

C-755-C Sample Shipment/Storage Facility



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

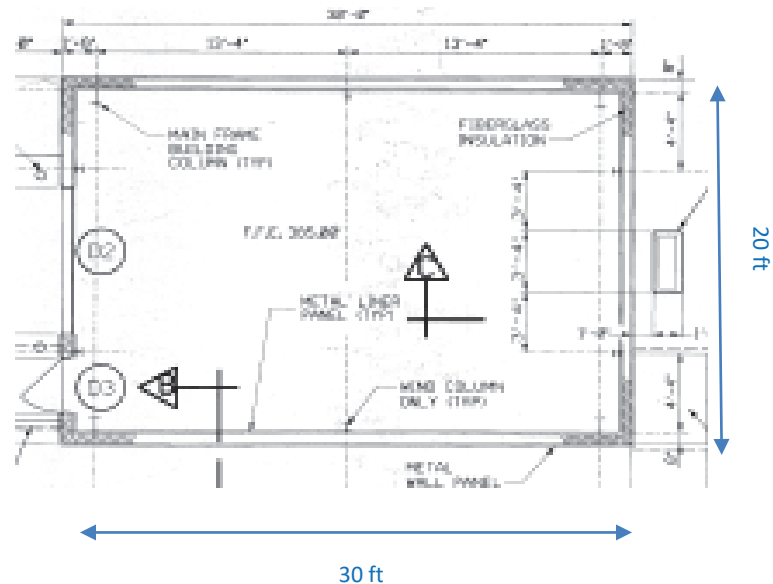
- The C-755-C Sample Shipment/Storage Facility is a candidate for future demolition and disposal, contingent upon funding priorities.
- Listed in Appendix 6 of the Site Management Plan (SMP); requires consultation with EPA and Kentucky for CERCLA screening prior to demolition.
- This presentation is 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 future CERCLA evaluation under Geographical Area (GA) 5.



C-755-C Facility Photo: 7/2021

Construction History

- C-755-C is located outside the Paducah Site security fence, east of C-360 between Patrol Road 3 and Dyke Road.
- The facility was constructed in 1993.
- The facility is constructed of prefabricated metal on a concrete slab (8 inches thick).
 - ❑ The structure is fully enclosed with a pedestrian door and a rollup door on the west end.
 - ❑ Sumps and floor drains were not included as part of the structure design and a facility walkdown has confirmed that no floor drains or sumps are present.
- The facility is approximately 600 ft².
 - ❑ Measuring ~30 ft x ~20 ft.



Floor Plan View: Excerpt from Engineering Drawing ASE 18089-A00, dated 2002

Operational History

- C-755-C was constructed in 1993 as an Environmental Restoration (ER) support facility and was operated as an ER sample shipment/storage facility until 2016.
 - ❑ From 1993 to approximately 2005, the facility was actively used by the ER program for sample storage and shipment.
 - ❑ The facility was posted as a radiological material area for radioactive storage, but radioactive material is no longer stored in the facility.
 - ❑ After 2005, the facility continued to be used for sample storage and shipment at a decreased frequency once C-743 transitioned as the preferred sample storage and shipment support facility for the ER program.
 - ❑ After 2012, the facility was no longer used as a sample storage/shipment facility and was transitioned to a storage facility for environmental equipment (e.g., geophysical equipment).
- USEC did not lease or use the facility.
- In 2016, C-755-C was transferred to the infrastructure support services contractor and continued to be used as a storage facility.
- In 2020, the infrastructure support services contractor converted C-755-C into a carpenter shop.

C-755-C East Side



C-755-C West Side



Interior North Wall and West Roll-up Door

Current Status

- C-755-C is currently operated as a carpenter shop.
- Walkdown inspection conducted in July 2021 and employee interviews confirmed no unusual conditions.
 - No sumps or floor drains are present.
 - Not used for radiological storage, nor does the facility contain any radiological postings.
 - No generator staging area (GSA) or satellite accumulation area (SAA).
 - No known asbestos-containing materials (ACM) or lead-based paint.
 - There are no known chemical spills.
 - No signs of cracks in concrete pad.
 - No floor stains.
 - A flammable storage cabinet containing paint 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.

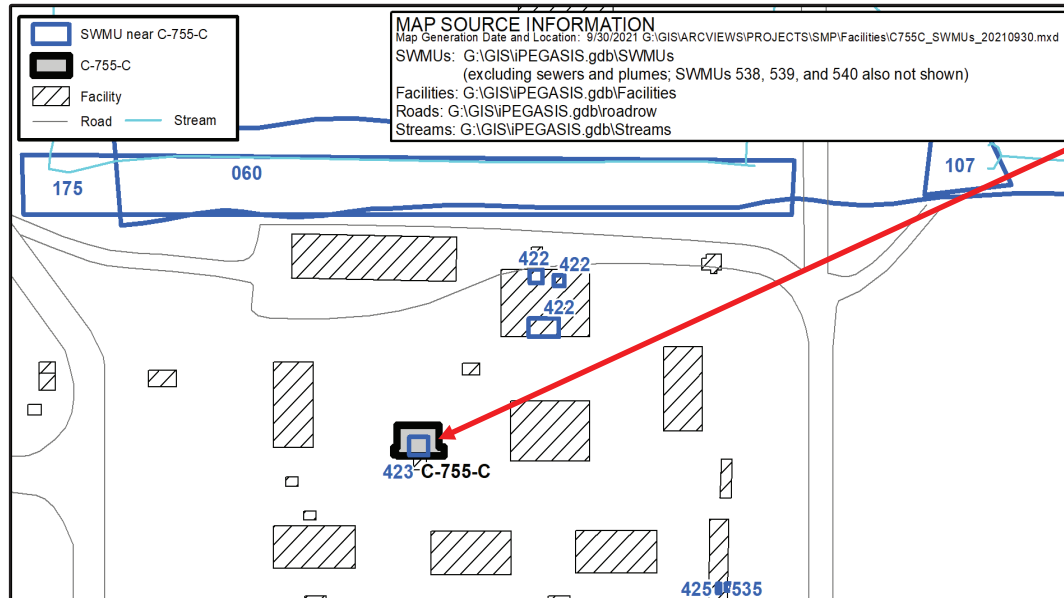


View of South Wall



View of North and East Walls

Environmental Impacts (Solid Waste Management Units)



- The C-755-C Sample Shipment/Storage Facility is not designated as a SWMU/AOC.
- SWMU 423 (G-755-C-01) was granted No Further Action by KDWM on 1/28/2004.

| 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, 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-C originally operated as a sample shipment/storage facility from its construction in 1993 until 2016; served as an infrastructure support services storage facility from 2016-2020; and has been used as an infrastructure support services carpenter shop from 2020 to present.
 - ❑ Building materials used for construction do not contain known ACM or lead-based paints.
 - ❑ No history or records of chemical use or 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 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-C 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)).

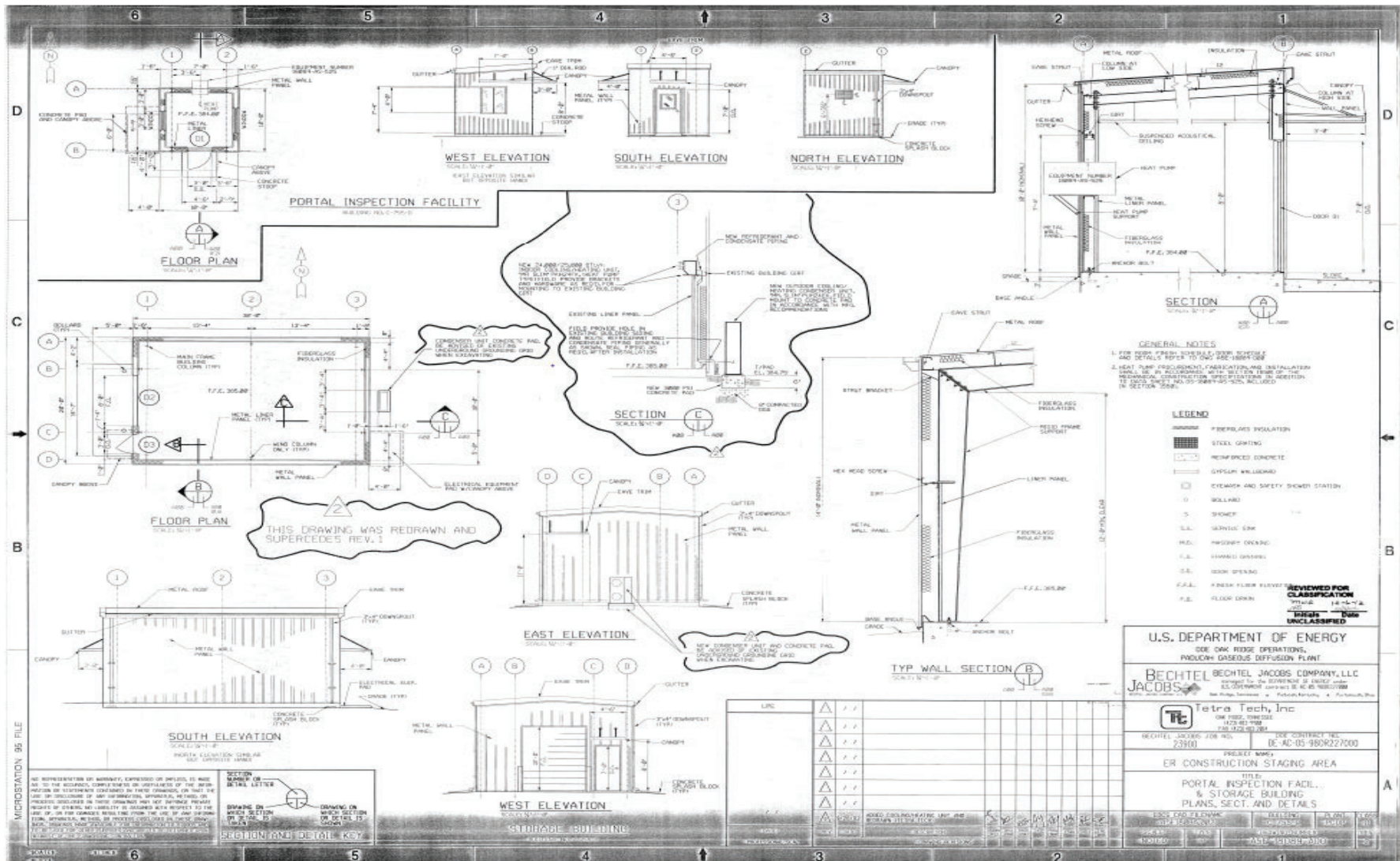
- Removal of the C-755-C facility will be documented in the appropriate annual SMP revision.

- The future evaluation conducted for GA 5 will further evaluate the potential threat of release associated with the slab/soils from the C-755-C facility.

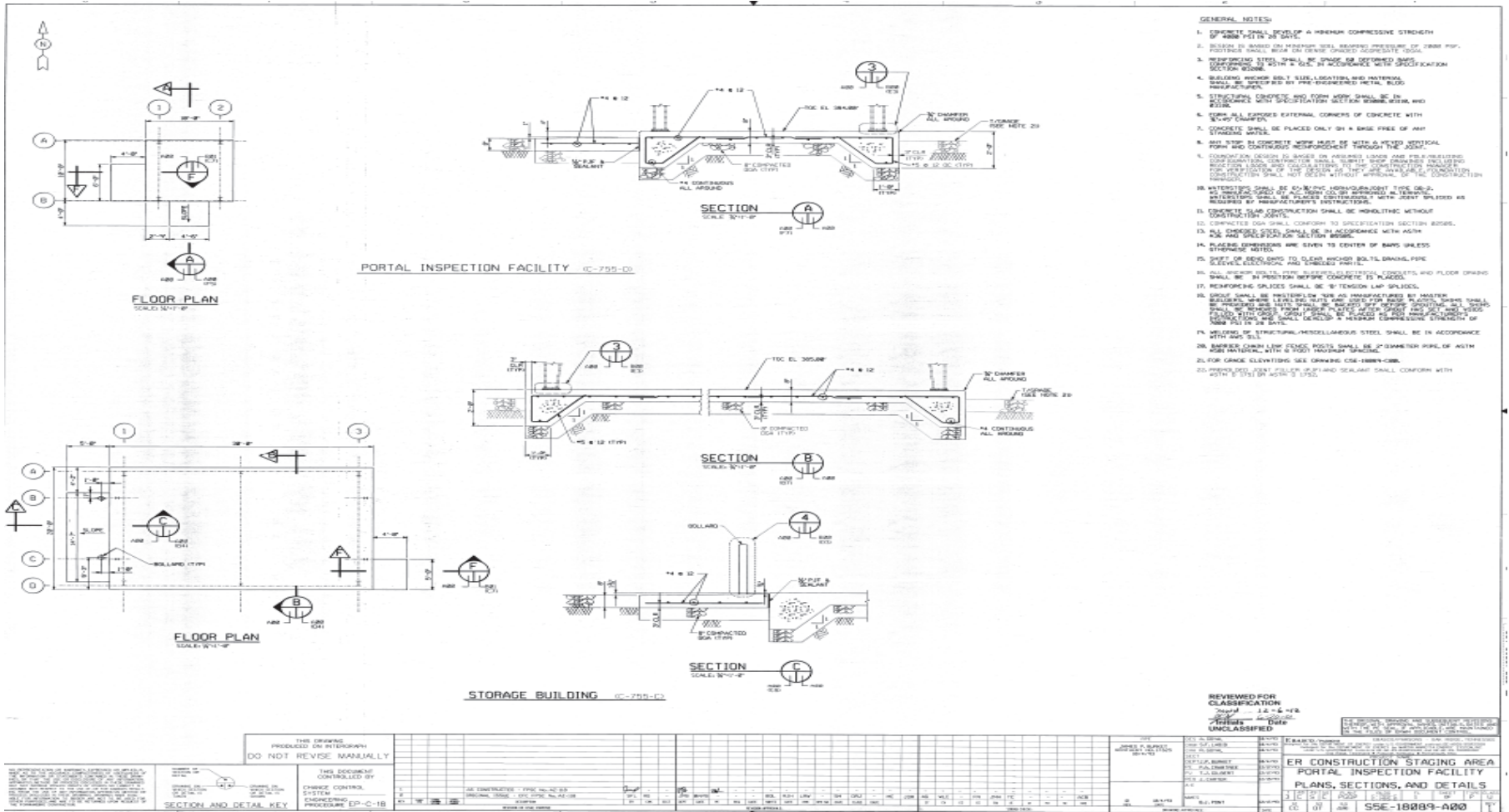
C-755-C Sample Shipment/Storage Facility

BACKUP INFORMATION

C-755-C Engineering Drawings



C-755-C Engineering Drawings



C-755-C 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)
 - Environmental Monitoring Subject Matter Expert (15 years plant expertise)
 - Engineer (16 years plant expertise)
 - Compliance Subject Matter Expert (27 years plant expertise)
 - Compliance Subject Matter Expert (45 years plant expertise)
- Documents:
 - Paducah Gaseous Diffusion Plant Sitewide Strategy Facility Background Information, FPDP-RPT-0021, May 2016