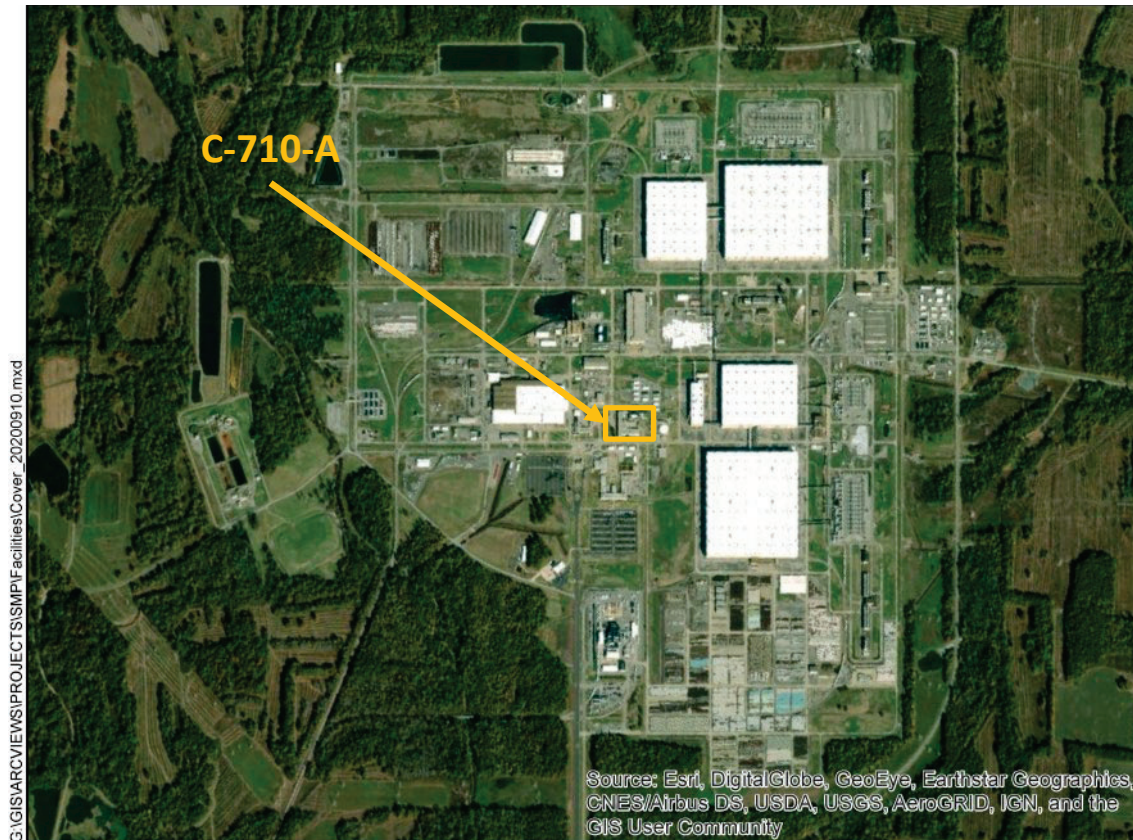


C-710-A Gas Cylinder Storage Building



Facility Overview Briefing

March 4, 2021

Reflects consultation with EPA and Kentucky in accordance with the Site Management Plan that occurred on February 1, 2021, and includes incorporation of comments from those discussions.

Purpose

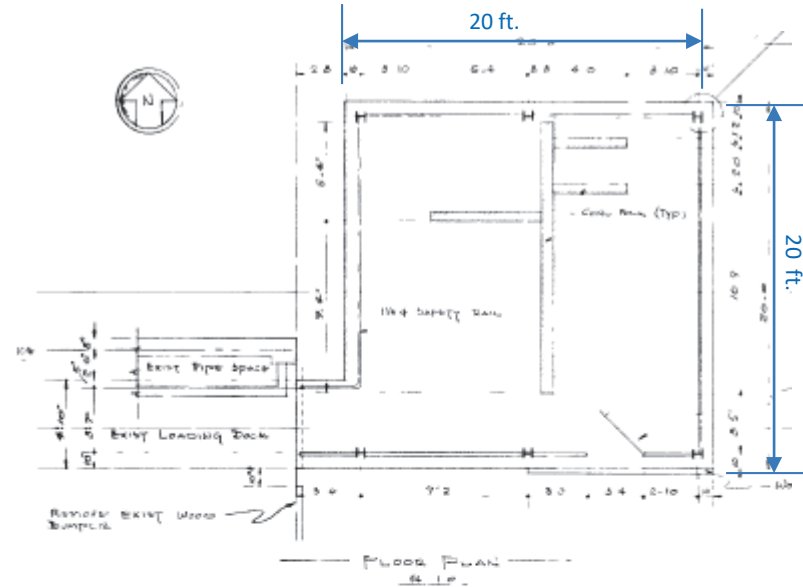
- The C-710-A Gas Cylinder Storage Building is a candidate for future demolition and disposal, contingent on funding priorities.
- Listed in Appendix 6 of the Site Management Plan (SMP) and requires consultation with EPA and Kentucky for CERCLA screening prior to demolition.
- This presentation is intended to serve as consultation, providing the basis for demolition and disposal of the aboveground structure outside of the FFA/CERCLA process.
- The slab/soils would remain for future CERCLA evaluation under Geographical Area (GA) 15.



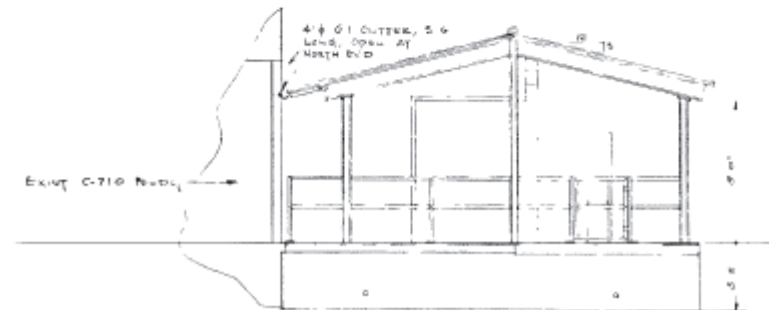
C-710-A Photo: 10/2020

Construction History

- C-710-A is located within the Paducah Site security fence on the east side of the C-710 Technical Services Building and north of C-100 Administrative Building.
- The C-710-A facility was constructed by 1954.
- Consists of an open structural steel frame constructed on an elevated concrete pad.
- The facility is approximately 400 ft².
 - Measuring ~20 ft x ~20 ft



Floor Plan View: Engineering Drawing E-A-10953-B, Rev. 0



South Elevation View: Engineering Drawing E-A-10953-B, Rev. 0₃

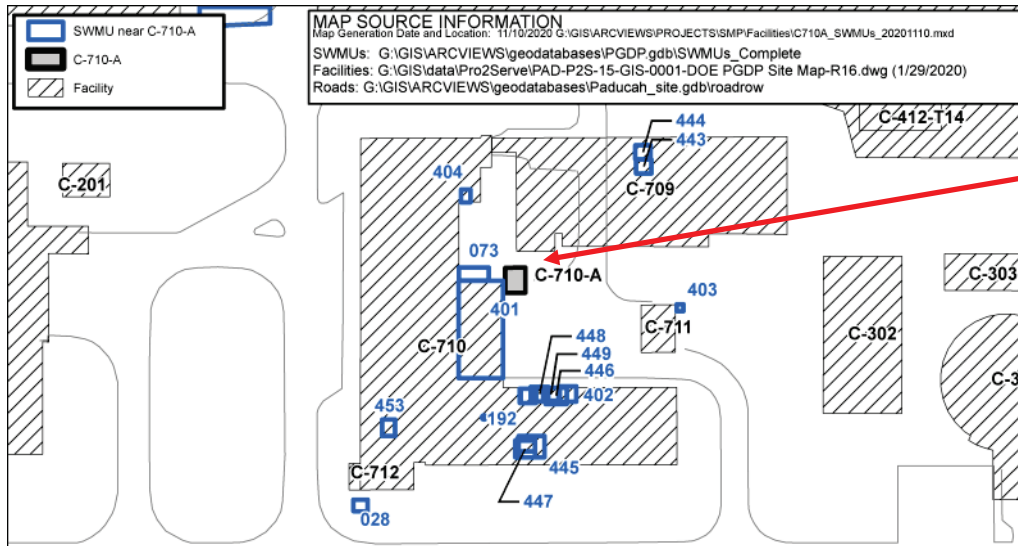
Operational History and Current Status

- The C-710-A facility was constructed for the primary purpose of storing product gas in cylinders for use in the C-710 Technical Services Building to support analytical testing and related lab operations.
- The facility was designed with four compartments divided by concrete walls for storage of the following types of gas cylinders:
 - Fuel gases (e.g., H₂ propane),
 - UF₆,
 - Acid and Oxidizer gases (e.g., HF, ClF₃),
 - Inert gases (e.g., nitrogen, helium, argon).
- The facility is currently operational and is still storing filled gas cylinders that have been identified as a Radioactive Material Area (RMA).



C-710-A Photos: 10/2020

Environmental Impacts (Solid Waste Management Units)



The C-710-A facility is not designated as a SWMU/AOC.

SWMU No.	Facility Name	Current Status	NFA Approval By
028	C-712 Laboratory Equalization Tank slab and underlying soils	Soils and Slabs OU	
073	C-710 Underground Gasoline Tanks	NFA	EPA HSWA Class 1 Permit Mod 3/17/1993; KDWM (UST C-200A; UST C-710; UST Branch) 2/19/2002
192	C-710 Acid Interceptor Pit slab and underlying soils	Soils and Slabs OU	
401	G-710	NFA	KDWM 1/4/2006
402	G-710-04	NFA	KDWM 9/11/2003
403	G-710-20	NFA	KDWM 1/4/2006
404	G-710-24	NFA	KDWM 9/11/2003
443	S-709-01	NFA	KDWM 6/29/2004
444	S-709-02	NFA	KDWM 6/29/2004
445	S-710-05	NFA	KDWM 2/14/2006
446	S-710-06	NFA	KDWM 9/11/2003
447	S-710-09	NFA	KDWM 1/4/2006
448	S-710-16	NFA	KDWM 9/11/2003
449	S-710-18	NFA	KDWM 9/11/2003
453	S-710-46	NFA	KDWM 9/11/2003

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-710-A has been used for its intended purpose since its initial construction in 1954 to store gas product in cylinders.
 - Building materials used for construction could contain lead-based paints and asbestos materials, both of which can be effectively verified during a pre-demolition inspection and properly managed using standard demolition and waste management practices.
 - No known history or records of spills or waste storage that would pose environmental release threat.

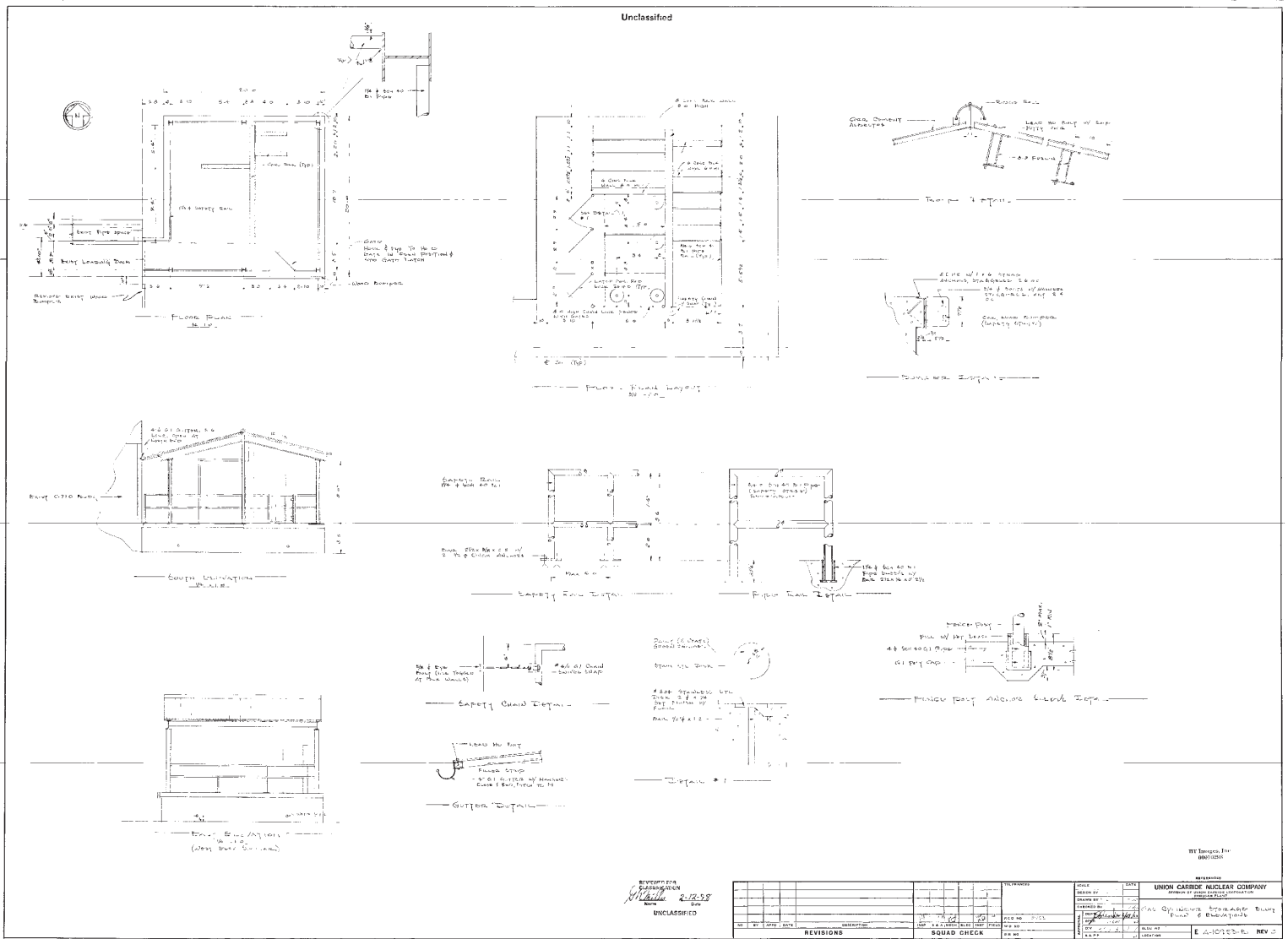
Conclusion and Recommendations

- 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 and designated as RMAs (to the extent practicable) prior to demolition.
- Pending ceasing of operation, deactivation, and availability of funding, DOE/FRNP proposes to proceed with demolition and disposal of the C-710-A (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.
- All applicable laws, regulations, and DOE procedures/protocols will be followed to ensure the demolition and disposal occurs in a safe, compliant manner, including conducting additional radiological characterization through confirmation radiological surveys (as necessary) to support demolition and waste disposition.
- Document the removal of the C-710-A in the appropriate annual SMP revision.
- The future evaluation conducted for GA 15 will further evaluate the potential threat of release associated with the concrete pad/soils from C-710-A.

C-710-A Gas Cylinder Storage Building

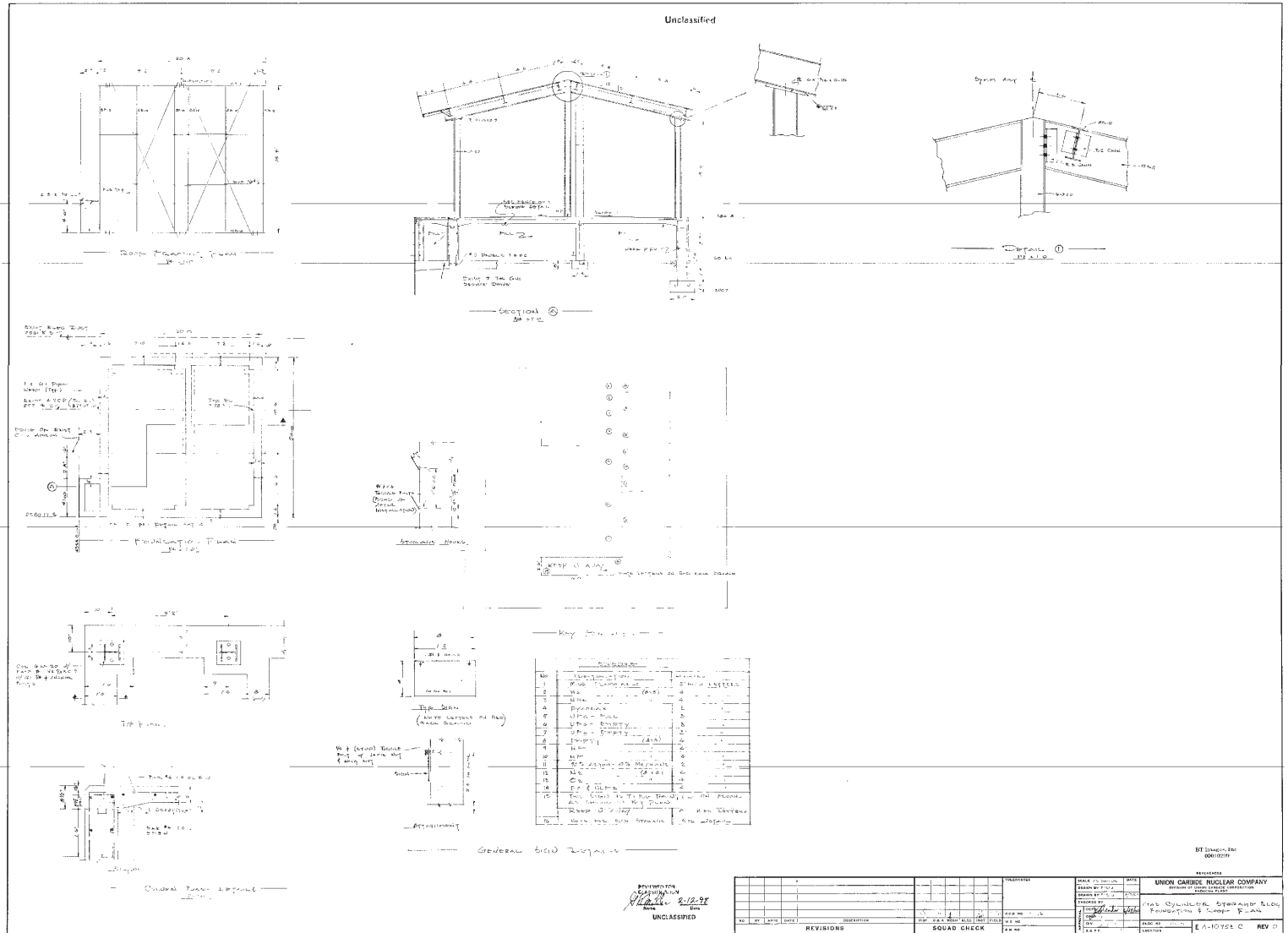
BACKUP INFORMATION

C-710-A – Gas Cylinder Storage BLDG Plan & Elevations



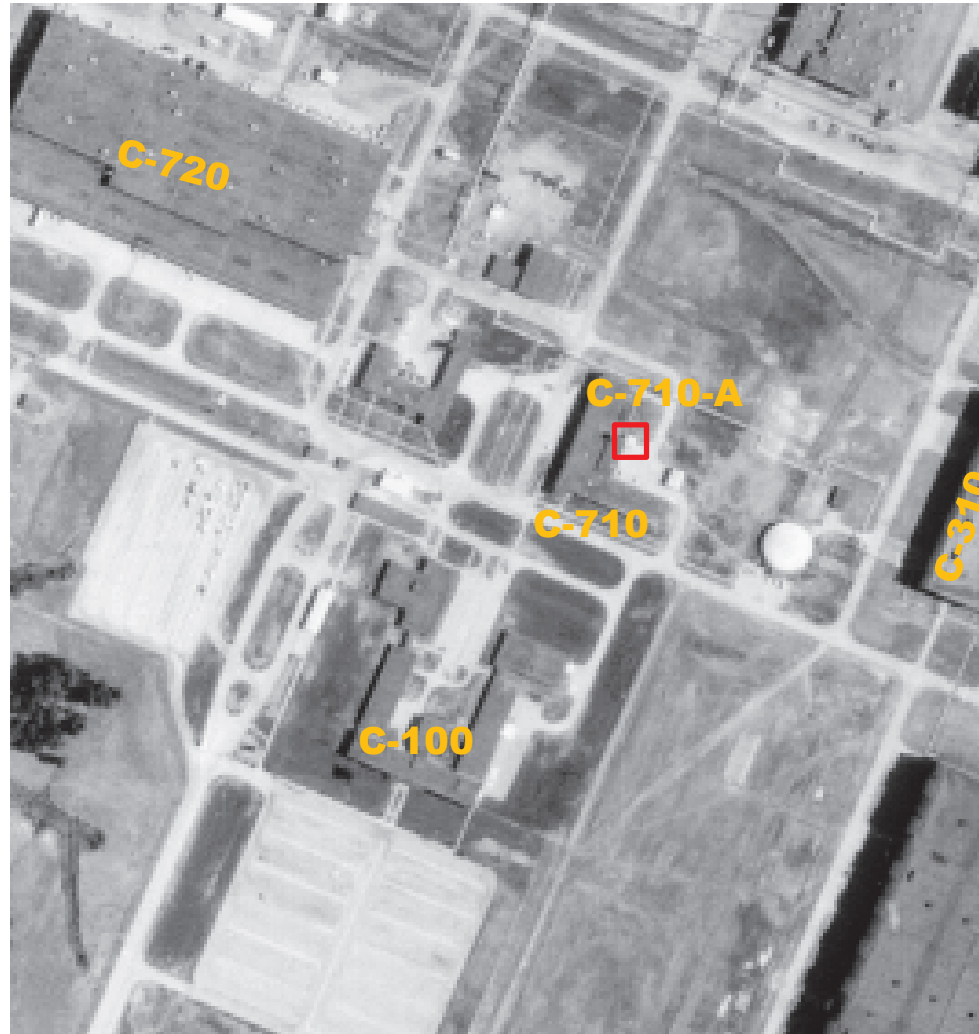
E-A-10953-B, Rev 0

C-710-A – Gas Cylinder Storage BLDG Foundation & Roof Plan



E-A-10953-C, Rev 0

C-710-A Gas Cylinder Storage Building (Aerial Photograph)



Modified from Aerial Photo: July 3, 1971 (ADZ-4LL-53)