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DEC 24 2008

NYSDEC REG 9  
✓ REL FOIL UNREL2008.00168.00  
December 23, 2008New York State Dept. of Environmental Conservation  
270 Michigan Avenue  
Buffalo, NY 14203

Attn: Mr. Eugene Melnyk

Re: ABC Paving  
4397 Seneca Street, West Seneca, NY

Dear Mr. Melnyk:

This Work Plan has been prepared by TVGA Consultants (TVGA) to provide a detailed description of the investigation to be implemented at the ABC Paving site located at 4397 Seneca Street, West Seneca, New York (project site). The New York State Department of Environmental Conservation (NYSDEC) has concluded that the existing analytical information for the on-site fill material is insufficient to make a determination relative to NYSED's listing of the site. The NYSED has indicated that its two primary concerns are that the blue material has not been sufficiently characterized nor has it been adequately delineated. Therefore, TVGA will complete an investigation of the site that efficiently and effectively meets the NYSED's requirements. The work will include coordination with the NYSED, excavation of test pits, screening and characterization of the excavated material, the collection of composite samples for chemical analysis, and preparation of a report that describes the methods and findings of the investigation. This work is described in detail below.

## INTRODUCTION

The project site contains a blue material that is reportedly spent, blue manufactured gas plant (MGP) purifier wastes generated by Iroquois Gas (currently National Fuel Gas Co.). These blue materials were disposed at the site by a previous owner. A number of investigations have occurred at the subject site to characterize this material. Based upon a review of these investigations completed at the project site, most notably the test pit excavation programs performed in December 1995 and January 1996, the areal extent of the contaminated material has been adequately delineated. Therefore, no additional delineation work will be performed required. Figure 1 depicts the locations previously excavated test pits, while Attachment A provides the field logs for those test pits. Please note that locations of the blue material identified outside the yard fence during our recent site visit is shown to contain the blue material as delineated by these test pits.

ELMA  
NEW YORKBUFFALO  
NEW YORKCOOPERSTOWN  
NEW YORKJAMESTOWN  
NEW YORKNIAGARA FALLS  
NEW YORKSARATOGA SPRINGS  
NEW YORKSYRACUSE  
NEW YORK

Member

ACEC New York

American Council of Engineering Companies of New York

## FIELD PROGRAM

### Test Pit Excavation

Based on the existing information and subsequent discussions with the NYSDEC, the proposed investigation will involve the excavation and sampling of four test pits. The proposed locations of the test pits are shown on Figure 1. The areal extent of the blue material would be divided into four quadrants, and one test pit would be excavated in the center of each quadrant. A composite sample of the blue material will be collected from each test pit for chemical analysis. It is anticipated that this will include one day of test pit excavations. The test pits will be completed following the procedures outlined below.

- Downward excavation will take place in one-foot increments until the subsurface (i.e. tank, piping, bedrock, impassable fill material) is encountered or to the maximum reach of the backhoe (which will be a minimum of ten feet), whichever occurs first.
- Material removed from the test pit will be temporarily staged adjacent to the excavation. The overlying clean material would be stripped off and set aside for reuse as cover after the excavation is complete, while the blue material would be placed on plastic sheeting. Additionally, material removed from the test pit that displays visual, olfactory and/or photoionic evidence of contamination will be temporarily staged on plastic adjacent to the excavation and will be segregated from materials that do not display any evidence of contamination.
- The excavated material will be characterized utilizing the Burmister Soil Classification System and will be recorded on a Test Pit Log. An example Test Pit Log is included in Attachment B.
- Screening and sampling of excavated soil will be performed in accordance with the applicable provisions listed below.
- Photographs of the completed test pit and excavated material will be collected.
- All soil/fill will be returned to the excavation in the same general order it originated and the area will be graded.

### Collection of Soil Samples for Chemical Analysis

Continuous soil samples collected from the test pits will be reviewed and evaluated for the purpose of selecting composite samples of the blue material for chemical analysis. The analysis of the blue materials will include semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs) appearing on EPA's Target Compound List (TCL) and metals appearing on EPA's Target Analyte List. Additionally, if field screening indicates the presence of elevated organic vapors, the samples will also be analyzed for TCL volatile organic compounds (VOCs). The procedures for sample selection are detailed below.

- Measure and record the organic vapor levels in the headspace of all of the samples from the test pits using the procedures outlined below.
- The interval of the blue material that exhibits the highest concentration of organic vapors will be selected for TCL VOC analysis.
- Material for VOCs analyses will be placed directly into the appropriate sample containers.
- Transfer the remainder of the selected sample to a stainless steel mixing bowl. Homogenize soil in the mixing bowl with the same stainless steel trowel or scoop used to collect the sample.
- Place homogenized sample in the appropriate sample containers.
- Sample handling, labeling, custody and shipping shall be in accordance with the procedures outlined below.
- Decontaminate the sampling equipment by manually removing foreign matter; washing with brushes in an alconox or liquinox and potable water mixture followed by rinsing with deionized water.

### Soil Screening

The MiniRAE 2000 photoionization detector (PID) will be utilized to screen soil for organic vapors as follows:

Upon successful unit zeroing and calibration, the PID is ready for use. Prior to screening soil, background readings should be determined in the vicinity of the sampling area by holding the probe tip at shoulder level and noting any readings on the digital meter. Any sustainable background readings will be noted on the Test Pit Log. Vinyl tubing, measuring approximately one-inch long (one-quarter inch outer diameter), should be placed on the end of the aluminum or plastic probe tip to avoid contaminating the PID.

#### Direct sample screening:

- With a spatula or spoon, the soil will be moved apart to reveal soil previously unexposed to the atmosphere.
- The tip of the PID will be placed as close to the top of the newly exposed soil sample as possible without contacting it.
- The digital meter will record the largest concentration detected and that number should be recorded in the field logbook and on the appropriate log form as well.

### Collection of Seep Sample for Chemical Analysis

The NYSDEC also requested the collection of a sample from the seep observed during the August 5, 2008 adjacent to the southeast corner of the fenced area for chemical analysis. This sample will be analyzed for TCL VOCs, SVOCs, pesticides and PCBs as well as TAL metals. The sample will be collected as described below:

- The sampler will complete the work in a downstream position from the collection container so as to limit turbidity, and will remain in place until all sampling is complete.
- With proper protective equipment (e.g., latex gloves), collect the grab samples by slowly submerging the sample container with minimal surface disturbances using the appropriate sample containers.
- Sample handling, labeling, custody and shipping shall be in accordance with the procedures outlined below.

### Sample Handling

Proper sample labeling, handling, packing and shipping will help ensure collected samples are accurate, secure and intact upon arrival at the laboratory for analysis.

#### Sample Labeling

Proper labeling is required to prevent sample misidentification of samples collected in the field and will be performed using the procedures detailed below.

- Affix a non-removable (when wet) label to each sample container.
- Cover the label with 2-inch cellophane or mylar tape.
- Write the following information on the label with a permanent waterproof marker:
  - Site Name
  - Sample Identification Code
  - Sampling Interval

- Project Number
- Date/Time
- Sampler's Initials
- Sample Preservative
- Analysis Required

#### Chain-Of-Custody

The documentation of sample collection and the method used to standardize the action is referred to as a chain-of-custody (COC). The COC is a legally defensible document that may be utilized as evidence in litigation or administrative hearings by regulatory agencies.

COC procedures are essential for the presentation of sample analytical chemistry in the form of an analytical report. Proper COC procedure will minimize the loss or misidentification of samples and may ensure unauthorized persons do not tamper with collected samples.

- The COC should be filled out with all relevant information in the appropriate space on the form. Information required at a minimum:
  - Site Name
  - Sample Identification
  - Project Number
  - Date And Time
  - Sampler's Signature
  - Sample Preservation
  - Required Analysis
- COCs should be completed in indelible ink.
- The COC is typically a carbon copy, which requires the preparer to apply sufficient pressure to mark all other pages.
- The top copy, usually a white original, should be sent to the laboratory with the samples.
- The preparer should retain the bottom copy, and any other carbon copies should be sent to the laboratory with the samples.
- The top copy of the COC should be placed in a zip-type plastic bag and placed in the cooler along with the samples and sealed according to the procedure outlined in next section.

#### Sample Shipping

The proper shipping of samples will help ensure sample security, by limiting access, integrity, by avoiding breakage, and validity, by maintaining temperature conditions. The following section describes the shipping procedures to be implemented during this project:

- Place about three inches of cushioning material in the bottom of the cooler.
- Place bottles in the cooler.
- Separate bottles from one-another with foam, cardboard or bubble-wrap plastic.
- Pack top of bottles with ice in plastic zip-type bags. Ice should originate from a potable water source.
- Place additional cushioning material in cooler as needed.
- Place COC in zip-type plastic bag inside cooler on to the top of packing material and sample bottles.

- Wrap cooler with strapping tape at two locations and secure lid, complete with two custody labels on the cooler.
- Be sure any drain plugs on cooler are closed and sealed with tape.
- Place "this side up" and "fragile" labels on cooler
- Samples should be shipped the same day they are collected to a New York State Department of Health (NYSDOH) ELAP-certified (Environmental Laboratory Approval Program) laboratory for analysis.

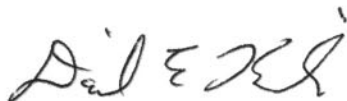
## REPORTING

TVGA will prepare a report that summarizes the investigative methods employed, describes the site conditions encountered, compares the analytical data with applicable regulatory levels, and assesses the implications of the investigation findings. The report will also contain raw and summarized analytical data, test pit logs and other pertinent data tables and maps.

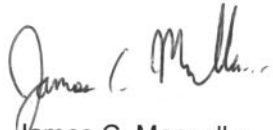
Please do not hesitate to contact us with any questions or comments.

Very truly yours,

TVGA CONSULTANTS



Daniel E. Riker  
Project Manager  
DER:JCM:csw



James C. Manzella  
Project Scientist

cc: R. Garman, ABC Paving

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**FIGURE 1**

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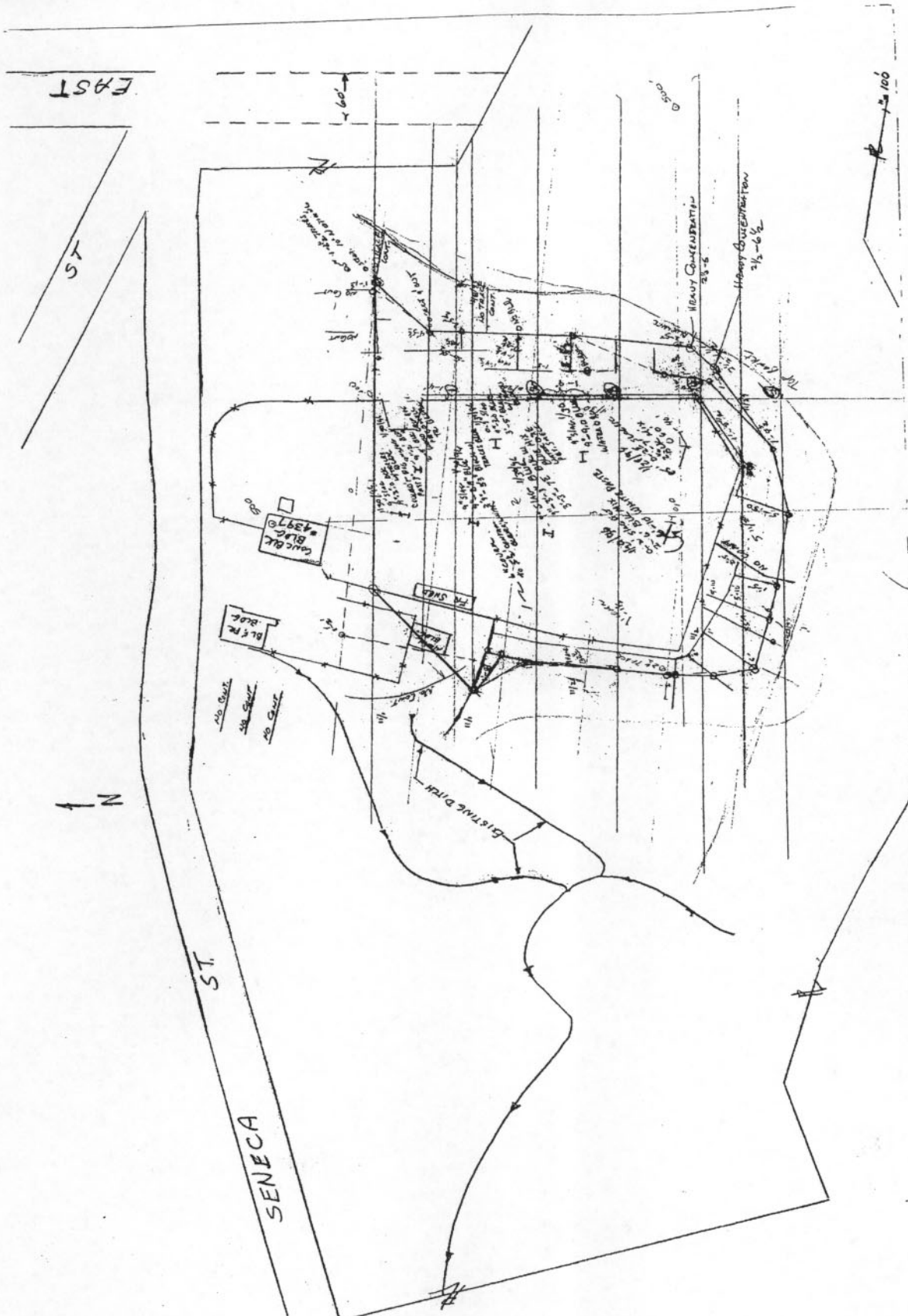


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**ATTACHMENT A**  
**HISTORICAL TEST PIT LOGS**

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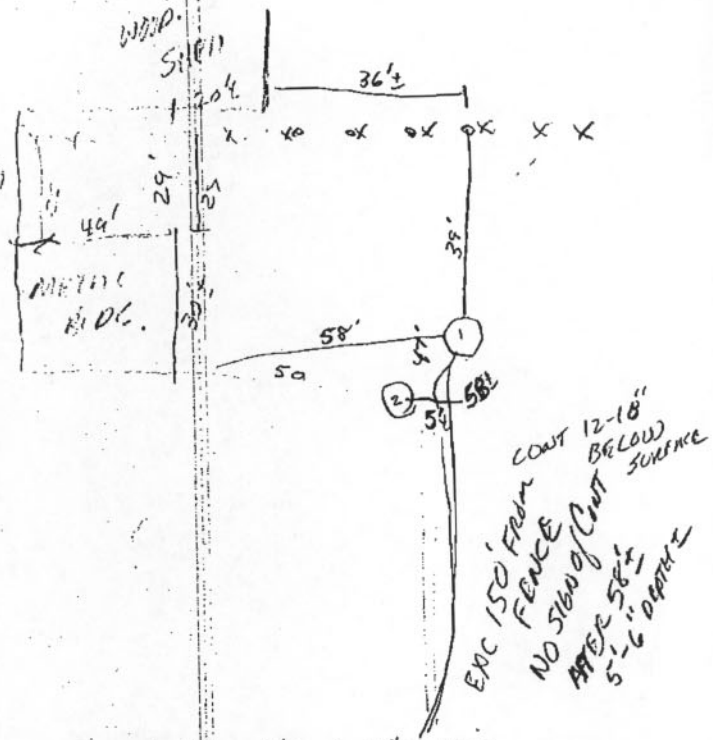
TANYA ALEXANDER.  
WATER FUEL REP 11/1/95

CHRIS GAY  
WATER FUEL

11/1/95

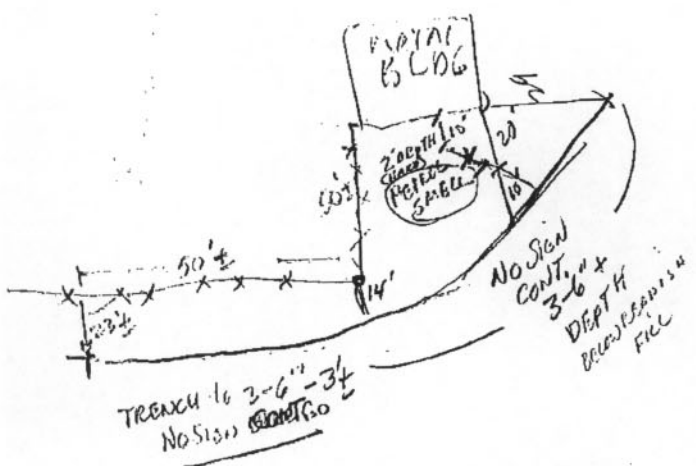
Stop

Exc. for Blue Dye

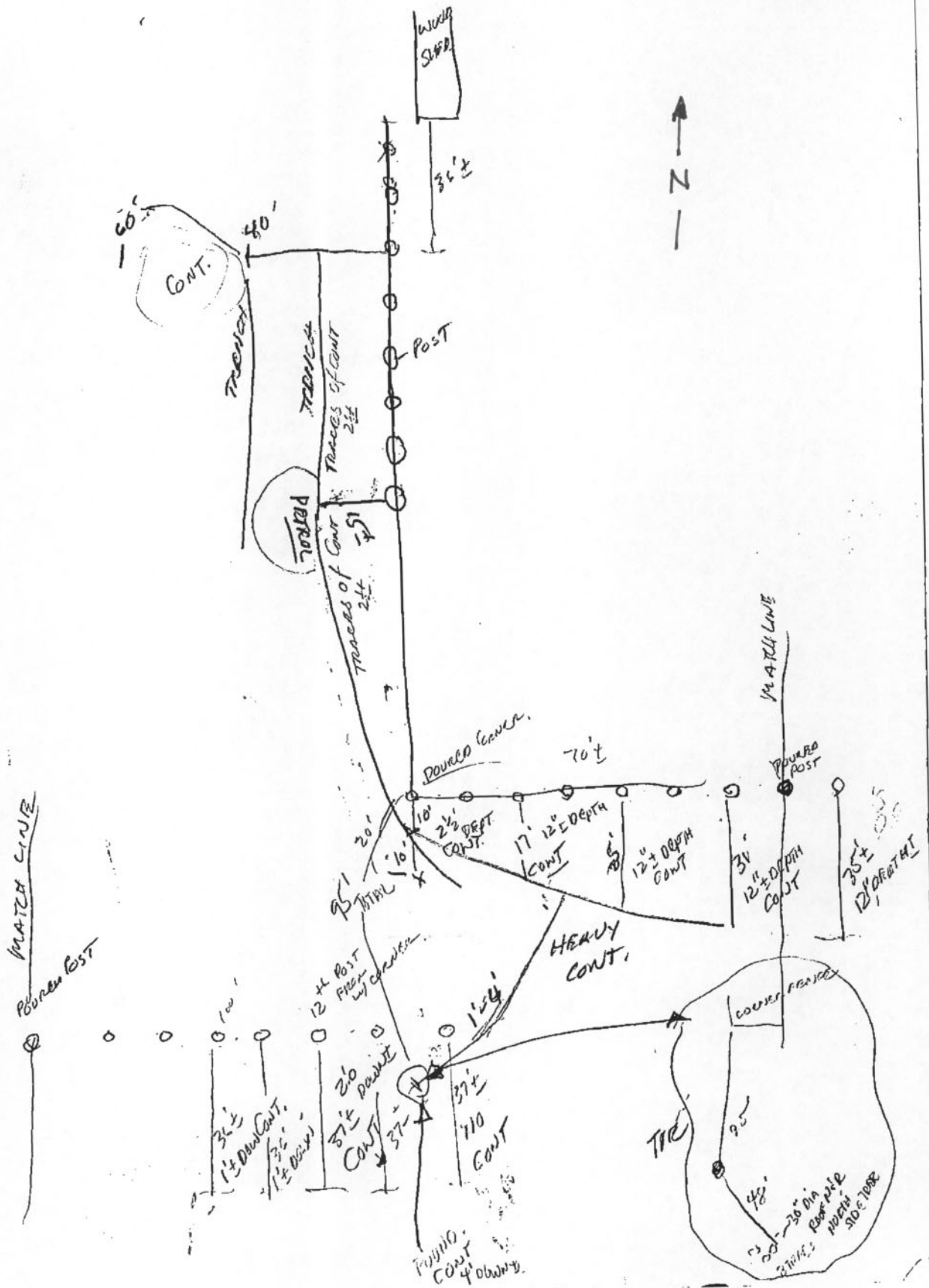


- 1) APPROX 9" BELOW GROUND 7"± THICK
  - 2) 2 VISIBLE POS. 10"±
- Excav. TRENCH 5'-6"± GROUND WATER

← Z



11/2/95  
Exc. for BLUE DYE





N ↑ | Shop |

11-27-95  
Monday

Back  
Fence  
corner

60'

35'

13'  
STORED  
TEL. POLES

Trench

40'

1' Thick Blue - 4" To 1 Foot Cover  
Bottom Trench 12' Remainder is  
all Black Material

1' To 2' Thick Blue - 1' To 5' Depth Cover  
Bottom Trench 10' Remainder is all  
Black Material

2' Thick Blue - 5' To 7' Depth Cover  
Bottom Trench 10' Remainder in all Black Mat.

Blue Stops

10 To 8' Depth some Black  
No Blue

10'

30'

80'

STORED TEL. POLES

60'

Trench

25'

10'

10'

45'

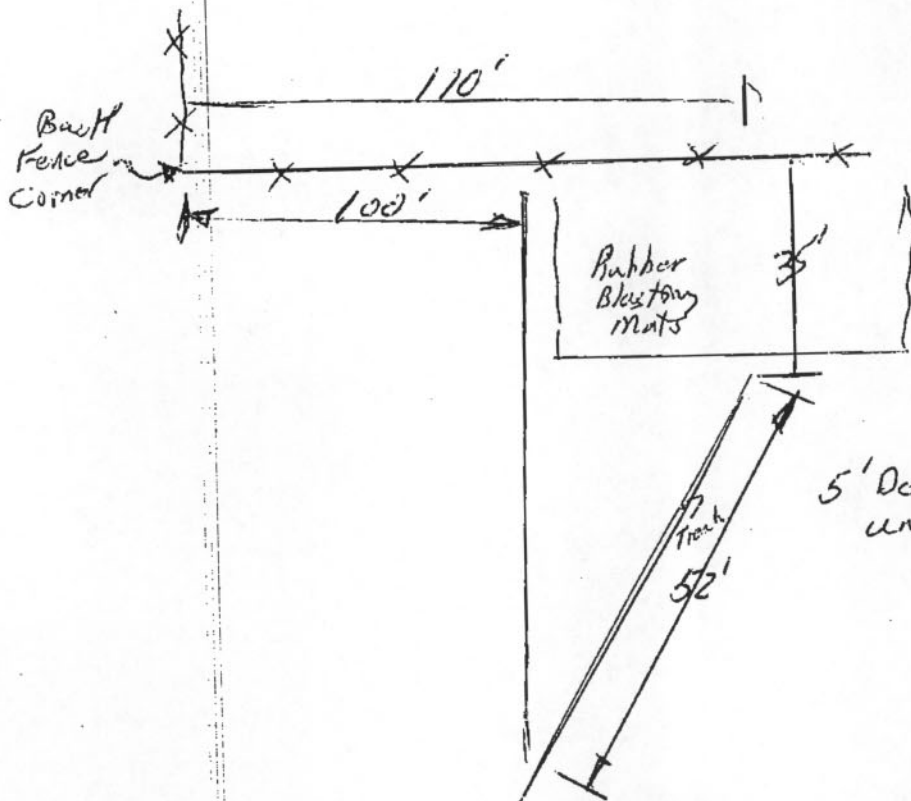
9' To 10' Depth all Black Material  
6" To 1' Cover

10' To 5' Depth all Black Mat.  
1' Cover (Black Mat. could be  
deeper)

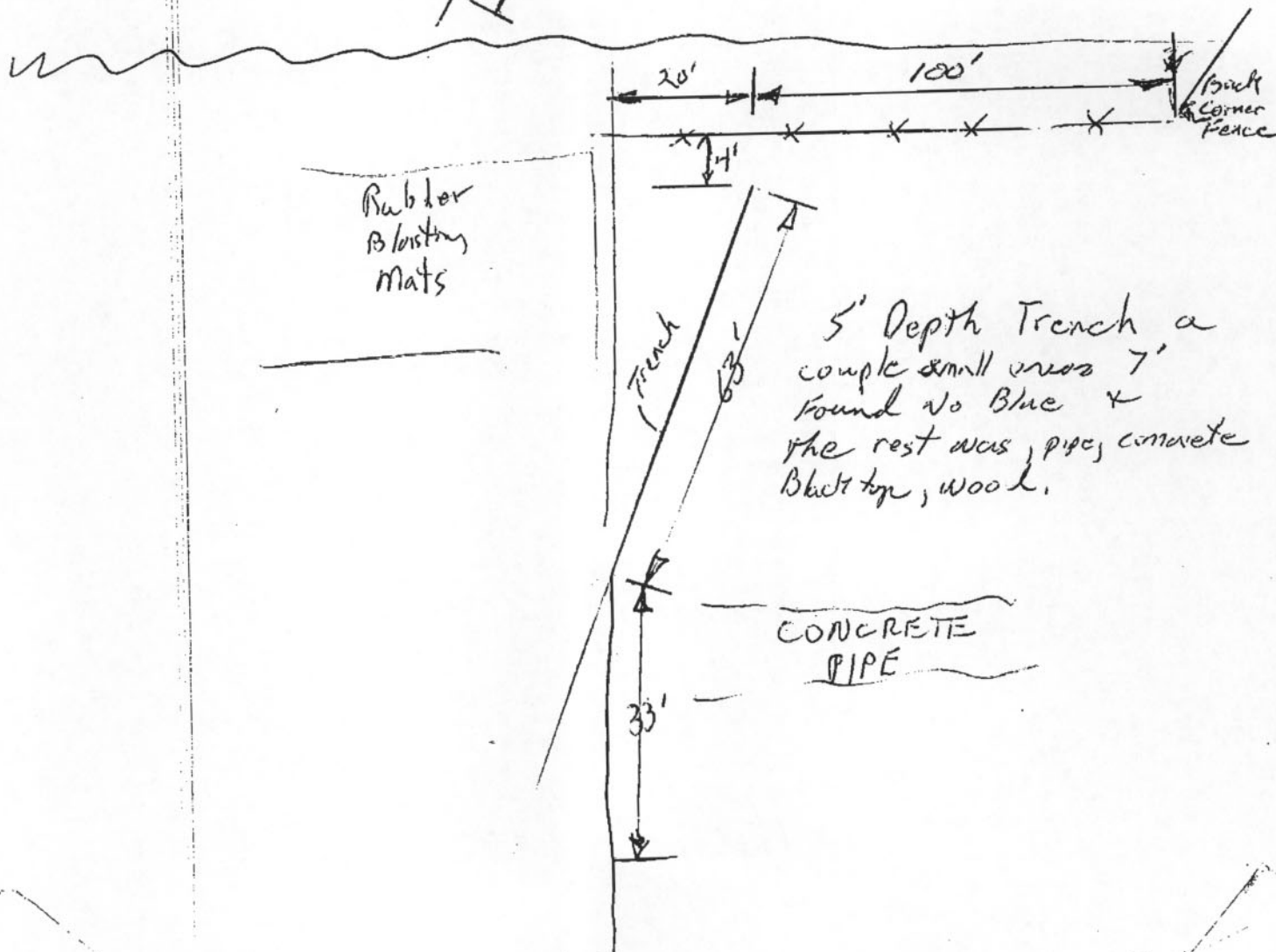
5' Depth all Black Mat.  
1' Cover (Black Mat. could be  
deeper)

Shop

Tuesday  
11-28-95



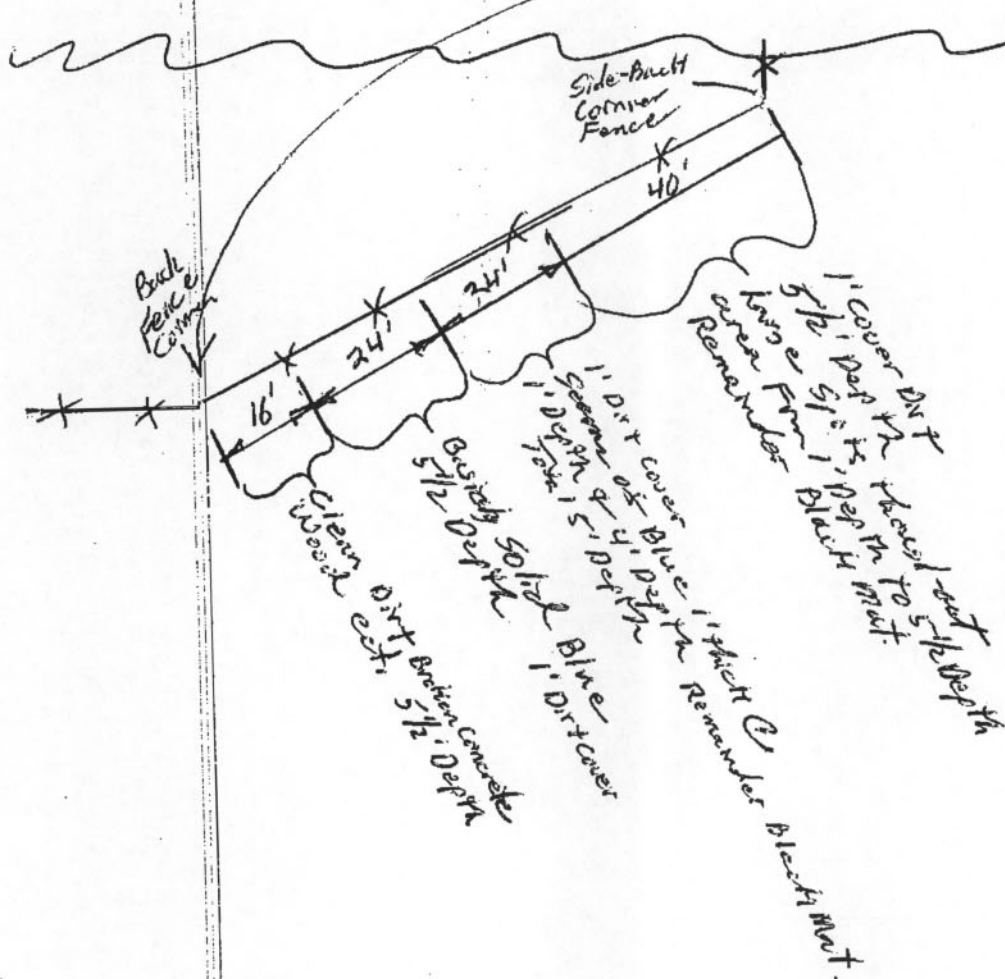
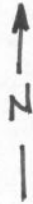
5' Depth Trench all Blasting Mats  
under 1' cover  
No Blue



5' Depth Trench a  
couple small areas 7'  
Found no Blue &  
the rest was pipe, concrete  
Blasting Mats, wood.

CONCRETE  
PIPE

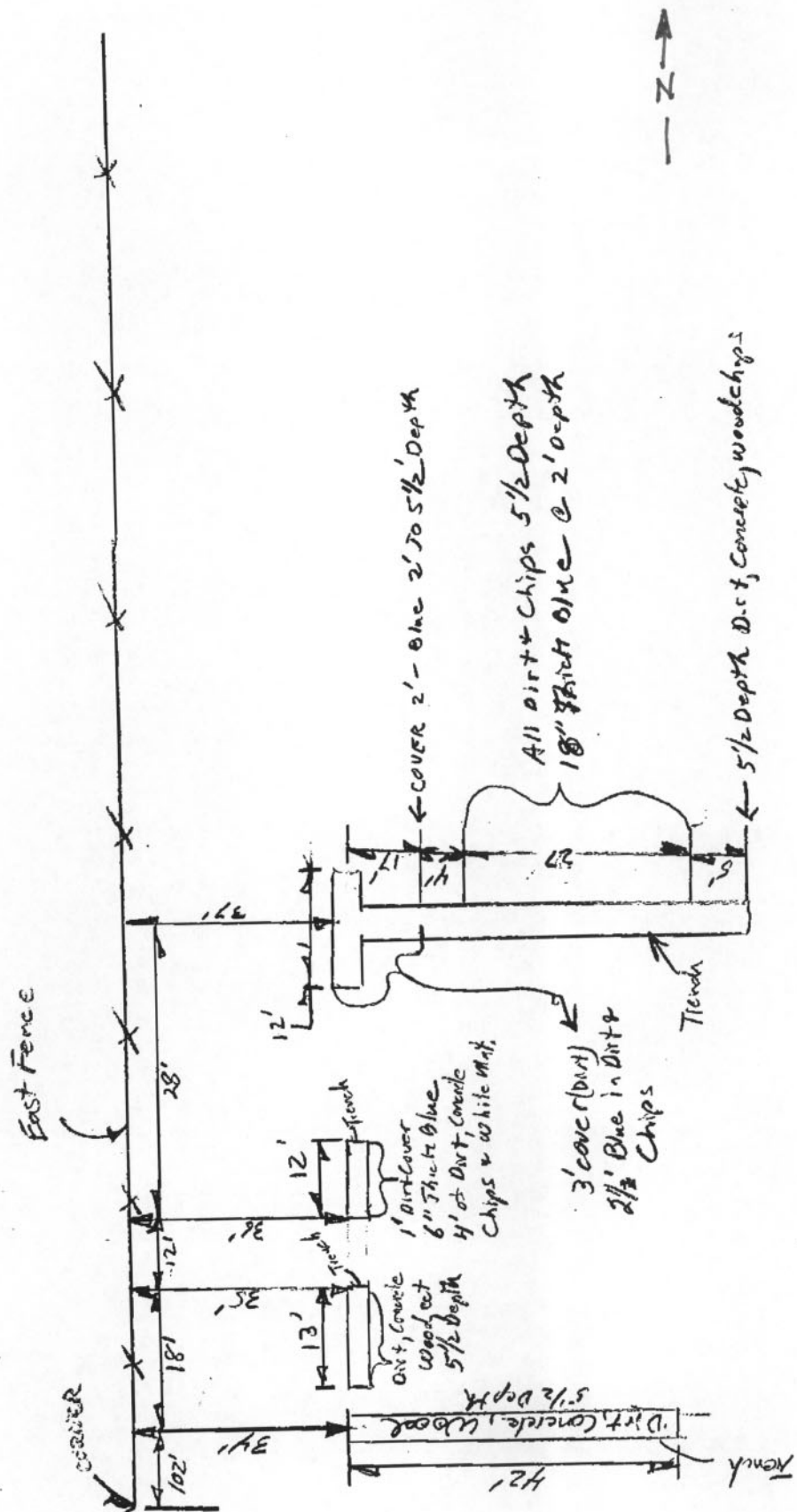
~~date~~ Tuesday  
11-28-95



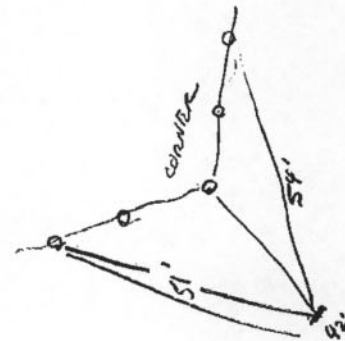


WEDNESDAY

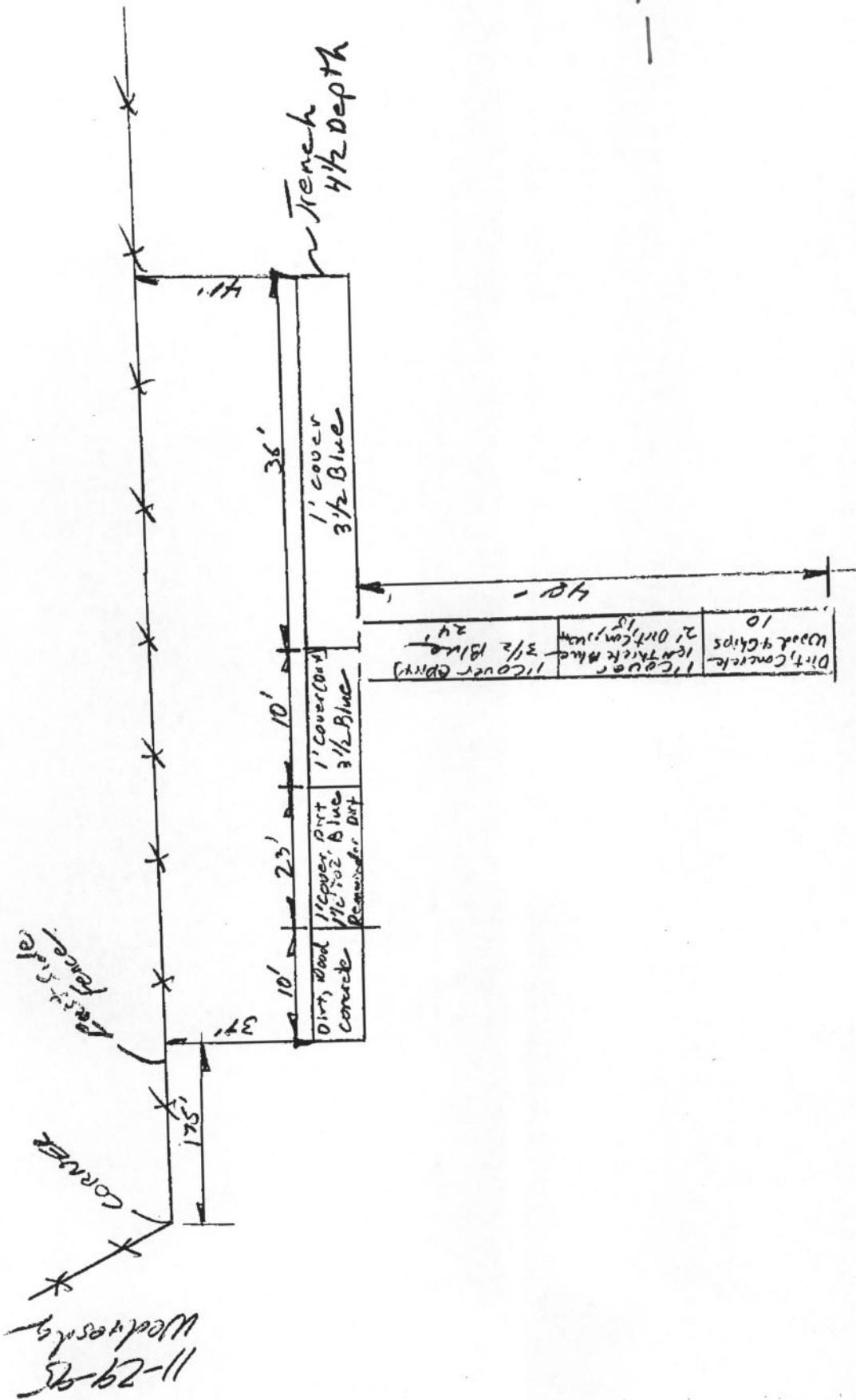
11-29-62  
used in study



Wednesday



WEDNESDAY





THURSDAY

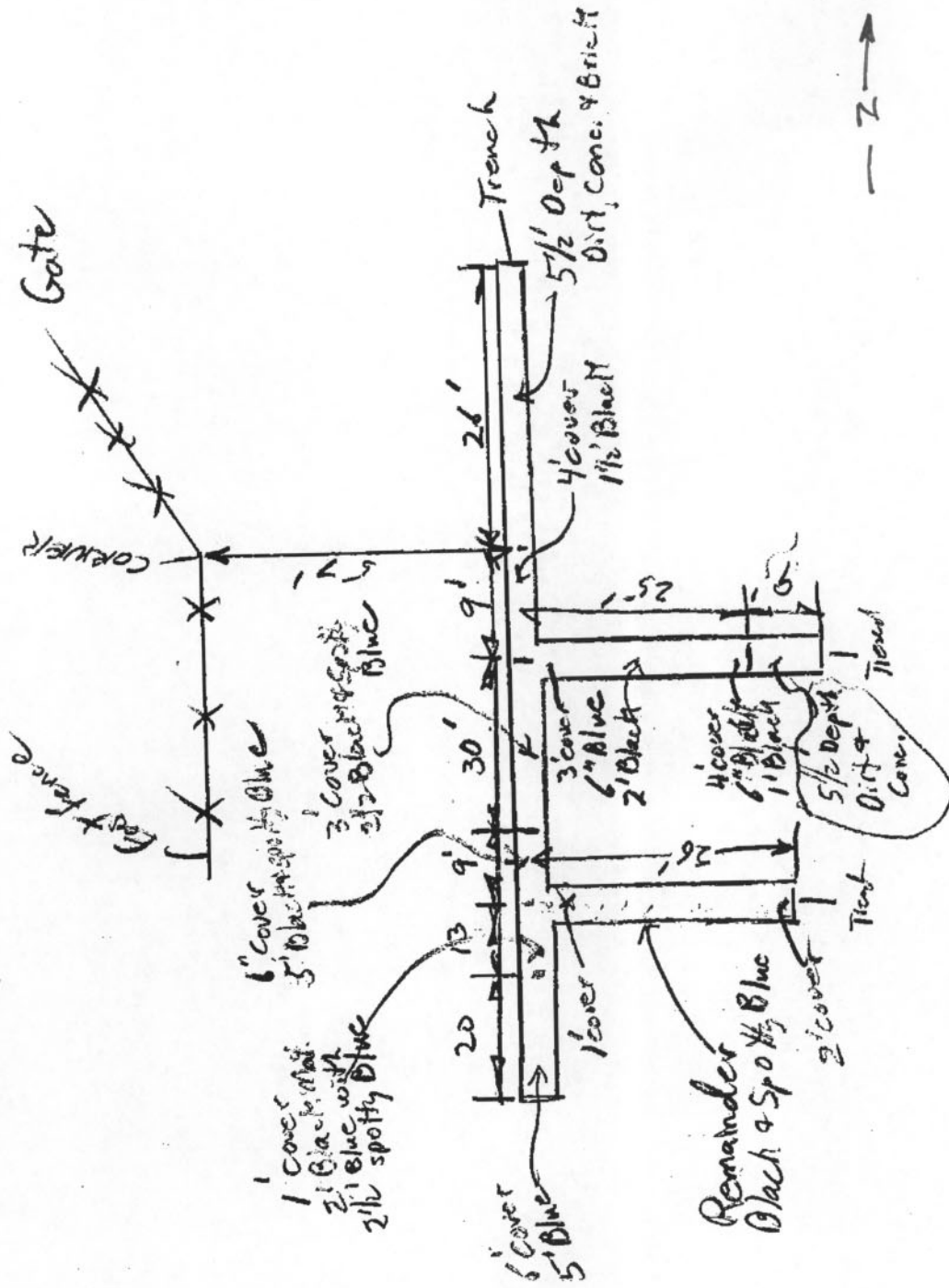


56-06-11

Same as  $\downarrow$

12-1-95

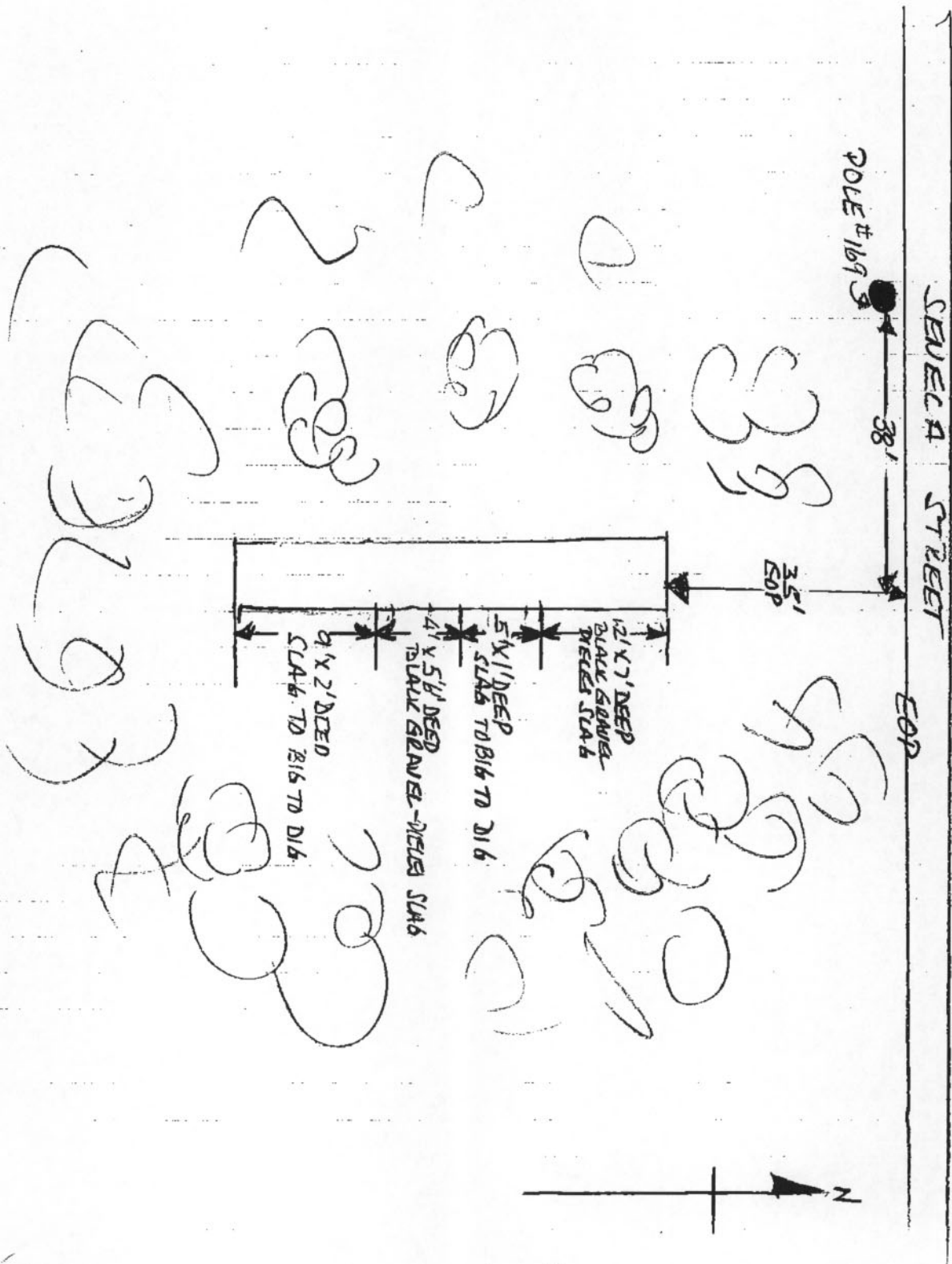
THURSDAY



12-1-95  
Friday

12-4-95  
MONDAY  
NTS

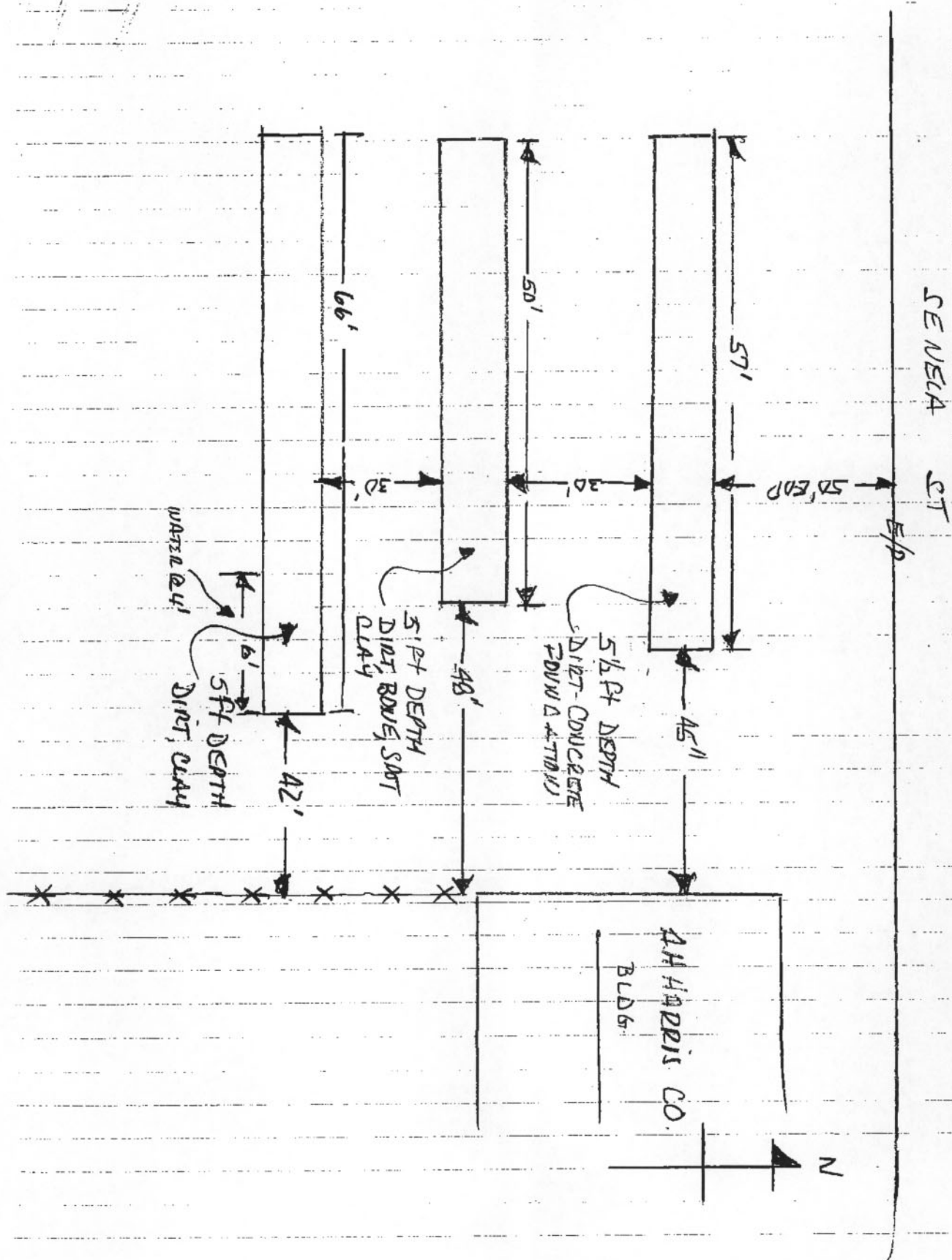
NO SIGNS OF CONTAMINATED SOIL

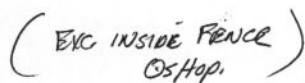




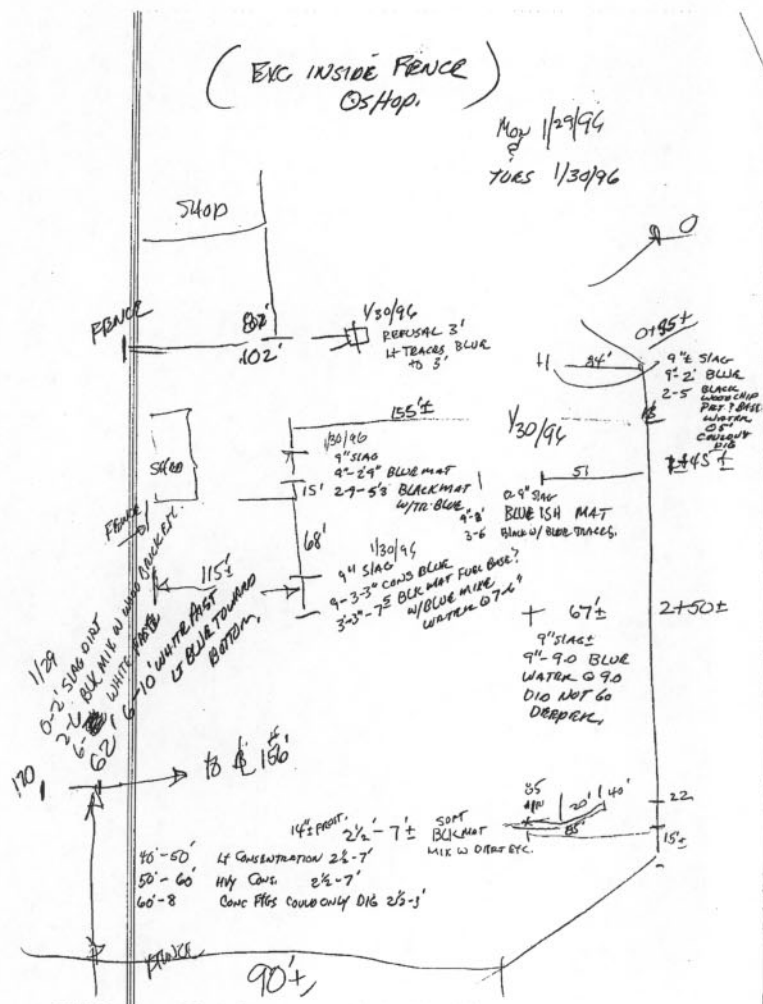
12-4-95  
MONDAY  
NTS

NO SIGNS OF CONTAMINATED SOIL





Mon 1/29/96  
Tues 1/30/96




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**ATTACHMENT B**

**TEST PIT FIELD LOG**

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<b>PIT NO:</b> _____	<h2 style="margin: 0;">TEST PIT LOG</h2>	
Project Name: <u>ABC Paving Site</u> Project Location: <u>West Seneca, NY</u>		Project No: <u>2008.0168.00</u> Date: _____
<b>Description</b>		
Depth		
0	Surface: _____	
1		
2		
3		
4		
5		
6		
<b>Comments:</b>		
Location Sketch	Cross Section:	
Geologist: _____	Operator: _____	