

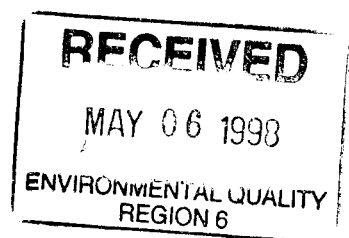
**REMEDIAL ACTION WORK PLAN
CANTERBURY PRINTING EXPANSION SITE
CENTRAL CORE
EAST ROME BUSINESS PARK
ROME, NEW YORK**

Prepared By:

**JACK EISENBACH ENGINEERING, P.C.
291 Genesee Street
Utica, New York 13501**

JEE Project No. 8514

MAY 5, 1998



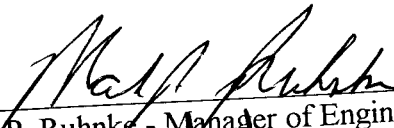
**REMEDIAL ACTION WORK PLAN
CANTERBURY PRINTING EXPANSION SITE
CENTRAL CORE
EAST ROME BUSINESS PARK
ROME, NEW YORK**

Prepared By:

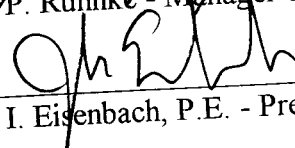
**JACK EISENBACH ENGINEERING, P.C.
291 Genesee Street
Utica, New York 13501**

JEE Project No. 8514

Prepared By: _____


Mark P. Ruhnke - Manager of Engineering Services

Reviewed By: _____


Jack I. Eisenbach, P.E. - President



MAY 5, 1998

CANTERBURY PRINTING EXPANSION

TABLE OF CONTENTS

SECTION	PAGE
1.0 INTRODUCTION	1-1
1.1 Background	1-1
1.2 Remedial Objectives	1-3
1.3 Area Description and Summary of Environmental Findings	1-3
1.3.1 Area Description	1-3
1.3.2 Summary of Environmental Findings	1-4
1.4 Work Plan Organization	1-5
2.0 SCOPE OF WORK	2-1
2.1 Remedial Activities	2-1
2.1.1 Demolition and Asbestos Removal	2-2
2.1.2 Underground Storage Tank Removal	2-2
2.1.3 Utility Lines and Manways	2-2
2.1.4 Clean Out of Tunnels	2-4
2.1.5 Utility Line Abandonment	2-4
2.1.6 Groundwater	2-4
2.2 Institutional Controls	2-5
2.3 Decontamination	2-5
3.0 REMEDIATION DOCUMENTATION	3-1
4.0 IMPLEMENTATION SCHEDULE	4-1
5.0 REFERENCES	5-1

LIST OF TABLES

Table 1	Laboratory Results Summary - Canterbury Parcel	1-6
---------	--	-----

LIST OF FIGURES

Figure 1-1 17 Acre Site Layout.....	1-2
Figure 2-1 Canterbury Expansion Parcel, Site Features.....	2-3

1.0 INTRODUCTION

This work plan presents the scope of work for remedial measures to be conducted at the Canterbury Parcel, which is located within the Central Core Area of the East Rome Business Park in Rome, New York. The Central Core Area, which is comprised of a portion of the old General Cable manufacturing facility, has been subdivided for redevelopment into seven parcels: the Pecoraro Dairy Products site, the Canterbury Printing expansion area, the City of Rome industrial access road right-of-way ("Roadway Property"), the Rod Mill parcel, and the three parcels fronting Railroad Street and the northern portion of the City's proposed access road (Figure 1-1).

The Central Core Area is a 17-acre parcel of land within the proposed 200-acre industrial redevelopment area known as the East Rome Business Park. The core area is generally bounded by Railroad Street to the north, the New York State Barge Canal Corporation property to the south and by industrial and commercial properties to the east and west. The property has been owned by Mr. Charles A. Gaetano since 1975, and is listed by the City of Rome as tax map parcel 242.020-0001-018. The Roadway Property, which is to be used for a new public road, was conveyed to the City in 1997 after the New York State Department of Environmental Conservation (NYSDEC) approved the City's application for a State Assistance Contract under the 1996 Clean Water / Clean Air Bond Act.

1.1 Background

The history of the site is described in the report titled "Phase I Environmental Site Assessment, City of Rome Industrial Redevelopment Area, Rome, New York" [RETEC, 1995]. The site was first developed in the late 1800s when the Rome Tube Company began construction of a casting and pickling facility. In 1904, the Electric Wire Works (later the Rome Wire Company) began construction on the northwest portion of the site. The Rome Wire Company, and its successor, General Cable, operated the facility from 1920 to 1972. During that period, a wide-range of metalworking activities were conducted including machining, stamping and drawing, plating, pickling, and coating with rubber, asbestos, and paints [RETEC, 1995]. General Cable ceased operations at the site in 1972.

Charles Gaetano, the site owner, acquired title to the site after General Cable ceased manufacturing operations, and since that time, has leased the site to various tenants and has continued to seek redevelopment of the site for commercial or industrial use. At present, the site contains abandoned buildings and open areas, most of which are covered with concrete pavement. Demolition to grade of several of the former General Cable buildings at the northern end of the site has been completed by Mr. Gaetano.

A limited Phase II investigation was performed by RETEC in 1996 in support of the proposed expansion project of Canterbury Printing [RETEC 1996]. The investigation was comprised of a series of test pits where surface soil, subsurface soil and groundwater samples were collected and analyzed. Samples were also obtained of sediment located in a tunnel which houses utilities in that area, connecting Building 38 and the Canterbury building to the former General Cable boiler house (Building 9). The investigation found concentrations of metals in soil in the study area were within typical background concentrations with the exception of copper. No organic compounds were found in groundwater samples taken from the excavations for the test pits. A 2,000 gallon gasoline UST was located between Building 38 and Building 11, and was found to have released an unknown quantity of petroleum product to the surrounding soils.

Later in 1996 RETEC conducted a Phase II investigation of the entire central core site to provide the environmental data needed for remediation and redevelopment of the site [RETEC, 1997a]. The field work was performed in December 1996 and consisted of: three surface soil samples; 22 soil borings; collection of 20 groundwater samples from temporary well points in the soil borings; soil gas sampling; shallow monitor well installation (four wells) and sampling; ambient air sampling from selected buildings; and a survey and sampling of subsurface structures and utilities.

Additional investigation of the Canterbury Site was conducted in the summer of 1997 by RETEC for the City of Rome in association with the Site Investigation (SI) of the industrial access roadway parcel. Soil, water, and utilities with the potential to impact the roadway were investigated under the terms of the SI approved by NYSDEC. These findings were reported in the site investigation report [RETEC, 1997b].

1.2 Remedial Objectives

The proposed remedial measures ("Remedial Action") presented in this work plan for the Canterbury Parcel were developed based upon the findings and recommendations presented in a recently completed Phase II Investigation [RETEC, 1997a] and Site Investigation (SI) [RETEC, 1997b]. Remedial Action on the Canterbury Parcel will be implemented by Mr. Gaetano, the site owner under a Voluntary Remedial Agreement with NYSDEC, and by the City of Rome under the terms of a Record of Decision for remediation of features associated with the proposed industrial access roadway. The objective of the agreement is to create conditions for redevelopment of the site which are protective of human health and the environment for commercial/industrial use.

1.3 Area Description and Summary of Environmental Findings

1.3.1 Area Description

The Canterbury Parcel is located along the western side of the Central Core Area (Figure 1-1). This parcel is bounded by the Nash Metalware site to the north, a portion of the City of Rome's proposed commercial access road to the north and east, the Rod Mill Parcel to the southeast and south, and the current Canterbury Printing property to the west. It is approximately 0.866 acres in size, and is currently covered with buildings and concrete pavement. These consist of Building 38 (the former General Cable metals reclaiming building) and the northernmost portion of the former General Cable Rod Mill (Building 11).

These buildings are constructed on-grade; however, a utility tunnel is present beneath the site. This tunnel contains both active and inactive utilities, and is impacted by hydrocarbons and PCBs in the sediment on the tunnel floor. Chemical analysis of the sediment (U38-6) indicates that PCB 1260 is present in the tunnel at a concentration of 130.0 mg/Kg, a concentration which is greater than the TSCA hazardous waste standard of 50 mg/Kg.

A portion of the storm sewer system for the General Cable complex is present on the Canterbury Parcel. Two shallow storm sewer lines, which collect water from the driveway between Buildings 11 and 38, drain to the south from the parcel to storm sewer manways on the city Roadway Property. A larger storm sewer line runs along the northern side of the parcel, conveying water from the current Canterbury property (formerly General Cable Building 32) to a man-way located north of the Parcel on the Roadway Property.

1.3.2 Summary of Environmental Findings

The following presents the key environmental findings and their significance for the redevelopment of the Canterbury Parcel. These findings were summarized from the Phase II Site Investigation Report [RETEC, 1997a], the limited Phase II investigation performed at Building 38 [RETEC, 1996], and the City of Rome's Roadway Property SI conducted under the NYSDEC municipal brownfield program [RETEC, 1997b]. The laboratory results from the investigations are shown on Table 1.

- The property is covered by buildings and pavement; no significant exposures of soil exist.
- Concentrations of metals were found to be elevated above the naturally occurring levels in soil samples from the soil borings. However, the buildings and concrete pavement prevents exposure, thereby eliminating potential exposure and risk which might be posed by the elevated metal concentrations.
- The 2,000 gallon underground gasoline storage tank located in the driveway between General Cable Buildings 11 and 38 has recently been excavated, and the surrounding soil is impacted; however, no impact to groundwater from this tank was detected at monitoring well MW-14, located on the down-gradient side of the tank. (NOTE: The tank has been excavated from the subsurface and is currently resting on the ground surface with the excavation open).
- The utility tunnel which crosses the northern end of Buildings 11 and 13 contains sediment impacted by petroleum hydrocarbons and PCB 1260. The concentration of this PCB congener was measured to be 130 mg/Kg in the Canterbury Parcel, which is above the TSCA hazardous waste threshold of 50 mg/Kg PCBs. Based on visual observations, the sediment was found to extend in both directions from this segment of the tunnel. The concentration of PCBs decreases towards the boiler house, as measured within the Roadway Property.
- No hydrocarbon impact was detected in the soil or groundwater from the contents of the tunnel. No PCBs were detected in the proposed Canterbury Parcel except for 4.47 mg/Kg of PCB 1260 in an accumulation of soil in a small sump inside of Building 38.
- No sources for the chlorinated solvent groundwater plume at the south end of the Rod Mill Parcel were found on the Canterbury Parcel. Groundwater from soil boring SB-6 contained a trace concentration of TCE; however, samples from borings surrounding this location did not detect the compound.

The Phase II report for the Central Core Area of the East Rome Business Park has been reviewed by the New York State Department of Health (NYSDOH). In its letter of April 22, 1997 commenting on the draft Phase II report, NYSDEC indicated that NYSDOH has concluded that the concentrations of metals and organic compounds in the soil at the site would not pose a risk for future commercial site development, provided that a cap was maintained over the soil, and that deed restrictions limiting site use to commercial or industrial are put in place.

1.4 Work Plan Organization

The remainder of this work plan is divided into four main sections. Section 2.0 describes the scope of work of the remedial activities. Section 3.0 describes the information that will be included in a report that will describe the work performed and document the remedial activities. Section 4.0 presents the proposed schedule for conducting the remedial activities. Section 5.0 presents a list of references used in preparing this work plan.

Table 1
Laboratory Results Summary - Canterbury Parcel 3/25/98

Name	NYSDEC Recommended Soil Cleanup Objective1 (mg/ Kg)	Soil Analytical Results (mg/Kg)				Utility Analytical Results (mg/Kg) U38-6	NYSDEC Groundwater Standard/Guidance Value (mg/L)	Groundwater Results (mg/ L) MW14 12/20/96
		MW14 (0-0.3 ft.)	SB6 (4-6 ft.)	SB7 (1.0-2.0 ft.)	SB10 (2-4 ft.)			
Total Solids %		79.68	71.7	83.59		NA		NA
Moisture %		NA	28.3	16.41	30.86	NA		NA
T. Organic		NA	NA	NA	NA	NA		NA
Metals (mg/Kg)								
Antimony	SB	7.49	3.44 U	3.34 U	3.82 U	U	0.003 g	0.029
Arsenic	7.5 /SB	6.9	4.3	5.4	4.4	U	0.025 s	0.04
Beryllium	0.16 /SB	0.494	0.687	0.808	1.02	U	0.003 g	0.002 U
Cadmium	1 /SB	0.59 U	0.6 U	0.54 U	0.77 U	U	0.01 s	0.005 U
Chromium	10 /SB	7.94	18.9	17	23.2	U	0.05 s	0.078
Copper	25 /SB	491	1650	1810	43.1	U	0.2 s	0.125
Lead	SB	106	33.3	57.9	14.7	U	0.025 s	0.019
Mercury	0.1	0.08	0.072	0.079	0.071	U	0.002 s	0.0002 U
Nickel	13 /SB	10.8	28	25	46.4	U	NA	0.074
Selenium	2 /SB	0.59 U	0.6 U	0.54 U	0.77 U	U	0.01 s	0.002 U
Silver	SB	0.714 U	0.737 U	0.716 U	0.818 U	U	0.05 s	0.006 U
Thallium	SB	1.2 U	1.2 U	1.1 U	1.5 U	U	0.004 g	0.01 U
Zinc	20 /SB	105	79.3	125	85.2	U	0.3 s	0.173
PAHs (mg/Kg)								
Naphthalene	13	1.5	0.31 U	2.3	0.36 U	2.5 U	10 g	5 U
Acenaphthylene	41	1.6	0.31 U	0.29 U	0.36 U	2.5 U	20 g	5 U
Acenaphthene	50	0.35 J	0.31 U	0.13 J	0.36 U	2.5 U	20 g	5 U
Flourene	50	0.65 J	0.31 U	0.13 J	0.36 U	2.5 U	50 g	5 U
Phenanthrene	50	9	0.31 U	1.7	0.36 U	1.1 J	50 g	5 U
Anthracene	50	1.5 J	0.31 U	0.18 J	0.36 U	2.5 U	50 g	5 U
Fluoranthene	50	14	0.31 U	0.82	0.36 U	2.5	50 g	5 U
Pyrene	50	24	0.31 U	0.88	0.36 U	2.9	50 g	5 U
Benz(a)anthracene	0.224 MDL	10	0.31 U	0.55	0.36 U	1.4 J	0.002 g	5 U
Chrysene	0.4	9.8	0.31 U	0.68	0.36 U	1.4 J	0.002 g	5 U
Benzo(b)fluoranthene	1.1	11 **	0.31 U	0.53	0.36 U	2.3 J	0.002 g	5 U
Benzo(k)fluoranthene	1.1	3.3 **	0.31 U	0.18 J	0.36 U	1.1 J	0.002 g	5 U
Benzo(a)pyrene	0.061 MDL	8.3 **	0.31 U	0.4	0.36 U	1.4 J	0.002 MDL	5 U
Indeno(1,2,3-CD)pyrene	3.2	3.4 **	0.31 U	0.23 J	0.36 U	1.5 J	0.002 g	5 U
Dibenzo(a,h)anthracene	0.014 MDL	1.5 **J	0.31 U	0.11 J	0.36 U	0.9 J	NA	5 U
Benzo(ghi)perylene	50	3.8 **	0.31 U	0.33	0.36 U	1.4 J	5 g	5 U
VOCs (mg/Kg)								
Chloromethane	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	NL	5 U
Vinyl Chloride	0.2	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	2 s	5 U
Chloroethane	1.9	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Bromomethane	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
1,1-Dichloroethene	0.4	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Acetone	0.2	0.031 U	0.056 U	0.028 U	0.058 U	500 U	50 g	25 U
Carbon Disulfide	2.7	0.0062 U	0.011 U	0.0056 U	0.026	50 U	NA	5 U
Methylene Chloride	0.1	0.007 U	0.011 U	0.009	0.02 B	50 U	5 s	5 U
Trans-1,2-dichloroethene	0.3	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
1,1-Dichloroethene	0.2	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 g	5 U
Cis-1,2-dichloroethene	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
2-Butanone (mek)	0.3	0.031 U	0.056 U	0.028 U	0.074 B	500 U	NA	25 U
Chloroform	0.3	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	7 s	5 U
1,1,1-Trichloroethane	0.8	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Carbon tetrachloride	0.6	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 g	5 U
Benzene	0.06	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	0.7 s	5 U
1,2-Dichloroethane	0.1	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Trichloroethene	0.7	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	11
1,2-Dichloropropane	0.3	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Bromodichloromethane	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	50 g	5 U
Cis-1,3-dichloropropene	0.3	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	50 s	5 U
4-Methyl-2-pentanone (MIBK)	1	0.012 U	0.022 U	0.011 U	0.023 U	100 U	NA	10 U
Toluene	1.5	0.0062 U	0.011 U	0.0056 U	0.012 U	160	5 s	5 U
Trans-1,3-dichloropropene	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
1,1,2-Trichloroethane	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Tetrachloroethene	1.4	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
2-Hexanone	NL	0.012 U	0.022 U	0.011 U	0.023 U	100 U	50 g	10 U
Dibromochloromethane	NA	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	50 g	5 U
Chlorobenzene	1.7	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Ethylbenzene	5.5	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
P-xylene/M-xylene	1.2 *	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s*	5 U
O-xylene	1.2	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Styrene	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
Bromoform	NL	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	50 g	5 U
1,1,2,2-Tetrachloroethane	0.6	0.0062 U	0.011 U	0.0056 U	0.012 U	50 U	5 s	5 U
PCBs (mg/Kg)								
PCB 1016	10	NA	NA	NA	NA	35 U	0.1 s	NA
PCB 1221	(Sum of all PCBs)	NA	NA	NA	NA	35 U	(Sum of all PCBs)	NA
PCB 1232		NA	NA	NA	NA	35 U		NA
PCB 1242		NA	NA	NA	NA	35 U		NA
PCB 1248		NA	NA	NA	NA	35 U		NA
PCB 1254		NA	NA	NA	NA	35 U		NA
PCB 1260		NA	NA	NA	NA	130		NA

Notes:

NA = Not available/Not analyzed

U = The material was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.

J = The associated numerical value is an estimated quantity.

B = For organic data, the analyte is present in the associated method blank as well as in the sample.

** = Results are possibly biased due to chromatographic interference.

MDL = Method Detection Limit

* = Each isomer

NL = Not listed

SB = Site Background

1 = NYSDEC Division of Hazardous Waste Remediation TAGM 4046.

2.0 SCOPE OF WORK

This section presents the specific activities planned for the remediation of the Canterbury Parcel, including a description of the additional data needs, institutional controls, and remedial actions. It should also be noted here that, prior to any site development activities, a site-specific health and safety plan (HASp) will be prepared based on the existing plan for investigation activities. This plan will outline the safety procedures for the site workers and steps to be taken to minimize any off-site impacts during remedial activities at the Canterbury Parcel.

The remedial actions are based on the following goals specified by NYSDEC during review of the findings of the Phase II investigation and the data generated in the course of the City's roadway brownfield remedial program:

1) Prevention of the migration of PCBs and copper to groundwater and to the Mohawk River. PCBs have been found in sediments within the tunnels and storm sewer system. Copper, and other metals associated with past industrial practices at the site, are found in the soil and in sediments in the tunnels and storm sewer system. Water quality conditions in the Barge Canal and Mohawk River are such that a discharge limit of non-detect for PCBs and copper has been established for the area by the NYSDEC Division of Water. A goal of the remedial program will therefore be to remove all materials from subsurface tunnel and utility systems which contain copper above background conditions, or with trace levels of PCBs where these materials have the potential to be transported to surface water.

2) Prevention of off-site migration of impacted groundwater via man-made conduits. There are concerns that impacted groundwater may leave the site through bedding materials associated with utility lines installed at or below the water table. Investigations of the tunnel and utility lines have not identified any areas where this is a concern on the Canterbury Expansion parcel.

3) Prevention of migration of contaminants onto City of Rome Roadway Property. The potential risks of contaminants migrating onto the Roadway Property must be eliminated. The prevention of contaminants running on to the Roadway Property will require the remedial program to address migration pathways on the Canterbury Parcel, that is, the storm sewer and tunnel system.

2.1 Remedial Activities

This section describes the remedial actions to be taken in the Canterbury Parcel to address specific concerns identified by the site investigations. Activities anticipated to be performed by the City of Rome under the NYSDEC municipal brownfield program for the Roadway Property are identified because they are part of the remedial plans for the parcel. Activities to be completed by the City include:

- Storm water sewer system cleanout of the line west of Building 38 (see Section 2.1.3).
- Storm water sewer system closure of lines southeast of Canterbury Printing (see Section 2.1.3).
- Tunnel and utility line cleanout and closure from Canterbury Printing to Building 9 (see Section 2.1.3 & 2.1.4).
- Asbestos abatement in tunnel, and Buildings 11, 13, and 38 (see Section 2.1.1).
- Demolition of Buildings 11, 13, and 38 (see Section 2.1.1).

- Remedial actions to be completed by the site owner include the removal of the gasoline UST and associated piping, and the excavation of petroleum impacted soil as necessary to meet NYSDEC petroleum-contaminated soil cleanup standards [STARS Memo #1], (see Section 2.1.2).

Site features to be addressed by the remedial work plan are identified on Figure 2-1.

2.1.1 Demolition and Asbestos Removal

Former General Cable Buildings 11, 13, and 38 on the Canterbury Parcel will be demolished in order to make way for site redevelopment. Building demolition and asbestos abatement will be performed by the City of Rome under the municipal brownfield remedial program because the Roadway Property cuts through these buildings. Asbestos insulation associated with steam lines in the utility tunnel will be removed during the tunnel remediation discussed in Section 2.1.4. All demolition and asbestos handling will be performed according to New York Department of Labor regulations. A portion of Building 11 steel framing will be left standing for reuse by the Owner.

2.1.2 Underground Storage Tank Removal

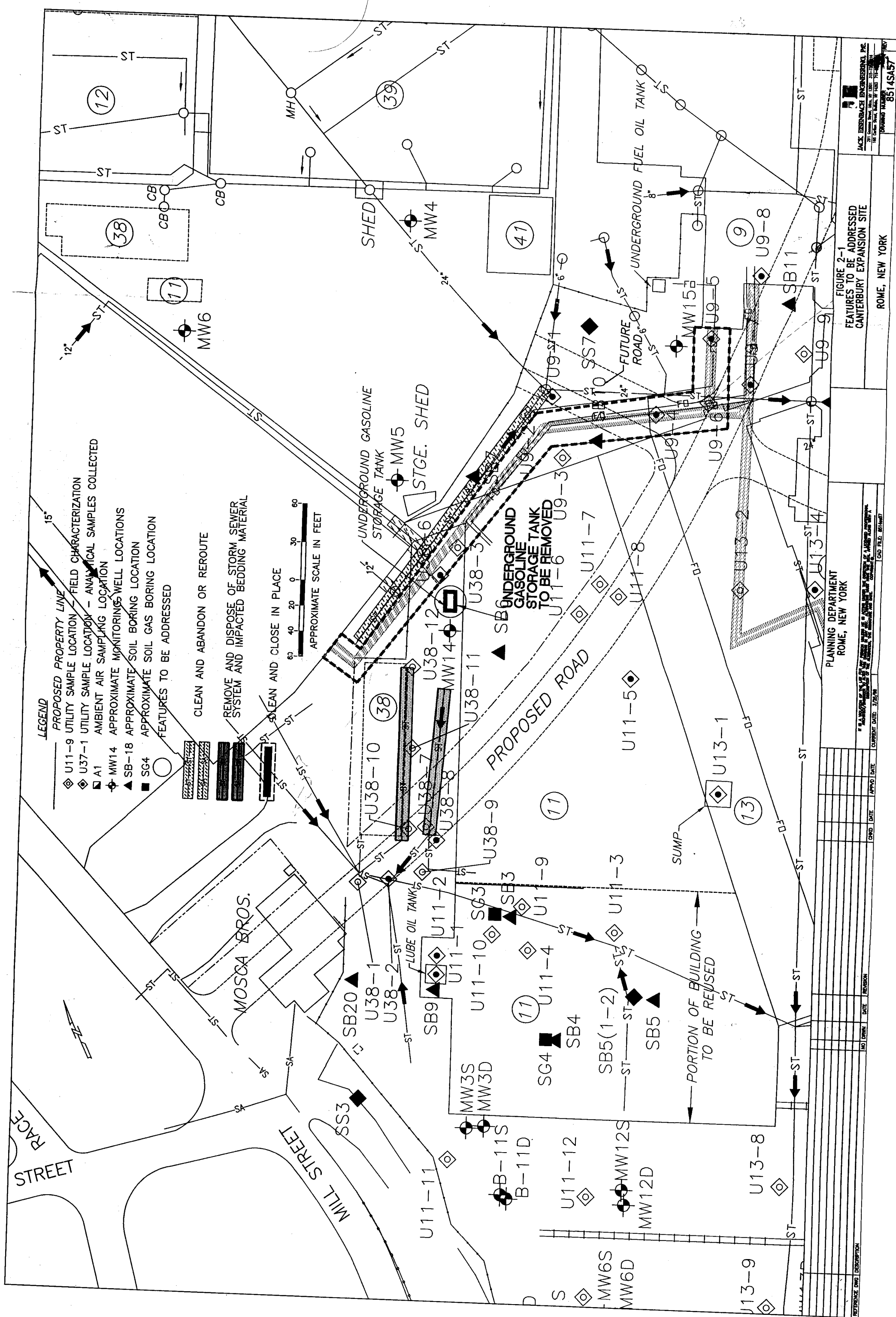
The underground gasoline storage tank and associated piping located adjacent to Building 11 will be removed by the Owner. Soil which has been impacted by the release of petroleum from the tank and piping will be remediated by excavation in accordance with NYSDEC petroleum-contaminated soil cleanup standards [STARS Memo #1]. Down gradient monitoring well MW-14 does not show any impacts from this tank; therefore, groundwater monitoring or treatment is not required at this location. (NOTE: The tank has been excavated from the subsurface and currently is on-site).

2.1.3 Utility Lines and Manways

All utility lines at the Canterbury Parcel which are to be reused on a permanent or interim basis will be cleaned to remove accumulations of sediments or sludge. Lines which will not be reused will be abandoned in place. Utility lines, sumps, and manways which have been identified by the site investigations are indicated on Figure 2-1.

Two types of utility lines are present on this parcel: lines which are contained within conduits or structures such as the utility tunnel, and lines buried in the ground. Abandoned lines within the structures will be removed during site demolition and remediation. An active water line for the sprinkler system of the current Canterbury Printing building is located within the utility tunnel. This line will be relocated prior to demolition of the lines, or preserved until such time as it can be replaced.

The storm sewer lines which drain the driveway between Buildings 11 and 38 will not be reused; they will be removed by the City of Rome under the remediation of the city roadway parcel in light of their potential impact on the Roadway Property. The storm sewer line along the northern edge of the Canterbury Parcel will be cleaned and then connected to the new storm sewer line to be installed within the Roadway Property.



2.1.4 Clean Out of Tunnels

The utility tunnel which crosses the Canterbury Parcel will be cleaned and the tunnel abandoned in place. This cleaning will include the off-site segment of the tunnel which extends to the west to the current Canterbury building, and to the east to the boiler house on the Roadway Property. A total of about 200 linear feet of tunnel will be cleaned and abandoned on the Canterbury Parcel, and 90 linear feet on the current Canterbury Property. Migration of water and sediments within the tunnel is from the Canterbury Property towards the boiler house; therefore, the cleaning of the entire length of the tunnel will be performed by the City under the remedial program for the Roadway Property. Cleaning of the tunnel from the Canterbury building to the down-gradient end of the tunnel where it enters the Roadway Property will be performed either as a discrete action, or in conjunction with the cleanup and demolition of the boiler house.

Cleaning of the tunnel will consist of three parts:

- All piping will be removed from the tunnel, including piping covered by asbestos insulation. Piping which is not decontaminated will be disposed of as solid waste. If the inside and outside of the piping is cleaned it may be recycled. An active water line which is present in the tunnel will not be removed unless it can be rerouted outside the tunnel.
- Sediment on the floor of the tunnel will be mechanically removed and stockpiled for off-site disposal.
- Residual materials on the floor, sides, and ceiling of the tunnel will be removed by power washing or steam cleaning. All liquids found within the tunnel and generated by cleaning will be captured at a down-gradient location and pumped from the structure for treatment and disposal.

2.1.5 Utility Line Abandonment

All utility lines which will not be reused will be abandoned. Abandonment will be by either cutting and capping the lines in place, or by removal. The method of abandonment will be selected during the development of site redevelopment plans. Lines which are shown to act as conduits for contaminated groundwater flow will be abandoned so that the groundwater migration pathway is removed. This will be accomplished by creating a barrier to groundwater flow with a low permeability material, or by removal of the line and backfilling the utility trench with soil with a permeability equal to or lower than that of the surrounding soil. Lines on the Canterbury Parcel to be remediated under the Roadway Property remedial program will be abandoned by removal.

2.1.6 Groundwater

Soil, soil gas, and groundwater were investigated during the Roadway SI to assess the source and distribution of chlorinated solvents (TCE) on the Rod Mill Parcel. The SI found that the source of the solvents was not on the Roadway Property, nor was the solvent source migrating onto the site from the north (up-gradient) direction. No remedial measures are necessary to remove the trace levels of TCE and related compounds which are present on the Canterbury Parcel. Construction activities and occupation of the parcel can be performed without special considerations for these compounds.

Remediation of groundwater is not proposed for the Canterbury Parcel due to the lack of defined sources and the low concentration of contaminants which exceed groundwater standards or guidance values. Groundwater remediation may be necessary if unanticipated conditions are encountered during the remediation of the gasoline storage tank or during excavation for site construction activities.

2.2 Institutional Controls

As discussed in Section 1, the concentration of metals in the soil and groundwater on the Canterbury Parcel are acceptable for commercial/industrial site occupation and use if a cap is maintained to prevent exposure to human receptors. The cap will consist of a building foundation, concrete or asphalt pavement or a minimum of six inches of topsoil or clean fill. To ensure that increased exposure to the soils does not occur without proper review, a deed restriction will be placed on the Canterbury Parcel to specify that future site use shall be limited to commercial/industrial purposes. [Note that the use of site groundwater for drinking water is prohibited by state law due to the presence of an active municipal water supply system [New York State Uniform Fire Prevention and Building Code (9 NYCRR 902.1 (a))].

2.3 Decontamination

All field equipment (i.e., backhoe, hand tools) will be broom cleaned, and high pressure water washed or steam-cleaned following use. The equipment will be cleaned over a temporary decontamination pad constructed so that water that is generated during the cleaning process is contained. The fluids generated during this cleaning process will be containerized in Department of Transportation (DOT) 55-gallon drums or other suitable tankage, or vacuumed with a vacuum truck for disposal at the selected off-site disposal facility. Any personal protective equipment (PPE), and the plastic sheeting used to construct the decontamination pad, will be disposed of at a selected landfill as non-hazardous waste.

3.0 REMEDIATION DOCUMENTATION

Following completion of the remediation performed by both the property owner and the City of Rome, a closure report will be prepared to document the remedial action. This report will summarize the work performed including procedures used, quantity of material removed, analytical results, and manifests or bills of lading for final disposition. The closure report will contain a certification by the project engineer that the work was performed in accordance with this Department-approved Work Plan. The closure report will be submitted to NYSDEC for approval under the terms of the Voluntary Remedial Agreement.

4.0 IMPLEMENTATION SCHEDULE

The remedial actions for the Canterbury Parcel will be performed in two parts. The work to be performed by the City will be implemented during Phase I of the roadway demolition and remediation program. The work to be performed by the property owner will occur independently from the City actions. A single site closure report will be prepared when both sets of remedial actions are complete. All remedial work will be performed prior to conveyance of the Canterbury Parcel to Canterbury Printing.

5.0 REFERENCES

- Empire Soils Investigations, 1993. "Contaminant Source Investigation, Proposed Independent Power Plan, Rome, New York". January 1993.
- New York State Department of Environmental Conservation, Letter to Remediation Technologies, Inc., April 22, 1997.
- RETEC, 1995. "Phase I Environmental Site Assessment, City of Rome Industrial Redevelopment Area" Rome, New York, Department of Planning and Community Development, City of Rome, New York. Reported prepared by Remediation Technologies, Inc. October, 1995.
- RETEC, 1996. "Limited Phase II Environmental Investigation, Former General Cable Property, Rome, New York". February 1996.
- RETEC, 1997a. "Phase II Investigation of the Former General Cable Manufacturing Site, Rome, New York". Draft report prepared by Remediation Technologies, Inc. March, 1997.
- RETEC, 1997b. "Site Investigation/Remedial Alternatives Report, Roadway Right-of-Way Property, East Rome Business Park, Rome, New York". Report prepared by Remediation Technologies, Inc., September, 1997.
- STARS Memo #1. "STARS Memo #1 Petroleum- contaminated Soil Guidance Policy" Prepared by New York State Department of Environmental Conservation, Division of Construction Management, Bureau of Spill Prevention and Spill Response; Spill Technology and Remediation Series, August 1992.