

**NEPA REVIEW SCREENING FORM (NRSF) 3**  
**Categorically Excluded Actions**

**Document ID #:**  
**DOE/CX-00225**

**I. Project Title:**

Modification of 13.8kV Electrical Distribution Powerlines from A8 Substation to 100 Area Fire Station and 100K Area

**II. Describe the proposed action, including location, time period over which proposed action will occur, project dimension (e.g., acres displaced/disturbed, excavation length/depth), and area/location/number of buildings. Attach narratives, maps and drawings of proposed action. Describe existing environmental conditions and potential for environmental impacts from the proposed action. If the proposed action is not a project, describe the action or plan.**

BACKGROUND

The U.S. Department of Energy (DOE), Richland Operations Office (RL), Infrastructure and Services Division (ISD) proposes to modify the 13.8kV electrical distribution powerlines from the A8 Substation (251W Building) to the 100 Area Fire Station and the 100K Area. Powerline modifications are needed to satisfy immediate and long-term requirements to ensure safe, effective, and timely execution of the Hanford Site mission. Powerline modifications would provide redundancy, improve reliability, and increase operational flexibility of the electrical distribution system in the 100 Areas. Failure to implement powerline modifications would increase the risk of electrical power outages and potentially impact ongoing and planned Hanford Site operations, cleanup efforts, and other activities, some of which are performed in accordance with the Hanford Federal Facility Agreement and Consent Order (also known as the Tri-Party Agreement) and related requirements. Other potential impacts include operation of the B Reactor National Historic Landmark Museum in 100B Area. B Reactor is part of the Manhattan Project National Historical Park that is jointly administered by DOE and the U.S. Department of the Interior National Park Service.

Project L-898, 100 Area Mission Critical Electrical Distribution System Modifications, was originally designed to modify powerlines servicing the 100B Area, 100K Area, 100N Area, 100D/DR Area, and the 100 Area Fire Station (see Figure 1, Zones 1 and 3). NEPA coverage for Project L-898 is provided by DOE/CX-00194, which was approved by the DOE Hanford NEPA Compliance Officer on July 10, 2019. DOE-RL revised Project L-898 work scope to include modification of powerlines from the A8 Substation to the 100 Area Fire Station (see Figure 1, Zone 2).

Project L-898 has been subsequently divided into three segments that relate to, but do not directly align with, the three zones as follows: Segment 1 is Zone 2 and a portion of Zone 1 from the 100 Area Fire Station to the 100K Area, Segment 2 is the remainder of Zone 1, and Segment 3 is Zone 3 (see Figure 2). Each segment would have rational endpoints for review of environmental impacts, would have independent utility, would not foreclose consideration of alternatives, and would not irretrievably commit funds for related projects. Therefore, despite being divided into three segments, Project L-898 would not constitute "segmentation" under the DOE NEPA Implementing Procedures [Title 10, Code of Federal Regulations (CFR), Part 1021.410(b)(3)]. Segmentation can occur when a proposal is broken into small parts in order to avoid the appearance of significance of the total action. The scope of a proposal must consider connected and cumulative actions; that is, the proposal is not connected to actions with potentially significant impacts and is not related to actions with individually insignificant but cumulatively significant impacts.

Based on the cultural and ecological resource reviews originally completed for Project L-898 and summarized in DOE/CX-00194, there would be no adverse effects resulting from project activities in Zone 1 and Zone 3 provided that identified work controls are followed. However, recent revision of Project L-898 scope to include Zone 2 powerline modifications resulted in an adverse effect to the Gable Mountain/Gable Butte traditional cultural property as discuss in the Cultural Resources Review section.

Proposed actions comprising each of the three segments would result in reduced cultural and ecological resource impacts and beneficial effects by removing and realigning portions of existing powerlines and installing new powerlines along existing roadways, where possible. This would eliminate the need for off-road travel to perform routine maintenance activities. The three segments of Project L-898 are not connected actions and would not have potentially significant cumulative impacts on the human environment.

This NEPA Review Screening Form addresses Segment 1 of Project L-898. Subsequent segments would be addressed in separate NEPA reviews. Proposed actions associated with Segment 1 are designed to integrate with subsequent segments to enable efficient completion of 100 Area mission critical electrical distribution system modifications in a technically sound, economically practical, and

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regulatory compliant manner. These electrical distribution system modifications would also benefit other planned 100 Area projects that have independent utility and include, but may not be limited to, Project L-781 and Project L-826. These reliability projects would replace existing vertical turbine pumps at the 181D and 181B Pump Houses and perform piping modifications at the 182D and 182B Reservoirs, respectively. These pump houses and reservoirs are part of the Export Water System that supplies the Hanford Site with raw and potable water.

**PROPOSED ACTION**

The Proposed Action would modify the powerlines from the A8 Substation to the 100 Area Fire Station and the 100K Area (Segment 1). This would be accomplished by removing and rebuilding portions of existing powerlines, constructing new powerlines, and utilizing switching stations capable of directing power from the A8 Substation to the 100B Area, 100K Area, 100N Area, 100D/DR Area, and the 100 Area Fire Station. Proposed modifications would reroute powerlines along existing paved roadways where possible to facilitate routine maintenance activities and avoid potentially adverse impacts to cultural and ecological resources by reducing off-road vehicle use.

The Proposed Action would include the following five tasks: (1) mobilization and site preparation, (2) new or rebuilt powerline installation from the A8 Substation to the 100 Area Fire Station and the 100K Area, (3) fiber optic cable installation from the A8 Substation to the 100 Area Fire Station and the 100K Area, (4) removing portions of existing powerlines, and (5) finalization and demobilization. Work activities for each task would include, but may not be limited to, the following:

**TASK 1 - MOBILIZATION AND SITE PREPARATION**

Task 1 would perform geophysical ground scans in all areas planned for excavation to identify and avoid potential subsurface obstructions. Outages would be planned and sequenced to minimize disruption of electrical services to affected facilities, structures, infrastructures, and equipment. A Traffic Control Plan would be developed to minimize impacts to private, government, emergency, and other vehicles during construction activities. Laydown and staging areas would be established in previously disturbed and developed areas. All applicable licenses, permits, authorizations, agreements, walk-downs, environmental reviews, and other project related documents would be completed and approved prior to the start of construction activities.

**TASK 2 - NEW OR REBUILT POWERLINE INSTALLATION FROM THE A8 SUBSTATION TO THE 100 AREA FIRE STATION AND THE 100K AREA**

Task 2 would install 13.8kV powerlines from the A8 Substation east to Route 4N, north to the 100 Area Fire Station, west along Route 1 to the intersection with K Avenue, and north to the 100K Area where the new electrical service would tie-in to the existing service. Where available and practical, existing underground raceways would be utilized and any new routing would be determined during the detailed design process, as needed. Switching stations would be utilized to provide the capability for routing power to multiple locations in the 100 Areas. The following identifies the 13.8kV powerline rebuild and new construction scope including utility poles, conductors, transformers, guy wires, anchors, and supporting hardware. Figure 3 illustrates the 13.8kV powerline removal, rebuild, and construction routes. Figure 4 illustrates the switching station configuration between the A8 and A9 Substations and the 100B Area, 100K Area, 100N Area, 100D/DR Area, and the 100 Area Fire Station.

- 13.8kV powerlines would be installed from the A8 Substation north to the intersection of Route 4N and Route 1 via Delridge Avenue, Railroad Road (also known as Deer Street), and Route 4N (new C8L15 powerline). Sections of existing C8L8 powerline that are no longer needed (between Railroad Road and Route 1) would be removed and sections proposed for continued use (from the A8 Substation and along Delridge Avenue and Railroad Road) would be rebuilt and connected to the new C8L15 powerline. The new C8L15 powerline would be constructed along Route 4N to the 100 Area Fire Station and would replace removed sections of the C8L8 powerline. The new C8L15 powerline would facilitate routine maintenance activities by allowing use of an existing paved roadway (Route 4N) and eliminate the need for repeated maintenance of the existing gravel access road along removed sections of the C8L8 powerline.

- At the intersection of Route 4N and Route 1, 13.8kV powerlines would be installed from utility poles G3596 through G3594, and utility poles G3599 and G3600 would be installed. 13.8kV powerlines

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would be installed from utility pole G3601 through G3604 and tie-in to the existing 100 Area Fire Station electrical service.

- 13.8kV powerlines would be installed from utility pole G3605 through G3644 along Route 1 from the intersection with Route 4N and westward to K Avenue where it would connect with the existing C8L14 powerline through a switching station (new C9L1 powerline). This switching station would have the capability to provide electrical power to the 100B Area. From the intersection of Route 1 and K Avenue a portion of the existing C8L14 powerline would be rebuilt (as C9L1/C9L2) and a new section of powerline would be installed to the existing utility tie-in (Circuit #3), allowing the A9 Substation to be bypassed. The C8L15 and C9L1 powerlines would be connected at a switching station located near the intersection of Routes 1 and 4N (south of the 100 Area Fire Station). The switching station would have the capability to provide electrical power to the 100N and 100D/DR Areas.

- At the intersection of Route 1 and K Avenue, utility poles G3674 through G3676 would be installed and tie-in to the existing Hendricks powerline.

- From the intersection of Route 1 and K Avenue to the intersection of K Avenue and 100K Remediation Access Road, a double-circuit would be installed with a north-end tie-in. Utility poles G3679 through K387 would be installed with tie-in to the existing Hendricks powerline north of pole K387. Electrical power is currently provided from the A8 Substation directly to the 100K Area by the C8L14 powerline. A portion of the C8L14 powerline would be rebuilt and connected to a switching station that would allow transfer of the 100 Area electrical power supply from the A9 Substation to the A8 Substation. This would facilitate planned removal of the A9 Substation in the future, bypass the C9X3/C9X4 circuit breakers, and allow connection between the existing utility tie-in (Circuit #3) and the new C8L15 powerline from the A8 Substation to the 100 Area Fire Station.

- From the intersection of K Avenue and the 100K Remediation Access Road to the existing utility tie-in (Circuit #3), utility poles K417 through K428 would be installed and conduit would be routed to a new riser at existing utility pole K331 and tie-in to the existing Circuit #3 at utility pole K331.

**TASK 3 - FIBER OPTIC CABLE INSTALLATION FROM THE A8 SUBSTATION TO THE 100 AREA FIRE STATION AND THE 100K AREA**

Task 3 would include fiber optic cable and hardware installation from the A8 Substation to a termination point near the 100 Area Fire Station, and continue west to a termination point near the intersection of Route 1 and K Avenue, and continue north to a termination point near the south entrance to the 100K Area. The fiber optic cable would be routed aerially along existing and newly installed utility poles with termination points at the 676 Telecommunications Building near the 100 Area Fire Station and in the 100K Area at the 1506K2 Telecommunications Building or other suitable locations. Staging and stockpiling of equipment and materials would be within existing laydown yards or in other previously disturbed, developed, or gravel covered areas including road shoulders. Figure 5 illustrates the fiber optic cable routing from the A8 Substation to the 100 Area Fire Station and the 100K Area. Fiber optic cable installation would require testing of the cable before and after installation. Fiber optic cable installation would include the following:

- From the A8 Substation to the 100 Area Fire Station (new C8L15 powerline), a 96 strand fiber optic cable would be installed along the 13.8kV powerline utility poles and terminate at utility pole G3599 near the 100 Area Fire Station. Termination points would include 250 feet of excess fiber optic cable to allow future expansion and termination.

- From the 100 Area Fire Station to the intersection of Route 1 and K Avenue (new C9L1 powerline), a 48 strand fiber optic cable would be installed along the 13.8kV powerline utility poles and terminate at utility pole G3643 near the intersection of Route 1 and K Avenue. Termination points would include 250 feet of excess fiber optic cable to allow future expansion and termination.

- From the intersection of Route 1 and K Avenue to the 100K Area termination, a 24 strand fiber optic cable would be installed from pole G3643 to pole K387. Termination points would include 250 feet of excess fiber optic cable to allow future expansion and termination.

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**TASK 4 - REMOVING PORTIONS OF EXISTING POWERLINES**

Task 4 includes removal and disposal of utility poles, conductors, transformers, and related hardware at the Hanford Site Environmental Restoration Disposal Facility (ERDF). After removal of demolished materials, disturbed areas would be backfilled, compacted, and graded to prevent subsidence due to soil settlement. The following work activities would be included:

- Remove out-of-service 13.8kV powerlines from the A8 Substation to the intersection of Route 4N and Route 1 (existing C8L8 powerline). The existing C8L8 gravel access road between Railroad Road and Route 1 would be removed from service and restored by revegetation (see Ecological Resources Review section for discussions regarding revegetation).
- Remove remaining K Avenue double-circuit not removed in conjunction with installation of the new 13.8kV powerline. Existing poles G1976, G2081, and G2082 would not be demolished and would be retained for use in completing electrical utility tie-ins.
- Remove remaining 100 Area Fire Station electrical utility system components not removed in conjunction with installation of the new 13.8kV powerline.

**TASK 5 - FINALIZATION AND DEMOBILIZATION**

In support of the final acceptance of construction activities and demobilization of construction equipment the following would be performed:

- Participate in and support resolution of items identified within Punch-list walk-down(s).
- Assist in verification of completeness and documentation by preparing the Construction Completion Document.
- Remove construction materials, equipment, debris, and other construction related temporary facilities.
- Remove temporary barricades, signage, and other construction site access controls.
- Return areas disturbed by construction activities to pre-construction conditions through revegetation in accordance with the Hanford Site Biological Resources Management Plan (DOE/RL-96-32, Rev. 2), Hanford Site Revegetation Manual (DOE/RL-2011-116, Rev. 1), or other appropriate guidance and requirements.

Powerline rights-of-way, utility corridors, and access roads would be maintained using herbicide applications, mowing, blading, and graveling, as needed. Removal, rebuild, and construction of powerlines would include, but may not be limited to, utility poles, conductors, transformers, circuit breakers, capacitors, cross-arms, insulators, guy wires, anchors, and associated hardware. Routine maintenance and repair of access roads, laydown areas, and switch yards would be performed as needed. Rebuilt and new powerlines would undergo routine maintenance and inspection activities over their lifetime. Such activities would include, but may not be limited to, testing and treating; wildfire protection; and repair or replacement of electrical distribution system components, equipment, and hardware.

A utility corridor approximately 200 feet wide would be established along rebuilt sections of powerline and would be centered on existing gravel access roads. A utility corridor approximately 150 feet wide would be established for the construction of new powerlines and would be positioned along the nearest edge of adjacent paved access roads.

Installation of each new utility pole would disturb an area approximately 30 feet in diameter to accommodate excavation and stockpiling activities. A hole approximately 10 feet deep and 2 feet in diameter would be mechanically augured for installation of each new utility pole. The annular space around each utility pole would be backfilled with sand and gravel. Utility pole guy wires and anchors would be installed at corners or where there is a change in angle. Guy wires and anchors would require an excavation approximately 6 feet long, 2 feet wide, and 6 feet deep.

In areas near the 100 Area Fire Station and at the intersection of Routes 1 and 4N where multiple short powerline spurs exist, the construction area would maintain a minimum 150 feet wide corridor

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from all powerline spurs. Additional areas may be needed adjacent to the 100 Area Fire Station and the A8 Substation to provide adequate space for movement of personnel and vehicles, staging and stockpiling of construction materials, and other miscellaneous project activities.

Existing utility poles along the portion of the C8L8 powerline to be demolished would be removed by pulling from the ground with mechanical equipment and backfilling holes with sand and gravel. Removed utility poles, conductors, transformers, circuit breakers, capacitors, cross-arms, insulators, guy wires, anchors, and associated hardware would be temporarily staged along existing access roads or in designated laydown areas for eventual recycling or disposal, as appropriate. If utility poles cannot be pulled from the ground, they may be removed using excavation, which would reach a depth of approximately 10 feet. Utility poles may also be cutoff below ground level and abandoned in place, as needed. Guy wires associated with removed utility poles would be cut off at the ground surface and anchors would be abandoned in place, when possible; otherwise they would be excavated and removed from the ground. All excavations would be backfilled with sand and gravel.

Project activities include, but may not be limited to, resurfacing and widening of roads, laydown areas, and switch yards and involve blading and grading, gravel installation, mechanical and chemical vegetation control, and asphalt repairs. Existing access roads measure approximately 20 feet in width. Blading and grading of unpaved roads may require ground disturbance to a maximum depth of approximately 6 inches. Gravel installation would occur in areas of recurring or frequent use, as needed. In areas that require less frequent use, mechanical mowing or chemical vegetation control may occur. Chemical vegetation control would be performed using approved herbicides applied in accordance with label requirements by properly licensed and trained personnel. Herbicide applications would be conducted in a manner that minimizes the potential for unintended non-target effects due to over-spray beyond maintained areas. While maintenance and repairs would be performed on existing gravel and asphalt roads, no new roads would be constructed. All areas would be maintained in a manner to ensure safe access to electrical distribution system structures, infrastructures, components, equipment, and hardware.

Work areas no longer required for operational use or safety would be revegetated. Revegetation would include, but may not be limited to, mechanical ground preparation such as mowing, blading, ripping, importing fill material, recontouring, seed drilling, hydroseeding, transplanting, and mulch applications. Revegetation of disturbed areas would be performed in accordance with the Hanford Site Biological Resources Management Plan (DOE/RL-96-32, Revision 2), the Hanford Site Revegetation Manual (DOE/RL-2011-116, Revision 2), and other applicable protocols, policies, and procedures.

The project scope includes approximately three miles of rebuilt powerlines, six miles of new powerlines, and three miles of removed powerlines. The total project area is approximately 180 acres.

**WASTE MANAGEMENT**

Removed powerline materials, equipment, and components not retained for reuse or recycling would be hauled to a designated staging area for regulatory compliant disposition. Pentachlorophenol (PCP) is an industrial wood preservative used mainly to treat utility poles and cross-arms. The Environmental Protection Agency (EPA) classifies PCP as toxic and a probable human carcinogen. Utility poles would be properly handled, managed, and disposed in Hanford's ERDF or other acceptable licensed and permitted landfill in accordance with waste acceptance criteria and other applicable regulatory requirements, protocols, policies, and procedures.

Electrical insulators may use lead tipped bolts or other lead containing components. Lead is a dangerous waste that would be handled, managed, and disposed in accordance with applicable Washington Administrative Code (WAC) requirements (e.g., WAC 173-303, Dangerous Waste Regulations).

The potential exists for removed electrical transformers and capacitors to contain polychlorinated biphenyls (PCBs), which are used as a coolant. PCBs are highly carcinogenic chemical compounds and if present, would be handled, managed, and disposed in accordance with applicable requirements [i.e., 40 CFR part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions].

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ECOLOGICAL RESOURCES REVIEW (ECR-2018-104, ECR-2020-611, ECR-2023-620)

DOE-RL Ecological Compliance performed several field surveys of the project area and issued ecological clearance letters on May 7, 2019; August 19, 2020; and June 19, 2023. Vegetation in the project area was mapped using aerial photography and ground verification. Approximately 42 percent of the project area is covered by native shrubs, 34 percent is covered by native and non-native grasses, and 23 percent is non-vegetated and covered by roads, parking lots, groundwater monitoring well pads, and other previously disturbed or developed areas. The remaining 1 percent of the project area is a revegetated site. One sensitive bird species (Loggerhead Shrike) was observed on the southern part of the project area and is a candidate for listing in Washington State as endangered, threatened, or sensitive. Other wildlife or signs of wildlife were observed in the project area (i.e., large mammals and birds).

The Hanford Site Biological Resources Management Plan (BRMP, DOE/RL-96-32, Revision 2), which is the primary implementation document for managing and protecting ecological resources on the Hanford Site, ranks wildlife species and habitats based on the level of concern for each resource (Levels 0-5). BRMP Level 0 and 1 habitats have low ecological value, and no compensatory mitigation is required other than compliance with applicable regulations (e.g., Migratory Bird Treaty Act). BRMP Level 2, 3, and 4 habitats require compensatory mitigation if the total project impact is greater than 1.2 acres. Compensatory mitigation replacement ratios for BRMP Level 2, 3, and 4 habitats are 1:1, 3:1, and 5:1, respectively. BRMP Level 5 habitat is considered irreplaceable as there is no practical way to replace or restore resources if lost; therefore, compensatory mitigation is determined on a case-by-case basis. No BRMP Level 5 habitat was found in the project area.

The project area contains approximately 45 acres of BRMP Level 0 habitat and 74 acres of BRMP Level 1 habitat. Neither of these habitats require compensatory mitigation. The project area contains no BRMP Level 2 habitat. The project area contains approximately 60 acres of BRMP Level 3 habitat, which would be replaced at a 3:1 ratio. Finally, the project area contains 1 acre of BRMP Level 4 habitat, which would be replaced at a 5:1 ratio. Based on habitat disturbance and related compensatory mitigation replacement ratios, the project would require approximately 185 acres of compensatory mitigation if the entire BRMP Level 3 and 4 habitats were impacted. The compensatory mitigation requirements would be assessed following completion of the project to determine the actual areas impacted. Mitigation measures such as avoidance, minimization, or diversion of impacts to lower level habitats can reduce or eliminate the need for compensatory mitigation and would be implemented to the extent possible. DOE-RL would determine the funding mechanism for implementation of compensatory mitigation measures.

Several Washington State Class B noxious weed species (i.e., Diffuse Knapweed and Saltcedar) were observed north and west of the 100 Area Fire Station. To prevent spread of noxious weed seeds, project vehicles and equipment used off-road in areas containing noxious weed species would be wash with cold, low-pressure water in designated areas prior to leaving the infested area. Soaps, detergents, or cleaners would not be used and compressed air may be used in lieu of water.

There is always the potential for birds to nest within the project area on the ground, on buildings, or on equipment. The bird nesting season at the Hanford Site is typically from mid-March to mid-July. Workers would be instructed by Project Management to watch for nesting birds. If any nesting birds are encountered or suspected, or bird defensive behaviors are observed within the project area, Project Management would contact DOE-RL Ecological Compliance to evaluate the situation. A bird survey would be performed by DOE-RL Ecological Compliance if ground disturbing activities are conducted during the nesting season. Project Management would contact DOE-RL Ecological Compliance at least 7 days prior to initiation of ground disturbing activities to arrange for a nesting bird survey.

All land areas disturbed by the project that are not needed for continued project use, access, or safety considerations would be replanted using locally derived, native plant species. The Hanford Site Revegetation Manual (DOE/RL-2011-116 Revision 1) provides guidance regarding species mix, planting rates, and methods. A site-specific revegetation plan would be prepared by DOE-RL Ecological Compliance for the utility corridors impacted by powerline decommissioning and removal in accordance with DOE/RL-2011-116, Revision 1. Revegetation must occur in the first planting window (November - January) after project completion and revegetation planning must occur between January and March of the year prior (7-9 months before planting window) in order to procure plant materials.

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No adverse impacts to ecological resources are anticipated from proposed project activities. The ecological resources review is valid for one year from the date performed due to the migratory and seasonal nature of the plant and animal species. DOE-RL Ecological Compliance would renew the ecological resources review prior to the expiration date, as required.

CULTURAL RESOURCES REVIEW (HCRC#2018-100-003, HCRC#2023-600-003a)

The portion of electrical distribution powerlines from the 100 Area Fire Station to the 100K Area was addressed in a previous cultural resources review (HCRC#2018-100-003). The DOE-RL Cultural and Historic Resources Program (CHRP) conducted a Cultural Resources Review (CRR) of the proposed project. DOE-RL CHRP sent an Area of Potential Effects (APE) notification to the Washington State Historic Preservation Officer (SHPO) and regional Native American Tribes on May 31, 2018. DOE-RL CHRP conducted a cultural resources survey on June 26-28, 2018, and July 2, 2018, and recorded one new historic site during the archaeological survey. DOE-RL CHRP transmitted the CRR, with a finding of no adverse effects, to the SHPO and regional Native American Tribes for a 30-day comment period on October 23, 2018. The SHPO concurred with the findings of the CRR on December 4, 2018. DOE-RL provided a notice of compliance with Section 106 of the National Historic Preservation Act on December 4, 2018.

The portion of electrical distribution powerline from the A8 Substation to the 100 Area Fire Station was addressed in a subsequent cultural resources review (HCRC#2023-600-003a). DOE-RL CHRP conducted a CRR of the proposed project. DOE-RL CHRP sent an APE notification to the SHPO and regional Native American Tribes on February 3, 2020. A revised APE notification was sent to the SHPO and regional Native American Tribes on March 16, 2021. DOE-RL CHRP conducted a cultural resources survey on April 6, 2021. Three historic properties were identified within the APE and one Traditional Cultural Property (TCP) was identified within the vicinity of the APE. DOE-RL CHRP transmitted the CRR with a finding of adverse effects to the SHPO and regional Native American Tribes for a 30-day comment period on August 24, 2021. The SHPO concurred with the findings of the CRR on August 25, 2021. A Memorandum of Agreement (MOA) was developed between DOE-RL CHRP, SHPO, and regional Native American Tribes to resolve adverse effects on May 2, 2023. DOE-RL CHRP provided a notice of compliance with 54 U.S.C. §306108 (formerly known as Section 106) of the National Historic Preservation Act for this project on April 15, 2023. DOE-RL CHRP would monitor compliance with the MOA stipulations and report regularly to the signatories of the MOA. Based on DOE-RL CHRP consultation with the SHPO, the Washington Department of Archaeology and Historic Preservation (DAHP), and regional Native American Tribes, Project Management would be required to adhere to work controls and stipulations established in the MOA. DOE-RL would determine the funding mechanism for implementation of the MOA in order to mitigate adverse effects and avoid additional impacts to cultural resources.

Workers would be directed by Project Management to watch for cultural materials (i.e., bones, stone tools, projectile points, mussel shells, cans, bottles, burned rock, charcoal) during work activities in the APE. If any cultural materials are encountered, work in the vicinity of the discovery would stop until an archaeological monitor or DOE-RL CHRP cultural resources specialist has been notified, the significance of the find assessed, appropriate consulting parties notified, and if necessary, arrangements made for mitigation of the find consistent with Section 5.4.2, Inadvertent Discovery of Native American Cultural Items, and related subsections of the Hanford Cultural Resources Management Plan (DOE/RL-98-10, current revision). DOE-RL CHRP anticipates no adverse effects to cultural resources or historic properties as a result of project activities beyond those identified and resolved by adhering to the terms, conditions, stipulations, and other requirements of the MOA.

**CONCLUSIONS**

The Proposed Action involves removal of portions of existing powerlines, rebuilding and reusing portions of exiting powerlines, and construction of new powerlines along the electrical distribution system alignment between the A8 Substation, the 100 Area Fire Station, and the 100K Area. These actions are addressed under DOE's NEPA Implementing Procedures by several 10 CFR 1021, Subpart D, Appendix B, Categorical Exclusions (CXs) including the following:

B1.3, Routine Maintenance. This CX covers corrective, preventive, and predictive maintenance required to preserve buildings, structures, infrastructures, and equipment in a condition suitable to be used for its designated purpose and includes in-kind repair or replacement. In particular,

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subpart (m) addresses repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, cross-arms, insulators, and downed powerlines. Subpart (n) addresses routine testing and calibration of components, subsystems, and equipment (i.e., transformers, capacitors, etc.).

B4.7, Fiber Optic Cable. This CX covers adding fiber optic cables 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.

B4.10, Removal of Electric Transmission Facilities. This CX covers deactivation, dismantling, and removal of electric transmission facilities (including, but not limited to, electric powerlines, substations, and switching stations) and abandonment and restoration of rights-of-way (including, but not limited to, associated access roads).

B4.12, Construction of Powerlines. This CX covers 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.

B4.13, Upgrading and Rebuilding Existing Powerlines. This CX covers upgrading or rebuilding approximately 20 miles in length or less of existing electric powerlines, which may involve minor relocations of small segments of the powerlines.

In addition, electrical distribution system components and hardware may contain hazardous materials that require proper handling, management, and disposal and may be subject to compliance with the Resource Conservation and Recovery Act (RCRA), Atomic Energy Act (AEA), or other authorities. Other 10 CFR 1021, Subpart D, Appendix B, CXs that may apply include the following:

B1.17, Polychlorinated Biphenyl Removal. This CX addresses removal of PCB-containing items (including, but not limited to, transformers and capacitors), PCB-containing oils flushed from transformers, PCB-flushing solutions, and PCB-containing spill materials from buildings or other aboveground locations in accordance with applicable requirements (such as 40 CFR part 761).

B6.1, Cleanup Actions. This CX addresses small-scale, short-term cleanup actions, under RCRA, Atomic Energy Act, or other authorities to reduce risk to human health or the environment from the release or threat of release of a hazardous substance other than high-level radioactive waste and spent nuclear fuel, including treatment (such as incineration, encapsulation, physical or chemical separation, and compaction), recovery, storage, or disposal of wastes at existing facilities currently handling the type of waste involved in the action.

Any changes to the proposed action described herein would require review and approval by the DOE Hanford NEPA Compliance Officer and may necessitate additional NEPA, cultural, and ecological review.

**III. Existing Evaluations (Provide with NRSF to DOE NCO):**

**Maps:**

Figure 1 - Project L-898 Electrical Distribution System Modifications by Zones.

Figure 2 - Project L-898 Electrical Distribution System Modifications by Segments.

Figure 3 - Overview of Project L-898 Segment 1 Electrical Distribution System Powerline Removal, Rebuild, and Construction from A8 Substation to 100 Area Fire Station and 100K Area.

Figure 4 - Switching Station Configuration between A8 and A9 Substations and 100B, 100K, 100N, 100D/DR Areas and 100 Area Fire Station.

Figure 5 - Aerial Fiber Optic Cable (FO) Route from A8 Substation to 676 and 1506K2 Telecommunications Buildings.

**Other Attachments:**

N/A



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**IV. List Applicable CX(s) from Appendix B to Subpart D of 10 CFR 1021:**

B1.3, Routine Maintenance; B4.7, Fiber Optic Cable; B4.10, Removal of Electric Transmission Facilities; B4.12, Construction of Power Lines; B4.13, Upgrading and Rebuilding Existing Powerlines; B1.17, Polychlorinated Biphenyl Removal; and B6.1, Cleanup Actions.

<b>V. Integral Elements and Extraordinary Circumstances (See 10 CFR 1021, Subpart D, B. Conditions that are Integral Elements of the Class of Actions in Appendix B; and 10 CFR 1021.410(b)(2) under Application of Categorical Exclusions)</b>	Yes	No
Are there extraordinary circumstances that may affect the significance of the environmental effects of the proposed action? If yes, describe them.	<input type="radio"/>	<input checked="" type="radio"/>
Is the proposed action connected to other actions with potentially significant impacts, or that could result in cumulatively significant impacts? If yes, describe them.	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action threaten a violation of applicable statutory, regulatory, or permit requirements related to the environment, safety, health, or similar requirements of DOE or Executive Orders?	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities?	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action disturb hazardous substances, pollutants, contaminants, or natural gas products already in the environment such that there might be uncontrolled or unpermitted releases?	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action have the potential to cause significant impacts on environmentally sensitive resources? See examples in Appendix B(4) to Subpart D of 10 CFR 1021.	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, such that the action is not contained or confined in a manner designed, operated, and conducted in accordance with applicable requirements to prevent unauthorized release into the environment?	<input type="radio"/>	<input checked="" type="radio"/>
If "No" to all questions above, complete Section VI, and provide NRSF and any attachments to DOE NCO for review. If "Yes" to any of the questions above, contact DOE NCO for additional NEPA review.		

**VI. Responsible Organization's Signatures:**

**Initiator:**

Jerry W. Cammann, HMIS/NEPA SME  
 Print First and Last Name

JERRY CAMMANN  
 (Affiliate)

Digitally signed by JERRY CAMMANN (Affiliate)  
 Date: 2024.02.29 15:53:54 -08'00'  
 Signature / Date

**Cognizant Program/Project Representative:**

Sean R. Madderom, DOE-RL/ISD  
 Print First and Last Name

SEAN MADDEROM

Digitally signed by SEAN MADDEROM  
 Date: 2024.03.12 08:46:20 -07'00'  
 Signature / Date

**VII. DOE NEPA Compliance Officer Approval/Determination:**

Based on my review of information conveyed to me concerning the proposed action, the proposed action fits within the specified CX(s):  Yes  No

Douglas H. Chapin, DOE Hanford NCO  
 Print First and Last Name

DOUGLAS CHAPIN

Digitally signed by DOUGLAS CHAPIN  
 Date: 2024.03.12 11:54:27 -07'00'  
 Signature / Date

NCO Comments:

**Figures for DOE/CX-00225**

**Modification of the 13.8kV Electrical Distribution Powerlines from A8 Substation to 100 Area Fire  
Station and 100K Area**

**(6 Pages Including this Page)**

Figure 1 - Project L-898 Electrical Distribution System Modifications by Zones

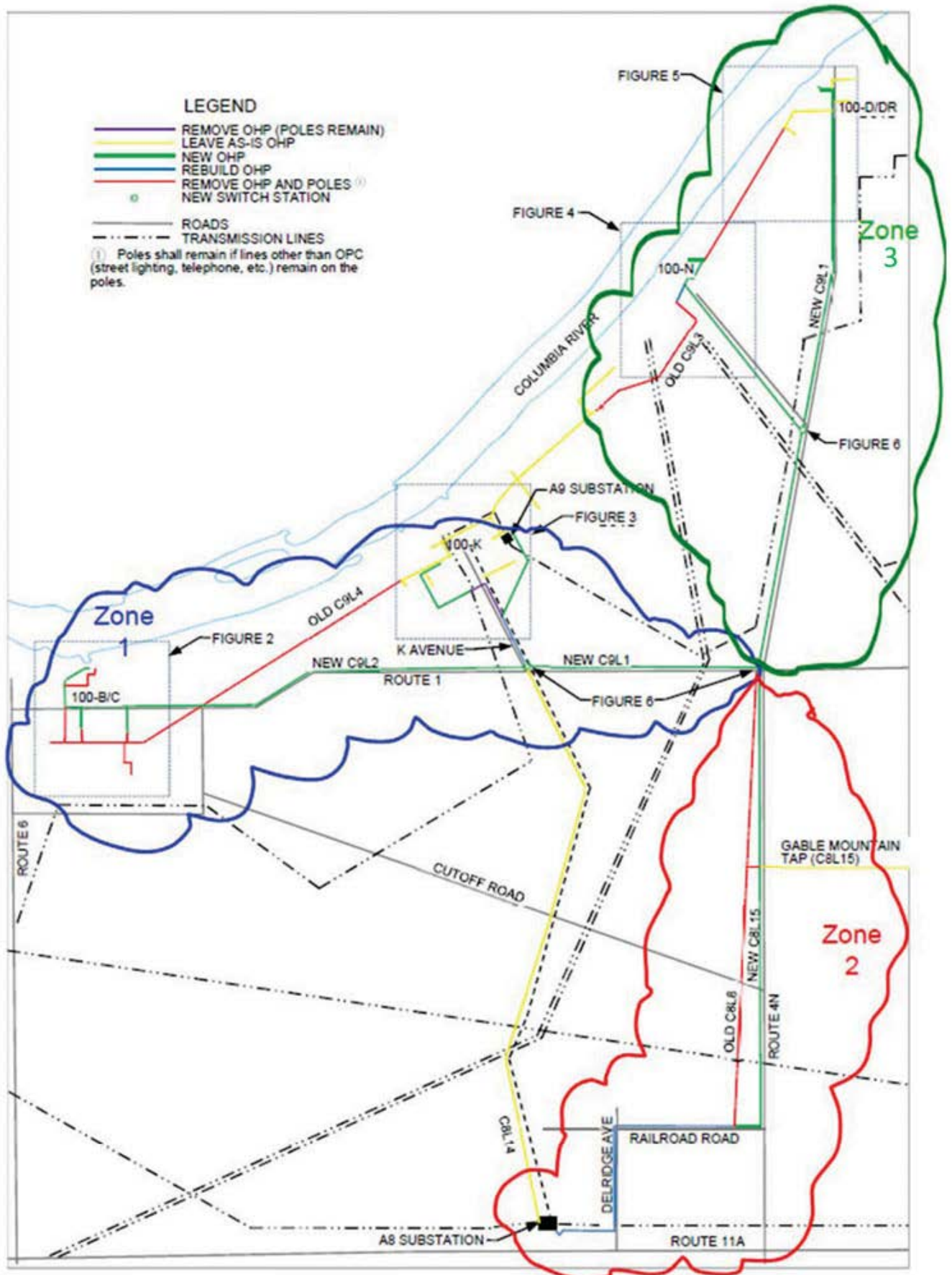
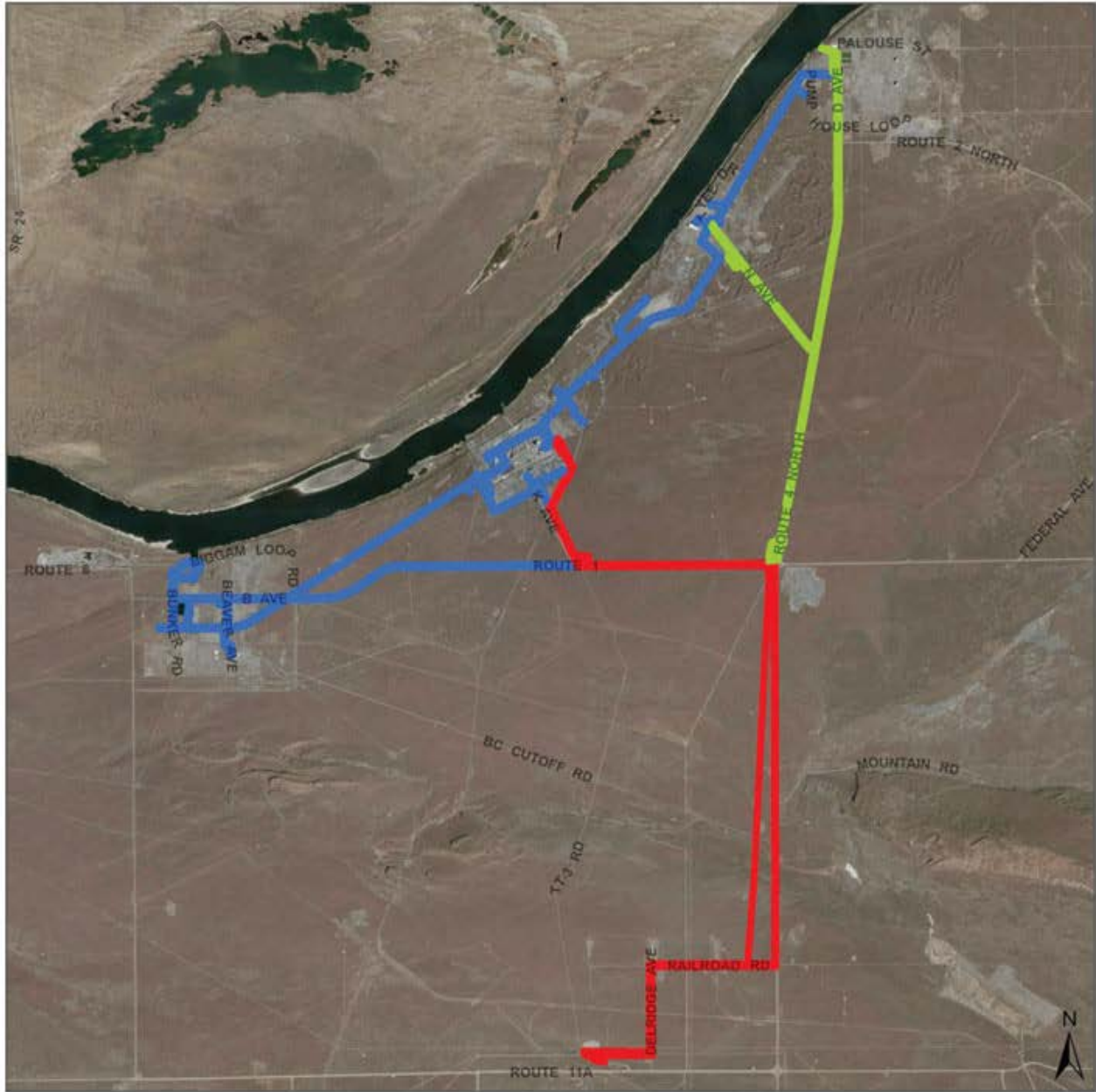
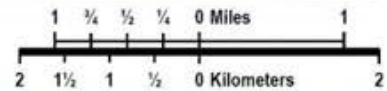


Figure 2 – Project L-898 Electrical Distribution System Modifications by Segments



**L-781, L-826, L-898**  
 Hanford Site, Benton County, Washington



- Segment 1
- Segment 2
- Segment 3



Aerial Imagery, 2022, HMIS.  
 1/3/2024

**Figure 3 – Overview of Project L-898 Segment 1 Electrical Distribution Powerline Removal, Rebuild, and Construction from A8 Substation to 100 Area Fire Station and 100K Area**

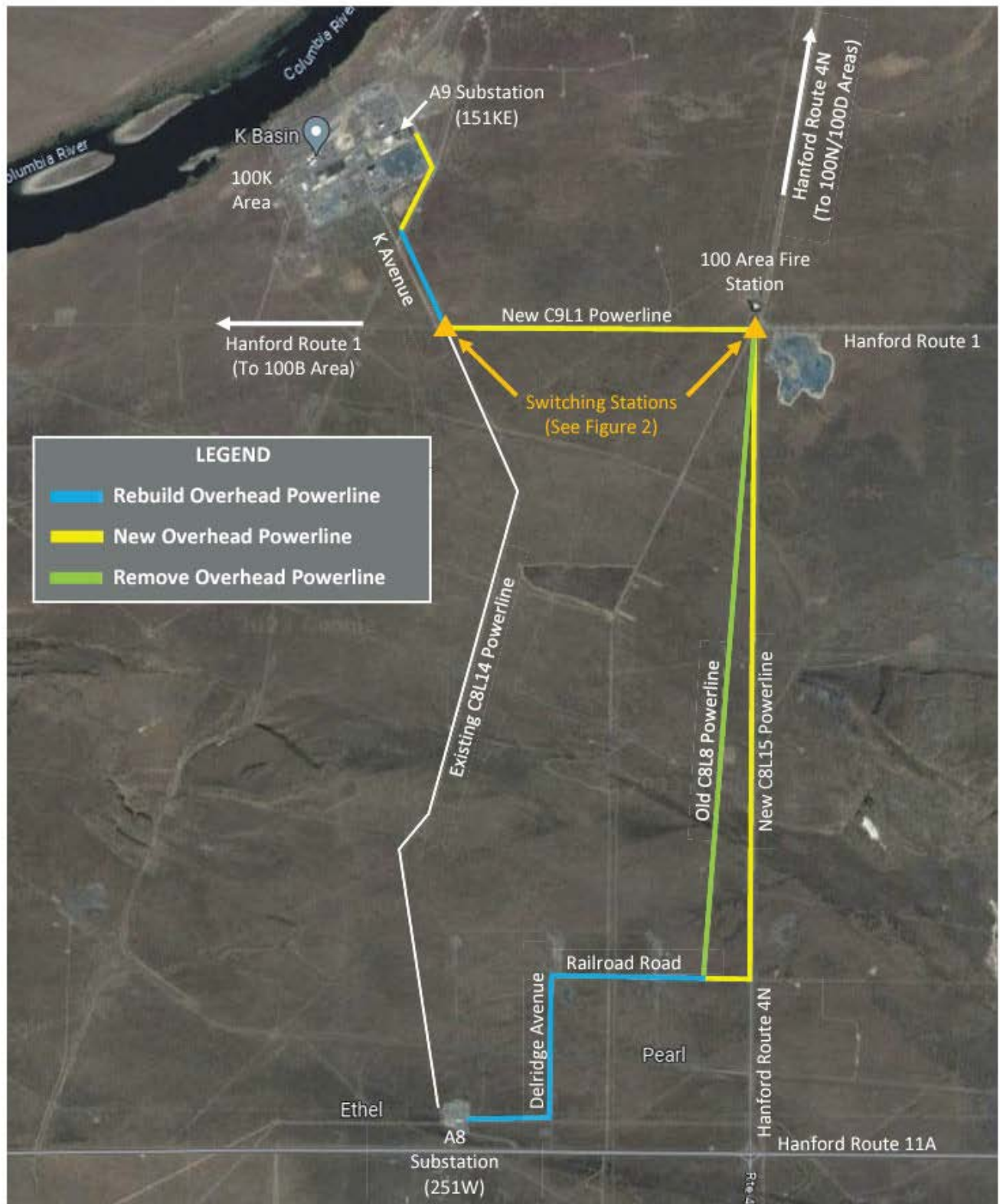


Figure 4 – Switching Station Configuration between A8 and A9 Substations and 100B, 100K, 100N, 100D/DR Areas and 100 Area Fire Station

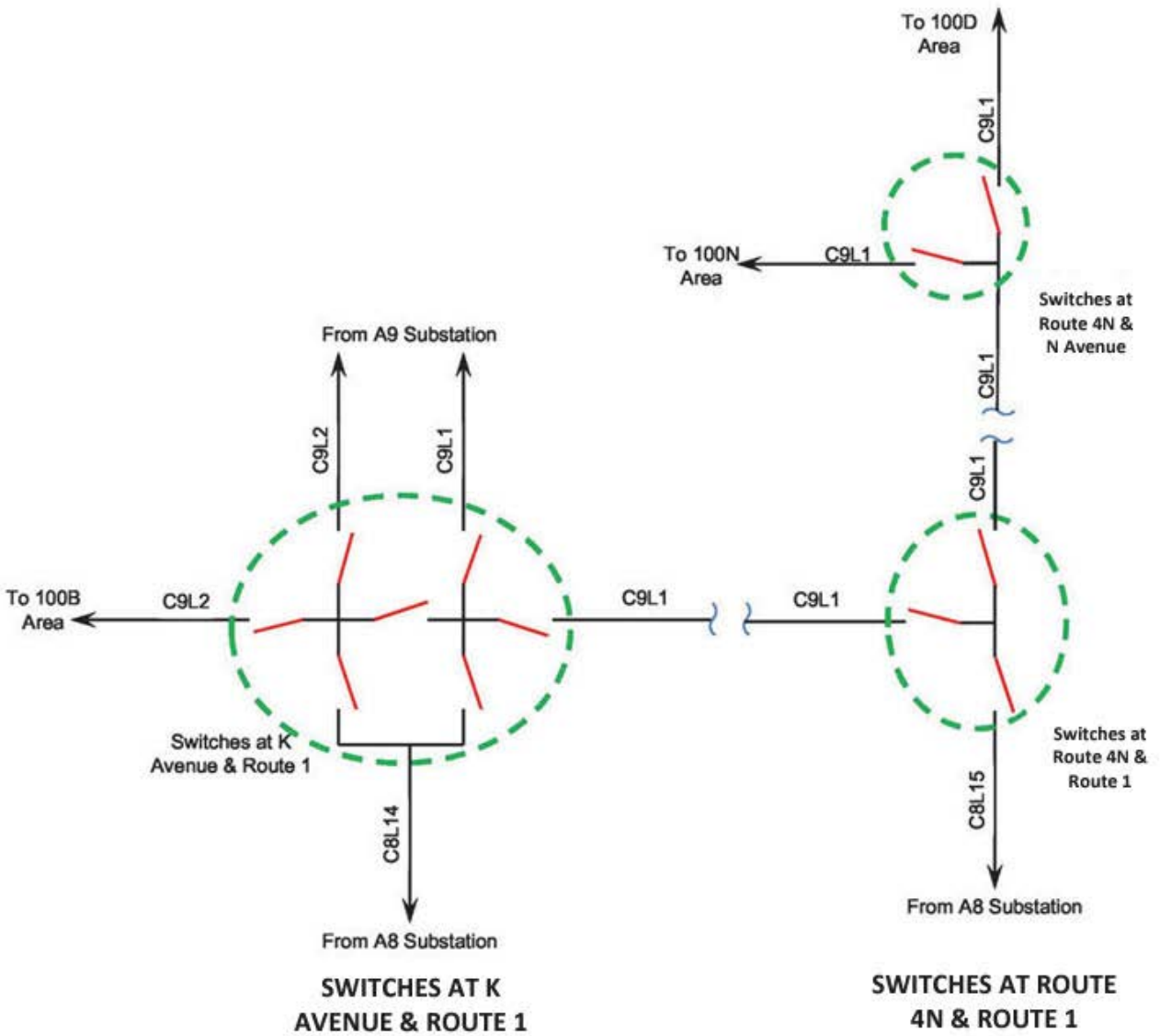


Figure 5 – Aerial Fiber Optic Cable (FO) Route from A8 Substation to 676 and 1506K2 Telecommunications Buildings

