

CROWELL & MORING  
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W. W. I. INTERNATIONAL 84344  
W. W. I. (DOMESTIC) 09-7449

*RGT - returns to me*  
*File Rivers Case*

September 28, 1984

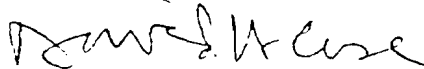
Michael J. Tone, Esquire  
Associate Counsel & Deputy Director  
Division of Environmental Enforcement  
N. Y. State Department of Environ-  
mental Conservation  
202 Mamaroneck Avenue  
White Plains, New York 10601

Re: Former Columbia Ribbon & Carbon Co. Site

Dear Mike:

I am pleased to enclose the Engineer's Certification Report and the as-built drawings for the initial remedial program (removal of buried drums and heavily contaminated soils) in accordance with the Consent Order.

Sincerely,



David R. Case

DRC:1F  
Enclosure

cc: Harold Berger, Esquire

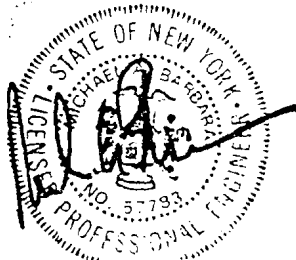
RECEIVED

OCT 1 1984

September 24, 1984

ENGINEER'S CERTIFICATION REPORT  
REMOVAL OF DRUMS AND CONTAMINATED SOILS  
FROM THE FORMER COLUMBIA  
RIBBON AND CARBON CO. SITE  
GLEN COVE, NY

September, 1984



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Michael A. Barbara, P.E.  
N.Y.P.E. #57783

Fred C. Hart Associates, Inc.  
New York, NY

## 1.0 Introduction

This certification report and the as-built drawings attached hereto are submitted to the New York State Department of Environmental Conservation ("NYSDEC") in accordance with the Order on Consent for the initial remedial program at the former Columbia Ribbon & Carbon Company (Glen Cove, NY). A certification that the initial remedial program was completed in accordance with the approved interim remedial program plan was submitted to the NYSDEC on August 1, 1984.

The scope of the initial remedial program certified in this report was developed for Powers Chemco, Inc. by Fred C. Hart Associates, Inc. ("FCHA"). Powers Chemco is the current owner of the Columbia site. Prior to developing the plan, FCHA completed a subsurface investigation including monitoring wells, test pits, OVA readings, magnetometry, surface resistivity and metal detection. The results of that investigation were reported to NYSDEC and served as the basis for the initial remedial plan. That plan called for the excavation of heavily contaminated soils and the removal of buried drums for proper off-site disposal.

Associated Chemical and Environmental Services (ACES) of Ohio, a remedial contractor with substantial experience with Superfund-type cleanups, was selected by Powers Chemco as the prime contractor for the remedial work. FCHA personnel served as On-Scene Coordinators (OSC). The on-site participants in the project were as follows:

John Biedry - Environmental Affairs Manager, Powers Chemco

Brian Jacot	- FCHA - Project Engineer
Michael Barbara	- FCHA - Professional Engineer
Richard Dorrlor	- FCHA - Professional Geologist
Eli Clevenger	- Site Coordinator, ACES
Thomas Wray	- Site Safety Officer, ACES
Richard Torrey	- NYSDEC representative
William Spitz	- NYSDEC representative
Todd Ghiosay	- NYSDEC technician
Terry Gerish	- NYSDEC engineer
Robert Frey	- NYSDEC Region 1
Robert Schenck	- NYSDEC Region 1
Robert Willis	- Nassau Co. Health Department
Stanley Juzak	- Nassau Co. Health Department

## 2.0 Implementation of Initial Remedial Plan

The implementation of the initial remedial plan began on June 13, 1984 with the mobilization of ACES personnel and equipment, and the delineation of the excavation boundaries of the site by FCHA. The site was excavated beginning on June 19 in a series of 15 overlapping "cuts" as shown on the as-built drawings, proceeding from the west side of the Powers Chemco building in a westerly direction. All soil, construction debris, and fill material that were heavily contaminated was placed directly into dump trucks lined with plastic for off-site disposal. The excavation was advanced to a depth at which no further heavy contamination by ink sludges was visible or until the underlying

saturated layer was encountered. In order to ensure that no additional contamination existed below the areas where clean soils were observed, an additional bucket scoop was taken to provide a visual assessment of the underlying materials. Drums, both crushed and intact, were restaged in a bermed, central receiving area also lined with plastic.

Whenever possible, groundwater inflow was channeled away from the excavation cuts. Perched groundwater within shallow pockets of sand and gravel that seeped into the excavations mixed with loose material and thus increased the volume of material that had to be excavated and hauled away. A significant portion of the western most area of the site, along the northern property line, was found not to be contaminated. This was confirmed by excavating a trench (4' x 95' x 4' deep) extending from the end of cut #15 to the site boundary.

The excavation proceeded to the perimeter of the site and, whenever necessary, additional material was excavated from areas beyond the boundaries to ensure that all areas of heavy contamination were removed. Scale drawings of the areal limits of excavation as well as cross-sectional views of each cut are presented in the as-built drawings. Delineations of the excavation limits were compiled from the OSC's field logbooks and confirmed by FCHA personnel upon completion of removal activities.

For the duration of field operations, personnel supervising and observing the excavation activities as well as heavy equipment operators were outfitted in Level C protective equipment. The safety plan prepared by ACES, based on EPA Emergency Response Team

(ERT) guidelines for unknown constituents, provided for Level B respiratory protection at OVA levels greater than 5 ppm. Based on extensive sampling data on the volatile organic contamination at the site available to the site safety officer, it was determined that Level C respiratory protection was appropriate for total OVA levels less than 100 ppm.<sup>1/</sup>

The determination to use Level C respiratory protection was approved by the OSC and a written justification was submitted to NYSDEC. OVA readings were taken by the safety officer to ensure that Level C personnel protection remained adequate within the excavation area. In addition, personnel working at the excavation were fitted with 3M personal passive dosimeters to ensure the characteristics of the ambient air remained within those parameters previously measured by FCHA.<sup>2/</sup>

Total quantities of material removed from the site was 4,645 tons of contaminated soils and 267 drums. These materials were transported under a total of 207 New York State hazardous wastes

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<sup>1/</sup> Of the volatile materials known to be present in the waste materials and the underlying saturated layers at the site, benzene was identified as having the lowest TLV of 10 ppm. The cartridge respirators worn by all personnel working adjacent to the excavation are considered effective by OSHA to ten times the TLV, or 100 ppm. Based on these data, an action level of 100 ppm (15 minute duration) was selected by the safety officer for the transition to supplied air. This level was not encountered for the duration of on-site activities.

<sup>2/</sup> The only reported safety-related incident during the duration of the project concerned a guard subcontracted by ACES who complained of nausea and left his post. A complete physical administered by a local physician at the time indicated no acute illness present and the employee was then released. The employee had no further complaints of illness.

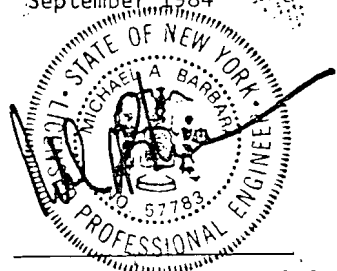
manifests and land- filled at the Fondessy Enterprises landfill  
(EPA ID# OHD-045243706) in Oregon, Ohio, which is approved for  
codisposal of drums and contaminated soils.

*File - 100-10000*

EXCAVATION CROSS-SECTIONS

Former Columbia Ribbon & Carbon Co., Inc.  
Glen Cove, NY

September 1984

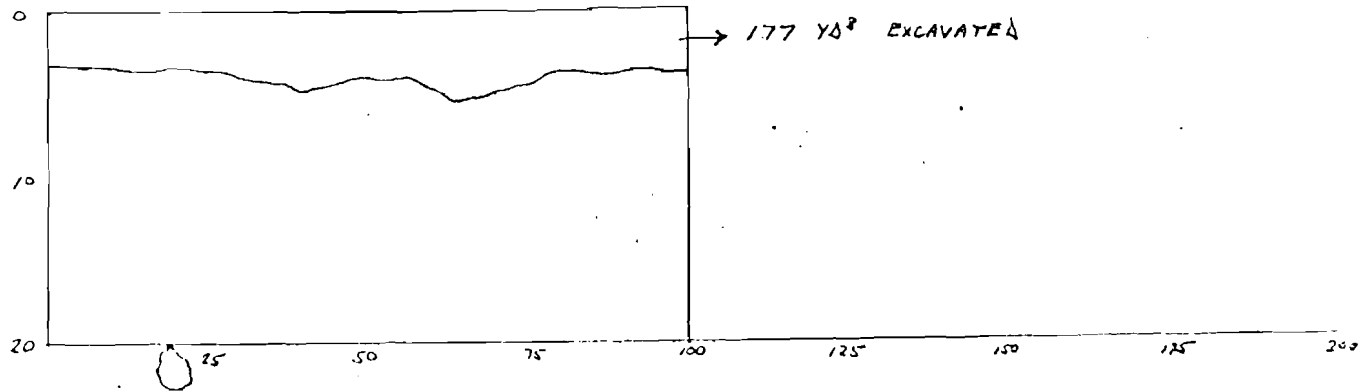


Michael A. Barbara, P.E.  
N.Y.P.E. # 57783

Fred C. Hart Associates, Inc.  
New York, New York



POW 25 - CHEMCO AD33E CUT #1



FRED C. HART ASSOCIATES, INC.
Approximate Excavation Cross-Sections
September, 1984

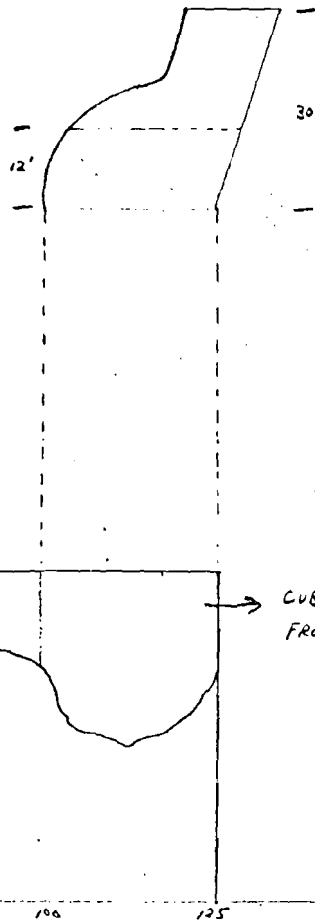
JUNE 25 1987

FRED C. HART ASSOCIATES, INC.

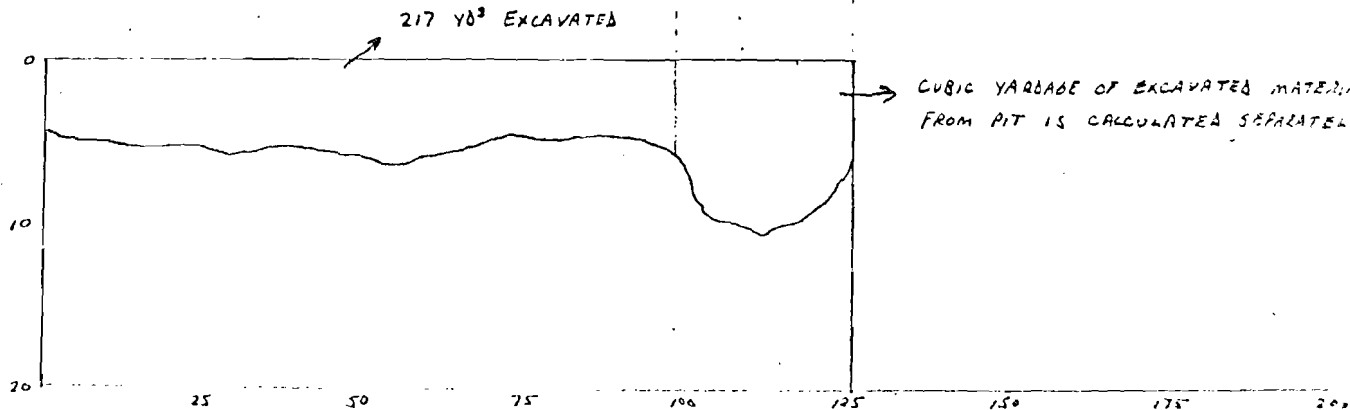
Approximate Excavation Cross-Sections

September, 1984

WIDTH  
OF  
CUT



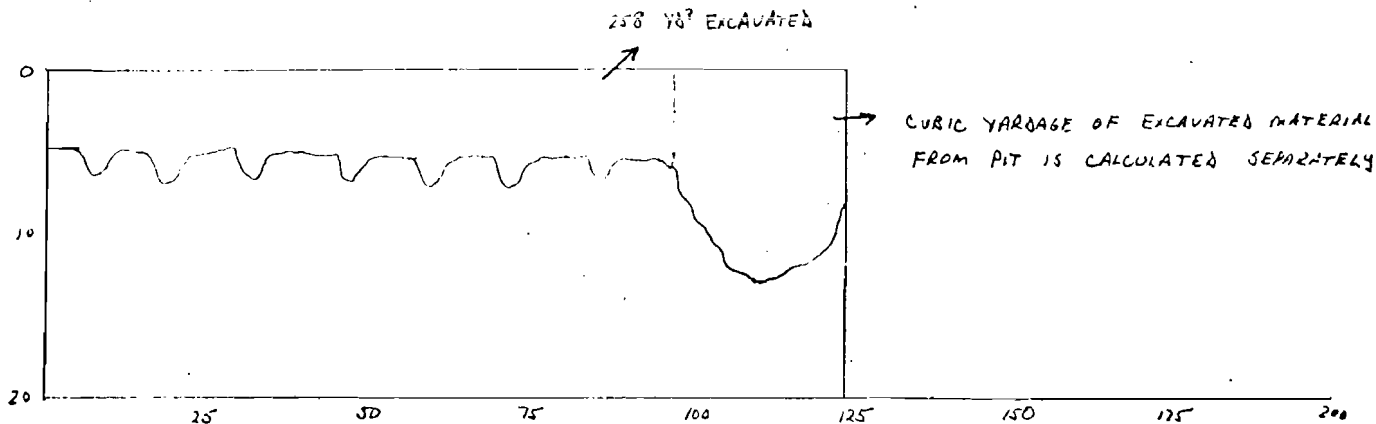
TOP VIEW OF WESTERN END OF CUT #2.  
DEPICTS SOUTHERN EXTENSION OF EXCAVATION  
(SEE OVERALL TOP VIEW OF TOTAL AREA  
EXCAVATED.)



JUNE 25, 1984

BA

POWERS-CHEMCO A035C CUT #3



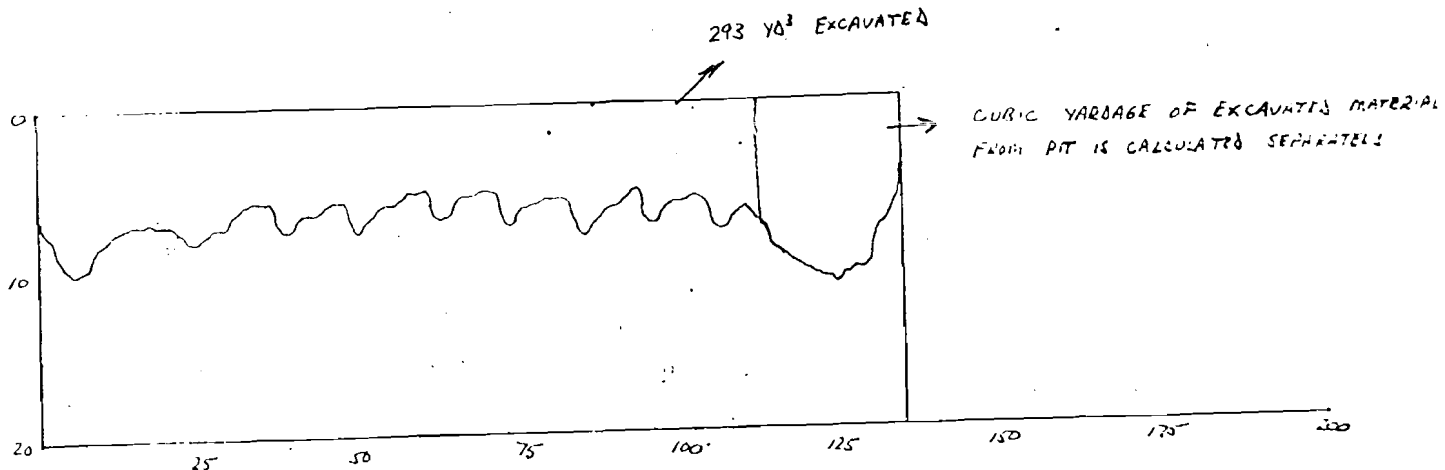
FRED C. HART ASSOCIATES, INC.

Approximate Excavation Cross-Sections

September, 1984

POWERS-CHEMCO A035 e CUT #4

NATIONAL 42.182 100 SHEETS



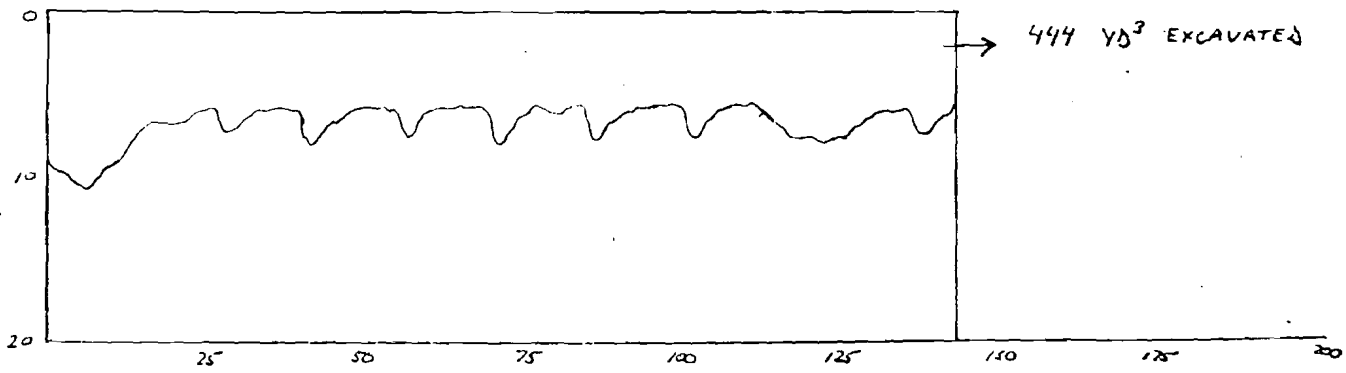
FRED C. HART ASSOCIATES, INC.

Approximate Excavation Cross-Sections

September, 1984

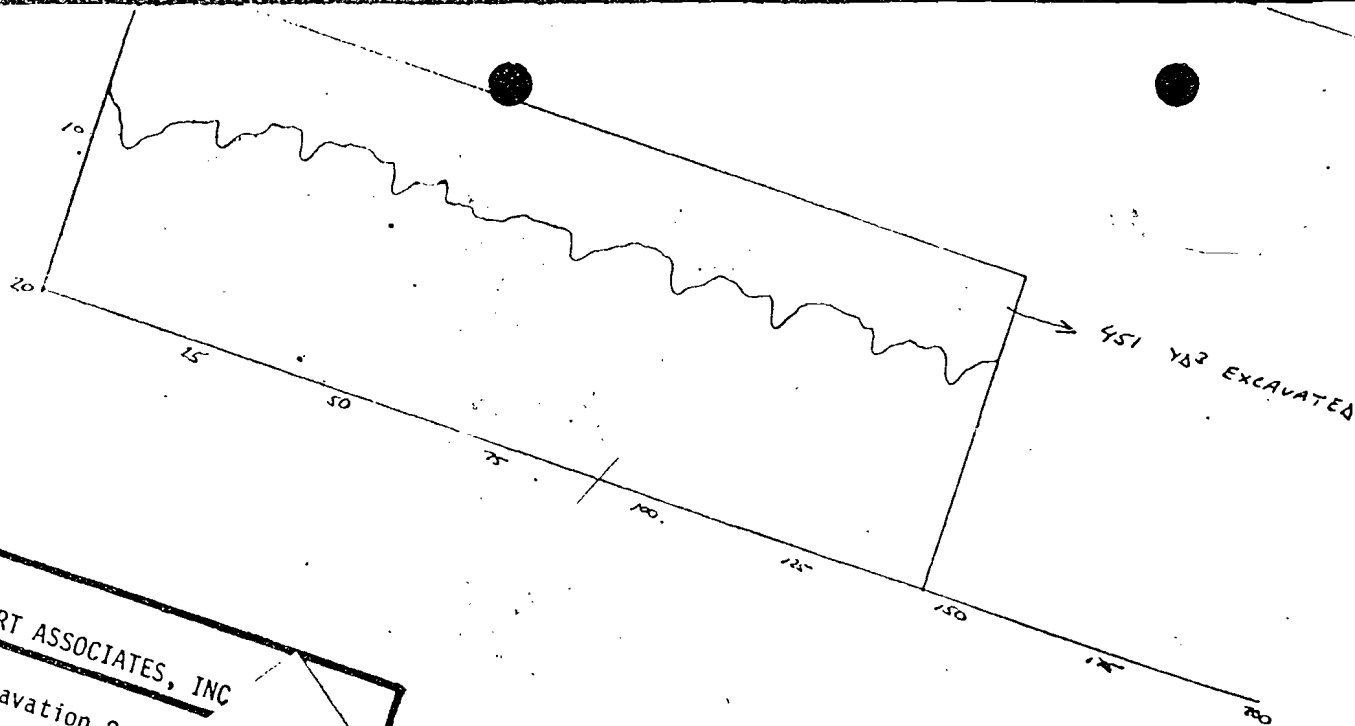
JUNE 25, 1984  
cf

POWERS - CHEMCO A035E CUT #5



FRED C. HART ASSOCIATES, INC.
Approximate Excavation Cross-Sections
September, 1984

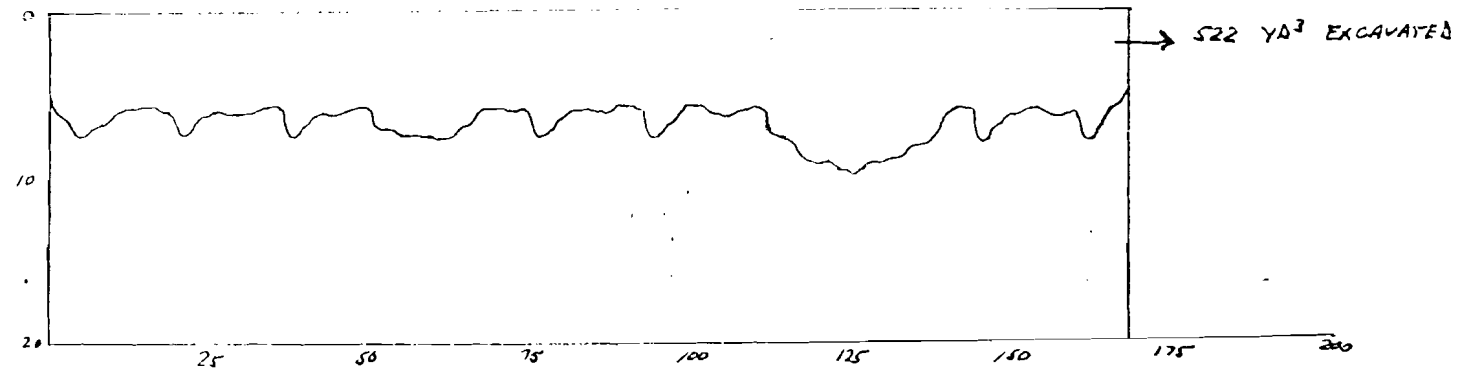
JUNE 25, 1984  
28



FRED C. HART ASSOCIATES, INC  
Approximate Excavation Cross  
September, 1988

JUNE 25, 1989  
JF

POWER CHEMCO A035E CUT #7



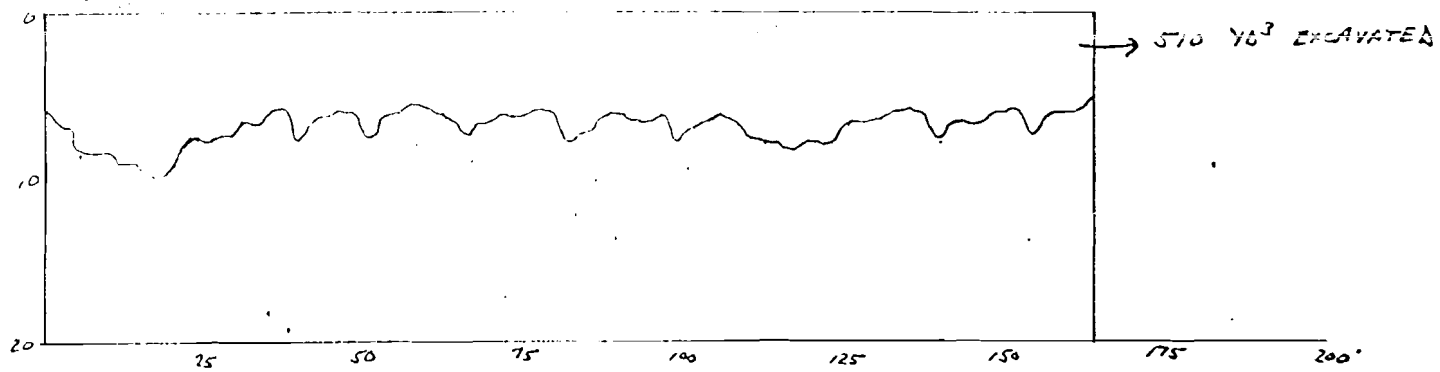
FRED C. HART ASSOCIATES, INC.

Approximate Excavation Cross-Sections

September, 1984

JUNE 25, 1984

POWERS - CHEMCO A035e CUT #8

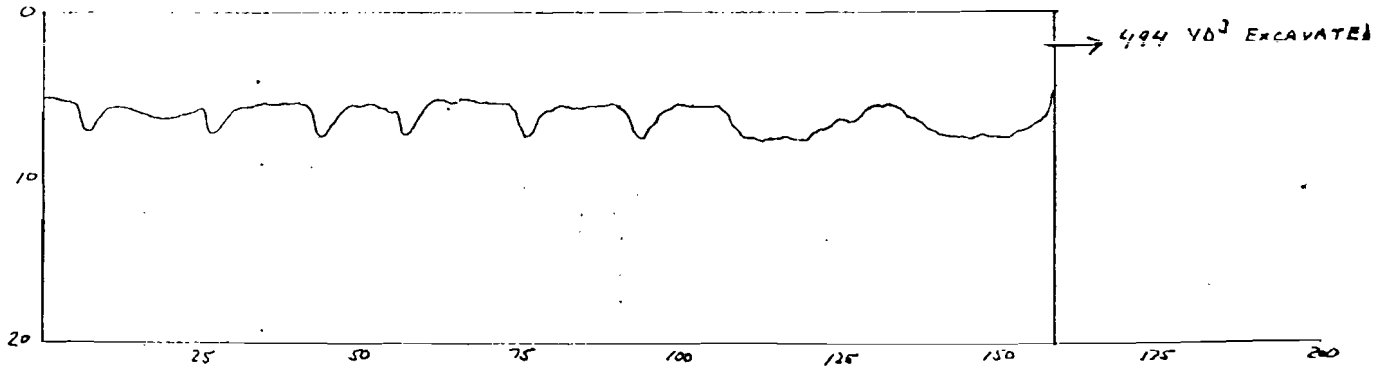


FRED C. HART ASSOCIATES, INC.
Approximate Excavation Cross-Sections
September, 1984

JUNE 25, 1984  
RT



POWERS-CHEMCO A035E CUT # 9



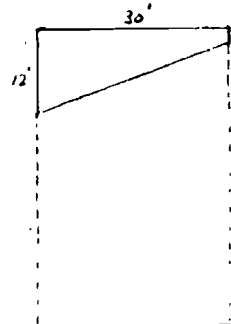
FRED C. HART ASSOCIATES, INC.

Approximate Excavation Cross-Sections

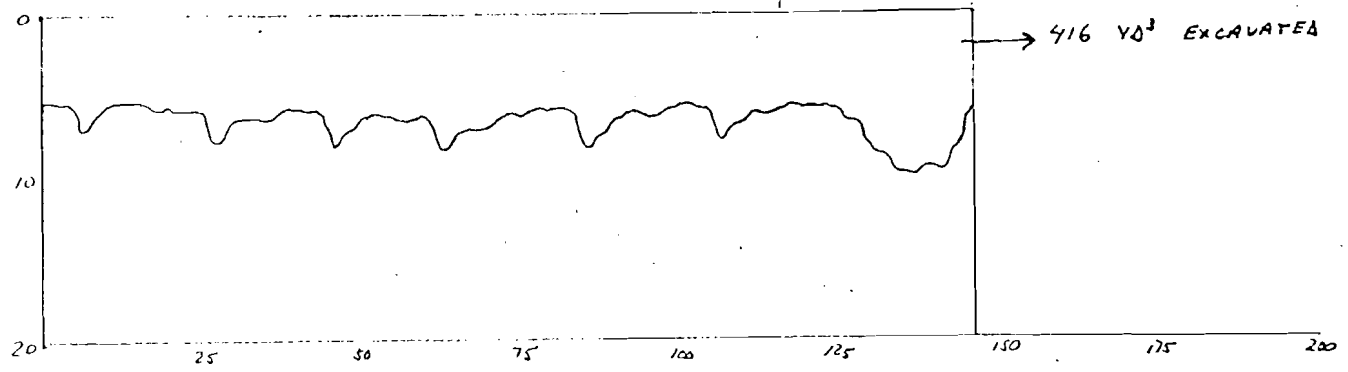
September, 1984

JUNE 25, 1984  
BY

POWERS-CHEMCO A035 e CUT # 10



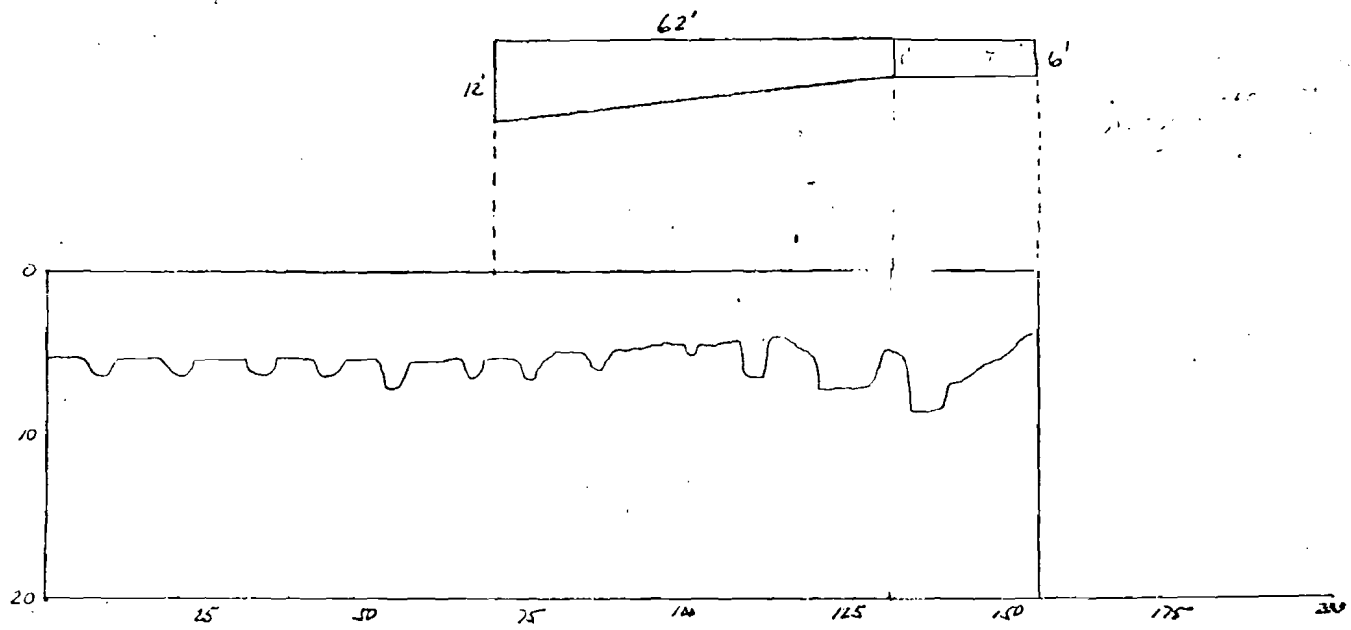
TOP VIEW OF LAST 30' OF CUT. CUT WAS TAPERED TO ALLOW FOR CONTINUED USE OF AREA FOR TRUCK TRAFFIC.



FRED C. HART ASSOCIATES, INC.  
Approximate Excavation Cross-Sections  
September, 1984

JUNE 25, 1984  
B.H.

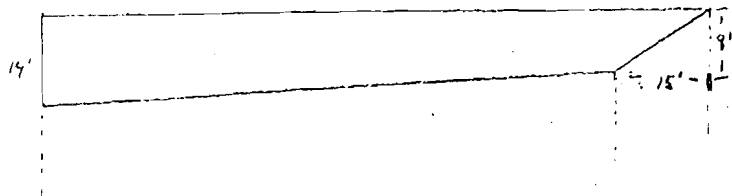
POWER - CHEMCO A035 e CUT II 11



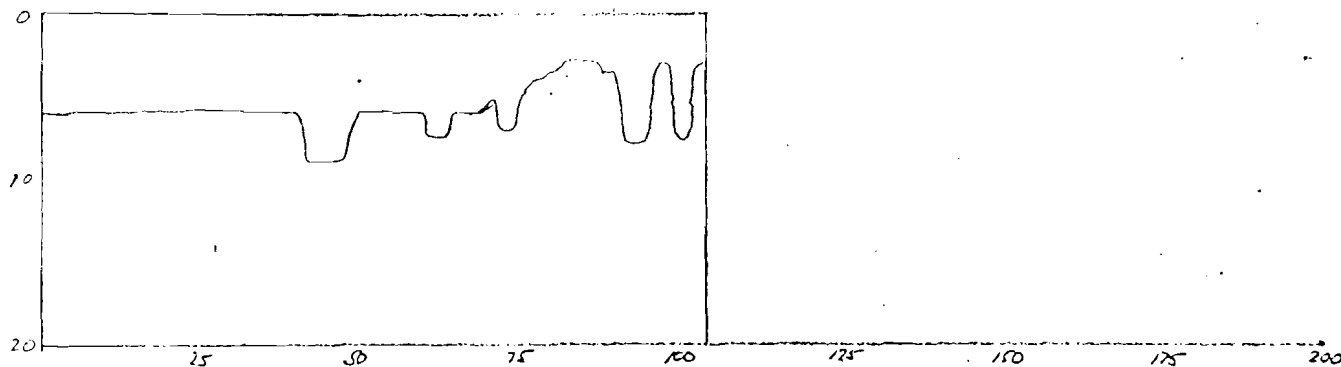
FRED C. HART ASSOCIATES, INC.  
Approximate Excavation Cross-Sections  
September, 1984

AUGUST 10, 1984  
BH

POWELL - CHEMCO A035 e CUT # 12



TOP VIEW OF CUT # 12. CUT WAS TAPERED TO ALLOW FOR CONTINUED USE OF AREA FOR TRUCK TRAFFIC



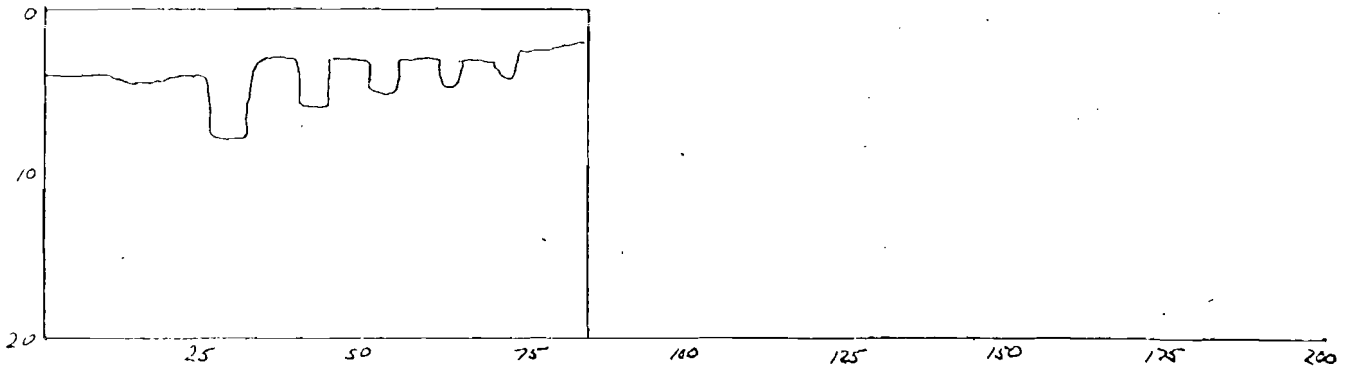
FRED C. HART ASSOCIATES, INC.

Approximate Excavation Cross-Sections

September, 1984

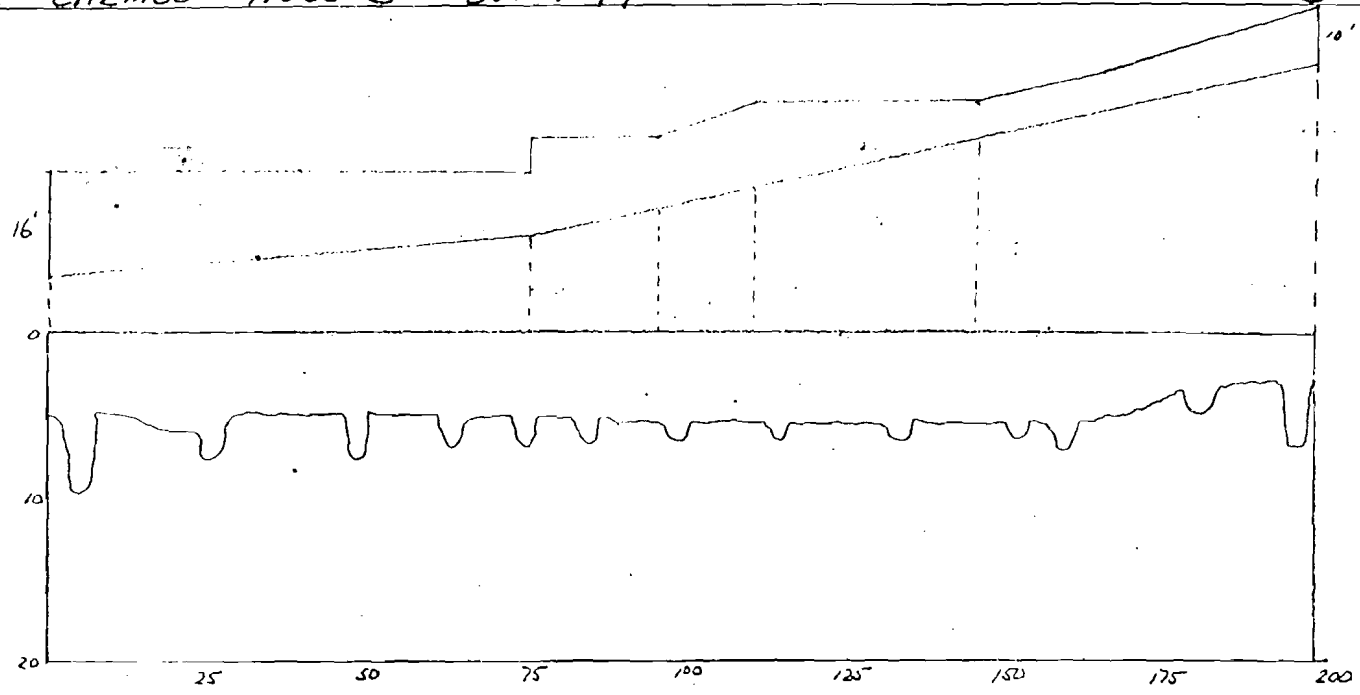
AUGUST 10, 1984

POWERS - CHEMCO AD35e CUT # 13



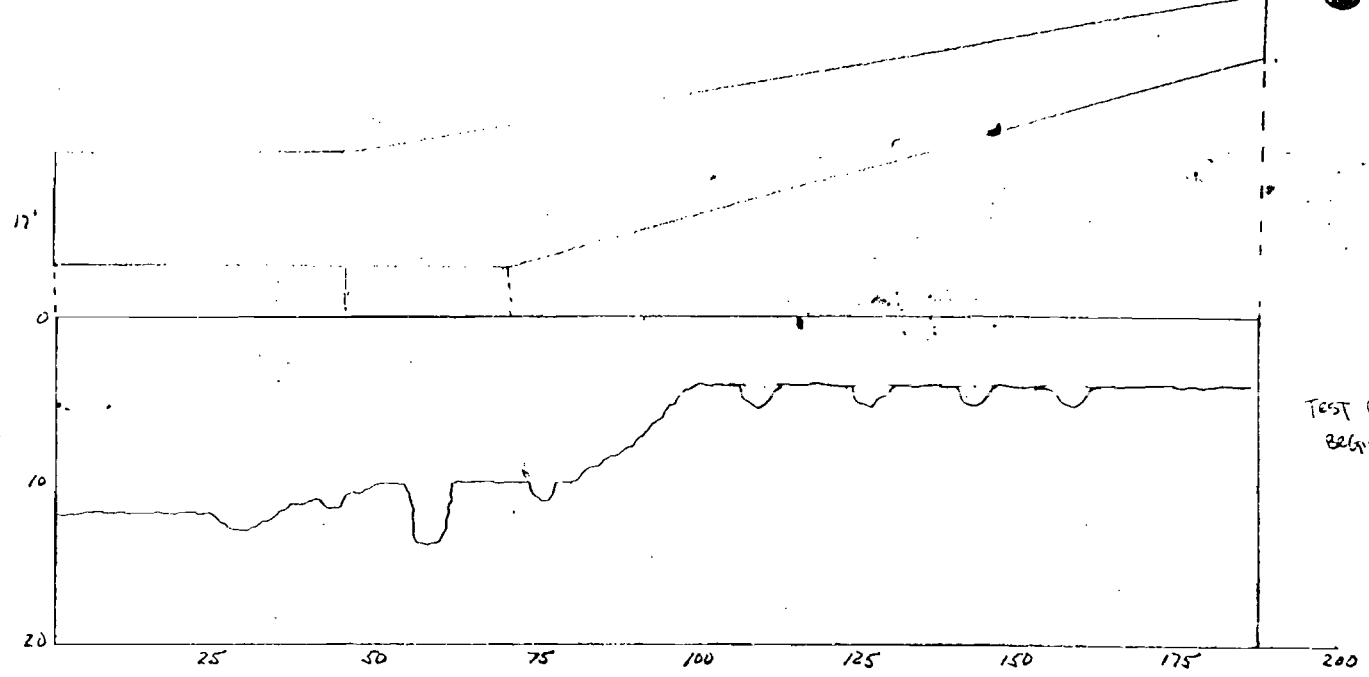
FRED C. HART ASSOCIATES, INC.  
Approximate Excavation Cross-Sections  
September, 1984

POWERS - CHEMCO A035 C CUT # 14



FRED C. HART ASSOCIATES, INC.
Approximate Excavation Cross-Sections
September, 1984

AUGUST 10, 1984  
B.F.




FRED C. HART ASSOCIATES, INC.

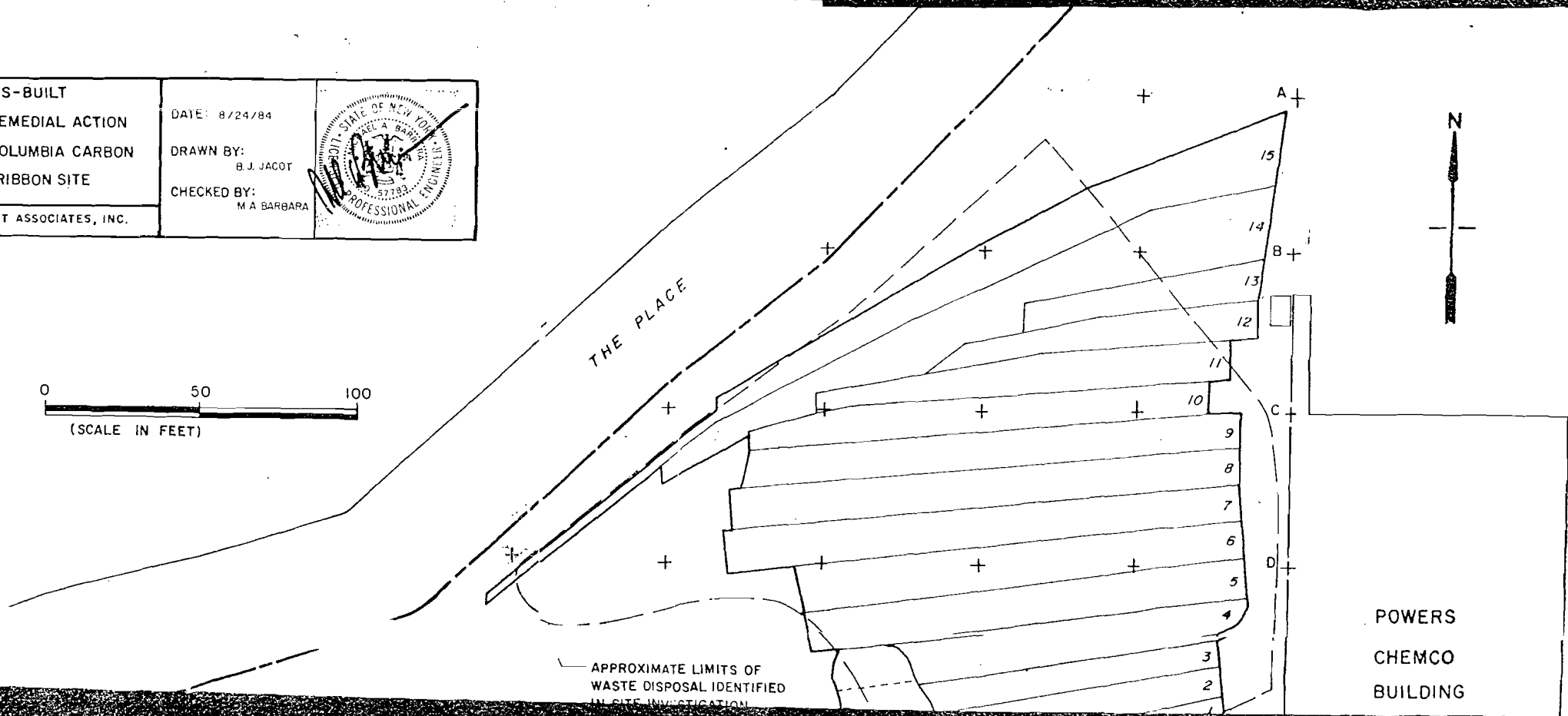
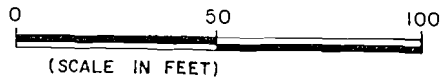
Approximate Excavation Cross-Sections

September, 1984

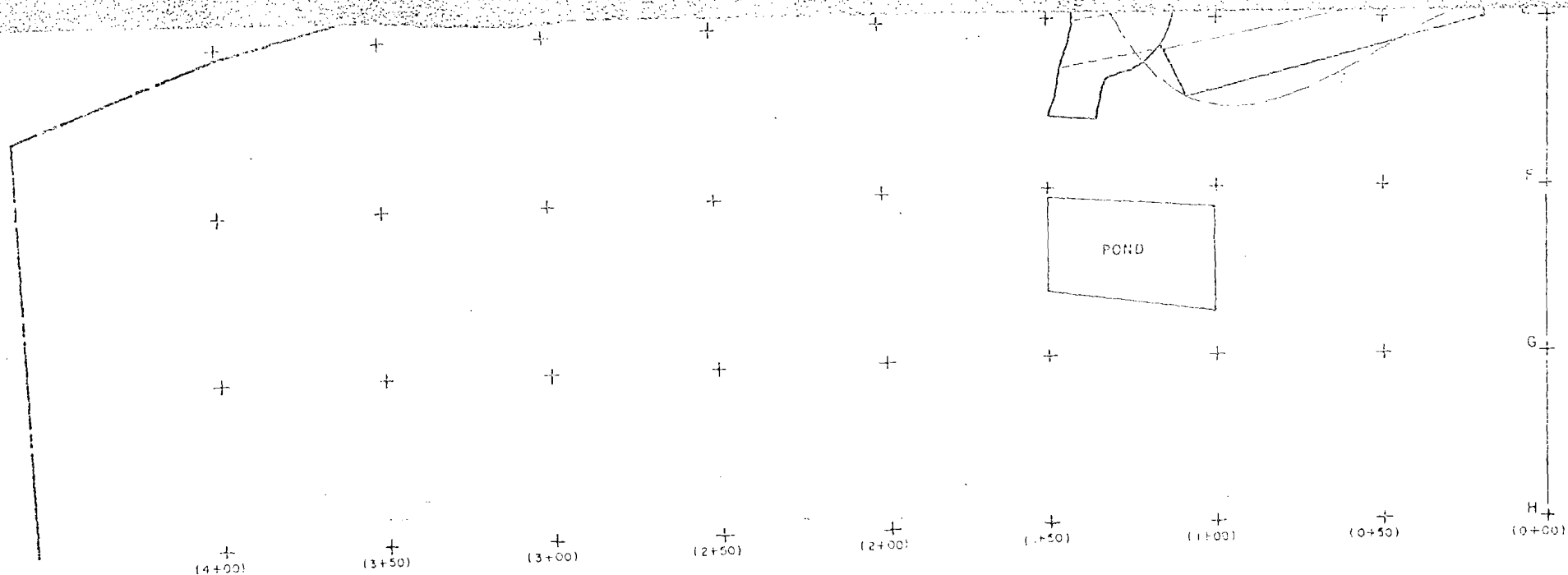
AUGUST 10, 1984

RF

<p>AS-BUILT INITIAL REMEDIAL ACTION FORMER COLUMBIA CARBON AND RIBBON SITE</p>	<p>DATE: 8/24/84</p>	
	<p>DRAWN BY: B. J. JACOT</p>	
<p>FRED C. HART ASSOCIATES, INC.</p>		







NOTES:

1. APPROXIMATE EXCAVATION DEPTHS ARE SHOWN FOR EACH CUT ON ATTACHED CROSS-SECTIONS.
2. TOTAL MATERIAL EXCAVATED = 4,645 TONS (APPROX. 2,730 CY) & TRANSPORTED TO FONDEBY ENTERPRISES
3. EXCAVATION COULD NOT BE ADVANCED TO WITHIN 15 FEET OF UTILITY POLE.