

PROPOSED TANK DETAILS

- PROPOSED VEEDER ROOT INTERSTITIAL TANK MONITOR (BRINE) PROBE #R734380-303
- PROPOSED SUBMERSIBLE PUMP w/ LEAK DETECTOR F.E. PETRO 2 HOSEPOWER
- PROPOSED INVENTORY PROBE/ MONITOR #R846390-110
- PROPOSED 3" EXTRACTOR TUBE w/ 233-4433 VALVE EXTRACTOR ASSEMBLY (OPW 6155A-1020-EVR ADAPTER w/ OPW 1711-7085-EVR, 3" CAP)
- PROPOSED 4" FILL RISER w/ OPW 01-1-4" DROP TUBE w/ WAPOR SEAL, 634T-7085-EVR TIGHT FILL CAP
- PROPOSED 3" EXTRACTOR TUBE w/ 233-4433 VALVE EXTRACTOR ASSEMBLY (OPW 6155A-1020-EVR ADAPTER w/ OPW 1711-7085-EVR, 3" CAP)
- PROPOSED 4" FILL RISER w/ OPW 01-1-4" DROP TUBE w/ WAPOR SEAL, 634T-7085-EVR TIGHT FILL CAP
- PROPOSED SUBMERSIBLE PUMP w/ LEAK DETECTOR F.E. PETRO 2 HOSEPOWER
- PROPOSED INVENTORY PROBE/ MONITOR #R846390-110
- PROPOSED 10" DIA. 20,000 GAL (12K/8K) COMPARTMENTALIZED UNDERGROUND DOUBLEWALL FIBERGLASS STORAGE TANK (CONTAINMENT SOLUTIONS)

NOT TO SCALE

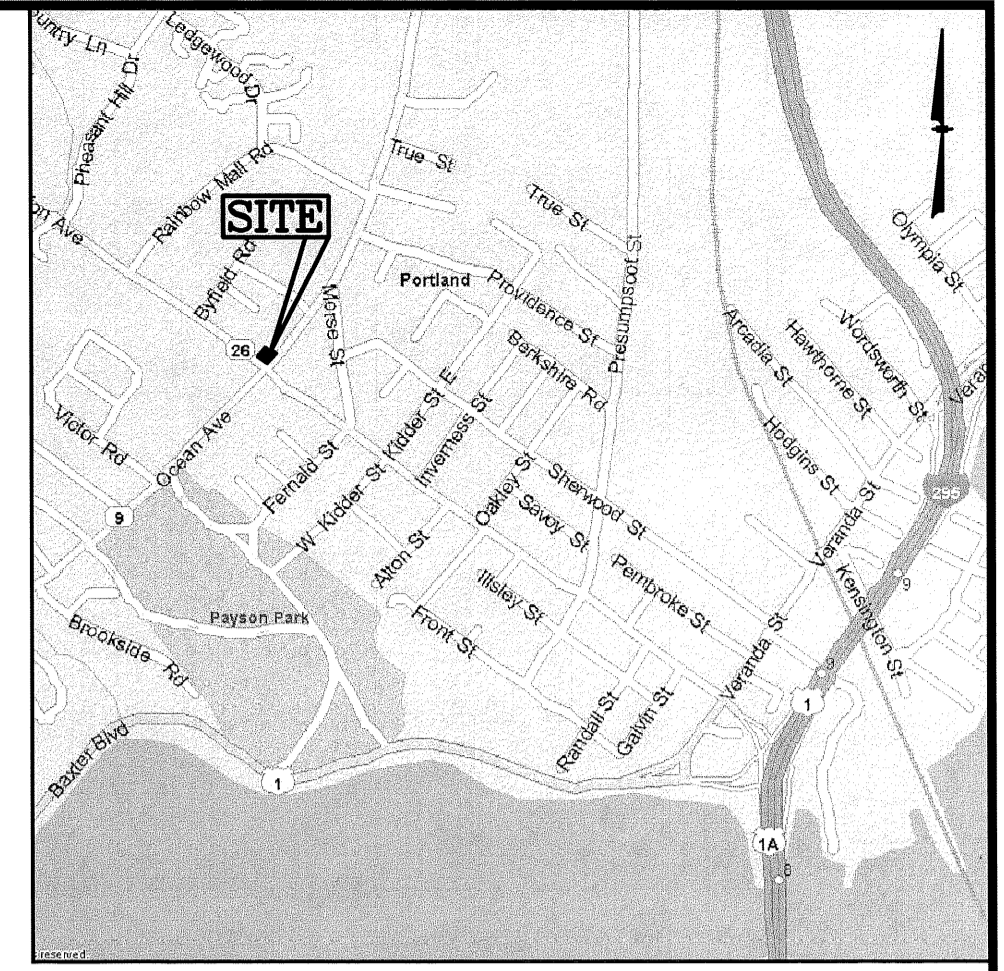
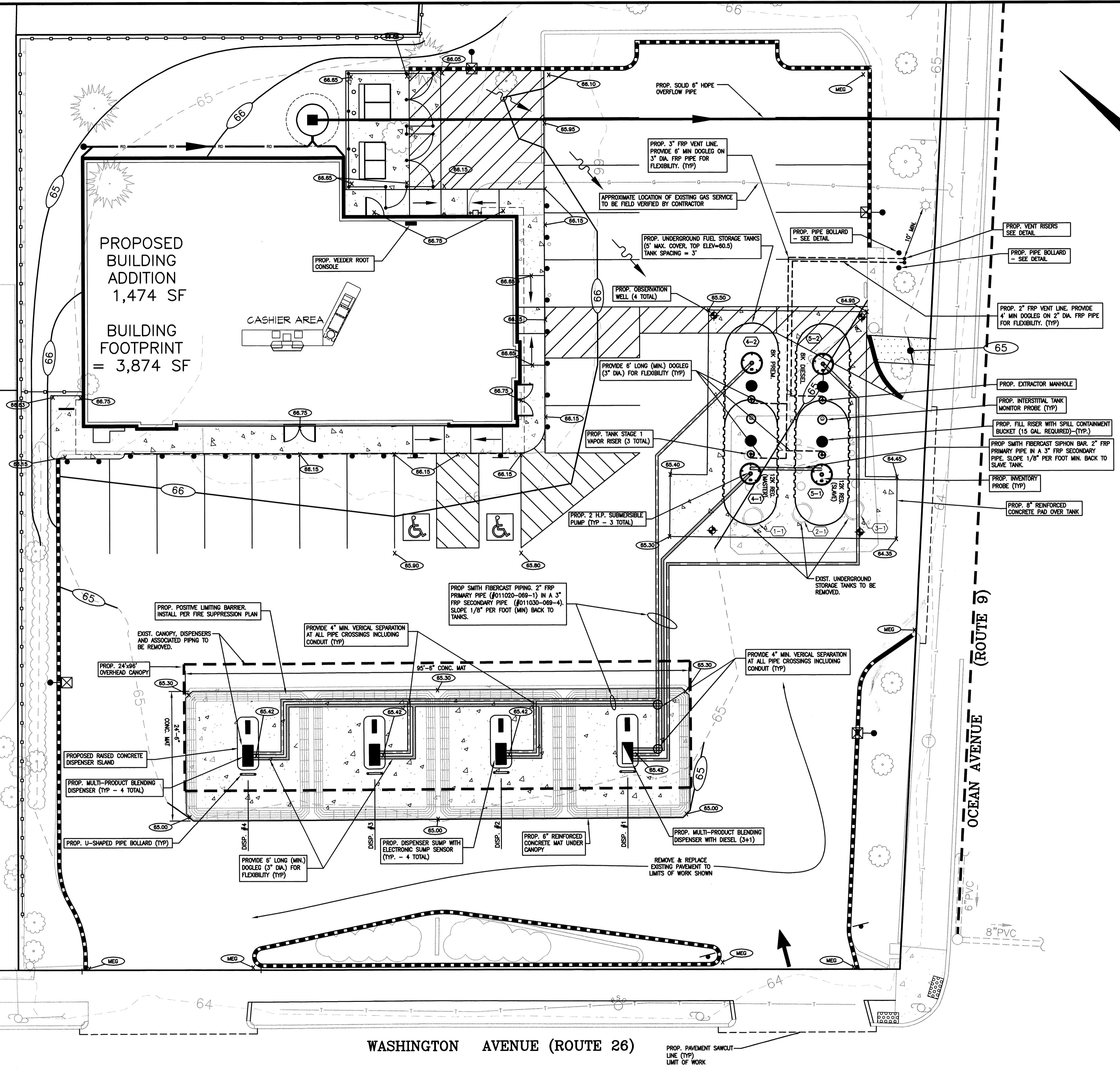
EXISTING TANK NOTES

1. TANK #	CAPACITY	CONTENT	MATERIAL	INSTALLED	INTENT
(1-)	8,000 gallon	gasoline	SW FRP	01-01-85	TO BE REMOVED
(2-)	8,000 gallon	gasoline	SW FRP	01-01-85	TO BE REMOVED
(3-)	8,000 gallon	gasoline	SW FRP	01-01-85	TO BE REMOVED

2. OWNER/OPERATOR: (day or night)
 GULF OIL
 BRANDED PRODUCTS DIVISION
 CUMBERLAND FARMS INC.
 100 CROSSING BLVD.
 FRAMINGHAM, MA 01702
 (508) 270-1400

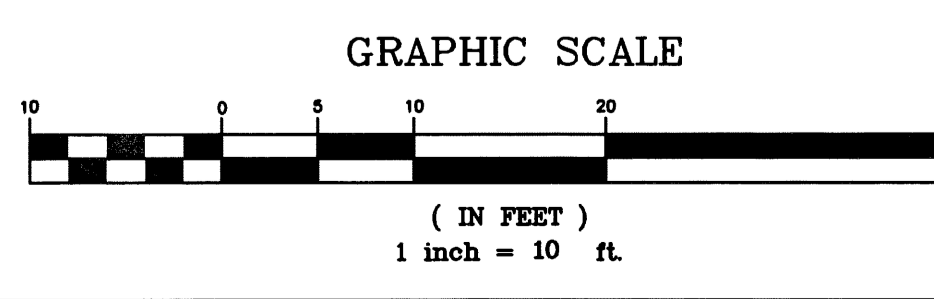
NEW TANK INSTALLATION NOTES

- The new underground storage tanks were installed in the month of 20__.
- All underground tanks to be double-walled fiberglass.
- | TANK# | CONTENT | CAPACITY | MATERIAL | INSTALLED |
|-------|------------|----------------|----------|-----------|
| (4-) | REG. UNL. | 12,000 gallons | dwfg | proposed |
| (4-2) | PREM. UNL. | 8,000 gallons | dwfg | proposed |
| (5-) | REG. UNL. | 12,000 gallons | dwfg | proposed |
| (5-2) | DIESEL | 8,000 gallons | dwfg | proposed |
- The interstitial space of a double-walled tank shall be continuously monitored for both water and stored product (VEEDER-ROOT TLS-350, w/ #R794380-303 Hydrostatic Sensor - Brine) and be equipped with an audio/visual alarm system.
- All supply lines are (SMITH FIBERCAST) double-walled fiberglass. All vent lines are single-walled fiberglass below grade.
- Piping shall be designed and installed to allow for testing without excessive excavation.
- Provide an overflow prevention valve on all fill tubes (OPW 71-S0-410C)
- A line leak detector shall be provided on the discharge of all remote pumps (FE PETRO)
- There are 4 - 4" slotted PVC observation wells. (1 @ each corner of the tank installation.)
- OWNER/OPERATOR: (day or night)
 GULF OIL
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 CUMBERLAND FARMS INC.
 100 CROSSING BLVD.
 FRAMINGHAM, MA 01702
 (508) 270-1400



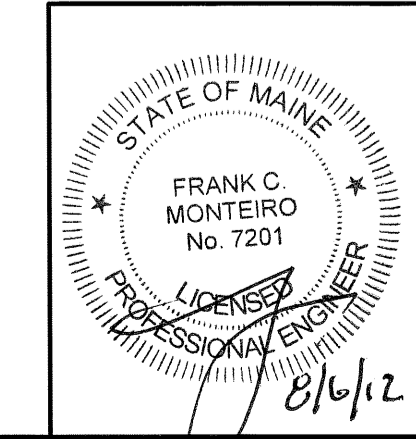
- ### NOTES:
- EXISTING MDEP REGISTRATION #9071
 - THE INTENT OF THIS PLAN IS TO SHOW THE INSTALLATION OF TWO NEW 20,000 GALLON COMPARTMENTALIZED UNDERGROUND FUEL STORAGE TANKS AND PRODUCT AND VENT PIPING. EXISTING OVERHEAD CANOPY, DISPENSERS, DISPENSER ISLANDS, UNDERGROUND STORAGE TANKS, AND ASSOCIATED PIPING WILL BE REMOVED.
 - EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION AS SHOWN WAS PREPARED BY MHF DESIGN CONSULTANTS, INC.
 - EXISTING UNDERGROUND PRODUCT PIPING, EQUIPMENT DESCRIPTIONS AND LOCATIONS ARE FROM RECORD PLANS PROVIDED BY CUMBERLAND FARMS. FIELD VERIFICATION IS REQUIRED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE UNDERGROUND STORAGE SYSTEM WILL BE TESTED BY THE CERTIFIED TANK INSTALLER PRIOR TO BACKFILLING AS FOLLOWS:
 - A. PRODUCT PIPING**
 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 SHOULDER INDICATES THAT THE POSSIBILITY OF JOINT FAILURE EXISTS. MAKE ANY NECESSARY REPAIRS BEFORE PRESSURIZING THE PIPING SYSTEM.
 CHECK THE INTEGRITY OF THE JOINTS BY 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 MINUTE AND SOAP ALL JOINTS TO CHECK FOR LEAKS.
SECONDARY LINE:
 PERFORM AN AIR TEST AT 10 PSIG AND MAINTAIN THE PRESSURE FOR A MINIMUM PERIOD OF 10 MINUTES BEFORE BACKFILL. 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 RESULTS SHALL BE PROVIDED TO THE OWNER WITHIN 30 DAYS OF THE TEST.
 - B. TANKS**
 EACH NEW TANK SHALL BE PRECISION TIGHTNESS TESTED BY A QUALIFIED TECHNICIAN.
 - THE CONTRACTOR SHALL CALL DISAISE 1-888-344-7233 AT LEAST 72 WORKING HOURS PRIOR TO ANY EXCAVATION.
 - ALL CONSTRUCTION AND EQUIPMENT MUST CONFORM TO THE APPLICABLE REGULATIONS AND CODES OF THE CITY OF PORTLAND, THE STATE OF MAINE (MDEP CHAPTER 691), AND THE NFPA.
 - CONTRACTOR SHALL PROVIDE AT LEAST 5 DAYS ADVANCE NOTICE TO THE PORTLAND FIRE DEPARTMENT AND THE OWNER TO INSPECT THE INSTALLATION PRIOR TO FINAL BACKFILL.
 - UNDERGROUND TANKS TO BE FILLED BY GRAVITY.
 - CONTRACTOR TO HAVE "FCI" CERTIFICATION.
 - CONTRACTOR TO VERIFY WITH OWNER THE PRODUCT PIPING LAYOUT AS SHOWN ON THIS PLAN PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO PROVIDE FLEXIBILITY ON ALL VENT AND VAPOR RECOVERY LINES VIA FLEX CONNECTORS, OR BY PROVIDING AT LEAST FOUR FEET OF STRAIGHT RUN (2" PIPE) AND SIX FEET OF STRAIGHT RUN (3" PIPE) BETWEEN CHANGES IN DIRECTION GREATER THAN 30 DEGREES.
 - CONTRACTOR TO ADJUST GRADES AS REQUIRED OVER THE TANK MAT TO ENSURE THAT IT SHEDS ANY STORMWATER RUNOFF.

SHEET INDEX	DWG NO.	SHEET NO.
PROPOSED UST SITE PLAN	UST1	1 OF 8
MATERIAL LIST	T1.0	2 OF 8
TANK INSTALLATION DETAILS	T2.0	3 OF 8
TANK INSTALLATION DETAILS	T3.0	4 OF 8
SUMP & PIPING DETAILS	T4.0	5 OF 8
SUMP & PIPING DETAILS	T5.0	6 OF 8
TANK INSTALLATION DETAILS	T6.3	7 OF 8
DISPENSER APRON PLAN, SECTIONS AND DETAILS	T8.3	8 OF 8



LEGEND

- 66.8 x PROP. SPOT ELEVATION
- 66.8 PROP. CONTOUR ELEVATION
- 65 - - - EXIST. CONTOUR ELEVATION



REVISIONS

DATE	REV. BY.	DESCRIPTION
8/2/12	FCM	MISC. REVISIONS

31,972 SQUARE FEET
 0.734 ACRES
 V# 1079
 Store# 5604
 Gas Station# 851839

MHF Design Consultants, Inc.
 44 Stiles Road, Suite One
 Salem, New Hampshire 03079
 (603) 893-0720
 ENGINEERS - PLANNERS - SURVEYORS
 www.mhfdesign.com

801 Washington Ave. & Ocean Ave.
PORTLAND, MAINE

CUMBERLAND FARMS INC.
 100 CROSSING BLVD.
 FRAMINGHAM, MA 01702

SCALE: 1" = 10'
 DATE: 7/27/12
 FILE: 2666TP.dwg
 DRAWN BY: MHF
 CHECKED BY:

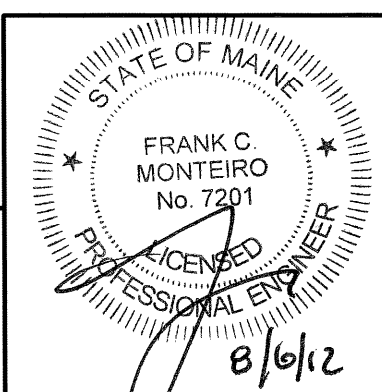
PROPOSED UST SITE PLAN **UST1**

MHF PROJECT NO. 266609 SHEET 1 OF 8


PARTS LEGEND

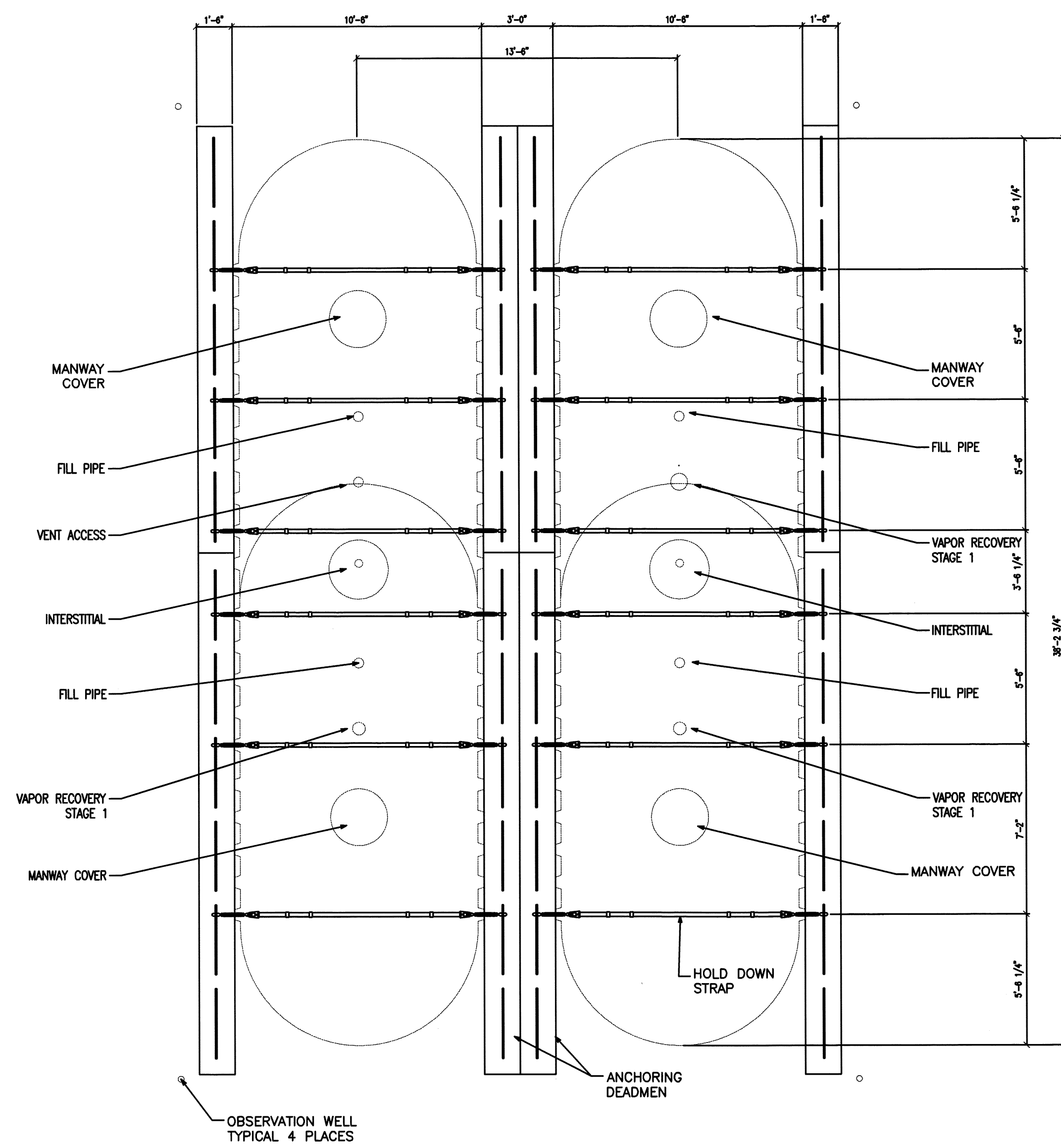
SECTION 100 - UNDERGROUND TANKS	SECTION 400 - VEEDER ROOT EQUIPMENT	SECTION 800 - BRAVO BOXES
<p>101 - 20,000 GALLON COMPARTMENTAL(126" DIA. X 38'-2 3/4") DOUBLE-WALL FIBERGLASS UNDERGROUND GASOLINE STORAGE TANK (CONTAINMENT SOLUTIONS) 12,000 / 8,000 SPLIT UNDERGROUND GASOLINE STORAGE TANK (CONTAINMENT SOLUTIONS)</p> <p>102 - 10 GA. STEEL WEAR PLATE</p> <p>103 - CONTAINMENT SOLUTIONS PRECAST CONCRETE DEADMEN</p> <p>104 - HOLD DOWN STRAPS BY TANK MANUFACTURER.</p> <p>105 - 3/4" GALVANIZED TURNBUCKLE ASSEMBLY W/ HOOK ENDS. (TB-3418)</p> <p>106 - HOLD DOWN STRAPS BY TANK MANUFACTURER</p> <p>107 - 8" THICK CONC. PAD W/ 6 X 6 10/10 WIRE REINFORCEMENT. (H-20 LOADING)</p> <p>108 - #5 REBARS @ 8" O.C.E.W. (TYP.)</p> <p>109 - PEA GRAVEL BACKFILL AROUND TANKS TO EXTEND 12" BELOW BOTTOM OF TANKS (TYP.) MUST HAVE MIN. DIA. OF 1/8" AND MAX. DIA. OF 3/4" (PER CONTAINMENT SOLUTIONS GUIDELINES)</p> <p>110 - 1" THICK COMPRESSIBLE FOAM BOARD (TYP.)</p> <p>111 - 4" SLOTTED P.V.C. PIPE OBSERVATION WELL. (1 @ EACH CORNER OF TANK INSTALLATION (4 REQUIRED) CAP EACH OBSERVATION WELL c/w LOCKING GRIPPER CAP</p>	<p>401 - 305XPA-1200AK MORRISON BROTHERS ATG PROBE 4" ALUMINUM CAP AND BRASS ADAPTER W/ 1.2" THREAD PORT HOLE AND CABLE CONNECTION</p> <p>402 - 848290-022 VEEDER ROOT TLS350 PLUS CONSOLE W/ INTEGRAL PRINTER</p> <p>403 - 329356-002 VEEDER ROOT TLS350R / TLS350 PLUS 4 INPUT PROBE INTERFACE MODULE</p> <p>404 - 329358-001 VEEDER ROOT TLS350R / TLS350 PLUS 8 INPUT INTERSTITIAL/LIQUID SENSOR INTERFACE MODULE</p> <p>405 - 794380-208 VEEDER ROOT PIPING SUMP SENSOR W/ 12' CABLE</p> <p>406 - 794380-303 VEEDER ROOT DUAL FLOAT HYDROSTATIC SENSOR</p> <p>407 - 330020-012 VEEDER ROOT UNIVERSAL SENSOR MOUNTING KIT</p> <p>408 - 846390-110 VEEDER ROOT 10'6" 0.1-GPH MAG PLUS PROBE</p> <p>409 - 886100-000 VEEDER ROOT 4" PHASE SEPARATION DETECTING FLOAT KIT W/ 5' CABLE</p> <p>410 - 846400-001 VEEDER ROOT DIESEL MAG PLUS PROBE INSTALLATION KIT W/ 5' CABLE AND 4" FLOAT</p> <p>411 - 330010-425 VEEDER ROOT TLS350R / TLS350 PLUS ETHERNET TCP/IP COMMUNICATIONS INTERFACE MODULE</p> <p>412 - 847490-001 VEEDER ROOT INTERFACE MODULE EXPANSION BOARD</p> <p>413 - OMNI-G11802 OMNI 18/2 GREY 2-CONDUCTOR WIRE - 1000' REEL - (COMMUNICATIONS)</p> <p>414 - 848480 VEEDER ROOT (PLLD) W/O SWIFTCHEK</p> <p>415 - 330160-060 VEEDER ROOT (PLLD) LINE LEAK DETECTOR RISK MANAGEMENT SEM</p> <p>416 - 330893-061 VEEDER ROOT 6 INPUT PRESSURE LEAK DETECTOR MODULE</p> <p>417 - 847490-001 VEEDER ROOT INTERFACE MOULE EXPANSION BOARD</p>	<p>801 - 7252-F2L-E0-WW-SOLID BRAVO 7000 SERIES WAYNE 3/590 MODEL B12 AND R22 GASOLINE BLENDER FIBERGLASS DISPENSER SUMP W/(2) PRODUCT A\STABILIZER BRACKETS (2) B-33-D 3" ENTRY FITTINGS, ELECTRIC OFFSET FRAME AND FIBERGLASS TROUGH VAPOR SHEAR VALVE BRACKET, BRAVO VAPOR SHEAR VALVE AND B-32-D 2" ENTRY FITTING WAYNE OVATION WAYNE VAC SOLID</p> <p>802 - 7253-F2L-B-E0 BRAVO 7000 SERIES WAYNE 3/590 MODEL B12 AND R22 GASOLINE BLENDER FIBERGLASS DISPENSER SUMP W/(2) PRODUCT A\STABILIZER BRACKETS (2) B-33-D 3" ENTRY FITTINGS, ELECTRIC OFFSET FRAME AND FIBERGLASS TROUGH VAPOR SHEAR VALVE BRACKET, BRAVO VAPOR SHEAR VALVE AND B-32-D 2" ENTRY FITTING WAYNE OVATION WAYNE VAC</p> <p>803 - 7253-SOLID-E0-WW-CF-10 BRAVO 7000 SERIES WAYNE B23 GASOLINE/DIESEL 3+1 FIBERGLASS DISPENSER SUMP W/(3) PRODUCT A\STABILIZER BRACKETS (3) B-33-D 3" ENTRY FITTINGS, ELECTRIC OFFSET FRAME AND FIBERGLASS TROUGH VAPOR SHEAR VALVE BRACKET, BRAVO VAPOR SHEAR VALVE AND B-32-D 2" ENTRY FITTING</p> <p>804 - FSS2WE150150 HOSE MASTER FIRE-SHIELD 1.5" X 15" BRAIDED STAINLESS STEEL FLEX CONNECTOR COUPLED 1.5" MALE SWIVEL X 2" FEMALE SWIVEL 90</p> <p>805 - FSS2WE130150 HOSE MASTER FIRE-SHIELD 1.5" X 13" BRAIDED STAINLESS STEEL FLEX CONNECTOR COUPLED 1.5" MALE SWIVEL X 2" FEMALE SWIVEL 90</p> <p>806 - 7252-SOLID - E0-CF - 12 - NV BRAVO 7000 SERIES WAYNE 3/590 MODEL B12 AND R22 GASOLINE BLENDER FIBERGLASS DISPENSER SUMP W/(2) PRODUCT A\STABILIZER BRACKETS (2) B-33-D 3" ENTRY FITTINGS, ELECTRIC OFFSET FRAME AND FIBERGLASS TROUGH WAYNE OVATION NO VAC SOLID</p>
<p>SECTION 200 - ISLANDS & BOLLARDS</p> <p>201 - RIVERSIDE STEEL 3'W X 12'L X 9"H STAINLESS STEEL ISLAND FORM W/6" RADIUS CORNERS</p> <p>202 - 1983-403656 UNIVERSAL 4"OD DIA X 36"W X 56"H U-SHAPED PIPE BOLLARD</p>	<p>SECTION 500 - SUBMERSIBLE PUMPS & COMPONENTS</p> <p>501 - 400834901 FE PETRO STP-VS2-VL2 2HP VARIABLE SPEED AND LENGTH SUBMERGED TURBINE PUMP - RANGE 88" - 150"</p> <p>502 - 4X15SGNRC 4" X 15" BLACK NIPPLE - REAM AND CHAMFER</p> <p>503 - 5874202800 FE PETRO NEW STYLE MAG VFC VER 1.22 CONTROLLER - WITH VERSION 1.22 SOFTWARE</p> <p>504 -</p> <p>505 -</p> <p>506 - 5800300100 FE PETRO STP-DHI 120 VAC ISOLATION RELAY</p> <p>507 - 400137937 FE PETRO A/G COMPATIBLE SYPHON CHECK VALVE ASSEMBLY</p> <p>508 - 184-2500MB MORRISON BROTHERS 4" X 2" X 2" CAST IRON DOUBLE TAP BUSHING</p> <p>509 - STPR-V34-VL2 FE PETRO STP-VS4-VL12 4HP VARIABLE SPEED AND LENGTH SUBMERGED TURBINE PUMP - RANGE 88" - 150"</p> <p>510 - 2" GALV. PIPE FOR SIPHON STUBS</p>	<p>SECTION 900 - GENERAL</p>
<p>SECTION 300 - TANK TOP EQUIPMENT</p> <p>301 - 65-8012-WC UNIVERSAL 8" ROUND LIMITED ACCESS MONITOR WELL MANHOLE</p> <p>302 - 781-418-08-STL EBW 18" MANHOLE X 8.5" SKIRT W/STEEL COVER</p> <p>303 - A0716-0044C EMCO WHEATON 44" COMPOSITE MANHOLE, 10" SKIRT, CAMLOCK</p> <p>304 - N/A</p> <p>305 - N/A</p> <p>306 - 705-550-102CI-GKT EBW 5 GALLON DOUBLE WALL DEFENDER SERIES, NPT, NO DRAIN, GREY EPOXY COATED CAST IRON COVER MANHOLE</p> <p>307 - 705-490-02CI-GKT EBW 5 GALLON SINGLE WALL, NPT, GREY EPOXY COATED CAST IRON COVER, RCA MANHOLE</p> <p>308 - 60-1280 UNIVERSAL 18" ROUND MANHOLE W/8" SKIRT</p> <p>309 - FSMS120200 HOSE MASTER FIRE-SHIELD 2" X 12" BRAIDED STAINLESS STEEL FLEX CONNECTOR COUPLED MALE X MALE SWIVEL</p> <p>310 - C/T38 X 50 F.W. WEBB 3/8" X 50' COPPER TUBING</p> <p>311 - 71SQ-410C OPW 4" 2-POINT CARB APPROVED ENHANCED OVERFILL PREVENTION VALVE W/120" EXTENDED LENGTH UPPER TUBE AND 102" EXTENDED LENGTH LOWER TUBE</p> <p>312 - 662-440-03 EBW 1.5" DOUBLE POPPET MALE TOP EMERGENCY SHEAR VALVE (REPLACES 662-440-06)</p> <p>313 - 61SALP-1020-EVR OPW 4" LOW PROFILE BRONZE SWIVEL ADAPTER (4 3/8" TALL)</p> <p>314 - 634TT-7085-EVR OPW 4" ENHANCED TOP SEAL FUEL CAP</p> <p>315 - INCLUDED IN PART NUMBER 307</p> <p>316 - INCLUDED IN PART NUMBER 307</p> <p>317 - 233-4420 OPW 4" X 2" EXTRACTOR FITTING W/O CAGE</p> <p>318 - 233-4430 OPW 4" X 3" EXTRACTOR FITTING W/O CAGE</p> <p>319 - 715-460-02-CI-GKT EBW 15 GALLON DOUBLE WALL SPILL CONTAINER (ME & VT ONLY)</p> <p>320 - 623V-3203 OPW PHASE-1 EVR 3" PRESSURE VAC VENT W/3" WATER COLUMN PRESSURE/8" WATER COLUMN VACUUM</p> <p>321 - 23-0044 OPW 1.5" ALUMINUM TANK VENT</p> <p>322 - 116-7085 OPW 4" DURATUFF PIPE CAP</p> <p>323 - COM38 X 14MUN F.W. WEBB 3/8" COMPRESSION X 1/4" MALE NPT BRASS FITTING</p> <p>324 - SA2009101 BOSTON METALS 2" BALL VALVE</p>	<p>SECTION 600 - ENTRY BOOTS & TEST REDUCERS</p> <p>601 - B-33-D BROVO 3" DOUBLE SIDED ENTRY BOOT W/COATED STAINLESS STEEL CLAMPS</p> <p>602 - B-17-D BRAVO 3/4" OR 1" DOUBLE ENTRY BOOT W/ COATED STAINLESS STEEL CLAMPS</p> <p>603 - TBA-3020 OPW FLEXWORKS 3" X 2" TEST BOOTS W/ AIR STEM</p>	<p>SECTION 700 - AO SMITH PIPE & FITTINGS</p> <p>701 - 011020-069-1 AO SMITH 2" X 15' FIBERGLASS PIPE</p> <p>702 - 012020-360-4 AO SMITH 2" 90 DEGREE ELBOW</p> <p>703 - 012020-310-4 AO SMITH 2" 45 DEGREE ELBOW</p> <p>704 - 012020-191-4 AO SMITH 2" BELL X MALE ADAPTER</p> <p>705 - 012020-194-4 AO SMITH 2" BELL X FEMALE ADAPTER</p> <p>706 - 012020-410-4 AO SMITH 2" TEE FIBERGLASS</p> <p>707 - 012020-101-8 AO SMITH 2" SLEEVE COUPLING</p> <p>708 - 011030-069-1 AO SMITH 3" X 15' FIBERGLASS PIPE</p> <p>709 - 012030-360-4 AO SMITH 3" 90 DEGREE ELBOW</p> <p>710 - 012030-310-4 AO SMITH 3" 45 DEGREE ELBOW</p> <p>711 - 012030-191-4 AO SMITH 3" BELL X MALE ADAPTER</p> <p>712 - 012030-194-4 AO SMITH 3" BELL X FEMALE ADAPTER</p> <p>713 - 012030-410-4 AO SMITH 3" TEE FIBERGLASS</p> <p>714 - 012030-101-8 AO SMITH 3" SLEEVE COUPLING</p> <p>715 - 012030-231-4 AO SMITH 3" X 2" REDUCER COUPLING</p> <p>716 - 012030-410-3 AO SMITH 3" TEE - SECONDARY CONTAINMENT</p> <p>717 - 120030-101-3 AO SMITH 3" COUPLING - SECONDARY CONTAINMENT</p> <p>718 - 012030-310-3 AO SMITH 3" 45 DEGREE ELBOW - SECONDARY CONTAINMENT</p> <p>719 - 012030-360-3 AO SMITH 3" 90 DEGREE ELBOW - SECONDARY CONTAINMENT</p>


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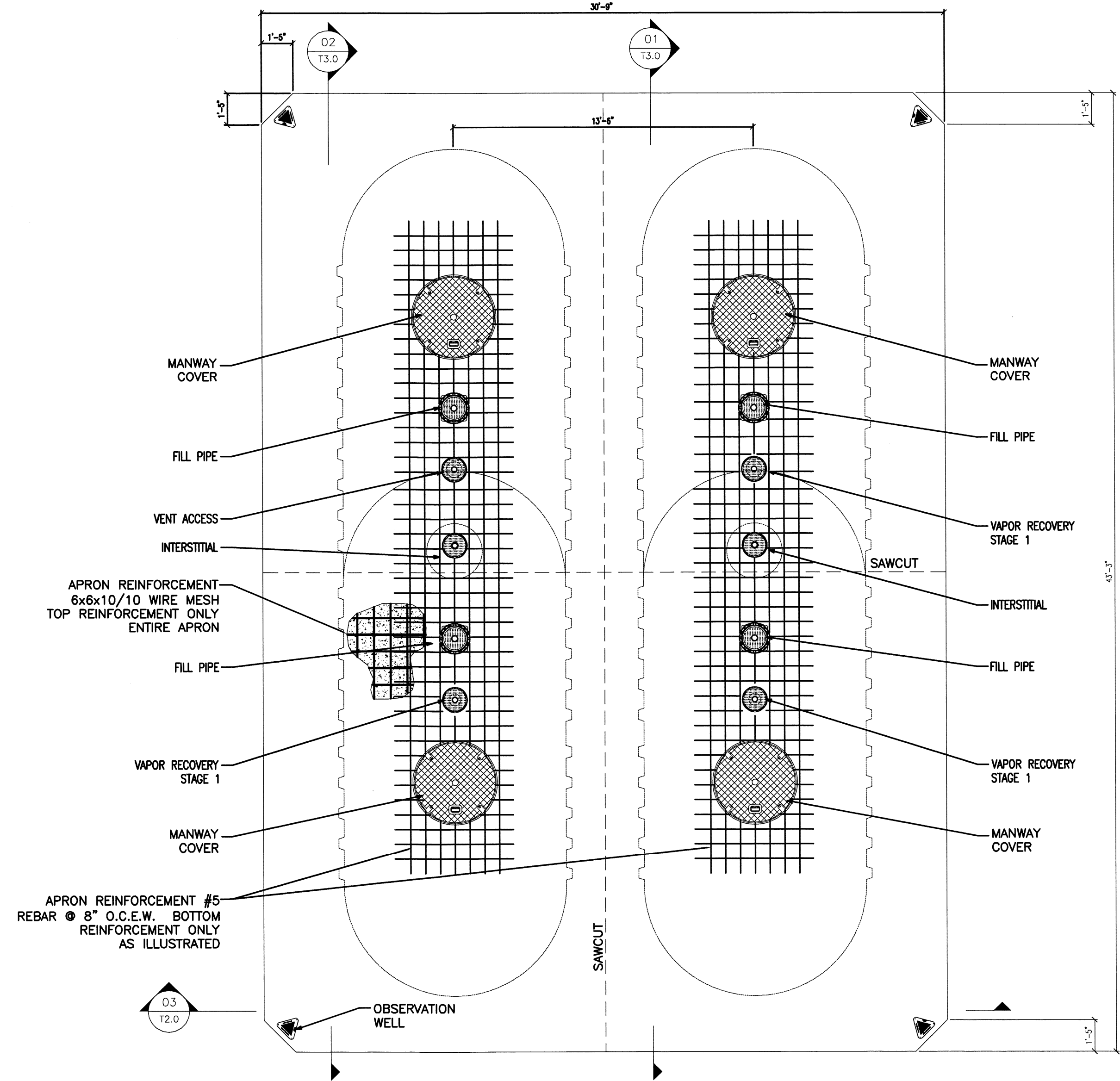


REVISIONS		
DATE	REV. BY	REVISIONS

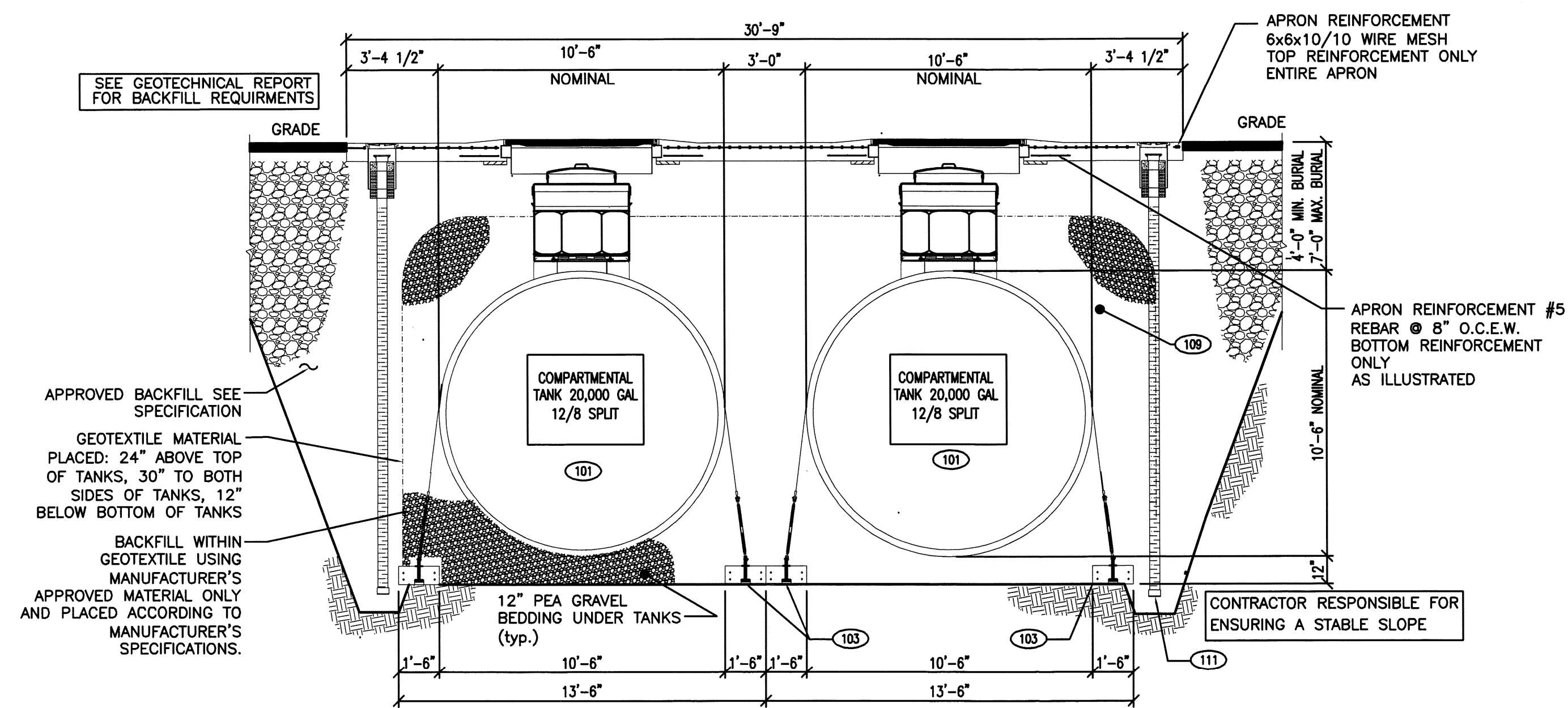
FUEL GUIDELINE DRAWING SHEET NO. 1	
DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR: TWO (2) 20,000 (12/8 SPLIT) GALLON TANKS	
 CUMBERLAND FARMS, INC. 100 Crossing Boulevard Framingham, MA 01702	SCALE: NTS DATE: February 7, 2012 FILE: 01 (2)12-8 SPLIT_T1.0 DRAWN BY: JAS
MATERIAL LIST	T1.0



01 TANK DEADMAN ANCHORING PLAN
T2.0 SCALE: 1/4" = 1'-0"

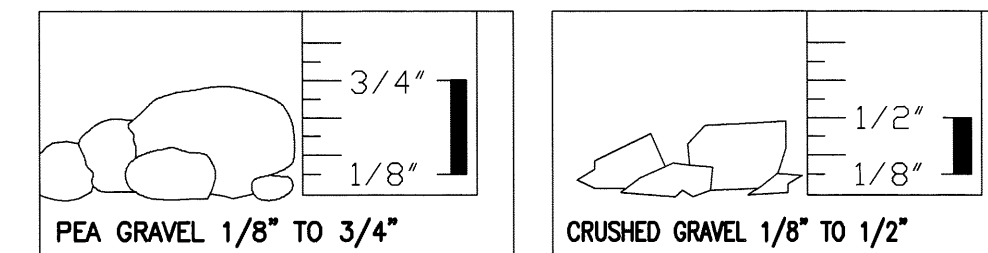


02 TANK TOP APRON - PLAN VIEW
T2.0 SCALE: 1/4" = 1'-0"



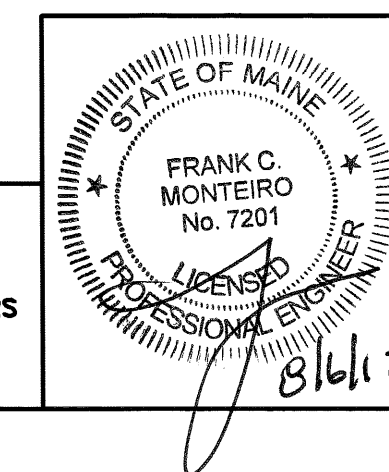
03 TANK FIELD CROSS SECTION
T2.0 SCALE: 1/4" = 1'-0"

MANUFACTURER'S APPROVED BACKFILL BETWEEN GEOTEXTILE AND TANKS:



NO PARTICLES LESS THAN 1/8" SIZE
SEE MANUFACTURER'S INSTRUCTIONS FOR ADDITIONAL DETAILS AND COMPACTION SPECIFICATIONS.

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Salem, New Hampshire 03079
(603) 893-0720
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REVISIONS		
DATE	REV. BY	REVISIONS

V# n/a
Store# n/a
Gas Station# n/a

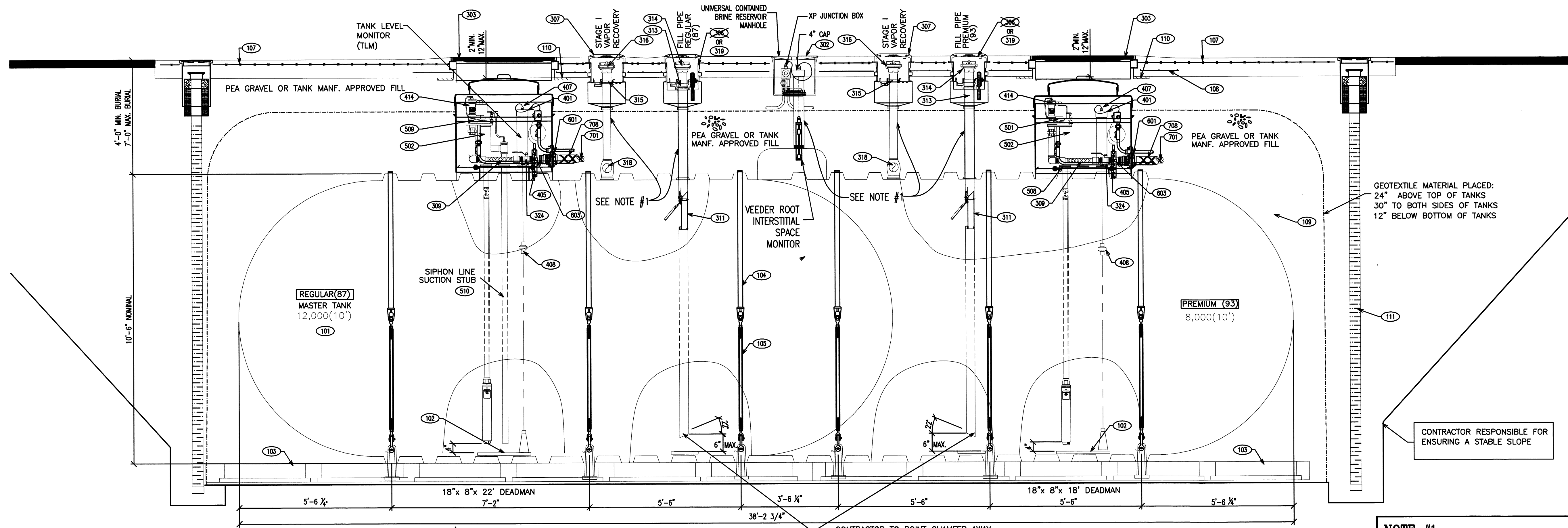
FUEL GUIDELINE DRAWING SHEET NO. 2

DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR:
TWO (2) 20,000 (12/8 SPLIT) GALLON TANKS

Cumberland Farms
CUMBERLAND FARMS, INC.
100 Crossing Boulevard
Framingham, MA 01702

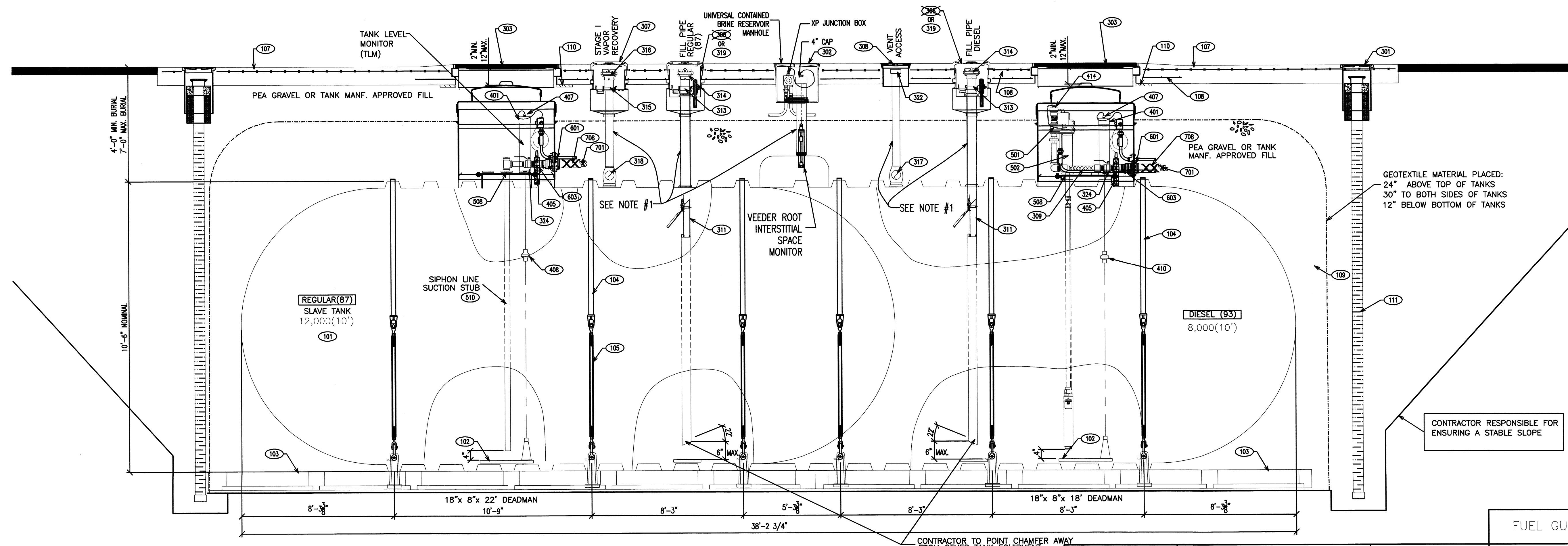
TANK INSTALLATION DETAILS
T2.0

SCALE: AS NOTED
DATE: February 7, 2012
FILE: cn (2)12-8-spl_t2.0
DRAWN BY: T.M.R.



01 20,000 GAL TANK ELEVATION - 12,000 GAL REGULAR / 8,000 PREMIUM
T3.0 SCALE: 1/2" = 1'-0"

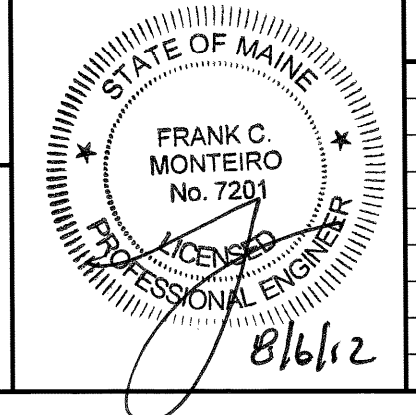
NOTE #1 - ALL GALVANIZED IRON PIPE RISERS IN CONTACT WITH BACKFILL SHALL BE COATED WITH 1/8" MIN. FIBERGLASS COATING OR 1/8" MIN. EPOXY RESIN COATING-TYP



02 20,000 GAL TANK ELEVATION - 12,000 GAL REGULAR / 8,000 DIESEL
T3.0 SCALE: 1/2" = 1'-0"

CONTRACTOR RESPONSIBLE FOR ENSURING A STABLE SLOPE

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V# n/a
Store# n/a
Gas Station# n/a

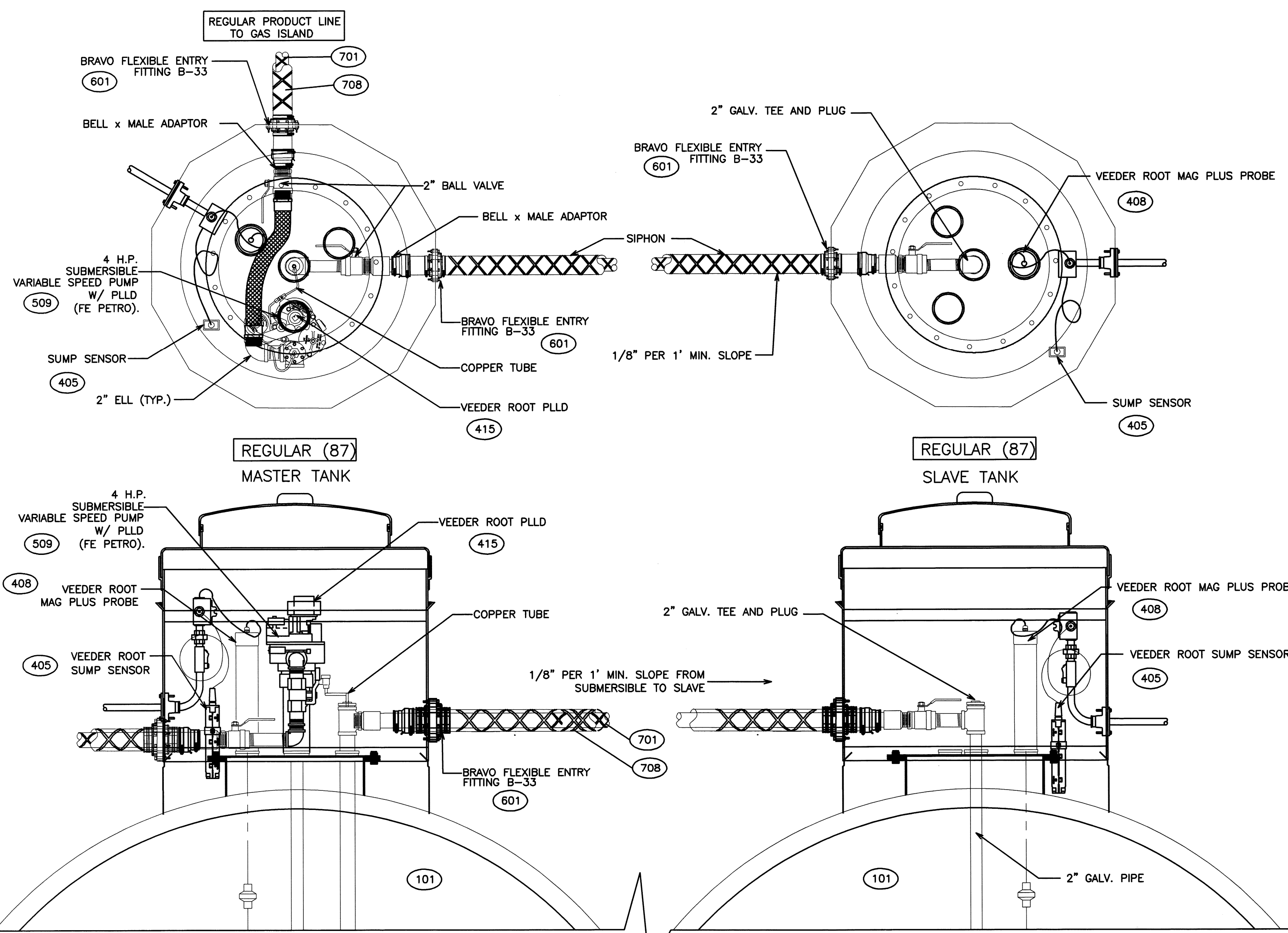
FUEL GUIDELINE DRAWING SHEET NO. 3

DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR:
TWO (2) 20,000 (12/8 SPLIT) GALLON TANKS

Cumberland FARMS
CUMBERLAND FARMS, INC.
100 Crossing Boulevard
Framingham, MA 01702

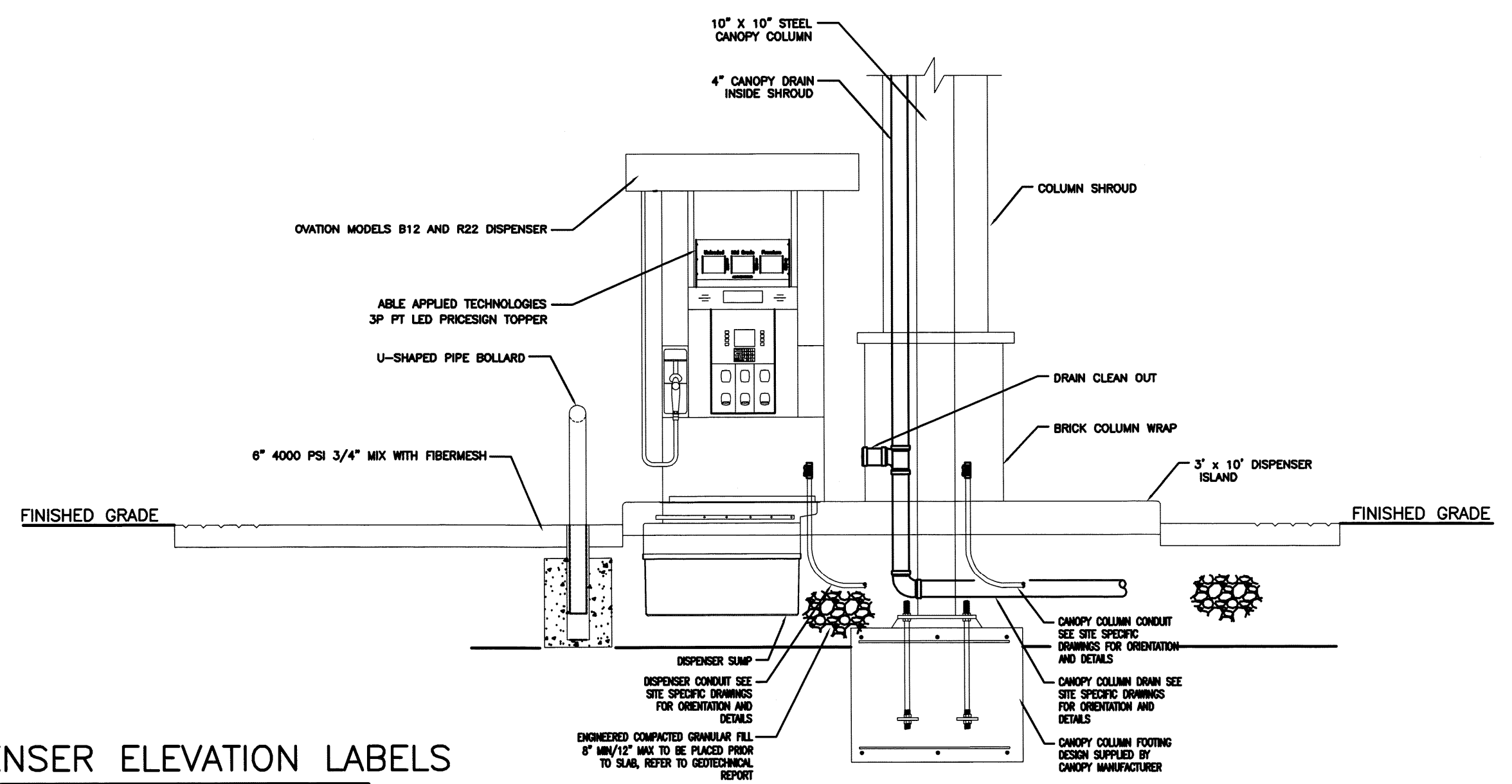
TANK INSTALLATION DETAILS

SCALE: 1/2" = 1'-0"
DATE: February 7, 2012
FILE: cr (2)12-8-split_T3.0
DRAWN BY: T.M.R.
T3.0

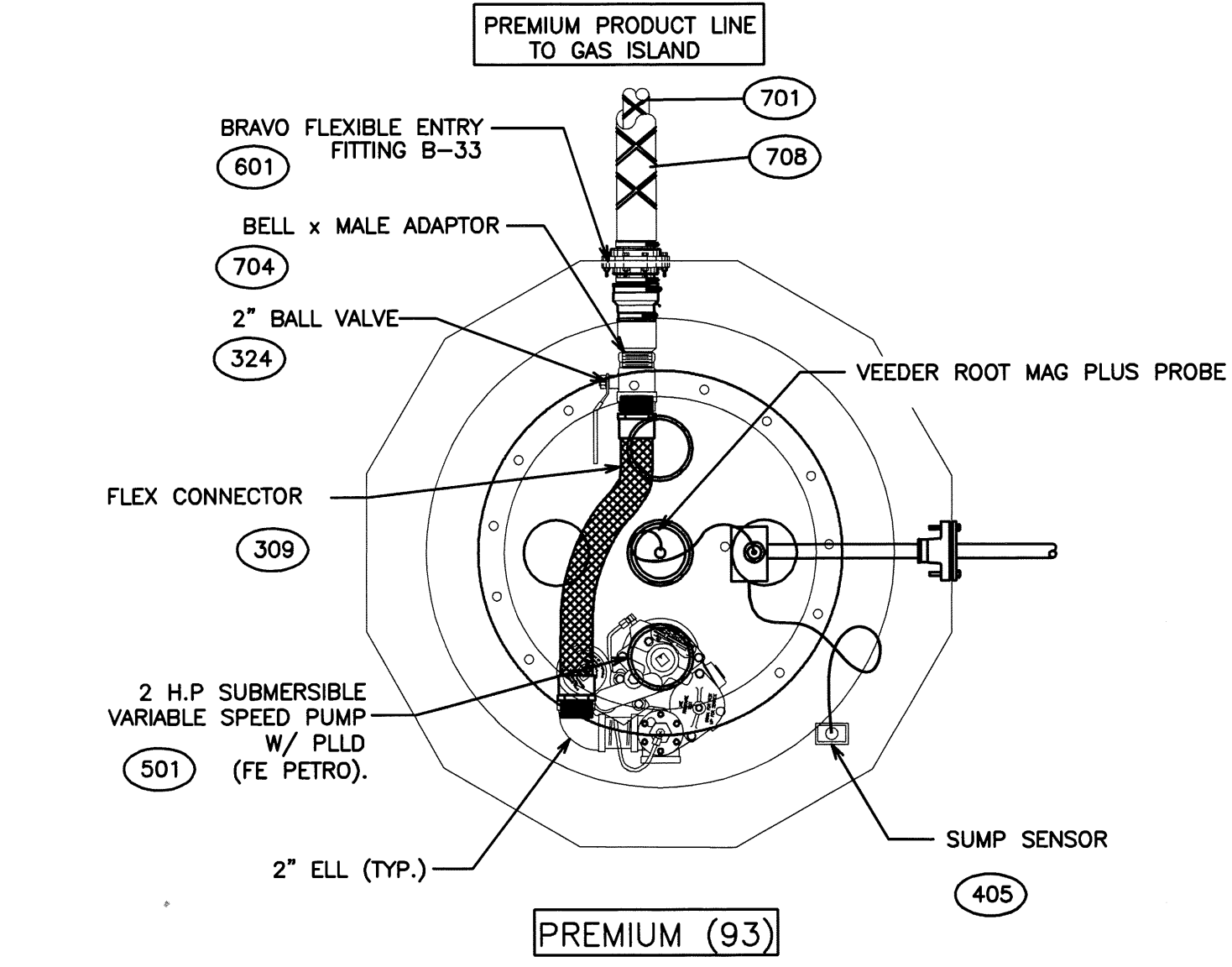
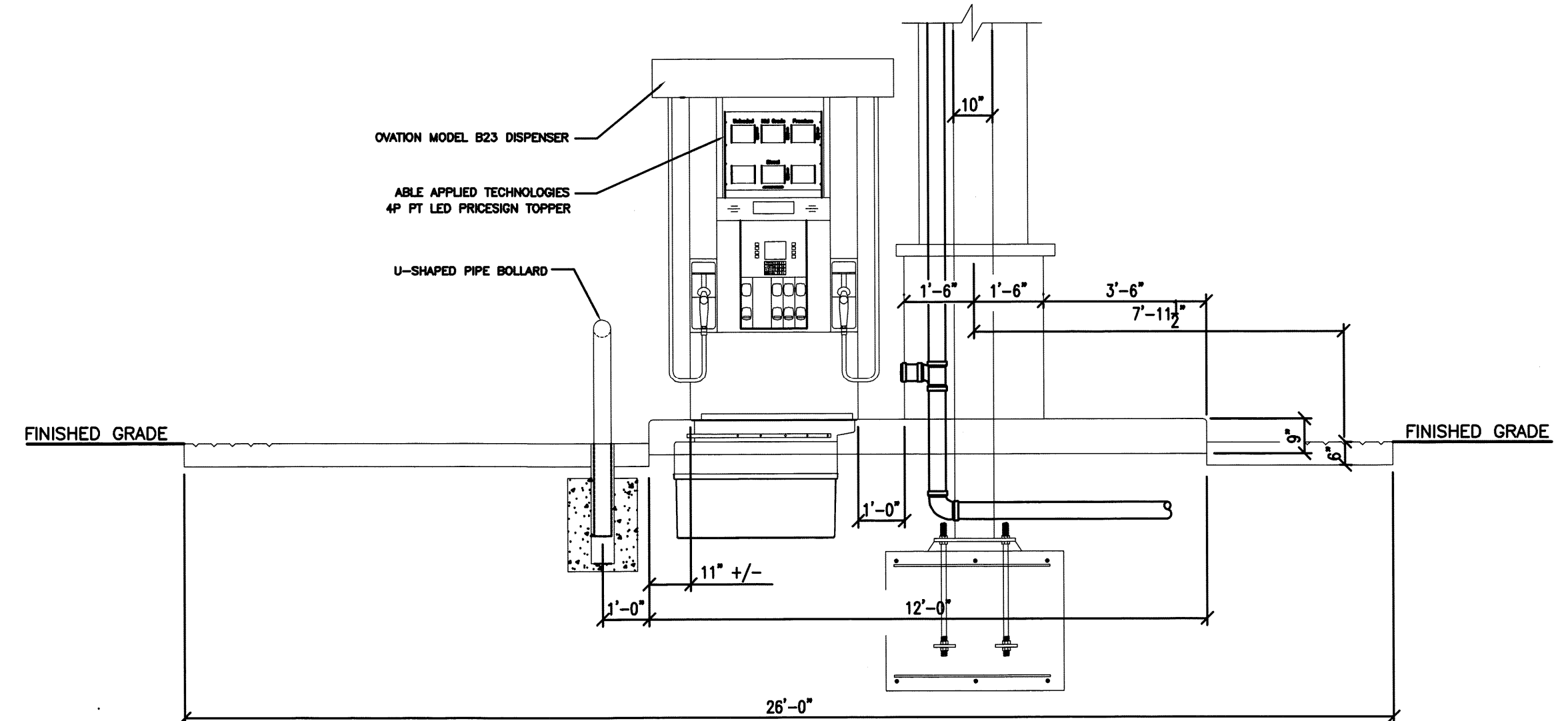


01 TYPICAL REGULAR TANK SUMP PLANS
 T4.0 SCALE: 1/2" = 1'-0"

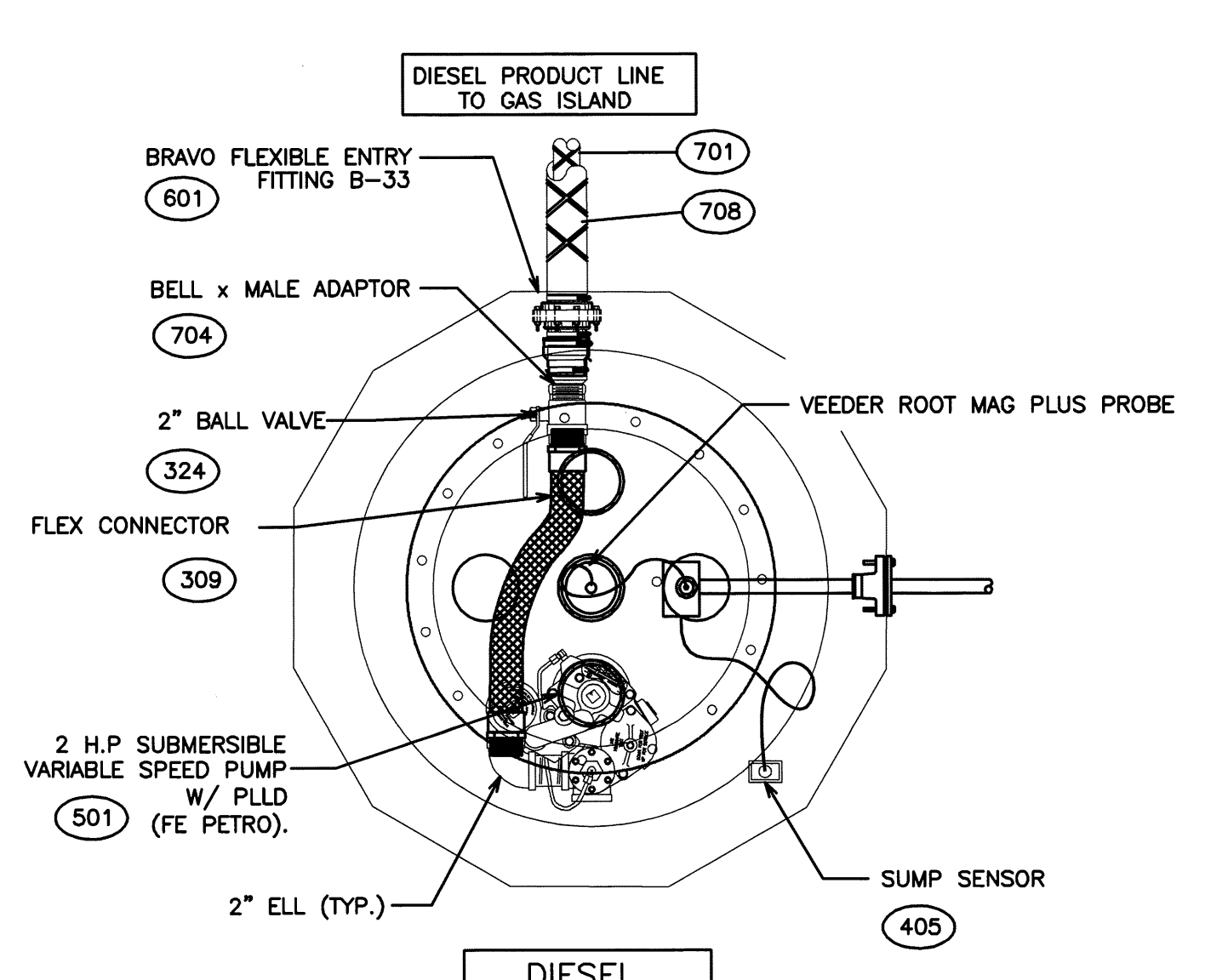
03 DISPENSER ELEVATION LABELS
 T4.0 SCALE: 1/2" = 1'-0"



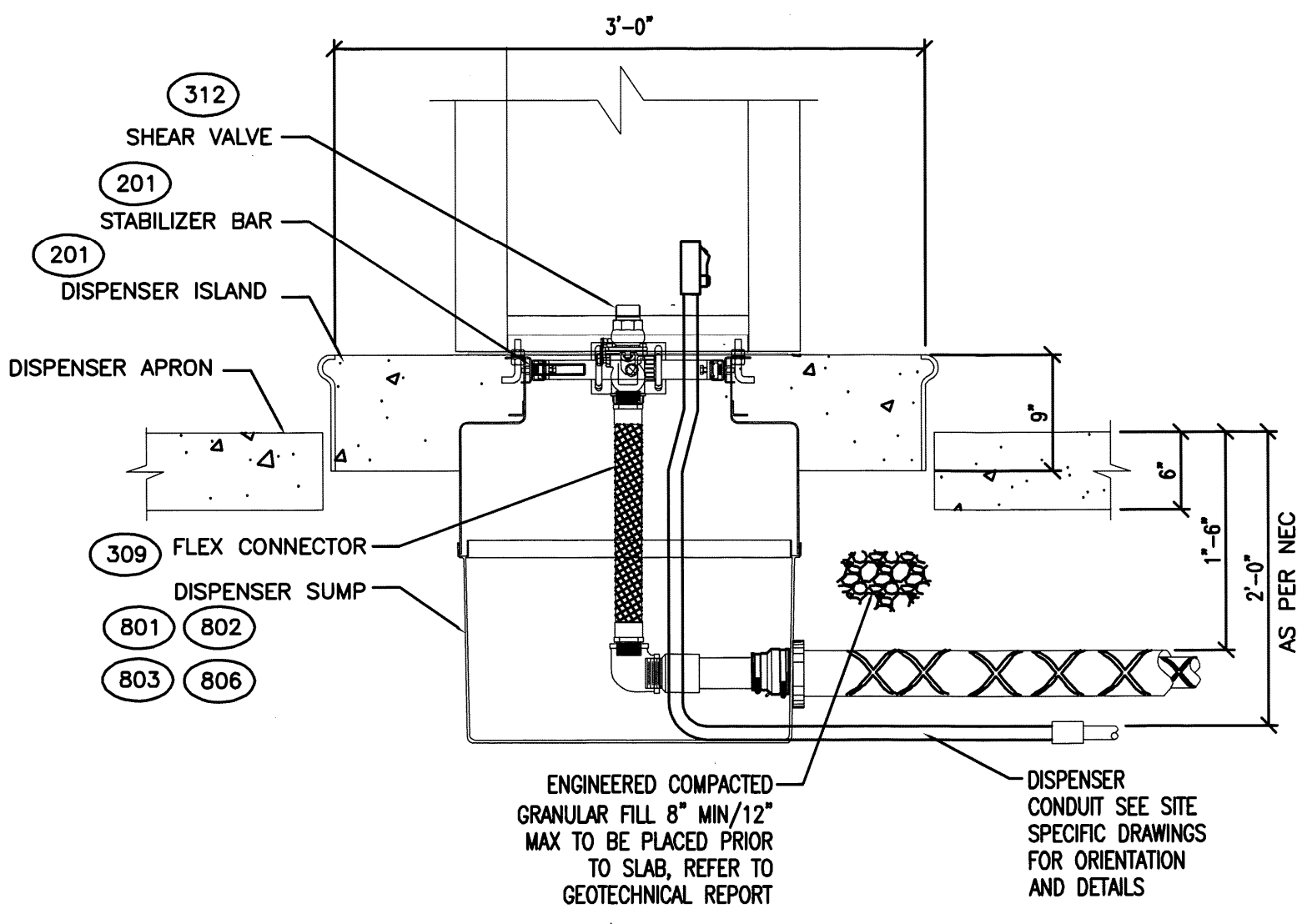
06 DISPENSER ELEVATION DIMENSIONS
 T4.0 SCALE: N.T.S.



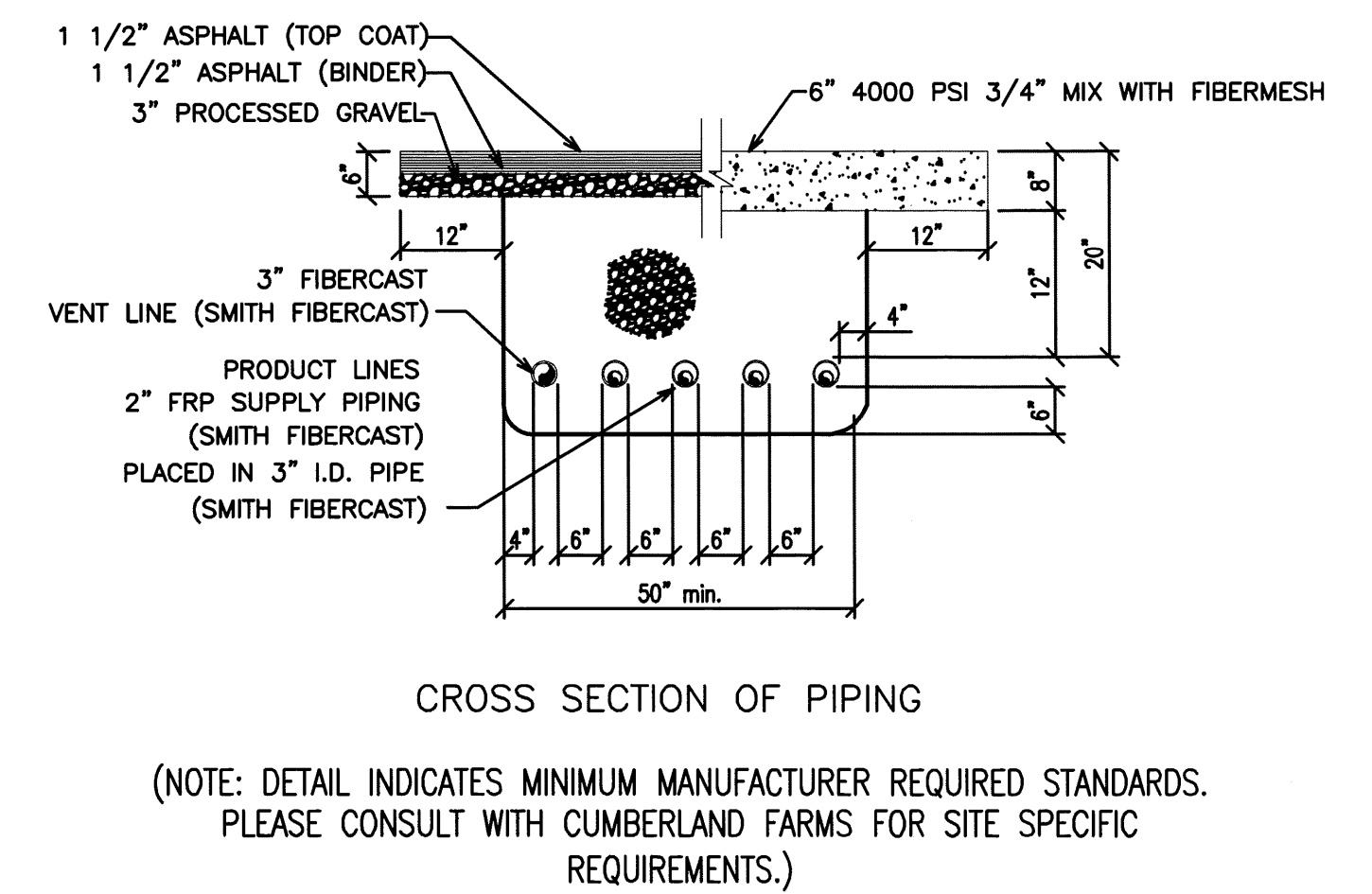
02 TYPICAL PREMIUM TANK SUMP PLAN
 T4.0 SCALE: 1/2" = 1'-0"



04 TYPICAL DIESEL TANK SUMP PLAN
 T4.0 SCALE: 1/2" = 1'-0"

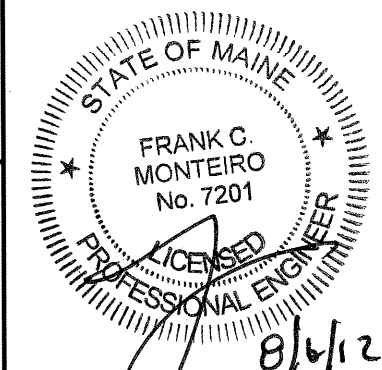


08 TYPICAL DISPENSER SUMP DETAILS
 T4.0 SCALE: 1/2" = 1'-0"



09 TYPICAL TRENCH DETAILS
 T4.0 SCALE: 1/2" = 1'-0"

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 Gas Station# n/a

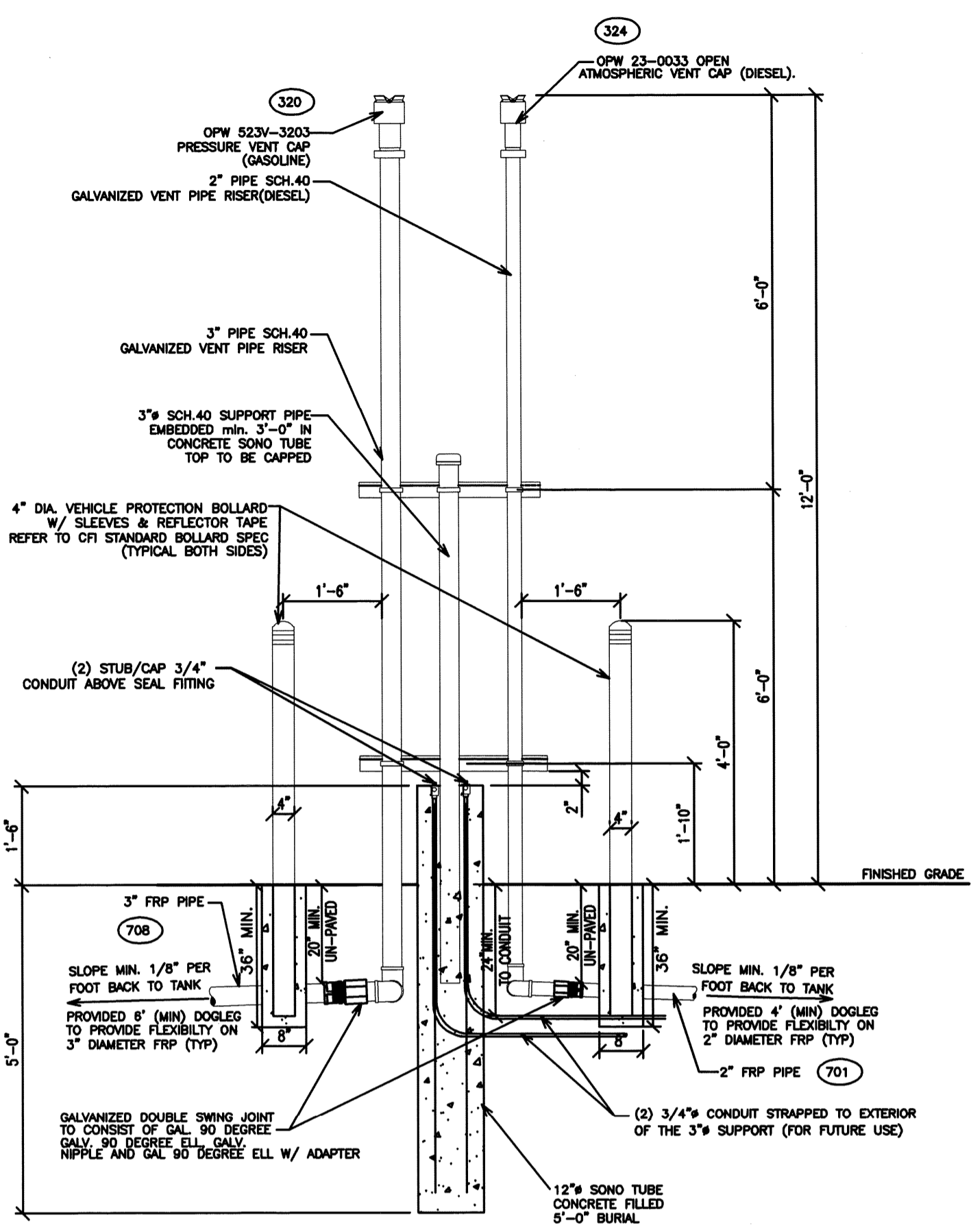
FUEL GUIDELINE DRAWING SHEET NO. 4

DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR:
TWO (2) 20,000 (12/8 SPLIT) GALLON TANKS

Cumberland Farms
 CUMBERLAND FARMS, INC.
 100 Crossing Boulevard
 Framingham, MA 01702

SCALE: AS NOTED
 DATE: February 7, 2012
 FILE: cfi (2)12-8-spl-T4.0
 DRAWN BY: T.M.R.

SUMP & PIPING DETAILS
 T4.0



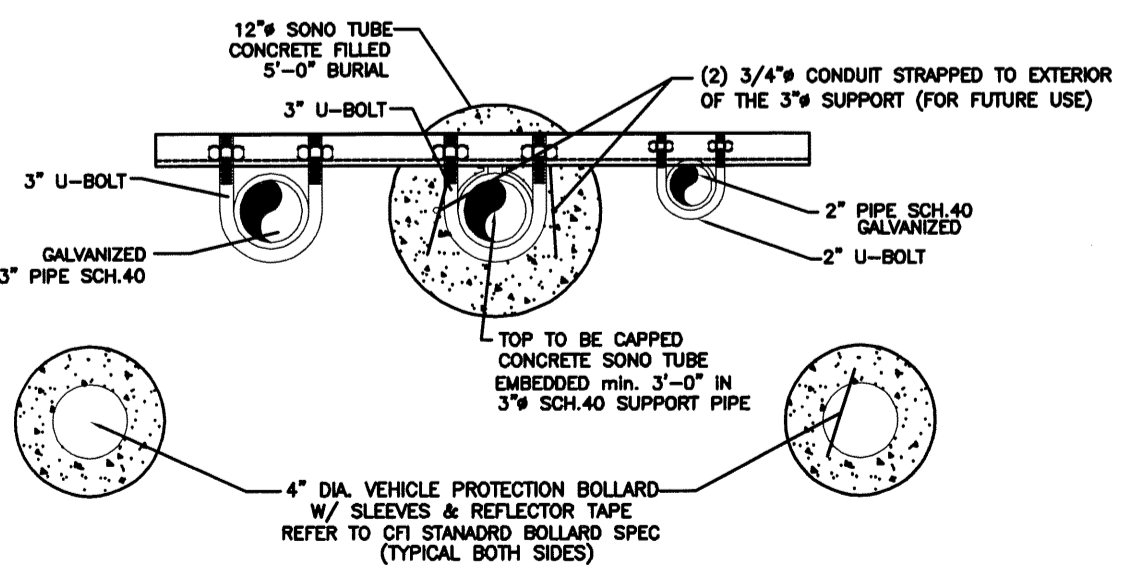
NOTE
 1) ALL GALVANIZED STEEL PIPE IN CONTACT WITH BACKFILL SHALL BE COATED WITH 1/8\"/>

01 VENT CLUSTER ELEVATION DETAIL
 T5.0 SCALE: 1/2\"/>

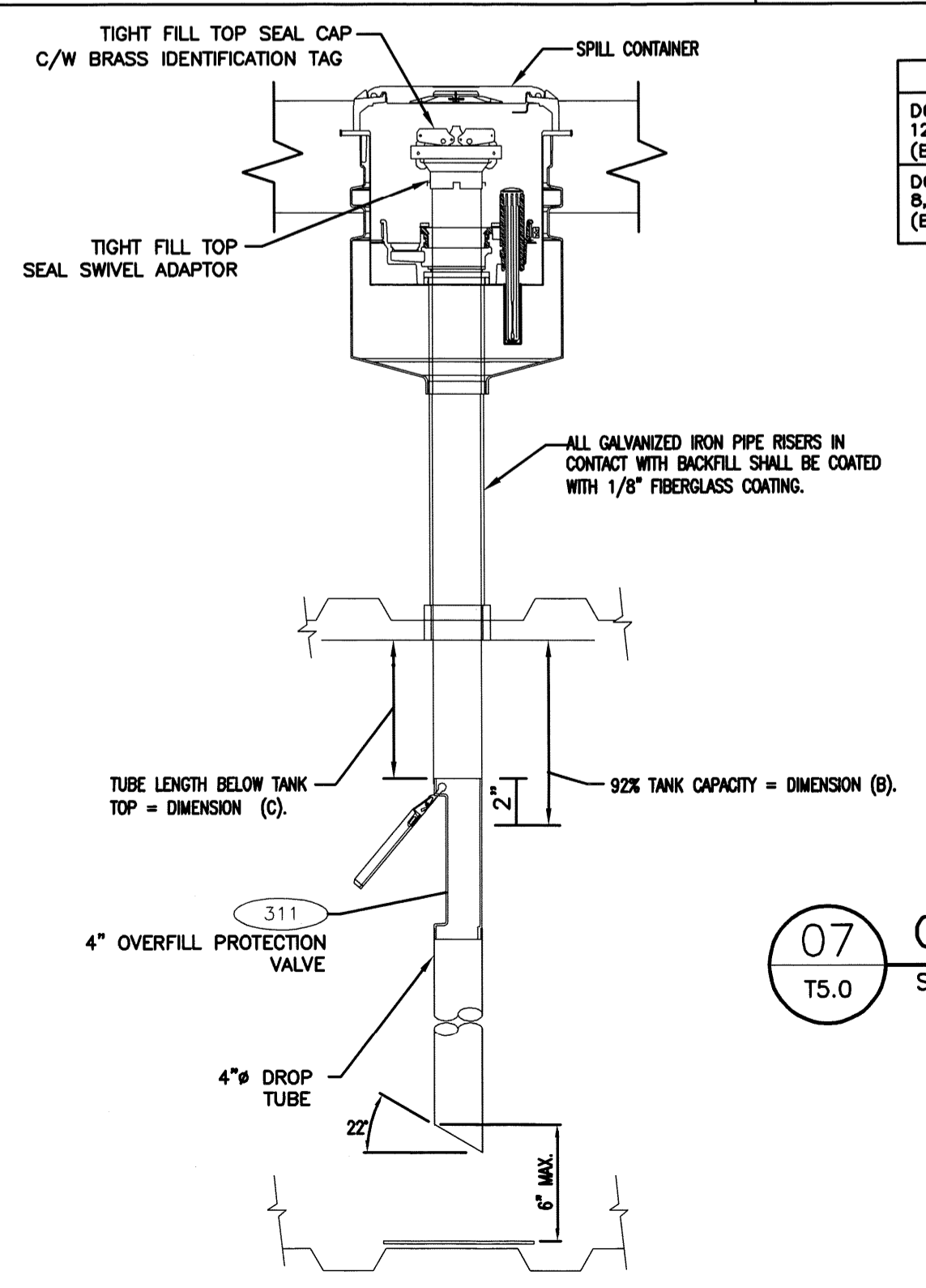
PIPING MANUFACTURER'S TEST REQUIREMENTS, PER SMITH FIBERCAST INSTALLATION INSTRUCTIONS FOR DW AND SW FRP FUEL LINES.

- TEST ENTIRE PRIMARY SYSTEM (HARD WALL) AT 50 P.S.I.
- CONTINUE TO MAINTAIN 50 P.S.I. FOR A PERIOD OF ONE (1) HOUR
- TEST ENTIRE SECONDARY PIPING SYSTEM (HARD WALL) AT 5 P.S.I.
- CONTINUE TO MAINTAIN 5 P.S.I. FOR A PERIOD OF ONE (1) HOUR
- UPON COMPLETION OF INSTALLATION, ENTIRE UNDERGROUND SYSTEM WILL BE PRECISION TESTED BY A LICENSED THIRD PARTY

08 TYPICAL PIPING TEST
 T5.0 SCALE: N.T.S.



02 VENT STACK PLAN VIEW
 T5.0 SCALE: 1/2\"/>



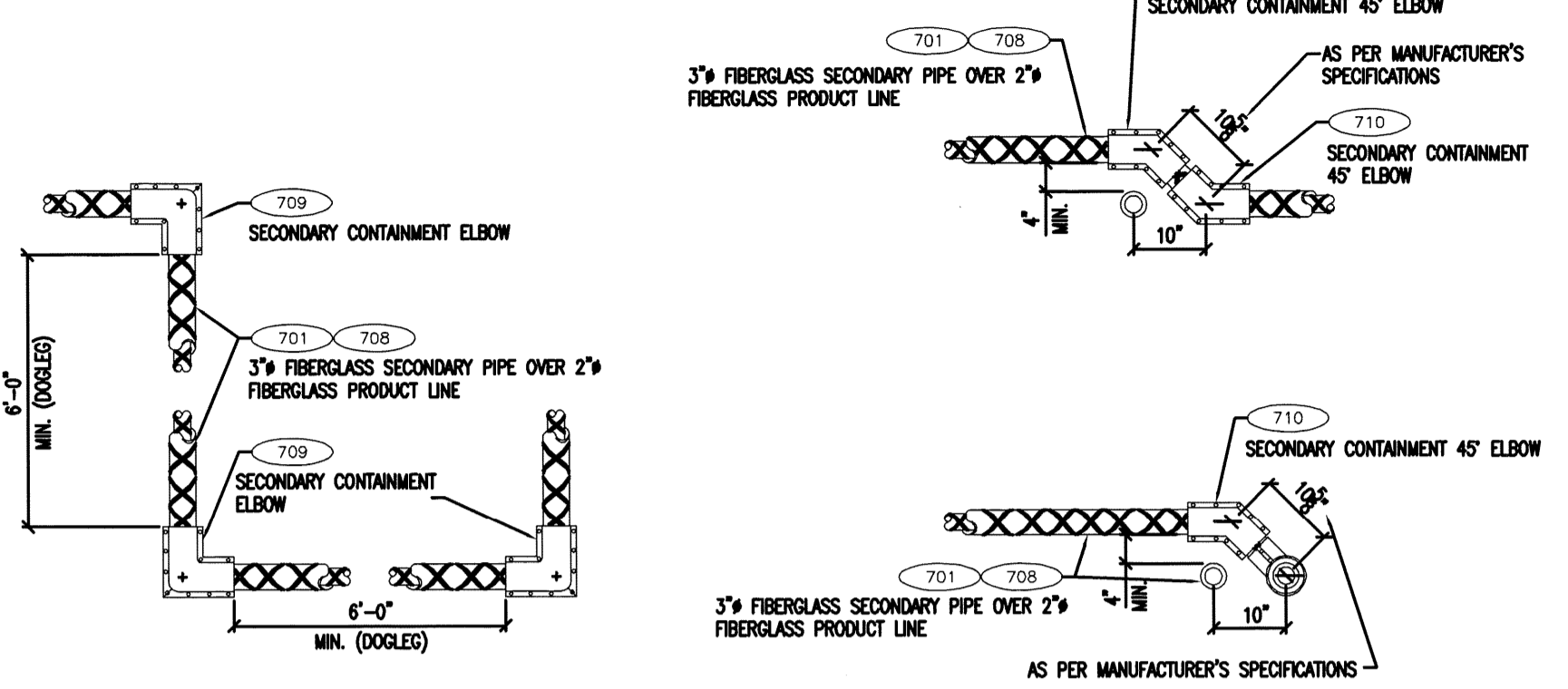
07 OVERFILL PREVENTION VALVE
 T5.0 SCALE: N.T.S.

TANK	DIMENSION (B) = 92% TANK CAPACITY (RESTRICT FLOW) **			
	NOMINAL VOLUME (GAL.)	92% (ACTUAL) VOLUME (GAL.)	DIM. B'	DIM. C'
DOUBLE WALL FRP TANK COMPARTMENT 12,000 GAL - REGULAR MASTER & SLAVE (BASE TANK)	11,873	.92 (11,873) = 10,923	17 5/8"	15 5/8"
DOUBLE WALL FRP TANK COMPARTMENT 8,000 GAL - SUPER & DIESEL (END TANK)	8,531	.92 (8,531) = 7,848	16 1/8"	14 3/8"

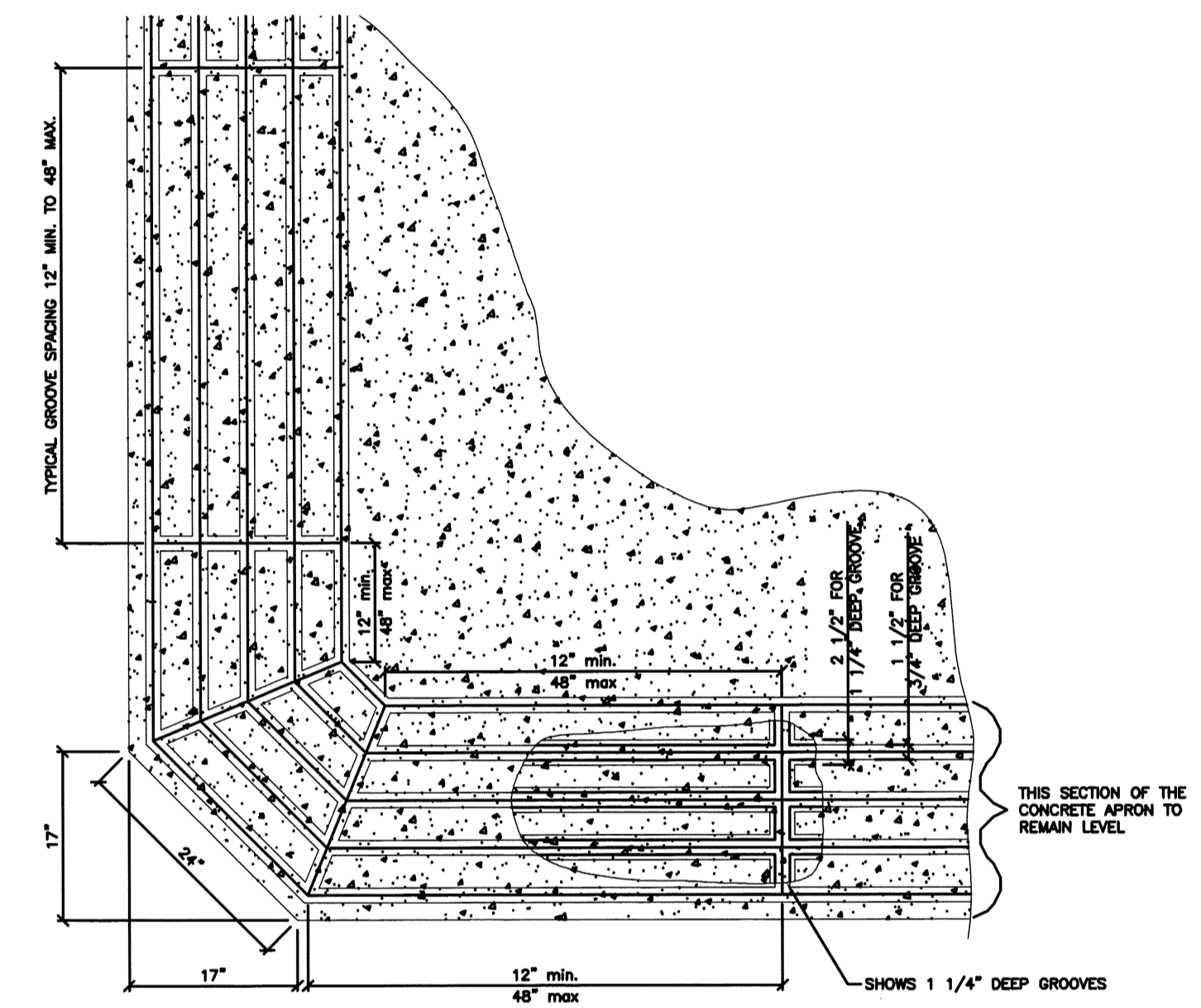
* BELOW THE TANK TOP (I.D.).
 DIM. B CORRESPONDS TO 92% ACTUAL TANK VOLUME.
 DIM. C = THE TOP TUBE LENGTH BELOW TANK TOP (I.D.) = DIM. B - 2".
 ** THE OPW 7150 OVERFILL PREVENTION VALVE IS A TWO STAGE SHUT OFF VALVE DESIGNED TO RESTRICT FLOW TO 5 GALLONS PER MINUTE AT 92% AND COMPLETELY CLOSE AT 95%. SEE MANUFACTURERS LITERATURE FOR CUTTING PROPER TUBE LENGTH.

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NOTE
 FRP DOGLEG:
 6'-0" MIN. STRAIGHT LENGTH OF PIPE (3" DIA. PIPE) FOLLOWING:
 1) EACH PIPE CHANGE IN DIRECTION
 2) EACH CONNECTION TO A FIXED POINT (TANK, DISPENSER, VENT)

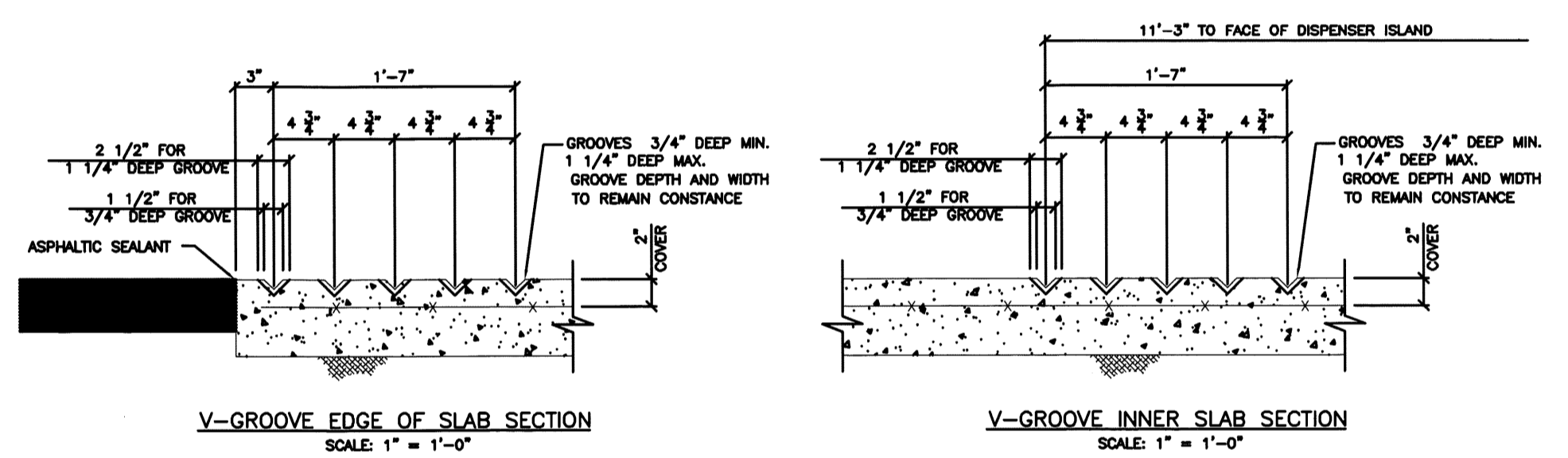


03 TYPICAL PIPING DOGLEG AND CROSSOVER DETAILS
 T5.0 SCALE: N.T.S.

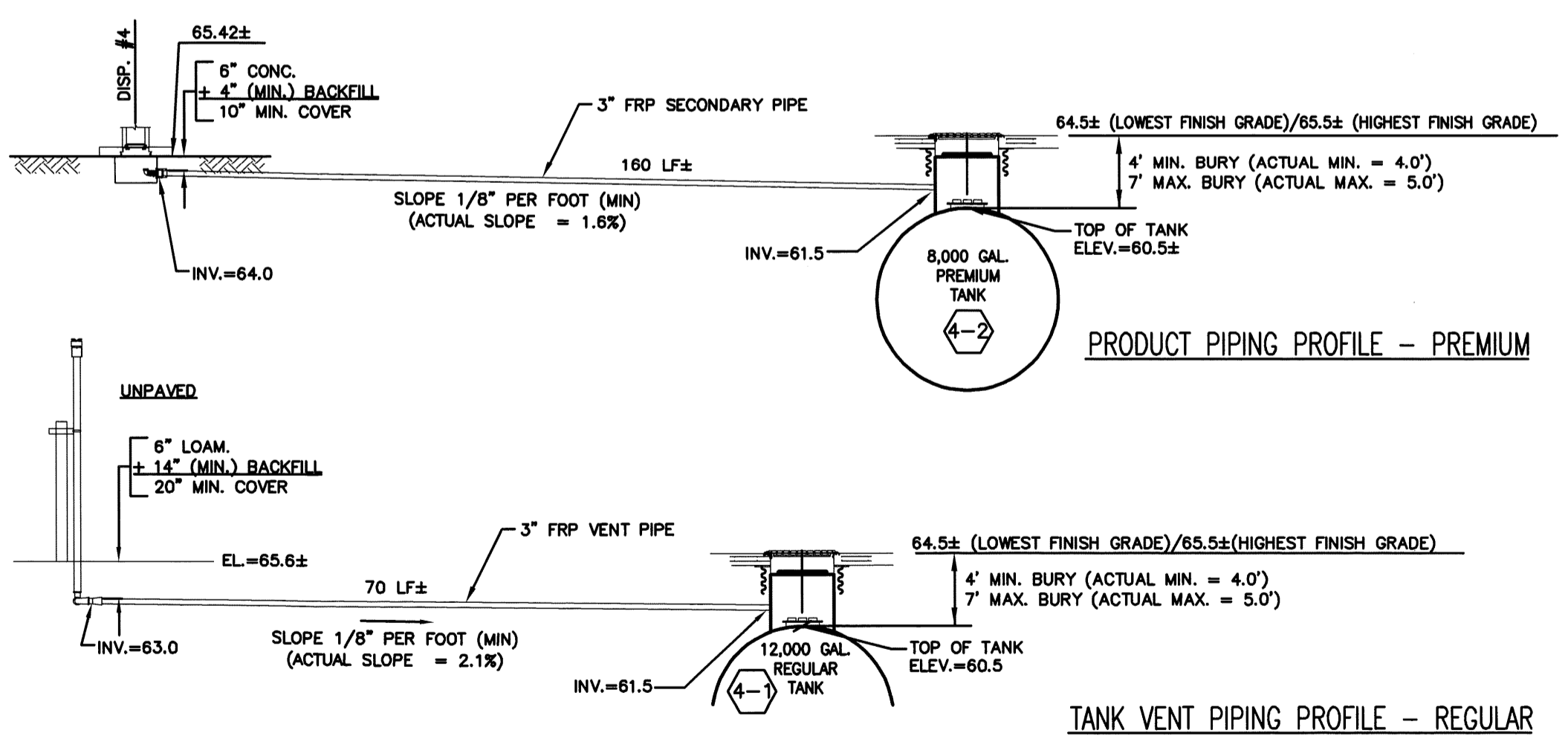


TYPICAL APRON CORNER AND GROOVE SPACING DETAIL
 SCALE: 3/4\"/>

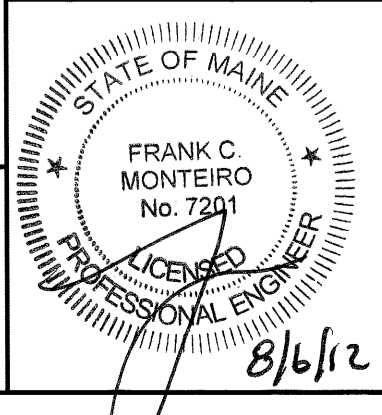
NOTE:
 1. THE POSITIVE LIMITING BARRIER TO BE 5 CONTINUOUS V-GROOVES 3/4"x3/4" DEEP, ON 4 3/4" CENTERS WITH CROSS INTERCONNECTING GROOVES, EQUALLY SPACED ON MIN. 12" MAX. 48" CENTERS.
 2. V-GROOVES SHALL BE TROWELED IN CONCRETE SLAB.
 3. V-GROOVES SHALL BE A CONSTANT WIDTH AND DEPTH FOR THE ENTIRE APRON.
 4. GROOVES MUST BE KEPT CLEAN OF DIRT AND DEBRIS.



05 POSITIVE LIMITING BARRIER DETAILS
 T5.0 SCALE: N.T.S.



06 PIPING PROFILES
 T5.0 SCALE: N.T.S.



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FUEL GUIDELINE DRAWING SHEET NO. 5

DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR:
TWO (2) 20,000 (12/8 SPLIT) GALLON TANKS

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

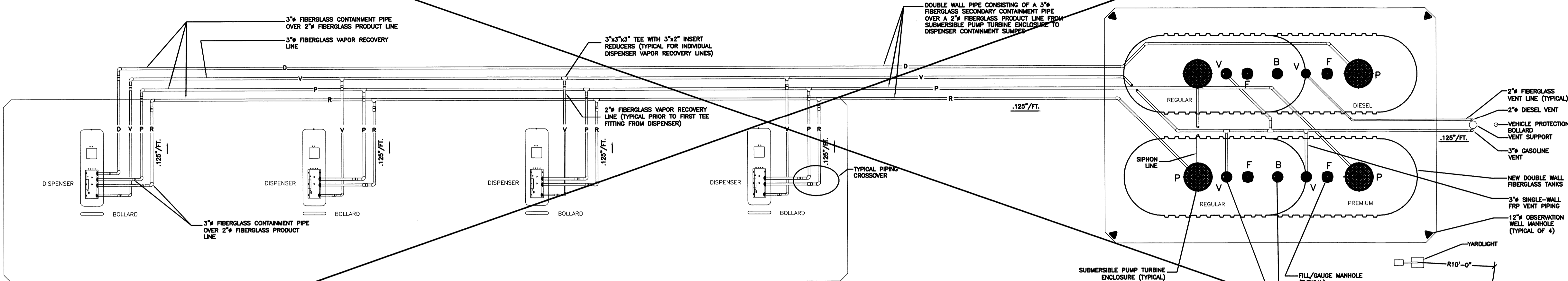
SCALE: AS NOTED
 DATE: February 7, 2012
 FILE: cr (2)12-8-split_T5.0
 DRAWN BY: T.M.R.

SUMP & PIPING DETAILS
 T5.0

LEGEND

- R — NEW REGULAR PRODUCT LINE
- P — NEW PREMIUM PRODUCT LINE
- D — NEW DIESEL PRODUCT LINE
- V — NEW VAPOR RECOVERY LINE
- NEW VENT LINE

.125'/FT. .125'/FOOT MINIMUM PIPING SLOPE BACK TO TANK

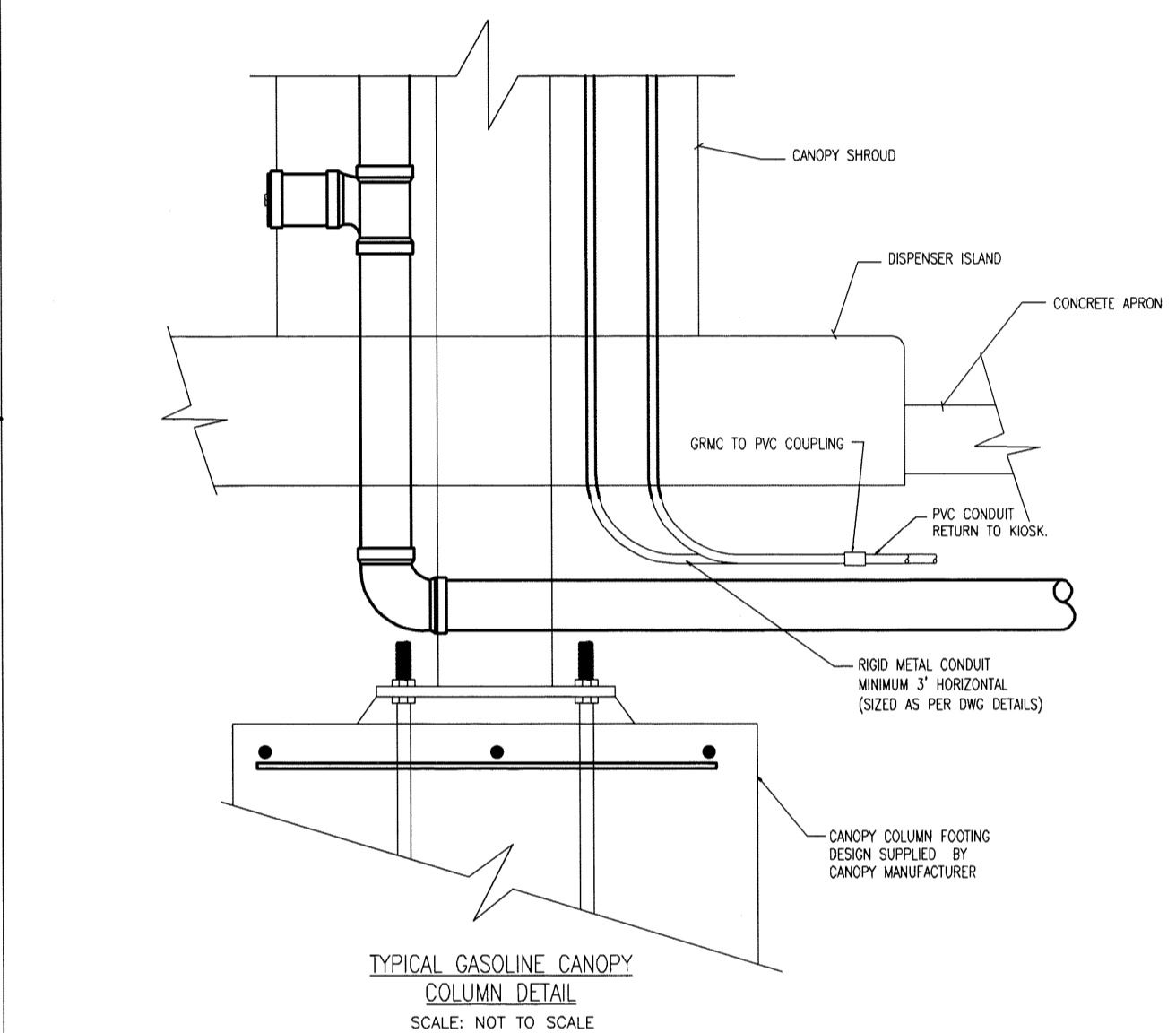
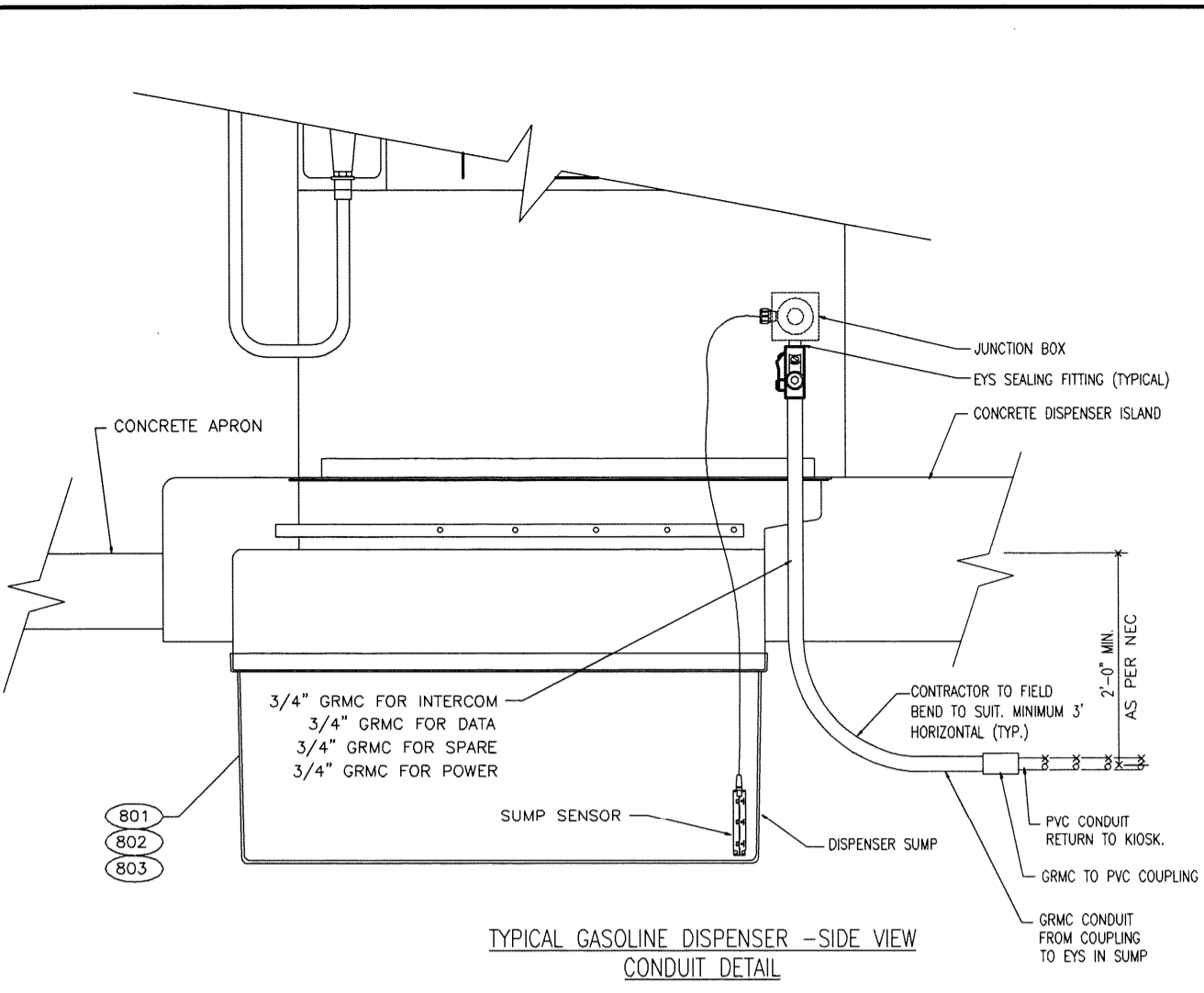


PIPING DIAGRAM
FOR PRODUCT, VAPOR RECOVERY AND VENT PIPING

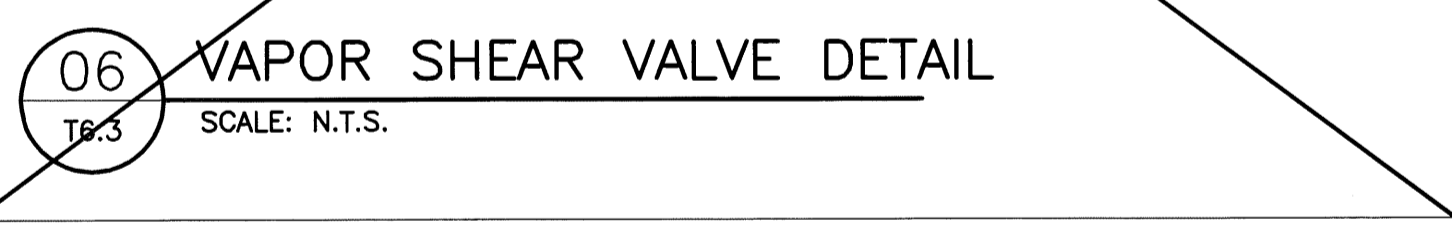
NOTE: SEE SITE PLAN FOR ACTUAL STATION LAYOUT, NUMBER, LOCATION, ARRANGEMENT AND CONFIGURATION OF TANKS, ISLANDS AND DISPENSERS, ETC.

01 TYPICAL PIPING LAYOUT
T6.3 SCALE: 1/4" = 1'-0"

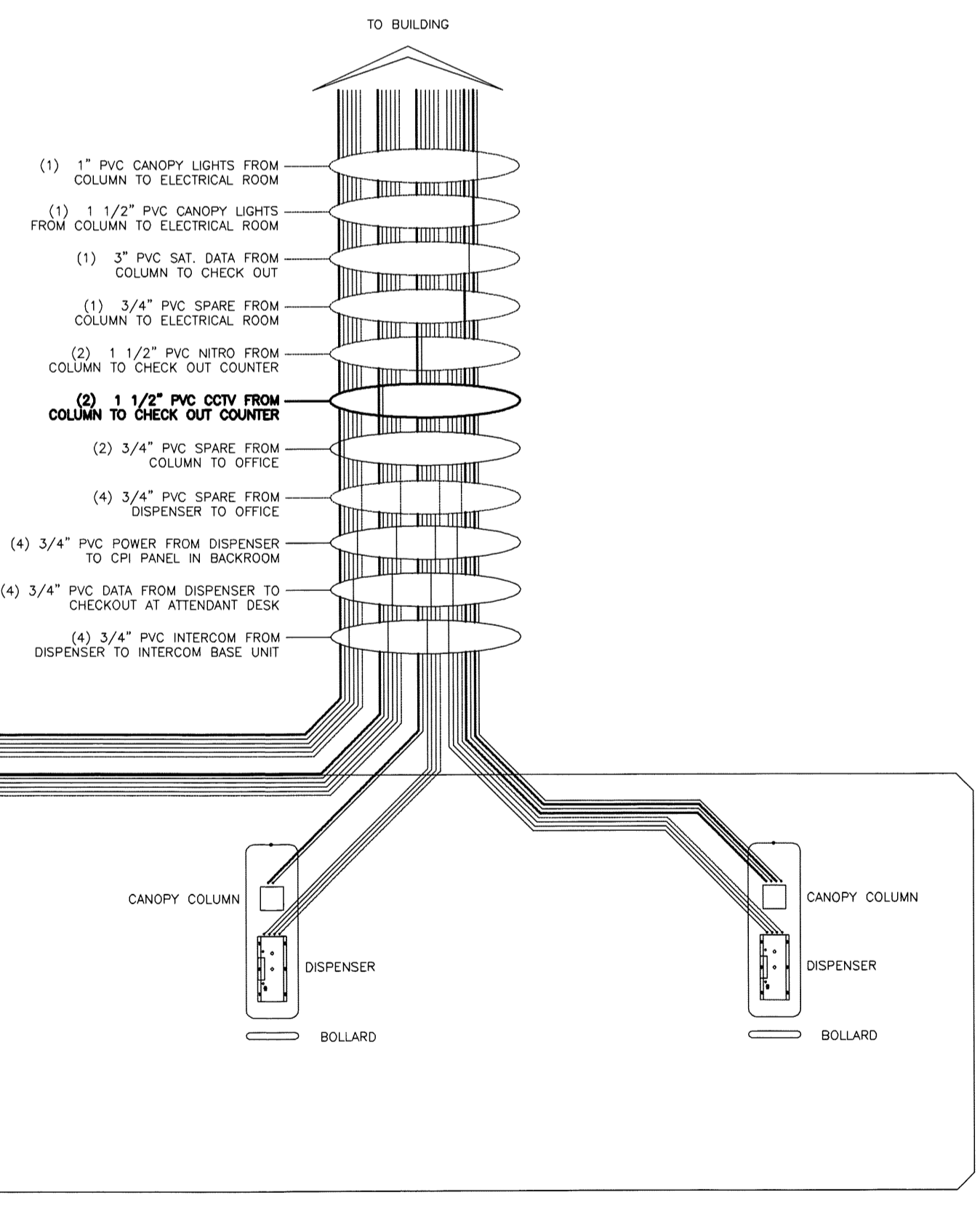
03 TYPICAL DISPENSER SIDE VIEW
T6.3 SCALE: N.T.S.



04 COLUMN DETAIL
T6.3 SCALE: N.T.S.

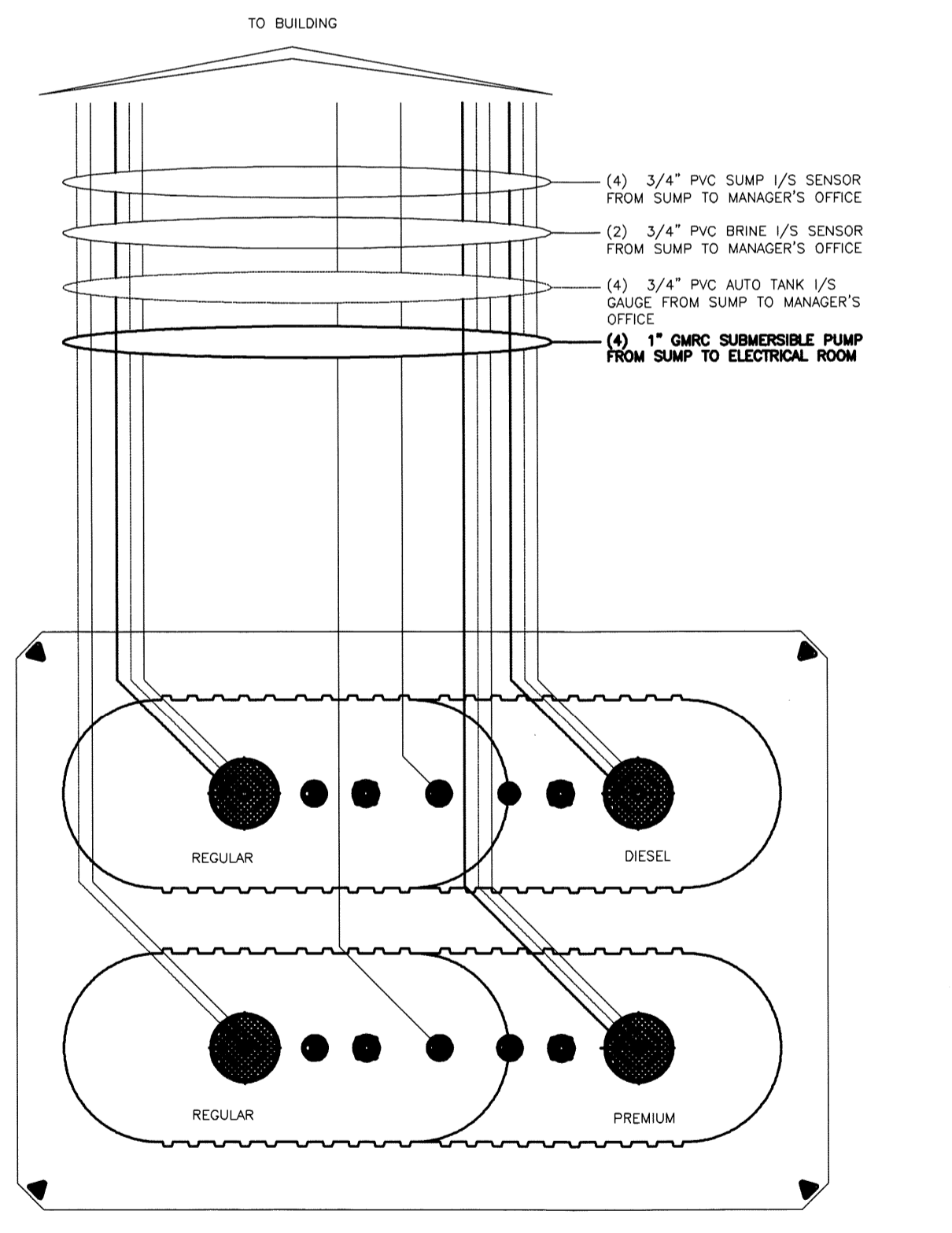


06 VAPOR SHEAR VALVE DETAIL
T6.3 SCALE: N.T.S.



ELECTRICAL DIAGRAM
FOR TANK AND DISPENSER WIRING

NOTE: SEE SITE PLAN FOR ACTUAL STATION LAYOUT, NUMBER, LOCATION, ARRANGEMENT AND CONFIGURATION OF TANKS, ISLANDS AND DISPENSERS, ETC.



05 VENT STACK DETAIL
T6.3 SCALE: N.T.S.

FUEL GUIDELINE DRAWING SHEET NO. 6
STAGE II VAPOR RECOVERY

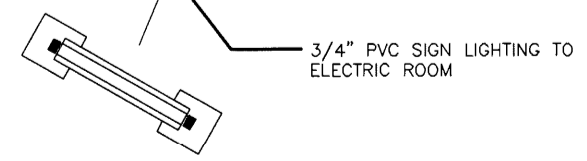
DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR:
TWO (2) 20,000 (12/8 SPLIT) GALLON TANKS

SCALE: AS NOTED
DATE: February 7, 2012
FILE: cfr (2)12-8spR16.3
DRAWN BY: T.M.R.

Cumberland FARMS
CUMBERLAND FARMS, INC.
100 Crossing Boulevard
Frammingham, MA 01702

TANK INSTALLATION DETAILS
T6.3

02 TYPICAL ELECTRICAL CONDUIT LAYOUT
T6.3 SCALE: 1/4" = 1'-0"

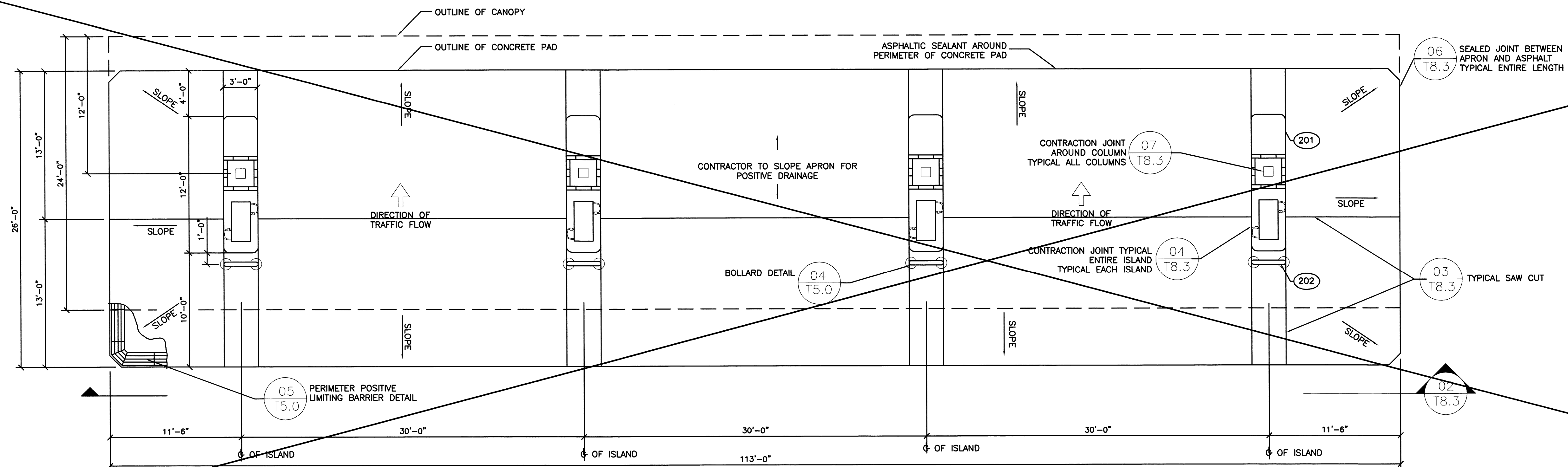


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STATE OF MAINE
FRANK C. MONTEIRO
No. 7201
LICENSED PROFESSIONAL ENGINEER
8/6/12

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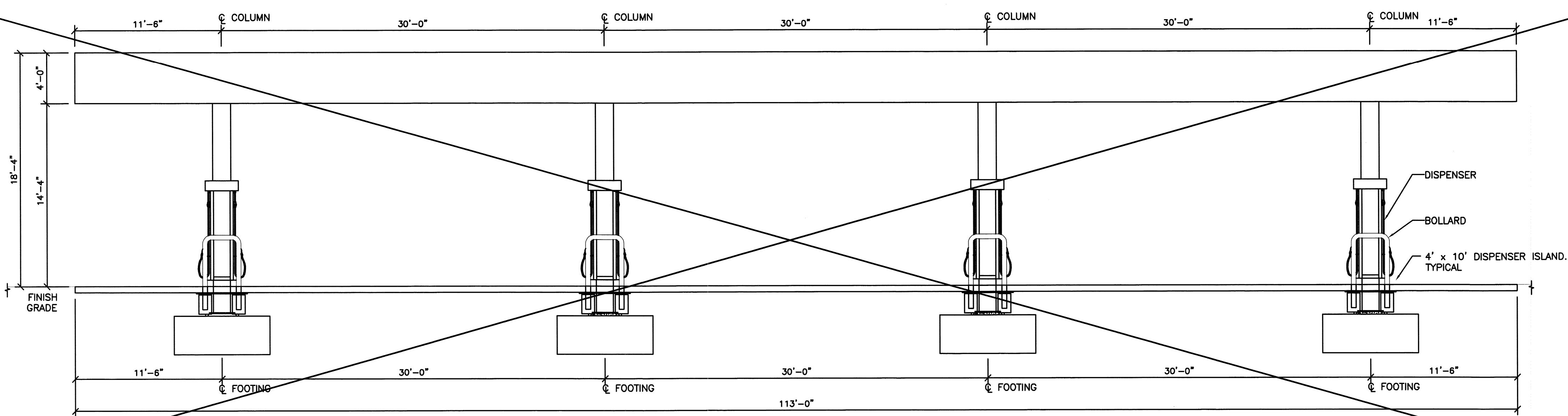
V# n/a
Store# n/a
Gas Station# n/a



01 DISPENSER APRON PLAN
T8.3 SCALE: 3/16" = 1'-0"

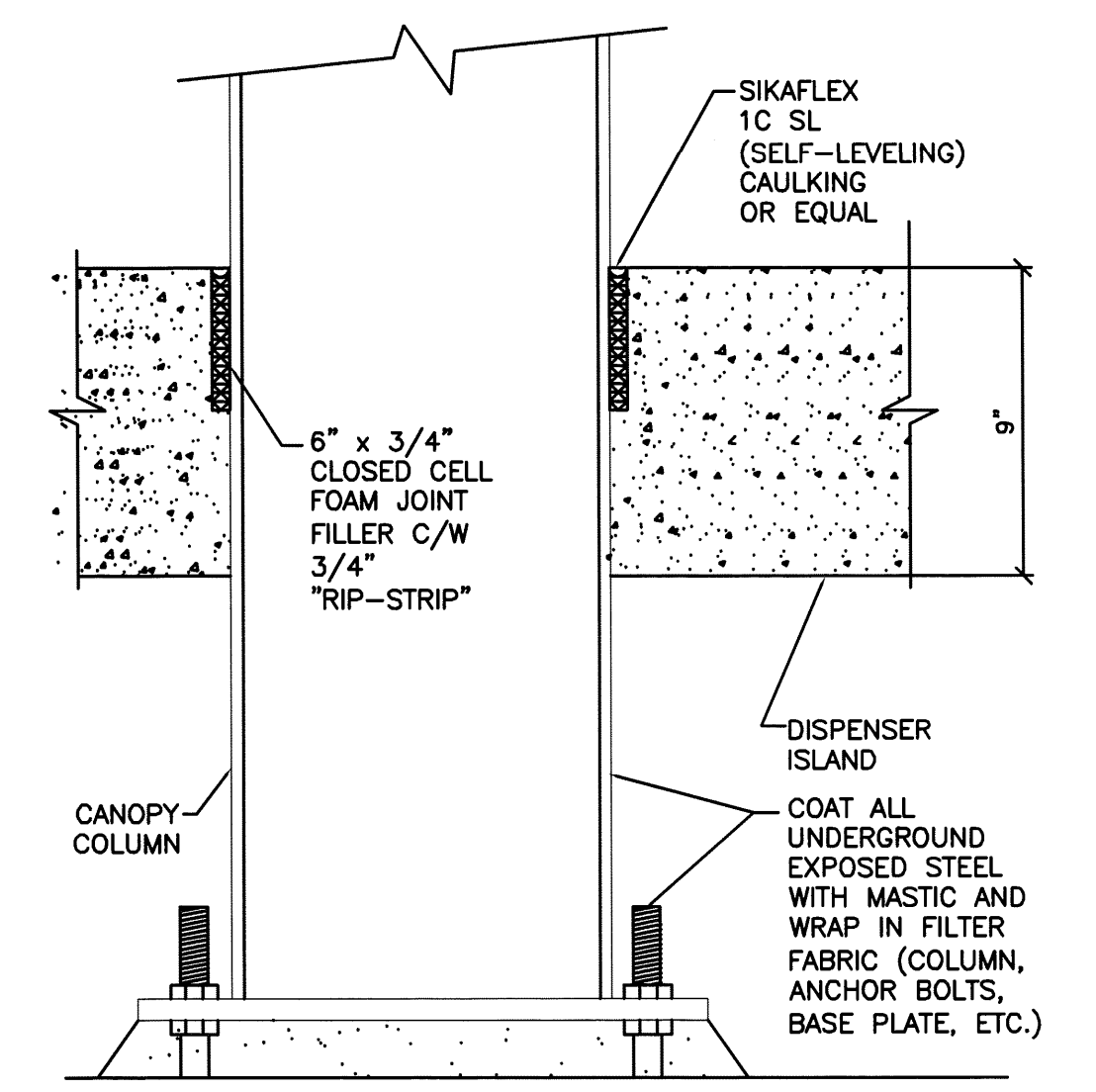
-SEE APPROVED SITE PLANS FOR DIMENSIONS

- NOTES:**
- COORDINATE APRON ELEVATIONS WITH CIVIL DRAWINGS AND FIELD ELEVATIONS.
 - DISPENSER SUMPS TO BE SET IN PLACE AND USED AS A FORM TO POUR CONCRETE AROUND.
 - CONCRETE SPECIFICATIONS:
-SOIL BEARING CAPACITY REQ'D: AS PER GEOTECHNICAL REPORT
-CONC. STRENGTH: 4000psi @ 28 DAYS 3% TO 7% AIR
TROWELLED SMOOTH FINISH WITH TWO COATS SEALING/CURING COMPOUND.
-CANOPY FOOTING CONC. STRENGTH: REFER TO DRAWINGS PROVIDED BY MANUFACTURER
 - ALL EQUIPMENT INSTALLATIONS MUST COMPLY WITH MANUFACTURER'S SPECIFICATIONS.
 - ALL EQUIPMENT AND CONSTRUCTION ARE NEW AND FACILITY IS TO BE ATTENDED SELF-SERVICE.
 - REFER TO CANOPY MANUFACTURER'S DRAWINGS FOR SPECIFIC CANOPY FOOTING OPTIONS.
 - REFER TO MANUFACTURERS FOR ARCHITECTURAL DETAILS ON CANOPY AND COLUMNS.
 - SEE CIVIL PLANS FOR ORIENTATION ON SITE, AND FOR TRAFFIC FLOW

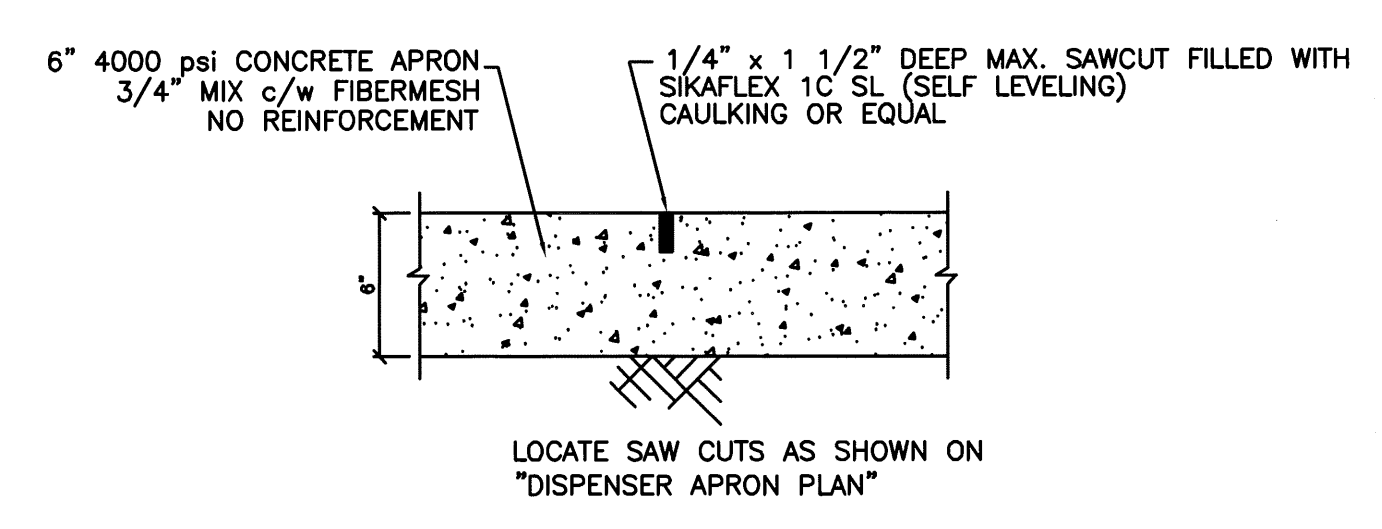


02 DISPENSER APRON SECTION - FRONT VIEW
T8.3 SCALE: 3/16" = 1'-0"

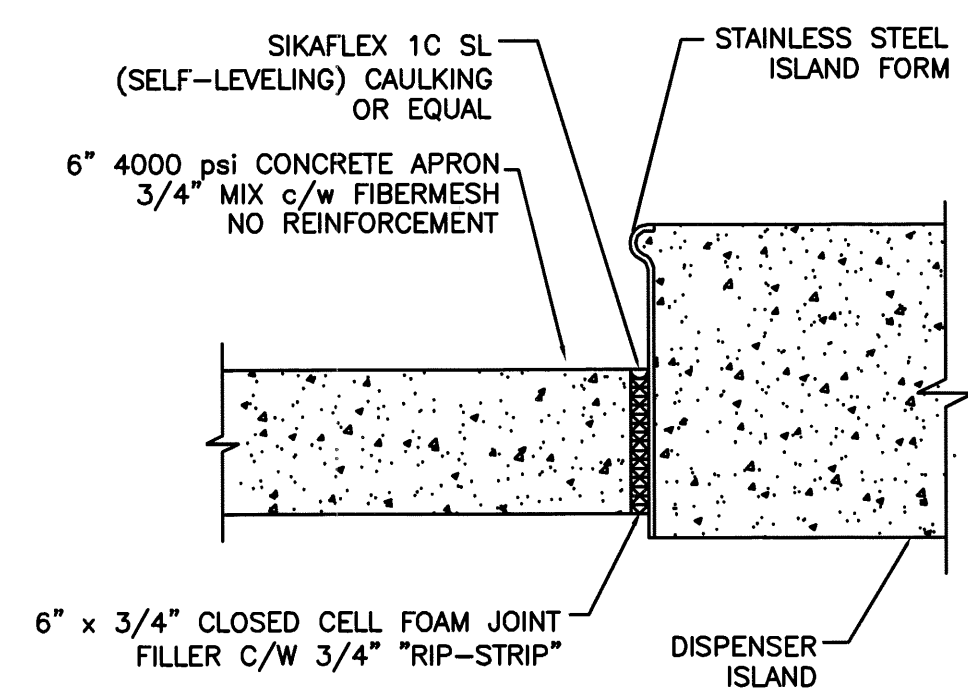
-SEE APPROVED SITE PLANS FOR DIMENSIONS



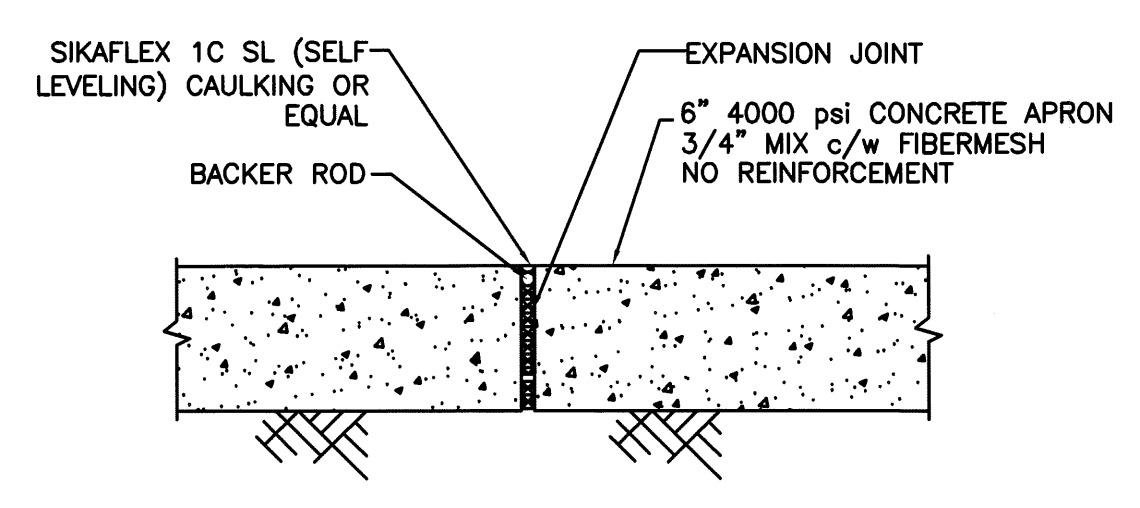
07 ISLAND COLUMN DETAIL
T8.3 SCALE: N.T.S.



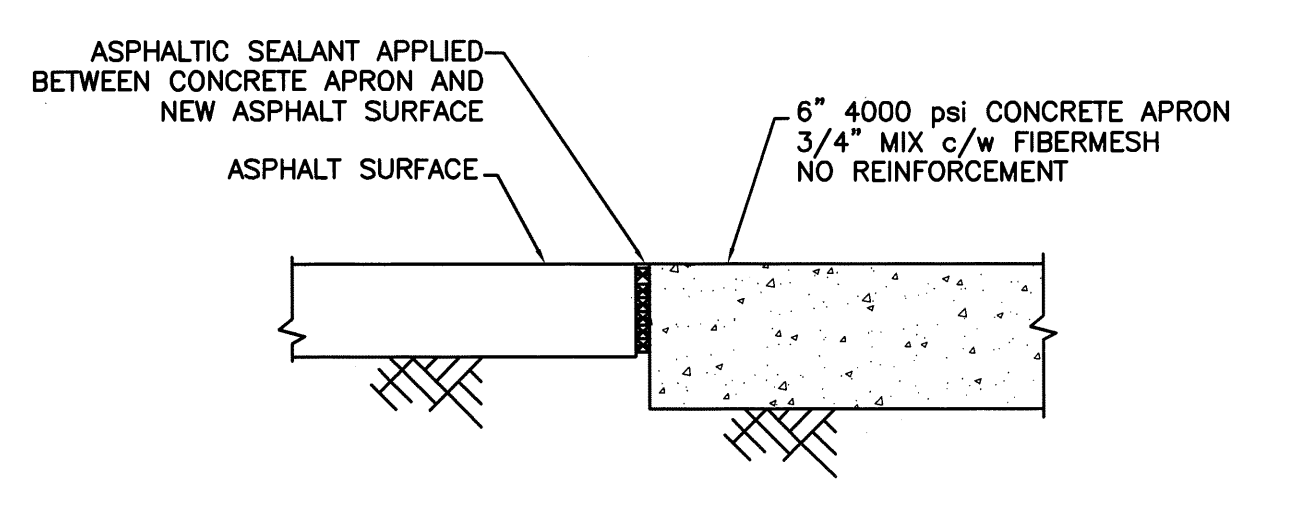
03 TYPICAL SAWCUT DETAIL
T8.3 SCALE: N.T.S.



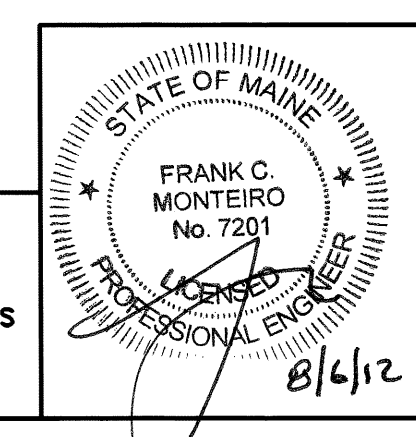
04 TYPICAL ISLAND/APRON DETAIL
T8.3 SCALE: 1" = 1'-0"



05 TYPICAL EXPANSION JOINT DETAIL
T8.3 SCALE: 1" = 1'-0"



06 TYPICAL CONCRETE/ASPHALT DETAIL
T8.3 SCALE: 1" = 1'-0"



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FUEL GUIDELINE DRAWING SHEET NO. 8

DOUBLE WALL FIBERGLASS TANK INSTALLATION FOR:
TWO (2) 20,000 (12/8 SPLIT) GALLON TANKS

CUMBERLAND FARMS, INC.
100 Crossing Boulevard
Frammingham, MA 01702

SCALE: AS NOTED
DATE: February 7, 2012
FILE: CF (2)12-8spit-18.3
DRAWN BY: T.M.R.

DISPENSER APRON PLAN, SECTIONS AND DETAILS
T8.3

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