

SECTION 8.0

Additional Services - Phase II Site Investigation

Whitestone conducted Phase II Site Investigation (SI) field activities at the subject property on September 22, 2004 to evaluate subsurface conditions in the vicinity of the existing dry-cleaning facility located on site. During the Phase II SI, Whitestone advanced five geoprobe borings to obtain subsurface soil and groundwater samples for laboratory analyses. A summary of Whitestone's findings, conclusions, and recommendations associated with these efforts is presented below.

8.1 SCOPE OF WORK AND LIMITATIONS

The primary goal of this Phase II SI was to preliminarily establish subsurface environmental conditions through the collection and analyses of soil and groundwater samples prior to site redevelopment and to determine if on-site conditions have been adversely impacted by historic site use. This Phase II SI was not intended to be an exhaustive evaluation of subsurface conditions at the subject property. Specifically, the Phase II SI activities included:

- ▶ installing five soil borings with Geoprobe drilling equipment to facilitate soil screening and select sample collection;
- ▶ logging and screening soil samples for visible evidence of contamination;
- ▶ installing one temporary wellpoint to facilitate groundwater sample collection; and
- ▶ submitting select soil and groundwater samples for laboratory analyses.

8.2 SAMPLING METHODOLOGY

8.2.1 Geoprobe Investigation

A total of five borings (B-1 through B-5) were advanced utilizing a truck-mounted, hydraulically-driven Geoprobe sampling unit subcontracted from Zebra Environmental Corporation (Zebra). The borings were advanced by driving a two-inch diameter by four-foot long macro-core sampler through the soil profile. Soil samples were forced into the tube as the sampler was advanced. The soil cores were screened with a PID to identify potential concentrations of volatile organic compounds (VOCs). The soil interval displaying the highest PID reading or visible evidence of contamination was targeted for laboratory analyses. Sampling equipment was decontaminated between successive uses. Boring logs are provided in Appendix 8.

Groundwater sample 7166-B1-GW was collected from boring B-1 by drilling beneath the groundwater table with a macro-core sampler and installing a temporary PVC screen. Dedicated polyethylene tubing was then lowered to the water table, and a groundwater sample was drawn to the surface for containerization.

Four soil samples were collected from Geoprobe borings B-1, B-2, B-4, and B-5 and submitted to Integrated Analytical Laboratories, L.L.C. (IAL) of Randolph, New Jersey. The soil samples collected from the borings were analyzed for volatile organic compounds (VOCs) by USEPA Method 8260 and semi-volatile organic compounds (SVOCs) by USEPA Method 8270. The groundwater sample collected from the PVC screen installed in boring B-1 was submitted to IAL for VOC analyses. Preliminary analytical results comprise Appendix 9 and are summarized in Table 1 (Soil Boring Installation & Sampling Summary), Table 2 (Soil Sampling & Analyses Data Summary), and Table 3 (Groundwater Sampling & Analyses Data Summary). The Site Location Map is attached as Figure 1, and sample locations are shown on Figure 4 (Soil Boring Location Plan).

Contaminant concentrations exhibited within soil samples were compared to New York State Department of Environmental Conservation (NYSDEC) Recommended Soil Cleanup Objectives (RSCOs). Groundwater contaminant concentrations were compared to the NYSDEC's groundwater standards/criteria. A summary of the soil and groundwater sampling is presented below.

8.3 SOIL SAMPLING AND ANALYSIS DATA SUMMARY

8.3.1 Sampling Strata

Five soil borings were installed utilizing truck-mounted, hydraulically-driven Geoprobe drilling equipment subcontracted from Zebra to depths of approximately 12.0 feet below ground surface (fbgs). Materials encountered in the borings included:

Surficial Material: Soil borings B-1, B-2, B-4, and B-5 were installed through the eastern asphalt-paved alley of the site and encountered approximately one foot of asphalt pavement and stone subbase. Soil boring B-3 was not installed at the subject property.

Fill Material: Fill material encountered in the soil borings installed throughout the site (B-1, B-2, B-4, and B-5) consisted of variable amounts of brown and orange/brown silt, fine to coarse sand, silty clay, and gravel at depths ranging from approximately 1.0 fbgs to 5.5 fbgs. In addition, brick fragments were encountered in soil boring B-2 at depths ranging from 1.0 fbgs to 2.0 fbgs.

Native Material: Native materials were observed in soil borings B-1, B-2, B-4, and B-5. The native soil consisted of brown and orange-brown medium to coarse sand at depths ranging from approximately 5.5 fbgs to 12.0 fbgs. Additionally, these borings encountered black stained medium to coarse sand at depths ranging from 10.0 fbgs to 12.0 fbgs.

Groundwater: Static groundwater was encountered within the soil profile at a depth of approximately 9.0 fbg in soil borings installed during the SI.

8.3.2 Laboratory Analysis Data Summary

8.3.2.1 Current and Historic Dry Cleaning Operations

Soil borings B-1, B-2, B-4, and B-5 were installed in the northeastern portion of the subject site behind the site building. Soil boring B-3 was not installed at the subject property during this SI. Elevated PID readings were observed in soil boring B-1 and B-5 and visual/olfactory evidence indicative of petroleum contamination were observed in soil borings B-1, B-2, B-4, and B-5. A maximum PID reading of 54.0 parts per million (ppm) and petroleum-like odors were detected in the 10.0 fbg to 12.0 fbg black-stained interval in soil boring B-1, and soil sample 7166-B1 was retained from a depth of 10.0 fbg to 10.5 fbg. Additionally, a maximum PID reading of 20 ppm and petroleum-like odors were observed in the 11.7 to 12.0 fbg black stained interval in soil boring B-5. Accordingly, soil sample 7166-B5 was retained from the 11.5 fbg to 12.0 fbg interval.

Although visual/olfactory evidence indicative of petroleum contamination was observed in soil borings B-1 B-2, B-4, and B-5, laboratory analyses of soil samples 7166-B1 did not detect VOCs or SVOCs above laboratory method detection limits (MDLs). Soil samples 7166-B2 and 7166-B5 did not detect VOCs above laboratory MDLs, however, laboratory analyses of soil sample 7166-B2 detected a select SVOC, phenanthrene, at a concentration of 0.181 ppm. This concentration is above laboratory MDL but does not exceed NYSDEC RSCO of 50.0 ppm for phenanthrene. Soil sample 7166-B5 also detected select VOCs, ethylbenzene and total xylenes, at concentrations of 0.111 ppm and 0.163 ppm, respectively. These levels do not exceed NYSDEC RSOCs of 5.5 ppm for ethylbenzene and 1.2 ppm for total xylenes. Laboratory analysis of soil sample 7166-B4 detected a select VOC, tetrachloroethane, at a concentration of 0.067 ppm. This concentration is above laboratory MDL but below the NYSDEC RSCO of 1.4 ppm for tetrachloroethane.

In addition, select SVOCs, including phenanthrene, fluoranthene, pyrene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, ideno[1,2,3-cd]pyrene, and benzo[g,h,i]perylene were detected in soil sample 7166-B4 above laboratory MDLs at concentrations of 0.144 ppm, 0.338 ppm, 0.281 ppm, 0.265 ppm, 0.228 ppm, 0.217 ppm, 0.162 ppm, and 0.195 ppm, respectively. These concentrations do not exceed NYSDEC RSCOs of 50.0 ppm for phenanthrene, fluoranthene, pyrene, and benzo[g,h,i]perylene; 0.4 ppm for chrysene; 1.1 ppm for benzo[b]fluoranthene and benzo[k]fluoranthene; and 3.2 ppm for ideno[1,2,4-cd]pyrene. Laboratory analyses of soil sample 7166-B4 also detected select SVOCs including benzo[a]anthracene and benzo[a]pyrene at concentrations of 0.242 ppm and 0.244 ppm, respectively. These concentrations exceed NYSDEC RSCOs of 0.224 ppm and 0.061 ppm for benzo[a]anthracene and benzo[a]pyrene, respectively.

Groundwater samples 7166-B1-GW was collected from soil boring B-1. Laboratory analyses of groundwater sample 7166-B1-GW detected vinyl chloride, benzene, trichloroethene, and tetrachloroethene at concentrations of 2.87 parts per billion (ppb), 3.55 ppb, 88.3 ppb, and 134.0 ppb, respectively. These levels exceed the NYSDEC groundwater standard/criteria of 2.0 ppb for vinyl chloride, 0.7 ppb for benzene, 5.0 ppb for trichloroethene, and 5.0 ppm for tetrachloroethene. Additionally, laboratory analyses of groundwater sample 7166-B1-GW detected chloromethane, methly-t-butyl-ether (MTBE), and toluene at concentrations of 6.04 ppb, 0.357 ppb, and 3.41 ppb, respectively. However, these concentrations are below NYSDEC standards of 50.0 ppb for chloromethane, 10.0 ppb for MTBE, and 5.0 ppb for toluene.

TABLE 1
SOIL BORING INSTALLATION & SAMPLING SUMMARY
Proposed Commerce Bank Site
Smith Street and Purchase Street
Rye, Westchester County, New York

Boring Number	Soil Sample Intervals (fbgs)	Total Depth (fbgs)	Depth to Groundwater (fbgs)	Maximum PID Reading (ppm)
7166-B1	10.0 to 10.5	12.0	9.0	54
7166-B2	10.5 to 11.0	12.0	9.0	0.0
7166-B4	8.5 to 9.0	12.0	9.0	0.0
7166-B5	11.5 to 12.0	12.0	9.0	20

NOTES:

PID Photoionization Detector
fbgs feet below ground surface
ppm parts per million

TABLE 2
SOIL SAMPLING & ANALYSES DATA SUMMARY
Proposed Commerce Bank Site
Smith Street and Purchase Street
Rye, Westchester County, New York

Sample Number	VOCs Detected Above MDLs (ppm)	SVOCs Detected Above MDLs (ppm)
7166-B1	ND	ND
7166-B2	ND	Phenanthrene- 0.181
7166-B4	Tetrachloroethene- 0.067	Phenanthrene- 0.144 Fluoranthene- 0.338 Pyrene- 0.281 Benzo[a]anthracene- 0.242 Chrysene- 0.265 Benzo[b]fluoranthene- 0.228 Benzo[k]fluoranthene- 0.217 Benzo[a]pyrene- 0.244 Ideno[1,2,3-cd]pyrene- 0.162 Benzo[g,h,i]perylene- 0.195
7166-B5	Ethylbenzene- 0.111 Total Xylenes- 0.163	ND

NOTES:

- [**BOLD**] Exceeds NYSDEC groundwater standard/criteria
- VOCs Volatile Organic Compounds
- SVOCs Semi-Volatile Organic Compounds
- MDLs Laboratory Method Detection Limits
- ppm parts per million
- ND Not detected above laboratory MDLs

TABLE 3
GROUNDWATER SAMPLING & ANALYSES DATA SUMMARY
Proposed Commerce Bank Site
Smith Street and Purchase Street
Rye, Westchester County, New York

Sample Number	VOCs Detected Above MDLs (ppb)
7166-B1-GW	Chloromethane- 6.04 Vinyl Chloride- 2.87 Methyl-t-Butyl Ether (MTBE)- 0.357 Benzene- 3.55 Trichloroethene (TCE)- 88.3 D Toluene- 0.445 Tetrachloroethene- 134.0 D

NOTES:

- [**BOLD**] Exceeds NYSDEC groundwater standard/criteria
- VOCs Volatile Organic Compounds
- MDLs Laboratory Method Detection Limits
- ppb parts per billion
- D The compound was reported from the Diluted analysis

SECTION 9.0

Findings, Conclusions, and Recommendations

Whitestone Associates, Inc. has performed a Phase I Environmental Site Assessment in general accordance with the scope and limitations of ASTM Standard Practice E1527-00 and the conditions of Section 2.2 of this report of the proposed Commerce Bank site located at 38 and 40 Purchase Street, Rye, Westchester County, New York. Phase I ESA activities identified several recognized environmental conditions (RECs) which warrant further consideration. These RECs and suggestions for their further investigation or remediation are outlined below.

9.1 OPINION - PHASE I ENVIRONMENTAL SITE ASSESSMENT

9.1.1 Summary of RECs

This assessment has revealed evidence of *recognized environmental conditions* (RECs) in connection with the subject property including the following:

- ▶ Subsurface soil and groundwater contamination above New York State Department of Environmental Conservation (NYSDEC) standards have been identified at the subject property. These conditions are suspected to be associated with the historic and current on-site dry cleaning operations. These conditions should be reported to NYSDEC by the site owner and supplemental site investigation and potential remediation will be required. Whitestone understands that Commerce Bank will not be responsible for documented contaminant conditions and will not be conducting earthwork activities as part of the proposed building renovation activities.

Recommendations for further investigation and/or remediation of each of these RECs are outlined in Section 9.3.

9.1.2 Limited Evaluation of Business Environmental Risk

Items that are not identified as RECs and do not warrant further investigation, however, may require limited corrective action include the following:

- ▶ As detailed in this report, laboratory analyses of the bulk samples collected as part of the asbestos survey confirmed asbestos present at concentrations equal to or greater than one percent in approximately 300 square feet of transite soffit on the exterior facade of the building; approximately 3,000 square feet of black floor tile (bottom layer) in the dry cleaning facility; approximately 400 square feet coating material on the ceiling in the basement of the dry cleaning facility; approximately 300 square feet roof flashing on the building; and approximately 100 square feet of miscellaneous tar on the roof of the building.

The identified ACM must be abated prior to proposed building demolition. Whitestone recommends direct negotiation with select, quality contractors who are properly licensed, bonded and insured for asbestos abatement. Full monitoring, inspection and documentation of abatement activities by an experienced industrial hygiene firm will aid in ensuring compliance with health and safety codes. Prior to commencing abatement activities, intrusive evaluation beneath fixed units within the building (under counters, refrigeration units, fixed equipment, behind walls, above ceilings, etc.) may be warranted to confirm or refute the presence of ACM in previously inaccessible spaces.

- ▶ Hazardous/potentially hazardous materials including dry-cleaning solvent, bleach, etc. are used and stored on site. These materials were stored in an environmentally sound fashion with no evidence of release. Prior to site redevelopment activities, potentially hazardous materials should be removed from the site by the current site owners and disposed/recycled accordingly.
- ▶ Sites developed prior to 1980 may house oil-filled electrical, mechanical, hydraulic, or heat transfer equipment and/or fluorescent light ballasts containing polychlorinated biphenyls (PCBs). Suspect PCB equipment observed included fluorescent light ballasts situated throughout the site building. Suspect equipment should be evaluated for PCBs and removed/disposed accordingly.
- ▶ Structures pre-dating 1980 may be coated with lead based paints (LBP). Although delaminating, peeling painted surfaces were not identified on site, based on the age of the site building (constructed sometime prior to 1892), LBP should be anticipated. Although lead abatement may not be required, regulated management of demolition/renovation wastes may be warranted.
- ▶ The site building currently is connected to the municipal sanitary sewer system. The date that the site was connected to the sanitary sewer system was not readily available, however, based on the age of the site building (constructed between 1887 and 1892), it is possible that the site was formerly serviced by an on-site septic system. No evidence of a septic system was observed during the site reconnaissance, however, it is possible that components of a previous septic system are present on site. Any septic system which may be encountered during site redevelopment will require proper closure in accordance with local regulations.
- ▶ Based on the findings of Whitestone's Phase II Site Investigation activities conducted on September 22, 2004, the subject property is underlain by approximately 4.5 feet of fill material at depths ranging from approximately 1.0 fbs to 5.5 fbs. This fill material generally consisted of variable amounts of brown and orange/brown silt, fine to coarse sand, silty clay, and gravel at depths ranging from approximately 1.0 fbs to 5.5 fbs. In addition, brick fragments were encountered in soil boring B-2 at depths ranging from 1.0 fbs to 2.0 fbs. Evidence of contamination (odor or staining) was not observed within this material. In the event that soil/fill material is excavated during site redevelopment activities and this material exhibits evidence of contamination or is documented to be contaminated, this material should be separated and stockpiled for subsequent waste characterization and off-site disposal or recycling in accordance with federal and state waste management regulations unless contaminant concentrations or institutional controls allow such material to be replaced or remain on-site.
- ▶ Two sumps were observed in the basement portion of the site building. One sump is located in the basement of Fashion Nails II and the second sump is located in the basement of Belle Laundry and

Cleaners. These sumps reportedly discharge to the municipal sanitary sewer system. These sumps should be properly closed in conjunction with the proposed demolition of this building.

- ▶ Based on the number of listed contaminated sites located within close proximity to the subject property, adverse impact to subsurface conditions at the subject property due to contaminant migration from these off-site sources is possible. However, future property owner/tenants would not be liable for contaminant conditions emanating from off-site sources.

9.2 OPINION - PHASE II SITE INVESTIGATION

The primary goal of this Phase II SI was to preliminarily establish subsurface environmental conditions through the collection and analyses of soil and groundwater samples to determine if on-site conditions have been impacted by historic and current site uses. A summary of the findings of this limited SI are summarized as follows:

- ▶ Petroleum-like odors and staining were observed within soil borings B-1 through B-5 installed in the vicinity of the existing dry cleaning operation located at 40 Purchase Street;
- ▶ Laboratory analyses of groundwater sample 7166-B1-GW exhibited select volatile organic compound (VOC) concentrations above New York State Department of Environmental Conservation (NYSDEC) Groundwater Standards/Criteria;
- ▶ Laboratory analyses of soil sample 7166-B4 exhibited select SVOC concentrations above the NYSDEC Recommended Soil Cleanup Objectives (RSCOs); and
- ▶ Laboratory analyses of soil samples 7166-B2, 7166-B4, and 7166-B5 exhibited select VOC and/or SVOC constituents above the laboratory method detection limit (MDL), however, the concentrations did not exceed the applicable NYSDEC RSCOs.

9.3 CONCLUSIONS AND RECOMMENDATIONS

The following activities are recommended to address the RECs listed in Section 9.1.1.

- ▶ Prior to execution of the lease, reliance or verification should be obtained to ensure that the site owner will be responsible for continued management of environmental liabilities associated with the subject property subsequent to execution of the proposed lease.
- ▶ The soil and groundwater contaminant conditions identified above must be reported to NYSDEC by the site owner. These conditions will require additional monitoring, delineation, reporting, and potential remediation in accordance with NYSDEC requirements. Whitestone understands that Commerce Bank will not be responsible for the documented contaminant conditions and will not be conducting earthwork activities as part of the proposed building renovation activities.
- ▶ The appropriate state and federal agencies should be contacted to confirm that all appropriate documents have been filed and maintained for on-site generation of hazardous wastes. Upon

property transfer, the United States Environmental Protection Agency (USEPA) *Notification of Hazardous Waste Activities Form* should be completed and submitted to USEPA to remove the subject site from the RCRIS SQG database. If available, documentation detailing past hazardous waste generation and disposal practices should be provided by the site owner for review.

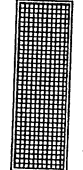
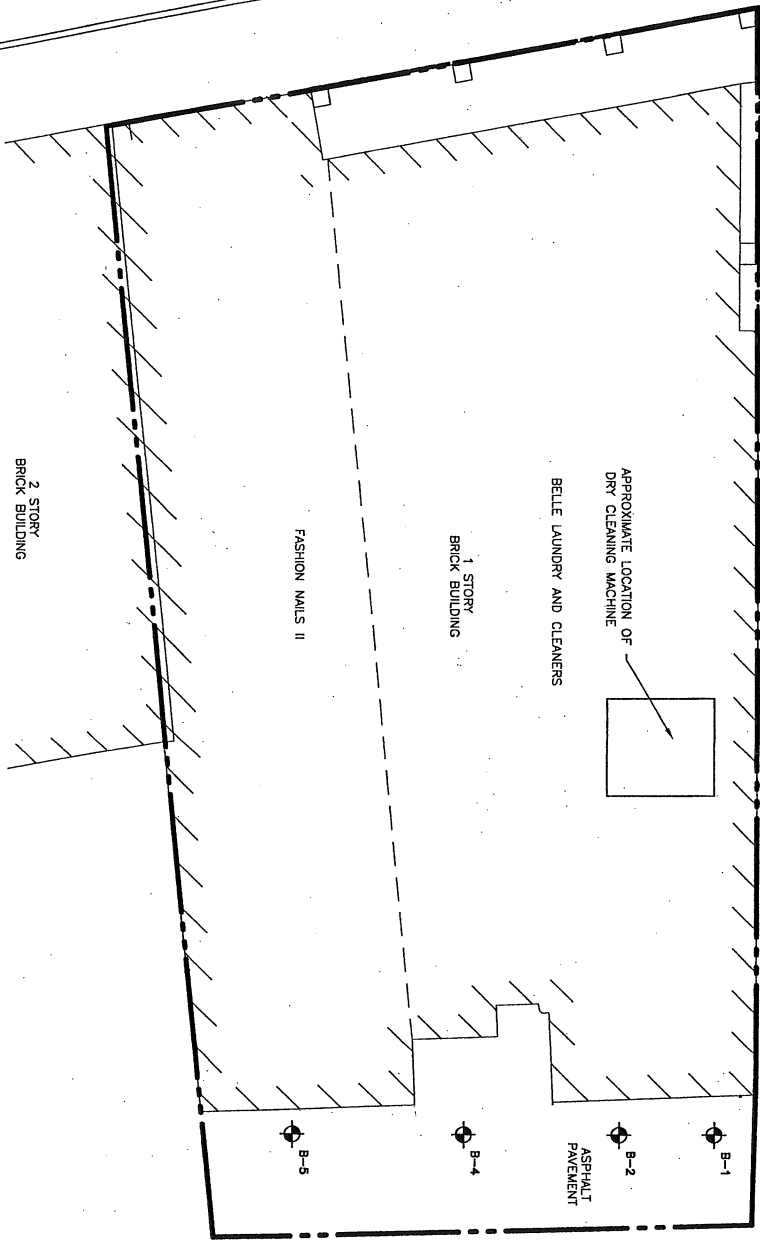
9.4 DEVIATIONS

Whitestone has performed a Phase I Environmental Site Assessment of the subject property in conformance with the scope and limitations of ASTM Practice E1527-00.

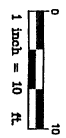
9.5 REFERENCES

1. American Society of Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E1527-00).
2. Aerial Photographs provided by Environmental Data Resources, Inc. (EDR) for the years 1954, 1966, 1974, 1989, and 1994.
3. Sanborn Fire Insurance Maps for the years 1910, 1916, 1925, 1932, 1942, 1949, and 1971.
4. United States Geological Survey (USGS) *7.5 Minute Topographic Quadrangle - Mamaroneck, New York* dated 1900, 1947, and 1967.
5. *EDR - Radius Map, Belle Laundry and Cleaners, 40 Purchase Street, Rye, New York 10580*, prepared by Environmental Data Resources, Inc., dated August 17, 2004.
6. *EDR - City Directory, Belle Laundry and Cleaners, 40 Purchase Street, Rye, New York 10580*, prepared by Environmental Data Resources, Inc., dated August 19, 2004.
7. U.S. Fish and Wildlife Services *National Wetlands Inventory Interactive Wetlands Database Map*.
8. *ALTA/ASCM Land Title Survey, Commerce Bank/Pennsylvania, N.A., 364-370 White Plains Road, Lots 2 & 4, Block 1, Section 66L, Town of Eastchester, Westchester County, New York* prepared by Control Point Associates, Inc. dated September 2, 2004.
9. *Subsurface Investigation Summary Letter, 40 Purchase Street, Rye, New York 11580* prepared by Merritt Engineering Consultants, P.C. dated July 13, 2001.
10. United States Environmental Protection Agency (USEPA), Asbestos Hazard Emergency Response Act (AHERA), Final Rule and Notice (40 CFR Part 763).
11. USEPA, *Guidance for Controlling Asbestos Containing Materials in Buildings* (Office of Pesticides and Toxic Substances, Doc. No. 560/3-85-024, 1985).
12. Part 56 of Title 12 of the Official Compilation of Codes, Rules and Regulations of the State of New York (12 NYCRR Part 56).

PURCHASE STREET



SMITH STREET



LEGEND

— SUBJECT PROPERTY BOUNDARY (APPROX.)

- - - BORING LOCATION (APPROX.)

◆ B-1 BORING LOCATION (APPROX.)

REFERENCE

THIS PLAN IS BASED UPON A JULY 2, 2004 BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY CONTROL POINT ASSOCIATES, INC.

TITLE:
BORING LOCATION PLAN

CLIENT: COMMERCE BANK, N.A.

PROJECT: PROPOSED COMMERCE BANK SITE
38 AND 40 PURCHASE STREET
RYE, WESTCHESTER COUNTY, NEW YORK



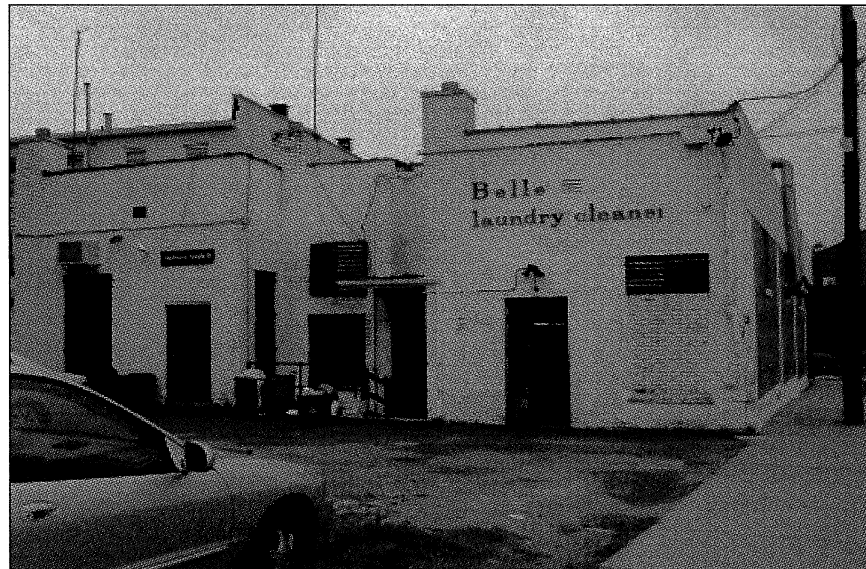
WHITESTONE ASSOCIATES, INC.

1600 Manor Drive, Suite 220
Chalfont, Pennsylvania 18914
Phone (215) 393-8200 Fax (215) 393-8574

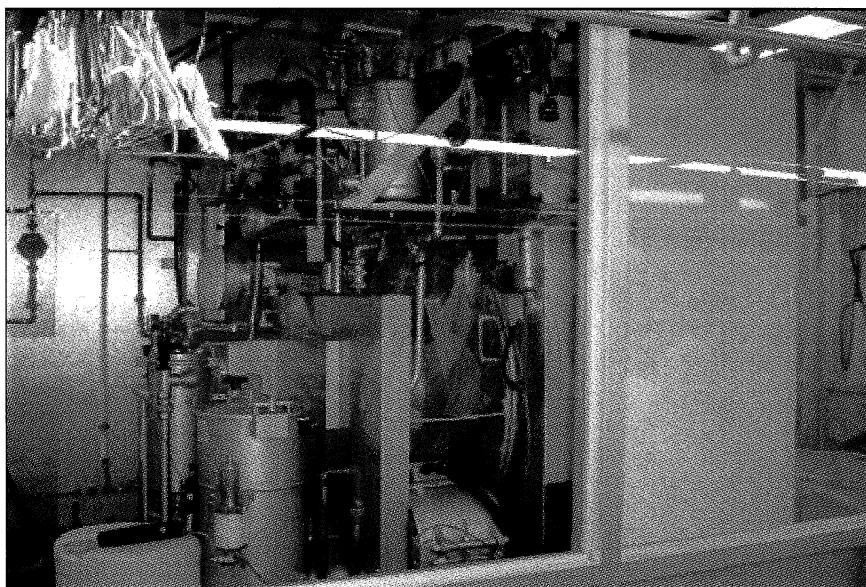
PROJECT #: WP04-7166	BY: MG	PROJ. MGR.: KTD	DATE: 9/28/04	SCALE: 1"=10'	FIGURE: 4
-------------------------	-----------	--------------------	------------------	------------------	--------------



SUBJECT PROPERTY, VIEW TO THE SOUTHEAST.



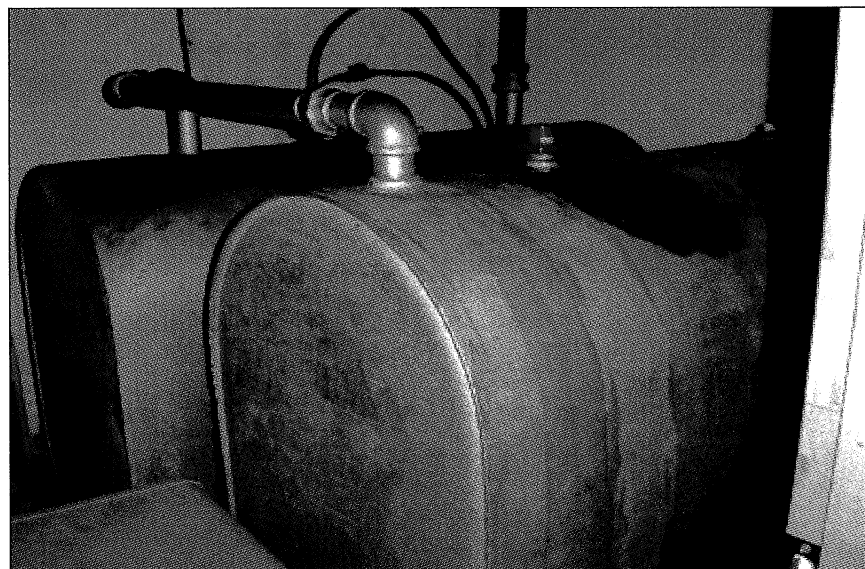
SUBJECT PROPERTY, VIEW TO THE WEST.



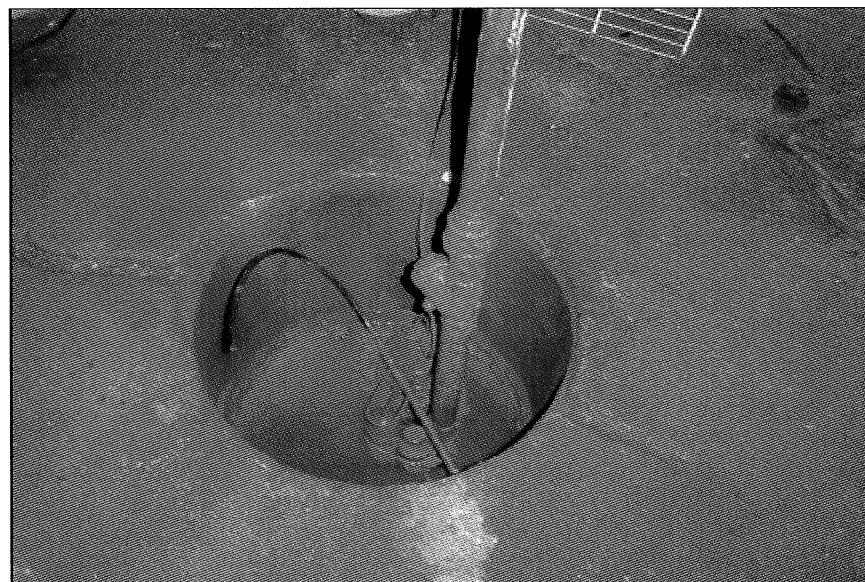
DRY CLEANING MACHINE LOCATED AT THE NORTHEASTERN PORTION OF BELLE LAUNDRY AND CLEANERS.



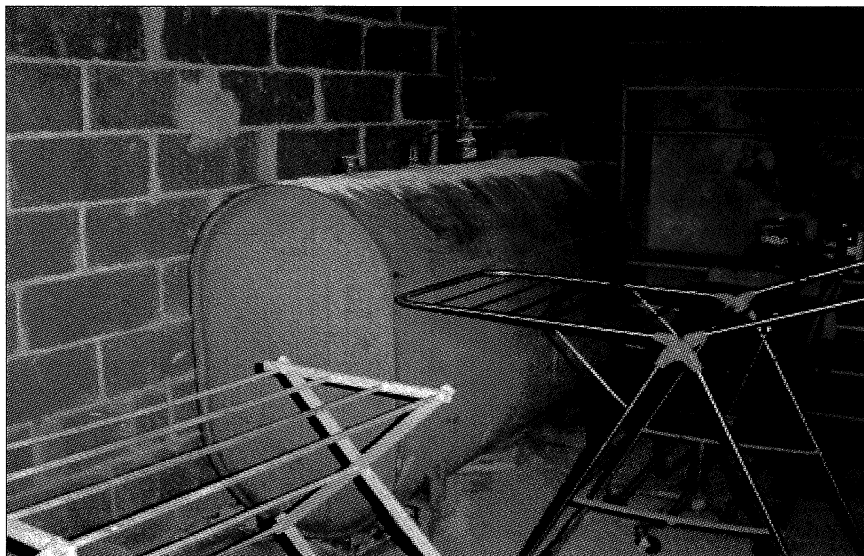
DRY CLEANING MACHINE WASTE STORAGE DRUMS LOCATED AT THE EASTERN PORTION OF BELLE LAUNDRY AND CLEANERS.



TWO 275 GALLON FUEL OIL ASTs LOCATED IN THE BASEMENT OF BELLE LAUNDRY AND CLEANERS.



SUMP LOCATED IN THE BASEMENT OF BELLE LAUNDRY AND CLEANERS.



ONE 275 GALLON FUEL OIL TANK LOCATED IN THE BASEMENT OF FASHION NAILS II.



FUEL OIL FILL PORTS AND VENT PIPES LOCATED AT THE EASTERN EXTERIOR WALL OF BELLE LAUNDRY AND CLEANERS.



COMMERCIAL AND RESIDENTIAL PROPERTY LOCATED NORTH OF THE SUBJECT SITE BEYOND SMITH STREET, VIEW TO THE NORTH.



COMMERCIAL AND RESIDENTIAL PROPERTIES TO THE SOUTH OF THE SUBJECT SITE, VIEW TO THE SOUTHEAST.



PARKING LOT LOCATED TO THE EAST OF THE SUBJECT SITE, VIEW TO THE SOUTHEAST.



COMMERCIAL AND RESIDENTIAL PROPERTIES LOCATED TO THE WEST OF THE SUBJECT SITE BEYOND PURCHASE STREET, VIEW TO THE SOUTHWEST.