General Notes 1. Petroleum Contractor shall furnish all Items with the exception of the Items "Furnished by Wawa".

- 2. Contractor shall complete and furnish all documentation as required by the Wana representative at the time of the punch list inspection.
- 4. Interior E-stops at cashler positions are detailed on Building Electrical plans, in addition to exterior E-stops shown on these plans.
- 5. Wawa to provide the required lobels 4 warnings detailed in NFPA 309-5.2 4 9-5.5.
- Contractor must use only manufacturer approved tools for installation of all piping & dispenser sumps. No use of hax same, hand same, Samzall, utility knives, etc. mill be allowed.
- 7 The Petroleum Contractor will furnish and Install seal off It has Petroleum Contractor will rurning and install seal of the littings for the conduit at the carapy columns for connection by the General Contractor. The Petroleum Contractor will spayly pilip all seal off fittings as required in the electrical room, at the dipensers, and canopy columns.
- Fetroleum Contractor will receive all Maixa supplied equipment 4 mill be responsible for any damage not identified to Maxa upon delivery. Petroleum Contractor to notify Maixa Project Manager within 72 hours of receiving equipment.
- 4. The Petroleum Contractor will be contracted to complete all tark installation, petroleum underground piping, backfill, stone subbase, fine grading 8 all electrical condult rough in associated with the pump and tank within time period determined by the Naine Project Manager. Concrete pour (for the tank area, pump islands, and conopy areas), dispenser installation 8 wilrig will be scheduled during project with Wawa Project Manager.
- IO. The General Contractor will layout tank pad, concey pad & footer locations, excavate, form & pour factings for steel canage, install canage drain laterals from canage, columns to starm sevier laterals, install hase bibs at canapy area.
- 12. All curbing surrounding tank slab shall be poured monolithic in conjunction with tank slab.

Installation
All mark to be coordinated with Mawa Project Manager,
General Contractor & Sub-contractors (including coordination
of electrical conduct runs to the canopy
4 bank pade with the General Contractor).

All Installation activities to be performed in strict accordance with PEI: "Recommended Practices for Installation of Underground Liquid Storage Sustems," [PL/NP/00-05, PEI: "Recommended Practices for Installations & Testing of Vapor Systems," [PE-RF300-04] or most current PEI versions, manufactures installation manuals for all products, state & local code & the specifications & notes cantained in these drawings.

Any discrepancy between these sources shall be identified & brought to attention of Mawa's representative before activity is performed for resolution. Contractor is responsible for all local permits. Contact Wava representative to verify that all required permits have been obtained. Contractor portions of registrations for statical agencies shall be completed § given to Mana's representative your completion.

Excavation
All excavation to be sized to provide minimum bedding clearance 4 depth of burlais a shown. (54" minimum from finish grade to top of tank)

Contractor to adhere to all OSHA standards for excavations. All excavations greater that 4 feet in depth are to be shored in accordance with OSHA standard (2ACRR, 1926.650-652). Fall Protection to be provided around tank excavation at all times in accordance viapoplication OSHA regulations.

Prior to back?!!! 4 tonk installation, filter fabric shall be installed in accordance with applicable methods. Filter fabric is determined by site specific requirements 4 use shall be determined by Mana Petroleum Dept.

Tanks, Tanks will be provided by Mana & delivered to the site by the manufacturer. Contractor is responsible for scheduling delivery via Mana's representative, unloading & inspection of tanks. Any problems encountered should immediately be disclosed to the Mana representative & Wana Fuel Equipment Flancatement habran activity is performed.

All tank handling 4 installation is to be in strict accordance with manufacturer's "installation Manual 4 Operating Guidelines". All chacklists including shipping accuments are to be completed 4 provided to Manual's representative. Manufacquires the use of a craine for all tank handling activities.

Tanks shall be installed with zero slope, dead level, with fills towards curb side or as directed by Mana's representative.

All manimal bolts to be securely fastened prior to sump installation.

All brine levels to be adjusted to $7 \ 1/2^{\circ}$ after tanks have been secured with hold down water.

Tanks shall be installed, backfilled to top of tank \$ filled water balliast the day they are deliverd. Deviation from I process must be authorized by Wana's representative. Scheduling is imperative to meet the process.

SSSESSIII, to be Pea Gravel, naturally flower processes of the pea Gravel, naturally rounded aggregate nominal 1/4" (1/6" min., 5/4" max.) in size, Pea Gravel is to be wasted, free flowing, free of ice, snow and debrie to come of the peach of the peach

When Fea Gravet is not readily available crushed stone may be used. The material is to be a mix of angular particles, sizes between VPP and I/27, and no more than 5% (by weight) of the material may pass through a 48 sieve.

The Contractor will provide Wawa's representative certificatic from the supplier that the material conforms to ASTM C-33 & other applicable specification.

<u>Disposal of Excavated Material</u>
All excavated material is to be treated as clean back fill, removed 4 disposed by contractor.

Mawa's representative must be notified immediately if any contaminated materials are encountered or suspected.

In the event contaminated material is encountered, such material is to be segregated by contractor \$ will be transported \$ disposed by third party.

Contractor will provide loading & credit given to Mana for transportation & disposal.

Excavation Denatoring
Wana xill provide soils & groundwater data for site to determine
if denatoring is necessary.

Confractor shall be responsible for installation of all dewatering squipment, it necessary, a shall furnish pumps with appropriate dewatering rates for use in 4 around the excavation to maintain as dry an excavation as possible.

Contractor shall be responsible for any required permits to discharge water to the closest available source.

in the event that these measures are not sufficient to control the deviatering, Mana's representative shall be notified 4 Mana shall secure third party services to assist in deviatering.

Contractor le responsible for continuous monitoring of ground water until facility is open.

Testing
Find precision testing of tanks, lines will be performed for Mawa
by third party. All other testing is to be performed by contractor
4 witnessed by Mawa's on
site representative.

All testing shall be performed in accordance with manufacturer

Contractor shall perform air test on tanks at time of delivery. Use 3 - 5 psi for a minimum of 60 minutes.

Primary plping to be air tested at 50 psi for a minimum of 60 minutes while scaping joints. (Do not exceed 60psi max)

Secondary testing to be performed at no more than 5 psi for a minimum of 60 minutes.

run reasting must remain in place on all plping (primary \$ secondary), with appropriate gauges with dispensers are set in place. Gouge reading needs to be documented that air test is good prior to dispenser set process. Upon completion of dispenser set process, an additional car test must be performed again on all piping until product is delivered \$ purgs process begins. Air testing must remain in place on all piping (primary \$

All sumps, including tank, spill bucket and disperser to be hydrostactically bested in accordance with Federal, state \$\(^1\) ical regulations. At a minimum all sumps should be tested with nater to a level \$\(^1\) above highest joint or penetration for a minimum of \$\(^1\) hours and verified liquid tight by the instailing contractor. Initial \$\(^1\) ending mater level measurements to be observed by a Mana representative. Failure to perform this test will result in a retest \$\(^1\) subsequent repairs at contractors expense.

All tests shall be recorded and given to Wawa's representative and included in the clossout documentation.

Hold Down Froduct Water is to be used as hold down. Water is to be clean, free of

Contractor is responsible for securing and disposing of water Tanks are to be filled to min. 90% capacity.

Water should remain in tanks until all petroleum work \$ tank mat is installed.

Assistanting.
All trains are to be anchored as shown on drawings. Deadmer may be field constructed or prefab as available from tank manufacturer.

typically equal to the length of the tank, with anchor boilts to correspond with straps.

All tank straps must be provided by tank manufacturer \$ installed in strict accordance with manufacturer instructions \$ spaced as directed.

Connect anchor to straps with %4" forged steel turnbuckies. A exposed turnbuckies 4 anchor bolts must be virapped 4 coate with Pitchmastic 4 protected with 18 lb, anades per tank side.

Pipling Product piping is to be 2" dia. APT XP Series in ducting. All runs are to be continuous, all joints are to be made in disperser containment units 4 took sumps only. A separate ball voice is required for each piping run. Piping corrections to submersible pump to be 2" galvantee or approved stainless steel flex line.

All entry boots & fittings are to be APT product only. Risers & fitting to shear valves are to be UL listed stainless steel flexible correctors.

Rines. Tasking. Treating of the secondary containment piping is required. The containment termination fitting in the sump is to be installed with the valve binned dam. After testing, the valve is to be opened to allow drainage of the secondary piping to the sump monitor probe.

STEEL FITTINGS	DIMENSIONS	MATERIAL	THREAD	
Steel Pipe Nipples Class ISO/PN 20	ASTM A TSS	ASTM A 53 (F # E)	ASME B.I 20.I	ASME B.I 16.3
Steel Pipe Nippies Class 150/PN 20 Schedule 40	N/A	ASTM A 53 (F # E)	ASME B.I 20.I	SAME BI 16.3

U.S. Cottokit.
All U.S. conduit shall be rigid galvanized steel. Conduit win bury depth is 24" per code. All junction boxes shall be clediv. 2 rated. All electrical conduit in sump shall include a seal-off entering & leaving, which shall be installed 6" min. abo highest penetration in sump. Dispenser conduits to be installed through metal sump top conduit knockouts.

Sump. Penetrotions of the tank sumps shall be seciled with double All penetrotions of the tank sumps shall be seciled with double bulkhoad fiftings 8 not to exceed 15% angle in any direction to ansure the proper installation of all bulkhead compression fittings 8 resultant of water tightness.

<u>Silbarco Dispenser installation</u>
Contractor shall install all dispensers in accordance with most current manifecturer installation practices. Strict adherence to installation guidelines should be followed at all times.

Dispenser DATA communication wiring shall be installed in separate consult 4 shall be twisted pair, minimum 18 gauge, cois coded for adot 4 CRIND withing, 160 rated 600 volls, 61 4 gas resistant. Wiring shall be home run from disperser to universal distribution box (79-60x) with no spicing. (See albat below)

The dispenser communication DATA/FUEL loop shall be wired in marner that will allow for dispensers to be split equally on each distribution board in the Fuel loop D-box.

The disperser communication CRIND loop shall be marker that will allow for dispensers to be an one board in the CRIND loop D-Box. Dispenser power witing shall be run in separate to be 12 AWG with home runs from the dispenser to the panel or leatation relay. Two (2) Spare wires of diff to be run also, terminating in J-box & trough in elect

		GILBARCO	SPEN	ISER WISE COLOR REFERI	ENCE
	80.	COLOR.	IN.AWG	The state of the s	
	1	BLACK	12	от то А	
i	2.	WHITE:	12	EUTRAL 1	
	3	GREEN	10	ROUND TO CONSTRUCT	
i	4	RED	12	PREMIUM SHAP	
. !	5	BLUE	12		
d	6	YELLOW	"III	SPARE	
1	7	BROWN	12 1111	SPARE	
d	umu	EA ACK	18	WARE IN (+))	TWISTED PAIR, NON-INSULATED.
a		Need.	18	TO A-19 (PUMP 2-WIRE OUT ())	NON SHIELDED
	10	PURPLE	18	TO B-9 (CRIND 2 WIRE IN (+))	TWISTED PAIR, NON-INSULATED.
2	dille	YELLOW	18	TO B-19 (CRIND 2-WIRE OUT ())	

Veeder-Root Installation 8 wiring to be performed in full accordance with Veeder-Root installation manual. Contractor 8 electrical contractor performing Veeder-Root Installation must have completed Veeder-Root installation certification. All probles sensor wiring splices shall use manufacturer supplied epoxy packs installation and class it excludes. sensor wiring splices shall use manufacturer sup & contained in a Class! electrical junction box.

Specific attention must be given to Veeder-Root grounding requirements. (\$12 AMS conductor, buried ground to the earth ground bus at power distribution panel)

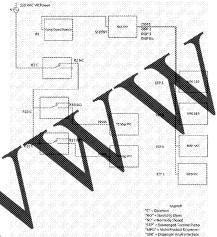
installation includes Overfill Alarm & acknowledgments switch on vant riser. Overfill diarm should be wired to output relay board located in slat no.1, position no.1.

Positive shut down of stemeralbie pump controllers (STPe) must be wired via the outcombit tank gauge (ATe) rating boards. It is the petroleum installation controdor's responsibility to nor the appropriate quantity and wire size to properly shut off all STP's in an individual manner as controlled by the ATE Sach STP should have home run wiring from the specified STP controller isolation relial box (STP-DHI) to the appropriate ATS relay board slot. Programming of the ATS will be the responsibility of the local ASC selected to service the location. Coordination should be taken between the installation controctor and the ASC to insure that proper wiring and programming corresponds to the requirements for the positive shutdown process.

Tark Leveling Requirement installation and programming required for all Compartmentalized UST sites. Whing to be added to all sites regardless of tark style and layout. Contractor will install an additional two (2) |4 AVI6 standard THAH writes as follows:

(Please use different colors and label accordingly.)

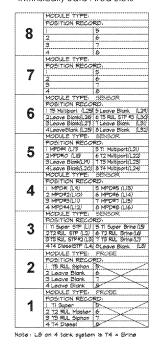
I. From VR Console power section to T2 Maa VFC 2.From VR Console power section to T3 Maa VFC



Sump sersors

Sensors to be mounted at side of tank where product
penstration into sump is made & below lovest penetration
fitting within sump area. Mount sensor flush to lovest point in
sump bottom. All tanks sump sensors shall be discriminating for
the presence of hydrocarbons.

Intrinsically Safe Area Slots



Equipment Start-Up/ Purging & Calibration

Contractor shall notify Wawa representative 72 hours prior to adjument startup. Dispenser, tank monitor & submersible pump commissioning to be performed by service vender as selected by Wawa. Permanent electrical service to store must be installed prior to equipment startup. Veeder Root to be operational upon gas entering the tanks.

Upon completion of equipment commissioning by service vendor, Contractor shall purgs all dispensing equipment in accordance with monitacturers' standard practices. Make requires a minimar of IBO gallions be purged from each meter after air is removed from product lines.

Purging of air from the product lines shall be accomplished using the product plping shear valve. Product shall be purged until no air is observed; a minimum of 50 gallons per shear valve. Initial purging of all shall NOT be done using the nazzle. Severe damage may occur to dispositing equipment. If damage occurs, Contractor is responsible for all repairs. Refer to manufacturer's instructions for proper purging procedures. Fallure to purge from the shear valve will result in fortifeiture of final payment.

Petroleum Contractor shall return to the site to purge \$ calibrate pumps, \$ shall return to the site for start up by a third party, as scheduled by the Wawa Project Manager.

Petroleum Contractor to be onsite during all third party tes The brine level in the tanks shall be verified a adjusted at greater than one tank capacity prior to store appropriate

The following items are required at all gasoline installation contract

i. Xerxes Tank Installatio of ladings. cklists # ass 2. Product Pleing Marranty

istration Applicat

4. Elamon avid Permit (If

5. Tank and

6. Weight & Med

Warrantu Registration Form (Provided by

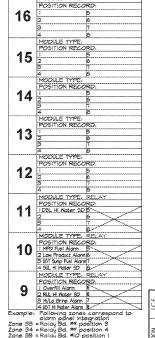
<u>Gilbarco Commissioning Checklist</u> (Provided by Start-up

9. Pictures of the entire installation process (tanks, piping and

 As-built drawings for underground tanks, piping, conduits, and any utilities. I. Pea grave! certification of ASTM G-33 from store supplier

Two (2) of each of these items need to be delivered by the petroleum contractor at the time of the gasoline punch list walk. Follium to provide the proper documentation will delay and/or forfelt final payment.

Power Area Slots



GASOLINE DETAILS

Wawa Suppied Material

20,000 gallon, 10' diameter, double wall, factory brine filled tank

OPM double poppet product shear valve

RESCRIPTION NDERGROUND STORAGE TANKS

Factory brive Filled tank
22,000 gaillon, IO' diameter, double
factory brive Filled compartmentalis
42' attached tank coller
22' manway with 4 - 4" NPT
22" manway with 5 - 4" NPT
IO' diameter hold down strape

NSER TRIM

APT dispenser sump APT stabilizer bar

PRODUCT PIPNG TRIM

APT clamshell coupling
APT by-pass tube
APT secondary test boot
APT test kit

GRADE LEVEL TRIM

APT 4" entry for risers 4 OW's
Fibrelite monitoring symp

3 x 5" x 13" s/s Island

TANK AND LINE MONITORING TLS-350R N/BIR 4 printe

TLS-25CR M/BIR 4 printer Exp. med for manifold tanks BIR protocal dim fits fax module Prote module Sensor module Four reliau output module Network interface cand IO' maa probe

4" cap and adapter
Discriminating tank sump sensor
Disc, disp, pan sensor
Dual float hydro sensor

Universal sensor mount kit Overfill alarm

Alarm acknowledgement

FIBRELITE MANWAY

Fibrelite mannay Fibrelite liftstick Fibrelite ID plates

SUBMERSIBLE PUMP TRIA

PE Petro Isolation bax FE Petro 2HP sub pump FE Petro controller FE Petro leak detector Diesel leak detector

Distribution box (2 board)

IRPCO (2' 3/4' MSXMS cure hose
IRPCO 8" 3/4' M X MS whip hose
IRPCO 8" 3/4' M X MS whip hose
IVSKI 1'XS pressure activated auto nozzle
IVSKI 3', "adie-t-brack
IVSKI 7', "adie-t-brack
IVSKI nozzle Diesel

OSEPOSE PACKAGE
Encore 5005 3-0 blender dispenser,60e0le
3 grade, 2 hose outlets, 2 sides
w site specific options.
Encore 5005 3-1 blender dispenser, Diesel
4 grade, 4 hose outlets, 2 sides
w site specific options.
Encore 5005 Diesel Only
1 grade, 1 hose outlets, 2 sides
w site specific options
Encore 5005 Diesel Only
1 grade, 1 hose outlet, 2 sides
w site specific options

HANGING HARDWAR

APT 2" piping APT 4" conduit

PART NUMBER

DWT-III, 20K

DWT-111, 22K

IOP-0152

810-4-K

XP-200-50 DGT-400 M5-XP-200-200

FLIBO WAWA ISLAND 623V-9203 23-0033 56-05

STP-DHI IST-240245993i

ENCSOO S NLI

ENC500 S NAO

PA0261000022 Site Specific

137325 16/20k Comp. 2

New Const

1/TANK

I/TANK

2/MPD

Site Specific

Site Specific

FLORIDA GENERAL NOTES & LEGEND (22,000 COMPARTMENTALIZED TANKS)

> DRAWN BY: CHECKED BY: NONE 4/01/14 REK DCV



5 OF 5