

**1 CONVENTION BOULEVARD
ATLANTIC CITY, NEW JERSEY**

**TECHNICAL SPECIFICATIONS FOR THE
ABANDONMENT OF THE
GROUNDWATER TREATMENT SYSTEM**

TECHNICAL SPECIFICATIONS

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DIVISION 1 – GENERAL

SECTION 1.1 – SCOPE OF WORK

- 1.1.1 The scope of work to be accomplished shall include all work shown on the contract drawings and specified herein for the abandonment pumping wells and piping located at 1 Convention Center Boulevard, Atlantic City, Atlantic County, New Jersey.

The general scope of work shall include the following:

Abandonment of the groundwater treatment system is limited to the abandonment of all piping and utilities associated with the GTS located at the 1 Convention Center Boulevard site, including pumping wells, sumps, and approximately 2500 linear feet of associated piping.

SECTION 1.2 – GENERAL

- 1.2.1 The work to be performed is shown on the contract drawings. Attempts have been made to call out all specific items on these drawings. Small items not included shall be abandoned/removed in accordance with local and state requirements.
- 1.2.2 The owner's representative shall be Langan Engineering & Environmental Services., and shall be hereinafter be referred to as Engineer. The Engineer is located at 300 Kimball Drive, Parsippany, New Jersey 07057, and (973) 560-4900.
- 1.2.3 The Contractor shall verify the estimated quantities for the items during removal/abandonment of the actual item. Any variation between the actual and estimated quantities shall be reported immediately to the Engineer, who shall verify the actual quantity. No extra work shall be performed by the Contractor until he has been notified in writing to proceed by the Owner or the Engineer.
- 1.2.4 The Contractor shall immediately notify the Engineer if site conditions differ from those on the contract drawings.
- 1.2.5 The Contractor shall obtain and pay for all necessary construction/demolition permits and fees required to complete the work.
- 1.2.6 The Contractor shall notify the Engineer in writing if additional work is required which is not shown on the contract drawings. Such notification must be made prior to starting such work.
- 1.2.7 The Contractor shall submit a detailed schedule of operations within one week after the contract is signed and Notice to Proceed is given. The Contractor will have thirty (90) days to complete all work once the Notice to Proceed has been given.

SECTION 1.3 – REFERENCES AND DEFINATIONS

1.3.1 REFERENCE STANDARDS

The following documents are listed herein and should be used as reference for implementation of this specification.

1. Standards for Soil Erosion and Sediment Control in New Jersey.
2. American Society of Testing and Materials Method D698, Tests for Moisture Density Relations of Soil-Aggregate Mixtures, Using 5.5 lb Rammer and 12 inch drop.
3. Unified soil classification system.
4. N.J.A.C. 7:9D Well Construction and Maintenance; Sealing of Abandoned Wells.

1.3.2 DEFINITIONS

Company – The party with whom the Contractor has entered into the Contract and for whom the work is to be provided.

Company's Representative – The party designated by Company to act on behalf of the Company to oversee the work.

Engineer – The engineer of record for the work licensed in the State of New Jersey and employed to act as a consultant and advisor to Company during construction, and to perform the functions of the Engineer.

Contractor – The party contracting directly with the Company to furnish and perform the work in accordance with the Construction Contract Documents.

Site Supervisor – The individual assigned by the Contractor who is thoroughly familiar with the type of work being performed and its best methods of completion.

Health and Safety Officer – The individual assigned by the Contractor to prepare and implement the Site-specific Health and Safety Plan.

Quality Control Engineer – The individual assigned by the Contractor who is thoroughly familiar with a specific aspect of work being performed and who will conduct quality assurance/quality control testing. The Quality Control Engineer may be the Site Supervisor or other designated Contractor personnel.

Subcontractor – An individual, firm or corporation having direct contract with the Contractor or any other Subcontractor for the performance of the work at the Site.

Owner – The party that is owner in simple fee of a particular property, utility, facility, etc.

SECTION 1.4 – SUBMITTALS

The Contractor shall provide to the Engineer at least seven (7) days prior to the start of construction, or as otherwise indicated in this specification, the following items:

1. A detailed schedule of operations.
2. Copies of all required permits.
3. A site specific health plan.
4. Specifications for compaction equipment if different from that specified herein.
5. A certificate of cleanliness from the supplies for all imported backfill materials.

SECTION 1.5 – PROVISIONS FOR PUBLIC SAFETY

- 1.5.1 The Contractor shall exercise caution to avoid injury, damage, or loss to the public, his work, the workman, and public and private property. He will be help responsible for any damages resulting from negligence, carelessness, or lack of skill on this part or that of his agents.
- 1.5.2 The Contractor shall be responsible for providing all personnel, facilities, equipment, and materials to protect all on-site workers from physical injury and adverse health effects due to exposure to site hazards. All on-site personnel shall comply with the requirements of the Contractor's Health and Safety Plan (HASP).
- 1.5.3 All excavations made shall be backfilled the same day whenever possible. Excavations and trenches shall be protected by the use of signs, barricades, lights, or other appropriate means, such that the public is aware that construction is in progress and is protected from injury. Excavations left open overnight or non working days shall be completely covered to prevent entry, accidental or otherwise, into the excavations.

SECTION 1.6 – PROJECT MEETINGS

- 1.6.1 **PRECONSTRUCTION:** A meeting with the Engineer, the Contractor and his designated Sub-contractors shall be held prior to commencement of work to resolve questions pertaining to the work and to establish basic administrative procedures. Meeting location and time will be determined by the Engineer.
- 1.6.2 **PROGRESS MEETINGS**
 - A. **Date and Time:** Progress meetings will be scheduled as necessary or required; as mutually agreed upon by the Company's Representative and the Contractor.
 - B. **Place:** The Contractor's on-site job field office or another mutually agreed upon location.
 - C. The Company's Representative will prepare agenda, preside at meetings, and prepare and distribute a transcript of proceedings to all parties.

- D. The Contractor shall provide data required and be prepared to discuss all items on the agenda.

SECTION 1.7 – EXISTING CONDITIONS AND STRUCTURES

- 1.7.1 The Contractor shall visit the site prior to submitting his bid to determine and satisfy himself with the existing conditions. Any differing conditions shall be reported to the Engineer.
- 1.7.2 The Contractor shall report to the Engineer any conditions encountered during construction which materially differ from those shown on the contract drawings or indicated in this specification. These conditions shall be reported in writing prior to continuing the related construction work.
- 1.7.3 The locations of the existing underground utilities as shown on the contract drawings are approximate and shall be verified by the Contractor.
- 1.7.4 If any utility services are broken, injured, or caused to leak by reason of the construction included in the Contract, the Contractor shall give notice to the proper parties. The expense of the repairs shall be paid by the Contractor.
- 1.7.5 The Contractor shall exercise care to avoid damage to existing structures, poles, utilities, pipes, etc. in the performance of the work. In locations where the excavations is carried beneath or adjacent to such facilities, the Contractor shall adequately support such structures, utilities, or pipes as necessary to maintain them in operation and their original position. The Contractor shall be responsible for any damage caused to any utilities by his work.
- 1.7.6 Information concerning existing conditions were taken from the groundwater treatment system construction drawings obtained by Langan Engineering & Environmental Services. Additional utilities not shown on the drawings may be encountered.

SECTION 1.8 – MOBILIZATION

1.8.1 DESCRIPTION OF WORK

The Contractor shall set up his necessary general plant, including storage areas, offices, equipment, and such sanitary and other facilities as are required by local and state regulations.

1.8.2 EXECUTION

- A. The Contractor shall provide the above facilities and services for mobilization which shall be done in a safe and workman like manner.
- B. The facilities and services shall be maintained in a good housekeeping manner consistent with applicable safety regulations.
- C. The Contractor shall install and maintain semi-permanent markers to clearly locate all identified active underground utilities, and to the extent practicable, remnants of abandoned utilities and structures.

- D. All activities such as housekeeping and soil erosion control shall be maintained at all times.

1.8.3 PARKING AREAS

- A. The Contractor shall maintain parking areas for company employees operating at the site throughout the duration of the construction activities.

1.8.4 INSPECTION

- A. The Engineer or his designee shall inspect mobilization activities as they progress to ensure they are performed in accordance with the specifications and construction drawings.

SECTION 1.9 – HEALTH AND SAFETY REQUIREMENTS

- A. The Contractor shall implement a Health and Safety program in accordance with the requirements of Title 29 of code of Federal Regulations Parts 1910 and 1926 regarding hazardous waste operations. Program requirements shall include, but not be limited to, medical surveillance, employee training, work practices, personal protective equipment, site monitoring, and emergency response.
- B. The Contractor shall be responsible for providing all personnel, facilities, equipment, and materials to protect all on-site workers from physical injury and adverse health effects due to exposure to site hazards. All on-site personnel shall comply with the requirements of the Contractor's Health and Safety Plan (HASP).

1.9.1 HEALTH AND SAFETY PLAN

The Contractor shall perform all site operations in compliance an approved Health and Safety Plan which is to be developed by the Contractor for site activities.

1.9.2 EQUIPMENT AND SUPPLIES

- A. The Contractor shall supply all personal protective equipment and materials needed to perform all construction activities.
- B. The Contractor shall supply all decontamination equipment and supplies for personal protective equipment and excavation machinery, and shall provide for the proper containment of wastewaters generated from decontamination procedures.
- C. The Contractor shall supply all necessary monitoring equipment and supplies to determine the level of personal protective equipment required as specified in the H.A.S.P.

1.9.3 SITE SAFETY AND HEALTH OFFICER

The Contractor shall provide an individual who is responsible to the employer (Contractor) and has the authority and knowledge necessary to implement the site health and safety plan and verify compliance with applicable health and safety requirements.

SECTION 1.10 – SITE CLEARING/ CLEAN UP

1.10.1 DESCRIPTION OF WORK

- A. Clearing shall consist of clearing and stockpiling equipment, storage drums, chain link fence, brush, trees, trash, or any other objectionable materials within the work areas.
- B. Cleanup shall include the routine removal and legal disposal from the work areas of all surplus excavation materials, debris, removed utilities, etc.

1.10.2 EXECUTION

- A. All trees, tires, trash and other objectionable materials that would interfere with the proposed construction, unless specifically designated to remain, shall be cleared from all work areas.
- B. Onsite trash burning shall not be permitted.
- C. Clearing shall be limited to areas where work will be accomplished. Any areas outside the work areas shall remain undisturbed unless otherwise specified by the Engineer.
- D. Any debris, trash, etc. which accumulates during construction shall be properly disposed off by the contractor.
- E. Upon completion of the work, prior to final inspection, the Contractor shall remove any debris or unused materials and shall put the entire area of work and public right-of-ways in near and clean condition.
- F. Disposal shall occur at a licensed disposal facility operating in accordance with all Local, State, and Federal requirements.

END OF DIVISION 1

DIVISION 2 – SITE PREPARATION

SECTION 2.1 – PROTECTION AND MAINTAINENCE OF EXISTING UTILITIES, STRUCTURES, AND FIXTURES

2.1.1 DESCRIPTION OF WORK

- A. The Contractor shall do everything necessary to support, protect, and sustain all sewer, water, gas or service pipes, electric light and power poles, telephone and telegraph poles, manholes, valve boxes, conduits, and any and all other utilities, structures, or fixtures laid across or along the area of the work.

2.1.2 MATERIALS

- A. Materials and methods of support for existing utilities, structures, or fixtures shall be selected by the Contractor.

2.1.3 EXECUTION

- A. Prior to opening an excavation, the Contractor shall determine whether underground installations, i.e. sewer, gas, water, fuel, and electric lines, service connections, etc. will be encountered and, if so, where such underground installations are located.
- B. When the excavation approaches the estimated location of such an installation, the exact location shall be determined by careful probing or hand digging, when it is uncovered, proper support shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation.
- C. The Contractor shall coordinate his prosecution of the work with utility companies having overhead or underground services within the limits of work. The Contractor shall notify the respective utility companies of services, mains, ducts, and poles that must be relocated or supported a minimum of seven (7) days before the work is required.

END OF DIVISION 2

DIVISION 3 – GROURWATER TREATMENT SYSTEM ABANDONMENT

SECTION 3.1 – COLLECTION WELLS & PIPING

3.1.1 DESCRIPTION OF WORK

- A. The work shall include all labor, materials, and equipment for the abandonment of the pumping wells and associated piping in the locations shown on the contract drawings.
- B. The Contractor shall comply with NJDEP requirements and procedures for the decommissioning of wells (N.J.A.C. 7:9D).

3.1.2 PERFORMANCE REQUIREMENTS

- A. Well Permits: The Contractor shall provide the Driller with a scaled site map showing the locations of the wells. The Driller shall complete a Well Abandonment Report and the report shall be submitted with a copy of all applicable well records to the NJDEP within 90 days of completion of sealing.
- B. Sealing materials shall be used to seal and decommission wells under pressure through a tremie pipe which discharges at the bottom of the well.
- C. Potable water shall be used for mixing grout materials and drilling fluids (if the use of drilling fluid is approved by the Engineer).

3.1.3 MATERIALS

- A. Grout: As specified in N.J.A.C. 7:9D-2.9.

END OF DIVISION 3