

**Engineers, Inc.**

1020 Seventh North Street, Liverpool, New York 13088-6199
(315) 457-6711 Fax (315) 457-9803

October 13, 1994

Mr. Paul D. Mazurkiewicz, P.E.
Senior Project Supervisor
OBG Technical Services, Inc.
5000 Brittonfield Parkway
East Syracuse, New York 13057

Re: Syracuse Fire Training Center
Contractor's Plan Submittals

File: 630.001 - 94

Dear Mr. Mazurkiewicz:

734039 312 State Fair Blvd 13204
ONON

As a result of our October 10, 1994 letter to you regarding "Document Review Comments", we have received from you the following revised plans:

Plan of Operation - Submission No. 02222-02
Excavation Dewatering Plan - Submission No. 02227-02
Laboratory Certifications

We have performed a general review of the content of your submitted plans and certifications and find that they sufficiently address the requirements of the Contract Specifications to allow you to proceed with the work governed by these plans. Please note however that there are still unresolved comments from our October 10, 1994 comment letter that must be addressed by you. These comments must be incorporated into your plans and the revised plans submitted to us by October 21, 1994. The outstanding comments are:

PLAN OF OPERATIONS

Provide details regarding the coordination and sequencing of activities associated with demobilization and final transport of all remaining wastes off-site.

Page 3, Section 4.0: Off-site transport operations must be described. Accident and spill emergency procedures during transport off-site must be addressed. Off-site transportation routes must be addressed.

Page 4, Section 4.4: Describe in detail how sediments/soils generated during decontamination activities will be handled.

MONITORING WELLS

Summary of Work Experience

This section did not provide the full information requested on page 02672-2. At a minimum, clearly identify the individual (name, title, company, telephone number) who is the most knowledgeable in providing a reference for the project.

Submit documentation (dates) that clearly demonstrates the well drilling firm has a minimum of four years experience.

Submit documentation (dates) that clearly demonstrates the well drilling firm's field supervisor has at least two years of experience.

Schedule of Work - Deep Wells

How will cuttings from inside the casing be removed prior to obtaining split spoon samples?

Schedule of Work - Well Abandonment

When using tricone roller bit, how will cuttings be removed?

Provide product data for specified materials prior to installation (Schedule 80 PVC, 4 inch Schedule 10 pipe).

Provide product data and specific grain size for proposed sand pack that is compatible with the well screen.

Provide product data which shows proposed bentonite clay confirms with material specification 2.1 E.

WASTE INVENTORY AND CLASSIFICATION PLAN

Waste Inventory

Indicate that all wastes currently existing on-site and all wastes generated during site work will be inventoried. Provide a sample Waste Inventory Log.

Page 2, 3rd paragraph: Indicate wastes will also be evaluated to determine if concentrations exceed those designated under 6NYCRR Part 371.

Provide permits for Hazardous Waste Disposal Facilities.

Mr. Paul D. Mazurkiewicz, P.E.
October 13, 1994
Page 3

EXCAVATION DEWATERING PLAN

A copy of the Excavation Dewatering Plan was submitted to NYSDEC at their request. Any NYSDEC comments will be forwarded to you as soon as they are available.

Please be advised that our review of your plans submitted pursuant to various specification sections is only for general verification that the items required to be included with the plan, as provided in each specification section, are addressed. Our review does not extend to the accuracy or completeness of details such as quantities, dimensions, weights or gauges, fabrication processes, construction means or methods, coordination of the work with other trades or specific construction safety precautions, all of which are the sole responsibility of the Contractor. It is your obligation and responsibility to develop and implement the required plans in compliance with the specifications.

Very truly yours,

C&S ENGINEERS, INC.

Lawrence Celeste

Lawrence M. Celeste, P.E.
Project Engineer

LMC/cal

cc: Peter D. Marschall, City of Syracuse (w/encs.)
John E. Durnin, NYSDEC - Albany (w/encs.)
John May, NYSDEC - Regional Office (w/encs.) ✓

PLAN OF OPERATIONS

SYRACUSE FIRE TRAINING CENTER
Syracuse, New York

October 11, 1994

Submission No. 02222-02



O'BRIEN & GERE
TECHNICAL SERVICES

O'BRIEN & GERE TECHNICAL SERVICES, INC.
5000 Brittonfield Pkwy.
E. Syracuse, NY 13057
(315) 437-6400



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PLAN OF OPERATIONS

This Plan of Operations has been developed to meet the requirements of the Contract Documents and describe how the site remediation activities will be performed. Site personnel shall be familiar with the site operations plan to ensure worker safety. The Plan of Operations shall not act as a stand alone document, as other plans including the site-specific Health and Safety Plan have been developed and shall be utilized in conjunction with the Plan of Operations. This Plan of Operations does incorporate the Waste Inventory and Classification Plan and Dewatering Plan as part of the overall site operations plan.

1.0 SITE PREPARATION ACTIVITIES

Initially, site operations shall include clearing and grubbing, layout of the work areas, installation of the air monitoring equipment, and installation of temporary facilities and utilities. Additionally, surveying will be performed to establish baseline conditions, including surface grades and contours, building and well locations. Additionally, all underground utilities shall be located to ensure excavation activities do not disturb these lines.

2.0 EXCAVATION

Excavation activities shall be conducted in accordance with the Contract Specifications and Drawings to remove and stockpile hazardous and non-hazardous soils. Excavations shall be completed in accordance with all OSHA worker safety codes and at no time shall the safety of a worker be compromised during any site activities. Excavations shall not interfere with underground utilities, or building foundations. Engineering controls shall be implemented to prevent surface water infiltration into the excavation areas. Additionally, provisions shall be implemented to control groundwater infiltration into any excavations. The excavated materials shall be segregated based on their physical and chemical makeup, and the intended reuse or disposition of the excavated materials. Excavation dewatering is discussed in the Dewatering Plan portion of this document and the excavated materials segregation shall be discussed further in Section 4.0 of this Plan of Operations. It is the intent of the excavation activities to eliminate cross-contamination of the unaffected and affected materials.

Protective measures shall be implemented to prevent excavation cave-in or loose impediments falling into the excavation. The bottom of the excavations in areas beneath foundations shall also be protected from freezing and cave-in.

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During various construction activities, excavated areas will remain open until analytical data can be returned and evaluated. During these periods, the following engineering controls can be implemented to prevent sediments and water infiltration into the excavation areas:

1. Visual inspection: A visual inspection will be conducted to verify the need for protection. If the natural grade prevents water infiltration, the area will be inspected daily to assure natural protection.
2. Soil Dike: Soil dikes can be sized and constructed to assure all storm water runs away from the excavation areas.
3. Straw Bale Dike: In non-accessible areas, straw bale dikes will be placed around the excavated areas. A poly liner may be used in conjunction with the bales to prevent all water from passing into the area.

3.0 FIELD QUALITY CONTROL

It shall be the responsibility of OBG Tech as the on-site Contractor to ensure all activities are conducted in accordance with the Contract Documents, the developed site-specific plans, and all applicable local, state, and federal regulations. The on-site Contractor representative shall ensure samples are collected and handled appropriately and taken from the correct location, and that all site activities are documented in a field log book for record purposes. A copy of the contract drawings shall be marked to indicate actual field conditions for purposes of developing record drawings. The Contractor shall be responsible for ensuring all surveying and elevations are recorded and documented for use in preparing the record drawings.

The Contractor shall ensure all field and personnel air monitoring is operating properly and samples are collected in accordance with accepted protocol and samples are handled in according to standard chain-of-custody procedures. The on-site Contractor representative is responsible for the actions and duties of any lower-tier subcontractors, ensuring the subcontractor is meeting the intent of the contract and all its flow down clauses. The Contractor shall ensure that subcontracted materials testing and analytical laboratories are administering acceptable quality control measures. The contractor shall also be responsible for the final contours and grades achieving the contract requirements.

4.0 STAGING AND DISPOSAL OF HAZARDOUS SOILS

This section outlines the procedures for loading and transporting contaminated soils to and from the staging area. Specifically, the following considerations are addressed: personnel safety, spill detection and response, vehicle decontamination, modes of transport, and environmental effects.

4.1 Modes of Transport

Following individual grid layout, the respective areas will be excavated beginning with Level 4 areas and continuing through the Level 3, 2, 1, 0 areas.

The Level 4 areas will be excavated to the depths shown on the contract drawings. The storage area will be located adjacent to the excavated area to alleviate the need to transport contaminated materials. The subgrade for the stockpile area will be leveled and all store and sharp objects removed. A 36 mil (minimum) liner will then be placed on the ground. The excavated materials will then be covered with a waterproof membrane to prevent surface water sedimentation. Each individual pile will properly identified showing the pile number and source location.

The Level 3, 2, 1, and 0 areas will be excavated using an excavator and loaded directly into a 10 wheel haul truck. The haul truck will then distribute the soils to their proper locations.

Once the soils are properly located and staged, a poly cover will be placed on top of the stockpiled soils. A stake will then be driven directly adjacent to each pile with a identification number affixed to a board or plate. The ID number of the stockpile will match the grid number which is outlined on Sheet No. 03, Contract drawings.

Additional ID markers will be placed under the poly cover for future reference should the stakes get knocked down or removed. The sampling and analysis log will reflect the ID numbers generated.

The hazardous and non-hazardous waste soils are expected to be removed within 45 days following excavation. In accordance with OBG Tech's construction schedule submitted on October 4, 1994, the soils will be removed during the month of November.

4.2 Personnel Safety

The excavating and staging operations will be conducted in strict accordance with OBG Technical Services' site specific Health and Safety Plan and OBG's Corporate Health and Safety standards.

Special safety considerations will also be provided to assure safety compliance. The travel routes will be clearly marked with paint or stakes to avoid collisions. In addition, the handling of hazardous wastes will be conducted with the proper PPE. Air monitoring operations will also be conducted during the excavation and staging procedures. There will be an on-site Health and Safety Officer at all times to monitor site activities.

Emergency telephone numbers and directions to the local hospital shall be posted in the contractor's field office. Should an emergency arise, all personnel should contact the site safety officer and/or the on-site supervisor to determine appropriate action.

4.3 Spill Detection and Response

During the on-site transportation of the soils, OBG Tech personnel will monitor the consistency of the soil for moisture content. Soils with excessive water will be stockpiled on poly near the excavated area to allow the soils to dry to a transporting consistency. The transportation routes will also be monitored for soils which have fallen off the back of the truck. All soils encountered from a spill will be handled in the same manner, as during the original excavation. Any soils which become stained due to a spill will be removed and stockpiled with the original soils.

4.4 Vehicle Decontamination

Vehicles involved with the on-site relocation of soils will not require decontamination while on site. The decontamination procedures for site vehicles is as follows:

- Remove all soils from tires and dump box
- Spray tires and dump box with power washer
- Contain soils and liquids in proper area
- Visually inspect vehicle to assure 100% decontamination

The decontamination area will be located near the front gates for accessible travel routes. An impermeable liner will be placed on level ground with a dike berm on all four side. A strategically located sump will be equipped with a portable pump to remove liquids. The liquids will be stored in 55-gallon drums or in the dewatering ModuTank.

4.5 Environmental Effects

During the excavation and staging operations OBG Tech plans to keep environmental effects to a minimum. The following concerns will arise during the operations.

Dust Control

Dust control will be implemented by the OBG Tech field representative upon inspection and evaluation of the excavation and staging operations.

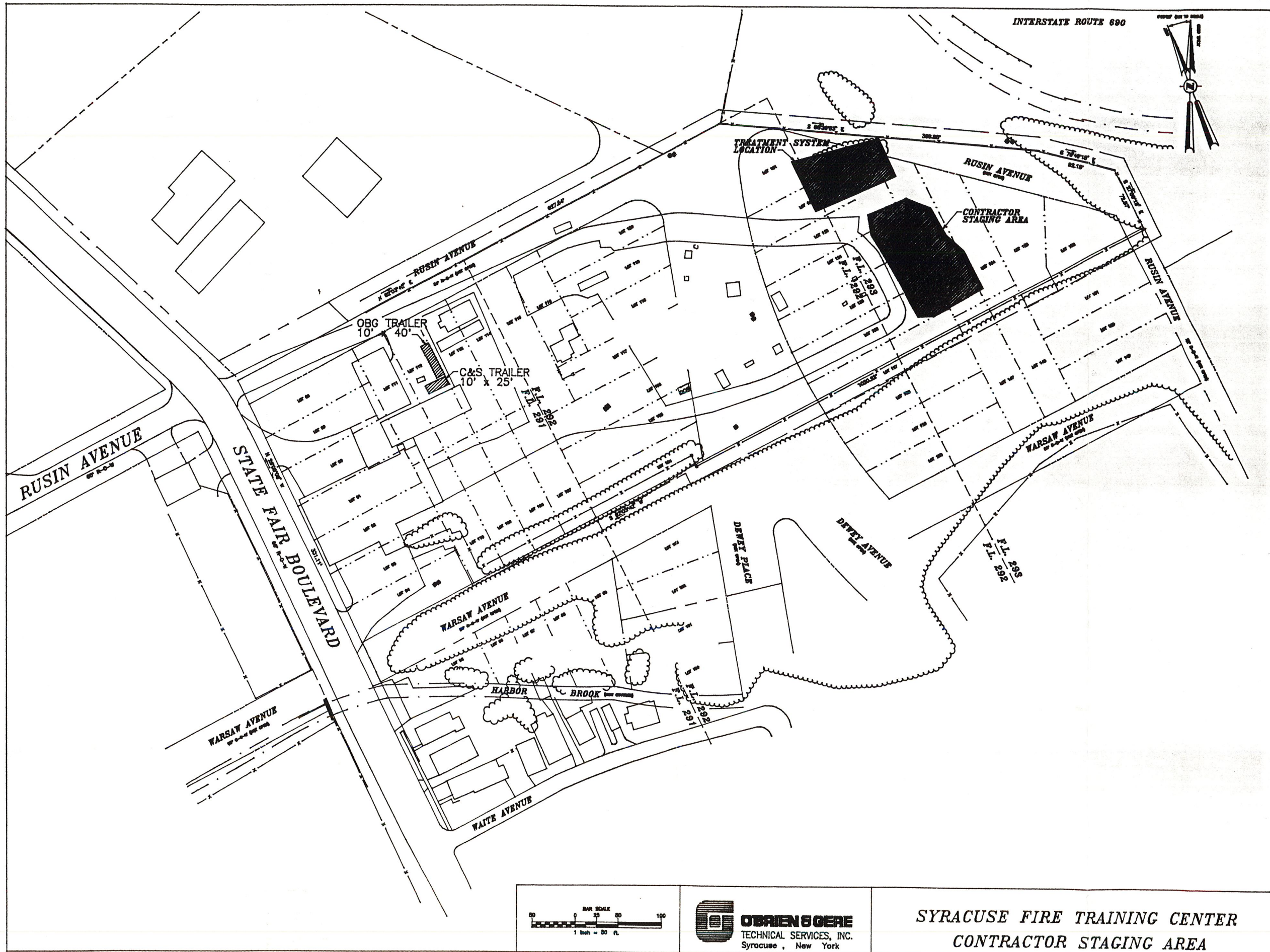
The site will be equipped with a hose which is capable of covering the dust impacted areas.

Due to the airborne particulates concerns, dust control will be closely monitored and implemented.

Erosion Control

The site will be completely surrounded by silt fence to be installed with a reinforcing netting and anchored into the ground by 8" of soils. Additional erosion control will be achieved through hay bale dikes and geotextile placement.

During rainstorms, the run-off flow will be monitored and erosion control will be implemented as required.



O **BRIEN & GERE**
 TECHNICAL SERVICES, INC.
 Syracuse, New York

SYRACUSE FIRE TRAINING CENTER
 CONTRACTOR STAGING AREA

EXCAVATION AND DEWATERING PLAN

**SYRACUSE FIRE TRAINING CENTER
Syracuse, New York**

November 2, 1994

Submission No. 02222-03



O'BRIEN & GERE
TECHNICAL SERVICES

O'BRIEN & GERE TECHNICAL SERVICES, INC.
5000 Brittonfield Pkwy.
E. Syracuse, NY 13057
(315) 437-6400



EXCAVATION DEWATERING PLAN

1.0 Introduction

This plan has been prepared to outline the techniques of excavation dewatering which will be performed throughout all construction activities at the Syracuse Fire Training Center. This plan specifically outlines the areas to be dewatered, methods of dewatering, discharge locations, sampling and analysis criteria, documentation procedures, and permitting criteria.

2.0 Possible Dewatering Areas

As shown on previous drilling logs the groundwater elevation has been identified at a level as high as five (5) feet below existing ground elevation. As a result, the following areas of concern have been identified:

- A) Oil/Water Separator System installation
- B) Stormwater piping installation, including all manholes, manhole connections, and catch basins
- C) Force main installation
- D) Reduced pressure zone installation
- E) Excavation and disposal of soils in Level 4 areas
- F) Underground electrical line installation

3.0 Dewatering Methods

3.1 Oil/Water Separator System

Due to the depth of the excavation (approximately 13 feet below grade) this area is the highest level of concern.

The proposed method is as follows:

a) Well point system

A rotary wellpoint system consisting of approximately 30, 24 foot riser pipes spaced every 5 to 10 feet. The system containing a jet pump, a test pump and the appropriate hoses. The system will be installed to lower the water level to approximately sixteen feet below ground level. Every effort shall be made to carefully control excess lowering of the ground water table. A back-up system consisting of a filter area and pump of will be provided to assure a controlled dewatering excavation.

b) Excavation

Upon lowering the water table, an area approximately 65' long by 20' wide and 15' deep will be excavated and backfilled to the proper grade with a filter stone for subbase material.

c) Slope protection

After excavation, a determination will be made by a professional engineer whether to install a sheeting or shoring system or to protect the slopes using the standard cut back method approved by OSHA. Should sheeting or bracing be required, a sheeting design will be provided and stamped by a professional engineer licenced to work in New York State.

3.2 Stormwater Piping Force Main Piping/Electrical Line Installation (including manholes and catch basins)

Water generated during piping installation will be collected using an appropriate trash pump capable of handling the flow rates generated.

3.3 Reduced Pressure Zone (RPZ)

The reduced pressure zone (RPZ) extends to approximately 6 or 7 feet below grade which should only require minimal dewatering efforts. THE RPZ sheeting and/or bracing details will be designed and stamped by a professional engineer licensed to perform work in New York State.

3.4 Level 4 Areas

Contaminated soils in Level 4 areas will be excavated to as deep as 8 feet below grade. In these deep excavation areas, groundwater may be encountered during the excavation and/or the confirmatory (identification and verification) sampling events. If encountered, the groundwater will be drained to a sump area in the excavation and pumped to the collection tank(s). Measures will be implemented to prevent surface runoff into the excavation. Following confirmation sampling indicating the excavation can be backfilled, groundwater (if encountered) will be pumped from the excavation as needed during the backfill and compaction of the backfill materials.

4.0 Transporting Water

The water generated during the areas outlined in Section 2 will be transported through a PVC piping system capable of handling the volume generated. All materials and equipment used in transporting and/or storing construction water shall be inspected daily for structural integrity and required maintenance shall be provided on an as needed basis. When not in service, the water treatment system shall be drained to the extent possible to minimize the potential for leaks and/or large quantity spills. Should there be a release of the construction water, spill containment devices will be installed and actions will be taken to recontainerize the material. Spill control devices shall be stored on site prior to implementing the site dewatering activities. Spills or releases of construction water shall be noted in the field log book and a report submitted to the Engineer.

Water offered for off site disposition shall be transported to the selected disposal facility using a permitted transporter utilizing trained operators, with a spill release/control program in place, and a 24-hour emergency phone number. All relevant emergency information shall be included on the waste manifest/bill of lading for driver use if required.

Should site activities require off-site transportation of the construction water, all applicable permits, certifications and transporter contingency plans shall be forwarded to the Engineer prior to scheduling shipments.

5.0 Water Storage/Treatment

A. Storage

The piping system will be connected directly into a ModuTank storage tank. The tank size and dimensions are shown in Figure 1.

The tank consists of 4' panels interconnected and reinforced with cables which run from side to side. A custom built liner will be installed on sand backfill prepared by OBG Tech. Daily visual inspections are conducted to ensure the integrity of the storage tank. A daily inspection record shall be utilized for record purposes (Figure 2).

If conditions warrant, OBG Tech shall implement freeze protection measures in the storage tanks and the piping. When not operating, the piping shall be drained. Agitation devices and/or heaters will be installed in the storage tanks. If operating 24 hours daily, engineering measures shall be implemented to avoid system failure or personnel will be required to oversee the system during these operations.

B. Treatment System

The water will be then pumped through a treatment system as shown in Figure 1 (Process Schematic) to provide an effluent acceptable to all rules, regulations, and discharge limits as outlined in Section 6 (construction water sampling and analysis).

1. **Equalization Tank** Capable of handling sufficient amounts of water to allow the proper sampling and analysis.
2. **Skid Mounted Pumps** Up to three (3) pump will be provided capable of handling a maximum of 100 gpm.
3. **Bag Filters** Four (4) bag filters for solids removal.
4. **Granulated Activated Carbon (GAC)** Two (2) GAC units.
5. **Totalizing Flowmeter** A totalizing flow meter is included to document the volume of dewatering effluent discharged in gallons.
6. **Effluent Holding Tank** Capable of handling up to two days of storage. A pump shall be utilized to discharge treated water to Harbor Brook. A conveyance hose capable of handling the required flow rates shall be use to transfer the water. If required, provisions will be made to minimize soil/sediment erosion in the vicinity of the treatment system discharge.

C. Effluent Discharge

The treated effluent will be stored in a 100,000-gal. holding tank. As required by the discharge permit (Attachment 1), the treated water will be tested weekly to ensure the effluent meets the permit criteria. OBG Tech shall test the water intermittently within the system to confirm treatment system effectiveness (after sand filters, after first GAC unit). Discharge to Harbor Brook shall be made utilizing a pump and PVC hose. For security purposes, the water will only be discharged when there are site personnel present.

6.0 Construction Water Sampling and Analysis

During construction dewatering, the water shall be collected and submitted for appropriate analyses. The analyses of the construction water may vary, depending of final disposition which will be:

- A) Discharge to Harbor Brook in accordance with NYSDEC requirements (See Attachment 1); or
- B) Collection and off-site disposition at a permitted wastewater treatment facility.

Provisions for both discharge to Harbor Brook and off-site disposition shall be in place to ensure the dewatering activities do not cause delays in site construction/remediation activities. Permits and certifications for the selected disposal facility shall be submitted to the Engineer prior to initiation of the dewatering activities.

Samples of construction water discharged to the Harbor Brook tributary, will be collected in accordance with the NYSDEC requirements indicated on Attachment 1. One representative sample shall be collected weekly to confirm the discharged water meets effluent criteria.

Once the lab analyses confirms parameters in the treated water are below acceptable criteria, the water shall be discharged appropriately. Water may be discharged continuously or in a batch cycle depending on daily flow rates, ensuring the NYSDEC permit flow limit is not exceeded. It is expected that the water flow rates shall not exceed 100 gpm. Although not required, OBG Tech may independently collect samples from the pretreatment system components to confirm treatment effectiveness prior to final disposition at a frequency greater than once per week. OBG Tech shall collect samples of the water in between the two GAC units to determine the efficiency of the first GAC unit in reducing contaminant concentrations. Similarly, samples may be collected prior to the GAC units (following the bag filters) to evaluate the water entering the GAC units. Should either of these analyses indicate elevated contaminant concentrations are present at these locations and the potential exists for contaminant concentrations in the effluent exceed permit criteria, provisions will be implemented to add further treatment means to ensure contaminant removal. A log book record shall be maintained for the treatment system operation and outfall discharge, noting daily flow rates, volumes stored, operations status, and laboratory data.

All water analyses shall comply with SW-846 standards. Preliminary data shall be provided within 72 hours of collection and the final package within 21 days of sample collection.

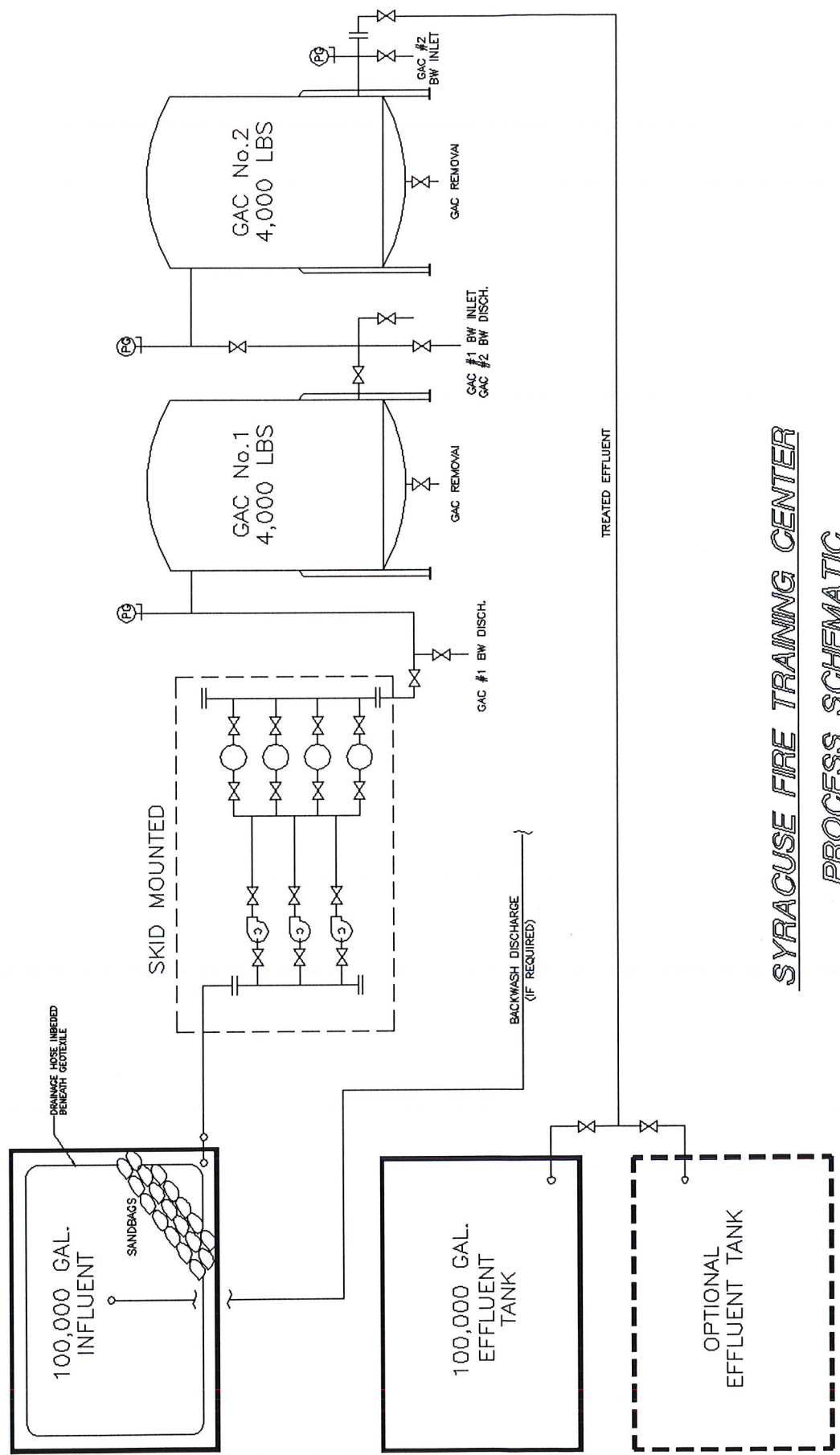
7.0 Treatment System Decommissioning/Waste Disposition

Treatment equipment shall be either decommissioned (decontaminated) or offered for off-site disposal. Materials which can be decommissioned shall be pressure washed and/or steam cleaned to remove residual contamination.

Wastes resulting from the dewatering treatment shall be characterized in accordance with the Waste Inventory and Classification Plan. Bag filters, spent activated carbon, and other materials which came into direct contact with the contaminated water shall be containerized, sampled and submitted for waste characterization analyses. Pending waste characterization analyses, a permitted disposal facility shall be selected. The disposal facility permits and certifications shall be submitted to the Engineer prior to offering the wastes for disposition and/or treatment.

FIGURE 1

PROCESS SCHEMATIC



SYRACUSE FIRE TRAINING CENTER PROCESS SCHEMATIC



ATTACHMENT 1

**NYSDEC EFFLUENT DISCHARGE REQUIREMENTS
FOR TRIBUTARY TO HARBOR BROOK**

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233



Langdon Marsh
Acting Commissioner

MAR 31 1994

Mr. Walter Gilcher
C&S Engineers, Inc.
1020 Seventh North Street
Liverpool, New York 13088

Dear Mr. Gilcher:

Re: Site #7-34-049
Syracuse Fire Training Center

In response to your February 15, 1994 request for the effluent discharge limits the Department has established effluent limitations and monitoring requirements for this site. The enclosed effluent criteria were developed for a 100 gpm discharge from soil excavation and construction dewatering activities to an existing on-site storm sewer tributary to Harbor Brook. The effluent monitoring results must be submitted to the NYSDEC on a weekly basis. Please mail effluent data to:

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
Bureau of Construction Services
50 Wolf Road, Room 207
Albany, New York 12233-7010
ATTENTION: James Van Hoesen

Please ensure future compliance with the discharge criteria and monitoring requirements.

If you have any questions, please call Lech Dolata at
(518) 457-9285.

Sincerely,

James Van Hoesen, P.E.
Chief, Central Field Services Section
Bureau of Construction Services
Div. of Hazardous Waste Remediation

Enclosure

cc: w/enc.: C. Branagh - NYSDEC, Region 7
R. Cozzy - NYSDEC
A. Carlson - NYSDOH
P. Marschall - Dept. of Engineering/Syracuse
L. Flocke - NYSDEC Region 7

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning April 1, 1994

and lasting until April 1, 1995

the discharges from the treatment facility shall be limited and monitored by the operator as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
<u>Outfall 001 - Treated Groundwater:</u>					
Flow	Monitor	144,000	gpd	Continuous	Meter
Aroclor 1016	NA	0.3	µg/l	Weekly	Grab
Aroclor 1221	NA	0.3	µg/l	Weekly	Grab
Aroclor 1232	NA	0.3	µg/l	Weekly	Grab
Aroclor 1242	NA	0.3	µg/l	Weekly	Grab
Aroclor 1248	NA	0.3	µg/l	Weekly	Grab
Aroclor 1254	NA	0.3	µg/l	Weekly	Grab
Aroclor 1260	NA	0.3	µg/l	Weekly	Grab
pH (Range)	(6.0 to 9.0)		SU	Weekly	Grab
Solids, Total Dissolved	Monitor	Monitor	mg/l	Weekly	Grab
Solids, Total Suspended	Monitor	20	mg/l	Weekly	Grab
COD	Monitor	Monitor	mg/l	Weekly	Grab
Chloride	Monitor	Monitor	mg/l	Weekly	Grab
Oil & Grease	Monitor	15	mg/l	Weekly	Grab
Aluminum, Total	Monitor	1.3	lb/d	Weekly	Grab
Arsenic, Total	Monitor	0.23	mg/l	Weekly	Grab
Barium, Total	Monitor	0.15	mg/l	Weekly	Grab
Beryllium, Total	Monitor	0.04	mg/l	Weekly	Grab
Chromium, Total	Monitor	0.5	mg/l	Weekly	Grab
Cobalt, Total	Monitor	0.33	mg/l	Weekly	Grab
Copper, Total	Monitor	0.5	mg/l	Weekly	Grab
Cyanide, Total	Monitor	150	µg/l	Weekly	Grab
Iron, Total	Monitor	4	mg/l	Weekly	Grab
Lead, Total	Monitor	0.4	mg/l	Weekly	Grab
Manganese, Total	Monitor	4	mg/l	Weekly	Grab
Nickel, Total	Monitor	1.3	mg/l	Weekly	Grab
Selenium, Total	Monitor	0.02	mg/l	Weekly	Grab
Silver, Total	Monitor	0.11	mg/l	Weekly	Grab
Vanadium, Total	Monitor	0.83	mg/l	Weekly	Grab
Zinc, Total	Monitor	0.4	mg/l	Weekly	Grab
Mercury, Total	Monitor	0.8	µg/l	Weekly	Grab
Nitrogen, TKN (as N)	Monitor	Monitor	mg/l	Weekly	Grab
BOD, 5-day	Monitor	Monitor	mg/l	Weekly	Grab
UOD (See Note 1)	Monitor	300	mg/l	Weekly	Calculated

Note 1:

"UOD" or "Ultimate Oxygen Demand" shall be calculated from individual results for BOD, 5-day and Total Kjeldahl Nitrogen (TKN), as follows: $UOD = 1.5 \times (BOD, 5\text{-day}) + 4.56 \times (TKN)$

ATTACHMENT 2

SITE WATER SYSTEM INSPECTION REPORT

