Savannah River NUCLEAR SOLUTIONS℠

Scoping Summary for the ECODS L-3 (East of L Area) (NBN), L-Area Rubble Pit (131-1L), and L-Area Rubble Pit (131-4L) Operable Unit

(Problem ID/FS Scoping)

SEMS Number: 91

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1.0 PROJECT PHASE AND STATUS

This scoping summary was prepared to support the Core Team Problem Identification (ID) and Feasibility Study (FS) discussion for the Early Construction and Operational Disposal Site (ECODS) L-3, L-Area Rubble Pit (131-1L) (LRP 131-1L), and L-Area Rubble Pit (131-4L) (LRP 131-4L) Operable Unit (OU). These OU subunits will be referred to as the ECODS L-3, LRP 131-1L, and LRP 131-4L Subunits (Figure 1). The OU is currently listed in Appendix C of the Federal Facility Agreement (FFA) (FFA 1993).

The objectives of this scoping meeting are to reach Core Team (United States Environmental Protection Agency, South Carolina Department of Health and Environmental Control, and United States Department of Energy [USDOE]) agreement on the problems warranting action, remedial action objectives, scope of the problems, likely response actions, and preliminary screening of the remedial alternatives for each subunit. A combined Resource Conservation and Recovery Act (RCRA) Facility Investigation/Remedial Investigation (RFI/RI) with Baseline Risk Assessment (BRA) and Corrective Measures Study (CMS)/FS Report is currently scheduled for submittal by July 31, 2024. Revised dates for the implementation schedule are presented in Section 6.0.

In the Post-Characterization/Preliminary Data Analysis scoping meeting conducted on November 9, 2023, the Core Team agreed that characterization for all of the subunits in the OU was adequate to proceed to the Problem ID phase of the project and that the datasets are of sufficient quality and quantity for the BRA and remedial decision making. No data gaps were identified. A human health (HH) risk assessment (HHRA), ecological (ECO) risk assessment (ERA), principal threat source material (PTSM) evaluation, and contaminant migration (CM) analysis were performed per the approved RFI/RI protocols (SRNS 2023) for each of the subunits. A Supplemental Risk Information Package that summarizes the risk assessments, PTSM evaluation, and CM analysis to support the data evaluation results presented in this document has been provided under separate cover (SRNS 2024). Table 1 provides a summary of the risk assessment results.

2.0 LAND USE

The ECODS L-3, LRP 131-1L, and LRP 131-4L Subunits are located in an area designated for industrial use as defined by the *Land Use Control Assurance Plan for the Savannah River Site* (WSRC 1999). No current or projected future development of the OU is planned. Land use controls (LUCs) will be part of any remedial action to ensure prevention of unrestricted use (e.g., residential), unless unrestricted use is supported by the RFI/RI/BRA results. Groundwater is not part of the OU and is addressed by the L-Area Southern Groundwater OU monitored natural attenuation final remedy. There is no current or projected future use of the groundwater as a drinking water source.

3.0 ECODS L-3 (NBN) SUBUNIT

3.1 ECODS L-3 (NBN) History and Background

The ECODS L-3 Subunit is located in the southern portion of the Savannah River Site (SRS), immediately southeast of L Area (Figure 1). The subunit is approximately (~) 9.7 kilometers (km) (6.0 miles [mi]) north of the nearest SRS boundary and is within the Steel Creek watershed. The ECODS L-3 Subunit is located outside of the L Area boundary, 518 meters (m) (1,700 feet [ft]) southeast of the southeastern corner of the L-Area perimeter fence.

The ECODS L-3 is one of twenty-five ECODS at SRS which were identified during a review of early 1950s aerial photographs. These sites were used during the construction and early operation of SRS for disposal of construction debris and other non-radioactive waste materials. Based on historical photographs and a ground-penetrating radar (GPR) survey completed in 2002, it is estimated that waste disposed of in ECODS L-3 was buried in two trenches located end-to-end (Figure 2). The original trenches were estimated to be 18 m (60 ft) wide by 30 m (100 ft) long. The ECODS L-3 Subunit was used to dispose of trash and construction debris, such as rubble and concrete, and is estimated to have been in use from November 1953 to June 1954. Prior to use as a disposal site, the area was used as farmland. Sections of the trenches may have been used as a burn pit for disposal of combustible waste.

The ECODS L-3 Subunit is in a relatively flat area that slopes gradually to the southwest and is covered with mature pine trees. There is no evidence of stained soil or stressed vegetation within the ECODS L-3 Subunit. The nearest wetland to the ECODS L-3 Subunit is the extensive wetlands and aquatic habitats associated with L Lake, located ~0.6 km (0.4 mi) to the south. The nearest RCRA/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) unit is the LRP 131-1L Subunit, which is 488 m (1,600 ft) northwest of the ECODS L-3 Subunit.

A Site Evaluation (SE) characterization effort performed a radiological control survey, a GPR survey, and soil sampling in 2002 (WSRC 2003). The radiological control survey designated the area as a "Clean Area". The GPR survey estimated the ECODS L-3 Subunit boundary (Figure 2) and estimated the depth as ~7.3 m (24 ft). However, during soil sampling, the bottom of the two trenches within the subunit was confirmed at depths of 3.4 m (11 ft) or less. Depth to groundwater at the subunit is 10.7 m (35 ft) below ground surface (bgs).

The SE soil sampling effort collected 90 samples from 5 depth intervals at 23 locations (Figure 2) and were analyzed for the complete list of Target Analyte List (TAL) constituents (inorganics) and the Target Compound List (TCL) of organic compounds, pesticides, and polychlorinated biphenyls (PCBs). The Core Team agreed at the December 2021 scoping meeting that the definitive level data from the SE Report was considered usable for the purposes of performing a BRA and to support remedial decision making; therefore, the ECODS L-3 Subunit was not included in the 2022 RFI/RI Work Plan characterization effort (SRNS 2022).

3.2 ECODS L-3 Data Evaluation Results

The dataset from the 2002 SE Report (WSRC 2003) was evaluated per the approved RFI/RI/BRA protocols (SRNS 2023).

For human receptors, PCBs (Aroclor 1254 and 1260) are identified as a HH problem warranting action (i.e., refined constituent of concern [RCOC]) for the hypothetical residential scenario in surface soil (Figure 3). PCBs also exceed the Toxic Substances Control Act (TSCA) Applicable or Relevant and Appropriate Requirements (ARAR) concentration of 1 milligram per kilogram (mg/kg) for

high occupancy (i.e., unrestricted use) (Figure 3). No problems warranting action for the industrial worker (IW) were identified. No ECO, CM or PTSM RCOCs were identified for this unit (see Supplemental Risk Information Package, SRNS 2024).

Although no asbestos characterization was conducted, based on historical experience with SRS ECODS units, and the dates of operation for the ECODS L-3 Subunit, asbestos-containing material (ACM) is potentially present in unit soils of the ECODS L-3 Subunit. Therefore, asbestos is identified as a problem warranting action.

In support of the CMS/FS, the likely response actions identified below are further evaluated in an alternative screening as shown in Table 2.

Problem(s) Warranting Action	Remedial Action Objectives	Scope of Problem(s)	Likely Response Actions
• ACM is likely present in unit soils that may pose a risk to human receptors if exposed.	• Prevent exposure of human receptors to presumed ACM that is likely present in unit soils.	• The total surface area of the ECODS L-3 Subunit is 1,533 square meters (m^2) (16,500 square feet [ft^2]). The total volume of the subunit is 5,607 cubic meters (m^3) (198,000 cubic feet [ft^3]).	• No Action • LUCs • Soil Cover/LUCs • Excavate and off-site disposal
• PCBs are present in the surface soil (0-0.3 m [0-1 ft]) that pose a risk greater than 1.0E-06 and a Hazard Quotient (HQ) greater than 1 to the hypothetical resident receptor scenario. More specifically, Aroclor 1254 (exposure point concentration [EPC] = 1.28 mg/kg) has a residential risk = 5.4E-06 and Aroclor 1260 (EPC = 0.356 mg/kg) has a residential risk of 1.5E-06. PCB total cumulative risk (TCR) = 6.9E-06. Aroclor 1254 also has a HQ = 1.1 for a residential scenario.	• Prevent exposure of a hypothetical resident to PCB 1254 and 1260 in surface soils at levels exceeding 1E-06 risk and HQ of 1.	• The total surface area of the ECODS L-3 Subunit is 1,533 m^2 (16,500 ft^2). The volume of unit media in the surface soil (0-0.3 m [0-1 ft]) is estimated to be 467 m^3 (16,500 ft^3).	
• PCBs are present in surface soil (0-0.3 m [0-1 ft]) that exceed the TSCA ARAR threshold of 1 mg/kg for high occupancy (i.e., unrestricted land use). Aroclor 1254 maximum detected concentration = 5.63 mg/kg and Aroclor 1260 maximum detected concentration = 2.17 mg/kg.	• Prevent exposure of human receptors to PCB 1254 and 1260 in surface soils at levels exceeding ARAR threshold of 1 mg/kg.	• The total surface area of the ECODS L-3 Subunit is 1,533 m^2 (16,500 ft^2). The volume of unit media in the surface soil (0-0.3 m [0-1 ft]) is estimated to be 467 m^3 (16,500 ft^3).	
• No HH industrial worker (IW), ECO, CM, PTSM RCOCs were identified for the ECODS L-3 Subunit.	• None	• None	
Uncertainties			
• None.			

4.0 L-AREA RUBBLE PIT (131-1L) SUBUNIT

4.1 L-Area Rubble Pit (131-1L) History and Background

The LRP 131-1L Subunit is a former waste disposal area reportedly used for various construction debris and operated from 1973 to 1982 (DuPont 1983a). The LRP 131-1L Subunit is located to the east of L Area, ~46 m (150 ft) outside of the facility boundary fence (Figure 1). Plant records indicate that metal, lumber, poles, concrete, brick, tile, asphalt, tires, rubber, scrap metal, fence posts, hard plastics, wallboard, asbestos, glass, batteries paint cans, drums and transite were disposed of at the LRP 131-1L Subunit (DuPont 1983a and DuPont 1983b). The term "pit" may be a misnomer as the 2022 characterization activities did not indicate that a pit was constructed or that waste was placed bgs. Recently discovered photos of the subunit show land disposal of material on the subunit. There is no record of hazardous or radioactive material disposed of at the pit.

Surface elevation at the LRP 131-1L Subunit is ~75 m (246 ft) above mean sea level (amsl) and is relatively flat across the subunit. The subunit gently slopes to the southeast. The subunit is within the Steel Creek Watershed; runoff from the subunit discharges to Steel Creek which is located ~1,280 m (4,200 ft) southeast of the pit. Although there is no information on the pit depth, typical disposal trenches used at SRS are ~3.0 m (10 ft) deep. Depth to groundwater at this location is at ~4.6 m (15 ft) bgs. The LRP 131-1L Subunit was cleared of vegetation in preparation for sampling to support the RFI/RI Work Plan. An area of subsidence, ~92 m^2 (990 ft^2), with the deepest section ~0.9 m (3 ft) below grade, is located within the unit boundary. Walkdown of the unit did not indicate stressed vegetation at the subunit.

The 2022 RFI/RI Work Plan characterization started with an effort to delineate the lateral and vertical extent of the subunit with a GPR survey. The GPR survey at the LRP 131-1L Subunit was not able to confirm land disturbance below surface within the subunit boundary. No identifiable waste or debris was observed during sampling activities, with the exception of one shallow interval at location LAP-1L-015, and therefore no pit was identified (Figure 4). Subsurface soil appeared to be native and undisturbed throughout. This was further supported by recently found photos of the unit that were presented at the Post-Characterization/Preliminary Data Analysis scoping

meeting conducted on November 9, 2023. The photo's showed waste was visible at the surface with no indications of a pit. The waste material was later removed at some undetermined time. Soil sampling of the LRP 131-1L Subunit was completed according to the RFI/RI Work Plan (SRNS 2022). Eight boundary locations were chosen to aid in extent determination and 13 locations were placed within the subunit boundary in a random, unbiased sampling pattern (Figure 4). Five soil boring intervals were sampled at all locations, including surface soil (0.0 to 0.3 m [0 to 1 ft]) and subsurface soil (0.3 to 1.2 m, 1.2 to 2.4 m, 2.4 to 3.7 m, 3.7 to 4.9 m [1 to 4 ft, 4 to 8 ft, 8 to 12 ft, 12 to 16 ft]). At the eight boundary locations, an additional subsurface soil interval was sampled 4.9 to 6.1 m (16 to 20 ft) bgs in order to confirm the extent of the subunit was delineated. All samples were successfully collected without any deviations. No potential asbestos containing material was observed in any soil borings for the LRP 131-1L Subunit. Waste was encountered at one location (LAP-1L-015) in the bottom of the 0.3 to 1.2 m (1 to 4 ft) interval. The observed waste appeared to be a railroad tie or other creosote wooden material.

All samples were analyzed for all constituents on the TAL and TCL, and all requested analyses were completed without deviation. In addition to TAL and TCL constituents, gross alpha and nonvolatile beta screening was performed on all samples. Exceedances of trigger levels for gross alpha (20 picocuries per gram [pCi/g]) and nonvolatile beta (50 pCi/g) prompted analyses of a contingent set of additional radiological analyses. Contingent radiological analyses were within the range of SRS background levels (WSRC 2006) and are indicative of naturally occurring radioactive material (NORM).

Soil core collected and described from each of the 21 locations did not indicate that a pit was constructed or that waste was placed in the subunit. The lithologic makeup of the sediments at the subunit appeared natural and unaffected by site operations. Makeup of the sediments contained a significant amount of clay in the matrix. At 3.7 m (12 ft) bgs, a dense clay layer was present that underlaid the entire area of the subunit. Figure 5 presents a cross section along the subunit depicting lithology and sampling depths.

4.2 L-Area Rubble Pit (131-1L) Data Evaluation Results

The RFI/RI Work Plan (SRNS 2022) dataset was evaluated per the approved RFI/RI/BRA protocols (SRNS 2023). No HH, ECO, CM or PTSM RCOCs were identified (see Supplemental Risk Information Package [SRNS 2024]).

There are no problems warranting action at this subunit.

Problem(s) Warranting Action	Remedial Action Objectives	Scope of Problem(s)	Likely Response Actions
• No HH, ECO, CM or PTSM RCOCs were identified.	• None	• None	• No Action
Uncertainties			
• None			

5.0 L-AREA RUBBLE PIT (131-4L) SUBUNIT

5.1 L-Area Rubble Pit (131-4L) History and Background

The LRP 131-4L Subunit is located north of the L-Area fence and east of Road 7 (Figure 1). The subunit surface elevation ranges from ~81 to 84 m (266 to 276 ft) amsl and slopes to the southeast toward railroad tracks, which head into L Area (Figure 6). Just before the railroad tracks on the southeastern end of the subunit, there is a depression and drainpipe which collects runoff and carries it under the railroad tracks (Figure 7). Orange ball markers are present to designate the subunit boundaries, an area ~30.5 m by 30.5 m (100 ft by 100 ft). However, during walkdowns to support a 1994 SE effort, the subunit size was questioned due to land disturbance on the northwestern side of the subunit, outside of the orange ball markers. Additionally, during site walkdowns in preparation of the RFI/RI Work Plan for the LRP 131-4L Subunit, surface disturbance and debris (e.g., rebar, concrete, asphalt) was observed on the northeastern side of subunit, outside of the orange ball markers. Therefore, the LRP 131-4L Subunit area to be investigated was considered to be ~36.6 m by 36.6 m (120 ft by 120 ft) to include the disturbed land and observed debris (Figure 6). The water table in this area is ~7.6 m (25 ft) bgs.

The subunit area was cleared of dense vegetation to support the RFI/RI Work Plan investigation. However, the area around the unit is surrounded by mature pine trees. An area of subsidence (approximately 9 m^2 [100 ft^2]) was noted outside of the orange ball markers to the northwest (Figure 6). Visual inspection indicated the presence of concrete and rebar on surface within the subunit. There is no evidence of stressed vegetation at the subunit. During the SE and recent project walkdowns, fragments of blacktop, asphalt, concrete, and rebar were observed on the surface within the expanded subunit boundary (WSRC 1994).

The LRP 131-4L Subunit received inert rubble from the L-Area Powerhouse Stack and Silo demolition (Dupont 1983a and DuPont 1983b). The rubble consisted primarily of concrete and asphalt material with some metal. The unlined pit was reported to have operated from 1973 to 1983 before it was filled and seeded in 1983. Operating procedures indicate it was to receive inert, non-hazardous materials and there are no records indicating any disposal of hazardous or radioactive materials.

The 2022 RFI/RI Work Plan characterization started with an effort to delineate the lateral and vertical extent of the subunit with a GPR survey. GPR was performed prior to commencement of soil sampling activities to ascertain if pit size and depth could be determined. However, due to interferences with shallow deposition of material and makeup, as well as shallow roots from the dense underbrush, the findings were inconclusive. Estimation of the pit boundary and depth was determined through sampling activities. Through soil sampling activities, waste was identified within the orange balls marking the pit boundary. Waste was also observed in peripheral locations to the northwest, therefore the four step-out locations were drilled and sampled. In this area, waste was observed at step-out location LAP-4L-040, from 3.0 to 15 ft bgs. Based on observation of waste material at LAP-4L-040, the RFI/RI Work Plan investigation of the subunit did not define the extent of the buried waste to the northwest (Figure 6). Material encountered at step-out locations, including LAP-4L-040, was consistent with material encountered at other sampling locations at the LRP 131-4L Subunit.

Description of waste encountered throughout the subunit consisted of brick, concrete, metal, rebar, wire, charred debris, black clinker/ash, and asphalt. Thickness of waste as defined by the investigation at the unit varied in depth from 0.2-3.9 m (0.5-12.8 ft) with an approximate volume of 6,500 m^3 (230,000 ft^3) (Figure 7). Figure 8 depicts a cross section that is northwest to southeast through the

unit while Figure 9 depicts a cross section southwest to northeast across the unit. Potential ACM was identified by technical oversight at one location (LAP4L-018) at a depth of 0.6-1.7 m (2-5.5 ft) (Figure 6). In accordance with the RFI/RI Work Plan, an asbestos inspector confirmed the material was presumed ACM and is consistent with expected building materials and the time period that the LRP 131-4L Subunit was in operation.

Soil sampling of the LRP 131-4L Subunit consisted of 41 total sample locations (Figure 6). There were fourteen interior sample locations, completed in a random, unbiased sampling pattern spaced 6.1 m (20 ft) apart within the subunit. Along the original subunit boundary, delineated by the orange ball markers, eleven peripheral sample locations were identified. Eight sample locations were included to investigate the area northeast of the subunit, where debris was observed on surface. Four sample locations were included to bound an area of subsidence that was identified during site walkdowns. Four step-out sample locations were identified northwest of the subunit as contingent locations based on field observations. All 41 locations were sampled with soil sampling depth intervals that included surface soil (0.0 to 0.3 m [0 to 1 ft]) and subsurface soil (0.3 to 1.2 m, 1.2 to 2.4 m, and 2.4 to 3.6 m [1 to 4 ft, 4 to 8 ft, and 8 to 12 ft], unless samples were unable to be collected due to waste in the sample core. At 32 locations, sampling was completed at 3.6 to 4.9 m (12 to 16 ft) because the bottom of the pit was not confirmed, or waste was determined in the previous sampling depth. At four locations, sampling was completed to a depth of 4.9 to 7.3 m (16 to 20 ft) because waste was confirmed in the 3.6 to 4.9 m (12 to 16 ft) interval. Additionally, at one location, sampling was completed to a depth of 6.1 to 7.3 m (20 to 24 ft) due to no soil recovery in the shallower depths. The deeper samples were collected to provide necessary information at depth to be used as part of the CM analysis and better define nature and extent below the subunit. Soil cores were recorded in the field for lithologic descriptions at all sample locations. At sample location LAP-4L-007, a soil core was collected to a depth of 15 m (50 ft) bgs, and lithologic descriptions recorded. Most of the soil described contained significant amount of clay matrix, except within the waste, and the pit was underlain by a dense clay unit.

All samples were analyzed for all constituents on the TAL and TCL, and all requested analyses were completed without deviation. In addition to TAL and TCL constituents, gross alpha and nonvolatile beta screening was performed on all samples. Exceedances of trigger

levels for gross alpha (20 pCi/g) and nonvolatile beta (50 pCi/g) prompted analyses of a contingent set of additional radiological analyses. Contingent radiological analysis results were within the range of SRS background levels (WSRC 2006) and are indicative of NORM.

5.2 L-Area Rubble Pit (131-4L) Data Evaluation Results

The RFI/RI Work Plan (SRNS 2022) dataset was evaluated per the approved RFI/RI/BRA protocols (SRNS 2023).

For human receptors, benzo[a]pyrene is identified as a problem warranting action (i.e., RCOC) for the hypothetical residential scenario in surface soil (Figure 10). No problems warranting action for the IW were identified. No ECO, CM or PTSM RCOCs were identified for this unit (see Supplemental Risk Information Package [SRNS 2024]).

In support of the CMS/FS, the likely response actions identified below are further evaluated in an alternative screening in Table 2.

Problem(s) Warranting Action	Remedial Action Objectives	Scope of Problem(s)[A]	Likely Response Actions[B]
• ACM is present in unit soils that may pose a risk to human receptors if exposed.	• Prevent exposure of human receptors to presumed ACM that is present in the unit soils.	• The total estimated volume of the buried waste at the LRP 131-4L Subunit is 15,045 m^3 (531,300 ft^3).	• No Action • LUCs • Soil Cover/LUCs • Excavate and off-site disposal
• Benzo[a]pyrene (EPC = 0.164 mg/kg) is present in the surface soil (0-0.3 m [0-1 ft]) that poses a risk greater than 1.0E-06 for the hypothetical resident receptor scenario (risk = 1.4E-06).	• Prevent exposure of a future resident to benzo[a]pyrene in surface soils (0-0.3 m [0-1 ft]) at levels exceeding 1E-06 risk.	• The total estimated volume of the surface soil (0-0.3 m [0-1 ft]) at the LRP 131-4L Subunit is 1,075 m^3 (37,950 ft^3).	
• No HH IW, ECO, CM or PTSM RCOCs were identified.	• None	• None	
Uncertainties			
• None			

[A] Due to observed waste in boreholes on the assumed LRP 131-4L Subunit boundary, the aerial extent of the subunit was extended to the ditch feature northwest of the subunit based on Core Team discussion in the Post-Characterization/Preliminary Data Analysis scoping meeting (Figure 10). This ditch feature is ~23 m (75 ft) northwest of the subunit and provides the most conservative scope estimate for response action comparisons.

[B] LRP 131-4L Subunit will require additional confirmatory coring for visual observation of waste during the remedy design in the CMIP/RAIP.

6.0 OPERABLE UNIT STRATEGY

The problems warranting action and likely response actions have been finalized following completion of the formal HH and ECO risk assessment, CM analysis, and PTSM evaluation implementing the protocols in the approved EC&ACP Regulatory Document Handbook (SRNS 2023). The RFI/RI with BRA and CMS/FS for the ECODS L-3, LRP 131-1L, and LRP 131-4L OU is currently included in the FFA for submittal by July 31, 2024 (FFA 1993).

A record of Core Team agreements and key changes to the scoping summary is documented in the following tables.

RECORD OF CORE TEAM AGREEMENTS	
Date	**Description of Agreement**
12/13/2021	*Core Team is in agreement that there are no additional data needs for the ECODS L-3 Subunit.*
	Core Team is in agreement that the proposed sampling strategy for the LRP 131-1L Subunit is sufficient in meeting data needs.
	Core Team is in agreement that the proposed sampling strategy for the LRP 131-4L Subunit is sufficient in meeting data needs.
11/9/2023	*The Core Team is in agreement that lead should not be identified as a HH or ARAR RCOC for the ECODS L-3 Subunit.*
	The Core Team is in agreement that hexavalent chromium should not be identified as a HH RCOC for the ECODS L-3 Subunit.
	The Core Team is in agreement that data collection is not necessary for hexavalent chromium and that existing total chromium data is adequate for baseline risk assessment and remedial decision making at the LRP 131-1L and LRP 131-4L Subunits.
	The Core Team is in agreement that characterization is adequate to proceed to Problem ID at the LRP 131-1L and LRP 131-4L Subunits and the 2022 RFI/RI Work Plan characterization dataset is adequate for baseline risk assessment and for remedial decision making.
	The Core Team is in agreement that further alpha spectroscopy is unnecessary at the LRP 131-1L and LRP 131-4L Subunits.
	The Core Team is in agreement that the nature of the contamination at the LRP 131-4L Subunit is defined and the extent of buried waste will be defined during remedy design in the CMIP/RAIP by confirmatory coring for visual observation of waste.
3/19/2024	*The Core Team is in agreement to exclude Aroclor 1254 as a HH RCOC for the IW scenario for the ECODS L-3 Subunit.*
	The Core Team is in agreement that there are no Problems Warranting Action for the LRP 131-1L Subunit.

KEY CHANGES TO THE SCOPING SUMMARY			
Date	**Section**	**Description of Change**	**Rational for Change**
01/15/2024	*All*	*Updated the November 2023 scoping summary to provide results of the formal data evaluations per the RFI/RI protocols and to scope the range of alternatives to be evaluated in the CMS/FS.*	*Updated all sections to reflect Problem Identification and CMS/FS scoping phase.*

7.0 REFERENCES

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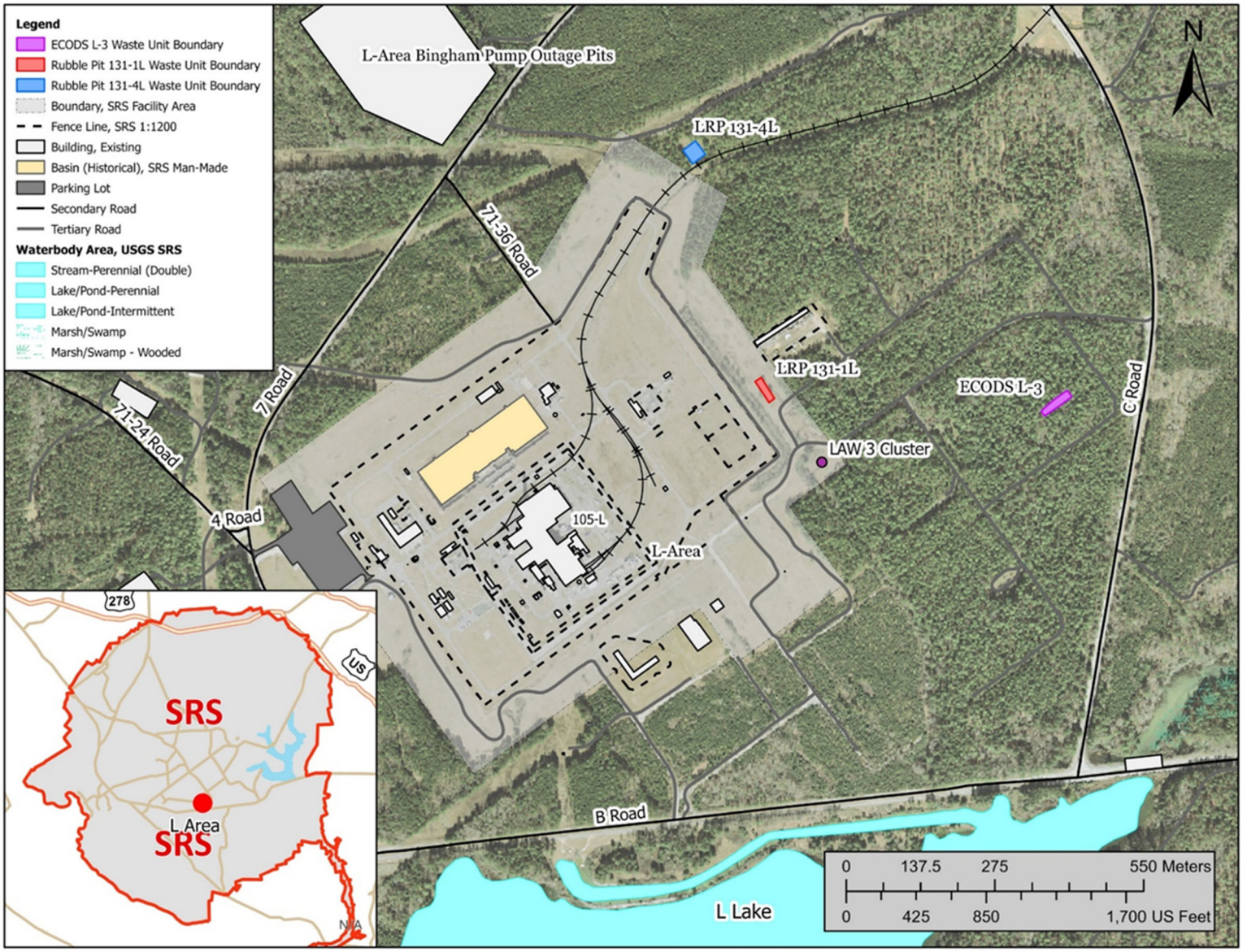

Figure 1. Location of the ECODS L-3, LRP 131-1L, and LRP 131-4L Operable Unit

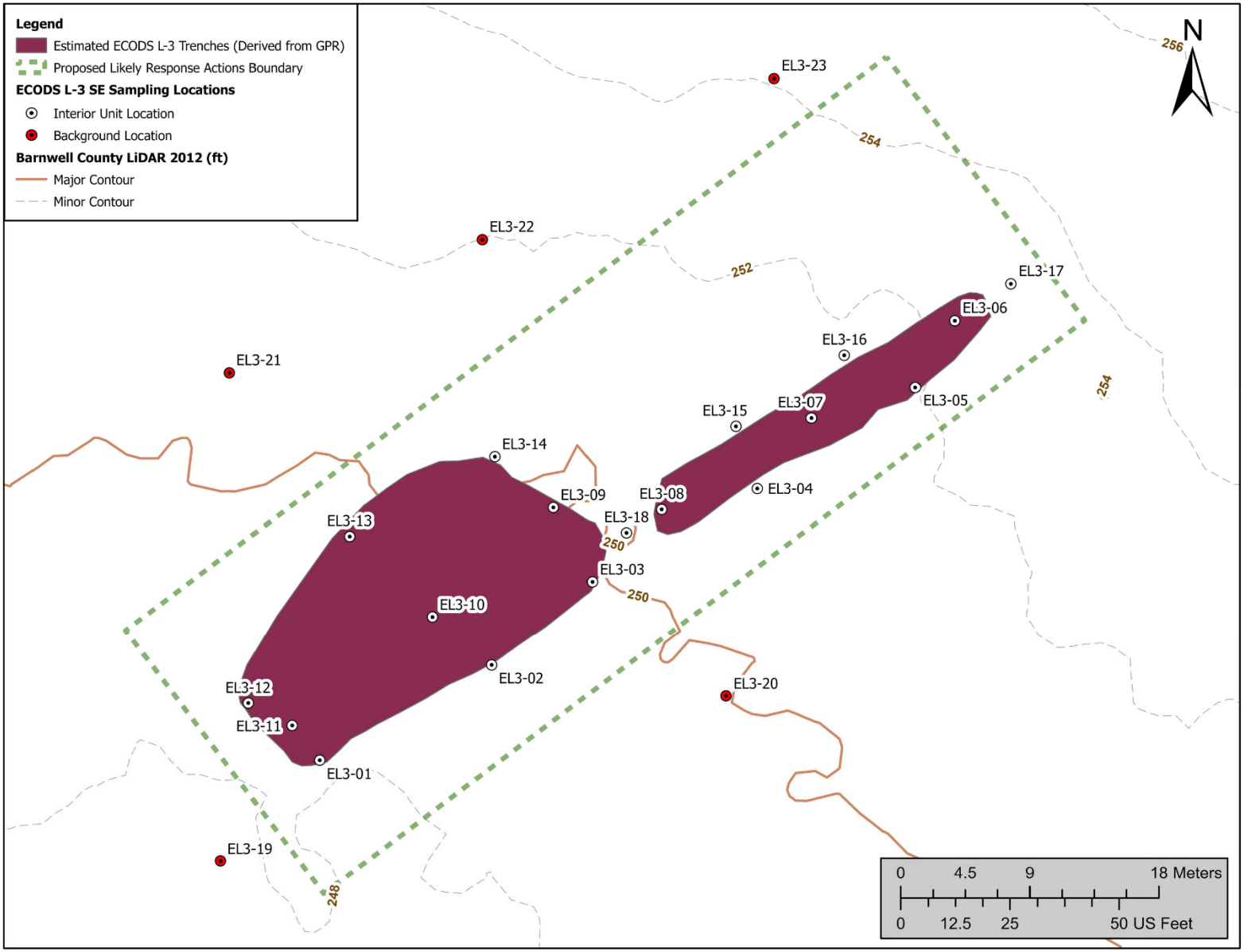

Figure 2. ECODS L-3 Subunit Boundaries and Site Evaluation Sampling Locations

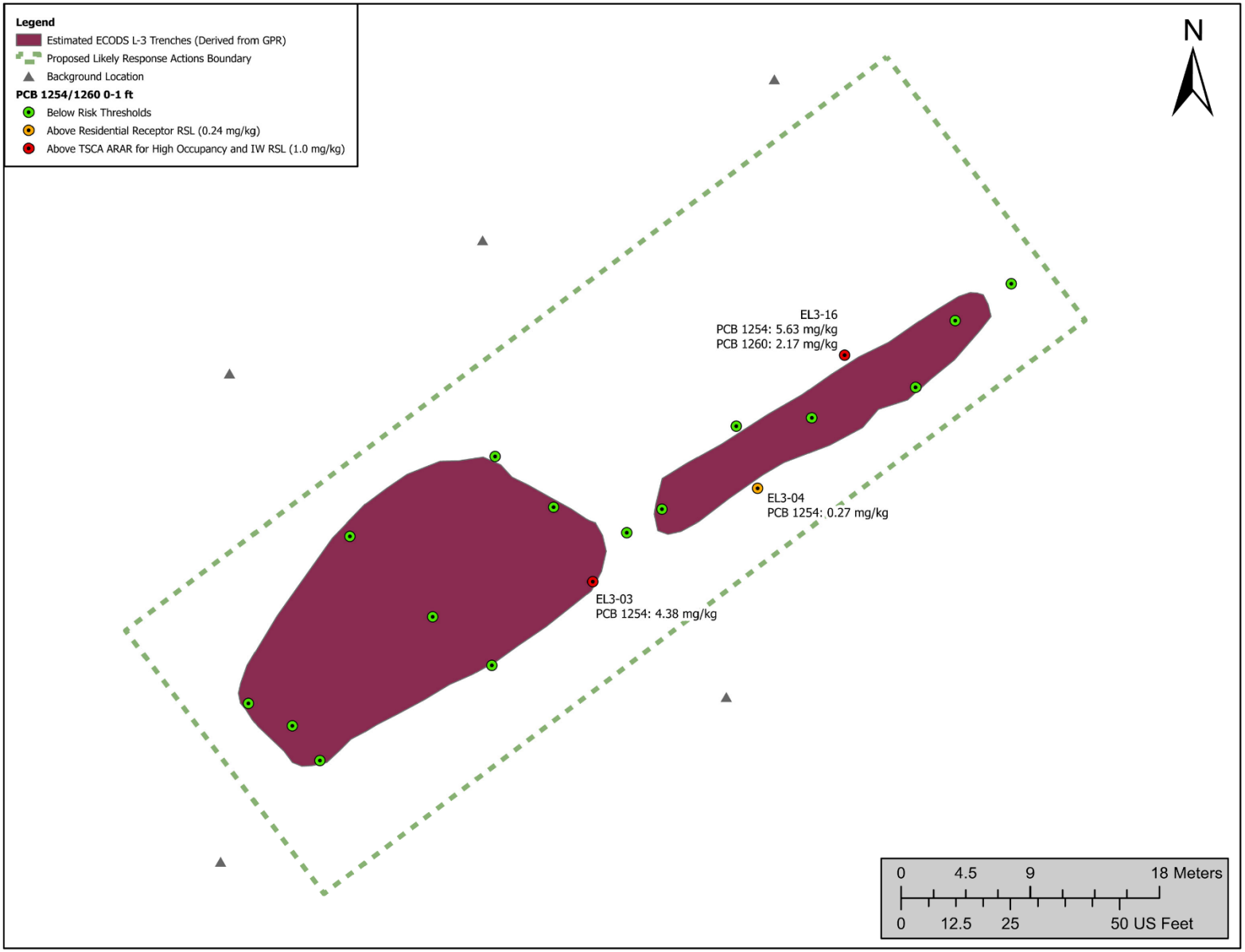

Figure 3. ECODS L-3 Subunit Site Evaluation PCB 1254/1260 Surface Soil (0-0.3 m [0-1 ft]) Results Above Thresholds

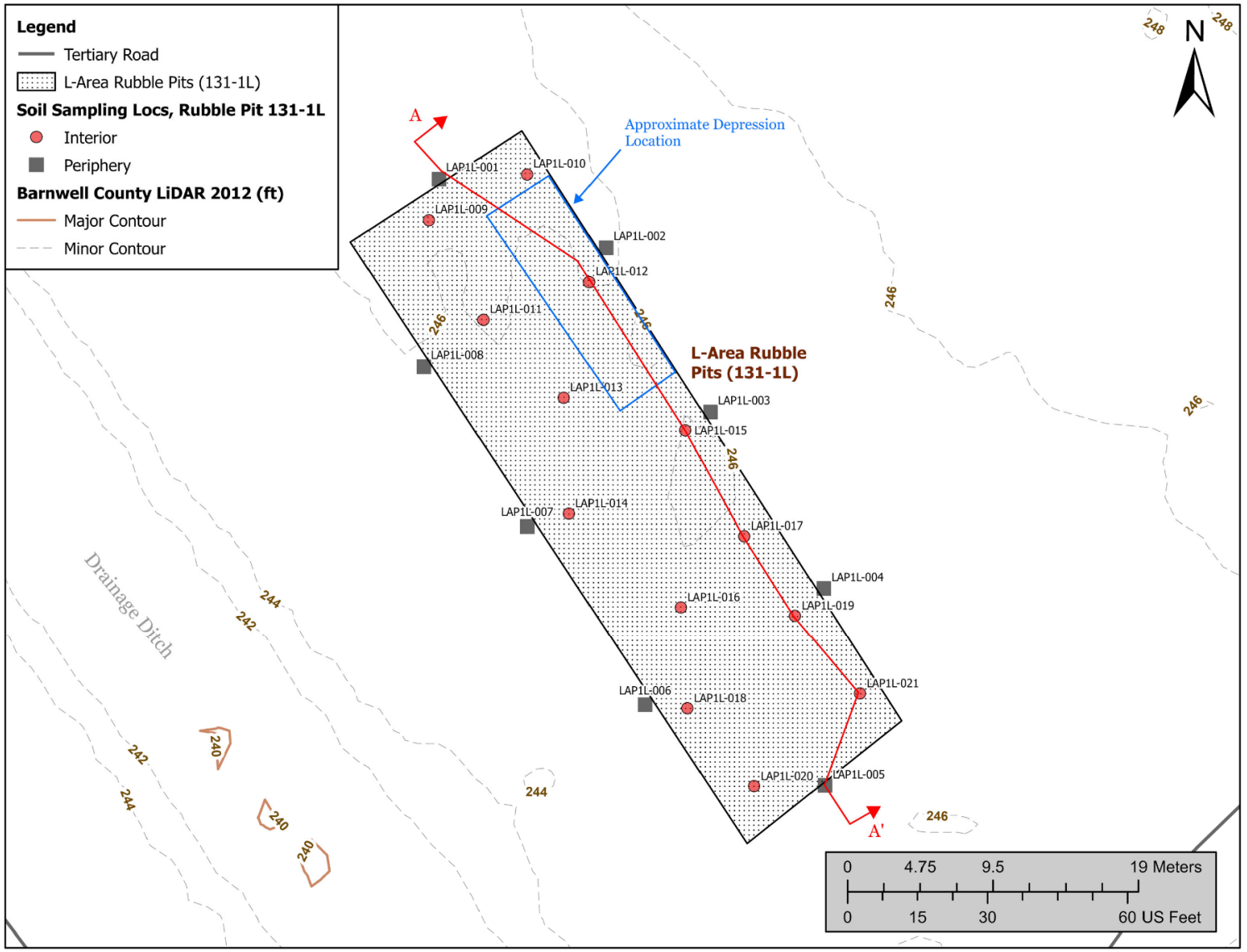

Figure 4. L-Area Rubble Pit 131-1L Subunit RFI/RI Work Plan Sampling Locations

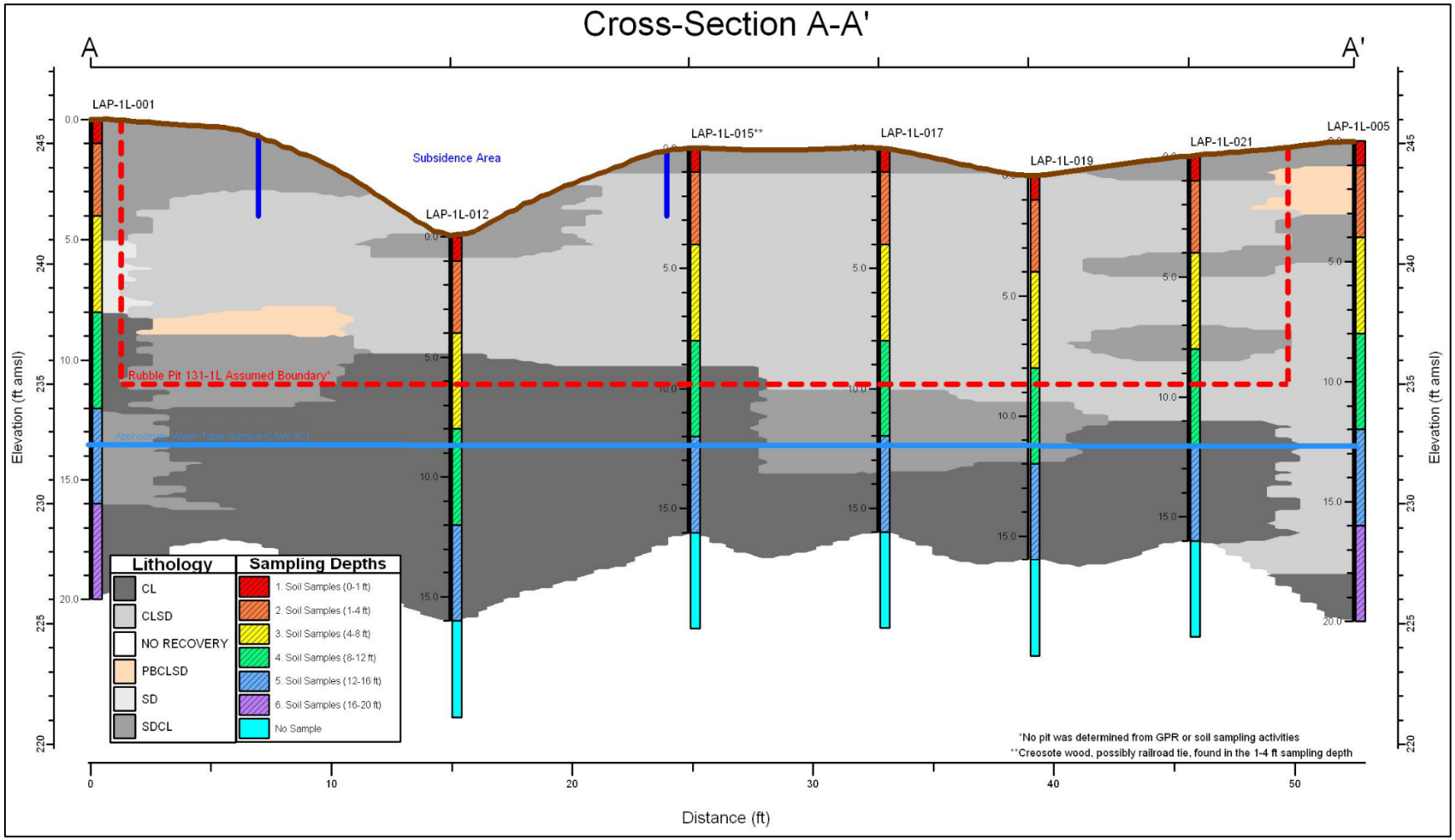

Figure 5. Cross Section A-A' of the L-Area Rubble Pit 131-1L Subunit

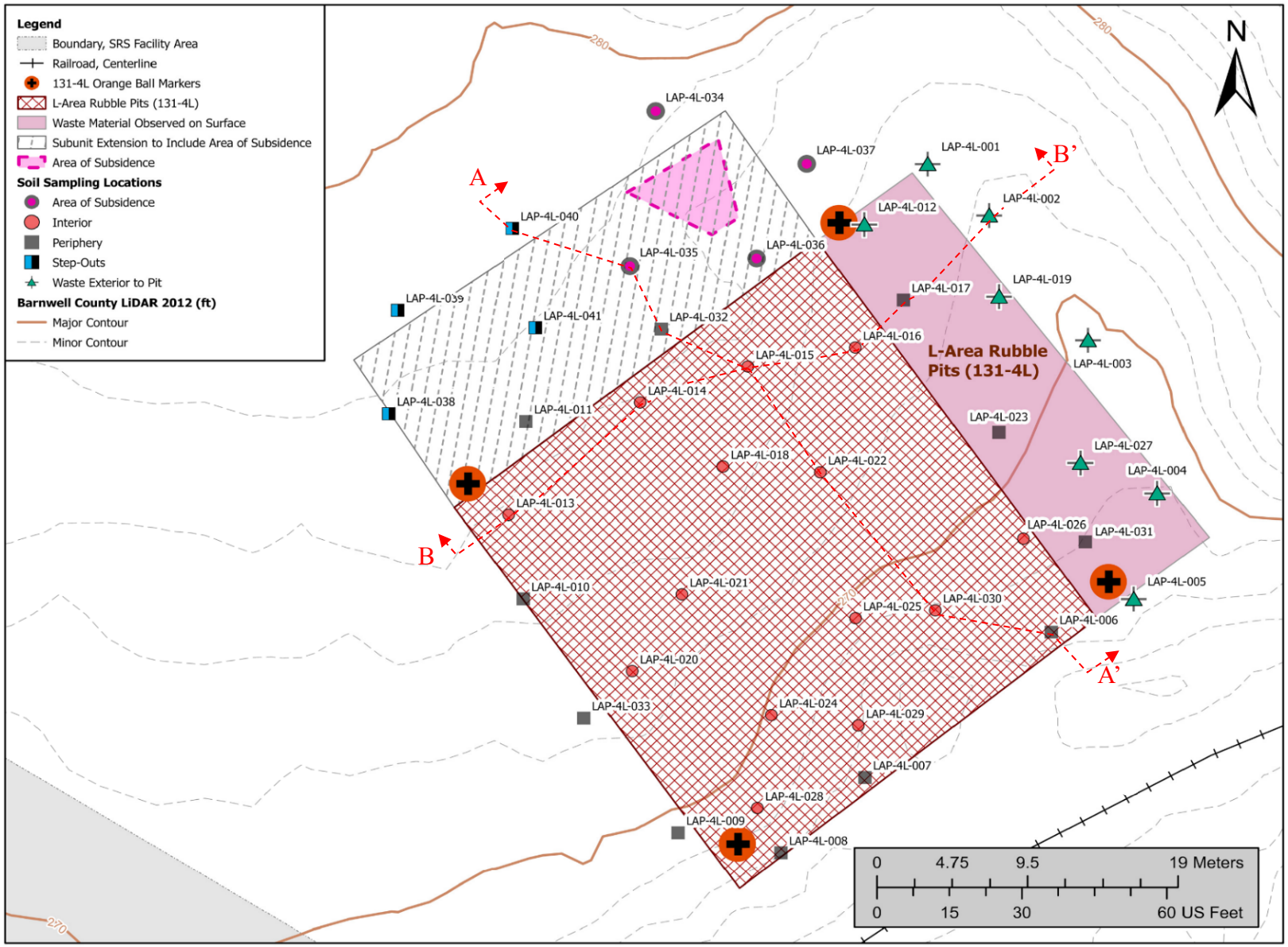

Figure 6. L-Area Rubble Pit 131-4L Subunit RFI/RI Work Plan Sampling Locations

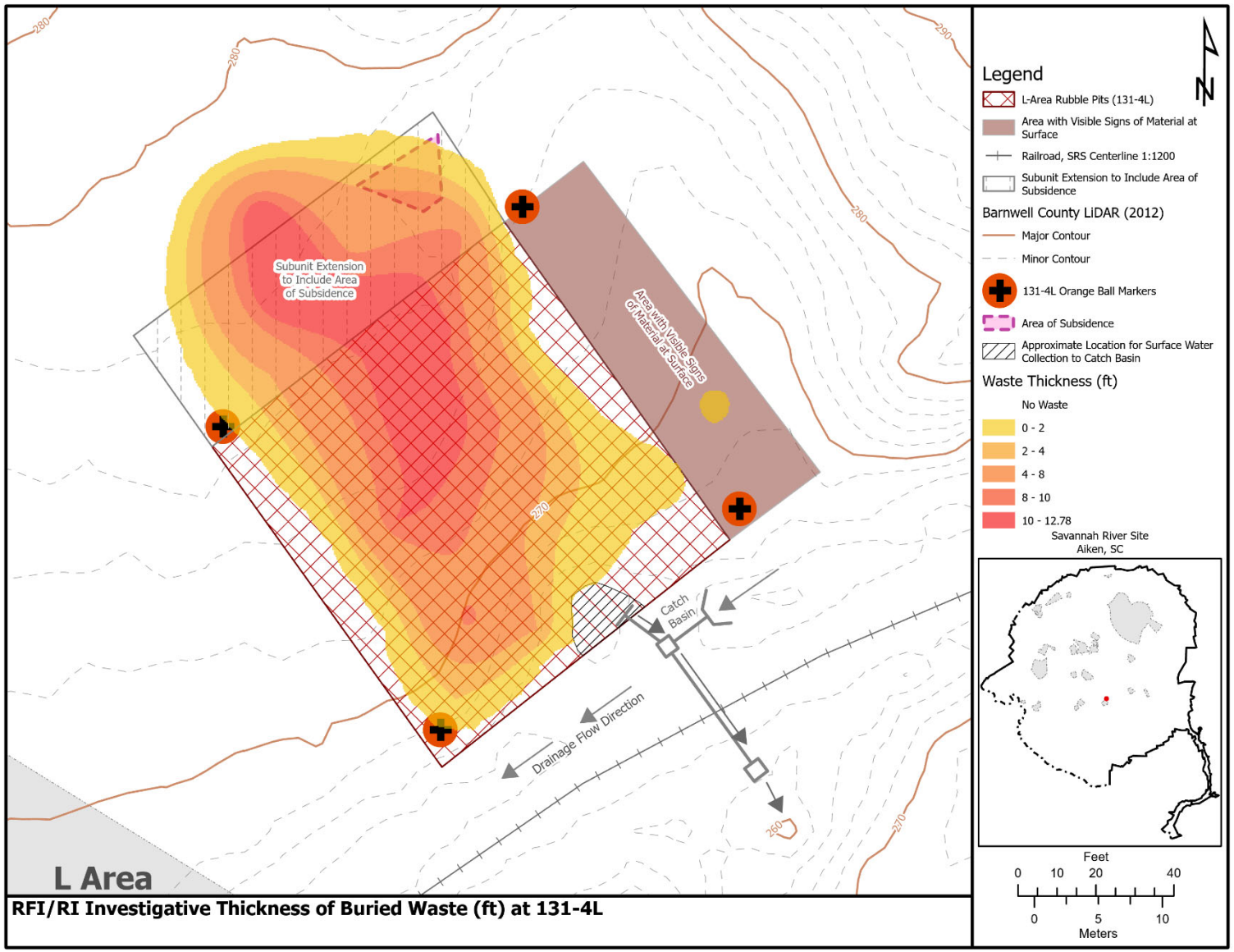

Figure 7. L-Area Rubble Pit 131-4L Subunit Waste Thickness

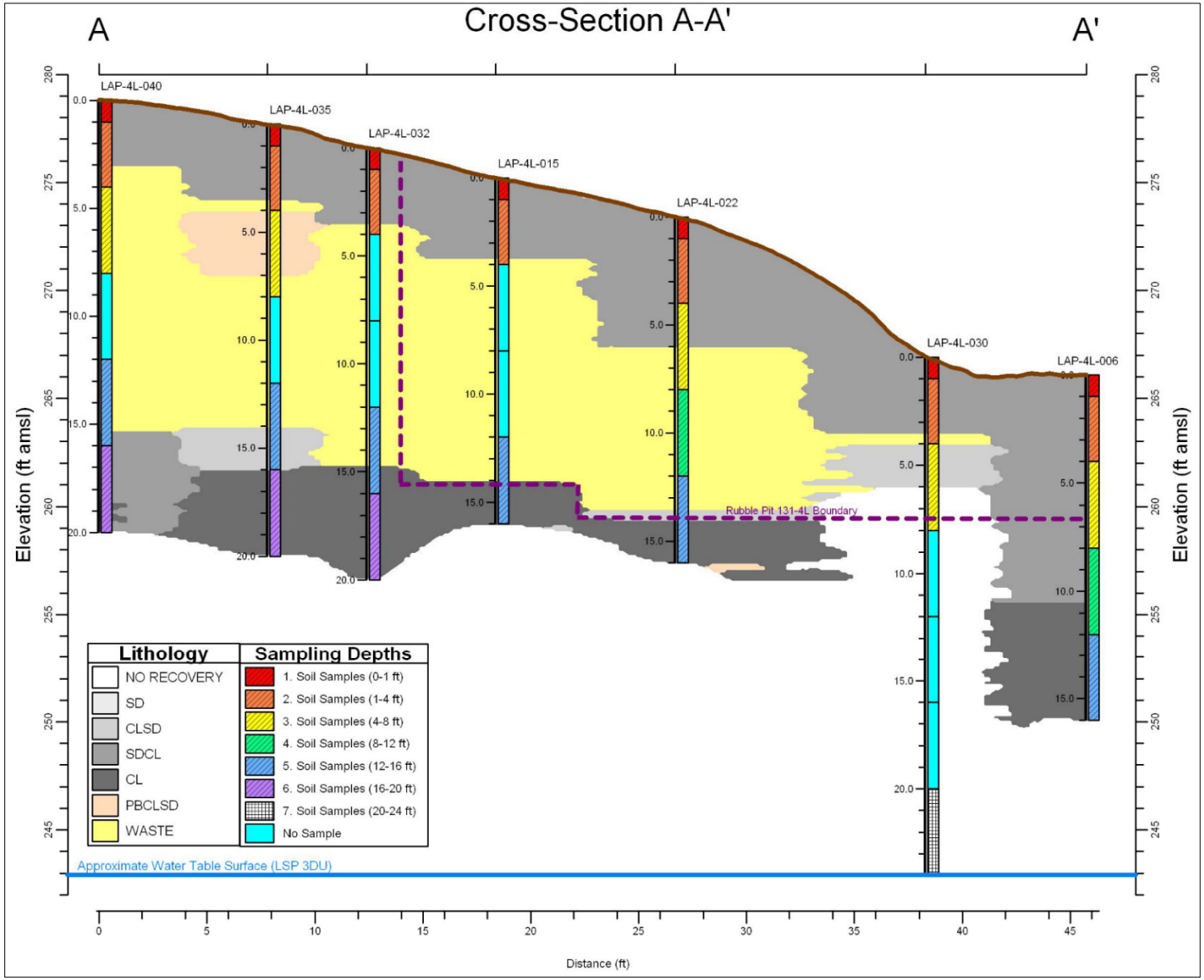

Figure 8. Cross-Section A-A' Through the L-Area Rubble Pit 131-4L Subunit

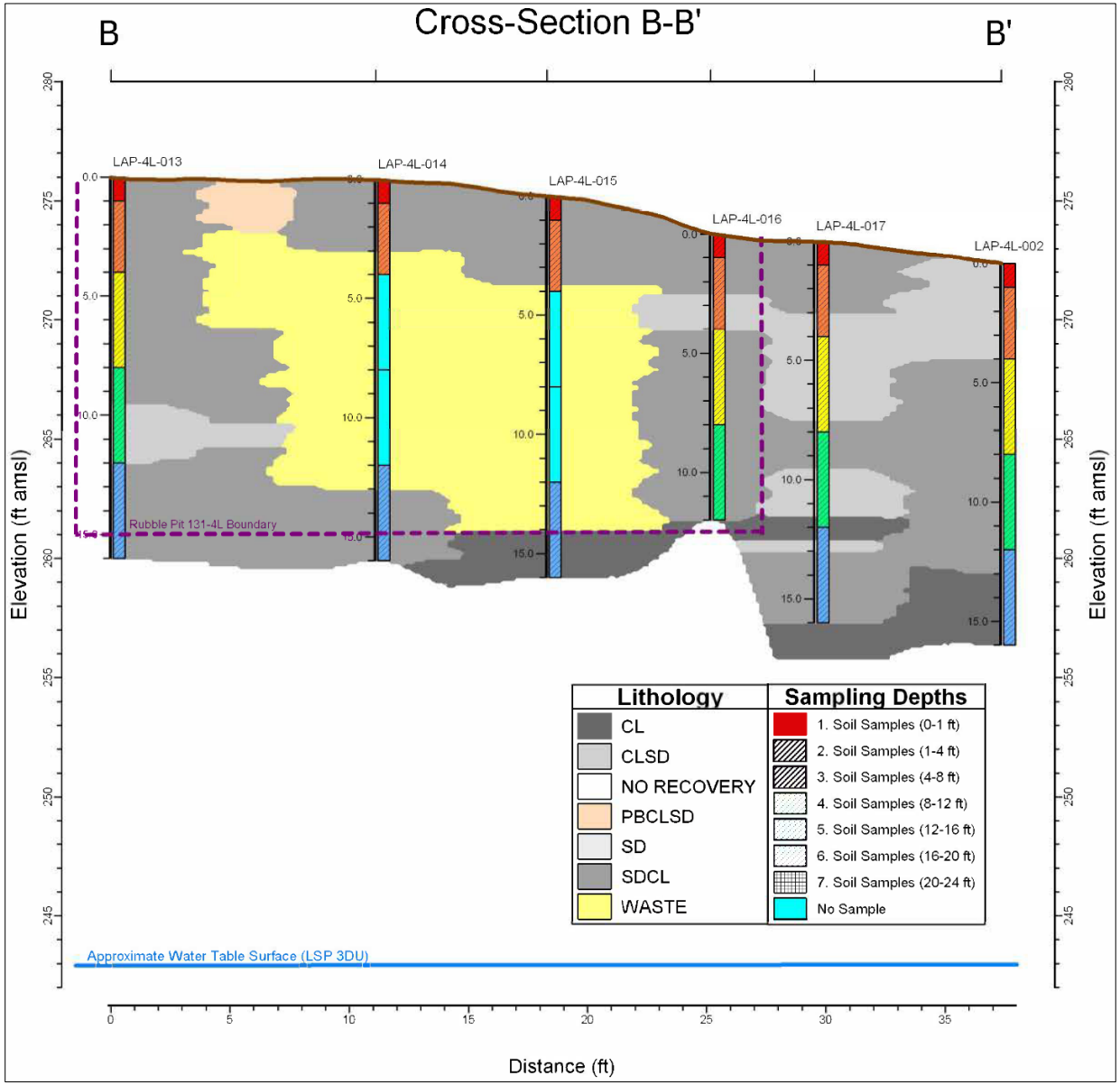

Figure 9. Cross-Section B-B' Through the L-Area Rubble Pit 131-4L Subunit

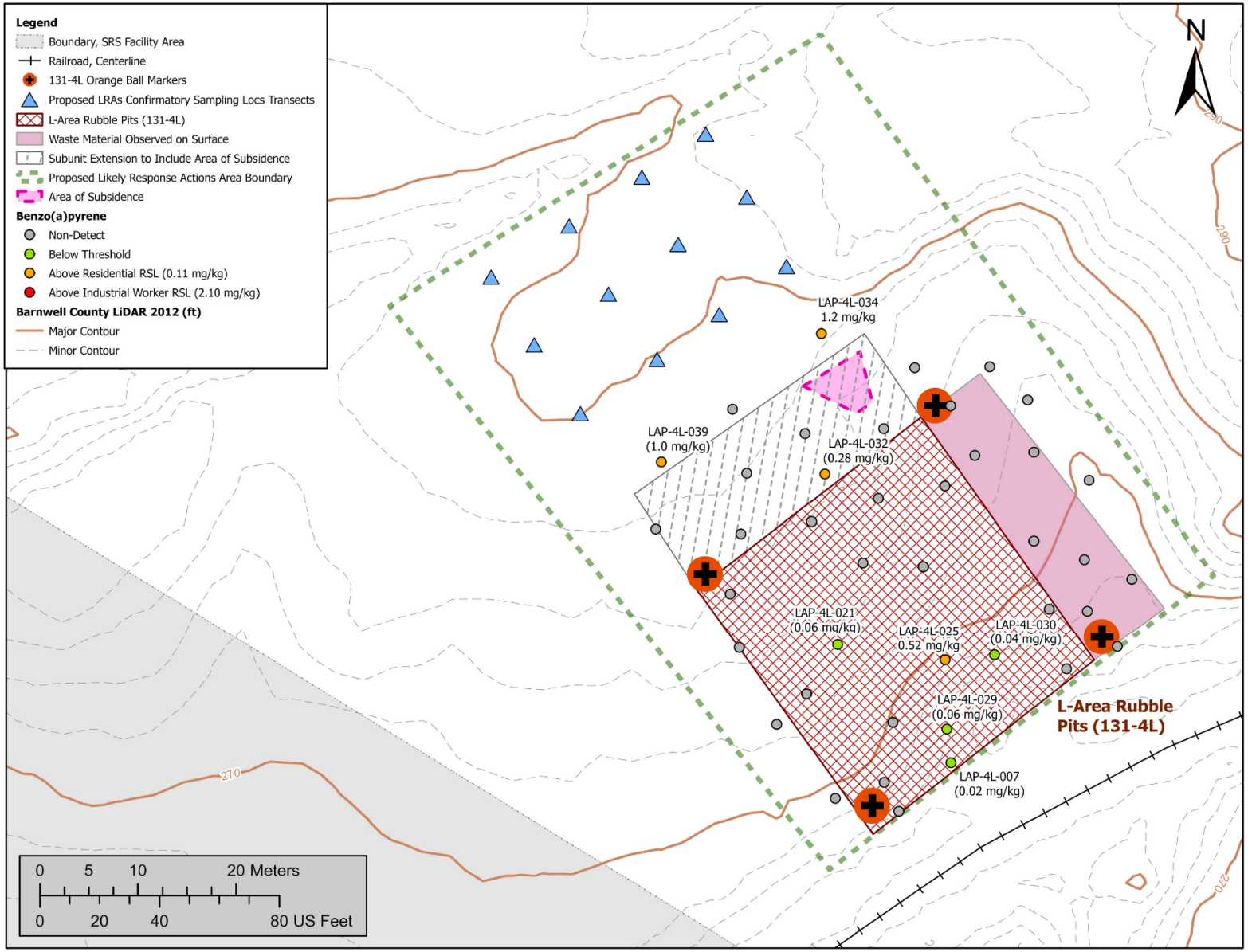

Figure 10. L-Area Rubble Pit 131-4L Benzo[a]pyrene Surface Soil (0-0.3 m [0-1 ft]) Results

Table 1. Summary of Risk Assessment Results

Subunit	Refined Constituent of Concerns (RCOC)				
	Contaminant Migration	Human Health Risk Assessment		Ecological Risk Assessment	Principal Threat Source Material
		Residential	Industrial		
ECODS L-3[1]	Soil All depths None	Soil 0 to 0.3 m (0 to 1 ft) *Aroclor 1254* ***Risk = 5.4E-06*** ***HQ = 1.1*** *Aroclor 1260* ***Risk = 1.5E-06*** *PCBs*[3] ***TCR = 6.9E-06***	Soil 0 to 0.3 m (0 to 1 ft) None	Soil 0 to 0.3 m & 0.3 to 1.2 m (0 to 1 ft & 1 to 4 ft) None	Soil All depths None
L-Area Rubble Pit (LRP) (131-1L)	Soil All depths None	Soil 0 to 0.3 m (0 to 1 ft) None	Soil 0 to 0.3 m (0 to 1 ft) None	Soil 0 to 0.3 m & 0.3 to 1.2 m (0 to 1 ft & 1 to 4 ft) None	Soil All depths None
LRP (131-4L)[2]	Soil All depths None	Soil 0 to 0.3 m (0 to 1 ft) *Benzo[a]pyrene* ***Risk = 1.4E-06***	Soil 0 to 0.3 m (0 to 1 ft) None	Soil 0 to 0.3 m & 0.3 to 1.2 m (0 to 1 ft & 1 to 4 ft) None	Soil All depths None

1 – Asbestos Containing Material (ACM) is likely to be present at ECODS L-3 Subunit
2 – ACM is present at LRP (131-4L) Subunit
3 – Polychlorinated biphenyls (PCBs) also identified as Applicable or Relevant Appropriate Requirements (ARAR) (Toxic Substance Control Act [TSCA]) RCOCs

Table 2. Alternative Screening for the ECODS L-3, LRP 131-1L[A] and LRP 131-4L OU

Alternative	Effectiveness	Implementability[B]	Cost	Status	Comments
No Action	Not effective in reducing exposure of contaminated media to human receptors. Alternative does not treat or remove waste.	Not Applicable	None	Required	Alternative is required by National Contingency Plan. Influenced by risk management decision to consider impact of removal/backfill alternatives on ecosystem.
Land Use Controls	Effective in reducing exposure from contaminated media to human receptors. Alternative leaves contaminated media in place.	Installation of warning signs and site inspections.	Low	Retained	Requires five-year remedy reviews.
Soil Cover/LUCs	Effective in reducing exposure from contaminated media to human receptors. Alternative leaves contaminated media in place.	Involves clearing and grubbing of vegetation and backfilling to break exposure pathway from contaminated media using standard earth-moving equipment. Installation of warning signs and site inspections.	High	Retained	Requires five-year remedy reviews. Requires LUCs to ensure the integrity of a soil cover.
Excavation and Disposal	Effective in eliminating exposure from contaminated media to human receptors after implementation.	Involves clearing and grubbing of vegetation, management of surface water, disposal of contaminated media at an offsite disposal facility, confirmatory sampling to confirm the absence of contaminated media, and backfilling for site restoration using standard earth-moving equipment.	High	Retained	Does not require five-year remedy reviews. Does not require LUCs.

[A] LRP 131-1L Subunit does not have any problems warranting action – therefore analysis of alternatives in the CMS/FS does not apply.
[B] LRP 131-4L Subunit will require additional confirmatory coring for visual observation of waste during the remedy design in the CMIP/RAIP.

Table 3. Implementation Schedule List of Submittals

Deliverable	Date
RFI/RI with CMS/FS and BRA	7/31/2024
Statement of Basis/Proposed Plan	6/5/2025
Record of Decision (ROD)	1/5/2026
Corrective Measures Implementation/ Remedial Action Implementation Plan	7/22/2026
Land Use Control Implementation Plan	7/22/2026
ROD Issuance	9/24/2026

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