- 915053

Department of Environmental Conservation

Division of Hazardous Waste Remediation

Record of Decision

Houdaille Industrial - Strippit Division Site
Town of Newstead, Erie County
Site Number 9-15-053

March 1995

New York State Department of Environmental Conservation
GEORGE PATAKI, *Governor* MICHAEL ZAGATA, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION
Inactive Hazardous Waste Site
Town of Newstead, Erie County, New York
Site No. 915053

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Houdaille Industrial-Strippit Division inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40 CFR Part 300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Houdaille Industrial Strippit Division Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous wastes and other chemical contaminants were addressed through the implementation of an Interim Remedial Measure (IRM). During the IRM, the landfill was properly capped. This will significantly reduce the mobility of contaminants through groundwater. With the cap in place, the direct contact exposure to humans and animals with the contaminants has been eliminated.

Description of Selected Action

The investigations conducted at this site clearly showed that the contamination due to the disposal of hazardous and other industrial chemical wastes was limited to the landfill and the drainage ditches area. The drainage ditches were remediated and the landfill area was capped as an Interim Remedial Measure. The groundwater contamination was found to be limited to the site area and had not moved off-site. A long term Operation & Maintenance Plan will be instituted to maintain the integrity of the landfill cap and monitor the groundwater conditions. Since no other uncontrolled environmental problems remain on site, the No Further Action Alternative has been selected for this site.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that employ treatment that reduce toxicity, mobility, or volume as a principal element.

3/20/95
Date

Michael J. O' Toole, Jr., P.E.
Director
Division of Hazardous Waste Remediation

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RECORD OF DECISION

HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION
Newstead, Erie County, New York
Site No. 9-15-053

MARCH 1995

SECTION 1: SITE LOCATION AND DESCRIPTION

This two acre landfill site is behind the plant building of Strippit,- Inc., a manufacturer of tools and dies located at 12975 Clarence Center Road. The site is in an industrial-residential area in the Town of Newstead, Village of Akron, New York. The plant property is bounded by Clarence Center Road on the north, NYS Route 93 on the east, railroad tracks on the south and a residential property on the west (Figure 1).

Surface water from the plant flows through a drainage ditch, along the western boundary of the site northward and eventually discharges into Murder Creek located about 3/4 of a mile from the site.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

The Buffalo Arms Corporation, a manufacturer of machine guns, owned and used this property for firing of machine guns and disposal of scrap metals from approximately 1940 to 1950. Houdaille Industries - Strippit Division (now known as Strippit, Inc.) has occupied this property since 1956. Houdaille Industries used the back portion of the property (landfill area) for disposal of about 20,000 gallons of water based coolant per year and 3 tons/year of heat treat sludge (a hazardous waste as defined in 6NYCRR Part 371 as FO11 Waste) from metal fabrication operations. Approximately 270 gallons/year of waste solvents were also generated. There are conflicting reports whether or not the waste solvents were used to open burn the solid waste in the landfill. The ash from burning was also disposed of on site. About 216 drums containing heat treat sludge were also reported to be buried in the landfill. During 1979, the landfill area was covered with clean fill from an on-site plant expansion project.

2.2: Remedial History

Originally the site was listed as a Class "2a" which is a temporary classification assigned to sites that have inadequate and/or insufficient data for inclusion in any of the other classifications. A State funded Phase I Investigation was completed during January 1986 and a Phase II Investigation was completed in March 1991. Based upon the Phase II, the site was reclassified to Class 3 in March 1992. The Class"3" means that the site does not present a significant threat to the public health or the environment - action may be deferred.

During July 1991, Strippit contacted Region 9 of NYSDEC to address the environmental problems at the site. The company agreed to perform a Supplemental Investigation and remediate the site by closing the landfill. The Consent Order was signed during December 1992. The field work for the site investigation was completed in February 1993. The final Supplemental Investigation report was submitted to NYSDEC in July 1993. After review of the previous investigations and Supplemental Investigation Report, it was concluded that contamination was not leaving the landfill area and the proper closure of the landfill to prevent the percolation

of rainwater through the waste material would be protective of the environment. The IRM work plan was submitted in October 1993 and was approved by NYSDEC.

SECTION 3: CURRENT STATUS

3.1: Summary of Site Investigations

In order to determine if any environmental problems were present at this site, the following investigations were performed at the Strippit site:

December 19 - 1981, NYSDEC Investigation

During this investigation 2 soil, 3 sediment and 3 surface water samples were collected from the site. The Samples were tested for metals and halogenated hydrocarbons.

January 1986 - Phase I Investigation (NYSDEC)

In addition to evaluating the information obtained during 1981 Investigation, the report also included information on the site hydrogeology, geology and wetlands in the area. No field work was done during this investigation.

January 1989 - EPA (NUS) Investigation

During May 1987, NUS on a contract with USEPA, collected two groundwater (from private wells), one surface water, one sediment, and five soil samples as part of their investigation on this site. The report was completed in January 1989.

March 1991 - Phase II Investigation (NYSDEC)

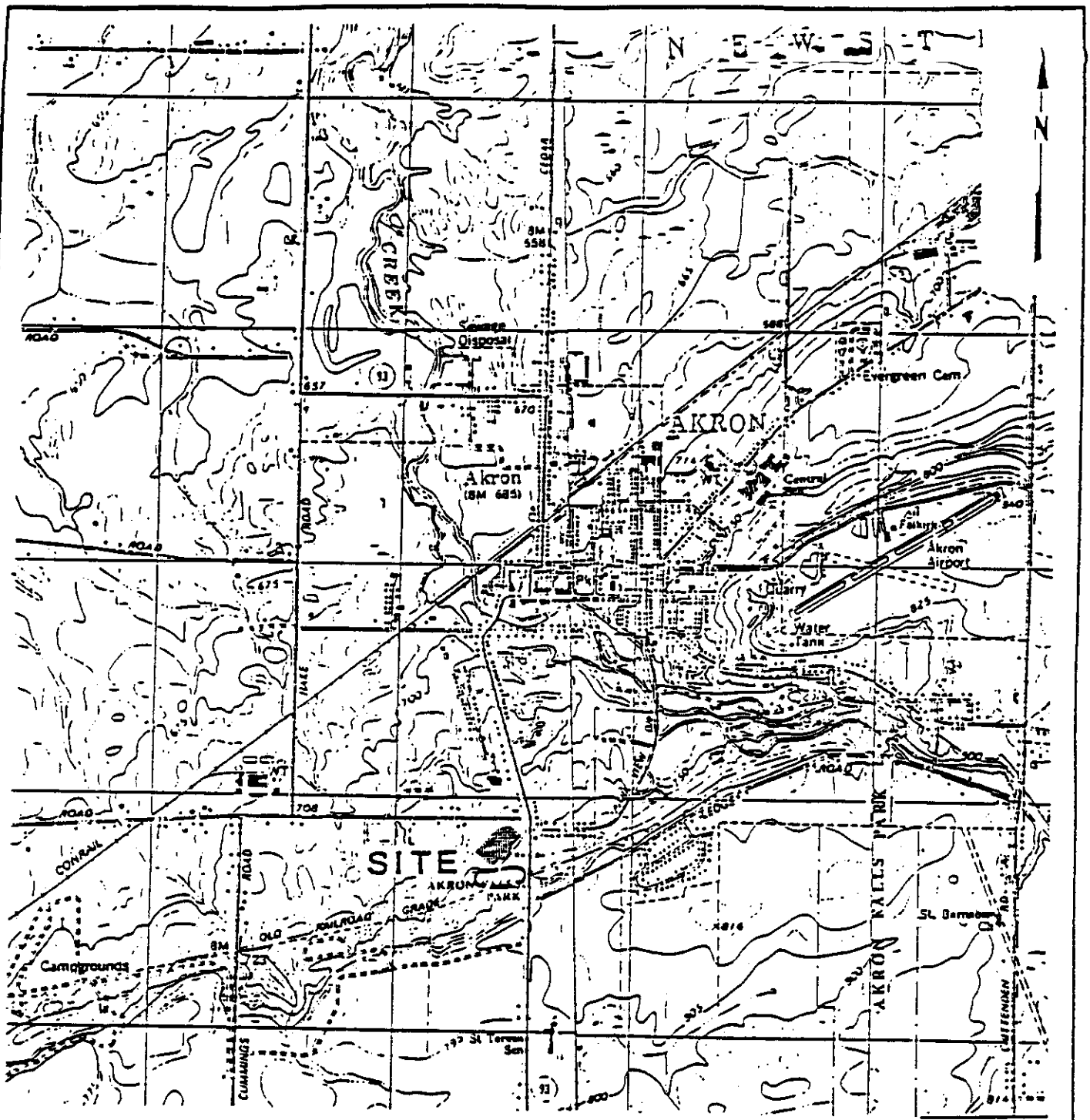
The purpose of this investigation was to provide a comprehensive site contamination assessment. During this investigation, four groundwater monitoring wells were installed. Groundwater, surface water, leachate and sediments samples were collected and tested for Target Compound List (TCL) organics and Target List Analytes (TAL) inorganics. The sampling locations are shown in Figure 2.

July 1993 - Field Investigation (Strippit, Inc.)

Strippit, Inc. contracted Day Engineering and performed an investigation during February 1993. The report was completed in July 1993.

During this investigation, 33 test pits were excavated in and around the disposal area. The test pit locations are shown in Figure 3. Some test pits were excavated in the property west of the landfill. The purpose of the test pit investigations was to find out if buried drums or wastes existed at the site and test their contents to determine whether or not they contained any hazardous wastes as defined in 6 NYCRR Part 371. No intact drums were encountered during this investigation. A composite soil sample from two test pits which were stained with similar materials was tested for TCL (organics) and TAL (inorganics) parameters and cyanides. An additional upgradient groundwater monitoring well installed during this investigation was also tested for the above listed parameters. The four wells installed during the State Superfund Phase II Investigation were also resampled and tested.

In addition a record search and interview with the plant personnel was conducted during this investigation to



LATITUDE: 43°00'27"

LONGITUDE: 78°30'14"

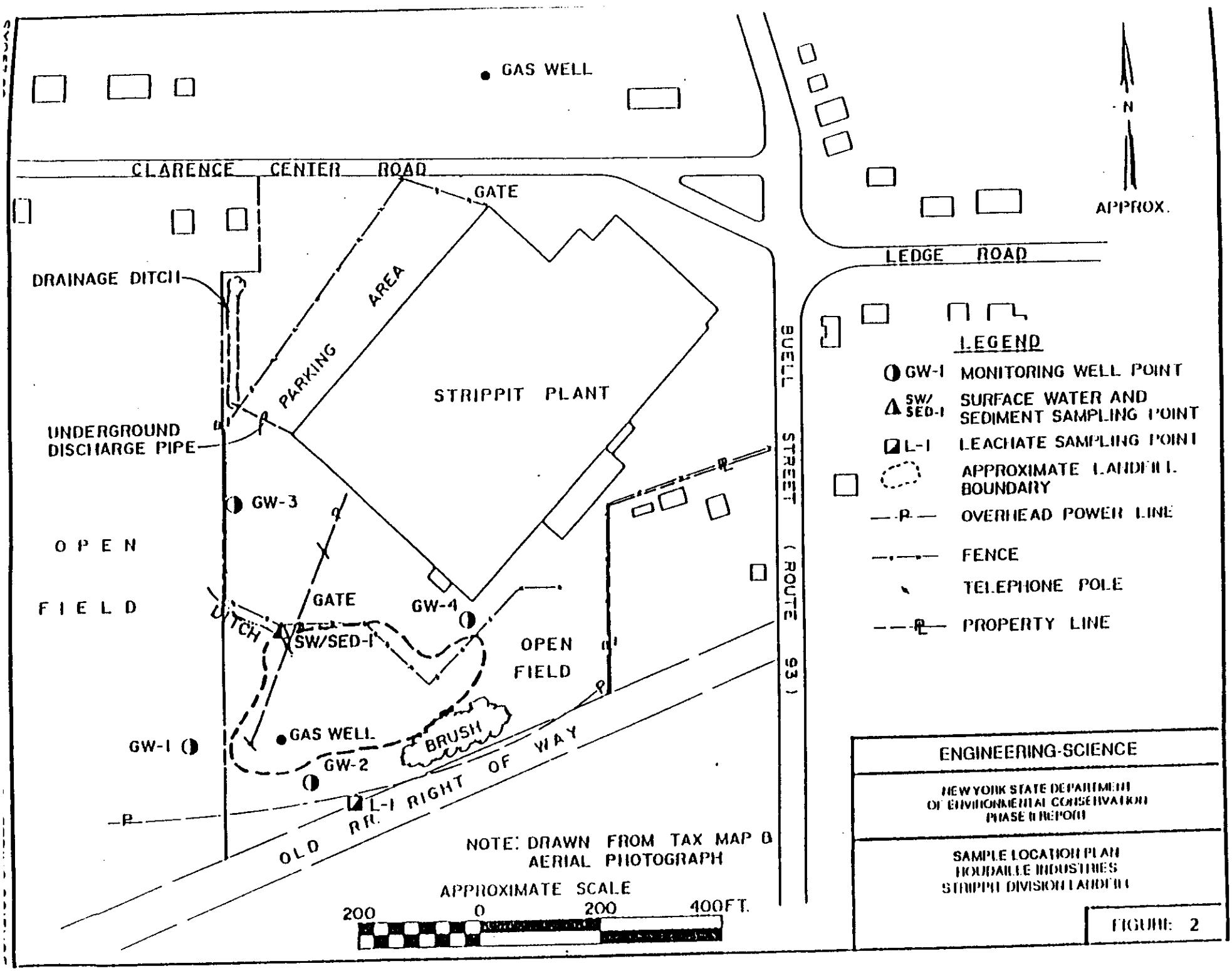
ENGINEERING-SCIENCE, INC.
IN ASSOCIATION WITH
DAMES & MOORE

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
PHASE I REPORT

SITE LOCATION MAP
HOUDAILLE INDUSTRIES
(STRIPPIT DIV.)

FIGURE 1

REFERENCE: U.S.G.S. 7.5' Topographic Map
Wadsworth, OH (1980) and
Akron, OH (1980) Quadrangles



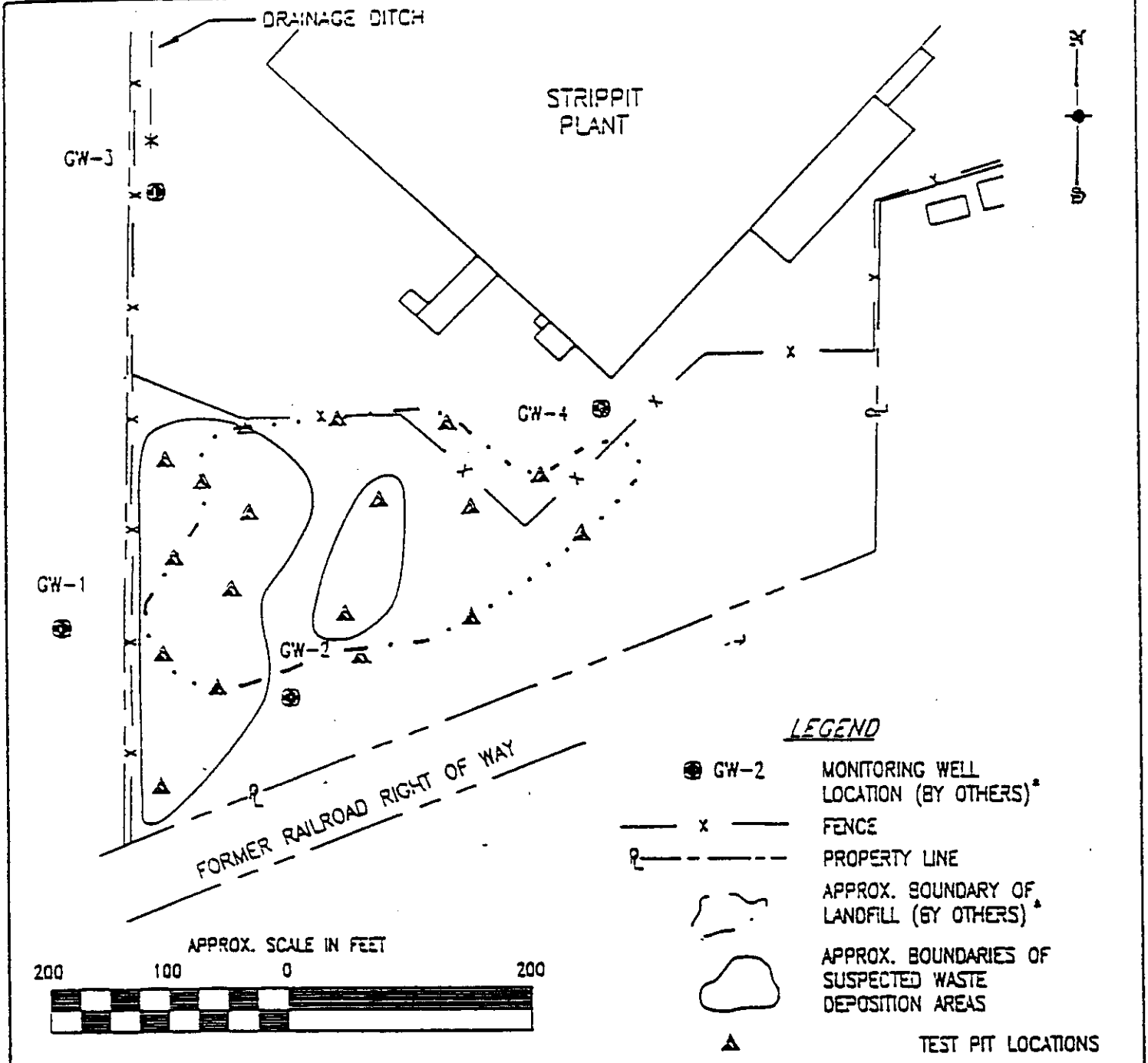
ENGINEERING-SCIENCE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE II REPORT

SAMPLE LOCATION PLAN
HOUDAILLE INDUSTRIES
STRIPPIT DIVISION LANDFILL

FIGURE 2

TIME PLOTTED: Thur Jan 30 16:30:00 1992
FILENAME: BASE2



* GROUNDWATER & LANDFILL INFORMATION SHOWN WAS TAKEN FROM FIGURE IV-5 IN REPORT ENTITLED: "PHASE II INVESTIGATIONS, HOUDAILLE INDUSTRIES, STRIPPIT DIVISION." REPORT PREPARED FOR NYSDEC BY ENGINEERING-SCIENCE, INC., DATED MARCH 1991

PROJECT NO. 91-1350S DRAWING NO. FIG. 3	PROJECT TITLE STRIPPIT, INC. 12975 Clarence Center Road Akron, New York 14001 DRAWING TITLE PROPOSED TEST PIT LOCATION MAP	DAY ENGINEERING, P.C. ENVIRONMENTAL ENGINEERING CONSULTANTS ROCHESTER, NEW YORK	DATE 01/31/92 DRAWN BY JJO SCALE SHOWN

determine company's disposal practices prior to closing the landfill. Aerial photographs (1927 to 1985) were reviewed to obtain information pertaining to the disposal practices.

3.2 Site Geology/Hydrology:

The subsurface soil is characterized as up to 12 feet of fill which consists of brown, medium-size sand and gravel and some dark black silt. The fill is underlain by 40-50 feet of coarse sandy glacial till, with a silty till underlying it. A water bearing glaciolacustrine sandy silt underlies the confining till at 40 to 60 feet below the surface. Onondaga limestone bedrock underlies the site at a depth of 110 to 120 feet with a gentle dip of 30-40 feet/mile to the south.

The seasonal groundwater in the overburden flows north from the landfill towards Murder Creek. Shallow groundwater in the landfill area may be temporarily perched above the confining till at a depth of 4-6 feet below ground surface. There may be a radial flow of groundwater from the landfill due to mounding effects.

3.3 Nature and Extent of Contamination

The evaluation of the different environmental media is as follows:

Soil

During the 1981 NYSDEC sampling one surface sample was collected. The surface soil sample showed 9.5 ppm of halogenated hydrocarbons, which is above typical background levels.

Subsurface soil samples were also tested during the 1981 NYSDEC Sampling, the 1989 NUS Study and the 1993 Field Investigation by Strippit. Low levels of contaminants such as arsenic (<8 ppm), barium (<59 ppm), lead (<19 ppm) and traces of organics such as Polycyclic Aromatic Hydrocarbons (PAHs) and Polychlorinated Biphenyls (PCBs) were found in soil samples during these investigations. With respect to metals, their levels are within the published background soil concentrations for the area. Test pits excavated during 1993 Field Investigation also did not show any evidence of widespread burial of drums.

In addition, the levels of contamination found in soils during 1981, 1989 and 1993 site investigations were compared against the Standards, Criteria and Guidance (SCGs). The Contaminant Concentrations were below the clean up levels set forth in the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) HWR-92--4046.

Groundwater

The Phase II Investigation and Strippit's 1993 Field Investigation evaluated the groundwater conditions within the monitoring wells located in proximity to the site. As shown in the Following table, the concentrations of some contaminants found in the groundwater were above the NYS Groundwater Standards. Acetone was also detected in some samples, however, it is considered a common laboratory contaminant. Cyanides were not detected in any of the soil or groundwater samples.

Contaminant	Frequency of Detection Out of 9	Concentration Range (ppb)	Average* Concentration (ppb)	New York State Groundwater Standard (ppb)
Aluminum	9	234-8260	2698	
Barium	9	71-1120	317	1000
Manganese	9	2-326	108	300
Magnesium	9	129-66700	21982	35000
2- Butanone	1	ND-11	5.9	50
Phenol	1	ND-10	4.8	1

* Average concentration with upper 95% Confidence Level
ND Not Detected

Surface Water

Three surface water samples tested during the 1981 DEC Investigation did not show any exceedances for the NYS Surface Water Standards. Only one surface water sample was collected from the drainage ditch during the 1991 Phase II Investigation. As shown in the following table, Class C surface water standards were exceeded for some metals for this sample. [Note: Murder Creek is classified as Class C.]

Contaminant	Maximum Concentration (ppb)	New York State Surface Water Standards (ppb)
Aluminum	20,700	
Barium	2,920	
Iron	38,300	300
Magnesium	73,700	
Manganese	3,310	
Zinc	393	
Arsenic	42	190
Selenium	10	1
Dichloroethanes	24	

Leachate

During the Phase II investigation a leachate seep south of the landfill was observed. A leachate sample was collected and the contents were analyzed. The analysis showed 30,200 ppb iron (Fe) 194 ppb zinc (Zn).

These levels are above the surface water standards which are 300 and 30 ppb for Fe, and Zn respectively. Low levels of acetone and 4-methylphenol were also detected in the leachate sample.

Sediment Samples

The 1981 NYSDEC Sampling Data for sediments from the drainage ditch showed arsenic (2.4-190 ppm), lead (19-140 ppm) zinc (21-1000 ppm) and Halogenated Organics (ND-26 ppm). Testing of drainage ditch sediment for TCL organics and TAL metals during the Phase II Investigation also showed the presence of barium (1140 ppm), cadmium (16 ppm), PAHs (20 ppm) and traces of phthalates (7 ppb). The concentration of barium and cadmium exceeded typical background/naturally occurring levels, which are 10-500 ppm for barium and 0.01-7 ppm for cadmium.

3.4 Summary of Human Exposure Pathways:

This section describes the types of human exposure that may present added health risks to persons at or around the site.

An exposure pathway is the process by which an individual comes into contact with a contaminant. The five elements of an exposure pathway are (1) the source of contamination (2) the environmental media and transport mechanism (3) the point of exposure (4) the route of exposure and (5) the receptor population. These elements of an exposure pathway may be based on past present or future events.

Human exposure pathways which are known to or may exist at the site include:

- o Dermal adsorption and ingestion of chemicals in soil.
- o Dermal absorption and ingestion of contaminated sediments and surface water.
- o Drinking water from contaminated wells.

3.5 Summary of Environmental Exposure Pathways

This section summarizes the types of environmental exposures which may be presented by the site. The following pathways for environmental exposure have been identified.

- o Direct contact with surface water, sediment and surface soil.

The contaminants detected in sediment samples were above typical background levels for the parameters of concern. During the IRM, sediments from the drainage ditches were excavated and placed into the landfill, thus environmental exposure through sediments in the ditches were eliminated.

During the IRM, the landfill was capped, minimizing any infiltration of rain water into the landfill. This prevented environmental exposure to the contaminants at the site through direct contact and substantially reduced groundwater contamination from the waste source.

SECTION 4: ENFORCEMENT STATUS

Strippit, Inc., the current owner and a Potential Responsible Party (PRP), entered into an order on Consent in December 1992 to perform Site Assessment and Interim Remedial Measures (IRM).

The Consent Order is referenced as follows:

Date	Index No.	Subject
1992	B9-398-92-03	IRM & Site Investigation

SECTION 5: SUMMARY AND EVALUATION OF THE IRM:

The Work Plan to implement the IRM is detailed in the document entitled "Interim Remedial Measure Work Plan, Strippit, Inc., Akron, NY", prepared by Day Engineering, P.C. dated October 1993. The IRM consisted of cleaning of drainage ditches and capping of the landfill. The Work Plan and the design were approved by NYSDEC.

5.1 Cleaning Drainage Ditches

The sediments from the western and southern ditches were excavated and disposed of in the site landfill. Post excavation tests were conducted to verify the clean up.

5.2 Landfill Capping

During the IRM, the landfill area was capped. The cap was designed to meet the standards set forth in 6 NYCRR Part 360. Gas venting system was eliminated from the design because the explosive gas survey showed readings of 0.2% and 2% of the Lower Explosive Limit (LEL) at two locations and no readings at the remainder of the 16 locations. The leachate collection system was also eliminated because the groundwater impact was considered insignificant.

The capping of the landfill consisted of the following tasks:

(1) Clearing and Grubbing:

All trees and brush were removed from the site prior to commencing any excavation or grading work. Roots, boulders and other objects which interfered with construction were also removed from the site.

(2) Retrofitting of the Existing Natural Gas Well and Monitoring Wells:

The well head of a natural gas well (not landfill gas well) located in the middle of the landfill was raised above the proposed final grade and put back into service for the production of gas. In addition, monitoring wells GW-2 and GW-5 were also retrofitted so that they could be used for post closure monitoring. Figure 2 shows locations of gas well and monitoring wells.

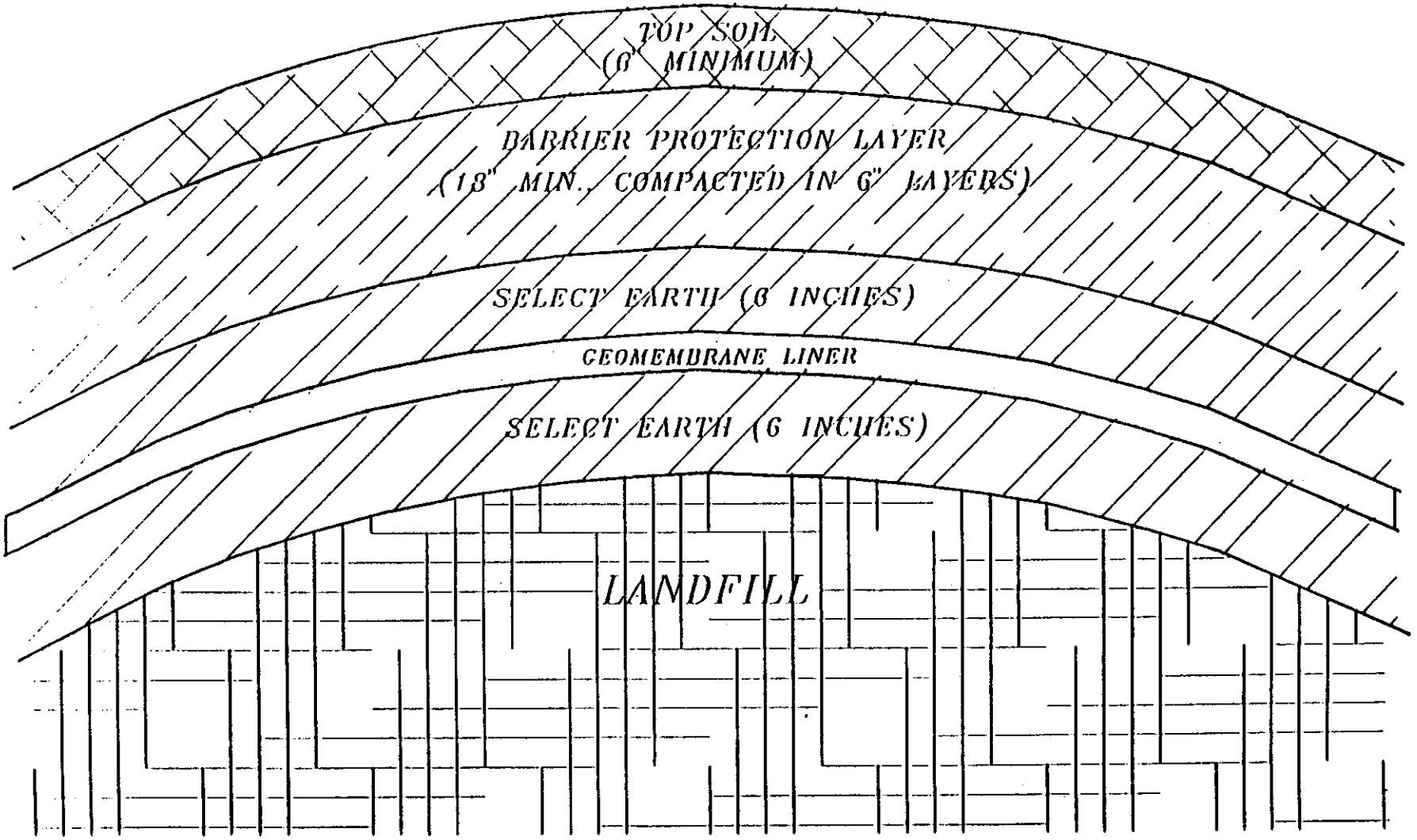
(3) Soil excavation and segregation:

The fill material along the western and northern boundaries of the landfill was pushed back by bulldozers to the top of the landfill and used to fill the low lying area. The ditches along the westerly and northerly boundaries which showed some contamination were also cleaned and the excavated soil/ sediment were placed onto the landfill. The waste containing drums and contaminated soil excavated while establishing the slopes were disposed off site. The upper surface of the subbase was sloped at 4% minimum while slopes had a maximum grade of 25%. Figure 4 shows typical layers of the landfill cap.

(4) Placement of the liner:

HOUDAILLE INDUSTRIAL–STRIPPIT, INC.

TYPICAL CAP SECTION



(NOT TO SCALE)

FIGURE 4

- o Mitigate threat to groundwater and surface water contamination from rain water or snow by significantly reducing mobility of the landfill contaminants. Reduction of mobility of contaminants will prevent the spread of groundwater contamination from the landfill.

- o Eliminate the potential for direct exposure to the wastes in the landfill and contaminated sediment to humans and animals.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

The selected remedy for the Houdaille Industrial-Strippit Division is **No Further Action.** The selection of this remedial alternative is based upon the IRM conducted at this site. During the IRM contaminated soil/sediments from the drainage ditches were removed, thereby, eliminating any potential for direct contact to humans and animals.

Some of the on site groundwater monitoring wells showed contamination for parameters such as aluminum, barium, iron, magnesium, and phenols. With the landfill cap in place, the infiltration into the landfill will be greatly reduced, thus eliminating the "perched" water conditions and hence reducing the possibility of leachate releases and groundwater contamination. The long term groundwater monitoring plan will determine the effectiveness of the selected remedy by determining if capping has in fact adequately controlled the groundwater contaminants. At present, no other uncontrolled sources of contamination are known at this site. Therefore, the No Further Action alternative is selected for the Houdaille Industrial-Strippit site.

SECTION 8. CITIZEN PARTICIPATION

As part of the implementation of the IRM and the Proposed Remedial Action Plan, the following Citizen Participation activities were conducted:

- o All important documents pertaining to the Site Investigations and IRM were made available for public review and comment at the document repository.

- o A mailing list was developed and a fact sheet was mailed to the public before the start of the IRM.

- o An informal mailing was sent to interested individuals/groups announcing the public meeting scheduled for the Proposed Remedial Action Plan (PRAP).

- o The public comment period on the PRAP lasted from December 15, 1994 to January 20, 1995.

- o A public meeting was held in Akron on January 17, 1995 to discuss the PRAP and obtain public comments on it. A Responsiveness Summary that addresses questions and comments raised during the public meeting and comment period is provided as Appendix A.

LINER KEYWAY AND DRAINAGE CHANNEL

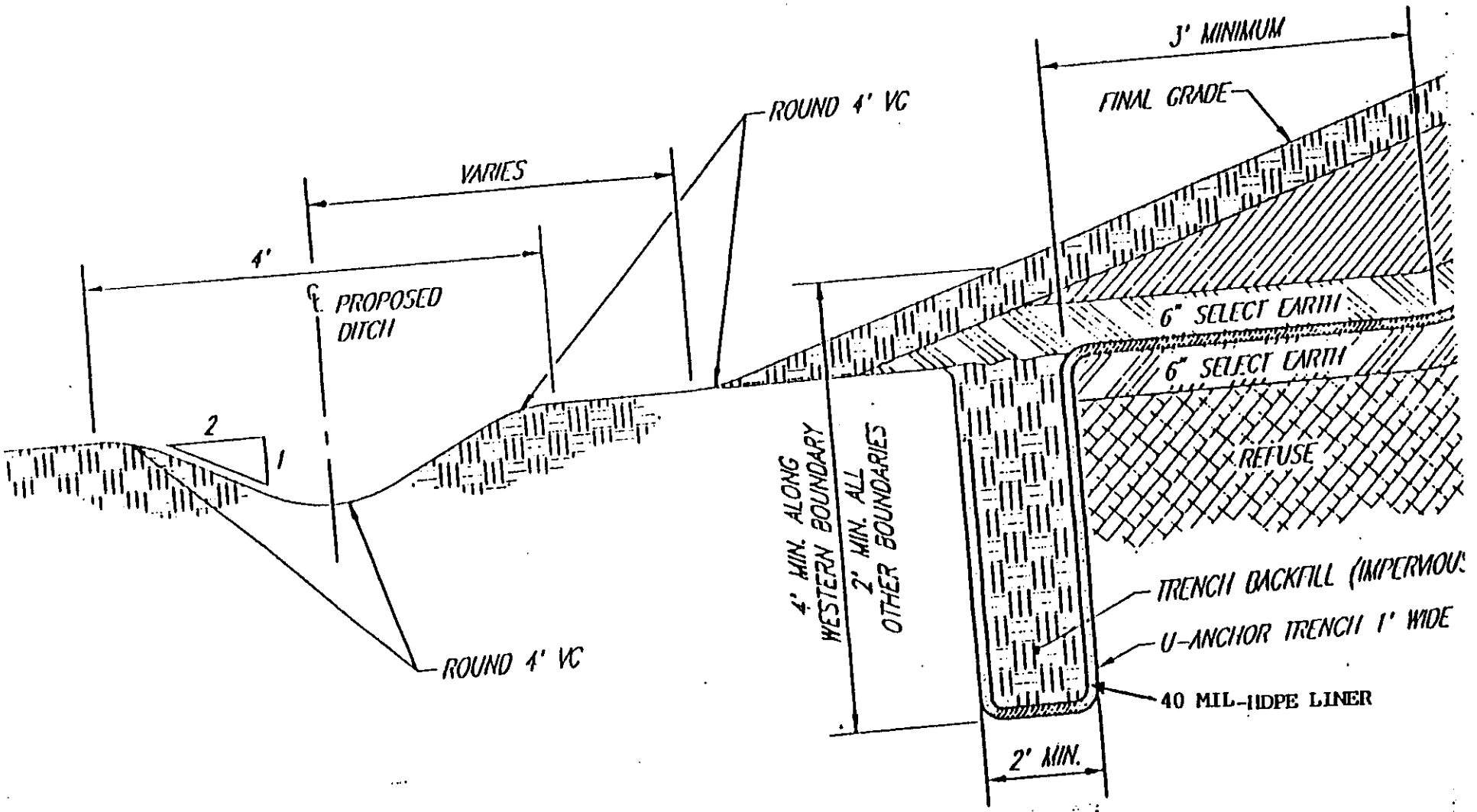


FIGURE 5

APPENDIX A
RESPONSIVENESS SUMMARY
for the
PROPOSED REMEDIAL ACTION PLAN
HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION
Newstead, Erie County, New York
Site No. 9-15-053

The Proposed Remedial Action Plan (PRAP) was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository in December, 1994.

The PRAP described the site investigations and the Interim Remedial Measure (IRM). The IRM consisted of (a) cleaning of drainage ditches and (b) capping of the landfill. The PRAP also described the long term maintenance of the landfill cap and monitoring of groundwater.

The proposed remedy in the PRAP for this site was - **No Further Action.** The selected remedy is the same as was proposed.

The PRAP was presented to the public on January 17, 1995 during a public meeting in the Village of Akron Library. The questions and concerns raised during that public meeting and other questions by the public during the comment period which ended on January 20, 1995, and the State's response is as follows:

1. Q. Is there any evidence of migration of contaminants off site?

   A. There is no evidence that the contaminants have moved off site. The groundwater monitoring wells were sampled twice during the site investigations. None of the contaminants of concern were found in the off site monitoring well. The cap installed on the landfill will greatly reduce the potential for contaminants from entering groundwater and off site migration.

2 Q Is there contaminated water flowing into the ditches now?

   A. The cap installed on the landfill has eliminated direct contact of the waste in the landfill with rain water. Therefore, the run off water from the landfill cannot dissolve any contaminants. Thus, runoff from the landfill area which flows through the ditches around the landfill is free of contaminants.

3. Q. With respect to the drainage ditch, it is currently plugged with hay, etc. and water does not flow freely. Snow is placed in the ditch when they plow their parking lot, which also hampers water flow. Can something be done to solve this problem?

   A. Currently, Strippit places bales of hay in the ditch to remove any residual oil and grease from the discharge of the plant operations cooling water. As far as water

from the ditch getting into neighbors backyards is concerned, Strippit has assured NYSDEC that they will look into the problem and take appropriate actions.

4. Q. Are the ditches being monitored for pollutants now?

   A. During the IRM, the contaminated soil/sediment from the ditches were excavated thereby removing any concerns about contaminated sediment being present. Presently, Strippit is discharging non-contact cooling water into the ditch flowing along the western boundary of Strippit under a State Pollution Discharge Elimination System (SPDES) permit. The permit requires Strippit to test the discharge water for oil and grease and pH. Questions regarding the SPDES permit should be directed to the NYSDEC Regional Water Engineer; Tel. No.(716)-851-7070

5. Q. How many pollutants were tested for when the sampling was done.

   A. During the various site investigations, groundwater, soil, leachate, surface water and sediment samples were tested for Target Compound List (TCL) Parameters (i.e. 125-volatiles and semivolatiles, 24 metals and total cyanides).

APPENDIX B
ADMINISTRATIVE RECORD
HOUDAILLE INDUSTRIAL - STRIPPIT DIVISION
Newstead, Erie County, New York
Site No. 9-15-053

Date	Document
December, 1981	NYSDEC Sampling Results
January, 1986	Phase I Investigation Report (NYSDEC)
January, 1989	Site Inspection Report - EPA (NUS)
March, 1991	Phase II Investigation Report (NYSDEC)
September, 1991	Rick Kennedy to Martin Doster proposal for additional investigation
May, 1992	Field Investigation Plan prepared by Day Engineering
August 3, 1992	Mark Kowalski to Cameron O'Connor - Drinking water wells in the area.
December, 1992	Consent Order (Index #B9-398-92-03)
July, 1993	Field Investigation Report (Strippit, Inc.)
October, 1993	Interim Remedial Work Plan
October 28, 1993	Jaspal S. Walia to Richard Crouch approval of IRM Work Plan
June, 1994	Fact Sheet
July, 1994	Site Specific Health & Safety Plan by Haseley Trucking Company
October 3, 1994	Dr. Frances Yang to Jaspal Walia - Test results of the ditches cleanup.
December, 1994	Construction Documentation Report - Interim Remedial Measure (Strippit, Inc.)
December, 1994	Proposed Remedial Action Plan (PRAP) - (NYSDEC)
February, 1995	Post-Closure Monitoring and Maintenance Plan (Strippit, Inc.)
March, 1995	Record Of Decision (ROD) - (NYSDEC)