C-755-A Decontamination Building

Facility Overview Briefing

October 19, 2021

Reflects consultation with EPA and Kentucky in accordance with the Site Management Plan that occurred on October 18, 2021.

Purpose

- The C-755-A Decontamination Building is a candidate for future demolition and disposal, contingent upon funding priorities.
- Listed in Appendix 6 of the Site Management Plan (SMP); requires consultation with EPA and Kentucky for CERCLA screening prior to demolition.
- This presentation is intended to serve as consultation, providing the basis for demolition and disposal of the aboveground structure outside of the FFA/CERCLA process.
- The remaining slab/soils will be subject to a further CERCLA evaluation as part of a future integrated site evaluation conducted under Appendix 4 of the SMP.

C-755-A Facility Photo: 7/2021

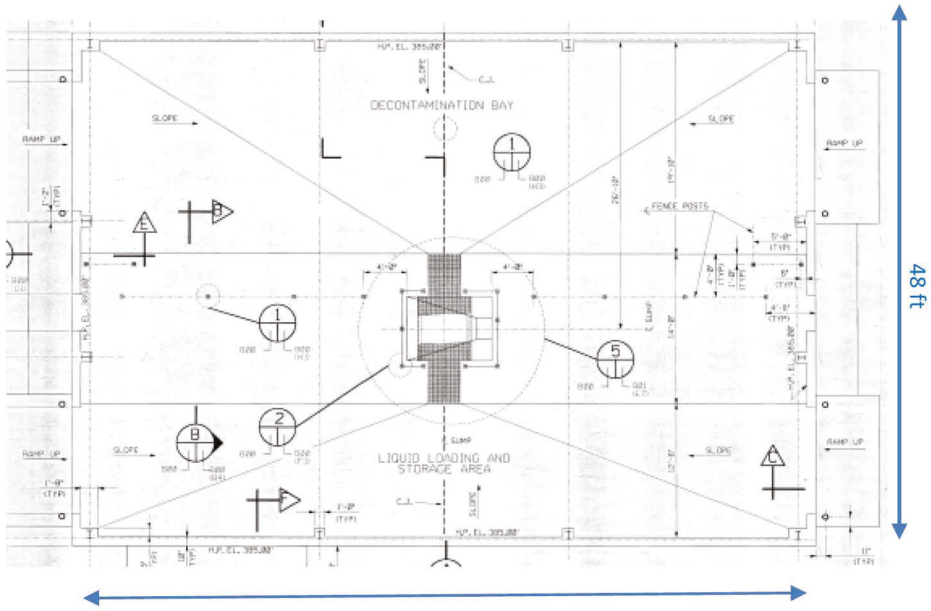
Construction History

- C-755-A is located outside the Paducah Site security fence, east of C-360 between Patrol Road 3 and Dyke Road.

- The facility was constructed in 1994.

- The facility is a prefabricated metal structure on a concrete slab (10-inches thick with a thicker portion in the center of the facility).
  - The structure is fully enclosed with pedestrian and roll up doors on the east and west ends.
  - A sump pit is included as part of the structure design.
    - Pit bottom and walls are 8-inches thick
    - Depth varies between 3-ft 4-inches to 4-ft
  - Floors are sloped allowing free-flowing liquids to drain to the sump pit.
  - No floor drains were included as part of the structure design and a facility walkdown has confirmed that no floor drains are present.

- The facility is approximately 3,360 ft^2.
  - Measuring ~70 ft x ~48 ft.



Floor Plan View: Excerpt from Engineering Drawing A5E 18089-B00, dated 1993

Operational History

- C-755-A was constructed in 1994 as an Environmental Restoration (ER) support facility and was operated as a CERCLA staging area and decontamination facility for ER field equipment (e.g., drill rigs) until C-752-C became the preferred ER decontamination facility.
  - Used to support the CERCLA Mega Waste Area Group project from 1999 to 2000.
  - Specific types of ER project support from 1994 to 1999 and from 2000 to 2005 is uncertain.

- From 1999 to 2000, C-755-A was used to decontaminate drilling equipment associated with the CERCLA Mega Waste Area Group project.
  - During the project, the area was managed in accordance with the substantive provisions of applicable or relevant and appropriate requirements.
  - Decontamination water was captured in a sump pit located in the center of the facility.
  - Upon completion of the CERCLA activities, the water from the sump was tested and removed for disposal.

- On January 13, 2000, a fire occurred in C-755-A and damaged a 1,000-gallon tank associated with SWMU 422.
  - Water used to put out the fire was containerized and transferred to C-752-A.
  - Fire retardant foaming agent(s) were not used to put the fire out.

- In 2005, C-755-A was transferred to the infrastructure support services contractor and was used until 2015 as a maintenance garage for equipment (e.g., tractors, lawnmowers, etc.).

North Truck Bay Looking West

North Truck Bay Looking East

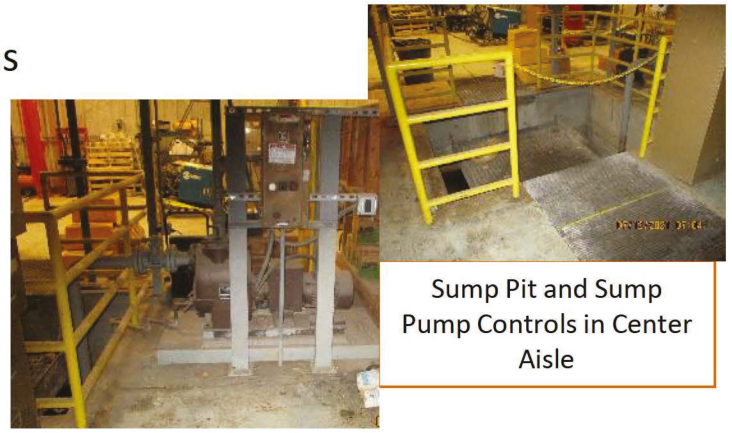
North Truck Bay Hot Work Area and Equipment

Flammable Items Storage Cabinet Along North Wall

C-755-A Facility Photos: 7/2021

Operational History

- Since 2015, the infrastructure support services contractor has operated C-755-A as a maintenance equipment repair and storage building consisting of the following:
  - Two drive through truck bays used for minor repairs and of maintenance equipment (e.g., lawnmowers).
  - Hot work areas on the west end of each bay for welding and fabrication.
  - A center aisle that includes a work bench, a battery charging station, and storage areas for cleaning materials and janitorial supplies [e.g., tarps; pig absorbent socks; vermiculite; and cleaning products (bleach, bathroom cleaner, air freshener, floor cleaner and polish, new unused rags); etc.].
  - A sump pit located in the center of the building.
- Water collected in the sump pit is hand pumped out of the pit and shipped off-site as sanitary waste.
  - Since 2005, no activities occur in the building that could generate hazardous waste water.
  - Water may be from wet vehicles or rainwater blown into the building.
- USEC did not lease or use the facility.



Sump Pit and Sump Pump Controls in Center Aisle

Battery Charging Station in Center Aisle

Work Bench in Center Aisle

Storage Cabinet and Shelving in Center Aisle

C-755-A Facility Photos: 7/2021

Current Status

- C-755-A remains operational as a maintenance equipment repair and storage building.

- Walkdown inspection conducted in July 2021 and employee interviews confirmed no unusual conditions.
  - ❑ One floor sump pit that is pumped, when necessary; water is containerized and sent off-site for treatment as sanitary waste.
  - ❑ No floor drains.
  - ❑ Not used for radiological storage, nor does the facility contain any radiological postings.
  - ❑ One generator staging area (GSA), G-755-A1.
  - ❑ No satellite accumulation area (SAA).
  - ❑ No known asbestos-containing materials (ACM) or lead-based paint.
  - ❑ No known chemical spills.
  - ❑ No signs of cracks in concrete pad.
  - ❑ Four flammable storage cabinets containing paints, gas, and aerosol sprays (e.g., wasp spray, hornet spray, spray paint, WD-40, etc.) stored in small quantities and in accordance with regulatory requirements and site procedures.
  - ❑ Floor stains in both truck bays that are consistent with garage activities and routinely cleaned up.

South Truck Bay Looking West

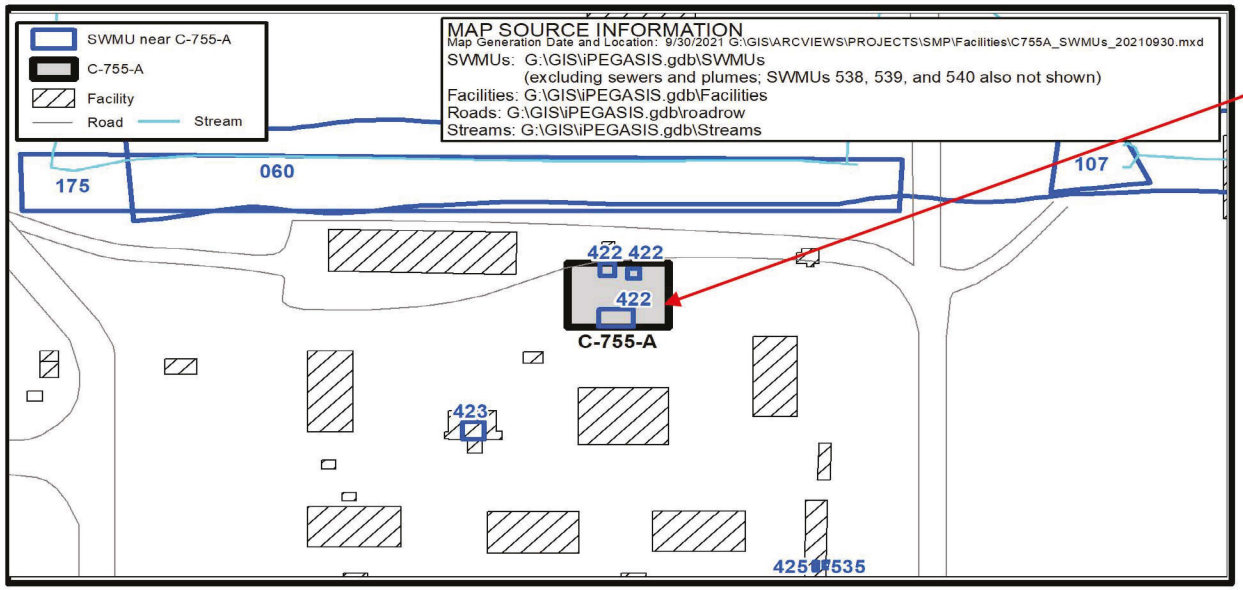
South Truck Bay Looking East

Storage Area in the SE Corner

South Truck Bay Hot Work Area and Equipment

C-755-A Facility Photos: 7/2021

Environmental Impacts
(Solid Waste Management Units)



- The C-755-A Decontamination Building is not designated as a SWMU/AOC.
- SWMU 422 is no longer present and was granted No Further Action by KDWM on 1/28/2004.
- There is no relationship between SWMU 422 and the current GSA.

SWMU No.	Facility Name	Current Status	NFA Approval By
060	C-375-E2 Effluent Ditch (KPDES 002)	SWOU	
107	Concrete Rubble Pile (5)	SWOU	
175	Concrete Rubble Pile (28)	SWOU	
422	G-755-A-01, G-755-A-02, and G-755-A-03	NFA	KDWM 1/28/2004
423	G-755-C-01	NFA	KDWM 1/28/2004
425	G-755-T-08	NFA	KDWM 1/28/2004
535	S-755-T08-01 (Satellite Accumulation Area at C-755, Trailer 8)	NFA	KDWM 2/14/2006
538*	S-MST-01-01 & S-MST-01-02 (Mobile Trailer 01)	NFA	KDWM 2/14/2006
539*	S-MST-02-01 & S-MST-02-02 (Mobile Trailer 02)	NFA	KDWM 2/14/2006
540*	S-MST-03-01 & S-MST-03-02 (Mobile Trailer 03)	NFA	KDWM 2/14/2006

* These SWMUs are in the area but are not shown on the map.

Environmental Impacts

- No information to indicate a release or threatened release of a hazardous substance that would require an evaluation for a potential response action to protect future public health or welfare or the environment.

  - C-755-A was originally constructed and operated as a staging area and decontamination facility for ER field equipment from its construction in 1994 to 2005; served as an infrastructure support maintenance garage for equipment from 2005 to 2015; and has been used as an infrastructure support maintenance equipment repair and storage building from 2015 to present.

  - On January 13, 2000, a fire occurred at the C-755-A facility. Water used to put out the fire was containerized and transferred to C-752-A. Foam containing PFAS was not used to put the fire out.

  - Building materials used for construction do not contain known ACM or lead-based paints.

  - No history or records of chemical spills that would pose an environmental release threat.

Conclusion and Recommendations

- Walkdown inspection of the facility, employee interviews, and other reviewed historical information did not identify any unusual conditions that would pose a potential threat of environmental release during future demolition of the aboveground structure.
  - Deactivation will include removal of any accessible loose items being stored (to the extent practicable) prior to demolition.
  - Any floor drains (including the sump pit) will be delineated, documented, and isolated prior to demolition.
- Pending ceasing of operation, deactivation, and availability of funding, proceeding with demolition and disposal of the C-755-A facility (aboveground structure) outside of the FFA/CERCLA process, contingent upon the fact that no additional changes have occurred that would affect the CERCLA determination of the facility prior to demolition, is recommended.
- All applicable laws, regulations, and DOE procedures/protocols will be followed to ensure the demolition and disposal of the aboveground structure occurs in a safe, compliant manner, including conducting any additional radiological characterization through confirmation radiological surveys (as necessary) to support demolition and waste disposition.

Conclusion and Recommendations

- As part of the demolition of the aboveground structure, the appropriate best management practices (BMPs) will be evaluated and implemented (as needed) to prevent/minimize the pooling and/or migration of storm water that may come into contact with any contamination that may exist on the pad/subsurface structure(s). For example, the following BMPs will be implemented as necessary:
  - Radiological surveying will occur following demolition.
  - Decontamination and/or application of fixatives and/or barriers to contaminated surfaces above regulatory posting limits.
  - Isolation measures and other types of barriers to minimize and/or control runoff/pooling of contaminated storm water (e.g., seal inlets to drains/sumps/subsurface structure(s)).

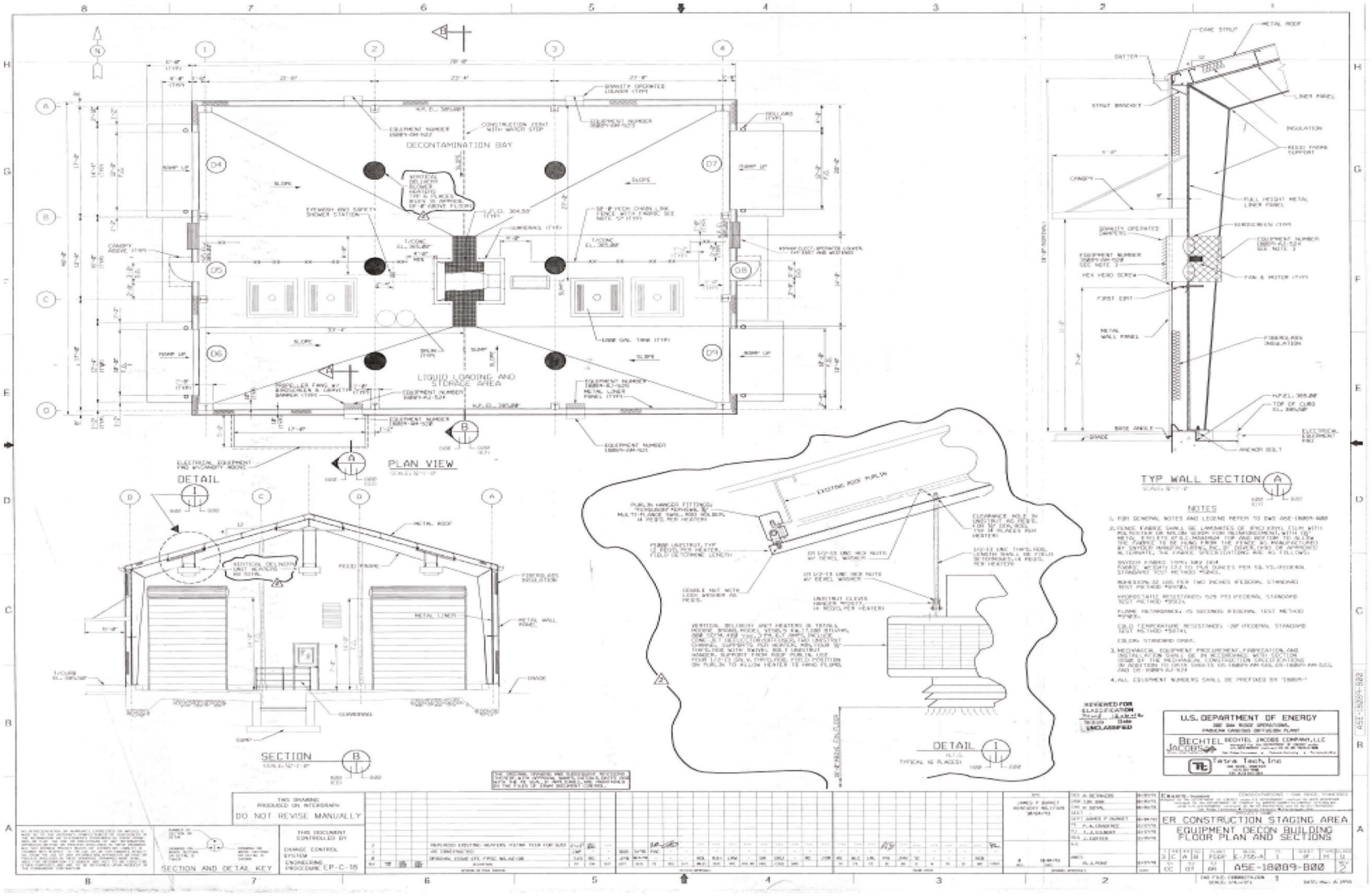
- Based on the historic use as an ER decontamination facility with a sloped floor and bays that allowed vehicles/equipment to be driven directly into the facility for decontamination, it is recommended that the remaining slab/soils be subjected to an integrated site evaluation.

- Removal of the C-755-A facility will be documented in the appropriate annual SMP revision.

C-755-A Decontamination Building

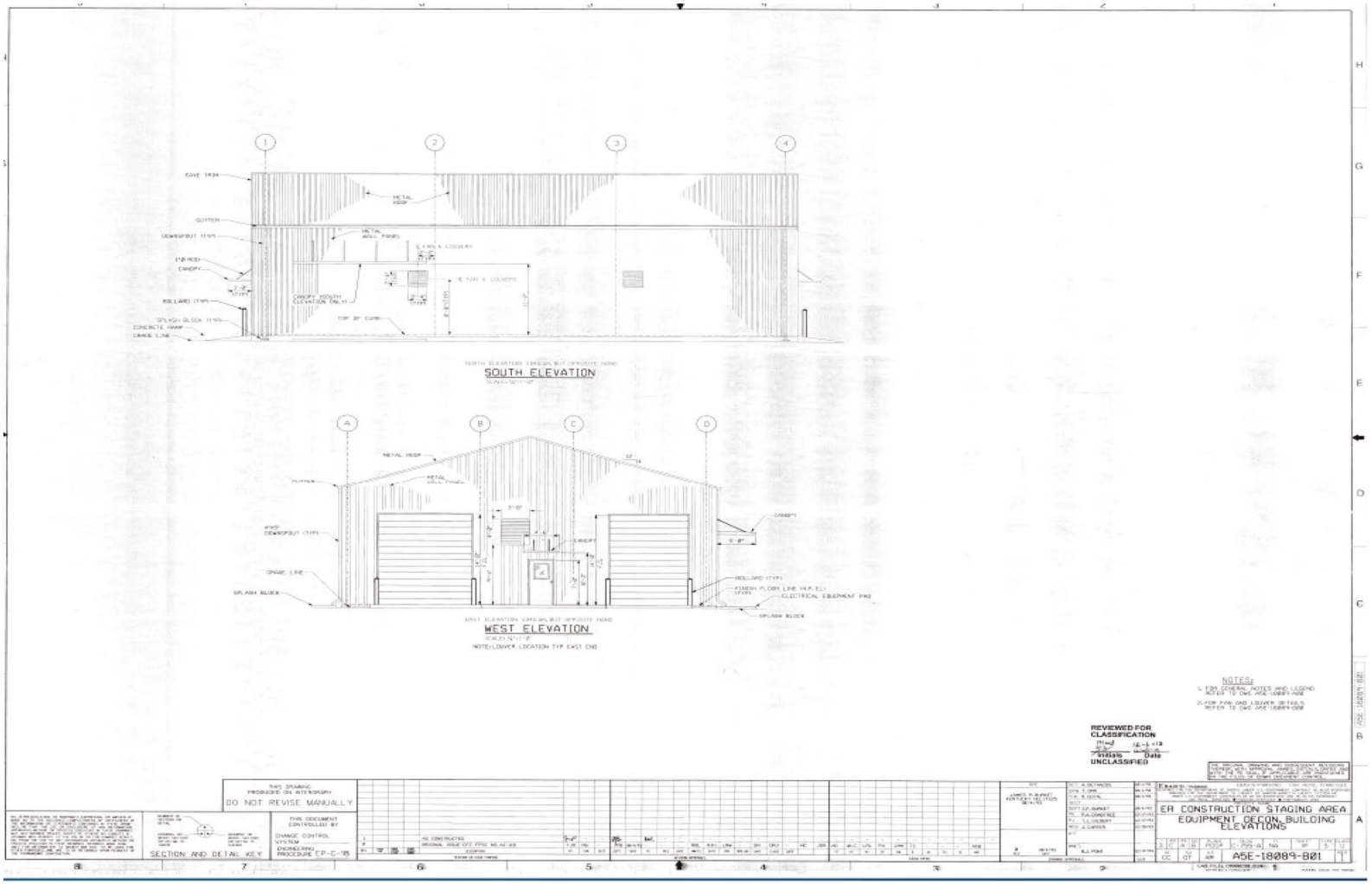
BACKUP INFORMATION

C-755-A Engineering Drawings



A5E-18089-B00, Rev 2

C-755-A Engineering Drawings



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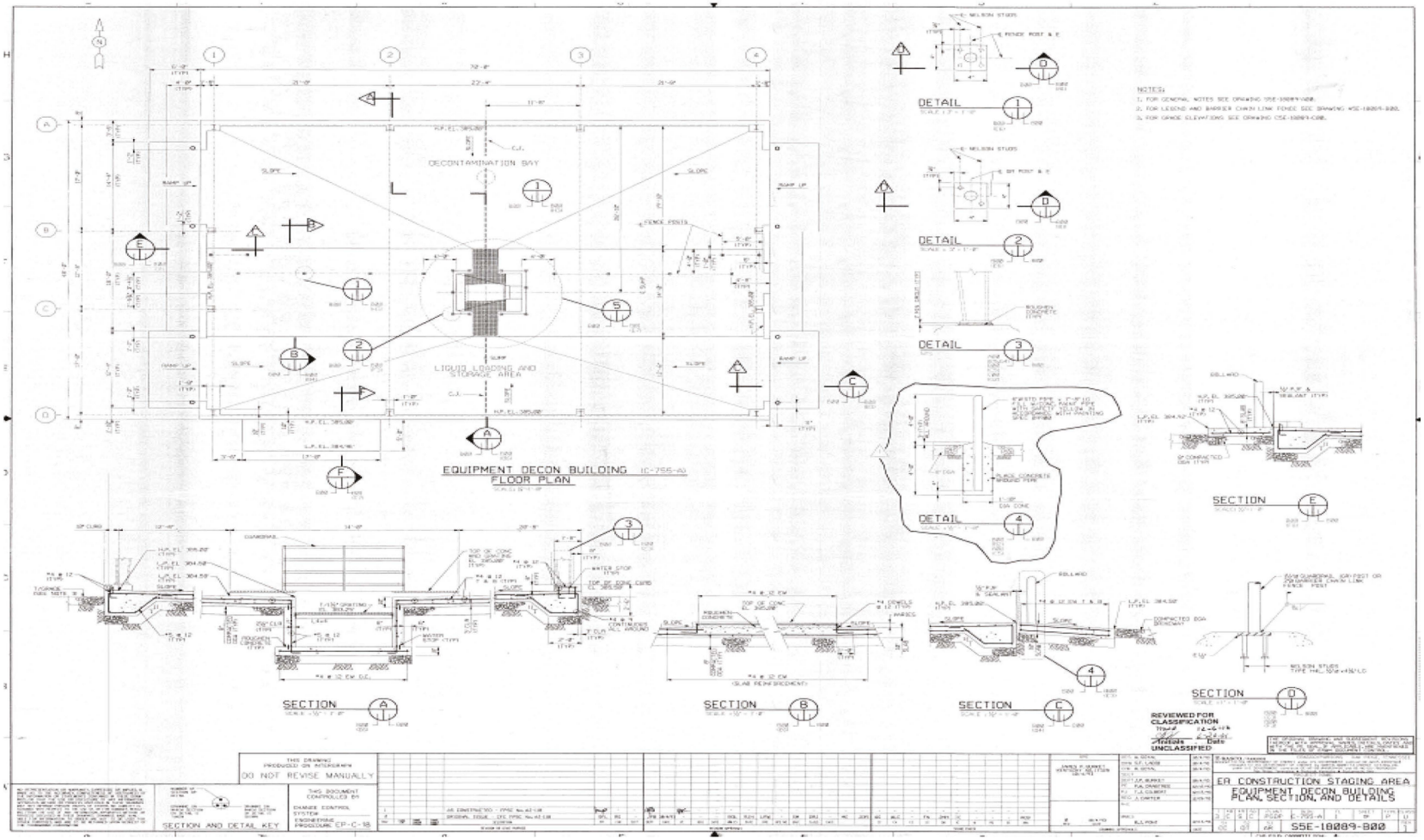
C-755-A Engineering Drawings



C-755-A Sources

- Engineering Drawings:
  - Provided in presentation
- Databases:
  - Issues Management System
  - Regulatory Compliance Archive Spill Log (pre-2018)
  - PCB Database (1989 – 2021)
  - Active GSAs and SAAs Master List
- Employee Interviews:
  - O&M Manager and Supervisor (5 years, total of 12 years plant expertise)
  - Compliance Subject Matter Expert (27 years plant expertise)
  - Site Geologist (30 years plant expertise)
  - Fire Department Subject Matter Expert (33 years plant expertise)
  - Project Manager (34 years plant expertise)
  - Compliance Subject Matter Expert (45 years plant expertise)
- Documents:
  - SWMU Assessment Report for SWMU 422
  - DOE Letter to KDWM, Response to Request for Submittal of Solid Waste Management Unit (SWMU) Assessment Report for Unidentified Solid Waste Management Units at the Paducah Gaseous Diffusion Plant, February 17, 2004

C-755-A Sources

- Documents continued:
  - Letter from KDWM to DOE and Bechtel Jacobs RE: Response to Request for Submittal of Solid Waste Management Unit (SWMU) Assessment Report for Unidentified Solid Waste Management Units at the Paducah Gaseous Diffusion Plant, March 1, 2004
  - Paducah Gaseous Diffusion Plant Hazardous Waste Annual Report, Enclosure 1, Other Non-compliance Not Otherwise Reported, 2005
  - Paducah Gaseous Diffusion Plant Sitewide Strategy Facility Background Information, FPDP-RPT-0021, May 2016