s Pull Box. Emergency repairs, which includes the right to access to protect the health, safety and welfare of the public and equipment, is permitted and authorized but shall be reported to the County no later than twenty-four (24) hours after such emergency access.

- ii. Access to the County's Pull Box shall be limited to the installation, maintenance, repair, and replacement of the authorized fiber telecommunication lines and related and necessary equipment. All work, testing, inspection, and installation of Grantee's personal property within the Utility Easement shall be constructed, installed, and operated in accordance with Grantor-approved plans, specifications, procedures, and terms of this Grant of Easement.
- iii. Grantee's access to the Pull Box includes the right to co-locate Grantee's fiber, splice case, conduits and related connections in the County Pull Box. Any fiber loop deemed appropriate for maintenance or other purposes by Grantee shall be located outside the County Pull Box. Only those items, connections, devices, or equipment as agreed to and documented in **Exhibit B** shall be allowed in or connected to the County's Pull Box.
- iv. Access to the County's Pull Box is only for "current request" purposes only and does not grant unlimited right of use. If such conduits are not used for the specific purposes provided herein, this Utility Easement shall be considered vacated and abandoned by Grantee.
- v. If it is determined by the County that future projects or related maintenance activities or projects require the installation or replacement of the Pull Box, Grantee, upon 30 days' notice, shall bear all costs and expense in the temporary removal, use alternatives, and replacement of Grantee's authorized and installed equipment, lines, and appurtenances.

B. TEMPORARY CONSTRUCTION EASEMENT. Grantor grants to Grantee a temporary construction easement ("Construction Easement") for right-of-way across County-owned lands, together with ingress and egress, for the purposes of construction, installation, inspection, testing, and repair of the following:

1. Grantee shall not begin work within the Construction or Utility Easement until Grantor issues authorization to proceed by its duly designated local representative.
2. Grantee is hereby granted authorization to locate equipment, staff, and limited materials within the County's right-of-way and on County property.
3. Grantee shall obtain any and all necessary or required permits, licenses, or authorizations to perform the Work as provided in **Exhibit B**, including but not limited to, County Excavation and Traffic Permits, etc.

SECTION 2. THESE EASEMENTS are granted subject to the following terms and conditions:

A. TERM/TERMINATION RIGHTS

1. **Temporary Construction Easement.** The Construction Easement shall commence on the effective date of this Agreement and shall automatically terminate and expire fourteen (14) months after the completion date of construction of the conduits and installation of the telecommunication line or lines in the conduits to the Pull Box. Upon the expiration of the

term of the Construction Easement, all of the rights and benefits of Grantee in, to, and under this Agreement with respect to the Construction Easement only shall automatically terminate and be of no further force and effect.

2. **Permanent Utility Easement.** The Utility Easement shall be effective upon execution by Grantor and shall be granted for an indefinite term in perpetuity, from the effective date of this Easement. This Utility Easement may be terminated by written notice from Grantor to the Grantee should the Utility Easement be: (a) abandoned; (b) not used for telecommunication purposes, or (c) for non-use for a continuous twenty-four (24) month period.

B. CONSIDERATION. Pursuant to the mutual obligations and covenants herein, and that Grantee is a government entity; consideration has been waived.

C. AUTHORIZED REPRESENTATIVES The following are the authorized and designated representatives for the purposes of this Agreement:

1. The Grantor's representative shall be to: County Manager, Division Director of Information Management Division, 1000 Central Avenue, Suite 350, Los Alamos, New Mexico 87544, telephone (505) 663-1750.
2. The Grantee's representative shall be Realty Officer, Office of Infrastructure Planning & Analysis NNSA Albuquerque Complex, Bldg. 401, NE, P.O. Box 5400, Albuquerque, New Mexico 87185-5400; telephone (505) 845-4178, the Realty Specialist or Utility Manager, or designee, 1000 Central Avenue, Suite 130, Los Alamos, New Mexico 87544; telephone (505) 662-8333.

Any changes in the designated representatives or in their respective addresses shall be provided to the other party in writing.

D. NOTICE. No notice, order, direction, determination, requirement, consent, or approval under this Easement shall be of any effect, within the restriction of this Easement, unless provided in writing to the authorized representative at the address set out in Condition 3.

E. PROVISIONS OF EASEMENT GRANTED. The installation and/or operation and maintenance of the facilities shall be accomplished without cost or expense to the Grantor under the general supervision and subject to the approval of the representative having immediate jurisdiction over the property, designated as the Grantor's "local representative." The said work shall be accomplished in such a manner as not to conflict with the rights of the Grantor or any other existing utilities already present, nor to endanger personnel or property of the Grantor on County-owned land.

F. PROTECTION OF PROPERTY. All portions of the facilities shall at all times be protected and maintained in good order and condition by and at the sole expense of the Grantee. Any property of the Grantor damaged or destroyed by the Grantee incident to the use and occupation of the easement area(s) granted by this Agreement shall be promptly repaired or

replaced by the Grantee to the satisfaction of the Grantor or in lieu of such repair or replacement the Grantee shall, if so agreed to by the Grantee and Grantor, pay to the Grantor money in an amount a reasonable amount sufficient to compensate for the loss sustained by the Grantor by reason of damages to or destruction of the Grantor's property.

G. TRANSFER/ASSIGNMENTS. The conditions of this Utility Easement shall extend to and be binding upon and shall inure to the heirs, representatives, successors, and assigns of the Grantee. The Grantee shall neither transfer nor assign this Utility Easement or any property on the Premises, nor sublet the Premises or any part of the property, nor grant any interest, privilege, or license whatsoever in connection with this Utility Easement without the express and prior written permission of the Grantor.

H. OFFICIALS NOT TO BENEFIT. No member of or Delegate to Congress, Resident Commissioner or local or State official shall be admitted to any share or part of this Utility Easement or to any benefit arising from it.

I. NON-DISCRIMINATION. Usage of the Premises or facilities will be operated in a nondiscriminatory manner to the end that no person shall, on the ground of race, color, religion, sex, age, handicap, or national origin, be excluded from using the Premises or facilities under the Utility Easement.

J. ENVIRONMENT. The Grantee shall not unlawfully pollute the air, ground or water or create a public nuisance. The Grantee shall use all reasonable means available to protect the environment and natural resources from damage arising from this Easement or activities incident to it and, where damage nonetheless occurs, the Grantee shall be liable to repair the damaged resources. The Grantee shall not create, use, store, treat, or dispose of any toxic or hazardous material on the Premises without prior Grantor written approval which shall not be unreasonably withheld. For the purpose of this Condition, hazardous materials shall include but not be limited to substances defined as "hazardous substances" or "toxic substances" in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. Sec. 9061 et seq.; Hazardous Materials Transport Act, 49 U.S.C. Sec. 1802; and Resource Conservation and Recovery Act, 42 U.S.C. Sec. 6901 et seq. and in the regulations adopted and publications promulgated pursuant to said laws. The Grantee shall at no cost to the County promptly comply with present and future Federal, State, and local laws, ordinances, regulations, or instructions controlling the quality of the environment. This does not affect the Grantee's right to contest their validity or enjoin their applicability. The Grantee shall not be responsible for hazardous materials or pollution caused by others including the Grantor. If the Grantee discovers contamination on the Premises, the Grantee shall immediately cease all activities and notify the Grantor's representative.

The Grantee shall have no liability or responsibility and the Grantor shall retain liability (including liability to third parties) and responsibilities for environmental remediation, impacts, claims, liabilities or damages arising under any laws, regulations or permits caused by or resulting from any generation, manufacture, presence, release, discharge, use, storage, handling, or disposal of any hazardous material on or from any part of the Premises or from on any part of the Grantor's property regardless of when the condition is discovered, except to the extent caused by Grantee.

K. CULTURAL ITEMS. The Grantee shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archaeological, architectural, or other cultural artifacts, relics, vestiges, remains or objects of antiquity. In the event such items are discovered on the Premises, the Grantee shall immediately notify the Grantor's representative and protect the site and the material from further disturbance until the Grantor gives clearance to proceed.

L. LAWS, ORDINANCES, REGULATIONS. Grantee shall comply with all applicable laws, ordinances, and regulations of the State, County and municipality wherein the Premises are located with regard to construction, sanitation, licenses or permits to do business, and all other matters affecting the Premises.

M. GRANTEE RESPONSIBILITY. The Grantee shall supervise the facilities and cause them to be inspected at reasonable intervals and shall use reasonable efforts to immediately repair any damage found as a result of the inspection or when requested by the Grantor's representative to repair any defects. Upon completion of the Work as described in **Exhibit B** or any subsequent repair or maintenance activity, the Grantee, at the Grantee's own expense shall remove construction debris, revegetate for erosion control, and grade to the original contour of the land. Grantee shall comply with such rules and regulations regarding County security, ingress, egress, safety, sanitation, etc. as may be prescribed from time to time by the Grantor. The Grantee shall not remove, relocate or damage any existing utilities and/or associated facilities belonging to Grantor.

The Grantee shall provide to Grantor a final legal description and survey within 30 days after the project is complete.

N. GRANTOR RESERVATIONS. The Grantor reserves to itself the right to construct, use, and maintain across, over and/or under the right-of-way granted any necessary electric transmission, telephone, telegraph, water, gas, gasoline, oil, sewer lines, and other facilities in such manner as not to create any unreasonable interference with the use of the right-of-way granted within this Utility Easement.

O. ACCESS TO SITE. Grantee understands and agrees that some access to property in the area, whether controlled by Grantor or by Grantee, may be subject to Grantor security regulations. Grantee and its contractors or agents agree to comply with any and all applicable Grantee security regulations including, but not limited to, requirements for obtaining access authorization for personnel working at the Premises.

P. THIRD-PARTY RESERVATIONS. This Construction and Utility Easement is granted subject to such other rights that may be outstanding to third-parties in, on, over, and/or across the Easement area.

Q. HOLD HARMLESS AND INDEMNITY

1. The Grantor shall not be responsible for damages or property or injuries to persons which may arise from or be incident to the use and occupation of the Premises nor shall it be responsible for damages to the property or injuries to the persons of the Grantee, its agents, employees, or

representative or others who may be on the Premises at their invitation, arising from Grantee activities.

2. The Grantee shall be solely responsible for the claims or damages arising from injury to persons or property caused by the action of the Grantee, its employees, agents, or contractors during its activities on the Premises or arising from any neglect or fault of the Grantee or the agents and the employees of the Grantee in using the Premises, or arising from the failure of the Grantee to comply and conform with all local, State, or federal laws, rules, regulations, or ordinances.

3. The Grantor agrees that to the extent authorized by the New Mexico Tort Claims Act, NMSA 1978, Sections 41-4-1 through 41-4-27, the Grantee will be responsible for related claims and damages arising from injury to persons or property caused solely by the actions of the Grantor, its employees, agents, or contractors during its operation on the Premises. Grantee recognizes that the Act prohibits Grantor from indemnifying Grantee.

4. The Grantor does not assume any liability or responsibility for environmental remediation, impacts and damage caused by the Grantees use of toxic or hazardous waste, substances or materials on any portion of the Premises. Grantor has no obligation under this Easement to undertake the defense of any such claim or action, whether in existence now or brought in the future, alleging environmental impacts and damage arising out of the use of or release of any toxic or hazardous waste, substance, or materials caused by Grantee. The Grantee shall retain liability for damages for exposure and responsibility for remediation which is caused by or arises from the presence of any hazardous waste in, on or under the Premises on or prior to time Grantor first began operations on the property.

R. BOUNDARY OR SURVEY MONUMENTATION. The Grantee shall contact the County Surveyor to locate survey monuments prior to trenching or excavation work and shall not disturb, obliterate, or destroy any land boundary or survey monument on the Premises without prior approval from the Grantor or Grantor's representative.

S. WETLANDS AND FLOODPLAINS. All activity within any flood plain or jurisdictional wetlands must comply with applicable Federal, State, and local laws, rules or ordinances governing land use in floodplains or wetlands.

T. GRANTEE'S PLANS AND SPECIFICATIONS. The Grantee shall submit plans and specifications of the Project to the Grantor representative for approval before beginning the Work and shall comply with the approved plans. Grantee shall submit any changes to the approved Work and plans for approval before undertaking any changes.

U. TIMBER. It is not anticipated that Grantee will need to cut any trees. Grantee shall notify and obtain written approval from the Grantor prior to cutting any trees. The Grantee will remove and dispose of any trees that it cuts on the Premise.

V. REMOVAL/RELOCATION OF FACILITIES. In the event all or any portion of the Premises occupied by the facilities shall be needed by the Grantor pursuant to Section 1 above,

the Grantee shall remove the facilities and appurtenant improvements, upon notice to do so, to such other location (s) on the premises as may be reasonably designated by the Grantor. In the event the facilities shall not be removed or relocated within ninety (90) days after the Grantor's notice, the Grantor may cause the same to be done at the expense of the Grantee, provided in lieu of taking such action, the Grantee may wholly remove its facilities from the lands of the Grantor. In this event, the Utility Easement rights set out within this document shall cease but the restoration obligation set out in Condition 24 shall remain.

W. RESTORATION. Upon expiration or termination of the Construction and/or Utility Easement pursuant to Section 1 above, the Grantee shall, without expense to the Grantor and within such time as the Grantor may reasonably indicate to abandon at the Premises to the Grantor. In the event the Grantee shall fail, neglect, or refuse to abandon or remove the facilities and restore the Premises, the Grantor shall have the option either to take over the facilities as the property of the Grantor, without compensation therefore, and in no event shall the Grantee have any claim for damages against the Grantor or its officers or agents on account of the taking over of the facilities or on account of its abandonment or removal.

X. GRANTEE PERFORMANCE. The failure of the Grantor to insist in any one or more instances upon strict performance of any of the terms, covenants, or conditions of this Utility Easement shall not be construed as a waiver or relinquishment of the Grantor's right to the future performance of any such terms, covenants, or conditions and the Grantee's obligations with respect to any such future performance shall continue in full force and effect.

Y. GRANTOR'S LIMITATIONS TO GRANT. It is understood that this instrument is effective only insofar as the rights of the Grantor in the Premises are concerned and that the Grantee shall obtain such permission as may be necessary on account of any other existing rights.

Z. AMENDMENT. This Utility Easement may not be amended or superseded except by an agreement in writing executed by the Grantor and Grantee.

IN WITNESS WHEREOF, all parties accept the terms and conditions of this Construction and Utility Easement and cause this Agreement to be signed on their behalf by their duly authorized representatives.

GRANTOR: Incorporated County of Los Alamos

By: _____	_____
Harry Burgess, County Manager	Date: _____
_____	_____
_____	_____

GRANTEE: Department of Energy/NNSA

By: Stephanie Loyd _____

Title: Certified Realty Specialist
NNSA Realty Officer

Date: 7/9/19 _____

EXHIBITS:

EXHIBIT A. Proposed Easement Map - The official survey will be provided after the project is complete

EXHIBIT B. Approved Work Plan - The project plan will be provided.

EXHIBIT A. Proposed Easement Map

EXHIBIT B. Work Plan

▪ SCOPE OF WORK — CWR 1266-00

[INSTALLATION OF OSP AND ISP FIBER FOR LFPRP]

▪ T-0002 SHEET 2

GENERAL

JOB NOTES

JOB SPECIFIC NOTES

1. COORDINATE ACCESS TO LA COUNTY PULL BOXES WITH LEAH FRAZIER (662-8090).
2. COORDINATE ACCESS TO CENTURY LINK PULL BOX WITH DOUG DALE (473-2194) OR JIM WOFFORD (473-1989)
3. COORDINATE ACCESS TO AFPS AND EXACT FIBER PANEL MOUNTING LOCATIONS WITH SECC-PSS (7-5862).
4. ~~COORDINATE BUILDING ACCESS WITH ROBERT PARKS (663-2020)~~ ALL PATHWAYS SHOWN ARE APPROXIMATE, FIELD DESIGN PATHWAYS AS NECESSARY.

▪ T-1001 SHEET 3

SITE PLAN

[SITE PLAN]

GENERAL NOTES

1. GENERAL NOTE 1

KEYED NOTES

1. INSTALL 24"X36"X30" PULL BOX AT A MINIMUM OF 3' FROM EXISTING CENTURY LINK PULL BOX. INTERCEPT EXISTING 4" CONDUIT FROM CENTURY LINK PULL BOX TO 00-1249.
2. INSTALL TWO 4" CONDUITS WITH ONE 3-CELL MAXCELL FROM NEW PULL BOX TO COUNTY PULL BOX.
3. INSTALL SPLICE CASE IN LA COUNTY PULLBOX. INSTALL 24SM FIBER CABLE FROM SPLICE CASE TO 00-1249. SPLICE VIOLET TUBE (LG325,1-12) OF COUNTY FIBER TO 1-12 OF 24SM FIBER TO 00-1249. CLOSE SPLICE CASE AND TEST TO ENSURE SEAL.

▪ T-1101 SHEET #

FLOOR PLAN

[TA-00-1249 2ND FLOOR]

GENERAL NOTES

1. GENERAL NOTE 1

KEYED NOTES

1. INSTALL WCH-02P FIBER HOUSING ON PLYWOOD BACKBOARD AT 5' TO TOP AFF. TERMINATE LG325,1-12 WITH LC CONNECTORS PLACED IN ONE 12LC CONNECTOR PANEL PLACED IN POSITION A.

Items 2 and 3 (LEFT) of KEYED NOTES are amended to read:

2. INSTALL ONE 4' CONDUIT WITH ONE 3-CELL MAXCELL FROM NEW PULL BOX TO COUNTY PULL BOX.

3. OPEN CURRENT SPLICE CASE AND

INTERCEPT THE 12 FIBER VIOLET TUBE MAXIMIZING AVAILABLE SPACE.

- 2. INSTALL 12SM FIBER FROM FIBER HOUSING IN ROOM 191 TO AFP IN ROOM 227. TERMINATE WITH LC CONNECTORS AND PLACE IN 12LC CONNECTOR PANEL PLACED IN POSITION B.
- 3. USING EXISTING CONDUIT INSTALL 12SM FIBER FROM AFP IN ROOM 187 TO AFP IN ROOM 227. TERMINATE WITH LC CONNECTORS AND PLACE IN 12LC CONNECTOR PANELS PLACED IN SPH-01P PANELS

▪ T-1102 SHEET # FLOOR PLAN
[TA-00-1249 3RD FLOOR]

GENERAL NOTES

- 1. GENERAL NOTE 1

KEYED NOTES

- 1. INSTALL 1" EMT FROM ROOM 2019 TO AFP.
- 2. INSTALL 12SM FIBER FROM ROOM 191 TO AFP IN ROOM 227. TERMINATE WITH LC CONNECTORS AND PLACE IN 12LC CONNECTOR PANEL PLACED IN SPH-01P HOUSING MOUNTED INSIDE AFP. COORDINATE EXACT MOUNTING LOCATION WITH SECC-PSS PERSONNEL.

▪ T-5001 SHEET # DETAIL
[ENTER DETAIL TITLE]

GENERAL NOTES

- 1. GENERAL NOTE 1

KEYED NOTES

- 1. KEYED NOTE 1

▪ T-6001 SHEET # OSPR [OSPR#]
[ENTER OSPR TITLE]

GENERAL NOTES

- 1. GENERAL NOTE 1

KEYED NOTES

- 2. INSTALL SPLICE CASE IN LA COUNTY PULLBOX. INSTALL 24SM FIBER CABLE FROM SPLICE CASE TO 00-1249. SPLICE VIOLET TUBE (LG325,1-12) OF COUNTY FIBER TO 1-12 OF 24SM FIBER TO 00-1249. CLOSE SPLICE CASE AND TEST TO ENSURE SEAL.

MATERIAL LIST

The bill of material is intended only as an aid in estimating and material take-off, and does not necessarily include all materials required. Unless otherwise noted, catalog numbers are given as reference only. All material shall be furnished by the sub-contractor unless otherwise noted. Project bidders should make a site visit to determine all necessary materials.

DO NOT BID ON MATERIALS HIGHLIGHTED IN ORANGE (GFE MATERIALS).

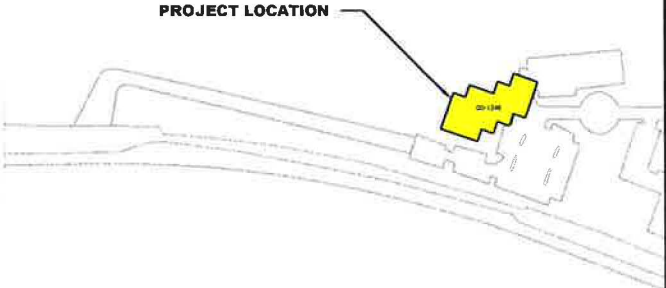
CWR I266

Material Description	Manufacturer	Part #	Qty	UOM
1 EMT	CONDUIT EMT	1-IN	100	Feet
1 EMT CONN S/C	CONDUIT & CABLE FITTINGS	1-IN	4	Each
1 EMT COUPL S/C	CONDUIT & CABLE FITTINGS	1-IN	10	Each
1 EMT 1 HOLE STP/STL	CONDUIT & CABLE FITTINGS	1-IN	20	Each
1 BUSH PLASTIC	THOMAS & BETTS	224	4	Each
SM LC FUSELITE blue	CORNING	SOC-LCU-900-SM	48	Each
SM LC FUSELITE blue FANOUT	Corning	SOC-LCU-FAN-SM	24	Each
24-Fiber SM MIC Plenum cable	Corning	024E88-33131-29	300	Feet
WCH-02P Up To 24 Fibers	Corning		1	Each
Single-Panel Housing SPH-	Corning	SPH-01P	3	Each
LC SM Duplex Corning 12F	Corning	CCH-CP12-A9	4	Each
LC SM Duplex Corning 24F	Corning	CCH-CP 24-A9	1	Each
24-Fiber SM Freedom	Corning		1500	Feet
4" PVC in trench SCH- 40			600	Feet
Detectable Mule Tape	Mule Tape		2000	Feet
Comm Hand Hole 30"x48'x36	HUBBELL INC	PG3048BA36	1	Each
AFL Fusion Splice Closure LG-350-U-O	AFL	FC000009-PS	1	Each
AFL Fusion Splice Tray LL-2400	AFL	91710-06	12	Each
3-Cell MaxCell	Maxcell	MXC4003XX250	300	Feet

INSTALLATION OF INSIDE AND OUTSIDE PLANT FACILITIES

BLDG 1249

TA-00



DESIGN DATA

- 1. LANL ENGINEERING STANDARDS MANUAL CHAPTER 19 - SECTION D60 COMMUNICATIONS (7/25/16)
- 2. LANL MASTER SPECIFICATIONS SECTION 27 1000 STRUCTURED CABLING SYSTEMS (7/25/16)
- 3. BICSI ISP TDM ENGINEERING STANDARDS (2014)
- 4. ALL WORK WILL CONFORM TO NFPA-70, 2017
- 5. LANL ENGINEERING STANDARDS MANUAL CHAPTER 19 - SECTION G50 SITE COMMUNICATIONS (02/23/15)

LIST OF DRAWINGS

REV	SHEET NUMBER	DISCIPLINE SHEET NUMBER	DRAWING TITLE
0	1	T-0001	TITLE SHEET
0	2	T-0002	JOB NOTES
0	3	T-1001	SITE PLAN
0	4	T-1101	PARTIAL SECOND FLOOR PLAN
0	5	T-1102	PARTIAL THIRD FLOOR PLAN
0	6	T-6001	OSPR F410
0	7	T-9001	3D - REPRESENTATION PHOTO

NIE-TS NETWORK AND INFRASTRUCTURE ENGINEERING										CUSTOMER LANL 6/5/19	
CWR 1266-00 INSTALLATION OF INSIDE AND OUTSIDE PLANT FACILITIES TITLE SHEET										DATE NOV 2018	
TA-00 BLDG 1249										SHEET T-0001	
SUBMITTED PROJECT ENGINEER										APPROVED FOR RELEASE PROJECT TEAM LEADER	
Los Alamos NATIONAL LABORATORY PO Box 1663 Los Alamos, New Mexico 87545										1 OF 7	
REVIEWER: P. LOWE DATE: 6-5-19										REV 0	
PROJECT ID -DWG-TA-BLDG--T-0001											

ATTENTION:

CONTACT INFORMATION		
CONTACT	PHONE	MOBILE
RUSTY ERVIN SUBCONTRACTOR TECHNICAL REPRESENTATIVE	667-6159	231-3237
PETE LOWE QUALITY ASSURANCE	665-9147	695-6275
DANIEL MONTANO DESIGN CONSTRUCTION MANAGER	665-7229	500-7550
PAM ROYBAL CONSTRUCTION MANAGEMENT	665-6427	

DESIGNER CONTACT INFORMATION		
CONTACT	PHONE	MOBILE
JASON FLESHER	606-2177	412-7892

EXCAVATION PERMIT REQUIRED FOR WORK ON THIS JOB.

CRAFTS MUST CHECK IN WITH FACILITIES MAINTENANCE OFFICE BEFORE BEGINNING WORK.

ANY NOISE PRODUCING OPERATIONS, (I.E. HAMMER DRILLING, HAMMERING, DRILLING, ETC.) ARE TO BE SCHEDULED THROUGH MC.

ATTENTION ASSIGNMENTS:
THIS JOB REQUIRES CABLE CUTS AND COUNT CHANGES.

FIRESTOP NOTICE:

SUBCONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF FIRE-RATED ARCHITECTURAL STRUCTURES, (I.E. WALLS, FLOORS, CEILINGS) WHEN THESE BARRIERS ARE PENETRATED. USE THE APPROPRIATE FIRE STOPPING SYSTEM PER ANSII/NFPA-70. THESE SYSTEMS MUST COMPLY WITH ASTM E-814 (UL 1479). THE INSTALLER SHALL LABEL EACH FIRE STOPPED PENETRATION WITH AN APPROPRIATE LABEL CONTAINING THE FOLLOWING:

- SUBCONTRACTOR NAME, ADDRESS, PHONE #
- FIRESTOP UL SYSTEM DESIGNATION
- FIRESTOP SYSTEM MANUFACTURE'S NAME
- DATE OF INSTALLATION
- INSTALLER'S NAME

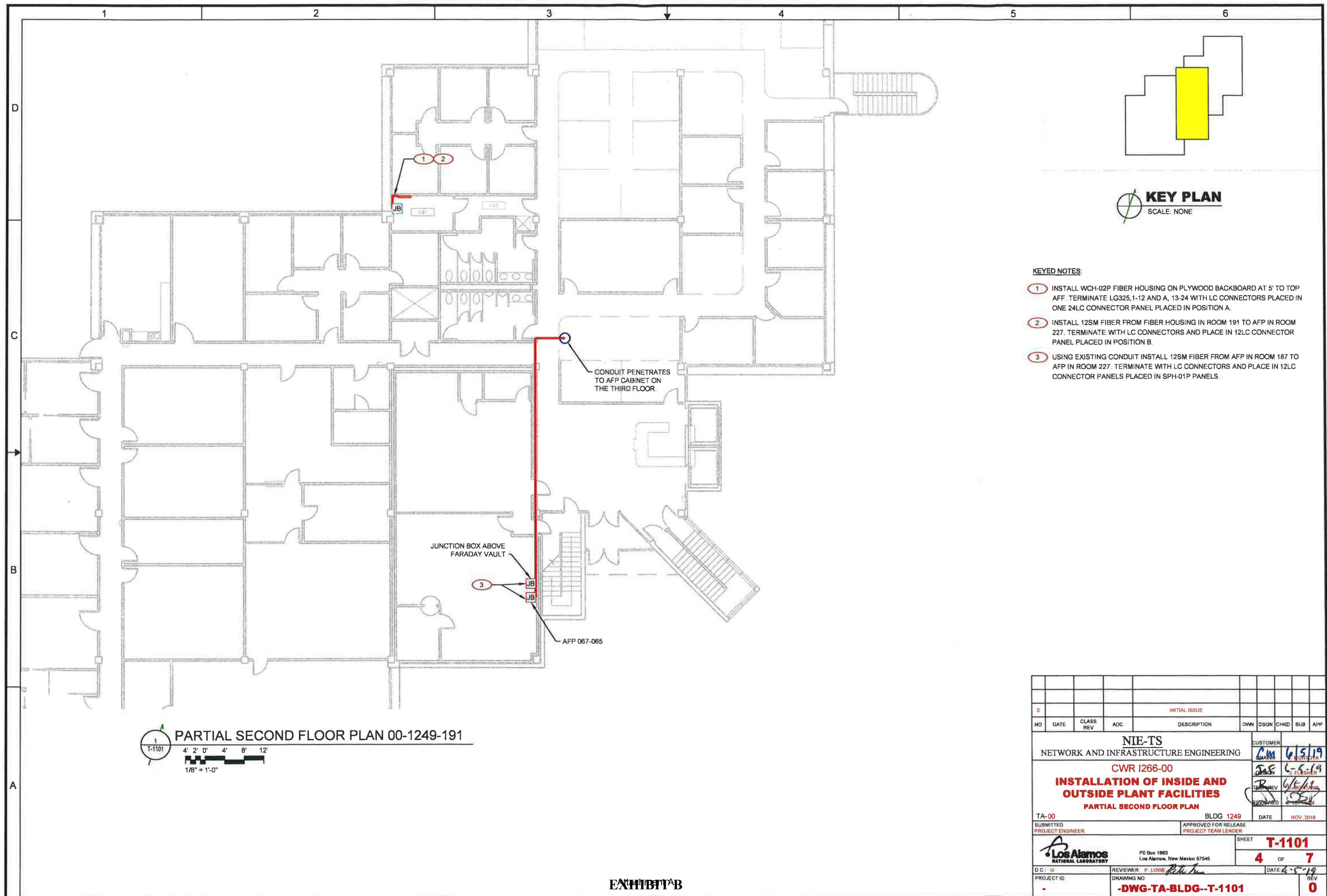
GENERAL NOTES:

- SIGNED DRAWING SETS SHALL BE COMPLETE. DO NOT DISTRIBUTE PARTIAL OR INDIVIDUAL DRAWING SHEETS.
- ALL KEYED NOTES SHOWN ON DRAWINGS REPRESENT TYPICAL INSTALLATIONS AND APPLICATIONS UNLESS OTHERWISE INDICATED.
- ALL WORK SHALL BE PERFORMED ACCORDING TO THE DESIGN DRAWINGS.
- SUB-CONTRACTOR SHALL TRANSPORT MATERIALS TO AND FROM THE JOB SITE. ANY UNUSED GFE WILL BE RETURNED TO THE NIE-TS WAREHOUSE.
- CONTACT THE SUBCONTRACTOR TECHNICAL REPRESENTATIVE (STR) FOR ANY ADDITIONS, DELETIONS, AND OR CHANGES TO THIS PROJECT. ALL PROPOSED MODIFICATIONS SHALL BE REVIEWED AND APPROVED BY THE DESIGNER. CONSTRUCTION MANAGEMENT CENTER (CMC) DOCUMENTATION IS REQUIRED PRIOR TO PROCEEDING WITH ANY CHANGES. AS-BUILT RECORD DRAWINGS (RED-LINED DRAWINGS) SHALL BE PROVIDED TO THE CMC AT THE COMPLETION OF THIS COMMUNICATIONS WORK REQUEST (CWR). THIS SHALL INCLUDE SEQUENTIALS, ROUTE CHANGES, MATERIAL CHANGES, AND ANY DEVIATION FROM THE ORIGINAL DRAWING SET.
- SCHEDULE WORK WITH FACILITY OPERATIONS DIRECTOR (FOD).
- NETWORK INFRASTRUCTURE AND ENGINEERING IS NOT RESPONSIBLE FOR DISCREPANCIES RELATED TO BUILDING STRUCTURES OR SITE PLANS. INQUIRIES CONCERNING BUILDING OR SITE PLANS SHALL BE DIRECTED TO EO-EPP AND ES-UI (UMAP) DIVISIONS, RESPECTIVELY.
- ALL NEW STRUCTURE SHALL BE INSPECTED AND ACCEPTED BY NIE-TS QUALITY ASSURANCE BEFORE CABLING CAN BE INSTALLED.
- ALL CABLES SHALL BE PLACED PER MANUFACTURER SPECIFICATIONS.
- A 1250 LB WOVEN PULL TAPE WITH FOOTAGE MARKERS IS REQUIRED ALONG WITH EACH CABLE OR INNERDUCT FOR FUTURE USE.
- ALL LABELS SHALL BE GENERATED AND PRINTED BY A MECHANICAL DEVICE. LABELING IS REQUIRED FOR ALL FACEPLATES, PATCHPANELS, PATCH/HYDRA CABLES, GROUNDING BUSBARS, FIRESTOP LOCATIONS, COPPER AND FIBER CABLES.
- ALL CABLES SHALL BE INSTALLED IN A NEAT AND ORDERLY FASHION. ANY CUTS, ABRASIONS, BURNS, STRETCHED SEGMENTS, OR OTHER DAMAGE THAT MAY BE DETRIMENTAL TO PERFORMANCE OF ANY CABLE SHALL BE CAUSE FOR COMPLETE REPLACEMENT OF THAT ENTIRE SEGMENT OF CABLE.
- ALL FIBER WILL BE TERMINATED USING LC DUPLEX TYPE CONNECTORS UNLESS STATED OTHERWISE.
- IN THE EVENT OF A PLANNED NETWORK OUTAGE, THE MAINTENANCE COORDINATOR AND THE NETWORK OPERATIONS CENTER SHALL BE NOTIFIED AT LEAST TWO WEEKS BEFOREHAND. NOTIFY ANY INDIVIDUAL GROUPS AS NECESSARY FOR SERVICE INTERRUPTIONS AND SERVICE RESTORATION CONFORMATIONS.
- SUB-CONTRACTOR SHALL PROVIDE NIE-TS ADMIN (667-7057) WITH THE TA, BUILDING, AND ROOM LOCATION OF THE CABINET INSTALLATION WHEN INSTALLING GFE CABINETS OR SHROUDS WITH TC1-1 KEY CORES PRE-INSTALLED.
- ALL NEW AND/OR REARRANGED FIBER CABLES WILL REQUIRE BI-DIRECTIONAL TESTING WHEN BOTH ENDS ARE TERMINATED. UNI-DIRECTIONAL TESTING IS REQUIRED WHEN ONLY ONE END OF THE FIBER CABLE IS TERMINATED. TESTING MUST MEET THE FOLLOWING CRITERIA:
THE LOSS ACROSS A MULTI-MODE FIBER CONNECTOR SHOULD NOT EXCEED 0.60 DB PER MATED PAIR TOTAL VALUE PLUS 0.10 DB LOSS PER 100 FEET OF FIBER CABLE LENGTH.
THE LOSS ACROSS A SINGLE-MODE FIBER CONNECTOR SHOULD NOT EXCEED 0.50 DB PER MATED PAIR TOTAL VALUE PLUS 0.03 DB LOSS PER 100 FEET OF FIBER CABLE LENGTH.
RED LIGHT ALL INDIVIDUAL FIBERS WITHIN EACH CABLE INSTALLED TO GUARANTEE POLARITY AND FIBER POSITIONING.
TEST ALL INSTALLED FIBER CABLES USING A FLUKE OPTICAL TIME DOMAIN REFLECTOMETER (OTDR). PROVIDE ALL TEST RESULTS TO THE CMC UPON JOB COMPLETION.
IF A TEST RESULTS IN A FAILURE AT THE SPLICE OR OTHERWISE, CONTACT NIE-TS QUALITY ASSURANCE TO DETERMINE IF A SECOND BI-DIRECTIONAL FLUKE POWER METER TEST WILL BE REQUIRED.
- LABEL ALL FIBER HOUSINGS ON THE OUTSIDE PANEL WITH LG NUMBER, CABLE COUNT, FIBER TYPE, AND THE "TO" LOCATION. ADD CORE SIZE ON ANY 50UM MULTI-MODE CABLES FOR EASIER IDENTIFICATION.

PROJECT SPECIFIC NOTES:

- COORDINATE ACCESS TO LA COUNTY PULL BOXES WITH LEAH FRAZIER (662-8090).
- COORDINATE ACCESS TO CENTURY LINK PULL BOX WITH DOUG DALE (473-2194) OR JIM WOFFORD (473-1989)
- COORDINATE ACCESS TO AFP WITH JOSEPHINE GONZALES (7-5862).
- ALL PATHWAYS SHOWN ARE APPROXIMATE, FIELD DESIGN PATHWAYS AS NECESSARY.
coordinate building access with Robert Parks (663-2020) OR parksrj@nv.doe.gov

NIE-TS NETWORK AND INFRASTRUCTURE ENGINEERING									
CWR 1266-00 INSTALLATION OF INSIDE AND OUTSIDE PLANT FACILITIES JOB NOTES									
TA-00 BLDG 1249									
SUBMITTED PROJECT ENGINEER					APPROVED FOR RELEASE PROJECT TEAM LEADER				
Los Alamos NATIONAL LABORATORY					PO Box 1663 Los Alamos, New Mexico 87545				
D.C. U					REVIEWER P. LOWE				
PROJECT ID					DRAWING NO				
					-DWG-TA-BLDG--T-0002				
					SHEET 2 OF 7				
					DATE 6-5-19				
					REV 0				

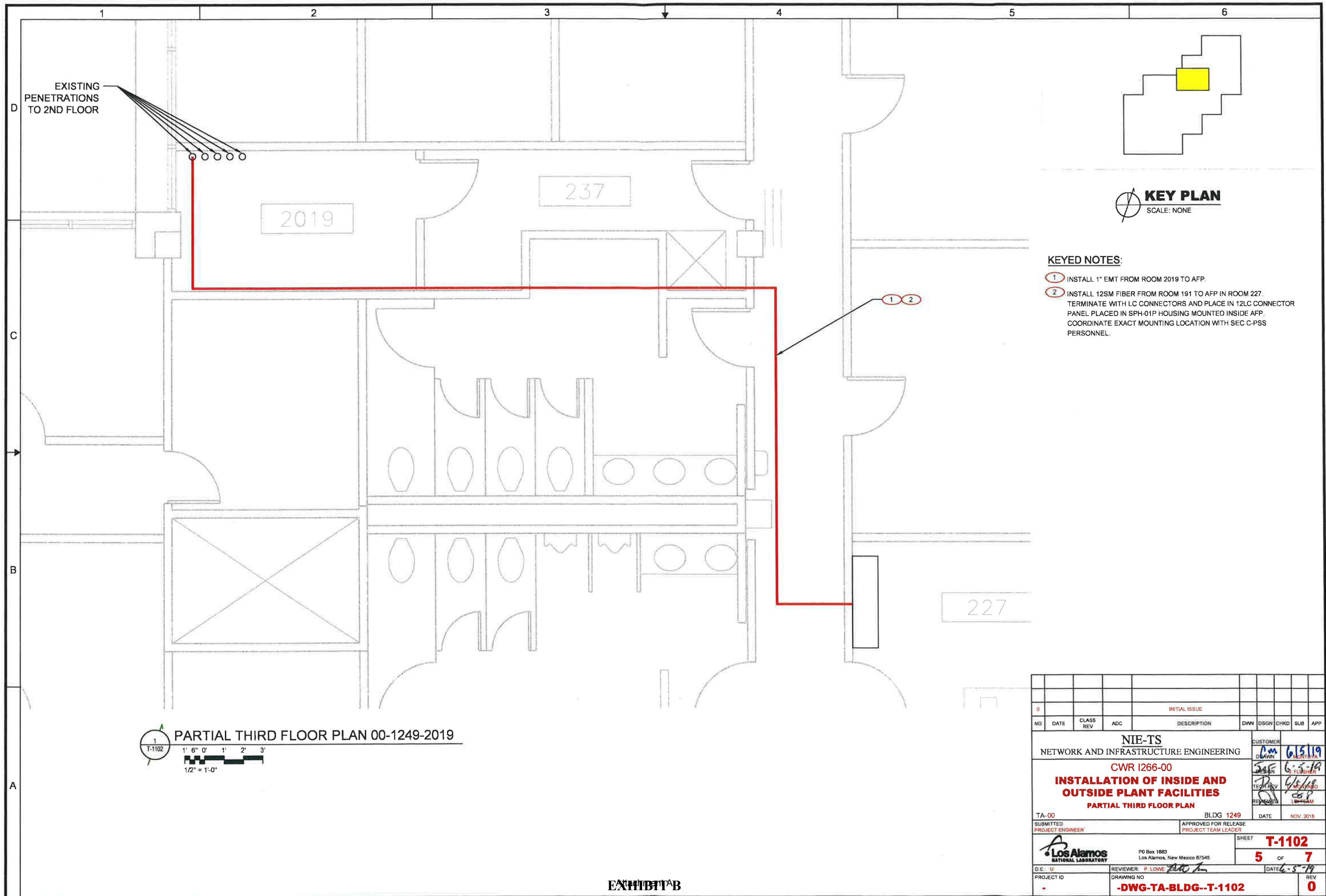


KEY PLAN
SCALE: NONE

- KEYED NOTES:**
- 1. INSTALL WCH-02P FIBER HOUSING ON PLYWOOD BACKBOARD AT 5' TO TOP AFF. TERMINATE LG325, 1-12 AND A, 13-24 WITH LC CONNECTORS PLACED IN ONE 24LC CONNECTOR PANEL PLACED IN POSITION A.
 - 2. INSTALL 12SM FIBER FROM FIBER HOUSING IN ROOM 191 TO AFP IN ROOM 227. TERMINATE WITH LC CONNECTORS AND PLACE IN 12LC CONNECTOR PANEL PLACED IN POSITION B.
 - 3. USING EXISTING CONDUIT INSTALL 12SM FIBER FROM AFP IN ROOM 187 TO AFP IN ROOM 227. TERMINATE WITH LC CONNECTORS AND PLACE IN 12LC CONNECTOR PANELS PLACED IN SPH-01P PANELS.

PARTIAL SECOND FLOOR PLAN 00-1249-191
T-1101
4' 2' 0" 4' 8' 12'
1/8" = 1'-0"

0									
INITIAL ISSUE									
NO	DATE	CLASS	ADC	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP
NIE-TS					CUSTOMER				
NETWORK AND INFRASTRUCTURE ENGINEERING					Cm 6/5/19				
CWR 1266-00					J. FLESHER 6-5-19				
INSTALLATION OF INSIDE AND OUTSIDE PLANT FACILITIES					J. FLESHER 6/5/19				
PARTIAL SECOND FLOOR PLAN					J. FLESHER 6/5/19				
TA-00					BLDG 1249				
SUBMITTED PROJECT ENGINEER					APPROVED FOR RELEASE PROJECT TEAM LEADER				
Los Alamos NATIONAL LABORATORY					SHEET T-1101				
P.O. Box 1663 Los Alamos, New Mexico 87545					4 OF 7				
D.C.: U					DATE: 6-5-19				
PROJECT ID					REV 0				
-DWG-TA-BLDG--T-1101									

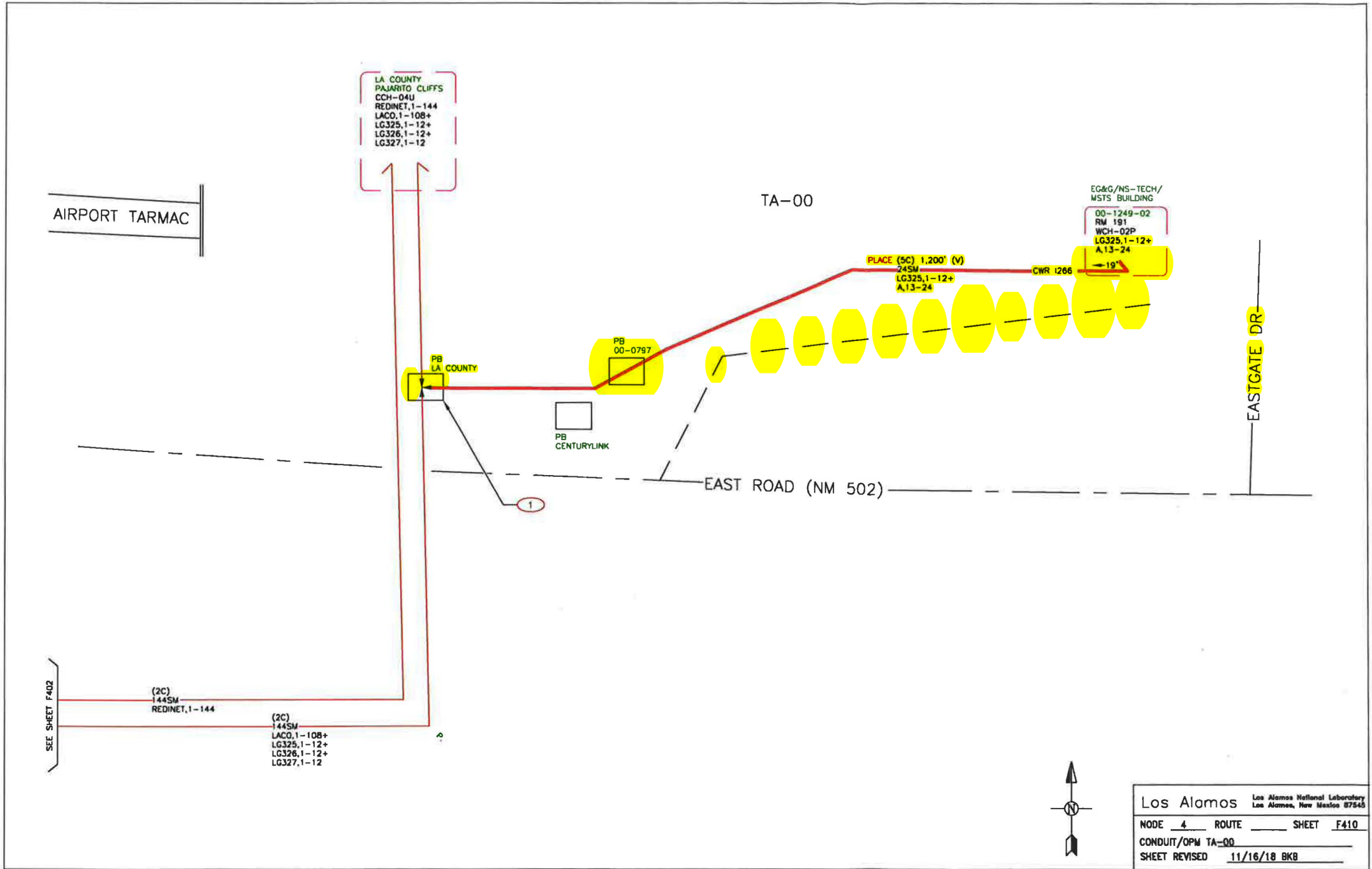


KEYED NOTES:

1 INSTALL SPLICE CASE IN LA COUNTY PULLBOX. INSTALL 24SM FIBER CABLE FROM SPLICE CASE TO 00-1249. SPLICE VIOLET TUBE (LG325,1-12) OF COUNTY FIBER TO 1-12 OF 24SM FIBER TO 00-1249. CLOSE SPLICE CASE AND TEST TO ENSURE SEAL.

The above note is amended to read:

(1) OPEN CURRENT SPLICE CASE AND INTERCEPT THE 12 FIBER VIOLET TUBE MAXIMIZING AVAILABLE SPACE.



Los Alamos National Laboratory
Los Alamos, New Mexico 87545
NODE 4 ROUTE SHEET F410
CONDUIT/OPM TA-00
SHEET REVISED 11/16/18 BKB

OSPR F410
SCALE: NONE

NIE-TS NETWORK AND INFRASTRUCTURE ENGINEERING									
CWR 1266-00 INSTALLATION OF INSIDE AND OUTSIDE PLANT FACILITIES OSPR F410									
TA-00 BLDG 1249									
SUBMITTED PROJECT ENGINEER					APPROVED FOR RELEASE PROJECT TEAM LEADER				
Los Alamos National Laboratory PO Box 1663 Los Alamos, New Mexico 87545					SHEET T-6001 6 OF 7				
D.C. U PROJECT ID					REVIEWER: P. LOWE DATE: 6-5-18 DWG-TA-BLDG--T-6001				
					REV 0				