

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: EBR-1 Roof Replacement

SECTION B. Project Description and Purpose:

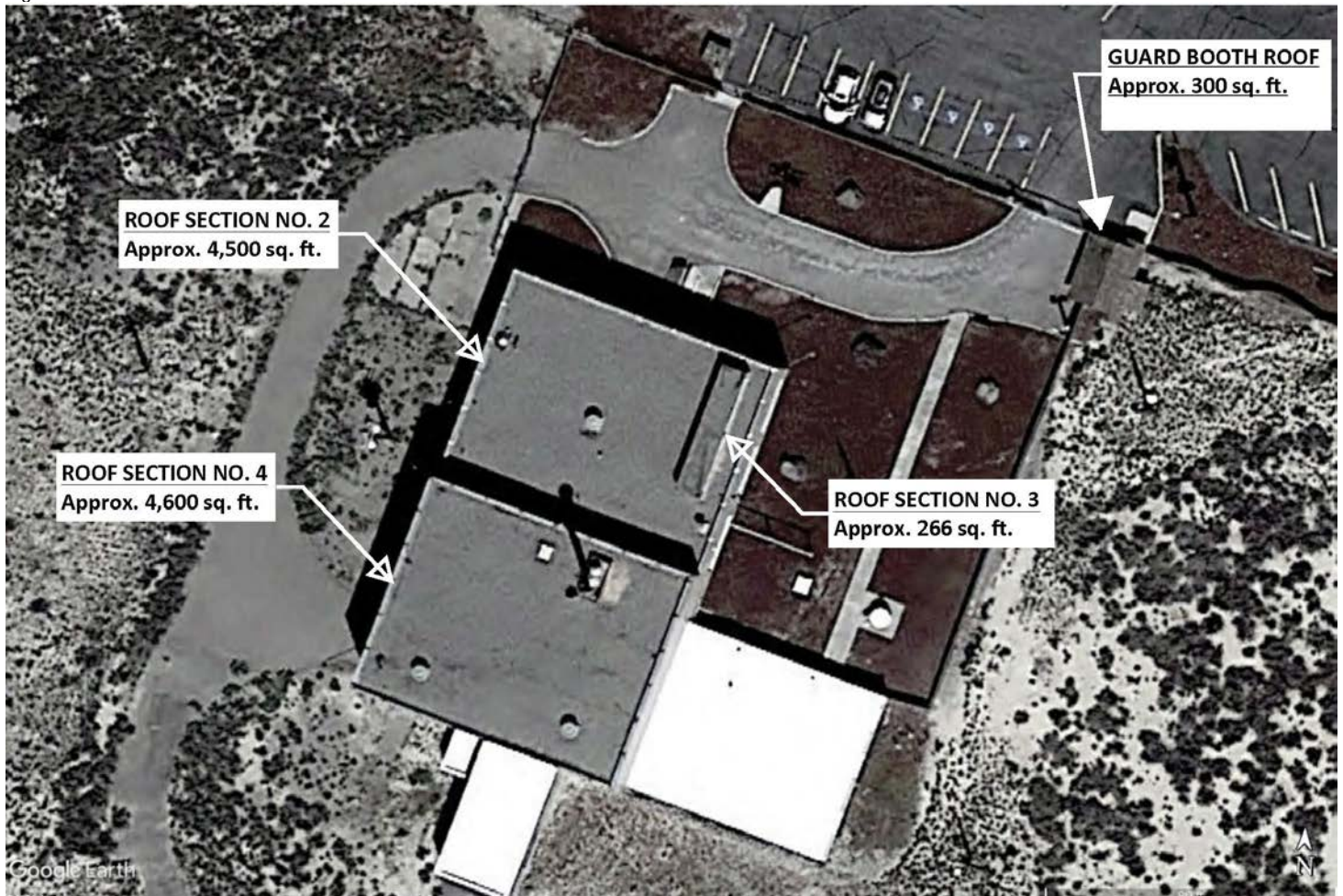
The roof at EBR-1 sections 2, 3, 4 and the guard house (figure 1) have reached the end of their useful life. Preventative maintenance is required to maintain National Historic Landmark status in accordance with the Secretary of Interior Standards.

The scope of this project is to replace the deteriorating sections 2, 3, and 4 on EBR-1-601 and the roof on the small guard house, EBR-1-602. The existing EBR-1-601 roof is approximately 10,000 square feet and is an asphalt/gravel built-up system and will be replaced with an ethylene propylene diene monomer (EPDM) membrane roof system.

EBR-1-602 is currently roofed with wood shingles. To maintain historical aesthetics, the roof will be replaced with new wood shingles that match the original shingles as closely as possible. The new wood roof shingles will need to be treated with a fire retardant to comply with National Fire Protection Association (NFPA 914) regulations.

These activities have been planned and approved through the Cultural Resource Management Office (CRMO).

Figure 1. Aerial View of EBR-1-601 and EBR-1-602 with Sections Labeled.

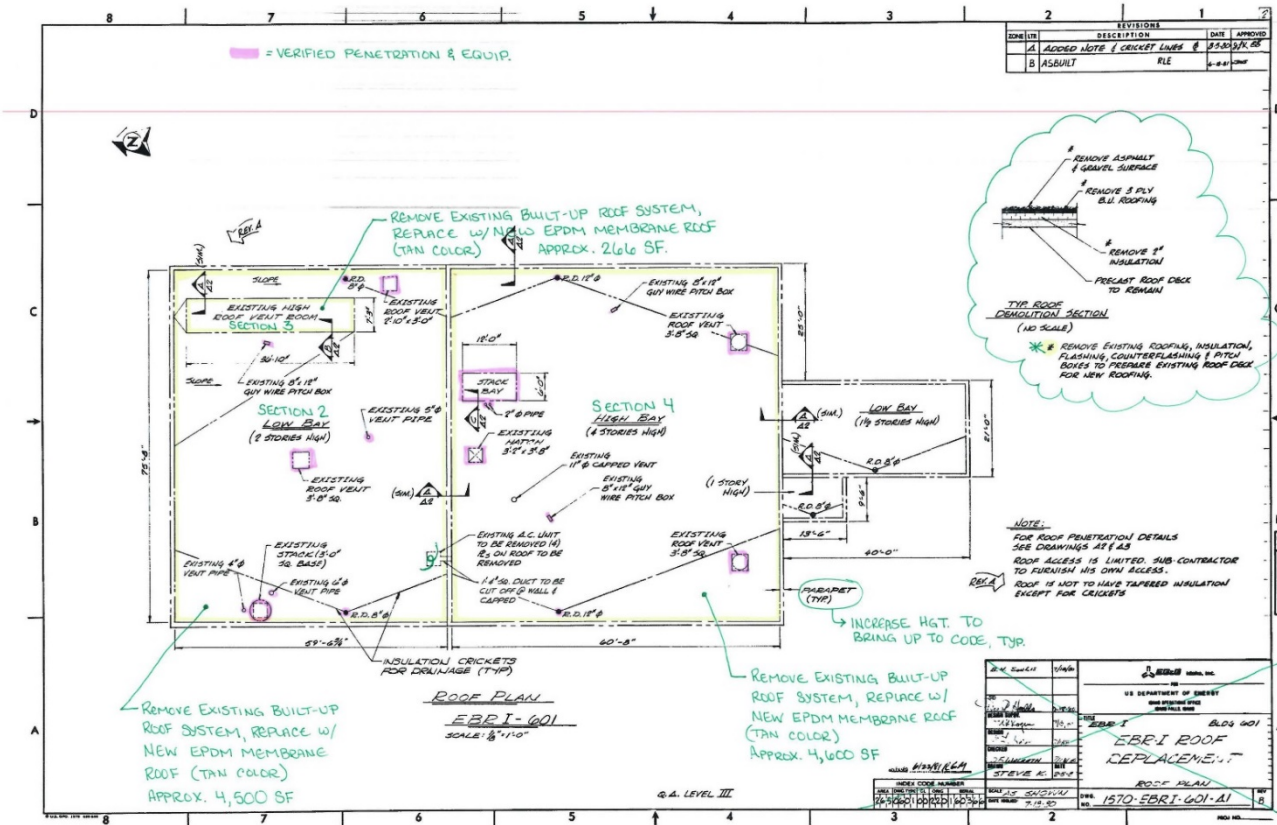


The details of the roof replacements are as follows:

- Removal of the existing built-up roof system on EBR1-601 (roof sections 2,3, and 4)
- Removal of existing shake roof system, rain gutter and downspout on the EBR 1-602 building
- Installation of a new white EPDM roof system on the EBR1-601 building
- Installation of a new wood shake roof system, new rain gutter, new fascia and new down spout on the EBR 1-602 building.

Figure 2 is a drawing of the proposed changes to EBR-1-601

Figure 2. Proposed changes to EBR-1-601 Roof Sections 2-4.



SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Certain roofing materials may contain asbestos that could become friable without proper control. Non-friable category I ACM will be removed using nonrotary blade removal methods described in 40 CFR 61, Subpart M, Appendix A, "Interpretive Rule Governing Roof Removal Operations." These methods include using power slicers and manual methods such as spud bars, pry bars, shovels, knives, etc., that do not destroy the structural matrix or integrity of the material. Any Regulated Asbestos Containing Material (RACM) that is discovered must be removed by trained workers using appropriate control methods.

Disturbing Cultural or Biological Resources

EBR-1 is listed on the National Register of Historic Places and is a National Historic Landmark. Roof replacement and repairs on buildings eligible for the National Register of Historic Places require review by the Cultural Resource Management Office (CRMO) and the Department of Energy Idaho Operations Office (DOE-ID). Removal and/or changes of original features may adversely affect these historic properties. As such, final plans and drawings must be reviewed and cleared by the INL Cultural Resource Management Office (contact Mary Scales English @ 208-526-4134) prior to beginning work.

Project activities have the potential to impact biological resources such as migratory birds, especially during nesting season (April 1 and October 1). Threats include, but are not limited to, noise, human activity around nests, lighting, and collisions with windows and other infrastructure.

Generating and Managing Waste

Non-friable category I asbestos containing roofing material will be generated and disposed at the Central Facilities Area (CFA) Landfill Complex. Nonhazardous industrial waste may be generated in the form of scrap wood, metal, RCRA empty containers, packaging material, etc. Lead flashing may be found at roof penetrations and will be separated for recycle. Pre-1982 materials are suspect for PCBs. All waste will be characterized, stored and disposed at the direction of Waste Generator Services (WGS).

Releasing Contaminants

Adhesives, caulks, paints, etc. will be used while installing the new roofing systems. The subcontractor will be required to submit a chemical inventory list with associated safety data sheets in the Vendor Data System prior to bringing them on site. The Construction Chemical Coordinator will track these chemicals in the INL Comply Plus Chemical Management System. Lead flashing may be found at roof penetrations and will be separated out for recycle.

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Using, Reusing, and Conserving Natural Resources

Scrap metal will be diverted from landfill disposal and recycled where appropriate and practical.

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.

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 to Subpart D, item B1.3, "Routine maintenance"

Justification: Project activities are consistent with 10 CFR 1021, Appendix B1.3 "Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

- A. Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses
- B. Door and window repair or replacement
- C. Wall, ceiling, or floor repair or replacement
- D. Reroofing
- E. Plumbing, electrical utility, lighting, and telephone service repair or replacement
- F. Routine replacement of high-efficiency particulate air filters
- G. Inspection and/or treatment of currently installed utility poles
- H. Repair of road embankments
- I. Repair or replacement of fire protection sprinkler systems
- J. Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces
- K. Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation)
- L. Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, "Radioactive Waste Management," or its successor; Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor
- M. Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes)
- N. Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors)
- O. Removal of debris

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