Procurement Specification/Statement of Work (SOW) Cover Sheet

Proc. Ref. E7, 2.14

1. Title		
Decommissioning of D-Area Coal Handling Houses and Associated Facilities		
2. Specification/SOW Number	3. Revision	5. Functional Classification
G-SOW-D-00015	0	GS
6. Requester Department	7. Requester Division	
EC&ACP	M&O	

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Procurement Specification/Statement of Work (SOW)
Revision History Sheet

1. Specification/SOW No.			2. Revision No.	3. Page
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4. Date	**5. Revision No.**	**6. Paragraph No.**	**7. Description of Changes**	
January 11, 2021	0	N/A	Initial Issue for Procurement	

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1.0 SCOPE

1.1 General Description

1.1.1 Summary

1.1.1.1 Provide labor, materials, and services required for the Decommissioning of D-Area Coal Handling Houses and Associated Facilities, and the remnants of several partially decommissioned facilities and their associated appurtenances in D-Area of the Savannah River Site (SRS) as defined in the procurement documentation including this Statement of Work (SOW).

1.2 General Description of Services

1.2.1 This SOW describes the activities required for the safe Decommissioning of D-Area Coal Handling Houses and Associated Facilities, and the remnants of several facilities and their associated appurtenances that have previously been partially decommissioned by the SRS-Community Reuse Organization (CRO) in D-Area of the SRS.

1.2.1.1 D-Area Coal Handling Houses and Associated Facilities

1.2.1.2 454-D, D-Area Diesel Fuel Tank and 454-1D, D-Area Diesel Fuel Unloading Facility

1.2.1.3 484-13D, D-Area Storage Building

1.2.1.4 683-D, Chlorine Unloading and Storage

1.2.2 The work to be performed includes demolition, management of non-friable asbestos, and removal of the buildings and all associated appurtenances (such as equipment, hydrants, bollards, electrical junction boxes, hose racks, sea-land containers, etc.) as described herein.

1.2.3 D-Area Coal Handling Houses and Associated Facilities

1.2.3.1 The proposed decommissioning end state of the underground structures of the facilities, which have no defined or anticipated future mission, is demolition of the tops of the concrete structures/tunnels for Conveyor No. 1 and Conveyor No. 4, removal and appropriate disposition of the conveyors for Conveyor No. 1 and Conveyor No. 4, removal of the remnants of the Track Hoppers at the east end of Conveyor No. 1, and removal of the remnants of the Reclaim Hopper at the south end of Conveyor No. 4. The remaining concrete structure for Conveyor No. 1 tunnel and Conveyor No. 4 tunnel along with the Track Hoppers and Reclaim Hopper shall remain. The floors of the tunnels for Conveyor No. 1 and Conveyor No. 4 will be penetrated at their low points to allow water drainage, and then, along with the Track Hoppers and Reclaim Hopper, will be refilled with concrete debris, rip-rap (minimum of 3-feet [ft.]), stone, excavated dirt and augmented with additional fill as may be required to bring them to grade.

1.2.3.2 The proposed decommissioning end-state for the above grade structures of these facilities, including any additional above ground appurtenances (such as hose racks, hydrants, bollards, electrical junction boxes, etc.), which have no defined or anticipated future mission, is demolition to the structures' slabs, or to grade, as appropriate. Conveyor No. 3 will be decommissioned in its entirety from the Building 484-21D Transfer House to the 484-D Powerhouse. Electrical junction boxes (See Attachment 5.1, Figures 16 and 17) encountered in the area shall be demolished and removed; any remaining holes shall be filled to the top of elevation with gravel/stone. All coarse debris will be removed from the slabs. All concrete slab penetrations greater than 2" in diameter will be cut off level with the slab, plugged and grouted in accordance with Reference 2.4.2.15. Slab protrusions will be cut off flush with the slabs. Any stains identified on the concrete slabs during decommissioning will be pressure washed

and/or cleaned with a strong surfactant, such as BioSolve™, as part of the decommissioning activities for these facilities.

1.2.4 454-D, D-Area Diesel Fuel Tank and 454-1D, D-Area Diesel Fuel Unloading Facility

1.2.4.1 The proposed decommissioning end-state for these facilities is removal of the tank and removal of all appurtenances, leaving only the concrete slabs, concrete tank bases, concrete pump bases and surrounding concrete dikes/curbs. The removal and disposition of the tank is outside the scope of this SOW. The sumps in the containment area of the 454-D Diesel Fuel Tank and on the west side of the 454-1D Diesel Fuel Unloading Facility (after removing the sump pumps) will be filled with concrete. The containment wall (dike) near the sump on the northwest corner of the dike wall and at the west wall (current) opening to the sump in the curb of the Unloading Facility will both be breached (cleaved) to prevent rainwater from accumulating in both areas.

1.2.5 484-13D, D-Area Storage Building

1.2.5.1 Ancillary to 484-13D is the 80-22D D-Area Bone Yard. The proposed decommissioning end-state for the 80-22 D Bone Yard is removal of all coarse debris form the slabs, and all low points and penetrations greater than 2" diameter or greater filled with grout or gravel.

1.2.5.2 The proposed decommissioning end-state for the above ground appurtenances of this facility, (such as hydrants, bollards, perimeter fencing, etc.), which have no defined or anticipated future mission, is demolition to the structures' slabs, or to grade, as appropriate.

1.2.6 683-D, Chlorine Unloading and Storage

1.2.6.1 The proposed decommissioning end-state for this facility is demolition of the above grade structure to the building slab.

1.2.6.2 Northwest of the 683-D concrete slab are the following ancillaries:

A. Three (3) sea-land containers (SRS-PB-01214, SRS-PB-01212, SRS-PB-01216)
B. Handi-House (SRS-PB-EX0046)
C. Metal tracks

1.2.6.3 The proposed decommissioning end-state for these ancillaries is dismantlement and removal (D&R) to grade.

1.3 Facility Descriptions

1.3.1 **The D-Area Coal Handling System** The complete coal handling system is located south of the 484-D Powerhouse at the Savannah River Site (SRS). The coal handling facilities consisted of three major structures (Coal Handling Shaker House [484-24D], Coal Handling Crusher House [484-22D], and Coal Handling Transfer House [484-21D]), as well as Track Hoppers, coal feeders, conveyors, chutes, coal crusher, magnetic pulleys, tripper car, Reclaim Hopper, and equipment to move the coal within the coal yard (See Attachment 5.1, Figures 1 and 2). The 484-D Powerhouse ceased operation on April 10, 2012 and the deactivation process for all associated Powerhouse facilities (including the coal handling facilities) commenced shortly after that date. D-Area deactivation was completed on March 31, 2014.

1.3.2 The D-Area coal handling system supplied coal to the 484-D Powerhouse. The primary function of the 484-D Powerhouse was to provide steam and electric power for the 400-D Area, power for the 681-5G Pump House, to supplement standby power for all other SRS areas and to provide start-up power requirements in the 100 Areas. Since coal was the fuel source used to generate the power, a system of coal handling facilities was necessary to deliver the coal to the 484-D Powerhouse.

1.3.2.1 The D-Area Coal Handling Houses and Associated Facilities consist of the following buildings and ancillary structures:

A. Coal Handling Houses
   1. 484-24D Coal Handling Shaker House
   2. 484-22D Coal Handling Crusher House
   3. 484-21D Coal Handling Transfer House

B. Portable Buildings
   1. 484-23D Coal Handling Breakroom Building (also known as [aka] SRS-PB-EX0032)
   2. SRS-PB-EX0033 Coal Handling Breakroom Building for Crusher House
   3. SRS-PB-EX0035 Storage Shed for Portable Equipment, Lube and Spare Parts

C. Coal Conveyor Systems
   1. Conveyor No. 1 from Shaker House (484-24D) to Crusher House (484-22D)
   2. Conveyor No. 2 from Crusher House (484-22D) to Transfer House (484-21D)
   3. Conveyor No. 3 from Transfer House (484-21D) to Powerhouse (484-D)
   4. Conveyor No. 4 from Reclaim Hopper to Crusher House (484-22D)
   5. Conveyor No. 5 from Transfer House (484-21D) to Coal Pile (in 484-17D)

1.3.2.2 **Coal Handling Shaker House (484-24D):** The starting point for coal handling began with the Coal Handling Shaker House (484-24D) and Track Hoppers beneath the building (See Attachment 5.1, Figures 3 and 4). Coal was initially delivered by rail to the Track Hoppers where an electrically operated car shaker located in the Coal Handling Shaker House (484-24D) assisted emptying coal over the reciprocating plate feeders in the Track Hoppers.

1.3.2.3 The Track Hoppers on the north side of the building were abandoned in place circa 1988 when coal delivery by rail was stopped in favor of delivery by trucks directly to the coal yard or the south Track Hoppers.

1.3.2.4 The Coal Handling Shaker House (484-24D) was constructed circa 1953 and consists of a steel I-beam framework with raised seam metal siding and roof panels, supported by a concrete foundation. The lofted floor level is constructed of steel plate flooring which is accessed by a steel staircase.

1.3.2.5 The below grade stairwell and Track Hoppers shown in Attachment 5.1, Figure 4 were filled with dirt and capped with clay under a D-Area work order and in conjunction with a South Carolina Department of Health and Environmental Control (SCDHEC) structural fill permit (Reference 2.4.2.8).

1.3.2.6 There is no presence of asbestos containing material (ACM) in Building 484-24D (Reference 2.4.2.2).

1.3.2.7 **Coal Handling Breakroom Building (Building 484-23D, aka SRS-PB-EX0032):** Adjacent to the Coal Handling Shaker House is Building 484-23D, Coal Handling Breakroom Building (See Attachment 5.1, Figure 5). This building is a 12-foot (ft) x 16-ft prefabricated wood framework with metal siding and a metal roof portable building supported by non-grouted masonry blocks and wood blocks on a concrete slab.

1.3.2.8 The building was formerly electrically powered and was supplied with an air conditioning unit.

1.3.2.9 There is a presence of non-friable asbestos in Building 484-23D (Reference 2.4.2.3).

1.3.2.10 **Conveyor No. 1:** Conveyor No. 1 (See Attachment 5.1, Figures 6, 7, and 8) consisted of an underground portion that started at the Track Hoppers (See Attachment 5.1, Figure 4) below the Coal Handling Shaker House (484-24D) and proceeded west through the concrete bunker

where Conveyor No. 1 transitioned from underground to above ground to the Coal Handling Crusher House (484-22D).

1.3.2.11 A section of Conveyor No. 1 was cut and removed during deactivation in 2013 and the concrete structure leading to the underground portion of Conveyor No. 1 was closed with a steel plate to prevent water and animal intrusion (See Attachment 5.1, Figure 7). The tunnel associated with Conveyor No. 1 was deactivated circa 2013. Deactivation of the tunnel included electrical disconnects, removal of all light bulbs, draining oil from gearboxes, washdown of the tunnel floor, removal of the washdown water, conveyor belts safely cut and left in place, and the west end of the tunnel closed with a steel plate.

1.3.2.12 There is a presence of non-friable asbestos in Conveyor No. 1 (Reference 2.4.2.4).

1.3.2.13 **Coal Handling Crusher House (484-22D):** Building 484-22D, the Coal Handling Crusher House (See Attachment 5.1, Figures 9 and 10) was constructed circa 1953 and consists of a steel I-beam framework supported by a concrete slab and foundation. The exterior is finished with raised-seam metal siding and roof panels. The multi-level interior is constructed with steel plate flooring that is interconnected and accessed by a steel staircase.

1.3.2.14 After the coal was delivered to the Coal Handling Shaker House (484-23D), it was transferred to the Coal Handling Crusher House (484-22D) via Conveyer No. 1. The coal was crushed at 484-22D via heavy equipment in that facility and then sent to the Coal Handling Transfer House (484-21D) via Conveyor No. 2 (See Attachment 5.1, Figure 6).

1.3.2.15 Coal from the Transfer House was either sent to the 484-D Powerhouse via Conveyor No. 3 or to the stockpile south of the Transfer House via Conveyor No 5. Coal from the stockpile was moved by front-end loader to the Reclaim Hopper where it was returned/sent to the Crusher House (484-22D) via Conveyor No. 4 to repeat the cycle of either going to the 484-D Powerhouse or retuning to the stockpile.

1.3.2.16 There is a presence of non-friable asbestos in Building 484-22D (Reference 2.4.2.4).

1.3.2.17 **Conveyer No. 4:** A section of the above ground portion of Conveyor No. 4 was removed, and the tunnel was closed with a steel plate to prevent water and animal intrusion after deactivation in 2013 (See Attachment 5.1, Figure 12).

1.3.2.18 The tunnel along with the Reclaim Hopper were deactivated circa 2013. Deactivation of the tunnel and Reclaim Hopper included electrical disconnects, removal of all light bulbs, draining oil from gearboxes, washdown of the tunnel floor, removal of the washdown water, and conveyor belts safely cut and left in place.

1.3.2.19 There is a presence of non-friable asbestos in Conveyor No. 4 (Reference 2.4.2.4).

1.3.2.20 **Reclaim Hopper:** The Reclaim Hopper is located at the south end of the Conveyor No. 4 tunnel (See Attachment 5.1, Figure 13). The gear box for the Reclaim Hopper was de-energized and drained of oil which was properly disposed of. The below grade structure of the Reclaim Hopper was filled with dirt and capped with clay under a D-Area work order and in conjunction with a SCDHEC structural fill permit (Reference 2.4.2.8).

1.3.2.21 **SRS-PB-EX0033 Coal Handling Breakroom Building for Crusher House:** Adjacent to the 484-22D Crusher House are two smaller buildings identified as SRS-PB-EX0033 and SRS-PB-EX0035 (See Attachment 5.1, Figures 14 and 15, respectively). SRS-PB-EX0033 is a 12-ft x 16-ft prefabricated wood framework with metal siding and a metal roof building supported by non-grouted masonry blocks and wood blocks on a concrete slab. The building was formerly electrically powered but had no air conditioning. During the deactivation of D-Area all electricity to the building was disconnected. Electrical junction boxes are shown in Attachment 5.1, Figures 16 and 17).

1.3.2.22 There is no presence of ACM in Building SRS-PB-EX0033 (Reference 2.4.2.5).

1.3.2.23 **SRS-PB-EX0035 Storage Shed for Portable Equipment, Lube and Spare Parts:** This storage shed (See Attachment 5.1, Figure 15) is an approximately (~) 10-ft x 5-ft open faced structure comprised of a metal framework, corrugated metal on three sides and the roof. The structure is mounted on an affixed metal pallet and has no electricity or plumbing.

1.3.2.24 There is no presence of ACM in Building SRS-PB-EX0035 (Reference 2.4.2.6).

1.3.2.25 **Conveyer No. 2:** Conveyor No. 2 carried coal from the Coal Handling Crusher House (484-22D) to the Coal Handling Transfer House (484-21D) (See Attachment 5.1, Figures 1 and 6).

1.3.2.26 There is a presence of non-friable asbestos in Conveyor No. 2 (Reference 2.4.2.4).

1.3.2.27 **Conveyer No. 3**: Conveyor No. 3 carried coal from the Coal Handling Transfer House (484-21D) to the Powerhouse (484-D) (See Attachment 5.1, Figures 1, 19, and 20).

1.3.2.28 There is a presence of non-friable asbestos in Conveyor No. 3 (Reference 2.4.2.7).

1.3.2.29 **Coal Handling Transfer House (484-21D):** Building 484-21D, the Coal Handling Transfer House (See Attachment 5.1, Figures 18 and 20) was constructed circa 1953 and consists of a steel I-beam framework supported by a concrete slab and foundation. The exterior is finished with raised-seam metal siding and roof panels. The multi-level interior is constructed with steel plate flooring that is interconnected and accessed by a steel staircase.

1.3.2.30 Coal was received via Conveyor No. 2 in the Transfer House from the Coal Handling Crusher House. In the Transfer House Conveyor No. 2 discharged coal to either Conveyor No. 3 or Conveyor No. 5. Conveyor No. 3 carried coal to the 484-D Powerhouse. Conveyor No. 5 sent coal back to the coal storage yard south of the Transfer House.

1.3.2.31 Coal was reclaimed from the storage yard by bulldozer or front-end loader that dumped or pushed the coal into the Reclaim Hopper located south of the Crusher House. Coal emptied into the Reclaim Hopper was carried back to the Crusher House via Conveyor No. 4 to repeat the process of feeding the crusher and sending it on to the Transfer House.

1.3.2.32 There is no presence of ACM in Building 484-21D (Reference 2.4.2.7).

1.3.2.33 **Conveyer No. 5:** Conveyor No. 5 carried coal from the Coal Handling Transfer House (484-21D) back to the stockpile in the 484-17D Coal Yard.

1.3.2.34 There is a presence of non-friable asbestos in Conveyor No. 5 (Reference 2.4.2.7).

1.3.2.35 D-Area power has been globally disconnected from the electrical grid, thereby rendering all subject facilities electrically “cold & dark”. All facilities have been isolated mechanically. Deenergized power, control wiring and instrumentation are currently abandoned in place. Mechanical equipment, structures and instrumentation are currently closed to a safe state and abandoned in place and/or removed altogether.

1.3.2.36 **454-D, D-Area Diesel Fuel Tank and 454-1D D-Area Diesel Fuel Unloading Facility:** The fuel oil tank is a 15,000-gallon (gal), carbon steel tank and was erected circa 1990. The tank is mounted on two cradle mounts inside a containment dike. The containment dike is cast-in-place concrete. The inner dimensions of the containment dike are ~ 20 ft-6 inches (in.) by 43 ft-4 in. The walls of the containment dike are ~12-in. thick while the slab is ~8-in. thick. The sump walls and floor are 12-in. thick all around (See Attachment 5.1, Figures 22-28).

1.3.2.37 The fuel oil tank is mounted on separate foundation supports above the slab of the containment structure. The foundation supports extend below the slab of the containment (See Attachment 5.1, Figures 25). The bottom of the containment dike slopes to the northwest corner with an approximate slope of 1/8 in. per foot. The sump in the northwest corner of the containment dike is ~3-ft wide on each side and 3-ft deep. The sump pump is off-center to the northwest in the sump. Within the confines of the containment dike were three transfer pumps (removed during deactivation in 2014) for the fuel oil, three discharge filters and associated piping, fittings, and

conduit. Controls and indications were outside the containment dike. The tank also has a 24-in. manhole at the south end.

1.3.2.38 There is no presence of ACM in either 454-D or 454-1D (Reference 2.4.2.13).

1.3.2.39 The 454-1D fuel oil truck unloading facility was erected circa 1990. The concrete pad for the unloading station is approximately 63' long by 13' wide. Included in the width are 6" wide curbs that run the length of the pad on either side. The curbs are 6" high at the ends of the pad and maintain a constant elevation the length of the pad.

1.3.2.40 Approximately 26'- 6" south of the north end of the pad, on the west side, is the unloading facility equipment. This includes the tanker connection, a spill box for catching small amounts of fuel oil spilled during connecting and disconnecting the tank truck, and a sump for catching spills of fuel oil from the pad. The entire pad at the unloading station slopes to the location of the sump. The opening in the curb that passes to the sump is 6" below the elevation at the north and south ends of the unloading station slab as well as the east side. The unloading facility sump is 4' on each of the sides and 4' deep. The sump pump is centered in the sump.

1.3.2.41 Other than reinforced concrete, the major materials of construction are painted and galvanized steel. Controls and indications are located at the station. Power to the facility was disconnected during deactivation (Reference 2.4.2.8).

1.3.2.42 Ancillary to 454-D are the cable trays and conduit/piping supports, including all supports from the north end of 454-D up to the tie-in at the southwest corner of the 484-D Powerhouse. See Attachment 5.1, Figure 22 for the demolition boundary of the cable trays and supports.

1.3.2.43 **484-13D, D-Area Storage Building:** The Bone Yard, 80-22D is enclosed by a fence that surrounds the area. The approximate dimensions of the Bone Yard are 68' by 430'. The Bone Yard is used for miscellaneous storage. The Bone Yard was placed into service circa 1973. Buried within the Bone Yard are process lines for domestic water and service raw water (See Attachment 5.1, Figures 29-31).

1.3.2.44 There are no sumps or drains associated with Building 484-13D.

1.3.2.45 There is no presence of ACM in Building 484-13 or the 80-22 Bone Yard (Reference 2.4.2.16).

1.3.2.46 **683-D, Chlorine Unloading and Storage:** Building 683-D is located on the west side of 400-D Area on the SRS in South Carolina. See Attachment 5.1, Figure 21 for 683-D's location in respect to surrounding buildings. The facility was constructed in 1952. On the southeast corner of the facility's concrete slab is a masonry constructed building where the chlorination room was located. The walls of the chlorination room are concrete block and mortar. The chlorination room is approximately 13' by 36' and 10' high (interior dimensions). There is a crack in the slab in the chlorination room. There is a small bridge crane in the chlorination room (See Attachment 5.1, Figures 32-35).

1.3.2.47 The building is free of hazardous materials/components including exit signs, fluorescent tubes, polychlorinated biphenyl (PCB) ballasts, batteries, etc. The electricity and water to the building were disconnected in 2014 (Reference 2.4.2.8).

1.3.2.48 There are stains in the concrete that appear to be from oil. The spaces of 683-D were used for maintenance activities as well as storage. Lube oil coolers, pumps, valves, and other equipment have been stored and/or serviced within the structure.

1.3.2.49 Northwest of the 683-D concrete slab are the following ancillaries (See Attachment 5.1, Figures 21, 32, and 34):

A. Three (3) sea-land containers (SRS-PB-01214, SRS-PB-01212, SRS-PB-01216)

B. Handi-House (SRS-PB-EX0046)

C. Metal tracks

1.3.2.50 There is a presence of PACM in the 3 sea-land containers and the Handi House (References 2.4.2.20, 2.4.2.21, 2.4.2.22, 2.4.2.23).

2.0 REFERENCES

2.1 Definitions

2.1.1 Acronyms

~	approximate, approximately
ACM	Asbestos Containing Material
BMP	Best Management Practice
CFR	Code of Federal Regulations
CRO	Community Reuse Organization
D&D	Deactivation and Decommissioning
D&R	Dismantlement and Removal, Dismantled and Removed
EC&ACP	Environmental Compliance and Area Completion Projects
EDR	Engineering Document Requirements
ft	foot, feet
FPP	Fire Protection Plan
GCO	Generator Certification Official (for SRS waste)
HSO	Health and Safety Officer
in.	inch, inches
NCR	Non-Conformance Report
OSHA	Occupational Safety and Health Administration
PACM	Presumed Asbestos Containing Material
PCBs	Polychlorinated Biphenyls
PDF	portable document format
PHSS	Packaging, Handling, Shipping, and Storage Requirements (PHSS)
PO	purchase order
SC	(State of) South Carolina
SCDHEC	South Carolina Department of Health and Environmental Control
SDDR	Supplier Deviation Disposition Request
SOW	Statement of Work
SRNS	Savannah River Nuclear Solutions, LLC
SRS	Savannah River Site
STR	Subcontract Technical Representative
TSP	Task Specific Plan
WPP	Worker Protection Plan

2.1.2 Terms

2.1.2.1 Administrative Hold Point: A designated verification beyond which work does not proceed until verification is performed and documented by a Subcontract Technical Representative (STR).

2.1.2.2 Repro: Reproducible paper copy.

2.1.2.3 Verification: The act of reviewing, inspecting, testing, checking, auditing, or otherwise determining and documenting whether items, processes, services, or documents conform to specified requirements.

2.1.2.4 Competent Person: One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsafe, unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them - usually also identified as "Qualified" (29 Code of Federal Regulations [CFR] 1926.32 incl.1101).

2.1.2.5 Qualified (Person): One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.

2.1.2.6 Engineering Survey/Report: The Subcontractor shall be required to prepare an engineering survey/report that addresses the requirements of 29 CFR 1926.850(a). Prior to permitting employees to start demolition operations, an engineering survey shall be made, by a competent person, of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure.

Any adjacent structure where employees may be exposed shall also be similarly checked. The employer shall have in writing evidence that such a survey has been performed and outlines the methods, equipment to be used and sequence of events for all D&R activities, including but not limited to removal and placement in supplied containers of all recyclables, removal and handling of any hazardous materials, segregation, appropriate size reduction and disposition of all materials, etc. Also include as a minimum a proposed layout/location for office trailers, toilet facilities, equipment staging area, material staging area(s), etc. A competent (qualified) person shall perform the survey.

2.1.2.7 Facility: Any building, structure, or other improvement to real property including their functional systems and equipment; site development features such as landscaping, roads, walks, and parking areas; outside lighting and communications systems; central utility plants; utility supply and distribution systems; and other physical plant features. For purposes of this SOW, this facility consists of the structures, appurtenances, equipment, etc. identified within the body of this SOW and its Attachment 5.1.

2.2 Codes / Standards

2.2.1 General

2.2.1.1 Use the edition in effect at date of contract award unless noted otherwise.

A. Material standard editions dated within the previous 10 years from the date of contract award are acceptable.

2.2.1.2 Obtain SRNS acceptance for Codes / Standards not required by this specification prior to use.

2.2.1.3 Obtain SRNS acceptance for editions and/or addenda of Codes / Standards not specifically authorized by this specification prior to use.

2.2.2 Required National Codes / Standards

2.2.2.1 None

2.3 Orders / Regulations

2.3.1 Regulations

2.3.1.1 10 CFR 851 – Worker Safety and Health Program

2.3.1.2 29 CFR 1910 – Occupational Safety and Health Standards (OSHA)

2.3.1.3 29 CFR 1926 – Safety and Health Regulations for Construction

A. 29 CFR 1926 Subpart T – Demolition

B. 29 CFR,1926.32, 1101 (Labor, Definitions), including Subpart Z, Asbestos

C. 29 CFR,1926 Subpart P - Excavations

2.3.1.4 40 CFR Part 61.145 Standard for Demolition and Renovation

2.3.1.5 S.C. Reg. 61-107.19, Solid Waste Landfill Regulation"

2.3.1.6 South Carolina Department of Health and Environmental Control (SCDHEC) Stormwater Management Best Management Practice Handbook, (2006)

2.4 SRNS Documents

2.4.1 Drawings (for Subcontractor reference)

2.4.1.1 484-24D Coal Handling Shaker House (including Track Hoppers):

A. BPF202088-000062, Rev. 0, dated 9/29/1951 "General Arrangement Car Shaker Bldg."

B. W728739, Rev. 6, dated 6/22/1984 "Coal Handling Facility Track Hopper Bldg. Stairway Layout & Sects"

C. W135983, Rev. 56, dated10/19/1951, "Coal Handling System Foundation for Track Hopper Sheet No. 1 of 3"

D. W136026, Rev. 25, dated 10/4/1951, "Coal Handling System Foundation for Track Hopper Sheet No. 2 of 3"

E. W731464, Rev. 1, dated 5/10/1984, "Coal Handling Facility Track Hopper General Arrangement Steel & Concrete"

F. W731466, Rev. 1, dated 5/10/1984, "Coal Handling Facility Track Hopper Sections Steel & Concrete

G. W735356, Rev. 39, dated 9/30/83, "Track Hopper & Conv. # 1 Lighting Plan/Instrument Arrg't Electrical/Instrumentation"

2.4.1.2 484-22D Coal Handling Crusher House (including Reclaim Hopper):

A. BPF202088-000038, Rev. 1, dated 9/26/1951 "Arrangement of Crusher House"

B. BPF202088-000080, Rev. 0, dated 12/27/1951 "Design of Chutes for Crusher House"

C. W136054, Rev. 42, dated 7/11/1983 "Coal Handling System Reclaim Coal Hopper Support"

D. W728745, Rev. 8, dated 6/22/1984 "Crusher House – Conveyor #1 Take Up Housing (U)"

E. W729019, Rev. 28, dated 5/30/1984 "Coal Handling Facility Crusher House Plans"

F. W732665, Rev. 11, dated 9/5/1984 "Coal Handling Facility Crusher House Control Room Steel Design"

G. W734200, Rev. 1, dated 5/16/1988 "Coal Handling Facility Crusher House Roof Plan & Exterior Elevation"

H. W735357, Rev. 85, dated 11/25/1987, "Crusher House Lighting Plan/Instrument Arrg't Electrical/Instrumentation"

I. W728742, Rev. 10, dated 5/30/1984, "Crusher House Sections & Detail Steel, Concrete & Plumbing"

J. W728745, Rev. 8, dated 6/22/1984, "Crusher House – Conv. # 1 Take Up Housing Steel"

K. W730329, Rev. 2, dated 1/30/1984, "Electrical Room – Coal Handling System Ventilation Arrangement H&V"

2.4.1.3 484-21D Coal Handling Transfer House:

A. W728741, Rev. 36, dated 8/22/1984 "Transfer House Plan and Elevation (U)"

B. W734199, Rev. 0, dated 9/5/1984 "Transfer House Roof Plan & Exterior Elevations"

C. W728750, Rev. 6, dated 6/22/1984 "Transfer House, Conveyor Number 2 Take Up Shed (U)"

D. W728733, Rev. 2, dated 5/10/1984, "Transfer & Crusher House General Layout & Key Index Concrete & Steel"

E. BPF202088-000029, Rev. 0, dated 2/23/1952, "Arrangement of Transfer House"

2.4.1.4 Conveyors:

A. W136014, Rev. 15, dated 6/10/1983 "Power Plant Coal Handling System Tunnel for Conveyor No. 1"

B. W728747, Rev. 9, dated 5/30/1984, "Conveyor Gallery Number 3 – At Transfer House Steel Design (U)"

C. W728753, Rev. 27, dated 5/30/1984, "Conveyor Number 3 - Bent and Tower Steel (U)"

D. W728756, Rev. 5, dated 5/30/1984, "Conveyor Number 3 – Middle Section Steel Design Steel"

E. W728740, Rev. 3, dated 5/30/1984, "Conveyor Number 3 (Powerhouse to Column) Steel Design Steel"

F. BPF202088-00006, Rev. 2, dated 9/21/1951, "Schematic Diagram Belt Conveyor No. 3"

G. W728759, Rev. 11, dated 5/30/1984, "Conveyor No. 3 & No. 4, Walkway & Floor Grating"

H. W730328, Rev. 0, dated 4/12/1983 "Conveyors, Transfer & Crusher House General Layout"

I. W735359, Rev. 16, dated 11/25/1987 "Power Plant Reclaim Hopper & Conv. #4 Lighting Plan/Inst. Arrgt."

J. W729068, Rev. 10, dated 6/22/1983 "Conveyor #1 General Arrangement Gallery (U)"

K. W728744, Rev. 2, dated 4/28/1983 "Conveyor Number 1 General Arrangement 30' Deck Truss (U)"

L. W731463, Rev. 1, dated 4/28/1983 "Coal Handling Facility Gen'l Arrg't Tunnel-Conv. #1 Plan & Sect. Steel"

M. W732900, Rev. 4, dated 4/28/1983 "Conveyor #4 & Reclaim Hopper Plan & Sections (U)"

2.4.1.5 W135967, Rev. 24, dated 6/7/1983 "Power Plant Building 484D Coal Handling System Foundation Layout"

2.4.1.6 W136296, Rev. 27, dated 11/25/1987 "Power Plant-Building No. 484-D Coal Handling System-Electrical Plot Plan Cable Ducts and Grounding"

2.4.1.7 454-D D-Area Diesel Fuel Tank and 454-1D D-Area Diesel Fuel Unloading Facility:

A. W2012835, Rev. 1, dated 3/18/1993 "Tank Storage Fac Containment Struct Fndn Plan, Sects & Dets (U)"

B. W2012836, Rev. 1, dated 3/16/1993 "Tank Storage Facility Misc Foundation Sections & Details (U)"

C. W2012840, Rev. 1, dated 3/18/1993 "Truck Unloading Facility Foundation Plan & Details (U)"

2.4.1.8 683-D, Chlorine Unloading and Storage

A. W735655, Rev. 6, dated 9/9/1986 "Gaseous Chlorination Facility Floor Plan & Section"

B. W745851, Rev. 26, dated 9/9/1986 "Gaseous Chlorination Facility Found Plan Sections & Details"

2.4.2 Documents

2.4.2.1 OSR 45-4, 2016, Supplier Deviation Disposition Request (SDDR)

A. With instructions

2.4.2.2 Q-APG-D-00002, Rev. 2, dated April 14, 2021, "Baseline Asbestos Inspection Report of Building 484-24D"

2.4.2.3 Q-APG-D-00042, Rev. 1, dated April 14, 2021, "Baseline Asbestos Inspection Report of Building 484-23D (aka SRS-PB-EX0032)"

2.4.2.4 Q-APG-D-00003, Rev. 1, dated April 14, 2021, "Baseline Asbestos Inspection Report of Building 484-22D" also includes Conveyor No. 1, Conveyor No. 2, and Conveyor No. 4.

2.4.2.5 Q-APG-D-00043, Rev. 0, dated February 25, 2021, "Baseline Asbestos Inspection Report of Building SRS-PB-EX0033"

2.4.2.6 Q-APG-D-00045, Rev. 0, dated March 9, 2021, "Baseline Asbestos Inspection Report of Building SRS-PB-EX0035"

2.4.2.7 Q-APG-D-00001, Rev. 1, dated April 14, 2021, "Baseline Asbestos Inspection Report of Building 484-21D", also includes Conveyor No. 3 and Conveyor No. 5.

2.4.2.8 V-PCOR-D-00042, Rev. 0, dated July 1, 2014, "Deactivation Project Final Report Building 484-D Powerhouse and Ancillary Buildings"

2.4.2.9 V-PMP-D-00047, Rev. 0, dated October 6, 2021, "Decommissioning End Points Document Coal Handling Houses and Associated Facilities"

2.4.2.10 Q-SDD-D-00020, Rev. 0, dated September 15, 2021, "Engineering Survey and Interference Report for Coal Handling Houses and Associated Facilities"

2.4.2.11 G-FDE-D-00057, Rev. 0, dated August 24, 2021, "Facility Decommissioning Evaluation, D-Area Coal Handling Houses and Associated Facilities"

2.4.2.12 G-FDE-D-00041, Rev. 0, dated November 3, 2019, "Facility Decommissioning Evaluation Building 454-D, D-Area Diesel Fuel Tank"

2.4.2.13 Q-APG-D-00021, Rev. 2, dated January 26, 2022, "Baseline Asbestos Inspection Report of Above Ground Storage Tank Building 454-D and Fuel Unloading Station Building 454-1D"

2.4.2.14 V-PMP-D-00024, Rev. 0, dated March 19, 2009, "Decommissioning End Points Document Building 454-D, D-Area Diesel Fuel Tank"

2.4.2.15 G-FDE-D-00021, Rev. 1, dated October 21, 2019, "Facility Decommissioning Evaluation Building 484-13D, D-Area Storage Building"

2.4.2.16 Q-APG-D-00013, Rev. 1, dated August 25, 2020, "Baseline Asbestos Inspection Report of Building 484-13D"

2.4.2.17 V-PMP-D-00022, Rev. 0, dated May 13, 2009, "Decommissioning End Points Document Building 484-13D, D-Area Storage Building"

2.4.2.18 G-FDE-D-00040, Rev. 0, dated November 13, 2019, "Facility Decommissioning Evaluation Building 683-D, Chlorine Unloading and Storage"

2.4.2.19 Q-APG-D-00015, Rev. 1, dated August 25, 2020, "Baseline Asbestos Inspection Report of Building 683-D"

2.4.2.20 Q-APG-D-00050, Rev. 0, dated January 26, 2022, "Baseline Asbestos Inspection Report of Building SRS-PB-EX0046"

2.4.2.21 Q-APG-D-00051, Rev. 0, dated January 26, 2022, "Baseline Asbestos Inspection Report of SRS-PB-01216"

2.4.2.22 Q-APG-D-00049, Rev. 0, dated January 26, 2022, "Baseline Asbestos Inspection Report of SRS-PB-01214"

2.4.2.23 Q-APG-D-00048, Rev. 0, dated January 26, 2022, "Baseline Asbestos Inspection Report of SRS-PB-01212"

2.4.2.24 V-PMP-D-00028, Rev. 0, dated September 17, 2009, "Decommissioning End Points Document Building 683-D, Chlorine Unloading and Storage"

2.4.2.25 E-SDD-D-00001, Rev. 1, dated August 19, 2020, "Verification of Hazardous Energy Isolations for Building 484-D Powerhouse and Ancillary Buildings"

2.4.2.26 E-SDD-D-00002, Rev. 1, dated March 31, 2021, "Closeout of Verification Document for Building 484-D Powerhouse and Ancillary Buildings"

2.4.2.27 S-EHS-D-00001, Rev. 1, dated October 2009, "Hazards Survey for D-Area"

2.4.2.28 SDD-2005-00170, Rev. 2, dated October 22, 2020, "Environmental Compliance and Area Completion Projects (EC&ACP) Deactivation and Decommissioning (D&D) Policy on Decommissioning End Points for Slabs, Pits, Basements and Basins (U)"

3.0 WORK REQUIREMENTS

3.1 General Scope

3.1.1 Employ all measures as required to protect personnel and the environment during the performance of this decommissioning work.

3.1.1.1 Prescriptive worker safety requirements are identified in 29 CFR 1926.

3.1.1.2 Provide all management, labor, materials, tools, equipment, supervision and services required for the completion of this SOW.

3.1.1.3 Work shall be performed in accordance with all applicable OSHA, SCDHEC and S.C. construction/demolition regulations and codes.

3.1.1.4 SRNS furnished material, equipment, services

A. SRS specific requirements for Subcontractor work on SRS in accordance with Special Provisions / Field Conditions which may include:

1. General Employee Training
2. Remote Worker Training
3. Emergency Response Briefing
4. Site Badging
5. Site Clearance Permit(s)

6. EC&ACP Waste Generator/Waste Verifier Training and Area Specific Training

B. Asbestos project design/management services to represent SRNS for the duration of these demolition activities, if any asbestos containing material (ACM) or presumed asbestos containing material (PACM) is subsequently identified during performance of this subcontract.

C. Receptacles/Accumulation Areas, as necessary, for all light bulbs, ballasts, etc.

D. Containers for disposition of universal waste.

E. OSR Form 4-356s for shipments of recyclable materials.

F. Special Waste Manifests/Worksheets for the disposition of special waste materials to the Three Rivers Landfill.

G. As built the final Demolition configuration and closure of the Site Clearance Permit(s) for the building within the scope of this SOW.

H. Work completed prior to Subcontractor mobilization shall include:

1. Isolate, relocate and/or eliminate all power/communication systems.
2. Building mechanically and electrically isolated rendering them "Cold and Dark."

3.1.1.5 Subcontractor furnished material, equipment, and/or services

A. Generators, as needed, qualified to site requirements

B. Hazardous material such as various light bulbs, thermostats with mercury switches, circuit boards will still require removal as universal waste prior to demolition. For light ballasts that remain in the building, the ballasts will be removed and inspected to determine if they contain polychlorinated biphenyls (PCB). Any switches that remain in the building will also be inspected for mercury.

C. Containers/roll-off pans, skid pans, and trucks for collection, transportation, and disposal of waste materials, recyclables, and debris (other than as specified in Sections 3.1.1.4.C. and 3.1.1.4.D.).

D. Tools, equipment, and consumables for non-radiological demolition work

E. Portable toilets for work location

F. Worker break/change facilities

G. All required personal protective safety equipment

H. All other required safety equipment

I. Prepare an Engineering Survey (Section 2.1.2.6) as required by 29 CFR 1926, Subpart T, for inclusion in the Subcontractor's Worker Protection Plan (Reference 3.1.1.7.G.)

J. Prepare and submit a Lift Plan that establishes the process for the D&R of Conveyor No. 3 as specified in this document. Subcontractor agrees to verify all weights and provide rigging and hoisting equipment to safely handle all components of the safe D&R of Conveyor No. 3.

K. Prepare and submit an Excavation Plan that establishes the process for the safe D&R of the underground sections of Conveyor No.1 and Conveyor No. 4 as required by 29 CFR 1926 Subpart P and per Manual 8Q, Procedure 34.

3.1.1.6 Prepare and submit a Fire Protection Plan (FPP) that defines and establishes the process and program for protecting life and property from fire during demolition activities.

A. The FPP shall outline the assignments of key personnel in the event of a fire and provide an evacuation plan for workers on the site.

B. The FPP may be included in the Worker Protection Plan (WPP) and shall consider requirements, programs and life safety plans already in place as well as adherence to all applicable OSHA guidelines.

C. Work shall be performed in accordance with the approved and accepted FPP.

1. Where guidelines are or may be in conflict, the strictest criteria shall apply.

D. The FPP shall specifically address and include as a minimum the following:

1. Implementation of 29 CFR 1926 requirements.
2. Use of and adherence to S.C. Reg. 61-107.19
3. Control of exits in and around the facilities
4. Control of transient combustibles (wood, paper, plastic, oily rags, etc.)
5. Control of flammable/combustible liquids
6. Temporary enclosures – self-extinguishing polyethylene
7. Temporary barricades
8. Use/refueling of internal combustion engines
9. Smoking in designated areas
10. Temporary lighting
11. Maintenance of access around the building for firefighting purposes
12. Hot work operations:
    a. Generate and submit a Hot Work Permit Procedure.
    b. Notify the SRNS STR that the permit is in place prior to beginning hot work.

3.1.1.7 Prepare a WPP and submit for the D&R of all Coal Handling Houses and all associated appurtenances as described herein (see Section 1.3).

A. The WPP shall cover the entire scope of field activities, potential hazards and describe the measures to be implemented to safeguard the health and welfare of workers in this Decommissioning effort.

B. As noted in 3.1.1.6.B, the WPP may also include the FPP.

C. No work will be allowed to start until WPPs have been reviewed and accepted by SRNS.

D. Include WPPs for the Subcontractor and any Sub-tier Subcontractors (if not covered by the Subcontractor's WPP) completely describing all measures in place to ensure the safety and wellbeing of those involved in these activities.

E. Work shall be performed in accordance with approved and accepted WPPs.

F. Describe the implementation requirements of 10 CFR 851, 29 CFR 1910 and 29 CFR 1926 for this demolition scope.

G. Include the Engineering Survey required by 29 CFR 1926, Subpart T.

3.1.1.8 Prepare and submit Task Specific Plans (TSPs) including any other safety and health provisions described in this SOW as necessary for each specific task/job.

A. No task work will be allowed to start until TSPs have been reviewed and accepted by SRNS.

B. Include TSPs for the Subcontractor and any Sub-tier Subcontractors that describe in detail how each aspect of the work will be handled by the performing entity.

C. TSP shall demonstrate how the requirements of the Decommissioning End Points Document (References 2.4.2.9) shall be met.

D. Work shall be performed in accordance with SRNS approved and accepted TSPs

3.1.1.9 Field verify the existing physical conditions, utilities, dimensions, and details affecting the work in each facility/area/site of this project.

3.1.1.10 Prepare a Decommissioning Plan and Activities Schedule which identify in detail the step-by-step activities relative to the D&R of the Coal Handling Houses and all associated appurtenances including, but not limited to:

A. Task Preview with Site Walkdown,

B. Pre-Job Brief,

C. Mobilization/demobilization,

D. Staffing level to meet project schedule,

E. Removal, collection, and packaging for final disposition of materials identified as:

1. Hazardous and universal waste materials discovered during decommissioning that were not previously removed by SRNS.
2. Recyclable metals: All brass will require segregation for metal recycle through the salvage yard. Scrap metals will be size reduced and segregated through the salvage yard. Leaded joints, if found, will be segregated and managed per GCO direction.
3. Plugging and grouting openings through the floor slab and surrounding ground such as drainpipes, conduits, etc.

F. No decommissioning activities shall start until the Plan has been reviewed and accepted by SRNS.

G. Post-Job Review.

3.1.1.11 Inform the SRNS Subcontract Technical Representative immediately of any spills or releases to the environment (air, water, soil, slab, etc.), regardless of amount.

A. STR will provide guidelines for any required remedial action.

B. Subcontractor is responsible for performing remedial actions.

3.1.1.12 Install sediment control Best Management Practice (BMP) as required around storm water drainage system prior to starting any demolition activities.

A. Prepare and submit placement, sizing, and modifications of Sediment Control BMPs. Additional information on the design and proper use of Sediment Control BMPs can be found in SCDHEC Stormwater Management BMP Handbook.

B. BMP Description:

1. Inlet protection is achieved by placing a temporary filtering device around any inlet to trap sediment.
2. The mechanism shall prevent sediment from entering inlet structures.

C. Inspect/document in accordance with the SCDHEC Stormwater Management BMP Handbook.

D. Remove accumulated sediment once it reaches 1/3 the height of the inlet filter.

E. Sediment tubes may be installed in conjunction with or in place of a silt fence to provide additional protection to the storm water system.

F. Contractor may utilize road crossing coal yard and area north of coal yard. Remove northern boundary chain as needed. Do not cross south boundary chain. Utilize measures

to avoid displacement of existing gravel. Stabilize disturbed gravel areas with gravel. Existing coal yard slope shall be maintained.

3.1.1.13 Obtain demolition permits as required by South Carolina Department of Health and Environmental Control (SCDHEC) Codes and Regulations, SC Reg. R61-86.1, Section V for Coal Handling Houses and Associated Facilities listed in Section 1.3.2.1.

A. In accordance with 40 CFR Part 61.145 permit shall be requested at least ten (10) working days before any demolition begins.

B. Submit two (2) copies of the SCDHEC approved demolition permit to SRNS.

3.1.1.14 All demolition work shall be performed, as a minimum, in compliance with 29 CFR 1926, Subpart T and the demolition permit.

3.1.1.15 Work shall be performed in accordance with all applicable OSHA and S.C. construction/demolition regulations, codes, permits and guidelines.

3.1.1.16 Implement waste management requirements to handle, segregate, package, and containerize waste materials as directed by the SRNS GCO and described in ACP Waste Generator/Waste Verifier Training and Area Specific Training.

3.1.1.17 Submit copies of the Three Rivers Sanitary Landfill scale ticket for each Three Rivers waste shipment.

3.1.1.18 Building demolitions shall be accomplished using heavy equipment and/or hand demolition as necessary or as identified and approved in TSPs.

3.1.2 D-Area Coal Handling Houses and Associated Facilities

3.1.2.1 Demolish, remove, and dispose of Building 484-23D (aka SRS-PB-EX0032) down to, but not including the concrete slab. The concrete slab shall be handled with the demolition and removal of the Building 484-24D Coal Handling Shaker House.

3.1.2.2 Demolish, remove, and dispose of Building 484-24D, Coal Handling Shaker House, structure (including all appurtenances) down to, but not including its concrete floor slab. Cut off and remove any above slab metal extrusions. Pressure wash and/or clean the concrete slab using a strong surfactant, such as "Biosolve™", if required.

3.1.2.3 Remove and properly dispose of the remnants of the north and south Track Hoppers located beneath the Coal Handling Shaker Building and east of the Conveyor No. 1 tunnel. Excavate and remove the dirt/soil in the Track Hoppers to facilitate removal of the Track Hopper remnants. The excavated soil may be placed in a location near the Track Hoppers to be placed back in the Track Hopper location once all remnants have been removed. Penetrate Track Hopper floor to ensure future water infiltration has an exit point. After verifying remnant removal, Track Hoppers shall be refilled with any removed concrete debris (minus rebar), rip-rap (minimum of 3 ft.), stone, previously excavated dirt and any dirt/common fill required to bring the area up to grade. Compact the fill as necessary to prevent future settling.

3.1.2.4 Excavate and remove the dirt cover over the underground portion of Conveyor No. 1. Demolish and remove the concrete cap, including the bunker entrance, over the underground portion of Conveyor No. 1 down to, but not including its concrete floor slab or underground concrete sides. Remove the conveyor and all its components from the tunnel and dispose of in accordance with SRNS guidelines. Penetrate the conveyor tunnel floor at its low point to ensure future water infiltration has an exit point.

3.1.2.5 Segregate rebar to the extent practical from concrete cap debris and place concrete debris (minus rebar to the extent practical) back in the Conveyor No. 1 tunnel. Dispose of the rebar and any concrete containing rebar in accordance with SRNS guidelines and all applicable SRS, Federal, State, and local rules and regulations. Concrete containing rebar will be disposed of as construction debris. Continue filling the tunnel with rip-rap (minimum of 3 ft.), stone,

previously excavated dirt and any additional dirt/common fill material as required to bring the area to grade. Compact the fill material as necessary to prevent future settling.

3.1.2.6 Dismantle, remove, and dispose of the above ground portion of Conveyor No. 1 to the Coal Handling Crusher House (484-22D), down to, but not including its concrete supports or slab as appropriate. Asbestos roof panels must be removed prior to conveyor system demolition.

3.1.2.7 Dismantle, remove, and dispose of Conveyor No. 2 from the Crusher House (484-22D) to the Transfer House (484-21D) but not including either of the subject Coal Handling Houses as applicable. Asbestos roof panels must be removed prior to conveyor system demolition.

3.1.2.8 Demolish, remove, and dispose of Buildings SRS-PB-EX0033, Coal Handling Breakroom for Crusher House and SRS-PB-EX0035, Storage Shed for Portable Equipment, Lube and Storage Equipment down to, but not including their concrete slabs. Cut off and remove any above slab metal extrusions. Pressure wash and/or clean slabs using a strong surfactant, such as "Biosolve™", if required.

3.1.2.9 Demolish, remove, and dispose of the Building 484-22D, Coal Handling Crusher House structure (including the Control House and all appurtenances) down to, but not including the concrete floor slab. Cut off and remove any above slab metal extrusions. Pressure wash and/or clean the concrete slab using a strong surfactant, such as "Biosolve™", if required.

3.1.2.10 Demolish, remove, and dispose of the concrete cap for the underground portion of Conveyor No. 4, including the bunker entrance, down to, but not including its concrete floor slab or underground concrete sides. Remove the conveyor and all its components from the tunnel and dispose of in accordance with SRNS guidelines and all applicable SRS, Federal, State, and local rules and regulations. Penetrate the conveyor tunnel floor at its low point to ensure future water infiltration has an exit point.

3.1.2.11 Remove and properly dispose of the remnants of the Reclaim Hopper located at the south end of the Conveyor No. 4 tunnel. Excavate and remove the dirt/soil in the Reclaim Hopper to facilitate removal of the Reclaim Hopper remnants. The excavated soil may be placed in a location near the Reclaim Hopper or in an area designated by SRNS to be placed back in the Reclaim Hopper location once all remnants have been removed. Penetrate the Reclaim Hopper floor to ensure future water infiltration has an exit point. The Reclaim Hopper shall be refilled with any removed concrete debris (minus rebar), rip-rap (minimum of 3 ft.), stone, previously excavated dirt and any dirt/common fill required to bring the area up to grade. Compact the fill as necessary to prevent future settling.

3.1.2.12 Dismantle, remove, and dispose of the above ground portion of Conveyor No. 4 to the Coal Handling Crusher House (484-22D), down to, but not including its concrete supports or slab as appropriate. Asbestos roof panels must be removed prior to conveyor system demolition.

3.1.2.13 Dismantle, remove, and dispose of Conveyor No. 3 between the 484-21D, Coal Handling Transfer House and the 484-D Powerhouse shown in Attachment 5.1, Figures 19 and 20 down to, but not including its concrete slab or to grade as applicable. Asbestos roof panels must be removed prior to Conveyor No. 3 D&R.

3.1.2.14 Dismantle, remove, and dispose of Conveyor No. 5 from the Transfer House (484-21D) as applicable. Asbestos roof panels must be removed prior to Conveyor No. 5 demolition and removal.

3.1.2.15 Demolish, remove, and dispose of the Building 484-21D, Coal Handling Transfer House, structure (including all appurtenances) down to, but not including its concrete floor slab. Cut off and remove any above slab metal extrusions. Pressure wash and/or clean the concrete slab using a strong surfactant, such as "Biosolve™", if required.

3.1.2.16 Demolish, remove, and dispose of electrical junction boxes located in the area. Fill any remaining holes to the top of elevation with gravel/stone.

3.1.3 454-D, D-Area Diesel Fuel Tank and 454-1D, D-Area Diesel Fuel Unloading Facility

3.1.3.1 Demolish, remove, and dispose of any remaining steel structure components down to the finished concrete slabs. Ensure slabs are free of coarse debris.

3.1.3.2 Dismantle/demolish overhead piping and conduit chases, bridges and supports running between 454-1D, 454-D and 484-D. Concrete pedestals may remain in place. Abandoned conduits, pipes, posts, poles, etc. cut off to within 2" of grade or slab, as appropriate.

3.1.3.3 Fill low points, drains and sumps with stone, grout and/or concrete.

3.1.3.4 Cleave and/or breach slab containment curbing to ensure drainage of water.

3.1.4 484-13D, D-Area Storage Building

3.1.4.1 Ensure any remnants from the building structure are demolished to the finished concrete slab.

3.1.4.2 Ensure slabs are free of coarse debris and all above ground appurtenances, (such as hydrants, bollards, perimeter fencing, etc.), are demolished to the concrete slab, or to grade, as appropriate.

3.1.4.3 Fill low points in Bone Yard with stone, grout, or concrete. This includes Bone Yard Pit and Domestic Water risers.

3.1.5 683-D, Chlorine Unloading and Storage

3.1.5.1 Demolish, remove, and dispose of masonry building structure to the finished slab. Ensure slab is free of coarse debris.

3.1.5.2 Remove and dispose of abandoned conduits and piping outside slab perimeter to within 2" of grade and fill penetrations 2" diameter or greater with stone and/or grout.

3.1.5.3 Demolish, remove, and dispose of the ancillary three (3) sea-land containers (SRS-PB-01214, SRS-PB-01212, SRS-PB-01216), metal tracks, and Handi-House (SRS-PB-EX0046) northwest of the 683-D concrete slab shown in Attachment 5.1, Figures 21, 32, and 34.

3.1.5.4 Use a strong surfactant (e.g., BioSolve™) to clean oil stains on slab of 683-D.

3.1.6 All hazardous materials (such as light bulbs/ballasts) shall be removed and collected. Contact the GCO prior to disposition by SRNS.

A. Light ballasts shall be removed, segregated by PCB containing and non-PCB containing, and placed in containers provided by SRNS for final disposition.
   1. **ADMINISTRATIVE HOLDPOINT –** For any ballasts found to be leaking, the Subcontractor shall immediately communicate the condition to the STR and the STR will immediately notify the GCO for appropriate management determination.

B. Cut and segregate any lead pipe joints.
   1. **ADMINISTRATIVE HOLDPOINT -** Verification by GCO. If pipe joints are found to be lead containing, then collect the item(s) and contact GCO for pickup and disposal options.

C. Notify GCO of total volume of hazardous waste.

3.1.7 All demolition work shall be planned and supervised by a "Competent Person".

A. This person shall ensure an engineering survey of the building and associated appurtenances listed in Attachment 5.1 is performed.

B. The Subcontractor shall be required to prepare an engineering survey/report that outlines the methods, equipment to be used and sequence of events for all deactivation, D&R activities, including but not limited to removal and placement in supplied containers of all recyclables, removal and handling of any hazardous materials, segregation, appropriate

size reduction and disposition of all materials, etc. Also, include as a minimum a proposed layout/location for office trailers, toilet facilities, equipment staging area, material staging area(s), etc.

C. Submit a Lift Plan for the D&R of Conveyor No. 3 as specified in this document. Subcontractor agrees to verify all weights and provide adequate rigging and hoisting equipment to safely handle the D&R of Conveyor No. 3 to be D&R.

D. Submit an Excavation Plan for the D&R of the underground sections of Conveyor No. 1 and Conveyor No. 4 as specified in this document, noted in 3.1.1.5.K.

E. Submit a copy of the Engineering survey or surveys.

F. This survey does not require Subcontractor to prepare any drawings.

3.1.8 Deactivation work to be performed includes removal of all remaining hazardous materials (such as light bulbs, fluorescent tubes, light ballasts, lead (including pipe joints), emergency lights, light ballasts (PCB and non-PCB), circuit boards, and brass valves). All deactivation activities shall be performed in accordance with all applicable Federal, State, and local rules and regulations.

A. Scrap materials removed during deactivation shall be reduced in size, as necessary.

3.1.9 Ensure the buildings' slabs/foundations are free of all debris and floor coverings at conclusion of demolition activities.

3.1.10 Ensure all floor penetrations (electrical conduit, piping, floor drains, etc.) have been cut flush with the top of the floor slab or grade, as applicable, and are plugged/filled with non-shrink grout or concrete.

3.1.11 Ensure any oil stains discovered on the concrete slabs are cleaned using a strong surfactant (i.e. BioSolve™) as part of the final clean-up of the concrete slabs and surrounding area.

3.1.12 Ensure all protrusions (anchor bolts, etc.) are cut flush with the top of concrete or grade, as applicable, where equipment, structural steel, supports, etc. are removed.

3.1.13 Any curbing remaining on a building slab or area around a building shall be breached or cleaved at as many locations as necessary to ensure drainage of rainwater.

3.1.14 Minimize interference with other personnel, roads, streets, etc. during all demolition activities.

3.1.15 Work area is not a guaranteed/exclusive work zone accessible only to the Subcontractor and his/her sub-tiers. SRNS will respect the boundaries of the area. However, there may be occasions where Fire and Rescue and/or Security forces require access to the area. Other access by SRNS Engineering and Operations personnel will be limited to as necessary by agreement (such as Asbestos Designer, SRNS Safety, GCO, etc.).

3.1.16 The subcontractor is responsible for providing Safety Data Sheets, maintaining a chemical inventory of all chemicals brought on site and removing all chemicals at the end of the project.

3.2 Quality Requirements

3.2.1 This SOW is a Level 3 procurement – no quality requirements are applicable.

3.3 Site Conditions

3.3.1 See Special Provisions / Field Conditions

3.4 Period of Performance / Schedule

3.4.1 From the date of award through completion of field activities, including SRNS acceptance, work shall be completed as specified in Subcontract Field Conditions. Demobilization shall be within thirty (30) days of accepted project completion.

3.5 Key Personnel Qualification / Certification

3.5.1.1 Subcontractor may employ the services of a qualified sub-tier subcontractor to perform the work under this subcontract if approved by SRNS.

3.5.1.2 Copies of required licenses and worker qualifications shall be submitted to SRNS with the proposal.

3.5.1.3 Subcontractor shall have successfully completed projects of similar scope and magnitude within the last five (5) years.

3.5.1.4 Subcontractor shall submit qualification documentation with the proposal, including all sub-tier subcontractors, with three (3) references from clients for jobs/projects of similar scope and magnitude.

3.5.1.5 These engineers/supervisors are expected to possess a minimum of a bachelor's degree in Engineering and a minimum of five (5) years of experience in similar operations.

A. Personnel with extensive experience but without a degree may be submitted for consideration.

3.5.2 Every supervisor, worker, building inspector, or management planner shall have any current, required license(s) specific to the duties performed under the license for completion of activities required by this SOW.

3.5.3 Assign a full-time Health and Safety Officer (HSO) to the project.

3.5.3.1 The HSO shall have documented evidence of field experience as HSO in areas with comparable demolition activities.

3.5.3.2 Submit HSO resume with proposal

3.5.4 Assign a Project Manager/Superintendent who will be responsible for overall contract administration, scheduling and record keeping as well as managing the day-to-day activities of work.

3.5.4.1 The Project Manager/Superintendent shall have demonstrated ability to conduct and manage the project via previous experience with similar projects.

3.5.4.2 Submit Project Manager/Superintendent resume with proposal

3.5.5 Assign a full-time competent person/supervisor in accordance with referenced codes, standards, procedures and regulations.

3.5.5.1 Due to the relatively small size of this project, the competent person/supervisor and Project Manager/Superintendent may all be the same person if qualified and accepted as such by SRNS.

3.5.5.2 This/these individuals shall by reason of experience, training, or education be able to identify unsafe fire/life safety acts or conditions and have the authority to "Stop Work" and/or take other corrective action(s), as needed.

3.5.5.3 Submit resume(s) with proposal

3.6 Deliverables and Submittals

3.6.1 Required Submittals:

3.6.1.1 Review all documents for completion prior to submission and certify conformance of documents to SOW requirements by signature of the Subcontractor's Authorized Engineering Representative.

3.6.1.2 See Attachment 5.2 "Engineering Document Requirement (EDR)" for deliverables required for this SOW.

3.6.1.3 List the following on each submittal transmittal cover letter:

A. Document category number, and applicable SOW Section and paragraph number.

B. Document description.

3.6.1.4 Reference the following information on transmittal letters, submittals and other correspondence:

Date of transmittal,

Sequence page number and total number of pages on each page,

Subcontractor Name, _____

SRNS Purchase Order (PO) No.: _____(Defined on Award)

SRNS Project No.: _____(Defined on Award)

SRNS Project Title: _____(Defined on Award)

Subcontractor's Order Number: _____

A. Transmit with a completed Transmittal Letter.

3.6.1.5 Provide documentation in unprotected Adobe Acrobat – Portable Document Format (PDF), unless specifically directed otherwise.

A. Use the latest version available at time of subcontract award.

B. Files shall print legibly on 8.5 in. by 11 in., 11 in. by 17 in., or 22 in. by 34 in.

C. Title for PDF file: "SRS PO …"

1. Append the SRS PO number to end of file name.
2. No symbols such as "&" or "," (comma) can be in the PDF file name.

D. Include only 1 PO related information per email.

1. Don't send in multiple PO numbers in a single email.
2. Each email is converted to a single vendor package number and assigned to one PO number.

E. Only PDFs can be sent into email account noted below.

1. Excel, Word, CADD and TIFF formatted files cannot be received.

F. Zip files

1. Multiple PDF files related to identified SRS PO are acceptable.
2. Include only PDF files - folders within a zip file are unacceptable.

G. Maximum email size limit: 30 megabytes

H. Verify each file is virus free.

3.6.1.6 Provide formal transmittal of documentation in Adobe Acrobat (PDF attached to an email (unless directed otherwise by the STR) sent to vendordocuments@srs.gov for:

A. EDR submittals,

B. SDDR forms.

C. Use black markings on white paper.

D. Paper submittals with less than 30% recycled content are acceptable.

3.7 Packaging, Handling, Shipping, and Storage Requirements (PHSS)

None specified

3.8 Deviations

3.8.1 SDDR Preparation

3.8.1.1 Prepare a SDDR for each proposed exception to this SOW.

A. Applies to proposed deviations after award of contract.

3.8.2 Perform the following for each deviation.

3.8.2.1 Identify SOW and revision number.

3.8.2.2 Identify criteria that cannot be met by item and SOW section number.

3.8.2.3 Present explanation for the deviation.

3.8.2.4 Present proposal for resolution of the deviation.

3.8.2.5 Present price and schedule adjustment for the proposed resolution of the deviation.

3.8.2.6 Do not perform work on, remove, or install any item for which a SDDR is submitted until a written disposition of the SDDR is received from SRNS.

3.8.2.7 Submit SDDR to STR for disposition prior to SDDR implementation.

3.8.3 Nonconformance

3.8.3.1 Identify on a SDDR.

3.8.3.2 Include supporting technical justification when requesting acceptance of a "Use-As-Is" or "Repair" disposition.

3.8.3.3 Attach a copy of the Non-Conformance Report (NCR)

3.8.3.4 Submit SDDR with NCR to STR for disposition prior to SDDR implementation.

3.8.4 Prior to close-out

3.8.4.1 Complete the SDDR(s), if any, in accordance with the SDDR instructions.

3.8.4.2 Provide completed SDDR(s) to the STR or with turn-over package.

4.0 ACCEPTANCE OF SERVICES

4.1 Inspection / Examination / Testing

4.1.1 Final Acceptance Inspection of New, Altered, or Dispositioned Facilities or Equipment per Manual 8Q, Procedure 51.

4.2 SRNS Surveillance and Audits

4.2.1 SRNS STR Verification

4.2.1.1 Verification by GCO of hazardous materials (such as light bulbs/ballasts, lead pipe joints, etc.) with STR oversight.

4.2.1.2 Verification that no internal or external insulation is included with the recyclable waste.

4.2.1.3 Verifications per each respective Decommissioning End Points Document.

4.3 Final Acceptance Method

4.3.1 Acceptance of Services

4.3.1.1 Successful completion of a walk down of the facilities by the STR and Subcontractor after completion of all SOW related activities.

4.3.1.2 Confirmation that all submittals have been accepted by SRNS.

4.3.1.3 Confirmation that all decommissioning end points have been completed.

4.3.1.4 Confirmation of satisfactory performance in accordance with procurement contract as documented by the STR and the SRNS procurement representative, per Manual 11B, Procedure 7.3.

4.3.1.5 Successful completion

A. Services will be accepted based on achieving the requirements of this SOW, including complete removal and disposal of all specifically identified materials and equipment, clean-up of the facilities, final removal of all equipment and materials utilized in performance of this work, and completion of all punch list items.

B. A Final Acceptance Inspection of New, Altered or Dispositioned Facilities or Equipment per Manual 8Q, Procedure 51 will be conducted by applicable SRNS representatives and the performing entity to confirm satisfactory safe condition and proper disposition of facilities listed in the SOW prior to final acceptance.

5.0 ATTACHMENTS

5.1 Photos and Drawings

5.2 Engineering Document Requirements with Instructions (2 Pages)

5.3 Asbestos Management Program Aid (2 Pages)

Attachment 5.1 – Photos and Drawings

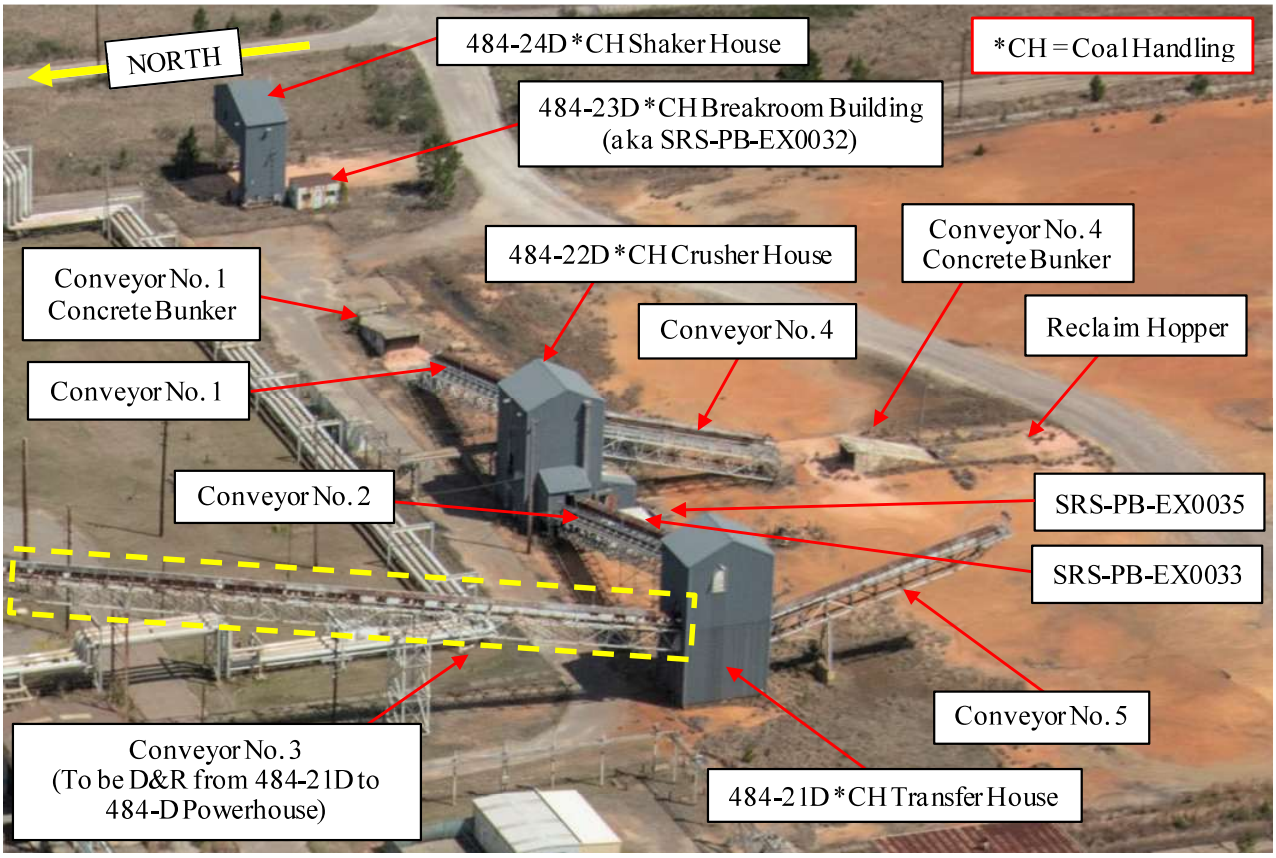


Figure 1. Aerial View of the Coal Handling Houses and Associated Facilities

Attachment 5.1 – Photos and Drawings (Continued)

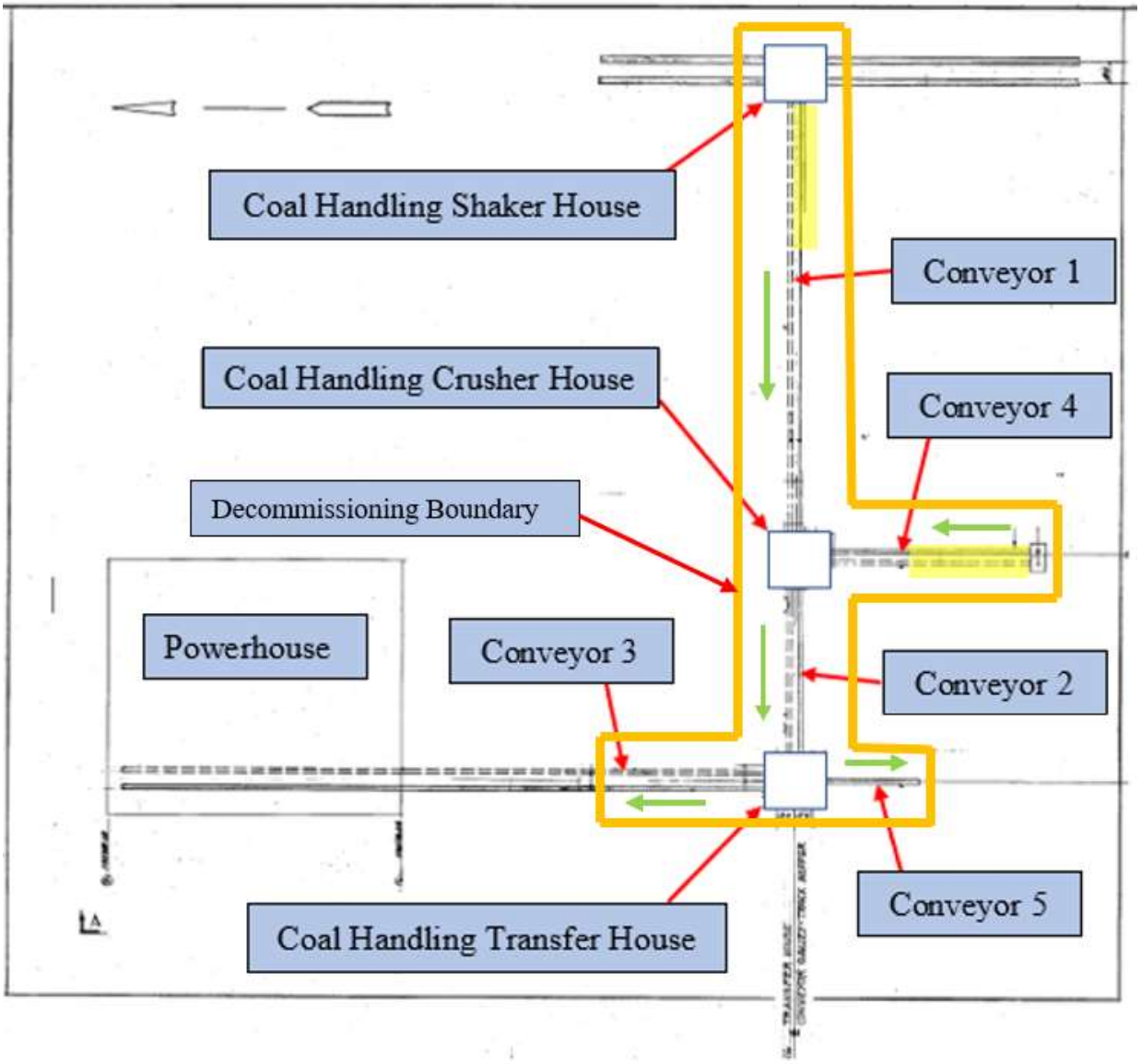
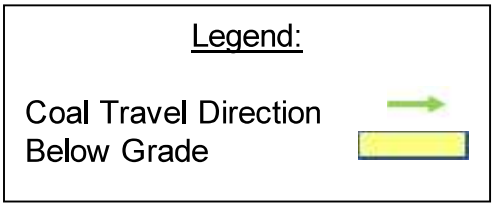


Figure 2. Coal Handling Facilities Plot Plan and Decommissioning Boundary



Attachment 5.1 – Photos and Drawings (Continued)

Figure 3. Building 484-24D, Coal Handling Shaker House (Looking North)

Attachment 5.1 – Photos and Drawings (Continued)

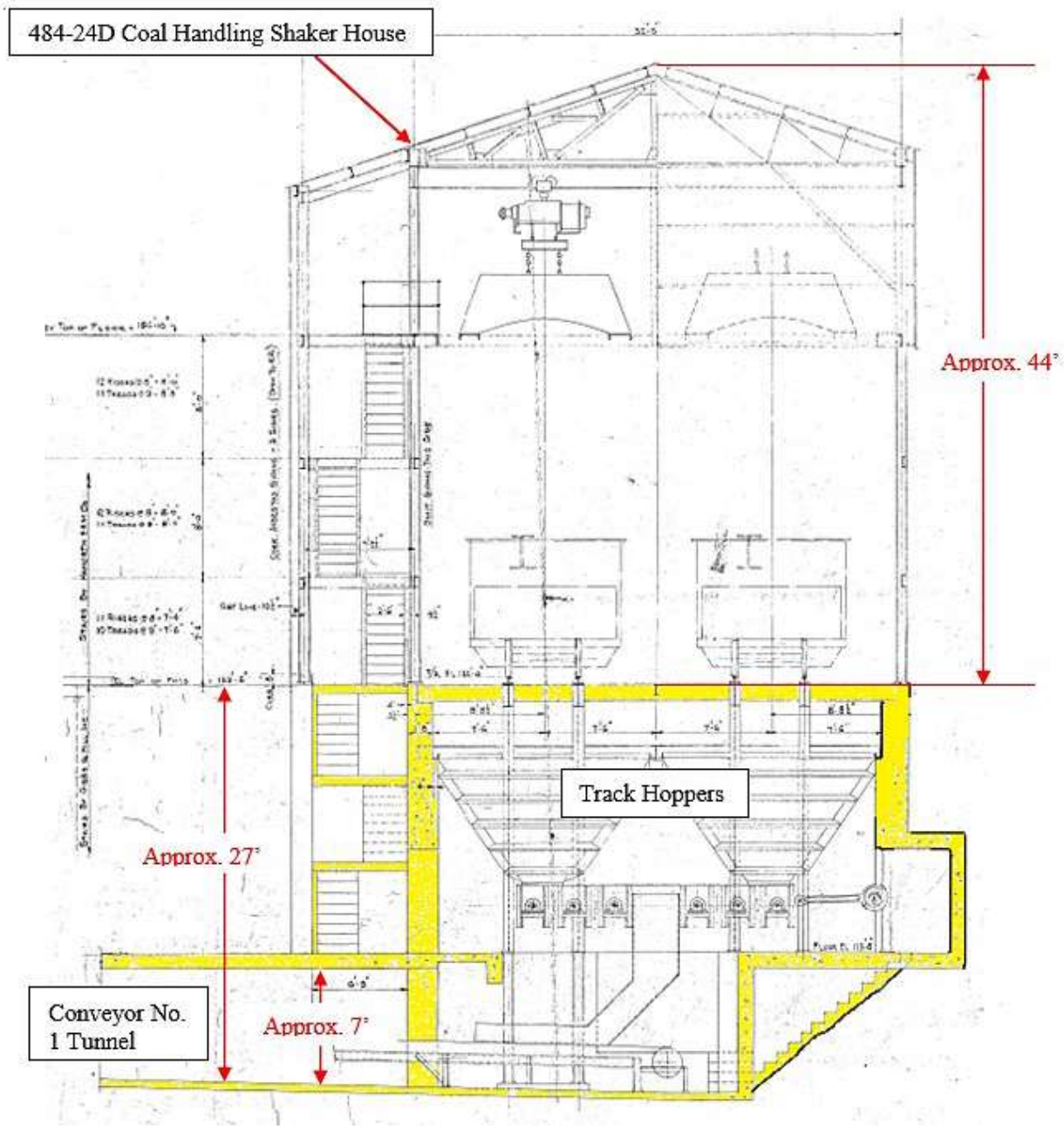


Figure 4. Elevation Dwg. of 484-24D Coal Handling Shaker House and Track Hoppers

Attachment 5.1 – Photos and Drawings (Continued)

Figure 5. 484-23D Coal Handling Breakroom Building (aka SRS-PB-EX0032)

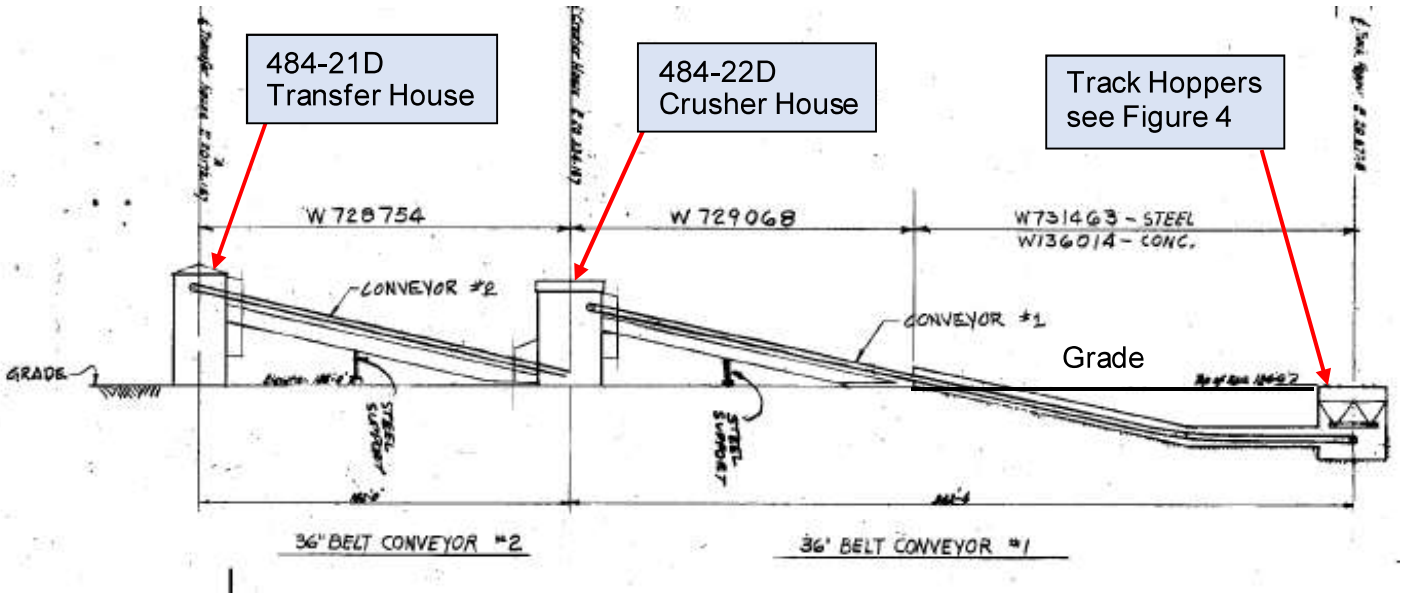


Figure 6. Conveyors No. 1 and No. 2

Attachment 5.1 – Photos and Drawings (Continued)

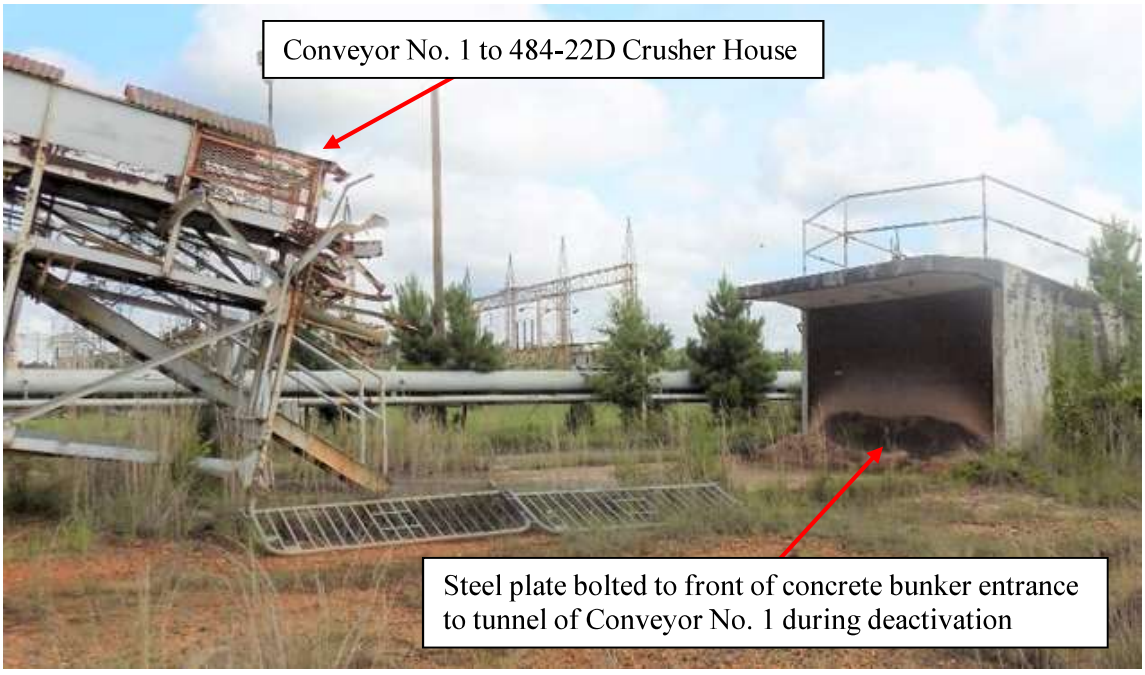


Figure 7. Conveyor No. 1 (cut) and Bunker Entrance to Conveyor No. 1 Tunnel

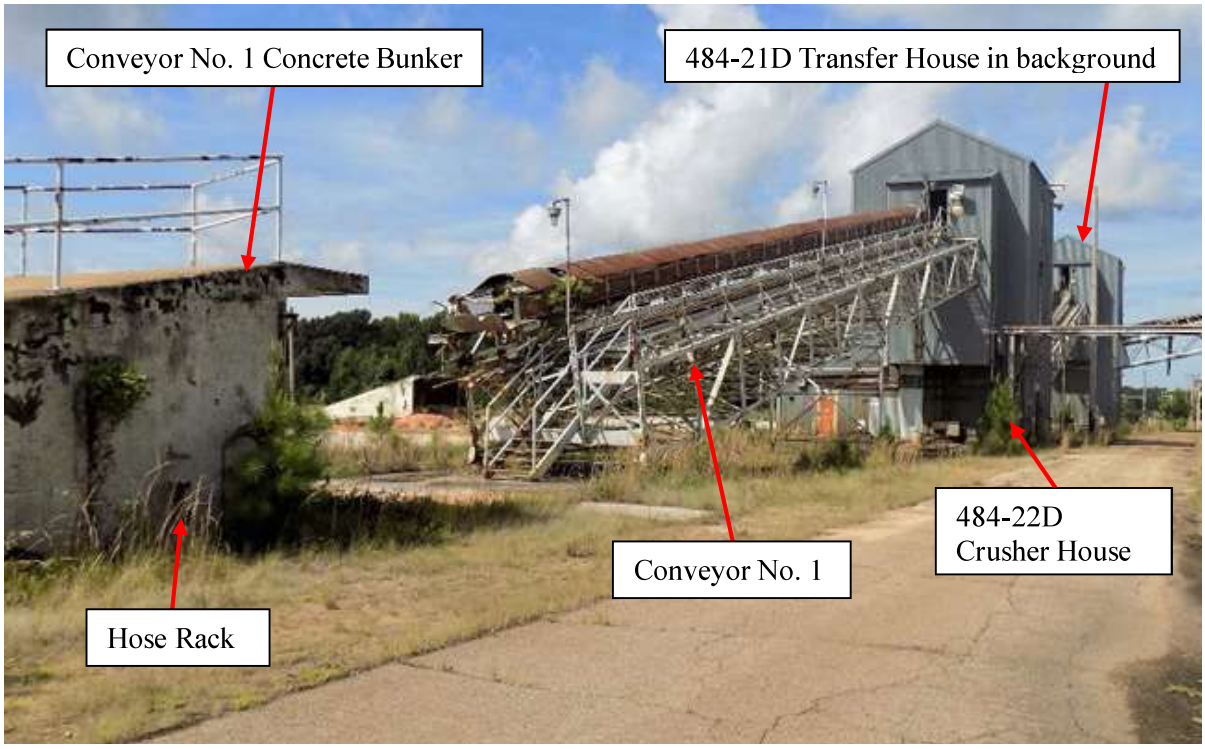


Figure 8. Conveyor No. 1 to 484-22D Crusher House (Looking Southwest)

Attachment 5.1 – Photos and Drawings (Continued)

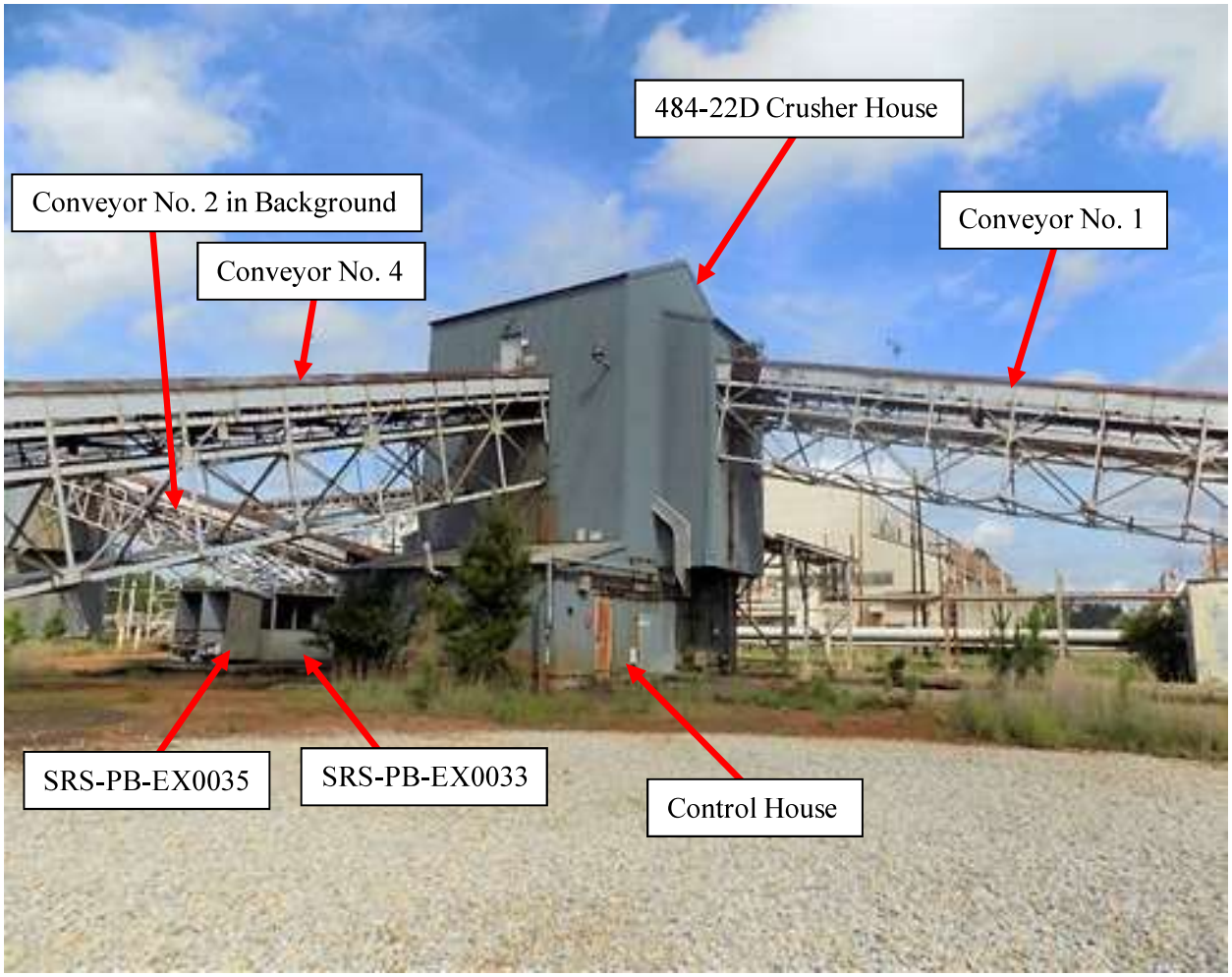


Figure 9. 484-22D Crusher House and Associated Facilities (Looking North)

Attachment 5.1 – Photos and Drawings (Continued)

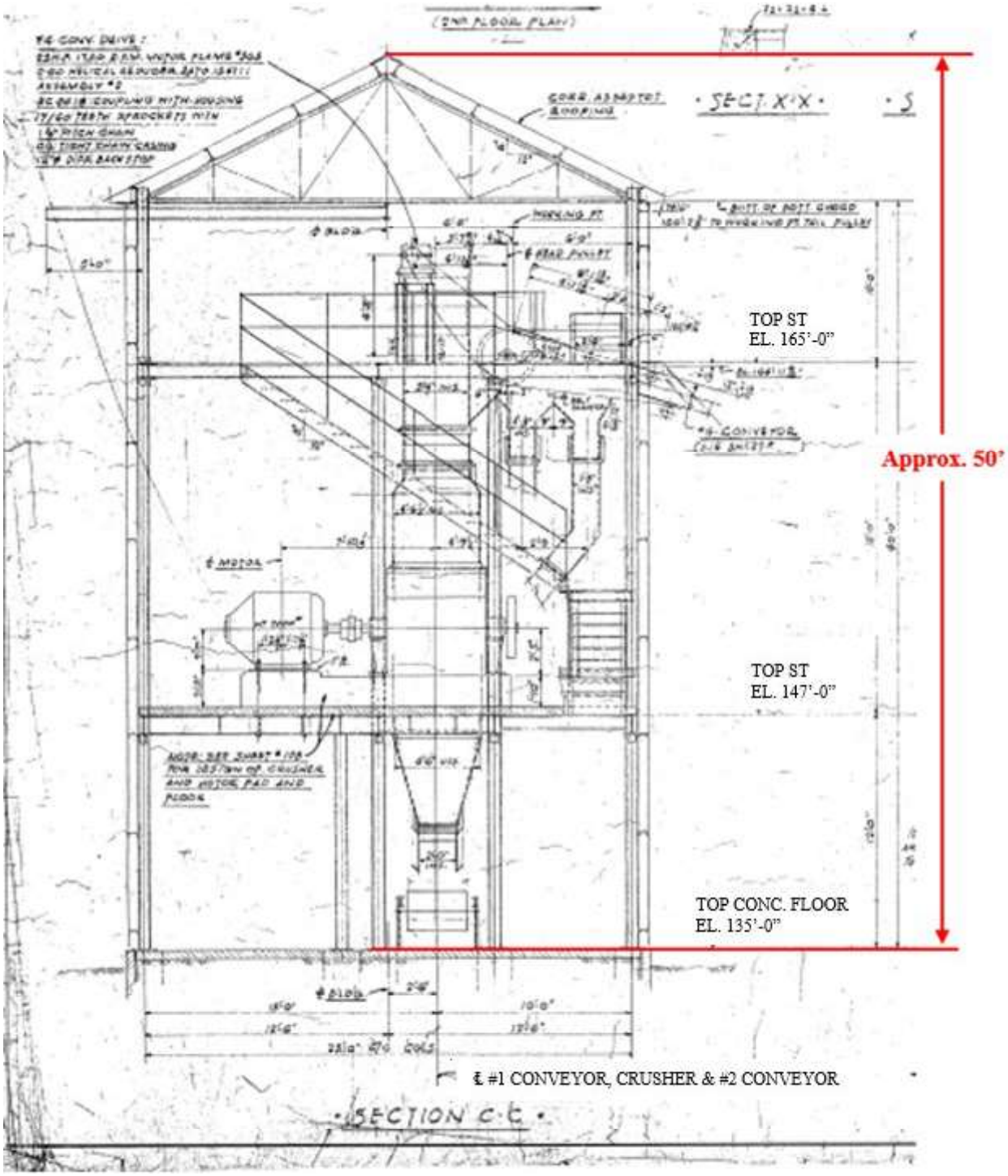


Figure 10. 484-22D Coal Handling Crusher House Interior Arrangement

Attachment 5.1 – Photos and Drawings (Continued)

Figure 11. Inside the Coal Handling Control House

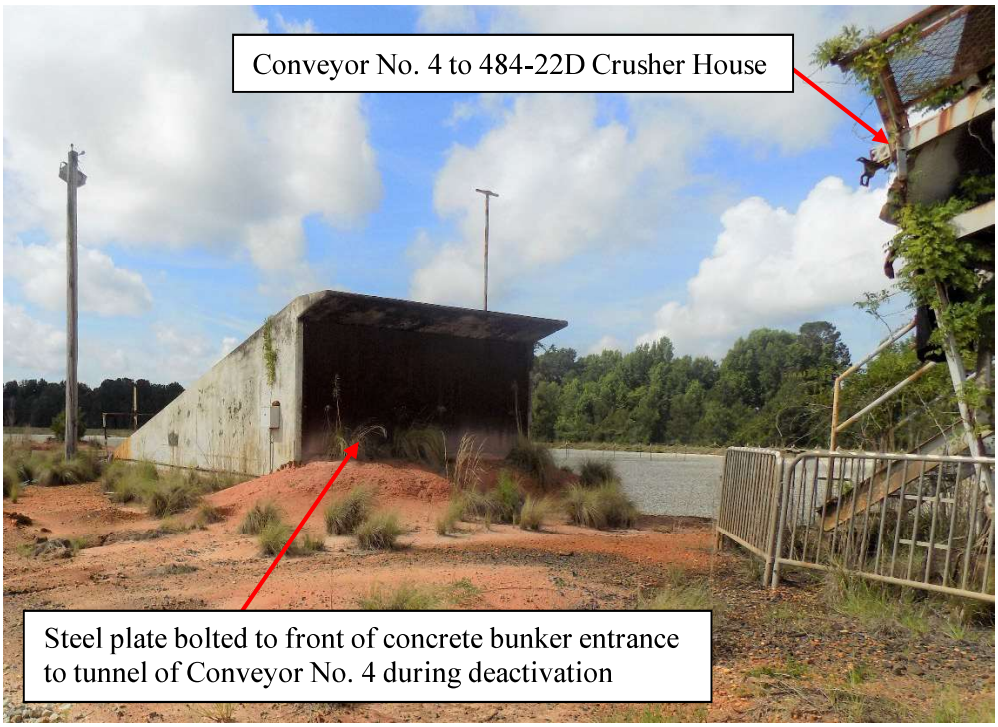


Figure 12. Concrete Bunker Entrance to Conveyor No. 4 Underground (Looking Southwest)

Attachment 5.1 – Photos and Drawings (Continued)

Figure 13. Reclaim Hopper South of 484-22D Crusher House

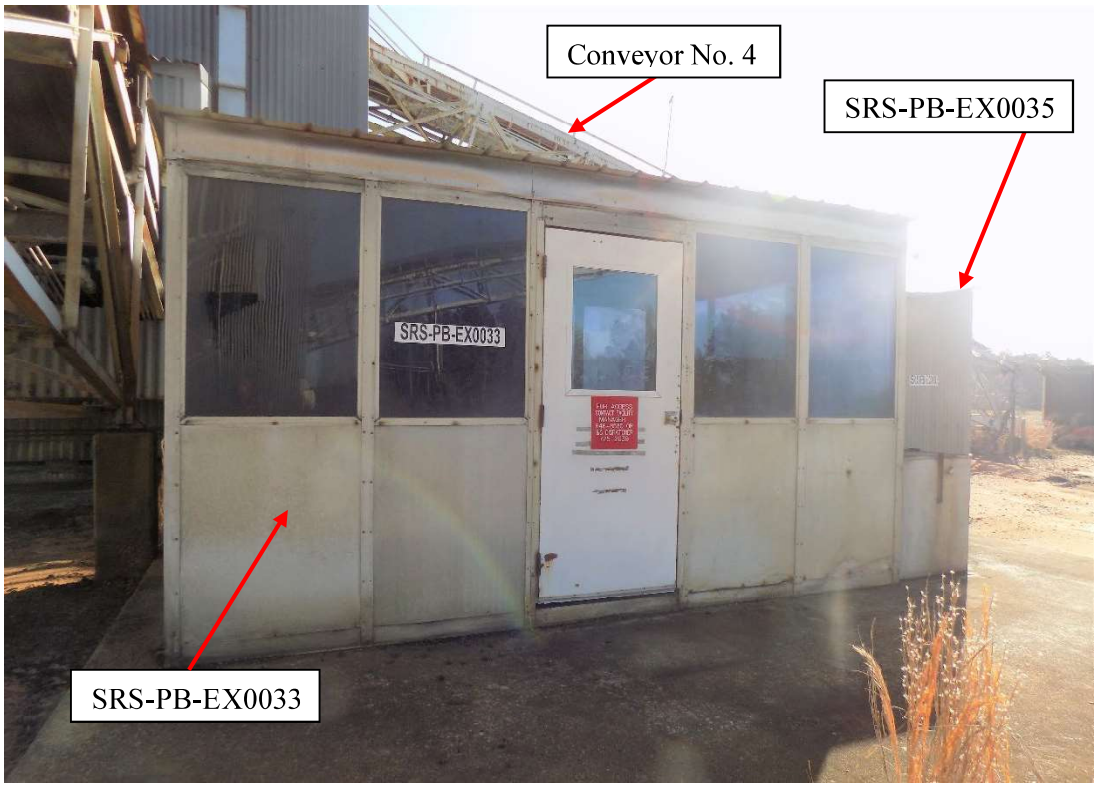


Figure 14. SRS-PB-EX0033 Coal Handling Breakroom Building for Crusher House

Attachment 5.1 – Photos and Drawings (Continued)

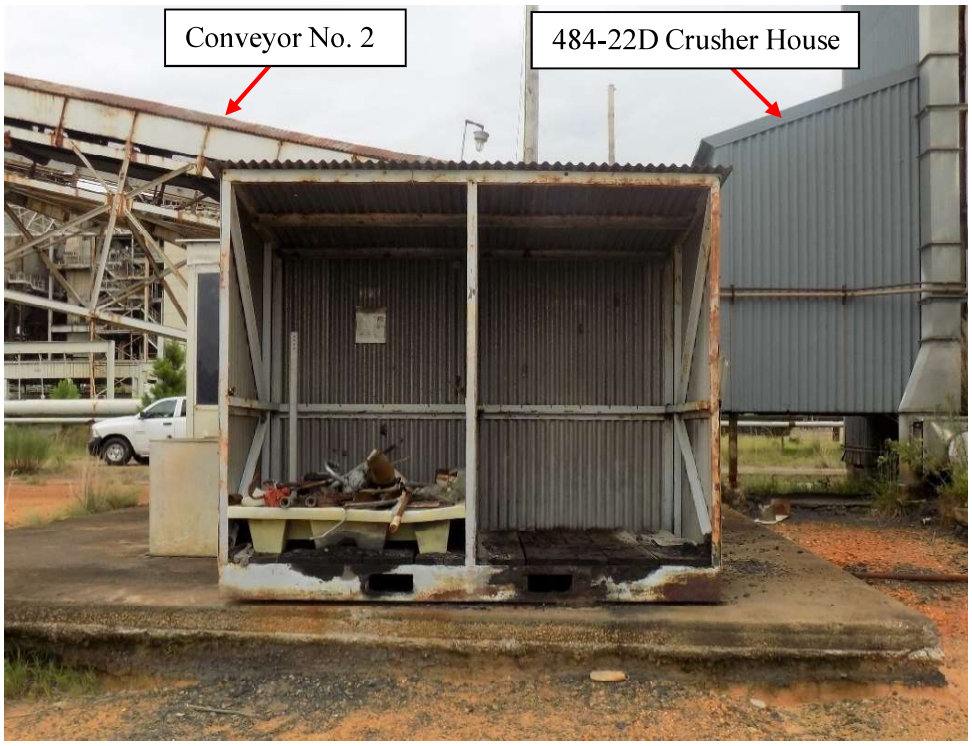


Figure 15. SRS-PB-EX0035 Storage Shed for Portable Equipment, Lube and Spare Parts

Attachment 5.1 – Photos and Drawings (Continued)

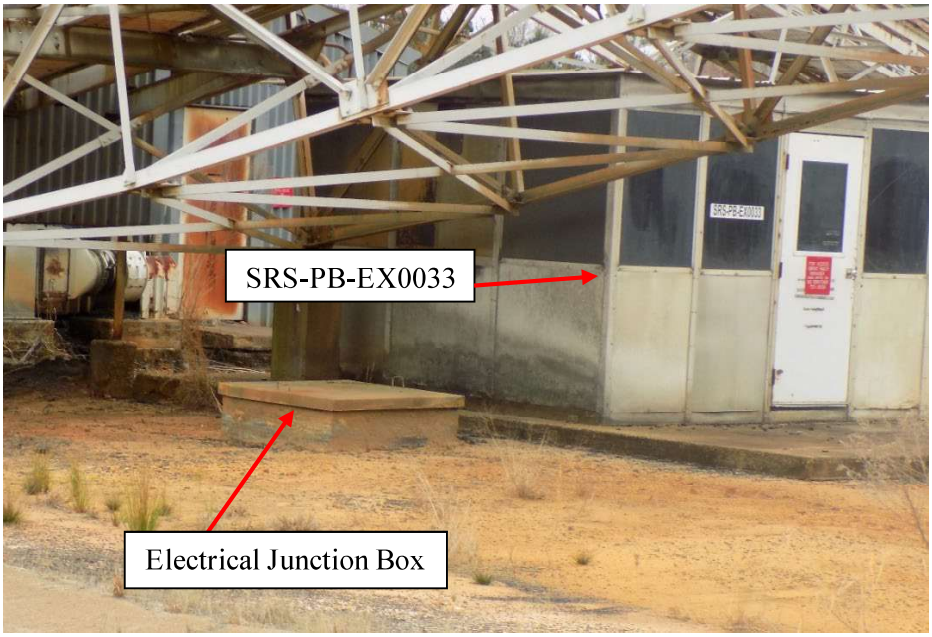


Figure 16. Electrical Junction Box North of SRS-PB-EX0033

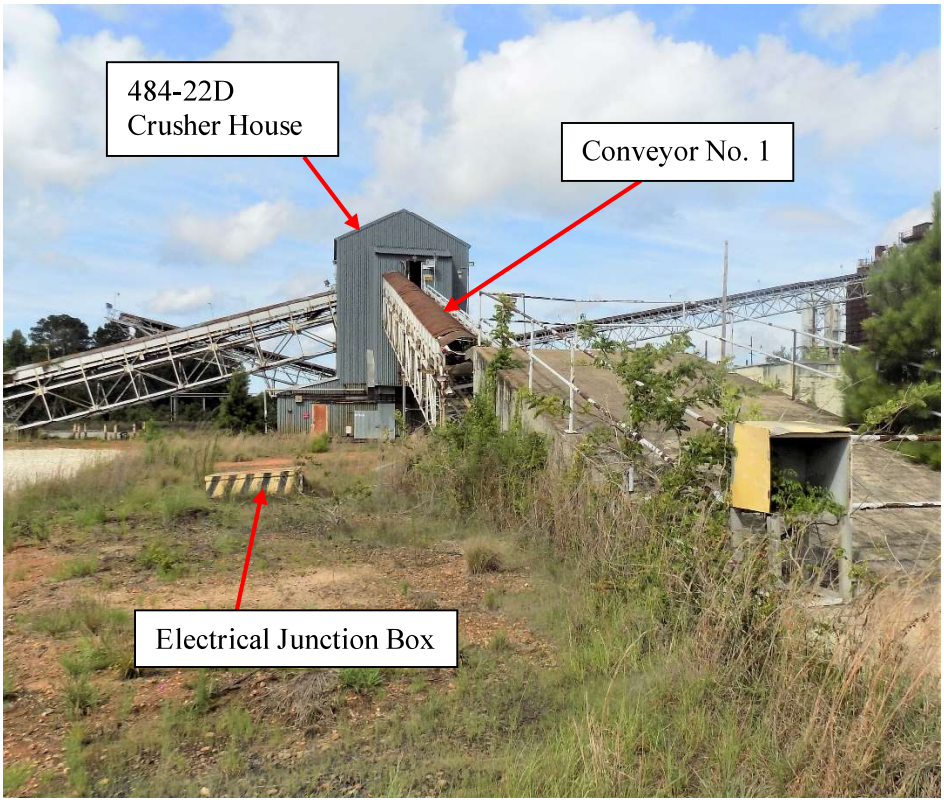


Figure 17. Electrical Junction Box South of Conveyor No. 1

Attachment 5.1 – Photos and Drawings (Continued)

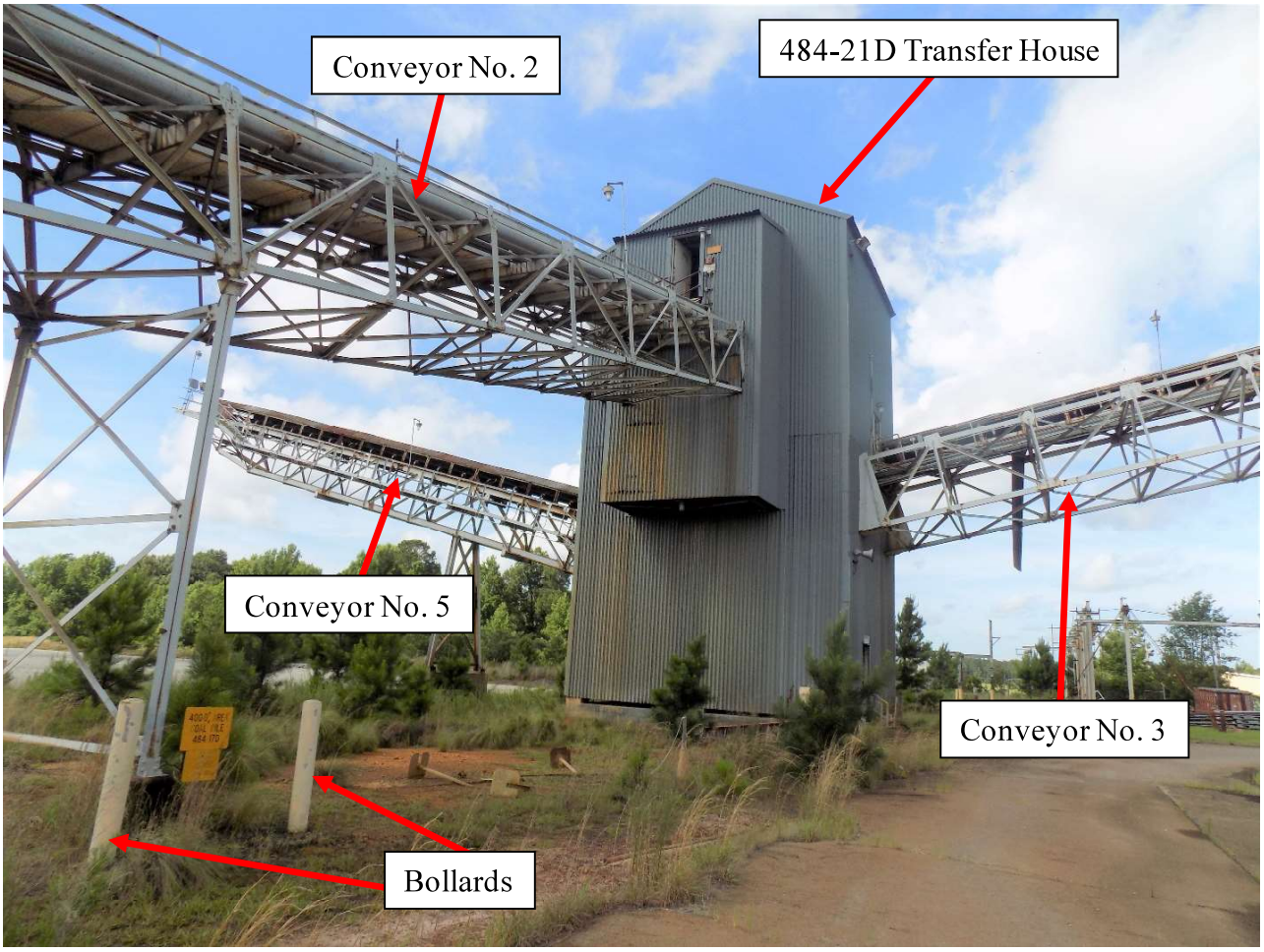


Figure 18. 484-21D Transfer House and Conveyors No. 2, 3, and 5 (Looking Southwest)

Attachment 5.1 – Photos and Drawings (Continued)

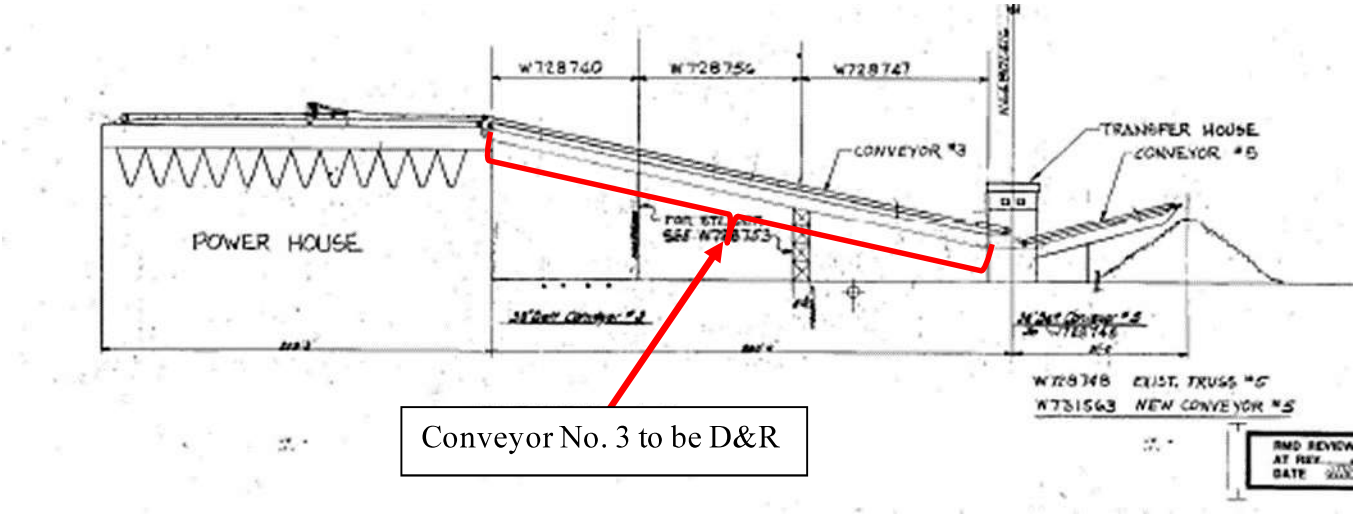


Figure 19. Conveyor No. 3 Elevation View (Looking East)

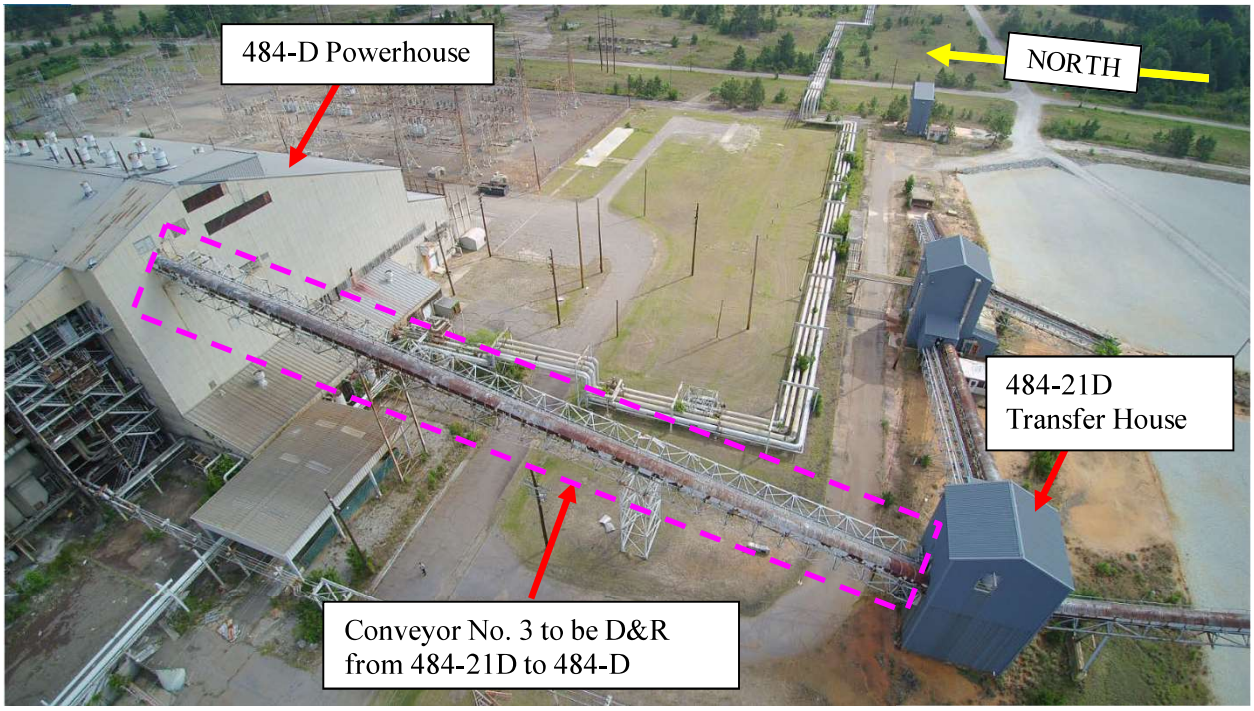


Figure 20. 484-21D Transfer House and Conveyor No. 3 to be D&R

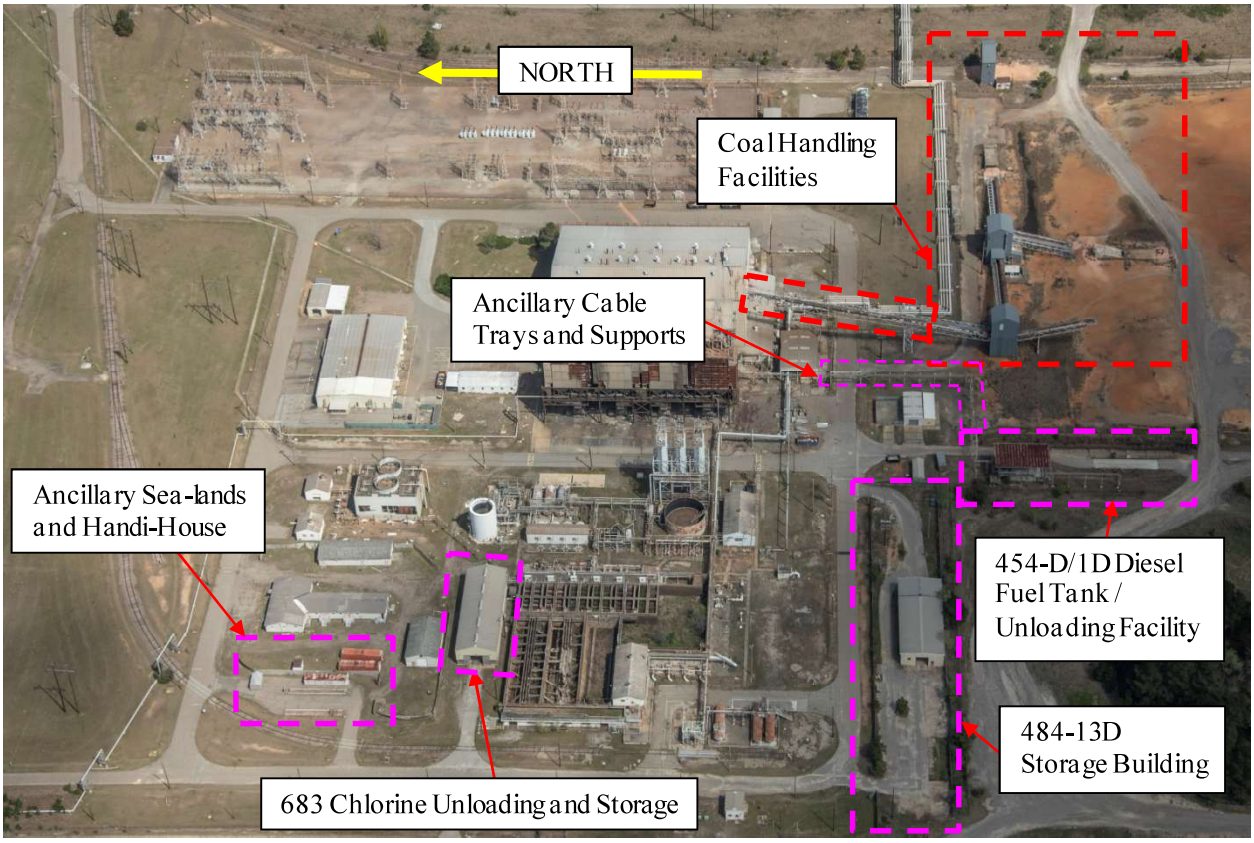


Figure 21. Aerial View of the Facility Remnants to be Decommissioned

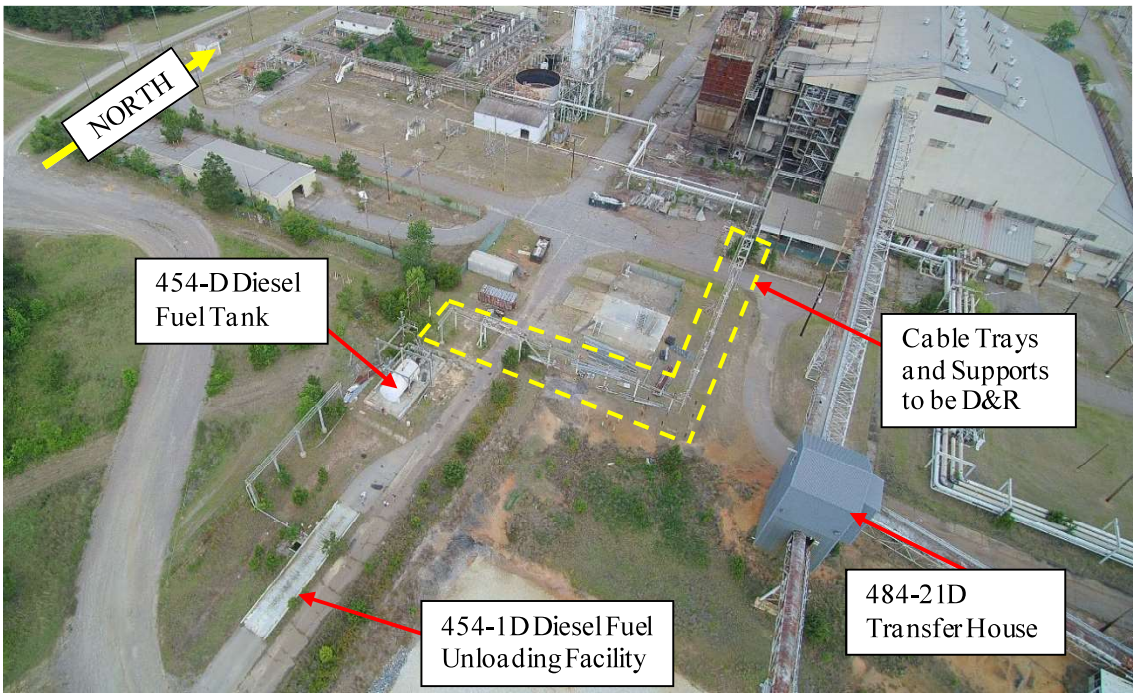


Figure 22. Aerial View of the 454-D/1D Facility Remnants to be Decommissioned

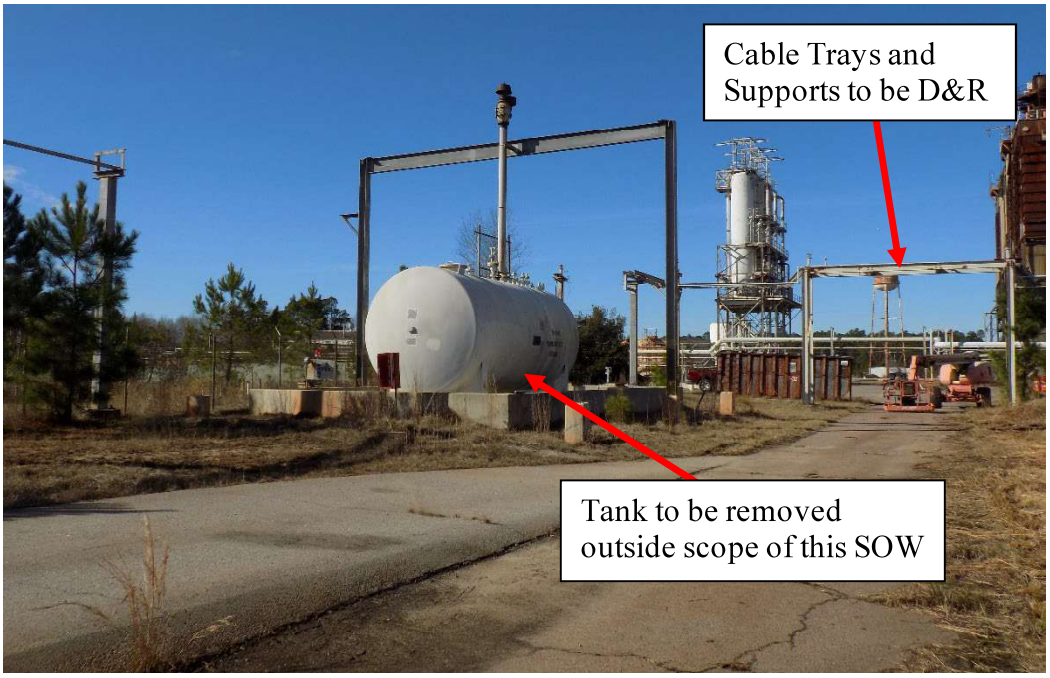


Figure 23. 454-D Tank to be Removed Outside the Scope of this SOW (Looking Northwest)

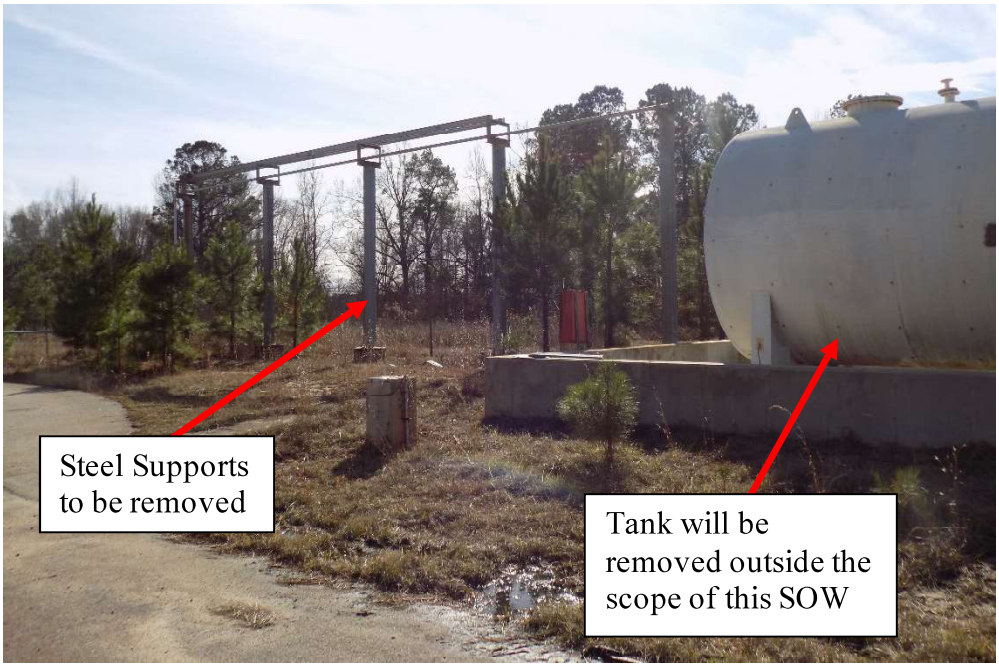


Figure 24. 454-D (Looking Southwest)

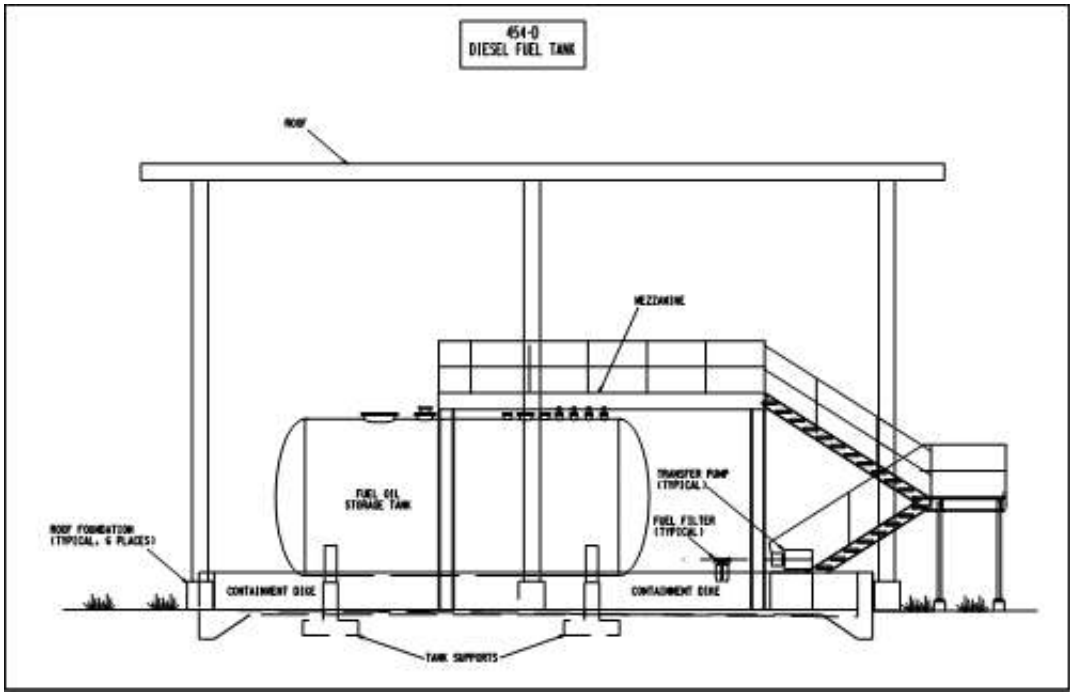


Figure 25. Building 454-D, D-Area Diesel Fuel Tank Layout (East View)

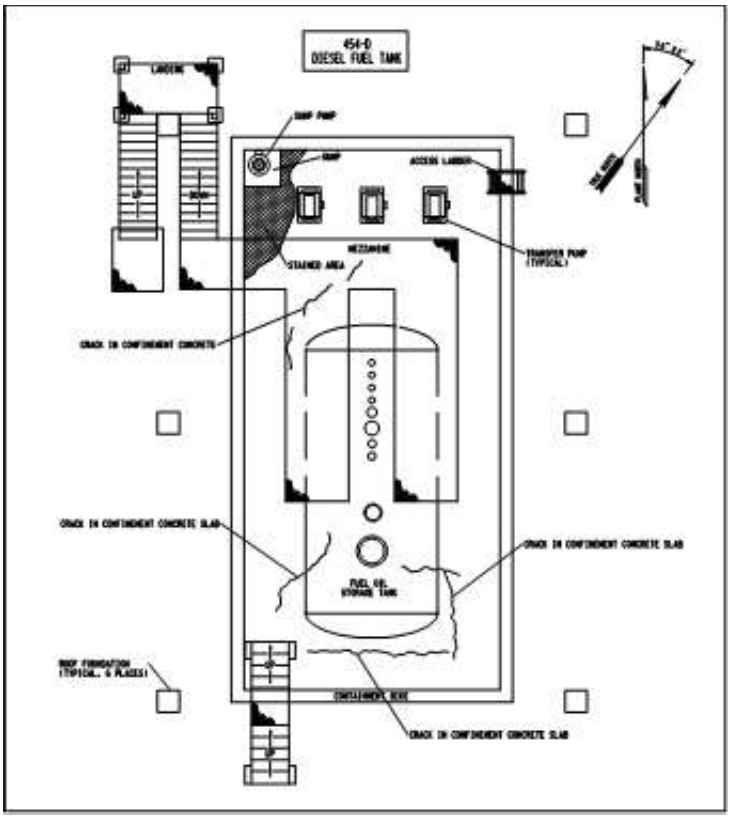


Figure 26. Building 454-D, D-Area Diesel Fuel Tank Layout (Plan View)

Figure 27. Building 454-1D, D-Area Diesel Fuel Unloading Facility (Looking South)

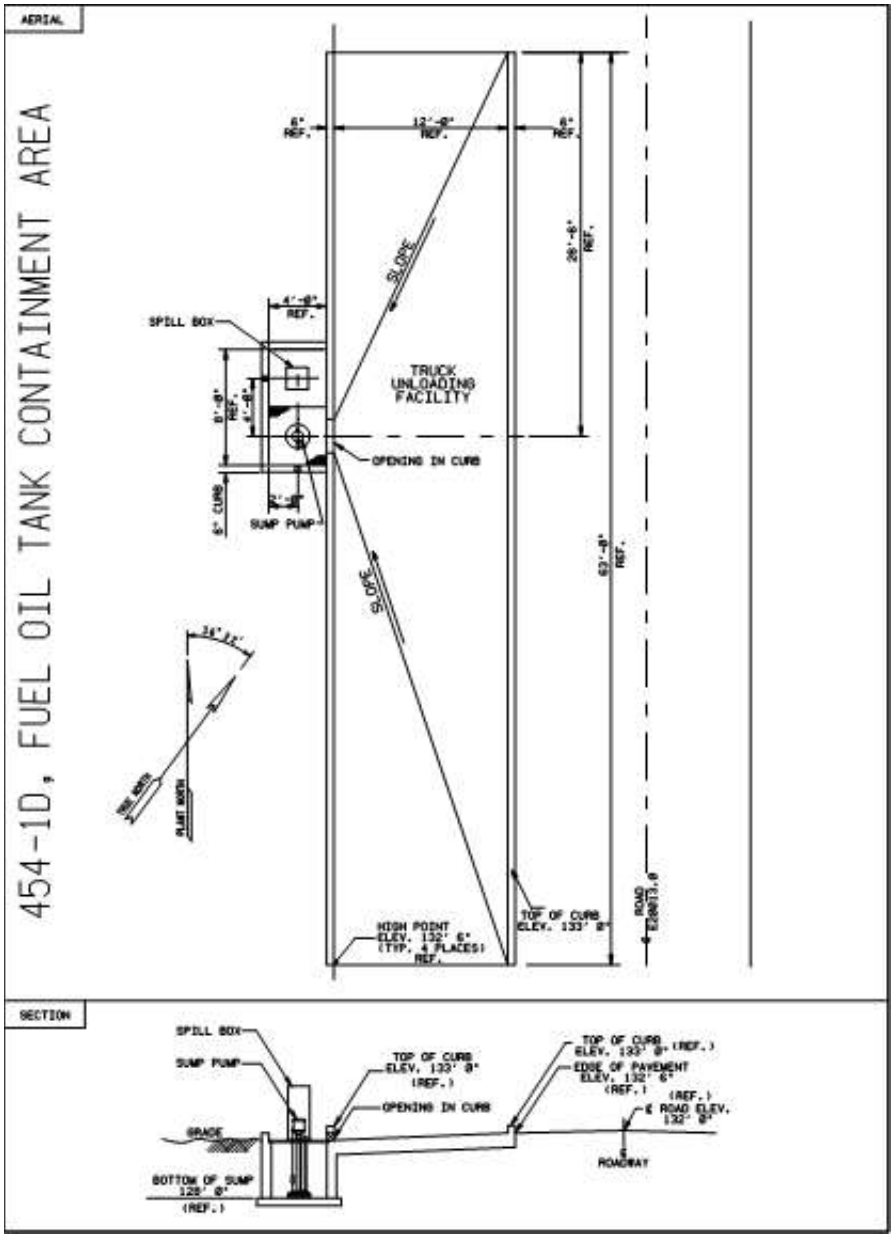


Figure 28. Building 454-1D, D-Area Diesel Fuel Unloading Facility Layout

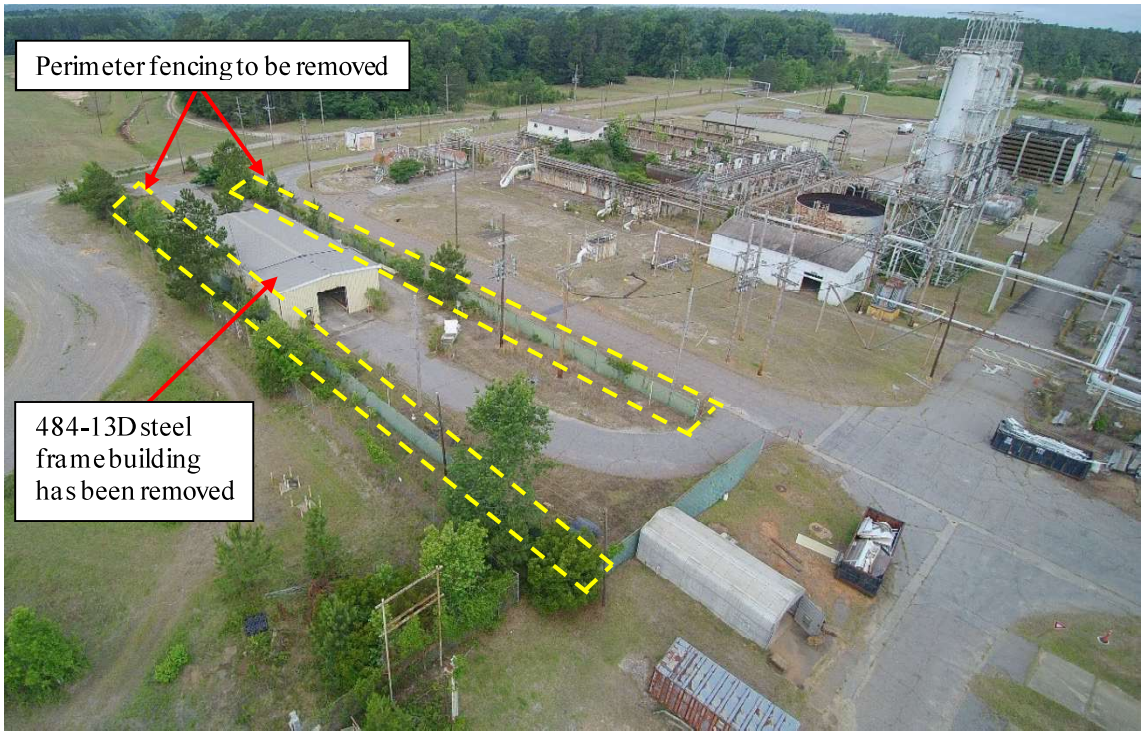


Figure 29. Aerial View of the 484-13D Facility Remnants to be Decommissioned

Figure 30. 80-22D Bone Yard

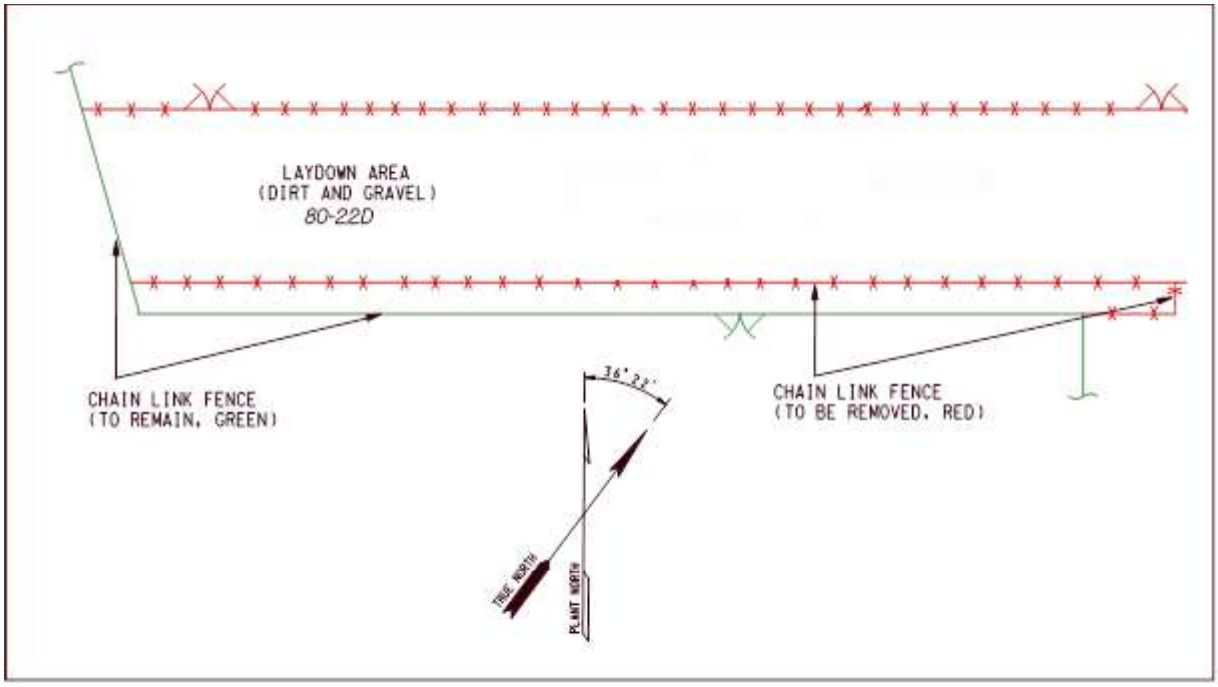


Figure 31. 80-22D, D-Area Bone Yard Storage Layout

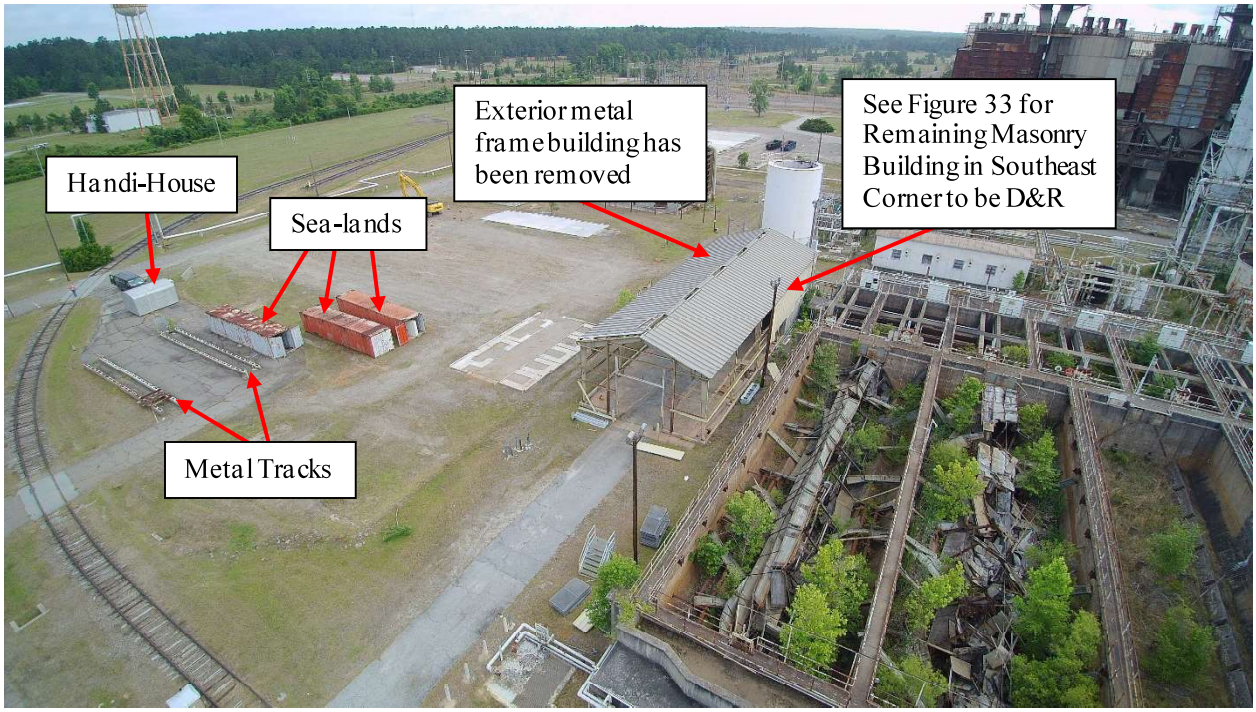


Figure 32. Aerial View of the 683-D Facility Remnants to be Decommissioned

Figure 33. 683-D Masonry Structure (Looking Southeast)

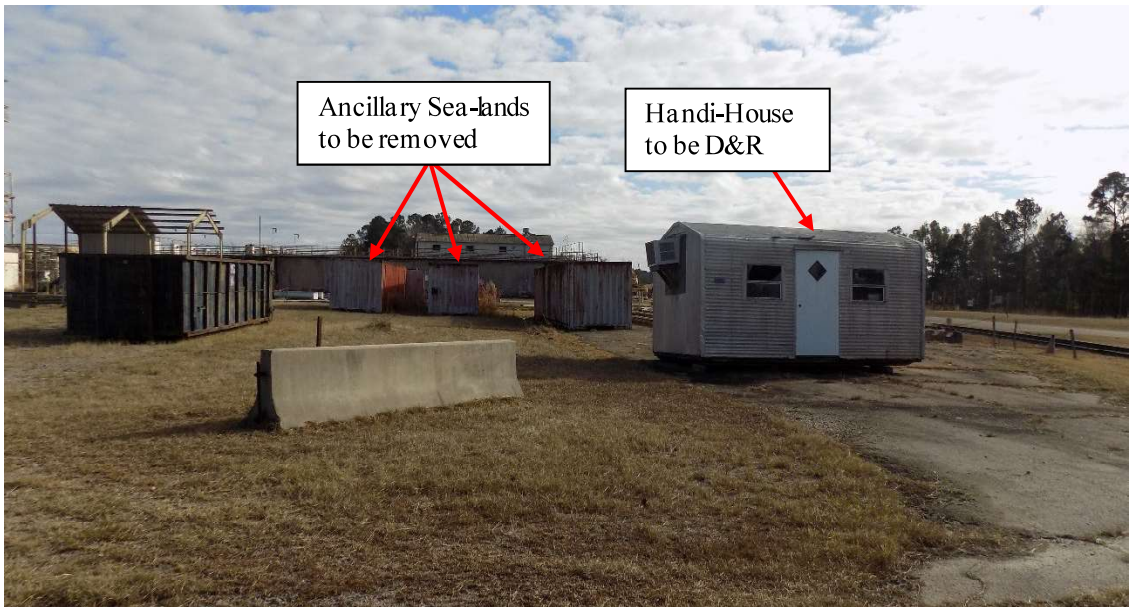


Figure 34. Ancillary Sea-lands and Handi-House to be D&R

Figure 35. Ancillary Metal Tracks to be Removed

Attachment 5.2 – Engineering Document Requirements

Purpose The Engineering Document Requirements (EDR) form is prepared by the originator, establishes a basis for actions required of a Supplier and provides the schedule for the submittal of engineering documents by the Supplier.

Legend Entry No. **Information Required**

1 Document category number – see below.
2 Applicable specification number and appropriate paragraph.
3 Description corresponding to document category number.
4 Permission to proceed with fabrication or other specific processes is marked yes, if required.
5 List a milestone after award i.e., prior to fabrication, prior to test, prior to shipment, or with shipment that the listed document is to be submitted by Supplier.
6 Number of copies required for submittal.
7 Reproducible, Mylar, Vellum, etc.
8 Enter remarks when appropriate.

Document Category Number and Descriptions

1.0 Drawings
- 1.1 Outline Dimensions, Services, Foundations and Mounting Details – Drawings providing external envelope, including lugs, centerline(s), location and size for electrical cable, conduit, fluid, and other service connections, isometrics and details related to foundations and mountings.
- 1.2 Assembly Drawings – Detailed drawings indicating sufficient information to facilitate assembly of the component parts of an equipment item.
- 1.3 Shop Detail Drawings – Drawings which provide sufficient detail to facilitate fabrication, manufacture, or installation. This includes pipe spool drawings, internal piping and wiring details, cross-section details and structural and architectural details.
- 1.4 Wiring Diagrams – Drawings which show schematic diagram equipment, internal wiring diagrams, and interconnection wiring diagram for electrical items.
- 1.5 Control Logic Diagrams – Drawings which show paths which input signals must follow to accomplish the required responses.
- 1.6 Piping and Instrumentation Diagrams – Drawings which show piping system scheme and control elements.

2.0 Parts Lists and Costs – Sectional view with identified parts and recommended spare parts for one year's operation and specified with unit cost.

3.0 Complete SRS Data Sheets – Information provided by Supplier on data sheets furnished by SRS.

4.0 Instructions
- 4.1 Erection/Installation – Detailed written procedures, instructions, and drawings required to erect or install material or equipment.
- 4.2 Operations – Detailed written instructions describing how an item or system should be operated.
- 4.3 Maintenance – Detailed written instructions required to disassemble, reassemble and maintain items or systems in an operating condition.
- 4.4 Site Storage and Handling – Detailed written instructions, requirements and time period for lubrication, rotation, heating, lifting or other handling requirements to prevent damage or deterioration during storage and handling at jobsite. This includes shipping instruction for return.

5.0 Schedules: Engineering and Fabrication/Erection – Bar charts or critical path method diagram which detail the chronological sequence of activities, i.e., Engineering submittals, fabrication and shipment.

6.0 Quality Assurance Manual/Procedures – The document(s) which describe(s) the planned and systematic measures that are used to assure that structures, systems, and components will meet the requirements of the procurement documents.

7.0 Seismic Data Reports – The analytical or test report which provides information and demonstrates suitability of material, component or system in relation to the conditions imposed by the stated seismic criteria.

8.0 Analysis and Design Reports – The analytical data (stress, electrical loading, fluid dynamics, design verification reports, etc.) which demonstrate that an item satisfies specified requirements.

9.0 Acoustic Data Reports – The noise, sound and other acoustic vibration data required by the procurement documents.

10.0 Samples
- 10.1 Typical Quality Verification Documents – A representative data package which will be submitted for the items furnished as required in the procurement documents.
- 10.2 Typical Material Used – a representative example of the material to be used.

11.0 Material Descriptions – The technical data describing a material which a Supplier proposes to use. This usually applies to architectural items, e.g., metal siding, decking, doors, paints, coatings.

12.0 Welding Procedures and Qualifications – The welding procedure, specification and supporting qualification records required for welding, hard facing, overlaying, brazing and soldering.

13.0 Material Control Procedures – The procedures for controlling issuance, handling, storage and traceability of materials such as weld rod.

14.0 Repair Procedures – The procedures for controlling materials removal and replacement by welding, brazing, etc., subsequent thermal treatments, and final acceptance inspection.

15.0 Cleaning and Coating Procedures – The procedures for removal of dirt, grease or other surface contamination, and preparation and application of protective coatings.

16.0 Heat Treatment Procedures – The procedures for controlling temperatures and time at temperature as a function of thickness, furnace atmosphere, cooling rate and methods, etc.

19.0 UT – Ultrasonic Examination Procedures – Procedures for detecting discontinuities and inclusions in materials by the use of high frequency acoustic energy.

20.0 RT – Radiographic Examination Procedures – Procedures for detecting discontinuities and inclusions in materials by x-ray or gamma ray expose of photographic film.

21.0 MT – Magnetic Particle Examination Procedures – Procedures for detecting surface or near surface discontinuities in magnetic materials by the distortion of an applied magnetic field.

22.0 PT – Liquid Penetrant Examination Procedures – Procedures for detecting discontinuities in materials by the application of a penetrating liquid in conjunction with suitable developing materials.

23.0 Eddy Current Examination Procedures – Procedures for detecting discontinuities in materials by distortion of an applied electromagnetic field.

24.0 Pressure Test – Hydro, Air, Leak, Bubble or Vacuum Test Procedures – Procedures for performing hydrostatic or pneumatic structural integrity and leakage tests.

25.0 Inspection Procedures – Organized process followed for the purpose of determining that specified requirements (dimensions, properties, performance results, etc.) are met.

26.0 Performance Test Procedures – Test performed to demonstrate that functional design and operational parameters are met.
- 26.1 Mechanical Tests – e.g., pump performance, data, valve stroking, load, temperature rise, calibration, environmental, etc.
- 26.2 Electrical Test – e.g., impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.

Attachment 5.2 – Engineering Document Requirements (Continued)

1.	2.	3.	4.		5.	6.		7.	8.
Document Category Number	Specification Paragraph Reference	Document Description	Permission to Proceed Required		Submittal Schedule	Quantity Required		Kind of Copies	Remarks
			Yes	No		Initial	Final		
4.0	3.1.1.6	Fire Prevention Plan (FPP)	Yes		30 calendar days after Award		1	Repro / PDF	
16.0	3.1.1.6. D.12.a.	Hot Work Permit Procedure	Yes		Prior to any Hot Work operations		1	Repro / PDF	
4.0	3.1.1.7	Worker Protection Plan (WPP)	Yes		30 calendar days after Award		1	Repro / PDF	
4.0	3.1.1.8	Task Specific Plans (TSP)	Yes		10 calendar days prior to start of each task		1	Repro / PDF	
5.0	3.1.1.10	Decommissioning Plan & Activities Schedule	Yes		30 calendar days after Award		1	Repro / PDF	
4.0	3.1.1.13	Approved Demolition Permit(s)	Yes		4 working days prior to start of any demolition activities		2	Repro / PDF	
4.0	3.5.1.2.	Copies of worker qualifications and any required licenses	Yes		With proposal		1	Repro / PDF	
4.0	3.1.1.17	Three Rivers Sanitary Landfill scale ticket for each waste shipment	Yes		After each shipment		1	Repro / PDF	
6.0	3.1.7.E	Engineering Survey	Yes		30 calendar days after Award		1	Repro / PDF	
8.0	3.1.7.C	Lift Plan	Yes		Prior to any Lift operations.		1	Repro/ PDF	
8.0	3.1.7.D	Excavation Plan	Yes		Prior to any Excavation operations.		1	Repro/ PDF	

Attachment 5.3 – Asbestos Management Program Aid

Asbestos Management Program	**Manual:**	**3Q**
	Procedure:	**4.14**
	Revision:	**11**
	Page:	**39 of 40**

APPENDIX 8.6
Aid for Determining Demolition License Requirements at the Savannah River Site
Page 1 of 2

Aid for Determining Demolition License Requirements at the Savannah River Site

Regulatory Integration and Environmental Services

March 28, 2012
Revision 2

Contact your area/ project Environmental Compliance Authority for assistance and more information.

This document is provided as a service to Savannah River Site organizations and contractors by the Regulatory Integration and Environmental Services Department

Additional Information Required for Compliance

This aid is a supplement to Procedures 3Q 4.14 and 3Q 5.1, and to South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1 as they relate to the demolition of structures. It should not be used as a replacement for compliance with the procedures and regulation. Items to be considered in determining the need for a demolition license:

- A demolition is defined as the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations, the burning of a facility, or the moving of a structure.
- Renovation is the altering of a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos from a facility component.
- A demolition license is required even if no asbestos is present in the building.
- An inspection by a certified asbestos inspector is required before applying for a license.
- SCDHEC requires a 10-day mandatory waiting period after the application is received and before a license can be issued and work begins.
- Start and finish dates are enforced by SCDHEC but can be modified with 24-hour notice to the RIAES licensing agent.
- SCDHEC licenses and license modifications must be obtained through the RIAES licensing agents via the following e-mail address: "ASBESTOS PERMITTING" or by calling 2-6553.

Attachment 5.3 – Asbestos Management Program Aid (Continued)

Asbestos Management Program	**Manual:**	**3Q**
	Procedure:	**4.14**
	Revision:	**11**
	Page:	**40 of 40**

APPENDIX 8.6
Aid for Determining Demolition License Requirements at the Savannah River Site
Page 2 of 2

Aid for Determining Demolition License Requirements

Examples of Activities Requiring a Certified Asbestos Inspection/Demolition License

- Buildings/structures being partially/completely demolished
- ALL office trailers demolished/partially dismantled/relocated
- Hand-Houses being demolished
- Portable carports being demolished
- Stacks being demolished/partially demolished

Specifically:
- >Buildings/structures that are affixed to foundation or ground
- >Structure that contains load-supporting members, beams, or posts
- >Structure being moved/demolished that has the appearance of "permanency"

A demolition license application, including an inspection report by a certified inspector, is required before any work begins.

A demolition license is required even if no asbestos is present.


Building affixed to the ground


ALL trailers relocated/demolished


Load-bearing wall removal


Structure with foundation


Porch with structural posts


Building with foundation

Examples of Renovations/Relocations Requiring a Certified Asbestos Inspection

- Hand-Houses with tie-downs and/or utilities being moved
- Mobile offices being moved that have permanent utilities
- Renovations that include alteration of facility
- Portable buildings being moved

Specifically:
- >Utility connections the only permanent part of structure
- >Structure temporary in nature
- >Structure temporary; foundation permanent

Renovations require an inspection report from a certified asbestos inspector—stating that asbestos is not present or that the asbestos will not be disturbed during the relocation—before work begins, with the certified report to be kept on file for three years.


Permanent electrical tie-in


Foundation break of a "sprung structure" requires inspection


Wheels and tow tongue make unit appear portable


Screw-type tie-downs


Electrical connection and restraints


Permanent electrical tie-in

Examples of Activities Not Requiring Inspection/License

- Containers (Sealtainx, Mobile Minis) that move—not affixed to the ground
- Hand-House with no utilities—only tie-downs without inground foundation
- Motor homes with no permanent utility connections
- Trailers on stabilizer jacks (temporary)
- "Party tents" – shelters for craft when performing tasks
- Temporary construction fixtures/equipment
- Portable carports (without foundations) that are moved but not disassembled

Concurrence by the area/project ECA is required prior to beginning work.


No tie-downs, not disassembled


No tie-downs/no utilities


No tie-downs/no utilities; routinely moved around the site


Portable tents without utilities


No tie-downs/no utilities