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915146



**EXCAVATION PLAN FOR  
SURFICIAL SOILS  
ST. ALDABERT'S CEMETERY/  
WEST SIDE OF MAIN BUILDING  
NIAGARA TRANSFORMER CORP.  
DALE ROAD FACILITY**

Prepared for:  
Niagara Transformer Corporation  
1747 Dale Road  
Buffalo, New York 14225  
October 19, 1992



Woodward-Clyde Consultants  
3571 Niagara Falls Boulevard  
North Tonawanda, New York 14120  
Project Number 90C2139-1

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# Woodward-Clyde Consultants

October 19, 1992  
91C2139-1

Mr. Fred Darby  
Niagara Transformer Corporation  
1747 Dale Road  
Buffalo, New York 14225

Re: **Excavation Plan for Surficial Soils:**  
**St. Adalberts Cemetery/West Side of Main Building**

Dear Mr. Darby:

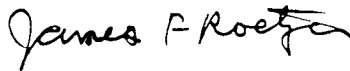
Woodward-Clyde Consultants (WCC) is pleased to submit this work plan for remediating contaminated soil in St. Adalbert's Cemetery and in the narrow strip of Niagara Transformer property between the main building and the cemetery. The plan proposes that the contaminated soil be excavated and disposed of properly in a licensed landfill. The excavated soil would be replaced with clean soil and the area would be reseeded.

If you have any questions or comments on the excavation plan, please contact the undersigned. We appreciate the opportunity to work with NTC on the Dale Road project.

Sincerely,



Kelly R. McIntosh, P.E.  
Associate



James F. Roetzer, Ph.D.  
Senior Associate

KRM/JFR:jee

Ntcexpla.rep



Consulting Engineers, Geologists  
and Environmental Scientists

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**EXCAVATION PLAN FOR  
SURFICIAL SOILS:  
ST. ADALBERT'S CEMETERY/  
WEST SIDE OF MAIN BUILDING  
NIAGARA TRANSFORMER CORP.  
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October 19, 1992

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Project Number 90C2139-1

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Niagara Transformer Corporation (NTC) retained Woodward-Clyde Consultants (WCC) to conduct a Remedial Investigation (RI) for its Dale Road facility. The RI was conducted pursuant to an Order on Consent (Index Number B9-0334-90-05) with the New York State Department of Environmental Conservation (NYSDEC).

The site plan is shown on Figure 1-1. As part of the RI, surficial soil samples were collected from St. Adalbert's Cemetery, which borders the site on the west. Soil samples were also collected from the narrow strip of NTC property located between the main NTC building and the cemetery fence line.

Elevated levels of PCB contamination were found to be present in these areas. The levels were sufficiently high for the NYSDEC to request that the area be considered a separate operable unit for remedial action, and that a plan for remedial action be prepared and submitted. In response, NTC retained WCC to prepare the current document, which presents a plan for remediating this operable unit.

A total of 30 surficial soil samples were collected from the east end of the cemetery near the NTC border. Twenty-five of these were obtained from approximately 1 to 3 inches below ground surface and two were obtained from 6 to 8 inches below ground surface. One sample was obtained from 6 to 12 inches below ground surface. Two samples were collected from the grass root mat and soil (0 to 1 inch below ground surface). Sample locations are shown on Figure 2-1. All samples were analyzed for PCB compounds in accordance with the RI Work Plan.

A total of four surficial soil samples were collected from 0 to 3 inches below ground surface in the narrow strip of NTC property between the main building and the cemetery. Six soil samples were collected in this area from deeper soil, between 1 and 4 feet in depth.

Sample locations are shown on Figures 2-1 and 2-2. Results of the analyses for PCBs are shown on Figures 2-3 and 2-4. Elevated concentrations were found in the upper 3 inches of soil in the cemetery within 15 feet of the fenceline. North and south of the main building, PCB levels exceeding 5 ppm were generally limited to within approximately 2 feet of the fenceline. Directly west of the building, elevated concentrations above 5 ppm were limited to within approximately 7 feet of the fenceline, except for one location (S-5, sampled in September 1992) near the south side of the building (16 ppm, 15 feet from the fenceline).

In the strip of NTC property along the west side of the buildings, concentrations greater than 1,000 ppm were measured in the upper 3 inches of soil. As shown on Figure 2-4, PCB concentrations were approximately 1 ppm or less for samples below 1 foot in depth.



### **3.1 AREAS TO BE EXCAVATED**

The planned remedial action will address soils along side the NTC main building and adjacent cemetery soils north of the southwest corner of the building. In these areas, the soil excavation is intended to constitute the final remedial action. In accordance with the remedial action objectives presented in the preliminary Feasibility Study (WCC, October 16, 1992), soil in these areas with PCB concentrations greater than 5 ppm (off-site) and 25 ppm (on-site) will be excavated. The area and depths to be excavated were determined based on analytical results for all samples collected to date. The delineated area to be excavated and depths of excavation are shown on Figure 3-1. On cemetery property, the upper 6-inches of soil will be excavated except for the small area near sample S-8 (shown on Figure 2-2) which will be excavated to a depth of 1 foot. In the narrow strip of NTC property adjacent to the building, soil containing PCB concentrations in excess of 25 ppm (based on the samples collected to date) will be excavated. This will entail excavation of the top 1 foot of soil as shown on Figure 3-1.

In addition to the areas described above, a small area of highly elevated PCB soil concentration on cemetery property bordering NTC's tank farm will be excavated. Other cemetery soil south of the main building will be addressed as part of the final remedial action selected based on the Feasibility Study (FS) being performed for the site.

### **3.2 METHODS**

Soil will be excavated using a backhoe or smaller "bobcat" excavation equipment, with hand work as needed. Currently, it is planned that soil will be loaded into appropriately equipped and permitted trucks and immediately transported to the off-site disposal facility. If the foundation for the spike fence is found to be intact and greater than 1 foot in depth, it will be left in place.

A decontamination zone for personnel and equipment will be established and used to

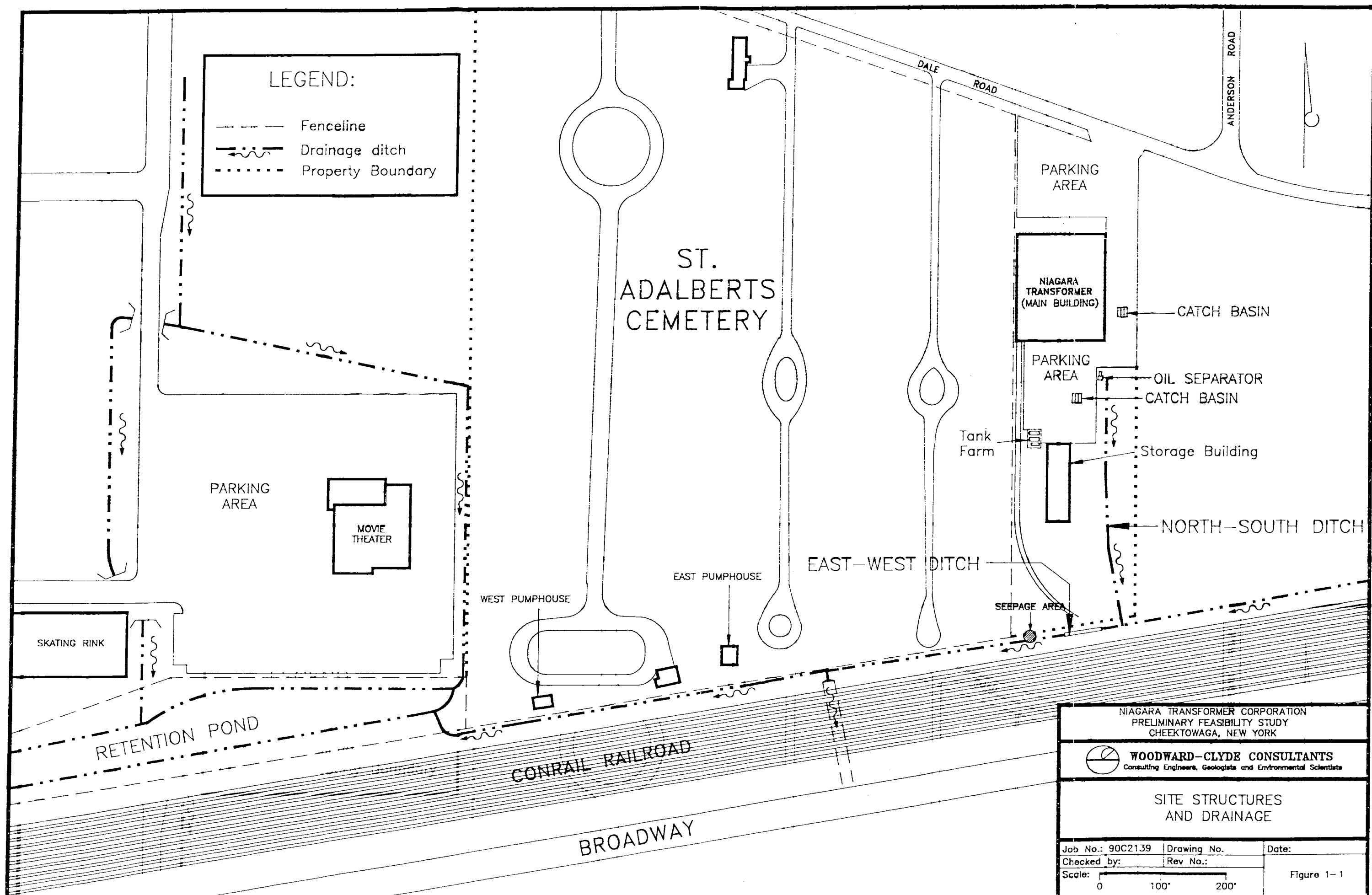
prevent cross-contamination. Air monitoring and health and safety requirements will be in accordance with the RI Work Plan and project Health and Safety Plan. Analytical testing of soil prior to disposal will be in accordance with the permitted landfill requirements. After excavation, the cemetery areas will be backfilled with clean topsoil, graded and seeded. Excavated areas on NTC property will be backfilled with either clay or clean topsoil.

This excavation plan addresses contaminated soil in the St. Adalberts Cemetery, north of the southwest corner of the main NTC building. It also addresses one small area of contamination found south of the main NTC building, in the vicinity of the tank farm. Based on extensive sampling and analytical data collected to date, areas were delineated for excavation based on PCB concentration. In the identified areas of the cemetery, soil with PCB concentration above 5 ppm will be excavated. In the subject area on NTC property, soil with PCB concentrations above 25 ppm will be excavated. Excavated soil will be disposed of off-site in an appropriately permitted landfill. During the excavation program, decontamination procedures, air monitoring, and health and safety requirements will be in accordance with the RI Work Plan and project Health and Safety Plan. After excavation, the areas will be filled with clean topsoil and reseeded (cemetery) or backfilled with clay or clean topsoil (NTC property).


WCC's work is in accordance with our understanding of professional practice and environmental standards existing at the time the work was performed. Professional judgements presented are based on our evaluation of technical information gathered and on our understanding of site conditions and site history. Our analyses, interpretations, and judgements rendered are consistent with professional standards of care and skill ordinarily exercised by the consulting community and reflect the degree of conservatism WCC deems proper for this project at this time. Methods are constantly changing and it is recognized that standards may subsequently change because of improvements in the state of the practice.

The information used for this investigation includes chemical analyses of soil samples. WCC has endeavored to collect soil samples which are representative of site conditions. These samples, however, can only represent a portion of the conditions in the area. The interpretations made in this report are based on the assumption that conditions do not deviate appreciably from those found during our field investigations.

**Figures**



NIAGARA TRANSFORMER CORPORATION  
 PRELIMINARY FEASIBILITY STUDY  
 CHEEKTOWAGA, NEW YORK

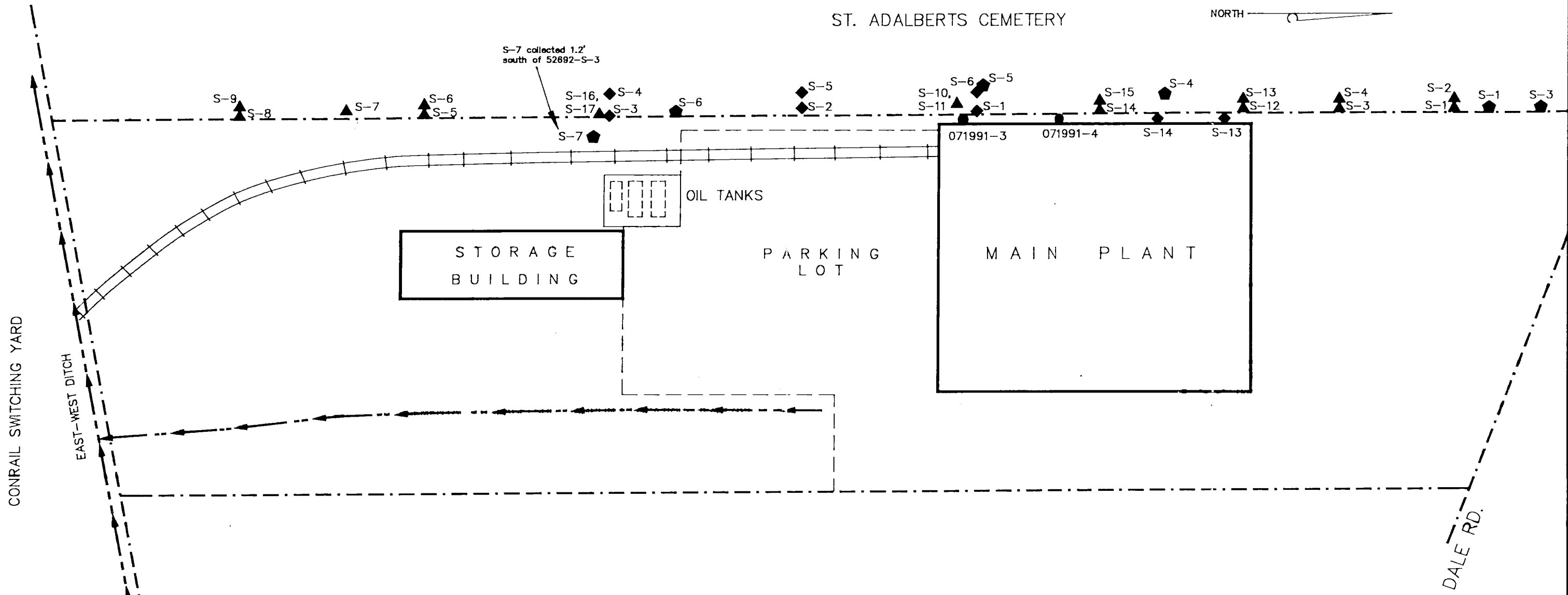
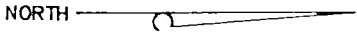
 **WOODWARD-CLYDE CONSULTANTS**  
 Consulting Engineers, Geologists and Environmental Scientists

**SITE STRUCTURES AND DRAINAGE**

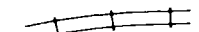

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Figure 1-1


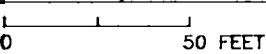
ST. ADALBERTS CEMETERY



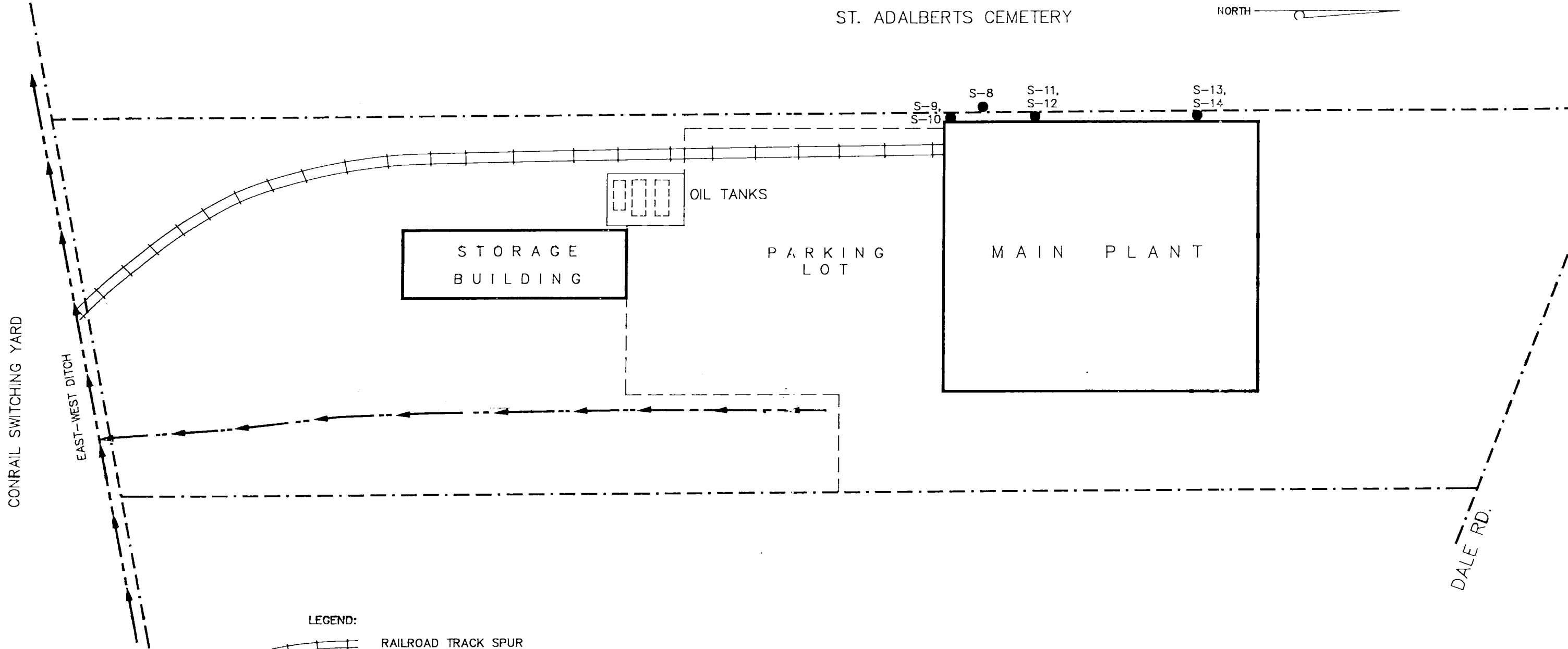
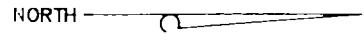
LEGEND:

-  RAILROAD TRACK SPUR
-  DRAINAGE DITCH WITH INTERMITTENT FLOW

- 072291-12 ● RI SURFACE SOIL SAMPLING LOCATION
- S-4 ◆ SUPPLEMENTAL SURFACE SOIL SAMPLING LOCATION: 5/26/92
- S-13 ▲ SUPPLEMENTAL SURFACE SOIL SAMPLING LOCATION: 7/15/92
- S-4 ● SUPPLEMENTAL SURFACE SOIL SAMPLING LOCATION: 9/18/92

NIAGARA TRANSFORMER CORPORATION CEMETERY SOILS EXCAVATION PLAN CHEEKTOWAGA, NEW YORK		
SURFICIAL SOIL SAMPLING LOCATIONS		
 <b>WOODWARD-CLYDE CONSULTANTS</b> Consulting Engineers, Geologists and Environmental Scientists		
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ST. ADALBERTS CEMETERY

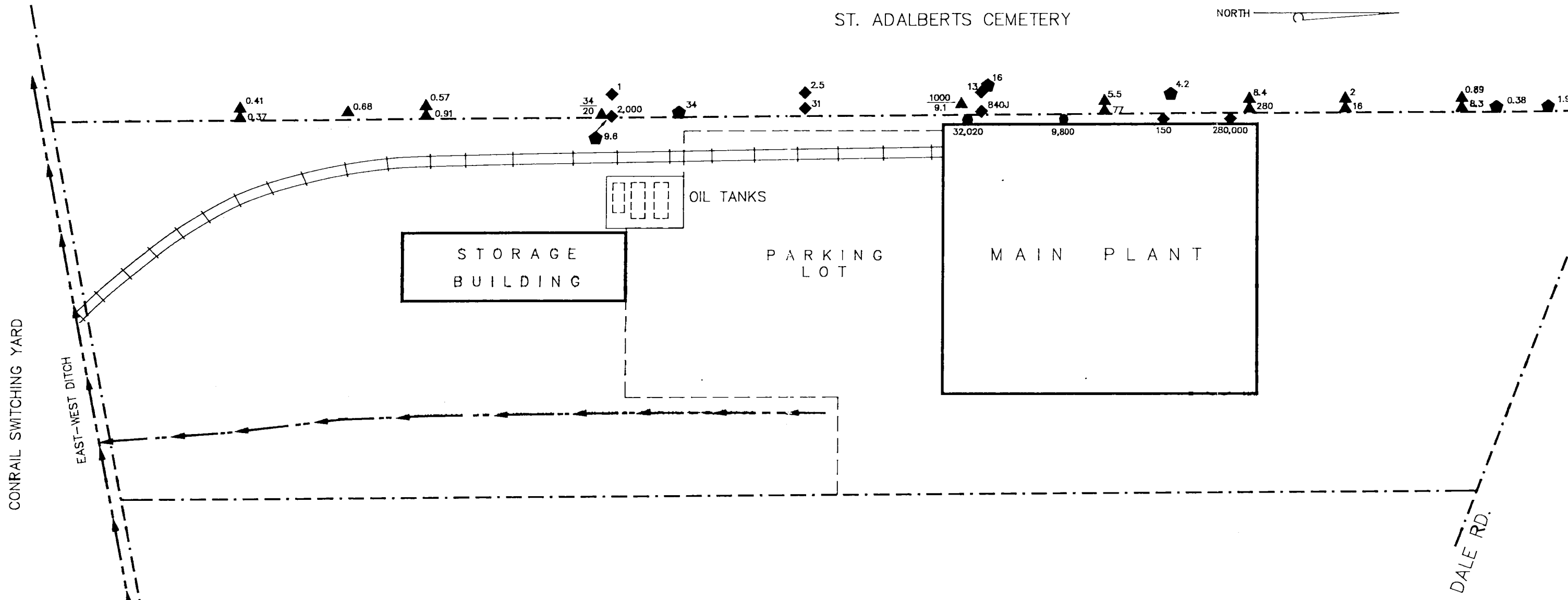
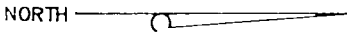


- LEGEND:
- RAILROAD TRACK SPUR
  - DRAINAGE DITCH WITH INTERMITTENT FLOW
  - S-13, S-14 ● DEPTH SPECIFIC SOIL SAMPLING LOCATION: 9/18/92

NIAGARA TRANSFORMER CORPORATION CEMETERY SOILS EXCAVATION PLAN CHEEKTOWAGA, NEW YORK		
DEPTH SPECIFIC SOIL SAMPLING LOCATIONS		
<b>WOODWARD-CLYDE CONSULTANTS</b> Consulting Engineers, Geologists and Environmental Scientists		
Job No.: 90C2139	Drawing No.	Date: 10/19/92
Drawn by: PFM	Checked by: KRM	Figure 2-2
Scale:  0 50 FEET		



ST. ADALBERTS CEMETERY

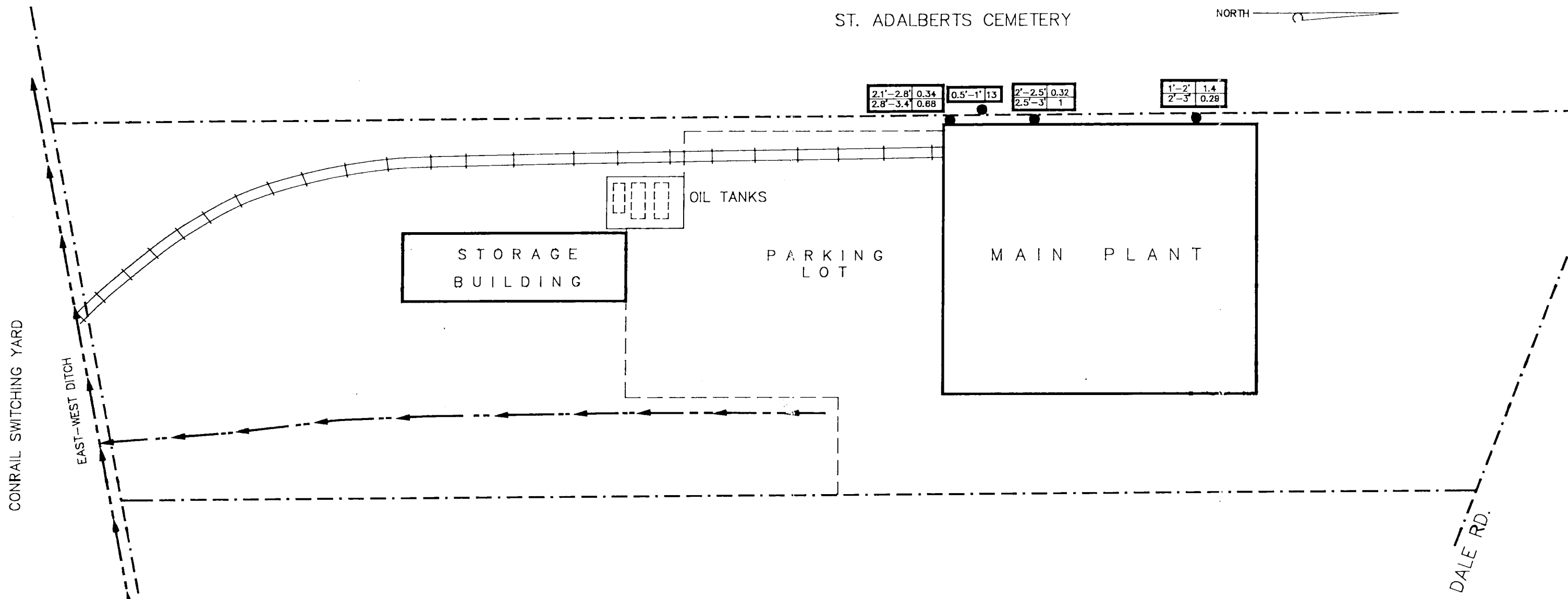
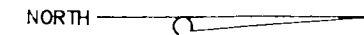


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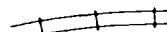
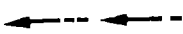
- RAILROAD TRACK SPUR
  - DRAINAGE DITCH WITH INTERMITTENT FLOW
  - ANALYTICAL RESULT FOR RI SURFICIAL SOIL SAMPLING PROGRAM (PCB CONCENTRATIONS IN PPM)
  - ANALYTICAL RESULTS FOR SURFACE SOIL SAMPLES COLLECTED ON 5/26/92 (PCB CONCENTRATIONS IN PPM)
  - ANALYTICAL RESULTS FOR SURFACE SOIL SAMPLES COLLECTED ON 7/15/92 (PCB CONCENTRATIONS IN PPM)
  - SUPPLEMENTAL SURFACE SOIL SAMPLING LOCATION: 9/18/92
- Depth specific sample results (0-1"/6-8")
- Single soil result

NIAGARA TRANSFORMER CORPORATION CEMETERY SOILS EXCAVATION PLAN CHEEKTOWAGA, NEW YORK		
SURFICIAL SOIL ANALYTICAL RESULTS		
<b>WOODWARD-CLYDE CONSULTANTS</b> Consulting Engineers, Geologists and Environmental Scientists		
Job No.: 90C2139	Drawing No.	Date: 10/19/92
Drawn by: PFM	Checked by: KRM	Figure 2-3
Scale:		

ST. ADALBERTS CEMETERY



LEGEND:

-  RAILROAD TRACK SPUR
-  DRAINAGE DITCH WITH INTERMITTENT FLOW
- S-13, S-14 ● DEPTH SPECIFIC SOIL SAMPLING LOCATION: 9/18/92

SAMPLE DEPTH	PCB CONC. IN PPM
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NIAGARA TRANSFORMER CORPORATION  
CEMETERY SOILS EXCAVATION PLAN  
CHEEKTOWAGA, NEW YORK

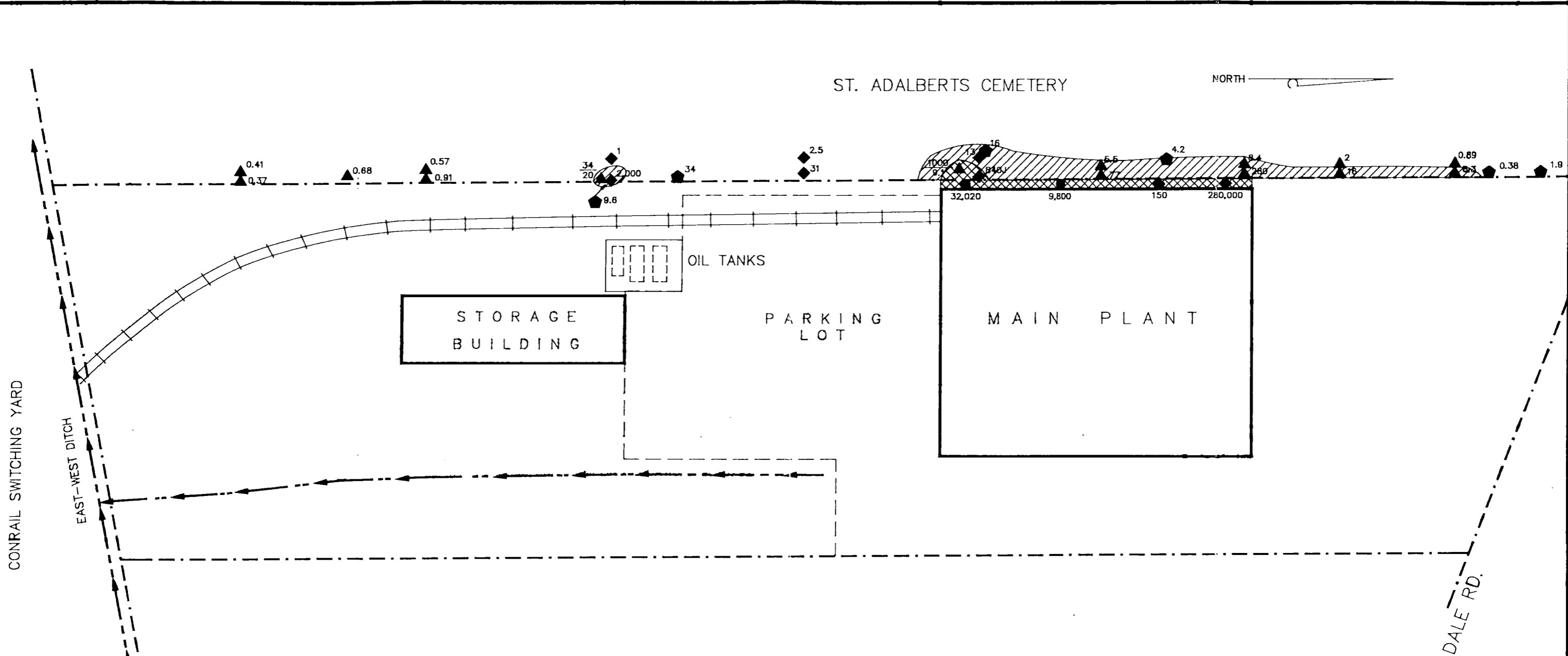
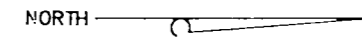
DEPTH SPECIFIC SOIL SAMPLE  
ANALYTICAL RESULTS



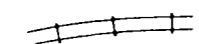





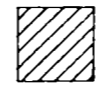
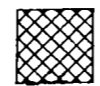
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Scale: 0 50 FEET		

ST. ADALBERTS CEMETERY



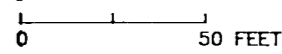
LEGEND:

-  RAILROAD TRACK SPUR
-  DRAINAGE DITCH WITH INTERMITTENT FLOW
-  ANALYTICAL RESULT FOR RI SURFICIAL SOIL SAMPLING PROGRAM (PCB CONCENTRATIONS IN PPM)
-  ANALYTICAL RESULTS FOR SURFACE SOIL SAMPLES COLLECTED ON 5/26/92 (PCB CONCENTRATIONS IN PPM)
-  ANALYTICAL RESULTS FOR SURFACE SOIL SAMPLES COLLECTED ON 7/15/92 (PCB CONCENTRATIONS IN PPM)
-  SUPPLEMENTAL SURFACE SOIL SAMPLING LOCATION: 9/18/92
-  SOILS TO BE EXCAVATED TO A DEPTH OF 6"
-  SOILS TO BE EXCAVATED TO A DEPTH OF 12"

NIAGARA TRANSFORMER CORPORATION  
CEMETERY SOILS EXCAVATION PLAN  
CHEEKTOWAGA, NEW YORK

AREAS TO BE EXCAVATED

**WOODWARD-CLYDE CONSULTANTS**  
Consulting Engineers, Geologists and Environmental Scientists

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