

Construction Option 2: This construction option includes the same building elements as Construction Option 1, with the exception that the SNM-Capable Hazard Category 2 building would be constructed below grade. For the Hazard Category 2 building, the maximum depth of excavation would increase to approximately 75 feet (23 meters). Excavated materials would be stockpiled onsite and would be used for regrading and constructing berms for the PIDAS around the facility. All other assumptions for the Hazard Category 3 and the administrative offices and support functions building would be the same as described in Construction Option 1.

Construction Option 3: This construction option includes a single consolidated SNM-capable Hazard Category 2 laboratory and a separate administrative offices and support functions building.

In this option, all Hazard Category 2 and 3 operations would be housed in the single Hazard Category 2 laboratory. The Hazard Category 2 building would contain a total of approximately 200,000 square feet (18,580 square meters) and be constructed with one floor below grade containing the Hazard Category 2 operations, and one floor above grade containing Hazard Category 3 operations. All assumptions for the administrative offices and support functions building would be the same as described in Construction Option 1.

In implementing this construction option with Alternatives 1 and 3 (at TA-55), connecting tunnels between the CMRR Facility and the Plutonium Facility would be excavated to a maximum depth of 50 feet (15 meters), with the estimated total length of tunnels approximately 1,200 feet (366 meters) for Alternative 1, and 500 feet (152 meters) for Alternative 3.

Construction Option 4: This option includes a single consolidated SNM-capable Hazard Category 2 laboratory constructed below grade and a separate administrative offices and support functions building.

As with Construction Option 3, all Hazard Category 2 and 3 operations would be housed in the single Hazard Category 2 laboratory constructed below grade. Maximum depth of excavation would be 75 feet (23 meters). All assumptions for the administrative offices and support functions building would be the same as described in Construction Option 1. Assumptions with respect to the connecting tunnels between facility elements would be the same as Construction Option 3.

General Construction Requirements for All Construction Options: Construction methods and materials employed on the CMRR project would be typical conventional light³-industrial for the administrative offices and support functions building and heavy-industrial, nuclear facility construction for the CMRR project nuclear laboratory elements. Information that is common to all the construction activities encompassed by the four construction options and four action alternatives is presented in the following paragraphs. A summary of construction requirements is presented in **Table 2-1**.

³Light industry refers to the use of small-scale construction machinery.