LEGAL DESCRIPTION (FROM PROPERTY APPRIASER) COMM NW COR OF NW1/4 OF NW1/4, E 1020.15 FT TO W R/W I-75, SE ALONG R/W 1195.87 FT FOR POB, W 196.16 FT, S 150 FT, E 150 FT, NE 157.11 FT TO POB.

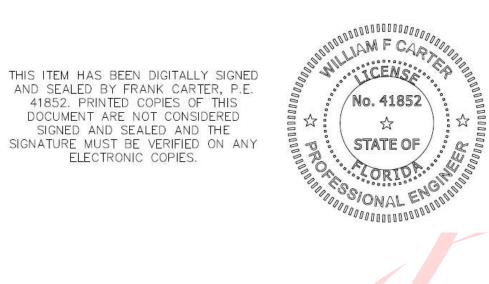
FUEL TANK PLANS STOP & GO #4 LAKE CITY, FL

PREPARED FOR PRECISION PETROLEUM 6195 90TH AVE N PINELLAS PARK, FL, 33782



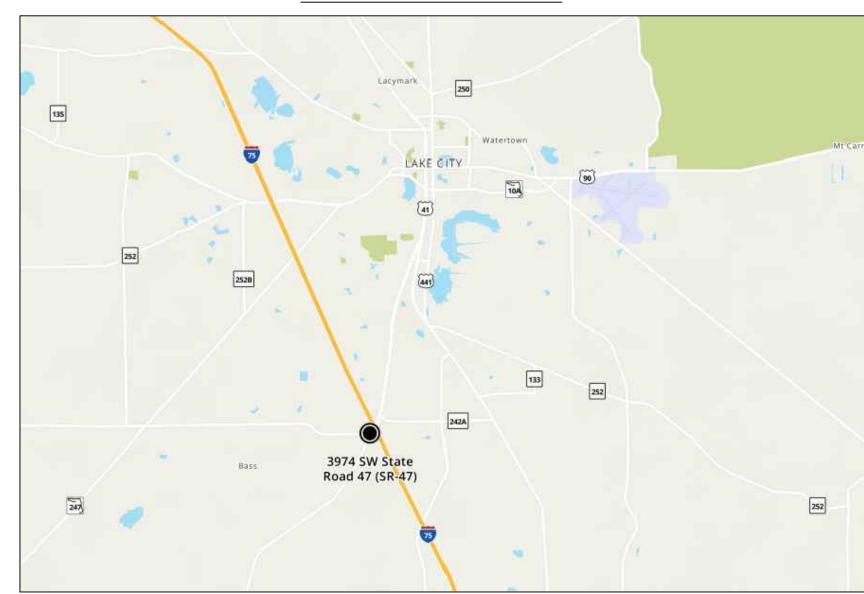
SHEET LIST

TITLE	SHEET NO.
COVER SHEET	C-1
SURVEY (BY OTHERS)	V-1
AERIAL SITE & FUEL TANK PLAN	C-2
TANK PLAN DETAILS	C-3
TANK PLAN DETAILS	C - 4



Digitally signed by William F. Carter DN: c=US, sn=Carter, givenName=William F., serialNumber=0f68b475-0bcd-440d-ade5-6eeaf938f63f, cn=William F. Carter Date: 2025.06.07 14:19:50 -04'00'

LOCATION MAP

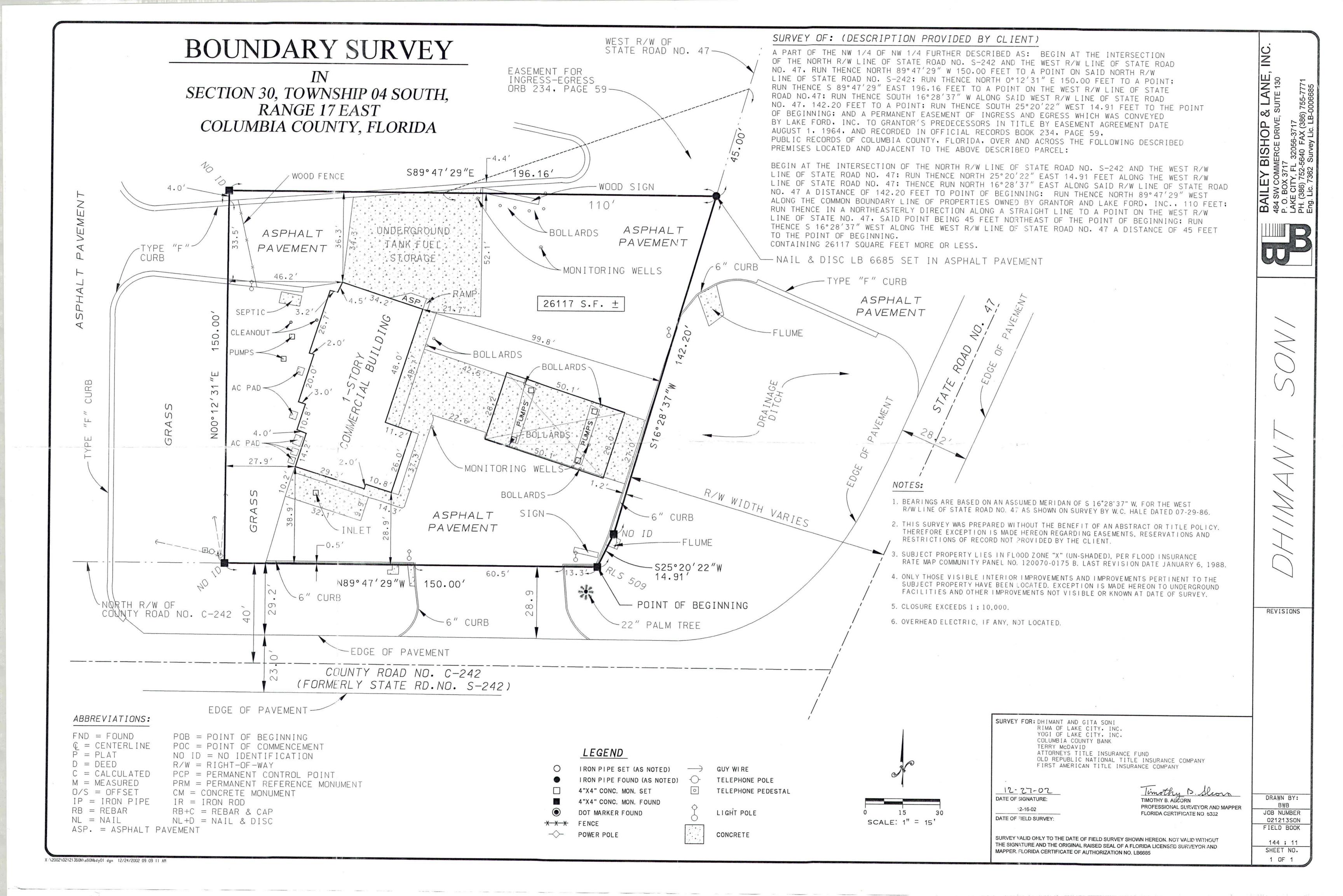






3 WORKING DAYS BEFORE YOU DIG CALL SUNSHINE STATE ONE CALL OF FLORIDA 1-800-432-4770 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

PREPARED FOR: PRECISION PETROLEUM 6195 90TH AVE N



BASIS OF DRAWING

AERIAL, PROPERTY LINES, AND ALL

PHYSICAL FEATURES BASED ON

GEOLOCATED, GIS, AND SURVEY DATA

CONTRACTOR TO CONFIRM ANY

DISCREPANCIES AND NOTIFY EOR.

ELECTRICAL
CONTRACTOR TO TIE INTO EX.
ELECTRICAL CONDUIT AND EX.
ELECTRICAL PANEL.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY FRANK CARTER, P.E. 41852. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



Digitally signed by William F. Carter DN: c=US, sn=Carter, givenName=William F., serialNumber=0f68b475-0bcd-440d-ade5-6eeaf938f63f, cn=William F. Carter Date: 2025.06.07 14:28:38 -04'00'



CONC. CONCRETE

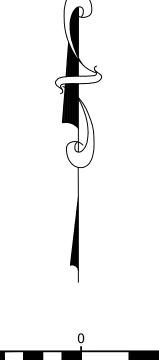
FFE FINISHED FLOOR ELEVATION

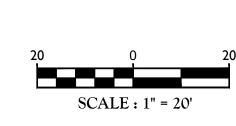
PROPERTY LINE

SURFACE WATER FLOW

U SHAPED BUMPER GUARD

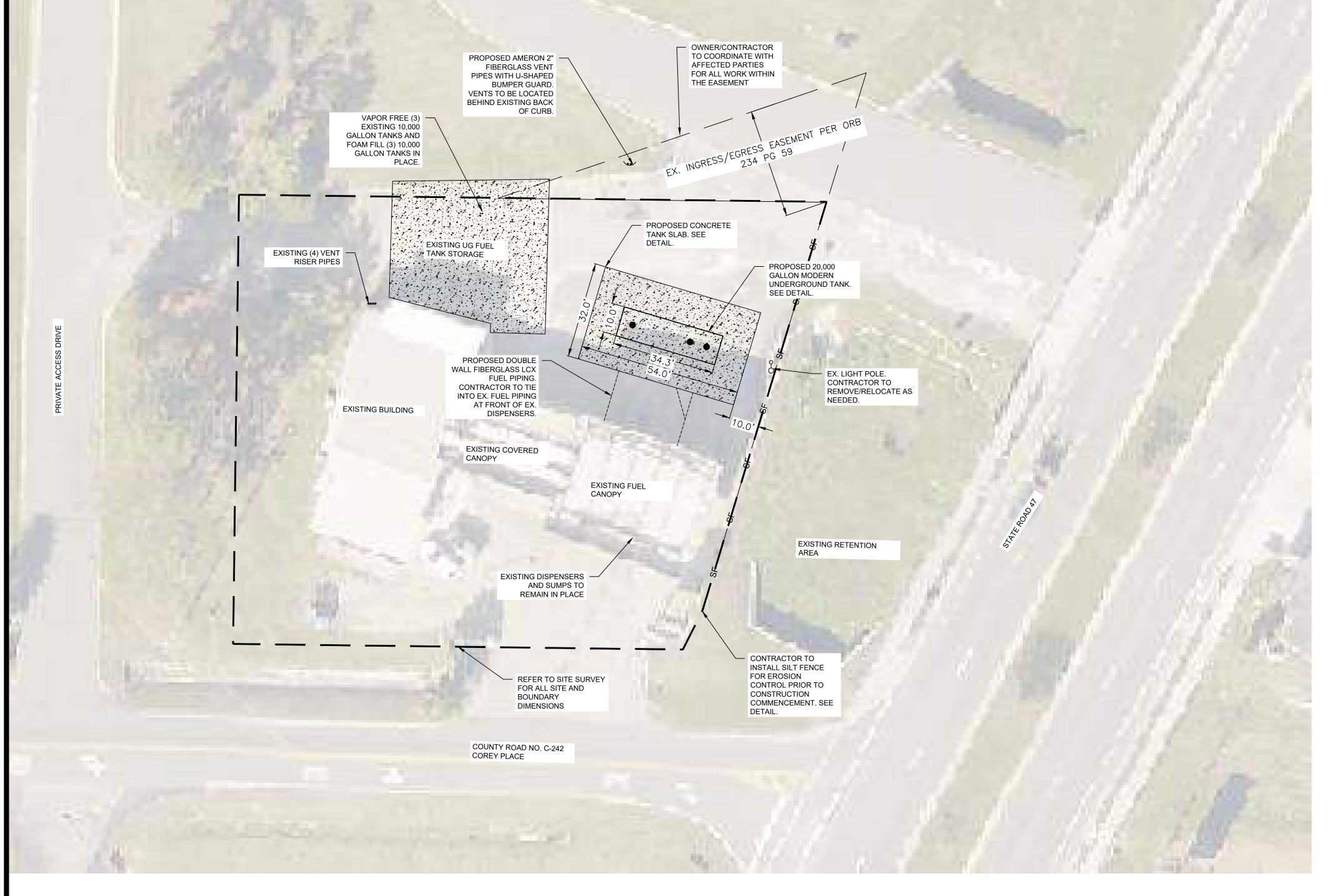
• VENT PIPE





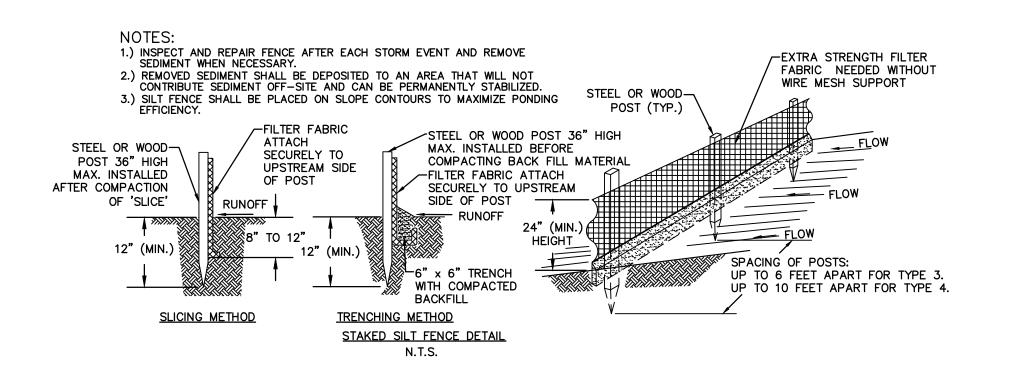
CONTRACTOR'S SCOPE OF WORK

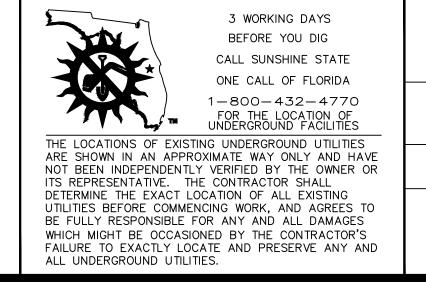
- 1. VAPOR FREE (3) EXISTING 10000 GALLON TANKS AND FOAM FILL (3) 10,000 GALLON TANKS IN PLACE.
- 2. EXCAVATE, SHEET PILE AND SUPPLY AND INSTALL (1) 20,000 GALLON THREE COMPARTMENT DOUBLE WALL TANK TYPE TWO MODERN WELDING TANKS. (12-4-4) (TANK SUPPLIED BY CUSTOMER)
- 3. SUPPLY AND INSTALL ALL REQUIRED TANK HOLD DOWN SLAB.
- 4. BACK FILL AND COMPACT ENTIRE TANK EXCAVATION WITH EXISTING FILL DIRT.
- 5. SUPPLY AND INSTALL (3) FIBERGLASS TANK SUMPS WITH TANK ADAPTERS.
- 6. SUPPLY AND INSTALL (3) FE PETRO 1 1 /2 HP SUB. PUMPS, (3) RELAY BOXES AND (3) LEAK DETECTORS.
- 7. SUPPLY AND INSTALL ALL REQUIRED 4" GALVANIZED RISER PIPES INCLUDING TANK GAGE RISERS.
- 8. SUPPLY AND INSTALL (3) FIVE GALLON DOUBLE WALL OVERSPILL BUCKETS (EMCO WHEATON) WITH FILL CAPS AND ADAPTERS.
- 9. SUPPLY AND INSTALL (3) OVERFILL TUBES.
- 10. SUPPLY AND INSTALL ALL REQUIRED "DOUBLE WALL FIBERGLASS LCX FUEL PIPING FROM NEW TANK TO EXISTING DISPENSER SUMPS. PIPING TO TIE INTO EXISTING PIPING AT FRONT OF EXISTING DISPENSER SUMPS. EXISTING DISPENSER SUMPS TO REMAIN IN PLACE.
- 11. SUPPLY AND INSTALL REQUIRED, BALL VALVES, ELBOWS, ENTRY BOOTS AND TEST BOOTS TO COMPLETE PIPING INSTALLATION.
- 12. SUPPLY AND INSTALL AMERON 2" FIBERGLASS VENT PIPING FOR NEW TANKS. VENTS TO BE LOCATED BEHIND CURB.
- 13. SUPPLY AND INSTALL (1) U SHAPED BUMPER GUARD FOR VENT STACKS
- 14. PROVIDE (3) 39" MAN HOLES, (6) 18" MAN HOLES TO COMPLETE TANK INSTALLATION.
- 15. POUR AND FINISH 32' X 54' X 8" NEW TANK PAD REINFORCED WITH #5 REBAR FIBER MESH & 3500 PSI CONCRETE. POUR AND FINISH ALL REQUIRED PIPING TRENCHES 3500 PSI CONCRETE REINFORCED WITH FIBER MESH.AREA NOT TO EXCEED 2550 SQ. FT. EACH ADDITIONAL SQ. FT. IF NEEDED WILL BE CHARGED AT \$8.55 PER SQ. FT.
- 16. PROVIDE REQUIRED ELECTRICAL FOR TANK GAUGE, (3) SUB. PUMPS (4) DISPENSERS AND EXISTING VEEDER ROOT NOTE: ALL ELECTRICAL FOR NEW TANK TO TIE INTO CONDUIT AT EXISTING TANK AREA.ALL ELECTRICAL FOR DISPENSERS TO TIE IN AT FRONT OF DISPENSERS EXISTING WIRE TO BE USED. IF NEW CONDUIT TO BUILDING IS REQUIRED ADDITIONAL COSTS WILL BE ADDED. IF NEW PANEL, BREAKERS, OR E-STOP ARE REQUIRED ADDITIONAL COSTS WILL BE ADDED.
- 17. SUPPLY AND INSTALL (3) INVENTORY PROBES,(3) SUMP SENSORS, (1) INTERSTITIAL SENSORS. (FOR EXISTING VEEDER ROOT.)
- 18. PURGE AND CALIBRATE FUEL SYSTEM.
- 19. PERFORM AND CERTIFY TANK AND LINE TESTS
- 20. SUPPLY FENCING DURING CONSTRUCTION.
- 21. PROVIDE REQUIRED INSPECTIONS.

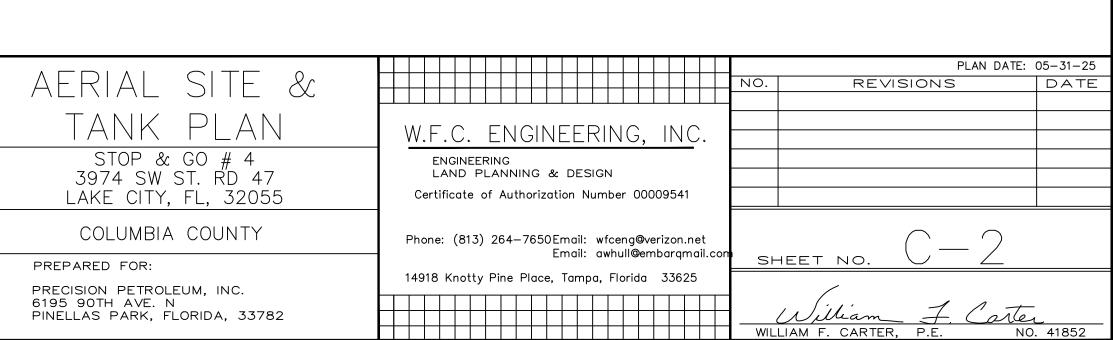


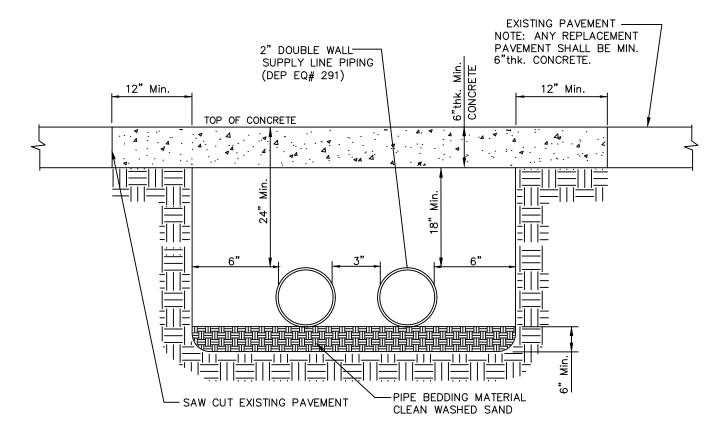
GENERAL NOTES

- 1. EXISITNG DISPENSORS AND SUMPS TO REMAIN IN
- 2. ALL ELECTRICAL TO TIE INTO EXISITNG CONDUIT FROM EXISITNG DISPENSORS.
- 3. INSTALL (1) 20,000 GALLON THREE COMPARTMENT (12-4-4) DOUBLE WALL TYPE TWO MODERN WELDING COMPANY UNDERGROUND FUEL TANK.
- 4. VAPOR FREE (3) EXISITNG 10,000 GALLON TANKS, FOAM FILL (3) 10,000 GALLON TANKS IN PLACE.
- 5. SUPPLY AND INSTALL 2" FIBERGLAS LCX VENT PIPING TO NEW TANKS.
- 6. SUPPLY FENCING AND EROSION CONTROL PRIOR TO ANY EXCAVATION.



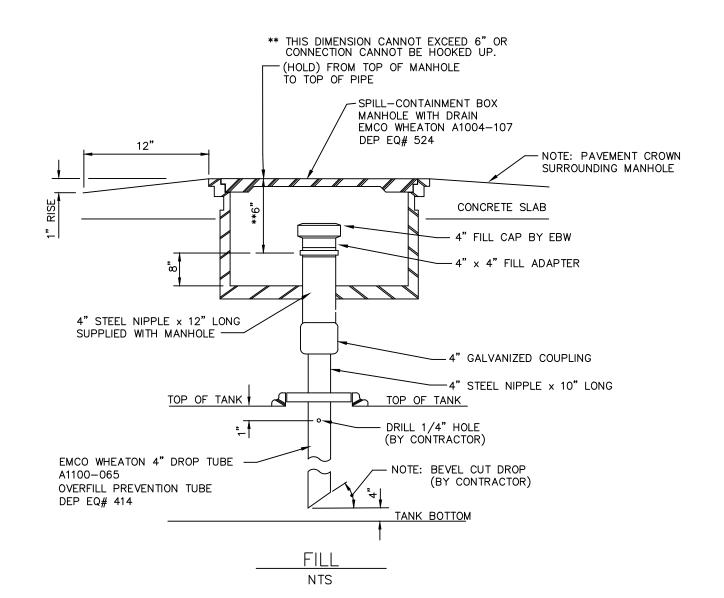


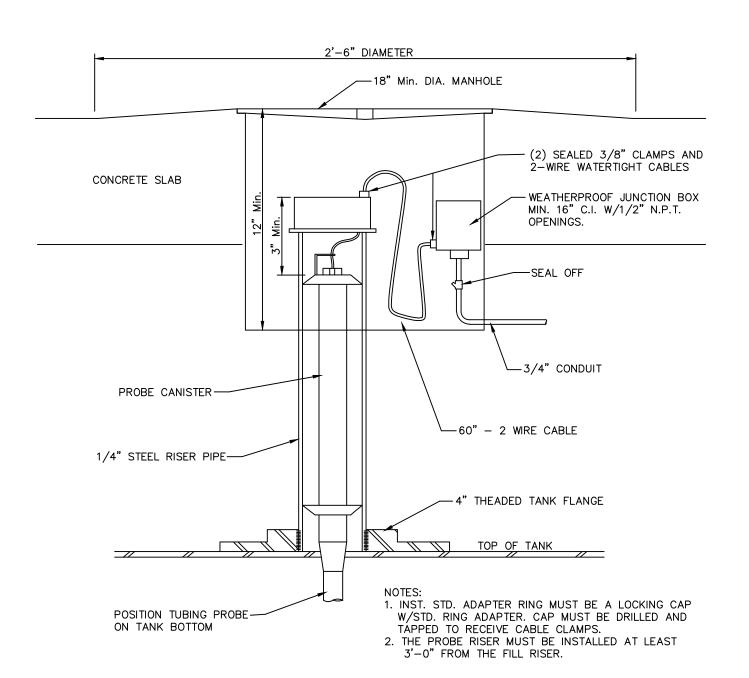




TYPICAL TRENCH DETAIL

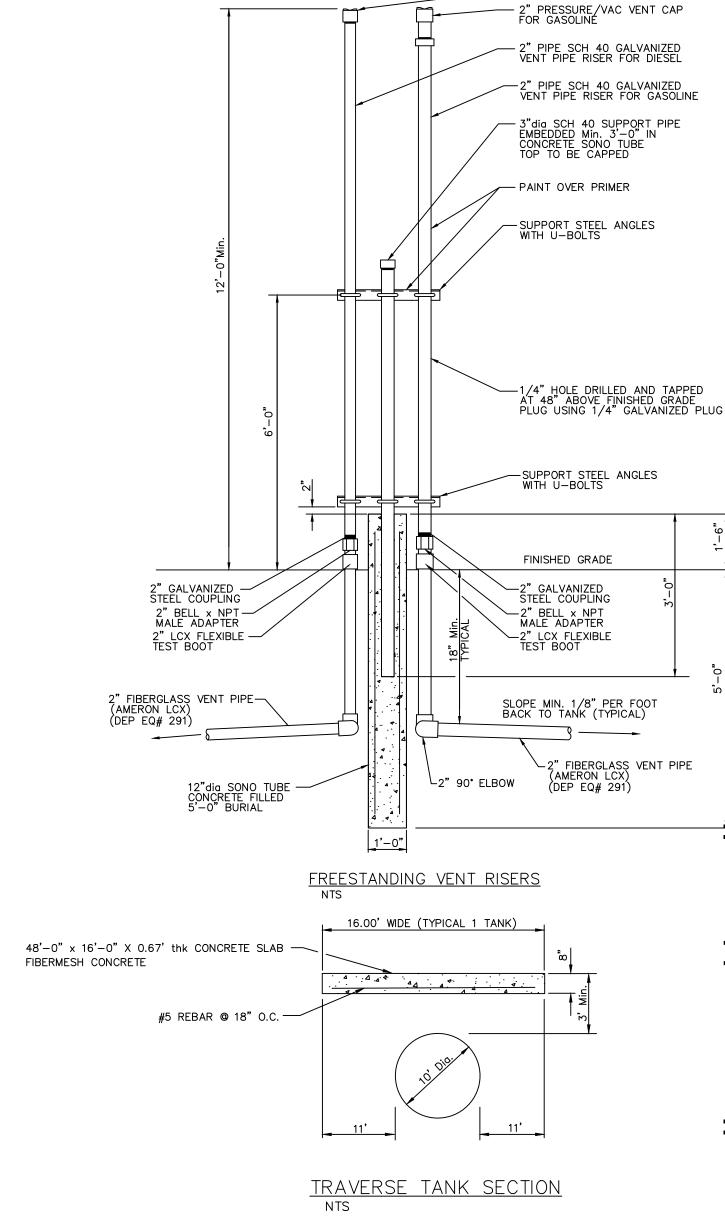
NOTE: THREE 2" DOUBLE WALL LINES IN TRENCH FOR THIS PROJECT.





VEEDEROOT MODEL TLS 350 ELECTRONIC LEVEL SENSOR ASSEMBLY FOR U.G. FUEL STORAGE WHEN REQUIRED DEP EQ# 196 & 614

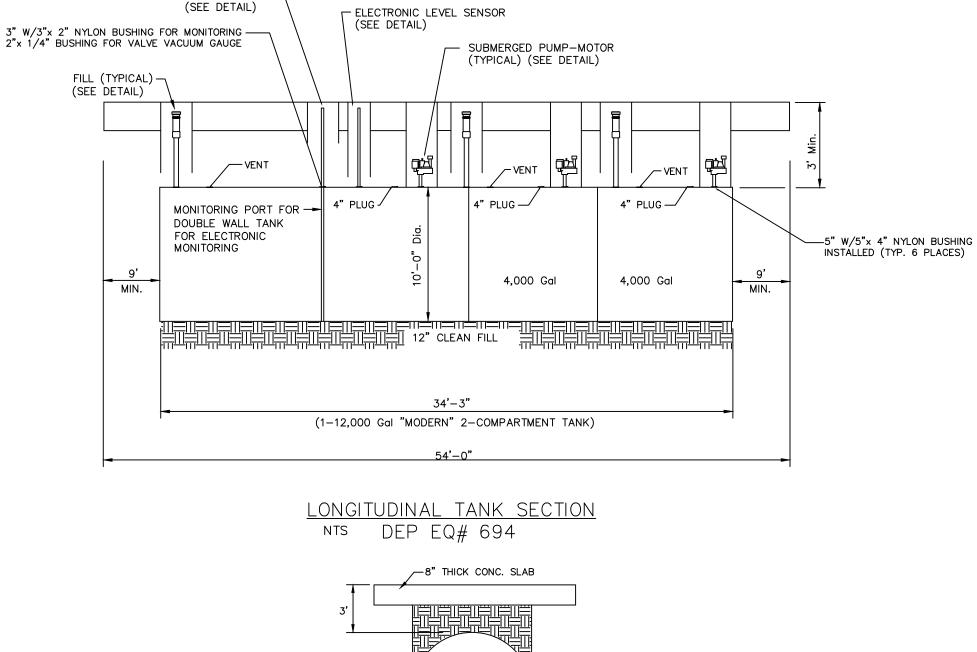
NOTE: EX. VEEDER ROOT SUPPLIED WITH (4) INVENTORY PROBES, (4 SUMP SENSORS, AND (1) INTERSTITIAL SENSOR.

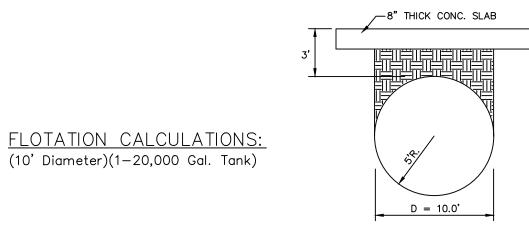


GENERAL NOTES:

- 1. ALL ELECTRICAL WORK TO BE DONE BY OTHERS.
- 2. ALL EMERGENCY CUT OFF SWITCHES TO BE INSTALLED BY AN ELECTRICIAN.
- 3. INSTALL RED JACKET FXIV DEP EQ# 373 MECHANICAL LEAK DETECTOR.
- 4. ALL BACKFILL MATERIAL SHALL BE CLEAN, NON-COHESIVE, NON-PLASTIC MATERIAL FREE OF DEBRIS, LUMPS AND CLODS.
- 5. ALL DISTURBED AREAS TO BE RETURNED TO EXISTING OR BETTER CONDITION COMPACT SUBGRADE TO 95% MODIFIED PROCTOR PRIOR TO PLACING CONCRETE. ALL FINISHED ELEVATIONS TO MATCH EXISTING ELEVATIONS FOR PROPER DRAINAGE. FORM ALL NEW EDGES OF CONCRETE WITH KEY JOINTS. PROVIDE STEEL KEYED CONTROL JOINTS ON 15 FOOT CENTERS. CONCRETE TO BE BROOM FINISHED.
- 6. PRODUCT LINES SHALL BE INSTALLED WITH A CONTINUOUS SLOPE UPWARD OF 1/8 in/ft FROM THE TANK TO THE DISPENSER.
- 7. ELECTRIC CONDUIT WILL BE INSTALLED SO THAT NO UNDERGROUND COMES IN CONTACT WITH ANOTHER CONDUIT.
- 8. 'AMERON LCX' SUPPLY PIPING SHALL BE INSTALLED BY A CERTIFIED INSTALLER. (DEP EQ# 291)
- 9. SUPPLY PIPING SHALL BE DOUBLE WALLED WITH AN OPERATING PRESSURE NOT TO EXCEED 75 PSI.
- 10. BACKFILL MATERIAL OVER TANKS SHALL BE CLEAN SAND.
- 11. NO POTABLE WATER WELLS EXIST WITHIN 50 FEET OF THE PROPOSED TANKS AND DISPENSERS.
- 12. SUBMERSIBLE PUMPS MANUFACTURED BY RED JACKET.
- 13. ALL PIPING TO DISPENSERS PUMPS WILL BE VISUALLY MONITORED.
- 14. ALL WORK SHALL BE IN ACCORDANCE WITH NFPA 30 & 31 AND LOCAL
- 15. ALL EQUIPMENT WILL BE FDEP APPROVED AND MEET ALL REQUIREMENTS OF <u>DERM</u>.
- 16. ALL METAL COMPONANTS IN CONTACT WITH SOIL WILL BE CATHODICALLY PROTECTED.
- 17. ALL VENT PIPING SHALL SLOPE BACK TO THE PRODUCT STORAGE TANKS AT A MINIMUM 1/8" PER FOOT. VENT PIPES SHALL DISCHARGE AT A MIN. HEIGHT OF 12 FT. ABOVE GRADE.
- 18. ALL EXISTING PIPING TO BE REMOVED AND DISPOSED OF.

00 0 William 0 **8f6** 8b te 0f6 \mathcal{C} 9 σ 7 sign 0 D =Wil te: 2 a<u>N</u> -ad 40d Dig gi∨





REFERENCE FOR CALCULATIONS BASED ON PETROLEUM EQUIPMENT INSTITUTE RECOMMENDED PRACTICES.

UNDERGROUND STORAGE TANKS: MODERN TYPE II UNDERGROUND STORAGE TANK, STANDARD OPENINGS, SSPC-SP6 FIBERGLASS EXTERIOR COATING. DEP EQ #694 TANK FABRICATION AND SPECIFICATIONS BY: MODERN WELDING CO., INC. ONE-20,000 GALLON "MODERN" DOUBLE WALL TANKS, $10'-0" \times 34'-3"$ TANK WEIGHT = 17,600 Lbs. (THREE COMPARTMENT)

WEIGHT OF MATERIALS: (PER PETROLEUM EQUIPMENT INSTITUTE, INC.) SAND OR PEA GRAVEL BACKFILL: 60 PCF 87.6 PCF REINFORCED CONCRETE: WATER 62.4 PCF OR 8.33 Lbs / GALLON

INTERSTITAL — MONITOR SENSOR

TANK & MANWAYS: 21,750 GALLONS SUBMERSIBLE PUMP & RISER: $3 \times 300 \text{ Lbs} = 900 \text{ Lbs}.$

B. REFLECTED TANK AREA: (SURFACE AREA OVER TANK, OVERBURDEN AREA) $10' \times 34.25' = 348 \text{ sq.ft.}$

C. TANK CAPACITY DISPLACEMENT: (NUMBER OF GALLONS) UPWARD FORCE: 8.33 Lbs / GALLON x 20,000 GALLONS = 166,600 Lbs. TOTAL UPWARD FORCES

D. REINFORCED CONCRETE PAD & GRADE OVER FUEL TANK: $54'-0" \times 32'-0" = 1,278 \text{ sq.ft.} \times 8" \text{thk} = 1,152 \text{ Cubic Feet}$ 1,152 Cubic Feet x 87.6 Lbs PCF = 100,915 Lbs.

- E. DEPTH OF OVERBURDEN BETWEEN TOP OF THE UNDERGROUND STORAGE TANK TO UNDERSIDE OF CONCRETE PAD ABOVE: 2.33 Feet.
- F. VOLUME AND WEIGHT OF OVERBURDEN / BACKFILL:
 - D = TANK DIAMETER=10'd. = DEPTH OF BURIAL=2.33'
 - h. = (D/2) + d=7.33
 - B1 = AREA OF CONCRETE PAD AT GRADE=1,278 S.F.
 - B2 = REFLECTED TANK AREA=348 S.F. V = TANK CAPACITY / DISPLACEMENT: 20,000 GALLONS / 7.5 Gal / cf = 2,667 cf $M = VOID IN OVERBURDEN: 4' \times 4' MANWAY \times 2' DEPTH = 32 cf PER MANWAY \times 3 OPENINGS=96 CF$

DATE

William J.
WILLIAM F. CARTER, P.E.

B1 + B2 + sq. root of (B1 x B2) x h/3 - (V/2 + M)1,278 sq.ft. + 348 sq.ft.+ $\sqrt{1,278 \times 348} \times 7.33/3 - ((2,667 \text{ cf/2}) + (96 \text{ cf}))$ 5,602 cf - 1,430 cf = 4,172 cf $4,172 \text{ cf } \times 60 \text{ PCF} = 250,320 \text{ Lbs.}$

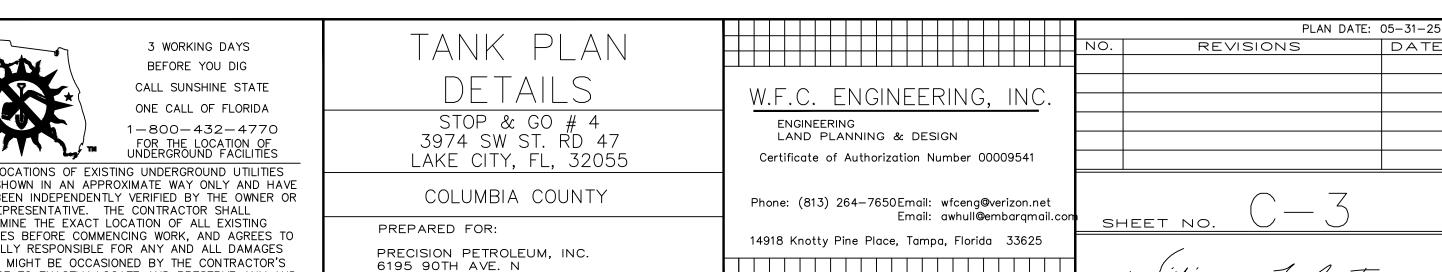
G. TOTAL DOWNWARD FORCES: TANK, MANWAYS, PUMPS & RISERS: 17,600 Lbs. CONCRETE PAD AT GRADE = 100,915 Lbs. BACKFILL OVER TANKS: = 250,320 Lbs.

TOTAL DOWNWARD FORCES: = 368,835 Lbs.

PINELLAS PARK, FLORIDA, 33782

H. TOTAL UPWARD FORCES: TANK CAPACITIES \times 8.33 Lbs/GALLON = 20,000 Gal \times 8.33 Lbs/Gal = 166,600 Lbs.

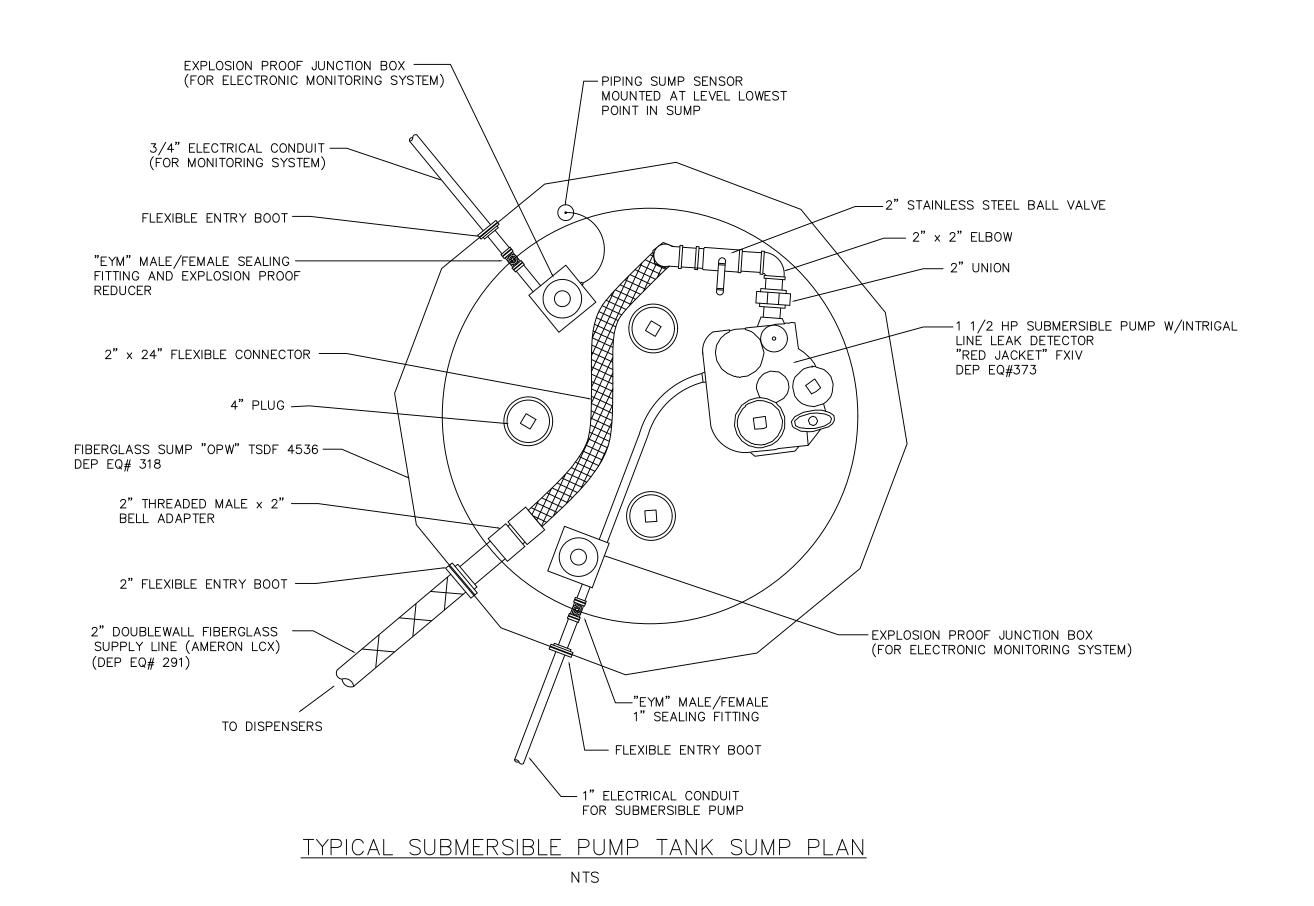
I. SAFETY FACTOR: 368,835 Lbs/166,600 Lbs = 2.21

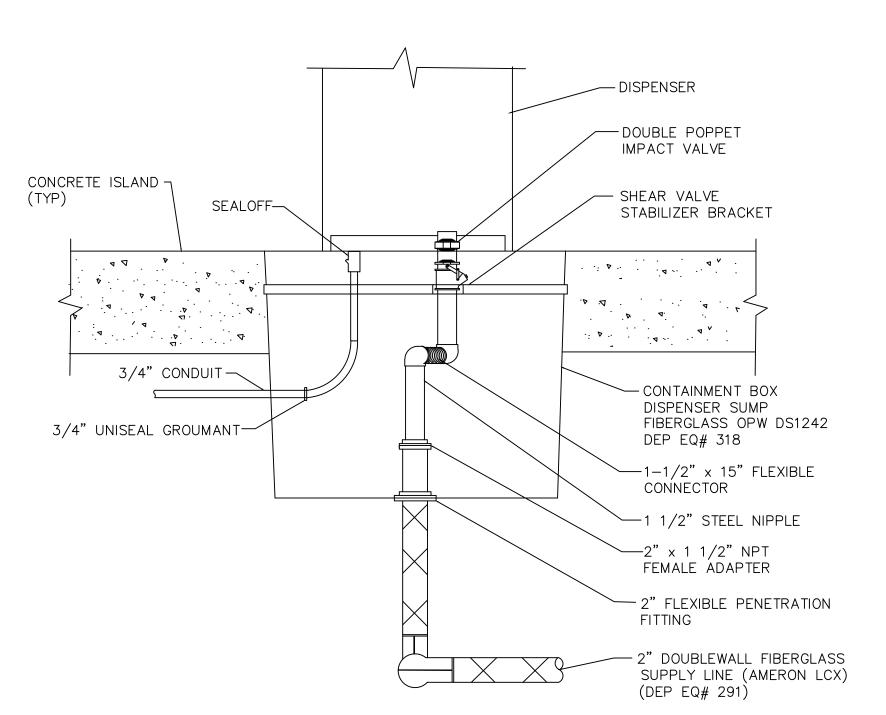




ALL UNDERGROUND UTILITIES.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND

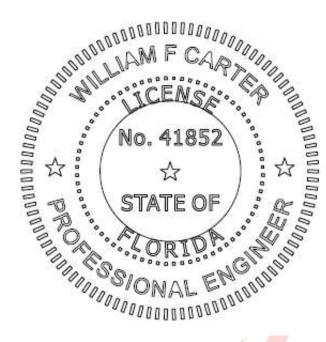




TYPICAL DISPENSER FUEL PIPING
AND CONTAINMENT BOX DETAIL

NOTE: IMPACT VALVE, FLEXIBLE CONNECTOR, FITTINGS, AND SUPPORTS ARE PRE—ASSEMBLED BY CONTAINMENT BOX MANUFACTURER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY FRANK CARTER, P.E. 41852. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



Digitally signed by William F. Carter DN: c=US, sn=Carter, givenName=William F., serialNumber=0f68b475-0bcd-440 d-ade5-6eeaf938f63f, cn=William F. Carter

Date: 2025.06.07 14:23:30 -04'00'

	3 WORKING DAYS BEFORE YOU DIG CALL SUNSHINE STATE ONE CALL OF FLORIDA 1-800-432-4770
TM To	FOR THE LOCATION OF UNDERGROUND FACILITIES
ARE SHOWN IN AN APPRO NOT BEEN INDEPENDENTLITS REPRESENTATIVE. THE DETERMINE THE EXACT LO UTILITIES BEFORE COMMEN BE FULLY RESPONSIBLE F WHICH MIGHT BE OCCASION	DCATION OF ALL EXISTING NCING WORK, AND AGREES TO TOR ANY AND ALL DAMAGES DNED BY THE CONTRACTOR'S CATE AND PRESERVE ANY AND

T		PLAN DATE: 05-31-25
TANK PLAN		NO. REVISIONS DATE
DETAILS	W.F.C. ENGINEERING, INC.	
STOP & GO # 4 3974 SW ST. RD 47 LAKE CITY, FL, 32055	ENGINEERING LAND PLANNING & DESIGN Certificate of Authorization Number 00009541	
COLUMBIA COUNTY	Phone: (813) 264—7650Email: wfceng@verizon.net Email: awhull@embarqmail.cor	C-4
PREPARED FOR: PRECISION PETROLEUM, INC. 6195 90TH AVE. N PINELLAS PARK, FLORIDA, 33782	14918 Knotty Pine Place, Tampa, Florida 33625	William J. Corter WILLIAM F. CARTER, P.E. NO. 41852