REQUEST FOR PROPOSALS

UNDERGROUND STORAGE TANK REMOVALS AND INSTALLATION OF ABOVEGROUND STORAGE TANKS AT VARIOUS CITY-OWNED FACILITIES FORT WORTH, TEXAS

PROJECT #: ENV 19-03 – CIP PST UPGRADE

Due: July 11, 2019

Submitted by:

Company Name	(print or type name of signatory)
Mailing Address	(signature)
City, State, Zip	Title
Telephone	Email

ADDENDUM

TO: Interested Parties
FROM: Kevin Pas, Senior Environmental Specialist
DATE: June 28, 2019
RE: Addendum
Project #: **ENV 19-03 : CIP PST UPGRADE**

As of Thursday, June 27, 2019, the following clarifications apply;

1. Attached is the non-mandatory pre-qualifications sign-in sheet and business card roster:

2. Must the Certificate of Interested Parties Form 1295 be completed on-line with the Texas Ethics Commission in advance of submission of the RFP (Section 2.6 of RFQ)?

   No. The Form 1295 will be required for the selected Provider at the time of contract negotiations and council approval.

3. Given that the services to be conducted under this contract are "Professional Services", is the prevailing wage rate form required (RFQ Section 2.16)?

   Yes. Please sign and submit the Prevailing Wage Rate Form located in Section 2.16 even though this is a Professional Services contract. There may be a possibility that under the negotiated contract, application of this requirement may be needed.

4. Do consultants have to be registered as a vendor with the City of Fort Worth in order to submit a SOQ?

   No.

5. Does the City of Ft. Worth have a preference on the UL2085 AST configuration? Do the tanks need to be Rectangular or Cylindrical?

   Yes, **Cylindrical** in nature is the preferred choice.

6. Does the City of Ft. Worth have a preference as to where the Fillrite Cabinet Pump is to be mounted (on top of tank or next to tank)?

   With the exception for the larger AST at ZBoaz, it is preferred to have the cabinet pump mounted on the top of the AST. At ZBoaz, the cabinet pump may be mounted adjacent to the AST on a permanent mount attached to the foundation pad.

7. On each project where the task is to install (via relocation or provide new) an AST, it specifies "Lightning protection". Does the city want the tanks bonded to the earth (grounded with ground rods), Lightning rods installed, TVSS (transient voltage surge suppression) installed on the whole fuel system electrical, or some combination of the aforementioned?

   Yes each AST should be "grounded" and applicable methods should be utilized in order to protect the entire system from lightning in the event that it strikes the AST.

8. Will contractors assume the existing conduits are in the buildings can be utilized and used for the new system?

   Yes, the existing conduit may be utilized inside of the existing buildings.

9. What is the amount that the Bid Bond should be based on?

   A Cashier's check or an acceptable bidder's bond payable to the City of Fort Worth, in an amount of five (5) per cent of the bid submitted. The Bid Security must accompany the bid and is subject to forfeit in the event the successful bidder fails to execute the contract documents within ten (10) days after the contract has been awarded. The Bid Security shall be included in the envelope containing the bid proposal. Failure to submit the Bid Security will result in the proposal not being considered for this project. Bidder's bond will be returned if the City fails to award the contract within 90 calendar days of receipt of bids, unless the Bidder agrees to an extension. The surety must be licensed to do business in the State of Texas.

   The Bid Bond shall be based on the total costs for the Base Bid for Site #3. Fire Station #30, 4416 Southwest Boulevard, Fort Worth Texas 76106. In other words, if the base bid for this site is $25,000, the Bid Bond should be 5% of that or $1,250.

10. Section 2.10 Project Schedule and Payment

When completing this section, it is not necessary to have the actual calendar dates incorporated into the schedule but rather a schedule of tasks and the length of time to complete that task.

11. Hose Reel Package Options

In addition to the **REELCRAFT Model F83000 OLP** Fuel Hose Reel, a substitution with an equivalent brand such as the **Alemite Model 8078-K** is acceptable.

12. Hanging Hardware for Cabinet Pump Connection with Fuel Hose

Tuthill Model #702VRU Fill-Rite® Cabinet Pumping Unit should be used as the standard specification for the base bid. Also in regards to the larger AST for ZBoaz, a remote pedestal should be considered for the **Tuthill Fill-Rite Cabinet Pump**. The pedestal should be **Fill-Rite® Model # FR102PHU pedestal with Nozzle Hook.**

13. Hanging Hardware for Cabinet Pump Connection with Fuel Hose

Tuthill Model #702VRU Fill-Rite® Cabinet Pumping Unit should be used as the standard specification for the base bid for sites other than ZBoaz.

14. How are the RFPs graded so as to determine awardees?

Within the RFP package, the selection criteria is clearly demarcated with certain percentages for each criterion section, including MWBE participation for subcontractors and the MWBE offices individual scoring percentage. The cost aspect will be individually compared and contrasted to ascertain the most advantageous cost for the City based on the other criteria. A simple lump sum total has not been requested and the individual line items will be compared and scores applied based on the comparisons.

15. You had mentioned the possibility of awarding to more than one vendor, is that still applicable?

Yes the City may, after careful review of all submittals, award more than one contract depending upon the direction for each individual sites requirements and the comparison of all submittals when compared to the top priority sites.

16. What is the schedule for activities for the overall project?

As stated in the pre-bid meeting, the RFP details the overall project scope in three (3) major tasks;

- **TASK 1 - AST Construction Related Activities**
- **TASK 2 - Various Sites - AST Relocation and Reinstallation Activities**
- **TASK 3 - Various Sites - UST Removal and AST Construction Related Activities**

The schedule will following these three general tasks in order of priority for completion.

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1.0 REQUEST FOR PROPOSALS

Chapter 252, Texas Local Government Code, "Purchasing and Contracting Authority of Municipalities" does not apply to this request for proposals for the underground storage tank removal activities associated with replacement project located at several locations within Fort Worth, Texas. The contract resulting from this process is "a procurement necessary to preserve or protect the public health or safety of the municipality's residents" as provided for in Section 252.022 of the Texas Local Government Code. This request for proposal follows a procedure established by the City, however, because this request is exempt from Chapter 252 of the Texas Local Government Code, the City reserves the right to negotiate a contract after receiving all proposals. The City reserves the right to waive any and all irregularities and to award a contract in the best interest of the city.

1.1 PROJECT DESCRIPTION

Proposals are being accepted by the City of Fort Worth for the provision of furnishing of all labor, materials, and equipment necessary for the removal and transportation, to a proper waste disposal facility of ten (10) underground storage tanks (USTs) with associated underground piping, and the installation of seven (7) new, aboveground storage tanks (AST) with associated piping and applicable ancillary delivery equipment, and relocation of two (2) City-owned ASTs described as follows:

TASK 1 - AST Construction Related Activities

Location	Address	AST Install
Z-Boaz (West Parks)	7103 Calmont, Fort Worth, Texas 76116	1 – 6,000 gallon (g) SPLIT
FS 24	3101 Forest Avenue, Fort Worth, Texas 76112	1 – 1,000 gallon (g)
FS 30	4416 Southwest Boulevard, Fort Worth, Texas 76116	1 – 1,000 gallon (g)

TASK 2 - Various Sites - AST Relocation and Reinstallation Activities

Present Location of AST	Future Location of AST	Size/Type of AST	Weight (Empty) Approx.
301 E. Felix Street	FS 10, 3209 Hemphill Street	500 g	~ 12,000 #
2500 Brennan Avenue	FS 25, 3801 North Main Street	500 g	~ 12,000 #

TASK 3 - Various Sites - UST Removal and AST Construction Related Activities

Fire Station (FS) No.	Number of USTs for Removal	Address	AST
FS 32	2	10201 White Settlement Road, Fort Worth, Texas 76108	1 – 1,000 g
FS 33	2	14650 Statler Drive, Fort Worth, Texas 76155	1 – 1,000 g
FS 31	2	4209 Longstraw, Fort Worth, Texas 76137	1 – 1,000 g
FS 14	2	2737 Meadowbrook Drive, Fort Worth, Texas 76103	1 – 1,000 g
FS 25	2	3801 North Main Street, Fort Worth, Texas 76106	N/A

The proposed response action includes the decommissioning of eight (8), approximately, 550-gallon USTs and the decommissioning of two (2), approximately, 1,000-gallon USTs.

The major work will consist of the (approximate) following:

- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST from Fire Station 32.
- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST from Fire Station 33.
- Removal and disposal of two (2) USTs, one (1), gasoline, 1,000-gallon and one (1), diesel, 1,000-gallon USTs from Fire Station 31.
- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST from Fire Station 14.
- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST from Fire Station 25.
- Installation of six (6) –1,000 gallon, above-ground storage tanks (ASTs) at six (6) Fire Stations (14, 24, 30, 31, 32,and 33);
- Installation of one (1) –6,000 gallon / Split, above-ground storage tank (AST) at Z-Boaz;
- Relocation of two (2) – City-owned, Convault® 500-gallon, above-ground storage tank (AST) to two (2) Fire Stations (10 and 25).
- Installation of new fuel dispensers, at Fire Stations 10, 14, 24, 25, 30, 31, 32, 33, and Z-Boaz.
- New concrete foundation, new piping, bollards, and associated electrical improvements for the nine (9) locations, {Fire Stations (10, 14, 24, 25, 30, 31, 32, and 33) and Z-Boaz}.

All work performed under the contract shall be in strict adherence to all applicable Federal, State and local rules and regulations.

Each provider including subcontractors shall NOT be listed on the Excluded Parties List System (www.epls.gov). Before proceeding on each portion of the project the provider including subcontractors will have to certify they are NOT on the EPLS.

Description of Work Activity
Removal and disposal of two (2), 550-gallon USTs – FS 31
Removal and disposal of two (2), 550-gallon USTs – FS 32
Removal and disposal of two (2), 1,000-gallon USTs –FS 33
Removal and disposal of two (2), 550-gallon USTs – FS 25
Removal and disposal of two (2), 550-gallon USTs – FS 14
Excavation of five (5) tankholds
Overexcavation of potential contamination located in tankholds
Transportation and disposal of contaminated soils from tankholds
Backfill, Compaction, Density Testing at five (5) locations
FS 30 - Install one, new, **1,000-gallon, AST** - SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085, UL-142, NFPA 30 and 30A, NFPA 1 Uniform Fire Code, STI F 941; One **Fuel Dispenser Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.
FS 31 - Install one, new, **1,000-gallon, AST** - SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085, UL-142, NFPA 30 and 30A, NFPA 1 Uniform Fire Code, STI F 941; One **Fuel Dispenser Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.
FS 32 - Install one, new, **1,000-gallon, AST** - SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085, UL-142, NFPA 30 and 30A, NFPA 1 Uniform Fire Code, STI F 941; One **Fuel Dispenser Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.
FS 33 - Install one, new, **1,000-gallon, AST** - SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085, UL-142, NFPA 30 and 30A, NFPA 1 Uniform Fire Code, STI F 941; One **Fuel Dispenser Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.
FS 24 - Install one, new, **1,000-gallon, AST** - SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085, UL-142, NFPA 30 and 30A, NFPA 1 Uniform Fire Code, STI F 941; One **Fuel Dispenser Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.
FS 14 - Install one, new, **1,000-gallon, AST** - SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085, UL-142, NFPA 30 and 30A, NFPA 1 Uniform Fire Code, STI F 941; One **Fuel Dispenser Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.
Z-Boaz - Install one, new, **6,000-gallon /Dual Compartment**, AST - SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085, UL-142, NFPA 30 and 30A, NFPA 1 Uniform Fire Code, STI F 941; Two **Fuel Dispenser Units**; and Two **Morrison Spill Buckets**, plus other required fittings and associated equipment.
Install nine (9) Concrete Foundations for ASTs
Install 6" Protective Bollards for nine (9) ASTs
Install New Dispensers
Install Applicable Signage for nine (9) ASTs
FS 10 - Relocate, upgrade, and install one, City-owned, 500-gallon **Convault** ®; One **Fuel Dispensing Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.
FS 25 - Relocate, upgrade, and install one, City-owned, 500-gallon **Convault** ® ; One **Fuel Dispensing Unit**; and One **Morrison Spill Bucket**, plus other required fittings and associated equipment.

Scope of Work

The installation of seven (7), new, double-wall UL-142 and UL-2085 listed, 1,000 gallon ASTs and the installation of one (1) new, double-wall UL-142 and UL-2085 listed 6,000 gallon, split AST meeting the Southwest Research Institute (SwRI Test Procedure 95-03, 93-01, UFC 79-7, UL-2085) requirements.

The project also includes removal of eight (8), 550-gallon USTs and two (2), 1,000-gallon USTs including

associated underground piping, fill ports, and ancillary equipment. In addition, two (1) City-owned ASTs will be repurposed from an existing locations and set up operationally at other existing City-owned sites. This will entail decommissioning and disconnecting associated fueling accessories located on individual ASTs, loading, transporting, unloading, establishing adequate foundations for installation of AST, installation of upgraded fueling accessories, installation of bollard protection, and ensuring sites are fully operational upon completion of each individual project location.

The Contractor will be required to deliver turnkey fueling facilities in full operational accordance with project specifications and all applicable industry standards and international, federal, state, city and county laws, rules, ordinances, and regulations.

The Contractor will be required to verify all regulatory requirements and industry standards. Particular attention should be given to compliance with TCEQ requirements and related guidance set forth in 30 TAC §334.

The Contractor will be responsible for determining and verifying the applicability of governing requirements. All work shall be performed as described in project drawings and specifications (this and all sections).

Contractor will work closely with the Owner to sequence construction/installation and demolition/removal activities to assure zero interruption and unreasonable inconvenience to Facility operations.

The City will perform the following tasks under this contract:

- Provide site contact information;
- Provide site access;
- Provide third-party environmental consultation, including construction oversight, sample collection, and close-out reports; and
- Provide analytical laboratory analysis.

1.2 GENERAL REQUIREMENTS

Proposals will be received at the **Purchasing Office**, City of Fort Worth, 200 Texas Street, Fort Worth, 76102, until **1:30 p.m., Thursday, July 11, 2019** and will be opened and publicly read aloud approximately thirty minutes later in the Council Chambers.

The project name is **"ENV 19 – 03 CIP PST UPGRADE"**.

After evaluating the Proposals submitted, the City will select the Offeror that provides the Best Value to the City and enter into negotiations with that Offeror. The City may discuss with the selected Offeror options for a scope or time modification and any price change associated with such modification.

1.2.1 Pre-Proposal Meeting

A Pre-Proposal Conference will be held from **10 a.m. to 12:00 p.m., Thursday, June 13, 2019 in the conference room on the 7th floor at 908 Monroe Street, Fort Worth, Texas**. Attendance at the pre-

proposal conference is not mandatory but is recommended.

The offers will be valid for **one-hundred twenty (120) calendar days.**

The Proposal Documents submitted in accordance with this Request for Competitive Sealed Proposal shall remain valid for one-hundred twenty (120) days after the due date.

All Providers must comply with:

- Chapter 17, "Human Relations," Article III, "Discrimination," Division 3, "Employment Practices," of the Code of the City of Fort Worth, prohibiting discrimination in employment practices.
- Fort Worth ordinance 20020, Business Diversity Enterprises.

Offerors must submit a bid bond with their proposal. Offeror(s) to whom an award of contract(s) is made will be required to provide Payment and Performance Bonds, as required, and provide proof of Contractors General Liability and Statutory Workers Compensation Coverage.

Proposal documents, addenda, and specifications may be obtained from the City of Fort Worth Web site at http://www.fortworthgov.org/purchasing/ in portable document format (PDF), or may be viewed at the Environmental Management Division office at 908 Monroe Street, 7th Floor, Fort Worth, Texas 76102, during normal business hours. Contact the Project Manager, Roger Grantham, at 817-392-8592 or email Roger.Grantham@fortworthtexas.gov for assistance.

1.3 INTERPRETATION OF RFP DOCUMENTS

All requests for an interpretation of the Request for Proposal must be made in writing and submitted to the Environmental Quality Division, regular mail or email, at any time up to seven (7) calendar days prior to the deadline date for submitting Proposal Packages. The person submitting the request will be responsible for its prompt delivery. No oral requests for interpretation will be answered.

The City will issue any interpretation of the Proposal Documents as a formal addendum. The City will attempt to email a copy of each addendum to each person receiving a Proposal Package, when those persons have identified themselves to the City. The City will also post addenda on the web site. The City will not be responsible for any other explanations or interpretations. It is the Provider's obligation to determine if addenda have been issued prior to the deadline for submitting the Proposal Package.

1.4 CONFLICTS

Should there be conflicts between the Proposal documents and the final executed contract document; the final contract shall take precedence. Questions regarding this Request for Proposal should be directed in writing immediately to:

Kevin Pas, Senior Environmental Specialist
Environmental Quality Division
City of Fort Worth
200 Texas Street, Fort Worth, TX, 76102-6311
Phone 817-392-8504
kevin.pas@fortworthtexas.gov

1.5 HOW TO SUBMIT A PROPOSAL PACKAGE

Each Provider must submit **one (1) electronic copy of the entire Proposal package on a "flash or thumb" drive** to the City. No hardcopies will be accepted.

All items to complete the submittal must be included within the Proposal Package or the entire Proposal Package may be considered non-responsive and rejected. In case of ambiguity or lack of clarity, the City reserves the right to adopt the construction most advantageous to the City or to reject the Proposal Package.

Proposal Packages (electronic thumb-drive only) must be submitted in a sealed envelope, addressed to the City of Fort Worth Purchasing Division, 200 Texas Street, Fort Worth, Texas 76102. The Proposal Packages must be received by the Purchasing Division no later than 1:30 p.m. on Thursday, July 11, 2019.

The project number must be clearly marked on the envelope and the statement "**PROPOSAL DOCUMENTS ENCLOSED, DELIVER TO PURCHASING DIVISION ONLY BEFORE 1:30 p.m. on Thursday, July 11, 2019**" placed in the lower left-hand corner of the envelope in which the documents are delivered. If the documents are placed in an envelope that is contained inside another envelope, the statement shall be placed on the outermost envelope.

Any Proposal Documents not properly marked or not received in the proper place by the proper time **will be considered non-responsive**.

NO FAXED or EMAILED PROPOSALS WILL BE ACCEPTED

1.6 OPENING OF PROPOSAL

The firm name for each proposal submitted will be read aloud at read aloud at 2:00 p.m. on **Thursday, July 11, 2019**, in the Fort Worth City Council Chambers. The Proposal Packages shall be handled so as to avoid the disclosure of the remainder of their contents to competing offerors and so as to keep such contents secret during negotiations. All Proposal Packages will be open for public inspection after the contract is awarded.

However, information in the Proposal Packages subject to the trade secrets exception of the Public Information Act under §552.110 of the Texas Government Code or the confidential information exception under §552.101 of the Texas Government Code will not be open to public inspection. It is the responsibility of the Provider to clearly mark as such any information they deem trade secret or confidential.

1.7 PROPOSAL EVALUATION CRITERIA

The City will select the most highly qualified Provider responding to the request, based upon demonstrated competence and the Proposal. The Proposal will be evaluated by qualitative measures and will be weighted as follows:

In determining the **Best Value Offeror**, the City will consider:

1. Proposed Price (35%)

The lowest priced responsive will receive 35 points for this rating criteria. Higher priced proposals will receive proportionally lower scores. When compared to the lowest price, the higher priced proposal will have its score reduced by one percent (1%) for every percent it is higher than the lowest price. The score will be rounded to the nearest whole number.

2. Proposed Project Schedule (5%)

For this project, the selected contractor will coordinate and work with the City Staff during the construction period.

3. Reputation/Experience (35%)

Reputation and experience of the Offeror (25%) as demonstrated by listing past and current projects including references with names and current telephone numbers; and, list of subcontractors (10%) including subcontractor qualifications.

The City may conduct such investigations as deemed necessary to assist in the evaluation of any Proposal and to establish the responsibility, Proposal, and financial ability of the Provider, subcontractors, and other persons who are proposed to work on the project.

4. Minority/Women Business Enterprise (25%)

MBE and WBE proposers, in accordance and consistent with the City's Business Diversity Enterprise (BDE) Ordinance, will receive Evaluation Preference Points to reflect the City's strong and serious consideration to use MBEs and WBEs as primes.

1.8 NEGOTIATION OF THE CONTRACT

After selecting the most highly qualified Provider, the City will then attempt to negotiate with the Provider a contract. If a satisfactory contract cannot be negotiated with the most highly qualified Provider, the City shall formally end negotiations with the Provider, select the next most highly qualified Provider, and attempt to negotiate a contract with that Provider. This process shall continue until a contract is entered into, or until the City rejects all submittals and issues a new Request for Proposal based on a new scope of work. The fees under the contract must be consistent with industry standard and may not exceed any maximum provided by law.

During negotiations, the Provider will also respond to the City's Business Diversity Enterprise (BDE) Utilization Requirements as set forth in Section 2.3 of this Request for Proposals. The City will negotiate with the successful Provider any final changes to the contract and any exceptions identified in the Proposal Documents. The City is not obligated to accept any exceptions made by Provider. After the negotiations, the City will prepare and issue the contract documents with the notice of award to the successful Provider.

1.9 AWARD OF THE CONTRACT

The City will send a notice of award letter to the successful Provider with three (3) sets of contract documents. The successful Provider must execute the contract in each set and return all three sets to the City. Upon receipt of the three sets, the City will execute each set and issue one set to the Provider with a letter entitled notice to proceed. This letter authorizes work to begin and invoices to be paid.

1.10 RESERVATIONS

The City reserves the right to reject any or all Proposal Packages and waive any or all formalities.

1.11 SECURITY

Upon acceptance of this Proposal by the City Council, the bidder is bound to execute a contract and, if the contract amount exceeds $50,000.00, furnish acceptable Performance and/or Payment Bonds approved by the City of Fort Worth for performing and completing the Work within the time stated and for the following sum, to wit: Before beginning the work, the Contractor shall be required to execute to the City of Fort Worth, a payment bond if the contract is in excess of $25,000, and a performance bond if the contract is in excess of $100,000. The payment bond is solely for the protection and use of payment bond beneficiaries who have a direct contractual relationship with the Contractor or subcontractor to supply labor or material; and in 100% the amount of the Contract. The performance bond is solely for the protection of the City of Fort Worth; in 100% the amount of the Contract; and

conditioned on the faithful performance by Contractor of the work in accordance with the plans, specifications, and contract documents. Contractor must provide the payment and performance bonds, in the amounts and on the conditions required, within 14 calendar days after Notice of Award.

1.12 VENDOR COMPLIANCE TO STATE LAW

The 1985 Session of the Texas Legislature passed House Bill 620 relative to the award of contracts to non-resident bidders. This law provides that, in order to be awarded a contract as low bidder, non-resident bidders (out of state contractors whose corporate offices or principal place of business are outside of the State or Texas) bid projects for construction, improvements, supplies or services in Texas at an amount lower than the lowest Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a non-resident bidder in order to obtain a comparable contract in the State in which the non-resident's principal place of business is located. The appropriate blanks in Section A must be filled out by all out-of-state or non-resident bidders in order for your bid to meet specifications. The failure of out-of-state or non-resident contractors to do so will automatically disqualify that bidder. Resident bidders must check the box in Section B.

A. Non-Resident vendors in _____ (give State), our principal place of business, are required to be _____ percent lower than resident bidders by State law. A copy of the Statute is attached.

Non-resident vendors in _____ (give State), our principle place of business, are not required to underbid resident bidders.

B. Our principle place of business or corporate office(s) is in the State of Texas. ☐

Bidder:

_____
Company Name

_____
By: (Please Print)

_____
Signature

_____
Title (Please Print)

1.13 CONTRACTOR'S RESPONSIBILITIES

Contractor is responsible for becoming familiar with the character, quality, quantity of work to be performed, materials and equipment required.

Contractor shall procure all permits and licenses, pay all charges, costs, and fees, and give all notices necessary and incident to the due and lawful prosecution of the work, unless otherwise specified in this Invitation to Bid.

All costs associated with preparing a bid in response to the solicitation shall be borne by the bidder.

The undersigned acknowledges the requirements of this section, and intends to comply with same in the execution of this project.

PROVIDER:

_____	BY:_____
Company Name	(print or type name of signatory)
_____	_____
Address	(Signature)
_____	_____
City, State, Zip	Title (print or type)

MINORITY BUSINESS ENTERPRISE (MBE): (**For bids in excess of $100,000**)

I am aware that I must submit information concerning the MBE participation within **TWO BUSINESS DAYS** of submittal of this Proposal in order to be considered RESPONSIVE.

PROVIDER:

_____	BY:_____
Company Name	(print or type name of signatory)
_____	_____
Address	(Signature)
_____	_____
City, State, Zip	Title (print or type)

2.0 PROPOSAL DOCUMENTS

2.1 PROPOSAL DOCUMENT CHECKLIST

All Proposal Documents, including this Checklist, must be completed in full and submitted in a sealed envelope, in the requested order, or the Proposal Package may be considered as a non-responsive submittal.

	Proposal Documents	Initial if Included
1.	PROPOSAL DOCUMENT CHECK LIST	_____
2.	ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA	_____
3.	MINORITY BUSINESS ENTERPRISES (MBE)	_____
4.	PROPOSAL SUMMARY	_____
5.	PROPOSAL OF PROVIDER	_____
6.	LIST OF SUBCONTRACTORS	_____
7.	INSURANCE CERTIFICATES	_____
8.	LICENSES & CERTIFICATES	_____
9.	LEGAL & COMPLIANCE HISTORY	_____
10.	PERFORMANCE AND PAYMENT BONDS	_____
11.	BID SECURITY	_____
12.	PREVAILING WAGE RATE	_____
13.	COMPLIANCE &WORKERS COMPENSATION	_____

I understand that failure to submit all of these items may cause my submittal to be considered non-responsive.

Name _____

Title _____

Company_____

2.2 ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA

Check if applicable ____

The undersigned acknowledges the receipt of the following addendum (a) to the Request for Proposal, and has attached all addenda following this page. (Add lines if necessary).

__ Addendum Number 1 _____
(Date received)

__ Addendum Number 2 _____
(Date received)

__ Addendum Number 3 _____
(Date received)

__ Addendum Number 4 _____
(Date received)

Check if applicable ____

The undersigned acknowledges the receipt of no addenda to the Request for Proposal.

PROVIDER:

_____ BY:_____
Company Name (print or type name of signatory)

_____ _____
Address (Signature)

_____ _____
City, State, Zip Title (print or type)

2.3 MINORITY BUSINESS ENTERPRISE (MBE) (BEST VALUE PROPOSAL)

In accordance with the City's Business Diversity Enterprise Ordinance No. 20020-12-2011 (as amended), the City has goals for the participation of minority business enterprise in City contracts. A copy of the Ordinance can be obtained from the Office of the City Secretary. The Bidder shall submit the MBE Utilization Form, Subcontractor/Supplier Utilization Form, Prime Contractor Waiver Form and/or Good Faith Effort Form with documentation and/or Joint Venture Form as appropriate. The Forms including documentation must be received by the City no later than 2:00 p.m. CST, on the second business days after the bid opening date. The Bidder shall obtain a receipt from the City as evidence the documentation was received. Failure to comply shall render the bid as non-responsive.

The **Minority Business Enterprise (MBE)** diversity goal is **10%**.

It is important to note that only MBE subcontractors and suppliers that perform a commercially useful function may count towards the MBE diverse goal. If the Proposer is certified as a DBE, MBE, SBE or WBE firm, it is not permissible to count itself or its subsidiary-owned companies towards the established goal; the goal represents subcontracting opportunities.

Bidders **must** obtain MBE listings from the City of Fort Worth's M/WBE Office at 817-212-2674 or email mwbeoffice@fortworthtexas.gov. This will ensure that Bidders are acknowledging MBE firms currently certified by the North Central Texas Regional Certification Agency (NCTRCA) or other certifying agencies that the City may deem appropriate and accepted by the City of Fort Worth at the time bids are submitted, in order for the participation to be counted towards the established diverse goal. The firms must be located in the City's six (6) county geographic marketplace that includes the counties of: Tarrant, Dallas, Denton, Johnson, Parker, and Wise. Also note if a firm is DBE certified that reflects minority ownership and meets the criteria's stated, it may count towards the goal.

If an Offeror (regardless of certification status or if a non-D/M/W/MBE), however, forms a joint venture with one or more MBEs, the MBE joint venture percentage participation will be counted towards the established goal. The appropriate City of Fort Worth Joint Venture form must be submitted for review and approval in order for it to be counted. The City of Fort Worth strongly encourages joint ventures.

If Offeror failed to meet the stated MBE goal, in part or in whole, then a detailed explanation must be submitted to explain the Good and Honest Efforts that firm made to secure MBE participation.

Failure to submit the MBE participation information or the detailed explanation of the bidder's Good and Honest Efforts to meet or exceed the stated MBE goal, may render that bid non-responsive.

The undersigned acknowledges the City's MBE requirements as stated above, and if selected as the most highly qualified provider, will comply with the requirement to submit a utilization plan during contract negotiations.

PROVIDER:

_____	BY:_____
Company Name	(print or type name of signatory)
_____	_____
Address	(Signature)
_____	_____
City, State, Zip	Title (print or type)

Remainder of page intentionally left blank

2.4 PROPOSAL SUMMARY

TO THE CITY OF FORT WORTH:

The undersigned hereby proposes to furnish the equipment, labor, materials, superintendence, and any other items or services necessary to perform the required UST removal and AST construction-related services as instructed by the City. The Scope of Services is outlined on the following pages of the Proposal Documents.

The proposed response action includes the decommissioning of eight (8), approximately, 550-gallon USTs and the decommissioning of two (2), approximately, 1,000-gallon USTs, and the installation of adequate concrete foundations for supporting the installation of applicable ASTs at the project locations.

The major work will consist of the (approximate) following:

- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST and ancillary piping, from Fire Station 32.
- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST and ancillary piping, from Fire Station 33.
- Removal and disposal of two (2) USTs, one (1), gasoline, 1,000-gallon and one (1), diesel, 1,000-gallon USTs and ancillary piping, from Fire Station 31.
- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST and ancillary piping, from Fire Station 14.
- Removal and disposal of two (2) USTs, one, gasoline, 550-gallon and one, diesel, 550-gallon UST and ancillary piping, from Fire Station 25.
- Installation of six (6) –1,000-gallon, above-ground storage tanks (ASTs) at six (6) Fire Stations (14, 24, 30, 31, 32,and 33);
- Installation of one (1) –6,000-gallon / Split, above-ground storage tank (AST) at Z-Boaz;
- Relocation of two (2) City-owned, 500-gallon above-ground storage tanks (ASTs) for Fire Stations 10 and 25.
- Installation of new fuel dispensers at Fire Stations 10, 14, 24, 25, 30, 31, 32, 33, and Z-Boaz.
- Installation of new spill buckets at Fire Stations 10, 14, 24, 25, 30, 31, 32, 33, and Z-Boaz.
- New concrete foundation, new piping, bollards, and associated electrical improvements for the nine (9) locations including, Fire Stations (10, 14, 24, 25, 30, 31, 32, and 33) and Z-Boaz.

In addition to the decommissioning of the existing USTs, clean select- fill materials will be required to fill the former tankhold. Compaction of select-fill materials will be required to occur in 8" lifts with density testing being required for each lift. Density testing requirements should meet or exceed +/- 95% before the next lift is initiated. Refer to section 3.4 for additional information.

The scope of work anticipated for the UST removal includes the following:

- Saw cutting and breaking the concrete cover over the UST, if applicable;
- Excavation of remaining tank backfill material to expose the tanks for removal;
- Removal of all associated product and vent line piping, where applicable;
- Evacuation and removal of any residual product remaining in the tanks;
- Cleaning the interior of the tanks and purging the tanks of all explosive vapors using forced air or other suitable means;
- Stockpile excavated soils for analytical testing*;
- Fill material removed from the tank pit will be placed on-site on polyethylene sheeting and covered to prevent stormwater runoff while awaiting characterization and authorization to return to the excavation;
- Once stockpile analytical results are received, assumes excavated soil material is "non-impacted," sufficient clean select fill material to make up the volume of the removed UST will be moved to another location at the facility. Clean fill placed back in the excavation and compacted to grade in 8-inch lifts. Compaction testing and verification will be performed with a density of +/- 95%.
- Necessary City of Fort Worth permits and TCEQ notifications of petroleum storage tank construction activities.

1. Fire Station # 10 – 3209 Hemphill Street, Fort Worth, Texas 76110

One 500-gallon, **Convault®** AST, presently located at 301 E. Felix Street will be relocated to the project site, 3209 Hemphill Street, Fire Station #10.

Task One – Concrete Foundation Installation **COST $_____**

Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Two – Relocation and Installation of AST **COST $_____**

Installation of one (1) 500-gallon, **Convault®** AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Three – Fuel Dispenser Package "A" **COST $_____**

Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 3; BASE BID COST $_____

Option One – Fuel Dispenser Package "B" **COST $_____**

Installation of one (1) *__Wayne Reliance G6200 Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**

Installation of one (1) *__Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**

Installation of one (1) *__Bennett Model 3711 SNR 17 Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**

Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management Package **COST $_____**

Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Fire Station # 10 – 3209 Hemphill Street, Fort Worth, Texas 76110

2. Fire Station # 25 – 3801 North Main Street, Fort Worth, Texas 76106

One 500-gallon, **Convault**® AST, presently located at 2500 Brennan Avenue will be relocated to the project site, 3801 North Main Street, Fire Station #25. Removal of one, 550-gallon, gasoline, and one, 550-gallon, diesel UST.

Task One – UST Removal/Backfill **COST $_____**
Removal of two (2) 550-gallon USTs; excavation of tankholds;
Backfilling and compaction with testing;

Task Two – Concrete Foundation Installation **COST $_____**
Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Three – Relocation and Installation of AST **COST $_____**
Installation of one (1) 500-gallon, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Four – Fuel Dispenser Package "A" **COST $_____**
Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 4; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) *__Wayne Reliance G6200 Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) *__Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) *__Bennett Model 3711 SNR 17 Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**
Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Fire Station # 25 – 3801 North Main Street, Fort Worth, Texas 76106

3. Fire Station # 30 – 4416 Southwest Blvd., Fort Worth, Texas 76106

One new, 1,000-gallon, AST and ancillary required fueling equipment will be installed at this site location and the system will be made fully operational.

Task One – Concrete Foundation Installation **COST $_____**
Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Two –Installation of AST **COST $_____**
Installation of one (1), new, 1,000-gallon, **FireGuard**®AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Three – Fuel Dispenser Package "A" **COST $_____**
Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 3; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) *__Wayne Reliance G6200 Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) *__Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) *__Bennett Model 3711 SNR 17Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**
Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel
Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

Option Six – AST Package "B" **COST $_____**
Installation of one (1) 1,000-gallon, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Fire Station # 30 – 4416 Southwest Blvd., Fort Worth, Texas 76106

4. Fire Station # 24 – 3101 Forest Avenue, Fort Worth, Texas 76112

One new, 1,000-gallon, AST and ancillary required fueling equipment will be installed at this site location and the system will be made fully operational.

Task One – Concrete Foundation Installation **COST $_____**
Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Two – AST Package "A" **COST $_____**
Installation of one (1), new, 1,000-gallon, **FireGuard**®AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Three – Fuel Dispenser Package "A" **COST $_____**
Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 3; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) *__Wayne Reliance G6200 Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) *__Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

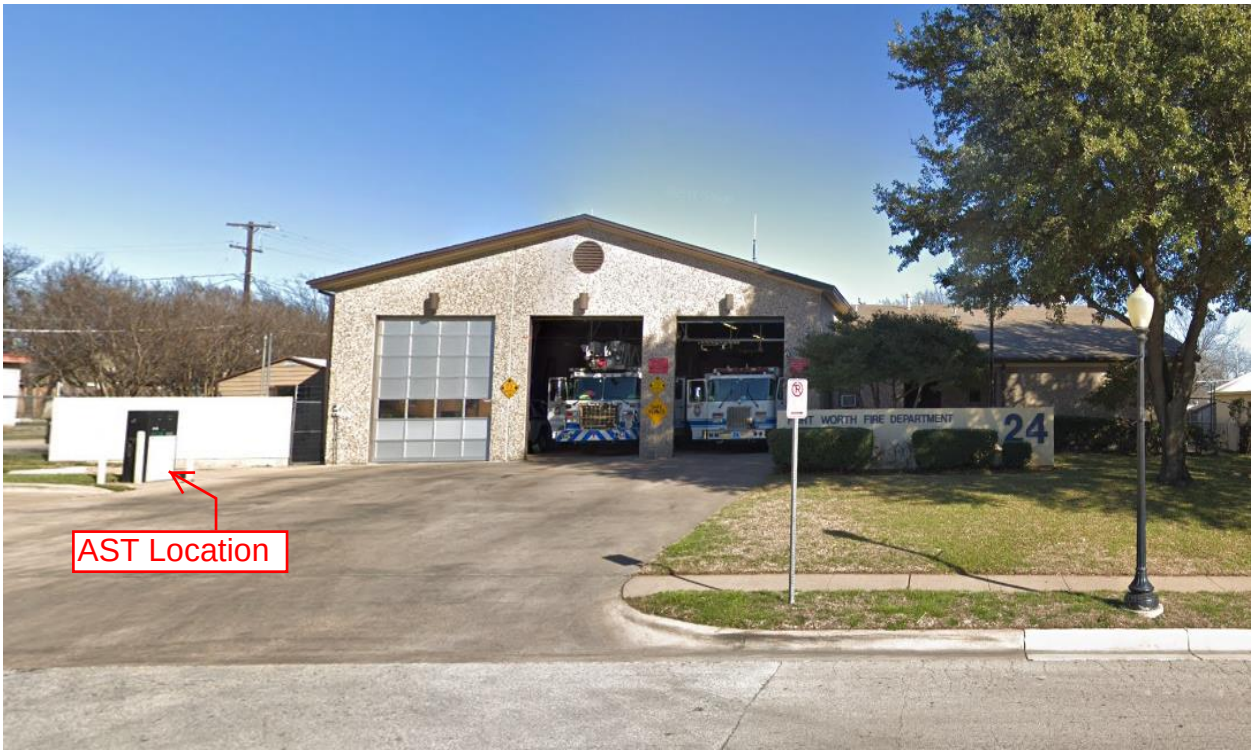
Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) *__Bennett Model 3711 SNR 17 Fuel Dispenser (single hose);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**
Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

Option Six – AST Package "B" **COST $_____**
Installation of one (1) 1,000-gallon, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.



Fire Station # 24 – 3101 Forest Avenue, Fort Worth, Texas 76112

5. Z-Boaz – West District Parks – 7103 Calmont, Fort Worth, Texas 76116

One new, 6,000-gallon, dual-compartment AST and ancillary required fueling equipment will be installed at this site location and the system will be made fully operational.

Task One – Concrete Foundation Installation **COST $_____**
Installation of one (1), new, concrete foundation with bollards according to Section 3.2 – Concrete Standards.
Foundation size - 18.0' x 12.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Two – AST Package "A" **COST $_____**
Installation of one (1), new, 6,000-gallon, dual-compartment, **FireGuard**®AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Three – Fuel Dispenser Package "A" **COST $_____**
Installation of two (2) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Units;**
Installation of two (2) **Morrison 516 Series Top-Mount Spill-Buckets.**

TASK 1 – 3; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) *__Wayne Reliance G6200 Fuel Dispenser (dual hose/dual product);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) *__Gilbarco Gasboy Atlas 9853K Fuel Dispenser (dual hose/dual product);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) *__Bennett Model 3712 SNR 21 Fuel Dispenser (dual hose/dual product);__
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

Option Five – AST Package "B" **COST $_____**
Installation of one (1) 6,000-gallon, dual-compartment, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Z-Boaz – West District Parks – 7103 Calmont, Fort Worth, Texas 76116

6. Fire Station # 14 – 2737 Meadowbrook Drive, Fort Worth, Texas 76103

Removal of two (2), 550-gallon USTs and Installation of one (1), 1,000-gallon AST and ancillary required fueling equipment will be installed at this site location and the system will be made fully operational.

Task One – UST Removal/Backfill **COST $_____**
Removal of two (2) 550-gallon USTs; excavation of tankholds;
Backfilling and compaction with testing;

Task Two – Concrete Foundation Installation **COST $_____**
Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Three – AST Package "A" **COST $_____**
Installation of one (1), new, 1,000-gallon, **FireGuard**®AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Four – Fuel Dispenser Package "A" **COST $_____**
Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 4; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) ***Wayne Reliance G6200 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) ***Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) ***Bennett Model 3711 SNR 17 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**
Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,**
Electronic Fuel Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

Option Six – AST Package "B" **COST $_____**
Installation of one (1) 1,000-gallon, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Fire Station # 14 – 2737 Meadowbrook Drive, Fort Worth, Texas 76103

7. Fire Station # 31 – 4209 Longstraw, Fort Worth, Texas 76137

Removal of two (2), 1,000-gallon USTs and Installation of one (1), 1,000-gallon AST and ancillary required fueling equipment will be installed at this site location and the system will be made fully operational.

Task One – UST Removal/Backfill **COST $_____**
Removal of two (2) 1,000-gallon USTs; excavation of tankholds;
Backfilling and compaction with testing;

Task Two – Concrete Foundation Installation **COST $_____**
Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Three – AST Package "A" **COST $_____**
Installation of one (1), new, 1,000-gallon, **FireGuard**®AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Four – Fuel Dispenser Package "A" **COST $_____**
Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 4; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) ***Wayne Reliance G6200 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) ***Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) ***Bennett Model 3711 SNR 17 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**
Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

Option Six – AST Package "B" **COST $_____**
Installation of one (1) 1,000-gallon, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Fire Station # 31 – 4209 Longstraw, Fort Worth, Texas 76137

8. Fire Station # 32 – 10201 White Settlement Road, Fort Worth, Texas 76108

Removal of two (2), 550-gallon USTs and Installation of one (1), 1,000-gallon AST and ancillary required fueling equipment will be installed at this site location and the system will be made fully operational.

Task One – UST Removal/Backfill **COST $_____**
Removal of two (2) 550-gallon USTs; excavation of tankholds;
Backfilling and compaction with testing;

Task Two – Concrete Foundation Installation **COST $_____**
Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Three – AST Package "A" **COST $_____**
Installation of one (1), new, 1,000-gallon, **FireGuard**®AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Four – Fuel Dispenser Package "A" **COST $_____**
Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 4; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) ***Wayne Reliance G6200 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) ***Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) ***Bennett Model 3711 SNR 17 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**
Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel
Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

Option Six – AST Package "B" **COST $_____**
Installation of one (1) 1,000-gallon, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

* If Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Fire Station # 32 – 10201 White Settlement Road, Fort Worth, Texas 76108

9. Fire Station # 33 – 14650 Statler Drive, Fort Worth, Texas 76155

Removal of two (2), 550-gallon USTs and Installation of one (1), 1,000-gallon AST and ancillary required fueling equipment will be installed at this site location and the system will be made fully operational.

Task One – UST Removal/Backfill **COST $_____**
Removal of two (2) 550-gallon USTs; excavation of tankholds;
Backfilling and compaction with testing;

Task Two – Concrete Foundation Installation **COST $_____**
Installation of one (1) concrete foundation with bollards according to
Section 3.2 – Concrete Standards.
Foundation size - 12.0' x 8.0' x 8.0";
Location: as designated by City of Fort Worth staff;

Task Three – AST Package "A" **COST $_____**
Installation of one (1), new, 1,000-gallon, **FireGuard**®AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

Task Four – Fuel Dispenser Package "A" **COST $_____**
Installation of one (1) **Tuthill Model #702VR Fill-Rite® Cabinet Pumping Unit;**
Installation of one (1) **Morrison 516 Series Top-Mount Spill-Bucket.**

TASK 1 – 4; BASE BID **COST $_____**

Option One – Fuel Dispenser Package "B" **COST $_____**
Installation of one (1) ***Wayne Reliance G6200 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Two – Fuel Dispenser Package "C" **COST $_____**
Installation of one (1) ***Gilbarco Gasboy Atlas 9853K Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Three – Fuel Dispenser Package "D" **COST $_____**
Installation of one (1) ***Bennett Model 3711 SNR 17 Fuel Dispenser (single hose);**
Installation of one (1) **Morrison 515 Series Remote AST Spill-Bucket.**

Option Four – Hose Reel Package **COST $_____**
Installation of one (1) **REELCRAFT® Model F83000 OLP Fuel Hose Reel.**

Option Five – Fuel Management System Package **COST $_____**
Installation of one (1) **OPW = "Site Sentinel® Integra 500™"** tank system;
Installation of one (1) **OPW K-800 Hybrid-H-FIT-2 PROX-KEY,** Electronic Fuel Management Control System with external **F.S.C.-3000 SITE CONTROLLER.**

Option Six – AST Package "B" **COST $_____**
Installation of one (1) 1,000-gallon, **Convault**® AST;
Emergency Shut-off; Signage as applicable; Operational testing;
Lightning protection; Electrical connection; Relief valves;

* If Fuel Dispenser Option Package B, C, or D is to be utilized, the associated piping from the AST to the dispenser will be required to be located aboveground.

Fire Station # 33 – 14650 Statler Drive, Fort Worth, Texas 76155

Proposal Documents have been submitted in one sealed package.

_____ Addenda to the Request for Proposal have been received as acknowledged in Section 2.2.

This Proposal Summary and the accompanying Proposal Documents are intended to be complete and will remain valid for ninety (90) days from the date of submittal.

PROVIDER:

_____	BY: _____
(Company Name)	(print or type name of signatory)
_____	_____
(Address)	(Signature)
_____	_____
(City, State, Zip)	Title (print or type)
_____	_____
Phone)	(Email)

Remainder of this Page Intentionally Left Blank

2.5 PROPOSAL OF THE PROVIDER

Provider shall provide its company name, address, telephone number(s), and email addresses for the local office as well as the headquarters.

Provider shall include a copy of its current Statement of Qualifications (**20-page maximum, 11 pt. type minimum**). If subcontractors are to be utilized, each subcontractor must be discussed within the statement of Proposal. Within the statement of Proposal the Provider should:

- Document Provider's experience (including references for petroleum storage tank services as discussed in the Scope of Services. This section should discuss past and current relevant jobs with special focus on LOCAL AREA work.

- Submit an organization chart depicting contact arrangement from the City to the Provider and from the Provider's representative to other areas within the Provider. Identify key persons by name and title and describe the primary work assigned. This chart must include the individual(s) assigned to ensure the BDE plan is followed.

- Submit a brief résumé (one page maximum, 11 pt. type minimum) for the overall key personnel assigned to this project (Project Manager, Project Site Supervisors, etc.) that will PERFORM WORK under this contract. These resumes do not count as part of the overall 20-page limit for the statement of Proposal.

The contractor is required to fill out and notarize the Certificate of Interested Parties Form 1295 and the form must be submitted to the Project Manager before the contract will be presented to the City Council. The form can be obtained at https://www.ethics.state.tx.us/tec/1295-Info.htm.

2.5.1 TCEQ Notification and Project Coordination

Contractor will be responsible for coordinating with the Environmental Management Division the start date of UST removal activities to allow for notification to the Texas Commission on Environmental Quality (TCEQ).

2.6 LIST OF SUBCONTRACTORS

Providers shall complete the following information and submit it with the Proposal Documents to permit the City of Fort Worth to more fully evaluate the submittal's quality prior to awarding the contract.

Subcontractor's Name	Subcontractor's Address	Subcontractor's Telephone No.	Subcontractor's Email	Proposed Tasks on the Project

IF NECESSARY, PROVIDE MORE SHEETS TO DESCRIBE ADDITIONAL SUBCONTRACTORS.

2.7 INSURANCE

FOR PURPOSES OF THIS REQUEST FOR PROPOSAL, PLEASE ATTACH A COPY OF YOUR CURRENT INSURANCE CERTIFICATE(S) FOLLOWING THIS SECTION AND INCLUDED WITHIN THE PROPOSAL PACKAGE.

The successful Provider will be required by the contract to have insurance coverage as detailed below. Prior to commencing work, the Provider shall deliver to Fort Worth certificates documenting this coverage. The City may elect to have the Provider submit its entire policy for inspection.

Insurance coverage and limits:

Provider shall provide to the City certificate(s) of insurance documenting policies of the following coverage at minimum limits that are to be in effect prior to commencement of work on the contract:

1. **Commercial General Liability**
   - **$1,000,000 each occurrence**
   - **$2,000,000 aggregate**

2. **Automobile Liability**
   - **$1,000,000 each accident, or**
   - **$250,000 property damage / $500,000 bodily injury per person per accident**

   A commercial business auto policy shall provide coverage on "any auto," defined as autos owned, hired and non-owned during the course of this project.

3. **Worker's Compensation**
   - **Coverage A: statutory limits**
   - **Coverage B: $100,000 each accident**
     $500,000 disease - policy limit
     $100,000 disease - each employee

   Waiver of Subrogation required.

4. **Professional Liability**
   - NOT APPLICABLE FOR THIS PROJECT

   Professional Liability Insurance shall be written on a project specific basis. The retroactive date shall be coincident with or prior to the date of this contract and the certificate of insurance shall state that the coverage is claims-made and the retroactive date. The insurance coverage shall be maintained for the duration of this contract and for five (5) years following completion of the contract (Tail Coverage). An annual certificate of insurance shall be submitted to the City for each year following completion of this contract.

5. **Environmental Impairment Liability and/or Pollution Liability**
   - **$4,000,000 per occurrence.**

   EIL coverage(s) must be included in policies listed in items 1 and 4 above; or, such insurance shall be provided under a separate policy or policies. Liability for damage occurring while loading, unloading and transporting materials collected under the contract project shall be included under the Automobile Liability insurance or other policy(s).

Certificates of insurance evidencing that the Provider has obtained all required insurance shall be delivered to the City prior to Provider proceeding with the contract.

1. Applicable policies shall be endorsed to name the City an Additional Insured thereon, as its interests may appear. The term City shall include its employees, officers, officials, agents, and volunteers as respects the contracted services.

2. Certificate(s) of insurance shall document that insurance coverage specified according to items in section 2.7 above are provided under applicable policies documented thereon.

3. Any failure on part of the City to request required insurance documentation shall not constitute a waiver of the insurance requirements.

4. A minimum of thirty (30) days' notice of cancellation or material change in coverage shall be provided to the City. A ten (10) days' notice shall be acceptable in the event of non-payment of premium. Such terms shall be endorsed onto Provider's insurance policies. Notice shall be sent to Roger Grantham, City of Fort Worth – Environmental Management Division, 200 Texas Street, Fort Worth, Texas 76102.

5. Insurers for all policies must be authorized to do business in the State of Texas or be otherwise approved by the City; and, such insurers shall be acceptable to the City in terms of their financial strength and solvency.

6. Deductible limits, or self-insured retentions, affecting insurance required herein shall be acceptable to the City in its sole discretion; and, in lieu of traditional insurance, any alternative coverage maintained through insurance pools or risk retention groups must be also approved. Dedicated financial resources or letters of credit may also be acceptable to the City.

7. **Applicable policies shall each be endorsed with a waiver of subrogation in favor of the City as respects the contract.**

8. The City shall be entitled, upon its request and without incurring expense, to review the Provider's insurance policies including endorsements thereto and, at the City's discretion, the Provider may be required to provide proof of insurance premium payments.

9. The Commercial General Liability insurance policy shall have no exclusions by endorsements unless the City approves such exclusions.

10. The City shall not be responsible for the direct payment of any insurance premiums required by the contract. It is understood that insurance cost is an allowable component of Provider's overhead.

11. All insurance required in section 2.7 above, except for the Professional Liability insurance policy, shall be written on an occurrence basis in order to be approved by the City.

12. Subcontractors to the Provider shall be required by the Provider to maintain the same or reasonably equivalent insurance coverage as required for the Provider. When subcontractors maintain insurance coverage, Provider shall provide City with documentation thereof on a certificate of insurance. Notwithstanding anything to the contrary contained herein, in the event a subcontractor's insurance coverage is canceled or terminated, such cancellation or termination shall not constitute a breach by Provider of the contract.

2.8 PROVIDER'S LICENSES & CERTIFICATES

Provider shall procure all permits and licenses, pay all charges, costs, and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

Provider should provide a copy of the appropriate certifications, registrations, and licenses and related certificates (including Subcontractors) with their submittal including but not limited to:

- TCEQ Licensed Corrective Action Specialist;
- TCEQ Licensed UST Contractor; and
- TCEQ Licensed UST Supervisor (A/B).

Provider shall provide necessary company licenses and certifications required to complete the project:

- Current **Texas Sales/Use Tax Certificate;**
- Current Texas Secretary of State Business/Company Registration exhibiting Officers of Business/Company; and
- Current **Certificate of Good Standing** (Texas Secretary of States' office).

ATTACH COPIES OF CURRENT APPLICABLE LICENSES AND CERTIFICATES FOLLOWING THIS PAGE AND INCLUDED WITHIN THE PROPOSAL PACKAGE

2.9 STAFF AND PROJECT REFERENCES

Provider shall complete a **staff matrix** including the following information detailing the provider's key personnel, their qualifications, and years of experience for staff that will be providing services associated with this Solicitation.

Provider shall provide at least **four (4) project references** similar in scope and size to that of this Solicitation. Each project reference shall include the following information:

- Company's Name
- Name and Title of Contact/Project
- Email, Phone, and Address of Contact
- Contract/Project Value
- Brief Description of Service Provided

2.10 PROJECT SCHEDULE AND PAYMENTS

Provider shall submit the following items included in this bid submittal, in the same order as listed, following this page, included within the response.

Project Schedule: Contractors shall provide a project schedule that includes all major tasks pursuant to the Scope of Work and Specifications. The project schedule shall show all tasks in the left most columns and their duration shall be plotted horizontally versus time. A time scale shall be selected so that the complete duration of the project can be shown on paper with a maximum dimension of 11" high by 17" wide. The project schedule must be submitted with the bid. During the term of the contract the Contractor shall submit monthly project schedules showing planned work and actual work accomplished.

Schedule of Values: Progress Payments will only be made after completion of those tasks and/or subtasks identified on the Project Schedule and Schedule of Payments. Progress Payments will be made during the project no more frequently than once per month. A payment schedule must be submitted with the Bid showing the name of each task and/or subtask, the name of the deliverable document for each task and/or subtask, total task and/or subtask cost, planned payment dates for each task and/or subtask, and the amount that would be remaining in the contract account. Upon receipt of final project completion documentation, final project payments will be approved. Final payments will not be approved until project completion documentation has been submitted to and approved by the City of Fort Worth.

Communications: Provide an organization chart that details the communication channels between the Contractor and City of Fort Worth personnel for this contract.

2.11 PROVIDER'S LEGAL AND COMPLIANCE HISTORY

Provider's legal and compliance history is a critical component of this Request for Proposal. Read this section with care and respond accordingly. Failure of the Provider to provide all the information requested and to certify the report, will result in the Provider's submittal being declared non-responsive.

Provider shall attach a written report of legal action brought against Provider, Provider's officers, Provider's employees, AND Provider's proposed subcontractors relating to the protection of the environment. The terms "legal action" and "relating to the protection of the environment" are defined below.

The report shall include all legal action brought within **five (5) years of the closing date of this Request for Proposal**. The report shall detail the substance, status, and outcome of such legal action. This includes without limitation the names of the agency and/or persons bringing the action, all relevant dates, and all fines, judgments, and/or settlements. Include the following information for each case at a minimum:

- Style of Case (X vs. Y)
- Cause Number
- Court
- Date of Disposition
- Settlement Information (as appropriate)
- Names / Addresses of all parties named
- Counsel List and phone numbers
- Judgment and Order of Judgment

"LEGAL ACTION" means: ANY enforcement action by the United States Environmental Protection Agency, the Occupational Safety and Health Administration, any other federal agency, the Texas Commission on Environmental Quality (including its predecessor agency the Texas Natural Resource Conservation Commission), the Texas Department of State Health Services (including its predecessor agency the Texas Department of Health), and any other state agency, commission or department, whether in Texas or elsewhere, when such enforcement action is a result of violations, real or alleged, of any laws, licenses, permits, judicial orders, or administrative orders, relating to the protection of the environment. In this context, enforcement action shall include without limitation, written warnings, notices of violation, consent orders or agreements, compliance orders, administrative hearings, civil litigation, and criminal prosecution. Legal action also means any civil litigation brought by any person relating to the protection of the environment.

"RELATING TO THE PROTECTION OF THE ENVIRONMENT" means: requirements pertaining to the manufacture, processing, distribution, use, handling, storage, transportation, reporting, records keeping, permitting, licensing, treatment, disposal, emission, discharge, spill, release, or threatened release of hazardous materials, hazardous substances, hazardous wastes, toxic substances, petroleum, industrial waste, solid waste, pollutants or contaminants into or onto the air, surface water, drinking water, groundwater, stormwater, publicly owned treatment works, and/or land.

THE REPORT SHALL BE SIGNED AND CERTIFIED by an authorized representative of the Provider, using the form on the following page. The top portion of the form is to be completed if a report of legal action is attached. The bottom portion of the form is to be completed if Provider has no legal action to report. **Make certain that the appropriate portion of the form is filled out and signed.**

AN AUTHORIZED REPRESENTATIVE OF THE PROVIDER shall mean:

(1) if the Provider is a corporation: the president, secretary, or treasurer, or a vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation;

(2) if the Provider is a partnership, a general partner; and

(3) if the Provider is a sole proprietorship, the sole proprietor.

INCLUDE A COPY OF THE REPORT OF LEGAL ACTION FOLLOWING THE CERTIFICATION PAGE AND INCLUDED WITHIN THE PROPOSAL PACKAGE

Certification of Provider's Legal and Compliance History

Complete ONE of the Following Certifications:

Certification of Legal Action Report

I certify under penalty of law that the attached Legal Action Report detailing Provider's, Provider's officers, Provider's employees, and Provider's proposed subcontractors legal and compliance history relating to the protection of the environment was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PROVIDER:

_____ BY:_____
Company Name (print or type name of signatory)

_____ _____
(signature) Title (print or type)

_____
Date

Certification of NO Legal Action

I certify under penalty of law that the legal and compliance history of Provider, Provider's officers, Provider's employees, and Provider's proposed subcontractors was researched under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I hereby certify that no legal action relating to the protection of the environment was brought against Provider, Provider's officers, Provider's employees, or Provider's proposed subcontractors within the preceding five years. To the best of my knowledge and belief, this statement is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PROVIDER:

_____ BY:_____
Company Name (print or type name of signatory)

_____ _____
(signature) Title (print or type)

_____
Date

2.12 PERFORMANCE AND PAYMENT BONDS

For projects in excess of $50,000, the successful bidder entering into a contract for the work will be required to give the City surety in a sum equal to the amount of the contract awarded. The form of the bond shall be as herein provided and the surety shall be acceptable to the City. All bonds furnished hereunder shall meet the requirements of Texas Government Code Section 2253, as amended.

In order for a surety to be acceptable to the City, the surety must (1) hold a certificate of authority from the United States Secretary of the Treasury to qualify as a surety on obligations permitted or required under federal law; or (2) have obtained reinsurance for any liability in excess of $100,000 from a reinsurer that is authorized and admitted as a reinsurer in the State of Texas and is the holder of a certificate of authority from the United States Secretary of the Treasury to qualify as a surety on obligations permitted or required under federal law. Satisfactory proof of any such reinsurance shall be provided to the City upon request. The City, in its sole discretion, will determine the adequacy of the proof required herein.

No sureties will be accepted by the City that are at the time in default or delinquent on any bonds or which are interested in any litigation against the City. Should any surety on the contract be determined unsatisfactory at any time by the City, notice will be given to the contractor to that effect and the contractor shall immediately provide a new surety satisfactory to the City.

If the total contract price is $50,000 or less, payment to the contractor shall be made in one lump sum. Payment shall not be made for a period of 45 calendar days from the date the work has been completed and accepted by the City.

If the contract is in excess of $50,000, a Payment Bond shall be executed, in the amount of the contract, solely for the protection of all claimants supplying labor and materials in the prosecution of the work.

If the contract amount is in excess of $100,000, a Performance Bond shall also be provided, in the amount of the contract, conditioned on the faithful performance of the work in accordance with the plans, specification, and contract documents. Said bond shall be solely for the protection of the City of Fort Worth.

2.13 BID SECURITY

Cashier's check or an acceptable bidder's bond payable to the City of Fort Worth, in an amount of five (5) per cent of the bid submitted. The Bid Security must accompany the bid and is subject to forfeit in the event the successful bidder fails to execute the contract documents within ten (10) days after the contract has been awarded. The Bid Security shall be included in the envelope containing the bid proposal. Failure to submit the Bid Security will result in the proposal not being considered for this project. Bidder's bond will be returned if the City fails to award the contract within 90 calendar days of receipt of bids, unless the Bidder agrees to an extension. The surety must be licensed to do business in the State of Texas.

PLEASE ATTACH BID SECURITY (CASHIER'S CHECK OR BID BOND) FOLLOWING THIS PAGE AND BOUND WITHIN THE PROPOSAL PACKAGE

2.14 PREVAILING WAGE RATE

A Contractor selected for this project will be required to comply with TEXAS GOVERNMENT CODE, Chapter 2258, with respect to payment of Prevailing Wage Rates for public works contracts. The current wage scale for members of the Building and Construction trade may be found at:

http://www.texoassociation.org/Chapter/wagerates.asp.

A worker employed on a public work by or on behalf of the City of Fort Worth shall be paid not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed; and not less than the general prevailing rate of per diem wages for legal holiday and overtime work. A worker is employed on a public work if the worker is employed by a contractor or subcontractor in the execution of a contract for the public work with the City of Fort Worth.

The contractor who is awarded a public work contract, or a subcontractor of the contractor, shall pay not less than the prevailing wage rates to a worker employed by it in the execution of the contract. A contractor or subcontractor who violates this requirement shall pay to the City of Fort Worth, $60 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the contract.

This requirement does not prohibit the contractor or subcontractor from paying an employee an amount greater than the prevailing wage rate.

The undersigned acknowledges the requirements of Chapter 2258 of the Texas Government Code, and intends to comply with same in the execution of this project.

CONTRACTOR:

_____	BY:_____
Company Name	(print or type name of signatory)
_____	_____
Address	(Signature)
_____	_____
City, State, Zip	Title (print or type)

2.15 WORKER'S COMPENSATION COMPLIANCE

CONTRACTOR COMPLIANCE WITH WORKER'S COMPENSATION LAW

Pursuant to Texas Labor Code Section 406.096(a), as amended, Contractor certifies that it provides worker's compensation insurance coverage for all of its employees employed on City Project, designated

"**ENV 19-03 – CIP PST UPGRADE"**

Contractor further certifies that, pursuant to Texas Labor Code, Section 406.096(b), as amended, it will provide to City its subcontractor's certificates of compliance with worker's compensation coverage.

CONTRACTOR:

_____ By: _____
Company
(Please Print)

_____ Signature: _____
Address

_____ Title: _____
City/State/Zip
(Please Print)

THE STATE OF TEXAS §
§ KNOW ALL BY THESE PRESENT:
COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, on this day personally appeared

_____, known to me to be the person whose name is subscribed to

the foregoing instrument, and acknowledged to me that he/she executed the same as the act and deed of

_____ for the purposes and consideration therein expressed and in

the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ____day of _____, 2018

_____
Notary Public in and for the State of Texas

3.0 UST REMOVAL SPECIFICATIONS

3.1 UNDERGROUND STORAGE TANK REMOVAL

1) The ten (10), 550-1,000-gallon/each underground storage tanks (USTs) which currently serve the facilities shall be removed/demolished along with all associated pumps, pipes, fill ports, and ancillary equipment. All work shall be performed as described in project specifications (this and all sections included as a part of this document).

2) Contractor shall work closely with the Owner to sequence construction/installation and demolition/removal activities to assure minimal interruption and unreasonable inconvenience to facilities' operations.

3) The Contractor is responsible for the removal and safe disposal of two (2) 1,000 gallon USTs and eight (8) 550-gallon USTs, and associated ancillary piping and fill ports.

4) Contractor must be a TCEQ-registered UST contractor to remove underground storage tanks (USTs). A **Registered UST contractor** is a company that has registered with the TCEQ to perform the installation, repair, modification, maintenance, and removal of UST systems. Contractor must employ supervisors and personnel with training, licensing, and understanding of Title 30 TAC §334 referring to State of Texas rules and for petroleum storage tank (PST) systems.

5) Contractor must be experienced in all relevant technical standards and guidance applicable for work on regulated petroleum storage tanks. The work shall be performed under the supervision of an individual holding a current TCEQ-issued on-site supervisor license.

6) Existing USTs and all associated pumps, piping, and ancillary equipment in association with the USTs shall be removed and disposed of properly.

7) Underground and above ground utilities shall be located and verified by Contractor prior to any digging, surface material removal or excavation. It is the responsibility of the Contractor to protect all utilities.

8) Approximately 500+/- linear feet of underground pipe is to be removed. Concrete pavement that is removed in association with the pipe removal is to be replaced to City of Fort Worth standard specifications. Contractor will assist the TCEQ-Licensed Corrective Action Project Manager (CAPM) with the collection of soil samples in the tankhold area as well beneath the underground piping runs and each dispenser.

9) Contractor shall assist the Owner' Representative or trained personnel in the collection of soil samples as directed in the field and take direction from the Owner' Representative or trained personnel concerning management of excavated soil.

10) Contractor shall assist the Owner' Representative or trained personnel in collection of soil samples within the exposed pipe trenches, within the tankhold, and beneath the dispensers. After sampling, as directed by Owner' Representative or trained personnel, Contractor shall backfill pipe chase trenches to sub-pavement grade, and pave to match surrounding pavement.

11) Any damage to the storm sewers, facility piping, electrical, or other utilities or structures during demolition procedures is to be repaired or replaced at Contractor expense. No change order will

be approved for any damage Contractor may cause to storm sewer or other existing utilities. The tankhold is to be back filled to the specifications found in Section 3.4

12) All replaced concrete shall be replaced with similar concrete paving and graded to match surrounding drainage. Comparable curbing and pavement, if necessary for removal, may also require replacement with surfaces equivalent to existing cover.

13) Contractor shall confirm measurement and quantities of cut and replacement concrete by reviewing plans, documents and by measurements if necessary during the mandatory pre-bid meeting.

14) As with any UST removal, contaminated soil or groundwater may be encountered that exceeds a TCEQ PST Action Level. Excavated tankhold fill material must be temporarily stockpiled on an impermeable polyethylene plastic surface; at least 10 ml thick, within a temporary containment in a location approved by the Owner's consultant and will be replaced with clean fill (See Section 3.4). The samples of the excavated material will be taken and analyzed for disposal characterization purposes. Upon review of laboratory analysis, the soil will be profiled and disposed of off-site, if required, or staged at a site located within the Village Creek Water Reclamation Facility complex. At the direction of the Owner, the excavated soil may be re-used at the site;

15) After the USTs are removed, new select fill shall be placed into the excavation to bring the tankhold level up to a sufficient grade and compaction to support the new paving and stable landscape grass cover.

16) Contractor should plan to leave the tankhold pit open for up to seven (7) calendar days, after confirmation samples are taken, awaiting a decision by the Owner' Representative for Contractor to remobilize and resume backfilling with clean fill. Contractor shall install orange safety fencing to secure the tankhold while awaiting instructions to continue backfilling.

17) Contractor shall pump or remove remaining diesel fuel/gasoline from existing tanks prior to beginning demolition.

18) Prior to removal and with on-site Fire Marshal permission (green tag), Contractor shall empty tank contents, triple rinse each UST and transport the rinseate for disposal. The fee for the vacuum truck and disposal shall be included in the base fee proposed by Contractor.

19) All liquids and residues removed from each tank shall be handled in accordance with appropriate federal, state and local regulations. Contractor shall supply, to the Owner's consultant, written certification in the form of manifests or other documentation by the Contractor, shipper, and receiver that all liquids and residues, contaminated backfill or other soil, tanks, and other materials were removed, shipped and disposed of in accordance with all applicable permits, safety rules, and regulations.

20) Pavement demolition may be required for the UST piping to be removed. The removed concrete will be transported off-site for disposal/recycling. Cost for demolition waste disposal/recycling shall be included in the Contractor's fee. Contractor shall include within its base fee and scope the proper removal, temporary storage, transportation and disposal of up to 100 cubic yards of excavated fill material should the Owner' Representative determine that the material is not fit for placing back into the tank pit.

21) Contractor shall be responsible for replacing the void of any such disposed fill material with an equivalent amount of approved backfill.

22) The emptied and rinsed USTs shall be tested by the Contractor with an MSA explosimeter, or equivalent, to monitor potentially explosive conditions during the removal of each tank. Once this instrument indicates that the atmosphere in every tank is non-explosive, the USTs shall be removed, labeled and transported off-site within 24 hours of removal. All tanks shall be appropriately vented, loaded and labeled for transportation and disposal purposes. A certificate of destruction for each tank will be provided with the final report.

23) The entire fuel system will not be removed. Consult the included construction and demolition plans for guidance on remaining equipment. Any monitoring equipment buried with the USTs shall also be removed.

24) Contractor shall be responsible for having all proper licenses/certifications to perform UST removal work. Contractor shall communicate and coordinate with Owner' Representative and/or Owner to obtain all applicable local, state, and federal permits and notifications including making all notifications and payment for such permits. Certain notifications and communication may be performed by the Owner' Representative. Contractor is required to work closely with Owner' Representative to determine appropriate notification and filing responsibilities, and confirm that all such notifications and filings are done in full compliance with all applicable rules, regulations, industry standards, and authoritative published guidelines. Contractor shall:

a) Retain copies of regulatory notifications, permits, and licenses and observe and comply with all regulations and conditions of the permit or license, including additional insurance requirements.
    a.
b) Obtain and pay for all other necessary permits including any and all necessary highway, street and road permits for transporting pipe, heavy supplies, wastes, and equipment necessary for construction of the Project.

c) Obtaining and paying for other permits necessary to conduct any part of the Work.

d) Arrange for inspections and certifications by agencies having jurisdiction over the work including local TCEQ and City Fire Marshal's office.

e) Make arrangements with private utility companies and pay fees associated with obtaining services, or inspection fees.

f) If necessary, Contractor shall make arrangements with private utility companies and pay for fees associated with obtaining services, or for inspection fees.

25) Contractor shall notify the Owner' Representative if site conditions vary substantially from specified drawings.

26) Contractor shall supply the Facility personnel and Owner' Representative with timely detailed work schedules and provides weekly progress reports.

27) The Contractor shall timely provide copies of all submittals and documents submitted to local and state regulatory permitting authorities as well as the Project Manager, Roger Grantham, to review prior to order and installation of any equipment or parts for this project. The Contractor shall provide detailed traffic control plan for the work area, if applicable.

28) Contractor shall conform to standard stormwater pollution control best management practices.

29) Existing structures, including nearby buildings, canopies, and walls, shall be protected by Contractor. Contractor shall repair any damage to structures to equivalent or improved status over pre-existing conditions.

3.2 CONCRETE STANDARDS

1) Work Includes: Design, fabrication, erection and stripping of formwork for cast-in-place concrete including shoring, reshoring, prefabricated forms and accessories.

   a. Erection shall include installation in formwork of items furnished by other trades.

   b. Furnish all labor and materials required to fabricate, deliver, and install reinforcement and embedded metal assemblies for cast-in-place concrete, including steel bars, welded steel wire fabric, ties, supports, and sleeves.

   c. Furnish all labor and materials required to perform the following:
      1) Cast-in-place concrete
      2) Concrete mix designs
      3) Grouting

2) Concrete Pads –
   - Eight (8) Locations - 12.0’ x 8.0’ x 8.0”; light broom finish; - 500g - 1,000g ASTs
   - One (1) Location - 18.0’ x 12.0’ x 8.0”; light broom finish; - 6,000g AST Steel Reinforcement –
     - Concrete Slab Reinforcing Bars-ASTM A615, Grade 60, #4 @ 9” O.C. located 2” clear of top surface and also 3” clear of bottom surfaces

3) Compressive Strength - Not less than 5,000 psi at 28 days when tested according to ASTM C109

   a) Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
   b) Do not add water to concrete during delivery, at Project site, or during placement.
   c) Do not exceed the maximum specified water/cement ratio for the mix.
   d) Deposit concrete continuously in one (1) layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints in accordance with the City of Fort Worth requirements.
   e) Deposit concrete in horizontal layers of depth to not exceed formwork design pressures, 15 feet maximum and in a manner to avoid inclined construction joints.
   f) Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
   g) Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least six (6) inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
   h) Do not permit concrete to drop freely any distance greater than 10 feet for concrete containing a high range water reducing admixture (superplasticizer) or 5 feet for other concrete. Provide chute or tremie to place concrete where longer drops are necessary. Do not place concrete into excavations with standing water. If place of deposit cannot be pumped dry, pour concrete through a tremie with its outlet near the bottom of the

place of deposit.

i) Discard pump priming grout and do not use in the structure.

4) Bar Supports

a) Bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire reinforcement in place.

b) Manufacture bar supports from steel wire, plastic or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:

- For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.
- For slabs-on-grade, provide sand plates, horizontal runners or precast concrete blocks on bottom where base material will not support chair legs or where vapor barrier has been specified.

5) Aggregate - well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by topping manufacturer.

6) Pipe Bollards

- 6" diameter standard pipe bollards are to be used;
- Length of bollard – 54"
- Bollard height above finished foundation elevation – 2 - 11"
- Concrete-filled with 1" rounded cap above bollard
- Bollard depth in concrete – 19"
- Bollards will be welded on each side of pipe to #5 rebar x 10" (4 per bollard)
- Spacing of bollards:
  - Corners – 1.0' from end of slab (relative to x and y axis)
  - In-line – Equal distant to adequately satisfy applicable requirements
- Painting – bollards will be painted safety yellow
- Reflective tape will be placed around each bollard, 5" below top of bollard crown

3.3 BACKFILL AND COMPACTION STANDARDS

1) The imported fill material to consist of clay soil with plasticity index less than 30.

2) The clay fill material should be free of any vegetation, roots, debris, rock fragments, or other objectionable material.

3) The clay fill material should be compacted at a minimum of 94 percent of ASTM 1 D 698 maximum dry density and within 1 to 5 percent above the optimum moisture content. The clay fill should be placed in 8 inch loose lifts. Any clay material below 10 feet should be placed at a minimum of 98 percent of ASTM D 698 maximum dry density within optimum to 4 percent above the optimum moisture content.

4) The top 2 feet should be a select fill material, sandy clay (CL) or clayey sand (SC) with a liquid limit of less than 35 and a plasticity index between 7 and 15. A minimum of 30 percent of the soil should pass the No. 200 sieve.

5) The material should be spread in loose horizontal lifts, less than 9 inches thick, and be uniformly compacted to a minimum of 95 percent of ASTM D 698 maximum dry density between minus one (-1) and plus three (+3) percentage points of its optimum moisture content. The select fill placement should begin immediately after the clay fill has been placed. A settlement of about 1 inch and 1.5 inches is calculated for fill material to depths of 12 and 15 feet, respectively.

6) Each lift should be tested to confirm it has the specified moisture and compaction. One in-place moisture/density test should be performed for every 5,000 square feet per lift of compacted area. For smaller areas, a minimum of one test should be provided for every lift. Subsequent lifts should not be placed until the exposed lift has the specified moisture and density. Lifts failing to meet the moisture and density requirements should be reworked to meet the required specifications.

7) The specified moisture content must be maintained until compaction of the overlying lift, or construction of the overlying structure. Failure to maintain the moisture content could result in excessive soil movement, and can also have a detrimental effect on overlying plastic concrete. The contractor must provide some means of controlling the moisture content (such as water hoses, water trucks, etc.). Maintaining subgrade moisture is always critical, but will require the greatest effort during warm, windy and/or sunny conditions. Density and moisture testing is recommended to provide an indication that adequate earthwork is being provided. However, the quality of the fill is the sole responsibility of the contractor. Satisfactory verification testing is not a guarantee of the quality of the contractor's earthwork operations.

8) Considerations should be given to placing the new fill after benching the slope of the excavation. The bench heights should not be less than 2 feet. Excavations should be configured to create a safe working condition. As required by Texas State law, the excavation design and maintenance is the sole responsibility of the Contractor. Attention is drawn to OSHA Standards 29 CFR - 1926 Subpart P for guidance in the design of such systems.

9) Shallow foundation placed on the prepared fill material may be designed for a maximum allowable bearing pressure of 2,000 psf. A potential vertical movement on the order of 1 inch is calculated placed on 2 feet of select fill underlain by properly compacted clay fill to depths up to 12 feet.

3.4 ABOVEGROUND FUEL STORAGE TANK (AST) AND ANCILLARY EQUIPMENT STANDARDS

1) Aboveground Fuel Tank Specifications

1. UL-2085 Listed “Protected” Aboveground Tanks for Flammable and Combustible Liquids;
2. UL - 142, aboveground steel tanks for flammable and combustible liquids;
3.
4. Both inner and outer tanks built per UL-142 Standard for Steel Aboveground tanks for Flammable and Combustible Liquids;
5. Uniform Fire Code, “Protected Tank”;
6. UL-2080 Listed “Fire Resistant” Tanks for Flammable and Combustible Liquids;
7. NFPA 30 and 30A, National Fire Protection Association;
8. NFPA 1, Uniform Fire Code™, of the National Fire Protection Association, “Protected Aboveground Tank;
9. Steel Tank Institute (STI) Standard F941 for Thermally Insulated Aboveground Storage Tanks;
10. International Fire Code (IFC);

11. ULC-S655 Underwriters Laboratories of Canada Standard for Aboveground Tanks for Flammable and Combustible Liquids;
12. Ballistics protection per UL-2085 ;
13. Vehicle impact protection per UL-2085 ;
14. Hose Stream tested per UL-2085 ;
15. California Air Resources Board (CARB) testing requirements for air emissions;

a) **Modern Welding Co., Inc. Fireguard®** Fire-Rated Aboveground Storage Tank (AST);

b) **Oldcastle Precast Convault®** Fire-Rated Aboveground Storage Tank (AST)

2) Fuel Dispensing Units

Installation of new fuel dispensers at Fire Stations 10, 14, 24, 25, 30, 31, 32, 33, and Z-Boaz. In summary, all pumps/dispensers shall be commercial fleet heavy-duty series at a minimum. Provide single-hose, single-product, diesel/gasoline dispenser with 22gpm (maximum) suction pump except for the unit assigned for Z-Boaz which will be required to be a dual-hose, dual-product, diesel/gasoline dispenser with 22gpm (maximum) suction pump.

a) **Tuthill Model #702VR Fill-Rite®Cabinet Pumping Units**

b) **Gilbarco Gasboy Atlas 9853K Fuel Dispenser**

c) **Bennett Model 3711 SNR 17 Fuel Dispenser**

d) **Wayne Reliance G6200 Fuel Dispenser**

3) Additionally, provide the following:

(a) appropriate signage for each location, in accordance to all applicable codes;

(b) Internal filters with replaceable cartridges;

(c) Install **Morrison** AST Spill containers, mounted at each location. Clearly label connections "DIESEL" or "GASOLINE";

(d) Nozzles with automatic shutoff;

(e) Delivery hose: UL listed 20 feet x 1-inch hose; Standard

(f) Hose-end swivels;

(g) Hose breakaway valves and connecting hoses;

(h) Hose retrievers; and

(i) Lightning Protection for Fuel Station- Contractor may sub-contract a Certified Lightning Protection Company to provide detailed specifications for installation of a class one lightning protection system utilizing the National Fire Protection Association's Standard Lighting Protection Systems - 2014 Edition (NFPA 780) and Lightning Protection Systems, UL96A of Underwriters Laboratories Inc., for materials, installation and installer certification requirements.

4) The dispenser and its components shall be Underwriters Laboratories listed for the purpose intended and shall comply with the requirements of NFPA 30A (4-2.5, 4-2.7), UFC (5201 & 5202) and BOCA (F-3201.1 and 3207).

5) Emergency Shut-off Switches (7)

1. Provide electrical disconnection of all conductors to the pump in accordance with NFPA Codes 30, 30A, and 70.

2. Locate the emergency shut-off in an accessible area, at least 20 feet but not more than 100 feet from the dispenser. Confirm the final location with the City of Fort Worth prior to installation.

3. Provide a palm type switch button that will shut off electrical power to the pump.

4. The emergency shut-off shall be clearly identified with signage.

5. Emergency shut-off shall have a manual reset.

3.5 INSTALLATION

The tank system including accessories shall be installed in strict accordance with the manufacturer's recommendations and applicable fire and environmental codes. All state and local permits shall be obtained by contractor prior to installation.

Tanks shall be installed on a reinforced concrete base slab designed to support the fully loaded tank. Protective bollards shall be installed where required by state and local codes.

Tanks shall be marked on all sides with warning signs: “FLAMMABLE” or “COMBUSTIBLE”, “NO SMOKING”, product identification placards, and other signs as required by applicable codes.

Electrical work shall be in accordance with applicable codes and shall be rated for hazardous area as required. Electric feed for dispensing pumps, fuel management and monitoring system shall include an emergency shutoff switch located per code requirements, lighting arrestor tying into main electrical panel feeding fuel electronics. Single Panel: Delta Lighting Arrestor, (Part #LA302R) and 3-Phase Panel: Delta Lighting Arrestor (Part #LA603). Tanks shall be electrically grounded in accordance with N.F.P.A.78.

Any proposed equal alternatives to this specification must be submitted for review and approval prior to bid opening. All expenses incurred for such review to be paid for by bidder.

The City of Fort Worth will register each tank and serial number with Steel Tank Institute in accordance with instructions provided by the manufacturer with the tank. Contractor is NOT authorized to sign any paper documentation on behalf of the City of Fort Worth.

Test for proper operation. Clean and protect work from damage. Tank shall be furnished complete with dispensing equipment, appropriate safety accessories, and product identification signs. It is intended that the successful bidder shall furnish a complete system to the City of Fort Worth. Awarded Contractor will provide a prepared concrete foundation, and be responsible for the installation of the electrical connection to the dispensers.

Model 516 5-Gallon Spill Container

SPECIFICATION SHEET

Application

Tank top spill containers are designed to contain small spills that occur at the fill point on aboveground storage tanks. The 516 has a hinged cover that is lockable with a padlock. EVR approved models available.

Materials of Construction

- Body... powder coated white (black powder coat optional)
- Lid... powder coated white (black powder coat optional)
- Other hardware... Zinc plated steel

Drain (optional)

- Drain push rod... brass
- Drain nut... brass
- Spring... bronze
- O-ring... fluoroelastomer

Code Compliance

- Florida DEP EQ 725, California Air Resources Board Phase I AST EVR models available, meets the new and revised requirements for CAN-ULC-S663-11 (effective September 25, 2015)

	Item Number	A	B	C	D	E	F	G	H	I
	516---0200 ACPW	F	2	No	Centered	$12^{1}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	17.0	Yes
	516---0400 ACPW	F	4	No	Centered	$13^{13}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	21.0	Yes
	516D--0200 ACPW	F	2	Yes	Centered	$13^{5}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	17.0	Yes
	516D--0400 ACPW	F	4	Yes	Centered	$13^{13}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	21.0	Yes
	516O--0200 ACPW	F	2	No	Offset	$12^{1}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	17.0	Yes
	516O--0400 ACPW	F	4	No	Offset	$13^{13}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	21.0	Yes
EVR	516O--0400ACEVR	F	4	No	Offset	$13^{13}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	21.0	Yes
	516OD-0200 ACPW	F	2	Yes	Offset	$13^{5}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	17.0	Yes
	516OD-0400 ACPW	F	4	Yes	Offset	$13^{13}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	21.0	Yes
	516M--0200 ACPW	M	2	No	Centered	$12^{9}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	16.50	Yes
	516M--0400 ACPW	M	4	No	Centered	$13^{25}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	190	Yes
	516MD-0200 ACPW	M	2	Yes	Centered	$13^{9}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	17.50	Yes
	516MD-0400 ACPW	M	4	Yes	Centered	$13^{25}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	20.50	Yes
	516MO-0200 ACPW	M	2	No	Offset	$12^{9}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	17.0	Yes
	516MO-0400 ACPW	M	4	No	Offset	$13^{25}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	19.0	Yes
EVR	516MO-0400ACEVR	M	4	No	Offset	$13^{25}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	19.0	Yes
	516MOD0200 ACPW	M	2	Yes	Offset	$13^{9}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	17.50	Yes
	516MOD0400 ACPW	M	4	Yes	Offset	$13^{25}/_{32}$"	$17^{13}/_{64}$"	$13^{13}/_{64}$"	20.50	Yes

SPECIFICATION OPTIONS:

A—Mounting connection: Male (M), Female (F)
B—Size: NPT threads
C—Drain: Yes/No
D—Mount
E—Height (inches)
F—Width (inches)
G—Body diameter (inches)
H—Shipping weight (lbs)
I—ULC listing

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MORRISON BROS. CO.

FILL-RITE®

SERIES FR702VR 115 and 230 VOLT AC FUEL TRANSFER PUMP

Owner's Operation & Safety Manual
Models FR702VR & FR702VER

OUTSTANDING FEATURES

•Up to 18 GPM/68 LPM
•UL listed dispenser & motor
•Full 1/3 HP explosion proof motor
•Meter accuracy of ± 1%

GENERAL DESCRIPTION

The FR702VR compact cabinet pump is based on Fill-Rite's FR700V positive displacement, direct drive pump, and Fill-Rite's series 800C nutating disc flow meter which features a flow rate of 5 to 20 GPM or 19 to 76 LPM and is accurate to within ±1%. Depending on product viscosity and nozzle selection, the FR702VR can deliver up to 18 gallons/68 liters of fluid per minute. This pumping system is UL listed for use with gasoline and diesel fuel.

The U.S. gallon meter has three resettable wheels, two unit wheels and a tenth wheel. It's non-resettable totalizer has five unit wheels and a tenth wheel. The optional liter meter has three unit wheels which can be reset to zero. It's non-resettable totalizer has six unit wheels.

OPTIONS

- Automatic nozzles
- Metering in U. S. gallons or liters
- Red or white cabinet paint
- Pedestal for island installations
- 220 VAC, 50/60 Hz

TECHNICAL INFORMATION

Design Features:

- 1.25" NPT inlet, 3/4" NPT outlet
- 22 PSI maximum outlet pressure
- Minimum dry vacuum of 10" Hg
- Furnished with 3/4" dia. x 12' hose and manual nozzle
- Cabinet measures 13"W x 11.5"D x 17.5 "H (38x29x 43.6 cm)
- Built-in check valve, bypass valve and thermal expansion valve
- No additional foot valve or check valve needed to hold prime
- 1/3 HP 115VAC-60Hz, 5.5 amp, 1725 RPM, direct drive motor
- Ball bearing construction: no lubrication required
- Thermal overload protection
- Explosion proof
- Meter's mechanical totalizer to 100,000 units
- Meter accuracy is ± 1%
- Unit wheels have large 11/16" (18 mm) figures
- Convenient, large reset knob with positive zero stop
- Not for resale use
- Pre-installed Anti-Siphon Valve

FLUID COMPATIBILITY

If in doubt about compatibility of a specific fluid, contact supplier of fluid to check for any adverse reactions to the wetted materials in the parts list.

SAFETY INSTRUCTIONS

To ensure safe and efficient operation, it is essential to read and follow each of these warnings and precautions.

1. Improper use or installation of this product can cause serious bodily injury or death.
2. Do NOT smoke near pump or use pump near an open flame when pumping flammable fluids. Fire could result.
3. A Fill-Rite filter should be used on pump outlet to ensure that no foreign material is transferred to fuel tank.
4. Use gasoline and oil resistant thread sealant or sealant tape on all threaded joints to protect against leakage.
5. Storage tank should be anchored to prevent tipping in both the full and empty conditions.
6. To minimize static electricity buildup, only use static wire, conductive hose when pumping flammable fluids and keep nozzle in contact with container being filled while filling container.
7. The pump motor is equipped with thermal overload protection. If overheated, it will shut off without any damage to the windings. Be sure to turn off the pump power if this occurs. When the motor cools, it will restart without warning if power is on.
8. Take motors needing service to an authorized repair shop to maintain "explosion proof" and "rain proof" integrity.
9. Do not operate without the check valve (700F2661) in place. Fluid leakage could result.

DANGER

Electrical wiring should be done by a licensed electrician in compliance with local, state and national electric codes. NEC/ANSI/NFPA 70, NFPA 30, NFPA 30A, as appropriate to the intended use of the pump. Threaded rigid conduit, seal fittings and conductor seal should be used. Pump should be properly grounded. Improper use or installation of this product can cause serious bodily injury or death.

WARNING

Do not use this product for fluid transfer into aircraft. This product is not suited for use with fluids for human consumption or fluids containing water.

INSTALLATION
GENERAL

Pumps are furnished with a tank adapter for skid tank mounting; pedestals are available for island installations. All tanks must be properly vented. A pressure retaining vent/fill cap can be used to reduce fuel loss due to evaporation but will reduce flow rate. Fill-Rite filters are recommended when pumping fuels.

Pump has a built-in check valve with pressure relief to prevent fluid thermal expansion from causing unsafe system pressures. **Do not use additional check valves or foot valves unless they have a proper pressure relief valve built into them.** Additional check valves will reduce flow rate.

Use a gasoline and oil resistant pipe sealant on all pipe threads to protect against leaks.

SKID TANK MOUNTING

1. Cut a 1 1/4" pipe that will extend to at least 3" (8 cm) above bottom of tank when screwed into tank adapter and tank adapter is screwed into tank flange.
2. Screw pipe into tank adapter, then screw tank adapter into tank flange.
3. Mount pump on tank adapter.

DIRECT MOUNTING TO UNDERGROUND TANK

1. Cut and thread both ends of a 2" pipe that will extend about 31" (79 cm) above the ground when installed in tank flange.
2. Install this pipe in tank flange. Screw 2" standard pipe coupling onto top of pipe.
3. Cut a 1 1/4" pipe that will extend to at least 3" (8 cm) above bottom of tank when screwed into tank adapter and tank adapter is screwed into 2" coupling.
4. Screw this pipe into tank adapter, then screw tank adapter into 2" coupling.
5. Mount pump on tank adapter.

ISLAND INSTALLATION

1. Install tank and piping per illustration.
2. The threaded 1 1/4" suction pipe is to extend 32-1/2" (83 cm) above island.
3. Remove coupler from pedestal pipe by loosening set screws.
4. Slip pedestal pipe/pump base assembly over suction pipe.
5. Loosen screws in pump base to allow pedestal pipe to slide down exposing end of suction pipe.
6. Screw coupler onto suction pipe.
7. Slide pedestal pipe into coupler, tighten set screws. Tighten screws in pump base.
8. Mount pump on coupler.

ELECTRICAL

1. Install pump. Read and understand all the electrical wiring instructions before proceeding.
2. Remove cabinet top to expose FR700V pump for electrical hookup. Cabinet can be disassembled by following the steps outlined in "ASSEMBLY/DISASSEMBLY" section of this manual.
3. Remove pump's electrical junction box cover and straighten the wires to make the stripped wire ends accessible outside of the junction box.

WARNING: ***AUX. WIRE IS LIVE WIRE!*** The AUX. lead wire is insulated and enclosed when shipped. Do not connect this wire without first verifying the 'ON' line voltage of the wire for compatibility to the equipment to be installed. Maximum amperage on wire is 1 ampere. The wire must be insulated and enclosed in the junction box if not used.

4. Power to the unit should be supplied from a dedicated 20 amp circuit breaker. No other equipment should be powered from this breaker. Threaded rigid conduit, seal fittings and conductor seal should be used. Provisions must be made to break both legs of any AC circuit. Connect like colored pump wires to supply wires. Ground wire must be connected.
5. Fold wires into junction box and replace cover making sure that gasket is in place. Make sure screws are seated so there is no space between the cover and the junction box.
6. Route wiring and rigid conduit through opening at base of cabinet. Pump has 1/2" NPT threaded conduit port.

OPERATING INSTRUCTIONS

1. Reset meter to 0 (if applicable).
2. Remove nozzle from nozzle boot and move switch handle up. This will turn the pump on.
3. Insert nozzle into container to be filled. To minimize static electricity buildup, keep nozzle in contact with container being filled while filling container.
4. Operate nozzle lever to dispense fluid.
5. When desired amount of fluid has been dispensed, release nozzle lever, remove nozzle from container, move switch handle to down position to turn off pump, replace nozzle in boot.

ASSEMBLY/DISASSEMBLY

Remove power to pump before removing cover. Drain liquid from system before loosening any fittings to prevent excessive spillage.

Pump Cabinet (see FR702VR cabinet drawing)

Disassembly

1. Pull off reset knob (item 26).
2. Turn switch handle (item 2) to vertical position.
3. Remove six screws (item 38) from cabinet top (item 7/7A).
4. Remove top and set aside to expose pump and meter.

Assembly

1. Replace cabinet top, making sure it slips over the meter and the outside edges of the cabinet base (item 6/6A).
2. Replace screws in cabinet top. Install the two screws in back of cabinet before replacing side screws. Position top squarely before tightening screws.
3. Attach reset knob.

REPAIR

Motors needing repair should be taken to an authorized repair shop. Pumps must be thoroughly flushed and drained before being taken in for service.

If pump was used for a fluid other than a petroleum product, it must be triple-rinsed and accompanied by an MSDS sheet indicating the chemicals which have been pumped with the unit. Pumps not adhering to these specifications may be refused service at the repair shop.

MAINTENANCE

To keep pump running at its best, remove cabinet cover and periodically perform the following procedures to the FR700V pump (see FR700V pump drawing).

1. Check pump strainer for dirt accumulation. To clean strainer, remove strainer cover (item 58) and pull out screen (item 48).
2. Remove pump rotor cover (item 64) and inspect vanes (item 51) for nicks, burrs or wear. Vane height should be no less than .40" (10 mm) or damage to pump could result.
3. Meter should operate maintenance free. However, certain liquids can dry out while in meter housing, causing meter to stop. If this happens, meter should be thoroughly cleaned (see cleaning instructions below).
4. Check hose (item 17) and nozzle (item 18) for wear or damage. Defective hoses or nozzles are potential safety hazards.

CLEANING INSTRUCTIONS

METER

Run a flushing fluid through meter. For a more thorough cleaning, disassemble meter according to the "ASSEMBLY/DISASSEMBLY" section, "Meter Chamber Assembly" subsection of the 800 C manual. Rinse all meter components. Recalibrate meter following calibration instructions in the 800C manual.

PUMP

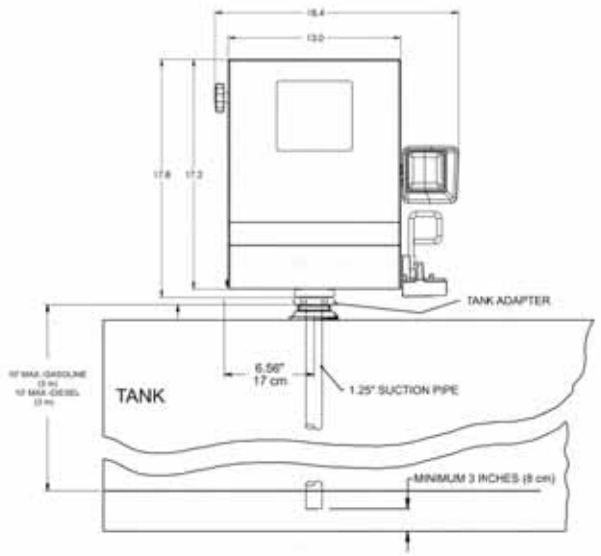
Cleaning Seal (item 45):

Due to the precise method of this procedure, only attempt to clean seal if all other troubleshooting solutions fail.

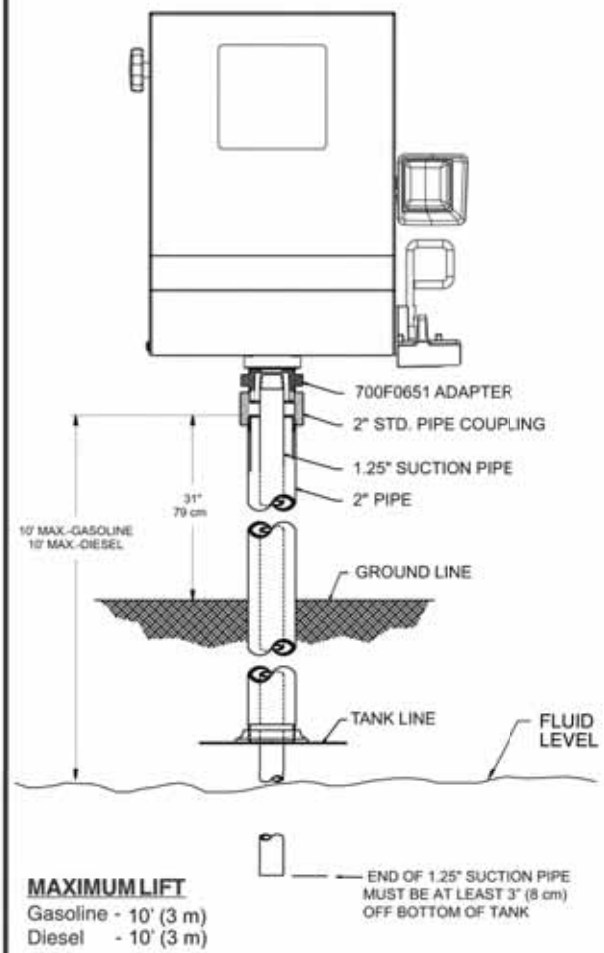
1. Remove any oil or particulate material from optically flat metal and carbon mating surfaces using a lint free cloth and methyl alcohol.
2. Visually check surfaces for damage such as nicks or wear.
3. Replace seal if any damage is noted.

NOTE: Do not allow body oil or any grease to coat mating seal surfaces as these surfaces must be clean and dry to properly seal.

SKID TANK INSTALLATION

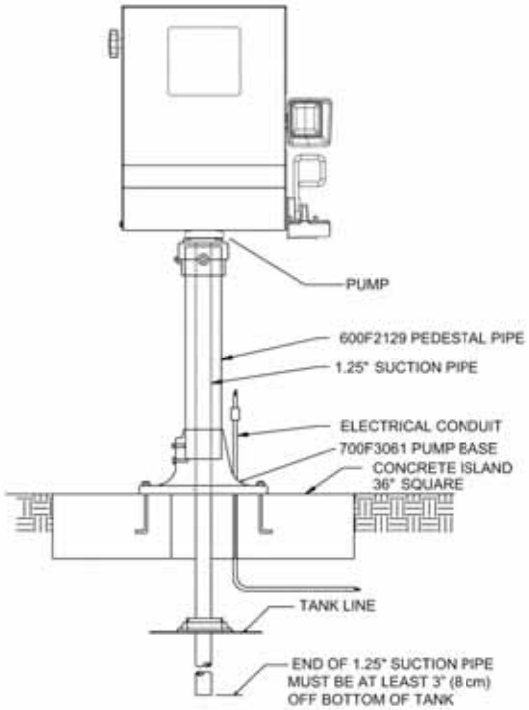


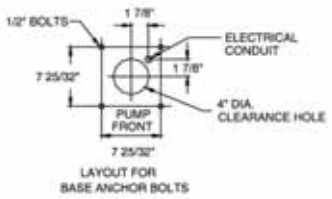
DIRECT MOUNTING INSTALLATION



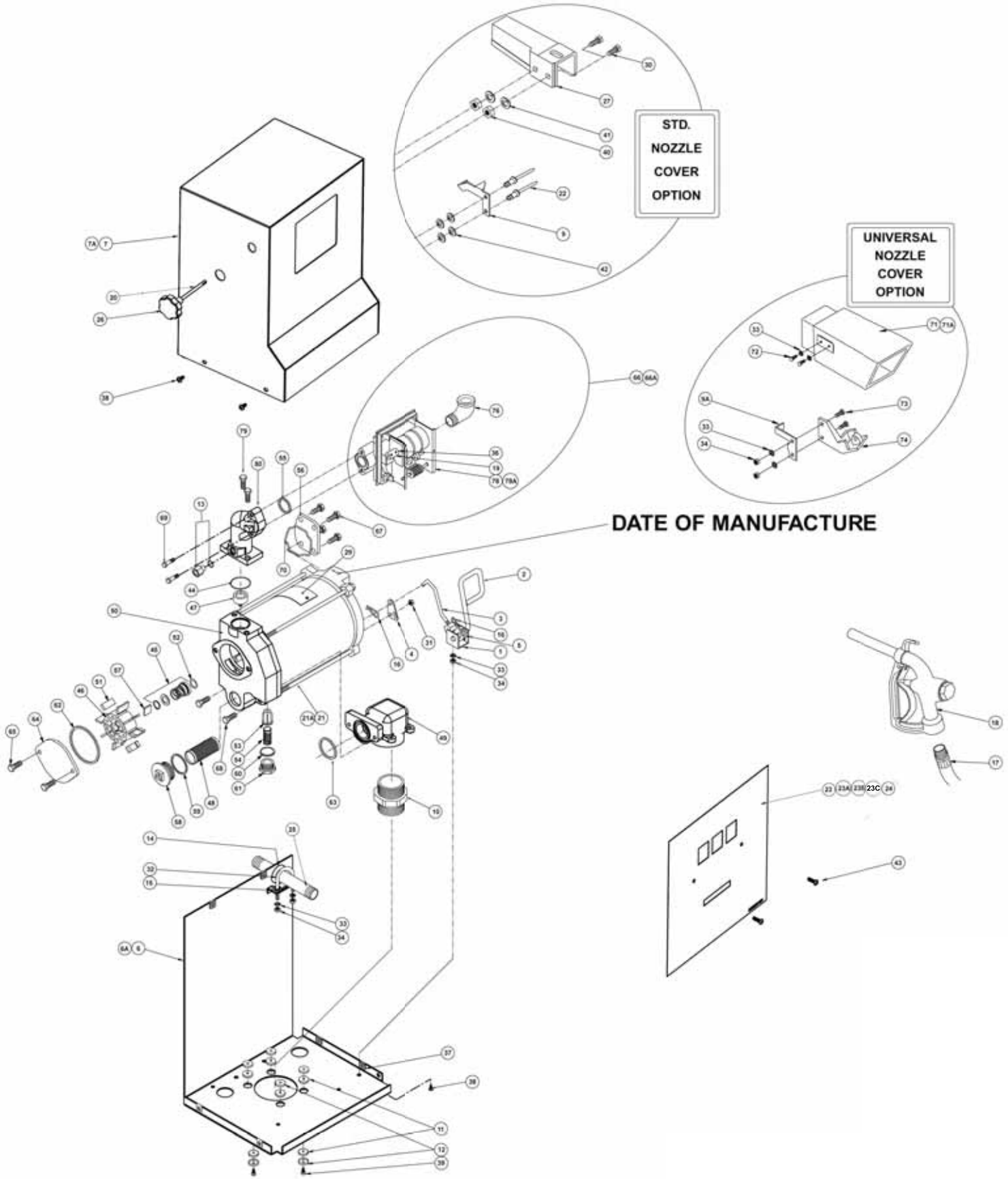
MAXIMUM LIFT
Gasoline - 10' (3 m)
Diesel - 10' (3 m)

RECOMMENDED ISLAND INSTALLATION





LAYOUT FOR
BASE ANCHOR BOLTS



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www.tuthill.com

FR702VR PUMP PARTS LIST

ITM. NO.	PART NO.	DESCRIPTION	QTY.
1	702F1023	BRACKET	1
2	702F1024	SWITCH HANDLE	1
3	702F1027	ROD SWITCH	1
4	702F1031	LEVER SWITCH STEEL	1
5	702F1042	LEVER SWITCH STEEL (J-SHAPED)	1
6	MF000146-000	CABINET BASE (RED)	1
6A	MF000146-001	CABINET BASE (WHITE)	OPT.
7	SA000149-000	CABINET TOP (RED)	1
7A	SA000149-001	CABINET TOP (WHITE)	OPT.
8	702H0760	CABINET FRONT (RED)	1
8A	702H0763	CABINET FRONT (WHITE)	OPT.
9	702F1103	STOP HANDLE STD.BOOT	1
9A	702F1104	STOP HANDLE UNIVERSAL BOOT	1
10	700F0651	TANK ADAPTER	1
11	702F2450	GROMMET MOUNTING	8
12	702F2460	CUP WASHER	8
13	700KTH0931	ANTI-SIPHON VALVE KIT ASSEMBLY	1
14	702F2600	GROMMET (PIPE NIPPLE)	1
15	702F2620	SPACER	1
16	702F3579	CLIP HAIRPIN	2
17	700F3135	12' UL LISTED HOSE	1
18	6U075	NOZZLE MANUAL 3/4" INLET	1
19	702F3250	COUPLING RESET	1
20	702F3260	SHAFT RESET	1
21	702H0996	PUMP SUB FR702VR 115V	1
21A	702H1000	PUMP SUB FR702VER 230V	OPT.
22	702F6684	POP RIVET 1/4 SHANK	2
23	LB000238-000	FACEPLATE FR702VR	1
23A	LB000239-000	FACEPLATE FR702VRU	OPT.
23B	LB000240-000	FACEPLATE FR702VRGU	OPT.
23C	LB000241-000	FACEPLATE FR702VLRU	OPT.
24	LB000242-000	FACEPLATE FR702VELRU	OPT.
25	700F3375	NIPPLE 3/4" X 7" GALV	2
26	800G8870	RESET KNOB	1
27	700F6673	STD. NOZZLE COVER (700 RED)	1
28	100F0830	SCREW 3/16-24 X 3/8" PHMS (CABINET FRONT)	4
29		MOTOR NAMEPLATE	
30	600F2220	SCREW 5/16-18 X 5/8" HHCS (STD. NOZZLE COVER)	2
31	700F2950	NUT LOCK 5/16-18 X 0.27" (SWITCH LEVER)	1
32	702F2610	BOLT 'U'	1
33	702F3300	1/4" EXTERNAL LOCK WASHER	3
34	702F3310	HEX NUT 1/4-20	3
35	702F3430	NUT #10-24 TYPE 'U' (CABINET TOP)	4
36	702F3440	SCREW #10-32 X 1/4" SHSC (COUPLING RESET)	2
37	702F3555	NUT 1/4-20 TINNERMAN 'U' TYPE (CABINET BASE)	6
38	702F8643	SCREW 1/4-20 X 1/2" PHMS	7

ITM. NO.	PART NO.	DESCRIPTION	QTY.
39	704F3640	SCREW 5/16-18 X 1-1/4" HHCS	4
40	704F3680	HEX NUT 5/16-18 (STD. NOZZLE COVER)	2
41	704F3690	WASHER 5/16" LOCK (STD. NOZZLE COVER)	2
42	704F3811	WASHER 1/4" FLAT (STD. NOZZLE COVER)	4
43	35F1397	SCREW #4 X 3/8" PHTS (FACEPLATE)	2
44	700H0676	O-RING FLUOROCARBON (-030)	1
45	300KTH0034	SEAL ASSEMBLY	1
46	700G8380	ROTOR	1
47	700F2661	CHECK VALVE ASSEMBLY	1
48	700F2665	STRAINER	1
49	700F2668	INLET HOUSING	1
50	700H0126	PUMP HOUSING (700V SERIES)	1
51	700H0534	VANE	8
52	700F2754	SLINGER SEAL	1
53	700F2762	POPPET	1
54	700F2775	BYPASS SPRING	1
55	700F2800	O-RING GASKET (BUNA -218)	1
56	700G9000	JUNCTION BOX COVER	1
57	700F3131	ROTOR KEY	1
58	800F4360	STRAINER COVER	1
59	800F4380	O-RING GASKET (BUNA -131)	1
60	1200F6455	O-RING GASKET (BUNA -121)	1
61	1200F6464	BYPASS CAP	1
62	300F7743	GASKET CUSTOM BUNA N 70	1
63	300F7744	O-RING GASKET (BUNA -224)	1
64	700G7063	ROTOR COVER	1
65	300G7296	SCREW 3/8-16 X 3/4" HHCS (ROTOR COVER)	2
66	800G1178	METER ASSY. GALLONS	1
66A	702F4183	METER ASSY. LITER	OPT.
67	700H0640	SCREW 1/4-20 X 5/8" HWHMS (COVER JUNCTION BOX)	4
68	704F3700	SCREW 3/8-16 X 1" HHCS (HOUSING)	2
69	704F3640	SCREW 5/16-18 X 1-1/4" HHCS (FLANGE-METER)	2
70	700G9066	JUNCTION BOX GASKET	1
71	712F3489	UNIVERSAL NOZZLE COVER (RED)	1
71A	712F3572	UNIVERSAL NOZZLE COVER (WHITE)	OPT.
72	5200F1470	SCREW 1/4-20 X 1/2" HHCS (UNIVERSAL NOZZLE COVER)	2
73	712F7338	SCREW 1/4-20 X 3/4" PHMS (UNIVERSAL NOZZLE COVER)	2
74	702F3519	UNIVERSAL NOZZLE RETAINER	1
75	702F3390	ELBOW 3/4" F X F	1
76	702F3400	STREET ELBOW 3/4" M X F	1
77	702F3340	3/4" CLOSE NIPPLE	1
78	800G1132	METER GALLON	1
78A	800G1677	METER LITER	OPT.
79	704F3700	3/8-16 X 1" HHCS (FLANGE-HOUSING)	2
80	700H0131	METER FLANGE	1

ACCESSORIES	
TH13	PEDESTAL KIT
1200KTF7018	FILTER KIT (PARTICULATE)
1210KTF7019	FILTER KIT (HYDROSORB)
KIT702VRFP	KIT, FR702VR FACEPLATE
KIT702VRUFP	KIT, FR702VRU FACEPLATE
KIT702VRGUFP	KIT, FR702VRGU FACEPLATE
KIT702VLRUFP	KIT, FR702VLRU FACEPLATE
KIT702VELRUFP	KIT, FR702VELRU FACEPLATE
KIT902CC	KIT, CLEAR COVER
702KTF3518	KIT, UNIVERSAL NOZZLE BOOT, SWITCH

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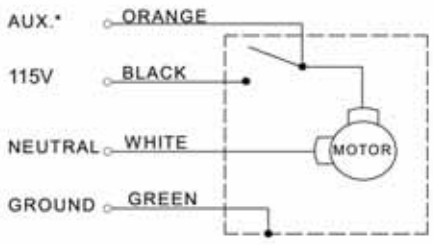
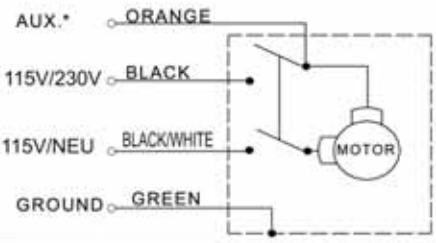
TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Pump won't prime	1. Suction line problem	Check for leaks in suction line
	2. Bypass valve open	Remove and inspect valve; must move freely & be free of debris
	3. Vanes sticking	Check vanes and slots for nicks, burrs and wear
	4. Gasket leakage	Tighten covers and joints
	5. Excessive rotor or vane wear	Check rotor & vanes for excessive wear or damage
	6. Outlet blocked	Check pump outlet, hose, nozzle & filter for blockage
	7. Vapor Lock	Reduce vertical and horizontal distance from pump to liquid; Remove automatic nozzle
Pump hums but will not operate	1. Dirt in pump cavity	Clean out pump cavity
	2. Broken key	Remove all debris & replace key
	3. Motor failure	Return to place of purchase
Low capacity	1. Excessive dirt in screen	Remove and clean screen
	2. Suction line problem	Check suction line for leaks or restrictions; it may be too small, too long or not airtight
	3. Bypass valve sticking	Remove and inspect valve; must move freely & be free of debris
	4. Vanes sticking	Check vanes and slots for wear
	5. Excessive rotor or vane wear	Check rotor & vanes for excessive wear or damage
	6. Hose or nozzle damage	Replace hose or nozzle
	7. Plugged filter	Replace filter
	8. Low fluid level	Fill tank
Pump runs slowly	1. Incorrect voltage	Check incoming line voltage while pump is running
	2. Vanes sticking	Check vanes and slots for nicks, burrs and wear
	3. Wiring problem	Check for loose connections
	4. Motor problem	Return to place of purchase
Motor stalls	1. Bypass valve sticking	Remove and inspect valve; must move freely & be free of debris
	2. Low voltage	Check incoming line voltage while pump is running
	3. Excessive rotor or vane wear	Check rotor & vanes for excessive wear or damage
	4. Debris in pump cavity	Clean pump cavity
Motor overheats	1. Pumping high viscosity fluids	These fluids can only be pumped for short periods of time (less than 30 minutes duty cycle)
	2. Clogged screen	Remove and clean screen
	3. Restricted suction pipe	Remove and clean pipe
	4. Pump rotor lock-up	Clean and check pump rotor and vanes
	5. Motor failure	Return to place of purchase
Motor will not turn on	1. No power	Check incoming power
	2. Incorrect/loose wiring	Check wiring
	3. Switch failure	Return to place of purchase
	4. Motor failure	Return to place of purchase
	5. Thermal protector failure	Return to place of purchase
Fluid leakage	1. Bad o-ring gasket	Check all o-ring gaskets
	2. Dirty shaft seal	Clean seal & seal cavity
	3. Bad shaft seal	Replace seal
	4. Incompatible fluid	Refer wetted parts list to fluid manufacturer
	5. Loose fasteners	Tighten fasteners

115 VOLT WIRE DIAGRAM



230 VOLT WIRE DIAGRAM



WIRE DIAGRAM

***WARNING: AUX. WIRE (orange) IS A LIVE WIRE!**
The AUX. lead wire is insulated and enclosed when shipped. **Do not** connect this wire without first verifying the '**ON**' line voltage of the wire for compatibility to the equipment to be installed. Maximum amperage on wire is 1 ampere. The wire must be insulated and enclosed in the junction box if not used.

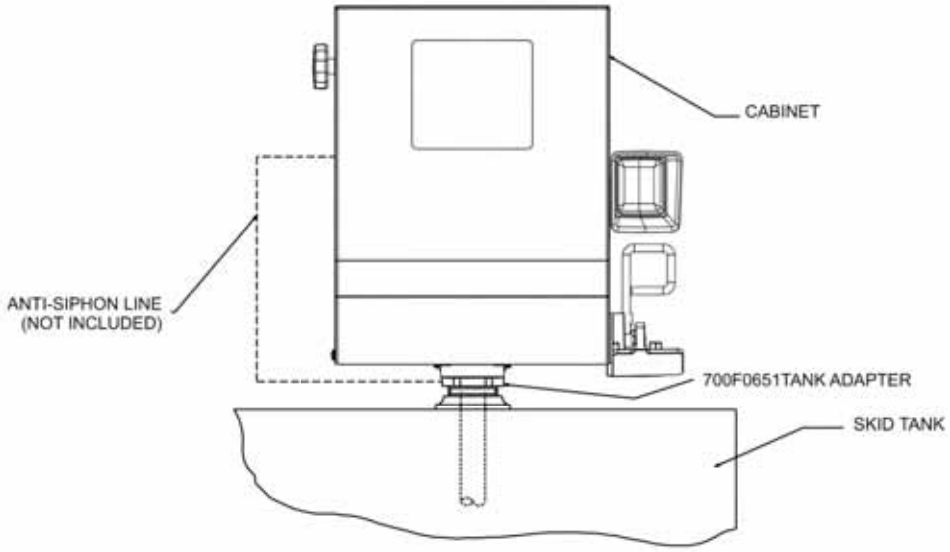
IF UNSURE OF THE MOTOR VOLTAGE, PLEASE REFER TO THE VOLTAGE RATING ON THE MOTOR NAMEPLATE (ITEM 29 ON PARTS LIST).

VACUUM BREAKER

The pumps are shipped with a threaded vacuum breaker (#13 on the Pump Parts List) installed. The vacuum breaker is used to break a siphon should an open nozzle or a leaking hose be below the fluid level in the tank with the pump turned off. Fill-Rite has provided a 1/4" NPT opening in the vacuum breaker and tank adapter to plumb the vacuum breaker back to the tank. The 1/4" NPT hole in the tank adapter has a plug installed at the factory.

VACUUM BREAKER TUBING INSTALLATION

The following illustration shows a method of installing tubing for the vacuum breaker that terminates in the vapor space at the top of the tank. Install tank adapter per instructions found in this manual. Before installing tubing, remove the plug from the tank adapter. It is very important that there are no liquid traps in the tubing. The tubing must have a continuous slope from the pump down to the tank. A liquid tight connection must be made from the tank adapter to the vacuum breaker by using a minimum of 1/4" tubing that is compatible with the liquid being pumped. Alternately, if the tank adapter is not used, tubing can be piped to any available opening on top of tank. Use reducer bushings as required. The tubing must terminate in the vapor space: if the tubing terminates below the liquid level of the tank, the vacuum breaker will not prevent siphoning.



PRODUCT WARRANTY

Tuthill Transfer Systems ("Manufacturer") warrants to each consumer buyer of its Fill-Rite products (the "Buyer"), from the date of invoice or sales receipt, that goods of its manufacture ("Goods") will be free from defects of material and workmanship. Duration of this warranty is as follows:

- Heavy Duty Products - Two years
- Standard Duty Products – One year
- Economy Duty Products – One year
- Cabinet pumps, Parts, and Accessories - One year

Manufacturer's sole obligation under the foregoing warranties will be limited to either, at Manufacturers' option, replacing or repairing defective Goods (subject to limitations hereinafter provided) or refunding the purchase price for such Goods theretofore paid by the Buyer, and Buyer's exclusive remedy for breach of any such warranties will be enforcement of such obligations of Manufacturer. If Manufacturer so requests the return of the Goods, the Goods will be redelivered to Manufacturer in accordance with Manufacturer's instructions F.O.B. Factory. The remedies contained herein shall constitute the sole recourse of the Buyer against Manufacturer for breach of warranty. IN NO EVENT SHALL MANUFACTURER'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF THE MANUFACTURE, SALE, DELIVERY, OR USE OF THE GOODS EXCEED THE PURCHASE PRICE OF THE GOODS. The foregoing warranties will not extend to Goods subjected to misuse, neglect, accident or improper installation or maintenance, or which have been altered or repaired by anyone other than Manufacturer or its authorized representative. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY, FITNESS FOR PURPOSE OF ANY OTHER TYPE, WHETHER EXPRESS OR IMPLIED. No person may vary the foregoing warranties and remedies except in writing signed by a duly authorized officer of Manufacturer. Warranties or remedies that differ from the foregoing shall not otherwise be binding on Manufacturer. The Buyer's acceptance of delivery of the Goods constitutes acceptance of the foregoing warranties and remedies, and all conditions and limitations thereof.

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FIREGUARD®

FIRE-RATED ABOVEGROUND TANKS

U.S. Patent #5695089 & #5809650

modern®

MODERN WELDING CO., INC.

1 800 922 1932

www.modweldco.com

UL 2085 Protected AST

FIREGUARD®

The New Generation of fire-rated AST's, going far beyond those "first generations" tanks which were merely enclosed in concrete.

- Fireguard® was the first AST of its design to obtain a UL Listing for secondary containment.
- Fireguard®'s secondary containment can be tightness tested on-site with standard testing procedures!
- Fireguard®'s exterior steel wall provides superior weatherability and low-cost maintenance. Unlike concrete, cracking or spalling will never be a problem!
- Fireguard®'s unique thermal insulating material is 75% lighter than concrete... Shipping, installation and relocation costs are reduced!
- The Fireguard® technology is patented under U.S. Patent #5695089 and #5809650 for "Lightweight Double Wall Storage Tank."

Is Your Aboveground Tank Everything It's Cracked Up To Be?

FIREGUARD®	VS.	Concrete Encased
• Secondary containment is testable on-site using standard, economical testing procedures. • Fireguard®'s steel outer wall provides low-cost maintenance and protects the insulation material from weathering. • An average 12,000 gallon Fireguard® weighs under 30,000 pounds - well within the legal load limit for trucking.		• The secondary containment on certain designs may require elaborate and expensive procedures to be tested on-site. • Exposed concrete outer wall is susceptible to cracking, spalling and weathering - problems that are expensive to correct and are usually not covered by warranty. • An average 12,000 gallon concrete-encased tank weighs upwards of 100,000 pounds - imagine the hassles involved in handling that tank.

FIREGUARD®: THE ONLY TANK THAT MEETS ALL OF THESE STANDARDS

- UL-2085 Listed "Protected" Aboveground Tanks for Flammable and Combustible Liquids
- Both inner and outer tanks built per UL-142 Standard for Steel Aboveground tanks for Flammable and Combustible Liquids
- Uniform Fire Code, "Protected Tank"
- UL-2080 Listed "Fire Resistant" Tanks for Flammable and Combustible Liquids
- NFPA 30 and 30A, National Fire Protection Association
- NFPA 1, Uniform Fire Code™, of the National Fire Protection Association, "Protected Aboveground Tank
- Steel Tank Institute (STI) Standard F941 for Thermally Insulated Aboveground Storage Tanks
- International Fire Code (IFC)
- ULC-S655 Underwriters Laboratories of Canada Standard for Aboveground Tanks for Flammable and Combustible Liquids
- Other Standards…
- Ballistics protection per UL-2085
- Vehicle impact protection per UL-2085
- Hose Stream tested per UL-2085
- California Air Resources Board (CARB) testing requirements for air emissions
- Many fire codes and environmental regulations will accept Fireguard® Secondary Containment Tanks as an alternate to diking requirements

If your project is required to follow NFPA 30 or 30A guidelines... Check with your area "Authority Having Jurisdiction" related to maximum allowable tank capacity for the class fuel being stored and secondary containment requirements.

FIREGUARD® SPECIFICATIONS			
CYLINDRICAL DESIGN			
SAMPLE OUTER TANK DIMENSIONS			
ALL DIAMETERS AND LENGTHS ARE NOMINAL			
GALLONS	DIAMETER	LENGTH	APPROX
			WEIGHT (lbs.)
186	48	54	2,119
250	48	68	2,513
300	50	72	2,821
500	54	70	2,413
560	54	78	2,606
1,000	54	134	5,338
1,000	70	78	5,005
1,500	70	114	6,537
2,000	70	150	8,309
2,500	70	186	9,644
3,000	70	222	10,979
4,000	78	233	13,523
4,000	90	175	14,072
5,000	79	290	18,998
5,000	103	169	17,149
6,000	79	347	21,961
6,000	103	199	19,206
8,000	103	259	23,319
10,000	103	331	28,256
12,000	103	391	32,370
15,000	127	313	35,821
20,000	127	415	44,506
25,000	127	517	55,891
30,000	127	619	64,575

Please note that all dimensions and weights are approximate. Individual tanks may vary from these values.

FIREGUARD® SPECIFICATIONS				
RECTANGULAR DESIGN				
SAMPLE OUTER TANK DIMENSIONS				
ALL DIAMETERS AND LENGTHS ARE NOMINAL				
GALLONS	LENGTH	WIDTH	HEIGHT	APPROX.
				WEIGHT (lbs.)
186	45	45	56	2,256
250	118	37	37	3,305
250	79	51	37	2,916
500	141	52	37	4,991
750	93	73	37	3,950
1,000	128	73	37	4,607
1,000	89	73	51	4,102
1,500	125	89	45	5,772
2,000	141	87	51	6,679
2,000	141	73	61	6,486
2,500	141	89	61	7,453
3,000	251	73	51	11,572
3,000	118	103	73	9,379
4,000	332	73	51	14,990
4,000	155	103	73	11,640
5,000	337	73	61	16,615
5,000	192	103	73	13,901
6,000	403	73	61	19,631
6,000	229	103	73	16,162
8,000	371	103	61	22,872
8,000	303	103	73	20,684
10,000	461	103	61	27,992
10,000	377	130	73	25,205
12,000	452	103	73	29,788
15,000	387	103	103	38,510
18,000	463	103	103	45,290
24,700	466	138	103	54,539

MODERN WELDING CO., INC.

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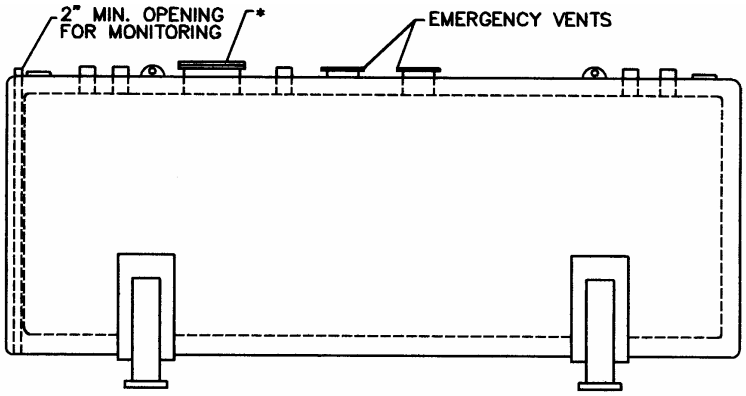
Modern Welding Company
Subsidiaries Nationwide

FIREGUARD® ABOVEGROUND "PROTECTED TYPE" DOUBLE WALL STORAGE TANKS



INNER TANK			OUTER TANK	
APPROX. CAP. (GALLONS)	NOM. DIAMETER	NOM. LENGTH	NOM. DIAMETER	NOM. LENGTH
186	36"	3'-6"	48"	4'-6"
300	38"	5'-0"	50"	6'-0"
560	48"	6'-0"	54"	6'-6"
1,000	64"	6'-0"	70"	6'-6"
1,500	64"	9'-0"	70"	9'-6"
2,000	64"	12'-0"	70"	12'-6"
2,500	64"	15'-0"	70"	15'-6"
3,000	64"	18'-0"	70"	18'-6"
4,000	84"	14'-0"	90"	14'-6"
5,000	96"	13'-6"	102"	14'-0"
6,000	90"	18'-2"	96"	18'-8"
6,000	96"	16'-0"	102"	16'-6"
8,000	96"	21'-0"	102"	21'-6"
10,000	96"	26'-10"	102"	27'-6"
12,000	96"	32'-0"	102"	32'-6"
15,000	120"	25'-6"	126"	26'-0"
20,000	120"	34'-0"	126"	34'-6"
25,000	120"	42'-6"	126"	43'-0"
30,000	120"	51'-0"	126"	51'-6"

Tank lengths listed above are based on nominal tank dimensions.
Overall tank lengths will vary during actual manufacturing.

STANDARD SPECIFICATIONS

- Built to the UL 2085 and STI FIREGUARD® standards.
- Tanks will bear UL 2085 label for "Insulated Secondary Containment for Flammable Liquids-Protected Type".
- Inner and outer tank construction and thickness per UL 142.
- Modern's standard opening locations and required lifting lugs.
- Annular space monitoring capabilities
- Support saddles.
- Exterior blasted and finish coated white to Fireguard requirements.
- Check with Modern for type of Emergency Vent Opening supplied.
- Other exterior and interior coating systems may be available upon request.
- Other tank sizes available upon request.

Certificate of Compliance

Certificate Number 0070130-MH17883
Report Reference MH17883,19940124
Issue Date 2007 January 30

Underwriters Laboratories Inc.®

Issued to: Steel Tank Institute, Div of STI/SPFA

570 Oakwood Rd.
Lake Zurich, IL 36502

This is to certify that representative samples of Protected Aboveground Tanks for Flammable and Combustible Liquids

Have been investigated by Underwriters Laboratories Inc.® in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 2085 Protected Aboveground Tanks for Flammable and Combustible Liquids

Additional Information: Listee's name,trade name.or trademark, a distinctive model designation or the equivalent, capacity of the primary containment tank, the month and year of manufacture, this tank requires emergency relief venting, the annular space requires emergency relief venting.

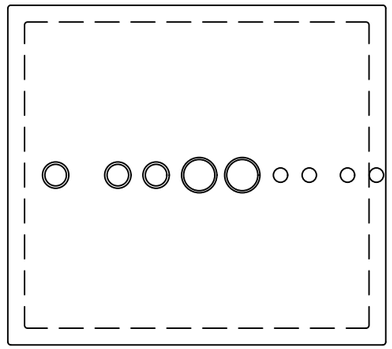
Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

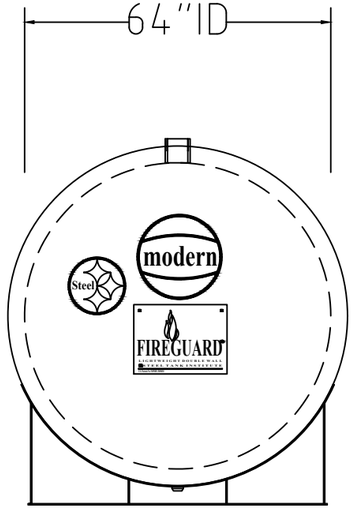
The UL Listing Mark generally includes the following elements: the symbol UL in a circle: (UL) with the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

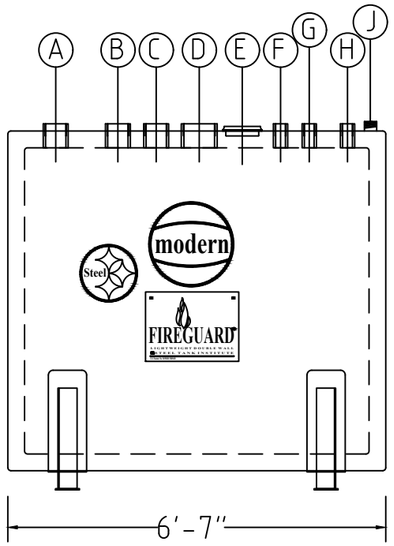
Look for the UL Listing Mark on the product

Issued by: John Silsdorf
John Silsdorf/Lead Engineering Associate
Underwriters Laboratories Inc.

Reviewed by: Milan Dotlich
Milan Dotlich/Operations Manager
Underwriters Laboratories Inc.







MARK	REQ'D.	SIZE	TYPE	REMARKS
J	1	2"	FNPT	MONITOR
H	1	2"	FNPT	
G	1	2"	FNPT	
F	1	2"	FNPT	
E	1	6"	FNPT	SEC E-VENT
D	1	6"	FNPT	PRI E-VENT
C	1	4"	FNPT	
B	1	4"	FNPT	
A	1	4"	FNPT	

FITTING SCHEDULE

DESIGN: FABRICATED PER UL-2085 SPECIFICATIONS
MEETS 2001 CBC REQUIREMENTS
MEETS 1997 ICBO UBC REQUIREMENTS
BULLET RESISTANT UNDER 1997 IFIC UFC STANDARD 79-7
IMPACT RESISTANT UNDER 1997 IFIC UFC STANDARD 79-7
CARB EXECUTIVE ORDER G-79-162-A

INSPECTION: MODERN WELDING COMPANY
MATERIAL: MILD CARBON STEEL (UNLESS NOTED)
INTERNAL SURFACE PREP: CLEAN OF DEBRIS, UNPAINTED
EXTERNAL SURFACE PREP: SSPC-SP6 (COM. BLAST)
COATING: WHITE EPOXY
INTERSTITIALSPACE: LIGHTWEIGHT PROPRIETARY CONCRETE PRODUCT

OPERATING PRESSURE: ATMOSPHERIC
FACTORY HOLIDAY TEST: 35,000 VOLT
PRESSURE TEST: 3-5 PSI

NOTE: AT NO TIME SHALL THE PRESSURE IN THE SECONDARY TANK EXCEED THE PRESSURE IN THE PRIMARY TANK.

GENERAL NOTES

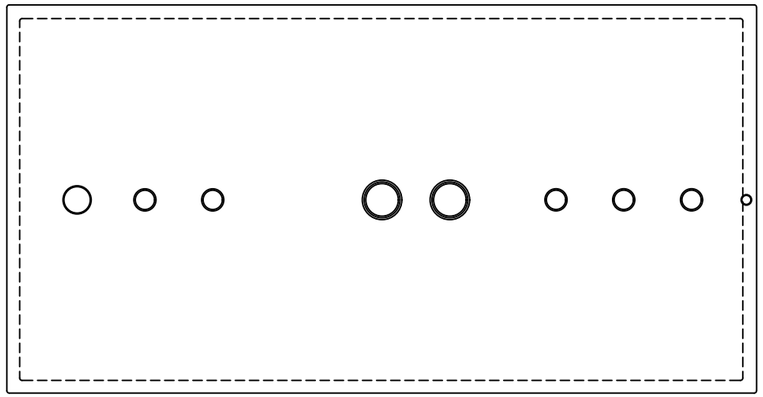
SIZE	O.D.	LENGTH	APPROX. WEIGHT
1,000	71"	6'-7"	5,000#

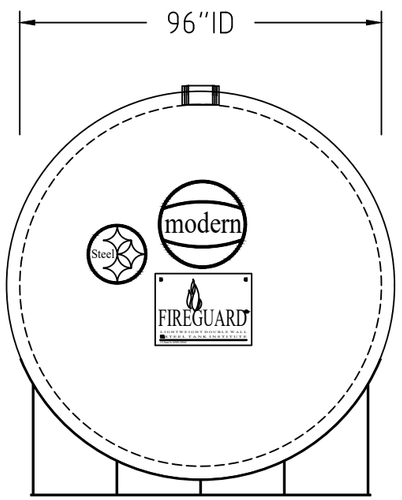
MODERN WELDING COMPANY, INC.

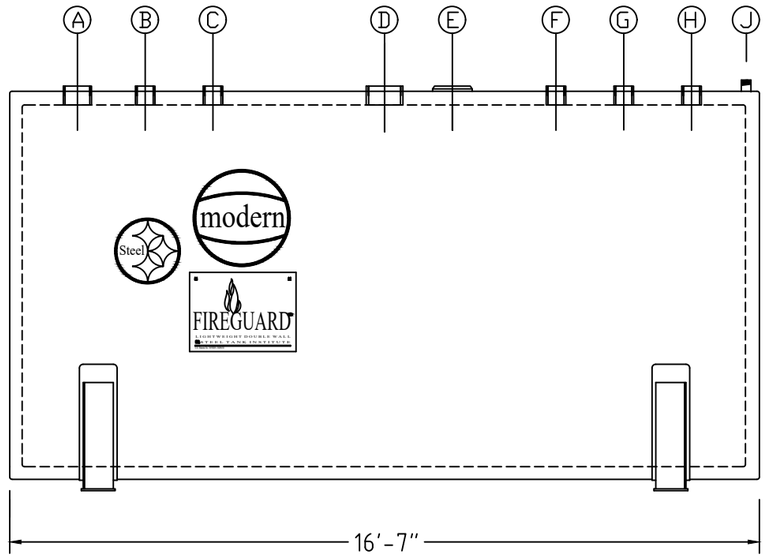
"FIREGUARD" FIRE-PROTECTED AST HORIZONTAL

TANK NOM. CAPACITY: 1,000 GALLONS

DWN. BY:	SCALE: NONE	DATE:	DWG NUMBER
APR. BY:	JOB NO.:JOB	SHEET: 1 of 1	







MARK	REQ'D.	SIZE	TYPE	REMARKS
J	1	2"	FNPT	MONITOR
H	1	4"	FNPT	
G	1	4"	FNPT	
F	1	4"	FNPT	
E	1	8"	FNPT	SEC E-VENT
D	1	8"	FNPT	PRI E-VENT
C	1	4"	FNPT	
B	1	4"	FNPT	
A	1	6"	FNPT	

FITTING SCHEDULE

DESIGN: FABRICATED PER UL-2085 SPECIFICATIONS
MEETS 2001 CBC REQUIREMENTS
MEETS 1997 ICBO UBC REQUIREMENTS
BULLET RESISTANT UNDER 1997 IFIC UFC STANDARD 79-7
IMPACT RESISTANT UNDER 1997 IFIC UFC STANDARD 79-7
CARB EXECUTIVE ORDER G-79-162-A

INSPECTION: MODERN WELDING COMPANY
MATERIAL: MILD CARBON STEEL (UNLESS NOTED)
INTERNAL SURFACE PREP: CLEAN OF DEBRIS, UNPAINTED
EXTERNAL SURFACE PREP: SSPC-SP6 (COM. BLAST)
COATING: WHITE EPOXY
INTERSTITIALSPACE: LIGHTWEIGHT PROPRIETARY CONCRETE PRODUCT

OPERATING PRESSURE: ATMOSPHERIC
FACTORY HOLIDAY TEST: 35,000 VOLT
PRESSURE TEST: 3-5 PSI

NOTE: AT NO TIME SHALL THE PRESSURE IN THE SECONDARY TANK EXCEED THE PRESSURE IN THE PRIMARY TANK.

GENERAL NOTES

SIZE	O.D.	LENGTH	APPROX. WEIGHT
6,000	103"	16'-7"	18,000#

MODERN WELDING COMPANY, INC.

"FIREGUARD" FIRE-PROTECTED AST HORIZONTAL

TANK NOM. CAPACITY: 6,000 GALLONS

DWN. BY:	SCALE: NONE	DATE:	DWG NUMBER
APR. BY:	JOB NO.:JOB	SHEET: 1 of 1	

Shop Fabricated Stationary Aboveground Storage Tanks For Flammable, Combustible Liquids

R912

INSTALLATION INSTRUCTIONS

November 2015

1 TANK SITE EVALUATION AND PREPARATION PRIOR TO INSTALLATION

1.1 The foundation for the tank must be designed to support the tank plus 100% of its contents when full. The design shall also take into account the type of support that is being used and the point load associated with that support. The foundation may be constructed using concrete, asphalt, gravel or other stable material and must include provisions in its design to prevent tank movement. The foundation should include any provisions necessary for seismic design. The foundation design must also include provision for draining surface water away from the tank.

1.2 For tank installations without cathodic corrosion protection, the tank should be grounded in accordance with applicable electrical and fire code standards.

1.3 Where the steel tank body is in contact with the earth, use a zinc grounding rod. Do not use a copper grounding rod.

1.4 Where the tank body is in contact with the earth or foundation, it should be protected from external corrosion. For external corrosion protection using cathodic corrosion protection, consult applicable standards (e.g. National Association of Corrosion Engineers) to provide the tank with appropriate protection from lightning without interfering with the corrosion protection. Steel tanks in contact with the earth should not use copper grounding. Refer to STI R893-89, "Recommended Practice for External Corrosion Protection of Shop Fabricated Aboveground Storage Tank Floors."

1.5 Tanks located in areas subject to flooding must be protected against floatation.

1.6 Aboveground tanks should not be located above underground utilities or directly beneath overhead power lines.The tank shall be protected from vandalism and accidental damage in accordance with all applicable codes, NFPA 30, NFPA 30A, UFC, etc.

2 TANK HANDLING

2.1 Do not handle or install tank without having knowledge and experience in procedures involved with proper and safe installation of an aboveground tank used for storage of stable, flammable and combustible liquids. To avoid tank damage, use skilled, professional installers.

2.2 Equipment for handling the tank shall be of adequate size to lift and position the tank. DO NOT DROP OR DRAG THE TANK.

2.3 Tanks shall be carefully handled. Use cables or chains of adequate length (with spreader bars, if necessary) and size. Attach to the tank using the lifting lugs provided. Care should be taken that the angle between the two cables, at the lift point, shall be no greater than 60 degrees.

2.4 DO NOT HANDLE OR MOVE THE TANK UNLESS IT IS EMPTY.

2.5 This is a stationary tank. Do not use this tank for transport of any product.

3 TESTING

3.1 GENERAL REQUIREMENTS

3.1.1 An on-site air test of the tank may be required by local authorities to ensure no damage has occurred in shipping and handling. All testing shall be performed as described in paragraph 3.2 below.

3.1.2 If the manufacturer has shipped the double wall tank with a vacuum on the space between the walls, read and record the vacuum pressure. If the vacuum gauge reading has dropped more than 2 inches Hg (40.5 6.77 kPa) from the level at which it was shipped, from contact the tank manufacturer.

3.1.3 In lieu of the air pressure test described in paragraph 3.2 below, a vacuum may be applied to the interstice of a double-wall tank or to the interstice of a double-bottom tank.

NOTE: This test procedure may be difficult to conduct for large (greater than 2000 gallons) tanks because of the greater volume of space to be evacuated and difficulty in sealing the tank openings. DO NOT APPLY A VACUUM TO THE PRIMARY TANK OF A DOUBLE-WALL TANK OR TO A SINGLE-WALL TANK. A vacuum of 6 inches Hg (20.3 kPa) is to be applied to the interstice. The vacuum shall be held without a loss for one hour on tanks less than 20,000 gallons and for 2 hours for tanks greater than or equal to 20,000 gallons. If this vacuum cannot be held for the specified time interval, then perform the air test procedure described in paragraph 3.2.

3.1.3.1 Caution must be taken in applying a vacuum to the interstice of a tank and the testing must be stopped if any deformation appears on the tank.

3.2 AIR PRESSURE TEST PROCEDURE FOR TANKS

3.2.1 If the tank is equipped with a long-bolt manway for emergency venting, do not remove the long-bolts from the long-bolt manway. Instead, long-bolt manways must be secured with C-clamps of appropriate size and strength to hold the vent cover in the sealed position to maintain the tank pressures required. If tank is equipped with standard emergency vents, remove emergency vents and cap openings to hold tank pressure as required.

NOTE: Use only calibrated air pressure gauges with a 0-15 psig (0-103 kPa) dial span. The relief valve must have a flow rate at the set pressure that is greater than the flow rate of the air supply line. The regulated air supply test pressure used for this test should be as follows:

a. **HORIZONTAL CYLINDRICAL (AND DIKED TANKS, IF APPLICABLE) TANKS** - Not less than 3 psig (20.7 kPa) nor more than 5 psig (34.5 kPa). Set the pressure relief valve in the air supply line at 5.5 psi (38 kPa).

b. **VERTICAL TANKS** - Not to be less than 1 ½ psig (10.4 kPa) nor more than 2 ½ psig (17 kPa) or that gauge pressure above 1 ½ psig (10.4 kPa) which first causes visible deformation of the tank. Set the pressure relief valve in the air supply line at 2 ½ psig (17 kPa).

c. **RECTANGULAR** TANKS - Not more than 1 ½ psig (10.4 kPa). Set the pressure relief valve in the air supply line at 1 ½ psig (10.4 kPa). This 1 ½ psig (10.4 kPa) pressure is to be used for testing tanks in the field ONLY. In-shop testing will be performed at a different pressure.

CAUTION: Do not leave pressurized tank unattended while the air supply line is connected. Do not stand in front of tank heads or fittings when pressurizing tank.

Pressurizing of large tanks may result in the slight deformation bulging of the tops and bottom of vertical tanks, bulging of the sides of rectangular tanks, and bulging of the heads and ends of cylindrical tanks. Should visible bulging occur or deformation appears severe, immediately relieve the pressure. Aboveground vertical tanks may have a "weak shell to roof" seam. Do not air pressure test a tank with a "weak shell to roof" seam. Rather, fill these tanks with water and check for leaks.

3.2.2 SINGLE-WALL TANK PRESSURIZING PROCEDURE

3.2.2.1 Install test piping as shown in Figure Temporarily plug, cap or seal off remaining tank openings to hold pressure.

3.2.2.2 Close valves A and B.

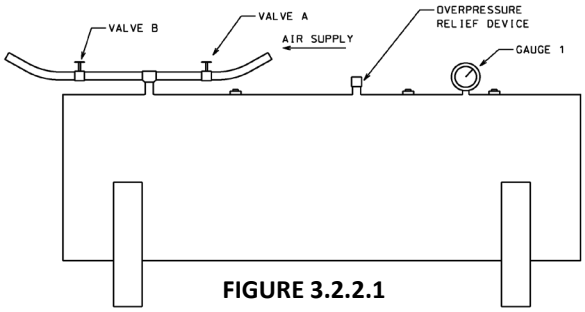


FIGURE 3.2.2.1
SINGLE-WALL TANK

3.2.2.3 Connect regulated test air supply line to test piping as shown in Figure 3.2.2.1.

3.2.2.4 Slowly open valve A to pressurize the tank. Pressure gauge 1 should indicate test air pressure given in paragraph 3.2.1 above. Close valve A. Disconnect regulated test air supply line from test piping.

3.2.2.5 Proceed to paragraph 3.2.4 "Detection of Leaks" below.

3.2.3 DOUBLE-WALL TANK PRESSURIZING

3.2.3.1 The following air pressure testing does not apply to double-wall tanks equipped with interstitial vacuum monitoring systems. In lieu of the air pressure test, the tank may be shipped from the factory with a vacuum in the tank interstice.

Read and record the vacuum pressure. If the vacuum pressure, gauge reading is less than 12 inches Hg (40.5kPa) contact the tank manufacturer.

3.2.3.2 Install test piping as shown in Figure 3.2.3.2. Temporarily plug, cap or seal off remaining tank openings to hold pressure.

3.2.3.3 Close valves A and B. Open valve C.

3.2.3.4 Connect regulated test air supply line to test piping as shown in Figure 3.2.3.2.

3.2.3.5 Slowly open valve A to pressurize the primary tank. Pressure gauge 1 should indicate test air pressure given in paragraph 3.2.1 above.

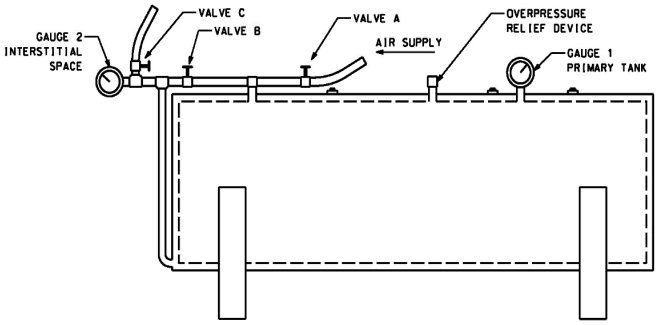


FIGURE 3.2.3.2
DOUBLE-WALL TANK

3.2.3.6 Close valve A. Disconnect regulated test air supply line from test piping.

3.2.3.7 Monitor test pressure in primary tank for 1 hour minimum. A steady drop in pressure reading for gauge 1 indicates there may be a leak in the primary tank. Check the fittings, and gauge, then retest. If the problem persists, contact the tank manufacturer.

3.2.3.8 If no leaks are found, close valve C and slowly open valve B to pressurize the interstitial space between the double walls of the tank. Pressure gauge 1 will indicate a slight drop in test pressure when valve B is opened, but should hold steady at the lower pressure. If test pressure drops below minimum requirements, close valve B, reconnect air supply line and slowly open valve A to increase pressure in primary tank. When the required pressure is indicated on gauge 1 close valve A, disconnect test air supply line. Open valve B to equalize pressure in the primary tank and the interstitial space. Gauge 1 and gauge 2 should have the same pressure reading.

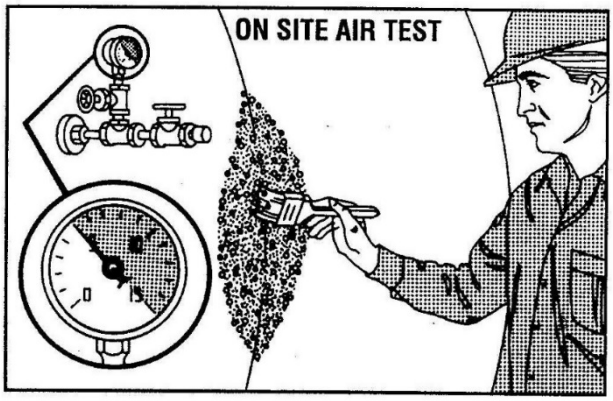
WARNING: Do not apply air pressure to the interstitial space between the walls of a double wall tank without air pressure in the primary tank.Do not apply air pressure to the interstitial space that is higher than the air pressure in the primary tank. Damage to the tank may result.

3.2.3.9 Close valve B. Hold test pressure in interstitial space for 1 hour minimum. A steady drop in pressure gauge 2 indicates there may be a leak in the interstitial space. Check the fittings, the gauges, and then retest. If the problem persists, contact the tank manufacturer.

3.2.3.10 Proceed to paragraph 3.2.4 “Detection of Leaks” below.

3.2.4 DETECTION OF LEAKS

3.2.4.1 Immediately apply leak test solution to tank exterior surfaces, welds, fittings, etc. Check for leaks. No leaks are permitted. If leaks are found, notify the tank manufacturer. If no leaks are found, testing of the tank is complete.



3.2.4.2 For single-wall tank, open valve B, then slowly open valve A to release test air pressure. For double-wall tank, open valve C, then slowly open valve B to release test air pressure.

3.2.4.3 **WARNING:** Emergency relief vents and long bolt manways must be operable to prevent causing tank failure by over-pressurization.

4 TANK PIPING AND ACCESSORIES

4.1 Install all permanent piping and fittings using compatible, non-hardening thread sealant material.

4.2 All unused tank openings must be properly sealed and tested to be liquid and vapor tight prior to putting the tank into service.

4.3 DO NOT WELD ON THE TANK, MODIFY OR PENETRATE THE TANK STRUCTURE IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE TANK MANUFACTURER.

4.4 All tank accessories shall be installed as required per local codes. Anti-siphon devices, overfill shut-offs and alarms, vents gauges, emergency vents, etc. are common requirements for tanks storing motor fuels for the purpose of being dispensed into motor vehicles.

5 MAINTENANCE

5.1 The tank operator should perform periodic walk-around inspections to identify and repair areas of damage to the tank or the coating. Check for proper drainage around the tank area.

5.2 It is imperative that the tank exterior be inspected periodically to ensure that the integrity of the coating is maintained. The frequency of periodic repainting will be based upon environmental factors in the geographic area where the tank is located. Special consideration should be given to the selection of the paint, surface preparation and coating application. The coating selected should be suitable for use with the current coating, or the existing coating should be removed. The coating selected should be of industrial quality.

5.3 Proper site preparation and maintenance are vital to ensure drainage of surface water. Should ground conditions change or settlement occur, take the appropriate steps to maintain proper drainage and prevent standing water near or under the tank area.

5.3.1 For diked tanks, remove any product spills immediately. Be sure to dispose of hazardous material properly.

5.3.2 For diked tanks fitted with a drain, drain off water only. Drain openings are required to be maintained liquid tight.

5.4 The primary tank should be inspected monthly for the presence of water at the lowest possible points inside the primary tank. Remove any water found. Water and sediment in fuel can cause plugging of filters. Also, bacterial growth, in this media, can cause filters to plug and cause corrosion of tanks and lines. For procedures on how to check for the presence of water and removal of water, refer to STI RP111, Storage Tank Maintenance. For copies of the RP and more information, please go to www.steeltank.com.

5.5 Tank relocation requirements – Aboveground storage tanks are often relocated. The following instructions are to be followed when this occurs. All steps are to be documented and the documentation is to be kept for the life of the tank.

5.5.1 The hazards associated with the cleaning, entry, inspection, testing, maintenance or other aspects of ASTs are significant. Safety considerations and controls should be established prior to undertaking physical activities associated with ASTs. Cleaning of tanks must be per state and local jurisdiction requirements.

5.5.2 Refer to STI Standard SP001, "Standard for the Inspection of Aboveground Storage Tanks" for requirements concerning tank inspections. This SP001 Standard details requirements for inspections based on the tank installation and age. A tank must undergo the appropriate inspection prior to relocation.

5.5.3 The tank must be subjected to a pressure (or vacuum) test as detailed paragraph 3.2 above except an inert gas, such as nitrogen, should be used for tanks that have previously held fuel.

3000 SERIES

Bennett
simply *better*

1218 E. Pontaluna Rd. Spring Lake, MI 49456 | 231.719.6050 | sales@bennettpump.com | bennettpump.com 08.15.17_RevA

3000 SERIES SPECIFICATIONS

STANDARD FEATURES

Dimensions: Low Hose: 30"w x 60"h x 20"d
High Hose: 30"w x 88"h x 20"d

Products: Up to 2 Products (per side)

Hoses: Up to 2 Hoses (per side)

Unit Type: Straight Grade Only

Hydraulics: Suction or Remote

Activation: Lift to Start

Displays: LCD 8-Digit 1" for Sales and Volume
LCD 4-Digit ½" Price Per Volume

Voltage: 120/240 VAC, 50/60Hz

Flow Rate: 18-23GPM[1]

Inlet / Outlet: 1.5" dia NPT / 1" dia NPT

Protocol: Bennett Open Protocol / Generic / RS485

Regulatory: UL™ Listed, Weights and Measures

[1] *Flow rates are nominal rates under test conditions. Actual rates will vary subject to installation conditions, hanging hardware used, and submerged pump used if applicable.*

[2] *Payment options are only available on Front Mounted Units*

OPTIONAL FEATURES

Payment Options[2]: A variety of payment options are available for the 3000 series dispenser depending on your needs.

- EMV-R: 7 Widescreen display with soft keys, Hybrid Chip EMV Card Reader, PCI Compliant EMV ready EPP, High Speed Receipt Printer
- Full-EMV: Full EMV payment with 7" Display (require dispenser hub board and in-store hub box)
- Credit-Alpha: 7" Widescreen display with soft keys, Dual Side Credit/Fleet Card Reader, Alphanumeric Pin-Pad, High Speed Receipt Printer
- Credit-Numeric: Numeric Credit Only Payment
- Audio: Media Kit with External Audio for 7" Displays
- NFC
- Local Preset

Stainless Steel: Optional stainless steel packages for doors, end panels, top cover, electronic cover assembly, hinged upper doors and grade panel area

Other Options: Low Hose or High Hose, Side Mount or Front Mount Nozzle Boots, Two-Tier Price Displays, Electro-Mechanical Totalizers, Junction Box, Pulse Output Board, Automatic Temperature Compensation, Intercom Speaker, Intercom Speaker with Call Button, Custom Graphics, Valance (high hose models)

BASE MODEL NUMBER DESCRIPTIONS

1	2	3	4	5	6	7
3	8	1	2	S	N	R

1. 3000 Dispenser Series: Always "3"
2. Display Type: 7=Commercial Display | 8=Retail Display 1 Tier Prices | 9=Retail Display Two Price Tiers
3. Products: 1 or 2
4. Hose Outlets: 1, 2, or 4
5. Flow Rate: S=Standard
6. Hydraulic Details: Always N for None
7. Hydraulics: R=Remote | S=Suction | P=Suction w/ Prepay Valve(s)

Bennett simply better

GASBOY

FLEET & COMMERCIAL

FUELING

GASBOY

CONTENTS

ATLAS SERIES

FUELING EQUIPMENT

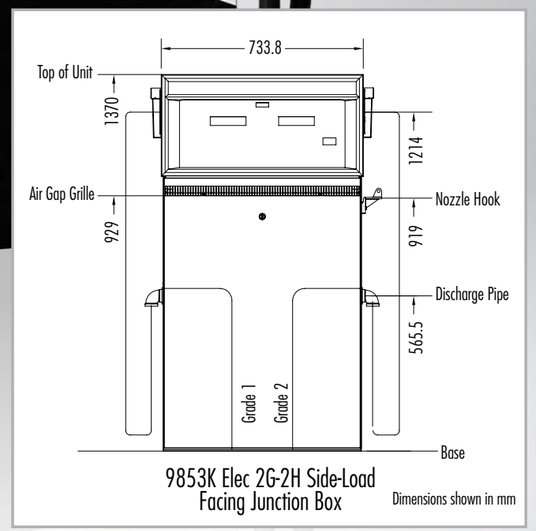
Gasboy has been producing refueling equipment since the 1920's. The Atlas Series is the latest generation in a long line of fleet-fueling equipment and is the workhorse for the tough Fleet and Commercial environment. It's compatible with the Gasboy PLUS Fuel Management System or a wide range of third-party controllers.

The Atlas Platform Offers:

- A wide range of models and flow rates
- Sophisticated electronics or simple mechanical registers which cover all requirements
- Use in Underground Tanks (UST) or Aboveground Tanks (AST) applications

Common Features in the Atlas Platform Include:

- Rugged and welded G90 galvanized-steel frame
- Structural foam bezel with a clear polycarbonate window, and a backscreen polycarbonate dialface
- Field-wiring junction box for easy installation
- Replaceable sheathing – painted or optional 304 embossed stainless steel
- Standard hydraulics – compatible with traditional motor fuels such as Biodiesel (up to B20) and Ethanol (up to E15); custom models are available for E85, B100 or DEF
- Safety listed and with NTEP CoC for W&M sealing for fuel resale application
- Optional High Retrievers and Catlow's hanging hardware to complete your fleet fueling equipment



9853K Elec 2G-2H Side-Load Facing Junction Box

Dimensions shown in mm

9853K

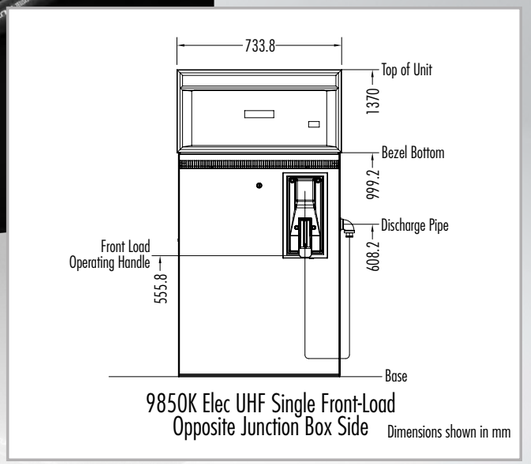
ATLAS 9853K

ELECTRONIC HIGH FLOW

Basic High Flow

The 9853K Series Basic High Flow Atlas has electronic displays. Available in a complete range of pump or dispenser style models. Versatile for most high-flow fleet fueling applications.

EASY USE	Large 1" LCD display with LED backlight and capacitor back up. LED lighting to identify fuel grade and illuminate the front panel.
FAST	High-flow rated at 22 gpm with side load or optional front load nozzle positions.
INTEGRATED	RS485 or Pulse Output interface for connectivity to Gasboy PLUS or other third-party site controllers.
DURABLE	Four-piston CFT meter with flow-through center chamber for harsh fuels. Large 1" internal piping for high flow rates in a variety of site conditions. Steel internal tubing on most models. 10-vane suction pump with 1-HP motor.
OPTIONS	Satellite piping option can turn your Atlas into a master / satellite fueling position.



9850K Elec UHF Single Front-Load
Opposite Junction Box Side

Dimensions shown in mm

9850K

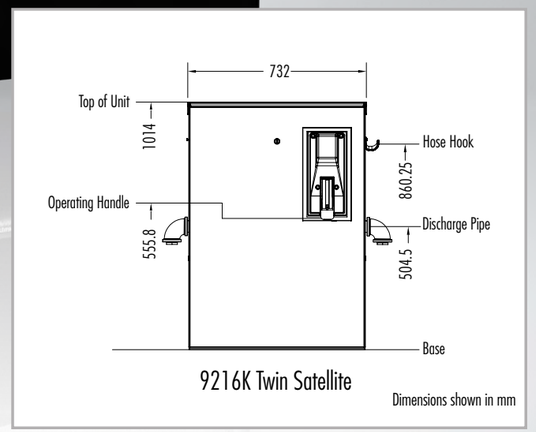
ATLAS 9850K

ELECTRONIC ULTRA-HI

Ultra-Hi Flow

The 9850K Series Ultra-Hi Atlas has electronic displays. Available in pump or dispenser style models. Heavy-duty, ultra-hi flow equipment is designed for the fleet market. Lane-oriented nozzles offer easy, saddle-tank fueling or side-load fueling for conventional islands.

EASY USE	Large 1" LCD display with LED backlight and capacitor back up. LED brand lighting.
ULTRA FAST	Rated at 50 gpm for the 9850 and 40 gpm for the 9840. LC meter in 9850, 2 CFT meters in the 9840.
DURABLE	Large 1-½" internal piping will give ultra-hi flow rates.
OPTIONS	Satellite piping option can turn your Atlas in to a master / satellite fueling position.



9216K Twin Satellite

Dimensions shown in mm

9216K

ATLAS 9216K

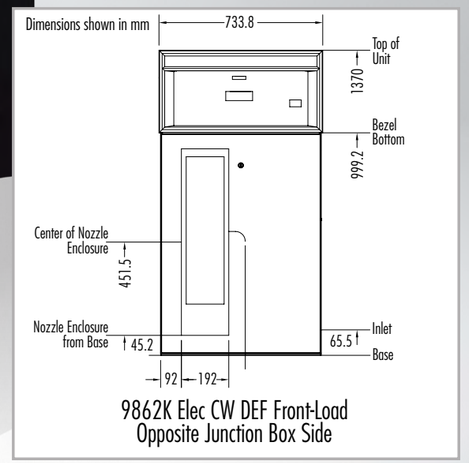
GENERAL PURPOSE SATELLITE

Satellite Dispenser

The 9216K Series general purpose satellite dispenser for use with Atlas or other master dispensers has front-load, lane-oriented nozzle boots. The 9216K is convenient for toll-gate island layout with fuel from both sides of the fueling lane, with a single or twin hose.

A perfect companion to the Atlas masters for either saddle-tank refueling, Encore® masters, or other third-party master dispensers.

DURABLE	Rugged Atlas welded frame with 13 gauge G90 galvanized steel.
FAST	Ultra-hi flow hydraulics standard with large 1-½" valve and piping to maximize flow rate / throughput.
COMPATIBLE	Wire to operate simultaneously with the master dispenser or independently. Image companion for Atlas, matches the frame size and footprint.
EASE OF USE	Large and open hydraulic cabinet for easy installation and service.
OPTIONS	Stainless-steel sides, top and door panels (replaceable). Embossed finish available. High-flow external filters and external high retrievers are available.



9862K Elec CW DEF Front-Load
Opposite Junction Box Side

9862K

ATLAS 9862K DEF

ELECTRONIC DEF

Gasboy Atlas DEF

Integrate Diesel Exhaust Fluid (DEF) into your site with the Gasboy 9862 DEF dispenser, available in a heated or unheated cabinet. The 9862K offers the same rugged Atlas welded frame and a familiar interface for users. The Coriolis Mass Flow meter has no moving parts and protects from crystallization. The optional electronic interface works with the Gasboy PLUS or other third-party controller.

VERSATILE

Cold weather (-40°C) and warm weather (-11°C) models are available. The cold weather (CW) model incorporates an improved heat-insulated cabinet with internal hose reel and enclosed nozzle area to protect from freezing and crystallization. Front-load nozzle position.

Warm weather (WW) model is for use in climates or applications where freeze protection is not required. Models are vailable in a front or side-load styles.

DEPENDABLE

Atlas electronics with electronic calibration.

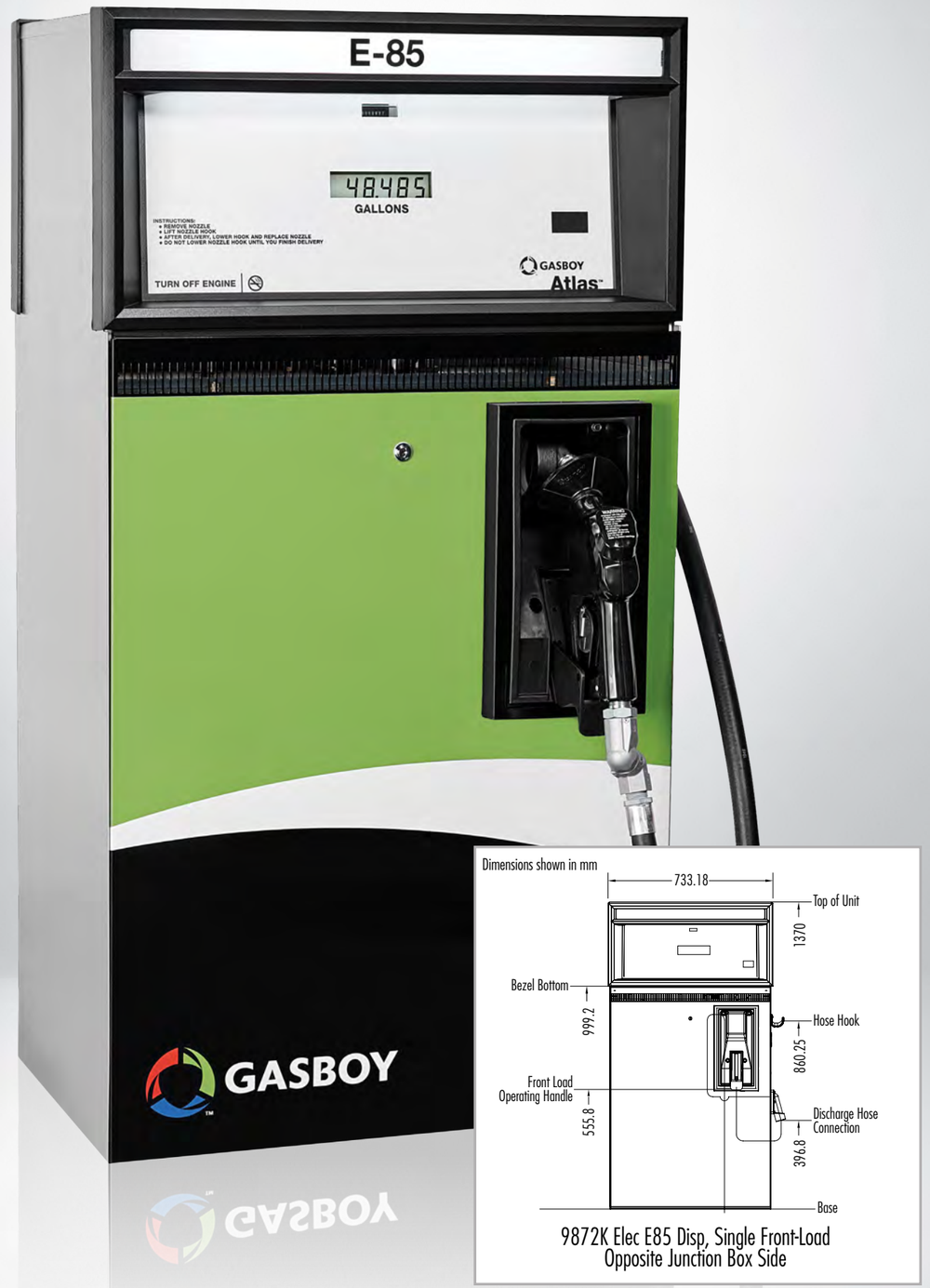
ACCURATE

Same reliable Coriolis meter used in both CW or WW models

CORIOLIS MASS FLOW METER

Both Atlas DEF dispenser models are equipped with a Coriolis Mass Flow Meter for exceptional accuracy.

- Mass flow technology delivers industry leading accuracy – even as the product characteristics change
- No moving parts that wear or stick, delivering reliable operation
- Measures mass directly and independently from viscosity and density changes, allowing the meter to be unaffected by temperature, conductivity and solid content
- Weights & Measures approved for transfer sales
- Electronic calibration for accuracy



9872K Elec E85 Disp, Single Front-Load
Opposite Junction Box Side

9872K

ATLAS 9872K E85

ELECTRONIC E85

Atlas E85 Dispenser

The 9872K Series is specifically designed and UL listed for use with E85 fuels. Works with the same site controllers as other Atlas electronic models.

DURABLE	Rugged Atlas welded G90 galvanized-steel frame.
EASY USE	Large 1" LCD display with LED backlight and capacitor back up.
ACCURATE	Electronic calibration. Rated at 15 gpm.
DEPENDABLE	Proven hydraulics from the Encore E85 series.
FLEXIBLE	Use with alternative fuels up to E85 or B100 along with conventional motor fuels.

PRIME

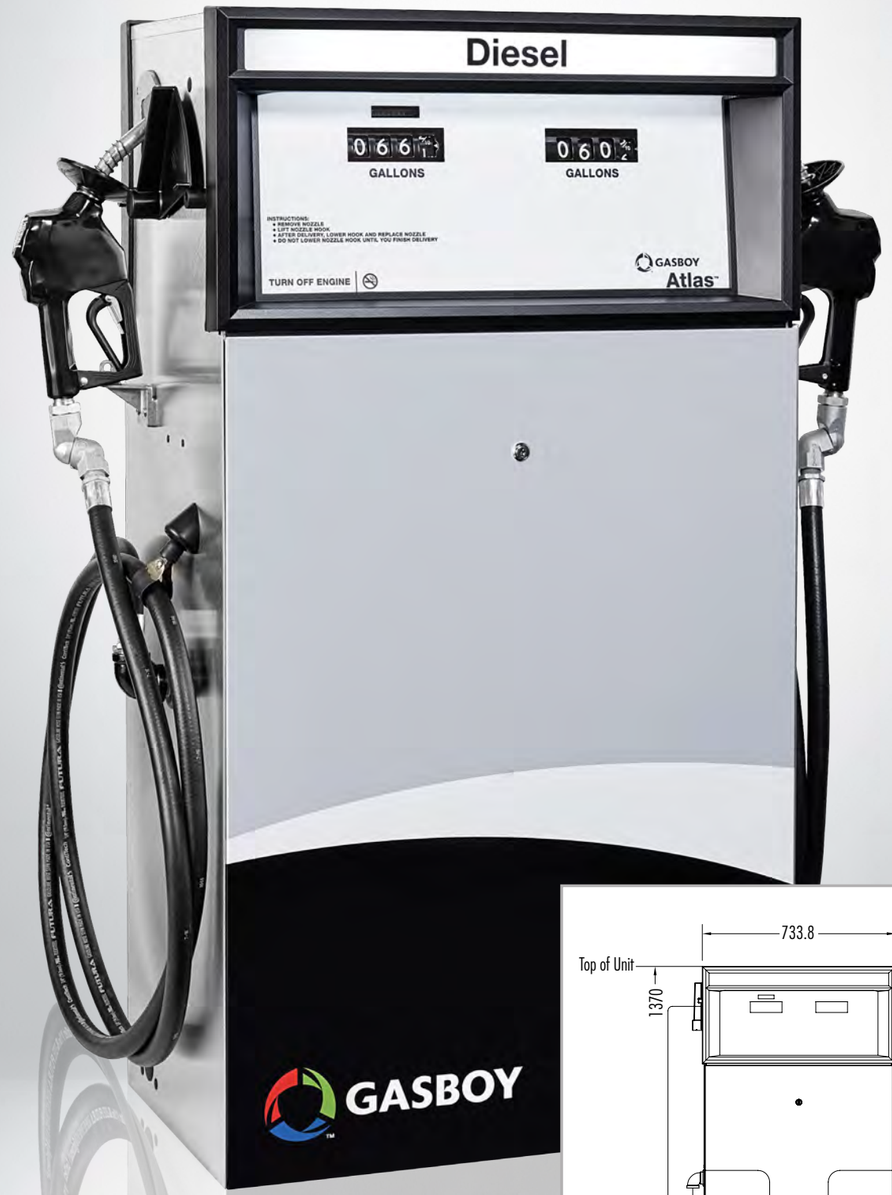
ATLAS PRIME

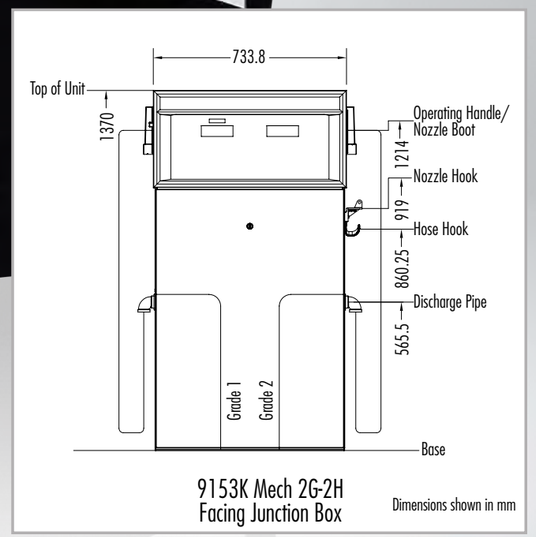
GASBOY FUEL MANAGEMENT

Gasboy Atlas PRIME

The newest Gasboy development integrates the Gasboy PRIME fuel-authorization terminal into the Atlas electronic platform. This provides full fuel management from the pump. The PRIME can operate as a stand alone or remote terminal.

EASY USE	Large, user-friendly, 40-key, and full alpha-numeric keypad with 4.3" high-brightness, LCD color screen and four soft-function keys.
ADVANCED TECHNOLOGY	MIFARE contactless reader with insert magnetic card reader. Optional HID reader. Web connection to Home Base FHO. Use in combination with an external printer.
FLEXIBLE	Optional FuelPoint PLUS controller.





9153K Mech 2G-2H
Facing Junction Box

Dimensions shown in mm

9153K

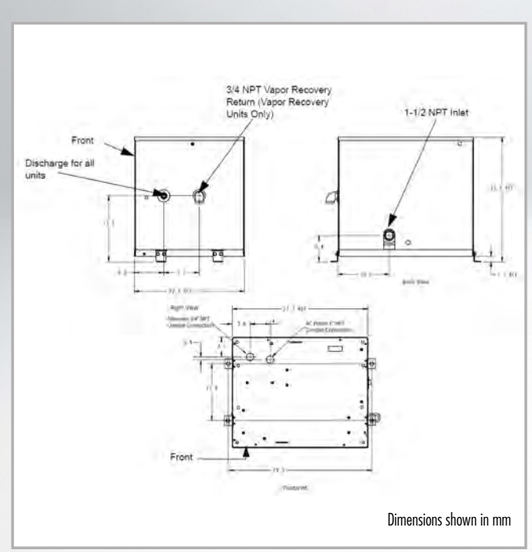
ATLAS 9153K

MECHANICAL HIGH FLOW

High Flow with Mechanical Register

The 9153K Series High Flow Atlas uses a mechanical register in the pump and dispenser models. Traditional refueling platform without electronics – simple to service.

DEPENDABLE	Same hydraulics as 9853 series with reliable VR10 mechanical register.
FAST	High-flow rated at 22 gpm.
DURABLE	10-vane suction pump with 1 HP motor. Power-operated reset mechanism.
FLEXIBLE	Pulser options for interface to site controllers. Keytrol option still available.



Dimensions shown in mm

Dimensions shown in mm

9823K

ATLAS 9823K

ELECTRONIC AST

Tank-Mounted Pump

The Atlas 9823K ASTRA is a split-remote, AST-mounted pump with an electronic display and a nozzle hang-up at grade. It has easy access and viewing at just the right user height.

EASY USE	W&M sealable Fleet pumps for above ground storage tanks (AST). Large 1" LCD display with LED backlight and capacitor backup.
DEPENDABLE	UL, cUL listed. NCWM approved. MC approved.
FLEXIBLE	Mount pump on top, side of tank or at grade.
FAST	Rated at 21 gpm.
VERSATILE	Use with Gasboy PLUS or competitive, fuel-management controllers for complete fuel management.

ATLAS MODELS

GASBOY MODELS

Model Number	Description	Type	Hoses	Products	Register	Flow Rating
9153K						
9153K	Hi-flow Single Pump	Pump	1	1	Mech	22 gpm
9152KTW1	Std-flow Twin 1 Pump	Pump	2	1	Mech	15 gpm
9153KTW1M	Hi-flow Twin 1 Pump	Pump	2	1	Mech	22 gpm
9153KTW2	Hi-flow Twin 2 Pump	Pump	2	2	Mech	22 gpm
9153KX	Hi-flow Single Dispenser	Dispenser	1	1	Mech	22 gpm
9153KXTW1	Hi-flow Twin 1 Dispenser	Dispenser	2	1	Mech	22 gpm
9153KXTW2	Hi-flow Twin 2 Dispenser	Dispenser	2	2	Mech	22 gpm
9853K						
9853K	Hi-flow Single Pump	Pump	1	1	Elec	22 gpm
9852KTW1	Std-flow Twin 1 Pump	Pump	2	1	Elec	15 gpm
9853KTW1M	Hi-flow Twin 1 Pump	Pump	2	1	Elec	22 gpm
9853KTW2	Hi-flow Twin 2 Pump	Pump	2	2	Elec	22 gpm
9853KX	Hi-flow Single Dispenser	Dispenser	1	1	Elec	22 gpm
9853KXTW1	Hi-flow Twin 1 Dispenser	Dispenser	2	1	Elec	22 gpm
9853KXTW2	Hi-flow Twin 2 Dispenser	Dispenser	2	2	Elec	22 gpm
9840K						
9840K	Super-hi Single Pump	Pump	1	1	Elec	40 gpm
9840KX	Super-hi Single Dispenser	Dispenser	1	1	Elec	40 gpm

Model Number	Description	Type	Hoses	Products	Register	Flow Rating
9850K						
9850K	Ultra-hi Flow Single Pump	Pump	1	1	Elec	50 gpm
9850KTW3	Ultra-hi Flow Combo Pump	Pump Combo	2	1	Elec	50 gpm
9850KX	Ultra-hi Flow Single Disp	Dispenser	1	1	Elec	50 gpm
9850KXTW1	Ultra-hi Flow Twin 1 Disp	Dispenser	2	1	Elec	50 gpm
9850KXTW2	Ultra-hi Flow Twin 2 Disp	Dispenser	2	2	Elec	50 gpm
9850KXTW3	Ultra-hi Flow Combo Disp	Disp Combo	2	1	Elec	50 gpm
9862K						
9862KX–Z	DEF – Cold Weather	Dispenser	1	1	Elec	
9862KX–WW	DEF – Warm Weather	Dispenser	1	1	Elec	
9862KX–ZWW	DEF – Warm Weather	Dispenser	1	1	Elec	
9872K						
9872KX	E85 – Single	Dispenser	1	1	Elec	15 gpm
9872KXTW1	E85 – Twin 1	Dispenser	2	1	Elec	15 gpm
9823K						
9823K	ASTRA Split AST Pump	Pump	1	1	Elec	21 gpm
9216K						
9216K	Satellite	Satellite	1	1	None	
9216KTW	Satellite	Satellite	2	1	None	

ATLAS FEATURES

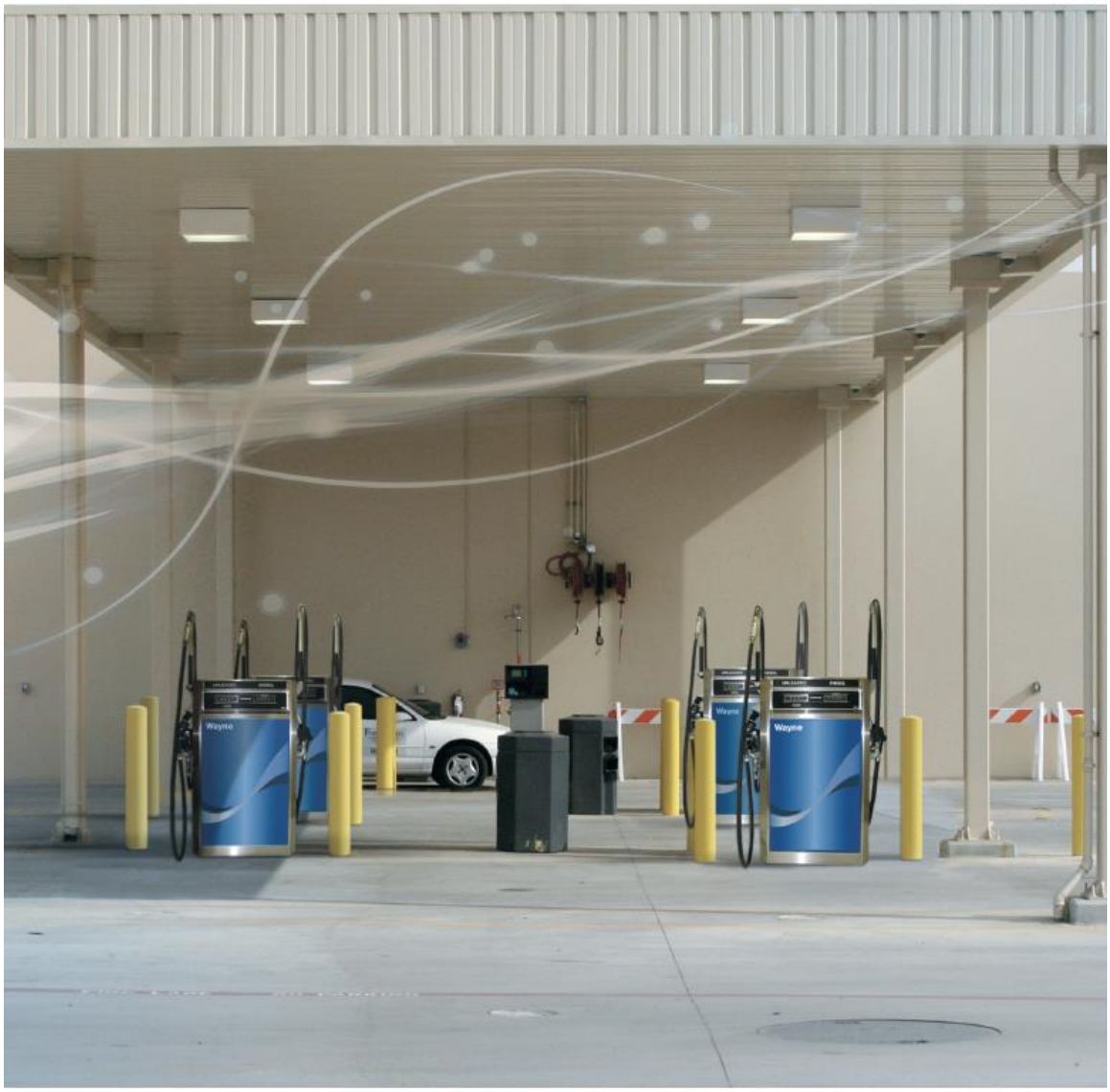
GASBOY MODELS

Feature	Short Description	9853	9840	9850	9823	9872	9862 CW	9862 WW	9153	9216
Approvals	Safety: UL and cUL Listed	S	S	S	S	S	MET	MET	S	S
	W&M: NCWM, Measurement Canada (MC)	S	S	S	S	S	S	S	S	S
Working Pressure	50 psi maximum	S	S	S	S	S	S	S	S	S
Operating Temp	-30°C to +55°C	S	S	S	S	S	S	-11°C	S	S
Unit of Measure	Gallons (liters optional)	S	S	S	S	S	S	S	S	—
Meter	Gilbarco 4 piston PD CFT Meter	S	S	—	S	S	—	—	S	—
	Liquid controls 6 step rotary PD Meter	—	—	S	—	—	—	—	—	—
	Coriolis Mass Flow Meter	—	—	—	—	—	S	S	—	—
Motors/Voltages	1 HP CD – 115V/60Hz (230V/50Hz optional)	S	S	—	S	—	—	—	S	—
	1½ HP CD – 115V/60Hz (230V/50Hz optional)	—	—	S	—	—	—	—	—	—
	3/4 HP CD 380V/50Hz/3-phase	0	0	—	0	—	—	—	0	—
Pump Models	10 vane rotary w/air separator	S	S	—	S	—	—	—	S	—
	High speed rotary vane w/air separator	—	—	S	—	—	—	—	—	—
Solenoid Valve	2-stage valve for Preset Operation (PP)	1"	1½"	1½"	1"	1"	¾"	¾"	1"	1½"
Filters	Internal spin-on style (F)	S	S	Strainer	S	S	Strainer	Strainer	S	—
	External Canister Type	0	0	0	0	—	—	—	0	0
Piping	Internal Fuel Piping	1"	1½"	1½"	1"	1"	¾"	¾"	1"	1½"
Discharge	Hose Connection – NPT	1"	1¼"	1¼"	1"	¾"	1" BSPP	1" BSPP	1"	1¼"
Satellite Piping	Satellite piping connection (S) – disp only	0	0	0	—	—	—	—	0	—
Inlet	Island Connection – NPT	1½"	2"	2"	1½"	1½"	1" BSPP	1" BSPP	1½"	1½"
Junction Box	Field Wiring Junction Box	S	S	S	S	S	S	S	S	S
Housing	G90 Galvanized Steel	13 GA	13 GA	13 GA	11 GA	13 GA	13 GA	13 GA	13 GA	13 GA
Panels	Lockable removable – Painted Galvanized Steel (std) – gauge	20	20	20	16	20	20	20	20	20
	Lockable removable – Kooline Stainless Steel – 22 gauge	0	0	0	—	0	—	0	0	0
Sheathing	Replaceable – Painted G60 Galvanized Steel (std) – gauge	20	20	20	16	20	20	20	20	20
	Replaceable – Kooline Stainless Steel – 22 gauge	0	0	0	—	0	0	0	0	0

Feature	Short Description	9853	9840	9850	9823	9872	9862 CW	9862 WW	9153	9216
Computer/Register	Electronic Register – Volume only display	S	S	S	S	S	S	S	—	—
	Mechanical Register – VR10 volume only	—	—	—	—	—	—	—	S	—
Electronic Display	1" LCD w/LED Backlight & Capacitor Backup	S	S	S	S	S	S	S	—	—
Interface Options	Pulser – 10:1 or 100:1 volume (CC or CX)	—	—	—	—	—	—	—	0	—
	RS-485 – Gasboy CFN, Islander, or TopKat	0	0	0	0	0	0	0	—	—
	Pulse Output I/F	0	0	0	0	0	0	0	—	—
	DC conduit and junction box (D)	S	S	S	—	S	S	S	—	—
	Keytrol (EK)	—	—	—	—	—	—	—	0	—
TopKAT PLUS	TopKAT PLUS with Ethernet conduit (factory install)	0	0	0	—	0	0	0	—	—
Brand Panel Lighting	LED Lighted brand panel (L)	0	0	0	—	0	0	0	0	—
Totalizers	Electronic	S	S	S	S	S	S	S	—	—
	Non-resettable Electro-mechanical	0	0	—	—	0	0	0	—	—
	Non-resettable mechanical	—	—	0	0	—	—	—	S	—
Nozzle Position	Side load	S	S	S	—	S	—	S	S	—
	Front load (Z)	0	0	0	S	0	S	0	—	S
Hose Retractors	Internal hose retractor (I)	0	0	—	—	—	—	—	0	—
	Internal hose reel	—	—	—	—	—	S	—	—	—
	High hose retractor – external post mounted	0	0	0	0	0	—	0	0	0
AST Applications	Pressure Regulating Valve Model 52A – suction pumps only	0	—	—	0	—	—	—	0	—
	9850 Above Ground Tank Kit – suction pumps only	—	—	0	—	—	—	—	—	—
Warranty	12 month – Parts and labor	S	S	S	S	S	S	S	S	S
	Extended – 2, 3, 4 or 5 years	0	0	0	0	0	—	—	0	0
Miscellaneous	ATC (Canada only)	0	0	0	—	—	—	—	—	—
	Hand crank (K)	—	—	—	—	—	—	—	0	—
	Power reset	—	—	—	—	—	—	—	S	—
	Display power fail backup	S	S	S	S	S	S	S	—	—
	Internal cabinet heater (DEF only)	—	—	—	—	—	S	—	—	—
	Balanced vapor recovery	0	—	—	0	—	—	—	0	—
	Healy Universal Kit compatible	0	—	—	—	—	—	—	0	—
	Hose, nozzle, swivel, breakaway	0	0	0	0	0	0	0	0	0

S = Standard; O = Optional; — = not available

RELIANCE® G6200
MECHANICAL FLEET DISPENSER



Wayne
FUELING SYSTEMS

Wayne Reliance G6200 Series Mechanical Fleet Dispensers

Fueling capabilities you can depend on down the road

Keeping your fleet on the move depends on reliable, fast access to fuel. Time spent waiting for an available dispenser or struggling with slow or inefficient fueling equipment can negatively impact your productivity. And any downtime caused by maintenance or repair issues not only increases inefficiencies, it raises your Total Cost of Ownership.

Wayne delivers fueling equipment you can count on to deliver consistent performance today and tomorrow. We've built the Reliance G6200 Series Mechanical Fleet Dispenser for reliability and durability by combining time-proven components with a durable cabinet. It stands up to years of rugged use in the harshest conditions.

Superior performance gets vehicles on the road faster

Engineered for fast fueling capabilities, the Reliance G6200 dispenser offers high flow rates up to 22 GPM*. Large capacity inlet/outlet castings, one-inch internal filters and discharge connections provide superior flow performance. The one horsepower motor on suction models offers extra capacity which extends the life of the motor. Plus, the micro-accurate positive displacement two-piston meter is weights and measures sealable and provides precise measurement at any flow rate.

**Flow rates are maximum test rates at discharge. Actual rates will depend upon application and accessories, and if applicable the submersible pump.*

Convenient, simple installation and maintenance

Simple installation and low maintenance are among the many ways the Reliance G6200 dispenser improves productivity and reduces operation costs. A single AC power line feed makes retrofitting to existing installations easy. Its hinged doors can be removed if necessary by simply pushing a button for simple access during routine maintenance. The gear-type pumping units (suction models) endure years of hard use, and the reliable mechanical registers require little maintenance. Additionally, vertical strainer removal minimizes spills during maintenance, and an adjustable v-link belt in suction models simplifies motor tension adjustment.

Ready for tomorrow's fuels today

The UL-listed Reliance E85** (E/ model prefix) employs special elastomers, electroless nickel-plating, hard anodizing, stainless steel, black iron piping and a special ethanol-compatible filter to provide compatibility with E85 fuel. The E85 option is available for all remote dispenser models and is also compatible with standard petroleum products like gasoline and diesel. Dispense E85 today or utilize standard fuels with the peace of mind that you are prepared for conversion to alternative fuels in the future.

Reliance G6200 Models

The Wayne G6200 fuel dispenser comes in a wide range of model selections so you can choose the dispenser that fits seamlessly within your environment and meets your fleet fueling requirements.

Model Number	Type	Hoses	Products	Pumps	Motors	Solenoid Valves
Suction Pumps						
/G6201P/2GJK	Single	1	1	1	(1) 1 HP	Option
/G6202P/2GJK/W1	Twin I	2	1	1	(1) 1 HP	1" (2.5 cm)
/G6205P/2GJK	Twin I HS	2	1	2	(2) 1 HP	Option
/G6203P/2GJK	Twin II	2	2	2	(2) 1 HP	Option
Remote Dispensers						
/G6201D/2GJK/W1	Single	1	1	N/A	N/A	1" (2.5 cm)
/G6202D/2GJK/W1	Twin I	2	1	N/A	N/A	1" (2.5 cm)
/G6203D/2GJK/W1	Twin II	2	2	N/A	N/A	1" (2.5 cm)
Satellites						
/V287S/KR	Single	1	1	N/A	N/A	1.5" (3.8 cm)
/V288S/K	Twin	2	2	N/A	N/A	1.5" (3.8 cm)

Model Number Format: */ Base Model / Suffix 1 Options / Suffix 2 Options (e.g. / G6201P / 2GJK /A)*
All non-satellite models include the following options as standard: 1" piping [2], internal filter [G], AC j-box [J], and hose hanger [K]. Option suffixes are noted in the specifications in [ ]. A "/" (e.g. [/A]) indicates a suffix 2 option.

***Note: "E/" models are UL Listed for ethanol blends up to E85 as well as gasoline and diesel.*
Select only hose and nozzle accessories that are expressly compatible with the fuel type being dispensed.

Standard features deliver a solid solution

Equipped with a rich set of standard features, the Reliance G6200 dispenser offers exceptional value. Based on years of experience and industry leadership, Wayne incorporates outstanding features into every dispenser.

- Internal filters help ensure product purity
- All user controls meet American Disability Act requirements
- Nozzle boots fit both standard and vapor recovery nozzles
- Satellite piping connections are provided for use with satellite dispensers

Reliance G6200 Specifications

Performance: Up to 22 GPM (83 lpm) per hose (exception: Twin I suction is 22 GPM per one hose operating, or 12 GPM (45 lpm) per hose with both operating).

Note: Specified rates are maximum test rates at the discharge. Actual flow rates will depend upon the installation conditions, dispenser accessories, and for remote dispensers, size of the submersible pump.

Compatibility: For dispensing low viscosity petroleum fuels - diesel; biodiesel blends up to 20%; gasoline, including oxygenated blends; kerosene; AvGas^, and jet fuel^. See E85 option and Approvals. Fuel must meet the applicable ASTM standard.

^Note: Confirm with fuel supplier on any fluid path metal restrictions before use. Install the proper filtration and water separation equipment necessary for aviation fueling.

Register: Non-computer mechanical register with power reset with interlock. Displays on both sides of cabinet. Maximum 999.9 gallons.

Totalizer: Non-resettable totalizer up to 9999999.9. Displays on front dial face.

Meter: Reliable, micro-accurate 2-piston positive displacement design. Weights & Measures sealable.

Pumping Unit++: Positive displacement, self-priming, gear-type pumping unit with integral centrifugal air separator and adjustable bypass valve. Suction strainers at inlet connection.

Motor++: 1-HP continuous duty with thermal overload protection. Adjustable V-link belt connects to pump pulley.

Electrical: 115VAC, 60Hz operation. Motors – 115/230VAC 50/60Hz.

Internal Filter [G]: Adapter with ten-micron filter helps ensure product purity.

Inlet Connection: 1½" NPT (3.8 cm).

Discharge: 1" NPT (2.5 cm) with ¾" reducing bushing.

Solenoid Valve: 1" (2.5 cm) two-stage valve. Standard on remote dispensers and Twin I suction. Also provides slow flow control for fuel control systems. With E85 option, valve is single stage.

Satellite Connection: Discharge assembly includes 1" NPT (2.5 cm) internal port for satellite piping connection on remote dispensers.

Cabinet Finish: Extremely durable powder-coated finish gives outstanding appearance and toughness. Sides, top, bezel, and base painted metallic silver. Doors painted blue (optional black, brown, green, red, silver, yellow, or white). Black register face.

Cabinet Construction: All panels are fabricated from heavy gauge galvannealed steel. 14-gauge side panels and 18-gauge doors. Top of bezel provides space for product id decals (specify w/ order).

Nozzle Boot and Hook: Side location is standard for access from either fueling lane. Fits standard U.L. interchangeable automatic nozzles. Hook may be adjusted for an OPW 11-VF long spout balanced vapor recovery nozzle. On/off handle for dispenser activation. Optional nozzle boot hoodkit for fitting short spout balanced vapor recovery nozzles.

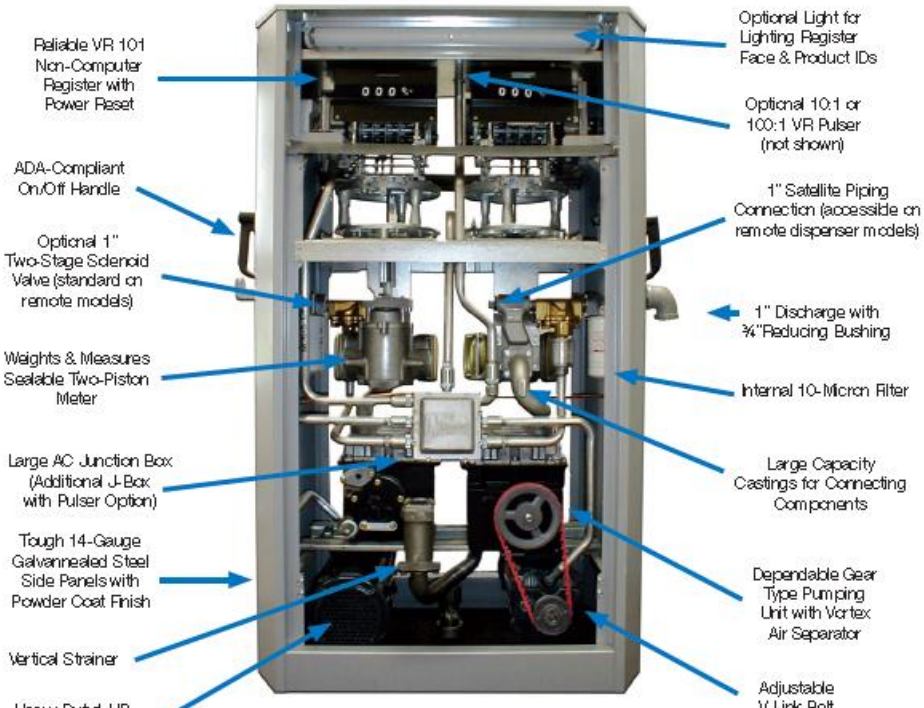
Hose Hanger [K]: Keeps hose off the island when not in use.

Actual Dimensions: 32.25" W x 19.38" D x 54.38" H (81.9cm W x 49.2cm D x 138.1cm H)

Approvals: C-UL-US -includes diesel; biodiesel blends to B5; gasoline including ethanol blends to E10 (to E85 with E85 option - UL only); & kerosene.

U.S. Weights & Measures - includes diesel; biodiesel; gasoline including oxygenated blends; kerosene; AvGas; and Jet Fuel.

All remote dispensers include a satellite connection as standard so that they can be piped to an opposing satellite dispenser for the convenient fueling of truck saddle tanks or vehicles positioned with their tank on the opposite side.



/G6205P/2GJK
Model

Model 515 Series AST Remote Spill Container

SPECIFICATION SHEET

Application

Remote fill containers provide containment for small spills that may occur at the fill point during remote filling operations.

Features and Details

- Single connections in 2”, 3” or 4” female threads
- Dual connections in 2” or 3” (may be combined)
- 15 gallon capacity
- Gas spring cylinder holds the lid in the up position when fueling
- Lockable with a padlock
- Weather-tight enclosure
- Vent cover
- 2 Inch female threaded return pump connection
- 1” NPT drain with locking ball valve
- Base to centerline connection height 30” to 48” pedestal model
- Base to centerline connection height 31” to 47” Four leg stand model
- Container 22-1/2” wide x 24” deep x 24-1/4” height
- Four leg stand ships knocked down and requires minimal assembly

Materials of Construction

- Container and lid... 12 gauge steel, powder coated white
- Pipe connection... powder coated steel
- Pedestal mount... Schedule 40 steel pipe, powder coated steel white
- Adjustable four-leg stand...10 gauge stainless steel or powder coated steel white
- Ball valve... brass
- Gasket... Teflon

Code Compliance

CAN-ULC-S663-11; Florida DEP EQ 535

ULC LISTED

515
(pedestal mount)

515
(4 leg stand)

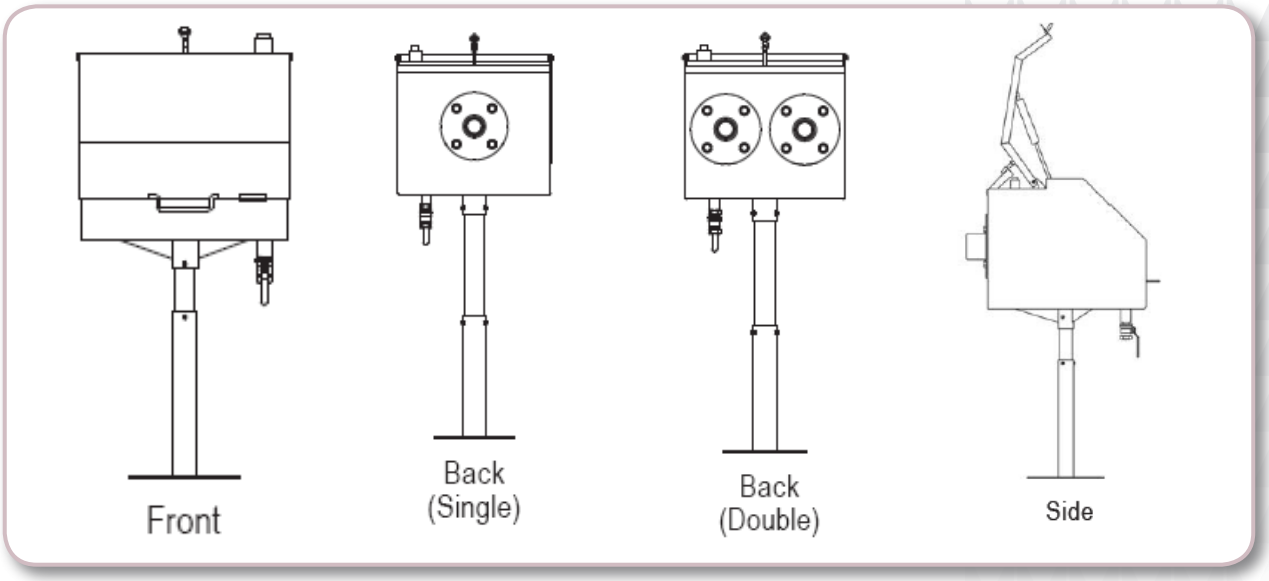
Item numbers and drawings on next page.

Model 515 Series AST Remote Spill Container *(continued)*

Item Number	A	B	C	D	E	F	G	H
515---0200 AC	P	1	2”	B	Y	23”	24”	136.50
515---0300 AC	P	1	3”	B	Y	23”	24”	138.0
515---0400 AC	P	1	4”	B	Y	23”	24”	140.0
515---2200 AC	P	2	2” & 2”	B	Y	23”	24”	147.0
515---2300 AC	P	2	3” & 3”	B	Y	23”	24”	150.0
515---3200 AC	P	2	2” & 3”	B	Y	23”	24”	148.50
515-ST0200 AC	S	1	2”	B	Y	23”	24”	136.50
515-ST0300 AC	S	1	3”	B	Y	23”	24”	138.0
515-ST0400 AC	S	1	4”	B	Y	23”	24”	140.0
515-ST2200 AC	S	2	2” & 2”	B	Y	23”	24”	147.0
515-ST2300 AC	S	2	3” & 3”	B	Y	23”	24”	150.0
515-ST3200 AC	S	2	2” & 3”	B	Y	23”	24”	148.50
515OEM0200 AC	T	1	2”	T	Y	23”	24”	103.0
515OEM0300 AC	T	1	3”	T	Y	23”	24”	101.0
515OEM2200 AC	T	2	2” & 2”	T	Y	23”	24”	107.0
515OEM2300 AC	T	2	3” & 3”	T	Y	23”	24”	103.0
515ST-0100 AS	Four leg adjustable stand, powder coated							
515STS0100 AS	Four leg adjustable stand, stainless steel							

SPECIFICATION OPTIONS:

A—Mounting connection: Pedestal mount female thread (P), four leg stand (S), or back mount 4 tabs (T)
B—Number of ports
C—Port sizes, Female NPT
D—Port location, Back (B), Top (T)
E—ULC Listed (Y), Not Listed (N)
F—Width (inches) (+/- ½”)
G—Height (inches) (+/- ½”)
H—Shipping weight (lbs)



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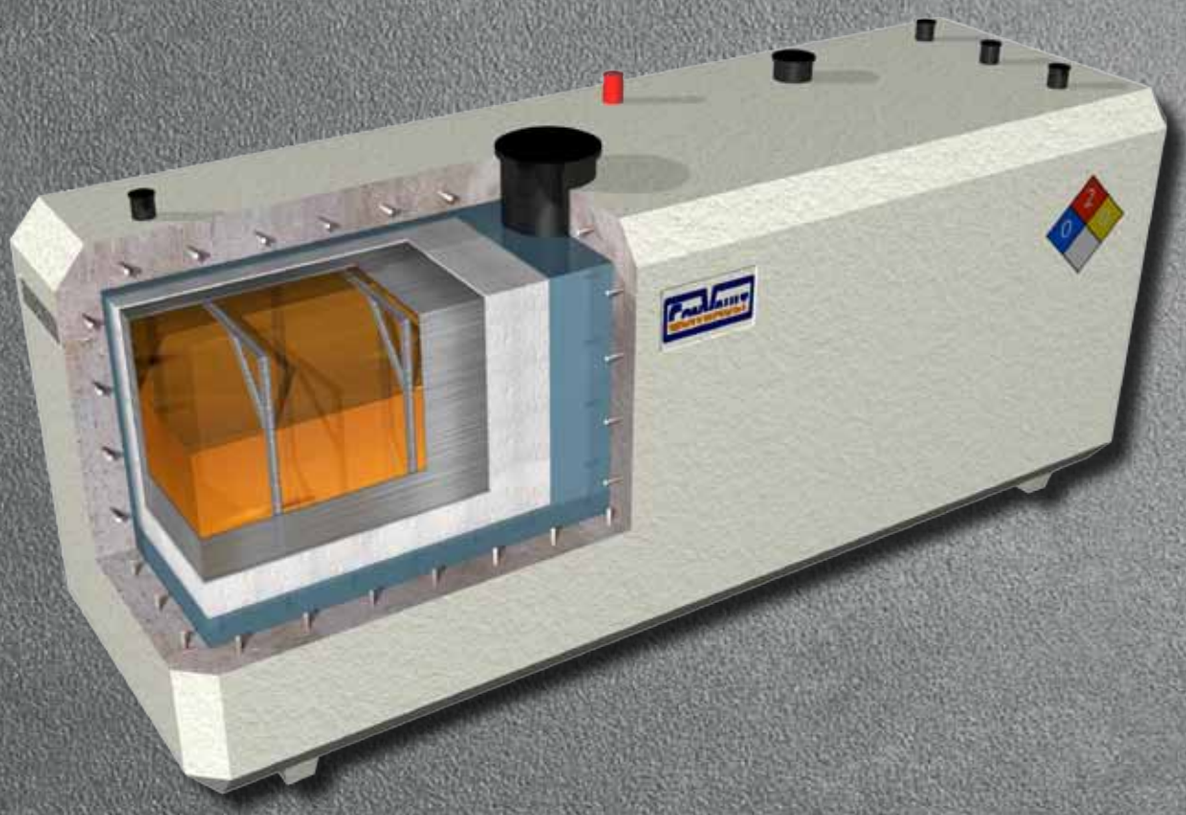
ConVault®

Above Ground Liquid Storage Solutions



Oldcastle Precast®

AVIATION

FARMS/FORRESTRY/MINING

FLEET/YARD OPERATION

MARINE

MILITARY/PUBLIC SAFETY

MISSION CRITICAL OPERATIONS

WATER TREATMENT

From Oldcastle Precast, the leading manufacturer of precast concrete products, comes ConVault, a superior line of above grade liquid storage vault solutions offering unsurpassed protection, versatility and reliability.

The ConVault line of products are ideal for Fuel & Lube Dispensing, Oil & Chemical Storage, as well as Generator & Boiler Set applications. ConVault above ground fuel storage tanks, (AST), are a patented system utilizing a primary steel tank, integral secondary containment, and an engineered concrete outer vault to provide a UL listed, impact resistant, time tested fluid storage solution.

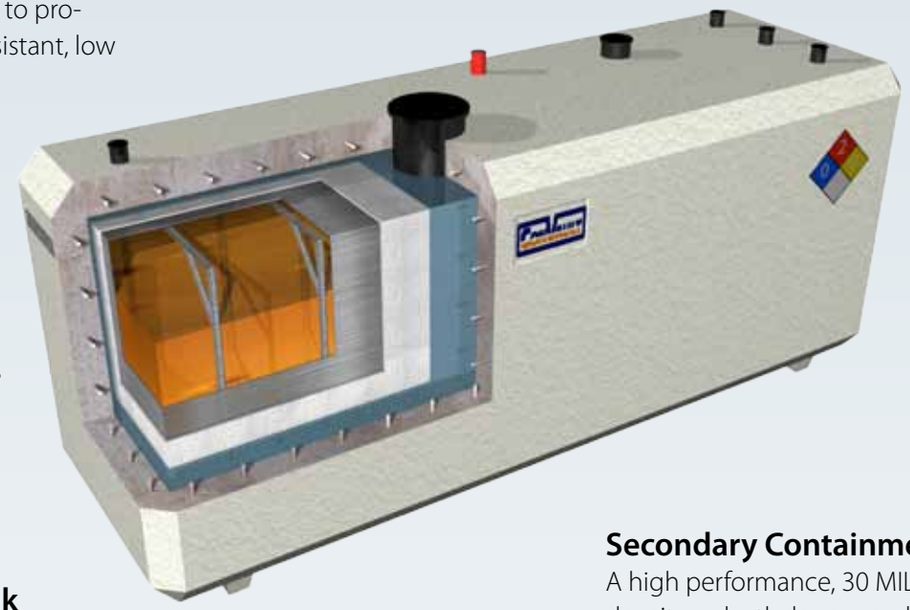
ConVault

Fire Protection
Seamless, six-inch reinforced concrete provides two-hour fire protection as per U. L. 2085 specification.

Versatility
ConVault can be manufactured and configured for a variety of uses in restricted spaces.

Engineered To Last
ConVault is Engineered to provide decades of rust resistant, low maintanence service.

EPA Compliant
ConVault is compliant with EPA regulations, Spill Prevention, Containment, and Countermeasures plans.



Impact Resistant
Vehicle impact, projectile, and blast resistance exceeds U. L. 2085 specification.

Multiple Size Options
ConVault provides versatile storage solutions with tank sizes ranging from 125 to 12,000 gallons.

Secondary Containment
A high performance, 30 MIL high density polyethylene membrane encloses the primary tank and provides secondary containment.

Primary Steel Tank
The steel tank is isolated from the concrete encasement to assure corrosion protection.

Thermal Protection
ConVault's monolithic concrete enclosure and insulation layers provide thermal protection.

ConVault Benefits

- **UL listed** - ConVault AST is listed in accordance with ULC 142.16, ULC 142.23 and UL Standard 2085 Insulated/Secondary Containment for Above ground Storage Tanks/Protected Type.
- **Meets Safety Regulations** - ConVault tanks meets all safety requirements for primary and secondary containment, leak monitoring, spill containment and overfill protection.
- **Manufactured** to the rigid standards of the Oldcastle quality control program at Oldcastle facilities around the country.
- **Engineering** - Every ConVault tank is designed and engineered to meet or exceed industry requirements for above ground fuel storage.
- **Environmentally Secure** - With multiple layers of containment surrounded by 6" of steel reinforced concrete, ConVault is designed to protect.
- **LEED** - Manufactured locally with recycled material.

PRIMARY USES

Generator & Boiler Sets

Generator & Boiler Sets are ideal for providing a reliable fuel supply for ***Mission Critical*** and ***Emergency Power*** applications such as emergency generator backup power for a wide range of critical facilities including:

- hospitals/medical centers
- water treatment plants
- data/computer centers
- telecommunications/internet service centers
- institutional boiler supply

Fuel & Lube Dispensing

Fuel & Lube Dispensing - ConVault fuel & lube dispensing systems are designed and engineered for the safe storage and dispensing of liquid fuels and lubricants such as:

- gasoline/diesel
- ethanol
- biodiesel
- kerosene
- lubricants

Oil & Chemical Storage

Oil & Chemical Storage - ConVault oil & chemical storage tanks provide safe and efficient storage of environmentally hazardous chemicals and petroleum products including:

- waste oil
- used oil
- vegetable/animal oils
- methanol/urea
- antifreeze
- hazardous waste oil

Sizes

Capacity	L	W	H
250 GAL	7′-8″	3′-9″	3′-3″
500 GAL	11′-0″	4′-6″	3′-4″
1000 GAL	11′-0″	5′-8″	4′-4″
2000 GAL	11′-3″	8′-0″	5′-6″
3000 GAL	12′-2″	8′-0″	6′-11″

Capacity	L	W	H
4000 GAL	12′-2″	8′-0″	8′-9″
6000 GAL	17′-7″	8′-0″	8′-9″
8000 GAL	23′-1″	8′-0″	8′-9″
10000 GAL	28′-7″	8′-0″	8′-9″
12000 GAL	34′-1″	8′-0″	8′-9″

• Sizes listed may not be available at all plants. Please check with your local Oldcastle Precast ConVault Sales Representative for size availability.
• ConVault is also offered with split tanks, which are available in many sizes. Please check with your local Oldcastle Precast ConVault Sales Representative for more information on split tanks.

APPLICATIONS

ConVault is designed and engineered for multiple uses and endless applications. Let us show you how we can provide a solution to meet your above ground liquid storage need.

AVIATION

ConVault is found in airports and military air operations nationwide because it's the safe above ground solution that can be flexibly configured to dispense aviation fuels in just about any footprint.

MARINE

A growing number of Coast Guard and Harbor Patrol operations and marinas are moving to ConVault due to its outstanding track record standing up to corrosion and increasingly intense marine storms.

MILITARY/PUBLIC SAFETY

ConVault proudly serves Air Force, Army, Coast Guard and Border Patrol operations as well as Police, Fire, and EMS stations across the USA.

FARMS/FORESTRY/MINING

ConVault provides versatile, rugged dependability to the US Forest Service, Parks Departments, large mining operations, farms, ranches, and other natural resource managers.

FLEET/YARD OPERATIONS

Impact and blast protection and low maintenance have made ConVault first choice for fleet and yard operations for decades.

MISSION CRITICAL OPERATIONS

The safety and value of ConVault are being proven every day in hospitals, schools, data centers, correctional facilities, command centers, and other mission critical operations.

WATER TREATMENT

ConVault serves double duty in wastewater treatment plants and lift stations by providing fuel for generator power and dispensing methanol used in processing.

LOCAL MANUFACTURING

Manufacturing of ConVault takes place at Oldcastle Precast facilities around the country. Our national footprint allows us to service anywhere in the continental United States and Hawaii. Dealing directly with Oldcastle Precast means there are no third parties involved that may hinder fast service and delivery.

Our facilities use state of the art tooling to manufacture product of the highest quality. In addition, our plants are held to the rigid standards of the Oldcastle Precast quality control program, as well as industry certifications.

ENGINEERING

ConVault is supported by Oldcastle Precast's national engineering and sales staff. Using advanced design and engineering software, every ConVault is designed, engineered, and manufactured to the latest NFPA 30, 30A, and 31 fire safety standards.

UL Listed

ConVault AST is listed in accordance with:

- ULC 142.16
- ULC 142.23
- UL Standard 2085 Insulated/Secondary Containment for above ground Storage Tanks

Engineered for Ultimate Value

Every ConVault tank manufactured by Oldcastle Precast offers superior strength, performance, and durability. Some additional benefits include:

- EXTERIOR SHELL made of steel reinforced precast concrete increases in strength over time.
- Rust and corrosion resistant.
- Performs in even the most aggressive environments.
- Resistant to rain penetration, flood damage, and impact.
- Withstands multiple freeze-thaw cycles unlike other materials, which can deteriorate quickly with such regular exposure to expansion and contraction.
- Concrete vaulted tanks are designed to minimize the effects of creep and shrinkage.

Engineering Support

Oldcastle Precast provides design and engineering support for every ConVault tank we manufacture. The local Oldcastle Precast ConVault Representative is available for prefabrication conferences to discuss the ConVault solution and configuration that meets your needs. Contact our staff for quick tank layouts and quotes.

DELIVERY

In most geographic markets, ConVault is manufactured at the local Oldcastle Precast facility. Local manufacturing means less hassle with unexpected delivery delays.

VERSATILITY

ConVault above ground liquid storage tanks offer a versatile aesthetically pleasing solution for safe and efficient storage of a variety of liquids including, environmentally hazardous chemicals, petroleum products, fuels, and lubricants.

Easy to Configure

ConVault solutions can be manufactured and configured for a variety of uses and applications across multiple industries. Whether you need a fuel dispensing station for fleet vehicles, or a reliable fuel supply for mission critical and emergency power applications such as emergency generator backup power for critical facilities, every ConVault is designed to be configured for a specific application resulting in a liquid storage solution that can be counted on to perform as required while providing decades of low maintenance, rust free service.

Multi-Compartment Tanks

ConVault tanks can be partitioned, in either direction, into multiple separate storage tanks for solutions that require the storage or dispensing of different types of liquids such as gasoline and diesel, from a single tank. This solution allows for multiple liquids to be stored in a small footprint.

Multiple Size Options

To meet the various solution needs across industries, Oldcastle Precast ConVault provides versatile storage solutions with tank sizes ranging from 125 to 12,000 gallons. Multi-compartment tanks are available in a variety of configuration options.

Blast and Impact Resistant

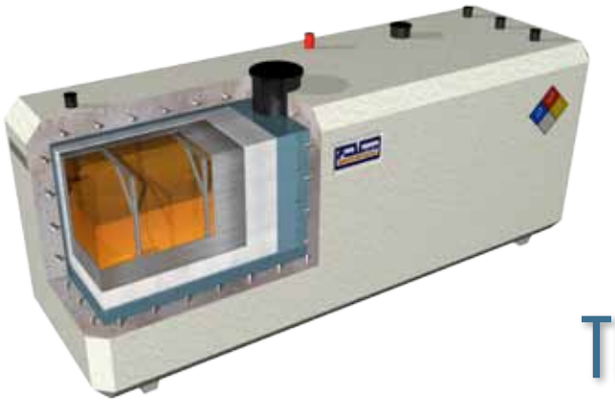
The strength and durability of the primary steel tank enclosed in steel reinforced concrete allows ConVault to provide unsurpassed protection against blast and impact damage. ConVault excels where other tanks fail when it comes to protecting the fuel containment steel tank from puncture due to impact or explosive blast. The exterior steel reinforced concrete is engineered to prevent puncture and withstand the impact from transportation related to facility operations such as forklifts and motor vehicles.

SUPPORT

Oldcastle Precast is the leading manufacturer of precast concrete, polymer concrete, and plastic products in the United States. With a nationwide network of facilities, our products are always close at hand. Our employees are committed to upholding core values of reliability, quality, and service in revolutionary ways. Our attention to detail exceeds the expectations of customers from small companies to some of the largest companies in the US across a spectrum of industries.

For Product Pricing or Technical Support
Please give us a call.

888-965-3227

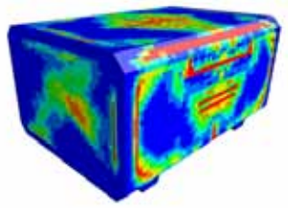


The Value of ConVault

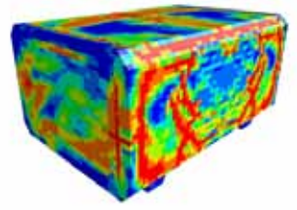
LOW COST OF MAINTENANCE
All fuel tanks require inspection and maintenance, as required by Federal and State regulation. Over time, steel that is exposed to natural elements such as rain, will rust and require constant maintainence. The entire exterior of steel tanks is exposed to the elements; the ONLY exposed steel on a Convault is the tank accessories and plumbing. Steel is also a better conductor of heat from the sun than concrete is, which causes outdoor steel tanks to transfer more heat from the outside of the tank to the fuel contained inside, resulting in more evaporative fuel loss. The insulative properties of the 6" concrete shell on Convault tanks can dramatically reduce evaporative fuel loss.

UNMATCHED PROTECTION OF THE PRIMARY TANK AND SECONDARY CONTAINMENT
Convault encases BOTH THE PRIMARY TANK AND THE SECONDARY CONTAINMENT in 6" of steel-reinforced concrete that outperforms stringent UL 2085 requirements for blast, fire, and ballistic impact protection. From coast to coast across the USA and around the world you will find countless examples of Convault tanks reliably performing through extreme weather and catastrophic events. That's one reason why Convault is the preferred tank at military, paramilitary, and public safety installations. A recent study by Karagozian and Associates demonstrated how the inertia and mass of Convault's steel reinforced, monolithic concrete entombment protects the tank from blast and impact.

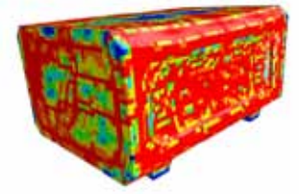
Karagozian & Associates Blast Effects Study: Concrete



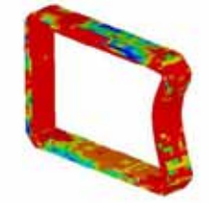
500 lbs TNT 40'



50 lbs TNT 10'



500 lbs TNT 10'



Section through AST

CORROSION RESISTANT
Water is one of the most harmful elements to the integrity of any fuel storage system. Over time water can cause rust and corrosion on any exposed steel tanks or fittings. When rust is introduced into the fuel supply it can significantly damage your fuel system leading to further corrosion, clogged fuel filters, fuel injectors, and possibly even tank failure.

ConVault's non-metallic secondary containment is sealed "inside" the 6" thick, precast concrete exterior and is designed not to fail should the primary tank that holds the fuel ever fail. The concrete exterior also features a low maintenance exterior finish that is rust and corrosion resistant eliminating the need for tank cathodic protection. ConVault tanks can be used with confidence in very aggressive environments.

SOLVES SPACE CONSTRAINT
Convault is an ideal storage solution when space constraints such as property lines, and building envelopes restrict available footprint. Convault's rectangular, concrete encased AST tanks allow you to safely store more fuel in a smaller footprint. In addition, Oldcastle Precast offers ConVault AST split tanks enabling you to store and dispense gas and diesel fuel or fuel and lubricants in one cost saving, compliant, easy solution to deploy and maintain.

CONVAULT - 30 YEAR WARRANTY
ConVault offers an exclusive 30 year written Limited Warranty. ConVault, Inc. warrants each CONVAULT® tank against defects in material or workmanship to the original owner from the date of purchase, for a period of twenty (20) years or thirty (30) years depending on model number of the tank. ConVault agrees to repair or replace any defective unit without charge provided that the tank is operated and maintained in accordance with the manufacturers Owners Manual.

Expertise and experience that enables you to quickly meet ALL fuel storage regulations so you can focus on your business – today and for many years to come.