

Public Safety HVAC and Roofing Upgrades

<u>Category:</u>	Government - Misc. Bldgs.	<u>Project ID #:</u>	1004507696
<u>Street Address:</u>	2 Academy Drive Mount Holly NJ 08060	<u>Staff Estimate Value</u>	\$250,000.00
<u>County:</u>	Burlington	<u>Stage:</u>	BIDDING - Biddate Set
<u>Bid Date:</u>	10/24/2017 , 10:30AM		
<u>Architect:</u>			
<u>Documents Available:</u>	Plans, Specs available in Insight		Plans available from Burlington County - Purchasing Department
<u>Last Update:</u>	9/28/2017		Concord Engineering Group was added as Mechanical Engineer

Personal Notes

User	Note	Update Date	Private?
Adam Sweet	500, 4,000 AND 8,000 GALLON CONVAULT AST FUEL TANKS FOR DIESEL, WASTE OIL AND UNLEADED GASOLINE	9/28/2017	False

Project Events

Event	Date	Details
Bid Date	10/24/2017 , 10:30AM	Sealed bids will be received by the Contracting Agent for the Board of Chosen Freeholders of the County of Burlington, in the Freeholders Conference Room B of the County Administration Office Building, First Floor, 49 Rancocas Road, Mount Holly, New Jersey, at which time said bids will be publicly opened and read aloud.
End Date	11/23/2018	
Pre-Bid Meeting	9/28/2017 , 09:00AM	A Pre-Bid Conference will be held in the Freeholders Board Room of the County Administration Office Building, 49 Rancocas Road, First Floor, Mount Holly, New Jersey.
Site Walkthrough		Site Visits will be by appointment only, please call (609) 265-5011, to schedule an appointment.
Start Date	11/23/2017	Actual Start Date

Notes

Scope Renovation of a municipal facility in Mount Holly, New Jersey. Completed plans call for the renovation of a municipal facility. ONE OVERALL SINGLE CONTRACT Trades Required: General Contractor Plumbing Electrical Mechanical Steel The proposed upgrades for the above reference project include but are not limited to the following: Demo Demolition and reconstruction of the existing HVAC and Roofing System as noted on the plans and specifications. Rehabilitation on the local potable well water treatment system Rehabilitation of the sewerage ejection system Removal of Underground Storage Tanks Site work and Installation of new Above Ground Storage Tanks Garage Door Infill Shooting Range Improvements Lighting Improvements Bids must be made on standard proposal forms in the manner designated therein and required by the specifications must be enclosed in a sealed envelope bearing the name and address of the bidder and proposal identification (BID TITLE), and Burlington County Contract Number CPU-17-0056, printed on outside of envelope, addressed to the Division of Purchase, Burlington County Administration Office Building, PO Box 6000, 49 Rancocas Road, Room 104, Mount Holly, New Jersey 08060-6000. The performance bond must be issued to the Burlington County Board of Chosen Freeholders by a surety company authorized to transact business in New Jersey. Each bidder must clearly list on the prescribed pages the name and addresses of the subcontractor he shall utilize. Failure to list those subcontractors, as required by the New Jersey Local Public Contracts Law, will result in the bidder being disqualified. Late bids will not be accepted or considered. The County assumes no responsibility for bids mailed or misdirected in delivery. AFFIRMATIVE ACTION; Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27. The Board reserves the right to accept or reject any or all bids and waive any immaterial defects or informality in any bid or in the bidding should it be in the best interest of the County to do so.

Notes Bid Date: 10/24/2017 10:30AM Sealed bids will be received by the Contracting Agent for the Board of Chosen Freeholders of the County of Burlington, in the Freeholders Conference Room B of the County Administration Office Building, First Floor, 49 Rancocas Road, Mount Holly, New Jersey, at which time said bids will be publicly opened and read aloud. Pre-Bid Meeting: 09/28/2017 09:00AM A Pre-Bid Conference will be held in the Freeholders Board Room of the County Administration Office Building, 49 Rancocas Road, First Floor, Mount Holly, New Jersey. Development include(s): Renovation

Details [Division 2]: Building Demolition, Hazardous Material Abatement, Clearing, Dewatering, Earthwork, Slope Protection & Erosion Control, Paving & Surfacing, Water Systems. [Division 3]: Concrete Formwork. Concrete Reinforcement. Structural Concrete. Post-Tensioned Concrete. Tilt-Up Precast

Concrete. [Division 4]: Clay Unit Masonry, Concrete Unit Masonry, Marble. [Division 5]: Structural Steel, Metal Fabrications, Metal Stairs. [Division 6]: Rough Carpentry, Architectural Woodwork. [Division 7]: Waterproofing, Membrane Roofing. [Division 8]: Metal Windows, Hardware. [Division 9]: Lath & Plaster, Drywall/Gypsum, Tile, Resilient Flooring, Carpet, Painting. [Division 10]: Louvers & Vents, Protective Covers, Partitions. [Division 11]: Fluid Waste Treatment/Disposal Equipment, Athletic Equipment. [Division 13]: Radiation Protection, Ground Storage Tanks, Elevated Storage Tanks, Underground Storage Tanks. [Division 14]: Elevators, Material Handling Systems. [Division 15]: Mechanical Insulation, Hydronic Piping, Boilers, Cooling Towers, Packaged A/C Units, Air Handling, Ductwork, Testing & Balancing. [Division 16]: Service/Distribution, Lightning Protection Systems, Alarm & Detection Systems.

Additional Details

<u>Listed On:</u>	9/20/2017	<u>Floor Area:</u>	
<u>Contract Type:</u>		<u>Work Type:</u>	Alteration
<u>Stage Comments 1:</u>		<u>Floors Below Grade:</u>	
<u>Stage Comments 2:</u>		<u>Owner Type:</u>	County
<u>Bid Date:</u>	10/24/2017	<u>Mandatory Pre Bid Conference:</u>	
<u>Invitation #:</u>	CPU-17-0056, 1C14150.00	<u>Commence Date:</u>	11/23/2017
<u>Structures:</u>	1	<u>Completion Date:</u>	11/23/2018
<u>Single Trade Project:</u>		<u>Site Area:</u>	
<u>Floors:</u>		<u>LEED Certification Intent:</u>	
<u>Parent Project ID:</u>		<u>Units:</u>	
<u>Parking Spaces:</u>			

Project Participants

Company Role	Company Name	Contact Name	Address	Phone	Email	Fax
Owner	Burlington County - Purchasing Department		49 Rancocas Rd. 1st Floor, Mount Holly, NJ 08060	(609) 265-5012	purchasing@co.burlington.nj.us	(609) 265-5438
Civil Engineer	T&M Associates,	Edwin Steck	1256 North Church Street , Moorestown, NJ 08057	(856) 722-6700		(856) 722-0175
Mechanical Engineer	Concord Engineering Group	John Marchiafava	520 South Burnt Mill Rd. , Voorhees, NJ 08043	(856) 427-0200	info@concord-engineering.com	(856) 427-6529

Contracts

Classification	Conditions	Bonding	Bid Date	Bids To	Bid Type
General Contractor		Bid:10.00%,Perf:100.00%,Pay:100.00%	10/24/2017	Owner	Open Bidding

History

User	Viewed	First Viewed Date	Currently Tracked?	Date Tracked
Adam Sweet	True	9/28/2017	True	9/28/2017

SECTION 231300 - FACILITY FUEL-STORAGE TANKS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Underground fuel storage tanks.
2. Aboveground fuel storage tanks.
3. Aboveground steel secondary containment dike tank.
4. Leak detection and location system.

B. Related Sections:

1. Section 033000 - Cast-In-Place Concrete: Product requirements for concrete ballast and fill pads for underground tank for placement by this section.
2. Section 055000 - Metal Fabrications: Product and execution requirements for bollards for placement by this section.

1.2 REFERENCES

A. American Petroleum Institute:

1. API 12P - Fiberglass Reinforced Plastic Tanks.
2. API 650 - Welded Steel Tanks for Oil Storage.
3. API 1615 - Installation of Underground Petroleum Storage Systems.
4. API 1632 - Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems.
5. API 2000 - Venting Atmospheric and Low-Pressure Storage Tanks: Nonrefrigerated and Refrigerated.

B. NACE International:

1. NACE RP-02-85 - Corrosion Control of Underground Storage Tank Systems by Cathodic Protection.

C. National Electrical Manufacturers Association:

1. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).

D. National Fire Protection Association:

1. NFPA 30 - Flammable and Combustible Liquids Code.
2. NFPA 31 - Standard for the Installation of Oil-Burning Equipment.

E. Petroleum Equipment Institute:

1. PEI 100 - Recommended Practices for Installation of Underground Liquid Storage Systems.

F. Steel Tank Institute:

1. STI ACT-100 - Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks.

G. Underwriters Laboratories Inc.:

1. UL 58 - Steel Underground Tanks for Flammable and Combustible Liquids.
2. UL 142 - Steel Aboveground Tanks for Flammable and Combustible Liquids.
3. UL 567 - Pipe Connectors for Flammable Liquids and Combustible Liquids and LP-Gas.
4. UL 913 - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous Locations.
5. UL 1316 - Glass Fiber Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures.
6. UL 2085 - Standard for Safety for Insulated Aboveground Tanks Flammable and Combustible Liquids.

1.3 SUBMITTALS

A. Shop Drawings:

1. Tanks: Indicate for fuel oil tanks dimensions; number, size, and location of openings; number, size, and location of manholes; number and location of hold down straps, and accessories. Indicate dimensions, reinforcing steel size, and reinforcing steel location.

B. Product Data:

1. Tanks: Submit manufacturer's catalog information including capacity.
2. Leak Detection and Location System: Submit manufacturer's catalog information for controller, alarm unit, cable type.

C. Test Reports: Submit written test results for tank pressure test.

D. Manufacturer's Installation Instructions

E. Manufacturer's Certificate:

1. Certify Products meet or exceed specified requirements.

F. Manufacturer's Field Reports: Submit report of each visit of manufacturer's representative to provide technical assistance during installation.

1.4 CLOSEOUT SUBMITTALS

A. Project Record Documents: Record actual locations of manholes, tanks, and leak detection and location system.

- B. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.
- C. Operation and Maintenance Data: Submit spare parts lists.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with NFPA 30 and 31.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Do not install underground tank when bedding is wet or frozen.
- B. Do not install tank foundations when bedding is wet or frozen.

1.7 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.

PART 2 - PRODUCTS

2.1 TANKS

- A. Manufacturers:
 - 1. Convault
 - 2. Approved equal
- B. Provide materials in accordance with State and Municipality standards.
- C. Description:
 - 1. The Insulated Secondary Containment Aboveground Storage Tank Systems for Flammable and Combustible Liquids, Protected Type: Vehicle Impact Protected, and Projectile Resistant shall be tested to and listed for the following:
 - a. UL - 142, aboveground steel tanks for flammable and combustible liquids.
 - b. UL - 2085, two-hour furnace fire test and two hour simulated pool fire test for insulated and protected tanks.
 - c. UL - 2085 and UFC Test Standard (Article 79 or APPENDIX #A-II-F-1), for both Vehicle Impact Protection and Projectile Resistance.
 - d. UL - 2085, Protected aboveground tanks for flammable and combustible liquids.

- e. UL - 2085, Non-Metallic Secondary Containment protected tanks for flammable and combustible liquids with secondary containment Emergency Venting by "Form of Construction".
- f. CAN/ULC - S601 (ORD - 142.18), Standard for shop fabricated steel above-ground horizontal tanks for flammable and combustible liquids.
- g. CAN/ULC - S655 (ORD - C 142.16), Standard for protected aboveground tank assemblies for flammable and combustible liquids
- h. CAN/ULC - (ORD - C 142.5), Standard for concrete encased aboveground tank assemblies for flammable and combustible liquids.
- i. CAN/ULC - (ORD - C 142.16), the furnace burn requirements for two hour fire rating.
- j. CAN/ULC - (ORD - C 142.25), the open (pool) fire testing for two-hour flammable liquid fire test.
- k. CAN/ULC - (ORD - 142.23), for aboveground tanks for used oil.
- l. The requirement for Uniform Fire Code (UFC) for two-hour (firewall) test.
- m. To be tested and certified by the California Air Resources Board (CARB) for Balanced Phase 1 and Phase 2 Vapor Recovery including methanol and ethanol.
- n. High Explosive (HE) Blast Resistance: The tank system design shall be the subject of a Blast Effects Analysis (BEA) for resistance under the following blast threat load scenarios:
 - 1. a 50-pound HE man-portable improvised explosive device (MPIED) at the standoff distance of 5 feet;
 - 2. a 500-pound HE vehicle-born improvised explosive device (VBIED) at the standoff distance of 20 feet; and
 - 3. a vapor cloud explosion (VCE) with a load of 10 psi.

The BEA shall conclude that the tank system shall resist the explosion loads and remain intact, without failure of the primary tank. The engineering consultants performing the BEA shall be a nationally recognized firm with over 10 years experience offering comprehensive services related to blast and impact effects analysis, explosive safety design, vulnerability assessments and threat mitigation.
- 2. The primary steel tank shall be rectangular in shape and have continuous welds on all exterior seams, manufactured in accordance with UL listing requirements and UL Standard 142.

3. The primary steel tank shall be pressure tested at 5 psig for 24 to 48 hours.
4. The primary steel tanks shall have "emergency vent" system as per NFPA 30 Code requirements.
5. The protected and insulated AST systems shall have a thru-tank leak detector tube to allow for physical checkup and monitoring capability between the primary and the secondary containment.
6. The primary steel tank shall be pressurized at 5 psig during concrete encasement.
7. The outer surface of the primary steel tank shall be covered by a minimum of 1/4" thick (6.4 mm) Styrofoam insulation panels.
8. The secondary containment shall consist of a 30 Mil thick (0.76 mm) High-Density Polyethylene membrane enclosing the steel tank and insulation material.
9. The primary steel tank and the secondary containment shall be encased in six inches of monolithic reinforced concrete, with minimum design strength of 4,000 and 5,000 psi at 28 days depending on the tank size. The concrete design shall include the following for long-term durability: air entrainment, water reducing admixture, and steel reinforcement. Concrete encasements with seams will not be approved.
10. The protected and insulated AST systems shall be of concrete exterior and a continuous and visually verifiable monolithic (seamless) pour on top, bottom, ends, and sides and contain no cold joints or heat sinks (heat transfer points). The AST must be shop fabricated and tested in accordance with the UL listings. Designs that use two layers of steel with insulation material between them will not be approved.
11. No steel or insulating material shall come in contact with the concrete or other corrosive material.
12. All openings shall be from the top only.
13. All exposed metal with the exception of stainless steel must be powder coated to inhibit corrosion.
14. The protected and insulated AST systems shall include a 7 or 15-gallon powder coated or stainless steel, UL listed spill containment, and shall include normally closed valve to release spilled product into the primary steel tank. Spill containment which route the spilled product into interstitial area will not be approved.
15. The protected and insulated AST systems shall have a coated concrete exterior to resist weather and reflect sunlight. Models with steel exteriors will not be approved.

16. The protected and insulated AST systems shall have a warranty of 30 years for systems 2,000 gallon capacity and larger and 20 years for systems 1,000 gallon capacity and smaller with optional 30-year warranty.
17. The protected and insulated AST systems design shall have been in use for a minimum of twenty (20) years. The manufacturer must stipulate no reportable AST containment system failure in 30,000 units produced.
18. The protected and insulated AST systems shall have two (2) bolts for connecting grounding conductors for lightning protection in accordance with NFPA 780.
19. Provide locked fill ports.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify excavations are to required grade, dry, and not over-excavated.

3.2 INSTALLATION

- A. Manufacturer shall have a minimum of 5 years experience in producing specified tank for commercial use and document at least 10 installations in satisfactory operation.
- B. The tank system and accessories shall be installed in strict accordance with the manufacturer's recommendations and applicable fire and environmental codes. Contractor shall obtain all state and local permits prior to installation.
- C. Tanks shall be set level and installed on a reinforced concrete base slab designed to support the fully loaded tank. Stainless Steel Protective bollards shall be installed where required by state and local codes.
- D. Tanks shall be marked on all sides with warning signs: "FLAMMABLE" or "COMBUSTIBLE", "NO SMOKING", product identification, and other signs as required by applicable codes.
- E. Electrical work shall be in accordance with applicable codes and shall be rated for hazardous area as required. Electric feed for dispensing pumps shall include an emergency shutoff switch located per code requirements. Tanks shall be electrically grounded in accordance with N.F.P.A. 78.
- F. The system installation shall be inspected and approved by the system supplier or its certified contractor. The system supplier shall submit a comprehensive checklist of quality and safety items critical to the system and verify that the installation has been in accordance with these standards and applicable fire and environmental codes.
- G. Special fittings to be furnished and installed shall include as a minimum, but not be limited to the following:

1. 2"x8' vent riser.
 2. 2" vent cap.
 3. 4" lockable fill cap.
 4. 6" or 8" emergency vent.
 5. 10' gauge stick.
 6. Sight gauge.
 7. All decals required by State, Federal, or local codes.
 8. Drop tubes required for suction pipes.
- H. Tanks threaded coupling, nipples, and pipe stubs shall be of filament wound or contact mold construction and shall conform to the size shown on drawings or as specified. All threaded fitting shall have machine tolerance in accordance with the ANSI Standard.
- I. All aboveground storage tanks shall be provided with labeling which shall note their contents. These shall include "Diesel Fuel," "Waste Oil" and "Unleaded Gasoline CAS #8006-61-9" as applicable. The Contractor shall provide the Engineer with submittals showing size of letter, the method used to affix the label to the aboveground storage tank and its proposed location.
- J. On completion of all the specified work, with equipment in place, a final test shall be conducted in the presence of the Owner or its authorized representative. Tanks shall be tested and installed according to the current installation instructions provided by the tank manufacturer
- K. The Contractor shall furnish the services of manufacturer's representatives, who shall instruct the Owner's operating personnel in the proper operation, care and maintenance of all equipment. The services of manufacturer's representatives shall be furnished by the Contractor at such times and for such lengths of time as required, at no additional expense to the Owner.

END OF SECTION 231300