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MHR-006/98
May 11, 1998

98-TC/05-11

Director, Miamisburg Environmental Management Project
U.S. Department of Energy
Miamisburg Environmental Management Project
P.O. Box 66
Miamisburg, OH 45343-0066

ATTENTION: Alan Spesard

SUBJECT: Contract No. DE-AC24-97OH20044
FINAL REPORT FOR C-BUILDING DEMOLITION PROJECT

Dear Mr. Brown:

This memo is to document the submittal of the Final Report for C-Building Demolition Project. All DOE comments received on the draft report have been incorporated.

Please contact Jean Boling at extension 3830 with any questions you may have concerning this submittal.

Sincerely,

Wm. Scott Hood
Project Manager, Main Hill Rad

WSH/mlr

Attachment: Final Report for C-Building Demolition Project

cc: James R. Powers, BWO
DCC

FINAL REPORT
FOR
C BUILDING DEMOLITION PROJECT

Final
May 11, 1998

Prepared by
Main Hill Rad
for

BABCOCK & WILCOX
OF OHIO

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EXECUTIVE SUMMARY

This is the final report for the C Building Demolition Project. Its purpose is to document the completion of the project's objective and to report the project's activities, final costs and schedule. Also included in this report, is the method of demolition, the waste disposition information, the terminated utilities "as built" drawing and progress photographs. A list of all reference documents and other related documents are included within the contents of this report.

C Building was constructed in 1948 as one of the original group of buildings at the Mound Plant. It was a one-story building with a partial basement. A 60 X 30 foot addition was added in 1967. The building's walls was constructed of eight-inch concrete block covered with a four-inch clay brick veneer. The floor and roof of the original structure were pre-cast concrete waffles supported by concrete reinforced columns. The building originally served as the main cafeteria and operated in this capacity until 1986. Afterwards, it was used as office space, record storage, engineering project storage, maintenance storage and an Emergency Shelter. The building had no radiological history, therefore, the building demolition was performed to general construction industry standards. Building materials and debris removed from the building was disposed of as construction debris. C Building was binned as No Further Action by the D.O.E.-U.S.E.P.A.-O.E.P.A. Core Team on November 19, 1997.

The objective of the project was to clean C Building of hazardous waste, isolate utilities and demolish the structure in order to provide adequate laydown and work space for the future demolition of SW & R buildings. Asbestos Containing Material (ACM) was present in the plaster of the first floor ceiling, the piping insulation on numerous pipes in the basement, and the soil inside the crawl space. Seneca Asbestos Removal and Controls Inc., a licensed asbestos abatement contractor, removed all ACM from the building prior to demolition. The molan system located on the roof of the building was rerouted and the electrical, ADT and telephone lines to the building were disconnected and cut. Domestic water and fire water lines were shut off at the valve and cut at least 2 feet from the exterior foundation of the building. All other utilities to the building were also cut at least 2 feet from the exterior foundation of the building, then capped. The basement walls were removed three feet below grade. The remaining wall

sections of the basement were left in place. C Building contained a sump that was located in the basement. The sump along with the entire basement floor was left in place. Holes were punched in the floor to allow for drainage and all storm sewers were plugged, at their respective manholes, to prevent back flow into the basement area.

All construction debris was separated into three different waste streams. The steel was segregated from the building debris and shipped off site to be recycled. Brick and concrete debris with rebar less than $\frac{3}{4}$ inch thick was sorted from the debris and sent to the staging area to later be recycled on site. Some of the remaining debris was used to backfill the basement and the rest was shipped offsite to an industrial landfill. The area was backfilled with 304 stone, compacted and graded according to the final grading plan. This area will be used for a staging area for future projects.

C building debris that was removed from site, or taken to the spoils area on site, was surveyed at the request of the Department of Energy and the Ohio Environmental Protection Agency. A Property/Waste Release Evaluation was used to provide guidance on the protocol for surveying the debris inside roll-off waste containers. Surveys consisted of performing a gamma radiation survey on the outside of the waste container subsequent to release to ensure that members of the general public would not be exposed.

Surveys were performed in this manner for approximately two thirds of the project. Subsequently, a compromise was granted from the Department of Energy and the Ohio Department of Health to perform surveys of piles of rubble prior to placement into any roll-off. These surveys were performed twice a day, once before start of work in the morning and the second prior to working after lunch break.

All radiation readings taken during the duration of the project were less than the minimum detectable limit for the survey meters. (< 0.1 mR/hr for the RO-2/20). No debris or concrete that had been in contact with soil was removed from the worksite. The foundation and slab was used as backfill in the basement and therefor were not surveyed or released from site.

This project was completed ahead of schedule and under budget, with no injuries or releases to the environment. The Integrated Safety Management (ISM) process was used to involve the bargaining unit workers, as well as, the project team and technical support personnel in the advance planning stages of the project and the development of the project work plan.

1. SUMMARY OF EVENTS

1.1. PERSONNEL ORGANIZATION OF THE DEMOLITION

Table I.1. Organization of the Demolition

Agencies or Parties Involved	Contact	Description of Participation
US EPA HSRM-6J 77 W. Jackson Chicago,IL 60604	Tim Fischer 312-886-5787	Federal agency responsible for response oversight.
Ohio EPA 410 E. Fifth St. Dayton, OH 45402-2911	Brian Nickel 937-285-6468	State agency responsible for response oversight.
DOE-MB P.O. Box 66 1 Mound Road Miamisburg, OH 45343-0066	Allan Spesard 937-865-4894	Federal OSC responsible for response oversight and success.
B&W of Ohio Main Hill Rad Project P.O. Box 3030 Mound Rd. Miamisburg, OH 45343-3030	William S. Hood 937-865-4852	Provided the OSC with technical assistance, administrative support, sampling, photo and site documentation, site safety, and report preparation.
B&W of Ohio General Superintendent and Equipment Manager P.O. Box 3030 Mound Rd. Miamisburg, OH 45343-3030	Rich Higgins 937-865-4400	Provided the craft personnel and equipment necessary for the removal as requested.

1.2. CHRONOLOGICAL NARRATIVE OF DEMOLITION ACTIVITIES

- 01 Oct. 97 Inventoried Building.
- 15 Oct. 97 Assessed utilities.
- 29 Oct. 97 Started building prep.
- 03 Nov.97 Started asbestos removal bid prep/Developed Statement of Work.
- 17 Nov. 97 Solicited bids for asbestos removal.
- 01 Dec. 97 Developed Draft Work Plan.
- 04 Dec. 97 Removed excess equipment.
- 11 Dec. 97 Removed waste.
- 15 Dec. 97 Conducted prebid meeting and building walk-thru.
- 17 Dec. 97 Started Molan reroute.
- 18 Dec. 97 Isolated utilities.
- 22 Dec. 97 Submitted Draft Work Plan to DOE for Reveiw/Approval.
- 06 Jan. 98 Received asbestos bid proposals.
- 08 Jan. 98 Awarded asbestos abatement contract.
- 02 Feb. 98 Started asbestos abatement.
- 17 Feb. 98 Performed readiness assessment.

- 19 Feb. 98 Completed asbestos abatement/Established work zones for demolition.
- 24 Feb. 98 Completed molan re-reroute and utilities isolation.
- 25 Feb. 98 Started demolition activities.
- 30 Mar. 98 Removed basement walls three feet below grade/Completed demolition activities.
- 02 Apr. 98 Backfilled area.
- 08 Apr. 98 Completed site grading and restoration.

1.3. LISTING OF FINAL RESOURCES COMMITTED

Table I.2. Materials and Disposition

Material	Quantity	Disposal Method	Disposal Location
Metal	10,530 cubic feet	Recycled	Franklin Metal
Construction Debris	8,640 cubic feet	To Be Crushed Later	Mound Site
Construction Debris	30,240 cubic feet	Industrial Landfill	Stony Hollow

Table I.3. Demolition Project Total Cost Summary

Project Costs:	Cost (\$)
LABOR	115,901
MATERIALS & SUPPLIES	16,496
PURCHASED SERVICES	61,412
Total Cost and Ceiling:	Cost (\$)
TOTAL PROJECT COST	193,809
PROJECT CEILING (including BCP MHRD0001.98)	366,327

2. EFFECTIVENESS OF THE DEMOLITION

C Building was successfully demolished and the area restored.

2.1. ACTIONS TAKEN BY MOUND PERSONNEL

All fieldwork was completed Babcock & Wilcox of Ohio personnel with the exception of the asbestos abatement contract.

2.2. ACTIONS TAKEN BY LOCAL, STATE, AND FEDERAL AGENCIES

As this building was binned as No Further Action, there were no local, state, or federal agencies that were involved in the demolition with the exception of the Department of Energy.

3. RECOMMENDATION

3.1. RECOMMENDATION TO THE MOUND CORE TEAM

C Building has been removed from the CERCLA process as a No Further Action location by the core team and the building has been demolished and the area has been restored. It is the recommendation of Babcock & Wilcox of Ohio that the Department of Energy transfer this property to the MMCIC (Miamisburg Mound Community Improvement Corporation) following the completion of other Main Hill demolitions, so that the area can be used as a staging area.

4. REFERENCE LIST OF SUPPLEMENTAL DOCUMENTS

Contact Mark Becker, Babcock & Wilcox of Ohio; Public Relations, at (937) 865-4450 to request access to these supplemental documents.

- I.e.,
- Mound Plant Building Data Package for C Building
 - Work Plan for C Building Demolition Project, dated January 5, 1998
 - Site Specific Health and Safety Plan for C Building Demolition Project

APPENDIX A

PROJECT SCHEDULE

APPENDIX B

LIST OF FIGURES

C - BUILDING DEMOLITION
SITE LOCATION

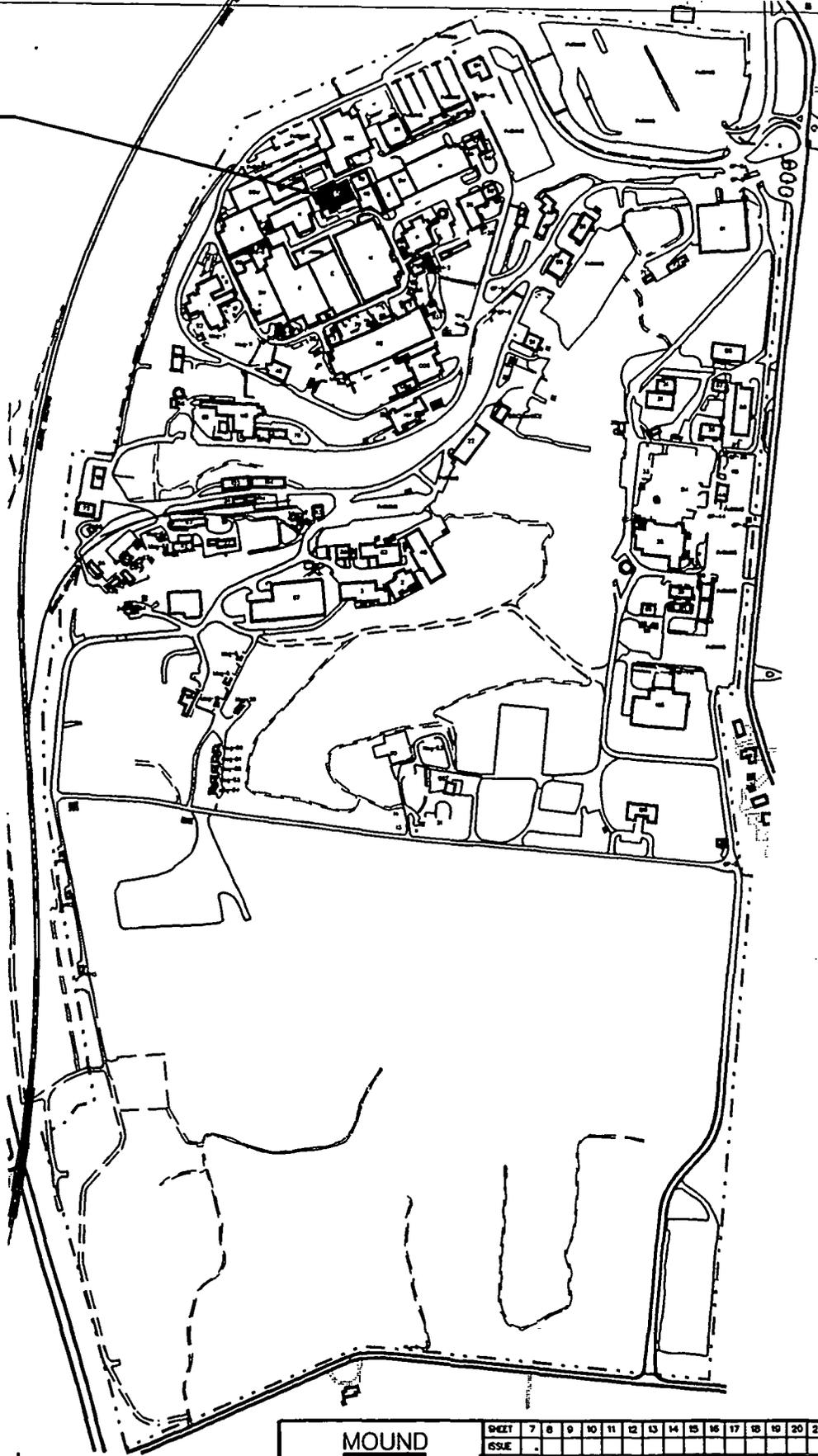


FIGURE - 1

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FIGURE - 2



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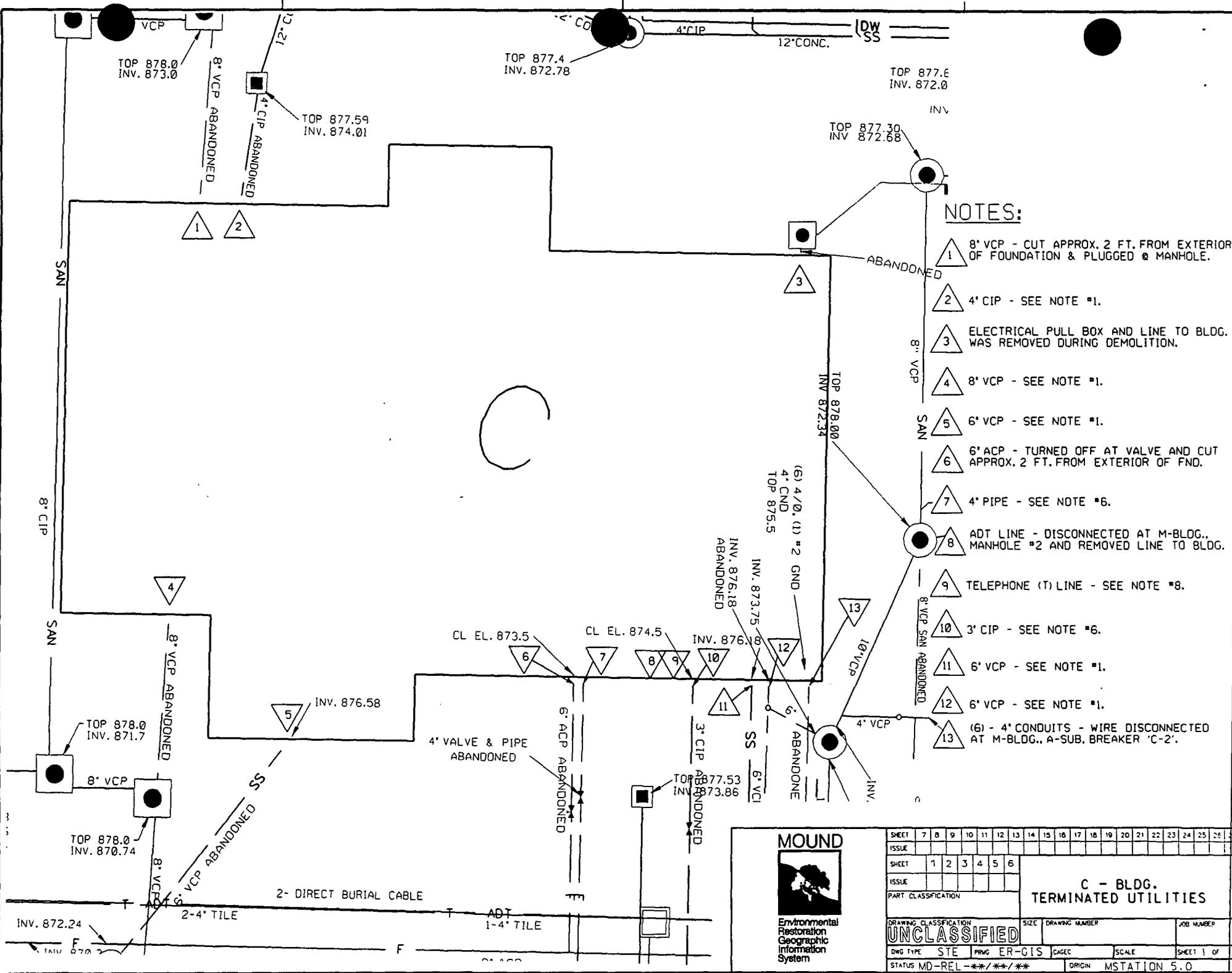
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NOTES:

- 1 8" VCP - CUT APPROX. 2 FT. FROM EXTERIOR OF FOUNDATION & PLUGGED @ MANHOLE.
- 2 4" CIP - SEE NOTE #1.
- 3 ELECTRICAL PULL BOX AND LINE TO BLDG. WAS REMOVED DURING DEMOLITION.
- 4 8" VCP - SEE NOTE #1.
- 5 6" VCP - SEE NOTE #1.
- 6 6" ACP - TURNED OFF AT VALVE AND CUT APPROX. 2 FT. FROM EXTERIOR OF FND.
- 7 4" PIPE - SEE NOTE #6.
- 8 ADT LINE - DISCONNECTED AT M-BLDG., MANHOLE #2 AND REMOVED LINE TO BLDG.
- 9 TELEPHONE (T) LINE - SEE NOTE #8.
- 10 3" CIP - SEE NOTE #6.
- 11 6" VCP - SEE NOTE #1.
- 12 6" VCP - SEE NOTE #1.
- 13 (6) - 4" CONDUITS - WIRE DISCONNECTED AT M-BLDG., A-SUB. BREAKER 'C-2'.

MOUND



Environmental
Restoration
Geographic
Information
System

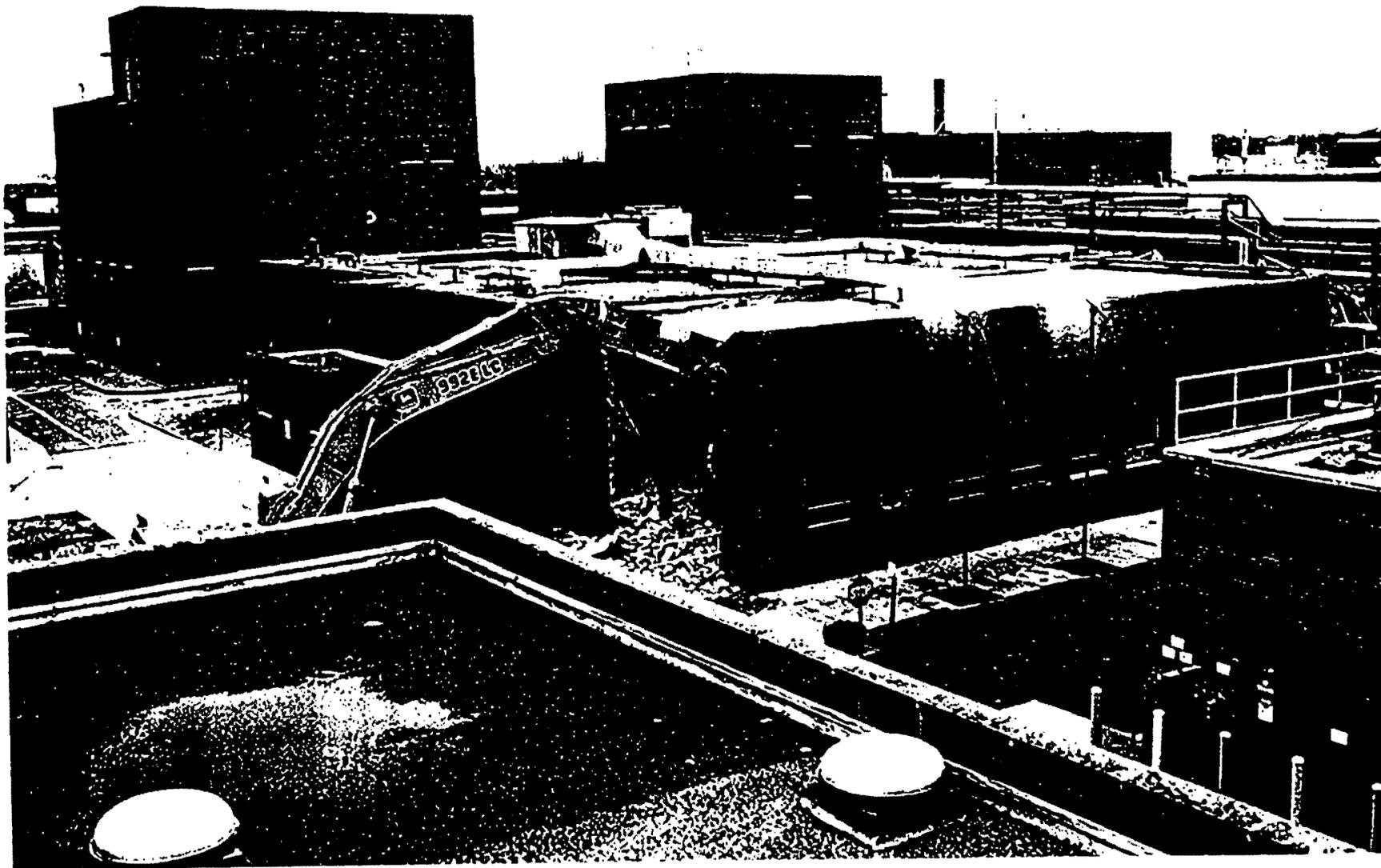
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APPENDIX C

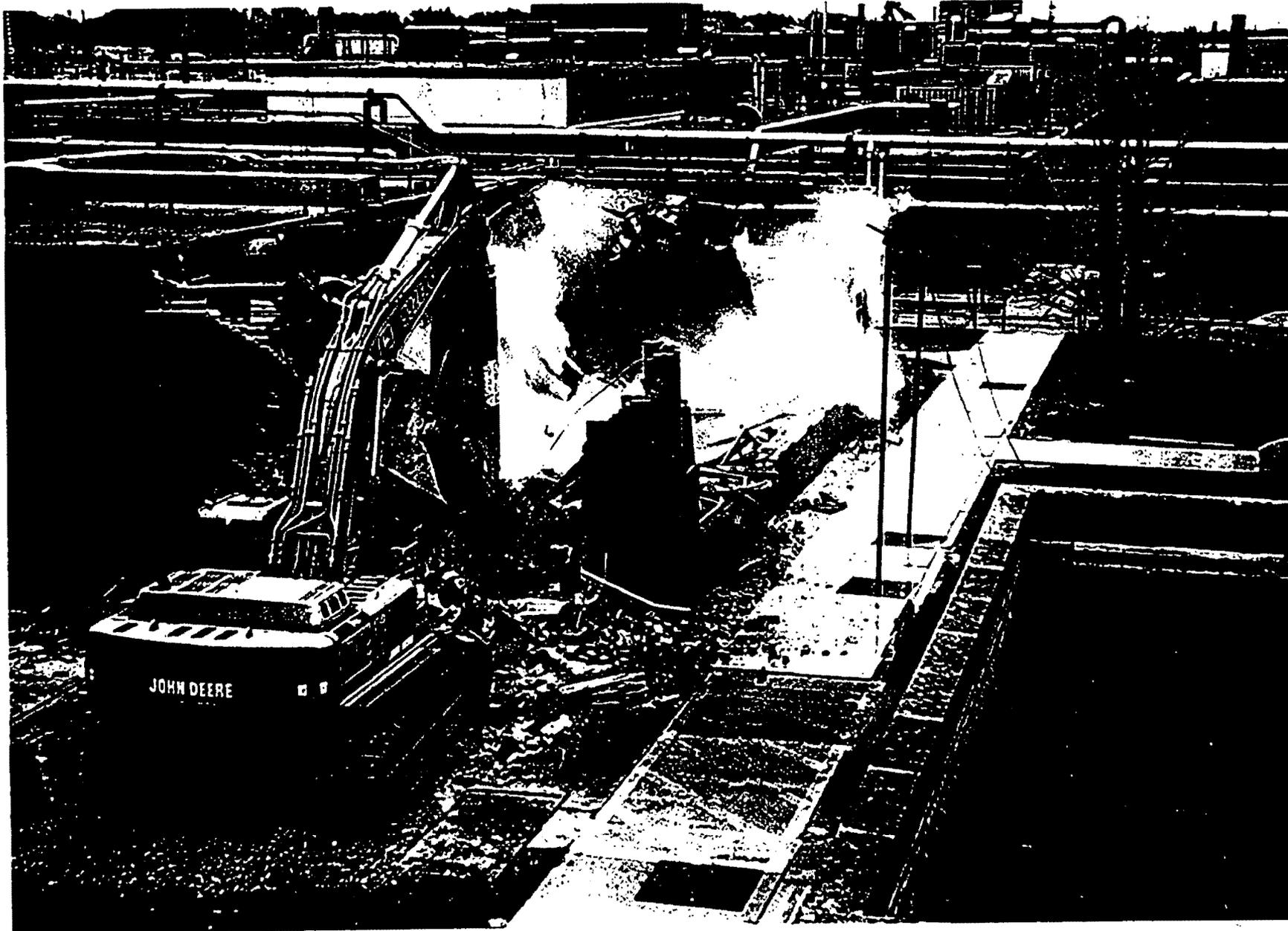
PHOTOGRAPH DOCUMENTATION



C Bldg., south side 02/28/96



02/26/98 C Bldg. demolition *980433



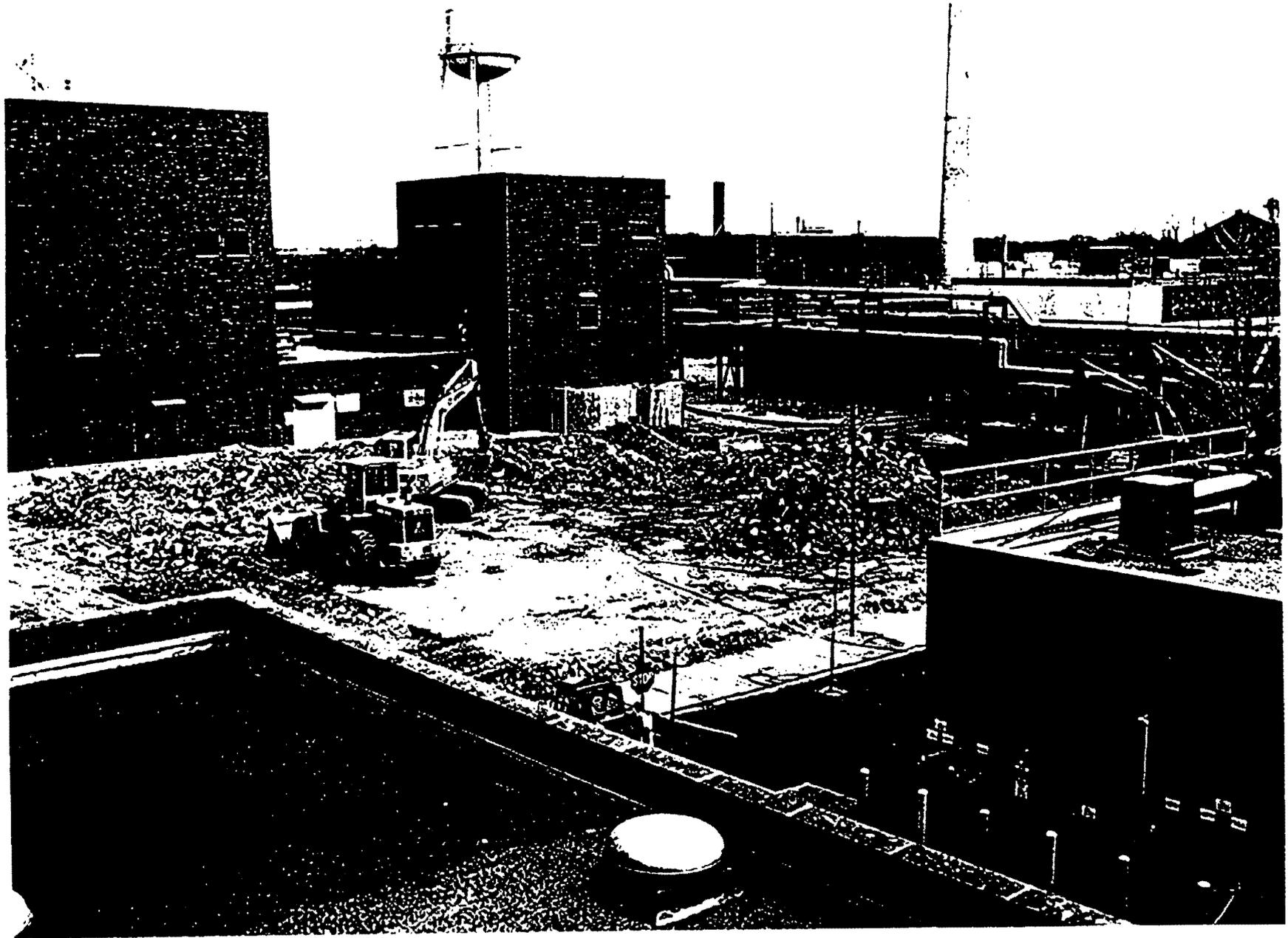
02/26/98 C Bldg. demolition *980444



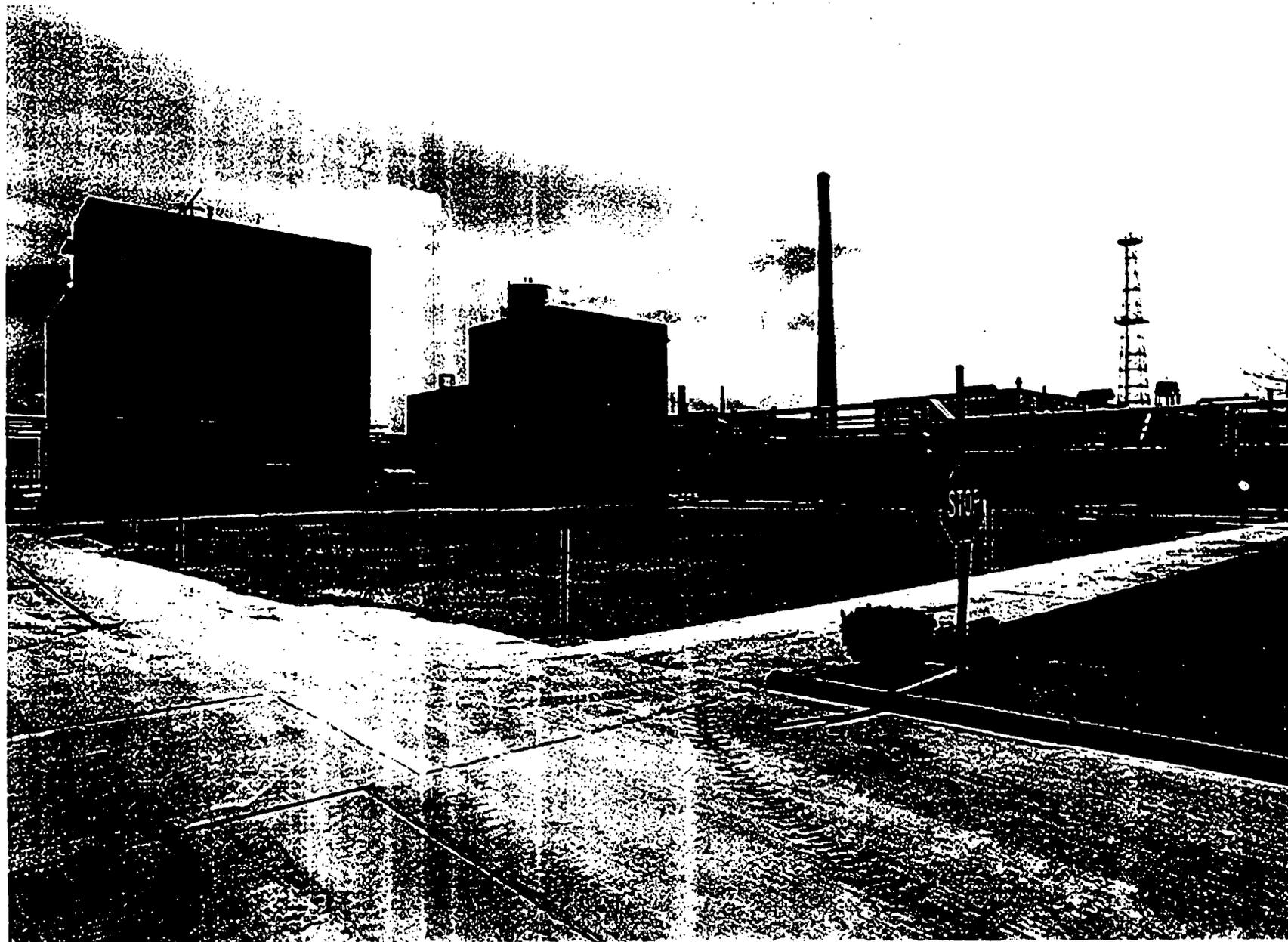
03/09/98 C Bldg. demolition *980504



03/02/98 C Bldg. demolition *980475



03/16/98 C Bldg. demolition *980592



04/08/98 C Bldg. site restoration, looking southeast *980746