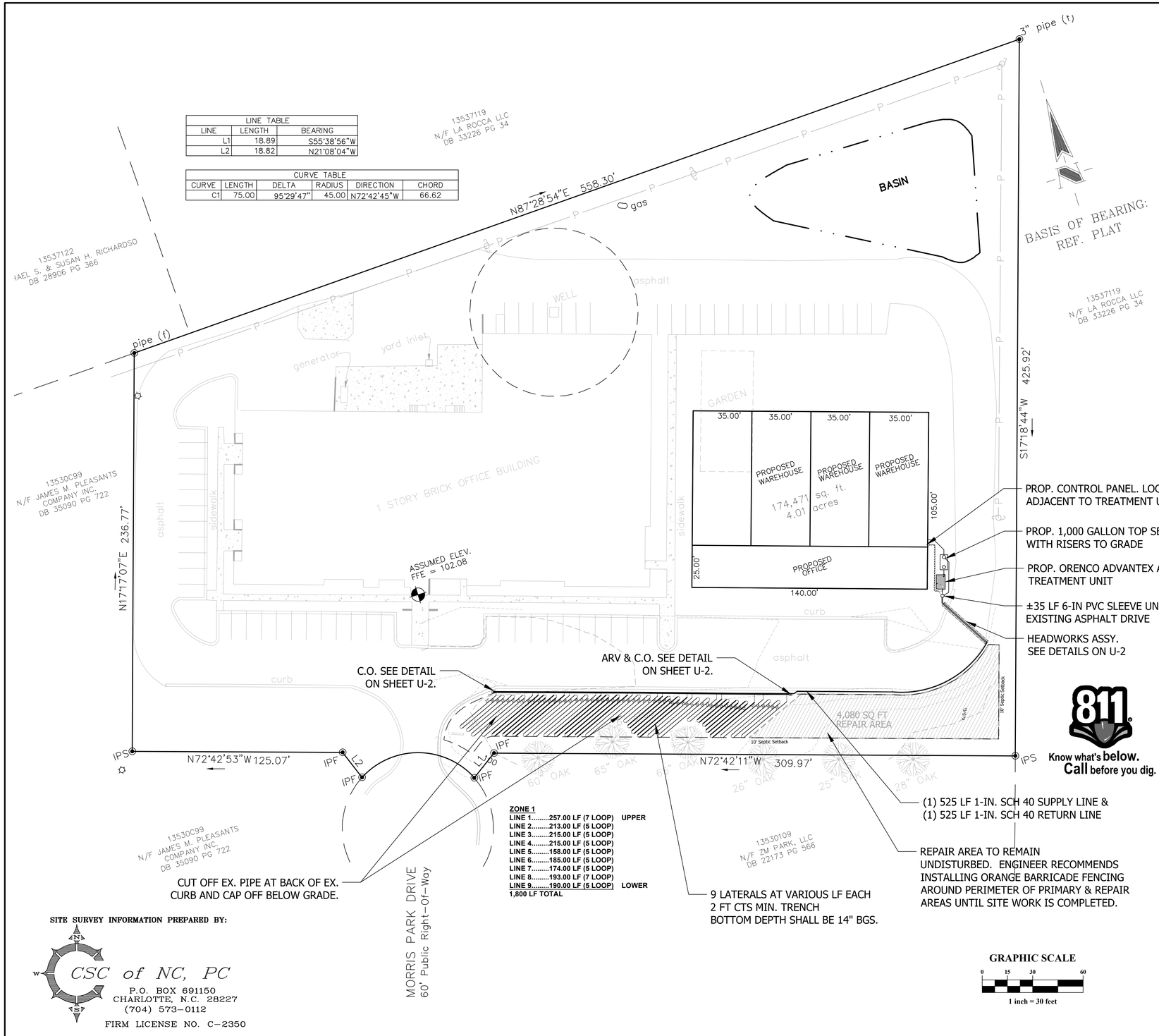
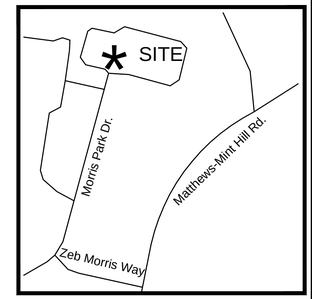
| LINE TABLE | | |
|---|---|---|
| LINE | LENGTH | BEARING |
| L1 | 18.89 | S55°38'56"W |
| L2 | 18.82 | N21°08'04"W |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | DELTA | RADIUS | DIRECTION | CHORD |
| C1 | 75.00 | 95°29'47" | 45.00 | N72°42'45"W | 66.62 |




**ZONE 1**
**LINE 1.....257.00 LF (7 LOOP) UPPER**
**LINE 2.....213.00 LF (5 LOOP)**
**LINE 3.....215.00 LF (5 LOOP)**
**LINE 4.....215.00 LF (5 LOOP)**
**LINE 5.....158.00 LF (5 LOOP)**
**LINE 6.....185.00 LF (5 LOOP)**
**LINE 7.....174.00 LF (5 LOOP)**
**LINE 8.....193.00 LF (7 LOOP)**
**LINE 9.....190.00 LF (5 LOOP) LOWER**
**1,800 LF TOTAL**

**GRAPHIC SCALE**
0 15 30 60
1 inch = 30 feet




VICINITY MAP
NO SCALE

| DESIGN NOTES: | |
|---|---|
| DESIGN FLOW (TOTAL): | 360 G/D |
| LTAR: | 0.125 G/D/SF |
| REPAIR LTAR: | 0.125 G/D/SF |
| SEPTIC TANK SIZE: | 1,000 GALLON (BAFFLED) |
| EFFLUENT FILTER: | OSI MODEL FTPS0436-28-NC |
| ADVANCED TREATMENT: | ORENCO ADVANTEX AX-20RT |
| RECIRCULATION PUMP: | ORENCO MODEL PF300512 |
| TREATMENT STANDARD: | TS-I |
| FIELD DOSING PUMP: | ORENCO MODEL PF201512 |
| SUBSURFACE DISTRIBUTION: | SUBSURFACE DRIP |
| NO. OF ZONES: | 1 |
| LATERAL LENGTH: | Zone 1: 9 Lines @ Various LF EA - 1,800 LF |
| SUPPLY MAIN SIZE: | (1) 1-INCH SCH 40 PVC |
| SUPPLY MAIN LENGTH: | 525 LF |
| RETURN MAIN SIZE: | 1-INCH SCH 40 PVC |
| RETURN MAIN LENGTH: | 525 LF |
| SYSTEM FLOW: | 900 EMITTERS @ 0.53 G/H = 7.95 G/M |
| 8 RUNS/DAY X 5.66 MIN X 7.95 G/M = 360 G/D | |

**NOTE:**
**WATER TO THE FACILITY WILL BE SUPPLIED BY A WATER WELL LOCATED GREATER THAN 50 FEET FROM ANY SEPTIC SYSTEM COMPONENT.**

- **REFER TO SPECIFICATION PACKAGE FOR MATERIALS SELECTION AND INSTALLATION REQUIREMENTS**
- **REFER TO SHEET U-2 FOR TREATMENT PLAN/PROFILE, INSTALLATION DETAILS & ELEVATIONS**

**NOTES:**
- SOIL EVALUATION PROVIDED BY MICHAEL ATHANAS, LSS & SCOTT KENNEDY WITH MA&A.
- REFER TO SHEET U-2 FOR SYSTEM DETAILS & ELEVATIONS.
- PRIOR TO ANY CONSTRUCTION, BARRICADE ALL DISPOSAL AREAS FROM CONSTRUCTION TRAFFIC
- CLEAR DRAIN FIELD OF ALL DEBRIS, LIMBS, ETC. LIGHTLY HAND SMOOTH ANY IRREGULAR SURFACES.
- PRIOR TO INSTALLATION OF LATERALS, ENSURE THAT DISPOSAL AREAS ARE CAPABLE OF SHEDDING RAINWATER AND FREE OF ANY LOW AREAS
- NO CUTS OF 2 FT OR MORE WITHIN 15 FT OF DRAINFIELD.
- SEED & MULCH ALL DISTURBED AREAS.
- MAINTAIN 2' MINIMUM SEPARATION ON ALL DRIP TUBING
- OBSERVE ALL SETBACKS.
- AREA IS AVAILABLE FOR SUBSURFACE DRIP REPAIR & SHALL REMAIN UNDISTURBED

811 Know what's **below.** **Call** before you dig.

**SITE SURVEY INFORMATION PREPARED BY:**

CSC of NC, PC
P.O. BOX 691150
CHARLOTTE, N.C. 28227
(704) 573-0112
FIRM LICENSE NO. C-2350

PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS WITHIN MUST BE WITH THE WRITTEN CONSENT OF PIEDMONT DESIGN ASSOCIATES, P.A.

Owner: _____ Approved: _____ Date of Issue: _____

PIEDMONT DESIGN
ENGINEERING • SURVEYING • PLANNING
Associates, P.A.
Suite 101 Westfield Center, 125 East Plaza Drive
Mooresville, North Carolina 28115
Phone:(704) 664-7888 Fax:(704) 664-1778 www.pdapa.com
NCBELS License #C-0907

PREPARED FOR:
PERGIS-NOVA CONSTRUCTION, INC.
3919 PLEASANT PLAINS ROAD
STALLINGS, NC 28104
(704) 684-1205

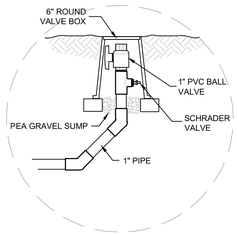
# SUBSURFACE DRIP SEPTIC SYSTEM SITE PLAN
## NEW OFFICE COMPLEX
## 4500 MORRIS PARK DRIVE
## MINT HILL, MECKLENBURG COUNTY, NORTH CAROLINA

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1727 DONALD L. MCKENZIE, JR.

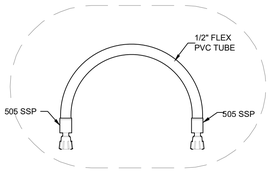
| REVISIONS | BY |
|---|---|
| A REV. PER COMMENTS BY MECK CO. HD STAFF (5/2/22) | DMD |

Date: 3/31/22
Scale: 1" = 30 FT
1' CONTOURS
Drawn: DMD
Checked: DLM
Project: 2022-03-22
Job: 2022-03-22
Sheet
U-1
A 5/2/22
of 2 Sheets

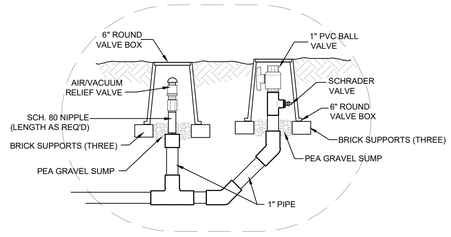
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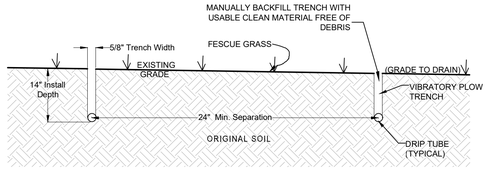

1 U2 CLEAN OUT DETAIL
N.T.S.



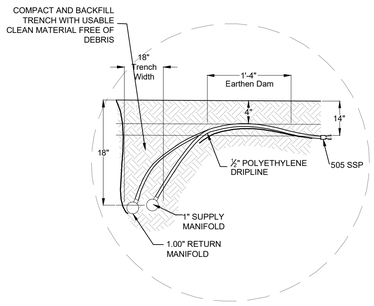

3 U2 LOOP CONNECTION
N.T.S.



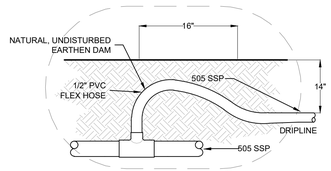

CLEAN OUT AND AIR/VACUUM RELIEF VALVE DETAIL (TYP.)
5 U2 N.T.S.




SECTION THRU DRIP LINES

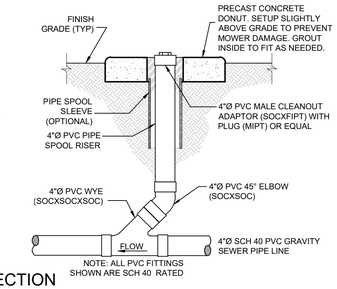



2 U2 DRIP FIELD MANIFOLD DETAIL
N.T.S.

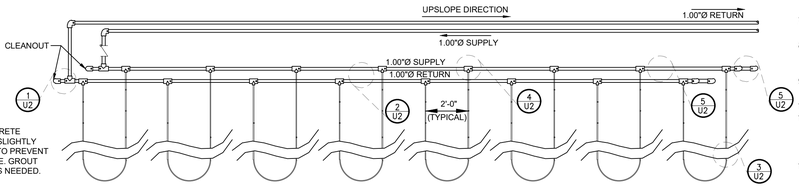



4 U2 SUB MAIN CONNECTION
N.T.S.

REFER TO SPECIFICATION PACKAGE FOR MATERIALS SELECTION AND INSTALLATION REQUIREMENTS



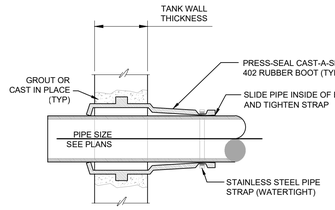

GRAVITY CLEANOUT
N.T.S.




SINGLE ZONE DRIP FIELD (9 LATERALS @ VARIOUS LF EA) WITH A TOTAL OF 1,800 LF OF TUBING W/ EMITTERS SPACED @ 24" CTS. EACH WAY. SEE SITE PLAN FOR DRIP FIELD LAYOUT

DRIP FIELD LAYOUT
N.T.S.

ZONE 1
LINE 1.....257.00 LF (7 LOOP) UPPER
LINE 2.....213.00 LF (5 LOOP)
LINE 3.....215.00 LF (5 LOOP)
LINE 4.....215.00 LF (5 LOOP)
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LINE 7.....174.00 LF (5 LOOP)
LINE 8.....193.00 LF (7 LOOP)
LINE 9.....190.00 LF (5 LOOP) LOWER
1,800 LF TOTAL




STANDARD PIPE PENETRATIONS
N.T.S.



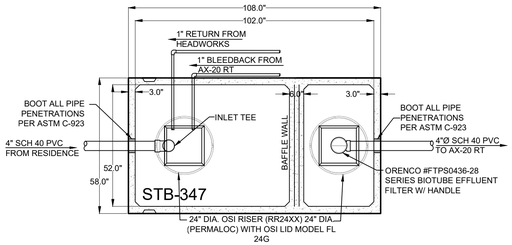

NOTE: SIGN SHALL BE INSTALLED AT TOP OF EVERY OTHER T-POST (OR EVERY 25 FEET WHICHEVER IS GREATER) SUPPORTING 4' HIGH ORANGE SAFETY FENCE SURROUNDING PRIMARY & REPAIR SEPTIC AREAS. CONTRACTOR TO INSTALL PRIOR TO ANY SITE DISTURBANCE.

DRAINFIELD PROTECTION & SIGNAGE
N.T.S.

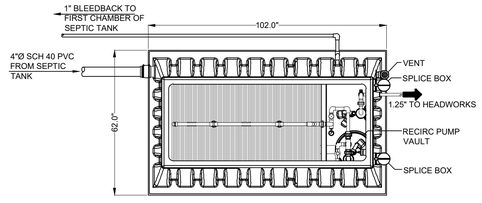
GENERAL NOTES:
1. NOTIFY UNDERGROUND UTILITIES LOCATOR PRIOR TO ANY EXCAVATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL TRADES AND SUBCONTRACTORS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS, ELEVATIONS, AND LOCATION OF ALL EXISTING CONDITIONS AND UTILITIES.
2. ALL PIPING SHALL BE SCH 40 PVC UNLESS OTHERWISE NOTED ON PLANS. ALL PVC PIPES SHALL BE BURIED A MINIMUM OF 3 FEET UNLESS SHOWN OTHERWISE.
3. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS.
4. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA, NCDOT, AND OTHER RELATED SAFETY REQUIREMENTS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL CONSTRUCTION DAMAGE EXPEDITIOUSLY AND AT NO ADDITIONAL COST TO THE OWNER.
6. SEPTIC TANK SHALL BE CONSTRUCTED WITH A BAFFLE WALL DIVIDING THE TANK INTERIOR 2/3rd TO 1/3rd. THE BAFFLE WALL SHALL BE CONSTRUCTED TO PERMIT PASSAGE OF EFFLUENT THROUGH A SLOT OR HOLES LOCATED BETWEEN 45 & 55 PERCENT OF THE INTERIOR DEPTH.
7. ALL TANKS SHALL HAVE A MINIMUM 28-DAY CONCRETE STRENGTH OF 4,500 PSI.
8. TANK SHALL MEET REINFORCING REQUIREMENTS TO ACCOMMODATE 3,000 POUNDS PER SQ. FT. EITHER STEEL REINFORCING WIRE. REBAR OR APPROVED FIBER MAY BE USED.
9. ALL SERVICE ACCESS OPENINGS SHALL BE A MINIMUM OF 24 INCHES.
10. RISERS TO BE CAST IN PLACE AT TIME OF TANK CONSTRUCTION
11. ALL TANKS AND EFFLUENT FILTERS SHALL BE APPROVED BY ENGINEER & NCDHHS. EFFLUENT FILTERS SHALL BE SIZED FOR DESIGN FLOW AND EXTEND DOWN TO 50-PERCENT OF LIQUID LEVEL.
12. ALL JOINTS (MID-SEAM, TOP-SEAM) SHALL BE SEALED USING CONCRETE SEALANTS BUTYL SEALANT # CS-102 MEETING ASTM C-990.
13. TANKS SHALL BE LEAK-TESTED PRIOR TO SYSTEM START UP BY APPLYING A VACUUM OF 5-INCHES OF MERCURY WITH RISER ASSEMBLIES IN PLACE OR A 24-HOUR STATIC WATER TEST IN ACCORDANCE WITH ASTM STANDARDS.
14. ALL PIPE PENETRATIONS THROUGH PRECAST CONCRETE TANKS SHALL BE PRESS-SEAL CAST-A-SEAL 402 RUBBER BOOTS AND GROUTED.
15. ALL TANK RISERS AND LIDS SHALL EXTEND A MINIMUM OF 6" ABOVE THE FINISHED GRADE.
16. ALL METAL INSTALLED IN TANKS SHALL BE STAINLESS STEEL.
17. ALL MANHOLES NOT INSTALLED NOT IN TRAFFIC AREAS SHALL HAVE TAMPER RESISTANT BOLTS ON LIDS.
18. CONTROL PANELS SHALL BE INSTALLED A MINIMUM OF 36 INCHES FROM FINISHED GRADE TO BOTTOM OF PANEL BOX. SEAL OFF ALL CONDUITS BETWEEN TANKS AND PANEL.
19. CONTRACTOR TO VERIFY EXISTING SITE POWER SUPPLY (VOLTAGE) BEFORE ORDERING PUMPS, CONTROLS, ETC.

TANK ELEVATIONS

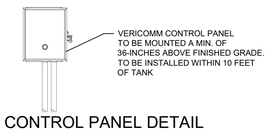
NOTE:TANK DIMENSIONS & ELEVATIONS BASED ON SHOAF PRECAST COMPANY, INC. OTHER STATE APPROVED TANKS MAY BE SUBSTITUTED BUT NOT WITHOUT PRIOR APPROVAL FROM THE ENGINEER. CONTRACTOR SHALL VERIFY DIMENSIONS AND ADJUST GRADES AND FLOAT SETTINGS AS REQUIRED TO CAUSE FLOW AND DOSING AS CALLED FOR. TANKS SHALL NOT BE PUMPED DURING EXTREMELY WET CONDITIONS.



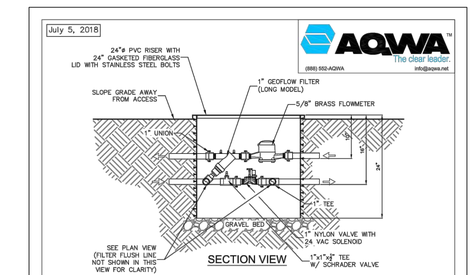

PLAN VIEW - 1,000 GAL SEPTIC TANK
N.T.S. TOP SEAM TANK ONLY



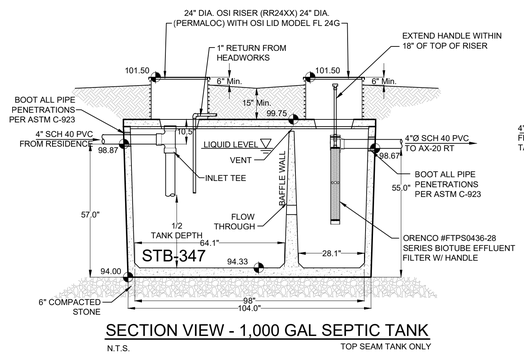

PLAN VIEW - ORENCO AX-20 RT
N.T.S. AX20RT Mode 3B



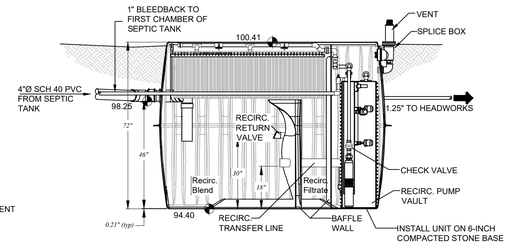

CONTROL PANEL DETAIL
N.T.S.



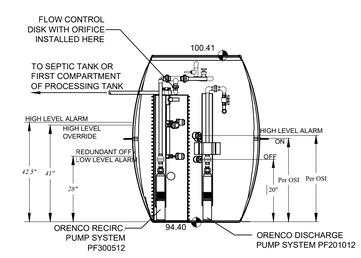

SINGLE ZONE AUTOMATIC HEADWORKS




SECTION VIEW - 1,000 GAL SEPTIC TANK
N.T.S. TOP SEAM TANK ONLY




SECTION VIEW - ORENCO AX-20 RT
N.T.S. AX20RT Mode 3B




SECTION VIEW - ORENCO AX-20 RT
N.T.S. DISCHARGE CHAMBER

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PIEDMONT DESIGN
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Associates, P.A.
Suite 101 Westfield Center, 125 East Plaza Drive
Mooresville, North Carolina 28115
Phone:(704) 664-7888 Fax:(704) 664-1778 www.pdapa.com
NCBELS License #: C-0907

PREPARED FOR:
PERGS-NOVA CONSTRUCTION, INC.
3919 PLEASANT PLAINS ROAD
STALLINGS, NC 28104
(704) 684-1205

SUBSURFACE DRIP SEPTIC SYSTEM DETAILS
NEW OFFICE COMPLEX
4500 MORRIS PARK DRIVE
MINT HILL, MECKLENBURG COUNTY, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17227 DONALD L. MARTIN 5-19-2022

| REVISIONS | BY |
|---|---|
| A REV. PER COMMENTS BY MECK CO. HD STAFF (5/2/22) | DMD |

Date: 3/31/22
Scale: AS SHOWN
Drawn: DMD
Checked: DLM
Project: 2022-03-22
Job: 2022-03-22
Sheet U-2
A 5/2/22
of 2 Sheets

I:\Engineering\1-Projects\2022\2022 Misc Septic\2022-03-22_Morris Park Drip, Meck Co\dwg\U-2.dwg, 5/2/2022 12:32:25 PM, dfearon