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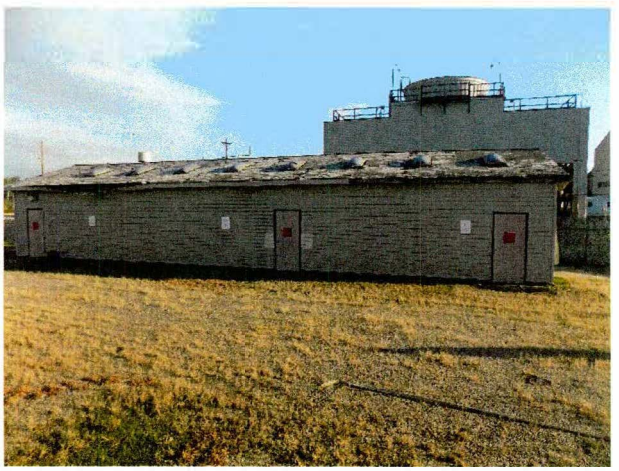
Q-SDD-D-00013
November 2, 2020
Rev. 0

Engineering Survey & Interference Report for Building 717-3D, D-Area Welding Shop



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Document Revision History

Date	Rev	Page	Description of Changes
11/2/20	0	All	Initial Issue

1.0 Introduction

The purpose of this survey / report is to provide guidance for the safe demolition of Building 717-3D, a welding shop/storage facility located west of the 485-D Cooling Tower in 400-Area, as well as meeting the requirements of OSHA Standard 1926.850(a).

2.0 Background

2.1 Facility Description

This document addresses Building 717-3D, D-Area Welding Shop.

Building 717-3D is a light steel constructed building with insulated walls and ceiling. The building was constructed in 1991 to serve as a welding shop, but within a couple of years it was converted to storage space. The building is approximately 26.5' by 73.5' and 14' high at the peak of the roof, giving it approximately 1,900 ft^2 of floor space. The building is light steel frame construction with insulated walls and ceiling. Vinyl siding, wood and composite materials (non-asbestos) are also included in the construction. The roof of the structure is asphalt shingle.

- Most of the floor in 717-3D is tile on concrete, except for one office which is carpeted and the small electrical room which is bare concrete.
- The building had electricity supplied but it was shut off and the building isolated in 2013 during deactivation.
- There was no domestic water or sewer supplied to the structure.
- The building has a small sump in the center of the largest room in the building (south end). The sump is covered with a metal grate.
- The HVAC unit (including the freon) was removed from the concrete pad on the exterior east side of the building (Reference 5.4).
- The building is free of hazardous materials/components including exit signs, PCB ballasts, batteries, fluorescent lights, chemicals and loose flammable or combustible materials.

2.2 Facility Condition

Based on visual inspection on October 5, 2020, the structure as defined in References 5.1 and 5.2 is in poor to good condition. There are signs of rotting/deteriorating eaves and also in the ceiling near and around one of the skylights over the sump area. Currently there is no potential for an unplanned collapse of the structure either due to forces of nature and/or vibrations created by movement of heavy equipment in proximity to the building during decommissioning.

The proposed end-state for this facility which has no defined or anticipated future missions, is decommissioning of the above grade structure to the top of the concrete

slab. The grate over the shallow sump will be removed and the sump filled with cementitious material (grout or concrete).

On October 15, 2020, a follow-up asbestos inspection was conducted on Building 717-3D (Q-APG-D-00008, Rev. 1, Reference 5.3), with the results being that no Asbestos Containing Material (ACM) or Presumed Asbestos Containing Material (PACM) was found in the building..

- There are no potential hazards from other structures in the area.
- There are no overhead or underground powerlines proximate the building.
- Any underground lines in the general vicinity of the building are deep enough that there is no potential for damage due to heavy equipment.
- There are no fall hazards associated with Building 717-3D.

3.0 Discussion

3.1 General

All demolition work shall meet the requirements of 29CFR1926 Subpart T and SRS Manual 8Q, Procedure 104. All personnel performing demolition work shall be knowledgeable of these documents.

Other hazards not specifically identified in the engineering survey are mitigated or prevented by site programs as described in SRS Manual 1-01, MP 1.22 Integrated Safety Management system.

3.2 Interferences

There are no electric lines, poles & guy wires or communications lines close to or associated with Building 717-3D. Also, there are no domestic water, fire water, or sanitary sewers associated with this building. Prior to decommissioning 480-3D shall be confirmed isolated and disconnected from any associated utilities and rendered cold and dark (C&D) in accordance with EC&ACP guidelines and as noted in References 5.5 and 5.6.

Appendix A, Figures 1 and 2 provide a general lay-out of the area, interfacing facilities/utilities within proximity of the building and defines the demolition boundary. All underground utilities are buried deep enough that the equipment may safely operate over them.

3.3 Hazardous Energy

There is no hazardous energy associated with Building 717-3D.

3.4 Unplanned Collapse

There is no potential for an unplanned collapse associated with demolition and removal of Building 717-3D.

4.0 Summary / Conclusions

The decommissioning end state for Building 717-3D, which has no defined or anticipated future mission, is "Demolish" the above grade structure to the building's concrete floor slab. (References 5.1 and 5.2). The structure can be demolished using a track hoe mounted hydraulic shear; the shear will also size reduce the material and load into skip pans. A grappler and front-end loaders may also be used to load material into skip pans. The area will be cleaned up. The equipment operators should utilize a flag person so as not to contact facilities/services within proximity of the demolition area. This method of demolishing the structure with the hydraulic shear will ensure that most of the rubble lands inside the building footprint.

This engineering survey was performed to determine the condition of the structure prior to demolition. The results of the survey are that the structure is sound and conventional demolition may proceed.

5.0 References

5.1 G-FDE-D-00056, Rev. 0, dated 4/27/20, "Facility Decommissioning Evaluation, Building 717-3D, D-Area Welding Shop"

5.2 V-PMP-D-00039, Rev. 1, dated November 2, 2020, "Decommissioning End Points Document Building 717-3D, D-Area Welding Shop"

5.3 Q-APG-D-00008, Rev. 1, dated October 21, 2020, "Baseline Asbestos Inspection Report of Building 717-3D"

5.4 V-PCOR-D-00042, Rev. 0, dated 7/1/2014, "Deactivation Project Final Report Building 484-D Powerhouse and Ancillary Buildings"

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

5.6 E-SDD-D-00002, Rev. 0, dated August 17, 2020, "Closeout of Verification for Building 484-D Powerhouse and Ancillary Buildings"

Appendix A – General Layout and Interfacing Facilities

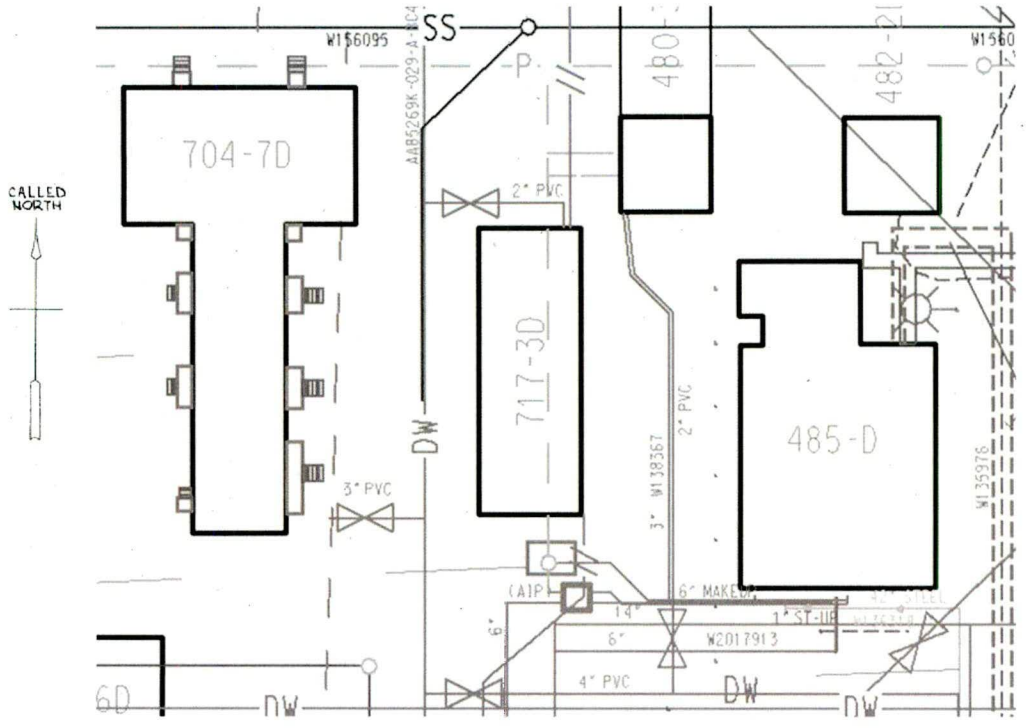

Figure 1: Building 717-3D and Surrounding Facilities/Utilities

Appendix A – General Layout and Interfacing Facilities

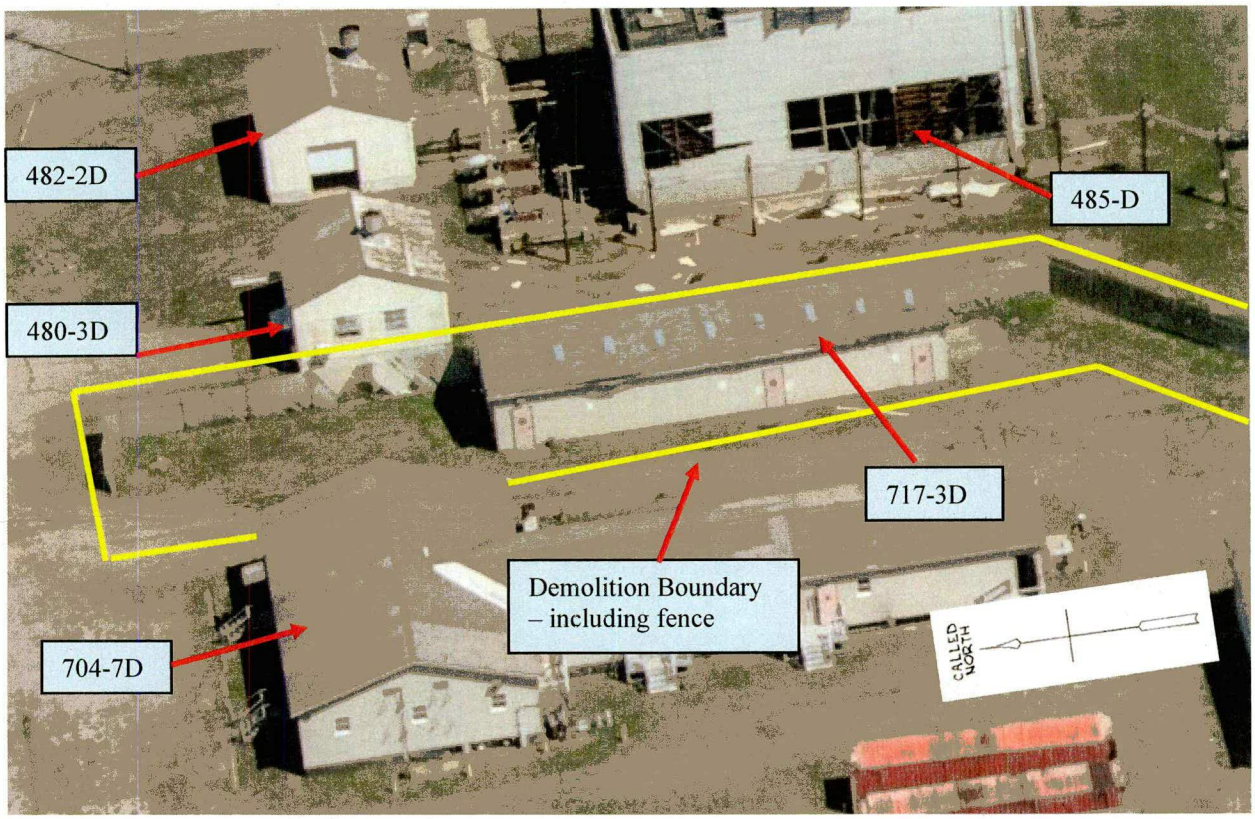

Figure 2: Aerial View of 717-3D and Surrounding Buildings