STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS SITE
SKANEATELES FALLS, NEW YORK

FINAL REMEDIAL DESIGN REPORT FOR SITE WIDE SOILS / DEBRIS REMEDIATION

VOLUME 5 OF 5
Phase III
Building Demolition Work Plan
(Appendix P)

December 13, 2002

Prepared for:

Stauffer Management Co.
1800 Concord Pike
Wilmington, DE 19850-5438

Prepared by:

SPEC CONSULTING
Professional Engineering Services

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SPEC Consulting Project #99-004

STAUFFER MANAGEMENT COMPANY

SKANEATELES FALLS SITE
4512 JORDAN ROAD
SKANEATELES FALLS, NEW YORK

BUILDING DEMOLITION
WORK PLAN

DECEMBER 2002

Prepared for:

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1800 Concord Pike
Wilmington, DE 19850

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STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NY
Building Demolition

MAIN INDEX

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Table of Contents

1.0 INTRODUCTION

This Building Demolition Work Plan has been prepared by SPEC Consulting for the Stauffer Management Company (SMC) Skaneateles Falls Site on Jordan Road in Skaneateles Falls, NY. The purpose of this plan is to detail the proposed site-specific activities necessary to demolish the existing structure located west of Skaneateles Creek referred to as the "Main Plant Building". This plan identifies the steps to be performed as part of the building demolition including asbestos abatement, lead paint abatement, cleaning and disposal of on-site tanks and process piping, sampling and analysis of building materials, building demolition to grade, and debris handling, removal and disposal. Additional work including building foundation sampling, subsurface soil characterization, is addressed in AEC-6 Phase III activities. This plan is divided into sections, which correspond to the proposed project bid items. These bid items represent the sequential approach to be used to carry out the building demolition contract. This Work Plan also serves as the first section of the overall Building Demolition Package. The Building Demolition Package consists of eight sections and includes all necessary documents for the building demolition project.

The work necessary to complete the building demolition activities is divided into the following Phases and corresponding activities:

AEC-6 Phase I – Demolition Preparation

- Collection and Analysis of Main Plant Building Materials of Construction.
- Cleaning and Removal of Tanks and Process Piping.
- Abatement of Friable Asbestos-Containing Materials.
- Abatement of Non-Friable Asbestos-Containing Materials.

AEC-6 Phase II – Demolition To Grade

- Lead Paint Abatement.
- Building Demolition to the Foundation.
- Demolition Debris Handling, Removal and Disposal.

AEC-6 Phase III – Characterization of Slabs, Foundations, and Subsurface Conditions

- Core Basement and Sub-Basement Floor Slabs.
- Collect and Analyze Subsurface Soil Samples.
- Establish Appropriate Course of Action for Handling and Removal of Slabs and Soils.

The following sections of this work plan address each phase and activity outlined above. Sections 5 & 6 of the overall building demolition package contain project bid documents and specifications detailing the work to be performed in each phase of the project. All Sections (2 through 8) form a part of this Work Plan and are attached as part of the Building Demolition Project.

It should be noted that the scope of activities addressed herein are limited to the boundaries of AEC-6, or the footprint of the building. Work conducted beyond the footprint of the building will be addressed in the appropriate AEC Work Plan.

2.0 BACKGROUND INFORMATION

The Stauffer Management Company (SMC) Site is located at 4512 Jordan Road in the Town of Skaneateles, County of Onondaga, in the State of New York. Manufacturing operations at the Stauffer site ceased in the early 1980's. Since the cessation of manufacturing operations, the Main Plant Building has been primarily vacant with its function limited to the operation of a water treatment system and occupancy by a site operator. Currently, environmental remediation operations at the site are in progress including a new groundwater treatment plant that has been constructed on the property and is currently in operation. The existing building is no longer required for water treatment operations and the company has no interest, at this time, in renovating the Main Plant Building. Therefore, SMC is proposing to demolish the Main Plant Building in accordance with the approved schedule.

The scope of work addressed in this work plan includes exclusively the area occupied by the structure referred to as the Main Plant building and the associated tank farm. This building is composed of several distinct and different areas 1.) A process/manufacturing area consisting of several attached rooms with different levels including a portion of the basement, 2.) An attached

warehouse area, 3.) A first floor and second floor offices, locker rooms, control rooms, etc., 4.) Machine and equipment rooms, 5.) Electrical equipment rooms, 6.) Non-electrical utility areas including a boiler room, water treatment, and utility distribution, 7.) A sub-basement area, and 8) Tank Farm. The building complex is composed of brick, poured concrete, sheet metal, structural steel, CMU (block) and asphalt based roofing, with some sheet metal decking.

In 1999, Griffin Industrial Services, Inc. of Syracuse, NY, conducted Pre-Demolition Survey in accordance with New York Industrial Code Rule Part 56 (ICR56) 1.9. The report, which also included scanning of painted surfaces with an XRF analyzer to determine if lead was present, is included in Section 4 of this document.

As part of the building decommissioning in the early 1980's, process equipment, raw materials, chemicals, finished products, etc. were removed from the building leaving it free of hazardous products. The majority of the manufacturing process equipment has since been removed abandoning several large fixed equipment items including tanks, hoppers, pumps, boilers, and compressors, and some process piping which will be removed as part of the building demolition. There are also some pieces of furniture, tools, movable partitions, portable equipment, etc. located within the building, which will be removed as part of the building demolition. On-site chemicals were previously inventoried and removed by Griffin Industrial Services in 1999.

Three concrete tanks (chests) are located within the building. Two of the chests currently contain dry solids, while the third (Chest A) has sludge. These chests, as well as other on-site tanks, will be cleaned as part of Phase I activities. Five aboveground storage tanks remain outside of the building and several former treatment vessels inside the building. The five exterior vertical steel storage tanks were used to store treated water from the Main plant Building treatment system. These tanks are currently open with minor accumulations of water and some residual sediment. The water in these tanks will be sent to the on-site treatment system. PCB's have been identified in the sediment from these tanks at levels ranging from <1ppm to 6.3 ppm. It is therefore likely that standing liquids and rinse water will have low-level PCB's as well, however the on-site treatment system is capable of treating the PCB's at the levels likely to be encountered. The Contractor selected to perform the work will be responsible for characterization and disposal of all sediments. With the sediments

removed, the tanks will be pressure washed and visually inspected to confirm that they are clean prior to being cut and sent off site for recycling.

SMC has completed cleaning of trench drains and sumps throughout the basement and sub-basement portions of the building. These areas have also been sampled for PCB's, and the results are presented in the site's PCB investigation Report. It will also be necessary to cut and grout sanitary lines as well as domestic waterlines as indicated on Drawings D-1, and D-3 located in Section 8 of this document. No other piping should be impacted by the proposed work.

3.0 OVERVIEW OF ACTIVITIES

It is proposed that all above grade and on grade building units, structures, equipment, tanks, pipes, pipe racks, and all other installed or constructed items associated with the main plant building be dismantled. Specific items remaining in the building that are to be removed are summarized above in Section 2.0. Items immediately outside the building including stairways, ramps, fencing, tanks, etc are to be removed as shown on the drawings and as detailed in the specifications. Removal of the Main Plant building foundations (spread footings, retaining walls, foundation walls, grade beams, etc.), are to occur as a part of Phase III activities and will require additional sampling, and may possibly include decontamination and disposal of foundation materials and underlying soils. If elected by SMC and approved by NYSDEC, foundations resting on bedrock may remain. All removed equipment shall be evaluated for contaminants, decontaminated, if necessary, and disposed in a manner acceptable to NYSDEC.

Since the SMC Main Plant Building site is adjacent to a residential area and the work zone located due east of a residential area across Jordan Road, work shall be scheduled and executed in a fashion to minimize the noise, dust and traffic impact on the neighbors. Care will be required by SMC's selected demolition contractor to avoid an adverse community reaction in response to excessive noise, dust and interference with traffic patterns.

4.0 BUILDING SAMPLING AND ANALYSIS

TABLE 1.1

Contaminants of Concern	Soils SCG's (ppm)	Cleanup Goals (ppm)	Landfill and Interior Soil Samples Results (AEC-1) ppm	Area North of Main Plant Building Soil Sample Results (AEC-2) ppm
Volatiles:				
Toluene	1.5	1.5	ND-1,000	ND-0.037
Xylenes (total)	1.2	1.2	ND-25,000	ND-2,200
Semi Volatiles:				
Benzo(a)anthracene	0.224	0.224	ND-1.5	ND-6.7
Chrysene	0.4	0.4	ND-1.6	ND-6.6
Benzo(b)fluroanthene	1.1	1.1	ND-2.0	ND-5.6
Benzo(k)fluroanthene	1.1	1.1	ND-1.0	ND-7.9
Benzo(a)pyrene	0.061	0.061	ND-1.3	ND-7.9
o-Toluic Acid	50	50	ND-81	ND-19.0
m-Toluic Acid	50	50	ND-8,500	ND-46.0
p-Toluic Acid	50	50	ND-1,600	ND-14.0
PCBs	1.0 (10)	1.0 (10)	†ND-0.23	†ND-0.059
	SCG's	"SSRG's		
Inorganics:	(ppm)	(ppm)		
Chromium	*	100	4.2-164	9.0-162
Cobalt	*	60	5.7-4,230	4.2-30.3
Lead	*	500	1.9-160	5.6-3,030
Mercury	*	5	ND-17.2	ND-25.2
Nickel	*	100	14.0-99.2	13.5-166
Zinc	*	750	26.4-1,170	22.5-15,600

SOILS AND WASTE
(AEC-1,2,6,7&8)

ND Not Detected
PCBs: 1.0 ppm for surface and 10 ppm for sub-surface.
† PCBs were detected in two of the total 34 soil samples analyzed.
* Imported soils used for clean backfill will meet NYS Department of Transportation registered quarry standards and approval by NYSDEC.
"Site Specific Remedial Goals (SSRG's).

The New York State Department of Environmental Conservation (NYSDEC) has requested that SMC complete a survey of the building (prior to demolition) for site- specific contaminants of concern (COC) as presented in the Amended Record of Decision (AROD) Table 1.1 presented above. This sampling is in addition to the previously performed sampling for PCB's (results presented in PCB Investigation Summary Report), asbestos, and lead (Griffin Industrial Services, Inc.'s 1999 Pre-Demolition Survey for Asbestos and Lead).

SPEC Consulting has developed an AEC-6 Sampling and Analysis Plan (SAP) to address the NYSDEC's request for a pre-demolition evaluation to confirm that VOC, SVOC and PCB contaminants of concern do not exist within the building. These results will also be used for

characterization of debris resulting from the building demolition, and will determine how demolition debris is handled. The SAP addresses sampling within the Main Plant building structure and does not address characterization of soils beneath, or adjacent to, the building. The SAP can be found in Section 2 of the Building Demolition Package. Soils beneath the building are addressed herein and are subject to characterization as per the site wide SAP.

Sampling for site-specific contaminants of concern including Xylene (for VOC's) and Toluic Acid (for SVOC's) shall be conducted prior to demolition of the building. The main areas of the building to be sampled include the finishing/manufacturing area, the warehouse / storage areas, the basement (including the sumps) and sub-basement areas. The oil-containing electrical equipment room shall be sampled for PCBs.

Areas not meeting the standards outlined in the AEC-6 SAP will require further delineation, decontamination and re-sampling, or off-site disposal to assure compliance with established Site Wide SAP criteria. Should decontamination be conducted, methods may include power washing, collection and subsequent treatment of the wash-water in the on-site water treatment plant, and re-sampling of the area. This will only be used for non-permeable surfaces determined to contain organic contamination (xylene and toluic acid). Any porous materials or areas found to be contaminated with PCB's above the clean-up criteria will be removed and disposed of in a landfill certified to receive the contaminants at the levels present.

5.0 AEC-6 PHASE I WORK ACTIVITIES

AEC 6 Phase I work of the building demolition project is being termed Building Preparation. This Phase of the project includes the work necessary to remove and/or abate all materials in the building that have the potential to present an environmental concern with regard to demolition of the Main Plant Building. As previously indicated, this involves abatement of friable and non-friable asbestos-containing materials as identified in the 1999 Pre-Demolition Survey completed by Griffin Industrial Services, Inc. (located in Section 4 of this document), abatement of loose lead paint from surfaces identified in Griffin report, cleaning and removal of on-site tanks, and removal of remaining process piping.

A separate Asbestos Abatement Specification has been prepared and is included in Section 3 of Building Demolition Project Submission Package. Removal of loose lead based paint will be performed in accordance with Section 02030 of the Demolition Specifications included in Section 6 of this document. Removal of all process piping will be performed consistent with the line breaking procedure included in Appendix C the site HASP. After breaking the line, any residual product shall be drained into a 55-gallon drum, provided by SMC. Residuals will be drummed by product. Characterization and disposal of the drummed liquid waste will be performed by SMC. After draining the piping, the inside of the piping will be decontaminated by rinsing; the piping will be cut into 5' sections and then disposed of as solid waste. The piping will be decontaminated on a decon pad constructed by the contractor or on the existing decon pad (see Drawing D-1 in the contract drawings for location). Decontamination rinsate water will be sent to the onsite water treatment system. Utility piping such as steam, condensate, water, sprinkler, etc. may be inspected for contamination and may be considered C&D materials and will be demolished and sent for off-site disposal at a Part 360 Landfill.

6.0 AEC-6 PHASE II WORK ACTIVITIES

AEC-6 Phase II of the building demolition will be performed only after completion of all AEC-6 Phase I Work activities. Phase II of the building demolition will involve demolition of the building to grade. The demolition will be carried out as specified in the project specifications in Section 6 of the Building Demolition Work Plan. From this point forward, the term *grade* will be defined as the lowest external ground surface and the base, basement or subbasement concrete for interior structures. The raceway will be plugged at the inlets and outlet as shown on Drawing D3 located in Section 8 of the Building Demolition Work Plan. The building concrete slabs will remain in place until a Phase III Plan is developed for characterization of slabs and sub-surface soils. Any excess stormwater inside the building area will be collected and the existing building sump will continue operation such that stormwater that may accumulate in the building area will be transferred to the water treatment system. Any excess stormwater will be transferred to the on-site treatment system and ultimately discharged through 02A.

7.0 AEC-6 PHASE III WORK ACTIVITIES

AEC-6 Phase III activities address the foundations and soil beneath the building. SMC will conduct subsurface sample collection at the 30 locations specified on Drawing DS-1. In the event that contamination is detected, additional sampling locations will be established as needed for delineation. It is expected that the grid sampling of the foundation will adequately characterize subsurface conditions. Sampling will be accomplished using a floor-standing concrete coring machine equipped with a three-inch core bit. Once the core is complete at a location, the removed core and the underlying soils will be evaluated for visual and photoionic evidence of contamination. If no evidence of contamination is present, the core will be discarded as general debris and sent off site for disposal. Any concrete core presenting evidence of contamination will be placed in a plastic bag labeled with the sample number and location for future evaluation.

The soils under the slabs will be sampled by hand driving a two-inch split spoon or using a hand auger. If a stone layer is present, it will be removed using a dedicated HEPA vacuum, and any stone collected will be drummed for subsequent evaluation and proper disposal determination. The split spoon will be used to collect soil samples from the zero to five-foot zone, or until no visual or PID evidence of contamination is detected. The samples will be containerized, labeled, and analyzed per the site-wide SAP included as Appendix F of the approved Phase I, AEC-1 Work Plan.

8.0 DEMOLITION DEBRIS HANDLING, REMOVAL AND DISPOSAL

Demolition debris will be segregated based on disposal requirements and will be stockpiled on site in designated areas until disposal. The debris stockpile areas are shown on the contract drawings in Section 8 of the Building Demolition Work Plan.

Demolition debris outside of asbestos and hazardous wastes will be disposed as detailed in this below. Asbestos material handling and disposal is addressed in the Asbestos Abatement Specification presented in Section 3. AEC-6 Demolition concrete, bricks, and masonry which meet SCG's/SSRG's may be proposed for use as backfill within the AEC. If these materials are proposed for use as fill in other areas of the site, they will be required to demonstrate compliance with NYSDEC TAGM 4046 requirements, with the exception of metals which are to meet SSRG's.

Concrete, steel and other recoverable materials may be sent to an approved recycler to be handled as C&D. Should SMC elect to crush clean concrete and/or CMU onsite, it will be done to meet the NY State Department of Transportation specification for Item 304.04 Sub-base Course, Type 3. Type 3 particle distribution is as follows:

Sieve Size Designation	Percent Passing by Weight
4 inch	100
¼ inch	30-75
No. 40	5-40
No. 200	0-10

Once properly characterized, other building materials including roofing, wood, etc. will be disposed of as C&D or at a permitted Part 360 landfill. Since all loose lead paint will be abated as specified in Phase I Work Activities, those items with residual lead paint shall be disposed of with the other debris at a Part 360 or C&D landfill.

9.0 SCHEDULE

This Work Plan will be initiated with the schedule set presented in the Approved August 9, 2002, Phase I, AEC-1 Work Plan.

It is expected that the asbestos abatement for the interior of the building (AEC-6 Phase I) as outlined in Section 5.0 of this Work Plan will take approximately 1-½ months to complete and that the roof asbestos abatement (also part of AEC-6 Phase I) as outlined in Section 5.0 will take approximately five weeks to complete. The demolition of the building to grade (AEC-6 Phase II), as outlined in Section 7.0, is expected to be completed approximately four months after completion of asbestos abatement activities. The last phase of the project (AEC-6 Phase III) consisting of characterization of Slabs and subsurface soils, recommendations for partial to full removal of the foundations and floor slabs, as outlined in Section 8.0, is anticipated to take approximately 3 to 6 months to complete.

STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NY

AEC-6 Sampling and Analysis Plan

MAIN PLANT BUILDING

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Table of Contents

1.0 INTRODUCTION

This sampling and analysis plan (SAP) has been prepared by SPEC Consulting for the Stauffer Management Company (SMC) Skaneateles Falls Site on Jordan Road in Skaneateles Falls, NY. The purpose of this plan is to detail the proposed site-specific plan to properly characterize the building materials throughout the Main Plant Building prior to demolition. This plan details the collection methods, sampling intervals and analytical protocols for obtaining representative samples of the building and materials while also serving to determine compliance with acceptance criteria for an approved New York State Part 360 Landfill. This plan addresses the general location, collection, sampling, and EPA test methods to be used for analysis of samples.

As part of the proposed building demolition, SMC has previously completed a lead and asbestos survey of the Main Plant Building. The New York State Department of Environmental Conservation (NYSDEC) requested that SMC complete a survey of the building (prior to demolition) of site-specific contaminants of concern (COC) outside of asbestos and lead. SPEC Consulting developed the original SAP to address the NYSDEC's request. This Amended SAP will address Department concerns and intended to combine the pre-demolition characterization of the building to ensure it meet the acceptance criteria for off-site disposal facilities. The SAP addresses the building structure itself (i.e. the structure to be demolished) and does not address the soils beneath the building.

2.0 BUILDING SAMPLING AND ANALYSIS

The building consists of approximately 56,500 square feet of floor space on the first floor and 54,400 square feet of floor space on the second floor. The basement area consists of approximately 31,500 square feet of floor space, and the sub-basement consists of approximately 18,000 square feet. The Main Plant building is composed of the following areas, as shown on drawing F-1 presented in Section 8 of the Building Demolition Work Plan.: Office Area / locker rooms (37,500 sq ft), Finishing / Packaging / Manufacturing (29,800 sq ft), Maintenance/Machine Shops (4,500 sq ft), Warehouse / Storage areas (32,000 sq ft), Boiler Room (2650 sq ft), Basement – Storage (31,500 sq ft) including the sumps, Sub-basement – Utilities (18,000 sq ft), and oil containing electrical equipment areas (2,100 sq ft).

Based on contaminants of concern for the site, knowledge of the site's history, and guidance provided by High Acres Landfill (Part 360 Landfill where some material may be shipped), the building will be sampled for TCLP Metals, PCB's, VOC's and SVOC's. Given that Xylene is a known contaminant of the site, ignitability will also be required. The frequency of sampling presented herein is based on the requirements that would

have to be met if material is shipped to an off-site landfill. This frequency is one sample per 1500-tons of material, and is consistent with requirements for off-site acceptance as either solid waste or C&D. The estimated mass of the building is approximately 12,000-tons. With this, a minimum of eight samples would be required, however, it is proposed that a total of ten to 15 samples be collected. These samples will be collected from selected areas in the basement and sub-basement, first floor, and second floor. Each sample will be comprised of the percentages of building materials as presented on the waste profile sheet included in Section 8 of the Building Demolition Work Plan. That is to say, 75%-70% concrete, 20%-25% metal/steel, 3% - 5% roofing, 1%-3% wood, and 3%-5% other (dirt, cellulous, fiberglass, and plastic). The oil-containing electrical equipment room in the basement will be wipe sampled for PCBs. The proposed sampling is outlined in Table 1. The samples will be analyzed as described in Table 1:

- TCLP Metals in accordance with EPA Method 6010/7400.
- Volatile organic compounds in accordance with EPA Method 8260
- Semi-volatile organic compounds in accordance with EPA Method 8270
- PCBs in accordance with EPA Method 8082
- Ignitability accordance with SW 846-1030

Table 1 – Building Sampling

Area	Test Parameter	Material	Samples
Electrical Equipment Rooms	PCB's	Equipment/walls	5 Wipe Samples
First Floor Warehouse Area	VOC's SVOC's PCB's Metals Ignitability	Concrete Metal/Steel Wood Other	3 Composite Samples
Second Floor	VOC's SVOC's PCB's Metals Ignitability	Concrete Metal/Steel Wood Other	3 Composite Samples
Basement Area	VOC's SVOC's PCB's Metals Ignitability	Concrete Metal/Steel Wood Other	2 Composite Samples
Sub-basement Area	VOC's SVOC's PCB's Metals Ignitability	Concrete Metal/Steel Wood Other	2 Composite Samples

The designated building areas will be sampled for the above referenced site parameters. The sample analytical data will be used to ensure that the debris resulting from demolition of the building is non-hazardous and meets off-site disposal facility acceptance criteria.

Areas not meeting the criteria will require additional investigation, delineation, and if necessary, decontamination so that re-sampling can occur. Decontamination methods may vary, however power washing will be used for non-permeable surfaces determined to contain organic contamination. Any areas found to be contaminated with PCB's above 50 PPM will be decontaminated in accordance with a separately submitted decontamination plan, unless it is determined to be more feasible to dispose of material off-site. If decontamination is chosen as an option, a Decontamination Plan will be submitted to the Department a minimum two weeks prior to planned commencement of decontamination activities.

Surfaces to be sampled include, but may not be limited to, concrete and masonry floors and walls, structural steel and sheet metal, windowsills, and any remaining process equipment and oil filled electrical equipment not certified PCB free.

2.1 Old Manufacturing / Warehouse / Basement / Sub-basement Area

Chip samples will be collected from concrete, CMU, and brick material. Materials such as steel (either structural or from other features to be demolished), wood, and "other" as identified on the waste profile sheet shall be collected in close proximity to the concrete collection site. Exact sampling locations will be selected in the field with special care taken to ensure an accurate representation of the entire sampling areas. Sample locations will be documented on site drawings and will also be entered into a sampling logbook, noting location and any special attributes of the sampling area. Sample collection sites will be clearly marked with a sample reference numbers.

The various components of the samples will be transferred from the sampling sites to a dedicated 1-gallon disposable pail and homogenized with a trowel. A new or decontaminated trowel will be used at each location. Material in the pail will be transferred with the trowel from the pail to the appropriate sample containers as identified in Section 4.1. Samples to be analyzed for VOCs will be collected first. To prevent potential contaminant migration to or from the sample, sample containers will be filled to the top, taking care to prevent soil or bits of debris from remaining in the lid threads prior to being sealed After sample containers are filled, they will be immediately sealed, chilled and processed for shipment to the laboratory.

As previously stated, two such samples will be collected from the basement area, two from the sub-basement area, three from the first floor, and three from the second floor. Each of these composite samples will be analyzed in accordance with Table 1.

2.3 Electrical Equipment Rooms

The electrical equipment room will be sampled for PCBs. Five (5) wipe samples will be taken and analyzed for PCBs in accordance with EPA method 8082. Wipe samples will be collected using laboratory supplied sterile gauze pads that have been soaked in hexane. Using firm strokes with even hand pressure and a dedicated template, an area of an individual piece of equipment, floor or wall will be wiped in an area of $100cm^2$. Should stained areas be observed in the electrical equipment room, the Department will be consulted to determine if additional sampling will be in the form of chip samples or wipe samples.

3.0 SCHEDULE AND REPORTS

The proposed building demolition SAP will be initiated upon acceptance by the New York State Department of Environmental Conservation (NYSDEC) and prior to the letting of appropriate contracts. The data will be collected by the SMC selected contractor. The collected data will be reviewed by SMC's Engineer to determine if decontamination and hazardous material abatement are required.

3.1 Data Management and Reporting

After the sampling event, copies of laboratory reports and chain of custody records will be provided to the NYSDEC within 2-3 weeks of receipt. The collected data, including a synopsis of the findings, will be supplied to the NYSDEC after the sampling event.

The results of the building sampling will be summarized in a report prepared by the Engineer. The report shall consist of the sampling procedures followed, obtained data, results of the sampling and plans for further action, if required.

4.0 QUALITY ASSURANCE / QUALITY CONTROL

4.1 Sampling Procedures

a) Samples for chemical analysis will be collected and placed in labeled containers provided by the laboratory. The sample containers will be labeled with the following information:

1) Project Name
2) Sample Identification
3) Date And Time Of Collection
4) Preservation, If Applicable
5) Analyses To Be Performed
6) Initials Of Sampler(S)

b) Organize sampling containers:

VOCs: Two (2) 120mL wide-mouth glass jars with Teflon septa, brass tube, or stainless steel tube. Chill to 4°C for preservation. Holding time not to exceed 14-days. (EPA 1997)

SVOCs: One (1) 8-ounce, wide-mouth glass jar with Teflon septa, brass tube, or stainless steel tube. Chill to 4°C for preservation. Holding time not to exceed 14-days. (EPA 1997)

Metals: One (1) 8-ounce, wide-mouth glass jar with Teflon septa, brass tube, or stainless steel tube. Chill to 4°C for preservation. Holding time not to exceed 180-days. (EPA 1997)

PCB's: One (1) 8-ounce, wide-mouth glass jar with Teflon septa. Chill to 4°C for preservation. Holding time not to exceed 7-days.

Ignitability: One (1) 8-ounce wide-mouth glass jar with Teflon septa.

c) Complete a chain-of-custody form for transmittal to laboratory.

4.2 Wipe Sampling Procedures

a) Samples for chemical analysis will be collected and placed in labeled containers provided by the laboratory. The sample containers will be labeled with the following information:

1) Project Name
2) Sample Identification
3) Date And Time Of Collection
4) Preservation, If Applicable
5) Analyses To Be Performed
6) Initials Of Sampler (S)

b) Organize sampling jars:
PCBs: One laboratory supplied glass jar per wipe sample.

c) Collect wipe sample using laboratory supplied sterile gauze pads that have been soaked in hexane. Using firm strokes with even hand pressure and a dedicated template, wipe an area of 100 cm^2. Return sample to laboratory supplied glass jar.

d) Keep sample bottles cool (<4 deg. C) in an ice-packed cooler prior to transportation or on-site. Send samples to the laboratory the same day that they were sampled.

e) Complete a chain-of-custody form for transmittal to laboratory.

4.3 Field QA/QC

Quality control samples consisting of trip blanks, equipment blanks, and field duplicates, will be collected in the same type of sample containers and handled in the same manner as the environmental samples (OBG 1998).

a) Field Duplicates
Field duplicate samples will be two samples collected at the same time from the same source, but

submitted as separate samples. Field duplicate sample volumes will be collected by alternating the filling of the sample containers for each parameter. These samples are collected to measure the precision of the field sampling procedures, as well as the laboratory's analytical methods. Duplicate samples will be identified on chain of custody records such that laboratory personnel cannot distinguish from other environmental samples. Field duplicate samples will be minimally collected at a frequency of one per every ten composite samples.

4.4 Sample Custody

Chain of custody procedures will be instituted and followed throughout this project. These procedures include field custody and laboratory custody. When the information has been gathered, the file will be inventoried, numbered, and stored for future reference (OBG 1998).

Chain of custody records will be initiated in the field when sample collection has been completed. In the field notebook, sample collection personnel will note meteorological observations, equipment employed for sample collection, well evacuation techniques, calculations, and information regarding collection of QA/QC samples. The following physical information will be recorded in the field notebook and on chain of custody records by the field sampling team (OBG 1998):

a) Project Identification
b) Sample Identification
c) Required Analysis
d) Data And Time Of Sample Collection
e) Type Of Sample (Matrix)
f) Sampling Technique
g) Preservation Used, If Applicable
h) Initials Of The Sampler

The field sampling personnel shall sign the chain of custody when relinquishing custody that includes placing the form in a sealed plastic bag in the sample cooler with the associated samples. Sampling containers will be packed in Styrofoam sheets, and put in plastic bags to help prevent breakage and cross-contamination. Samples will be shipped in coolers containing ice or icepacks to maintain the inside temperature at approximately 4°C. If commercial vendors (Federal Express, etc.) are used, they will be required to document the transfer of the package with their organization (OBG 1998).

5.0 REFERENCES

Field Sampling Plan and Quality Assurance Project Plan with Guidance, Prepared by: Quality Assurance Program, United States Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105, March 1997

STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NY SITE

BID DOCUMENTS

MAIN PLANT BUILDING
ASBESTOS ABATEMENT

Prepared For:

Stauffer Management Company
4512 Jordan Rd
Skaneateles Falls, NY 13153

Prepared By:

18 Computer Drive West
Albany, NY 12205

SPEC Consulting Project #: 99-004

December 2002

Status: For Bid

GENERAL

A. SITE DESCRIPTION

The Stauffer Management Company (SMC) Site is located at 4512 Jordan Road in the Town of Skaneateles, County of Onondaga, in the State of New York. Manufacturing operations ceased in the early 1980's. The Main Plant Building has been vacant since operations were ceased. Currently environmental remediation operations at the site are in progress. A new groundwater treatment plant has been constructed on the property and is currently in operation.

The scope of work addressed in this bid includes Abatement of Asbestos-Containing Materials (ACM) from the Main Plant building. As required by Industrial Code Rule 561.9, a pre-demolition survey of the building was conducted. That document is included as Appendix A.

The manufacturing building consists of a process area consisting of several attached rooms with different levels and basements and an attached warehouse area with second floor offices and basements. The building complex is primarily of brick, poured concrete and CMU construction with some metal. The majority of the process equipment has been removed, however some items remain. The items remaining consist of tanks, hoppers, pumps, boilers, compressors, instrumentation, etc. It will be necessary to conduct abatement activities in the presence of these items. To the extent possible, items will be moved out of work areas. Items that remain within the abatement areas will be treated as non-movable items and shall be protected as described in ICR 56.

B. OVERVIEW

The asbestos-containing materials are being removed from the main plant building in preparation for demolition. Work is to be conducted in two separate phases. Phase I includes removal of all friable ACM identified in Table 1.4.1. Phase III of the abatement will include removal of all non-friable materials presented in Table 1.4.2.

All equipment in the building is presumed to be scrap, however all necessary pre-cleaning and precautions to prevent asbestos contamination must be taken. None of this equipment will be made available for future service without express written agreement from SMC.

Any questions that may arise during the bidding period should be addressed to the Engineer:

SPEC Consulting
Aaron Mars/Joe Burke, PE
18 Computer Drive West
Phone: (518) 438-6809

C. COMMUNITY RELATIONS

The SMC site is adjacent to a residential area. The work zone is located with houses opposite it on the other side of the road. Work must be scheduled and executed in a fashion to minimize the impact on the neighbors. Care must be taken to avoid an adverse community reaction in response to excessive noise, dust releases and interference with traffic patterns. Area news media will possibly follow work at the site, seeking comment from contractor personnel. It is essential that all such inquiries be directed to specified SMC representatives.

BUILDING DEMOLITION BID PACKAGE

The demolition work shall be in accordance with the following documents and specifications provided within this bid-package.

SECTION I. INSTRUCTIONS TO BIDDERS

A. Bids must be submitted on the Form of Proposal enclosed herewith and **must be submitted so as to reach the addressee by 10:00 am on XXX, 2002.** No proposals will be accepted after this time. Bids are to be submitted to:

Mr. Tom Haldas
Stauffer Management Company
1800 Concord Pike
Wilmington, DE 19850
Phone: (800) 456-3669

B. Bidders shall base their Proposal on the plans and specifications listed in the scope section of this document and the attached specifications and drawings.

C. The Owner may, during the bidding period, advise the Bidders by bulletins and addenda of changes in drawings and specifications. All such changes shall be included in the Bidder's Proposal as if they were originally part of this package.

D. The Owner reserves the right to reject any or all bids and to award the contract to other than the low bidder.

E. Based on actual field measurements, the successful Bidder will be required to red-line a record set of all construction drawings. The drawings shall then be reviewed with the Project Manager for subsequent delivery to archives. Winning Contractor will be required to answer any questions until the "As Built" package is completed.

F. The successful Bidder shall have full responsibility for the work of the Abatement contract as herein described. Before any changes in the Contract are approved by the Owner, a detailed estimate will be furnished to the Owner. The Owner's definition of a detailed estimate is one in which labor, equipment and materials are broken down by each of the work classifications involved. In the case of a subcontractor, a detailed breakdown similar to that from the Bidder must also be furnished.

G. Bidder is to base their proposal on initiating the project within two weeks of the notice to proceed and work towards completion. All work must be completed by XXX, 2002. The contractor is to comment on the required timeframe.

H. The unsuccessful bidder must return all specifications and drawings to the Owner within one week of notice of award.

I. The bidder is advised to visit the project site. Failure to visit the site shall not relieve the bidder of any responsibilities he/she assumes by submitting a proposal. A bid and walk-through meeting shall be held on the date listed below. Arrangements for visiting the site should be made in advance by contacting the Project Manager.

WALKTHROUGH DATE: XXX @ 1:00 PM
WALKTHROUGH MEETING PLACE: Site Trailer

J. Lump Sum Proposal. Included within this document is a lump sum proposal form. All bidders shall use this form to submit their bid to SMC.

SECTION II. SCOPE OF WORK

01010 Summary of Project

The SMC Skaneateles Falls Asbestos Abatement project consists of the removal of friable asbestos-containing materials and non-asbestos materials from the Main Plant building. Work is to be conducted in two phases, with Phase I addressing the friable material and Phase II dealing with the non-friables such as vinyl-asbestos floor tile & mastic and roof flashing.

The approximate building footprint is shown on the Drawing F-1 in the contract drawings. These buildings have the following features:

A. Warehouse

1. The warehouse is a two-story building with a basement under the west half of the building. The footprint of the building is approximately +/- 32,000 square feet. The basement ties in to the basement under the manufacturing area. A rail siding splits the first floor in the north to south direction. The rails, etc. have been removed. There are five truck docks at the north end of the structure and one dock on the east side. Access to the manufacturing area is via ramps at the south end of the building.

2. The east wing, of the first floor, contains a small warehouse office area. The west wing contains a small office area and restroom. A one-story guardhouse is attached on the north end of the west wing.

3. The second floor of the structure consists of two wings tied together at the north end of the building. The west wing was used as offices and labs. The east wing was a storeroom.

4. The water and gas mains that service the new water treatment facility run from the utility mains on the west side of the building through the basement and then underground to the new plant. These lines must be protected and remain in continuous service during and after the removal project. See the attached drawing for details of these utilities and the design for protection.

5. The building is of concrete, CMU, brick, wood and steel construction. There are two furnaces, used for building heat, located in this structure. One is on the first floor, in the west wing and one on the second floor, in the north end. There is also a large air-handling unit on the first floor, west wing. There are sump pumps in the basement.

6. Other materials to be removed include, but are not limited to: lab benches, fume hoods, electrical materials, piping, miscellaneous equipment, foundations, etc.

7. This information is intended for use only as a general description and is not complete. It is the Contractor's responsibility to measure and identify all items and quantities to be removed, demolished, disposed, etc.

B. Manufacturing Area

1. The manufacturing area is made up of several rooms and elevations. There are basements and sub basements throughout. This area has a footprint of approximately +/- 24,000 square feet.

2. Some equipment remains in the building. This consists of five hoppers that penetrate the second floor in the southwest corner of the complex, four tanks and one furnace on the first floor, seven tanks and two pumps in the basement. There are two small fire-tube boilers, four tanks and one air compressor in the boiler room. There are nine tanks located outside the building at the southeast side. The Cardox equipment in this area has been removed.

3. The building is of concrete, CMU, brick, wood and steel construction. Other materials to be removed include, but are not limited to electrical materials (ballasts, etc. may contain PCBs), piping, miscellaneous equipment, foundations, etc.

4. This information is intended for use only as a general description and is not complete. It is the Contractor's responsibility to measure and identify all items and quantities to be removed, demolished, disposed, etc.

01020 Summary of Work

A. Friable Asbestos Abatement

1. Task No. I-A – Develop Health and Safety Plan (HASP)

a. Contractor will develop a Health and Safety Plan (HASP) covering all fieldwork for the bid tasks in Phase I. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, hazardous material handling and asbestos. The HASP will include provisions for compliance with USEPA, OSHA, NYSDOL, and NY Industrial Code Rule 56 (ICR 56) regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

2. Task No. I-B – Perform Phase I Abatement of friable asbestos-containing materials presented in Table 1.4.1 of the specification documents.

a. Contractor will provide a lump sum cost for this activity based on observations obtained during the job site visit and the pre-demolition asbestos survey found in Section 3. Contractor will also provide unit costs for removal of any previously unidentified items. Contractor will remove from site and properly dispose of all asbestos-containing material in accordance with all applicable Federal, State, and Local regulations.

3. Task No. I-D – Dispose of all friable asbestos-containing material

a. Contractor will remove from site and properly dispose of all material generated during abatement of friable ACM presented in Table 1.4.1. Contractor will also remove from site and properly dispose of, if appropriate, any materials brought on site by contractor or generated by contractor during abatement activities. Contractor will provide documentation for the disposal location of all materials removed from site. All asbestos containing material shall be disposed of in accordance with all applicable local, state, and federal regulations.

4. Task No. I-E – Other/Miscellaneous

a. Contractor will use this Task to bid any item which is required for the completion of the asbestos abatement and all related work but which is not included in the above numbered Tasks. Contractor will provide details for any item bid under this Task.

B. Phase II – Abatement of Non-Friable Materials

1. Task No. II-A – Develop Health and Safety Plan (HASP)

a. Contractor will develop a Health and Safety Plan (HASP) covering all fieldwork for the bid tasks in Phase II. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, hazardous material handling and asbestos. The HASP will include provisions for compliance with USEPA, OSHA, New York State Industrial Code Rule 56 (ICR 56) regulations, and any applicable or site specific variances used for abatement activities. The HASP will address all notification, permitting, training and documentation items involved in these issues.

2. Task No. II-B – Sample and analyze dust, sludge, sediments and other materials on roof.

a. The roof of the building had been sampled for asbestos containing materials. The results of the sampling can be found in the "Pre-Demolition Survey for Asbestos & Lead Containing Materials", by Griffin Industrial Services, Inc found in Section 4.

3. Task No. II-C - Abate non-friable asbestos materials presented in Table 1.4.2.

a. Contractor will provide a lump sum cost for this activity based on observations obtained during the job site visit, the asbestos survey and the Asbestos Abatement Plan by IT Corporation found in Section 3. Contractor will also provide unit costs for removal of any previously unidentified items. Contractor will remove from site and properly dispose of all asbestos containing material. Asbestos abatement shall be in accordance with the Asbestos Abatement Plan by IT Corporation previously mentioned and found in Section 3.

4. Task No. I-D – Dispose of all asbestos containing material

a. Contractor will remove from site and properly dispose of all material generated during abatement of non- friable ACM presented in Table 1.4.2. Contractor will also remove from site

and properly dispose of, if appropriate, any materials brought on site by contractor or generated by contractor during abatement activities. Contractor will provide documentation for the disposal location of all materials removed from site. All asbestos containing material shall be disposed of in accordance with all applicable local, state, and federal regulations. Contractor will provide documentation for the disposal location of all materials removed from site. All asbestos containing material shall be disposed of in accordance with the Section 02080 of this document.

5. Task No. II-E – Other/Miscellaneous

Contractor will use this Task to bid any item which is required for the completion of the roof asbestos abatement and all related work but which is not included in the above numbered Tasks. Contractor will provide details for any item bid under this Task.

SECTION III. SAFETY

Contractor will develop a Health and Safety Plan covering all fieldwork for the bid tasks as described in the separate phases of the project. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, hazardous material handling and asbestos. The HASP will include provisions for compliance with USEPA, OSHA and NYSDOL Asbestos regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

SECTION IV. EXTRA WORK

Any and all changes to design must be approved by the Project Manager. A **FIELD CHANGE REQUEST** form must be signed by the Project Manager or his/her representative prior to any out of scope work. **If any work is initiated prior to a signed FIELD CHANGE REQUEST the bidder shall do so at his/her cost.**

SECTION V. PERMITS

Each morning work authorization and any other additional permits shall be executed prior to proceeding with the actual work. Regular work hours are from 7:00 AM to 6:00 PM. Daily work permits will be required. Permits will be issued by the task supervisor at 7:00 AM daily. Special Permits such as hot work, will be required.

SECTION VI. GENERAL REQUIREMENTS

A contractor job trailer will be allowed on the plant site. Space will be provided in a suitable location. This area will be accessible from the contractor parking area and the contractor employees must be transported from this area to the project site. Contractor Employees are not to be transported in the back of trucks, seating must be available to the personnel being transported. Coffee breaks and lunches are not to be taken in the demolition areas. Contractor employees must take their breaks and lunches in the contractor area.

SECTION VII. DRAWINGS

The following drawings are included as part of this project:

DWG #	TITLE	DATE
F-1	Building Floor Plan	5/17/00

SECTION VIII. SCHEDULE

All work must be completed by XXX, 2002.

BID FORM
BUILDING DEMOLITION
Skaneateles Falls Building Demolition

To: Stauffer Management Company From: _____
(Name of Bidder)
Date: _____

If this proposal is accepted within thirty (30) days, we, the undersigned, hereby agree to furnish and install all labor, materials, and all other items necessary to perform this work at SMC Site located in Skaneateles Falls, NY in accordance with Instructions to Bidder's, which we acknowledge receiving for the Lump Sum amount of:

Break prices down on the attached Schedule of Values. This completed document must be included in the bid.

Phase I

Lump Sum Bid_____Dollars	($	)
Unit Price Off Site Disposal - Asbestos	($	)/ton

Phase II

Lump Sum Bid_____Dollars	($	)
Unit Price Off Site Disposal - Asbestos	($	)/ton

We further agree to execute with you a contract covering said work on the Lump Sum Form of Contractor enclosed with the Letter of Invitation.

We acknowledge receipt of the following Addenda and have included the costs associated therewith in our Lump Sum price.

As provided for in the Instruction to Bidders, we shall commence work __calendar days after receipt of purchase order and complete all work prior to _____.

The cost of all required insurance is included in the foregoing proposal.

In the event we are the successful bidder, we agree as a condition of this bid to submit evidence satisfactory to the Owner of our financial ability to perform all the work as covered by this bid.

Bidder is required to issue to SMC Corporation their rate schedule and any and all charges that would be used to calculate change orders, labor rates, equipment, stationary, phone costs, etc.

Signed:_____

Title: _____

Date: _____

STAUFFER MANAGEMENT COMPANY
SKANEATLES FALLS
BUILDING DEMOLITION
SCHEDULE OF VALUES

PAYMENT ITEM	DESCRIPTION	UNITS	COST
PHASE I -	**ABATEMENT FRIABLE ASBESTOS-CONTAINING MATERIALS**		
I-1	Mobilization Costs	Lump Sum	
I-2	Permitting Costs and Fees	Lump Sum	
I-3	Health and Safety Plan Development and Implementation	Lump Sum	
I-4	Work Plan Implementation	Lump Sum	
I-5	Temporary Facilities	Lump Sum	
I-6	Abatement of friable ACM	Lump Sum	
I-7	Disposal of all asbestos and lead containing material.	Lump Sum	
I-8	Demobilize	Lump Sum	
I-9	Final Report for NYSDEC submittal (No. of Copies 20)	Lump Sum	
I-10	Other/Miscellaneous (Provide details below).		
I-11	Cost for additional asbestos abatement.	Unit Cost	
I-12	Cost for offsite disposal of asbestos.	Unit Cost	
I-13	Cost for offsite disposal of lead.	Unit Cost	
	SUB TOTAL		
	Credit to SMC on sale of equipment and scrap/recyclable items if authorized.	Lump Sum	
	TOTAL PRICE - PHASE I		
PHASE II -	**ABATEMENT OF NON-FRIABLE ASBESTOS-CONTAINING MATERIALS**		
II-1	Mobilization Costs	Lump Sum	
II-2	Permitting Costs and Fees	Lump Sum	
II-3	Health and Safety Plan Development and Implementation	Lump Sum	
II-4	Work Plan Implementation	Lump Sum	
II-5	Temporary Facilities	Lump Sum	
II-6	Abatement of Non-Friable ACM	Lump Sum	
II-7	Disposal of all Non-Friable ACM	Lump Sum	
II-8	Demobilize	Lump Sum	
II-9	Final Report for NYSDEC submittal (No. of Copies 20)	Lump Sum	
II-10	Other/Miscellaneous (Provide details below).		
II-11	Cost for additional asbestos/lead abatement.	Unit Cost	
II-12	Cost for offsite disposal of asbestos.	Unit Cost	

PAYMENT ITEM	DESCRIPTION	UNITS	COST
PHASE II -	**Roof Asbestos Abatement (Continued)**		
	SUB TOTAL		
	Credit to SMC on sale of equipment and scrap/recyclable items if authorized.	Lump Sum	

Hourly costs for PPE levels for Equipment an Personnel to be added:

PPE LEVEL	A	B	C
Hourly Adder For Personnel			
Hourly Adder For Equipment			
TOTAL PRICE (per hour)			

Other/Miscellaneous Tasks:

Phase I:_____

Phase II:_____

STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NY

SPECIFICATIONS

MAIN PLANT BUILDING ASBESTOS ABATEMENT

Prepared For:

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153

Prepared By:

SPEC CONSULTING
Professional Engineering Services

18 Computer Drive West
Albany, NY 12205

SPEC Consulting Project #: 99-004

STAUFFER MANAGEMENT COMPANY

MAIN PLANT BUILDING ASBESTOS ABATEMENT

A. SITE DESCRIPTION

B. OVERVIEW

C. COMMUNITY RELATIONS

D. DIVISION 1 – GENERAL REQUIREMENTS

E. DRAWINGS

A. SITE DESCRIPTION

The Stauffer Management Company (SMC) Site is located at 4512 Jordan Road in the Town of Skaneateles, County of Onondaga, in the State of New York. Manufacturing operations ceased in the early 1980's, and the Main Plant Building has been vacant since that time. A new groundwater treatment plant has been constructed and is currently in operation on the site. Environmental remediation operations are currently being conducted under the December 2001 amended Record of Decision (ROD). The amended ROD includes the main plant building and the soils under it as Area of Environmental Concern 6 (AEC-6).

The scope of work addressed in these bid documents includes the removal of all asbestos-containing material associated with the Main Plant building and the tank farm. This building is comprised of a process area consisting of several attached rooms with different levels and basement areas, as well as, an attached warehouse area with second floor offices and basements, and a tank farm.

Miscellaneous furniture, tools, movable partitions, portable equipment, etc. located within the building and it may be necessary to work around some of these items during abatement activities.

Five aboveground vertical steel storage tanks storage tanks are located outside of the building. At least two of these tanks have asbestos insulation.

B. OVERVIEW

These bid documents are intended to address m asbestos removal in the main plant building on the Skaneateles Falls Site.

A pre-demolition asbestos inspection as required by Industrial Code Rule 56-1.9 was completed by Griffin Industrial Services, Inc., and is attached as Appendix A.

C. COMMUNITY RELATIONS

The SMC site is adjacent to a residential area. The work zone has residential dwellings located directly across Jordan Road. Work must be scheduled and executed in a fashion to minimize the impact on the neighbors. Care must be taken to avoid an adverse community reaction in response to excessive noise, dust releases, and/or interference with traffic patterns. Area news media will likely follow work at the site, seeking comment from contractor personnel. It is imperative that all such inquiries be directed to specified SMC representatives

DIVISION 1 – GENERAL REQUIREMENTS

A. SECTION 01030 - MEASUREMENT AND PAYMENT

1.1 GENERAL

A. Lump Sum and Unit Price Payments

1. The labor, materials, equipment and supervision for asbestos removal of friable and non-friable asbestos-containing materials, and all other work on site is to be bid and executed as a lump sum. The Contractor is responsible for accurately estimating the quantities and magnitude of this work for his proposal.
2. The cost of the labor, materials, equipment and fees used to classify and dispose of materials off site is to be bid and executed as unit price, based on the weight of the materials to be disposed. All trucks leaving the site must be loaded in a fashion to assure that they are as full as possible and still meet legal weight requirements. Owner's representative must inspect each truck before leaving site. Weigh tickets must be supplied to Owner in a timely fashion but in no case later than one week after shipment is made.
3. Quantities indicated in the individual specification sections are for bidding and contract purposes only. Quantities and measurements verified as specified below determine payment.
4. If the actual work requires more or fewer quantities than those quantities indicated, provide the required quantities and the unit sum contracted.

B. Measurement of Quantities

1. Measurement Devices:

   a. Weigh Scales: Inspected, tested and certified by the State of New York Department of Weights and Measures within the applicable statutory period.
   b. Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
   c. Metering devices: Inspected, tested and certified by the State of New York Department of Weights and Measures within the applicable statutory period.

C. Payment

1. Payment Includes: Full compensation for all required labor, products or services, tools, equipment, transportation and incidentals associated with abatement activities removal; overhead and profit.
2. Final payment for work governed by unit prices will be made on the basis of actual measurements and quantities accepted by the Owner and Contractor multiplied by the unit sum for work which is incorporated in or made necessary by the work.

D. Non-Payment for Rejected Quantities

A. If, in the opinion of the Owner, the measurement of quantities does not comply with the procedures specified in this section and the Contract documents, payment may be withheld in accordance with the Contract Documents.

SECTION 01040 - COORDINATION AND MEETINGS

1.1 Coordination

A. Coordinate scheduling, submittals and work of the various tasks to assure efficient and orderly sequence of performance of interdependent construction elements, with provisions for work by others.

B. Verify utility requirements and characteristics are compatible with specified work Coordinate work of various tasks having interdependent responsibilities for performance of work of other tasks.

C. Coordinate completion and clean up of work of separate tasks in preparation of Substantial Completion.

1.2 Meetings

A. The following meetings will be held:

1. Site Mobilization Meeting: This will be held prior to Contractor occupancy with Owner, Owner's Representative, Engineer, Contractor and major Subcontractors. Contractor will provide the agenda for this meeting, to Owner, one week prior to the meeting.
2. Kickoff Meeting: This meeting will be held following Contractor occupancy and before substantial start of work. Same format.
3. Progress Meetings: These will be held weekly on Wednesday at 9:00 AM, same format.

B. For all meetings, Contractor will record minutes and distribute copies within two days after meeting to participants, with two copies to Owner, Owner's representative, Engineer, Contractor and those affected by decisions made.

SECTION 01050 - PROJECT COORDINATION

1.1 PROJECT COORDINATOR

A. Project Coordinator

Owner's Site Representative: Ron Pucci

1.2 CONSTRUCTION MOBILIZATION

A. Cooperate with the Project Coordinator in allocation of mobilization areas of Site; for field offices and sheds; for access to Site; and parking areas

B. During abatement activities, coordinate use of Site and facilities through the Project Coordinator.

C. Comply with Project Coordinator procedures for inter-project communications; Submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.

D. Comply with the instructions of the Project Coordinator, for use of temporary utilities and construction facilities.

1.3 SCHEDULES

A. Submit preliminary progress schedules.

B. After review, revise and resubmit schedule to comply with revised project schedule.

C. During progress of work, revise and resubmit, as directed by Project Coordinator, and with applications for payment.

1.4 SUBMITTALS

A. Submit Shop Drawings in accordance with Section 01300-Submittals for review and compliance with Contract Documents. Revise and resubmit as required.

B. Submit Applications for Payment forms for review and submittal to Owner to Project Coordinator.

C. Submit requests for interpretation of Contract Documents, and obtain instructions through the Project Coordinator.

D. Deliver Closeout Submittals for review and transmittal through the Project Coordinator.

1.5 COORDINATION DRAWINGS

A. Provide information required by Project Coordinator for preparation of coordination drawings.

1.6 CLOSEOUT PROCEDURES

A. Notify Project Coordinator when work is considered ready for Substantial Completion.

B. Comply with Project Coordinator's instructions to correct items of work listed in executed Certificates of Substantial Completion.

C. Notify Project Coordinator when work is considered finally complete.

D. Comply with Project Coordinator's instructions for completion of items of work determined by Owner's final inspection.

SECTION 01060 - REGULATORY REQUIREMENTS

1.1 GENERAL REQUIREMENTS

A. Contractors shall obtain all necessary permits and licenses necessary to complete described herein. This includes, but is not limited to filing project notifications with the NYSDOL Division of Health and Safety Asbestos Control Bureau and the USEPA, hazardous waste transporter licenses and other requirements. Permit and application fees are to be included in the Contractor's bids.

B. Copies of all permits or other required documentation shall be provided to the Owner prior to commencement of work. The Contractor shall obtain and maintain, for the duration of the project or other statutory period, all necessary permits, licenses, waivers and other required documentation.

C. The Contractor warrants that he is familiar with the codes and requirement applicable to the work and shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the work. If the Contractor observes that the specifications or plans are at variance therewith, he shall give written notice to the owner describing such variance. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations and without written notice to the Owner, he shall bear all costs arising therefrom. The Contractor's particular attention is directed to the necessity of complying with the regulations in the progress of his work. Failure or omission on the part of the Contractor, or any of their representatives, either to discover or to bring to the attention of the Owner any deviation from, omission from or noncompliance with the requirements for asbestos abatement shall not be used by the Contractor as defense for failure on his part to fulfill such requirements.

1.2 Safety Requirements

A. Contractors shall be responsible for the safety education of their employees. Training shall comply with all laws and standards and shall be documented. At a minimum, the following items should be considered for Contractor training were applicable:

1. NYS Asbestos Handlers Certification
2. Contractor's NYS Asbestos Handling License
3. Supervisory safety training to assure that Contractor management understands that safety is their first responsibility.
4. Orientation for Contractor employees in Contractor's safety policies, safety manuals, first aid/CPR, accident reporting procedures, safety meeting participation, personal protective equipment and enforcement procedures.
5. Hazardous Waste Operations and Emergency Response procedures training as outlined under Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120, General Industry Safety Orders (GISO) 5192 and other applicable codes. Training by qualified instructors is a requirement.
6. Hazard communication training in accordance with OSHA 29 CFR 1910.1200 and GISO 5194.
7. Safety meeting and accident prevention programs.
8. Permit system training to include applications to the following:

    a. Hot Work 29CFR 1910, Subpart Q and 29 CFR 1926, Subpart J.
    b. Confined Space Entry and Rescue procedures 29 CFR 1910.146 and GISO 5156-5159.
    c. Line Breaking.

9. Lockout/tagout training in accordance with 29 CFR 1910.147 and GISO 3314.

10. Personal protective equipment training, 29 CFR 1910, Subpart I and GISO 1514(3380).
11. Vehicle safety training.

B. Contractors retained by SMC shall have in effect a comprehensive substance abuse testing program for their employees. This program shall be in accordance with all applicable Federal, State and local laws. Any Contractor employee who tests positive for substance abuse shall be removed immediately from the site and shall not be allowed to return to work without Owner approval.

C. The Contractor shall immediately report to Owner the following:

1. Provide written accident/incident reports.
2. Provide verbal reports of any NY-OSHA recordable injury or illness.
3. Provide Employer's First Report of Occupational Injury or Illness within 24 hours of occurrence.
4. Provide written report of any near misses or incidents that could have resulted in property damage or serious injury to employees.
5. Provide written recommendations when a work practice is identified that may result in property damage or injury unless a procedural change is made.
6. Provide and inspect all personal protective equipment necessary for execution of work.

D. Owner shall conduct periodic safety audits assessing the following:

1. Documentation of training to include a record of Contractor new hires.
2. The number of safety meetings conducted, the percentage of Contractor employees attending and a summary of occupational injuries, illnesses and lost workdays versus hours worked.
3. Safety meeting attendance records and meeting minutes.
4. Inspection Reports and a summary of corrective actions implemented.

E. Contractor shall prepare a comprehensive Health and Safety plan as outlined in Task No. 1 of the Scope of Work in Section 01020 of these specifications, to include the following:

1. All safety procedures.
2. All training requirements.
3. Names and telephone number of the Site Safety Coordinator, other key Contractor personnel and emergency contacts.
4. Emergency procedures, including first aid, hospital information (with directions) and order of call.

SECTION 01070 - REFERENCE STANDARDS

1.1 QUALITY ASSURANCE

A. For products or workmanship specified by association, trade or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard by date of issue on date of Contract Documents.

C. Obtain copies of standards when required by the Contract Documents.

D. Maintain copy at project site until Substantial Completion.

SECTION 01080 - SPECIAL PROJECT PROCEDURES

1.1 Disposition of Materials Transported Offsite

A. A Material Disposition Record will be used to track the disposition of all asbestos materials that are shipped offsite during the project. All materials shipped offsite shall receive one of these forms.

B. The Contractor shall initiate the form, including a description of the material to be shipped, the transporter and the receiver. If the material potentially contains a hazardous substance, the shipper acknowledges that this potential is recognized. Materials potentially containing hazardous substances destined for disposal should be accompanied by a Hazardous Waste Manifest. If materials potentially containing a hazardous waste are intended for recycling or reuse, the shipper must acknowledge that recycling or reuse is the ultimate disposition of the material.

C. Once the Owner has completed and signed the form, the Contractor for ultimate inclusion into the project record documents will retain all copies.

1.2 Acceptance of Job Site

A. Contractor shall complete a tour of the site and confirm any dimensions, measurements and issues concerning the job site. **Quantity takeoffs, characterizations and other actual measurements are the sole responsibility of the Contractor Bidder.**

1.3 Discovery of Unspecified Hazards

A. If the Contractor discovers any potential hazardous substance or waste or other potential hazard to human health, property or the environment, the Contractor shall immediately notify the Owner in writing. After receiving Owner's approval, the Contractor shall remove and appropriately treat or dispose of such items at a unit price identified by the Contractor in his bid.

B. The term "unspecified hazards" refers to latent conditions that could not be reasonably identified prior to project execution.

1.4 Workarounds

A. The Owner maintains the right to direct the Contractor to an alternative work area selected by the Owner due to the discovery of an unspecified hazard during demolition or cleanup without penalty to the Owner. Typically but not exclusively, this right will be invoked when an unspecified hazard is discovered during demolition and the Owner determines that investigation or other action should be performed on the item prior to the Contractor proceeding with work in the area.

1.5 Work Stoppage

A. The Owner reserves the right to direct work stoppage at the site if the Owner determines that unacceptable levels of contaminants are being emitted or other hazards or unsafe conditions are present. Any costs resulting from such work stoppage shall be born by the Contractor.

1.6 Testing

A. Testing by Owner does not relieve the Contractor from providing necessary tests required by regulations, codes and standards for the protection of his workers or to maintain compliance with said regulations, codes and standards. The Contractor shall provide all such testing as part of this work, even if the Owner's testing duplicates it. The results of all Contractors provided testing shall be submitted to the Owner as a condition of final payment. Observation of the performance of the Contractor's work by Owner shall not imply approval or acceptance by the Owner of the work in progress.

1.7 Exposure of Subsurface Structures/Notification of Removal

A. Exposure of Subsurface Structures: If the Contractor uncovers any slab, pavement, sump, pipe or otherwise exposes soil or other material under improvements or surface coverings that exhibits staining, odors, or other evidence of a potential release, the Contractor shall immediately discontinue excavation and removal and shall notify the Owner. At the discretion of the Owner, The Contractor may be required to discontinue operations pending investigation, sampling or other assessment by the Owner, under the work around clause described herein.

B. Notification of Removal: Whenever specified herein that the Owner shall be present during removal of a structure (i.e., sumps, pavement, slabs, foundations, etc.), the Contractor shall provide 48 hours notice of the removal to the Owner via the Project Coordinator.

SECTION 01090 - HAZARDOUS MATERIALS PROCEDURES

1.1 WASTE MATERIALS

A. Definitions: The term "Waste Materials" refers to any and all waste produced as a result of performing the Scope of Work, whether solid, liquid, semi-solid, particulate, or gaseous, and whether hazardous or non-hazardous.

B. Reporting Requirements: In the event of a release, incident or occurrence, including accidents involving the transportation vehicle while said vehicle is transporting Waste Materials under this Agreement, whether or not a release occurs, including, but not limited to, accidents, fines, violations of governmental orders, or impoundment of the transportation vehicle, Contractor shall take immediate action to protect human health, property, and the environment as required under the circumstances, by order of any government entity or by the Owner. The Contractor shall notify the Owner and others, as required by law, of a release, incident or occurrence involving the transportation vehicle or the Waste Materials by the most expeditious means available.

C. Waste and Debris Disposal: All non-hazardous Waste Materials, including demolition debris, shall be disposed in approved landfills or recycling facilities. Hazardous Waste Materials shall be treated and/or disposed in approved, licensed facilities. The Contractor shall notify and obtain the approval of the Owner prior to the use of a particular hazardous waste treatment, storage, and disposal facility.

D. Marking and Placarding: All Waste Materials transported by the Contractor shall be properly classified, described, packaged, marked, labeled, and shall be in proper condition for transportation according to all applicable laws and regulations. Contractor's employees, subcontractors, agents, or others acting for or on Owner's behalf, shall comply with all applicable regulations for transporting Waste Materials.

E. Shipping Documents: In the event any hazardous Waste materials must be shipped, the owner shall be responsible for preparing and delivering to the Contractor any documents, shipping papers, or manifests, executed by the Owner as required for lawful transfer of the Waste Material to the Contractor, by valid and applicable statutes, ordinances, orders, rules or regulations of the Federal, State, or local governments, including, but not limited to, the Hazardous Materials Transportation Act, the Toxic Substances Control Act, and the Resource Conservation and Recovery Act of 1976, and all applicable laws thereafter and amendments thereto (including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

F. Performance and Transfer of Title

1. Contractor shall satisfactorily perform and complete the work, in a diligent and workmanlike manner in accordance with the Contract Documents, and shall obtain and maintain all permits, licenses, or other forms of documentation required by law. Contractor agrees to take title and risk of loss to all Waste delivered to Contractor hereunder directly from the Owner of the Waste and to relieve Owner from any responsibility for the Waste (save only Owner's CERCLA liability for the Waste, if any), following Contractor's loading of the Waste for transportation.
2. Contractor agrees to look solely to the Owner or other generator of the Waste in the event the Waste is determined to be non-conforming or otherwise unacceptable to the ultimate disposal site and shall not make any claims against others by reason thereof. Contractor acknowledges that title and risk of loss to the Waste passes hereunder directly from the Owner to the Contractor and that Others at no time takes title or risk of loss to or exerts control of the Waste.

G. Non-delivery of Waste Materials: Should the Waste Materials not be accepted or delivery cannot be made to the designated storage or disposal facility, Contractor shall contact Owner for further

instructions. Contractor at all times until acceptance by the designated storage or disposal facility, retains possession and control of the Waste Materials. Contractor shall obtain approval from the owner for an alternative site for delivery of the Waste Materials or return of the Waste Materials to the generator site.

1.2 CONTRACTOR WARRANTIES

A. Contractor warrants that:

1. Contractor's vehicles shall be clean and not contain any contaminants that may mix with or change the composition or characteristics of the Waste Materials.
2. Contractor will not commingle or mix Waste Materials with other materials or otherwise cause the alteration of the characteristics or components of the Waste Materials.
3. Contractor will not load in its vehicles any material that would not be compatible with, or may be contaminated by, the transportation of Waste Materials.
4. Contractor's transportation vehicle, prior to hauling other materials, goods or products after the termination of transportation services for the Owner, shall be cleaned, purged or decontaminated as necessary, such that other materials, goods or products transported by Contractor are not contaminated with Waste Materials.
5. Contractor has obtained and will maintain during the term of this Agreement, all permits, licenses, certificates of approval, required by applicable Federal, State or local law, rule or regulation to allow Contractor to transport the Waste Materials.
6. If any manifest or other document required by Federal, State or local law or regulation executed by the Owner is to accompany or be delivered with the Waste Materials, such manifest or documents shall be delivered in the form and number and in the same condition, as received by the Contractor from the original generator of the Waste Materials.
7. Contractor has acquired the requisite expertise to safely transport Waste Material that Contractor agrees to transport for Owner.
8. Contractor understands the hazards and risks involved in transporting Waste Materials to human health, property and the environment.

SECTION 01120 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1.1 Temporary Electricity

A. While available the building complex power supply may be used by Contractor. Should site activities preclude further use of this utility, Contractor shall provide temporary power for his activities.

B. In all cases, Contractor is responsible for the electrical work to provide this power. Installations must conform to applicable codes and regulations.

C. Anticipated work includes:

1. Provide power outlets for Abatement operations with branch wiring and distribution boxes located as required. All power used for abatement must be GFCI protected.
2. Provide temporary lighting for construction purposes. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails and lamps as required.

1.2 Telephone Service

A. Provide, maintain and pay for telephone service to the field office at time of project mobilization. Cellular Telephone service may be used.

B. Provide, maintain and pay for facsimile machine in field office at time of project mobilization. Cellular telephone facsimile may be used.

1.3 Temporary Water Service

A. Provide and maintain suitable quality water service. Connect to existing water source for construction operations.

B. Contractor to pay cost of water used. Exercise measures to conserve water.

C. Extend branch-piping outlets located so water is available by hoses with threaded connections.

1.4 Temporary Sanitary Facilities

A. Provide and maintain required facilities and enclosures as required.

1.5 Barriers

A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide barricades required by governing authorities for public rights of way if required.

C. Provide protection for plant life designated to remain. Replace damaged plant life.

1.6 Project Identification

A. No signs are allowed without Owner permission except those required by law.

1.7 Security Program

A. Protect work and existing premises from theft, vandalism and unauthorized entry.

B. Initiate security program at project mobilization.

C. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

1.8 Entry Control

A. Restrict entrance of persons and vehicles into project site.

B. Allow entrance only to authorized persons.

1.9 Access Roads and Parking

A. Maintain access to site through the Jordan Road entrance.

B. Maintain access to the existing water treatment plant.

C. Relocate work as required to maintain access.

D. Provide unimpeded access for emergency vehicles. Maintain 20-foot width driveways with turning space between and around combustible materials.

E. Arrange temporary parking areas to accommodate use of construction personnel in the parking areas available.

1.10 Field Offices and Sheds

A. Field offices and sheds shall be adequate for the required purpose. Existing facilities may not be used for field offices.

B. Such structures shall be portable or mobile buildings with steps and landings at entrance doors. They shall be secure and lockable. Appropriate type fire extinguishers and first aid kits shall be provided at each office and storage area.

C. Field offices and sheds shall be cleaned and maintained weekly.

D. Approach walks shall be kept free of mud, water and debris.

E. At completion of the project, all buildings, foundations, utility services and debris shall be removed and the areas restored.

SECTION 01130 - FINAL REPORT

1.1 ABATEMENT REPORT

A. The Contractor shall provide SMC with a final Abatement Report at the completion of each phase of the project. This report shall be specific in areas of materials leaving the site and all work performed. The report shall include all shipping documents for asbestos-containing waste removed from the site and facility weight tickets for each waste shipment. This shall provide the description of material, what it is how much there is and where it is going.

SECTION 01140 - CONTRACT CLOSE OUT

1.1 Closeout procedures

A. Submit written certification that Contract Documents have been reviewed, work has been inspected and that work is complete in accordance with Contract Documents and ready for Owner's review.
B. Provide copies of all air sampling conducted during abatement activities.

C. Provide submittals to Owner through Project Coordinator that are required by governing or other authorities.

D. Submit Final Application for Payment identifying total adjusted Contract Sum, Previous payments and sum remaining due.

1.2 Final Cleaning

A. Execute final cleaning prior to final project assessment.

B. Remove wastes and surplus materials, rubbish and construction facilities from the site.

1.3 Project Record Documents

A. Maintain on site one set of the following record documents; record actual revisions to the work:

1. Drawings
2. Specifications
3. Addenda
4. Change Orders and other modifications to the Contract
5. Reviewed shop drawings

B. Ensure entries are complete and accurate, enabling future reference by Owner.

C. Store record documents separate from documents used for construction.

D. Record information concurrent with progress.

E. Submit documents to Owner through Project Coordinator with claim for final Application for Payment.

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including;

1. Contractor's progress schedule.
2. Submittal schedule.
3. Daily activity reports.
4. Shop Drawings.
5. Product Data.

B. Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

1. Permits.
2. Applications for payment.
3. Performance and payment bonds.
4. Insurance certificates.
5. List of Subcontractors.

C. The Schedule of Values submittal is included in Section "Applications for Payment."

D. Inspection and test reports are included in Section "Quality Control Services."

1.3 SUBMITTAL PROCEDURES

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

    a. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

3. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for re-submittals.

    a. No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the Work to permit processing.

B. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal form with AIA Form G810 or equivalent. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix. Submittals received from sources other than the Contractor will be returned without action.

On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

D. Identify Project, Contractor, Subcontractor or supplier, pertinent drawing and detail number and Specification section number as appropriate.

E. Apply Contractor's signature certifying that review, verification of field dimensions, adjacent construction work and coordination of information is in accordance with the requirements of the work and Contract documents.

F. Schedule submittals to expedite the work and deliver to Project Coordinator. Coordinate submission of related items.

G. Identify variations from Contract documents, which may be detrimental to successful performance of the completed work.

H. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with provisions.

1.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Bar-Chart Schedule: Prepare a fully developed, horizontal bar- chart type (GANTT Chart) Contractor's construction schedule. Submit within 15 days of Notice to proceed. Coordinate content with the Schedule of Values.

B. Work Stages: Indicate important stages of construction for each major portion of the Work, including testing and installation.

C. Provide narrative report to define problem areas, anticipated delays and impact on schedule. Report corrective action taken or proposed and it's effect including the effect of changes on schedules of separate contractors.

D. Distribution: Following response to the initial submittal, print and distribute copies to the Engineer, Owner, subcontractors, and other parties required to comply with scheduled dates. Post copies in the Project meeting room and temporary field office.

When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

E. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

1.5 DAILY ACTIVITY REPORTS

A. Prepare a daily construction report, recording the following information concerning events at the site; and submit duplicate copies to the Engineer, weekly.

1. List of subcontractors at the site.
2. Approximate count of personnel at the site.
3. High and low temperatures, general weather conditions.
4. Accidents and unusual events.
5. Meetings and significant decisions.
6. Stoppages, delays, shortages, losses.
7. Emergency procedures.
8. Air Monitoring Results.

1.6 ABATEMENT SUBMITTALS

A. Correspondence

1. Correspondence.
2. Transmittals.
3. Minutes of meetings.

B. Accounting Records

1. Revised schedule of values.
2. Contractor's affidavit of payment of debits and claims.
3. Contractor's affidavit of release of liens.
4. Applications for payment.
5. Construction change directives.

1.7 ABATEMENT RECORDS

A. Daily air monitoring results

B. Final clearance air sampling record

C. Daily activity reports.

D. Progress reports.

E. Progress schedules.

F. Sign in/out logs.

1.8 MODIFICATIONS TO CONTRACT

A. Contractor's supplemental instructions.

B. Construction change directives.

C. Change orders.

D. Addenda.

1.9 PROJECT RECORD DOCUMENTS

A. Asbestos during and clearance sampling records.

B. Hazardous materials characterization report.

C. Certificate of substantial completion.

D. Asbestos waste manifests.

E. Material disposition records.

F. Air sampling records.

G. Contractor testing Reports:

1. Hazardous materials characterization test results.
2. Compaction test results.
3. Waste profile records.

1.10 PRODUCT DATA

A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions and catalog cuts. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."

1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

a. Manufacturer's printed recommendations.
b. Compliance with recognized trade association standards.
c. Compliance with recognized testing agency standards.
d. Application of testing agency labels and seals.
e. Notation of dimensions verified by field measurement.
f. Notation of coordination requirements.

2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
3. Preliminary Submittal: Submit a preliminary single-copy of Product Data where selection of options is required.
4. Submittals: Submit 5 copies of each required submittal; submit 2 additional copies where required for maintenance manuals.

a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

5. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.

a. Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.
b. Do not permit use of unmarked copies of Product Data in connection with construction.

1.11 MATERIAL SAFETY DATA SHEETS (MSDS):

A. Each Contractor shall comply with "Right to Know" requirements of Chapter 551 of Laws of New York, 1980, concerning notification of the use of toxic substances.

1. Any product or substance used by each Contractor or its Subcontractors which is listed in sub-part Z of OSHA Part 1910 Title 29 of Code of Federal Regulations entitled "Toxic and

Hazardous Substances" shall be identified to the Engineer by the submission of a standard Material Safety Data Sheet.

2. The MSDS or a manufacturer's standard form (OSHA-20) shall be submitted to the Engineer before the material is brought on site.

1.12 ENGINEER'S ACTION

A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Engineer will review each submittal, mark to indicate action taken, and return promptly.

1. Compliance with specified characteristics is the Contractor's responsibility.

B. Action Stamp: The Engineer will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:

1. Final Unrestricted Release: Where submittals are marked "No Exceptions Taken," that part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.
2. Final-But-Restricted Release: When submittals are marked "Make Corrections Noted," that part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
3. Returned for Resubmittal: When submittal is marked "Revise and Resubmit", "Rejected", or "Submit Specified Item", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.

a. Do not permit submittals marked "Revise and Resubmit", "Rejected", or "Submit Specified Item" to be used at the Project site, or elsewhere where Work is in progress.

4. Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned, marked "Action Not Required".

SECTION 01400 - QUALITY CONTROL SERVICES

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 QUALITY ASSURANCE

A. Monitor quality control over suppliers, Products, Services, site conditions and workmanship, to produce work of specified quality.

B. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.

1.3 SUMMARY

A. This Section specifies administrative and procedural requirements for quality control services.

B. Quality control services include inspections and tests and related actions including reports performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Engineer.

C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.

D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.

1. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
2. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.

E. Requirements for the Contractor to provide quality control services required by the Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.4 RESPONSIBILITIES

A. Contractor Responsibilities: The Contractor shall provide inspections, tests and similar quality control services, specified in individual Specification Sections and required by governing authorities, except where they are specifically indicated to be the Owner's responsibility, or are provided by another identified entity; these services include those specified to be performed by an independent agency and not by the Contractor. Costs for these services shall be included in the Contract Sum.

1. The Contractor shall employ and pay an independent agency, to perform specified quality control services.
2. The Owner will engage and pay for the services of an independent agency to perform inspections and tests specified as the Owner's responsibility.
3. Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract

Document requirements, regardless of whether the original test was the Contractor's responsibility.

a. Cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original construction.

B. Coordination: The Contractor engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

1. The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

1.5 SUBMITTALS

A. The Contractor shall submit a certified written report of each inspection, test or similar service to the Engineer, in duplicate.

1. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:

a. Date of issue.
b. Project title and number.
c. Dates and locations of samples and tests or inspections.
d. Names of individuals making the inspection or test.
e. Designation of the Work and test method.
f. Identification of product and Specification Section.
g. Complete inspection or test data.
h. Test results and an interpretations of test results.
i. Ambient conditions at the time of sample-taking and testing.
j. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements.
k. Name and signature of inspector.
l. Recommendations on retesting.

1.6 REPAIR AND PROTECTION

A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes, where applicable. Comply with Contract Document requirements for "Cutting and Patching".

SECTION 01720 - RECORD DOCUMENTS

1.1 DESCRIPTION

A. Maintenance of Documents:

1. The Contractor shall maintain, at the job site, one copy of:

   a. Contract Drawing
   b. Project Notifications
   c. Daily Air Sampling Results
   d. Specifications
   e. Addenda
   f. Change Orders
   g. Field Test Records
   h. Correspondence File

2. Store documents in approved locations, apart from documents used for construction.
3. Provide files and racks for storage of documents.
4. Maintain documents in clean, dry, legible condition.
5. Do not use record documents for construction purposes.
6. Make documents available at all times for inspection by Engineer and Designated Representative.
7. At close of project, turn over field office file to Designated Representative.

B. Recording

1. Label each document in A. above "PROJECT RECORD" in 2-inch high printed letter.
2. Keep record documents current.
3. Do not permanently conceal any work until required information has been recorded
4. Specifications and Addenda: Legibly mark up each Section to record:
   a. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
   b. Changes made by Change Order.
   c. Other matters not originally specified.

5. Shop Drawings: Maintain as record documents. Legible mark-up to show changes made after review.

C. Submittals:

1. At completion of project prior to the final project close-out meeting, deliver marked-up record documents to Engineer.
2. Accompany submittal with transmittal letter, containing:

   a. Date.
   b. Project title and number.
   c. Contractor's name and address.
   d. Title and number of each record document.
   e. Certification that each document as submitted is complete and accurate.
   f. Signature of Contractor, or his authorized representative.

SECTION 02080

ASBESTOS ABATEMENT

PART I: GENERAL

1.1 WORK SUMMARY

A. The work specified herein shall be the construction of isolation barriers, protecting all non-removable items, removing all asbestos-containing materials, and cleaning of the work area by persons trained, knowledgeable and qualified in the techniques of: abatement, handling, cleaning, disposal and working with or around, asbestos-containing and asbestos-contaminated material. Those persons shall comply with all applicable Federal, State, and Local regulations including requirements of this specification, and shall be capable of and willing to perform the work of this Contract.

B. The information provided in this specification is for the abatement of asbestos containing materials at the former Stauffer Chemical facility located at 4512 Jordan Road in Skaneateles Falls, NY. The reproduction or use of information included in this specification for any other purpose is prohibited.

1.2 RELATED SECTIONS

A. Documents affecting the work of this section include but are not limited to, general conditions, general requirements, supplementary conditions and sections in Division 1 of these specifications.

B. Section 02081: Air Monitoring

1.3 QUALIFICATIONS

A. Pre-Contract Submittals: Two days after bids are open, those bidders to whom award of contract is under consideration shall be required to submit, to the extent not already submitted with the bid, the following documentation:

1. Asbestos Contractors Resume: Shall include the following:

a. Contractor license issued by New York State Department of Labor.

b. The number of years engaged in asbestos removal.

c. Provide a list of projects performed within the past two years and include the dollar value of all projects. Provide project references to include owner, consultant, and air monitoring firms' name, contact person, address and phone number.

d. A list of owned equipment available to be used in the performance of the project.

e. An outline of the worker training course and medical surveillance program conducted by the contractor.

f. A standard operating procedures manual describing work practices and procedures, equipment, type of decontamination facilities, respirator program, special removal techniques, etc.

2. Citations/Violations/Legal Proceedings - Submit a notarized statement describing:

a. Any citations, violations, criminal charges, or legal proceedings undertaken or issued by any law enforcement, regulatory agency, or consultant concerning performance on

previous abatement contracts. Briefly describe the circumstances citing the project and involved persons and agencies as well as the outcome of any actions.

b. Any Stop Work Orders issued on projects within the past two years.

c. Any litigation or arbitration proceedings arising out of performance on past projects.

d. Any liquidated damages assessed within the last two years.

3. Preliminary Schedule

a. Provide an estimate of manpower to be utilized and the time required for completion of each major work area. Include estimated size and number of crews and work shifts.

4. The Contractor shall inform the Owner, by letter, that he is familiar with all aspects of the job. Any questions shall be addressed before submitting the proposal.

5. The Contractor shall be held financially responsible for any misinterpretations in his estimating and bidding. All errors made in estimating, including costs and difficulties, are the sole responsibility of the contractor, and shall not result in additional expense to the Owner.

6. The Owner assumes no responsibility for any conclusions or interpretations made by the Contractor based upon the information made available by the Owner.

B. Pre-work Submittals. The asbestos abatement contractor shall submit to the Owner's Representative within seven days prior to the pre-construction conference three (3) copies of the documents listed below:

1. Progress Schedule:

a. Show the complete sequence of construction by activity and the sequencing of work within each phase or section of the work.

b. Show the dates for the beginning and completion of each major element of work including substantial completion dates for each work area, or phase.

c. Show projected percentage of completion for each item, as of the first day of each month.

d. Show final inspection dates.

2. Notifications: Submit copies of asbestos project notification as required by ICR 56-1.6(b) notifications required by federal, state, and local regulations together with proof of timely transmittal to agencies requiring the notice (e.g., certified mail return receipt).

3. Permits: Submit copies of current valid permits required by state and local regulations, including arrangements for storage, transportation, and disposal of contaminated material.

4. Abatement Work Plan: Provide plans which clearly indicate all work areas (numbered sequentially) including the locations and types of all decontamination chambers, entrances and exits to the work area, type of abatement activity/technique, number and location of negative air units and exhaust including calculations, and the proposed location and construction of storage facilities and field office.

5. Equipment: Submit manufacturer's information about vacuums, negative air pressure equipment, respirators, and air supply equipment, etc. Provide certification that all equipment meets applicable requirements of OSHA and EPA.

6. Samples: Submit samples of warning notices to be posted, catalog descriptions of protective clothing, replacement materials, etc.

7. Worker Training and Medical Surveillance: The Contractor shall submit a list of the persons who will be employed by him and his subcontractors in the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.

8. Logs: Specimen copies of daily progress log, visitor's log, and disposal log.

9. Material List: A complete materials list of all items proposed to be furnished and used under this contract.

10. Subcontractors List: The Contractor shall submit a list of all subcontractors he intends to use on the project.

11. Material Safety Data Sheets (MSDS): Submit copies of MSDS for each chemical or material used for the project (encapsulant, surfactant, mastic remover, etc.).

12. Project Supervisor: Submit the resume of the proposed Project Supervisor.

13. Rental Notifications: Submit copies of notices sent to rental suppliers informing them of the nature of the work that the Contractor intends to use the equipment for an asbestos abatement project.

14. Worker's Acknowledgments: Submit statements signed by each employee that the employee has received training in the proper handling of asbestos-containing materials; understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

C. Project Close Out Submissions in addition to the requirements of Section 01700 of the specifications:

1. Submit copies of all waste disposal manifests, seals, and disposal logs.

2. Submit OSHA compliance air monitoring records conducted during the work.

3. Submit copies of the daily progress log.

4. Submit copies of the Visitor's log.

5. Submit Certificate of Visual Inspection.

6. Submit a list of all employees utilized on the project with social security number and New York State Asbestos Handler Certificate number.

7. Submit copies of any required Employee Statements such as Medical Examination Statement, Certificate of Worker's Release, or Employee Training Statement.

D. The Contractor shall be financially responsible for:

1. All demolition associated with asbestos removal, asbestos removal and asbestos disposal costs.

2. Installation of temporary electricity and lights.

3. Standby electrician for temporary power.

4. All plumbing work necessary for abatement.

1.4 DESCRIPTION OF WORK ACTIVITIES

A. Abatement activities at the SMC site includes removeal of the asbestos-containing materials (ACM) indetified in Table 1.4.1 and Table 1.4.2. Work will be conducted in two phases. Phase I of the work will include removal of the friable ACM presenetd in Table 1.4.1. Phase II will include the removal of the non-friable materials identified in Table 1.4.2.

Table 1.4.1
Friable ACM

Material Type	Location	Est. Quantity
Boiler Insulation	2nd Flr Sub-West Wing	100 SF
Tank Insulation	2nd Flr Sub-West Wing	50 SF
Boiler Insulation	2nd Flr Sub-West Wing	100 SF
Duct Insulation	2nd Flr Sub-West Wing	1,350 SF
Transite Labtop	2nd Flr East &West Wings	140 SF
Boiler Breaching	Boiler Room	170 SF
Tank Insulation	Tank Farm	325 SF
Tank Insulation (outer)	Tank Farm	100 SF
Pipe and fitting insluation	2nd Flr -West Wing	3,325 LF
Unit Insulation	2nd Flr – Upper West Wing	1,100 SF
Fitting Ring	Basement	50 SF
Mill-Board Pipe Insulation	First Flr – North Bay	Not Provided
Aircell Pipe Insulation	Break Rm & Mens Rm	475 LF
Aircell Pipe Insulation	Laundry Rm	225 LF

1. Contractor to make determination as to use of Applicable Variances for completion of work identified in Table 1.4.1. Contractor may also opt to petition the NYSDOL Asbestos Control Bureau, Department of Engineering Services for a site-specific variance. SMC requires review and approval of any variance applications prior to submission to NYSDOL.

2. One mobilization is expected for completion of the work identified in Table 1.4.1. The building is vacant and available at times specified by owner.

B. Base Bid Work Area Information - For the purpose of the description of work, friable and non-friable materials will be bid as separate contracts.

Table 1.4.2
Non-Friable ACM

Material Type	Location	Est. Quantity
Floor Tile & Mastic	First Flr	115 SF
Floor Tile & Mastic	First Flr Break Rm	940 SF
Floor Tile & Mastic	First Flr – Mens Bathroom	760 SF
Roof Flashing	All Roofs	To Be Determined
Floor Tile & Mastic	2nd Flr – West Wing	8,100 SF
12"x12" Floor Tile & Mastic	2nd Flr – Sub West Wing	930 SF
Linoleum & Mastic	2nd Flr – Sub West Wing	700 SF
Window Glazing	All Interior & Exterior	Not Provided

1. Work procedures for the items presented in table 1.4.2 will be conducted in accordance with New York State Code Rule 56 and Applicable Variance AV 119 dated June 30, 2000, for Asbestos-Containing Roofing/Flashing, and AV 120 for Asbestos Floor Covering and Mastic Manual Removal dated June 30, 2000.

C. The Contractor is responsible for verifying the quantities and locations of material.

1.5 AUTHORITY TO STOP WORK

A. The Owner, Asbestos Project Monitor or other authorized representative has the authority during asbestos abatement activities to stop the work at any time the conditions are not within the Specifications or applicable regulations. The stoppage of work shall continue until conditions have been corrected to the satisfaction of the Owner, Asbestos Project Monitor or other authorized representative. Standby time required to resolve violations shall be at the Contractor's expense.

1.6 DEFINITIONS

A. The following definitions apply to this project:

1. Abatement - Procedures to control fiber release from asbestos-containing materials. This includes removal, encapsulation, enclosure and repair. "Abatement Activities" shall mean all activities from the initiation of work area preparation through successful clearance air monitoring performed at the conclusion of an asbestos project or minor project.

2. Aggressive Sampling - A method of sampling in which the person collecting the air sample creates activity by the use of mechanical equipment during the sampling period to stir up settled dust and simulate activity in that area of the building.

3. AIHA - The American Industrial Hygiene Association, 475 Wolf Ledges Parkway, Akron, Ohio 44311.

4. Air Lock - A system for permitting entrance and exit while restricting air movement between a contaminated area and an uncontaminated area. It consists of two curtained doorways separated by a distance of at least 3 feet such that one passes through one doorway into the Air Lock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

5. Air Sampling - The process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400, or the provisional method developed by the U.S. EPA which are utilized for lower detectability and specific fiber identification.

6. Ambient Air Monitoring - Shall mean measurement or determination of airborne asbestos fiber concentrations outside but in the general vicinity of the work site.

7. Amended Water - Water to which a surfactant has been added.

8. ANSI - The American National Standards Institute, 1430 Broadway, New York, New York 10018.

9. Area Air Sampling - Any form of air sampling or monitoring where the sampling device is placed at some stationary location.

10. Asbestos - Any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cumingtonite-grunerite), crocidolite (riebeckite), tremolite, anthophyllite and actinolite.

11. Asbestos-Contaminated Objects - shall mean any objects which have been contaminated by asbestos or asbestos-containing material.

12. Asbestos Containing Material (ACM) - Asbestos or any material containing one percent or more asbestos by weight.

13. Asbestos Containing Waste (ACW) - Asbestos-containing material or asbestos-contaminated objects requiring disposal.

14. Asbestos Project - Any form of work performed in connection with the alteration, renovation, modification or demolition of a building or structure which will disturb an asbestos-containing material.

15. Asbestos Removal Plan - A plan which will be undertaken so as to prevent asbestos from becoming airborne in the course of the alteration, renovation, modification or demolition of any building or structure.

16. Approved Safety and Health Program - A program that provides training in the handling and use of asbestos-containing material, and safety and health risks inherent in such handling and use, together with methods for minimizing the exposure of workers and the public to asbestos fibers, and instruction in all applicable Federal, State and Local laws and regulations pertaining to asbestos related work.

17. ASTM - The American Society For Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

18. Authorized Visitor - The building owner, his representative, and any representative of a regulatory or other agency having jurisdiction over the project.

19. Background Level Monitoring - A method used to determine airborne asbestos fiber concentrations inside and outside a building prior to starting an asbestos abatement project.

20. Baseline Monitoring - Shall mean a measurement or determination of airborne asbestos fiber concentrations inside the work place and outside a building prior to starting abatement activities.

21. Clean - Shall refer to a state deemed acceptable to the Building Owner and shall be based on visual, analytical and other appropriate methods.

22. Clean Room - An uncontaminated area or room which is a part of the worker decontamination enclosure with provisions for storage of workers' street clothes and protective equipment.

23. Clearance Air Monitoring - The employment of aggressive sampling techniques with a volume of air collected to determine the airborne concentration of residual fibers, and shall be performed as the final abatement activity.

24. Contractor - Any self-employed person, company, unincorporated association, firm, partnership or corporation and any owner or operator thereof, which engages in an asbestos project or employs persons engaged in an asbestos project.

25. Curtained Doorway - A device which consists of at least three overlapping sheets of plastic over an existing or temporarily framed doorway. One sheet shall be secured at the top and left side, the second sheet at the top and right side, and the third sheet at the top and left side. All sheets shall have weights attached to the bottom to insure that the sheets hang straight and maintain a seal over the doorway when not in use.

26. Decontamination Enclosure System - A series of connected rooms, separated from the work area and from each other by Air Locks, for the decontamination of workers, materials, and equipment.

27. Department - Any regulatory agency having jurisdiction over the project.

28. Disturb - Shall mean to alter, change, or stir, such as but not limited to the removal, encapsulation, enclosure or repair of asbestos-containing material.

29. Encapsulant (sealant) or Encapsulating Agent - A liquid material which can be applied to asbestos-containing material and which temporarily controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulation) or by penetrating into the material and binding its components together (penetrating encapsulant).

30. Encapsulation - The coating or spraying of asbestos material with a sealant.

31. Enclosure - The construction of air tight walls and ceilings between the asbestos material and the facility environment, or around surfaces coated with asbestos materials, or any other appropriate scientific procedure as determined by the Department which prevents the release of asbestos materials.

32. EPA - The Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.

33. Equipment/Waste Decontamination Enclosure - That portion of a decontamination enclosure system designated for the controlled transfer of materials and equipment, consisting of airlocks, a washroom and a holding area.

34. Equipment Room - A contaminated area or room which is part of the worker decontamination enclosure system with provisions for the storage of contaminated clothing and equipment.

35. Fiber - an acicular single crystal or a similarly elongated polycrystalline aggregate which displays some resemblance to organic fibers by having such properties as flexibility, high aspect ratio, silky luster, axial lineation, and others, and which has attained its shape primarily through growth rather than cleavage.

36. Fixed Object - A unit of equipment or furniture in the work area that cannot be removed from the work area.

37. Friable Asbestos Material - Any material applied onto ceilings, walls, structural members, piping, ductwork, or any other part of the building structure which, when dry, may be crumbled, pulverized or reduced to powder by hand pressure.

38. Glovebag Technique - A method for removing friable asbestos-containing material from heating, ventilation, and air conditioning (HVAC) ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces in a non-contained work area. The glovebag assembly is a manufactured device consisting of a glovebag (constructed of 10-mil transparent plastic), two inward-projecting long-sleeve rubber gloves, one inward-projecting water-wand sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glovebag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process.

39. HEPA Filter - A high efficiency particulate air filter capable of trapping and retaining 99.97 percent of particles (asbestos fibers) greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.

40. HEPA Filter Equipped Unit - A portable local exhaust system equipped with HEPA filtration. The system shall be capable of creating a negative pressure differential between the outside and inside of the work area.

41. HEPA Vacuum Equipment - Vacuuming equipment with a high efficiency particulate air filter system.

42. Holding Area - A chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.

43. Homogeneous Work Area - A site within the abatement work area which contains one type of asbestos-containing material and where one type of abatement is used.

44. Incidental Exposure - Shall mean any occupational exposure to asbestos fibers caused by disturbing asbestos containing material during the performance of one's job other than during asbestos abatement activities.

45. Industrial Hygienist - The professional contracted or employed by the Building Owner to supervise and/or conduct air monitoring and analysis, perform inspections and act as the Owner's Representative.

46. Isolation Barrier - Shall mean the construction of partitions, the placement of solid materials, and the plasticizing of apertures to seal off the work place from surrounding areas and to contain asbestos fibers in the work area.

47. Log - Shall mean an official record of all activities that occurred during the project and it shall identify the Building Owner, Agent, Contractor, and Workers, and other pertinent information.

48. Monitoring - May Include:
    a. Visual inspection for the presence of visible emissions.
    b. Air monitoring performed in accordance with accepted methods.
    c. Core samples of encapsulated or bridged materials.

49. Movable Object - A unit of equipment or furniture in the work area which can be removed from the work area.

50. NESHAPS - The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

51. NIOSH - The National Institute for Occupational Safety and Health CDC - NIOSH, Building J N.E., Room 3007, Atlanta, GA 30333.

52. Non-Asbestos Material - Materials manufactured without knowingly introducing asbestos containing materials and containing a maximum of 1% asbestos by weight.

53. Occupied Area - Area of the work site where abatement is not taking place and where personnel or occupants normally function, or where abatement project workers are not using personal protective equipment.

54. OSHA - The Occupational Safety and Health Administration, 200 Constitution Avenue, Washington, DC 20210.

55. Outside Air - The air outside buildings and structures.

56. Personal Air Monitoring - A method used to determine employees' exposure to airborne fibers. The sample is collected outside the respirator in the worker's breathing zone. This form of sampling is required by the OSHA asbestos standards (29 CFR 1926.1101).

57. Personal Protective Equipment - Appropriate clothing, head gear, eye protection, footwear and NIOSH approved respiratory protection acceptable to the department.

58. Plasticize - To cover floors and walls with fire retardant plastic sheeting or by using spray plastics.

59. Prior Experience - Experience required of the Contractor on asbestos projects of similar nature and scope to insure capability of performing the asbestos abatement in a satisfactory manner. Similarities shall be in areas related to material composition, project size, abatement methods required, number of employees and the engineering, work practice and personal protection controls required.

60. Removal - The stripping of any asbestos-containing material from surfaces or components of a facility or taking out structural components in accordance with 40 CFR 61 Subsections A and M.

61. Renovation - Altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or taken out are excluded.

62. Respiratory Protection Standard - Respiratory protection provided to workers in accordance with of Personnel Protection Requirements OSHA 29 CFR 1926.1101 and Cal OSHA General Industry Safety Orders Section 520B.

63. Shift - Shall mean a worker's, or simultaneous group of workers', complete daily term of work.

64. Shower Room - A room between the Clean Room and the Equipment Room in the Worker Decontamination Enclosure with hot and cold running water controllable at the tap and arranged for complete showering during decontamination.

65. Staging Area - The area near the Waste Transfer Air Lock where containerized asbestos waste has been placed prior to removal from the work area.

66. Strip - To remove friable asbestos materials from any part of the facility.

67. Structural Member - Any load-supporting member of a facility, such as beams and load-supporting walls, or any non-load-supporting member, such as ceiling and non-load-supporting walls.

68. Surfactant - A chemical wetting agent added to water to improve penetration.

69. Visible Emissions - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments.

70. Washrooms - A room between the Work Area and the Holding Area in the Equipment/Waste Decontamination Enclosure System where equipment and waste containers are wet cleaned and/or HEPA vacuumed prior to disposal.

71. Water Leaks - Special care and consideration will be given to prevent occurrences of water leaks. It is the contractors responsibility to periodically monitor the exterior of the work area to assure themselves that no leaks have occurred. In the advent of a leak, all work will stop and the personnel devoted to locating, stopping and properly cleaning up the water leak. Work shall not commence inside the area until the cause of the water leak is documented and procedures to prevent further incidents are enacted.

72. Wet Cleaning - The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water, and by afterward disposing of these cleaning tools as asbestos contaminated waste.

73. Work Area - Designated rooms, spaces, or areas of the project where asbestos abatement activities take place.

74. Work site - Premises where asbestos abatement activity is taking place, and may be composed of one or more work areas.

75. Worker Decontamination Unit - That portion of a Decontamination Enclosure System designated for controlled passage of workers, and other personnel and authorized visitors, consisting of a Clean Room, a Shower Room, and an Equipment Room separated from each other and from the work area by air locks and curtained doorways.

1.7 PERSONNEL QUALIFICATIONS

A. All personnel of the Contractor's involved with asbestos work must be trained and tested prior to any work, possess an appropriate Asbestos Handlers Certificate, and shall be thoroughly familiar with the standard operating procedure of the Contractor for abatement work. All personnel shall undergo the medical examinations required by OSHA. The project supervisor and the foreman shall be thoroughly familiar with all applicable regulations and practices for asbestos work and shall have participated in at least two abatement projects, similar in size and scope, during the last two years. All personnel shall pass the respirator fit test. Anyone without the above qualifications shall not be allowed to work during the abatement phase at any time.

1. The Abatement Contractor shall designate a full time Project Supervisor who shall be on-site at all times. If the Project Supervisor is not on site, all work shall be stopped. The Project Supervisor must be able to read and write English fluently, as well as communicate with his workers. The Project Supervisor shall remain until the project is complete and cannot be removed without the written consent of the Owner and the Environmental Consultant.

2. Prior to the commencement of work, the Abatement Contractor shall submit the proposed Project Supervisor's resume to the Owner and Environmental Consultant for approval. The Project Supervisor shall meet the requirements of a "Competent Person" as defined by OSHA

1926.1101 and have a minimum of one year on-the-job training. This person shall hold certification as an Asbestos Project Supervisor.

B. Project Supervisor Qualifications

1. Training and knowledge of applicable regulations and expertise in safety and environmental protection as evidenced by the participation in, successful completion of, and certification by a training course offered by an approved Asbestos Supervisor's course; with current certification by NYS Department of Labor.

2. Experience with abatement work as evidenced through participation in at least two asbestos abatement projects, similar in size and scope to this project.

3. Shall be fluent in English and must speak the language of all of the employees or have designated interpreters on each shift, and provide a list of designated interpreters and their work schedule for the Owner.

C. The Supervisor shall:

1. Maintain a permanently bound project log book which will:

a. Identify the facility, Owner's Representative, agent, Contractors and the project.

b. Define each work area.

c. Record completely all pertinent facts.

d. Record date, time and name after each entry.

e. Have a daily sign-in for each and every individual crossing into the work area. They must provide, in legible print, name (first and last), worker license number, the time and date entered and exited or proof of authorizeded visitor status.

f. Dates of inspections and documentation of passing.

g. A summary of work accomplished at the end of each shift.

h. Notes and inspections.

2. Shall see that the decontamination chambers are kept immaculate.

3. Shall ensure that sufficient personal protective equipment is stored in the clean room.

4. Shall survey the work area a minimum of two times per shift for proper housekeeping, safety precautions, barrier integrity and integrity of air hoses. Shall record objective observations.

5. Shall ensure that workers are wearing proper personal protective equipment and are trained in its use, and shall instruct workers on evacuation procedures during air compressor breakdown.

6. Shall ensure that all workers are certified and licensed.

7. Shall take precautions to prevent overstressing workers.

D. Workmen Qualifications

1. Training as evidenced by the participation in, successful completion of, and certification by an approved asbestos handlers course. All asbestos handlers shall have current certification by the New York State Department of Labor.

2. Familiarization with the standard operating procedures for asbestos abatement work.

1.8 NOTIFICATIONS, PERMITS, WARNING SIGNS, LABELS, AND POSTERS

A. It is the specific responsibility of the Contractor to make, in proper and timely fashion, all necessary notifications to relevant federal, state, and local governing bodies and to obtain and comply with the provisions of all permits or applications required by the Work specified, as well as to make all required submittals required under those auspices. The Contractor shall indemnify the Owner and Owner's Representative from, and pay for all claims resulting from failure to adhere to these premises.

1. Provide the required ten working day notification to EPA on the current EPA notification of demolition and renovation form. Provide the required ten day notification to the New York State Department of Labor on Form DOSH-483, and any other state, regional, and local authority having jurisdiction on the project. Secure all the permits required for the work, including disposal of asbestos in an approved landfill.

2. Erect warning signs around the work space and at every point of potential entry from the outside. Signs should be in accordance with OSHA standard 29 CFR 1926.1101 Paragraph k (1) (ii). The warning signs shall be a bright color so that they will be easily noticeable. The size of the sign and the size of the lettering shall be no less than the OSHA requirements.

3. Provide the OSHA required labels, DOT required labels, and EPA Generator labels for all plastic bags and all drums utilized to transport contaminated material to the landfill.

4. Provide any other signs, labels, warning, and posted instructions that are necessary to protect, inform and warn people of the hazard from asbestos exposure. This notification must be posted prior to the commencement of abatement activities. Post, in a prominent and convenient place for the workers, a copy of the latest applicable regulations from OSHA, EPA, NIOSH and state of New York.

5. Provide notification to all occupants of the work place and areas immediately adjacent to the asbestos project. Information provided in the notification shall include contractor, project location and size, amount and type of ACM, abatement, dates of expected occurrence and the NYS Department of Labor telephone number.

1.9 EMERGENCY PLANNING

A. Emergency planning and procedure shall be developed by the Contractor prior to abatement initiation and agreed to by Contractor and Owner's Representative.

B. Emergency procedures shall be in written form and prominently posted in the Clean Change Area and Equipment Room of the worker decontamination area. Everyone prior to entering the work area must read and sign these procedures to acknowledge receipt and understanding of work site layout, location of emergency exits and emergency procedures.

C. Emergency planning shall include written notification to facility safety department of planned abatement activities, work schedule and layout of work area, particularly barriers that may affect response capabilities.

D. Emergency planning shall include considerations of fire, explosion, toxic atmospheres, electrical hazards, slips, trips and falls, confined spaces and heat related injury. Written procedures shall be developed and employee training in procedures shall be provided.

E. Employees shall be trained in evacuation procedures in the event of work place emergencies.

1. For non-life threatening situations follow normal procedures with assistance from fellow workers if necessary, before exiting the work place to obtain proper medical treatment.

2. For life-threatening injury or illness, worker decontamination shall take lower priority. After measures to stabilize the injured worker, remove him from the work place and secure proper medical treatment.

3. Telephone numbers of all emergency response personnel shall be prominently posted in the Clean Change Area and Equipment Room, along with the location of the nearest telephone.

1.10 RESPIRATORY SYSTEMS

A. Provide all workers, foremen, superintendents, authorized visitors and Inspectors personally issued and marked respiratory equipment approved by NIOSH and OSHA. When using respirators with disposable filters, supply replacements as necessary.

B. Where not in violation of NIOSH, OSHA, and any other regulatory requirements or other provisions of the project specifications, the Contractor shall provide the following minimum respiratory protection to the maximum use concentrations indicated. These requirements are based on the more stringent of the OSHA or NIOSH protection factors and a concentration inside the respirator of 0.01 f/cc.

MSHA/NIOSH Approved Respiratory Protection	**Maximum Use Concentrations**
Half-Mask Air Purifying with HEPA Filters	0.1 f/cc
Full-Facepiece Air Purifying HEPA Filters and Quantitative Fit Test	0.5 f/cc
Powered Air Purifying (PAPR), Loose fitting Helmet or Hood, HEPA Filter	0.25 f/cc
Powered Air Purifying (PAPR), Full Facepiece, HEPA Filter	0.5 f/cc
Supplied Air, Continuous Flow, Loose fitting Helmet or Hood	0.25 f/cc
Supplied Air, Continuous Flow, Full Facepiece, HEPA Filter	0.5 f/cc
Full Facepiece, Supplied Air, Pressure Demand, HEPA Filter	10 f/cc
Full Facepiece, Supplied Air, Pressure Demand, with Aux. SCBA, Pressure Demand or Continuous Flow	>10 f/cc

C. Type "C" Respiratory Protection

1. When type "C" Respirators are employed, the Air Supply System shall provide Grade "D" breathing air in accordance with OSHA 29 CFR 1910.134 ANSI 286.1-1973 and Compressed Association Commodity Specification G-7.1 1976.

2. The compressed Air System for Type "C" Respirators shall have a compressor capacity that satisfies the respirator manufacturer's recommendations. The receiver shall have sufficient capacity to allow escape time for the respirator wearers in the event of compressor failure or malfunction. The Compressed Air System shall have a compressor failure alarm, high temperature alarm, carbon monoxide alarm and suitable in-line purifying sorbent beads and filters to assure Grade "D" Breathing Air, and have a minimum of 1 hour of reserve air for emergency evacuations.

3. Emergency evacuation procedures to be followed in the event of compressor failure shall be posted in the work area and shall be explained by the Asbestos Handler Supervisor to all Handlers prior to commencement of work.

4. Safety inspections for air line hoses shall be conducted as necessary with the maximum hose length being 300 feet.

1.11 PERSONAL PROTECTIVE EQUIPMENT

A. Provide to all workers, foremen, superintendents and authorized visitors and Inspectors protective disposable clothing consisting of full body coveralls, and head covers.

B. Provide eye protection (contact lenses shall not be worn and spectacle kits which fit each personal respirator shall be issued) and hard hats and safety shoes as required by job conditions and safety regulations. Safety shoes and hard hats shall be approved in accordance with ANSI Z89.1 1969 and ANSI Z41.1 1967.

C. Reusable footwear, hard hats and eye protection devices shall be left in the "Contaminated Equipment Room" until the end of the asbestos abatement work.

D. All disposable protective clothing shall be discarded and disposed of as asbestos waste every time the wearer exits from the work space to the outside through the decontamination facilities.

E. If it is absolutely necessary that non-disposable clothing be worn for the asbestos project, laundering services shall be conducted in accordance with 29 CFR 1926.1101.

1.12 PERSONAL DECONTAMINATION ENCLOSURE SYSTEM

A. For each abatement area provide decontamination facilities located in an area agreed upon with the Owner's Representative. The decontamination facilities shall include a Decontamination Enclosure System for workers and visitors and a Decontamination Enclosure System for loading asbestos out of the work area for transportation to the landfill.

B. The Decontamination Enclosure System for workers and visitors shall consist of three rooms equipped with Air Locks as follows: Clean Room at entrance, Air Lock, Shower Room, Air Lock, an Equipment Room, and Air Lock leading to the Work Area.

1. The worker decontamination unit shall be constructed of appropriate framing and fully lined utilizing two layers of 6-mil fire-retardant polyethylene sheeting.

2. In accordance with regulations, reinforced polyethylene sheeting shall be utilized for lining the floor of the decontamination enclosure unit.

C. Provide or Post the following information in the Clean Room.

1. A copy of the U.S. Environmental Protection Agency Regulations for Asbestos, 40 CFR 61 Subparts A and M and a copy of OSHA Asbestos Regulations, 29 CFR 1926.1101, and a copy of NYS Department of labor industrial code rule 56 with any applicable or site specific variances.

2. A list of telephone numbers for local hospital, local emergency squad, local fire department, the building owner (or representative) and NYS Department of Labor.

3. A copy of all Material Safety Data Sheets (MSDS) for hazardous chemicals used during the asbestos project.

D. Provide lockers for storage of street clothes of workers in the Clean Room. Provide in the same room uncontaminated disposable protective clothing and equipment. This room shall be used by workers and visitors to change from street clothes to disposable protective clothing and gear prior to entering into the contaminated area and to dress into street clothing after they have showered and dried in the Shower Room as they exit from the contaminated area.

E. Provide walk-through type shower facilities (i.e. enter through one side of the shower and exit the opposite side) with hot and cold water so arranged as to provide complete showering of workers and visitors as they exit from the contaminated area. Make provisions to prevent contaminated water run-off from the Shower Room.

F. There shall be one shower per 6 full-shift abatement personnel calculated on the basis of the largest shift.

G. Provide the Equipment Room with storage for contaminated clothing and equipment. In this room, workers and visitors dispose of their disposable protective clothing, except the Respirator, as they prepare to enter the Shower Room.

H. Provide heating and ventilation in the entire Decontamination System so that air flow will be from the outside towards work space.

I. All water utilized during this project and contaminated by asbestos shall be filtered. The final filter should be of a 5 micron size. A system containing a series of several filters with progressively smaller pore sizes shall be used to avoid rapid clogging of the filtration system by large particles. Filtered waste water shall be discharged to a sanitary sewer. Used filters shall be disposed of as asbestos containing waste.

1.13 WASTE DECONTAMINATION ENCLOSURE SYSTEM

A. For each abatement area provide decontamination facilities located in an area agreed upon with the Owner's Representative. The decontamination facilities shall include a Decontamination Enclosure System for workers and visitors and Decontamination Enclosure System for loading asbestos out of the work area for transportation to the landfill.

B. The Decontamination Enclosure System for transporting asbestos out of the Removal Area shall consist of an Air Lock from the Work Area leading into the Bag Wash and Wipe Room, and another Air Lock leading into the holding area.

1. The waste wash-down room in the decontamination enclosure system shall be a walk-through type (i.e. enter through one side of the waste wash-down room and exit the opposite side.

2. The waste decontamination unit shall be constructed of appropriate framing and fully lined utilizing 2 layers of 6-mil fire-retardant polyethylene sheeting.

3. In accordance with regulations, reinforced polyethylene sheeting shall be utilized for lining the floor or the decontamination enclosure unit.

C. The Bag Wash and Wipe Room shall be equipped with the facilities to wash and wipe the outside of the Bags prior to removing them from the work area for transportation to the landfill. Make provisions to prevent any contaminated water run-off from the Bag Wash and Wipe Room.

D. Provide heating and ventilation in the entire Decontamination System so that air flow will be from the outside towards work space.

E. All water utilized during this project and contaminated by asbestos shall be filtered. The final filter should be of a 5 micron size. A system containing a series of several filters with progressively smaller pore sizes shall be used to avoid rapid clogging of the filtration system by large particles. Filtered waste water shall be discharged to a sanitary sewer. Used filters shall be disposed of as asbestos containing waste.

1.14 WORK PLACE ENTRY AND EXIT PROCEDURES

A. Personnel Entry & Exit

1. Provide all personnel throughout the abatement process with the specified protective clothing and gear. Ensure that all personnel entering and leaving the work place abide by the following procedures:

a. All workers and authorized personnel shall enter the work area through the worker Decontamination Enclosure System.

b. All personnel, before entering the work area, shall read and be familiar with all posted regulations, personal protection requirements including work place entry and exit procedures and emergency procedures. A sign off sheet shall be used to acknowledge that these have been reviewed and understood by all personnel prior to entry.

c. All personnel shall proceed first to the Clean Room, remove all street clothes and appropriately don respiratory protection (as deemed adequate for the job conditions).

d. Personnel wearing designated personal protective equipment shall proceed from the Clean Room through the Shower Room and Equipment Room to the main work area.

e. While inside the work area there shall be no smoking, eating, drinking, chewing of gum or tobacco, or wearing of jewelry.

f. Before leaving the work area all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and/or wet wiping procedures.

g. Personnel shall proceed to Equipment Room where they remove all protective equipment except respirators.

h. Reusable, contaminated foot wear shall be stored in the Equipment Room when not in use in the work area.

i. Still wearing Respirators, personnel shall proceed to the Shower Area, clean the outside of the Respirators and the exposed face area under running water prior to removal of

respirator, then shower and shampoo to remove residual asbestos contamination. Various types of Respirators will require slight modification of these procedures. An Airline Respirator with HEPA filtered disconnect protection may be disconnected in the Equipment Room and worn into the Shower. A Powered Air-Purifying Respirator face piece will have to be disconnected from the filter/power pack assembly which is not waterproof, upon entering the shower. A Dual Cartridge Respirator may be worn into the shower. Cartridges must be replaced for each new entry into the work area.

j. After showering and drying off, proceed to the Clean Room and don clean clothing.

k. Personnel will not be allowed outside the decontamination unit at the work site when wearing protective clothing since no determination can be readily made concerning their purpose in that area.

l. These procedures shall be posted in the Clean Room and the Equipment Room.

1.15 EQUIPMENT and WASTE CONTAINER DECONTAMINATION and WASTE REMOVAL PROCEDURES

A. Waste Container Pass-Out Procedures.

1. Asbestos contaminated waste that has been containerized shall be transported out of the work area through the waste Decontamination Enclosure.

2. The following procedures shall be followed whenever equipment or containers are removed from the work area during a large asbestos project.

3. Waste removal shall not occur during worker shift changes or when workers are showering or changing. Care shall be taken to prevent short circuiting and cycling of air outward through the waste wash room.

4. Workers are to be stationed in each room/area of the decontamination enclosure to transfer/process the containers and equipment to or from adjacent sections. These workers are not to cross into the adjacent areas/rooms until the waste/equipment transfer is finished for that period and the workers have gone through decontamination as required by Section 1.14 of these specifications. The holding area workers shall have entered from uncontaminated areas with appropriate personal protective equipment; or prior to the start of waste transfer, these workers shall have exited the work area, fully decontaminated, and subsequently donned clean personal protective equipment.

5. External surfaces of contaminated containers and equipment shall be cleaned by wet cleaning and/or HEPA vacuuming in the work area before transferring such items into the decontamination enclosure system. Contaminated workers shall not enter the washroom during this procedure.

6. The cleaned containers of ACM and equipment shall be placed in uncontaminated leak-tight plastic bags or sheeting as the item's physical characteristics demand. Air volume shall be minimized and the bags or sheeting shall be sealed. Items that may puncture or tear the plastic bags or sheeting shall be placed in a hardwall container and sealed.

7. The clean recontainerized items shall be moved into the airlock for subsequent transfer to the holding area. The washroom workers shall not enter this airlock or the work area until waste removal is finished for that period.

8. Recontainerized items and cleaned equipment shall be removed from the airlock to the holding area by workers who have entered from uncontaminated areas with appropriate personal protective equipment.

9. The recontainerized items of ACM and cleaned, bagged equipment shall be placed in closed top, watertight plastic carts. These carts shall be held in the holding area pending removal. The carts shall be HEPA vacuumed or wet-cleaned following the removal of the containers of ACM from them.

10. The carts shall be stored in a holding area on the work site.

B. At the end of a work period, the exit from the Worker Decontamination Enclosure system shall be secured to prevent unauthorized entry.

1.16 DISPOSAL ACTIVITIES

A. Applicable Regulations

1. All asbestos waste shall be stored, transported and disposed of as per, but not limited to, the following Regulations:

a. NYS DEC 6 NYRCC part 360 and 364

b. USEPA NESHAPS 40 CFR 61

c. USEPA ASBESTOS WASTE MANAGEMENT GUIDANCE EPA/530-SW-85-007

B. Transportation and Disposal Site

1. The Contractor's Hauler and Disposal Site shall be approved by the owner.

2. The Contractor shall give 24-hour notification prior to removing any waste from the site. Waste shall be removed from site only during normal working hours unless otherwise specified. No waste may be taken from the site without authorization from the Owner's Consultant.

3. The Contractor shall have the Hauler estimate the date and time of arrival at the Disposal Site.

4. Upon arrival at the removal site, the Hauler must possess and present to the Owner's Consultant a valid New York State Department of Environmental Conservation Part 364 asbestos hauler's permit. The Owner's Consultant may verify the authenticity of the hauler's permit with the proper authority.

5. The Hauler, with the Contractor and the Owner's Representative, shall inspect all material in the transport container prior to taking possession and signing the asbestos waste manifest.

6. The Contractor shall not permit any off-site transfers of the waste or allow the waste to be combined with any other off-site asbestos material. The Hauler must travel directly to the disposal site with no unauthorized stops.

C. Waste Storage Container

1. All waste containers shall be fully enclosed and lockable (i.e. enclosed dumpster, trailer, etc.). NO OPEN CONTAINERS WILL BE PERMITTED ON-SITE (i.e. open dumpster with canvas cover, etc.).

2. The container shall be plasticized and sealed with a minimum of one (1) layer of 6 mil. polyethylene on the sides and two (2) layers of 6 mil. polyethylene on the floor.

3. While on-site, the container shall be labeled with EPA Danger signs:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

4. The New York State Department of Environmental Conservation Asbestos Hauler's Permit number shall be stenciled on both sides and back of the container. The container will not be permitted to leave the site without the proper identification.

5. Once the container is loaded at the site, the door(s) will be locked at all times.

6. Before the container is removed from the project site for transportation to the Disposal Site, the Owner's Consultant will confirm the container doors are locked. The locks shall be removed at the Disposal Site by the operator of the Disposal Facility.

7. The Owner may initiate random checks at the Disposal Site to insure that the procedures outlined herein are complied with.

D. Asbestos Waste Manifest

1. The manifest shall be completed by the Contractor and verified by the Owner's Consultant that all the information and amounts are accurate and the proper signatures are in place.

2. The manifest shall have the signatures of the Owner's Consultant, the Contractor, and the Hauler representatives prior to any waste being removed from the site. A copy of the completed manifest shall be retained by the Owner's Consultant and the Contractor and shall remain on site for inspection.

3. The Contractor shall maintain a waste disposal log which indicates load number, date and time left site, container size, quantity of ACM, Hauler, NYS DEC permit number, trailer and tractor license number, and date manifest was returned to Consultant.

4. Upon arrival at the Disposal Facility, the manifest shall be signed by the Disposal Facility operator to certify receipt of asbestos containing materials covered by the manifest.

5. The Disposal Facility operator shall return the manifest to the Owner's Consultant. Copies of the completed manifest are to be sent by the Disposal Facility operator to the Hauler and Contractor.

E. Compliance

1. Failure to adhere to these procedures shall constitute a material breach of the Contract and the Owner shall have the right to and may terminate the Contract provided, however, the failure of the Owner to so terminate shall not relieve the Contractor from future compliance.

1.17 ENGINEERING CONTROLS

A. Provide supplied air to and exhaust air from the work area to maintain negative pressure. The ventilation system shall operate on a 24 hour basis throughout the abatement process and throughout the wet cleaning. The ventilation system shall be in accordance with EPA recommendations included

in the "Guidance for Controlling Friable Asbestos-Containing Materials in Buildings" and current OSHA standards.

B. A static negative air pressure of 0.02 inches (minimum) water column shall be maintained at all times in the work area during abatement to ensure that contaminated air in the work area does not filter back to uncontaminated areas.

C. In a multi-room abatement project, provide a sufficient number of supply and exhaust units to create a stream of air away from faces of the workers in each room, and in such a way as to not damage or compromise the integrity of the plastic isolation barriers.

D. Install and initiate operation of HEPA filter ventilation units as needed to provide an air change in the work area, every 15 minutes. Four air changes per hour will be used to calculate the number of HEPA filter ventilation units needed to perform this project.

E. During Final Clearance Air Testing an air change shall be made in the work area once every 30 minutes.

F. Openings made in the enclosure system to accommodate these shall be made airtight with tape and/or caulking as needed.

G. Where more than one unit is installed, they should be turned on one at a time, checking the integrity of wall barriers for secure attachment and need for additional reinforcement.

H. A dedicated power supply for the negative pressure ventilating units shall be utilized.

I. On electric power failure, all work must stop immediately, and shall not resume until power is restored and exhaust units are operating again. On extended power failure, (longer than 1 hour), the decontamination facilities shall be sealed air tight after the evacuation of personnel from the work area.

J. HEPA filter ventilation units shall be in compliance with ANSI Z9.2 (1979), Local Exhaust Ventilation.

1.18 MAINTENANCE OF WORK PLACE BARRIERS AND WORKER DECONTAMINATION ENCLOSURE SYSTEMS

A. Following completion of the construction of all polyethylene barriers and Decontamination System Enclosures, a twelve hour settling period shall be allowed to insure that barriers will remain intact and secured to walls and fixtures before beginning actual work activities.

B. All polyethylene barriers inside the work place, in the Worker Decontamination Enclosure System, in the Waste Container Pass-Out Air Lock, and at partitions constructed to isolate the work area from occupied areas, shall be inspected at least twice daily, including prior to the start of each day's abatement activities. The time of the inspections and conditions observed shall be documented in the daily project log.

C. Damage and defects in the Enclosure System are to be repaired immediately upon discovery.

D. Smoke tubes shall be used to test the effectiveness of the work area barrier and the Worker Decontamination Systems before abatement work begins with the negative pressure ventilation units in operation and at least once a day thereafter until the work is completed. Results and observations shall be documented in the project log book.

E. At any time during the abatement activities after barriers have been erected, if visible material is observed outside of the work area or if damage occurs to barriers, work shall immediately stop, repairs

made to barriers, and debris/residue cleaned up using appropriate HEPA vacuuming and wet cleaning procedures.

F. If air samples collected outside of the work area during abatement activities indicate airborne fiber concentrations greater than 0.01 f/cc or pre-measured background levels (whichever is higher), work shall immediately stop for inspection and repair of barriers. Cleanup of surfaces outside of the work area, using HEPA vacuums or wet cleaning techniques, may be necessary.

1.19 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced on text by basic designation only.

1. United States Department of Labor - OSHA Regulation 1926.1101. Asbestos. (Fed Reg Vol 59, No. 153, Wednesday August 10, 1994, Rules and Regulations).

2. United States Department of Labor - OSHA.1910.1001 Asbestos. (Fed Reg Vol 59, No. 153, Wednesday August 10, 1994, Rules and Regulations).

3. United States Department of Labor. OSHA Safety and Health Standards (20 CFR 1926/1910). Construction industry. (Most Current Edition).

4. U.S. Environmental Protection Agency. 40 CFR Part 61, Subsection B: National Emission Standard for Asbestos, Asbestos Stripping, Work Practices, and Disposal of Asbestos Waste.

5. U.S. Environmental Protection Agency. Guidance for Controlling Asbestos-Containing Materials in Buildings. EPA 560-5-85-024, June 1985, and EPA 560/5-83-002, March 1983).

6. U.S. Environmental Protection Agency. Asbestos-Containing Materials in School buildings: A Guidance Document. (C00090 March 1979 Parts 1 & 2).

7. New York State Department of Labor Industrial Code 56.

1.20 ASBESTOS WASTE REQUIREMENTS

A. The Contractor shall maintain compliance with all provisions of the following regulations: NYS DOL IC 56; USEPA, Asbestos Regulation 40 CFR 61.152, 29 CFR 1926.1101, 29 CFR 1910.1200 (F) of OSHA's Hazard Communication Standard, and other applicable standards.

Note: Any penalties incurred for failure to comply to any of the above regulations, will be the sole responsibility of the Contractor and his Sub-Contractors. The Owner claims no responsibility for fines imposed due to the negligence of the Contractor.

B. Labeled ACM waste containers or bags shall not be used for non-asbestos-containing debris or trash. Any material placed in labeled containers or bags, whether turned inside out or not, shall be handled and disposed of as asbestos-containing waste (ACW).

C. When presenting asbestos-containing waste (ACW) for storage at the generation site, the Contractor shall:

1. Wet down ACW in a manner sufficient to prevent all visible emissions of dust into the air.

2. Seal material in a leak tight container while wet.

3. Keep ACW separate from any other waste.

D. When presenting asbestos-containing waste (ACW) for storage away from the site of generation, the Contractor shall:

1. Ensure that ACW has been properly packaged and labeled as per requirements above.

2. Examine the containers of ACW to ensure that there are no breaks in the containers and that no visible dusts are being released into the air.

a. The examination shall be conducted in a manner reasonably calculated to minimize disturbance and damage to the container.

b. If examination reveals damage to a container of ACW the Contractor or person accepting the waste shall immediately wet down the ACW and re-package it into a clean leak tight container. The repackaging shall be conducted in a place and manner to minimize potential exposure to the general public. The subsequent repackaging shall be the financial responsibility of the Contractor and occur at no extra cost to the Owner.

E. Keep asbestos-containing waste (ACW) separate from any other waste.

F. When storing asbestos-containing waste (ACW) - The Contractor shall:

1. Ensure that the ACW has been sufficiently wet down in a leak tight container.

2. Examine the integrity of the container's leak tight seal at a minimum of once per 24 hour period.

3. Re-wet and repackage any damaged containers.

4. Maintain at storage site an adequate supply of spare leak tight containers.

5. Maintain at storage site an adequate supply of amended water.

6. Keep ACW separate from any other waste.

7. Keep ACW in a secured, enclosed, and locked container.

8. If the Contractor has intention of storing a quantity of asbestos-containing waste (ACW) greater than or equal to 50 cubic yards, the Contractor shall:

a. Submit a written request and receive written approval from the Owner's Representative.

G. When presenting asbestos-containing waste (ACW) for transport, the contractor shall:

1. Ensure that ACW has been sufficiently wetted down.

2. Examine the integrity of the container's air tight seal.

3. Re-wet and re-package any damaged containers.

4. Keep waste separate from all other wastes.

5. Ensure that a person transporting asbestos waste holds a valid permit issued pursuant to law.

H. When transporting Asbestos-Containing Waste (ACW)

1. Examine the integrity of the container's leak tight seal at a minimum of once per 24 hour period.

2. Re-wet and re-package any damaged containers.

3. Keep ACW in a secured, enclosed, and locked container.

I. When asbestos-containing waste (ACW) is presented for disposal

1. The Contractor at the time of presenting for disposal of ACW shall:

a. Comply with all applicable orders issued pursuant to asbestos disposal.

b. Ensure that ACW has been sufficiently wet down.

c. Examine the integrity of the container's air tight seal.

d. Re-wet and re-package any damaged containers.

e. Keep waste separate from all other wastes.

J. Disposal of asbestos-containing waste (ACW)

1. NO PERSON UNDER ANY CIRCUMSTANCES SHALL ABANDON ASBESTOS CONTAINING WASTE.

2. Disposal shall be at an approved landfill and a manifest form will be signed by the Landfill Owner documenting receipt and acceptance of the ACW which will be furnished to the Owner's Representative.

1.21 TEMPORARY FACILITIES, CONTROLS, OFFICE

A. A source of water and electricity will be provided at the site without any charge to the Contractor.

B. Temporary Electricity and Lighting.

1. Electrical connections from the source of the electricity to the work area shall be provided by the Contractor.

2. The Contractor shall provide all wiring, lighting, switches, outlets, etc., and shall be in accordance with national, state, local and Underwriters Laboratories requirements and installed by qualified and licensed individuals.

3. The Contractor shall be responsible for any damages caused by them to the Owner's electrical systems.

4. The Contractor shall utilize Ground Fault Interrupts, and undamaged, grounded extension cords

5. The Contractor shall have adequate lighting within the work area.

6. The Contractor shall take all appropriate precautions and steps necessary to protect all people from the hazards involved with electricity and liquids inside the work area.

C. Temporary Water

1. All connections to the Building's water system by the Contractor shall be equipped with Back Flow protection.

2. All fittings, valves, hoses, etc. utilized must be temperature and pressure rated for the project's conditions.

PART 2: MATERIAL AND EQUIPMENT

2.1 MATERIALS AND EQUIPMENT

A. All materials subject to damage shall be stored off the ground, away from wet or damp surfaces, and under protective cover to prevent damage or contamination. Replacement materials shall be stored outside of the work area until abatement is completed.

1. Damaged and deteriorating materials shall not be used and shall be removed from the premises.

2. When asbestos containing material that has been used for insulation is removed, equivalent protection shall be provided with non-asbestos containing material, in conformity with all applicable NYS Codes.

B. Plastic (polyethylene) sheeting, or spray-plastics, of 6-mil thickness or greater, in sizes to minimize the frequency of joints, shall be employed for containment. All polyethylene sheeting shall be fire-retardant.

C. Duct tape or equivalent shall be capable of sealing joints of adjacent sheets of plastic, facilitating attachment of plastic sheets to finished or unfinished surfaces of dissimilar materials, and adhering under both dry and wet conditions, including during the use of amended water.

D. Spray adhesive shall be capable of providing additional sealing of joints and facilitating attachment of plastic sheeting to finished or unfinished surfaces where needed. Adhesive shall be capable of adhering under dry and wet conditions, including during the use of amended water.

E. The surfactant shall be a product that is non toxic, non-carcinogenic, and is not an eye, respiratory system, or skin irritant.

F. Airtight and watertight containers shall be provided to receive and retain any asbestos-containing or contaminated materials for storage until disposal at a disposal site. The containers shall be labeled with the appropriate OSHA required labels (OSHA Regulation 29 CFR 1926.1101(k)), DOT required labels, and EPA Generator labels. Plastic bags used for waste storage or disposal shall be 6-mil in thickness minimum and be marked with the appropriate OSHA and DOT caution labels and the EPA Generator label.

G. Provide adequate HEPA Filter equipped ventilation units, including HEPA filter replacements.

H. Provide all tools, respirators and filter replacements necessary.

I. Provide the necessary water filtration units, including filters to filter waste water through a 5 micron final filter.

J. The Contractor shall have available ladders and/or scaffolds of sufficient dimension and quantity so that all work surfaces can be easily and safely reached by Inspectors. Scaffold joints and ends shall be sealed with tape to prevent incursion of asbestos fibers. Scaffolding shall comply with the New York State Building Code and OSHA requirements.

PART 3: EXECUTION

3.1 WORK AREA PREPARATION

A. The Contractor shall provide notification to all occupants of the floor where abatement is scheduled and adjacent floors of the building of the scheduled asbestos project in accordance with NYS Code Rule 56.

B. The work area shall be vacated by the occupants prior to work area preparation and until successful clearance air monitoring.

C. Contractor shall post caution signs meeting the specifications of OSHA Construction Standard Section 1926.1101 (k) at appropriate approaches to a location where airborne concentrations of asbestos may exceed ambient background levels. Signs shall be posted a distance sufficiently far enough away from the work area so as to permit residents, employees and visitors to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of work place enclosure barriers.

D. The Contractor shall have at least one supervisor at the job site at all times who can communicate effectively in English. Failure of this provision will result in stoppage of work, and will not resume until such a person is on the job site.

E. The Contractor shall erect the decontamination enclosure system.

F. The Contractor shall wet clean and remove all removable items from the work area. This includes furniture and mechanical objects that are movable. All remaining items shall be wet cleaned and protected.

G. The Contractor shall shut down all existing electric power in the work areas. Provide and ensure safe installation of temporary power sources and equipment, giving special attention to any area of high humidity and/or sprayed water. Installation must comply with all applicable codes. All power to work areas shall be brought into the area through ground-fault interrupters positioned at the source.

3.2 FLOOR PREPARATION

A. Cover all remaining non-removable items within the removal area with two layers of fire retardant 6 mil polyethylene sheeting taped securely.

B. Seal all floor penetrations watertight.

C. Cover all pre-cleaned floors inside the work area but not included in the abatement area with two layers of fire retardant 6 mil (minimum) polyethylene sheeting or equivalent. Additional layers of sheeting may be utilized as drop cloths to aid in cleanup of bulk materials.

1. Plastic shall be sized to minimize seams. If the floor area necessitates seams, those on successive layers of sheeting shall be staggered to reduce the potential for water to penetrate to the flooring material. A distance of at least 6 feet between seams is sufficient. Do not locate any seams at wall/floor joints.

2. Floor sheeting shall extend at least 12 inches up the side walls of the work area.

3. If the walls of the work area are plasticized in accordance with Applicable Variance, AV-120, all wall/floor sheeting seams shall overlap a minimum of 12 inches, and be secured by first applying spray adhesive and then firmly securing with tape.

4. Contractor will be responsible for any water damage caused by the removal process to the floor(s) below.

3.3 WALL AND CEILING PREPARATION

A. All "critical" barriers, those separating removal areas from non- removal areas, shall be constructed according to Section 3.5.

B. Fill any holes, cracks or inlets into the work area with caulking or equivalent.

C. In accordance with AV-120, if the walls are being covered, cover the walls within the work area with two layers of fire retardant 6 mil polyethylene sheeting up to a height of four feet.

1. Each layer of polyethylene sheeting shall be taped securely to the wall/ceiling. Layers shall not be taped to each other.

2. Plastic shall be sized to minimize seams. Seams shall be staggered and separated by at least a distance of six feet.

3. Wall sheeting shall overlap floor sheeting by at least 12 inches beyond the wall/floor joint.

4. Wall sheeting shall be secured so as to prevent it from falling away from walls. This may require additional support/attachments when negative pressure ventilation systems are turned on.

5. Caulk or seal edges of sheeting at floor, ceiling, walls, and fixtures to form an air tight seal.

D. Entrances to the work place that will not be used for worker entry or emergency exits shall be locked to prevent unauthorized entry.

E. Refer to Section 1.18 for procedures to utilize in properly maintaining Work Place Barriers and Worker Decontamination Enclosure Systems.

F. Where floor tile is abated in accordance with Applicable Variance AV-120, dated June 30, 2000, the plasticizing of ceilings will be required where ceiling surfaces are porous.

3.4 EXPOSURE CONTROLS

A. The Contractor shall install Enclosure Engineering Controls (refer to section 1.17) before any material is disturbed or removed.

3.5 CRITICAL BARRIER INSTALLATION

A. The Contractor shall seal all openings from the work area to occupied areas of the building as per the following:

1. Fire exits: Since they must be accessible at all times, equip each exit location with an emergency egress panel to be utilized only in emergencies.

2. Critical Barriers: Barriers that separate the protected work area from unprotected non-work areas. These barriers shall be constructed of conventional 2" x 4" (minimum) wood or metal stud framing, 16" o.c. (maximum).

a. A solid construction material of at least 3/8" thickness shall be applied to the work side of the framing. The critical barrier then becomes a wall surface requiring two layers of 6-mil polyethylene (Section 3.3).

b. Critical barriers shall be put into place before any disturbance of the asbestos containing material.

B. Additional barriers (i.e., sealing off of all openings, including but not limited to windows, corridors, doorways, barriers, skylights, ducts, grills, diffusers, and any other penetrations of the work place) shall be installed with 2 layers of fire retardant 6 mil plastic sheeting sealed with tape. All seams of HVAC or other system components that pass through the work place shall also be sealed.

3.6 ASBESTOS CONTAINING MATERIAL REMOVAL

A. Gross Removal

1. Wet all asbestos containing material with an amended water solution. Equipment used should be capable of providing a fine spray mist, in order to reduce airborne fiber concentrations when the material is disturbed. Saturate the material to the substrate; however, do not allow excessive water to accumulate in the work area. Keep all removed material wet until it can be containerized for disposal (to prevent fiber release).

2. All items or obstructions shall be removed or positioned in ways, insofar as practical, so as to fully access the asbestos-containing material.

3. Once saturated, the asbestos containing material shall be removed in manageable sections. Removal shall be by teams of people, who containerize all material before moving to a new location. All removal areas shall be periodically sprayed to maintain in a wet condition until all visible material has been cleaned up.

4. Material that is removed shall not be dropped or thrown.

5. Removal shall be performed in teams, broken down into:

a. Sprayer - in charge of adequately wetting the ACM.

b. Scrapers/Removers - responsible for the careful removal of the ACM.

c. Cleaners - responsible to immediately bag all asbestos waste which has just been removed.

d. Scrubbers - will scour the now bare surfaces and rid them of all visible dust and debris.

e. The team will move in an orderly fashion completing the four steps in each section before moving to a new section.

6. Containerized waste (6 mil polyethylene bags or hardwall containers) shall be sealed when full. Since wet material can be exceedingly heavy, containers shall not be overfilled. Containers shall be securely sealed to prevent accidental opening and leakage (i.e., tying tops of bags in an overhand knot or by taping in goose neck fashion, never with wire or cord). Bags shall be decontaminated on exterior surfaces by wet cleaning or HEPA vacuuming before being placed in clean containers. Bags may be placed in drums for staging and transportation to the landfill.

7. Following completion of gross removal, all visible residue on substrate shall be removed by means of brushes or sponges.

8. Upon completion of all Gross and Residue Removal, initiate Clean-Up Procedures.

3.7 CLEAN-UP PROCEDURES - GENERAL

A. Clean up of visible accumulations of loose ACM shall occur whenever there is a sufficient amount to fill a single asbestos bag.

B. ACM shall be collected utilizing rubber dust pans and rubber squeegees.

C. HEPA vacuums shall NOT be used on wet materials unless specially designed for that purpose.

D. Metal shovels shall not be used within the work area.

E. Accumulations of dust shall be cleaned off all surfaces of the work area daily.

3.8 FINAL CLEAN-UP PROCEDURES

A. After removal of all visible accumulations of ACM, the work areas shall be:

1. HEPA vacuumed on dry surfaces.

2. A wet/dry shop vacuum (dedicated to asbestos abatement) may be used to pick up excess water and gross saturated debris.

3. All surfaces shall be wet cleaned. Contractor will request and pass a visual inspection performed by the consultant before proceeding to the next step. Documentation of passing this inspection shall be recorded in a daily log book.

4. The Contractor shall encapsulate the polyethylene sheeting with a lockdown encapsulant. The abated surfaces shall not be encapsulated prior to each work area passing final air clearance sampling.

5. The cleaned, exposed surface barrier shall be removed from wall and floor.

6. The work area shall be be allowed to dry a minimum of 4 hours when the walls have been plasticized. If the walls have not been plasticized, a minimum of 6 hours drying time shall be required.

B. Second Cleaning:

1. If the walls were not plasticized for work in accordance with AV-120, one thorough cleaning and settling period shall suffice, a second and third cleaning will not be required providing the work area passes the visual inspection and final clearance sampling.

2. All objects and surfaces covered by the second layer of plastic shall be HEPA vacuumed and/or wet cleaned.

3. The remaining plastic surface barriers will be removed and disposed of as asbestos contaminated waste, while the critical barriers remain in position.

4. The areas shall be vacated for twelve (12) hours to allow fibers to settle.

5. Negative air controls shall still be in operation.

C. Third Cleaning:

1. A third cleaning shall be performed on all surfaces within the work site using HEPA vacuuming and/or wet cleaning.

2. All containerized waste shall be removed from the work area and holding area.

3. All tools and equipment shall be removed from work area and properly decontaminated in the decontamination enclosure system.

D. Following successful completion of third cleaning, inform the Owner's Representative that work areas are ready for Clearance Air Monitoring.

END OF SECTION 02080

SECTION 02081 - ASBESTOS MONITORING

PART 1: GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division -1 Specification sections, apply to work of this section.

B. Section 02080: Asbestos Abatement.

1.2 DESCRIPTION OF WORK

A. The Owner will appoint an Asbestos Project Monitor firm (APM) for the project. The APM will designate a qualified Asbestos Safety Technician (AST) to represent the APM during the removal program.

B. The AST must be on the job site at all times during the abatement work. Absolutely no abatement or preparation work will occur without the presence of the AST.

C. The APM will conduct four milestone inspections.

1. Pre-commencement inspection shall be conducted as follows:

   a. Notification in writing to the APM shall be made by the applicant or Contractor to request a pre-commencement inspection at least 48 hours in advance of the desired date of inspection. This inspection shall be requested each time another work site is started.

   b. The AST shall ensure that:

      1) The job site is properly prepared and that all containment measures are in place.

      2) All workers shall present to the inspector a valid asbestos handling certificate issued by the New York State Department of Labor.

      3) Measures for the disposal of removed asbestos material are in place and shall conform to the adopted standards.

      4) The Contractor has a list of emergency telephone numbers at the job site which shall include the monitoring firm employed by the Owner and telephone numbers for fire, police, emergency squad, local hospital and health officer, and the New York State Department of Labor.

   c. If all is in order, the AST shall issue a written notice to proceed in the field. If the job site is not in order, then any needed corrective action must be taken before any work is to commence. Conditional approvals shall not be granted.

2. Progress inspection shall be conducted as follows:

   a. Primary responsibility for ensuring that the asbestos abatement work progresses in accordance with these technical specifications rests with the Abatement Contractor. The AST shall continuously be present to observe the progress of work, perform a minimum of two inspections within each containment or work area daily, and perform required tests.

b. If the AST observes irregularities at any time, he shall direct such corrective action as may be necessary. If the Contractor fails to take the corrective action required, or if the Contractor or any of their employees habitually and/or excessively violate the requirements of any regulation, or the specification, then the AST shall inform the Owner or other authorized representative having jurisdiction who shall issue a Stop Work Order to the Contractor and have the work site secured until all violations are abated.

3. Clean-up inspections shall be conducted as follows:

a. Notice for clean-up inspection shall be requested by the Contractor at least 48 hours in advance of the desired date of inspection.

b. The clean-up inspection shall be conducted prior to the removal of the critical barriers.

c. The AST shall ensure that:

1) The work site has been properly cleaned and is free of visible asbestos and asbestos-containing material.

2) All removed asbestos has been properly placed in a locked secure container outside of the work area.

d. If all is in order, the AST shall issue a written notice of authorization to remove barriers from the job site.

4. Final inspection shall be conducted as follows:

a. Upon notice by the Owner or by the Contractor and within 48 hours after the removal of the critical barriers, a final inspection shall be made to ensure the absence of any visible signs of asbestos or asbestos-containing materials.

5. Violations:

a. The AST shall ensure that the work conforms to the specification. If it is found that the asbestos abatement work is being conducted in violation of the specifications the AST shall issue in writing a Stop Work Order to the Contractor and have the work site secured until all violations are abated. If the Contractor fails to correct the violation the, course of action listed under 1.2.C.2.b. will be followed.

PART 2 PRODUCTS (Not used)

PART 3 EXECUTION

3.1 AREA AIR MONITORING

A. The APM firm will be responsible for performing the air monitoring.

B. Monitoring outside the work area shall be provided throughout removal operations, to ensure that no outside contamination is occurring.

1. The sampling zone for indoor air samples shall be representative of the building occupant's breathing zone.

2. Outdoor ambient and baseline samplers shall be placed about six feet above the ground surface in reasonable proximity to the building and away from obstructions and drafts that may unduly affect airflow.

3. Samples shall have a chain-of-custody record.

4. Area air sampling shall be conducted as specified in the following documents except as restricted or modified herein:

   a. Measuring airborne asbestos following an abatement action, USEPA document 600/4-85-049 (Nov. 1985).

   b. Guidance for controlling asbestos-containing materials in building; USEPA Publication 560/5-85-024 (June 1984).

   c. Asbestos Hazard Emergency Response Act of 1986 (AHERA), USEPA 40 CFR 763, Subpart E.

   d. NIOSH Method 7400, Revised.

   e. NYS DOL ICR 56.17.

C. Filter cassettes and sampling train shall be assembled as specified in NIOSH #7400. The total volume shall be a volume sufficient to achieve a detection limit of 0.004 f/cc. A minimum sample volume of 1250 liters shall be collected; flow rate shall be calibrated between 3 and 15 liters per minute before and after sampling, and a record kept of this calibration.

D. Prior to the contractor's arrival on-site, background samples shall be taken in accordance with NYS Industrial Code Rule 56. The samples shall be taken during normal occupancy activities and circumstances at the site. Samplers shall be located within and at the barriers to the proposed work area. The number and location of background samples shall be sufficient to represent the entire work area and agreed upon by the APM.

E. Background, pre-abatement and post-abatement clearance air monitoring samples for each large asbestos abatement work area shall include 5 inside and 5 outside samples, at a minimum, to be taken. In addition to the five sample minimum, one representative sample shall be collected for every 5,000 square feet above 25,000 square feet of floor space.

F. Background and pre-abatement air monitoring samples for a small asbestos project shall include 3 inside and 3 outside samples, at a minimum, to be taken. Post-abatement clearance air monitoring samples for a small asbestos project shall include 5 inside and 5 outside samples, at a minimum, to be taken.

G. Pre-abatement samples shall be collected in accordance with NYS Industrial Code Rule 56. The sampling shall occur prior to the planned disturbance of asbestos containing materials but shall not commence until at least 12 hours after a wet cleaning or in the presence of pools of liquid or condensation. If wet cleaning is not performed, it is not necessary to wait 12 hours prior to collecting pre-abatement samples.

H. The following number of samples shall be provided during abatement, and the frequency and duration shall be representative of the actual conditions.

   1. Two area samples outside work area in uncontaminated areas of the building, remote from the decontamination facilities.

      a. Primary location selection shall be within ten feet of isolation barriers.

      b. Where negative ventilation exhaust runs through uncontaminated building areas, during sampling will be conducted in such areas to monitor the air.

c. Where no adjacent non-work areas exist, an additional exterior area sample shall be taken.

2. One area sample within the uncontaminated entrance to each worker decontamination and waste decontamination enclosure system.

3. One area sample within ten feet of the unobstructed exhaust from each negative pressure vent.

4. One area sample outside of the building.

J. If the Contractor's barriers or other control methods are observed to malfunction and if the Contractor does not correct the problems immediately upon notification, the AST shall inform the Owner or other authorized representative. In such a situation additional area sampling of up to three samples per day shall be performed by the independent air monitoring company.

K. Criteria during abatement activities - If air samples collected outside of the work area during abatement activities indicate airborne fiber concentrations above 0.01 f/cc or the original background levels, whichever is greater, as determined by Phase Contrast Microscopy (PCM), work shall stop for inspection, and the integrity of barriers shall be restored. Clean-up of surfaces outside of the work area using HEPA vacuums or wet cleaning techniques shall be done prior to resuming abatement activities.

L. The turn-around time for analysis of the samples shall be maximum of 48 hours from the time samples are collected. This requirement may be superseded by any variance being utilized which may require a faster turn-around time for analysis.

M. The evaluation criteria shall be 0.01 fibers per cubic centimeter.

N. A series of smoke tests shall be performed at the decontamination unit entrance/exit, by the AST to ensure continuous negative air pressure during abatement activities.

O. The AST shall calculate the required number of negative air filtration units for each work area. This calculation shall be made whenever the volume of the work area changes. The AST, will alert the Contractor of any discrepancies between the number of units required and those in operation within the work area. If problems are identified and not corrected, the monitor shall inform the Owner or other authorized representative.

P. The AST shall keep a record in a daily log of all on-site observations, and required activities of the Contractor.

3.2 POST-ABATEMENT FINAL AIR CLEARANCE TESTING

A. Post-removal test shall be conducted as follows:

1. Within 48 hours after final clean-up and before removal of critical barriers, a final air test shall be performed. This test is required to establish safe conditions for removal of critical barriers and to permit reconstruction activity to begin. Sufficient time following clean-up activities shall be allowed so that all surfaces are dry during monitoring.

2. Samplers shall be placed at random around the work area. If the number of rooms within the work area is equivalent to the number of required samples based on floor area, a sampler shall be placed in each room. When the number of rooms is greater than the required number of samples a representative sample of rooms shall be selected.

3. The representative samplers placed outside the work area but within the building shall be located to avoid any air that might escape through the isolation barriers and shall be approximately 50 feet from the entrance to the work area and 25 feet from the isolation barriers.

4. The following aggressive sampling procedures shall be used within the work area during all clearance air monitoring:

   a. Before starting the sampling pumps use forced air equipment (such as a one horsepower leaf blower) to direct exhaust air against all walls, ceilings, floors, ledges and other surfaces in the work area.

      1) This pre-sampling procedure shall take at least five minutes per 1,000 square feet of floor area.

      2) At a minimum, place a 20-inch fan 3 feet above the floor in the center of the room. (Use one fan per 10,000 cubic feet of room space). Place the fan on slow speed and point it toward the ceiling.

      3) Start the sampling pumps and sample for the required time or volume.

      4) Turn off the pump and then the fan(s) when sampling is completed.

5. For post-abatement monitoring, area samples shall conform to the following schedule:

AREA SAMPLES FOR ANALYSIS BY	MINIMUM VOLUME	FLOW RATE
PCM	1250 Liters	5 to 15 l/min.

6. Each homogeneous work area which does not meet the clearance criteria shall be thoroughly recleaned using wet methods, with the negative pressure ventilation system in operation. New samples shall be collected in the work area as described above. The process shall be repeated until the work site passes the test.

7. For an asbestos project with more than one homogeneous work area, the release criteria shall be applied to each work area.

8. Preparation and analysis of area samples by PCM shall be by NIOSH Method 7400.

9. Clearance and/or Re-occupancy Criteria

   a. The clearance criteria shall be applied to each homogeneous work area independently.

   b. For PCM analysis, the clearance level of any work area shall be less than 0.01 f/cc, or the background level, whichever is greater.

F. Final inspections shall be conducted by the asbestos safety technician as follows:

1. Upon notice by the Owner or by the Contractor and at least 48 hours after the removal of the critical barriers, a final inspection shall be made to ensure the absence of any visible signs of asbestos or asbestos-containing material.

2. The asbestos safety technician shall ensure that all asbestos waste and asbestos-contaminated waste has been removed from the work site in a registered vehicle by a registered waste hauler.

3.3 PERSONAL AIR MONITORING

A. The Contractor shall be responsible for conducting personal sampling in accordance with applicable rules and regulations.

B. In addition to the requirements of OSHA 1926.1101, the contractor shall be required to perform personal air monitoring during every work shift in each work area during which abatement activities occur in order to verify that appropriate respirator protection is being utilized.

C. Results of the monitoring shall be returned to the site, at least verbally, and posted no later than 24 hours following the time the sample was collected. Written results shall be returned to the site and posted no more than five days after the monitoring was performed.

D. Personal air samples shall be analyzed by a laboratory which holds certification by the New York State Department of Health's Environmental Laboratory Approval Program. The asbestos consultant must approve the laboratory the contractor intends to use.

END OF SECTION 02081

Stoll

GRIFFIN
INDUSTRIAL SERVICES INC.

PRE-DEMOLITION SURVEY FOR ASBESTOS & LEAD CONTAINING MATERIALS

Stauffer Chemical
4512 Jordan Road
Skaneateles Falls, New York

Conducted: October 1999

Prepared For:

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1.0 INTRODUCTION

Griffin Industrial Services, Inc. was retained by IT Corporation on September 27, 1999, to conduct an inspection and pre-demolition survey of the former Stauffer Chemical facility located at 4512 Jordan Road in Skaneateles Falls, New York.

Griffin Industrial Services, Inc. conducted the survey, sampling, and analysis during October 1999. Griffin Industrial Services, Inc.'s Asbestos Handling License Number is AC 99-0463 and our New York State Inspectors License is AH-89-09565. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located at the subject property in Skaneateles, New York. This inspection was performed in accordance with procedures and guidelines commonly used and accepted by New York State Industrial Code Rule 56-1.9.

EMSL Analytical, Inc. located at 440 Lawrence Bell Drive, Williamsville (accreditation; New York State ELAP #11606, NVLAP #200056-0), and Paradigm Environmental Services, Inc. of 179 Lake Avenue, Rochester, New York (accreditation; New York State ELAP #10958, NVLAP #101904-0), analyzed the samples of suspected materials.

2.0 BACKGROUND INFORMATION

2.1 *Health Effects*

Asbestos, a naturally occurring fibrous mineral silicate, was used extensively in building products from the early 1900's to the late 1970's. Asbestos was primarily used for thermal and acoustical insulation, fire proofing, and decorative purposes. When these materials deteriorate or become disturbed, they may release microscopic fibers into the air. Once airborne, the fibers may remain suspended for extended periods and be readily inhaled by building occupants. Because of their small size and aerodynamic shape, the fibers can easily migrate throughout a building via the ventilation system and fluctuating air currents. Extensive medical evidence has shown that the inhalation of asbestos can cause asbestosis, lung cancer, pleural and peritoneal mesothelioma (cancer of the lining of the lungs, and stomach, respectively) and gastrointestinal cancer. These diseases have a latency period of period of between ten (10) and forty (40) years and are usually fatal. The risk of disease is directly related to the amount of exposure (each exposure accumulates in the body). This is referred to as a dose-response relationship. Presently, medical models rely on the data gained from patients exposed to high occupational levels of asbestos fibers. Extrapolations are made to estimate the risk of disease at lower levels. However; there is no evidence of a threshold exposure level below which the risk of cancer is not increased. The gravity of this situation has prompted many government agencies to promulgate regulations designed to reduce occupational and environmental exposures to asbestos.

2.2 *Government Regulations*

Governmental authorities on both the state and federal level have promulgated asbestos regulations. The U.S. Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) are the major regulators on the federal level.

OSHA has set regulations for both general industry and the construction industry (see 29 CFR 1910.1001 and 29 CFR 1926.58, respectively). OSHA is primarily concerned with occupational exposures to asbestos and has established a permissible exposure limit (PEL) of 0.1 fibers per cubic centimeters of air (f/cc) based on an eight-(8) hour time weighted average (TWA). The standards also mandate methods of compliance, exposure monitoring, work practices, and record keeping. Separate standards for general industry and the construction industry, including demolition and renovation projects, were developed in recognition of the inherent differences between them.

The EPA primarily regulates atmospheric asbestos emissions and asbestos in schools (see 40 CFR Part 61, Subpart M and 40 CFR Part 763, respectively). In the present case only 40 CFR Part 61, Subpart M must be considered. These regulations were promulgated under the National Emissions Standards for Hazardous Air Pollutants (NESHAPS). They specify methods for controlling fiber release during mining, milling, manufacturing operations, and demolition projects. The regulations also specify methods of transportation and disposal for asbestos-containing materials.

On the state level, the New York State Department of Labor (NYSDOL) asbestos regulations (see Part 56 of Title 12 NYCRR) are designed to protect the public from asbestos exposures. They require certification of asbestos handlers and licensing of asbestos abatement contractors. Standard work practices are also specified. NYSDOL notification is required before the initiation of large asbestos projects. Record keeping regulations and compliance criteria have also been established. The regulations designate projects, which disturb greater that 160 square feet or 260 linear feet of ACM as large asbestos abatement projects. Projects involving the disturbance of between 10 square feet and 160 square feet or between 25 linear feet and 260 linear feet of ACM are designated as small asbestos abatement projects. Projects involving 10 square feet or less or 25 linear feet or less of ACM are designated as minor asbestos abatement projects. The level of regulation is adjusted progressively with each project designation.

3.0 METHODOLOGIES

The collection of bulk samples was conducted as follows: After the inspector donned the appropriate protective equipment, the suspect material was dampened with amended water at the sample location to minimize fiber release. A portion of the material was removed using a coring device or similar implement and placed into a labeled sample container.

The sample areas were then labeled with a duct tape tag to mark the area for future reference. The sampling instrument was then cleaned with soapy water, rinsed, and wiped clean after each sample was taken to prevent cross contamination of samples. All contaminated debris was placed in sealed containers and disposed of as asbestos waste. The samples were transported back to Griffin Industrial Services, Inc. and then delivered to EMSL Analytical, Inc., Williamsville, New York or Paradigm Environmental Services, Inc., Rochester, New York.

The Non-friable Organically Bound (NOB) samples were analyzed in accordance with NYSDOH ELAP Method 198.4, by EMSL Analytical Services, Inc. This method is a two- (2) step procedure, which was completed as follows:

1. EMSL/Paradigm performed a gravimetric matrix reduction preparation of each NOB sample collected as part of the completed survey. This involved reducing a portion of the original sample to a residue by removing as much binder material as possible. If the weight of the resulting residue was less than one percent (<1%) of the original starting weight, the sample was considered to be non-asbestos containing. If the residue was greater than one percent (>1%), a Polarized Light Microscopy (PLM) analysis of the residue was initiated. If asbestos was detected as a result of the PLM analysis, and it was calculated that the overall percentage of asbestos in the sample was greater than one percent (>1%), the material was considered to be asbestos containing.

2. If the residue discussed in Item #1 was greater than one percent (>1%), and no asbestos was detected, the sample was submitted for analysis by Transmission Electron Microscopy (TEM) techniques. Before NOB materials can be considered or treated as non-asbestos-containing, confirmation must be made by quantitative transmission electron microscopy.

Fiber identification required the determination of the following optical properties: morphology, color and pleochrism, refractive index, birefringence, extinction characteristics, and sign of elongation. Different asbestos fibers exhibit distinct optical properties. The relative percentages of asbestos and other materials in the sample were based upon the empirical observations of the microscopist. Please refer to Appendix A for copies of the Laboratory Analysis Reports.

PLM/TEM Analyses

EMSL Analytical, Inc., 440 Lawrence Bell Drive, Suite 2, Williamsville, New York 14221 completed sample analyses. EMSL is certified by the New York State Department of Health (NYSDOH) to perform bulk asbestos analyses under the Department's Environmental Laboratory Approval Program (ELAP). EMSL's ELAP Laboratory Identification Number is 11606. Paradigm Environmental Services, Inc., 179 Lake Avenue, Rochester, New York completed additional sample analyses. Paradigm is certified by the New York State Department of Health (NYSDOH) to perform bulk asbestos analyses under the Department's Environmental Laboratory Approval Program (ELAP). Paradigm's ELAP Laboratory Identification Number is 10958.

Transmission Electron Microscopy (TEM) analyses, which were completed for the non-friable organically bound (NOB) materials were also performed by EMSL.

4.0 DISCUSSION

The identification of asbestos containing materials within the subject property located at 4512 Jordan Road was determined through the sampling and analysis of suspect material with analysis by a New York State Department of Health (NYSDOH) certified laboratory. The survey consisted of a thorough inspection of all visible suspect asbestos containing materials. Materials suspected to contain asbestos were then identified and representatively sampled. The quantity of suspect ACM was estimated using measurements taken in the field. Multiple asbestos containing materials were identified as a result of this survey.

A general description of these materials is as follows:
Sample number 001 (floor tile), 002 (floor tile), and 003 floor mastic from the front entrance, all tested positive for containing asbestos greater than one percent. Within the warehouse bay the interior windows (sample 007) were positive for containing asbestos. Most of the pipe insulation throughout the two bays south of the trough consisted of asbestos magnesia, air-cell, and millboard type pipe insulation (samples 008, 015, & 021) and air-cell pipe was detected within the laundry room area. Within the lunch/break room, asbestos was detected within the floor mastic (making the floor tile positive), and pipe insulation located above the drop ceilings (samples 011, & 015). The floor tile and mastic within the adjacent men's bathroom also contained asbestos (samples 018 & 019). Asbestos was detected within the boiler room at the breeching and the hot water storage tank (samples 24 & 25).

Based on the first round of results, additional samples were obtained to verify or deny the presence of additional asbestos containing materials. The following is an overview of those materials and their general locations.

Asbestos and fiberglass pipe and fitting insulation have been identified throughout the facility within various locations. Much of the piping throughout the basement portion of the facility consisted of fiberglass insulation; however, the fittings were comprised of asbestos mudded joint packing.

The first floor area was broken into several subsections, see the attached maps which correspond to the sample locations. Two of the three main bays located on the west -side of the facility contained the majority of the asbestos pipe and fitting insulation. In addition, asbestos pipe and fitting insulation was detected within the "laundry room", the break room, bathrooms, room adjacent to the boiler room, and the green colored piping throughout the boiler and sprinkler rooms. The pipe and fitting insulation in the northwest bay did not contain asbestos. All floor tile and black mastic throughout the facility contained asbestos in amounts greater than one percent.

The asbestos containing materials identified within the boiler room consisted of all "green" pipes and fitting insulation, the boiler breeching, hot water storage tank, and interior boiler insulation.

Within the second floor east wing area, asbestos was detected within the pipe and fitting insulation throughout. A field determination will be required to differentiate the asbestos piping from the fiberglass piping. The floor tile and linoleum within the "control room" also contained asbestos in amounts greater than one percent.

Additional asbestos containing materials exist throughout the facility, these materials consist of unit insulation located at the second floor upper west wing. Interior and exterior window caulk/glazing throughout the facility, transite table tops located in the second floor west wing and second floor east wing.

Asbestos duct insulation was detected on the second floor west wing, and asbestos was also detected at the outside tank farm within the outer shell insulation, top coatings, and mudded joint packing.

Finally, asbestos was detected in varying percentages in all of the roof flashing of the entire roof system and within the roof fields of roof sections; J, K, L, P and any roof systems, which are coated with a aluminized roof paint.

The locations of the samples which were obtained are listed in the following section; however, it should be noted that the samples represent homogenous materials throughout the facility, not just at the given sample locations. Any contractor, which may examine the site, should be aware that the given quantities represent like materials throughout the entire facility.

5.0 IDENTIFIED ACM

Table 5-1 lists those materials, which were confirmed as asbestos containing materials (ACM's). Approximate quantities of confirmed ACM are also provided. **However, these quantities are field estimates only and should be verified at the site, and should not be used for the purpose of bidding.**

5.1 *Identified Asbestos Containing Building Materials*

The following is a list of asbestos containing materials, which are present at Stauffer Chemical, located at 4512 Jordan Road in Skaneateles Falls, New York:

Sample #	Location	Material	% Asbestos	Approx. Quantity	Condition
001	First floor	Floor tile	18.0	115 sq. ft	Good
002	First floor	Floor tile	21.0	Same	Good
003	First floor	Mastic	2.5	Same	Good
007	Interior windows	Glazing	5.2	All	Good
008	First floor No. bay	Mill-board pipe	27.0	Throughout	fair
011	First floor break room	Mastic	4.3	940 sq. ft	good
015	Break room & men's rm.	Air-cell pipe	14.0	475 ln. ft.	good
018	Men's bath	Tan floor tile	6.1	760 sq. ft.	good
019	Men's bath	Mastic	1.3	760 sq. ft.	good
021	Laundry rm.	Air-cell pipe	67.0	225 ln. ft.	fair
024	Boiler room	Breeching	67.0	115 sq. ft.	good
025	Boiler room	Tank insulation	50.0	55 sq. ft.	fair

Sample #	Location	Material	% Asbestos	Approximate Quantity	Condition
RF B.2	"B" Roof	flashing	28.0	650 ln. ft	Good
RF C.1	"C" Roof	flashing	2.3	900 ln. ft	Good
UC C.1	"C" Roof	Roof unit	1.4	75 ln. ft	Good
RF D.1	"D" Roof	flashing	14.0	650 ln. ft	Good
RF F.1A	"F" Roof	flashing	19.0	700 ln. ft	Good
RF G.1	"G" Roof	flashing	6.3	200 ln. ft	Good
RF I.1	"I" Roof	flashing	9.7	50 ln. ft	Good
WC I.1	"I" Roof	Window glazing	5.6	All exterior windows	Good
APA J.1	"J" Roof & "K" Roof	Aluminized Paint	18.0	1150 sq. ft	Good
RM L.1	"L" Roof	Membrane and flashing	4.5	450 sq. ft	Good
RF M.2	"M" Roof	flashing	13.0	50 ln. ft	Good
WC M.1	"M" Roof	Window caulk/glaze	4.8	All exterior windows	Good
RF N.2	"N" Roof	flashing	20.0	30 ln. ft	Good
WC N.1	"N" Roof	Window caulk	1.1	All exterior windows	Fair
WG N.2	"N" Roof	Window glazing	6.2	All exterior windows	Fair
RM P.2	"P" Roof	Membrane	1.3	250 sq. ft	Good
FTM A.1	2nd Fl. west	Vat & mastic	2.9	8100 sq. ft	Good
FT A.4	2nd Fl. Sub-west	12"beige vat & mastic	4.8	280 sq. ft	Good
FT A.5	2nd Fl. Sub-west	12" streaked floor tile	1.9	250 sq. ft	Good

FT A.6	2nd Fl. Sub-west	12" tan floor tile & mastic	1.1	400 sq. ft	Good
LI A.1	2nd Fl. Sub-west	Linoleum & mastic	20.0	700 sq. ft	Good
LT A.1	2nd Fl. west	Lab table	25.0	140 sq. ft	Good
TTC A.1	Tank farm	Top coat insulation	7.4	325 sq. ft	Fair
TFJP A.1	Tank farm	Mud joint	22.0	50 ln. ft	Fair
OTI A.1	Tank farm	Outer tank insulation	12.0	100 sq. ft	Fair
OTI A.2	Tank farm	Outer tank insulation	17.0	Same	Fair
DIW A.1	2nd Fl. West-wing	Duct insulation	40.0	1350 sq. ft	Good
MJP A.2	2nd Fl. West-wing	Mudded joint packing	35.0	All fittings associated with TI A.1 & A.2	Good
TI A.1	2nd Fl. West-wing	Pipe insulation	10.0	3,325 linear feet	Good
TI A.2	2nd Fl. West-wing	Pipe insulation	27.0	Same	Good
BHI A.1	2nd Fl. Sub-west wing	Boiler header	5.0 chrysotile 14.0 amosite	100 sq. ft	Good
TAI A.1	2nd Fl. Sub-west wing	Tank insulation	35.0	50 sq. ft	Good
BI A.1	2nd Fl. Sub-west wing	Boiler insulation	15.0	100 sq. ft	Good
UI A.1	2nd Fl. Upper west wing	Unit insulation	5.0	1100 sq. ft	Good
FRI A.2	Basement	Fitting ring	5.0	50 sq. ft	Good

6.0 RECOMMENDATION

General Response Actions

Listed below are four (4) response actions generally available to prevent or limit the release of asbestos fibers from ACM.

1. **Implementation of an Operations and Maintenance (O&M) Program:**
   This response action is a set of standard operating procedures used by in-house maintenance personnel which are designed to clean-up fibers previously released and limit future asbestos exposures by instituting preventative measures (i.e., personnel training, material repair, special clean-up procedures, etc.).

2. **Encapsulation:**
   This response action limits fiber release by chemical means. That is, either a hard impermeable barrier between the material and the environment is created (bridging encapsulant) or the material is penetrated and its fibers are bound together in a hard matrix (penetrating encapsulant). A lag cloth can also be used for pipe insulation, which consists of a wettable cloth, which is applied to a damaged area and dries and seals like a cast.

3. **Enclosure of Asbestos Material:**
   Enclosure of asbestos entails the construction of a permanent, physical, airtight impermeable barrier between the ACM and the environment using material such as cement block, gypsum board, tongue and groove and spline jointed plywood, etc.

4. **Removal:**
   Removal of asbestos is a process by which the ACM is stripped from its underlying substrate in a controlled manner so as to prevent building contamination. The major benefit of removal is that when done properly, it is a permanent solution, which eliminates any further need to deal with the material. The greatest drawback to removal is that performing asbestos abatement in accordance with applicable regulations is often an expensive and complex undertaking.

The need to initiate remedial measures is generally based on the hazard assessments prepared for the materials identified during a survey. These hazard assessments are normally based on several factors including the following:

- The friability of the material
- The physical condition of the material (i.e., good, fair, poor)
- The likelihood for disturbance of the material
- Activity in the area (i.e., ventilation equipment, etc.)
- Occupancy of the area

GENERAL RECOMMENDATIONS

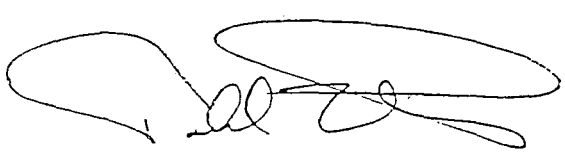
The identified asbestos containing materials range from fair to good condition. However, it is our understanding that the building is scheduled for demolition. As per NYS Industrial Code Rule 56, all identified asbestos containing material must be removed and disposed of at an approved landfill for asbestos waste, prior to demolition. The contractor performing the removal of the asbestos containing material must hold a valid NYS Contractor Asbestos License. Based on the analytical provided, those areas, which contain asbestos materials, need to be abated prior to disturbance or demolition. If suspect material is encountered during the course of demolition, samples should be taken and analyzed for the presence of asbestos.

7.0 DAMAGES AND LIABILITY

Griffin Industrial Services, Inc.'s total liability in damages or otherwise shall not exceed the payment, if any, received by Griffin Industrial Services, Inc. for the products and services furnished or to be furnished, as the case may be, resulting in the loss or damage claimed. In no event shall Griffin Industrial Services, Inc. be liable for incidental, consequential, indirect, punitive, or special loss or damages of any kind, such as but not limited to lost business revenue, lost profits, or costs of downtime resulting from Griffin Industrial Services, Inc. products or services, however caused, whether based on contract, tort (including negligence), or any other legal theory.

If you have any questions regarding the information contained in this report, please feel free to contact me at your convenience.

Very truly yours,
Griffin Industrial Services, Inc.



Todd Platten
Project Manager – Asbestos Building Inspector

Cc: Mike Tambroni, Branch Manager

*** A full survey including lead testing will be sent immediately upon its availability.

GRIFFIN
INDUSTRIAL SERVICES INC.

PRE-DEMOLITION SURVEY FOR ASBESTOS & LEAD CONTAINING MATERIALS

Stauffer Chemical
4512 Jordan Road
Skaneateles Falls, New York

Conducted: October 1999

Prepared For:

IT Corporation
Mr. Dave Stoll
13 British American Boulevard
Latham, New York 12110

Prepared by:

Griffin Industrial Services, Inc.

☐ Corporate Office
PO Box 519
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INTRODUCTION

Paradigm Environmental Services, Inc. was retained by *Griffin Industrial Services, Inc.* on October 21, 1999 to conduct a limited inspection for the presence of lead-based paints located at **Stauffer Chemical Company, Skaneateles Falls, New York.**

Paradigm Environmental Services, Inc. holds a New York State Department of Labor Radioactive Materials License to own and operate an X-Ray Fluorescence lead paint analyzer. An EPA certified Lead Inspector, Shawn House, conducted this inspection with procedures and guidelines commonly used and accepted in New York State and EPA.

The objective of this inspection was to identify locations of lead-based paint on floors, interior walls, doors and door casings, windows and window casings, on the first and second floors, basement, and exterior of the building as requested by the Client. Sample locations are designated on the enclosed drawing.

The LPA-1 Lead Paint Analyzer is an analytical radiation instrument used in quantitative analysis of lead in paint for various substrates. The LPA-1 is a spectrum analyzer that resolves the lead X-Ray intensity from interfering radiation.

Certain substrates may register a reading in the inconclusive range. They are:

Substrate	Inconclusive Range
Brick	None
Concrete	None
Drywall	None
Metal	0.9 to 1.3 mg/cm^2
Plaster	0.9 to 1.0 mg/cm^2
Wood	None

The inspection at Stauffer Chemical Company did not generate any readings in the inconclusive range.

A radioactive material, Cobalt 57, is used as the radiation source in this device for nondestructive method of sample analysis. In order to verify the proper operation of the analyzer it is calibrated before each inspection.

LIMITATIONS

The information provided in this report was compiled from field notes and instrument data.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of lead based paint within the building was subject to the accessibility of individual areas or spaces.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

DEFINITIONS

Lead based paint - Paint or other surface coatings that contain lead equal to or in excess of 1.0 mg/cm^2 or 0.5% by weight.

CONCLUSIONS

A limited lead-based paint survey was performed by Paradigm Environmental Services, Inc. for *Griffin Industrial Services, Inc.* at **Stauffer Chemical Company, Skaneateles, New York.** The inspection was conducted on October 21, 1999.

The following components were determined to have instrument readings at or over the HUD abatement level of 1.0 mg/cm^2 :

EXTERIOR COMPONENTS

Roof

- Roof – Lime Green Metal Soffit

Second Floor

- Room 39 – Lime Green Metal Window Lintel
- Eastside Stairway – Lime Green Metal Stairway Stringer
- Eastside Stairway – Lime Green Metal Handrail
- Eastside Stairway – Lime Green Metal Exit Door

First Floor

- Room 50 – Lime Green Metal Overhead Door
- Room 51 - Green Metal Door Jamb
- Room 51 – Green Metal Hand Rail
- Room 54 – Green Metal Door
- Room 54 – Green Metal Door Jamb
- Green Wood Door
- Green Metal Soffit
- Green Metal Window Lintel

Basement

- Green Metal Window Part Bead
- Lime Green Metal Stair Tread
- Lime Green Wood Overhead Door
- Grey Metal Beam

INTERIOR COMPONENTS

Second Floor

- Green Metal Door Lintel
- Room 4 – White Metal Window Lintel
- Room 5 – Lime Green Metal Window Lintel
- Room 7 – Yellow Metal Window Lintel
- Room 13 – Lime Green Metal Window Lintel
- Room 13 – Yellow Concrete Floor
- Room 13 – Red Metal Cabinet Door
- Room 13 – Blue Metal Cabinet Door
- Room 13 – Yellow Metal Cabinet Door
- Room 13 – Green Metal Cabinet Door
- Room 26 – Yellow Metal Stairwell Hand Rail
- Room 30 – Green Metal Door
- Room 32 – Lime Green Metal Window Lintel
- Room 38 – Yellow Concrete Floor
- Room 46 – White Metal Door Lintel
- Room 46 – Brown Metal Stairwell Tread
- Room 46 – Grey Metal Stairwell Riser
- Room 46 – Brown Metal Stairwell Stringer
- Room 46 – Yellow Metal Stairwell Hand Rail
- Room 47 – Red Metal Overhead Door

First Floor

- Room 50 – Green Metal Door Jamb
- Room 50 – Yellow Concrete Floor
- Room 50 – Yellow Metal Pole
- Room 50 – Yellow Concrete Curb
- Room 50 – Green Metal Sliding Door
- Room 50 – Light Green Metal Sliding Door Frame
- Room 52 – Lime Green Metal Door
- Room 52 – Grey Wood Door Frame
- Room 52 – White Wood Double Swinging Doors
- Room 52 – Red Metal Sliding Door
- Room 56 – Lime Green Metal Door
- Room 57 – Grey Metal Stairwell Stringer
- Room 59 – Red Metal Door Casing
- Room 59 – Red Metal Door
- Room 59 – Yellow Metal Catwalk
- Room 62 – Blue Metal Tank

Basement

- Room 64 – White Metal Door Jamb
- Room 64 – White Wood Door
- Room 64 – Yellow Metal Stairwell Hand Rail
- Room 65 – Blue Wood Electrical Room Door
- Room 65 – Green Metal Stairwell Stringer
- Room 65 – Grey Metal Stairwell Stringer
- Room 65 – Green Metal Tank
- Room 65 – Yellow Concrete Curbing
- Room 66 – Green Metal Hand Rail
- Room 66 – Lime Green Metal Beam
- Room 66 – Lime Green Metal Holding Tank

All lead-based paints should be inspected and maintained periodically. These paints must be handled with care and disturbances should be minimized. Abatement strategies for lead paint include the following: interim controls, replacement, encapsulation, and paint removal.

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: S#01091 - 10/21/99 09:30

INSPECTION FOR: Griffin Industrial Services, Inc.
P.O. Box 519
East Syracuse, New York 13057

PERFORMED AT: Stauffer Chemical Company
Skaneateles Falls, New York

INSPECTION DATE: 10/21/99

INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 01091

ACTION LEVEL: 1.0 mg/cm²

OPERATOR LICENSE: _____

SIGNED: _____ Date: 10-28-99

Shawn House

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Griffin Industrial Services, Inc.

Inspection Date: 10/21/99
Report Date: 10/28/99
Statement Level: 1.0
Report No. S#01091 - 10/21/99 09:30
Total Readings: 167
Job Started: 10/21/99 09:30
Job Finished: 10/21/99 14:34

Stauffer Chemical Company
Skaneateles Falls, New York

Read No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1	CALIBRATION								2.2	QM
2	CALIBRATION								1.8	QM
3	CALIBRATION								1.6	QM
4	CALIBRATION								-0.1	QM
5	CALIBRATION								-0.1	QM
6	CALIBRATION								-0.2	QM
7	2nd Floor	A	Stairs	Ctr	Wall	I	Concrete	White	-0.1	QM
8	2nd Floor	A	Railing	Lft	Railing	I	Metal	Grey	0.0	QM
9	2nd Floor	A	Floor	Ctr		I	Concrete	Grey	-0.1	QM
10	2nd Floor	A	Stairs	Ctr	Stringer	I	Metal	Grey	0.2	QM
11	2nd Floor	A	Window	Ctr	Sill	I	Concrete	White	-0.1	QM
12	2nd Floor	A	Window	Ctr	Part. bead	I	Metal	White	0.0	QM
13	2nd Floor	A	Door	Ctr	U Ctr	I	Metal	Green	0.1	QM
14	2nd Floor	A	Door	Ctr	Rgt jamb	I	Metal	Green	0.0	QM
15	2nd Floor	A	Door	Ctr	Header	I	Metal	Green	2.3	QM
16	2nd Floor	A	Wall	U Ctr		I	Concrete	Lime	0.2	QM
17	2nd Floor	C	Wall	U Ctr		I	Drywall	Lime	0.0	QM
18	Room 2	A	Wall	U Ctr		I	Concrete	White	0.0	QM
19	Room 2	A	Wall	U Ctr		I	Drywall	White	0.0	QM
20	Room 2	A	Door	Ctr	Lft jamb	I	Wood	White	-0.1	QM
21	Room 2	A	Window	Ctr	Sill	I	Concrete	White	-0.1	QM
22	Room 2	A	Window	Ctr	Part. bead	I	Metal	White	0.0	QM
23	Room 3	A	Floor	Ctr		I	Concrete	Red	0.0	QM
24	Room 4	A	Window	Ctr	Header	I	Metal	White	1.0	QM
25	Room 4	A	Wall	U Ctr		I	Drywall	Cream	-0.2	QM
26	Room 5	A	Window	Ctr	Header	I	Metal	Lime	1.0	QM
27	Room 4	A	Radiator	Ctr		I	Metal	Cream	0.0	QM
28	Room 5	A	Wash Basin	Ctr		I	Concrete	Red	0.0	QM
29	Room 5	A	Wash Basin	Ctr		I	Concrete	Cream	0.0	QM
30	Room 5	A	Beam	Ctr		I	Metal	Cream	0.1	QM
31	Room 7	A	Wall	U Ctr		I	Drywall	Yellow	0.0	QM
32	Room 7	A	Wall	U Ctr		I	Concrete	Yellow	0.1	QM
33	Room 7	A	Window	Ctr	Header	I	Metal	Yellow	1.6	QM
34	Room 9	A	Window	Ctr	Sill	I	Wood	Lime	-0.1	QM
35	Room 8	A	Wall	U Ctr		I	Concrete	Grey	0.0	QM
36	Room 13	A	Floor	Ctr		I	Concrete	Yellow	3.2	QM
37	Room 11	A	Divider	Ctr		I	Metal	Dk Green	0.2	QM
38	Room 13	A	Cabinet Door	Ctr		I	Metal	Red	6.9	QM
39	Room 13	A	Cabinet Door	Ctr		I	Metal	Blue	4.1	QM
40	Room 13	A	Cabinet Door	Ctr		I	Metal	Yellow	5.5	QM
41	Room 13	A	Cabinet Door	Ctr		I	Metal	Green	3.5	QM
42	Room 13	A	Cabinet	Ctr		I	Metal	White	0.1	QM
43	Room 13	A	Slop Sink	Ctr		I	Concrete	Black	-0.2	QM
44	Room 13	A	Shelf	Lft		I	Wood	Blue	-0.1	QM
45	Room 13	A	Shelf	Lft		I	Wood	White	-0.1	QM
46	Room 13	A	Wall	U Ctr		I	Concrete	Dk Pink	0.1	QM
47	Room 13	A	Window	Ctr	Header	I	Metal	Lime	1.0	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Griffin Industrial Services, Inc.

[redacted]	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
48	Room 14	A	Wall	U Ctr		I	Drywall	Brown	-0.2	QM
49	Room 14	A	Window	Ctr	Sill	I	Wood	Brown	-0.1	QM
50	Room 15	A	Ceiling			I	Plaster	White	0.1	QM
51	Room 15	A	Wall	U Ctr		I	Plaster	Yellow	0.0	QM
52	Room 15	A	Floor	Ctr		I	Concrete	Green	0.3	QM
53	Room 15	A	Door	Ctr	Rgt jamb	I	Metal	Brown	0.0	QM
54	Room 19	A	Strwell Dr	Ctr		I	Metal	White	0.0	QM
55	Room 19	A	Door	Ctr	Rgt jamb	I	Metal	Brown	0.0	QM
56	Room 19	A	Stairs	Ctr	Stringer	I	Metal	Green	0.0	QM
57	Room 19	A	Stairs	Ctr	Risers	I	Concrete	Black	-0.2	QM
58	Room 26	A	Railing	Lft	Railing	I	Metal	Yellow	7.8	QM
59	Room 26	A	Stairs	Ctr	Stringer	I	Metal	Brown	0.0	QM
60	Room 30	A	Door	Ctr	L Rgt	I	Metal	Green	1.0	QM
61	Room 30	A	Door	Ctr	Lft jamb	I	Metal	Green	0.0	QM
62	Room 30	A	Door	Ctr	U Ctr	I	Metal	Green	0.5	QM
63	Room 31	A	Wall	U Ctr		I	Concrete	Yellow	-0.2	QM
64	Room 31	A	Window	Ctr	Sill	I	Concrete	Yellow	0.3	QM
65	Room 31	A	Window	Ctr	Sill	I	Concrete	Lime	-0.1	QM
66	Room 31	A	Floor	Ctr		I	Concrete	Lime	-0.1	QM
67	Room 32	A	Window	Ctr	Header	I	Metal	Lime	>9.9	QM
68	Room 32	A	Window	Ctr	Part. bead	I	Metal	Lime	0.0	QM
69	Room 38	A	Floor	Ctr		I	Concrete	Yellow	2.9	QM
70	Room 35	A	Floor	Ctr		I	Concrete	Brown	-0.2	QM
71	Room 35	A	Wall	U Ctr		I	Drywall	Peach	0.2	QM
72	Room 35	A	Window	Ctr	Part. bead	I	Metal	White	0.5	QM
[redacted]3	Exit Door	A	Door	Ctr	Rgt jamb	I	Metal	Lime	0.2	QM
[redacted]	Exit Door	A	Door	Lft	L Ctr	I	Metal	Lime	5.1	QM
75	Exit Door	A	Stairs	Ctr	Stringer	I	Metal	Lime	2.8	QM
76	Exit Door	A	Railing	Lft	Railing	I	Metal	Lime	4.9	QM
77	Room 39	A	Window	Ctr	Header	I	Metal	Lime	>9.9	QM
78	Room 39	A	Pipe	Ctr		I	Metal	Red	0.0	QM
79	Room 45	A	Wall	U Ctr		I	Drywall	Peach	-0.2	QM
80	Room 46	A	Railing	Lft	Railing	I	Metal	Yellow	6.2	QM
81	Room 46	A	Stairs	Ctr	Stringer	I	Metal	Brown	2.3	QM
82	Room 46	A	Stairs	Ctr	Risers	I	Metal	Grey	1.6	QM
83	Room 46	A	Stairs	Ctr	Treads	I	Metal	Brown	2.4	QM
84	Room 46	A	Stairs	Ctr	Wall	I	Concrete	White	0.0	QM
85	Room 46	A	Door	Ctr	Header	I	Metal	White	8.8	QM
86	Room 47	A	Ovrhead Dr	Ctr		I	Metal	Red	>9.9	QM
87	Roof	A	Roof Vent	Ctr		I	Metal	Lime	0.0	QM
88	Roof	A	Soffit			I	Metal	Lime	2.1	QM
89	Roof	A	Roof	Ctr		I	Metal	Green	0.0	QM
90	Roof	A	Roof	Ctr		I	Brick	White	0.0	QM
91	Roof	A	Roof	Ctr		I	Brick	Lime	0.0	QM
92	Roof	A	Roof Door	Ctr		I	Wood	Green	0.1	QM
93	Room 47	A	Wall	U Ctr		I	Concrete	White	-0.2	QM
94	1st Floor	A	Stairs	Ctr	Treads	I	Concrete	Grey	-0.1	QM
95	Room 50	A	Wall	U Ctr		I	Concrete	White	-0.1	QM
96	Room 50	A	Pole	Ctr		I	Metal	Yellow	>9.9	QM
97	Room 50	A	Curb	Ctr		I	Concrete	Yellow	5.8	QM
98	Room 50	A	Sliding Dr	Ctr		I	Metal	Green	1.5	QM
99	Room 50	A	Door Frame	Ctr		I	Metal	Lt Green	5.0	QM
100	Room 50	A	Door	Ctr	Rgt jamb	I	Metal	Green	2.2	QM
101	Room 50	A	Door	Ctr	U Ctr	I	Metal	Green	0.0	QM
102	Room 50	A	Stairs	Ctr	Stringer	I	Metal	Lime	0.0	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Griffin Industrial Services, Inc.

[illegible]d	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
103	Room 50	A	Ovrhead Dr	Ctr		I	Metal	Lime	1.9	QM
104	Room 50	A	Sliding Dr	Ctr		I	Metal	White	0.4	QM
105	Room 51	A	Door	Ctr	Lft jamb	I	Metal	Green	0.0	QM
106	Room 51	A	Door	Ctr	Rgt jamb	I	Metal	Green	2.0	QM
107	Room 51	A	Door	Ctr	U Ctr	I	Metal	Green	0.4	QM
108	Room 51	A	Hand Rail	Ctr		I	Metal	Green	2.9	QM
109	Room 51	A	Wall	U Ctr		I	Plaster	Lime	-0.2	QM
110	Room 51	D	Ceiling			I	Plaster	White	-0.1	QM
111	Room 50	A	Floor	Ctr		I	Concrete	Yellow	2.2	QM
112	Room 52	A	Door	Ctr	U Ctr	I	Metal	Lime	2.7	QM
113	Room 52	A	Wall	U Ctr		I	Concrete	Lime	-0.1	QM
114	Room 52	A	Door	Ctr	Rgt jamb	I	Metal	Brown	0.0	QM
115	Room 55	A	Door	Lft	L Ctr	I	Metal	Lime	3.0	QM
116	Room 53	A	Door	Ctr	U Ctr	I	Metal	Orange	0.0	QM
117	Room 53	D	Ceiling			I	Plaster	White	-0.1	QM
118	Room 54	A	Door	Ctr	L Rgt	I	Metal	Green	2.9	QM
119	Room 54	A	Door	Ctr	Rgt jamb	I	Metal	Green	5.8	QM
120	Exterior	A	Door	Ctr	U Rgt	I	Wood	Green	3.2	QM
121	Exterior	A	Window	Ctr	Header	I	Wood	Green	2.6	QM
122	Exterior	A	Soffit			I	N/A	Green	2.3	QM
123	Room 56	A	Wall	U Ctr		I	Metal	Lime	2.4	QM
124	Room 52	A	Door	Ctr	Lft jamb	I	Wood	Grey	5.2	QM
125	Room 52	A	Sliding Dr	Ctr		I	Metal	Red	5.7	QM
126	Room 52	A	Door	Ctr	U Ctr	I	Wood	White	1.0	QM
127	Room 50	A	Wall	L Ctr		I	Metal	Green	0.2	QM
[illegible]28	Room 57	A	Stairs	Ctr	Stringer	I	Metal	Grey	5.1	QM
[illegible]9	Room 59	A	Boiler	Ctr		I	Metal	Lime	0.0	QM
130	Room 59	A	Tank	Ctr		I	Metal	Blue	0.0	QM
131	Room 59	A	Door	Ctr	U Ctr	I	Metal	Red	8.4	QM
132	Room 59	A	Door	Ctr	Rgt casing	I	Metal	Red	8.3	QM
133	Room 59	A	Catwalk	Ctr		I	Metal	Yellow	8.4	QM
134	Room 60	A	Wall	U Ctr		I	Brick	Yellow	0.0	QM
135	Room 61	A	Door	Ctr	Lft jamb	I	Wood	Yellow	-0.1	QM
136	Room 62	A	Tank	Ctr		I	Metal	Blue	1.5	QM
137	Room 62	A	Stairs	Ctr	Stringer	I	Metal	White	0.0	QM
138	Room 63	A	Tank	Ctr		I	Metal	Green	0.0	QM
139	Room 64	A	Wall	U Ctr		I	Concrete	White	0.0	QM
140	Room 64	A	Stairs	Ctr	Treads	I	Metal	Grey	-0.2	QM
141	Room 64	A	Stairs	Ctr	Stringer	I	Metal	Grey	0.4	QM
142	Room 64	A	Railing	Ctr	Railing	I	Metal	Yellow	>9.9	QM
143	Room 64	A	Door	Ctr	U Ctr	I	Wood	White	1.0	QM
144	Room 64	A	Door	Ctr	Lft jamb	I	Metal	White	1.0	QM
145	Room 65	A	Pads	Ctr		I	Concrete	Blue	-0.1	QM
146	Room 65	A	Door	Ctr	U Ctr	I	Wood	Blue	1.6	QM
147	Room 65	A	Door	Ctr	Lft jamb	I	Wood	Lime	0.4	QM
148	Room 65	A	Tank	Ctr		I	Metal	Green	3.0	QM
149	Room 65	A	Stairs	Ctr	Stringer	I	Metal	Green	3.3	QM
150	Room 65	A	Stairs	Ctr	Stringer	I	Metal	Grey	3.4	QM
151	Room 65	A	Curbing	Ctr		I	Concrete	Yellow	>9.9	QM
152	Room 66	A	Door	Ctr	U Lft	I	Wood	White	-0.1	QM
153	Room 66	A	Wall	U Ctr		I	Concrete	White	0.0	QM
154	Room 66	A	Railing	Ctr	Railing	I	Metal	Green	5.8	QM
155	Room 66	A	Beam	Ctr		I	Metal	Lime	4.6	QM
156	Room 66	A	Tank	Ctr		I	Metal	Lime	8.6	QM
157	Exterior	A	Stairs	Lft	Treads	I	Metal	Lime	8.2	QM

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Griffin Industrial Services, Inc.

Read No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
158	Exterior	A	Wall	L Ctr		I	Concrete	White	-0.1	QM
159	Exterior	A	Ovrhead Dr	Ctr		I	Wood	Lime	2.6	QM
160	Exterior	A	Wall	L Ctr		I	Concrete	Lime	-0.2	QM
161	Exterior	A	Wall	L Ctr		I	Wood	Red	-0.2	QM
162	Exterior	A	Siding	Ctr		I	Metal	Cream	0.3	QM
163	Exterior	A	Siding	Ctr		I	Metal	Green	0.0	QM
164	Exterior	A	Window	Ctr	Part. bead	I	Metal	Green	2.5	QM
165	Exterior	A	Beam	Ctr		I	Metal	Grey	6.5	QM
166	CALIBRATION								1.8	QM
167	CALIBRATION								0.0	QM

---- End of Readings ----

APPENDIX A

Laboratory Results

EMSL Analytical, Inc.

440 Lawrence Bell Drive, Suite #2
Williamsville, NY 14221
Phone (716) 631-5887
Fax (716) 631-7693

October 14, 1999

Griffin Industrial Services, Inc.
P.O.Box 519
East Syracuse, New York 13057
Phone: (800) 459-4999
Fax: (315) 463-2931
Attention: Todd Platten
Project: G5769 / Stauffer Chemical
Ref #: BU993894

Analysis of New York State NOBs Performed by Transmission Electron Microscopy (TEM) ELAP 198.4 Method*

SAMPLE ID	SAMPLE DESCRIPTION	COLOR	% NON FIBROUS MATERIAL	% NON-ASB FIBERS	TEM RESULTS % ASBESTOS
001	tile	green	82		18 chrysotile
002	tile	tan	79		21 chrysotile
003	mastic	black	97.5		2.5 chrysotile
004	stair tread	green	100		NAD
005	baseboard	black	100		NAD
006	mastic	brown	100		NAD
007	caulk	gray	94.8		5.2 chrysotile
010	tile	white	100		NAD
011	mastic	black	95.2		4.3 chrysotile
016	baseboard	black	100		NAD
017	mastic	brown	100		NAD
018	tile	tan	93.9		6.1 chrysotile
019	mastic	tan	98.7		1.3 chrysotile

Analyst _____ Kenneth Najuch

Approved Signatory _____

NOTES: Trace indicates asbestos detected at <1%
NON-ACM indicates a final residue weight <1% of subsample original weight
NAD - No Asbestos Detected

NVLAP #200056-0 NY STATE ELAP #11606

EMSL Analytical, Inc.

440 Lawrence Bell Dr.
Buffalo, NY 14221
Phone: (716) 631-5887 Fax: (716) 631-7693

Attn.: Todd Platten
Griffin Industrial Services, Inc.
P.O. Box 519
East Syracuse, NY 13057

Wednesday, October 13, 1999

Ref Number: BU993895

POLARIZED LIGHT MICROSCOPY (PLM) - POINT COUNT

Performed by EPA 600/R-93/116 Method*

Project: G5769 / Stauffer Chemical

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
008	1st fl warehouse bay no.	Grey Fibrous Homogeneous	Teased	27.% Chrysotile	50.% Cellulose	23.% Matrix
009	warehouse 1st fl no.	Grey Fibrous Homogeneous	Teased	None Detected	40.% Glass	60.% Matrix
012	1st fl break rm	Grey Fibrous Homogeneous	Teased	None Detected	50.% Cellulose 30.% Min. Wool	20.% Matrix
013	1st fl break rm	Grey Fibrous Layers # 1	Teased	None Detected	5.% Cellulose	95.% Matrix
013	1st fl break rm	White Non-Fibrous Layers # 2	Teased	None Detected		100.% Matrix
013	paper	Brown Fibrous Layers # 3	Teased	None Detected	95.% Cellulose	5.% Matrix

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

Eric Fischer
Analyst

Approved
Signatory

EMSL Analytical, Inc.

440 Lawrence Bell Dr.
Buffalo, NY 14221
Phone: (716) 631-5887 Fax: (716) 631-7693

Attn.: Todd Platten
Griffin Industrial Services, Inc.
P.O. Box 519
East Syracuse, NY 13057

Wednesday, October 13, 1999

Ref Number: BU993895

POLARIZED LIGHT MICROSCOPY (PLM) - POINT COUNT

Performed by EPA 600/R-93/116 Method*

Project: G5769 / Stauffer Chemical

Sample	Location	Appearance	Sample Treatment	ASBESTOS % Type	NON-ASBESTOS % Fibrous	% Non-Fibrous
024	boiler rm breech	Grey Fibrous Homogeneous	Teased	Trace Chrysotile 67.% Amosite		33.% Matrix
025	boiler rm hot water tank	Grey Fibrous Homogeneous	Teased	50.% Chrysotile		50.% Matrix
026	boiler rm wall	Grey Fibrous Homogeneous	Crushed/Dissolved	None Detected	5.% Cellulose	95.% Matrix
027	boiler rm yellow line	Grey Fibrous Homogeneous	Teased	None Detected	40.% Min. Wool	60.% Matrix

Comments: For all obviously heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. Also, "# of Layers" refers to number of separable subsamples.

* NY samples analyzed by ELAP 198.1 Method.

Eric Fischer
Analyst

Approved
Signatory

Analysis performed by EMSL Buffalo (NVLAP Air and Bulk #200056, NYSDOH ELAP# 11606)

EMSL Analytical, Inc.
440 Lawrence Bell Drive, Suite #2
Williamsville, NY 14221
Phone (716) 631-5887
Fax (716) 631-7693

November 2, 1999

Griffin Industrial Services, Inc.
P.O. Box 519
East Syracuse, NY 13057
Phone: (800) 459-4999
Fax: (315) 463-2931
Attention: Todd Platten
Project: G5769 / Stauffer Chemical
Ref #: BU994072 / BU994119

Analysis of New York State NOBs Performed by Transmission Electron Microscopy (TEM) ELAP 198.4 Method*

SAMPLE ID	SAMPLE DESCRIPTION	COLOR	% NON FIBROUS MATERIAL	% NON-ASB FIBERS	TEM RESULTS % ASBESTOS
RM A.1	roof	black	100		NAD
RF A.1	flashing	black/silver	100		NAD
RF A.2	flashing	black	100		trace chrysotile
RM B.1	roofing	black/silver	100		NAD
RM B.2	roofing	black	100		trace chrysotile
RF B.1	flashing	black	100		trace chrysotile
RF B.2	flashing	black	72		28 chrysotile
WC B.1	glaze	gray	99.51		0.49 chrysotile
UF B.1	flashing	black	Not Analyzed		
RM C.1	roof	black/silver	100		NAD
RM C.2	roof	black/tan	100		NAD
RF C.1	flashing	black/silver	97.7		2.3 chrysotile
RF C.2	flashing	black	Not Analyzed		
UF C.1	flashing	black	Not Analyzed		
UC C.1	glaze	gray	98.36		1.4 chrysotile 0.24 anthophyllite

NOTES: *Trace indicates asbestos detected at <1%*
NON-ACM indicates a final residue weight <1% of subsample original weight
NAD - No Asbestos Detected

NVLAP #200056-0 NY STATE ELAP #11606

EMSL Analytical, Inc. 440 Lawrence Bell Drive, Suite #2
Williamsville, NY 14221
Phone (716) 631-5887
Fax (716) 631-7693

Reference Number: BU994072 and BU994119

Analysis of New York State NOBs Performed by Transmission Electron Microscopy (TEM) ELAP 198.4 Method*

SAMPLE ID	SAMPLE DESCRIPTION	COLOR	% NON FIBROUS MATERIAL	% NON-ASB FIBERS	TEM RESULTS % ASBESTOS
RM D.1	roofing	black	99.94		0.06 chrysotile
RF D.1	flashing	black	86		14 chrysotile
WC D.1	glaze	gray	99.61		0.39 chrysotile
AP E.1	paint	black	99.12		0.88 chrysotile
RM F.1A	roofing	black	100		NAD
RF F.1A	flashing	black	81		19 chrysotile
RM F.1B	roofing	black/silver	Not Analyzed		
RM F.2B	roofing	black	Not Analyzed		
RM F.3B	roofing	black	Not Analyzed		
RM F.1C	roofing	black/silver	Not Analyzed		
RM F.2C	roofing	black	Not Analyzed		
RF F.1C	flashing	black/silver	Not Analyzed		
RF F.2C	flashing	black	Not Analyzed		
RM G.1	roofing	black			NON-ACM
RM G.2	roofing	black			NON-ACM
RF G.1	flashing	black/gray	93.7		6.3 chrysotile
RF G.2	flashing	black	Not Analyzed		
RF G.3	flashing	black/tan	Not Analyzed		
RM DIG.1	mass	black	100		NAD
RM H.1	roofing	black	100		NAD
RM I.1	roofing	black			NON-ACM
RF I.1	flashing	black	90.3		9.7 chrysotile
WC I.1	glaze	gray	94.4		5.6 chrysotile
APA J.1	paint	black	82		18 chrysotile.
RF J.2	flashing	black	Not Analyzed		

NOTES: Trace indicates asbestos detected at <1%
NON-ACM indicates a final residue weight <1% of subsample original weight
NAD - No Asbestos Detected

NVLAP #200056-0 NY STATE ELAP #11606

EMSL Analytical, Inc.
440 Lawrence Bell Drive, Suite #2
Williamsville, NY 14221
Phone (716) 631-5887
Fax (716) 631-7693

Reference Number: BU994072 and BU994119

Analysis of New York State NOBs Performed by Transmission Electron Microscopy (TEM) ELAP 198.4 Method*

SAMPLE ID	SAMPLE DESCRIPTION	COLOR	% NON FIBROUS MATERIAL	% NON-ASB FIBERS	TEM RESULTS % ASBESTOS
RM L.1	roofing	black	95.5		4.5 chrysotile
RF L.2	flashing	black/silver	Not Analyzed		
RF L.3	flashing	black	Not Analyzed		
RM M.1	roofing	black	99.27		0.73 chrysotile
RF M.2	flashing	black	87		13 chrysotile
FR M.3	flashing	black	Not Analyzed		
WC M.1	caulking	gray	95.2		4.8 chrysotile
WG M.1	glazed	gray	100		NAD
RM N.1	roofing	black			NON-ACM
RF N.2	flashing	white/black	80		20 chrysotile
RF N.3	flashing	black	Not Analyzed		
WC N.1	caulk	gray	98.9		1.1 chrysotile
WG N.2	glaze	gray	93.8		6.2 chrysotile
RS O.1	roofing shingle	black	100		NAD
RS O.2	roofing	black	100		NAD
RM P.1	roofing	black			NON-ACM
RM P.2	roofing	black/tan	98.7		1.3 chrysotile
FT A.1	floor tile	green	Not Analyzed		
FTM A.1	mastic	black	97.1		2.9 chrysotile
FT A.2	floor tile	gray	Not Analyzed		
FT A.3	floor tile	gray	Not Analyzed		
FT A.4	floor tile	tan	95.2		4.8 chrysotile
FTM A.4	mastic	brown	100		NAD
FT A.5	floor tile	gray	98.1		1.9 chrysotile
FTM A.5	mastic	tan	99.64		0.36 chrysotile
FT A.6	floor	tile	98.9		1.1 chrysotile
FTM A.6	mass	black	99.83		0.17 chrysotile

NOTES: Trace indicates asbestos detected at <1%
NON-ACM indicates a final residue weight <1% of subsample original weight
NAD - No Asbestos Detected

NVLAP #200056-0 NY STATE ELAP #11606

EMSL Analytical, Inc.
440 Lawrence Bell Drive, Suite #2
Williamsville, NY 14221
Phone (716) 631-5887
Fax (716) 631-7693

Reference Number: BU994072 and BU994119

Analysis of New York State NOBs Performed by Transmission Electron Microscopy (TEM) ELAP 198.4 Method*

SAMPLE ID	SAMPLE DESCRIPTION	COLOR	% NON FIBROUS MATERIAL	% NON-ASB FIBERS	TEM RESULTS % ASBESTOS
LI A.1	linoleum	gray	80		20 chrysotile
CMM A.1	mastic	tan	100		NAD
ST A.1	tread	tan	99.19		0.81 chrysotile
STM A.1	mastic	brown	100		NAD
CTM A.1	mastic	brown	100		NAD
DIM A.1	mastic	brown	100		NAD
LT A.1	mass	gray	75		25 chrysotile
LT A.2	mass	gray	100		NAD
TTC A.1	mass	gray	92.6		7.4 chrysotile
TFJP A.1	mass	gray	78		22 chrysotile
OTI A.1	mass	black	88		12 chrysotile
OTI A.2	mass	black	83		17 chrysotile

Analyst_____
Rhonda Scherer

Analyst_____
Eric Fischer

Approved Signatory_____

NOTES: Trace indicates asbestos detected at <1%
NON-ACM indicates a final residue weight <1% of subsample original weight
NAD - No Asbestos Detected

NVLAP #200056-0 NY STATE ELAP #11606

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: Griffin Industrial Services, Inc.
Location: Stauffer Chemical Company, Skaneateles, NY
2nd Floor - West Wing
Sample Date: 10/21/1999

Job No: 102234
Page: 1 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	TEM	Non-Asbestos Fibers Type & Percentage	Matrix Material %
CT-A.1	71202A	2nd Floor West Wing (See Map)	White/Grey Fibrous 2'x 4' Ceiling Tile	None Detected	0%		Cellulose 40%	60%
CT-A.2	71202	2nd Floor West Wing (See Map)	White 12" x 12" Ceiling Tile	None Detected	0%		None Detected	100%
CT-A.3	71203	2nd Floor West Wing (See Map)	White/Brown Fibrous 12" x 12" Ceiling Tile	None Detected	0%		Cellulose 25%	75%
CT-A.4	71204	2nd Floor West Wing (See Map)	White/Brown Fibrous 12" x 12" Ceiling Tile	None Detected	0%		Cellulose 15%	85%
DW-A.1	71205	2nd Floor West Wing (See Map)	White/Grey Drywall	None Detected	0%		None Detected	100%
[illegible]-A.1	71206	2nd Floor West Wing (See Map)	White Joint Compound	None Detected	0%		None Detected	100%
MJP-A.1	71207	2nd Floor West Wing (See Map)	White Mudded Joint Packing	None Detected	0%		None Detected	100%
DIW-A.1	71208	2nd Floor West Wing (See Map)	White/Grey Fibrous Duct Insulation Wrap	Chrysotile 40%	40%		None Detected	60%
MJP-A.2	71209	2nd Floor West Wing (See Map)	White/Grey Fibrous Mudded Joint Packing	Amosite 23% Crocidolite 12%	35%		None Detected	65%
TI-A.1	71210	2nd Floor West Wing (See Map)	Grey Fibrous Thermal Insulation	Chrysotile 10%	10%		None Detected	90%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for identifying and quantifying asbestos in bulk samples").

Date Analyzed: 10/25/1999
Microscope: Olympus BH-2 #232953
[illegible]st: *Connie Stephens*

Laboratory Results Approved By: _____

File ID: StaufferChem.xls

10/26/1999

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: Griffin Industrial Services, Inc.
Location: Stauffer Chemical Company, Skaneateles, NY
2nd Floor - West Wing
Sample Date: 10/21/1999

Job No: 102234
Page: 2 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	TEM	Non-Asbestos Fibers Type & Percentage	Matrix Material %
TI-A.2	71211	2nd Floor West Wing (See Map)	White Fibrous Thermal Insulation	Amosite 21% Crocidolite 6%	27%		None Detected	73%
EJC-A.1	71212	2nd Floor West Wing (See Map)	Black Expansion Joint Cloth	None Detected	0%		Cellulose 5%	95%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for identifying and quantifying asbestos in bulk samples").

Date Analyzed: 10/25/1999
Microscope: Olympus BH-2 #232953
Analyst: *Connie Stephens*

Laboratory Results Approved By: _____

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: Griffin Industrial Services, Inc.
Location: Stauffer Chemical Company, Skaneateles, NY
1st Floor - West & East Wing
Sample Date: 10/22/1999

Job No: 102233
Page: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	TEM	Non-Asbestos Fibers Type & Percentage	Matrix Material %
WP-A.1	71198	1st Floor West & East Wing (See Map)	White/Grey Wall Plaster	None Detected	0%		None Detected	100%
CP-A.1	71199	1st Floor West & East Wing (See Map)	White/Grey Ceiling Plaster	None Detected	0%		None Detected	100%
CT-A.7	71200	1st Floor West & East Wing (See Map)	White/Grey Fibrous 2' x 2' Ceiling Tile	None Detected	0%		Cellulose 30%	70%
MJP-A.3	71201	1st Floor West & East Wing (See Map)	Grey Mudded Joint Packing	None Detected	0%		None Detected	100%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for identifying and quantifying asbestos in bulk samples").

Date Analyzed: 10/25/1999
Microscope: Olympus BH-2 #232953
st: *Connie Stephens*

Laboratory Results Approved By: _____

File ID: StaufferChem.xls

10/26/1999

PARADIGM Environmental Services, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: Griffin Industrial Services, Inc.
Location: Stauffer Chemical Company, Skaneateles, NY
2nd Floor - Sub West Wing & Upper West Wing
Sample Date: 10/22/1999

Job No: 102235
Page: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	TEM	Non-Asbestos Fibers Type & Percentage	Matrix Material %
BHI-A.1	71213	2nd Floor Sub West Wing (See Map)	White Fibrous Boiler Header Insulation	Chrysotile 5% Amosite 14%	19%		None Detected	81%
BG-A.1	71214	2nd Floor Sub West Wing (See Map)	White Fibrous Boiler Gasket	None Detected	0%		Fiberglass 25%	75%
FRI-A.1	71215	2nd Floor Sub West Wing (See Map)	Grey Fitting Ring Insulation	None Detected	0%		Fiberglass 5%	95%
TAI-A.1	71216	2nd Floor Sub West Wing (See Map)	White/Grey Fibrous Tank Insulation	Chrysotile 35%	35%		None Detected	65%
BB-A.1	71217	2nd Floor Sub West Wing (See Map)	White/Yellow Boiler Brick	None Detected	0%		None Detected	100%
[illegible]-A.1	71218	2nd Floor Sub West Wing (See Map)	White/Grey Fibrous Boiler Insulation	Chrysotile 15%	15%		None Detected	85%
UI-A.1	71219	2nd Floor Upper West Wing (See Map)	White/Yellow Unit Insulation	Chrysotile 5%	5%		None Detected	95%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for identifying and quantifying asbestos in bulk samples").

Date Analyzed: 10/25/1999
Microscope: Olympus BH-2 #232953
[illegible]st: *Connie Stephens*

Laboratory Results Approved By: _____

File ID: StaufferChem.xls

10/26/1999

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: Griffin Industrial Services, Inc.
Location: Stauffer Chemical Company, Skaneateles, NY
2nd Floor - Sub West Wing
Sample Date: 10/21/1999

Job No: 102246
Page: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
CT-A.6	71274	2nd Floor Sub West Wing (See Map)	White/Grey Fibrous 2'x 2' Ceiling Tile	None Detected	0%		Cellulose 10% Fiberglass 10%	80%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for identifying and quantifying asbestos in bulk samples").

Date Analyzed: 10/25/1999
Microscope: Olympus BH-2 #232953
st: *Connie Stephens*

Laboratory Results Approved By: _____

File ID: StaufferChem.xls

10/26/1999

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: Griffin Industrial Services, Inc.
Location: Stauffer Chemical Company, Skaneateles, NY
Basement - West & East Wing
Sample Date: 10/22/1999

Job No: 102247
Page: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	TEM	Non-Asbestos Fibers Type & Percentage	Matrix Material %
FRI-A.2	71275	Basement West & East Wing (See Map)	Grey Fibrous Fitting Ring Insulation	Chrysotile 5%	5%		Cellulose 5%	90%
MJP-A.4	71276	Basement West & East Wing (See Map)	Grey Mudded Joint Packing	None Detected	0%		None Detected	100%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for identifying and quantifying asbestos in bulk samples").

Date Analyzed: 10/25/1999
Microscope: Olympus BH-2 #232953
Analyst: *Connie Stephens*

Laboratory Results Approved By:

File ID: StaufferChem.xls

10/26/1999

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: Griffin Industrial Services, Inc.
Location: Stauffer Chemical Company
Skaneateles, New York
Sample Date: 10/21/1999

Job No: 102332
Page: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	TEM	Non-Asbestos Fibers Type & Percentage	Matrix Material %
CT-A.5	71750	Second Floor, East Wing	White/Yellow Fibrous 2'x4' Ceiling Tile	None Detected	0%		Fiberglass 45%	55%
FE-A.1	71751	Second Floor, East Wing	Black/Brown Floor Expansion	None Detected	0%		None Detected	100%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for identifying and quantifying asbestos in bulk samples").

Date Analyzed: 10/27/1999
Microscope: Olympus BH-2 #232953
Analyst: *Connie Stephens*

Laboratory Results Approved By: _____

File ID: 102332p1.XLS

10/27/1999

APPENDIX B

Chain of Custody

All NF (non-friables) TEM only

GRIFFIN INDUSTRIAL SERVICES, INC.

24 Hour Service
1-800-459-1999
Environmental Contracting

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client: _____

Contact: Todd

Project: Stauffer Chemical

REQUIRED TURNAROUND:

_____ Hour 3 Day

Inspector: SP

Job # G5769

PO # 990410

Analyte: PLM, EPA NOB

Date: 9/30/99

SAMPLE ID	LOG NO.	LOCATION	MATERIAL	FRIABLE (F) OR NON-FRIABLE (NF)	+OR-
001		1st Fl. Front Enterance	Floor tile	NF	
002		1st Fl. Front Enterance	floor tile	NF	
003		1st Fl. Front Enterance	floor mastic	NF	
004		1st Fl. Ent. ~~Floor~~ tread	stair tread	NF	
005		1st Fl. Front Enterance	Baseboard	NF	
006		1st Fl. Front enterance	Baseboard mastic	NF	
007		1st Fl. Warehouse interios window	window caulk	NF	
008		1st Fl. Warehouse Bay No.	Pipe insulation millboard	F	
009		Warehouse 1st Fl. No.	Pipe fitting	F	
010		1st Fl. Break Rm	12" floor tile	NF	
011		1st Fl. Break Rm	Floor mastic	NF	
012		1st Floor Break Rm.	Ceiling tile 2x2	F	
013		1st Fl. Break Rm.	sheetrock	F	
014		1st Floor Break Rm.	skim coat	F	
015		1st Fl. Break Rm. above ceiling	Pipe insulation	F	

Delivered By: _____ Date: 9/30 Time: _____ Received By: _____ Date: 10-11-99 Time: 9AM

Collected By: _____ Date: 9/30 Time: _____ Delivered By: _____ Date: _____ Time: _____

0044 of 17

GRIFFIN INDUSTRIAL SERVICES, INC.
24 Hour Service
1-800-459-4999
Environmental Contracting

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client: _____

Contact: Todd

Project: Stauffer Chemical

REQUIRED TURNAROUND: _____ Hour 3 Day

Inspector: SD

Job # G5769

PO # 990410

Analyte: PLM, EL AP NOB

Date: 9/30/99

SAMPLE ID	LOG NO.	LOCATION	MATERIAL	FRIABLE (F) OR NON-FRIABLE (NF)	HOMO OR
016		1st Fl. Break Rm.	Baseboard	NF	
017		1st Fl. Break Rm.	mastic	NF	
018		1st Fl. Mens. Bath	Floor tile	NF	
019		1st Fl. Mens Bath	~~tile~~ floor tile mastic	NF	
020		1st Fl. Mens Bath	2x2 Ceiling tile	F	
021		1st Fl. Laundry Rm.	pipe insulation	F	
022		Boiler Rm. Door	Door Cap insulation	F	
023		Boiler Rm. Boiler	Door gasket	F	
024		Boiler Rm. Breech.	Breeching insulation	F	
025		Boiler Rm Hot H_2O tank	tank insulation	F	
026		Boiler Rm. Wall	Wall coating	F	
027		Boiler Rm yellow line	pipe fitting	F	
~~028~~					
~~029~~					
~~030~~					

Delivered By: _____ Date: 9/30 Time: _____ Received By: _____ Date: 10-1-99 Time: 9AM

Collected By: _____ Date: 9/30 Time: _____ Delivered By: _____ Date: _____ Time: _____

GRIFFIN INDUSTRIAL SERVICES, INC.
24 Hour Service
1-800-459-4999
Environmental Contracting

* Read these groups first A, C, F, G If all positive stop analysis on the rest of the roofing

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client:
Contact: Todd Platten
Project: Stauffer Chem.

REQUIRED TURNAROUND:
4/8 Hour ____ Day
Inspector:

Job # G5769
PO # 5990410
Analyte: TEM NOB
Date:

SAMPLE ID	LOG NO.	LOCATION	MATERIAL	FRIABLE (F) OR NON-FRIABLE (NF)	% ASB
RM A.1	② *	"A" Roof	Roof Membrane	NF	
RF A.1	③	"A" Roof	Roof flashing	NF	
RF A.2	④	"A" Roof	Roof flashing	NF	
RM B.1	①	B Roof	Membrane	NF	
RM B.2	②		Membrane		
RF B.1	③		Flashing		
RF B.2	④ *⑤		Flashing		28
WC B.1		B Roof Window	Glazing		
UF B.1	⑤	B Roof Unit	Unit Flashing		
RM C.1	① *	C Roof ~~Unit~~	Membrane		
RM C.2	②		Membrane		
RF C.1	③		Flashing		2,3
RF C.2	④		Flashing		
UF C.1	⑤	C Roof Unit	Flashing		
UC C.1		C Roof Unit	Glazing		1,4

Delivered By: _____ Date: 10/27 Time: _____ Received By: _____ Date: _____ Time: _____

Collected By: J. Magee Date: 10/21 Time: _____ Delivered By: _____ Date: _____ Time: _____

GRIFFIN INDUSTRIAL SERVICES, INC.

24 Hour Service
1-800-459-4999
Environmental Contracting

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client: _____

Contact: Todd Platten

Project: Stauffer Chem.

REQUIRED TURNAROUND:

4/8 Hour _____ Day

Inspector: _____

Job # G5769

PO # 5990410

Analyte: TEM NOB

Date: _____

SAMPLE ID	LOG NO	LOCATION	MATERIAL	FRIABLE (F) OR NON FRIABLE (NF)	PLM % OR
RM D.1	①	D Roof	Membrane	NF	
RF D.1	②	↓ ↓	Flashing		14
WC D.1		↓ ↓ Window	Glazing		
AP E.1		E Roof	Alum. Paint		
RM F.1A	① *	F Roof	Membrane		
RF F.1A	②	↓ ↓	Flashing		19
RM F.1B	③		Membrane		
RM F.2B	④		Membrane		
RM F.3B	⑤		Membrane		
RM F.1C	⑥		Membrane		
RM F.2C	⑦		~~Flashing~~ Membrane		
RF F.1C	⑧		Flashing		
RF F.2C	⑨	↓	Flashing		
RM G.1	① *	G Roof	Membrane		
RM G.2	② 1345	↓ ↓	Membrane	←	

Delivered By: _____ Date: 10/27 Time: _____ Received By: _____ Date: _____ Time: _____

Collected By: Magee Date: 10/21 Time: _____ Received By: _____ Date: _____ Time: _____

GRIFFIN INDUSTRIAL SERVICES, INC.
24 Hour Service
1-800-459-4999
Environmental Contracting

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client: _____
Contact: Todd Slatten
Project: Stauffer Chem.

REQUIRED TURNAROUND:
4/8 Hour _____ Day
Inspector: _____

Job # G5769
PO # S990410
Analyte: TEM NOB
Date: _____

SAMPLE ID	LOG NO	LOCATION	MATERIAL	FRIABLE (F) OR NON FRIABLE (NF)	%OR
RF. G.1	③	G Roof	Flashing	NF	6.3
RF G.2	④	↓ ↓	↓		
RF G.3	⑤				
RM DI G.1		↓ ↓	Deck Insulation, Membrane		
RM H.1		H Roof	Membrane		
RM I.1	①	I Roof	Membrane		
RF I.1	②	↓ ↓	Flashing		9.7
WC I.1		↓ ↓	Glazing		5.6
APA J.1	①	J Roof	Alum. Paint		18
RF J.2	②	↓ ↓	Flashing		
RM L.1	①	L Roof	Membrane		4.5
RF L.2	②	↓ ↓	Flashing		
RF L.3	③	↓ ↓	Flashing		
RM M.1	①	M Roof	Membrane		
RF M.2	② & ③	↓ ↓	Flashing	↓	13

Delivered By: _____ Date: 10/27 Time: _____ Received By: _____ Date: _____ Time: _____
Collected By: M. Magee Date: 10/21 Time: _____ Delivered By: _____ Date: _____ Time: _____

GRIFFIN INDUSTRIAL SERVICES, INC.
24 Hour Service
1-800-459-4999
Environmental Contracting

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client: _____

Contact: Todd Platten

Project: Stauffer Chem.

REQUIRED TURNAROUND:

4/8 Hour _____ Day

Inspector: _____

Job # G5769

PO # S990410

Analyte: TEM NOB

Date: _____

SAMPLE ID #	LOG NO.	LOCATION	MATERIAL	FRIABLE (F) OR NON-FRIABLE (NF)	% OR
RF M.3	③	M Roof	Flashing	NF	
WC M.1		↓ ↓ Window	Caulking		4.8
WG M.1		↓ ↓ ↓	Glazing		
RM N.1	①	N Roof	Membrane		
RF N.2	②	↓ ↓	Flashing		20
RF N.3	③	↓ ↓	Flashing		
WC N.1		↓ ↓ Window	Caulk		1.1
WG N.2		↓ ↓ ↓	Glazing		6.2
RS O.1	①	O Roof Section	Layer 1 Roofing		
RS O.2	②	↓ ↓	Layer 2 Roofing		
RM P.1	①	P Roof	Membrane		
RM P.2	②	↓	↓		1.3

Delivered By: _____ Date: 10/21 Time: _____ Received By: _____ Date: _____ Time: _____

Collected By: M. Magee Date: 10/21 Time: _____ Received By: _____ Date: _____ Time: _____

GRIFFIN INDUSTRIAL SERVICES, INC.
24 Hour Service
1-800-459-4999
Environmental Contracting

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client: _____
Contact: Todd Platten
Project: Stauffer Chem.

REQUIRED TURNAROUND:
48 Hour _____ Day
Inspector: _____

Job # G5769
PO # S990410
Analyte: TEM NOB
Date: _____

SAMPLE ID	LOG NO.	LOCATION	MATERIAL	FRIABLE (F) OR NON-FRIABLE (NF)	% OR
FT A.1	(2)	2nd Fl. West	9x9 Green floor tile	NF	
FTM A.1	(1)	↓ ↓ ↓	mastic		2.9
FT A.2	(3)	↓ ↓ ↓	9x9 white floor tile		
FT A.3	(4)	↓ ↓ ↓	9x9 white floor tile		
FT A.4	(2)	2nd Fl. Sub. west wing	12x12 beige floor tile		4.8
FTM A.4	(1)	↓ ↓ ↓	brown mastic		
FT A.5	(2)	↓ ↓ ↓	streaked 12" floor tile		1.9
FTM A.5	(1)	↓ ↓ ↓	yellow mastic		
FT A.6	(2)	↓ ↓ ↓	tan speckled 12" floor tile		1.1
FTM A.6	(1)	↓ ↓ ↓	black mastic		
LI A.1		2nd Fl. Sub. west wing	linoleum		20
CMM A.1		↓ ↓	Cove molding mastic		
ST A.1	(2)	↓ ↓	Beige stair tread		
STM A.1	(1)	↓ ↓	mastic	↓	

Delivered By: _____ Date: 10/21 Time: _____ Received By: _____ Date: _____ Time: _____
Collected By: M. Magee Date: 10/21 Time: _____ Delivered By: _____ Date: _____ Time: _____

GRIFFIN INDUSTRIAL SERVICES, INC.

24 Hour Service
1-800-459-4999
Environmental Contracting

BULK SAMPLE LOG

P.O. Box 519
East Syracuse, NY 13057
Phone (315) 463-6945 Fax (315) 463-2931

Client: _____

Contact: Todd Platten

Project: Stauffer Chem.

REQUIRED TURNAROUND:

48 Hour ____ Day

Inspector: _____

Job # G5769

PO # S990410

Analyte: TEM NOB

Date: _____

SAMPLE ID	LOG NO	LOCATION	MATERIAL	FRIABLE (F) OR NON-FRIABLE (NF)	% ASBESTOS
CTM A.1		2nd Fl. West wing	Ceiling tile mastic	NF	
DIM A.1		↓	brown mastic	↓	
LT A.1		↓	Lab table top #1		25
LT A.2		↓	Lab table top #2	↓	
TTC A.1		Tank Farm top coat	top coat insulation		7.4
TFJP A.1		Tank Farm elbow	joint packing		22
OTI A.1		Tank Farm outer shell	outer tank insulation		12
OTI A.2		Tank Farm outer shell	outer tank insulation	↓	17

Delivered By: S.P. Date: 10/21 Time: _____ Received By: _____ Date: _____ Time: _____

Collected By: M. Magee Date: 10/21 Time: _____ Delivered By: _____ Date: _____ Time: _____

APPENDIX C

Drawings

STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NY SITE

BID DOCUMENTS

MAIN PLANT BUILDING DEMOLITION WORK PLAN

Prepared For:

Stauffer Management Company
4512 Jordan Rd
Skaneateles Falls, NY 13153

Prepared By:

SPEC CONSULTING
Professional Engineering Services

18 Computer Drive West
Albany, NY 12205

SPEC Consulting Project #: 99-004

DUE: XXX 2002 - 10:00 AM

Status: For Bid
Issued – December 2002

GENERAL

A. SITE DESCRIPTION

The Stauffer Management Company (SMC) Site is located at 4512 Jordan Road in the Town of Skaneateles, County of Onondaga, in the State of New York. Manufacturing operations ceased in the early 1980's, and the Main Plant Building has been vacant since that time. A new groundwater treatment plant has been constructed and is currently in operation on the site. Environmental remediation operations are currently being conducted under the December 2001 amended Record of Decision (ROD). The amended ROD includes the main plant building and the soils under it as Area of Environmental Concern 6 (AEC-6).

The scope of work addressed in these bid documents includes the demolition of the Main Plant building. This building is comprised of a process area consisting of several attached rooms with different levels and basement areas, as well as, an attached warehouse area with second floor offices and basements. The building complex is constructed primarily of brick, poured concrete, CMU, and some metal.

Trench drains are located throughout the basement of the building. The drains flow to a sump identified on F-1. Sediments from these drains have removed, and the trenches cleaned.

All known chemicals have been removed from the site and the majority of the manufacturing process equipment has been removed, several large fixed items including tanks, hoppers, pumps, boilers, and compressors remain and will be removed as part of the building demolition. Some process piping is still present in the building and will be removed as part of the contract. It is expected that piping will be cut into sections for off-site disposal at a Part 360 facility as regulated waste.

Two tanks (chests) in the Main Plant Building were most recently used as part of the former water treatment system. Both of these chests contain sediments that were found to have PCBs. Analytical data indicates that Chest A has PCBs at 10.3 PPM, with Chest B sediments at 5.6 PPM. These sediments will be removed and disposed of in a properly permitted facility under separate contract.

Miscellaneous furniture, tools, movable partitions, portable equipment, etc. located within the building will be removed as part of the demolition contract.

Five aboveground vertical steel storage tanks storage tanks are located outside of the building. Theses tanks were originally used for raw material storage, and were used for storage of treated water for a period of time. During an April 2002 site visit, all tanks, with the exception of the white tank, were observed to be open and empty with the exception of some water infiltration. The standing water will be removed to the on-site treatment plant and the tanks will be cleaned, cut up, and removed from the site of as scrap metal.

B. OVERVIEW

These bid documents are intended to address demolition to the foundation of all buildings, structures, equipment, and all other significant features associated with the interior of the main plant building and the tank farm on the Skaneateles Falls Site. Complete removal of foundations is to be quoted as a separate item.

All removed equipment is presumed to be scrap and will not be made available for future service without the express written consent of SMC.

A pre-demolition asbestos inspection as required by Industrial Code Rule 56-1.9 was completed by Griffin Industrial Services, Inc., and is Included as Appendix B. References and sections pertaining to asbestos and lead abatement have been removed from this document. Abatement of the asbestos-containing materials will be completed under a separate contract and will not be addressed herein.

The asbestos abatement portion of the project formerly described in Phases I and II in the AEC-6 Summary of Work will be let as a separate contract.

Any questions that may arise during the bidding period should be addressed to the Engineer:

SPEC Consulting
Aaron Mars/Joe Burke, PE
18 Computer Drive West
Albany, NY 12205
Phone: (518) 438-6809

C. COMMUNITY RELATIONS

The SMC site is adjacent to a residential area. The work zone is located with houses opposite it on the other side of the road. Work must be scheduled and executed in a fashion to minimize the impact on the neighbors. Care must be taken to avoid an adverse community reaction in response to excessive noise, dust releases and interference with traffic patterns. Area news media will possibly follow work at the site, seeking comment from contractor personnel. It is essential that all such inquiries be directed to specified SMC representatives.

BUILDING DEMOLITION BID PACKAGE

The demolition work shall be in accordance with the following documents and specifications provided within this bid-package.

SECTION I. INSTRUCTIONS TO BIDDERS

A. Bids must be submitted on the Form of Proposal enclosed herewith and **must be submitted so as to reach the addressee by 10:00 am on XXX, 2002.** No proposals will be accepted after this time. Bids are to be submitted to:

Mr. Tom Haldas
Stauffer Management Company
1800 Concord Pike
Wilmington, DE 19850
Phone: (800) 456-3669

B. Bidders shall base their Proposal on the plans and specifications listed in the scope section of this document and the attached specifications and drawings.

C. The Owner may, during the bidding period, advise the Bidders by bulletins and addenda of changes in drawings and specifications. All such changes shall be included in the Bidder's Proposal as if they were originally part of this package.

D. The Owner reserves the right to reject any or all bids and to award the contract to other than the low bidder.

E. Based on actual field measurements, the successful Bidder will be required to red-line a record set of all construction drawings. The drawings shall then be reviewed with the Project Manager for subsequent delivery to archives. Winning Contractor will be required to answer any questions until the "As Built" package is completed.

F. The successful Bidder shall have full responsibility for the work of the building demolition contract as herein described. Before any changes in the Contract are approved by the Owner, a detailed estimate will be furnished to the Owner. The Owner's definition of a detailed estimate is one in which labor, equipment and materials are broken down by each of the work classifications involved. In the case of a subcontractor, a detailed breakdown similar to that from the Bidder must also be furnished.

G. Bidder is to base their proposal on initiating the project within two weeks of the notice to proceed and work towards completion. All work must be completed by XXX, 2002. The contractor is to comment on the required timeframe.

H. Unsuccessful bidders must return all specifications and drawings to the Owner within one week of notice of award.

I. The bidder is advised to visit the project site. Failure to visit the site shall not relieve the bidder of any responsibilities he/she assumes by submitting a proposal. A bid and walk-through meeting shall be held on the date listed below. Arrangements for visiting the site should be made in advance by contacting the Project Manager.

WALKTHROUGH DATE: XXX @ 1:00 PM
WALKTHROUGH MEETING PLACE: Site Trailer

J. Lump Sum Proposal. Included within this document is a lump sum proposal form. All bidders shall use this form to submit their bid to SMC.

SECTION II. SCOPE OF WORK

01010 Summary of Project

The SMC Skaneateles Falls demolition project consists of one building complex to be removed, which is made up of several different sub-buildings. There are few drawings of the general arrangement and none showing construction details.

The approximate building footprint is shown on the Drawing F-1 in the contract drawings. These buildings have the following features:

A. Warehouse

1. The warehouse is a two-story building with a basement under the west half of the building. The footprint of the building is approximately +/- 32,000 square feet. The basement ties in to the basement under the manufacturing area. A rail siding splits the first floor in the north to south direction. The rails, etc. have been removed. There are five truck docks at the north end of the structure and one dock on the east side. Access to the manufacturing area is via ramps at the south end of the building.

2. The east wing, of the first floor, contains a small warehouse office area. The west wing contains a small office area and restroom. A one-story guardhouse is attached on the north end of the west wing.

3. The second floor of the structure consists of two wings tied together at the north end of the building. The west wing was used as offices and labs. The east wing was a storeroom.

4. The water and gas mains that service the new water treatment facility run from the utility mains on the west side of the building through the basement and then underground to the new plant. These lines must be protected and remain in continuous service during and after the removal project. See the attached drawing for details of these utilities and the design for protection.

5. The building is of concrete, CMU, brick, wood and steel construction. There are two furnaces, used for building heat, located in this structure. One is on the first floor, in the west wing and one on the second floor, in the north end. There is also a large air-handling unit on the first floor, west wing. There are sump pumps in the basement.

6. Other materials to be removed include, but are not limited to: lab benches, fume hoods, electrical materials (ballasts, etc. may contain PCBs), piping, miscellaneous equipment, foundations, etc.

7. This information is intended for use only as a general description and is not complete. It is the Contractor's responsibility to measure and identify all items and quantities to be removed, demolished, disposed, etc.

B. Manufacturing Area

1. The manufacturing area is made up of several rooms and elevations. There are basements and sub basements throughout. This area has a footprint of approximately +/- 24,000 square feet.

2. Some equipment remains in the building. This consists of five hoppers that penetrate the second floor in the southwest corner of the complex, four tanks and one furnace on the first floor, seven tanks and two pumps in the basement. There are two small fire-tube boilers, four tanks and one air compressor in the boiler room. There are nine tanks located outside the building at the southeast side. The Cardox equipment in this area has been removed.

3. The building is of concrete, CMU, brick, wood and steel construction. Other materials to be removed include, but are not limited to electrical materials (ballasts, etc. may contain PCBs), piping, miscellaneous equipment, foundations, etc.

4. This information is intended for use only as a general description and is not complete. It is the Contractor's responsibility to measure and identify all items and quantities to be removed, demolished, disposed, etc.

01020 Summary of Work

A. Phase I – Lead Abatement

1. Task No. I-A – Develop Health and Safety Plan (HASP)

   a. Contractor will develop a Health and Safety Plan (HASP) covering all fieldwork for the bid tasks in Phase I. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, and hazardous material handling. The HASP will include provisions for compliance with these specifications, OSHA and any applicable Federal, State, or Local regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

2. Task No. I-B – Locate areas of loose lead-based paint on building surfaces and on or in equipment.

   a. The interior of the building had been sampled for lead-based paint. The results of the sampling can be found in the "Pre-Demolition Survey for Asbestos & Lead Containing Materials", by Griffin Industrial Services, Inc found in Appendix B.

3. Task No. I-C - Abate loose lead-based paint in accordance with SECTION 02030 prior to dismantlement activities.

   a. Contractor will provide a lump sum cost for this activity based on observations obtained during the job site visit, and the information provided in the Pre-Demolition Survey of Asbestos & Lead Containing Materials presented in Appendix B. Contractor will remove from site and properly dispose of all lead containing materials collected during completion of work.

4. Task No. I-D – Dispose of all lead containing material

   a. Contractor will remove from site and properly dispose of all lead containing material generated as a result of the abatement. Contractor will also remove from site and properly dispose of, if appropriate, any materials brought on site by contractor or generated by contractor during abatement activities. Contractor will provide documentation for the disposal location of all materials removed from site.

5. Task No. I-E – Other/Miscellaneous

   a. Contractor will use this Task to bid any item which is required for the completion of the lead abatement and all related work but which is not included in the above numbered Tasks. Contractor will provide details for any item bid under this Task.

B. Phase II – Demolish Building to Grade

1. Task No. II -A – Develop Health and Safety Plan (HASP)

   a. Contractor will develop a Health and Safety Plan (HASP) covering all fieldwork for the bid tasks in Phase II. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, hazardous material handling and asbestos. The HASP will include provisions for compliance with USEPA, and OSHA regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

2. Task No. II -B – Protection of gas and water mains

   a. Contractor shall protect gas and water mains during demolition activities. Gas and water service must remain in continuous service during and after the demolition project. See the contract drawings for details of the utilities and design for protection.

3. Task No. II -C – Dismantle designated items

a. Within the designated areas, Contractor will remove all equipment, buildings, sheds, storage tanks, process equipment, structures, pipes, pipe racks, utility poles, electrical equipment, wire, conduit and all other installed or constructed items, unless otherwise instructed by SMC, in writing. All dismantled items will be removed completely.

4. Task No. II -D – Remove and dispose of all dismantled items (debris, equipment, building materials, chemical waste, etc.)

   a. Contractor will remove from site and properly dispose of all debris, equipment, building materials, hazardous and non-hazardous wastes and other items generated as a result of the dismantlement. Contractor will also remove from site and properly dispose of, if appropriate, any materials brought on site by contractor or generated by contractor during dismantlement activities. Contractor will provide documentation for the disposal location of all materials removed from site.

5. Task No. II -E – Other/Miscellaneous

   a. Contractor will use this Task to bid any item which is required for the completion of the dismantlment and all related work but which is not included in the above numbered Tasks. Contractor will provide details for any item bid under this Task.

SECTION III. SAFETY

Contractor will develop a Health and Safety Plan covering all fieldwork for the bid tasks as described in the separate phases of the project. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, hazardous material handling and asbestos. The HASP will include provisions for compliance with USEPA, OSHA and AHERA regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

SECTION IV. EXTRA WORK

Any and all changes to design must be approved by the Project Manager. A **FIELD CHANGE REQUEST** form must be signed by the Project Manager or his/her representative prior to any out of scope work. **If any work is initiated prior to a signed FIELD CHANGE REQUEST the bidder shall do so at his/her cost.**

SECTION V. PERMITS

Each morning work authorization and any other additional permits shall be executed prior to proceeding with the actual work. Regular work hours are from 7:00 AM to 6:00 PM. Daily work permits will be required. Permits will be issued by the task supervisor at 7:00 AM daily. Special Permits such as hot work, will be required.

SECTION VI. GENERAL REQUIREMENTS

A contractor job trailer will be allowed on the plant site. Space will be provided in a suitable location. This area will be accessible from the contractor parking area and the contractor employees must be transported from this area to the project site. Contractor Employees are not to be transported in the back of trucks, seating must be available to the personnel being transported. Coffee breaks and lunches are not to be taken in the demolition areas. Contractor employees must take their breaks and lunches in the contractor area.

SECTION VII. DRAWINGS

The following drawings are included as part of this project:

DWG #	TITLE	DATE
D-1	Building Removal Site Plan	12/5/99
D-2	Building Removal Plan	12/5/99
D-3	Building Removal Details	12/5/99
T-1	Tank Locations	4/26/02
S-2A	Roof of Main Plant Building	11/2/01
F-1	Building Floor Plan	5/17/00

SECTION VIII. SCHEDULE

All work must be completed by XXX, 2002.

BID FORM
BUILDING DEMOLITION
Skaneateles Falls Building Demolition

To: Stauffer Management Company From: _____
(Name of Bidder)
Date: _____

If this proposal is accepted within thirty (30) days, we, the undersigned, hereby agree to furnish and install all labor, materials, and all other items necessary to perform this work at SMC Site located in Skaneateles Falls, NY in accordance with Instructions to Bidder's, which we acknowledge receiving for the Lump Sum amount of:

Break prices down on the attached Schedule of Values. This completed document must be included in the bid.

Phase I

Lump Sum Bid_____Dollars	($	)
Unit Price Off Site Disposal - Non-Hazardous Materials	($	)/ton
Unit Price Off Site Disposal - Hazardous Materials	($	)/ton

Phase II

Lump Sum Bid_____Dollars	($	)
Unit Price Off Site Disposal – Non-Hazardous Materials	($	)/ton
Unit Price Off Site Disposal - Hazardous Materials	($	)/ton

Alternate 1:

Lump Sum Bid_____Dollars	($	)

We further agree to execute with you a contract covering said work on the Lump Sum Form of Contractor enclosed with the Letter of Invitation.

We acknowledge receipt of the following Addenda and have included the costs associated therewith in our Lump Sum price.

As provided for in the Instruction to Bidders, we shall commence work ___calendar days after receipt of purchase order and complete all work prior to _____.

The cost of all required insurance is included in the foregoing proposal.

In the event we are the successful bidder, we agree as a condition of this bid to submit evidence satisfactory to the Owner of our financial ability to perform all the work as covered by this bid.

Bidder is required to issue to SMC Corporation their rate schedule and any and all charges that would be used to calculate change orders, labor rates, equipment, stationary, phone costs, etc.

Signed:_____

Title: _____

Date: _____

STAUFFER MANAGEMENT COMPANY
SKANEATLES FALLS
BUILDING DEMOLITION
SCHEDULE OF VALUES

PAYMENT ITEM	DESCRIPTION	UNITS	COST
	Lead Abatement		
I-1	Mobilization Costs	Lump Sum	
I-2	Permitting Costs and Fees	Lump Sum	
I-3	Health and Safety Plan Development and Implementation	Lump Sum	
I-4	Work Plan Implementation	Lump Sum	
I-5	Temporary Facilities	Lump Sum	
I-6	Abatement of lead.	Lump Sum	
I-7	Disposal of lead containing material.	Lump Sum	
I-8	Demobilize	Lump Sum	
I-9	Final Report for NYSDEC submittal (No. of Copies 20)	Lump Sum	
I-10	Other/Miscellaneous (Provide details below).		
I-11	Cost for additional lead abatement.	Unit Cost	
I-13	Cost for offsite disposal of lead.	Unit Cost	
	SUB TOTAL		
	Credit to SMC on sale of equipment and scrap/recyclable items if authorized.	Lump Sum	
	TOTAL PRICE – This Phase		
	Demolition of Building to Grade		
II-1	Mobilization Costs	Lump Sum	
II-2	Permitting Costs and Fees	Lump Sum	
II-3	Health and Safety Plan Development and Implementation	Lump Sum	
II-4	Work Plan Implementation	Lump Sum	
II-5	Temporary Facilities	Lump Sum	
II-6	Protection of gas and water mains.	Lump Sum	
II-7	Dismantle designated items.	Lump Sum	
II-8	Remove and dispose of all dismantled items (debris, equipment, building materials, chemical waste, etc.)	Lump Sum	
II-9	Demobilize	Lump Sum	
II-10	Final Report for NYSDEC submittal (No. of Copies 20)	Lump Sum	
II-11	Other/Miscellaneous (Provide details below).		
II-12	Cost for offsite disposal of non-hazardous material.	Unit Cost	
II-13	Cost for offsite disposal of hazardous material.	Unit Cost	
	SUB TOTAL		
	Credit to SMC on sale of equipment and scrap/recyclable items if authorized.	Lump Sum	
	TOTAL PRICE – This Phase		

Hourly costs for PPE levels for Equipment an Personnel to be added:

PPE LEVEL	A	B	C
Hourly Adder For Personnel			
Hourly Adder For Equipment			
TOTAL PRICE (per hour)			

Other/Miscellaneous Tasks:

Lead Abatement:

Demolition to Grade:

STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NY

SPECIFICATIONS

MAIN PLANT BUILDING DEMOLITION

Prepared For:

Stauffer Management Company
4512 Jordan Road
Skaneateles Falls, NY 13153

December 2002

Prepared By:

SPEC CONSULTING
Professional Engineering Services

18 Computer Drive West
Albany, NY 12205

SPEC Consulting Project #: 99-004

STAUFFER MANAGEMENT COMPANY
MAIN PLANT BUILDING DEMOLITION

TECHNICAL SPECIFICATIONS

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A. SITE DESCRIPTION

The Stauffer Management Company (SMC) Site is located at 4512 Jordan Road in the Town of Skaneateles, County of Onondaga, in the State of New York. Manufacturing operations ceased in the early 1980's, and the Main Plant Building has been vacant since that time. A new groundwater treatment plant has been constructed and is currently in operation on the site. Environmental remediation operations are currently being conducted under the December 2001 amended Record of Decision (ROD). The amended ROD includes the main plant building and the soils under it as Area of Environmental Concern 6 (AEC-6).

The scope of work addressed in these bid documents includes the demolition of the Main Plant building. This building is comprised of a process area consisting of several attached rooms with different levels and basement areas, as well as, an attached warehouse area with second floor offices and basements. The building complex is constructed primarily of brick, poured concrete, CMU, and some metal.

Trench drains are located throughout the basement of the building. The drains flow to a sump identified on F-1. Sediments from these drains have removed, and the trenches cleaned.

All known chemicals have been removed from the site and the majority of the manufacturing process equipment has been removed, several large fixed items including tanks, hoppers, pumps, boilers, and compressors remain and will be removed as part of the building demolition. Some process piping is still present in the building and will be removed as part of the contract. It is expected that piping will be cut into sections for off-site disposal at a Part 360 facility as regulated waste.

Two tanks (chests) in the Main Plant Building were most recently used as part of the former water treatment system. Both of these chests contain sediments that were found to have PCBs. Analytical data indicates that Chest A has PCBs at 10.3 PPM, with Chest B sediments at 5.6 PPM. These sediments will be removed and disposed of in a properly permitted facility under separate contract.

Miscellaneous furniture, tools, movable partitions, portable equipment, etc. located within the building will be removed as part of the demolition contract.

Five aboveground vertical steel storage tanks storage tanks are located outside of the building. Theses tanks were originally used for raw material storage, and were used for storage of treated water for a period of time. During an April 2002 site visit, all tanks, with the exception of the white tank, were observed to be open and empty with the exception of some water infiltration. The standing water will be removed to the on-site treatment plant and the tanks will be cleaned, cut up, and removed from the site of as scrap metal.

B. OVERVIEW

These bid documents are intended to address demolition to the foundation of all buildings, structures, equipment, and all other significant features associated with the interior of the main plant building and the tank farm on the Skaneateles Falls Site. Complete removal of foundations is to be quoted as a separate item.

All removed equipment is presumed to be scrap and will not be made available for future service without the express written consent of SMC.

A pre-demolition asbestos inspection as required by Industrial Code Rule 56-1.9 was completed by Griffin Industrial Services, Inc., and is Included as Section 4 of this package. References and sections pertaining to asbestos and lead abatement have been removed from this document. Abatement of the asbestos-containing materials will be completed under a separate contract and will not be addressed herein.

C. COMMUNITY RELATIONS

The SMC site is adjacent to a residential area. The work zone has residential dwellings located directly across Jordan Road. Work must be scheduled and executed in a fashion to minimize the impact on the neighbors. Care must be taken to avoid an adverse community reaction in response to excessive noise, dust releases, and/or interference with traffic patterns. Area news media will likely follow work at the site, seeking comment from contractor personnel. It is imperative that all such inquiries be directed to specified SMC representatives.

D. DIVISION 1 – GENERAL REQUIREMENTS

SECTION 01010 - SUMMARY OF PROJECT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. The Project consists of the items outlined in SECTION 01020, SUMMARY OF WORK

1. Project Location: 4512 Jordan Road in the Town of Skaneateles, County of Onondaga, State of New York.
2. Owner: Stauffer Management Company (SMC)

B. The work will be constructed under a single prime contract.

1.3 WORK SEQUENCE

A. The demolition work identified herein will be completed under a single Contract with SMC. The demolition, removal, excavation, backfill, embankment, restoration, cutting and patching is to be performed in accordance with these Contract Plans, specifications and attachments. A site visit is required prior to submittal of the bid.

1.4 CONTRACTOR USE OF SITE

A. Access to Site is limited to the dates and time specified by SMC.

B. Construction Operations is limited to areas specified by SMC.

C. Time Restrictions for Performing Work is Monday through Friday 7:30 am to 4:00 pm or during daylight hours unless otherwise approved by SMC.

D. Contractor shall coordinate work activities with other site contractors.

E. Contractor shall schedule the disconnect of power, water service, and telephone service with SMC no less than one week prior to mobilization to site

PART 2 - EXECUTION

2.1 GENERAL

The SMC Skaneateles Falls demolition project consists of one building complex to be removed, which is made up of several different sub-buildings. There are few drawings of the general arrangement and none showing construction details.

The approximate building footprint is shown on the Drawing F-1 in the contract drawings. These buildings have the following features:

A. Warehouse

1. The warehouse is a two-story building with a basement under the west half of the building. The footprint of the building is approximately +/- 32,000 square feet. The basement ties into the basement under the manufacturing area. A former rail siding splits the first floor in the north to south direction. The rails, etc. have been removed. There are five truck docks at the north end of the structure and one dock on the east side. Access to the manufacturing area is via ramps at the south end of the building.
2. The east wing, of the first floor, contains a small warehouse office area. The west wing contains a small office area and restroom. A one-story guardhouse is attached on the north end of the west wing.
3. The second floor of the structure consists of two wings tied together at the north end of the building. The west wing was used as offices and labs. The east wing was a storeroom.
4. The water and gas mains that service the new water treatment facility run from the utility mains on the west side of the building through the basement and then underground to the new plant. These lines must be protected and remain in continuous service during and after the removal project. See the attached drawing for details of these utilities and the design for protection.
5. The building is of concrete, CMU, brick, wood and steel construction. There are two furnaces, used for building heat, located in this structure. One is on the first floor, in the west wing and one on the second floor, in the north end. There is also a large air-handling unit on the first floor, west wing. There are sump pumps in the basement.
6. Other materials to be removed include, but are not limited to: lab benches, fume hoods, electrical materials (ballasts, etc. may contain PCBs), piping, miscellaneous equipment, foundations, etc.
7. This information is intended for use only as a general description and is not complete. It is the Contractor's responsibility to measure and identify all items and quantities to be removed, demolished, disposed, etc.

B. Manufacturing Area

1. The manufacturing area is made up of several rooms and elevations. There are basements and sub basements throughout. This area has a footprint of approximately +/- 24,000 square feet.
2. Some equipment remains in the building. This consists of five hoppers that penetrate the second floor in the southwest corner of the complex, four tanks and one furnace on the first floor, seven tanks and two pumps in the basement. There are two small fire-tube boilers, four tanks and one air compressor in the boiler room. There are nine tanks located outside the building at the southeast side. The Cardox equipment in this area has been removed.
3. The building is of concrete, CMU, brick, wood and steel construction. Other materials to be removed include, but are not limited to electrical materials (ballasts, etc. may contain PCBs), piping, miscellaneous equipment, foundations, etc.
4. This information is intended for use only as a general description and is not complete. It is the Contractor's responsibility to measure and identify all items and quantities to be removed, demolished, disposed, etc.

SECTION 01020 - SUMMARY OF WORK

1.1 GENERAL TASKS AND PHASES OF PROJECT

A. Phase I – Lead Abatement

1. Task No. I-A – Develop Health and Safety Plan (HASP)

   a. Contractor will develop a Health and Safety Plan (HASP) covering all fieldwork for the bid tasks in Phase I. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, and hazardous material handling. The HASP will include provisions for compliance with these specifications, OSHA and any applicable Federal, State, or Local regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

2. Task No. I-B – Locate areas of loose lead-based paint on building surfaces and on or in equipment.

   a. The interior of the building had been sampled for lead-based paint. The results of the sampling can be found in the "Pre-Demolition Survey for Asbestos & Lead Containing Materials", by Griffin Industrial Services, Inc found in Section 4.

3. Task No. I-C - Abate loose lead-based paint in accordance with SECTION 02030 prior to dismantlement activities.

   a. Contractor will provide a lump sum cost for this activity based on observations obtained during the job site visit, and the information provided in the Pre-Demolition Survey of Asbestos & Lead Containing Materials presented in Section 4. Contractor will remove from site and properly dispose of all lead containing materials collected during completion of work.

4. Task No. I-D – Dispose of all lead containing material

   a. Contractor will remove from site and properly dispose of all lead containing material generated as a result of the abatement. Contractor will also remove from site and properly dispose of, if appropriate, any materials brought on site by contractor or generated by contractor during abatement activities. Contractor will provide documentation for the disposal location of all materials removed from site.

5. Task No. I-E – Other/Miscellaneous

   a. Contractor will use this Task to bid any item which is required for the completion of the lead abatement and all related work but which is not included in the above numbered Tasks. Contractor will provide details for any item bid under this Task.

B. Phase II – Demolish Building to Grade

1. Task No. II -A – Develop Health and Safety Plan (HASP)

   a. Contractor will develop a Health and Safety Plan (HASP) covering all fieldwork for the bid tasks in Phase II. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, hazardous material handling and asbestos. The HASP

will include provisions for compliance with USEPA, and OSHA regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

2. Task No. II -B – Protection of gas and water mains

   a. Contractor shall protect gas and water mains during demolition activities. Gas and water service must remain in continuous service during and after the demolition project. See the contract drawings for details of the utilities and design for protection.

3. Task No. II -C – Dismantle designated items

   a. Within the designated areas, Contractor will remove all equipment, buildings, sheds, storage tanks, process equipment, structures, pipes, pipe racks, utility poles, electrical equipment, wire, conduit and all other installed or constructed items, unless otherwise instructed by SMC, in writing. All dismantled items will be removed completely.

4. Task No. II -D – Remove and dispose of all dismantled items (debris, equipment, building materials, chemical waste, etc.)

   a. Contractor will remove from site and properly dispose of all debris, equipment, building materials, hazardous and non-hazardous wastes and other items generated as a result of the dismantlement. Contractor will also remove from site and properly dispose of, if appropriate, any materials brought on site by contractor or generated by contractor during dismantlement activities. Contractor will provide documentation for the disposal location of all materials removed from site.

5. Task No. II -E – Other/Miscellaneous

   a. Contractor will use this Task to bid any item which is required for the completion of the dismantlment and all related work but which is not included in the above numbered Tasks. Contractor will provide details for any item bid under this Task.

SECTION 01030 - MEASUREMENT AND PAYMENT

1.1 GENERAL

A. Lump Sum and Unit Price Payments

1. The labor, materials, equipment and supervision for demolition and off-site disposal of materials and debris generated during demolition activities, grading, slab removal, and all other work on site is to be bid and executed as a lump sum. The Contractor is responsible for accurately estimating the quantities and magnitude of this work for his proposal.
2. The cost of the labor, materials, equipment and fees used to classify and dispose of materials off site is to be bid and executed as unit price, based on the weight of the materials to be disposed. All trucks leaving the site must be loaded in a fashion to assure that they are as full as possible and still meet legal weight requirements. Owner's representative must inspect each truck before leaving site. Weigh tickets must be supplied to Owner in a timely fashion but in no case later than one week after shipment is made.
3. Quantities indicated in the individual specification sections are for bidding and contract purposes only. Quantities and measurements verified as specified below determine payment.
4. If the actual work requires more or fewer quantities than those quantities indicated, provide the required quantities and the unit sum contracted.

B. Measurement of Quantities

1. Measurement Devices:

   a. Weigh Scales: Inspected, tested and certified by the State of New York Department of Weights and Measures within the applicable statutory period.
   b. Platform Scales: Of sufficient size and capacity to accommodate the conveying vehicle.
   c. Metering devices: Inspected, tested and certified by the State of New York Department of Weights and Measures within the applicable statutory period.

2. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness expressed in gallons (liquids) or cubic yards (non-liquids).
3. Measurement by Area: Measured by square dimension using mean length and width or radius expressed in square feet.

C. Payment

1. Payment Includes: Full compensation for all required labor, products or services, tools, equipment, transportation and incidentals; erection, application, installation, demolition or removal of an item of work; overhead and profit.
2. Final payment for work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Owner and Contractor multiplied by the unit sum for work which is incorporated in or made necessary by the work.

D. Non-Payment for Rejected Quantities

A. If, in the opinion of the Owner, the measurement of quantities does not comply with the procedures specified in this section and the Contract documents, payment may be withheld in accordance with the Contract Documents.

SECTION 01040 - COORDINATION AND MEETINGS

1.1 Coordination

A. Coordinate scheduling, submittals and work of the various tasks to assure efficient and orderly sequence of performance of interdependent construction elements, with provisions for work by others.

B. Verify utility requirements and characteristics are compatible with specified work Coordinate work of various tasks having interdependent responsibilities for performance of work of other tasks.

C. Coordinate completion and clean up of work of separate tasks in preparation of Substantial Completion.

1.2 Field Engineering

A. Locate and protect survey and reference points.

B. Verify setbacks and easements, confirming drawing dimensions and elevations.

1.3 Meetings

A. The following meetings will be held:

1. Site Mobilization Meeting: This will be held prior to Contractor occupancy with Owner, Owner's Representative, Engineer, Contractor and major Subcontractors. Contractor will provide the agenda for this meeting, to Owner, one week prior to the meeting.
2. Kickoff Meeting: This meeting will be held following Contractor occupancy and before substantial start of work. Same format.
3. Progress Meetings: These will be held weekly on Wednesday at 9:00 AM, same format.

B. For all meetings, Contractor will record minutes and distribute copies within two days after meeting to participants, with two copies to Owner, Owner's representative, Engineer, Contractor and those affected by decisions made.

SECTION 01050 - PROJECT COORDINATION

1.1 PROJECT COORDINATOR

A. Project Coordinator

1. Owner's Site Representative: Ron Pucci

1.2 CONSTRUCTION MOBILIZATION

A. Cooperate with the Project Coordinator in allocation of mobilization areas of Site; for field offices and sheds; for access to Site; and parking areas

B. During construction, coordinate use of Site and facilities through the Project Coordinator.

C. Comply with Project Coordinator procedures for inter-project communications; Submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.

D. Comply with the instructions of the Project Coordinator, for use of temporary utilities and construction facilities.

1.3 SCHEDULES

A. Submit preliminary progress schedules.

B. After review, revise and resubmit schedule to comply with revised project schedule.

C. During progress of work, revise and resubmit, as directed by Project Coordinator, and with applications for payment.

1.4 SUBMITTALS

A. Submit Shop Drawings in accordance with Section 01300-Submittals for review and compliance with Contract Documents. Revise and resubmit as required.

B. Submit Applications for Payment forms for review and submittal to Owner to Project Coordinator.

C. Submit requests for interpretation of Contract Documents, and obtain instructions through the Project Coordinator.

D. Deliver Closeout Submittals for review and transmittal through the Project Coordinator.

1.5 COORDINATION DRAWINGS

A. Provide information required by Project Coordinator for preparation of coordination drawings.

1.6 CLOSEOUT PROCEDURES

A. Notify Project Coordinator when work is considered ready for Substantial Completion.

B. Comply with Project Coordinator's instructions to correct items of work listed in executed Certificates of Substantial Completion.

C. Notify Project Coordinator when work is considered finally complete.

D. Comply with Project Coordinator's instructions for completion of items of work determined by Owner's final inspection.

SECTION 01060 - REGULATORY REQUIREMENTS

1.1 GENERAL REQUIREMENTS

A. Contractors shall obtain all necessary permits and licenses necessary to complete described herein. This includes, but is not limited to Building Demolition Permit, hazardous waste transporter licenses and other requirements. Permit fees are to be included in the Contractor's bids.

B. Copies of all permits or other required documentation shall be provided to the Owner prior to commencement of work. The Contractor shall obtain and maintain, for the duration of the project or other statutory period, all necessary permits, licenses, waivers and other required documentation.

C. The Contractor warrants that he is familiar with the codes and requirement applicable to the work and shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the work. If the Contractor observes that the specifications or plans are at variance therewith, he shall give written notice to the owner describing such variance. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations and without written notice to the Owner, he shall bear all costs arising therefrom. The Contractor's particular attention is directed to the necessity of complying with the regulations in the progress of his work. Failure or omission on the part of the Contractor, or any of their representatives, either to discover or to bring to the attention of the Owner any deviation from, omission from or noncompliance with the requirements for asbestos or lead abatement shall not be used by the Contractor as defense for failure on his part to fulfill such requirements.

1.2 Safety Requirements

A. Contractors shall be responsible for the safety education of their employees. Training shall comply with all laws and standards and shall be documented. At a minimum, the following items should be considered for Contractor training were applicable:

1. Supervisory safety training to assure that Contractor management understands that safety is their first responsibility.
2. Orientation for Contractor employees in Contractor's safety policies, safety manuals, first aid/CPR, accident reporting procedures, safety meeting participation, personal protective equipment and enforcement procedures.
3. Hazardous Waste Operations and Emergency Response procedures training as outlined under Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120, General Industry Safety Orders (GISO) 5192 and other applicable codes. Training by qualified instructors is a requirement.
4. Hazard communication training in accordance with OSHA 29 CFR 1910.1200 and GISO 5194.
5. Safety meeting and accident prevention programs.
6. Permit system training to include applications to the following:

    a. Hot Work 29CFR 1910, Subpart Q and 29 CFR 1926, Subpart J.
    b. Confined Space Entry and Rescue procedures 29 CFR 1910.146 and GISO 5156-5159.
    c. Line Breaking.

7. Lockout/tagout training in accordance with 29 CFR 1910.147 and GISO 3314.
8. Personal protective equipment training, 29 CFR 1910, Subpart I and GISO 1514(3380).
9. Vehicle safety training.
10. Heavy equipment operation safety training.

B. Contractors retained by SMC shall have in effect a comprehensive substance abuse testing program for their employees. This program shall be in accordance with all applicable Federal, State and local laws. Any Contractor employee who tests positive for substance abuse shall be removed immediately from the site and shall not be allowed to return to work without Owner approval.

C. The Contractor shall immediately report to Owner the following:

1. Provide written accident/incident reports.
2. Provide verbal reports of any NY-OSHA recordable injury or illness.
3. Provide Employer's First Report of Occupational Injury or Illness within 24 hours of occurrence.
4. Provide written report of any near misses or incidents that could have resulted in property damage or serious injury to employees.
5. Provide written recommendations when a work practice is identified that may result in property damage or injury unless a procedural change is made.
6. Provide and inspect all personal protective equipment necessary for execution of work.

D. Owner shall conduct periodic safety audits assessing the following:

1. Documentation of training to include a record of Contractor new hires.
2. The number of safety meetings conducted, the percentage of Contractor employees attending and a summary of occupational injuries, illnesses and lost workdays versus hours worked.
3. Safety meeting attendance records and meeting minutes.
4. Inspection Reports and a summary of corrective actions implemented.

E. Contractor shall prepare a comprehensive Health and Safety plan as outlined in Task No. 1 of the Scope of Work in Section 01020 of these specifications, to include the following:

1. All safety procedures.
2. All training requirements.
3. Names and telephone number of the Site Safety Coordinator, other key Contractor personnel and emergency contacts.
4. Emergency procedures, including first aid, hospital information (with directions) and order of call.

SECTION 01070 - REFERENCE STANDARDS

1.1 QUALITY ASSURANCE

A. For products or workmanship specified by association, trade or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard by date of issue on date of Contract Documents.

C. Obtain copies of standards when required by the Contract Documents.

D. Maintain copy at project site until Substantial Completion.

SECTION 01080 - SPECIAL PROJECT PROCEDURES

1.1 Disposition of Materials Transported Offsite

A. A Material Disposition Record will be used to track the disposition of materials that are shipped offsite during the project. All materials shipped offsite shall receive one of these forms with the exception of hazardous waste. Non-hazardous waste shipments will be accompanied by a completed Non-Hazardous Waste Manifest, and Hazardous waste shipments will be accompanied by a Hazardous Waste Manifest.

B. The Contractor shall initiate the form, including a description of the material to be shipped, the transporter and the receiver. If the material potentially contains a hazardous substance, the shipper acknowledges that this potential is recognized. Materials potentially containing hazardous substances destined for disposal should be accompanied by a Hazardous Waste Manifest. If materials potentially containing a hazardous waste are intended for recycling or reuse, the shipper must acknowledge that recycling or reuse is the ultimate disposition of the material.

C. Once the Owner has completed and signed the form, the Contractor for ultimate inclusion into the project record documents will retain all copies.

1.2 Acceptance of Job Site

A. Contractor shall complete a tour of the site and confirm any dimensions, measurements and issues concerning the job site. **Quantity takeoffs, characterizations and other actual measurements are the sole responsibility of the Contractor Bidder.**

1.3 Discovery of Unspecified Hazards

A. If the Contractor discovers any potential hazardous substance or waste or other potential hazard to human health, property or the environment, the Contractor shall immediately notify the Owner in writing. After receiving Owner's approval, the Contractor shall remove and appropriately treat or dispose of such items at a unit price identified by the Contractor in his bid.

B. The term "unspecified hazards" refers to latent conditions that could not be reasonably identified prior to project execution.

1.4 Workarounds

A. The Owner maintains the right to direct the Contractor to an alternative work area selected by the Owner due to the discovery of an unspecified hazard during demolition or cleanup without penalty to the Owner. Typically but not exclusively, this right will be invoked when an unspecified hazard is discovered during demolition and the Owner determines that investigation or other action should be performed on the item prior to the Contractor proceeding with work in the area.

1.5 Work Stoppage

A. The Owner reserves the right to direct work stoppage at the site if the Owner determines that unacceptable levels of contaminants are being emitted or other hazards or unsafe conditions are present. Any costs resulting from such work stoppage shall be born by the Contractor.

1.6 Testing

A. Testing by Owner does not relieve the Contractor from providing necessary tests required by regulations, codes and standards for the protection of his workers or to maintain compliance with said regulations, codes and standards. The Contractor shall provide all such testing as part of this work, even if the Owner's testing duplicates it. The results of all Contractors provided testing shall be submitted to the Owner as a condition of final payment. Observation of the performance of the Contractor's work by Owner shall not imply approval or acceptance by the Owner of the work in progress.

1.7 Exposure of Subsurface Structures/Notification of Removal

A. Exposure of Subsurface Structures: If the Contractor uncovers any slab, pavement, sump, pipe or otherwise exposes soil or other material under improvements or surface coverings that exhibits staining, odors, or other evidence of a potential release, the Contractor shall immediately discontinue excavation and removal and shall notify the Owner. At the discretion of the Owner, The Contractor may be required to discontinue operations pending investigation, sampling or other assessment by the Owner, under the work around clause described herein.

B. Notification of Removal: Whenever specified herein that the Owner shall be present during removal of a structure (i.e., sumps, pavement, slabs, foundations, etc.), the Contractor shall provide 48 hours notice of the removal to the Owner via the Project Coordinator.

SECTION 01090 - HAZARDOUS MATERIALS PROCEDURES

1.1 WASTE MATERIALS

A. Definitions: The term "Waste Materials" refers to any and all waste produced as a result of performing the Scope of Work, whether solid, liquid, semi-solid, particulate, and whether hazardous or non-hazardous.

B. Reporting Requirements: In the event of a release, incident or occurrence, including accidents involving the transportation vehicle while said vehicle is transporting Waste Materials under this Agreement, whether or not a release occurs, including, but not limited to, accidents, fines, violations of governmental orders, or impoundment of the transportation vehicle, Contractor shall take immediate action to protect human health, property, and the environment as required under the circumstances, by order of any government entity or by the Owner. The Contractor shall notify the Owner and others, as required by law, of a release, incident or occurrence involving the transportation vehicle or the Waste Materials by the most expeditious means available.

C. Waste and Debris Disposal: All non-hazardous Waste Materials, including demolition debris, shall be disposed in approved landfills or recycling facilities. Hazardous Waste Materials shall be treated and/or disposed in approved, licensed facilities. The Contractor shall notify and obtain the approval of the Owner prior to the use of a particular hazardous waste treatment, storage, and disposal facility.

D. PCB Electrical Equipment: Contractor is responsible for ensuring that all equipment that contains dielectric fluids that have not been certified PCB free, is sampled for PCB's and disposed properly.

E. Marking and Placarding: All Waste Materials transported by the Contractor shall be properly classified, described, packaged, marked, labeled, and shall be in proper condition for transportation according to all applicable laws and regulations. Contractor's employees, subcontractors, agents, or others acting for or on Owner's behalf, shall comply with all applicable regulations for transporting Waste Materials.

F. Shipping Documents: In the event any hazardous Waste materials must be shipped, the owner shall be responsible for preparing and delivering to the Contractor any documents, shipping papers, or manifests, executed by the Owner as required for lawful transfer of the Waste Material to the Contractor, by valid and applicable statutes, ordinances, orders, rules or regulations of the Federal, State, or local governments, including, but not limited to, the Hazardous Materials Transportation Act, the Toxic Substances Control Act, and the Resource Conservation and Recovery Act of 1976, and all applicable laws thereafter and amendments thereto (including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

G. Performance and Transfer of Title

1. Contractor shall satisfactorily perform and complete the work, in a diligent and workmanlike manner in accordance with the Contract Documents, and shall obtain and maintain all permits, licenses, or other forms of documentation required by law. Contractor agrees to take title and risk of loss to all Waste delivered to Contractor hereunder directly from the Owner of the Waste and to relieve Owner from any responsibility for the Waste (save only Owner's CERCLA liability for the Waste, if any), following Contractor's loading of the Waste for transportation.
2. Contractor agrees to look solely to the Owner or other generator of the Waste in the event the Waste is determined to be non-conforming or otherwise unacceptable to the ultimate disposal site and shall not make any claims against others by reason thereof. Contractor acknowledges that title and risk of loss to the Waste passes hereunder directly from the Owner to the Contractor and that Others at no time takes title or risk of loss to or exerts control of the Waste.

H. Non-delivery of Waste Materials: Should the Waste Materials not be accepted or delivery cannot be made to the designated storage or disposal facility, Contractor shall contact Owner for further instructions. Contractor at all times until acceptance by the designated storage or disposal facility, retains possession and control of the Waste Materials. Contractor shall obtain approval from the owner for an alternative site for delivery of the Waste Materials or return of the Waste Materials to the generator site.

1.2 CONTRACTOR WARRANTIES

A. Contractor warrants that:

1. Contractor's vehicles shall be clean and not contain any contaminants that may mix with or change the composition or characteristics of the Waste Materials.
2. Contractor will not commingle or mix Waste Materials with other materials or otherwise cause the alteration of the characteristics or components of the Waste Materials.
3. Contractor will not load in its vehicles any material that would not be compatible with, or may be contaminated by, the transportation of Waste Materials.
4. Contractor's transportation vehicle, prior to hauling other materials, goods or products after the termination of transportation services for the Owner, shall be cleaned, purged or decontaminated as necessary, such that other materials, goods or products transported by Contractor are not contaminated with Waste Materials.
5. Contractor has obtained and will maintain during the term of this Agreement, all permits, licenses, certificates of approval, required by applicable Federal, State or local law, rule or regulation to allow Contractor to transport the Waste Materials.
6. If any manifest or other document required by Federal, State or local law or regulation executed by the Owner is to accompany or be delivered with the Waste Materials, such manifest or documents shall be delivered in the form and number and in the same condition, as received by the Contractor from the original generator of the Waste Materials.
7. Contractor has acquired the requisite expertise to safely transport Waste Material that Contractor agrees to transport for Owner.
8. Contractor understands the hazards and risks involved in transporting Waste Materials to human health, property and the environment.

SECTION 01120 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1.1 Temporary Electricity

A. While available the building complex power supply may be used by Contractor. When demolition activities preclude further use of this utility, Contractor shall provide temporary power for his activities.

B. In all cases, Contractor is responsible for the electrical work to provide this power. Installations must conform to applicable codes and regulations.

C. Anticipated work includes:

1. Provide power outlets for construction operations with branch wiring and distribution boxes located as required. Provide flexible power cords as required.
2. Provide temporary lighting for construction purposes. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails and lamps as required.

1.2 Telephone Service

A. Provide, maintain and pay for telephone service to the field office at time of project mobilization. Cellular Telephone service may be used.

B. Provide, maintain and pay for facsimile machine in field office at time of project mobilization. Cellular telephone facsimile may be used.

1.3 Temporary Water Service

A. Provide and maintain suitable quality water service. Connect to existing water source for construction operations.

B. Contractor to pay cost of water used. Exercise measures to conserve water.

C. Extend branch-piping outlets located so water is available by hoses with threaded connections.

1.4 Temporary Sanitary Facilities

A. Provide and maintain required facilities and enclosures as required.

1.5 Barriers

A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide barricades required by governing authorities for public rights of way if required.

C. Provide protection for plant life designated to remain. Replace damaged plant life.

1.6 Project Identification

A. No signs are allowed without Owner permission except those required by law.

1.7 Security Program

A. Protect work and existing premises from theft, vandalism and unauthorized entry.

B. Initiate security program at project mobilization.

C. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

1.8 Entry Control

A. Restrict entrance of persons and vehicles into project site.

B. Allow entrance only to authorized persons.

1.9 Access Roads and Parking

A. Maintain access to site through the Jordan Road entrance.

B. Maintain access to the existing water treatment plant.

C. Relocate work as required to maintain access.

D. Provide unimpeded access for emergency vehicles. Maintain 20-foot width driveways with turning space between and around combustible materials.

E. Arrange temporary parking areas to accommodate use of construction personnel in the parking areas available.

1.10 Easements

A. Maintain access to easements indicated on drawings.

B. Relocate work as required to maintain access.

C. Provide and maintain access to special areas as required by cognizant authorities.

1.11 Field Offices and Sheds

A. Field offices and sheds shall be adequate for the required purpose. Existing facilities may not be used for field offices.

B. Such structures shall be portable or mobile buildings with steps and landings at entrance doors. They shall be secure and lockable. Appropriate type fire extinguishers and first aid kits shall be provided at each office and storage area.

C. Field offices and sheds shall be cleaned and maintained weekly.

D. Approach walks shall be kept free of mud, water and debris.

E. At completion of the project, all buildings, foundations, utility services and debris shall be removed and the areas restored.

SECTION 01130 - FINAL REPORT

1.1 DEMOLITION REPORT

A. The Contractor shall provide SMC with a final Demolition Report at the completion of the project. This report shall be specific in areas of materials leaving the site and all work performed. The report shall include all "Bill of Loading" or "Non-Hazardous Waste Manifests" and facility weight tickets for everything that is shipped off site. This shall provide the description of material, what it is how much there is and where it is going. Specific photographs of work in progress shall also be included in the report for record purposes.

SECTION 01140 - CONTRACT CLOSE OUT

1.1 Closeout procedures

A. Submit written certification that Contract Documents have been reviewed, work has been inspected and that work is complete in accordance with Contract Documents and ready for Owner's review.

B. Provide submittals to Owner through Project Coordinator that are required by governing or other authorities.

C. Submit Final Application for Payment identifying total adjusted Contract Sum, Previous payments and sum remaining due.

1.2 Final Cleaning

A. Execute final cleaning prior to final project assessment.

B. Remove wastes and surplus materials, rubbish and construction facilities from the site.

1.3 Project Record Documents

A. Maintain on site one set of the following record documents; record actual revisions to the work:

1. Drawings
2. Specifications
3. Addenda
4. Change Orders and other modifications to the Contract
5. Reviewed shop drawings

B. Ensure entries are complete and accurate, enabling future reference by Owner.

C. Store record documents separate from documents used for construction.

D. Record information concurrent with progress.

E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:

1. Measured depths of removals, subsurface items remaining, underground obstructions and other pertinent subsurface features remaining in relation to finish datum.
2. Measured horizontal and vertical locations of underground utilities and appurtenances referenced to permanent surface improvements.
3. Field changes of dimensions and detail.
4. Details not on original Contract drawings.

F. Submit documents to Owner through Project Coordinator with claim for final Application for Payment.

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including;

1. Contractor's progress schedule.
2. Submittal schedule.
3. Daily construction reports.
4. Shop Drawings.
5. Product Data.

B. Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

1. Permits.
2. Applications for payment.
3. Performance and payment bonds.
4. Insurance certificates.
5. List of Subcontractors.

C. The Schedule of Values submittal is included in Section "Applications for Payment."

D. Inspection and test reports are included in Section "Quality Control Services."

1.3 SUBMITTAL PROCEDURES

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

    a. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

3. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for re-submittals.

    a. No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the Work to permit processing.

B. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal form with AIA Form G810 or equivalent. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix. Submittals received from sources other than the Contractor will be returned without action.

1. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

D. Identify Project, Contractor, Subcontractor or supplier, pertinent drawing and detail number and Specification section number as appropriate.

E. Apply Contractor's signature certifying that review, verification of field dimensions, adjacent construction work and coordination of information is in accordance with the requirements of the work and Contract documents.

F. Schedule submittals to expedite the work and deliver to Project Coordinator. Coordinate submission of related items.

G. Identify variations from Contract documents, which may be detrimental to successful performance of the completed work.

H. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with provisions.

1.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Bar-Chart Schedule: Prepare a fully developed, horizontal bar- chart type (GANTT Chart) Contractor's construction schedule. Submit within 15 days of Notice to proceed. Coordinate content with the Schedule of Values.

B. Work Stages: Indicate important stages of construction for each major portion of the Work, including testing and installation.

C. Provide narrative report to define problem areas, anticipated delays and impact on schedule. Report corrective action taken or proposed and it's effect including the effect of changes on schedules of separate contractors.

D. Distribution: Following response to the initial submittal, print and distribute copies to the Engineer, Owner, subcontractors, and other parties required to comply with scheduled dates. Post copies in the Project meeting room and temporary field office.

1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

E. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

1.5 DAILY CONSTRUCTION REPORTS

A. Prepare a daily construction report, recording the following information concerning events at the site; and submit duplicate copies to the Engineer, weekly.

1. List of subcontractors at the site.
2. Approximate count of personnel at the site.
3. High and low temperatures, general weather conditions.
4. Accidents and unusual events.
5. Meetings and significant decisions.
6. Stoppages, delays, shortages, losses.
7. Emergency procedures.
8. Testing.

1.6 CONSTRUCTION SUBMITTALS

A. Correspondence

1. Correspondence.
2. Transmittals.
3. Minutes of meetings.

B. Accounting Records

1. Revised schedule of values.
2. Contractor's affidavit of payment of debits and claims.
3. Contractor's affidavit of release of liens.
4. Applications for payment.
5. Construction change directives.

1.7 CONSTRUCTION RECORDS

A. Daily construction reports.

B. Progress reports.

C. Progress schedules.

D. Sign in/out logs.

1.8 MODIFICATIONS TO CONTRACT

A. Contractor's supplemental instructions.

B. Construction change directives.

C. Change orders.

D. Addenda.

1.9 PROJECT RECORD DOCUMENTS

A. Asbestos and lead clearance sampling records.

B. Hazardous materials characterization report.

C. Certificate of substantial completion.

D. Hazardous and/or Non-Hazardous waste manifests.

E. Material disposition records.

F. Confirmation sampling records.

G. Contractor testing Reports:

1. Hazardous materials characterization test results.
2. Compaction test results.
3. Waste profile records.

1.10 PRODUCT DATA

A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions and catalog cuts. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."

1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

a. Manufacturer's printed recommendations.
b. Compliance with recognized trade association standards.
c. Compliance with recognized testing agency standards.
d. Application of testing agency labels and seals.
e. Notation of dimensions verified by field measurement.
f. Notation of coordination requirements.

2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
3. Preliminary Submittal: Submit a preliminary single-copy of Product Data where selection of options is required.
4. Submittals: Submit 5 copies of each required submittal; submit 2 additional copies where required for maintenance manuals.

a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

5. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.

a. Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.
b. Do not permit use of unmarked copies of Product Data in connection with construction.

1.11 MATERIAL SAFETY DATA SHEETS (MSDS):

A. Each Contractor shall comply with "Right to Know" requirements of Chapter 551 of Laws of New York, 1980, concerning notification of the use of toxic substances.

1. Any product or substance used by each Contractor or its Subcontractors which is listed in sub-part Z of OSHA Part 1910 Title 29 of Code of Federal Regulations entitled "Toxic and Hazardous Substances" shall be identified to the Engineer by the submission of a standard Material Safety Data Sheet.

2. The MSDS or a manufacturer's standard form (OSHA-20) shall be submitted to the Engineer before the material is brought on site.

1.12 ENGINEER'S ACTION

A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Engineer will review each submittal, mark to indicate action taken, and return promptly.

1. Compliance with specified characteristics is the Contractor's responsibility.

B. Action Stamp: The Engineer will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:

1. Final Unrestricted Release: Where submittals are marked "No Exceptions Taken," that part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.
2. Final-But-Restricted Release: When submittals are marked "Make Corrections Noted," that part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
3. Returned for Resubmittal: When submittal is marked "Revise and Resubmit", "Rejected", or "Submit Specified Item", do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.

a. Do not permit submittals marked "Revise and Resubmit", "Rejected", or "Submit Specified Item" to be used at the Project site, or elsewhere where Work is in progress.

4. Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned, marked "Action Not Required".

SECTION 01400 - QUALITY CONTROL SERVICES

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 QUALITY ASSURANCE

A. Monitor quality control over suppliers, Products, Services, site conditions and workmanship, to produce work of specified quality.

B. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.

1.3 SUMMARY

A. This Section specifies administrative and procedural requirements for quality control services.

B. Quality control services include inspections and tests and related actions including reports performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Engineer.

C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.

D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.

1. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
2. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.

E. Requirements for the Contractor to provide quality control services required by the Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.4 RESPONSIBILITIES

A. Contractor Responsibilities: The Contractor shall provide inspections, tests and similar quality control services, specified in individual Specification Sections and required by governing authorities, except where they are specifically indicated to be the Owner's responsibility, or are provided by another identified entity; these services include those specified to be performed by an independent agency and not by the Contractor. Costs for these services shall be included in the Contract Sum.

1. The Contractor shall employ and pay an independent agency, to perform specified quality control services.
2. The Owner will engage and pay for the services of an independent agency to perform inspections and tests specified as the Owner's responsibility.
3. Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract

Document requirements, regardless of whether the original test was the Contractor's responsibility.

a. Cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original construction.

B. Coordination: The Contractor engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

1. The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

1.5 SUBMITTALS

A. The Contractor shall submit a certified written report of each inspection, test or similar service to the Engineer, in duplicate.

1. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:

a. Date of issue.
b. Project title and number.
c. Dates and locations of samples and tests or inspections.
d. Names of individuals making the inspection or test.
e. Designation of the Work and test method.
f. Identification of product and Specification Section.
g. Complete inspection or test data.
h. Test results and an interpretations of test results.
i. Ambient conditions at the time of sample-taking and testing.
j. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements.
k. Name and signature of inspector.
l. Recommendations on retesting.

1.6 REPAIR AND PROTECTION

A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes, where applicable. Comply with Contract Document requirements for "Cutting and Patching".

SECTION 01720 - RECORD DOCUMENTS

1.1 DESCRIPTION

A. Maintenance of Documents:

1. The Contractor shall maintain, at the job site, one copy of:

   a. Contract Drawing
   b. Specifications
   c. Addenda
   d. Approved Shop Drawing
   e. Change Orders
   f. Field Test Records
   g. Correspondence File

2. Store documents in approved locations, apart from documents used for construction.
3. Provide files and racks for storage of documents.
4. Maintain documents in clean, dry, legible condition.
5. Do not use record documents for construction purposes.
6. Make documents available at all times for inspection by Engineer and Designated Representative.
7. At close of project, turn over field office file to Designated Representative.

B. Recording

1. Label each document in A. above "PROJECT RECORD" in 2-inch high printed letter.
2. Keep record documents current.
3. Do not permanently conceal any work until required information has been recorded.
4. Contract Drawings: Legibly mark to record actual construction, including:

   a. Depths of various elements of foundation in relation to the finish floor.
   b. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
   c. Location of internal utilities and appurtenance concealed in construction referenced to visible and accessible features of structure.
   d. Field changes of dimension and detail.
   e. Changes made by Change Order.
   f. Clarification drawings not on original contract drawings.

5. Specifications and Addenda: Legibly mark up each Section to record:

   a. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
   b. Changes made by Change Order.
   c. Other matters not originally specified.

6. Shop Drawings: Maintain as record documents. Legible mark-up to show changes made after review.

C. Submittals:

1. At completion of project prior to the final project close-out meeting, deliver marked-up record documents to Engineer.
2. Accompany submittal with transmittal letter, containing:

a. Date.
b. Project title and number.
c. Contractor's name and address.
d. Title and number of each record document.
e. Certification that each document as submitted is complete and accurate.
f. Signature of Contractor, or his authorized representative.

SECTION 02000 - DEMOLITION

PART 1 - GENERAL

1.1 DESCRIPTION:

A. The Contractor shall provide all labor, materials, equipment, and services necessary for, and incidental to, the demolition of buildings and structures as shown on the Drawings and as specified herein.

B. In general, this work shall include, but is not necessarily limited to:

1. Building Demolition.
2. Removal of all interior equipment, associated piping, electrical equipment and miscellaneous items.
3. Protection of existing utilities, structures and other items to remain.
4. Plugging and/or capping existing piping at demolition limits, or at locations shown on the Drawings.
5. Disposal of all objects off-site, except items designated to remain.
6. Sorting and stockpiling of items designated to remain.
7. Dust control and safety measures.
8. Cutting of foundations to 12" below grade or removal of the foundations completely.
9. Sampling and testing in accordance with Sampling Work Plan for items below grade.
10. Cleaning, restoration, and removal of all debris.

1.2 EXISTING CONDITIONS

A. The drawings and specifications do not purport to show and describe all aspects of work involved, but rather they outline the work for general informative purposes only.

B. The Contractor shall visit the site of the demolition and acquaint himself with all existing conditions, types of structures, equipment and miscellaneous items to be demolished and equipment to be removed. The Owner reserves the right to keep specified types of materials and equipment. These designated equipment and materials are to be stockpiled on site as the designated materials.

1.3 PROJECT REQUIREMENTS

A. Notify the Engineer of any unexpected conditions.

B. Notify the appropriate utility company of all demolition work, which involves the removal of gas and/or electric utilities.

C. Comply with all OSHA requirements.

D. Obtain all permits necessary for all demolition work.

E. Do not interrupt existing utilities serving facilities occupied and used during occupied hours, except when permitted in writing by the Engineer and then only after acceptable temporary utility services have been provided.

F. Provide a minimum of 48-hour notice to the Engineer and receive written notice to proceed before interrupting any utility.

G. Do not bring explosives onto site or use in work without prior written permission from authorities having jurisdiction. Contractor is solely responsible for handling, storage, and use of explosive materials when their use is permitted.

PART 2 - EXECUTION

2.1 PREPARATION:

A. Verify the location and status of all utilities within the project limits.

B. Disconnect all utilities at the project limits or at locations shown on Contract Drawings.

C. Remove all items designated to remain in possession of the Owner. Sort and stockpile in a location approved by the Engineer. Any damage incurred by such items shall be corrected at no further expense to the Owner.

D. Remove all items designated to be "removed" or "demolished". Dispose off site as required.

E. All structures and items attached to adjacent buildings or structures shall be removed. All piping and utilities that have not been disconnected shall be brought to the Engineer's attention. Process piping shall be removed by following the line breaking procedure specification. After breaking the line, any liquids in the pipe will be into a drum supplied by SMC for proper disposal. SMC is responsible for characterization and disposal of drummed waste. The Contractor shall cut the piping into 5-foot sections and dispose of the piping as solid waste.

F. All piping encountered will be removed if it is within the building perimeter. Any other piping will be sealed with grout or water plug provided that the foundations are removed. It is anticipated that no underground process lines will be encountered during progression of work.

G. Prior to demolition, the building shall be checked by the Engineer and Owner to ensure the building is in a "gutted" condition.

2.2 DEMOLITION:

A. The Contractor shall water down structures being demolished in order to prevent the spreading of dust. A continuous watering down of the section being demolished shall be done, if required, in order to prevent dust from penetrating adjacent buildings. Fog nozzles, or similar type equipment shall be used to perform the wetting.

B. No structure or part of a structure shall be left unguarded in such a condition that it may fall, collapse or weaken due to wind pressure, water pressure or vibration.

C. The walls and slabs shall be completely removed down to top of the concrete foundation wall at grade in the first phase of demolition, or as shown on the Drawings.

D. All demolition debris and materials will be segregated as it is generated. At a minimum, roofing and other miscellaneous materials will be segregated from concrete and CMU. The environmental integrity of the materials will be assessed in the field, and a determination of the most prudent handling method will be made by the Engineer.

Materials slated for C&D will be sampled for the parameters and at the frequency required by the destination facility. This will also be true for any materials transported to a Part 360 landfill for disposal. Any proposed facility will be informed of the site contaminants of

concern. It is up to the facility to determine the analytical requirements and sampling frequency necessary to meet their facility permit requirements and/or restrictions. SMC will ensure that all materials shipped off-site have met all requirements of the destination facility. SMC will also ensure that representative samples include proper proportions of concrete, metal & steel, wood, and "other" miscellaneous materials. SMC will have an approved waste profile sheet for each proposed facility prior to the start of work. Should any materials be found unacceptable for disposal at a Part 360 Facility, it will be shipped to a properly permitted Hazardous Waste Facility.

E. A protected zone of demolition shall be maintained around the work area with barricades, danger signs and watchmen. Close cooperation and communication shall be maintained to ensure that all safety standards are implemented and maintained.

F. Foundations shall be removed to 12" below grade in the second phase of demolition. The raceway will be plugged at the inlets and outlet as shown on the contract drawings. This will prevent any potential contamination from migrating to the outfall. The slabs shall be left in place until provisions to handle contaminated soil have been made. Any water collected will be transferred to the the WWTP for processing and discharge through 02A. The basement sump will remain operational for the duration of work and will need to be protected. When the area is dry, soils underlying the slabs will be investigated for signs of contamination. The soil shall be screened with a photo ionization detector (PID). If VOC's are detected at levels above background during the PID screening, or if the soils exhibit visual evidence of contamination, samples will be collected and sent to a certified environmental laboratory for analysis as described in the Amended ROD. If there is no indication of contamination under the slabs, the concrete may be considered C&D debris. If contamination is found under the slabs, the material will be sampled and disposed off in accordance with the site-wide SAP.

2.3 SHEETING AND BRACING

A. Installation

1. The Contractor shall furnish, place and maintain such temporary sheeting, bracing and shoring as may be required when non-intact structural members are encountered in such manner as to prevent any movement which could, in any way, injure the pipe, structures, or other work; diminish the width necessary for construction; otherwise damage or delay the work of the Contract; endanger existing structures, pipes or pavements; or cause the excavation limits to exceed the right-of-way limits.
2. In no case will bracing be permitted against pipes or structures in trenches or other excavations.
3. Sheeting shall be driven as the excavation progresses, and in such manner as to maintain pressure against the original ground at all times. The sheeting shall be driven vertically with the edges tight together, and all bracing shall be of such design and strength as to maintain the sheeting in its proper position. Seepage which carries fines through the sheeting shall be plugged to retain the fines.
4. Where breast boards are used between soldier piles, the boards shall be back packed with soil to maintain support.
5. The Contractor shall be solely responsible for the adequacy of all sheeting and bracing and shall be responsible for any damage to the site, adjacent properties, Skaneateles Creek, Jordan Road, or Vinegar Hill Road resulting from the failure of any such sheeting or bracing.

B. Removal

1. In general, all sheeting and bracing, whether of steel, wood or other material, used to support the structural members, shall be withdrawn as work is finished, unless otherwise directed, before more than six inches of earth is placed above the top of the pipe or

structural foundation and before any bracing is removed. The voids left by the sheeting shall be carefully refilled with selected material and rammed tight with tools especially adapted for the purpose or otherwise as may be approved.

2. The Contractor shall not remove sheeting and bracing until the work has attained the necessary strength to permit placing of backfill.
3. All sheeting and bracing shall be properly decontaminated prior to its removal from the site.

C. Left in place

1. If, to serve any purpose of his own, the Contractor files a written request for permission to leave sheeting or bracing in the trench or excavation, the Engineer may grant such permission, in writing, on condition that the cost of such sheeting and bracing be assumed and paid by the Contractor.
2. The Contractor shall leave in place all sheeting, shoring and bracing which are specified to be left in place or which the Engineer may order, in writing, to be left in place. All shoring, sheeting and bracing shown or ordered to be left in place will be paid for under the appropriate item of the Contract. No payment allowance will be made for wasted ends or for portions above the proposed cutoff level which are driven down instead of cut-off.
3. In case sheeting is left in place, it shall be cut offer driven down as directed so that no portion of the same shall remain within 12 inches of the street subgrade or finished ground surface.

2.4 DISPOSAL:

A. The Contractor shall remove from the site all material, (except those items expressly indicated to remain), in conjunction with the demolition. No material shall be allowed to be stockpiled on site that may interfere with construction.

B. Items to remain on site will be outlined and enumerated in the field by the Engineer.

C. The items to remain on site shall be stockpiled in areas specified by the Engineer.

2.5 REPAIRS:

A. Upon completion of the demolition, repair all items that have been damaged during construction.

B. Damages that require immediate repair shall be repaired as they occur.

2.6 CLEAN UP:

A. The Contractor shall keep the demolition area neat and clean at all times. No material or debris shall be allowed to be scattered outside the sealed off and barricaded demolition area. Outside the sealed off area cleanup shall be done daily. Inside the sealed off and barricaded area clean up shall be done at the Contractor's discretion.

B. Prior to leaving the site, demolition, repair, and clean up shall be done to the satisfaction of the Engineer and Owner.

SECTION 02010 - HAZARDOUS MATERIALS ABATEMENT

PART1 - GENERAL

1.1 SUMMARY OF WORK

A. Scope of Work

1. The work covered by this Specification includes the abatement of hazardous materials and hazardous wastes that may be identified during the Contractor's characterization of the SMC facility.
2. The Contractor shall furnish all labor, materials, services, insurance, equipment, and decontamination facilities to carry out the complete characterization, removal and disposal of all hazardous materials and hazardous wastes identified at the SMC facility. The Contractor shall make all his own quantity take off to determine quantities.
3. The Work specified in this Section includes the handling of materials containing hazardous materials and hazardous wastes which may be encountered during removal and demolition operations and the incidental procedures and equipment required to protect workers and occupants of the building or area, or both, from contact with hazardous materials and hazardous wastes. The Work includes the demolition and removal of building materials and other materials located in the SMC facility.
4. The Work specified also includes the disposal of the removed hazardous materials.
5. Hazardous materials abatement and removal Work shall be performed in accordance with all applicable regulations, codes, ordinances and standards of governing authorities having jurisdiction, including 29 CFR 1910.120, 40 CFR 260-265, and the requirements specified herein.

B. Identification of hazardous materials and hazardous wastes: Those materials known to contain hazardous materials or hazardous wastes and scheduled for hazardous materials abatement are included in this Section.

C. The Owner will oversee the Contractor's Work and may provide confirmation sampling and direct oversight.

D. In no circumstance shall the Contractor disturb or damage areas to be protected as shown on the Drawings.

E. The Contractor shall abate all onsite hazardous materials (confirmed or represented by analytical data) as identified during the Contractors characterization of the SMC facility.

F. If in the course of removing hazardous materials and hazardous wastes from the site, the Contractor discovers any other hazardous materials and hazardous wastes, other than those identified during the Contractors characterization of the SMC facility, the Contractor shall notify the Owner in writing. SMC shall notify the NYSDEC within 24 hours of this condition. After receiving Owner's approval, the Contractor will remove and dispose of such item(s) at the contract unit price identified by the Contractor in his bid

G. With respect to available utilities, the Contractor shall coordinate access and use of all utilities as needed for the duration of the project with the Owner. The Contractor will be required to provide utilities. The Contractor shall obtain all necessary permits from the Town of Skaneateles and other authorities having jurisdiction.

1.2 QUALITY ASSURANCE

A. All removal and related work shall be accomplished by a contractor specializing in, and having a record of, not less that two years successful experience in hazardous materials removal and related work. The Contractor's superintendent shall have not less than one year of full time experience in the responsible charge of hazardous materials removal operations within the 24-month period preceding the start of the project.

B. The Contractor shall submit to Owner evidence of compliance with all applicable regulations, codes, standards, and submittals prior to commencement of work at the project site.

C. Title to Materials

1. Contractor shall satisfactorily perform and complete the Work in a diligent and workmanlike manner in accordance with the Contract Documents and shall obtain and maintain all permits, licenses or other forms of documentation required by law. Contractor agrees to take title and risk of loss to all waste delivered to Contractor hereunder directly from the Owner of the waste and to relieve Owner and Others from any responsibility for the waste (save only Owners CERCLA liability for the Waste, if any) following Contractors loading of the waste for transportation.
2. Contractor agrees to look solely to the Owner or other generator of the waste in the event the waste is determined to be non-conforming or otherwise unacceptable to the ultimate disposal site and shall not make any claims against Others by reason thereof. Contractor acknowledges that title and risk of loss to the waste passes hereunder directly from the Owner to the Contractor and that the Others at no time takes title or risk of loss to or exerts control of the waste.

D. The Contractor warrants that he is familiar with the codes and requirements applicable to hazardous material and hazardous waste work and shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work. If the Contractor observes that the specifications or plans are at variance therewith, he shall give written notice to the Owner describing such variance. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without written notice to the Owner, he shall bear all costs arising therefrom. The Contractor's particular attention is directed to the necessity of complying with applicable regulations in the progress of his work. Failure or omission on the part of the Contractor, or any of their representatives, either to discover or to bring to the attention of the Owner any deviation from, omission from, or noncompliance with the requirements for hazardous material and hazardous waste abatement shall not be used by the Contractor as defense for failure on his part to fulfill such requirements.

E. Permits, State Licenses, and Notifications

1. Obtain all required permits and State licenses in conjunction with hazardous material and hazardous waste abatement, removal, hauling and disposition, and furnish timely notification of such actions required by Federal, State, regional, and local authorities having jurisdiction.

1.3 NOTIFICATIONS

A. Notification of hazardous material and hazardous waste abatement activities shall be provided by the Contractor to all cognizant Federal, State, and local agencies prior to the start of abatement activities. The cognizant agencies are listed below.

1. Federal Guidelines

a. Environmental Protection Agency (EPA)

2. State Guidelines

1. New York State Department of Environmental Conservation (NYSDEC)
2. New York State Department of Labor, Division of Safety and Health's Asbestos Control Bureau for notification of asbestos abatement activities

3. Local Guidelines

1.4 QUANTITY TAKEOFF

A. All quantities shall be determined by the bidder and no claim for additional cost will be accepted by the Owner as a result of quantities to be abated except those provided for in these Specifications.

B. Any quantities indicated in these Specifications are illustrative only and are not intended to represent actual quantities for bidding purposes.

1.5 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Field Test Reports

1. Waste profile reports.

C. Administrative and Closeout Submittals

1. Notification of Equipment Rental: If rental equipment is to be used during hazardous material and hazardous waste handling and disposal, written notification concerning the intended use of the equipment will be furnished to the rental agency, with a copy to the Owner.
2. Landfill Delivery Records: Within 3 days after delivery of hazardous material and hazardous waste to a landfill, submit detailed hazardous waste manifests, prepared, signed, and dated by an agent of the landfill, certifying the amount of materials delivered to the landfill.
3. Waste Disposal Site Approval: Submit written evidence to the Owner prior to disposal, that the waste disposal site is approved for the specific hazardous waste disposal by the EPA and other applicable authorities.
4. Personnel Training Certificates: Prior to the Notice to Proceed, the successful Contractor shall submit a declaration certifying that all of the Contractor's employees have been adequately trained in accordance with applicable NY-OSHA requirements.
5. Medical Examination and Certification: Prior to the Notice to Proceed, the Contractor shall submit proof that all personnel who will be permitted to enter contaminated Work Areas have had medical examinations in accordance with applicable NY-OSHA requirements.
6. Contractor Licensing Certification: Submit a copy of any required licenses and certifications.
7. Hazardous Waste Hauler License and EPA Transporters Number: Submit proof that the Contractor or the Contractors Hazardous Waste Hauler possesses a current Hazardous Waste Hauler License and EPA Transporter's Number to the Owner.

1.7 SCHEDULING

A. Schedule work as per the "Special Project Procedures."

B. Schedule work to coincide with demolition and Work by Others.

C. Describe hazardous materials removal procedures and schedule as specified in specifications.

D. Perform work between the hours of 7:00 AM to 6:00 PM Monday through Friday, or as specified by SMC.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Provide all materials, such as lumber, nails, and hardware that may be required to construct and dismantle decontamination areas and the barriers that isolate the Work area.

B. Provide all tools, equipment, and materials required to perform the Work.

PART 3 - EXECUTION

3.1 MATERIAL HANDLING

A. Deliver materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.

B. Store materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.

C. Remove from the premises all hazardous material and hazardous waste in damaged or deteriorating condition. Dispose of materials that become contaminated with hazardous material and hazardous waste in accordance with applicable regulatory standards.

3.2 EQUIPMENT

A. Respirators: Contractor shall provide workers with personally issued and marked respiratory equipment approved by NIOSH or MSHA and meeting the specifications of NY-OSHA. This respiratory equipment shall be suitable for the exposure level in the Work area.

B. Personal Protective Equipment: Contractor shall provide workers, Owner, and authorized visitors with sets of personal protective equipment of sizes to properly fit individual workers and visitors whenever they are required to enter the Work area. Provide access and use of the Contractor's change room and decontamination areas. Provide a minimum of four sets per day and sufficient sets as required for workers and Owner. The personal protective equipment shall remain the property of the Contractor.

C. Caution Signs and Labels: Provide caution signs printed in English at approaches to Work areas. Locate signs at such distance that personnel may read the sign and take the necessary precautions before entering the Work area. Provide caution labels printed in English. Affix labels to hazardous materials, scrap, waste, debris, and other potentially contaminated products. Caution signs and labels shall conform to the code requirements.

3.3 WORKER PROTECTION

A. Prior to commencement to work, all workers shall be instructed and shall be knowledgeable in the appropriate procedures of personal protection and hazardous materials and hazardous waste removal.

B. Contractor shall be solely responsible for enforcing worker protection requirements.

C. Reporting Unusual Events: When an event of unusual and significant nature occurs at the site, Contractor shall prepare and submit a special report listing chain of events, persons participating, responses and similar pertinent information. When such events are known or predictable in advance, advise the Owner at the earliest possible date.

D. Reporting Accidents: If a significant accident occurs at the site or anywhere else work is in progress, the Contractor shall prepare and submit appropriate reports to the Owner. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained.

E. Contingency Plan: The Contractor shall prepare a contingency plan for emergencies including fire, accident, power failure, pressure differential system failure, supplied air failure, or any other event that may require modification or abridgment of decontamination of Work area isolation procedures. The Contractor shall include in the plan specific procedures for decontamination or Work area isolation. Note that nothing in this specification should impede safe exiting or the providing of adequate medical attention in the event of an accident.

3.4 SIGN-IN/SIGN-OUT LOG & DAILY ACTIVITY REPORT

A. Contractor shall maintain a sign-in/sign-out log in the immediate vicinity of the Work area or areas hazardous materials abatement is being performed. This log shall be maintained from the time the first activity is performed involving the disturbance of hazardous materials until acceptance of the final Work. All persons entering the Work area, including the Contractor's workers, Owner, Owner's consultants, and Government officials, shall be required to sign in and out each time upon entering and leaving the Work area. All persons shall indicate name, time, company or agency represented, and reason for entering the Work area.

B. Contractor shall maintain a daily activity report describing work performed, materials and methods used, inspections made, test taken, and any unusual conditions or problems.

C. Two copies of all daily sign-in/sign-out logs and daily activity reports shall be provided to the Owner at the completion of the project.

D. Except for governmental inspectors having jurisdiction, no visitors shall be allowed in any work area, except as authorized by the Owner.

3.5 HOUSEKEEPING

A. The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by their employees. Hazardous materials and hazardous wastes shall be removed immediately at the completion of Work. Maintain surfaces of the Work area free of debris and keep waste from being distributed outside of the immediate Work area.

B. When Work is complete, the Contractor shall notify the Owner. The Owner shall perform a visual inspection and confirmation sampling, if necessary. The Owner shall certify, in writing, that the Work is complete and that there are no visible accumulations of hazardous materials or dust present. Do not remove the Work area enclosure and caution signs prior to receipt of the Owner's certification. After final cleanup, remove enclosures and all other Contractor-constructed items.

C. Removal of Hazardous Waste Containers: Store hazardous waste containers in the Work area until cleanup is complete. Do not remove waste containers and caution signs prior to receipt of the Owner's clearance certification.

D. Procedure for Disposal of Hazardous Waste: Do not remove any hazardous waste from the site without approval from the Owner. Procedure for hauling and disposal of asbestos waste shall comply with 40 CFR 260-265.

E. The Contractor shall use the Owners EPA/NYS identification number on hazardous waste manifests.

3.6 WORK AREA PREPARATION

A. Where appropriate, the Contractor shall seal all openings with a 6-mil minimum polyethylene containment barrier to prevent leakage of air into the outside environment or other portions of the building.

B. The Contractor shall pre-clean movable objects to be salvaged for the Owner within the proposed Work areas using HEPA vacuum equipment or wet or dry cleaning methods as appropriate. The Contractor shall move such items to a storage or other area as directed by the Owner.

C. The Contractor shall pre-clean fixed objects, such as mechanical and electrical equipment and fixtures, within proposed Work area using HEPA vacuuming equipment or wet or dry cleaning methods as appropriate.

D. The Contractor shall construct worker and drum/equipment decontamination units in compliance with EPA and NYS guidelines.

E. Where appropriate, the Contractor shall provide sufficient HEPA filtered negative air pressure units to maintain an air flow of at least four complete air changes per hour in the Work area.

F. The Contractor shall establish emergency exits and procedures for the Work area, satisfactory to fire officials.

G. The Contractor shall post signs as required by NY-OSHA regulations.

H. The Contractor shall ensure that barriers and plastic enclosures remain effectively sealed and taped. Inadvertent tears in plastic shall be repaired with fiber tape and the tear covered by plastic applied with spray adhesive, overlapping the tear by 6 inches on all sides.

3.7 DECONTAMINATION OF OIL-STAINED BUILDING MATERIALS/EQUIPMENT

A. Oil-stained floors, walls, sumps, equipment, fixtures, and other appurtenances might be present throughout the site as a result of normal manufacturing processes historically conducted at the facility. Some of these areas might contain accumulations of oil that have been deemed to require, or potentially require, decontamination prior to disposal or demolition.

B. Sampling and decontamination procedures shall be previously completed by others in accordance with the appropriate Sampling Work Plan.

C. Determination of whether a given area possesses sufficient accumulations of oil to warrant decontamination is subjective. If free-flowing oil residue is present on the surface of an area, decontamination is required. Incidental oil staining or discoloration of surfaces does not require decontamination. The goal of decontaminating oil-stained materials is to ensure that oil residues do not cross contaminate or commingle with other materials or the site, and to avoid unlawful disposal of waste materials that may be classified as hazardous waste by virtue of their oil content. The Owner will assist the Contractor in identifying oil-stained areas requiring decontamination.

D. Decontamination Protocols

1. Oil-stained areas shall be decontaminated using a method specified by the Contractor in the Contractors bid.
2. Decontamination methods that may be used include, but are not limited to, steam cleaning, high pressure washing, the use of mechanical or chemical adsorption, and manual scrubbing.
3. All decontamination fluids and other materials shall be contained and collected for disposal or recycling by the Contractor
4. Emphasis shall be placed on methods that avoid the generation of large quantities of additional waste materials (i.e., large volumes of water or other solutions).
5. Contractor shall attempt to recycle oily wastes whenever technically and economically feasible.
6. Prior to commencing decontamination procedures, the Contractor shall notify the Owner of the decontamination method selected. The Owner retains the right to direct the Contractor to revise or select an alternative method.
7. Under no circumstances shall the Contractor utilize a decontamination method that causes, by virtue of the materials or methods used, the area being decontaminated to be classified as hazardous waste after decontamination. This includes the addition or application of any hazardous, or potentially hazardous substance in an intermediate decontamination step to the area that is not removed prior to final decontamination.

D. Confirmation Sampling/Determination of Cleanliness

1. Upon completion of decontamination, the Contractor shall request inspection of the area by the Owner.
2. Quantitative confirmation sampling will not be conducted on oil-stained materials after decontamination. The Owner will determine cleanliness by visual inspection or other means if the material decontaminated meets the subjective criteria described herein.
3. If confirmation sampling is performed, it will be conducted by the Owner to determine if the materials will be classified as hazardous waste upon disposal.
4. If the material contains concentrations of oil that classify it as hazardous waste, the Contractor shall segregate and properly dispose of the material.
5. At the Owner's discretion, the Contractor may be requested to perform further decontamination to attempt to render the material non-hazardous.

    a. If this additional procedure is determined to be an addition to the Contractors scope of work, the Contractor shall request, in writing, a change order from the Owner.
    b. The Contractor shall not perform out-of-scope work without first obtaining written authorization from the Owner.

6. If confirmation sampling indicates the material is not classified as hazardous waste after decontamination, the material may be disposed of by the Contractor.

3.8 DECONTAMINATION/REMOVAL OF HAZARDOUS MATERIALS

A. Several areas located throughout the site may contain, or may have been impacted by, hazardous materials or hazardous wastes during normal manufacturing operations. These locations, if any, will be identified during the Contractors characterization of the Owner's facility.

B. Sampling and decontamination procedures shall be previously completed by others in accordance with the appropriate Sampling Work Plan.

C. Areas and items that contain accumulations of hazardous manufacturing residues, or that normally contain hazardous substances, that would cause the materials or items to be classified as a hazardous waste upon disposal have been deemed to require, or potentially require, decontamination or removal prior to demolition.

D. Decontamination Protocols

1. Hazardous materials Areas of Concern (AOC) shall be decontaminated using a method specified by the Contractor in the Contractors Bid.
2. Methods that may be used include, but are not limited to, steam cleaning, high pressure washing, the use of mechanical or chemical adsorption, and manual scrubbing.
3. All decontamination fluids and other materials shall be contained and collected for disposal or recycling by the Contractor.
4. Emphasis shall be placed on methods that avoid the generation of large quantities of additional waste materials (i.e., large volumes of water or other solutions).
5. Contractor shall attempt to recycle waste materials whenever technically and economically feasible.
6. Prior to commencing decontamination procedures, the Contractor shall notify the Owner of the decontamination method selected. The Owner retains the right to direct the Contractor to revise or select an alternative method.
7. Under no circumstances shall the Contractor utilize a decontamination method that causes, by virtue of the materials or 'Methods used, the area being decontaminated to be classified as hazardous waste after decontamination. This includes the addition or application of any hazardous, or potentially hazardous substance in an intermediate decontamination step to the area that is not removed prior to final decontamination.

E. Confirmation Sampling/Determination of Cleanliness

1. Upon completion of decontamination, the Contractor shall request inspection of the area by the Owner.
2. Quantitative confirmation sampling may or may not be conducted on AOC after decontamination at the discretion of the Owner.
3. If confirmation sampling is not conducted, Owner will determine by visual inspection or other means if the material decontaminated meets subjective criteria of cleanliness as described herein.
4. If confirmation sampling is performed, it will be conducted by the Owner to determine if the materials will be classified as hazardous waste upon disposal.
5. If the material contains concentrations of hazardous substances that classify it as hazardous waste, Contractor shall segregate and properly dispose of the material.
6. At the Owner's discretion, the Contractor may be requested to perform further decontamination to attempt to render the material non-hazardous.

    a. If this additional procedure is determined to be an addition to the Contractor's scope of work, the Contractor shall request, in writing, a change order from the Owner.
    b. The Contractor shall not perform out-of-scope work without first obtaining written authorization from the Owner.

7. If confirmation sampling indicates the material is not classified as hazardous waste after decontamination, the material may be salvaged or disposed by the Contractor.

3.9 FIELD QUALITY CONTROL

A. The Owner will observe the abatement process throughout removal and cleaning operations and will conduct final inspections and confirmation sampling. Such observance and testing shall not imply approval or acceptance by the Owner of the work in progress.

B. The Owner reserves the right to direct work stoppage at the project site if the Owner determines that unacceptable levels of hazardous materials or hazardous wastes are being emitted. Any costs resulting from such work stoppage shall be borne by the Contractor.

C. Such testing for the Owner does not relieve the Contractor of providing necessary tests required by other regulations, codes, and standards for the protection of his workers, or any other purpose. The Contractor shall provide all such testing as part of this work, even if it if duplicated by the Owner's testing. This may include additional sampling for conformation of acceptance criteria by the off-site disposal facility. The results of all Contractor-provided testing shall be provided to the Owner as a condition of final payment.

D. The results of Owner's tests will be available to the Contractor. The Contractor is cautioned that interpretations made, opinions formed, and conclusions drawn as a result of examining test results are solely the responsibility of the Contractor.

E. Waste profiling tests are the responsibility of the Contractor

SECTION 02030 - LEAD ABATEMENT

PART 1 - GENERAL

1.1 SUMMARY OF WORK

A. Scope of Work

1. The Contractor shall furnish all labor, materials, services, insurance, equipment, employee training and testing, waste transport and disposal, permits and agreements, and decontamination facilities necessary to perform the work required for management of lead based paint in accordance with these specifications and applicable Federal, State, and Local regulations.
2. The work covered by this Specification includes the removal, packaging, characterizing, and properly disposing of lead based debris from areas identified in the Pre-Demolition Survey for Asbestos and Lead Containing Materials by Griffin Industrial Services, Inc. A copy of this report in included as Section 4 of the Bid Package.

B. In no circumstance shall the Contractor disturb or damage areas to be protected as shown on the Drawings.

C. With respect to available utilities, the Contractor shall coordinate access and use of all utilities as needed for the duration of the project with the Owner. The Contractor may be required to provide utilities. The Contractor shall obtain all necessary permits from the Town of Skaneateles Falls and other authorities having jurisdiction.

1.2 QUALITY ASSURANCE

A. All lead removal and related work shall be accomplished by a contractor specializing in, and having a record of, not less that two years successful experience in lead removal and related work. The Contractors superintendent shall have not less than one year of full time experience in the responsible charge of lead removal operations within the 24-month period preceding the start of the project.

B. The Contractor shall submit to Owner evidence of compliance with all applicable regulations, codes, standards, and submittals prior to commencement of work at the project site.

C. Title to Materials

1. Contractor shall satisfactorily perform and complete the Work in a diligent and workmanlike manner in accordance with the Contract Documents and shall obtain and maintain all permits, licenses or other forms of documentation required by law.
2. Contractor agrees to take title and risk of loss to all Waste delivered to Contractor hereunder directly from the Owner of the Waste and to relieve Owner and Others from any responsibility for the Waste (save only Owner's CERCLA liability for the Waste, if any) following Contractor's loading of the Waste for transportation.
3. Contractor agrees to look solely to the Owner or other generator of the Waste in the event the Waste is determined to be non-conforming or otherwise unacceptable to the ultimate disposal site and shall not make any claims against Others by reason thereof.
4. Contractor acknowledges that title and risk of loss to the Waste passes hereunder directly from the Owner to the Contractor and that Others at no time takes title or risk of loss to or exerts control of the Waste.

D. The Contractor warrants that he is familiar with the codes and requirements applicable to lead abatement work and shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work. If the Contractor observes that the specifications or plans

are at variance therewith, he shall give written notice to the Owner describing such variance. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without written notice to the Owner, he shall bear all costs arising therefrom. The Contractor's particular attention is directed to the Applicable NY-OSHA regulations and the necessity of complying with the regulations in the progress of his work. Failure or omission on the part of the Contractor, or any of their representatives, either to discover or to bring to the attention of the Owner any deviation from, omission from, or noncompliance with the requirements for lead abatement shall not be used by the Contractor as defense for failure on his part to fulfill such requirements.

E. Medical Requirements

1. Medical Examinations: Before exposure to lead, furnish workers with a comprehensive medical examination as required by 29 CFR 1926.62. Such exams must include blood sampling and analysis (for lead, zinc, and prototoporphyn), a detailed work medical history, a pulmonary evaluation, blood pressure measurement, and kidney function evaluation.

    a. Examination is not required if records show the employee has been examined as required within the past year.
    b. The same medical examination shall be given on an annual basis to employees engaged in an occupation involving lead dust and within 30 calendar days before or after termination of employment in such occupation.

2. Medical Surveillance Program: Maintain complete and accurate records of employee's medical examinations, medical records, and exposure measurements as required for a period of 30 years after termination of employment. Make records of the required medical surveillance program available for inspection and copying to:

    a. The Assistant Secretary of Labor for Occupational Safety and Health.
    b. The Director of The National Institute of Occupational Safety and Health (NIOSH) and the State of New York, Department of Labor, Division of Occupational Safety and Health (NY-OSHA).
    c. Authorized representatives of affected employees, former employees, or designated representatives.

F. Training: Within one year prior to assignment to lead abatement Work, each employee shall be instructed for a minimum of 32 hours, and each supervisor for a minimum of 40 hours, by an industrial hygienist with regard to the hazards of lead, safety and health precautions, the use and requirements for protective clothing, equipment, and respirators.

1. Furnish each employee with a respirator fit test administered by the industrial hygienist as required.
2. Fully cover engineering and other hazard control techniques and procedures.

G. Permits, State Licenses, and Notifications

1. Obtain all required permits and State licenses in conjunction with lead abatement, removal, hauling and disposition, and furnish timely notification of such actions required by Federal, State, regional, and local authorities having jurisdiction.
2. Notify the regional office of the Environmental Protection Agency (EPA), appropriate State Department and the Contractor and Owner in writing 20 days prior to commencement of Work, in accordance with 40 CFR 61, Subpart M.

H. Safety and Health Compliance: In addition to detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of Federal, State, regional, and local authorities regarding handling, storing, transporting, and disposing of lead waste materials.

1. Comply with the applicable requirements of the current issue of 29 CFR 1926.62 and 40 CFR 61, Subparts A and M.
2. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting Work. Where specification requirements and referenced documents vary, the most stringent requirement shall apply.

I. Respirator Program: Establish and implement a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134. The Contractor shall provide workers with approved respirators. Non-disposable half-mask respirators with HEPA filter cartridges will be considered the minimum acceptable equipment. The Contractor shall also provide a sufficient quantity of filter cartridges approved for lead abatement so that the workers can change cartridges during the work shift. Filter cartridges shall not be used any longer than one (1) work-day or after they have been wetted in a decontamination shower. Respirator filter cartridges may be stored at the job site, but shall be protected from exposure to lead prior to use.

1.3 NOTIFICATIONS

A. Notification of lead abatement activities shall be provided by the Contractor to all cognizant federal, state, and local agencies prior to the start of abatement activities.

B. Written notification of intention to demolish shall be provided to the Office at least ten (10) days prior to commencement of lead Abatement work. If the abatement work is delayed, then written notification shall be re-submitted at least five (5) days prior to commencement of such work.

C. Written notification of intention to renovate shall be provided to the Office as early as possible prior to commencement of lead abatement work.

1. Local Guidelines

a. Notification shall be made as required by local regulation.

1.4 QUANTITY TAKEOFF

A. All lead containing materials quantities shall be determined by the bidder and no claim for additional cost will be accepted by the Owner as a result of quantities of lead-containing materials to be removed except those provided for in these Specifications.

B. Any quantities implied in these Specifications are illustrative only and are not intended to represent actual quantities for bidding purposes.

1.5 WORKSITE CONDITIONS

A. The Contractor is hereby advised that lead has been determined to be a CANCER CAUSING AGENT. The Contractor shall provide workers with respirators that, at a minimum, shall meet the requirements applicable code and full protective clothing including head covers, body coveralls and foot covers during the preparation of Work areas, at anytime inside the Work areas including prior to commencing, during actual lead abatement and until the Owner has given final clearance after clean-up is completed

1.6 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Manufacturer's Product Data

1. Local Exhaust Equipment.
2. Vacuum Equipment.
3. Respirators.
4. Other Tools and Chemicals.

C. Plan for Removal and Demolition of Lead: Submit a detailed job-specific plan of the Work procedures to be used in the removal and demolition of materials containing lead.

1. The plan shall be prepared, signed, and sealed, including certification numbers and dates, by the Contractor.
2. Such plan shall include a sketch showing the location, size, and details of lead control areas, location and details of the change rooms, layout of change rooms, layout and location of waste container pass-out airlock system, and locations of local exhaust equipment (if in use).
3. The plan shall also include interface of trades involved in the construction, sequencing of lead-related Work, disposal plan, sampling plan, respirators, protective equipment, chemical paint removers, and a detailed description of the method to be employed in order to control pollution.
4. The air sampling portion of the plan shall include air sampling training and strategy, sampling locations, estimated sampling locations, estimated numbers of samples, sampling methodology, and frequency and duration of sampling.
5. The plan shall be approved prior to the start of lead abatement Work.
6. Prior to beginning Work, the Owner and Contractor shall meet to discuss in detail the lead plan, including Work procedures and safety precautions.

D. Field Test Reports

1. Air Sampling Results: Laboratory analysis shall be completed and results reviewed by the Owner within 56 hours. The Owner shall notify the Contractor immediately of exposure to lead dust in excess of the action level.

2. Lead Disposal Quantity Report: The Contractor shall review and report to the Owner within 24 hours from the end of each day, the amount of lead containing material removed during the previous day.

E. Administrative and Closeout Submittals

1. Notification of Equipment Rental: If rental equipment is to be used during lead handling and disposal, written notification concerning the intended use of the equipment will be furnished to the rental agency, with a copy to the Owner.
2. Landfill Delivery Records: Within 3 days after delivery of lead-containing material to the landfill, submit detailed delivery tickets, prepared, signed, and dated by an agent of the landfill, certifying the amount of materials delivered to the landfill.
3. Waste Disposal Site Approval: Submit written evidence to the Owner prior to disposal, that the waste disposal site is approved for lead disposal by the EPA and other applicable authorities.
4. Personnel Training Certificates: Prior to the Notice to Proceed, the successful Contractor shall submit a declaration certifying that all of the Contractor's employees have been adequately trained. The Contractor shall also submit two certificates signed by each

employee who will be involved in lead abatement in the designated Work Areas indicating that the employee is aware that lead-containing materials are present in these Work Areas and that he/she has had training concerning the hazards of lead exposure, lead-containing materials removal, respirator use, decontamination and has understood these instructions.

5. Medical Examination and Certification: Prior to the Notice to Proceed, the Contractor shall submit proof that all personnel who will be permitted to enter contaminated Work Areas have had medical examinations. Provide a written certification signed by a licensed physician that all workers and supervisors have met or exceeded all of the medical prerequisites listed herein.
6. Contractor Licensing Board Lead Certification: Submit a copy of the Subcontractor's State Contractor's License to the Owner.
7. Hazardous Waste Hauler License and EPA Transporter's Number: Submit proof that the Contractor or the Contractor's Hazardous Waste Hauler possesses a current Hazardous Waste Hauler License and EPA Transporter's Number to the Owner.

1.8 SCHEDULING

A. Schedule work as per the "Special Project procedures."

B. Schedule work to coincide with demolition and Work by Others.

C. Describe lead removal procedures and schedule as specified in specifications.

D. Perform work between the hours of 7:00 am to 6:00 pm Monday through Friday, or as specified by SMC.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Polyethylene sheeting in sizes to minimize the frequency of joints.

B. Tape: Glass fiber or other tape capable of sealing joints of adjacent plastic sheets and for attachment of plastic sheeting to finished or unfinished surfaces of dissimilar materials under both dry and wet conditions.

C. Surfactant (Wetting Agent): Shall consist of materials that are non-toxic and non-irritating to skin and eye, and non-carcinogenic. The wetting agent shall consist of 50% polyoxyethylene or polyglycol ester and 50% polyoxyethylene ether, or the equivalent.

D. Impermeable Containers: Air and water-tight, suitable to receive and retain any lead-containing materials or contaminated materials until disposal at an approved site and labeled in accordance with applicable NY-OSHA regulations. Two types of impermeable containers shall be used:
   1. Six (6) mil plastic bags sized to fit within the drum.
   2. Metal or fiber drums with tightly fitting lids.

E. Warning Labels and Signs: In conformance with applicable NY-OSHA regulations.

F. Other Materials: Provide all other materials, such as lumber, nails, and hardware that may be required to construct and dismantle the decontamination area and the barriers that isolate the

G. Work area.

PART 3 - EXECUTION

3.1 MATERIAL HANDLING

A. Deliver materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.

B. Store materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.

C. Remove all lead containing materials from the premises. Dispose of materials that become contaminated with lead in accordance with applicable regulatory standards.

3.2 EQUIPMENT

A. Respirators: Contractor shall provide workers with personally issued and marked respiratory equipment approved by NIOSH or MSHA and meeting the specifications of NY-OSHA. This respiratory equipment shall be suitable for the lead exposure level in the Work area. The Contractor shall provide disposable HEPA cartridges as required, with sufficient replacement cartridges.

B. Personal Protective Equipment: Contractor shall provide workers, Owner, and authorized visitors with sets of protective disposable clothing, head covers, gloves , eye protection and foot covers of sizes to properly fit individual workers and visitors whenever they are required to enter the Work area. Provide access and use of the Contractors change room. Provide a minimum of four sets per day and sufficient sets as required for workers and Owner. The personal protective equipment shall remain the property of the Contractor.

3.3 WORKER PROTECTION

A. Prior to commencement to work, all workers shall be instructed and shall be knowledgeable in the appropriate procedures of personal protection and lead removal.

B. Contractor shall be solely responsible for enforcing worker protection requirements.

C. Reporting Unusual Events: When an event of unusual and significant nature occurs at the site, Contractor shall prepare and submit a special report listing chain of events, persons participating, responses and similar pertinent information. When such events are known or predictable in advance, advise the Owner at the earliest possible date.

D. Reporting Accidents: If a significant accident occurs at the site or anywhere else work is in progress, the Contractor shall prepare and submit appropriate reports to the Owner. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained.

E. Contingency Plan: The Contractor shall prepare a contingency plan for emergencies including fire, accident, power failure, pressure differential system failure, supplied air failure, or any other event that may require modification or abridgment of decontamination of Work area isolation procedures. The Contractor shall include in the plan specific procedures for decontamination or Work area isolation. Note that nothing in this specification should impede safe exiting or the providing of adequate medical attention in the event of an accident.

F. Work Area Requirements

1. Workers shall always wear a respirator properly fitted on the face while in the Work area. Workers wearing tight-fitting face pieces shall be clean-shaven to the extent that the hair does not interfere with the sealing surface of the respirator. This must be documented by a standard respirator fit test.
2. The Contractor shall instruct and train workers in proper respirator use.
3. Workers shall wear disposable, full-body coveralls and disposable head covers and footwear suitable for lead work in the Work area.
4. At all areas where lead abatement will take place, the Contractor shall set up a change room, shower and equipment room outside the Work area. All workers without exception shall:

    a. Remove and properly store street clothes in the change room and put on new disposable coveralls, head covers, footwear and cleaned respirator before entering the Work area.
    b. Remove the disposable coveralls, head covers, and footwear in the equipment room and dispose them in an appropriate lead waste container. Still wearing their respirators, workers shall proceed to the showers and remove their respirators while showering with soap and tempered water. Wetted respirator cartridges shall be disposed of in appropriate lead containers.
    c. This procedure shall be followed each time a worker enters or leaves the Work area.
    d. Workers shall not eat, drink, smoke, or chew gum or tobacco in the Work area.
    e. The Contractor shall provide disposable coveralls, head covering, and footwear to any official representative of the Owner who inspects the project.
    f. All persons entering the Work area shall wear an approved respirator and disposable coveralls, head covering, and footwear.
    g. The Contractor shall instruct and train workers in the nature of lead and the hazards of lead exposure during abatement work.
    h. The Contractor shall submit medical documentation from a physician indicating each worker is capable of safely using a respirator.
    i. Personal air monitoring shall be conducted by the Contractor on a daily basis in order to determine the airborne concentrations of lead to which workers may be exposed.

3.4 SIGN-IN/SIGN-OUT LOG & DAILY ACTIVITY REPORT

A. Contractor shall maintain a sign-in/sign-out log in the immediate vicinity of the change room of any decontamination area or areas where glove bag removal is being performed. This log shall be maintained from the time the first activity is performed involving the disturbance of lead-containing materials material until acceptance of the final air test results. All persons entering the Work area, including the Contractor's workers, Owner, Owner's consultants, and Government officials, shall be required to sign in and out each time upon entering and leaving the Work area. All persons shall indicate name, time, company or agency represented, and reason for entering the Work area.

B. Contractor shall maintain a daily activity report describing work performed, materials and methods used, inspections made, test taken, and any unusual conditions or problems.

C. Two copies of all daily sign-in/sign-out logs and daily activity reports shall be provided to the Owner at the completion of the project.

D. Except for governmental inspectors having jurisdiction, no visitors shall be allowed in any work area, except as authorized by the Owner.

3.5 HOUSEKEEPING

A. The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by their employees. Bags of lead material and other waste material shall be removed immediately at the completion of work. Maintain surfaces of the Work area free of debris and keep waste from being distributed outside of the immediate Work area.

B. When lead removal, disposal, and cleanup are complete, the Contractor shall notify the Owner. The Owner shall perform a visual inspection and clearance wipe sampling. The Owner shall certify, in writing, that the concentration of lead on wipe samples do not exceed the recommended clearance levels for lead removal projects in HUD's 1995 Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. Do not remove the Work area enclosure and caution signs prior to receipt of the Owner's clearance certification. After final cleanup, remove enclosures and all other Contractor-constructed items.

C. Removal of Lead Waste Containers: Store lead waste containers in the Work area until cleanup is complete, or provide a waste container removal system. Lead waste containers shall not be removed through the change rooms. The waste container removal system shall consist of a washdown station inside the Work area, a washroom, and a waste container holding area. Provide airlocks between each area and an airlock with access to outside the Work area from the holding areas. Provide caution signs as specified herein for lead Work areas. The waste container removal system shall be a temporary unit constructed to prevent the escape of lead dust from the area. The system shall be physically attached to the Work area. Personnel entering the waste container removal system shall wear personal protective equipment. The system shall not be used to enter or exit the Work area. Access to outside the waste container removal system shall be sealed except during the removal of lead waste containers. Perform cleanup of the waste container removal system as specified herein for enclosed Work areas. Do not remove the waste container removal system enclosure and caution signs prior to receipt of the Owner's clearance certification.

D. Procedure for Disposal of Lead: Do not remove any lead containing materials from the site without approval from the Owner. Procedure for hauling and disposal of lead waste shall comply with 40 CFR 61, Subpart M. The Contractor shall use his own EPA identification number on lead waste manifests. The Contractor shall not use the Owner's EPA identification number.

3.6 LEAD PAINT REMOVAL

A. In a Work area, the Contractor shall:

1. Lightly Spray a mixture of water and commercial grade soap, or similar surfactant, on walls to be **decontaminated** only to dampen the surface and minimize the potential for generating airborne dust during the process.
2. Remove loose paint. Loose paint is any paint that is flaking, bubbled, or otherwise separated from the surface from which it was applied. Do not remove all paint from all surfaces; remove only loose paint.
3. Lightly spray removed loose paint removed and accumulated on plastic sheeting with the water and soap mixture to minimize dust.
4. Roll up plastic sheeting with lead paint debris. Make sure material stays damp so as not to encourage generation of dust.
5. Place rolls of plastic sheeting and paint debris in appropriate containers for shipping to an approved disposal facility.
6. Cleanup of area shall be verified by the Contractor through visual means. There shall be no visual residue of loose paint on any surface.

7. Remove dust barriers and place plastic sheeting and PPE into containers for proper off-site disposal.
8. Document daily progress of lead paint removal on contract drawings or through use of photographs.
9. Maintain an inventory of waste containers and staging locations.

3.8 CLOSURE

A. The lead containing materials shall be sealed in plastic bags (6 mil) and, where appropriate, shall be packed while still wet into sealable plastic bags (6 mil). Initial bagging of waste shall be supplemented by a secondary containment using a fiber or metal drum. Any large items should be removed intact whenever possible and can be wrapped in 2 layers of 6 mil minimum polyethylene sheeting or bags, secured with tape. If it appears that the waste material could tear the plastic, then the bag must be marked with a label. The outside of all containers shall be cleaned before leaving the Work area.

B. Work areas and all other decontaminated and cleaned areas shall be considered clean when wipe sampling is performed and approved by the Owner.

C. Areas that do not comply with the standard of cleaning for closure shall continue to be cleaned by and at the Contractor's expense until the specified standard is achieved. The costs of all follow-up tests necessitated by the failure of the wipe tests to meet the cleaning criteria shall be borne by the Contractor; the Owner will deduct the cost of such follow-up tests from whatever moneys remain due to the Contractor. Follow-up testing shall occur within the time allotted for gross removal or all costs to the Owner of the building attributable to delayed occupancy or usage shall be borne by the Contractor.

D. When the clearance is achieved and an inspection determines that the area meets the specified criteria, the decontamination enclosure systems shall be removed, the area thoroughly wet cleaned, and materials from the equipment room and shower disposed of as contaminated waste. The remaining barriers between contaminated and clean areas and all seals on openings into the Work area and fixtures shall be removed and disposed of as contaminated waste.

E. The Contractor shall transport the sealed lead materials to an approved waste disposal site.

3.9 FIELD QUALITY CONTROL

A. The Owner reserves the right to direct work stoppage at the project site, if the Owner determines that unacceptable levels of lead dust are being emitted. Any costs resulting from such work stoppage shall be borne by the Contractor.

B. Such testing for the Owner does not relieve the Contractor of providing necessary tests required by other regulations, codes, and standards for the protection of his, workers or any other purpose. The Contractor shall provide all such testing as part of this work, even if it is duplicated by the Owner's testing. The results of all Contractor-provided testing shall be provided to the Owner as a condition of final payment.

C. The results of Owner's tests will be available to the Contractor. The Contractor is cautioned that interpretations made, opinions formed, and conclusions drawn as a result of examining test results are solely the responsibility of the Contractor.

SECTION 02040 - EARTHWORK

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Earthwork is not included in the base scope of work. This section covers any work that might result during the normal execution of the project and become a field change. Contractor is instructed to provide unit prices for the work in this section.

1.2 REGULATORY REQUIREMENTS

A. Conform to applicable code for earthwork, dust control, service utilities, and hazardous materials handling.

B. Conform to Town of Skaneateles Falls demolition requirements.

C. Obtain required permits from authorities.

D. Coordinate notification of affected utility companies with Owner before starting work and comply with their requirements.

E. Do not close or obstruct roadways, sidewalks, fire hydrants, or other offsite areas/structures without permits.

F. Conform to applicable regulatory procedures when discovering hazardous materials. Notify Owner immediately if hazardous materials are discovered.

1.3 REFERENCES

A. ASTM D1556: Test Method for Density of Soil in Place by the Sand-Cone Method.

B. ASTM D 1557: Test Method for Moisture-Density Relations of Soils and SoilAggregate Mixtures Using 10 Lb. Rammer and 18 inch Drop.

C. ASTM D2922: Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Shop Drawings and Schedules: Describe crushing, grading, removal procedures, sequences, and schedules.

1.5 PROJECT RECORD DOCUMENTS

A. Submit under provisions of Section 01720.

B. Accurately record actual locations of remaining utilities, subsurface obstructions, and other items remaining after demolition.

1.6 SCHEDULING

A. Schedule work as per the "Special Project Procedures."

B. Coordinate Work with Work by Others and Work by other Subcontractors.

C. Describe demolition removal procedures and schedule.

D. Perform work between the hours of 7:00 AM to 6:00 PM Monday through Friday, 9:00 AM to 6:00 PM Saturday, and 10:00 AM to 6:00 PM Sunday and Holidays, or as specified by SMC.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Do not perform Work when weather conditions will not permit successful completion of Work.

PART 2 - PRODUCTS

2.1 MATERIALS

A. All materials will be imported from off-site sources as specified in the project Revised Remedial Design.

PART 3 - EXECUTION

3.1 PROTECTION

A. Identify and protect remaining structures from damage.

B. Verify that survey benchmarks and areas to be protected are as indicated.

C. Protect benchmarks and areas to be protected from excavating equipment and vehicular traffic.

3.2 EXAMINATION AND PREPARATION

A. Verify substrate has been inspected, gradients and elevations are correct, and is dry.

B. Correct irregularities in substrate gradient and elevation by scarifying, reshaping, and re-compacting.

C. Do not place fill on soft, muddy, or frozen surfaces.

D. Notify Owner of unexpected subsurface conditions and discontinue affected Work until notified by Owner to resume Work.

3.3 CLEARING AND REMOVAL

A. Clear areas required for execution of Work.

B. Remove gross accumulations of soil from materials cleared during removal.

C. Dispose (off-site) of specified existing concrete debris.

3.4 BACKFILLING

A. Fill areas to contours and elevations with unfrozen materials.

B. The Contractor will provide laboratory data to Owner under chain-of-custody that the imported backfill contains no detectable concentrations of volatile organic compounds (via EPA Test Method 8240), semi-volatile organic compounds (via EPA Test Method 8270), petroleum hydrocarbons (via EPA Test Method 8015M), or polychlorinated biphenyls (via EPA Test Method 8080), and meet TAGM 4046. Additionally, the subcontractor will provide laboratory data under chain-of-custody that the imported material does not contain elevated concentrations of heavy metals (10 times STLC, CAC Title 26). Please note that the cost of this analytical work is to be included in the Contractor's cost quotations for infill material.

C. Import soil shall have an infiltration rate no greater than the native soil surrounding the impoundment basin. Contractor will provide certification to Owner that the import soil has met or exceeded infiltration/percolation requirements.

D. Maintain optimum moisture content of fill materials to attain required compaction density of 90%.

E. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.

F. Make gradual grade changes. Blend slope into level areas.

G. Fill excavated material to rough grade elevation compacted to 90% maximum density.

H. Place in maximum 8-inch layers and compact to specified density.

3.5 ROUGH GRADING

A. Identify required lines, levels, contours, and data.

B. Identify remaining underground, aboveground and aerial utilities. Stake flag locations.

C. Remove debris and rock larger than 3-inch diameter from site.

3.6 FIELD QUALITY CONTROL

A. Removal of all slabs on grade, subsurface structures, and pavements will be inspected by others. Inspection is directed at discovering soil that may be contaminated with hazardous materials.

B. Compaction Testing:

1. Compaction testing will be performed in accordance with ASTM D1556, ASTM D1 557, or ASTM D2922. Subcontractor is responsible for compaction testing.
2. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.
3. Frequency of tests: One test per layer, every 5000 square feet.

3.7 OPTIONAL EARTHWORK

As an Option, provide detailed costs for the following:

A. Concrete and bituminous pavement recycling/Crushing

1. Recycle structural concrete, slabs on grade, pavements, and other concrete or asphaltic-concrete.

2. Segregate asphaltic-concrete from other materials and recycle separately.
3. Segregate stockpiled materials at direction of Owner.
4. Blend recycled material at direction of Owner prior to placement.

B. Aggregate Placement

1. Spread aggregate over prepared substrate to rough grade as required.
2. Spread material in windrows for profiling and precompaction.
3. Place aggregate in maximum 8-inch layers and compact to specified density.
4. Level and contour surfaces to rough grade elevations.
5. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.

SECTION 02078 - BUILDING DECONTAMINATION

PART 1 - GENERAL

1.1 SUMMARY

A. Provide all labor, equipment, materials and supplies, to complete the building roof decontamination.

B. Provide and maintain environmental protective measures and associated health and safety measures, equipment, and procedures at the work site.

C. Materials and equipment shall meet all applicable governmental agency codes, patents, rules, and regulations.

D. Equipment and surfaces to be cleaned include, but are not limited to the building roof. Items to be disposed of as hazardous waste include, but are not limited to, wood debris, concrete debris, and PPE.

E. Waste Classification and Handling:

1. Areas to be decontaminated are classified with respect to the waste material that will be removed, including, but not limited to, hazardous dusts, dirt debris, and grime, building surfaces and wash water. The hazardous determination of the specified materials has been evaluated through representative surface sampling and laboratory analysis for specific constituents of concern.
2. Ship the waste off-site in compliance with the manifesting and shipping requirements specified in 6 NYCRR Part 372.
3. Dispose of waste in an approved waste disposal facility. Prior to disposal, the Engineer will review the certifications of any facility used for disposal of waste.
4. Provide copies of all fully completed manifests, shipping papers, and disposal records, including weight receipts, to the Engineer upon authorization and return from the landfill.
5. Historical exposure air monitoring data for cleanup activities similar in nature have documented that airborne lead concentrations have been in excess of the established OSHA permissible exposure levels (PELs). Provide required PPE for work in areas exceeding OSHA PELs.

F. Perform the Building Decontamination in the following sequence:

1. Mobilize, establish, and construct support facilities (i.e.: construction trailer). Refer to Section 01050 of this specification for project coordination. Install required scaffolding and lifting apparatus on exterior of building to insure appropriate building access to all stories.
2. Where required, lockout and tagout all sources of mechanical and electrical energy according to applicable regulations. Coordinate any lockout/tagout procedures with the Engineer.

    a. Electrical lockout/tagouts shall be performed by a certified electrician.
    b. Provide temporary lighting for clear visibility throughout the work area.
    c. Electrical powered equipment used within the work area shall be individually protected by in-line ground fault circuit interrupters (GFIs).
    d. In areas requiring power washing, all electricity shall be brought in from outside the work area.
    e. The building will be unoccupied and non-energized.

3. Establish decontamination units in areas approved by the Engineer. Refer to the specifications and the Contract Drawings for equipment decontamination area and personnel decontaminant unit construction specifications. Coordinate the timing and exact placement of the decontamination areas and units with the Engineer. Historical exposure monitoring for cleanup activities similar in nature have documented that airborne lead concentrations have been in excess of the established OSHA PELs, therefore the requirements of shower facilities being installed within the personnel decontamination unit, as outlined in 29 CFR 1926.62, the OSHA Lead in Construction Standard, shall be adhered to.
4. Install required shoring as specified.
5. Isolate the work areas to prevent the migration of waste containing ash and dust.

    a. Establish temporary partitions using wood 2" x 4 " framing with 6 mil fire-retardant plastic sheeting on the work area partition side. Existing temporary partitions may be utilized if in acceptable condition.
    b. Provide area air monitoring for ambient dust. Establish two air samplers at the exterior project limits and down wind of the building. Comply with 29CFR 1926.55 for maintaining fugitive ambient dusts below 150 $\mu g/m^3$ by using dust control methods during work activities as specified. Exterior air samples will be collected and submitted to a NYSDOH qualified laboratory for analysis daily.
    c. Pre-clean non-fixed and semi-fixed equipment and apparatus using HEPA vacuuming, or power washing, or wet washing, or a combination of methods. Remove pre-cleaned items to equipment decontamination area and decontaminate according to these specifications.
    d. Remove asbestos-containing materials as specified in Section 02020, lead-containing materials as specified in Section 02030 and hazardous materials as specified in Section 02010.
    e. Comply with decontamination procedures in Section 02078-1.3.
    f. Removed chipped and flaking paint from substrates using wet methods and manual scraping. Comply with the OSHA lead in construction standard (29CFR1926.62) including personal protective equipment, removal and handling procedures and required respiratory protection.
    g. Remove all non-contaminated solid waste from building areas outside of building decontamination limits specified in the contract drawings and dispose of as solid waste.
    h. Conduct a visual inspection of the cleaned areas in the presence of the Engineer and collect random wipe samples from the decontaminated areas.

        1.) Provide access for the Engineer's Representative to all cleaned surfaces.
        2.) An area is considered clean when laboratory analysis of wipe samples demonstrates that the associated area contains less than the specified levels of contaminants, as specified in Section 02078 1.3.
        3.) Re-clean areas as directed, where laboratory analysis demonstrated that areas exceed specified levels.
        4.) After notification by the Engineer that the wipe sample has been determined clean via laboratory analysis, remove physical barriers, provided that these actions will not subject the area to contamination from other work in areas.

    i. Refer to Section 02000 building demolition.
    j. Pack, transport and dispose of all building decontamination wastes, including, but not limited to, contaminated debris, dust, dirt and grime, lead paint chips, wash water, non-decontaminated equipment and apparatus and used decontamination equipment in accordance with all applicable Federal, State and local regulations. Applicable regulations include, but are not limited to the following:

        1.) 29 CFR 1910

2.) 29 CFR 1926
3.) 40 CFR 260-263
4.) 49 CFR 106,107, 171-179
5.) 6 NYCRR 360, 364, 372

k. Ensure the safe and appropriate transport of wash water from the building to the liquid disposal containers.
l. No unauthorized discharges to city sanitary and/or storm sewers or other uncontrolled discharges shall occur.

1.2 BUILDING DECONTAMINATION

A. Decontaminate the building roof using HEPA vacuuming, power washing, mopping, squeegeeing, or wet wiping, or a combination of methods.

1. Remove chipped and flaking paints using power washing, manual scraping and HEPA vacuuming, or a combination of methods.
2. Do not allow wash water to puddle or stand.

B. Water surfactants are to be approved by the engineer prior to use.

C. Collect a maximum of 10 representative wipe samples as directed by the Engineer from the decontaminated building roof surface after the area has been decontaminated and has dried.

1. Collect wipe samples using laboratory supplied sterile gauze pads that have been soaked in distilled water. Allow excess water to run off prior to sampling. Using firm strokes with even hand pressure and a dedicated template, wipe an area of $100cm^2$.
2. Place collected samples in laboratory provided/cleaned glass jars and labeled with the appropriate sample information.
3. Collect one of the 10 collected samples as split samples and submit to the engineer for laboratory analysis using the engineer's laboratory.
4. Keep collected samples cool (approximately 4°C) for no longer than 14 days.
5. Laboratory analyses will be conducted according to NYSDEC's ASP protocol. Deliverables will be ASP Category A. Faxed results are to be provided to the Engineer within 24 hours of sample collection. ASP deliverables are to be provided to the Engineer within 30 days of sample collection. Laboratory will be NYSDOH ELAP/CLP certified for the parameter being analyzed.

D. The roof of the building will be considered decontaminated when laboratory analysis of associated wipe samples indicates that samples contain less than 10ug / $100cm^2$ of toluic acid using EPA method 8270.

E. Contractor is responsible for re-testing where above limits are not met for decontamination.

F. Coordinate the collection of wipe samples with the Engineer.

1.4 W ASTE DISPOSAL

A. Dispose of collected dirt, dust and grime, paint chip debris, wood, contaminated concrete and wash water as hazardous waste.

B. Dispose of asbestos as asbestos waste and lead as lead waste.

C. Dispose of solid wastes outside of the decontamination limits, as solid waste.

D. Dispose of collected water as hazardous waste or as specified.

1.5 CONFINED SPACE.

A. Comply with confined space and permit-required confined space regulations as defined in Title 29, Part 1910, Section 146 of the Code of Federal Regulations (29 CFR 1910.146).

B. Notify the Engineer in writing, of confined spaces that existed were created or eliminated during execution of the Work.

C. Furnish, at no additional cost, personnel and equipment, as directed, to allow the Engineer to enter confined space am permit-required confined space Dl compliance with Title 29, Part 1910, Section 146 of the Code of Federal Regulations (29 *CFB~* 1910.146).

1.6 LAYOUT OUT

A. Examine the contract documents thoroughly and promptly report any errors or discrepancies to the Engineer before commencing the work.

B. Layout the work in accordance with the Contract Documents.

1.7 VIOLATIONS OF SPECIFICATIONS

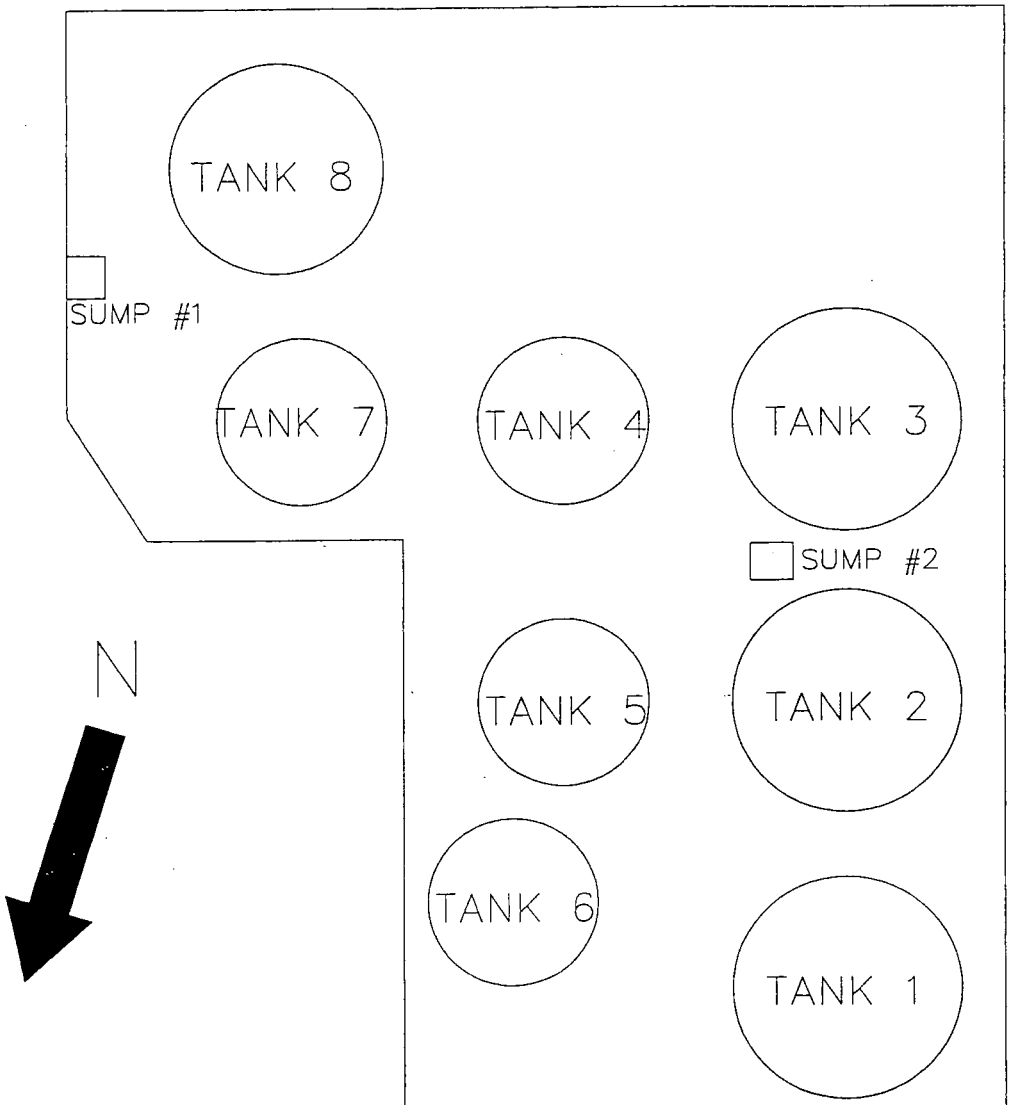
A. Violations of the safety, hygiene, or environmental procedures herein or failure to cooperate with the Engineer shall be grounds for removal of that person from the work site.

DRAWINGS

SITE: SKANEATELES FALLS
CLIENT: SMC
CLIENT JOB#: 99-004
DESCRIPTION: TANK LOCATIONS
SHEET#: T-1

SPEC CONSULTING, LLC
SPEC Consulting, LLC
18 Computer Drive West
Albany, NY 12205
Phone: 518.438.6809
Fax: 518.438.8527

PREPARED BY: S. THOMAS
DATE: 4/26/02
REVIEWED BY: A. MARS
DATE: 4/26/02
SUBJECT: BLDG. DEMO



TANK ID	CAPACITY (gal.)	TANK CONTENTS
TANK 1	8,000	SEDIMENT
TANK 2	8,000	SEDIMENT
TANK 3	8,000	SEDIMENT
TANK 4	6,000	SEDIMENT
TANK 5	6,000	EMPTY
TANK 6	6,000	EMPTY
TANK 7	6,000	SEDIMENT
TANK 8	20,000	SEDIMENT

APPENDIX A

REVISED
AEC-6 SAMPLING AND ANALYSIS PLAN

MOVED TO SECTION 2

APPENDIX B

PRE DEMOLITION ASBESTOS INSPECTION

MOVED TO SECTION 4.0

APPENDIX C

PCB SAMPLING REPORT SUMMARY
TABLE 8

Table 8: PCB Investigation Sampling Results

Sample ID	Sample Location	Matrix	Results (ppb)			
			Aroclor 1248	Aroclor 1254	Aroclor 1260	Date Sampled
B1	Front of Building	Soil	ND	57	ND	11/15/00
B2	Front of Building	Soil	ND	ND	ND	11/15/00
B3	Front of Building	Soil	ND	290	ND	11/15/00
B4	Front of Building, outside fence near Jordan Rd	Soil	ND	25	ND	11/15/00
B5	Front of Building	Soil	ND	1400	ND	11/15/00
B6	Front of Building	Soil	ND	25	ND	11/15/00
B7	Front of Building	Soil	ND	100	ND	11/15/00
B8	Front of Building, outside fence near Jordan Rd	Soil	ND	17000	ND	11/15/00
B9	Front of Building	Soil	ND	870	ND	11/15/00
B10	West of B11, outside fence, near Jordan Rd	Soil	ND	83	ND	11/15/00
B11	Southwest of tank farm, near fence line	Soil	ND	3200	ND	11/15/00
B12	Southwest of tank farm, west of outfall 003	Soil	ND	ND	ND	11/15/00
B13	Southern portion of property	Soil	ND	95	ND	11/15/00
B14	South of tank farm, near outfall 003	Soil	ND	270	ND	11/15/00
B15	Southwest of Landfill and MW 2I	Soil	ND	130	43	11/15/00
B16	Southern portion of property (near fence line)	Soil	ND	320	ND	11/15/00
B17	Southern portion of property (near fence line)	Soil	ND	ND	ND	11/15/00
RD1	Across Jordan Rd	Soil	ND	21	ND	11/15/00
RD2	Across Jordan Rd	Soil	ND	ND	ND	11/15/00
T1	Telephone Pole outside fence	Soil	ND	42	ND	11/15/00
T2	Telephone Pole outside fence	Soil	ND	200	ND	11/15/00
T3	Telephone Pole outside fence	Soil	ND	ND	ND	11/15/00
TF1	South Plant, northeast corner of tank farm	Soil	ND	ND	ND	11/16/00
TF2	South Plant, southwest side of tank farm	Soil	ND	ND	ND	11/16/00
TF3	South Plant, east of tank farm, next to guardrail	Soil	ND	54	16	11/16/00

Sample ID	Sample Location	Matrix	Results (ppb)			
			Aroclor 1248	Aroclor 1254	Aroclor 1260	Date Sampled
TF4	South Plant, southeast side of tank farm	Soil	ND	ND	ND	11/16/00
TF5	South Plant, south side of tank farm	Soil	ND	ND	ND	11/16/00
TF6	South Plant, northwest corner of tank farm	Soil	ND	ND	ND	11/16/00
OT1	Old Oil Tank Location, in front of building	Soil	ND	ND	ND	11/16/00
OT2	Old Oil Tank Location, in front of building	Soil	ND	ND	ND	11/16/00
NP1	North Plant, north end	Soil	700	ND	ND	11/16/00
NP2	North Plant, west side	Soil	ND	220	38	11/16/00
NP3	North Plant, south end	Soil	ND	2600	480	11/16/00
LF1	Landfill, west side	Soil	ND	ND	ND	11/16/00
LF2	Landfill, southwest end	Soil	ND	ND	ND	11/16/00
LF3	Landfill, southwest corner	Soil	ND	ND	ND	11/16/00
LF4	Landfill, southeast side	Soil	ND	ND	ND	11/16/00
LF5	Landfill, southeast corner	Soil	ND	ND	ND	11/16/00
RF1	Old Roof	Roof Material	ND	2900	ND	11/15/00
RF2	Old Roof	Roof Material	ND	180	ND	11/15/00
RF3	Old Roof	Roof Material	ND	180	ND	11/15/00
RF4	Old Roof	Roof Material	ND	2100	1000	11/15/00
RF5	Old Roof	Roof Material	ND	300	ND	11/15/00
ROOF SED-1	Old Roof	Roof Sediment	ND	3300	ND	11/17/00
ROOF SED-2	Old Roof	Roof Sediment	ND	7700	ND	11/17/00
ROOF SED-3	Old Roof	Roof Sediment	ND	13000	ND	11/17/00
W1	Monitoring Well 2I	Soil	ND	ND	ND	11/16/00
TESTPIT 2	South Plant, south of TF5	Water	3	8.9	1.1	11/20/00
TESTPIT 2	South Plant, south of TF5	Soil	ND	3900	ND	11/20/00
ALCOVE-STORM BASIN	Front of Building - Alcove Stormbasin	Water	ND	ND	ND	11/20/00
ALCOVE-STORM BASIN	Front of Building - Alcove Stormbasin	Sediment	ND	8600	2300	11/20/00
CHEST A	Inside Building	Sediment	3200	6300	840	11/20/00
CHEST B	Inside Building	Sediment	1500	3600	530	11/20/00
R2BC	Raceway Basement Concrete - sample from concrete boring hole	Sediment	43	57	ND	11/20/00
T1	Tank 1 - tank farm	Sediment	ND	860	ND	11/17/00
T2	Tank 2 - tank farm	Sediment	ND	720	ND	11/17/00

Sample ID	Sample Location	Matrix	Results (ppb)			
			Aroclor 1248	Aroclor 1254	Aroclor 1260	Date Sampled
T3	Tank 3 - tank farm	Sediment	ND	420	ND	11/17/00
TANK 4 - OUTSIDE	Tank Farm Tank 4 - tank farm	Sediment	ND	700	360	11/20/00
T7	Tank Farm Tank 7 - tank farm	Sediment	ND	170	ND	11/17/00
WHITE TANK	Tank Farm	Sediment	ND	2400	480	11/20/00
TANK FARM SUMP 1	Tank Farm Sump - sump toward stream	Sediment	ND	290	ND	11/21/00
TANK FARM SUMP 2	Tank Farm Sump - Back of tank farm	Sediment	ND	160000	ND	11/21/00
TANK 3 - INSIDE BLDG	Tank in Building Basement floor	Water	ND	ND	ND	11/20/00
TANK 4 - ARCHWAY	Pipe in Building Basement – thought it was a tank	Water	ND	ND	ND	11/20/00
RACEWAY BASEMENT JUNCTION	Open raceway pipe in Basement at pipe junction	Sediment	ND	37	ND	11/17/00
TRENCH DRAIN	Basement - 5 point composite	Sediment	5700	11000	1600	11/17/00
C-1	Creek Sediments - east side of Creek	Soil	ND	ND	ND	11/16/00
C-2	Creek Sediments - west side of Creek	Soil	ND	220	48	11/16/00
SUM #2 0"-6"	Tank Farm Sump	Soil	ND	850	ND	1/2/01
SUM #2 6"-18"	Tank Farm Sump	Soil	ND	50	ND	1/2/01

NO SURROGATES INCLUDED
ND - Not Detected

Table 9: NYSDEC Split Sample Results

NYSDEC SAMPLE ID	IT CORPORATION SAMPLE ID	SAMPLE LOCATION	PCB DETECTION (ppb)
C-2	C-2	South Plant, West of Creek	Aroclor 1260 – 94 ppb
TF-1	TF1	Soil Boring TF-1 (2-8')	<42 ppb
Roof 1	ROOF SED-1	3rd Level – Old Roof	Aroclor 1254 – 3500 ppb Aroclor 1260 – 1400 ppb
Roof 2	ROOF SED-2	2nd Level – Old Roof	Aroclor 1254 – 13000 ppb Aroclor 1260 – 5200 ppb
Roof 3	ROOF SED-3	1st Level – Old Roof	Aroclor 1254 – 7300 ppb Aroclor 1260 – 4200 ppb
TD-1	TRENCH DRAIN	Trench Drain	Aroclor 1254 – 2000 ppb Aroclor 1260 – 720 ppb

STAUFFER MANAGEMENT COMPANY

SKANEATELES FALLS SITE
4512 JORDAN ROAD
SKANEATELES FALLS, NEW YORK

REMOVAL OF TANKS, PROCESS VESSELS
&
PROCESS PIPING

December 2002

Prepared for:

Stauffer Management Co.
1800 Concord Pike
Wilmington, DE 19850

Prepared by:

18 Computer Drive West
Albany, NY

SPEC Consulting Project #99-004

Table of Contents

1.0 INTRODUCTION

This Work Scope has been prepared by SPEC Consulting for the Stauffer Management Company (SMC) Skaneateles Falls Site on Jordan Road in Skaneateles Falls, NY. The purpose of this Work Scope is to identify site-specific tasks associated with AEC-6 Phase I of the building demolition. More specifically, it will address cleaning and removal of on-site tanks and process piping. This work is to be conducted separate from other Phase I Work Activities presented in the Building Demolition Work Plan, Asbestos Abatement Specifications, and Building Demolition Technical Specifications.

2.0 BACKGROUND INFORMATION

The Stauffer Management Company (SMC) Site is located at 4512 Jordan Road in the Town of Skaneateles, County of Onondaga, in the State of New York. Manufacturing operations at the Stauffer site ceased in the early 1980's. Since the cessation of manufacturing operations, the Main Plant Building has been primarily vacant with its function limited to the operation of a water treatment system and occupancy by a site operator. Currently, environmental remediation operations at the site are in progress including a new groundwater treatment plant that has been constructed on the property and is currently in operation. The existing building is no longer required for water treatment operations and the company has no interest, at this time, in renovating the Main Plant Building. Therefore, SMC is proposing to demolish the Main Plant Building in accordance with the approved schedule.

The work addressed in this Scope includes the removal of tank contents, rinsing of tanks, disposal of tanks, and removal of process piping associated with the Main Plant Building.

3.0 TANKS AND CHESTS

Three concrete tanks (chests) are located within the building. Two of the chests currently contain dry solids, while the third (Chest A) has sludge. Five aboveground storage tanks remain outside of the building and several former treatment vessels inside the building. The five exterior vertical steel storage tanks were used to store treated water from the Main plant Building treatment system. These tanks are currently open with minor accumulations of water and some residual sediment. The water in these tanks will be sent to the on-site treatment system. PCB's have been

identified in the sediment from these tanks at levels ranging from <1ppm to 2.4 ppm. It is therefore likely that standing liquids and rinse water will have low-level PCB's as well, however the on-site treatment system is capable of treating the PCBs at the levels likely to be encountered. The Contractor selected to perform the work will be responsible for characterization and disposal of all sediments. With the sediments removed, the tanks will be rinsed with biosolve, or equivalent, pressure washed, and visually inspected to confirm that they are clean prior to being cut and sent off site for recycling. These same procedures will be used for process vessels inside the building.

The Contractor will be responsible for characterization and removal of the solids in the concrete chests. The contractor will advise SMC of the proposed disposal facility for sediments and solids. All existing analytical data for these chests will be provided. With the contents removed, the chests will be rinsed with biosolve, and then power washed. The wash water is to be collected and sent to the on-site treatment plant. The collected solids will be shipped off-site for disposal using either a non-hazardous waste manifest, or a hazardous waste manifest, whichever is appropriate.

Upon completion of the cleaning, the contractor will be required to collect PCB's wipe samples. Five (5) wipe samples will be analyzed for PCBs in accordance with EPA method 8082. One wipe sample will be collected from each wall and one from the floor, using laboratory supplied sterile gauze pads that have been soaked in hexane. Using firm strokes with even hand pressure and a dedicated template, an area of an individual piece of equipment, floor or wall will be wiped in an area of $100cm^2$.

Should sample results indicate that PCB are below 10 ppm, work will cease. If sample results indicate that PCB's are present above 10 ppm, SMC will decide whether to attempt decontamination, or if demolition and off-site disposal is the most prudent approach.

4.0 PROCESS PIPING

SPEC Consulting, LLC has conducted a piping survey of the Main Plant Building. While domestic water, steam supply and condensate, sanitary, air, sprinkler, and electrical conduit were included in the survey, this section addresses process piping only.

Piping traced back to process equipment or vessels has been marked with red paint and ribbon. There appears to be a total of 680 lineal feet of piping to be removed under this section. In general:

- The breaking of the lines will be completed in accordance with the appended Line Breaking Specification.
- Any liquids present in the process piping will be drummed for characterization and disposal.
- Any section of piping found to contain liquids will require rinsing or cleaning, at a minimum.
- If hard chemical deposits are observed in the piping, it shall be placed into a container for off site disposal. Contractor will inform SMC of this conditions so that proper characterization of the material can be accomplished.
- If piping is clean and free of liquids and liquids, it will be set aside for recycling or disposal as general C&D debris under an other portion of the work.

All other piping will be handled as part of building demolition.

5.0 BIDDING

Summary of Work

1. Task No. I-A – Develop Health and Safety Plan (HASP)

    a. Contractor will develop a Health and Safety Plan (HASP) covering all fieldwork for the bid tasks identified herein. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, and hazardous material handling. The HASP will include provisions for compliance with these specifications, OSHA and any applicable Federal, State, or Local regulations. The HASP will address all notification, permitting, training and documentation items involved in these issues.

2. Task No. I-B – Remove Solids From Tanks And Process Vessels.

    a. The interior of the tanks have been sampled for PCB's. Appropriate Personal Protective Equipment must be used when performing work.
    b. Comply with all Confined Space Entry and Lockout/Tagout Procedures when working in tanks and vessels.

3. Task No. I-C – Rinse Interior of Tanks and Vessels With Biosolve and Pressure Wash.

   a. Collect rinse and wash water and transfer to on-site water treatment system.

4. Task No. I-D – Perform PCB Wipe Tests for Concrete Chests

   a. Contractor will collect a minimum of five wipe samples from each concrete chest using laboratory supplied sampling set-ups. Complete proper Chain-of-Custody and submit samples to laboratory.

5. Task No. I-E – Other/Miscellaneous

   a. Contractor will use this Task to bid any item which is required for the completion of the lead abatement and all related work but which is not included in the above numbered Tasks. Contractor will provide details for any item bid under this Task.

SAFETY

Contractor will develop a Health and Safety Plan covering all fieldwork for the bid tasks as described in the separate phases of the project. The HASP will provide the frame work for compliance with all applicable federal, state and local regulations involving worker's safety and health, environmental issues, hazardous material handling and asbestos. The HASP will address all notification, permitting, training and documentation items involved in these issues.

EXTRA WORK

Any and all changes to design must be approved by the Project Manager. A **FIELD CHANGE REQUEST** form must be signed by the Project Manager or his/her representative prior to any out of scope work. **If any work is initiated prior to a signed FIELD CHANGE REQUEST the bidder shall do so at his/her cost.**

PERMITS

Each morning work authorization and any other additional permits shall be executed prior to proceeding with the actual work. Regular work hours are from 7:00 AM to 6:00 PM. Daily work permits will be required. Permits will be issued by the task supervisor at 7:00 AM daily. Special Permits such as hot work, will be required.

GENERAL REQUIREMENTS

A contractor job trailer will be allowed on the plant site. Space will be provided in a suitable location. This area will be accessible from the contractor parking area and the contractor employees must be transported from this area to the project site. Contractor Employees are not to be transported in the back of trucks, seating must be available to the personnel being transported. Coffee breaks and

lunches are not to be taken in the demolition areas. Contractor employees must take their breaks and lunches in the contractor area.

DRAWINGS

The following drawings are included as part of this project:

DWG #	TITLE	DATE
D-1	Building Removal Site Plan	12/5/99
D-2	Building Removal Plan	12/5/99
D-3	Building Removal Details	12/5/99
T-1	Tank Location	4/26/02
F-1	Building Floor Plan	5/17/00

SECTION VIII. SCHEDULE

All work must be completed in accordance with the approved schedule.

BID FORM
BUILDING DEMOLITION
Skaneateles Falls Tank and Process Piping Removal

To: Stauffer Management Company

From: _____
(Name of Bidder)

Date: _____

If this proposal is accepted within thirty (30) days, we, the undersigned, hereby agree to furnish and install all labor, materials, and all other items necessary to perform this work at SMC Site located in Skaneateles Falls, NY in accordance with Instructions to Bidder's, which we acknowledge receiving for the Lump Sum amount of:

Break prices down on the attached Schedule of Values. This completed document must be included in the bid.

Phase I

Lump Sum Bid_____Dollars	($	)
Unit Price Off Site Disposal - Non-Hazardous Tank/Vessel Solids	($	)55-gal drum
Unit Price Off Site Disposal - Hazardous Tank/Vessel Solids	($	)55-gal drum
Unit Price Off Site Disposal – Process Piping – Solid Waste	($	)/ton
Unit Price Off Site Disposal - Process Piping – C&D Debris	($	)/ton

We further agree to execute with you a contract covering said work on the Lump Sum Form of Contractor enclosed with the Letter of Invitation.

We acknowledge receipt of the following Addenda and have included the costs associated therewith in our Lump Sum price.

As provided for in the Instruction to Bidders, we shall commence work ____calendar days after receipt of purchase order and complete all work prior to _____.

The cost of all required insurance is included in the foregoing proposal.

In the event we are the successful bidder, we agree as a condition of this bid to submit evidence satisfactory to the Owner of our financial ability to perform all the work as covered by this bid.

Bidder is required to issue to SMC Corporation their rate schedule and any and all charges that would be used to calculate change orders, labor rates, equipment, stationary, phone costs, etc.

Signed:_____

Title: _____

Date: _____

STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS
TANK, PROCESS VESSEL, AND PROCESS PIPING
SCHEDULE OF VALUES

PAYMENT ITEM	DESCRIPTION	UNITS	COST
Task	**Tanks Vessels and process Piping**		
I-1	Mobilization Costs	Lump Sum	
I-2	Permitting Costs and Fees	Lump Sum	
I-3	Health and Safety Plan Development and Implementation	Lump Sum	
I-4	Work Plan Implementation	Lump Sum	
I-5	Temporary Facilities	Lump Sum	
I-6	Removal of Solids	Lump Sum	
I-7	Disposal of Solids – Non Hazardous	Per 55-Gal Dr	
I-8	Disposal of Solids -- Hazardous	Per 55-Gal Dr	
I-8	Removal of Process Piping	Lump Sum	
I-9	Transportation and Disposal of Piping – Solid Waste	Per Pound	
I-10	Transportation and Disposal of Piping – C&D Debris	Per Pound	
I-11	Other/Miscellaneous (Provide details below).	Unit Cost	
I-12	Demobilize	Unit Cost	
I-13	Final Report for NYSDEC submittal (No. of Copies 20)	Unit Cost	
	SUB TOTAL		
	Credit to SMC on sale of scrap/recyclable items if authorized.	Lump Sum	
	TOTAL PRICE - PHASE I		

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☒ YES ☐ NO Profile Number: _____

☐ Hazardous ☒ Non-Hazardous ☐ TSCA Renewal Date: _____

A. Waste Generator Information

1. Generator Name: Stauffer Management Company
2. SIC Code:
3. Facility Street Address:Jordan Road
4. Phone: 315-685-5717
5. Facility City: Skaneateles Falls
6. State/Province: New York
7. Zip/Postal Code: 13153
8. Generator USEPA/FED ID #: NYD004659955
9. County: Onondaga
10. State/Province ID#:
11. Customer Name: Stauffer Management Company
12. Customer Phone: 518-438-6809
13. Customer Contact: Tom Haldas
14. Customer Fax: 518-438-8527
15. Billing Address: 1800 Concord Pike, Wilmington, DE 19850-5437

B. Waste Stream Information

1. DESCRIPTION

a. Name of Waste: Non haz Demolition Debris

b. Processing Generating Waste :Building demolition

c. Color: brown/black,grey

d. Strong odor (describe): none

e. Physical state @ 70°F: ☒ Solid ☐ Liquid ☐ Gas ☐ Sludge ☐ Other _____

f. Layers: ☒ Single Layer ☐ Multi-Layer

g. Free liquid range: 0 to0.5 %

h. pH: Range _____to n/a

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☐ ≥200°F ☒Not Applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis)

Constituents	Concentration Range	Constituents	Concentration Range
concrete	65% - 70%		
Steel	20% - 25%		
Wood	1%-3%		
roofing	3%-5%		
ther (dirt, glass, flooring)	4%-5%		

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐ Oxidizer ☐ Pyrophoric ☐ Explosive ☐ Radioactive
☐ Carcinogen ☐ Infectious ☐ Shock Sensitive ☐ Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA Notification? (list in Section B.l.) ☐ YES ☒ NO

m. Does the waste represented by this profile contain dioxins? (list in B.1.j) ☐ YES ☒ NO

n. Does the waste represented by this profile contain asbestos? ☐ YES ☒ NO
If yes ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene? ☐ YES ☒ NO
If yes, concentration _____ ppm
Is the waste subject to benzene waste operations NESHAP ☐ YES ☒ NO

p. Is the waste subject to RCRA Subpart CC controls? ☐ YES ☒ NO
If no, does the waste meet the organic LDR Exemption? ☐ YES ☒ NO
If no does the waste contain <500 ppmw volatile organic (VO)? ☐ YES ☒ NO
Volatile organic concentration_____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleteing substance? ☐ YES ☒ NO

r. Does the waste contain debris? (list in Section B.1.j.) ☒ YES ☐ NO

s. Is the waste subject to controls as a Group 1 wastewater or residual under the HON? ☐ YES ☒ NO
If yes, is it a Table 8 ☐ or Table 9 ☐ compound?

2. **Quantity of Waste**
Estimated Annual Volume12,000 ☒ tons ☐ Yards ☐ Drums ☐ Other (specify) _____

3. **Shipping Information**
Packaging
☒Bulk Solid: Type/SizeTruck
☐Drum: Type/Size55gal/metal
☐ Bulk Liquid, Type/Size _____
☐ Other _____

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

b. Shipping frequency: Units 12 tons Per: ☐Month ☐Quarter ☐Year ☒One Time ☐Other_____

Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e and f) ..... ☐ YES ☒ NO

Reportable quantity (lbs./kgs):_____ e. Hazardous Class/ID#: _____

USDOT Shipping Name _____

g. Personal Protective Equipment Requirements None

h. Transporter/Transfer Station

C. Generator's Certification (Please check appropriate responses, sign and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2 ..... ☐ YES ☒ NO

a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U)

b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (if yes, list in Section. B.I.j) ..... ☐ YES ☒ NO

c. Does this waste contain debris? (if yes, list size and type in Chemical Composition- B.I.) ..... ☒ YES ☐ NO

2. Is this a state hazardous waste? ..... ☐ YES ☒ NO

Identify ALL state hazardous waste codes _____

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ..... ☒ YES ☐ NO

If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up for activity. For state mandated clean-up, provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ..... ☐ YES ☒ NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (if yes, list in Chemical Composition-B.I.j.) ..... ☐ YES ☒ NO

a. If yes, were the PCBs imported into the U.S.? ..... ☐ YES ☒ NO

6. Do the waste profile sheet and all the attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ..... ☒ YES ☐ NO

Will all- changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ..... ☒ YES ☐ NO

☐ Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: _____ Title: _____

Name (Type or Print) Lee Erickson Company Name SMC Date_____

☒ Check if additional information is attached. Indicate the number of attached pages. _____

D. Waste Management's Decision

1. Management Method ☐ Landfill ☐ Non-hazardous Solidification ☐Bioremediation ☐ Incineration ☐ Hazardous Stabilization ☐ Other (Specify)

2 Proposed Ultimate Management Facility_____

3. Precautions, Special Handling Procedures, or Limitation on Approval _____

4. Waste Form: _____ 5. Source: _____ 6. System Type: _____

Special Waste Decision:_____ ☐ Approved ☐ Disapproved

Salesperson's Signature: _____ Date: _____

NIAGARA MOHAWK
(REPUTED OWNER)

DECON PAD

FOUNDATION RUIN

SUBSTATION

SKANEATELES CREEK

RECOVERY WELL PIPING

EXISTING TP SUMP (SEE NOTE 7)

SHADOWS

CONC TANK

MAIN PLANT BLDG.
(TO BE REMOVED)

8" HDPE WATERLINE

4" HDPE GASLINE

SPARE

LEACH FIELD

OLD WATER SHOUTOFF VALVE

OLD GAS SHOUTOFF VALVE

NEW FENCE

OLD RAILROAD BED

WATER SHOUTOFF VALVE

GAS SHOUTOFF VALVE

BROKEN PAVEMENT

JORDAN ROAD

CENTERLINE HIGHWAY

RAPIDS

RUIN

BRIDGE RUINS

REFERENCE:
BASE MAP SOURCE: O'BRIEN & GERE

MAP NOTES:

1. MAPPING ADOPTED FROM TOPOGRAPHIC SURVEY MAP PREPARED BY C.T. MALE ASSOCIATES, P.C. 300 GATEWAY PARK DRIVE, P.O. BOX 3246, SYRACUSE, NY 13220.
2. NORTH ORIENTATION AND COORDINATES BASED ON N.Y.S. PLANE COORDINATE SYSTEM, CENTRAL ZONE.
3. ELEVATION DATUM NAVD 1988.
4. BOUNDARY INFORMATION BASED ON MAP OF SURVEY DATED JULY 16, 1993, PREPARED BY ANDERSON SURVEY.

LEGEND

- PROPERTY LINE
- LIMITS OF CREEK
- SWALE
- FENCE
- GRAVEL ROAD
- TREE LINE
- 710 — ELEVATION CONTOUR
- APPROX. LOCATION OF 100 YEAR FLOOD BOUNDARY
- E — ELECTRIC
- W — WATER/SPRINKLER SYSTEM
- S — SANITARY SEWER
- WETLAND AREA (APPROX. LOCATION) TO BE CONFIRMED

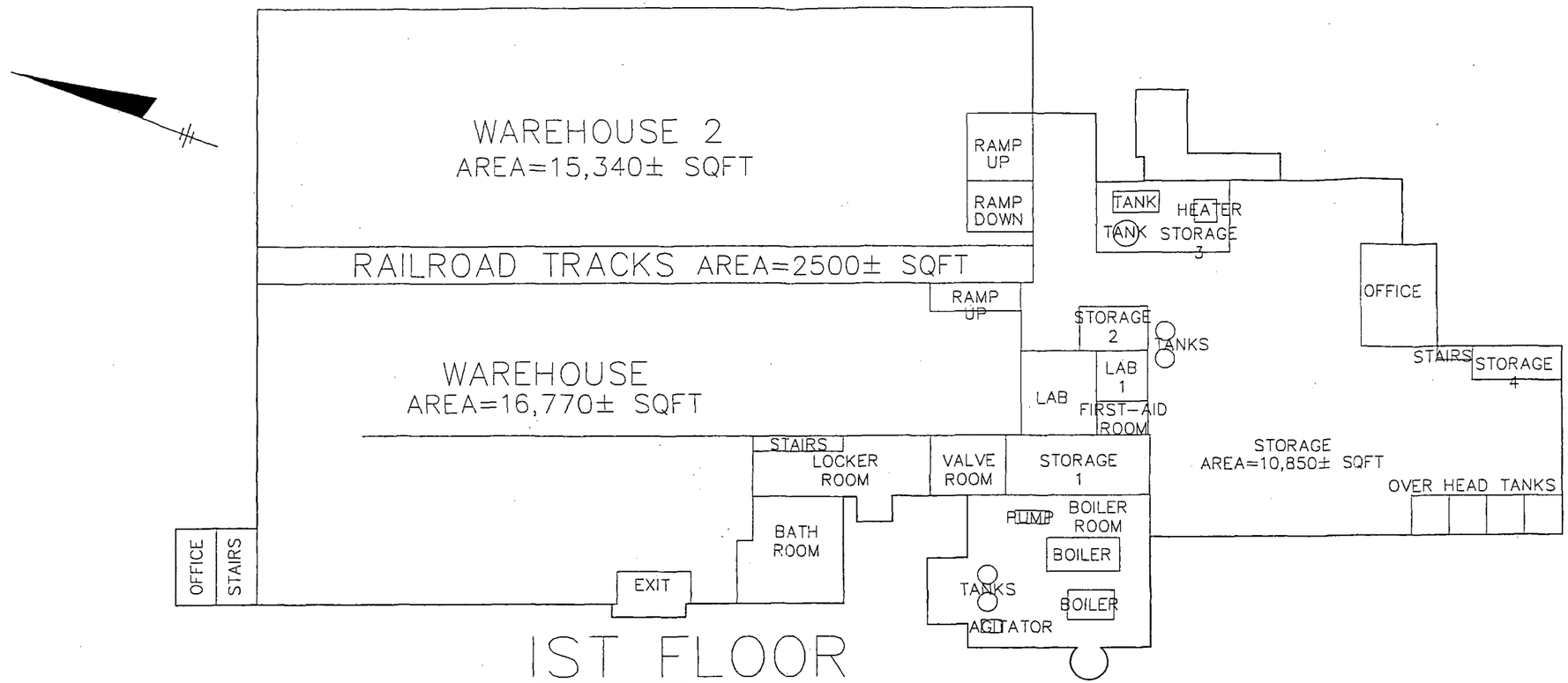
SPEC CONSULTING, LLC
SPEC Consulting, LLC
18 Computer Drive West
Albany, NY 12205
Phone: 518.438.6809
Fax: 518.438.8527

W.O.	No.	REVISION	DATE	DRN CHK.	APR.

DESIGN ENGINEER	AM	4/15/02	APPROVED
DESIGN CHECK	JB	4/15/02	
DRAWN BY	ST	4/15/02	
DRAWING CHECK	AM	4/15/02	DATE

BUILDING DEMOLITION
STAUFFER MANAGEMNET COMPANY
SKANEATELES FALLS, NEW YORK
BUILDING DEMOLITION SITE PLAN

SCALE	DRAWING No.	SHEET	REV. No.
N.T.S.	D-1	1 OF 1	—



IST FLOOR

ROOM AREAS

FLOOR	LOCATION	AREA(SQFT)
1st FLOOR	WAREHOUSE	16,770±
1st FLOOR	WAREHOUSE 2	15,340±
1st FLOOR	RAILROAD TRACKS	2,500±
1st FLOOR	LOCKER ROOM	819±
1st FLOOR	BATH ROOM	945±
1st FLOOR	VALVE ROOM	392±
1st FLOOR	BOILER ROOM	2,647±
1st FLOOR	STORAGE 1	742±
1st FLOOR	STORAGE 2	262±
1st FLOOR	STORAGE 3	820±
1st FLOOR	STORAGE 4	260±
1st FLOOR	STORAGE	10,850±
1st FLOOR	OFFICE (TOTAL)	956±
1st FLOOR	LAB	550±
1st FLOOR	LAB 1	225±
2nd FLOOR	LAB	1,496±
2nd FLOOR	LAB 1	425±
2nd FLOOR	HOOD ROOM	151±
2nd FLOOR	ELECTRICAL CLOSET TOTAL (EC)	148±
2nd FLOOR	OFFICES (TOTAL)	4,618±
2nd FLOOR	BATH ROOMS	295±
2nd FLOOR	RECEPTION AREA	363±
2nd FLOOR	STORAGE	10,086±
2nd FLOOR	STORAGE 1	878±
2nd FLOOR	STORAGE 2	1,049±
2nd FLOOR	STORAGE 3	837±

ROOM AREAS

FLOOR	LOCATION	AREA(SQFT)
2nd FLOOR	STORAGE 4	5,031±
2nd FLOOR	STORAGE 5	1,850±
2nd FLOOR	MANUFACTURING	2,835±
2nd FLOOR	MCC	253±
2nd FLOOR	QUALITY CONTROL (QC)	230±
2nd FLOOR	LAB 2	636±
2nd FLOOR	LAB 3	844±
2nd FLOOR	LAB 4	151±
2nd FLOOR	SCREEN ROOM	349±
BASEMENT/SUB	STORAGE	897±
BASEMENT/SUB	STORAGE 1	895±
BASEMENT/SUB	STORAGE 2	2,697±
BASEMENT/SUB	STORAGE 3	725±
BASEMENT/SUB	STORAGE 4	362±
BASEMENT/SUB	STORAGE 5	3,000±
BASEMENT/SUB	CONC. TANK	300±
BASEMENT/SUB	CONC. TANK 1	408±
BASEMENT/SUB	MANUFACTURING	3,153±
BASEMENT/SUB	ELECTRICAL ROOM	875±

SPEC PROJECT #99-004

SPEC CONSULTING, LLC
SPEC Consulting, LLC
18 Computer Drive West
Albany, NY 12205
Phone: 518.438.6809
Fax 518.438.8527

W.O.	No.	REVISION	DATE	DRN.	CHK.	APR.

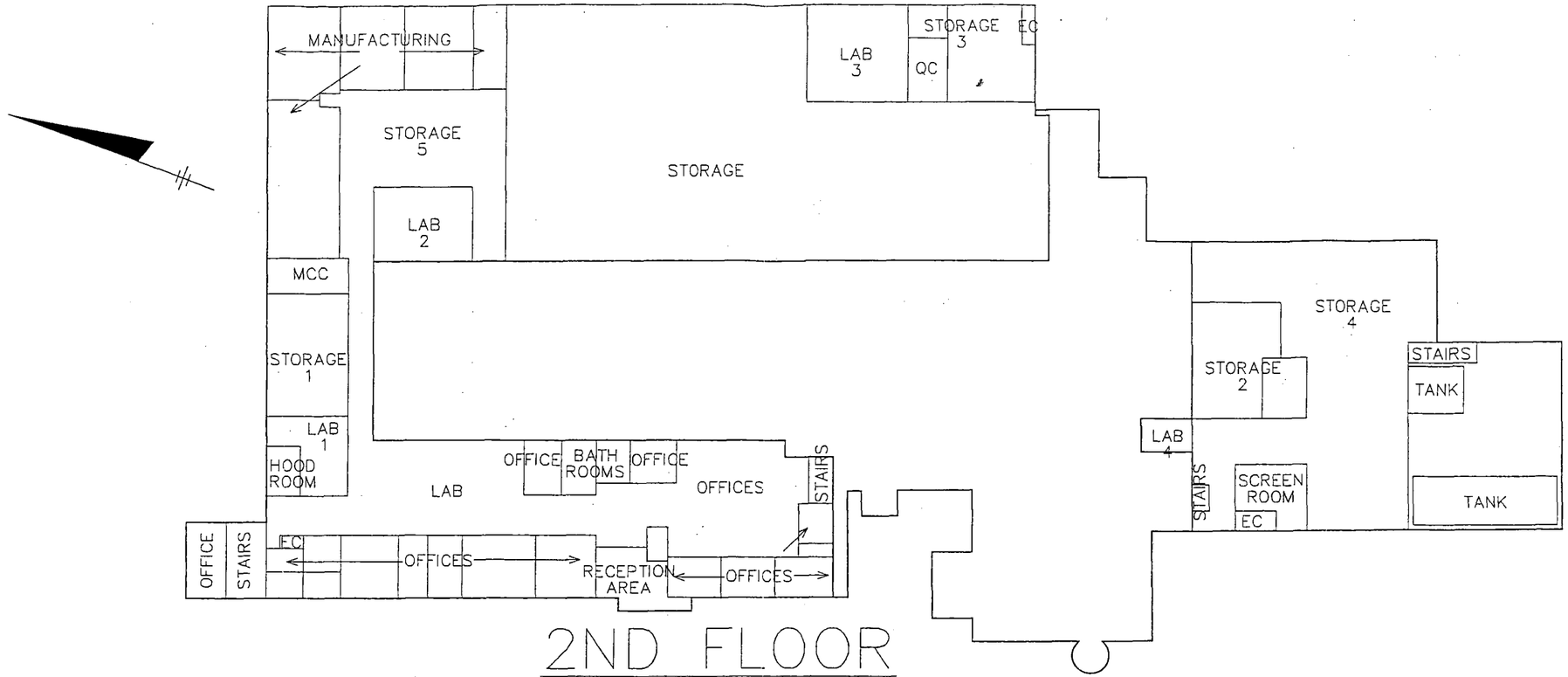
DRAWING STATUS

FOR REFERENCE ONLY

DESIGN ENGINEER	AM	5/10/02	APPROVED
DESIGN CHECK	JB	5/10/02	
DRAWN BY	ST	5/10/02	
DRAWING CHECK	AM	5/10/02	DATE

BUILDING DEMOLITION
STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NEW YORK
BUILDING FLOOR PLAN

SCALE	DRAWING No.	SHEET	REV. No.
N.T.S.	F-1	1 OF 3	–



2ND FLOOR

ROOM AREAS

FLOOR	LOCATION	AREA(SQFT)
1st FLOOR	WAREHOUSE	16,770±
1st FLOOR	WAREHOUSE 2	15,340±
1st FLOOR	RAILROAD TRACKS	2,500±
1st FLOOR	LOCKER ROOM	819±
1st FLOOR	BATH ROOM	945±
1st FLOOR	VALVE ROOM	392±
1st FLOOR	BOILER ROOM	2,647±
1st FLOOR	STORAGE 1	742±
1st FLOOR	STORAGE 2	262±
1st FLOOR	STORAGE 3	820±
1st FLOOR	STORAGE 4	260±
1st FLOOR	STORAGE	10,850±
1st FLOOR	OFFICE (TOTAL)	956±
1st FLOOR	LAB	550±
1st FLOOR	LAB 1	225±
2nd FLOOR	LAB	1,496±
2nd FLOOR	LAB 1	425±
2nd FLOOR	HOOD ROOM	151±
2nd FLOOR	ELECTRICAL CLOSET TOTAL (EC)	148±
2nd FLOOR	OFFICES (TOTAL)	4,618±
2nd FLOOR	BATH ROOMS	295±
2nd FLOOR	RECEPTION AREA	363±
2nd FLOOR	STORAGE	10,086±
2nd FLOOR	STORAGE 1	878±
2nd FLOOR	STORAGE 2	1,049±
2nd FLOOR	STORAGE 3	837±

ROOM AREAS

FLOOR	LOCATION	AREA(SQFT)
2nd FLOOR	STORAGE 4	5,031±
2nd FLOOR	STORAGE 5	1,850±
2nd FLOOR	MANUFACTURING	2,835±
2nd FLOOR	MCC	253±
2nd FLOOR	QUALITY CONTROL (QC)	230±
2nd FLOOR	LAB 2	636±
2nd FLOOR	LAB 3	844±
2nd FLOOR	LAB 4	151±
2nd FLOOR	SCREEN ROOM	349±
BASEMENT/SUB	STORAGE	897±
BASEMENT/SUB	STORAGE 1	895±
BASEMENT/SUB	STORAGE 2	2,697±
BASEMENT/SUB	STORAGE 3	725±
BASEMENT/SUB	STORAGE 4	362±
BASEMENT/SUB	STORAGE 5	3,000±
BASEMENT/SUB	CONC. TANK	300±
BASEMENT/SUB	CONC. TANK 1	408±
BASEMENT/SUB	MANUFACTURING	3,153±
BASEMENT/SUB	ELECTRICAL ROOM	875±

SPEC PROJECT #99-004

SPEC CONSULTING, LLC
SPEC Consulting, LLC
18 Computer Drive West
Albany, NY 12205
Phone: 518.438.6809
Fax: 518.438.8527

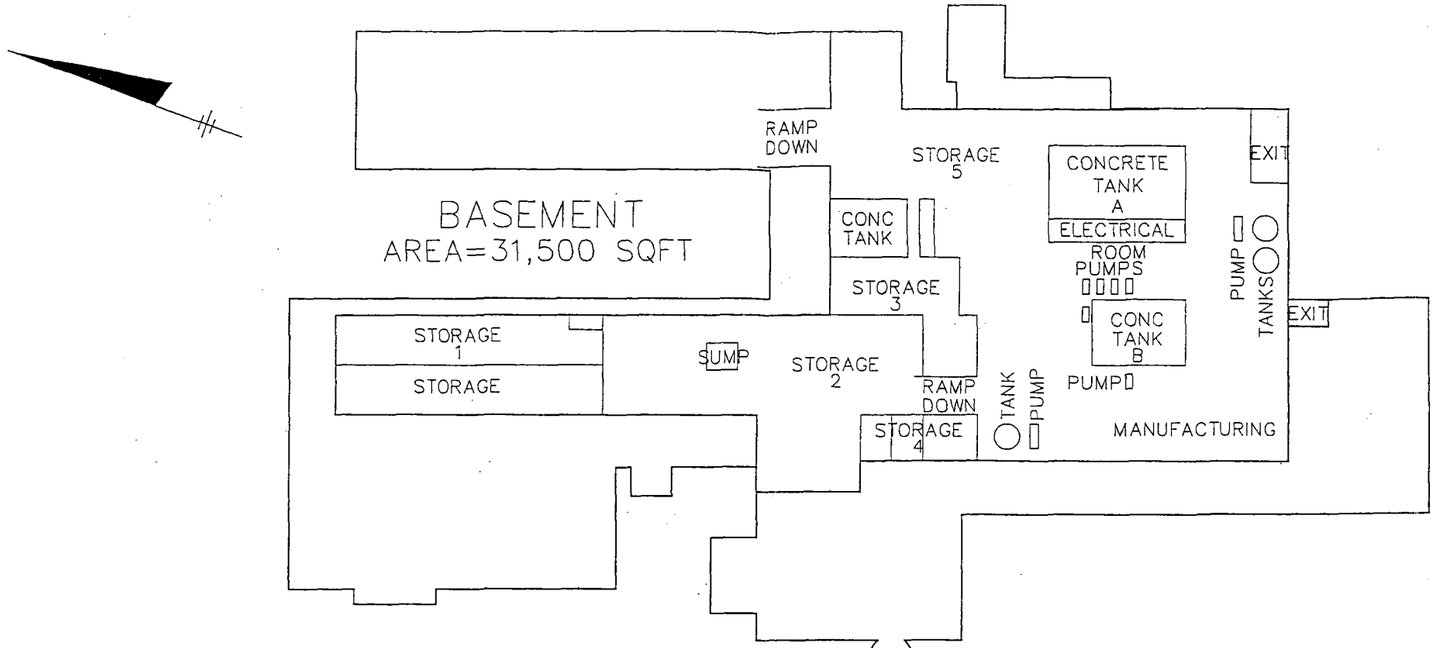
W.O.	No.	REVISION	DATE	DRN.	CHK.	APR.

DRAWING STATUS
FOR REFERENCE ONLY

DESIGN ENGINEER	AM	5/10/02	APPROVED
DESIGN CHECK	JB	5/10/02	
DRAWN BY	ST	5/10/02	
DRAWING CHECK	AM	5/10/02	DATE

BUILDING DEMOLITION
STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NEW YORK
BUILDING FLOOR PLAN

SCALE	DRAWING No.	SHEET	REV. No.
N.T.S.	F-1	2 OF 3	-



BASEMENT/SUB-BASEMENT

ROOM AREAS

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BASEMENT/SUB	MANUFACTURING	3,153±
BASEMENT/SUB	ELECTRICAL ROOM	875±

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Fax: 518.438.8527

W.O.	No.	REVISION	DATE	DRN.	CHK.	APR.

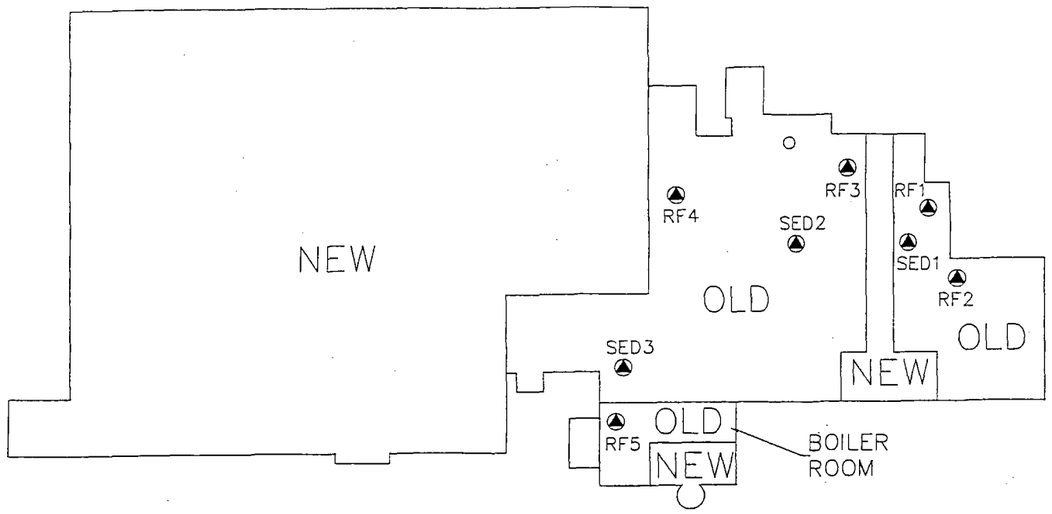
DRAWING STATUS

FOR REFERENCE ONLY

DESIGN ENGINEER	AM	5/10/02	APPROVED
DESIGN CHECK	JB	5/10/02	
DRAWN BY	ST	5/10/02	
DRAWING CHECK	AM	5/10/02	DATE

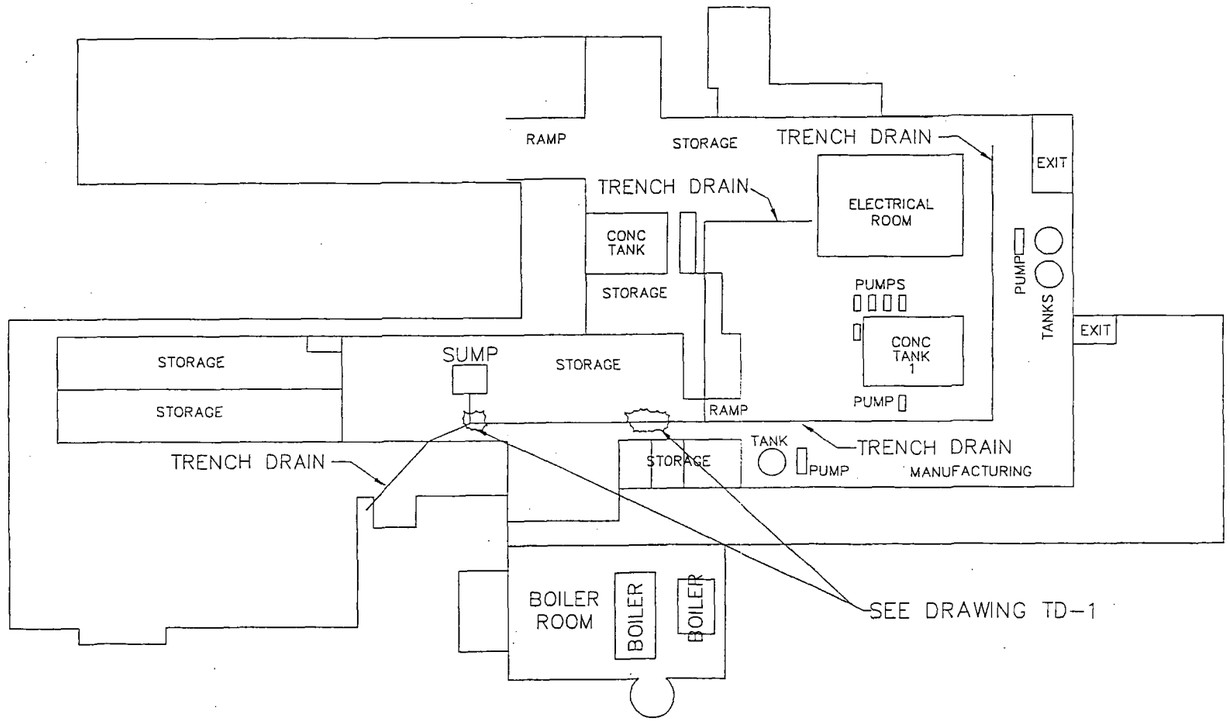
BUILDING DEMOLITION
STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NEW YORK
BUILDING FLOOR PLAN

SCALE	DRAWING No.	SHEET	REV. No.
N.T.S.	F-1	3 OF 3	-



SED = ROOF SEDIMENT SAMPLE
RF = ROOF MATERIAL SAMPLE

ROOF OF MAIN PLANT BUILDING



TRENCH DRAINS IN BASEMENT/SUB-BASEMENT

SPEC CONSULTING
Professional Engineering Services

W.O.	No.	REVISION	DATE	DRN.	CHK.	APR.
						APR.
						APR.
						APR.
						APR.

DRAWING STATUS
FOR INFORMATION ONLY
REDUCED SCALE DRAWING

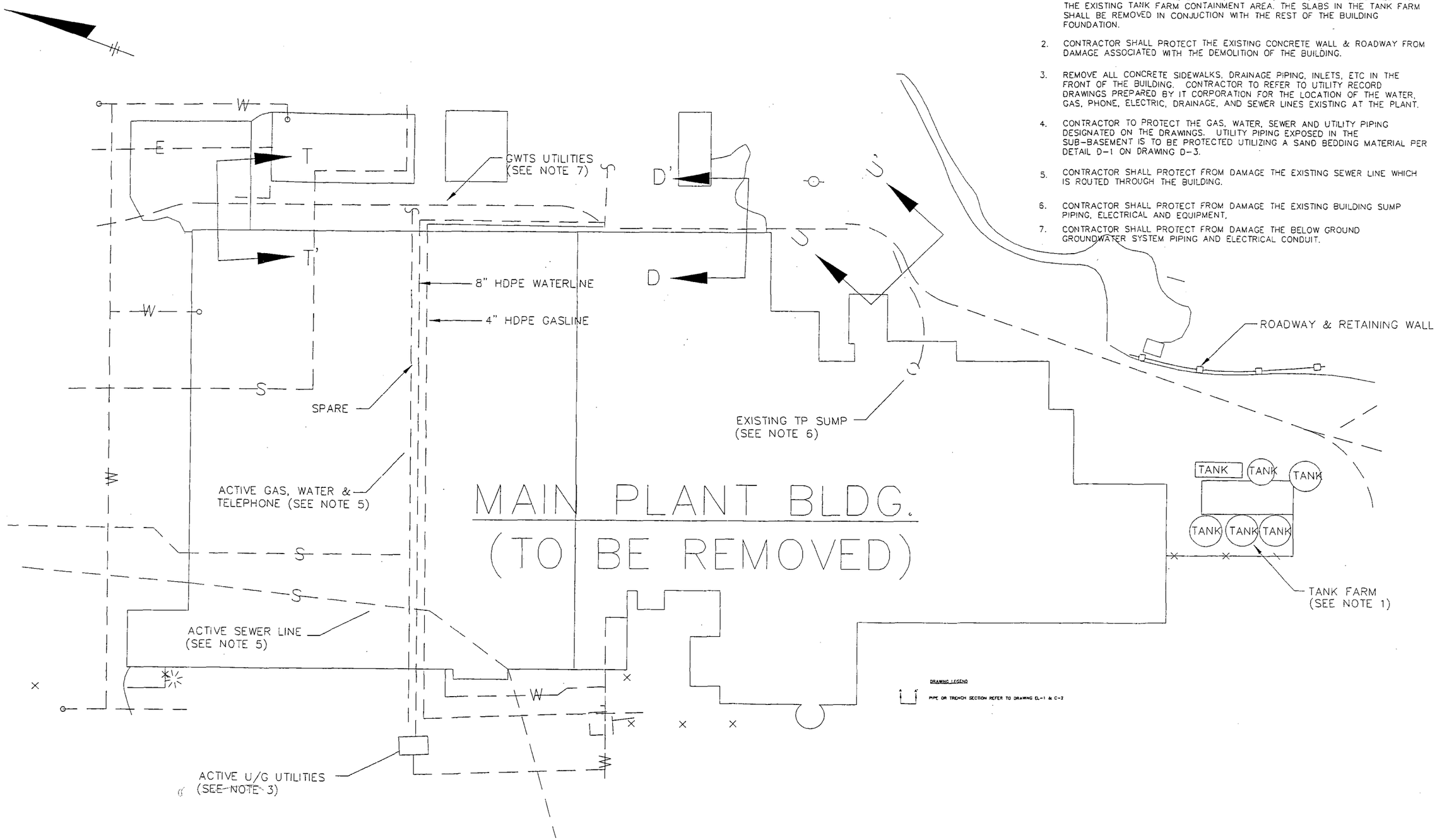
DESIGN ENGINEER	GA	11/2/00	APPROVED
DESIGN CHECK	JSB	11/2/00	
DRAWN BY	GA	11/2/00	
DRAWING CHECK	JSB	11/2/00	DATE

PCB INVESTIGATION
STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NEW YORK
ROOF AND TRENCH DRAIN SAMPLE LOCATIONS

SCALE	DRAWING No.	SHEET	REV. No.
NTS	S-2A	1 OF 1	–

DRAWING NOTES

1. DEMOLITION WORK INCLUDES REMOVAL OF TANKS, PIPING, INSULATION, FENCE, APPURTENANCES, CONCRETE WALLS, FOOTINGS, SLABS, ETC. ASSOCIATED WITH THE EXISTING TANK FARM CONTAINMENT AREA. THE SLABS IN THE TANK FARM SHALL BE REMOVED IN CONJUCTION WITH THE REST OF THE BUILDING FOUNDATION.
2. CONTRACTOR SHALL PROTECT THE EXISTING CONCRETE WALL & ROADWAY FROM DAMAGE ASSOCIATED WITH THE DEMOLITION OF THE BUILDING.
3. REMOVE ALL CONCRETE SIDEWALKS, DRAINAGE PIPING, INLETS, ETC IN THE FRONT OF THE BUILDING. CONTRACTOR TO REFER TO UTILITY RECORD DRAWINGS PREPARED BY IT CORPORATION FOR THE LOCATION OF THE WATER, GAS, PHONE, ELECTRIC, DRAINAGE, AND SEWER LINES EXISTING AT THE PLANT.
4. CONTRACTOR TO PROTECT THE GAS, WATER, SEWER AND UTILITY PIPING DESIGNATED ON THE DRAWINGS. UTILITY PIPING EXPOSED IN THE SUB-BASEMENT IS TO BE PROTECTED UTILIZING A SAND BEDDING MATERIAL PER DETAIL D-1 ON DRAWING D-3.
5. CONTRACTOR SHALL PROTECT FROM DAMAGE THE EXISTING SEWER LINE WHICH IS ROUTED THROUGH THE BUILDING.
6. CONTRACTOR SHALL PROTECT FROM DAMAGE THE EXISTING BUILDING SUMP PIPING, ELECTRICAL AND EQUIPMENT.
7. CONTRACTOR SHALL PROTECT FROM DAMAGE THE BELOW GROUND GROUNDWATER SYSTEM PIPING AND ELECTRICAL CONDUIT.



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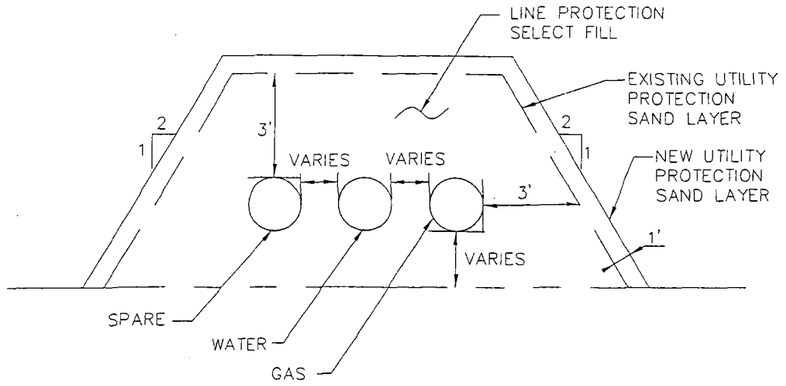
W.O.	No.	REVISION	DATE	DRN CHK	APR.
–	–	–	–	– –	–

DESIGN ENGINEER	AM	4/15/02	APPROVED
DESIGN CHECK	JB	4/15/02	
DRAWN BY	ST	4/15/02	
DRAWING CHECK	AM	4/15/02	DATE

BUILDING DEMOLITION
STAUFFER MANAGEMNET COMPANY
SKANEATELES FALLS, NEW YORK
BUILDING REMOVAL PLAN

SCALE	DRAWING No.	SHEET	REV. No.
N.T.S.	D-2	1 OF 1	–

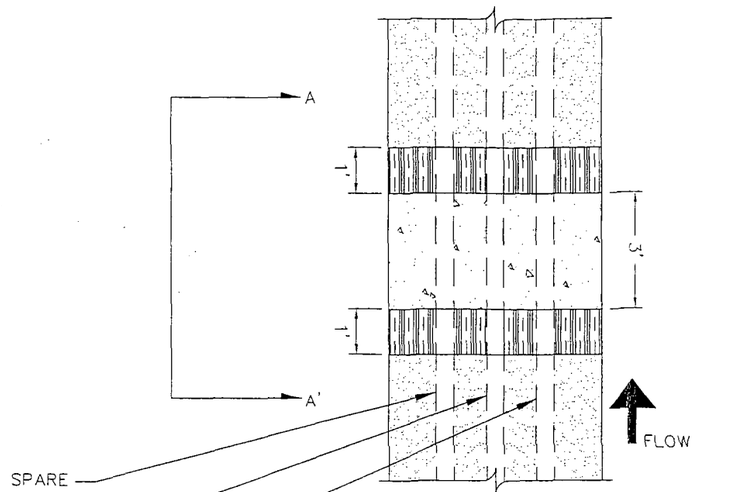


NOTES:
1. CHLORIDE CONCENTRATION IN FILL TO BE LESS THAN 25 PPM.
2. SELECT FILL TO BE TYPE D WASHED SAND IN ACCORDANCE WITH GRADATION TABLE.
3. PROTECTION IS FOR SUBBASEMENT EXPOSED PIPE UTILITY LOCATIONS.

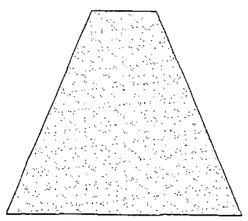
GRADATION TABLE

% PASSING	SIEVE
100	3/8-INCH
95-100	NO. 4
80-100	NO. 8
50-85	NO. 16
25-60	NO. 30
10-30	NO. 50
2-10	NO. 100

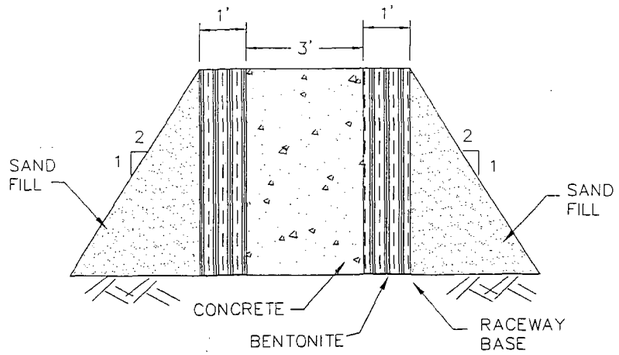
1 / D3 UTILITY LINE PROTECTION
N.T.S.



2 / D3 RACEWAY PLUG DETAIL - PLAN
N.T.S.



3 / D3 RACEWAY PLUG DETAIL - ELEVATION
N.T.S.



4 / D3 RACEWAY PLUG DETAIL
SECTION A - A'
N.T.S.

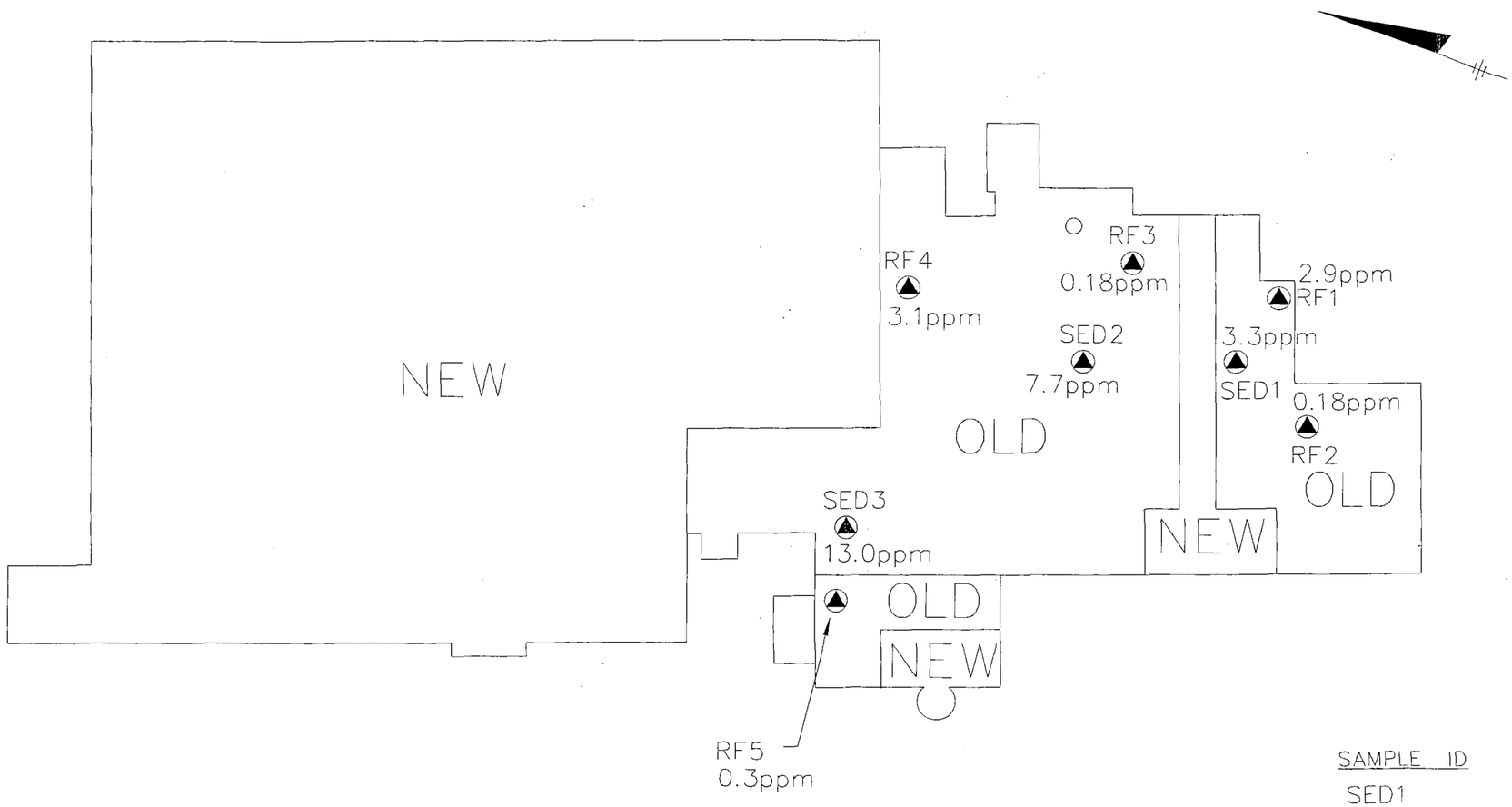
W.O.	No.	REVISION	DATE	DRN. / CHK.	APR.
–	–	–	–	–	–

DRAWING STATUS
FOR BID ONLY
REDUCED SCALE DRAWING

DESIGN ENGINEER	AM	4/15/02	APPROVED
DESIGN CHECK	JB	4/15/02	
DRAWN BY	ST	4/15/02	
DRAWING CHECK	AM	4/15/02	DATE

BUILDING DEMOLITION
STAUFFER MANAGEMNET COMPANY
SKANEATELES FALLS, NEW YORK
BUILDING DEMOLITION DETAILS

SCALE	DRAWING No.	SHEET	REV. No.
N.T.S.	D-3	1 OF 1	–



SAMPLE ID	SAMPLE DATE
SED1	11/17/2000
SED2	11/17/2000
SED3	11/17/2000
RF5	10/30/2001

ROOF OF MAIN PLANT BUILDING

SPEC CONSULTING
Professional Engineering Services

W.O.	No.	REVISION	DATE	DRN. CHK.	APR.
					APR.
					APR.
					APR.
					APR.

DRAWING STATUS
FOR INFORMATION ONLY
REDUCED SCALE DRAWING

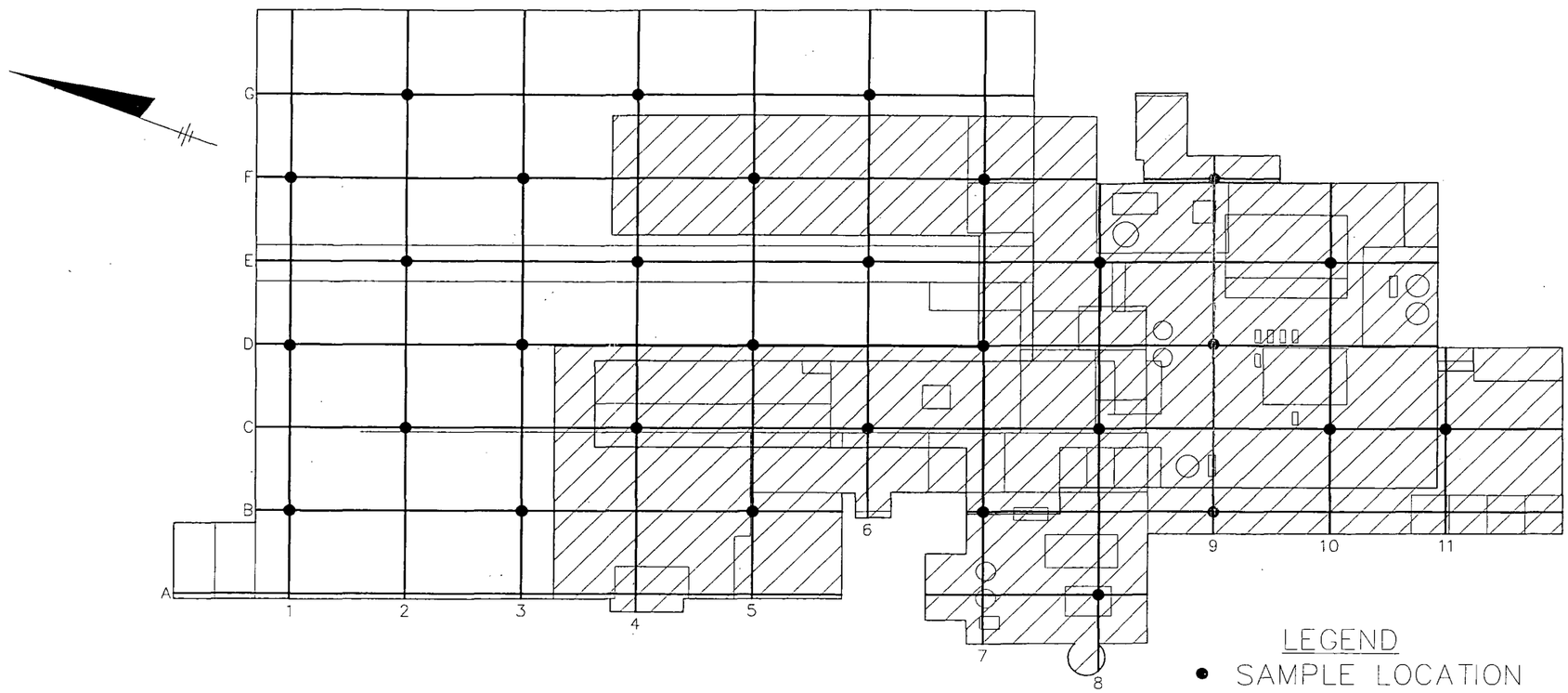
DESIGN ENGINEER	WF	11/2/01	APPROVED
DESIGN CHECK	WF	11/2/01	
DRAWN BY	WF	11/2/01	
DRAWING CHECK	JSB	11/2/01	DATE

STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NEW YORK
ROOF PCB SAMPLE LOCATIONS

SCALE	DRAWING No.	SHEET	REV. No.
NTS	S-2A	1 OF 1	2

SUBSURFACE SAMPLING LOCATIONS

SAMPLE NUMBER	SAMPLE LOCATION
1	1B
2	1D
3	1F
4	2C
5	2E
6	2G
7	3B
8	3D
9	3F
10	4C
11	4E
12	4G
13	5B
14	5D
15	5F
16	6C
17	6E
18	6G
19	7B
20	7D
21	7F
22	8A
23	8C
24	8E
25	9B
26	9D
27	9F
28	10C
29	10E
30	11C



LEGEND

● SAMPLE LOCATION

▨ BASEMENT/SUB-BASEMENT

1ST FLOOR-BASEMENT/SUB-BASEMENT

SUBSURFACE SAMPLING LOCATIONS

SPEC PROJECT #99-004

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W.O.	No.	REVISION	DATE	DRN. CHK.	APP.

DRAWING STATUS: FOR REFERENCE ONLY

DESIGN ENGINEER	AM	5/10/02	APPROVED
DESIGN CHECK	JB	5/10/02	
DRAWN BY	ST	5/10/02	
DRAWING CHECK	AM	5/10/02	DATE

BUILDING DEMOLITION
STAUFFER MANAGEMENT COMPANY
SKANEATELES FALLS, NEW YORK
AEC-6 BUILDING FLOOR PLAN

SCALE	DRAWING No.	SHEET	REV. No.
N.T.S.	DS-1	3 OF 3	—