

DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

SECTION A. Project Title: T-25 Fiber Optic Cable Distribution Project

SECTION B. Project Description and Purpose:

The T-25 Storage Area is located north of the Materials and Fuels Complex (MFC) at the Idaho National Laboratory (INL) Site. The wireless alarm system for the storage area needs to be modified. The proposed action will install 144-single mode fiber optic cable in existing underground raceways from the MFC Dial Room (building MFC-1728) to power poles located in the MFC-758 Substation yard (see Figure 1). The fiber optic cable will then be routed above ground from the substation yard, attached to the 13.8kVA East Loop H-structures, and coiled in a fiber enclosure adjacent to the Storage Area. Several power poles and an associated non-engineered, two-track maintenance road will be installed from the powerline to the storage area across undisturbed ground (see Figure 2) and will also support a 48-single mode fiber optic cable. Fiber pairs will be connected between the 48-strand fiber cable and the 144-strand fiber cable. The total length of fiber optic cable to be installed is listed below:

- 144 Single Mode Fiber Optic Cable (aerial) = 11,691.39'
- 144 Single Mode Fiber Optic Cable (underground) = 550.42'
- 48 Single Mode Fiber Optic Cable (aerial & underground) = 2,258'

All work is expected to be complete by the end of FY 2017.

Figure 1. Work area inside MFC

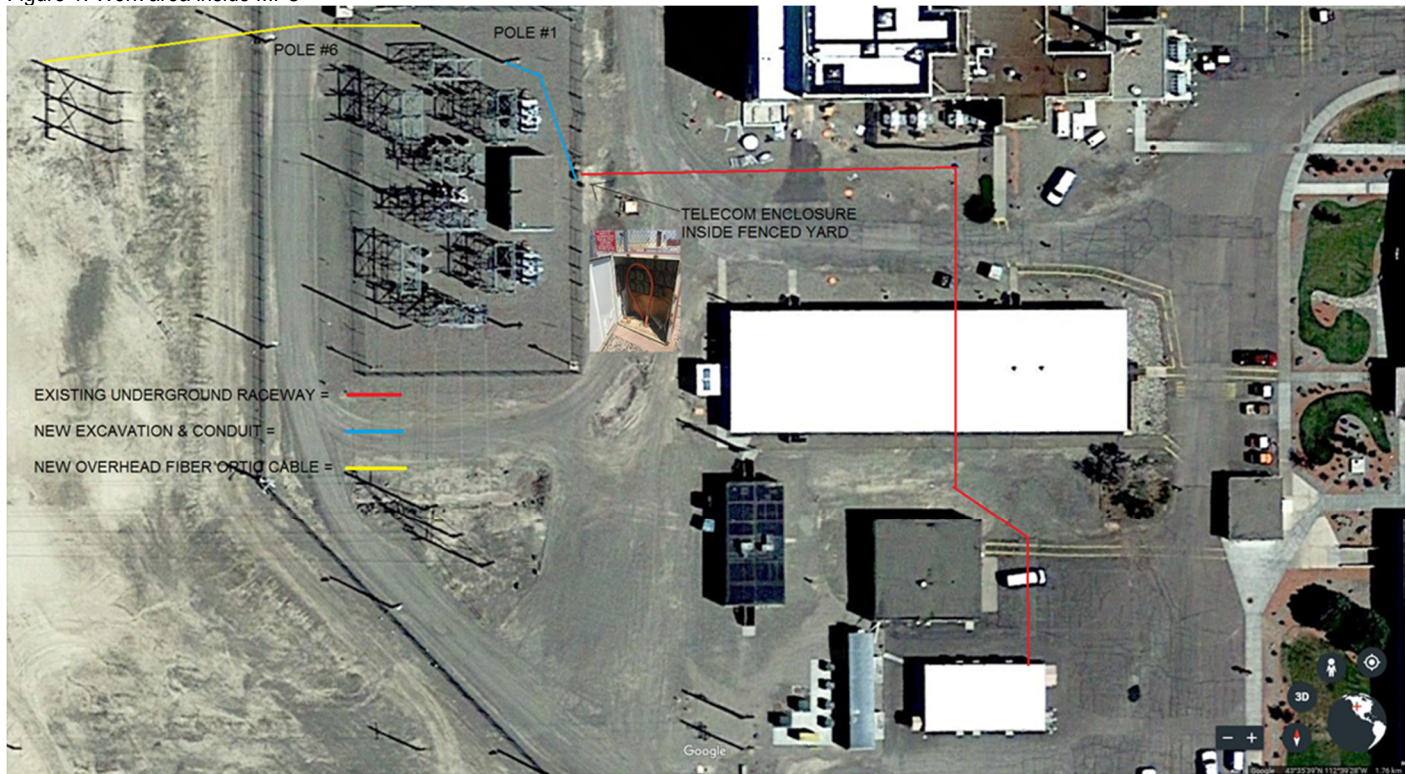


Figure 2. Proposed routing of fiber optic cable from 138KVA East Loop.



SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Emissions and fumes from common construction adhesives are anticipated.

Fugitive dust may be generated during project activities.

If portable emission sources are used, equipment must meet opacity requirements.

Disturbing Cultural or Biological Resources

Project activities have the potential to disturb biological and cultural resources.

Generating and Managing Waste

Industrial waste, in the form of common construction debris, is expected. All Solid Waste would be managed by Waste Generator Services (WGS).

Releasing Contaminants

Typical construction chemicals such as lubricants, adhesives, etc., will be used during the project.

Using, Reusing, and Conserving Natural Resources

All applicable waste will be diverted from disposal in the landfill when possible. Project personnel will use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. The project will practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, and are non-toxic or less-toxic alternatives. New equipment will meet either the Energy Star or SNAP requirements as appropriate (see <http://www.sftool.gov/GreenProcurement>).

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification: Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

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For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: 10 CFR 1021, Appendix B, B4.7, "Fiber optic cable" and B4.12, "Construction of powerlines."

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, 4.7 "Adding fiber optic cable to transmission facilities or burying fiber optic cable in existing powerline or pipeline rights-of-way. Covered actions may include associated vaults and pulling and tensioning sites outside of rights-of-way in nearby previously disturbed or developed areas;" and B4.12 "Construction of electric powerlines approximately 10 miles in length or less, or approximately 20 miles in length or less within previously disturbed or developed powerline or pipeline rights-of-way."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) Yes No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 9/06/2017