DECLARATION STATEMENT
ENVIRONMENTAL RESTORATION RECORD OF DECISION

OLD GENERAL CABLE
ROAD RIGHT-OF-WAY
EAST ROME BUSINESS PARK
CITY OF ROME, ONEIDA COUNTY, NEW YORK
Environmental Restoration Site
Site No. B-00010-6

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Road Right-Of-Way environmental restoration site which was chosen in accordance with the New York State Environmental Conservation Law (ECL).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Road Right-Of-Way Environmental Restoration 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 substances and/or petroleum products from this site, if not addressed by implementing the response action selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Site Investigation/Remedial Alternatives Report (SI/RAR) for the Road Right-Of-Way and the criteria identified for evaluation of alternatives the NYSDEC has selected the removal and disposal of contaminated soil, sediment, underground storage tanks and associated piping, and contaminated sewers and tunnels within a City owned access corridor of the East Rome Business Park. Also, asbestos removal and building demolition are a necessary component of the selected remedy. The components of the remedy are as follows:

- Sludge, sediment, oil and water found in tunnels, tanks, basements, piping, and sumps contaminated with PCBs, chlorinated solvents, petroleum, and heavy metals will be removed, treated as necessary and disposed off site.

- Tanks, piping, tunnels and other associated structures will be removed, decontaminated as necessary, and disposed off site. Larger tunnels will be decontaminated and demolished in place.

- Visibly contaminated soils around buildings, underground storage tanks, and sewers contaminated with PCBs, chlorinated solvents, petroleum, and heavy metals will be excavated to meet cleanup objectives identified in NYSDEC TAGM 4046, and disposed off site.

- Friable and non-friable asbestos material will be removed from buildings, pipes and structures.

- Existing buildings will be demolished as necessary for site remediation. Rubble and other debris piles will be sorted and disposed off-site.

- The area will be restored using common backfill material and revegetated, or the area will be backfilled over which a new access road will be constructed.

- Deed restrictions will limit future development of the site to industrial/commercial use, and prevent the use of groundwater as a potable water supply.

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.

1/21/98
Date

Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

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SECTION 1: SITE LOCATION AND DESCRIPTION

The site is an approximately 3-acre parcel of land which has been defined by the City of Rome as the Road Right-of-Way (RROW) Property (Figure 1-1). This parcel is located in the western portion of the 17-acre Central Core area (Figure 2-2) of a 200-acre industrial redevelopment area known as the East Rome Business Park (Figures 2-1 and 2-5). The Central Core area is generally bounded by Railroad Street to the north, the Mohawk River/New York State Barge Canal 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.

In order to provide access to the new subdivision within the East Rome Business Park, the City of Rome has acquired this 3-acre parcel to build an access road from the intersection of Railroad Street and Fifth Street at the north side of the site to the intersection of Mill Street and East Whitesboro Street at the south side. The RROW Property passes through the present or former locations of General Cable Buildings 1, 2, 3, 22, 9 (the boiler house), 13, 11 (the rod mill), 38, and the adjacent Mosca Moving Company garage. Future connecting roads to the east and west to access additional areas within the Business Park are planned to intersect this road south of the boiler house. Redevelopment of the RROW parcel would consist of installation of a full set of modern underground utilities, construction of the commercial access road, and construction and landscaping of a pedestrian sidewalk to connect the commercial/residential neighborhood along East Dominick Street with the City of Rome Marina Park at the former Mohawk River terminal.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

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 metal working activities were conducted including machining, stamping and drawing, plating, pickling, and coatings with rubber, asbestos, and paints. General Cable ceased operations at the site in 1972 and, with minor exceptions, the site has been unused since then. 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. Figure 1-1 is a current site map providing the location of buildings and other features of the site including the RROW Property.

2.2: Environmental Investigation History

A number of investigations have been previously performed at the property and in the Central Core of the East Rome Business Park. This section describes the history and conditions of the area.

In 1984, a spill was recorded with NYSDEC for the Revere Copper and Brass facility, located to the north and upgradient of the site. According to the spill file, oil was released into the storm sewer system, which allowed it to be conveyed to the Central Core property. A manhole, located to the south of former Building 38, acted as an oil-water separator and was the location of clean-up efforts by NYSDEC.

A PCB removal action occurred at the Central Core site in 1991. Environmental Products and Services, Inc., under contract with Mr. Gaetano, completed the removal of several transformers and capacitors reported to have contained PCB oils, from the basement of former General Cable Building 50. The PCB materials were disposed at a licensed facility. The record shows that the spill file has been closed.

A Phase I environmental site assessment was completed for the Central Core and its wider setting by Plumley Engineering P.C. on behalf of a potential private developer. The 1992 document, "Draft Phase I Environmental Site Assessment of the Former Rome Manufacturing Division of Revere Copper and Brass, Inc., and the Former General Cable Corporation in the City of Rome, New York," noted a number of environmental concerns on the property. These included the presence or reported presence of underground storage tanks (USTs), stained floors and ground surfaces throughout the complex, 55-gallon drums containing liquids, and piles of demolition debris. The locations of several USTs, identified from historical Sanborn maps, could not be verified in the field.

Remediation Technologies Inc. (RETEC), an environmental consultant, was contracted through the Saratoga Associates by the City of Rome and the Rome Industrial Development Corporation to provide environmental consulting and investigation services in support of the creation and development of the East Rome Business Park. As part of this work, RETEC prepared an environmental overview of the entire 200-acre redevelopment area which included both a review of the hydrogeologic setting and the industrial history of the area. This report contained a review of the history of the Central Core site and summarized the information from the previous investigations discussed above.

In 1996, a limited Phase II investigation was performed by RETEC in support of the proposed expansion project of Canterbury Printing Co., an active business which borders the southwest side of the Central Core area and RROW Property. The investigation found metals in soil in the study area were within typical background concentrations with the exception of copper. 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.

In 1996, RETEC conducted an investigation of the Central Core site to provide the environmental data needed to plan the redevelopment of the site. The investigation found that the northern area of the proposed right-of-way, from Railroad Street to the boiler house, was characterized by elevated (compared to background) metals in both the soil and in the utility tunnel system. Low levels of polycyclic aromatic hydrocarbons (PAHs) were found in the soil. The soil and groundwater near the boiler house were found to be impacted by antimony. Free petroleum, identified as the "heavy end" of number 2 fuel oil or as number 6 fuel oil was found in one of the tunnels joining the south side of the boiler house. The utility

tunnel extending from the "courtyard" area south of the boiler house to the Canterbury Printing Building contained hydrocarbon- and PCB-impacted sediments. Total PAHs were found at levels up to 362 parts per million (ppm) and levels of PCBs ranged from 85 ppm to 130 ppm.

A Phase II investigation was performed on the Mosca Garage on Mill Street by RETEC in 1997. The information collected during the Phase II investigation is included in the report titled "Phase I and Limited Phase II, Environmental Site Assessment Report". A 1,000-gallon underground fuel oil tank was located along the northern wall of the building. Parts cleaning solvents were observed to be in use in the building, along with other automotive chemical products. Drums of spent solvent were observed to be present at the site.

SECTION 3: CURRENT STATUS

To determine the nature and extent of any contamination by hazardous substances of this environmental restoration site, the City of Rome, Department of Planning and Community Development recently completed a Site Investigation/Remedial Alternatives Report (SI/RAR). In addition to the RROW Brownfield Program, a voluntary cleanup agreement is currently being negotiated between Mr. Gaetano and the NYSDEC for properties which are adjacent to the RROW. The City of Rome's application for a second Brownfield Investigation Program on the Nash/Rossi Property, which is located adjacent to and east of the RROW, has been approved.

3.1: Summary of the Site Investigation

The purpose of the SI was to define the nature and extent of any contamination resulting from previous activities at the site.

A report entitled "Site Investigation Report, RROW, East Rome Business Park", dated September 1997, has been prepared describing the field activities and findings of the SI in detail. The SI included the following activities:

- A review of all existing data.
- A soil gas survey.
- Sampling and analysis of water and solids from underground utilities.
- Installation of soil borings and monitoring wells for analysis of soils and groundwater as well as physical properties of soil and hydrogeologic conditions.
- Excavation of test pits to locate underground utilities and to investigate pathways through bedding material.
- An asbestos survey to determine quantity, type and location of asbestos-containing materials.

The analytical data obtained during the SI was compared to applicable standards, criteria, and guidance values (SCGs). Groundwater, drinking water and surface water SCGs identified for the RROW were based

on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of the NYS Sanitary Code. Soil SCGs are based on NYSDEC's Technical and Administrative Guidance Memorandum 4046 - Determination of Soil Cleanup Objectives and Cleanup Levels for soil cleanup guidelines for the protection of groundwater and background conditions. The following outlines the specific information gathered during the SI for each medium of concern.

3.1.1 Geological Features

The East Rome Business Park is located in the western Mohawk River valley of the Hudson-Mohawk lowlands physiographic province of New York State. The lowland is formed by the Appalachian Plateau to the south, and by the Adirondack region to the north. The site is situated in the river valley and floodplain of the Mohawk River and, as such, is characterized by low relief with elevations across the site varying by less than ten feet. The regional drainage pattern in the vicinity of the site has been modified by the diversion of the Mohawk River and the construction of the New York State Barge Canal, which is located to the south of the site.

The Business Park is underlain by a sequence of unconsolidated sediment layers, having a total thickness of approximately 100 feet, which fills a shale and siltstone bedrock valley. This material is a combination of glacial outwash sediments and post-glacial alluvial sediments which have filled the trough of the Mohawk River. The sediments, from top to bottom, are composed of industrial fill, alluvial deposits, lacustrine sand, and a basal till emplaced on the bedrock. Soil boring logs from previous site investigations show that a silt-clay unit is also present at approximately 50-60 feet below the ground surface, but in the recent SI it was shown that this unit is discontinuous and not present near the River. Surface water and groundwater at the site flows generally to the south to the Mohawk River/Barge Canal which flow together adjacent to the site.

Two shallow stratigraphic units have been identified at the site. The uppermost consists of fill which varies in composition, but is generally a gray to black clayey silt containing varying amounts of angular and rounded rock fragments, brick fragments, cinders and slag fragments, wood, glass, and other debris. Underlying the fill material is a heterogeneous mixture of fluvial sediments which is comprised of discontinuous beds of near-shore sediments, primarily clayey silt/silty clay, silty sand, and gravel.

3.1.2 Hydrogeologic Features

Detailed information regarding the site hydrogeology was obtained during previous investigations and the recent SI. The depth to water was defined by previously existing and the newly installed monitoring wells. A complete round of depth-to-water measurements was collected on July 29, 1997. These measurements have been used to map the potentiometric surface of the water table (Figure 3-4). The inferred direction of the groundwater flow at any location is at a right angle to the groundwater contours.

The water table can be found in the fluvial soils beneath the fill unit. The depth-to-water is approximately six feet below the ground surface in the center of the RROW, but may be as deep as 16 feet in other parts of the Central Core. The surface of the water table slopes towards the canal at all locations within the site. This direction of flow to the south was determined by RETEC, and by previous site studies conducted by Empire Soils and the United States Geologic Survey. Based on water table maps from RETEC, the average horizontal gradient across the site was calculated to be 0.022 feet/feet. Two deep/shallow

monitoring well couplets in the area south of the RROW show an upward gradient from the deeper wells to the shallow portion of the aquifer.

Six shallow (MW-18, MW-19, MW-20, MW-21, MW-22, and MW-23) and one deep (MW-19D) monitoring well were installed as part of the SI (Figure 2-1). The shallow water table wells are for the assessment of groundwater impacts from suspected sources of PCBs (MW-19 and MW-21) and metals (MW-20 and MW-22), to investigate a previously unsampled area (MW-18), and to investigate visual impacts and odors found in test pits completed in the northern proposed RROW (MW-23). Shallow monitoring well MW-19 was installed in an area that is also suspected of trichloroethene (TCE) impacts. The well screens were set approximately at the same depth in all of the shallow wells (4.0 to 14.0 feet below ground surface). The deep monitoring well MW-19D was installed as part of the TCE investigation. The well screen for MW-19D was installed at 55.3 feet to 65.3 feet below ground surface to determine whether TCE is present in either the dissolved or free-phase (DNAPL) form in the lower aquifer.

3.1.3 Physical Features

The RROW and historical sample locations are shown in Figure 4-4. Active utilities are found at both the north (Railroad Street) and west (Mill Street) ends of the RROW. At the north end, active gas and water mains and sanitary and storm sewers are present in the Railroad Street right-of-way. In the western end of the RROW, active utilities include gas and water lines which are located on the Mosca Brothers Moving and Storage Garage grounds in the Mill Street right-of-way. One sanitary sewer line crosses the RROW in the northern portion of the site. RETEC was unable to determine the condition of the sewer system due to the presence of debris in the manhole (U22-1). According to historical drawings, the sanitary sewer flows from the direction of the former Rome Manufacturing Company Building (Rossi Building) to the current building occupied by Serway to the east. This sewer is reported to be abandoned.

Active storm sewers in the RROW are found in two areas. At the southern end of Building 38, the storm sewer system collects surface run-off into a shallow system of storm drains around Building 38 and then discharges water into a deeper (12 feet deep) system of drains. The deeper system also collects water from the north (Canterbury Printing Co. property) and discharges via a 20-inch line which runs beneath Building 11 and then to the Mohawk River.

An active storm sewer system was found in the central area of the RROW around the boiler house (Building 9). This system consists of two branches which meet in a manhole at the north end of Building 53 and then flow to the river. A 24-inch line collects water from the north (Nash Metal Works site) and west (Canterbury Printing Co. property) at sampling point U9-1 and flows to the east to Building 53.

The second storm sewer branch in this area is found along the east side of the boiler house where a 24-inch line carries water to the manhole at the end of Building 53. This branch collects water from the northern area of the RROW including the area of the Rossi Building and Building 39. The RROW area includes the boiler house (Building 9). The foundation of this building was found to be acting as a sump which collects surface water from the utility tunnel to the west. No outlet for this water could be located in the field or on the historic site plans.

As described above, a main subsurface feature in the RROW is the southern utility tunnel system in the area of the boiler house. There may, however, be features associated with subsurface conditions beneath

the floors of Buildings 11 and 13. Building 13 is constructed with a gap between the floor and the ground surface, with sumps and utility lines located beneath the floor elevation. Similarly, the floor of the south-central portion of Building 11 was found to be constructed above the ground surface, with support systems and structures located in the hollow space below the floor. According to a former General Cable employee, a series of wires and settling basins were constructed in this space to collect and recycle metals. The northern portion of Building 11 does not have access points to inspect the subsurface, and from the building construction it appears that it may have a different foundation and subfloor structure from the south end. Borings SG14, SG15 and SG16 found the floor slab to be on-grade.

Three electrical utility vault access manholes were investigated in the RROW. Two of the vaults were located in Building 11 (U11-7 and U11-8) and a third was located outside of the north end of Building 11. All three of the utility vaults were found to be filled with standing water in 1997.

3.1.4 Surface Water

The Mohawk River is situated approximately 100 feet south of the site. This Class C water body is not part of the Brownfield Program at this time since it is not believed that any contamination in the River originated on the RROW, but most likely migrated through the RROW from an upgradient source. Future investigations of sites which are sources of contamination may evaluate the impacts to the River.

3.1.5 Contaminants

The following is a description of impacts from the disposal of hazardous substances and past industrial practices at the Old General Cable facility and other surrounding facilities. Based on the results of the site investigation in comparison to SCGs and potential public health and environmental exposure rates, certain areas and media of the site require remediation. Figures 5-3, 5-4, and 5-5 show sampling locations from several investigations which were performed in the vicinity of the RROW.

3.1.6 Groundwater

Generally, groundwater contamination found within the RROW only slightly exceeded groundwater quality standards in the seven monitoring wells installed as part of this investigation, even though water collected from shallow test pits indicated contamination of copper, lead, PCBs, and TCE several orders of magnitude above standards. The elevated levels of contaminants in the test pit water is attributed to turbid samples which are not a true indicator of groundwater quality. The elevated level of TCE is attributed to a leaking sewer near the sampling point, which historically conveyed industrial waste. The details of the groundwater investigation are described below.

Groundwater quality standards were exceeded in 28 of 54 groundwater samples analyzed for benzene, toluene, ethylbenzene, and xylene (collectively known as BTEX), chlorinated VOCs, PAHs, PCBs, and metals. Six of fourteen TCE screen samples were analyzed only for chlorinated VOCs. Approximately half of all groundwater samples had at least one exceedance.

Groundwater samples GW1 near the Mosca Garage, SB1 near the former oil tank, and SB-27 near the former underground fuel tank lines were the only samples having exceedances for BTEX compounds. Only one sample (SB-27-10) had an exceedance for benzene (2 μg/L vs 0.7 μg/L SCGs). Groundwater

samples GW1 near the Mosca Garage, TPW-5 near the underground fuel tank in the center of the site, TPW-11 and SB13 near the northeast end of the RROW, and SB1 and SB2 near the former oil tank, were the only samples to have exceedances for PAH compounds. Exceedances for CPAHs only occurred in TPW-5, TPW-11, and SB13. It appears that these exceedances of BTEX and PAHs may be due to activities at the Mosca Garage or to leaking hydrocarbons from tanks or piping.

The PCB standard of 0.1 μg/L was exceeded in about half of all groundwater samples. The largest exceedances were in samples TPW-5 and SB-27 near the center of the site and TPW-9 near the northeastern end of the RROW. Groundwater is widely impacted with heavy metals, particularly antimony, copper, and lead, which had exceedances in five or more samples. Concentrations of copper and lead exceed the SCGs by several orders of magnitude in groundwater samples SB-27 and TPW-7 near the center of the site, and TPW-8 and TPW-10 near the north end of the site. As mentioned previously, contamination in the test pit and soil boring water is attributed to turbid samples which are not a true indicator of groundwater quality.

In the TCE screen samples, only 1,2-dichloroethene (DCE) and trichloroethene (TCE) were detected. Levels of DCE and TCE exceeded the groundwater standards in samples TPW-1, DP-02, DP-03, and DP-04 near the southwestern end of the RROW. Levels of DCE exceeded the standards in samples DP-10 and DP-14 located between the southeastern end of the RROW and the Mohawk River. Only one groundwater sample (TPW-1) exceeded the SCGs of a chlorinated hydrocarbon by more than one order of magnitude (for TCE, 100 μg/L vs 5 μg/L SCGs).

The TCE groundwater contamination appears to be associated with the storm sewer system which comes onto the RROW from the Canterbury Printing Co. and Nash/Rossi properties. TCE groundwater contamination downgradient of Building 11 also appears to be consistent with subsurface drains and utility location. TCE was detected in the soils at levels below soil cleanup goals, but not in the groundwater, at the rear of the Mosca Garage. TCE was detected at 100 parts per billion (ppb) in the groundwater found in the test pit (TP-1) adjacent to the storm sewer system, however no contamination was found in the surrounding soils. The Department believes that, except for the small quantity of TCE behind the Mosca garage, there does not appear to be a source of TCE contamination on the RROW. Trace levels of TCE on the RROW and downgradient of the RROW appear to be related to the storm sewer system.

3.1.7 Soil Gas

Of the fourteen soil gas samples analyzed for TCE in the SI, eleven were above the detection limit of 0.005 mg/m^3 or 0.0009 ppm-v; however, all concentrations were less than 0.02 mg/m^3 or 0.004 ppm-v. The maximum concentration in soil gas is over four orders of magnitude lower than the OSHA permitted exposure limit of 50 ppm-v on a time-weighted average basis. In addition, the typical dilution factor for transport from soil gas to indoor air ranges from 100 to 1,000,000. As such, concentrations of TCE in indoor air would most likely be less than the detection limit. Nonetheless, the highest concentration was detected in sample SG-14 between Mill Street and the proposed intersection near the center of the site. Note that SG-14 is in the same general location as DP-04 where there was an exceedance of TCE in groundwater. Both locations are in close proximity to the storm sewer pipes which come from the Canterbury and Nash/Rossi Properties.

3.1.8 Soil

PAH and BTEX contamination above cleanup goals are associated with underground storage tanks, piping and historic oil releases in basements and tunnels. Cleanup objectives for soil were exceeded in 49 of 62 soil samples. TP1, TP2, and TP4 from the Mosca Garage area were the only soil samples with exceedances for BTEX compounds. Total BTEX concentrations were found from 3.4 ppm to 23 ppm. Soil samples MW-21, SB-30, and SB-31, located on-site near the north/south RROW division, SB18, located off-site southeast of the north/south RROW division, MW14, near the underground gasoline storage tank, and MW17, near Railroad Street, were the most impacted samples with regards to total PAHs, which were found at levels up to 103 ppm.

Across the site, elevated levels of metals have been found which indicate that these contaminants are ubiquitous due to the former use of the site and filling practices. Soils were widely impacted with heavy metals, particularly antimony, beryllium, copper, and mercury, which exceeded site background levels. Site background levels were determined based on five off-site surface soil samples and were calculated statistically as the mean of the concentrations plus three times the standard deviation, according to EPA guidelines (USEPA, 1992). Over two-thirds of all samples had an exceedance of background for at least one metal. The highest concentrations of heavy metals were in soil samples SB-27, MW15, and MW-20 near the center of the site, MW-21 and SB-30 located on site near the north/south RROW division, SB-13 and SB-32 near the northeastern end of the RROW, and SB-15, SB-17, and SB-18 located off-site southeast of the north/south RROW division.

Chlorinated VOCs and PCBs did not exceed the NYSDEC's Technical and Administrative Guidance Memorandum 4046 - Determination of Soil Cleanup Objectives and Cleanup Levels.

3.1.9 Utility Solids/Sludges

Overall, the concentrations of PCBs, PAHs and metals found in the underground utilities solids and sludges are considered to be the most significant threat to the environment. Given the direct pathway, via storm sewers, to the Mohawk River this medium is most likely to impact off-site environmental receptors.

All samples of solids/sludges taken from the sewers, tunnels, and other utility lines were analyzed for BTEX, chlorinated VOCs, PAHs, PCBs, and metals. There was an exceedance of soil cleanup objectives for at least one compound in all but two utility samples of solids/sludges.

In addition, there was an exceedance of cleanup objectives in soil for at least one PAH in every utility sample of solids/sludges. The level of total PAHs was less than 400 mg/Kg in all samples. PAHs were found in the range of 2.4 ppm to 255 ppm. The guideline for residential use of 1,000 μg/Kg for total PCBs was exceeded in samples U33-3 and U33-4 from the southern end of Building 33. PCBs were found in the range of 3 ppm to 750 ppm. The concentrations of heavy metals in solids/sludges exceeded background soil levels in about half of the utility samples. The highest concentrations of contaminants were in sample locations U1-2, U3-1, U9-11, U11-14, U33-3, and U33-4.

3.1.10 Utility Water

The utility water is considered to be a significant threat to the environment. Discharge of contaminated

waters, via the storm sewer system, provides a direct pathway for PCBs, PAHs and metals to the Mohawk River. All utilities are proposed for cleaning and/or removal which would eliminate the pathway to the Mohawk River.

All but two of the twelve samples of water taken from the subsurface utility lines exceeded SCGs for Class C surface water. Water samples were compared to surface water standards because the Mohawk River is the receptor of the water from the storm sewers. The standard for benzene was exceeded in only one water sample (91J ppb), U9-12, near the boiler house, and the standard for the benzo(a)pyrene was exceeded in water samples U6-1, U9-10, U13-4, and U53-1. Levels of benzo(a)pyrene ranged from 0.3 ppb to 19 J ppb. The standard of 0.001 μg/L for PCBs was exceeded by several orders of magnitude in about half of the water samples. Levels of PCBs ranged from 0.3 ppb to 5.6 ppb. Every water sample analyzed for metals exceeded the standards for copper, lead, and zinc, based on an assumed hardness of 50 ppm in the Mohawk River water.

3.1.11 Air

Soil sampling and screening for the primary organic compounds of concern have not indicated the presence of the target compounds at measurable levels near the surface of the RROW and, therefore, airborne contamination is not likely as it pertains to volatile organic compounds. Asbestos-containing materials have been found throughout the site in several buildings, piping and roofing materials. The asbestos which is friable could become airborne if disturbed or damaged, and therefore must be removed as part of any remedial action.

3.2: Interim Remedial Measures

An Interim Remedial Measure (IRM) is implemented when a source of contamination or an exposure pathway can be effectively addressed before completion of the SI/RAR. At this time, the only IRM which has been considered for the RROW is the securing, sampling and staging of nine 55-gallon drums which were found throughout the facility. These drums were found to contain oil or a powder matrix. One drum was found to contain corrosives.

3.3: Summary of Human Exposure Pathways

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the health risks can be found in the SI Report.

An exposure pathway is the process by which an individual may come into contact with a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media and transport mechanisms; 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.

Completed pathways which are known to or may exist at the site include ingestion, inhalation and dermal.

Incidental ingestion of contaminated soil may occur at the site. Potential also exists for ingestion of contaminated groundwater. However, no potable supply wells operate on the site and the area is supplied by public water.

Inhalation of friable asbestos from building and pipe insulation and roofing material is possible if it is disturbed and becomes airborne. Improper demolition of on-site structures could disturb the asbestos and result in its release to the air. Suspension of dust from contaminated surface soil may serve as a vehicle for inhalation of on-site contaminants. Chemical vapors have not been found to be a substantial health threat.

Contaminated surface soil provides a pathway for dermal contact with on-site contaminants.

3.4: Summary of Environmental Exposure Pathways

Because the site is fully developed, there are few if any on-site ecological receptors (i.e., terrestrial flora and fauna) to be evaluated. Likewise, all of the neighboring properties, except the Mohawk River to the south, are developed and have minimal ecological receptors. Potential risks to ecological receptors in the Mohawk River to the south would be from groundwater discharge or surface water runoff. Storm water is collected by an existing storm sewer system which drains to the Mohawk River. This system combined with the coverage of the site by buildings and pavement generally prevents storm water from contacting soil at the site. However, significant concentration of hydrocarbons (particularly benzene and PAHs), heavy metals, and PCBs (particularly Aroclor-1260), were detected in solids/sludges and water samples taken in the storm sewer. The direct pathway, via the storm sewer system, to the Mohawk River constitutes the most significant threat to the environment found at the site. Historic discharges and seepage of liquid waste into and out of the storm sewer systems has caused impacts to soils, groundwater and surface water. All pathways from the RROW and to the storm sewer system and subsequently to the Mohawk River are to be remediated as part of the RROW remedy. It is believed that much of the contamination found on the RROW does not originate on the RROW, but comes from upgradient sources.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past owners and operators, waste generators, and haulers.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the State to recover State response costs should PRPs be identified. The City of Rome will assist the State in its efforts by providing all information to the State which identifies PRPs. The City of Rome will also not enter into any agreement regarding response costs without the approval of the NYSDEC.

SECTION 5: SUMMARY OF THE REMEDIATION GOALS AND FUTURE USE OF THE SITE

Goals for the remedial program have been established through the remedy selection process stated in 6NYCRR Part 375-1.10. The overall remedial goal is to restore the site to predisposal conditions to the extent feasible and authorized by law.

At a minimum, the remedy selected should eliminate or mitigate all significant threats to the public health and to the environment presented by the hazardous substance disposed at the site through the proper application of scientific and engineering principles.

The goals selected for this site are:

- Reduce, control, or eliminate to the extent practicable the contamination present within the soils/waste on site.
- Eliminate the threat to surface waters by eliminating any future contaminated surface runoff from the contaminated soils on site or by eliminating future contamination from migrating off site through storm sewer systems and other underground utilities.
- Eliminate the potential for direct human or animal contact with the contaminated soils on site.
- Mitigate the migration of contaminated storm water, utility water and/or surface water to the environment.
- Prevent, to the extent possible, migration of contaminants in site soils and wastes to groundwater.

SECTION 6: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy should be protective of human health and the environment, be cost effective, and comply with other statutory laws. Potential remedial alternatives for the RROW were identified, screened and evaluated in a Remedial Alternatives Report. This evaluation is presented in the report entitled "Site Investigation/Remedial Alternatives Report for the RROW, East Rome Business Park".

A summary of the detailed analysis follows. As used in the following text, the time to implement reflects only the time required to implement the remedy, and does not include the time required to design the remedy or procure contracts for design and construction.

6.1: Description of Alternatives

The description below addresses the alternatives which have been identified to remediate the contamination associated with the RROW site. The potential remedies are intended to address the contaminated soils, waste, structures, underground utilities and groundwater found at the site.

A preliminary screening of alternatives is used to determine which remedies should be considered during detailed analysis, and which alternatives are impractical.

Complete removal of all soils to meet SCGs was not retained for detailed analysis. Since elevated levels of metals are ubiquitous across the entire area, and the NYS Department of Health determined that these contaminants did not pose a threat to human health as long as they remained covered by the proposed roadway, complete removal of soils was found not to be cost effective.

An active groundwater restoration program for the RROW is not justified for a number of reasons. The slight exceedance of groundwater quality standards observed in the monitoring wells does not pose a significant threat to human or environmental receptors since no pathway to receptors would exist under the proposed use of this site or adjoining properties. In general, the technical practicability of groundwater remediation of low levels of contamination has been shown to be questionable with regard to effectiveness

and cost/benefit.

The isolated areas of soil contamination, leaky sewers, and underground storage tanks which contribute to site groundwater contamination would be removed and therefore eliminate continuing sources of contamination to groundwater. Due to the historic use of the entire area for heavy industry, metal contamination in soil and groundwater is ubiquitous, and therefore any attempt at groundwater quality restoration within the RROW would be infeasible. For those reasons, active groundwater quality restoration is dropped from further consideration at this time.

Alternative #1
No Action

The no action alternative is typically evaluated as a procedural requirement and as a basis for comparison. It requires continued monitoring only, allowing the site to remain in an unremediated state. This alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment.

Sampling of the storm sewer systems would be conducted to determine if site-related contaminants are discharging to the Mohawk River. Routine monitoring would be performed to insure that the site was secure and to define groundwater and surface water migration.

Present Worth:	$ 120,000.00
Capital Costs:	$ 20,000.00
Annual O&M:	$ 3,800.00
Time to Implement:	0 to 6 months

Alternative #2
Limited Action

This alternative includes institutional controls such as commercial deed restrictions and/or deed restrictions on groundwater use. The site would be covered with topsoil and seeded. Contaminated sediments and standing water in large subsurface structures, tunnels, underground utility corridors and basements would be removed and the structures closed in place to prevent direct contact. Contaminated water would be discharged to the local Rome wastewater treatment facility if it meets pretreatment standards, and contaminated solids would be shipped off-site for proper disposal. Subsurface underground storage tanks, piping and valves would be removed as part of remediation, and asbestos removal would be conducted to prevent contact and inhalation of asbestos fibers. Upon completion of decontamination and an asbestos removal program, above-ground structures would be demolished. Remedial activities associated with Alternative #2 are illustrated in a figure in Appendix B.

Present Worth Costs:	$ 1,300,000.00
Total Capital Costs:	$ 1,300,000.00
Total Annual O&M:	$ 0.00
Time to Implement:	6 to 12 months

Alternative #3
Hot Spot Removal

This alternative consists of the action described in Alternative #2, but in addition, excavation and disposal of all visibly contaminated areas known as hot spots would be performed. The "hot spots" are related to soils which contain concentrations of target compounds significantly above site background. These hot spots are attributed to leaky underground tanks or subsurface structures such as sewer systems, and pipe galleries. In addition, the smaller underground structures, utility corridors, and pipe galleries within the RROW would be removed in order to eliminate migration pathways off-site to the Mohawk River. Larger tunnels and utility corridors would be closed in place, also to eliminate potential routes of migration off-site. The areas would be excavated in order to meet cleanup goals and then backfilled to meet existing grade. At a minimum, all remedial action areas associated with this alternative would be backfilled to existing grade, topsoiled and vegetated. Remedial activities associated with Alternative #3 are illustrated in a figure in Appendix B.

Present Worth:	$ 2,100,000.00
Capital Costs:	$ 2,100,000.00
Annual O&M:	$ 0.00
Time to Implement:	12 months

Alternative #4
Redevelopment Alternative

This alternative includes all remedial actions as discussed under Alternative #3, however instead of closing large tunnels in place and placing topsoil, seed and mulch across the site, the subsurface structures would be removed within the RROW and paved surfaces including asphalt and concrete would be placed. Remedial activities associated with Alternative #4 are illustrated in a figure in Appendix B.

Present Worth:	$ 2,700,000.00
Capital Costs:	$ 2,700,000.00
Annual O&M:	$ 0.00
Time to Implement:	12 to 18 months

6.2: Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of an Environmental Restoration Brownfield site in New York State (6NYCRR Part 375-4). For each of the criteria, a brief description is provided followed by an evaluation of the alternatives against that criterion. A detailed discussion of the evaluation criteria and comparative analysis is contained in the RAR. The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection. The last five evaluation criteria are termed "primary balancing criteria" and are used to compare the positive and negative aspects of each alternative.

1. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.

Alternative #1 would not meet SCGs for groundwater and/or soils because contaminated waste found in buildings, hot spots, underground utilities and underground tanks would be allowed to stay in place and future contamination could migrate to the groundwater and to the Mohawk River.

Alternative #2 would be more likely meet SCGs concerning storm water discharge to the Mohawk River, because contaminated utilities, underground tanks, pipes and structures would be cleaned. SCGs for groundwater may not be met because highly contaminated soils, referred to as hot spots, would be allowed to remain.

Alternative #3 and Alternative #4 would meet SCGs. These alternatives include the removal of all known contamination found in underground utilities, tanks, pipes and structures. In addition, highly contaminated soils, referred to as hot spots, would also be removed.

2. Protection of Human Health and the Environment. This criterion is an overall evaluation of the health and environmental impacts to assess whether each alternative is protective.

Alternative #1 would not be considered to be protective of human health and the environment since site-related contaminants above cleanup goals would remain in-place and would continue to migrate off-site to the Mohawk River.

Alternative #2 is considered to be more protective than Alternative #1 because contamination located in subsurface structures, buildings and utilities would be removed and loading to the Mohawk River would be reduced. In addition, exposure to waste found in on-site structures would be removed, limiting the potential for contact.

Alternative #3 and Alternative #4 are considered to be the most protective of human health and the environment, due to the complete removal of all wastes, hot spots and migration pathways to both environmental and human receptors.

Currently, no significant groundwater contamination has been found on the RROW. Small source areas have been found in the shallow soils and have been associated with underground tanks near the Mosca Garage and storm sewer piping which enters the site from the Gaetano, Canterbury, Nash/Rossi properties. Removal of these small soil contamination areas would remove the threat to groundwater. Removal of the old storm sewer system within the RROW would break the migration pathways which currently cross the RROW from the Gaetano, Canterbury, Nash/Rossi properties to the Mohawk River. Cleaning of the storm lines back to the next available manhole or junction would remove contamination immediately upgradient of the RROW and would provide a level of protection to the Mohawk, until such time that all upgradient sources can be investigated and remediated on the Gaetano, Canterbury, Nash/Rossi properties.

3. Short-term Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternative #1 would not cause any short-term impacts due to the lack of disturbance of the site and it would take the least time to implement. However, Alternative #1 would not attain SCGs and remedial

goals.

The remaining alternatives could create potential short-term impacts to workers and the public from the demolition of structures, removal of wastes, and exposure to soils, dust and noise. However, these impacts would be mitigated by implementing readily available safety procedures, including air monitoring, the wearing of protective equipment, decontamination of equipment prior to leaving the site, and the implementation of engineering controls which may include but are not limited to: covering excavated soils, installing migration barriers to keep contaminants from migrating beyond the work site boundaries and the use of dust suppression techniques. The remaining alternatives are considered to have the same level of short-term impacts and are all considered to take approximately the same time to implement.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the controls intended to limit the risk, and 3) the reliability of these controls.

Alternative #1 would not provide long-term effectiveness or permanence because all the identified contamination located within buildings or associated with underground utilities or subsurface soils would remain in place.

Alternative #2 would provide a higher degree of long-term effectiveness or permanence in comparison to Alternative #1, however, contaminated soils would still remain at the site and could potentially continue to impact groundwater quality.

Alternative #3 and Alternative #4 would be considered to have the highest degree of long-term effectiveness and permanence based on the removal of contaminated sludges, soils, tanks and subsurface structures.

5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative #1 would provide no reduction in toxicity, mobility or volume as it pertains to contaminated wastes. The remaining alternatives all include the removal of contaminated soils, sludges and sediments.

Alternative #2 is considered to provide a higher degree of reduction in comparison to Alterative #1. Alternative #3 and Alternative #4 are considered to provide the highest amount of reduction based upon the quantity of materials to be removed. All contaminated materials would be taken off-site for proper disposal.

6. Implementability. The technical and administrative feasibility of implementing each alternative is evaluated. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.

All demolition, soil and waste removal and structure decontamination is considered to be implementable. Standard demolition, excavation and removal techniques would be implemented and no special equipment or tools would be required. The "no action" alternative would be the most implementable since little to no remediation would take place, however remedial goals would not be achieved.

Next to the "no action" alternative, Alternative #2 would be considered to have a lesser degree of implementability. Alternatives #3 and #4 would be considered to be the least implementable, however, all proposed remedies are considered to be highly implementable overall, because standard construction and administrative techniques would be utilized.

7. Cost. Capital and operation and maintenance costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, cost effectiveness can be used as the basis for the final decision. Alternative # 3 and Alternative # 4 are essentially the same as it pertains to remedial actions. However Alternative # 4 goes beyond the minimum required remediation to include work which is necessary to prepare the RROW and to construct a new road system with the required infrastructure. Other volunteer remedial programs will be responsible for costs associated with off-site remedial actions. The costs for each alternative are presented in Table 3.

8. Community Acceptance. Concerns of the community regarding the SI/RAR and the Proposed Remedial Action Plan are considered at the end of the public review period. However during the public comment period for the Road Right-of-Way environmental restoration site, no comments, written or verbal were received.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

Based on the results of the SI/RAR, and the evaluation presented in Section 6, the NYSDEC is selecting Alternative #3 as the remedy for this site.

The elements of the proposed remedy are as follows:

- Sludge, sediment, oil and water found in tunnels, tanks, basements, piping, and sumps contaminated with PCBs, chlorinated solvents, petroleum, and heavy metals will be removed, treated as necessary and disposed off site.

- Tanks, piping, tunnels and other associated structures will be removed, decontaminated as necessary, and disposed off site. Larger tunnels will be decontaminated and demolished in place.

- Visibly contaminated soils around buildings, underground storage tanks, and sewers contaminated with PCBs, chlorinated solvents, petroleum, and heavy metals will be excavated to meet cleanup objectives identified in NYSDEC TAGM 4046, and disposed off site.

- Friable and non-friable asbestos material will be removed from buildings, pipes and structures.

- Existing buildings will be demolished as necessary for site remediation. Rubble and other debris piles will be sorted and disposed off-site.

- The area will be restored using common backfill material and revegetated, or the area will be backfilled over which a new access road will be constructed.

- Deed restrictions will limit future development of the site to industrial/commercial use, and prevent the use of groundwater as a potable water supply.

The estimated present worth cost to implement the remedy is $2,100,000. The cost to construct the remedy is estimated to be $2,100,000. No annual O&M is anticipated for this portion of the project.

The following is the basis of the Department's selection:

- The removal of the contaminated sludges and sediments along with tunnels, piping and underground structures will mitigate the migration of contaminated materials and water to the Mohawk River.

- The removal of heavily contaminated soils, known as hot spots, along with contaminated sewer bedding materials and underground piping will remove potential sources of groundwater contamination from the site.

- The removal of all friable asbestos materials will mitigate the potential for contact and inhalation of asbestos fibers.

- The removal of underground tanks and contaminated soils associated with releases from the tank areas will remove petroleum contamination and subsequently remove sources of potential groundwater contamination.

- The removal of all known sources of contamination from the RROW will return the site to a reusable parcel.

- The placement of deed restrictions will allow the site to be commercially developed. Deed restrictions will pertain to the metals and PAHs which have been documented at the site but are not considered to be a significant environmental or health threat as long as a proper cover is maintained over these materials. Deed restrictions will also prohibit the use of groundwater.

SECTION 8: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the Road Right-of-Way environmental restoration process, a number of Citizen Participation (CP) activities were undertaken in an effort to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

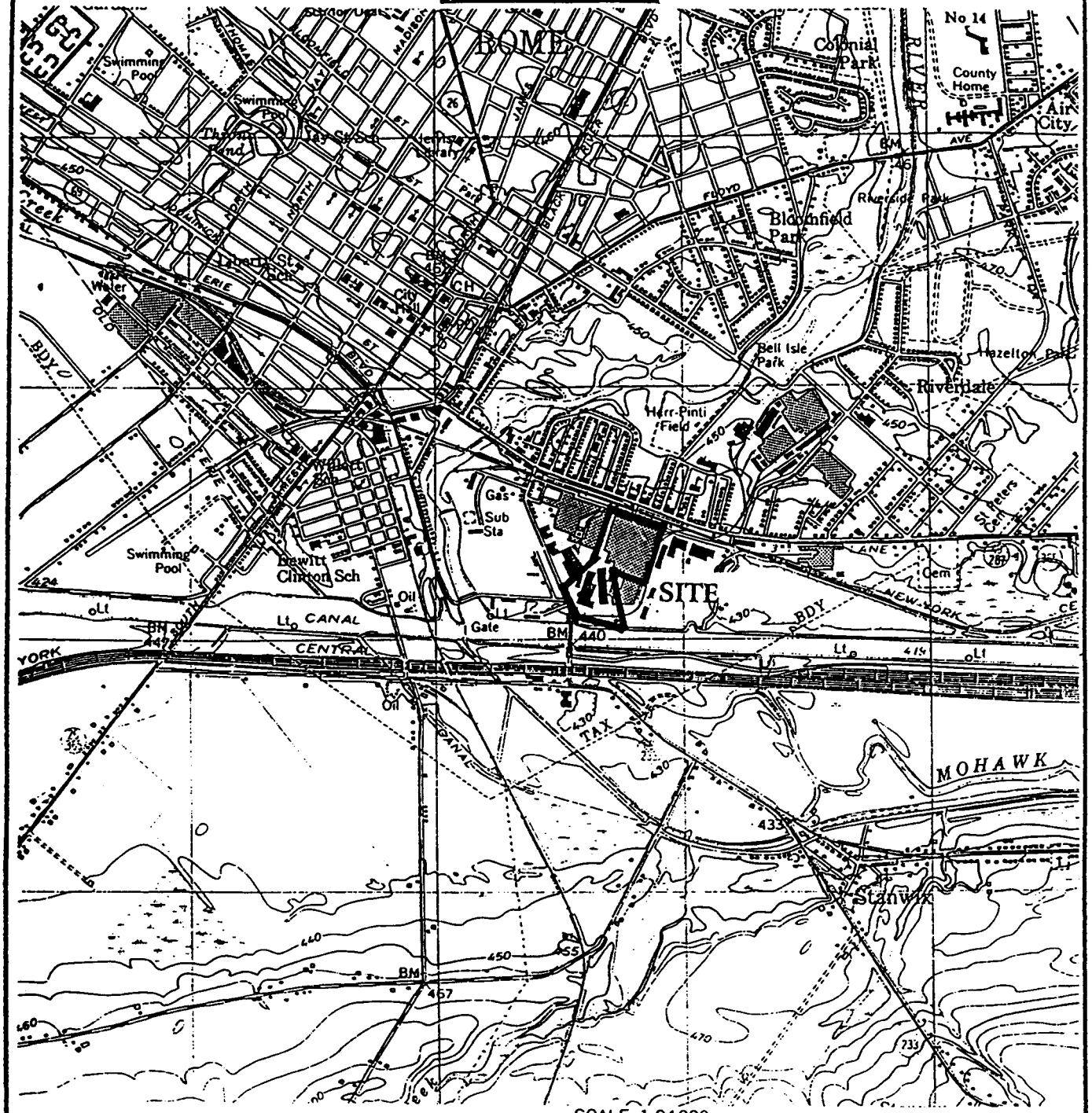
- Several repositories for documents pertaining to the site were established.

- A site mailing list was established which included nearby property owners, local political officials, local media and other interested parties.

- A public meeting was held to present the Proposed Remedial Action Plan to interested public, to answer questions and receive comments. No comments or questions about the PRAP were raised during the public meeting.

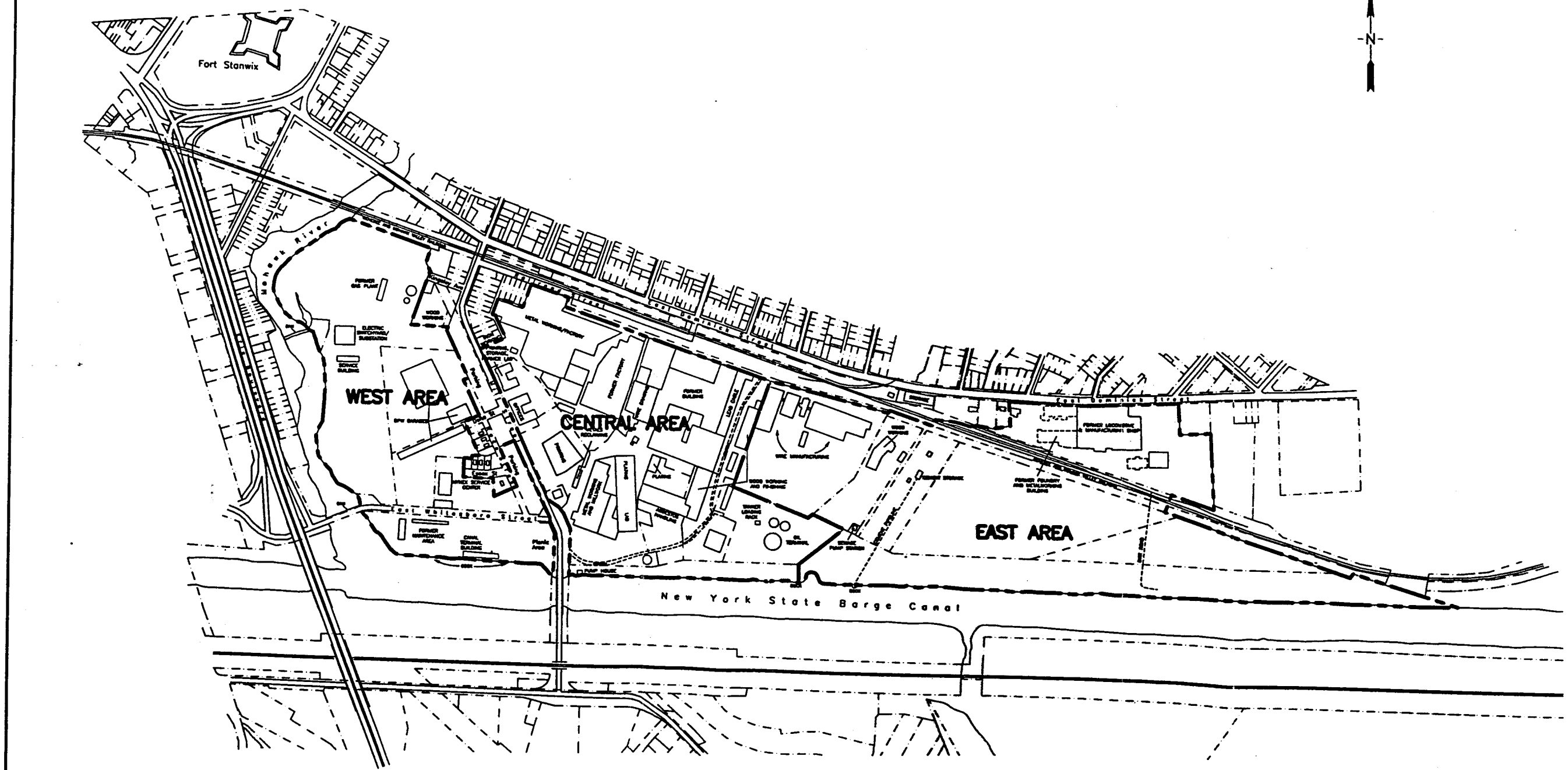
FIGURES

REIEC



SITE LOCATION MAP

FIGURE 2-1



REFERENCE DWG	DESCRIPTION	NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
		6							
		5							
		4							
		3							
		2							
		1							
		0	EAP	9/15/95	REVIEW COPY				

PLANNING DEPARTMENT
ROME, NEW YORK
3-2013-200

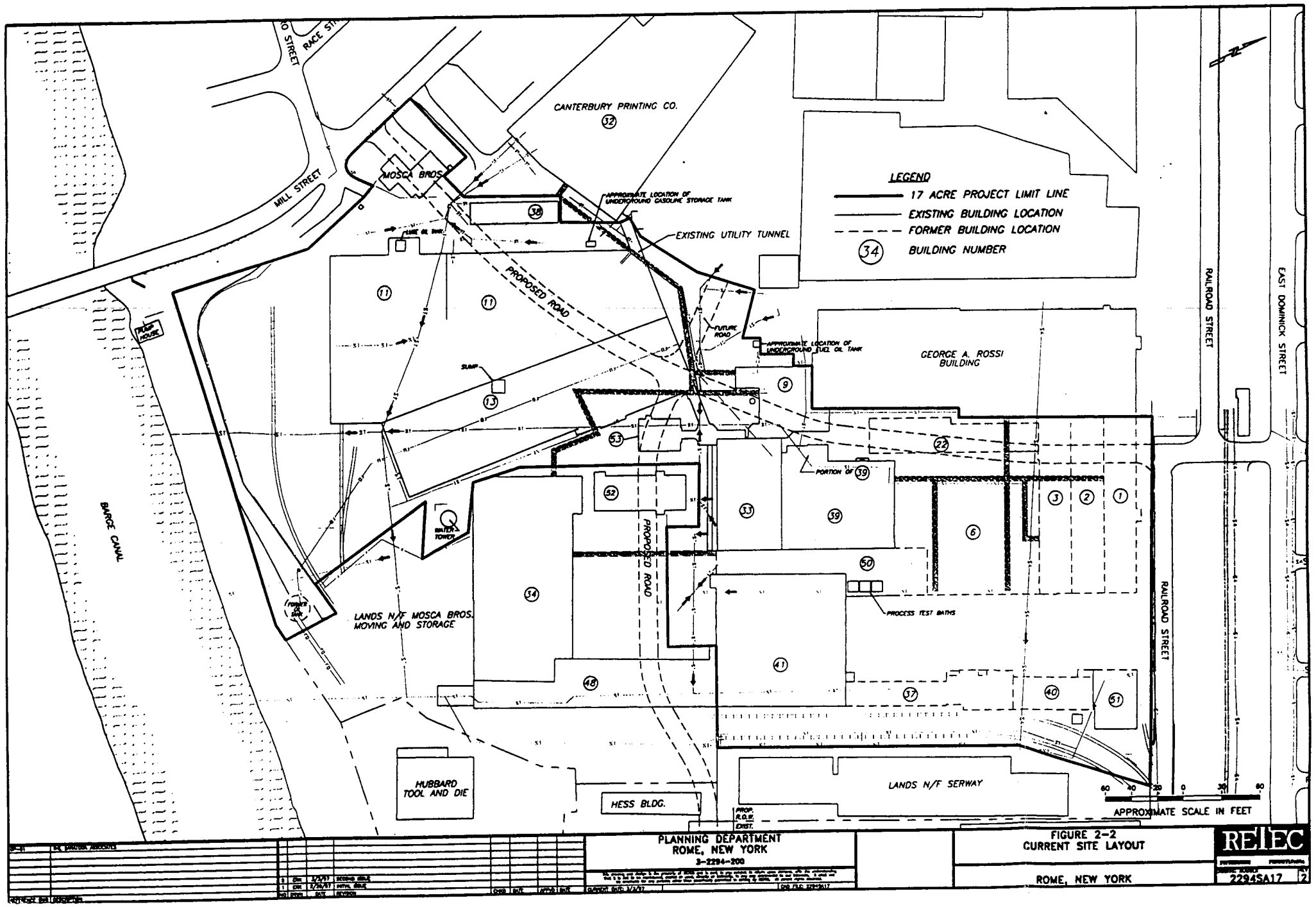
CURRENT DATE: 9/15/95 | CAD FILE: 2013-002

FIGURE 2-5
REDEVELOPMENT AREA SUBDIVISIONS

ROME, NEW YORK

RE

PITTSBURGH
DRAWING NUMBER
2013-



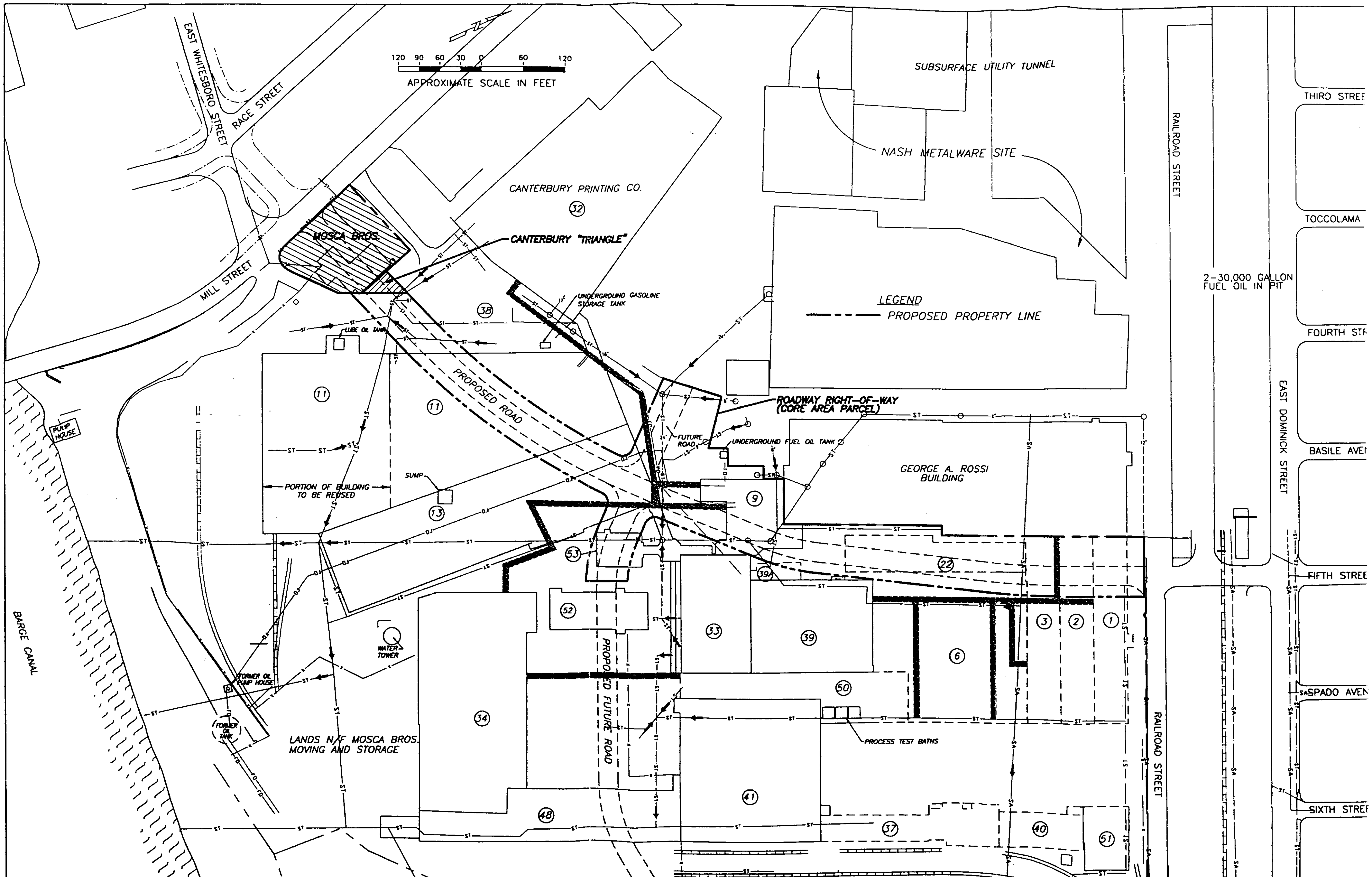
PLANNING DEPARTMENT
ROME, NEW YORK
3-2294-200

FIGURE 2-2
CURRENT SITE LAYOUT

ROME, NEW YORK

RETEC

2294SA17 REV 2



DP-91	THE SARATOGA ASSOCIATES							
		2	KEZ	5/26/97	GENERAL REVISION			
		0	ERK	5/9/97	INITIAL ISSUE			
REFERENCE DWG	DESCRIPTION	NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD DATE

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3-3270-300

CURRENT DATE: 5/26/97 | CAD FILE: 2294SA56

FIGURE 1-1
CITY ROADWAY RIGHT-OF-WAY

ROME, NEW YORK

RETEC
PITTSBURGH
DRAWING NUMBER
2294SA

LEGEND

- CB — CATCH BASIN
- MH — MANHOLE
- MW — MONITOR WEI
- SB — SOIL BORING
- TP — TEST PIT
- SS — SURFACE SOI
- DP — DIRECT PUSH
- MW — TAGM EXCEEI
- SB — TAGM EXCEEI
- SS — TAGM EXCEEI

NOTE

ALL SAMPLE LOCATIONS EXCEPT TP-N2, SB-5(1-2), SB20, SS7 AND SSB HAD AN EXCEEDANCE OF SOIL TAGMs FOR AT LEAST ONE CONSTITUENT OF INTEREST.

100 50 0 5

APPROXIMATE SCALE

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
6							
5							
4							
3							
3	MZ	8/29/97	GENERAL REVISION				
2	MZ	8/28/97	GENERAL REVISION				
1	MZ	8/18/97	DRAFT				

REFERENCE (RW) DESCRIPTION

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3-3270-300

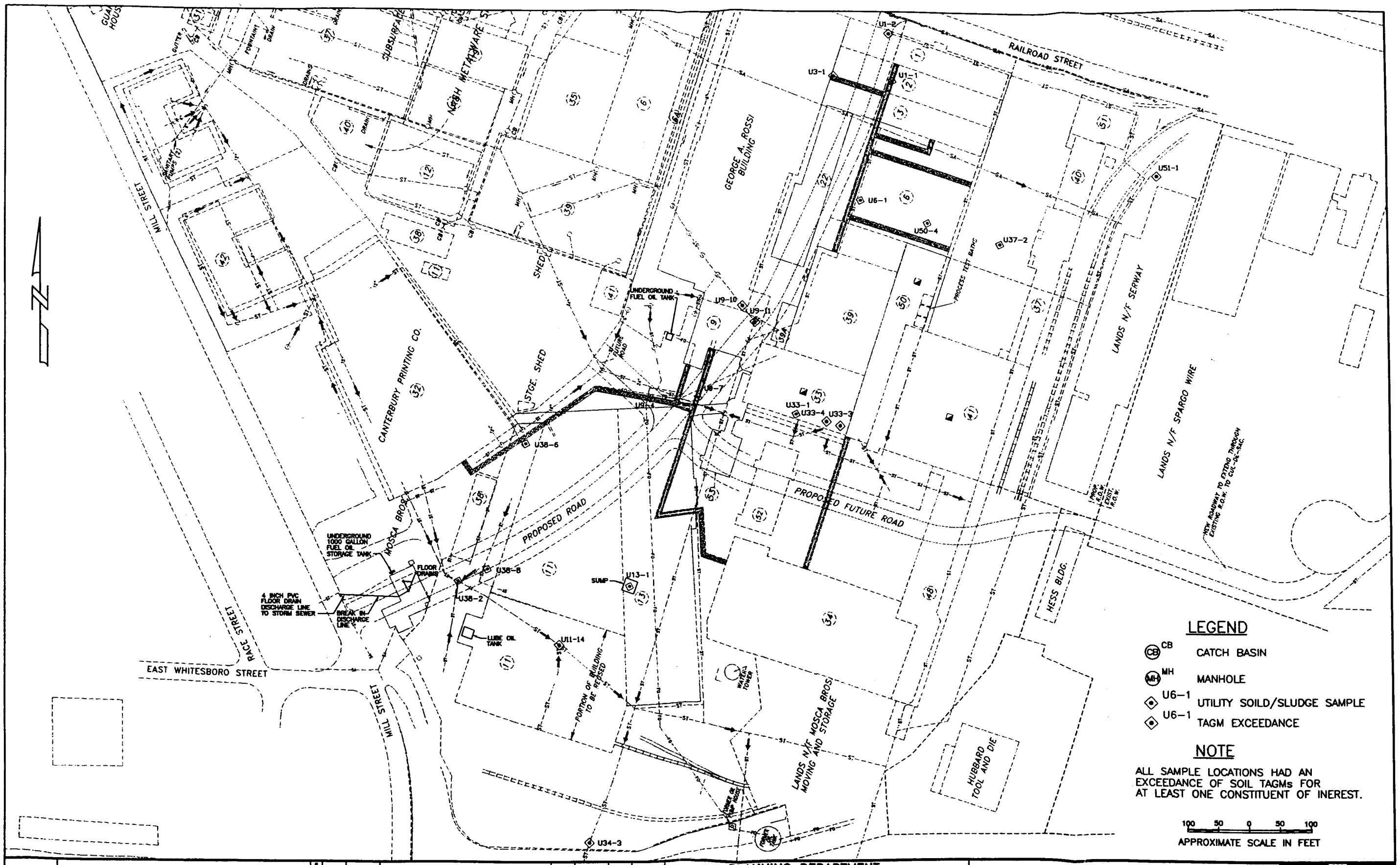
CURRENT DATE: 8/29/97 CAD FILE: 32705A08

SOIL SAMPLING LOCATIONS EXCEEDING TAGMs

FIGURE 5-3
ROME, NEW YORK

RE

DRAWING NUMBER
3270S



NO	BRNN	DATE	REVISION	CHKD	DATE	APPVD	DATE
6							
5							
4							
3							
3	BZZ	8/29/97	GENERAL REVISION				
2	BZZ	8/26/97	GENERAL REVISION				
1	BZZ	8/15/97	DRAFT				

REFERENCE DWG | DESCRIPTION

CURRENT DATE: 8/29/97 | CAD FILE: 3270SA10

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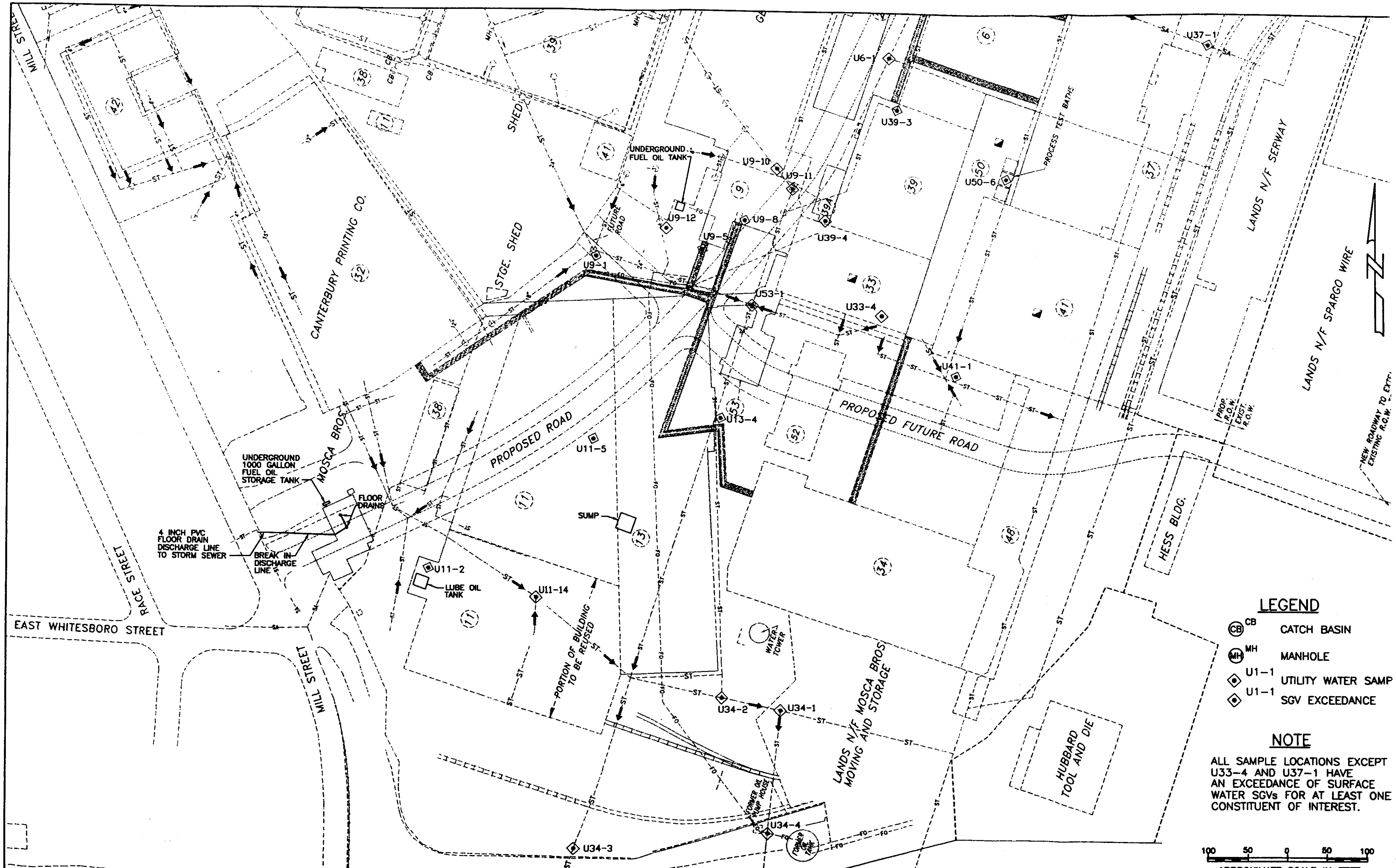
3-3270-300

UTILITY SOLID/SLUDGE SAMPLING LOCATIONS EXCEEDING TAGMs

FIGURE 5-4
ROME, NEW YORK

RETEC
CHICAGO ILLINOIS
DRAWING NUMBER 3270SA10 REV 3


LANDS N/F SPARGO WIRE
LANDS N/F SERWAY
NEW ROADWAY TO EXT. EXISTING R.O.W.
PROP. R.O.W.
EXIST. R.O.W.
HESS BLDG.
HUBBARD TOOL AND DIE
LANDS N/F MOSCA BROS MOVING AND STORAGE
WATER TOWER
FORMER OIL PUMP HOUSE
FORMER OIL TANK
PROPOSED FUTURE ROAD
PROPOSED ROAD
PROCESS TEST BATHS
CANTERBURY PRINTING CO.
STGE. SHED
SHED
FUTURE ROAD
UNDERGROUND FUEL OIL TANK
UNDERGROUND 1000 GALLON FUEL OIL STORAGE TANK
MOSCA BROS
FLOOR DRAINS
4 INCH PVC FLOOR DRAIN DISCHARGE LINE TO STORM SEWER
BREAK IN DISCHARGE LINE
SUMP
LUBE OIL TANK
PORTION OF BUILDING TO BE REUSED
EAST WHITESBORO STREET
RACE STREET
MILL STREET
U37-1
U6-1
U39-3
U50-6
U9-10
U9-11
U9-12
U9-8
U9-5
U39-4
U9-1
U53-1
U33-4
U41-1
U13-4
U11-5
U11-2
U11-14
U34-2
U34-1
U34-4
U34-3
LEGEND
CB CATCH BASIN
MH MANHOLE
U1-1 UTILITY WATER SAMP
U1-1 SGV EXCEEDANCE
NOTE
ALL SAMPLE LOCATIONS EXCEPT U33-4 AND U37-1 HAVE AN EXCEEDANCE OF SURFACE WATER SGVs FOR AT LEAST ONE CONSTITUENT OF INTEREST.
100 50 0 50 100
APPROXIMATE SCALE IN FEET

NO	DRWN	DATE	REVISION
6			
5			
4			
3			
3	IOZ	8/29/97	GENERAL REVISION
2	IOZ	8/26/97	GENERAL REVISION
1	IOZ	8/18/97	DRAFT

REFERENCE DWG | DESCRIPTION | CHKD | DATE | APPVD | DATE

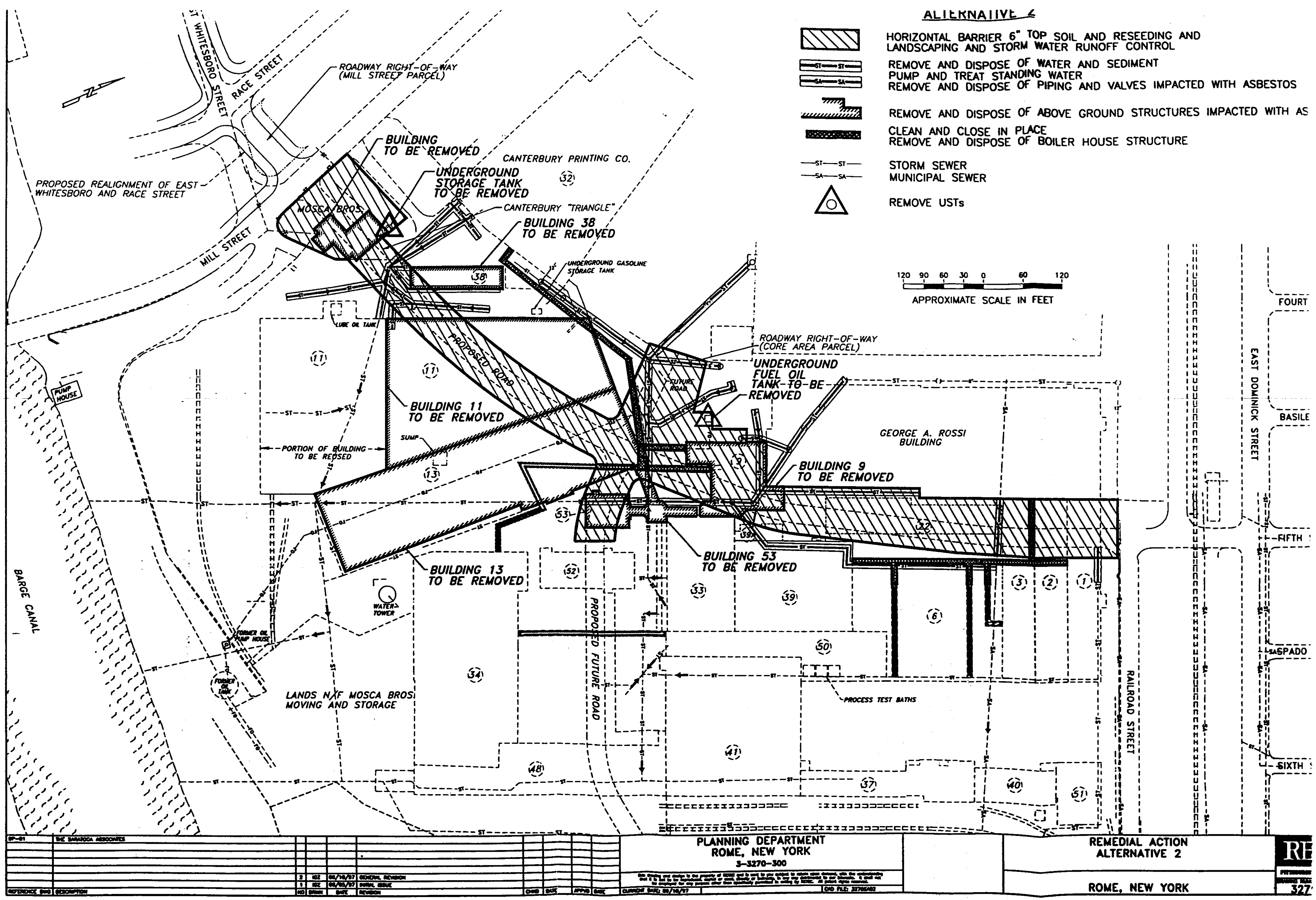
PLANNING DEPARTMENT
ROME, NEW YORK
3-3270-300

CURRENT DATE: 8/29/97 | CAD FILE: 3270SA11

UTILITY WATER SAMPLING LOCATIONS EXCEEDING CLASS "C" SURFACE WATER SGVs
FIGURE 5-5

UTILITY WATER SAMPLING LOCATIONS
ROME, NEW YORK

RETEC
3270SA11


ALTERNATIVE 2
HORIZONTAL BARRIER 6" TOP SOIL AND RESEEDING AND LANDSCAPING AND STORM WATER RUNOFF CONTROL
REMOVE AND DISPOSE OF WATER AND SEDIMENT
PUMP AND TREAT STANDING WATER
REMOVE AND DISPOSE OF PIPING AND VALVES IMPACTED WITH ASBESTOS
REMOVE AND DISPOSE OF ABOVE GROUND STRUCTURES IMPACTED WITH AS
CLEAN AND CLOSE IN PLACE
REMOVE AND DISPOSE OF BOILER HOUSE STRUCTURE
STORM SEWER
MUNICIPAL SEWER
REMOVE USTs
120 90 60 30 0 60 120
APPROXIMATE SCALE IN FEET
ROADWAY RIGHT-OF-WAY (MILL STREET PARCEL)
BUILDING TO BE REMOVED
UNDERGROUND STORAGE TANK TO BE REMOVED
CANTERBURY PRINTING CO.
CANTERBURY "TRIANGLE"
BUILDING 38 TO BE REMOVED
UNDERGROUND GASOLINE STORAGE TANK
PROPOSED REALIGNMENT OF EAST WHITESBORO AND RACE STREET
WHITESBORO STREET
RACE STREET
MILL STREET
MOSCA BROS.
LUBE OIL TANK
PROPOSED ROAD
ROADWAY RIGHT-OF-WAY (CORE AREA PARCEL)
UNDERGROUND FUEL OIL TANK TO BE REMOVED
FUTURE ROAD
GEORGE A. ROSSI BUILDING
BUILDING 9 TO BE REMOVED
BUILDING 11 TO BE REMOVED
PORTION OF BUILDING TO BE REUSED
SUMP
BUILDING 13 TO BE REMOVED
BUILDING 53 TO BE REMOVED
PUMP HOUSE
BARGE CANAL
WATER TOWER
FORMER OIL PUMP HOUSE
FORMER OIL TANK
LANDS N/F MOSCA BROS MOVING AND STORAGE
PROPOSED FUTURE ROAD
PROCESS TEST BATHS
RAILROAD STREET
EAST DOMINICK STREET
FOURT
BASILE
FIFTH
SPADO
SIXTH
PLANNING DEPARTMENT
ROME, NEW YORK
3-3270-300
REMEDIAL ACTION
ALTERNATIVE 2
ROME, NEW YORK
THE SARATOGA ASSOCIATES
GENERAL REVISION
INITIAL ISSUE
327

HORIZONTAL BARRIER 6" TOP SOIL AND RESEEDING AND LANDSCAPING AND STORM WATER RUNOFF CONTROL

REMOVE AND DISPOSE OF WATER AND SEDIMENT

REMOVE AND DISPOSE OF SEWER SYSTEMS AND BEDDING MATERIAL

REMOVE ASBESTOS AND DEMOLISH

CLEAN AND CLOSE IN PLACE

EXCAVATE SOIL HOT SPOTS

ST—ST STORM SEWER
SA—SA MUNICIPAL SEWER

REMOVE AND DISPOSE OF LARGE UNDERGROUND STRUCTURE

REMOVE USTs

120 90 60 30 0 60 120
APPROXIMATE SCALE IN FEET

WHITESBORO STREET
RACE STREET
ROADWAY RIGHT-OF-WAY (MILL STREET PARCEL)
PROPOSED REALIGNMENT OF EAST WHITESBORO AND RACE STREET
MILL STREET
BUILDING TO BE REMOVED
UNDERGROUND STORAGE TANK TO BE REMOVED
CANTERBURY PRINTING CO.
MOSCA BROS.
CANTERBURY "TRIANGLE"
BUILDING 38 TO BE REMOVED
UNDERGROUND GASOLINE STORAGE TANK
LUBE OIL TANK
PROPOSED ROAD
BUILDING 11 TO BE REMOVED
PORTION OF BUILDING TO BE REDSED
SUMP
PUMP HOUSE
ROADWAY RIGHT-OF-WAY (CORE AREA PARCEL)
FUTURE ROAD
UNDERGROUND FUEL OIL TANK TO BE REMOVED
GEORGE A. ROSSI BUILDING
BUILDING 9 TO BE REMOVED
BUILDING 53 TO BE REMOVED
BUILDING 13 TO BE REMOVED
WATER TOWER
FORMER OIL PUMP HOUSE
FORMER OIL TANK
LANDS N/F MOSCA BROS. MOVING AND STORAGE
PROPOSED FUTURE ROAD
PROCESS TEST BATHS
RAILROAD STREET
BARGE CANAL
EAST DOMINICK STREET
FOURTH
BASILE
FIFTH ST
SASPADO A
SIXTH ST

REFERENCE DWG	DESCRIPTION	NO	BY/MM	DATE	REVISION	CHKD	DATE	APP'D	DATE
EP-91	THE SARATOGA ASSOCIATES	2	KEZ	08/16/97	SECTORAL REVISION				
		1	KEZ	08/05/97	SURVAL SERVICE				

PLANNING DEPARTMENT
ROME, NEW YORK
3-3270-300

CURRENT SURV: 08/16/97 — CAD FILE: 32705A03

REMEDIAL ACTION
ALTERNATIVE 3

ROME, NEW YORK

RE

3270

ALTERNATIVE 4

HORIZONTAL BARRIER INCLUDING ASPHALT ROADWAY SIDE WALKS AND 6" TOP SOIL AND RESEEDING AND LANDSCAPING AND STORM WATER RUNOFF CONTROL

REMOVE AND DISPOSE OF WATER AND SEDIMENT

REMOVE AND DISPOSE OF SEWER SYSTEMS AND BEDDING MATERIAL

REMOVE ASBESTOS AND DEMOLISH

CLEAN AND CLOSE IN PLACE

EXCAVATE SOIL HOT SPOTS

ST — ST — STORM SEWER
SA — SA — MUNICIPAL SEWER

REMOVE AND DISPOSE OF LARGE UNDERGROUND STRUCTURE

REMOVE USTs

120 90 60 30 0 60 120
APPROXIMATE SCALE IN FEET

ST WHITESBORO STREET
RACE STREET
ROADWAY RIGHT-OF-WAY (MILL STREET PARCEL)
PROPOSED REALIGNMENT OF EAST WHITESBORO AND RACE STREET
MILL STREET
BUILDING TO BE REMOVED
CANTERBURY PRINTING CO.
UNDERGROUND STORAGE TANK TO BE REMOVED
MOSCA BROS.
CANTERBURY "TRIANGLE"
BUILDING 38 TO BE REMOVED
UNDERGROUND GASOLINE STORAGE TANK
LUBE OIL TANK
PROPOSED ROAD
PUMP HOUSE
BUILDING 11 TO BE REMOVED
PORTION OF BUILDING TO BE REUSED
SUMP
ROADWAY RIGHT-OF-WAY (CORE AREA PARCEL)
UNDERGROUND FUEL OIL TANK TO BE REMOVED
GEORGE A. ROSSI BUILDING
BUILDING 9 TO BE REMOVED
BUILDING 53 TO BE REMOVED
BUILDING 13 TO BE REMOVED
WATER TOWER
FORMER OIL PUMP HOUSE
FORMER OIL TANK
LANDS N/F MOSCA BROS MOVING AND STORAGE
PROPOSED FUTURE ROAD
PROCESS TEST BATHS
RAILROAD STREET
EAST DOMINICK STREET
FOUR
BASIL
FIFTH
SIXTH
BARGE CANAL

SP-01	THE SARATOGA ASSOCIATES									
		2	GIZ	08/18/97	GENERAL REVISION					
		1	GIZ	08/01/97	INITIAL ISSUE					
REFERENCE DWG	DESCRIPTION	NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE	

PLANNING DEPARTMENT
ROME, NEW YORK
5-3270-300

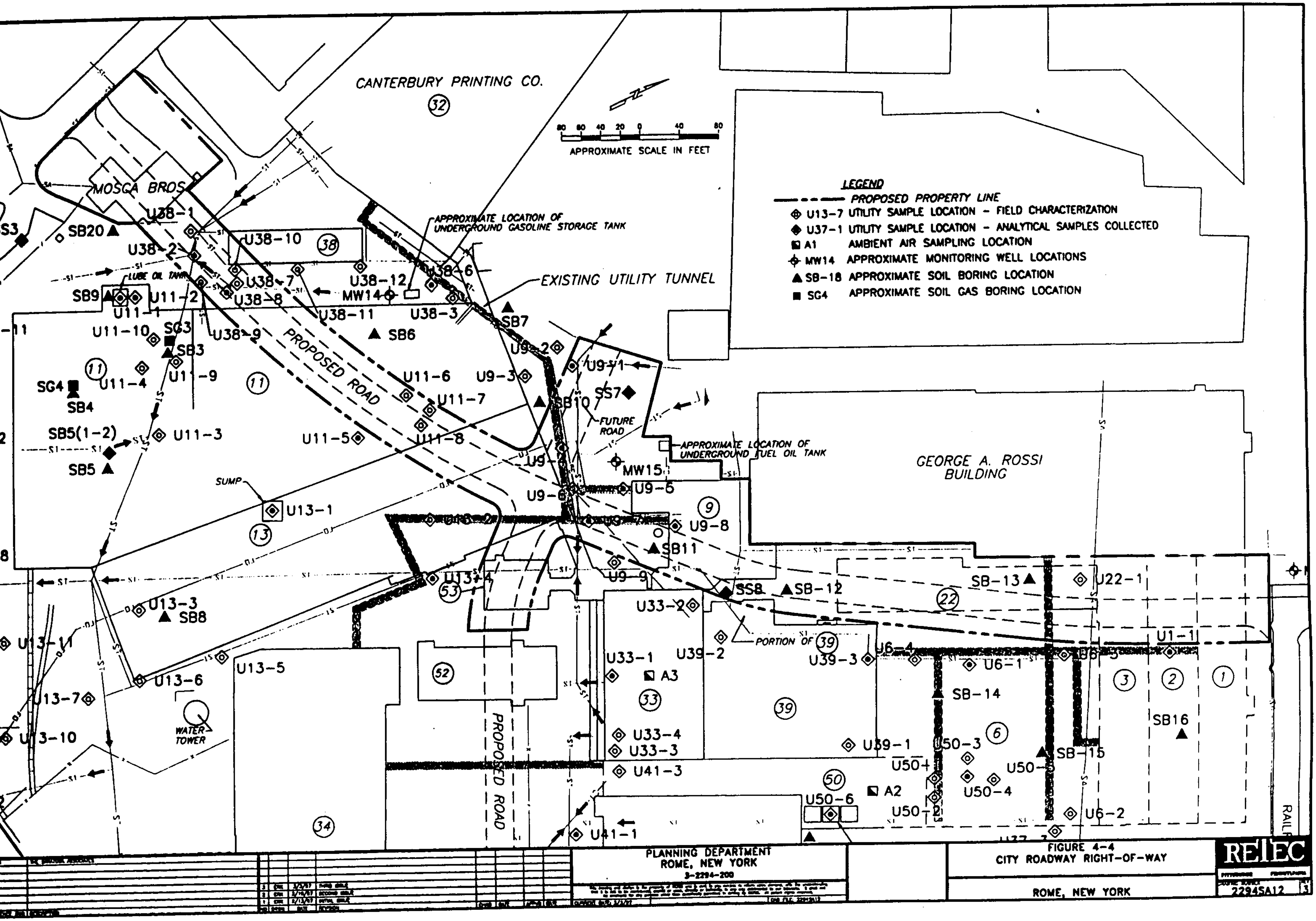
CURRENT DATE: 08/18/97 — CAD FILE: 32705404

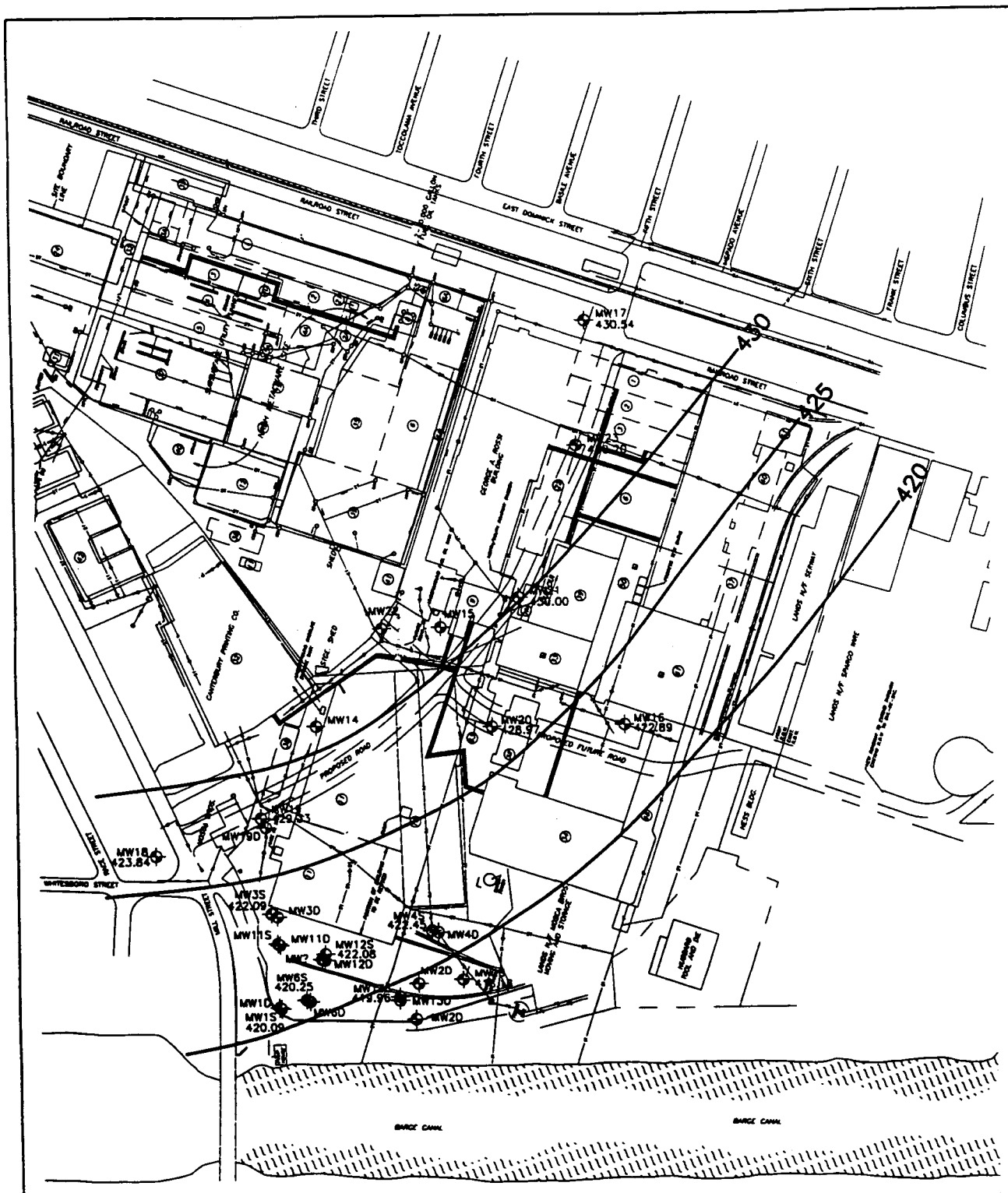
REMEDIAL ACTION
ALTERNATIVE 4

ROME, NEW YORK

R

32


CANTERBURY PRINTING CO.
APPROXIMATE SCALE IN FEET
LEGEND
PROPOSED PROPERTY LINE
U13-7 UTILITY SAMPLE LOCATION - FIELD CHARACTERIZATION
U37-1 UTILITY SAMPLE LOCATION - ANALYTICAL SAMPLES COLLECTED
A1 AMBIENT AIR SAMPLING LOCATION
MW14 APPROXIMATE MONITORING WELL LOCATIONS
SB-18 APPROXIMATE SOIL BORING LOCATION
SG4 APPROXIMATE SOIL GAS BORING LOCATION
MOSCA BROS
APPROXIMATE LOCATION OF UNDERGROUND GASOLINE STORAGE TANK
EXISTING UTILITY TUNNEL
LUBE OIL TANK
PROPOSED ROAD
FUTURE ROAD
APPROXIMATE LOCATION OF UNDERGROUND FUEL OIL TANK
GEORGE A. ROSSI BUILDING
SUMP
WATER TOWER
PORTION OF 39
PLANNING DEPARTMENT
ROME, NEW YORK
3-2294-200
FIGURE 4-4
CITY ROADWAY RIGHT-OF-WAY
ROME, NEW YORK
REIEC
2294SA12



LEGEND

MW1 — MONITOR WELL

420 — GROUNDWATER ELEVATION CONTOUR

N

0 150 300 450 600

1"=300'

NO	BY	DATE	REVISION	CHKD	DATE	APPD	DATE	CAD FILE	FIG-1		
1	RTZ	9/29/97	GENERAL REVISION								
0	RMB	9/3/97	DRAFT								
NO	BY	DATE	REVISION								

PLANNING DEPARTMENT
ROME, NEW YORK
3-3270-300

SCALE 1"=300'

WATER TABLE MAP
JULY 29, 1997

ROME, NEW YORK

REMEDIATION TECHNOLOGIES INC

FIGRUE 3-4

APPENDIX A

Appendix A - Table 1
New York State Standards, Criteria and Guidance Applications

U.S. Environmental Protection Agency (EPA)
- Toxic Substance Control Act (TSCA)
- USEPA Health Based Soil Criteria for Systemic Toxicant and Carcinogens

New York State Department of Environmental Conservation (NYSDEC)

NYSDEC - Division of Environmental Remediation
- 6NYCRR Part 375-Inactive Hazardous Waste Disposal Site Remedial Program

Hazardous Waste Technical and Administrative Guidance Memoranda (TAGMs)
- TAGM 4030 - Selection of Remedial Actions at Inactive Hazardous Waste Sites
- TAGM 4046 - Determination of Soil Cleanup Objectives and Cleanup Levels
- TAGM 4031 - Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites

NYSDEC - Division of Hazardous Substance Regulations
- 6NYCRR Part 370 - Hazardous Waste Management System - General
- 6NYCRR Part 371 - Identification and Listing of Hazardous Wastes
- 6NYCRR Part 372 - Hazardous Waste Manifest System and Related Standards for Generators, Transporter, and Facilities
- 6NYCRR Part 376 - Land Disposal Restrictions

NYSDEC - Division of Solid Waste
- 6NYCRR Part 360 - Solid Waste Management Facilities
- 6NYCRR Part 364 - Waste Transporters Permits

NYSDEC - Division of Water
- 6NYCRR Part 700-705 - Water Quality Regulations for Surface Water and Groundwater
- 6NYCRR Part 750-757 - Implementation of NYPDES in New York State
- Technical and Operation Guidelines (TOGS) 1.1.1-Ambient Water Quality Standards and Guidance Values

NYSDEC - Division of Spill Management
- STARS Memo # 1: Petroleum-Contaminated Soil Guidance Policy
- State Navigation Law - Article 12 (Oil Spill Prevention, Control and Compensation)

NYSDEC - Division of Fish and Wildlife
- Technical Guidance for Screening Contaminated Sediments (Nov 1993)

New York State Department of Labor
- 12 NYCRR Part 56-Asbestos

Occupational Safety and Health Administration
- 29 CFR 1900-1999

Appendix A - Table 2
Representative Contamination

Medium	Class	Contaminant of Concern	Concentration Range	Frequency of Exceedances	SCG *
Groundwater (Shallow)	Volatile Organic Compounds	Trichloroethene	Non Detect - 100 ppb	6 out of 14	5 ppb
		1,2-Dichloroethene	Non Detect - 31 ppb	8 out of 37	5 ppb
		Toluene	Non Detect - 6J ppb	1 out of 37	5 ppb
		Benzene	Non Detect - 2J ppb	1 out of 37	0.7 ppb
	Semi Volatile Organic Compounds	Benzo(a)anthracene	Non Detect - 0.8J ppb	2 out of 37	.0002 ppb
		Chrysene	Non Detect - 1J ppb	2 out of 37	.0002 ppb
	Polychlorinated Biphenyls	Total	Non Detect - 340 ppb	10 out of 23	0.1 ppb
	Metals	Antimony	Non Detect - 12 ppb	7 out of 14	3 ppb
		Arsenic	Non Detect - 884 ppb	3 out of 14	25 ppb
		Beryllium	Non Detect - 55.3 ppb	2 out of 14	3 ppb
		Chromium	Non Detect - 1,400 ppb	2 out of 14	50 ppb
		Copper	Non Detect - 29,500 ppb	5 out of 14	200 ppb
		Lead	Non Detect - 6,950 ppb	3 out of 14	25 ppb
		Mercury	Non Detect - 10.9 ppb	3 out of 14	2 ppb
		Zinc	Non Detect - 8,950 ppb	4 out of 14	300 ppb
Soils	Volatile Organic Compounds	Benzene	Non Detect - 170 ppb	1 out of 17	60 ppb
		Toluene	Non Detect - 17,000 ppb	1 out of 17	1500 ppb
		Xylene (total)	Non Detect - 18,000 ppb	3 out of 17	1200 ppb
	Semi Volatile Organic Compounds	Benzo(a)anthracene	Non Detect - 2,900 ppb	3 out of 17	224 ppb or MDL
		Chrysene	Non Detect - 3,300 ppb	3 out of 17	400 ppb
		Benzo(b)fluoranthene	Non Detect - 2,000 ppb	2 out of 17	1,100 ppb
		Benzo(k)fluoranthene	Non Detect - 2,000 ppb	2 out of 17	1,100 ppb
		Benzo(a)pyrene	Non Detect - 2,600 ppb	4 out of 17	61 ppb or MDL
		Benz(a,h)anthracene	Non Detect - 1,200 ppb	2 out of 17	14 ppb or MDL
Utility Sludges and Sediments	Semi Volatile Organic Compounds	Acenaphthene	Non Detect - 130,000 ppb	2 out of 15	50,000 ppb
		Benzo(a)anthracene	Non Detect - 7,700 ppb	10 out of 15	224 ppb or MDL
		Chrysene	Non Detect - 12,000 ppb	10 out of 15	400 ppb
		Benzo(b)fluoranthene	Non Detect - 12,000 ppb	10 out of 15	1,100 ppb
		Benzo(k)fluoranthene	Non Detect - 12,000 ppb	10 out of 15	1,100 ppb
		Benzo(a)pyrene	Non Detect - 6,400 ppb	13 out of 15	61 ppb or MDL

Appendix A - Table 2
Representative Contamination

Medium	Class	Contaminant of Concern	Concentration Range	Frequency of Exceedances	SCG *
Utility Sludges and Sediments (Continued)	Polychlorinated Biphenyls	Total	Non Detect - 750 ppm	8 out of 15	1 ppm
	Metals	Antimony	Non Detect - 345 ppm	6 out of 8	6 ppm
		Arsenic	Non Detect - 60.6 ppm	6 out of 8	12 ppm
		Beryllium	Non Detect - 3.2 ppm	5 out of 8	0.419 ppm
		Chromium	Non Detect - 303 ppm	5 out of 8	27 ppm
		Copper	Non Detect - 10,400 ppm	4 out of 8	4,770 ppm
		Lead	Non Detect - 4,780 ppm	6 out of 8	607 ppm
		Mercury	Non Detect - 38.9 ppm	7 out of 8	0.10 ppm
		Nickel	Non Detect - 115 ppm	5 out of 8	44 ppm
Utility Water	Volatile Organic Compounds	Benzene	Non Detect - 91 J ppb	1 out of 8	6 ppb
	Semi Volatile Organic Compounds	Benzo(a)pyrene	Non Detect - 19 J ppb	3 out of 11	0.0012 ppb
	Polychlorinated Biphenyls	Total	Non Detect - 5.6 ppb	8 out of 11	0.001 ppb
	Metals	Copper	Non Detect - 1,950 ppb	6 out of 11	7 ppb
		Lead	Non Detect - 1,220 ppb	6 out of 11	1.3 ppb
		Mercury	Non Detect - 4.4 ppb	1 out of 11	0.2 ppb
		Zinc	Non Detect - 1,260 ppb	5 out of 11	30.0 ppb

* SCG's for groundwater is standard in 6NYCRR Part 703
SCG's for soil is objectives in NYSDEC TAGM 4046
SCG's for metals in soils are based on average site background
SCG's for sludges and sediments in sewers is NYSDEC TAGM 4046 and USEPA Toxic Substance Control Act (TSCA)
SCG's for utility water is standard in 6 NYCRR Part 703

Appendix A - Table 3
Old General Cable - Road Right-of-Way
Remedial Alternative Costs

Remedial Alternative	Capital Costs	Annual O&M	Total Present Worth
Alternative # 1 No Action	$ 24,000.00	Year 1 - $ 15,200 Years 2-30 - $ 3,800	$ 120,000.00
Alternative # 2 Limited Action	$ 1,300,000.00	0.00	$ 1,300,000.00
Alternative # 3	$ 2,100,000.00	0.00	$ 2,100,000.00
Alternative # 4	$ 2,700,000.00	0.00	$ 2,700,000.00

***Note**: Present Worth Value is based upon a 5 % Present Work Factor using continuous compounding.*

APPENDIX B

Administrative Record
Old General Cable Site, East Rome Development Project
Road Right-of-Way

Title of Document	Author	Date
Phase II Environmental Site Assessment for Independent Power Plant, Rome, New York	Empire Soils Investigations, Inc., Division	September 1991
Contaminated Source Investigation Proposed Independent Power Plant Rome, New York	Huntingdon, Empire Soils Investigations, Inc., Division	January, 1993
Phase I Environmental Site Assessment City of Rome Industrial Redevelopment Area, Rome, New York	RETEC	October, 1995
Limited Phase II Environmental Investigation, Former General Cable Property, Rome, New York	RETEC	February, 1996
USEPA - Brownfield Economic Redevelopment Initiative for the East Rome Industrial Redevelopment Project.	USEPA	March 4, 1996
Site Specific Health and Safety Plan for the Former General Cable Site, Rome, New York	RETEC	September 10, 1996
Work Plan for a Limited Subsurface Investigation to Support Commercial/Industrial Redevelopment of the Former General Cable Manufacturing Site, Rome, New York	RETEC	September, 1996
East Rome Business Park Environmental Assessment Form	RETEC	November 19, 1996
Voluntary Agreement for the Implementation of a Focused Investigation of a Site Known as the East Rome Business Park, Rome, New York	NYSDEC - Charles Gaetano	Executed December 6, 1996
Citizen Participation Plan, East Rome Industrial Redevelopment Project, Rome, New York	RETEC	March, 1997
Phase II Investigation of the East Rome Business Park Core Area, Rome, New York	RETEC	March 4, 1997
Phase II Investigation of the East Rome Business Park Core Area, Rome, New York, Appendix E (continued)	RETEC	March 7, 1997
Phase II Investigation of the East Rome Business Park Core Area, Rome, New York, Appendix E	RETEC	March 7, 1997
Attachment 5 - Work Plan for a Site Investigation/ Remedial Alternatives Report, Road Right-of-Way, east Rome Business Park, Rome, New York	RETEC	April, 1997

Detailed Budget for the Site Investigation/ Remedial Alternatives Report, Road Right-of-Way, east Rome Business Park, Rome, New York	RETEC	April, 1997
East Rome Business Park, City of Rome, NYSDEC - 1996 Clean Water/Clean Air Bond Act Environmental Restoration Projects - Title 5	RETEC & Saratoga Associates	April 24, 1997
Field Sampling and Analysis Plan Roadway Right-of-Way, Rome, New York	RETEC	May, 1997
Quality Assurance/Quality Control Plan fro Brownfield Development Pilot Program, East Rome Business Park, Rome, New York	RETEC	May, 1997
Environmental Conditions Report Nash Metalware Site, Rome, New York	RETEC	June 25, 1997
Phase II Investigation of the East Rome Business Park Core Area, Rome, New York (REVISED)	RETEC	July, 1997
Quality Assurance/Quality Control Plan for the Brownfield Development Pilot Program, East Rome Business Park, Rome New York, USEPA	RETEC	August, 1997
Site Investigation Report, RROW, East Rome Business Park	RETEC	September, 1997