

FUEL GUIDELINES

MICCO RD. & US HWY 1

BREVARD CO., FL

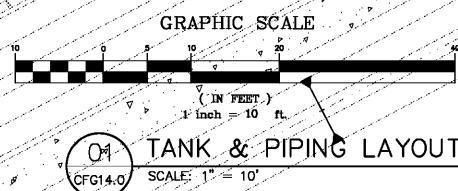
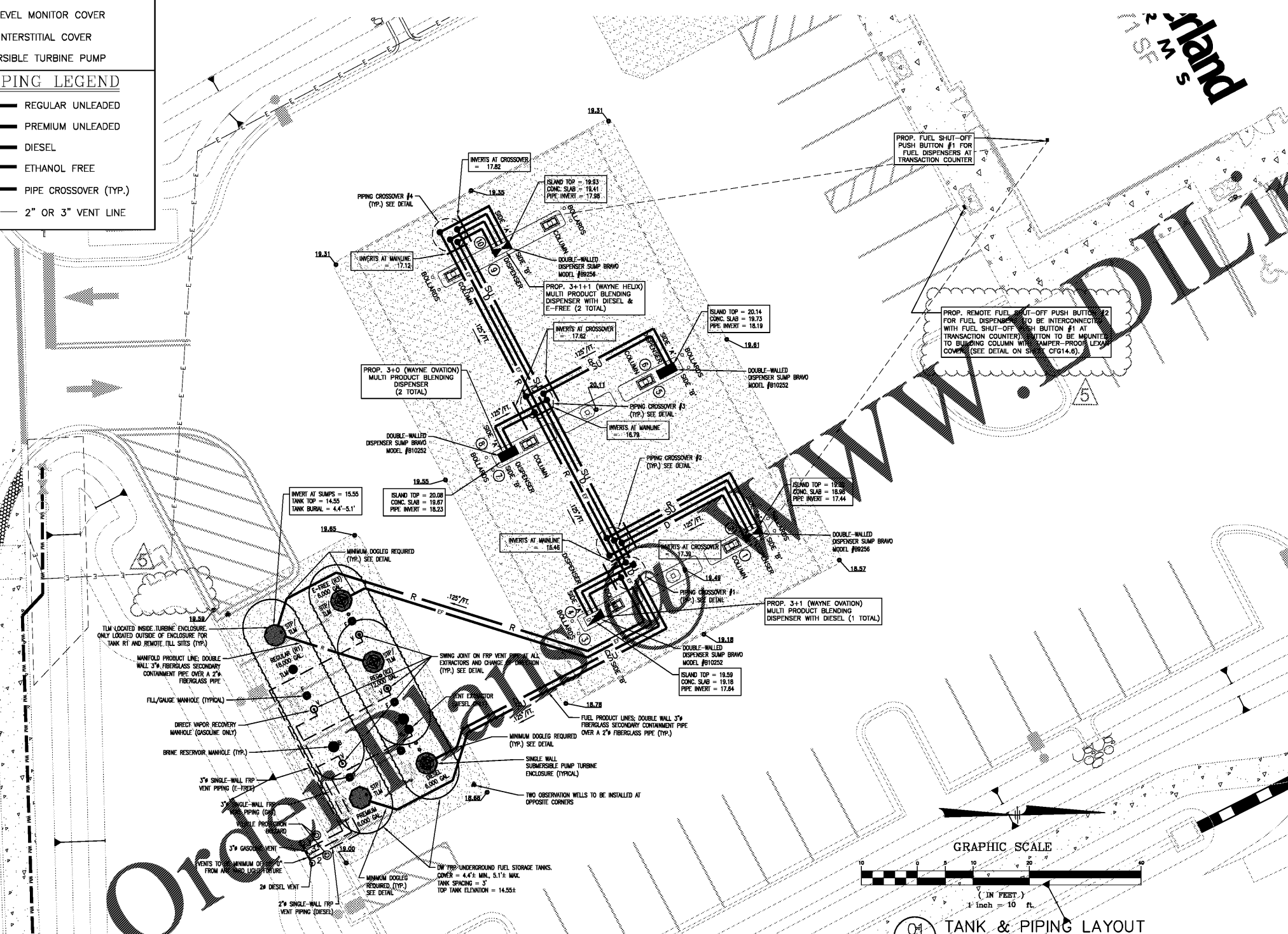
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LEGEND	
99.50	PROP. SPOT ELEVATION AT BOTTOM OF CURB OR ISLAND
100	PROP. CONTOUR ELEVATION
→	PROP. DIRECTION OF SURFACE FLOW
100	EXISTING CONTOUR ELEVATION
F	FILL COVER
V	VAPOR RECOVERY/VENT COVER
TLM	TANK LEVEL MONITOR COVER
B	BRINE/INTERSTITIAL COVER
STP	SUBMERSIBLE TURBINE PUMP

PRODUCT PIPING LEGEND	
R	REGULAR UNLEADED
SU	PREMIUM UNLEADED
D	DIESEL
EF	ETHANOL FREE
—●—	PIPE CROSSOVER (TYP.)
---	2" OR 3" VENT LINE

GENERAL UST SYSTEM NOTES

- THE UNDERGROUND STORAGE SYSTEM WILL BE TESTED BY THE CERTIFIED TANK INSTALLER PRIOR TO BACKFILLING AS FOLLOWS:
 - PRODUCT PIPING & SIPHON LINE (NOV-RED THREAD)
 - THE FOLLOWING TESTS SHALL BE CERTIFIED BY THE INSTALLER PRIOR TO BACKFILLING AND COPIES OF THE RESULTS SHALL BE PROVIDED TO THE OWNER AT THE TIME OF BACKFILL INSPECTION.
 - PRIMARY LINE: VISUALLY INSPECT ALL JOINTS FOR PROPER INSERTION AND ADHESIVE CURE PRIOR TO PRESSURIZING THE SYSTEM. A GAP BETWEEN THE ADHESIVE BEAD AND THE FITTING SHOULD INDICATE THE POSSIBILITY OF JOINT FAILURE EXISTS. MAKE ANY NECESSARY REPAIRS BEFORE PRESSURIZING THE SYSTEM TO 25 PSIG AND HOLDING THE PRESSURE FOR A MINIMUM OF ONE MINUTE. SOAP ALL JOINTS TO TEST FOR LEAKS. IF THERE ARE NO LEAKS, RAISE THE LINE PRESSURE IN THE SYSTEM TO A MAXIMUM OF 50 PSIG. AGAIN, HOLD THE PRESSURE FOR AT LEAST ONE HOUR AND SOAP ALL JOINTS TO CHECK FOR LEAKS. IF LEAKING HAS PASSED THE 50 PSIG PRESSURE TEST, REDUCE THE PRESSURE TO 25 PSIG AND MAINTAIN UNTIL ALL PAVING HAS BEEN COMPLETED.
 - SECONDARY LINE: PRIOR TO AIR TEST, THE CONTRACTOR SHALL MAINTAIN THE PRESSURE FOR A MINIMUM PERIOD OF ONE HOUR, OR LONG ENOUGH TO SOAP ALL JOINTS BEFORE BACKFILLING. THE CONTRACTOR SHALL MAINTAIN THE REQUIRED PRESSURE FOR A MINIMUM OF 2 HOURS AFTER THE BACKFILL PROCESS HAS BEEN COMPLETED. THE RESULTS OF THIS POST BACKFILL TEST SHALL BE CERTIFIED BY THE INSTALLER AND PROVIDED TO THE OWNER WITHIN 30 DAYS OF THE TEST.
 - TANKS (XERXES): TANKS MUST BE CERTIFIED BY TANK MANUFACTURER. EACH NEW TANK SHALL BE PRECISION TIGHTNESS TESTED AT 5 PSIG. TANK MANUFACTURER'S CHECKLIST MUST BE COMPLETED (INCLUDING ALL TANK DEFLECTION MEASUREMENTS) BY CONTRACTOR AND A COPY PROVIDED TO OWNER PRIOR TO BACKFILL INSPECTION.
 - VENT PIPING (NOV-RED THREAD)
 - THE FOLLOWING TEST SHALL BE CERTIFIED BY THE INSTALLER PRIOR TO BACKFILLING AND COPIES OF THE RESULTS SHALL BE PROVIDED TO THE OWNER AT THE TIME OF BACKFILL INSPECTION. THE CONTRACTOR TO PROVIDE A COPY OF THE COMPLETED TANK MANUFACTURER'S INSTALLATION CHECKLIST.
 - VISUALLY INSPECT ALL JOINTS FOR PROPER INSERTION AND ADHESIVE CURE PRIOR TO PRESSURIZING THE SYSTEM. A GAP BETWEEN THE ADHESIVE BEAD AND THE FITTING SHOULD INDICATE THE POSSIBILITY OF JOINT FAILURE EXISTS. MAKE ANY NECESSARY REPAIRS BEFORE PRESSURIZING THE SYSTEM TO 25 PSIG AND HOLDING THE PRESSURE FOR A MINIMUM OF ONE MINUTE. SOAP ALL JOINTS TO TEST FOR LEAKS. IF THERE ARE NO LEAKS, RAISE THE LINE PRESSURE IN THE SYSTEM TO A MAXIMUM OF 50 PSIG. AGAIN, HOLD THE PRESSURE FOR AT LEAST ONE HOUR AND SOAP ALL JOINTS TO CHECK FOR LEAKS. IF LEAKING HAS PASSED THE 50 PSIG PRESSURE TEST, REDUCE THE PRESSURE TO 25 PSIG AND MAINTAIN UNTIL ALL PAVING HAS BEEN COMPLETED.
- DISPENSER SUMPS AND TANK SUMPS
 - THE FOLLOWING TEST SHALL BE CERTIFIED BY THE INSTALLER PRIOR TO BACKFILLING AND COPIES OF THE RESULTS SHALL BE PROVIDED TO THE OWNER AT THE TIME OF BACKFILL INSPECTION.
 - NEW TANK SUMPS (XERXES): HYDROSTATICALLY TESTING SUMPS IS REQUIRED TO ENSURE THAT ALL SUMP PENETRATIONS AND FIELD INSTALLED SEAMS ARE TIGHT. THE FOLLOWING TEST SHALL BE CERTIFIED BY THE INSTALLER PRIOR TO BACKFILLING AND COPIES OF THE RESULTS SHALL BE PROVIDED TO THE OWNER AT THE TIME OF BACKFILL INSPECTION. THE NEW SUMPS SHALL BE HYDROSTATICALLY TESTED FOR TIGHTNESS AS FOLLOWS:
 - AFTER ALL SEAMS AND FITTINGS HAVE BEEN COMPLETED AND ALL PIPING AND CONDUITS HAVE BEEN INSTALLED;
 - AT A LEVEL THAT IS WITHIN ONE INCH OF THE TOP OF THE SUMP;
 - BY RECORDING THE LIQUID LEVEL MEASUREMENTS AT THE BEGINNING AND END OF THE TEST;
 - FOR A MINIMUM OF 3 HOURS; AND
 - WITH NO ADDITION OF LIQUID TO THE SUMP.
 - A PASSING HYDROSTATIC TEST SHALL HAVE NO LOSS OF LIQUID OR OBSERVED LEAKS AFTER THE COMPLETE DURATION OF THE TEST.
 - DISPENSER SUMPS (DOUBLE WALL BRAVO): THE CERTIFIED TANK INSTALLER SHALL TEST THE NEW DISPENSER SUMPS FOR TIGHTNESS. THE FOLLOWING TESTS SHALL BE CERTIFIED BY THE INSTALLER PRIOR TO BACKFILLING AND COPIES OF THE RESULTS SHALL BE PROVIDED TO THE OWNER AT THE TIME OF BACKFILL INSPECTION.
 - DOUBLE WALL INTERSTITIAL TESTING:
 - PRIOR TO CUTTING ANY PORTION OF THE SUMP, THE CONTRACTOR SHALL VERIFY THE SUMP IS HOLDING 12" OF MERCURY.
 - INSTALL ALL THE REQUIRED FITTINGS AND CONDUIT PENETRATIONS (PER THE RESPECTIVE INSTALLATION INSTRUCTIONS).
 - TEST THE INTEGRITY OF THE BOX, PRESSURE THE SUMP TO 4 PSI AND SOAP ALL FITTINGS INSIDE AND OUT.
 - INSTALL ALL THE REQUIRED PRIMARY AND SECONDARY PIPING.
 - AGAIN TEST THE INTEGRITY OF THE BOX, PRESSURE THE SUMP TO 4 PSI AND MAINTAIN FOR 1 HOUR PER INSTALLATION INSTRUCTIONS.
 - PERFORM ADVANCED LEAK DETECTION PROCEDURE, APPLY VACUUM TO THE SEALED INTERSTITIAL SPACE, AND GENERATE 20"-30" OF VACUUM FOR A MINIMUM OF 5 MINUTES.
 - ATTACH MANOMETER AND MAINTAIN 20" OF VACUUM, RAISE FLUID LEVEL TO 2" BELOW MANOMETER AND MAINTAIN FOR A 1 HOUR TEST.
 - INSTALL INTERSTITIAL HYDROSTATIC SENSOR.
 - PROCEED WITH INSTALLATION OF UPPER FRAME AND SHEAR VALVES PER BRAVO INSTALLATION INSTRUCTIONS.
 - HYDROSTATIC TESTING:
 - IN ADDITION, THE NEW SUMPS SHALL BE HYDROSTATICALLY TESTED FOR TIGHTNESS AS FOLLOWS:
 - AFTER ALL SEAMS AND FITTINGS HAVE BEEN COMPLETED AND ALL PIPING AND CONDUITS HAVE BEEN INSTALLED;
 - AT A LEVEL THAT IS WITHIN ONE INCH OF THE TOP OF THE SUMP;
 - BY RECORDING THE LIQUID LEVEL MEASUREMENTS AT THE BEGINNING AND END OF THE TEST;
 - FOR A MINIMUM OF 3 HOURS; AND
 - WITH NO ADDITION OF LIQUID TO THE SUMP.
 - A PASSING HYDROSTATIC TEST SHALL HAVE NO LOSS OF LIQUID OR OBSERVED LEAKS AFTER THE COMPLETE DURATION OF THE TEST.
- EMCO WHEATON DOUBLE SPILL CONTAINMENT MANHOLES ARE VACUUM TESTED, BOTH PRIMARY AND SECONDARY, PRIOR TO SHIPMENT, TO ENSURE THAT NO DAMAGE WAS INCURRED DURING SHIPMENT OR INSTALLATION. THE FOLLOWING TESTS ARE QUICK, ON-SITE METHODS TO VERIFY THE INTEGRITY OF THE PRIMARY (E1) AND SECONDARY (E2) CONTAINMENTS.
 - PRIMARY HYDROSTATIC TESTING PROCEDURE:
 - FILL THE SPILL BUCKET WITH WATER UNTIL THE LEVEL IS 1" BELOW THE UPPER LIP OF THE SNOW PLOW RING.
 - AFTER 1 HOUR, IF THERE IS NO DETECTABLE DROP IN WATER LEVEL, THE SPILL BUCKET HAS PASSED THE TEST.
 - SECONDARY INTEGRITY TEST (VACUUM):
 - REMOVE THE GAUGE FROM THE INSPECTION PORT AND INSTALL THE TEST ADAPTER P/N 494343 (INCLUDED WITH THE VACUUM APPARATUS).
 - ATTACH AIR PRESSURE SOURCE TO AIR PRESSURE REGULATOR ON VACUUM APPARATUS.
 - SLOWLY APPLY VACUUM OF 30" WC TO THE INTERSTITIAL SPACE; WAIT 30 SECONDS; REPLY 30" WC.
 - ENSURE SWITCH IS IN OFF (CENTER) POSITION, START TIMER AND RECORD REMAINING VACUUM AFTER 1 MINUTE.
 - IF THE REMAINING VACUUM AFTER 1 MINUTE IS 26" WC (1.9" MERCURY) OR GREATER, BOTH THE PRIMARY AND THE SECONDARY CONTAINMENT VESSELS ARE TIGHT.
 - IF THE TEST FAILS, PERFORM PRESSURE TEST.
 - REPLACE COMPONENTS OR REPAIR AS NECESSARY.
 - REINSTALL GAUGE (OR PUSH BUTTON TEST PORT ASSEMBLY, IF CM SENSOR MODEL).
- THE CONTRACTOR SHALL CALL DIGSAFE AT 811 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
- ALL CONSTRUCTION AND EQUIPMENT MUST CONFORM TO THE APPLICABLE REGULATIONS AND CODES OF THE MUNICIPALITY, STATE, AND THE NFPA.
- CONTRACTOR SHALL PROVIDE AT LEAST 5 DAYS ADVANCE NOTICE TO THE STATE, THE LOCAL FIRE DEPARTMENT, AND THE ENGINEER TO INSPECT THE INSTALLATION PRIOR TO FINAL BACKFILL.
- CONTRACTOR TO VERIFY WITH OWNER THE PRODUCT PIPING LAYOUT AS SHOWN ON THIS PLAN PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL ADJUST GRADES AS REQUIRED OVER THE TANK MAT TO ENSURE THAT STORMWATER RUNOFF SHEDS AWAY FROM ALL SURFACE MANHOLES.
- ALL NEW TANK RISERS SHALL BE COATED WITH 1/8" MIN. FIBERGLASS COATING OR 1/8" EPOXY RESIN COATING. THE USE OF PVC 10 MIL PIPE WRAP IS NOT PERMITTED.
- ALL PIPING SYSTEMS SHALL PROVIDE FLEXIBILITY FOR MOVEMENT AT THE TANK END, DISPENSER END, AND AT PIPING DIRECTION CHANGES TO RELIEVE STRESS. CONTRACTOR TO PROVIDE FLEXIBILITY ON ALL FIBERGLASS LINES BY PROVIDING 4" MIN. DOGLEG FOR 2" DIA. PIPE, 5" MIN. DOGLEG FOR 3" DIA. PIPE, AND 5'-6" MIN. DOGLEG FOR 4" DIA. PIPE. CHANGES IN DIRECTION NOT ATTACHED TO A RIGID CONNECTION SHALL NOT HAVE A STRAIGHT RUN OF LESS THAN 4' ON ONE SIDE OF THE CONNECTION.
- PER NFPA 30A (2015) 6.7, EMERGENCY ELECTRICAL DISCONNECTS ARE REQUIRED FOR FUEL DISPENSING SYSTEMS. SUCH DEVICES OR DISCONNECTS SHALL BE INSTALLED IN APPROVED LOCATIONS BUT NOT LESS THAN 20' OR MORE THAN 100' FROM THE FUEL DISPENSING DEVICES THEY SERVE. (SEE SHEET CFG14.6 FOR REMOTE FUEL SHUT-OFF DETAIL).



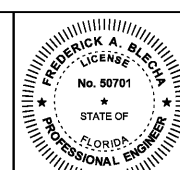
PLAN REFERENCES:

- SITE PLAN, SITE GRADING PLAN, AND SITE UTILITIES PLAN* PREPARED BY ATKINS LIMITED, 7175 MURRELL ROAD, MELBOURNE, FL 32941. PREPARED FOR CUMBERLAND FARMS, INC. NOT DATED, SCALE: 1"=20'. SHEETS CFG04.0, CFG05.0 & CFG07.0.

F.D.E.P. EQUIPMENT EQ#S:

EQUIPMENT DESCRIPTION	MANUFACTURER / MODEL / EQ#
1. DOUBLE-WALLED UNDERGROUND STORAGE TANKS	XERXES (EQ# 200)
2. DOUBLE-WALLED FIBERGLASS PRODUCT PIPE	NOV RED THREAD (EQ# 252)
3. LEAK DETECTION CONSOLE	VEEDER ROOT TLS-350 (EQ# 197)
4. SUMP LEAK SENSORS	VEEDER ROOT PART NUMBER 794380 (EQ# 614)
5. DISPENSER SUMPS - DOUBLE WALL	BRAVO (EQ# 727)
6. STP SUMPS - SINGLE WALL FIBERGLASS	CONTAINMENT SOLUTIONS (EQ# 191)
7. DOUBLE-WALLED SPILL BUCKETS	EMCO WHEATON MODEL A1004 (EQ# 524), FE PETRO (EQ# 335)
8. MECHANICAL LINE LEAK DETECTOR	

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REVISIONS

NO.	DATE	REV. BY.	DESCRIPTION
1	09/12/18	MHF	UPDATE GUIDELINES
2	10/19/18	FAB	CLIENT REVIEW
3	12/05/18	FAB	REV. PER CLIENT REVIEW
4	07/25/19	FAB	REV. PER LATEST CIVIL
5	10/21/19	FAB	REV. PER LATEST CIVIL

V#
Store#
Gas Station#
Facility#

MICCO ROAD & US HWY 1
BREVARD COUNTY, FLORIDA

XERXES - DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR
ONE (1) 24,000 (18/6 SPLIT)/ONE (1) 24,000 (6/12/6 SPLIT GAL. TANKS

CUMBERLAND FARMS, INC.
100 Crashing Boulevard
Framingham, MA 01702

SCALE: 1" = 10'
DATE: SEPTEMBER 12, 2018
FILE: CFG 14.0_DSA
DRAWN BY: DSA

TANK & PIPING PLAN CFG14.0

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