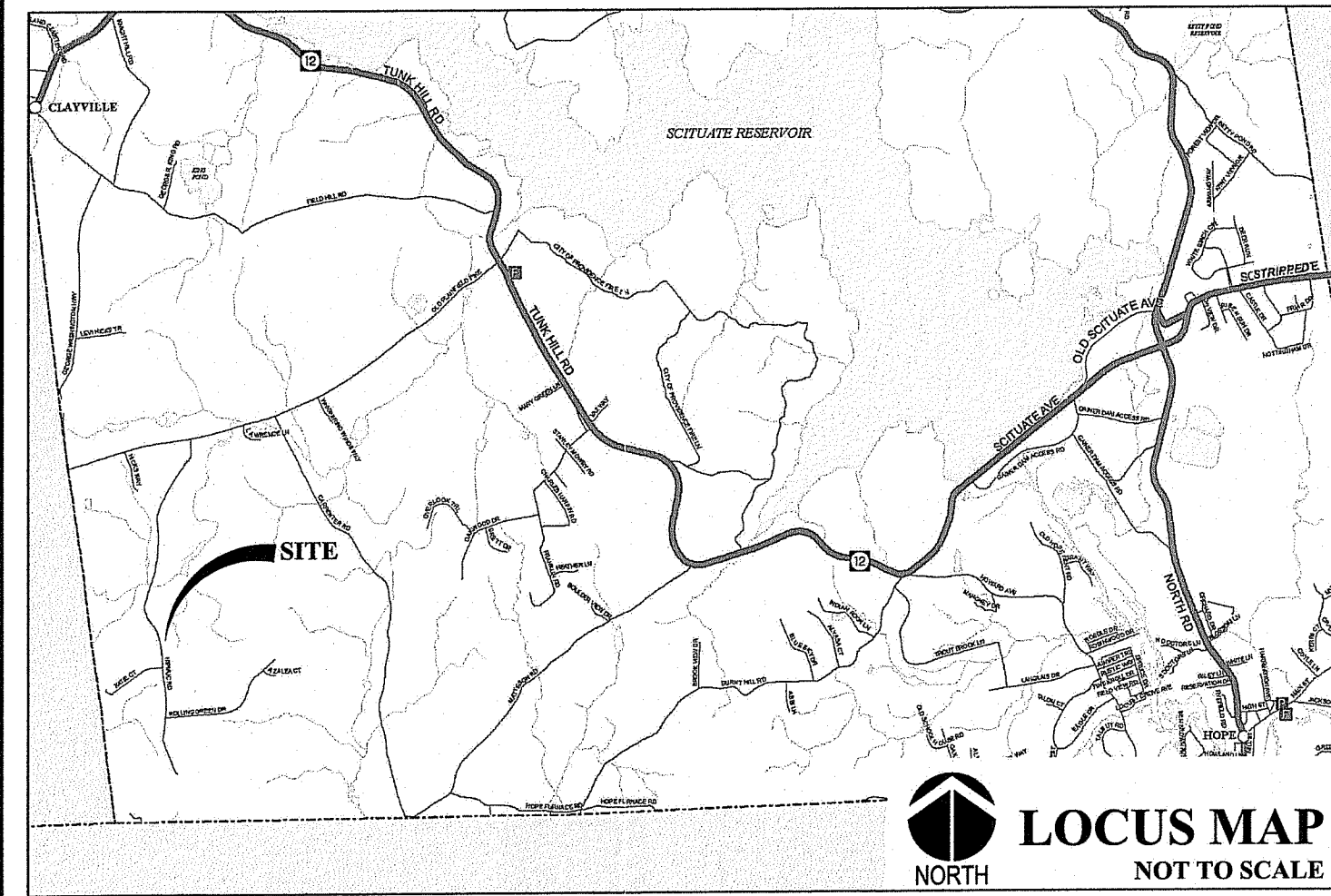


SITE PLANS FOR A PROPOSED 3-BEDROOM SINGLE FAMILY HOME AP 50, LOT 35 NIPMUC ROAD SCITUATE, RI

ZONING DISTRICT: RR-120



GENERAL NOTES:

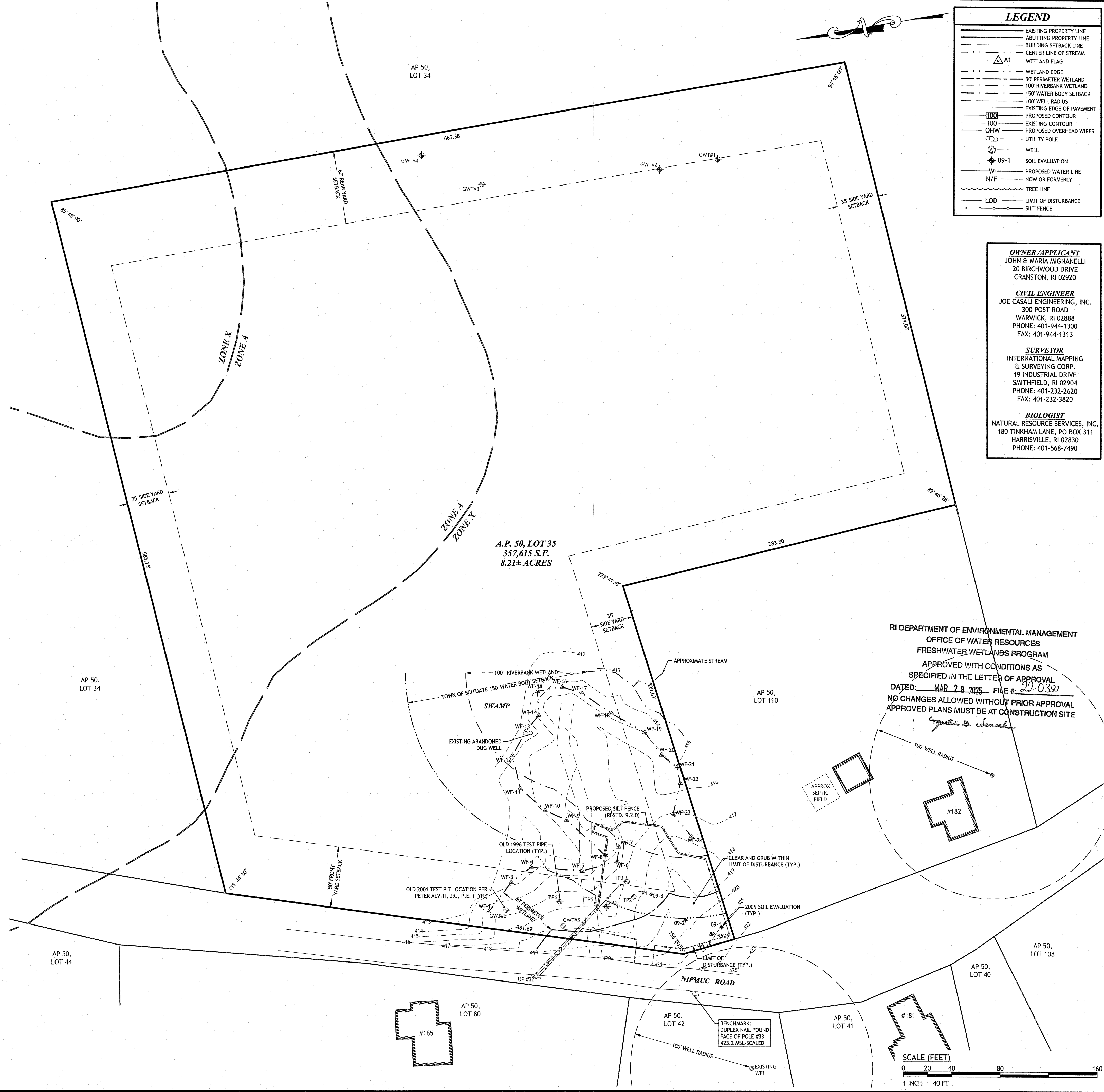
1. THE OWNER/APPLICANT OF THIS PROJECT IS JOHN & MARIA MIGNANELLI, 20 BIRCHWOOD DRIVE, CRANSTON, RHODE ISLAND 02920.
2. CLASS I PROPERTY LINE SURVEY OF NORTH WESTERN & SOUTH WESTERN PROPERTY LINES AND CLASS III TOPOGRAPHIC SURVEY COMPLETED BY INTERNATIONAL MAPPING & SURVEYING CORP., 19 INDUSTRIAL DRIVE, SMITHFIELD, RI IN APRIL 2010.
3. THE PERIMETER PROPERTY LINE SHOWN FOR AP 50, LOT 35 FROM PLAN ENTITLED, "PROPERTY LINE RETRACEMENT SURVEY EXISTING CONDITIONS" FOR JOHN A. & MARIA G. MIGNANELLI BY BOYER AND ASSOCIATES.
4. EXISTING UTILITIES HAVE BEEN PLOTTED FROM BEST AVAILABLE INFORMATION. LOCATION OF ALL UNDERGROUND STRUCTURES ARE APPROXIMATE ONLY.
5. PORTIONS OF THE SUBJECT PARCEL ARE LOCATED WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND ZONE "A" (AREAS WITHIN THE 100-YEAR FLOOD PLAIN, ELEVATIONS NOT DETERMINED), AS SHOWN ON FLOOD INSURANCE RATE MAP FOR THE TOWN OF SCITUATE, MAP NO. 44007C0385G, EFFECTIVE DATE OF MARCH 2, 2009.
6. SOIL EVALUATIONS PERFORMED BY ECOSYSTEMS SOLUTIONS, INC. AND WITNESSED BY RIDEM ON DECEMBER 7, 2009.
7. WETLAND FEATURES HAVE BEEN FLAGGED BY NATURAL RESOURCE SERVICES, INC. ON APRIL 12, 2022 AND FIELD LOCATED BY JOE CASALI ENGINEERING, INC.
8. THE ENTIRE SITE IS LOCATED WITHIN THE SCITUATE RESERVOIR WATERSHED AREA.

RR-120 DISTRICT DEMINSIONAL REGULATIONS:

| ZONING CRITERIA | REQUIRED |
|---------------------------|------------|
| MINIMUM LOT SIZE | 120,000 SF |
| MINIMUM LOT WIDTH | 300 FT |
| MINIMUM FRONT YARD DEPTH | 50 FT |
| MINIMUM SIDE YARD DEPTH | 35 FT |
| MINIMUM REAR YARD DEPTH | 60 FT |
| MAXIMUM BUILDING COVERAGE | 15 % |
| MAXIMUM BUILDING HEIGHT | 36 FT |

SOIL EVALUATION DATA:

| TEST HOLE | GROUND ELEV. | SHGWT ELEV. | LIMITING LAYER |
|-----------|--------------|-------------|----------------|
| 09-1 | 421.00 | 419.00 | NONE |
| 09-2 | 419.71 | 417.71 | NONE |
| 09-3 | 418.30 | 417.30 | NONE |



LEGEND

- EXISTING PROPERTY LINE
- ABUTTING PROPERTY LINE
- BUILDING SETBACK LINE
- CENTER LINE OF STREAM
- WETLAND FLAG
- WETLAND EDGE
- 50 PERIMETER WETLAND
- 100 RIVERBANK WETLAND
- 150 WATER BODY SETBACK
- 100 WELL RADIUS
- EXISTING EDGE OF PAVEMENT
- PROPOSED CONTOUR
- EXISTING CONTOUR
- 100' OHW
- PROPOSED OVERHEAD WIRES
- UTILITY POLE
- WELL
- 09-1 SOIL EVALUATION
- PROPOSED WATER LINE
- N/F NOW OR FORMERLY
- TREE LINE
- L/D LIMIT OF DISTURBANCE
- SILT FENCE

OWNER/APPLICANT
JOHN & MARIA MIGNANELLI
20 BIRCHWOOD DRIVE
CRANSTON, RI 02920

CIVIL ENGINEER
JOE CASALI ENGINEERING, INC.
300 POST ROAD
WARWICK, RI 02888
PHONE: 401-944-1300
FAX: 401-944-1313

SURVEYOR
INTERNATIONAL MAPPING & SURVEYING CORP.
19 INDUSTRIAL DRIVE
SMITHFIELD, RI 02904
PHONE: 401-232-2620
FAX: 401-232-3820

BIOLOGIST
NATURAL RESOURCE SERVICES, INC.
180 TINKHAM LANE, PO BOX 311
HARRISVILLE, RI 02830
PHONE: 401-568-7490

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: MAR 28 2025 FILE # 2025-0350
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

**SITE IMPROVEMENT PLANS FOR A PROPOSED
SINGLE FAMILY HOME
NIPMUC ROAD
SCITUATE, RHODE ISLAND
AP 50, LOT 35**

RI Environmental Management
Office of Water Resources
MAY 09 2024

REVISIONS:

| NO. | DATE | DESCRIPTION |
|-----|------------|----------------------------|
| 1 | 7/12/2019 | RIDEM RTC |
| 2 | 12/27/2019 | RIDEM RTC |
| 3 | 3/18/2020 | RIDEM RTC |
| 4 | 6/30/2022 | RIDEM APP. TO ALTER FILING |
| 5 | 1/2/2024 | RIDEM RTC |
| 6 | 5/9/2024 | RIDEM NOTICE |

**NOT FOR CONSTRUCTION
UNLESS APPROVED BY RIDEM**

DRAWN BY: WMLJR
CHECKED BY: JAC
DATE: OCTOBER 2015
PROJECT NO: 03-35

**EXISTING
CONDITIONS
PLAN**

**SHEET
1 OF 4**

Q:\03-35-John Mignanelli\2024 RIDEM Plans\NOTICE.dwg, May 09, 2024 2:09pm

GENERAL OWTS NOTES:

THIS DESIGN IS SUBMITTED TO RIDEM TO BE REVIEWED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. CONSTRUCTION OF THIS SYSTEM WILL REQUIRE THE DESIGNER'S CERTIFICATE OF CONSTRUCTION FOR OWTS.

UNLESS OTHERWISE SPECIFIED, THE SYSTEM HAS NOT BEEN DESIGNED WITH THE PROVISIONS FOR GARBAGE GRINDERS.

THERE ARE NO KNOWN PUBLIC WELLS, EXISTING OR PROPOSED, WITHIN 500 FEET OF THE DESIGNED SYSTEM UNLESS SHOWN.

LEACHFIELD SHALL NOT BE WITHIN 25 FEET OF ANY UPGRADIENT SUBSURFACE DRAIN OR WITHIN 50 FEET OF ANY DOWNGRADIENT SUBSURFACE DRAIN, INCLUDING FOUNDATION DRAINS. THERE ARE NO KNOWN SUBSURFACE DRAINS 25 FEET UPGRADIENT OR 50 FEET DOWNGRADIENT OF THE PROPOSED LEACHFIELD.

NO DRIVING, PARKING OR PAVING WITHIN 10' OF BSF.

THIS SEWERAGE DISPOSAL SYSTEM SHALL CONFORM TO ALL THE REGULATIONS UNDER SECTIONS 42-17.1-2(1), (M) (R) AND (S) AND SECTION 23-19.5-4 AND CHAPTER 42-35 OF THE GENERAL LAWS OF RHODE ISLAND.

ALL PIPES EXCEPT IN THE LEACHING FIELD SHALL BE SIZED 4 INCH DIAMETER SDR 35 WITH WATER TIGHT JOINTS OR EQUIVALENT UNLESS OTHERWISE SPECIFIED.

ALL GRAVITY PIPES UNLESS OTHERWISE SPECIFIED SHALL HAVE A SLOPE NOT LESS THAN 1/8 INCH PER FOOT BUT NO GREATER THAN 3%.

SEPTIC TANK AND DOSING TANK SHALL BE SET ON A LEVEL STABLE BASE THAT WILL NOT SETTLE.

INSPECTIONS OR AS-BUILT PLANS ARE REQUIRED, DESIGNER MUST BE NOTIFIED 48 HOURS IN ADVANCE AND COMPONENTS OF SYSTEM MUST BE LEFT EXPOSED.

BOTTOMLESS SAND FILTER NOTES:

THE BOTTOMLESS SAND FILTER (BSF) IS INCORPORATED AS THE DISPOSAL BED IN THIS DESIGN TO MAXIMIZE THE REMOVAL OF PATHOGENIC ORGANISMS (PAGE 6 RIDEM TRC GUIDELINES).

PER RIDEM NOTICE 4/30/04, TOTAL PEA STONE DEPTH IS INCREASED TO 9' TO REDUCE WINTER FREEZE POTENTIAL.

THE BSF AREA IS TO BE LOCATED AND STAKED IN THE FIELD BY THE INSTALLER PRIOR TO CONSTRUCTION. PROTECTION AGAINST HEAVY VEHICLE TRAFFIC MUST BE ESTABLISHED IN THE BSF AREA PRIOR TO INITIATING ANY CONSTRUCTION OPERATIONS ON THE SITE. DEGRADATION OF THE PROPOSED SITE AREA WILL REQUIRE A RE-DESIGN.

SYSTEM COMPONENTS WITHIN THIS DESIGN ARE AVAILABLE FROM ORENCO SYSTEMS INC., 814 AIRWAY AVENUE, SUTHERLIN, OR. 97479. LOCAL DEALER INFORMATION IS AVAILABLE AT 1-800-348-9843 OR WWW.ORENCO.COM.

A MINIMUM TEN (10) FEET MUST BE MAINTAINED BETWEEN THE BSF AND ADJACENT TREES AND SHRUBS.

INTERMITTENT PRESSURE DOSED EFFLUENT WILL PROVIDE A UNIFORM DISTRIBUTION OF WASTE WATER OVER THE BSF AREA, MINIMIZING LOCALIZED SATURATION. LATERAL GATE VALVES ARE DESIGNED FOR PLACEMENT OFF THE HEADER LINE SO AS TO EQUALIZE HYDRAULIC PRESSURE IN THE DISPERSAL.

THE PRESSURE LINE IS TO BE SLOPED BACK TOWARDS THE PUMP CHAMBER FROM THE BSF FIELD TO ELIMINATE FREEZING.

THE BSF SAND MEDIA MUST CONFORM TO ASTM C-33 SPECIFICATIONS. EFFECTIVE SIZE (D10) OF 0.3 mm AND A UNIFORMITY COEFFICIENT (D60/D10) OF 3.0 TO 4.0. MAXIMUM MATERIAL PASSING THE NUMBER 200 SIEVE SHALL BE 1%. THE INSTALLER SHALL PRODUCE GRADATION ANALYSIS RESULTS FOR THE MATERIAL PROVIDED FROM THE SUPPLIER.

PERIMETER STRIPPING OF THE SOIL MATERIAL BELOW THE BSF IS PROHIBITED, UNLESS FILL MATERIAL IS PRESENT.

THE WALLS OF THE BSF ENCLOSURE MUST BE LINED WITH A 30 MIL PVC LINER WITH ALL BOOTS, PATCHES, REPAIRS, AND SEAMS HAVING THE SAME PROPERTIES AS THE LINER.

ANY PENETRATION THROUGH THE PVC LINER WALL SHALL BE DONE WITH A PVC BOOT ATTACHMENT GLUED TO THE LINER WITH APPROPRIATE RESILIENT SEALER.

EXCAVATOR/BACKHOE BUCKET USED TO PLACE MEDIA SHALL BE WASHED THOROUGHLY BEFORE LOADING PROCESS.

SAND MEDIA SHALL BE PLACED IN 6 INCH LIFTS AND WETTED TO PROVIDE EVEN SETTLING. AFTER PLACEMENT OF EACH LIFT EDGES OF THE FILTER SHALL BE WALKED DOWN, CLEAN SHOES ARE REQUIRED FOR THIS PROCESS.

AFTER SAND MEDIA HAS SETTLED, 3 INCHES OF 3/8 INCH WASHED PEA STONE SHALL BE PLACED OVER SAND MEDIA. AFTER INSTALLATION OF DISTRIBUTION LATERALS ADD 6 INCHES OF WASHED PEA STONE TO COVER THE SYSTEM. NO FILTER FABRIC OF ANY KIND IS TO BE USED BETWEEN THE SAND AND OVERLYING PEA STONE LAYERS.

THE ELEVATION OF THE BSF INVERT SHALL EXTEND 5 FEET BEYOND THE WALL PERIMETER.

WHILE NOT NORMALLY EXPERIENCED, THERE HAVE BEEN REPORTED INSTANCES WHERE SAND FILTER SYSTEMS HAVE BEEN KNOWN TO EXPERIENCE PROBLEMS WITH FREEZING OF PIPES UNDER EXTREME COLD CONDITIONS. WHILE MOST SAND FILTER INSTALLATIONS OPERATE PROPERLY AND WITHOUT FREEZING PROBLEMS, THE POSSIBILITY OF FREEZING MAY EXIST UNDER CERTAIN CIRCUMSTANCES. SHOULD THE OWNER WISH TO MAXIMIZE THE POSSIBILITY OF THIS POSSIBILITY, THE OWNER MAY ELECT THE OPTION OF INSTALLING HEAT TRACING SYSTEM ON THE PIPELINES. OWNER SHOULD CONTACT MANUFACTURERS/SUPPLIERS OF SUCH EQUIPMENT FOR FURTHER INFORMATION.

SUPPORT WALLS ARE NEEDED TO PREVENT CAVING OF FILTER WALLS DURING CONSTRUCTION. THESE WALLS SHALL BE RIGID AND MADE OF PLYWOOD (OR EQUIVALENT) AND 2" x 4" SUPPORT BOARDS.

A PERMANENT TOP FRAME STRUCTURE MUST BE PROVIDED ON ANY PORTION OF THE BSF THAT IS INSTALLED ABOVE GRADE (MAX OF 24" ABOVE GRADE). THE PERIMETER OF THE BSF, BELOW THE REQUIRED PERIMETER OF TIMBERS, MAY BE BERMED WITH NATIVE SOIL OR OTHER MATERIAL SUCH AS LANDSCAPE STONE OR OTHER NON-DEGRADING MATERIAL. BELOW GRADE USE OF TIMBERS IS PROHIBITED.

ADVANTEK AX 20 TREATMENT SYSTEM NOTES:

THE AX 20 SYSTEM IS AN ORENCO COMPONENT SYSTEM AND THIS DESIGN IS PREDICATED UPON AN INSTALLATION IN THE SERIES 3B MODE. IN MODE 3B THE FILTRATE RECIRCULATES BACK TO THE HIGH-CARBON, LOW OXYGEN ENVIRONMENT OF THE PROCESSING TANK. THIS PROCESS ALLOWS MICROBES TO REDUCE NITRATES TO NITROGEN GAS, DENITRIFYING THE EFFLUENT. THE INSTALLER OF THIS SYSTEM MUST BE LICENSED BY ORENCO, INC.

THE UNIT UTILIZED IN THIS DESIGN IS AN ORENCO AX 20, WITH COLD WEATHER CONFIGURATION.

IT IS CONDITIONAL IN THIS DESIGN THAT THE LID OF THE AX 20 UNIT BE TREATED WITH 2 INCHES OF FOAM INSULATION TO REDUCE FREEZING POTENTIAL.

A THERMOSTATICALLY CONTROLLED IN-LINE HEATER TO PRE-HEAT TREATMENT AIR IS AN OPTION WHICH IS RECOMMENDED IN THIS PLACEMENT.

THE INCORPORATION OF THE AX 20 SYSTEM WILL PROVIDE FOR A CATEGORY 1 TREATMENT SYSTEM, AN ADVANCED TREATMENT UNIT THAT IS TIME DOSED AS CLASSIFIED BY THE RIDEM.

EXTREME CARE TO BE TAKEN IN THE PLACEMENT OF THE EFFLUENT PRESSURE LINE FROM THE AX-20 PUMP CHAMBER TO THE BOTTOMLESS SAND FILTER. SOIL BASE IS TO BE COMPACTED TO PREVENT SETTLEMENT AND A MINIMUM SLOPE OF 1/8 INCH PER FOOT FROM BSF TO THE PUMP CHAMBER.

RV5 LEVEL: FOR STINGER PIPE LENGTHS UP TO 24' LONG. THE LOW LIQUID LEVEL WILL BE APPROXIMATELY 5'-6" BELOW THE TOP OF THE RSV CAGE. LOW LIQUID LEVEL IS THE LEVEL AT WHICH 100% OF THE FILTRATE RETURNS TO THE TANK. FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS (APPROX. 50% TO 100% OF ACTUAL FLOW). THE SURGE VOLUME IS THE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. FOR MODE 3 INSTALLATIONS, THE DUCKBILL MODEL RSV IS REQUIRED, WHICH HAS A FLEXIBLE PVC TUBE THAT VENTS THE RSV GAGE TO THE ATMOSPHERE.

FLOAT LEVELS: TYPICALLY THE BOTTOM FLOAT SHOULD BE POSITIONED AS CLOSE TO THE TOP OF THE BUTYRE CARTRIDGE AS POSSIBLE. THE TOP FLOAT IS NORMALLY SET ONE TO TWO INCHES BELOW THE INVERT OF THE TANK INLET. FOR MOST RESIDENTIAL APPLICATIONS, THE RECOMMENDED SURGE VOLUME IS APPROXIMATELY 150 TO 250 GALLONS (APPROX. 50% TO 100% OF ACTUAL FLOW). THE SURGE VOLUME IS THE VOLUME BETWEEN THE LOW LIQUID LEVEL AND THE HIGH WATER ALARM FLOAT. BE SURE TO CHECK PLANS FOR ANY SITE SPECIFIC OR TANK SPECIFIC FLOAT SETTINGS.

OPERATIONAL AND MAINTENANCE NOTES:

THIS SYSTEM SHALL PROVIDE FOR AN AUDIBLE ALARM FOR HIGH WATER IN THE PUMP CHAMBERS WHICH MAY BE SILENCED BY PUSHING A BUTTON ON THE CONTROL PANEL. THIS SITUATION MAY DEVELOP WITH UNUSUALLY HIGH WATER USAGE AND WILL NOT INDICATE AN ONGOING PROBLEM. REPEATED ALARMS, OR ALARMS WITH NO UNUSUAL WATER USAGE SHOULD BE REPORTED TO YOUR MAINTENANCE PROVIDER.

THE PROPERTY OWNER SHALL ENTER INTO MAINTENANCE CONTRACTS FOR BOTH THE ADVANTEK AX SYSTEM AND THE BSF DISPOSAL FIELD. EACH UNIT SHOULD HAVE A MINIMUM OF 2 INSPECTIONS ANNUALLY.

THE MAINTENANCE PROVIDER SHALL AFFIX THEIR NAME AND 24-HOUR CONTACT PHONE INSIDE THE CONTROL BOX LOCATED ON THE EXTERIOR OF THE HOUSE.

THE BSF INSPECTION SHALL INCLUDE A SAMPLING OF THE BSF EFFLUENT TO CHECK FOR CLARITY.

BSF LATERALS SHALL BE CLEANED ANNUALLY BY OPENING THE LATERAL THREADED END CAP AND CLEANING THE ENTIRE LENGTH OF THE LATERAL WITH A BOTTLE BRUSH. THE ACCUMULATED CLEANED MATERIAL MAY BE DEPOSITED IN THE INLET OF THE SEPTIC TANK. EACH LATERAL IS TO BE FLUSHED AS REQUIRED.

THE TOP OF THE BSF FIELD IS TO BE KEPT CLEAN OF DEBRIS AND UNWANTED VEGETATION (WEEDS, LEAVES, BRUSH, ETC.). LANDSCAPE TIMBERS AS DESIGNED SHALL BE MAINTAINED TO PREVENT CRUSHING OF THE SYSTEM BY UNWANTED LOADS, AND SURFACE WATER INDICATION OF THE SYSTEM.

ELECTRONIC COMPONENTS OF THE ADVANTEK AND THE BSF SYSTEMS SHALL BE CHECKED ANNUALLY FOR OPERATION.

ALL FLOATS IN THE PUMP CHAMBERS SHALL BE HOSED DOWN AND CLEANED FROM BUILD-UP.

THE INLET OF THE SEPTIC TANK AND THE DOSING TANK SHALL BE INSPECTED FOR SLUDGE AND SCUM ACCUMULATION. WHEN THESE MATERIALS BUILD UP TO 33% OF THE SEPTIC TANK HEIGHT, THE TANK SHOULD BE PUMPED AND THE ACCUMULATIONS APPROPRIATELY REMOVED.

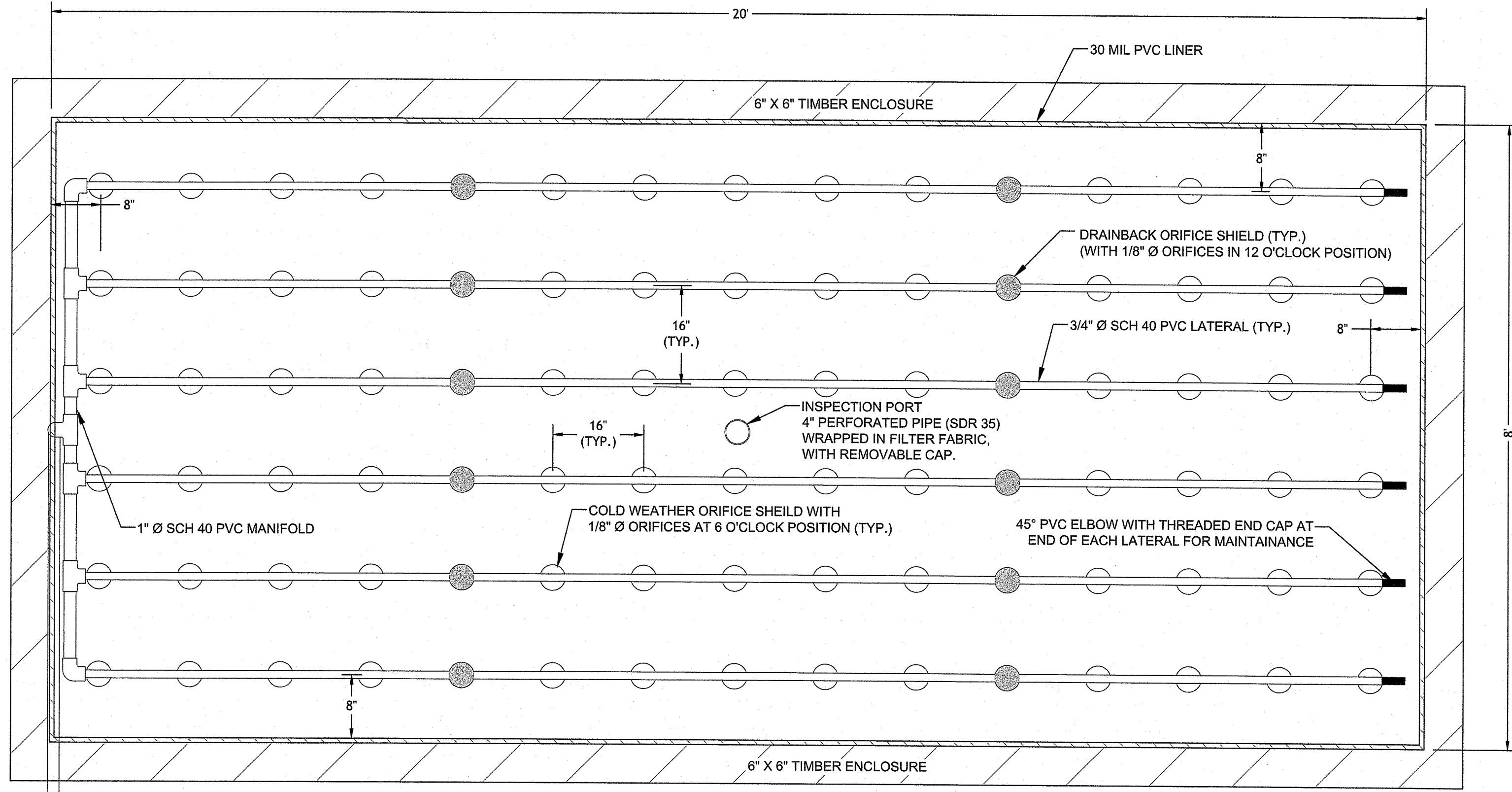
THE FILTER IN THE PUMP CHAMBERS SHALL BE CLEANED ANNUALLY.

SHOULD THE PUMP ASSEMBLY BE REMOVED, THE VAULT SHALL BE CLEANED AND FILLED WITH CLEAN WATER TO PREVENT THE SCREEN FROM BEING FOULED WITH SOLIDS.

TIMER SETTINGS SHALL BE CHECKED AT EVERY ESTABLISHED MAINTENANCE AND INSPECTION VISIT AND ADJUSTED AS NEEDED BY THE SERVICE PROVIDER.

ALL TANKS AND BASINS SHALL BE VISUALLY INSPECTED FOR WATER TIGHTNESS.

PROPERTY OWNER TO REDUCE ANY SHADING IN THE AREA OF THE BOTTOMLESS SAND FILTER TO REDUCE FREEZE POTENTIAL. ANY ACTIVITY TO REDUCE SHADING MUST BE IN ACCORDANCE WITH THE RIDEM WETLANDS APPROVALS.



8' X 20' BOTTOMLESS SAND FILTER
CONFIGURED FOR LOADING RATES UP TO 2.3 gpd/sf
(90) ORIFICES/ZONE
NOT TO SCALE

TWO (2) ORIFICES IN EACH LATERAL SHALL BE DRILLED POINTING UP (12 O'CLOCK POSITION); ALL OTHER ORIFICES SHALL BE DRILLED POINTING DOWN (6 O'CLOCK POSITION). THE UP-POINTING ORIFICES SHALL BE LOCATED APPROXIMATELY 1/3 AND 2/3, RESPECTIVELY, ALONG THE LENGTH OF EACH LATERAL. ORIFICE SHIELDS SHALL BE PLACED OVER EACH ORIFICE (ABOVE OR BELOW THE LATERAL, AS REQUIRED). ORIFICE SHIELDS PLACED BELOW ANY ORIFICE SHALL CONTAIN SLOTS OR HOLES TO PROVIDE FREE DRAINING (USUALLY REFERRED TO AS COLD WEATHER ORIFICE SHIELDS).

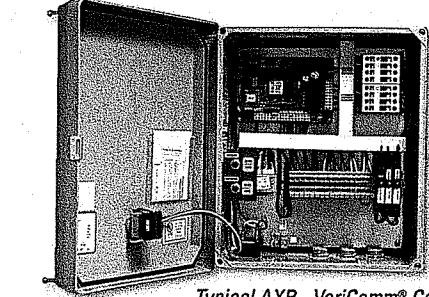
VeriComm® AXB Control Panels

Technical Data Sheet

For AdvanTex® Treatment Systems

Applications

VeriComm® AXB1 and AXB2 remote telemetry control panels are used with two-pump operations — recirculation and discharge (or demand or timed) — for AdvanTex® Treatment Systems. Interlocked controls prevent the recirculation pump from running if there is a high level alarm on the discharge side. Coupled with the VeriComm Web-based Monitoring System, these affordable control panels give water/wastewater system operators and maintenance organizations the ability to monitor and control each individual system's operation remotely, with real-time efficiency, while remaining invisible to the homeowner. VeriComm AXB panels allow remote operators to change system parameters, including timer settings, from the Web interface.



To Specify...

To specify this panel for your installation, require the following:

- **Basic Control Logic: Three Operating Modes**
 - A "Start-up Mode" for the initial 30 days, during which the system collects trend data to establish operating standards for future reference.
 - A "Normal Mode" that manages day-to-day functions.
 - A "Test Mode" that suspends data collection and alarm reporting during installation and service.

Data Collection and Utilization

- Data logs of system conditions and events, such as pump run times, pump cycles, and alarm conditions.

Troubleshooting and Diagnostic Logic

- Troubleshooting capabilities that can report suspected failed components, which then trigger Alarms.

Advanced Control Logic

- Advanced control logic that activates during float malfunctions to diagnose the situation and keep the system operating normally until servicing.

Communication and Alarm Management

- Remote telemetry capabilities coupled with a Web-based monitoring application (see VeriComm Monitoring System, ATD-WEB-VCOM-1) for communication and alarm management. Updating of point values (including timer settings) and receipt of queued changes during each communication session with host. Communication sessions that occur monthly, at a minimum, and more frequently during alarm conditions.
- Multiple methods of communication, as follows:

- **Call-In to VeriComm® Host**
 - Automatic notification to host of "Alarms," which signal fault conditions that need to be addressed immediately (e.g., pump failure).
 - Automatic notification to host of "Alerts," which signal less critical fault conditions and which trigger the panel's troubleshooting logic and alternative operating mode (e.g., stuck float switch).
- Automatic notification to host of "Updates," which include alarm updates or all-clear notifications following Alarms/Alerts, as well as normally scheduled monthly panel reports.

- Manual, forced communication from panel to host to effect an updating of point values and receipt of queued changes.

Real-Time Direct Connection to Panel

- Manual, direct connection at the site via RS-232 serial port, to allow a local operator real-time access to detailed logged data and the ability to change point values from a laptop.
- Manual, forced communication by local operator/homeowner at the site to initiate an auto-onover mode, allowing a remote operator real-time access to detailed logged data and the ability to change point values.

During real-time, manual connections, software with open architecture (and password security) is used; no proprietary software is required. VT100 protocol allows access and control from any computer/modem (Mac or PC) with a simple communication program (e.g., Windows® HyperTerminal®); multilevel password protection in panel ensures that only qualified personnel can access the panel's data.

Additional Features

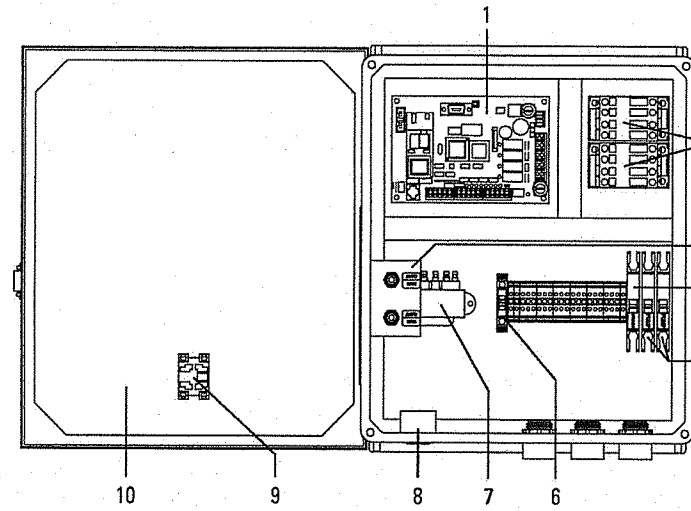
- Status light indicators on the board, including:
 - Flashing green LED for normal operation
 - Red LEDs for status of digital inputs
 - Red LEDs for status of digital outputs and modem activity
- UL-recognized and FCC-approved

For more information, try our online demo at www.vericom.net (no password required).

VeriComm® AXB Control Panels

Technical Data Sheet

1. VeriComm® Remote Telemetry Board
2. Motor-Start Contactors
3. Toggle Switches
4. Control Circuit Breaker
5. Pump Circuit Breakers
6. Fuse
7. Transformer
8. Audio Alarm
9. Visual Alarm
10. Panel Enclosure



Standard Components

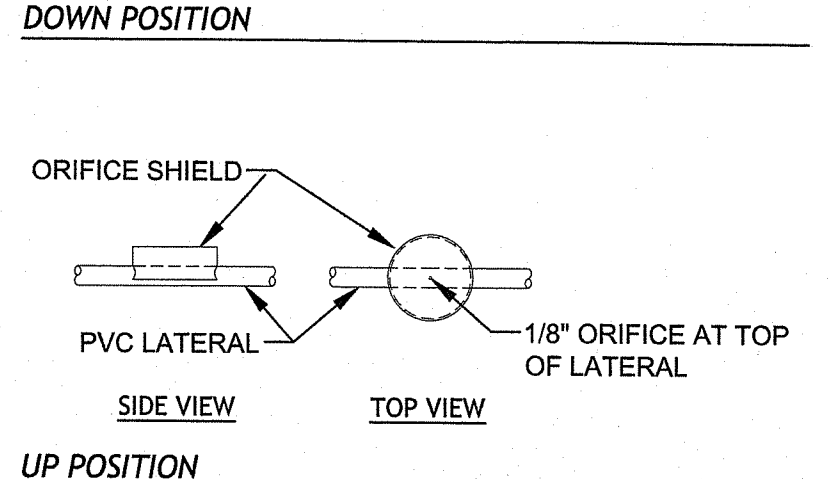
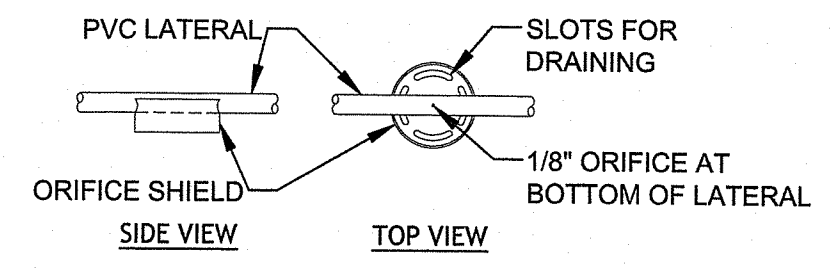
| Feature | Specifications |
|-------------------------------------|---|
| 1. VeriComm® Remote Telemetry Unit* | ATRTU-100: 96/18 VAC (center tap transformer), 8 digital inputs, 4 analog inputs, 4 digital outputs, 0 analog outputs, on-board modem (2400 baud), LED input and output indicators, 1-year battery backup of data and program settings. |
| 2. Motor-Start Contactors | 120 VAC, 16 FLA, 1 hp, 60 Hz; 2.5 million cycles at FLA (10 million at 50% of FLA); 240 VAC, 16 FLA, 3 hp, 60 Hz; 2.5 million cycles at FLA (10 million at 50% of FLA). |
| 3. Toggle Switches | Single-pole switch, automatic On, with spring-loaded, momentary, manual On, 20 A, 1 hp. |
| 4. Control Circuit Breaker | 10 A, OFF/ON switch, Single-pole 120 VAC, double-pole 240 VAC. DIN rail mounting with thermal magnetic tripping characteristics. |
| 5. Pump Circuit Breakers | 20 A, OFF/ON switch, Single-pole 120 VAC, double-pole 240 VAC. DIN rail mounting with thermal magnetic tripping characteristics. |
| 6. Fuse | 120 VAC, 38 VCT @ 0.85 A Secondary. |
| 7. Transformer | 250 VAC, 1 A. |
| 8. Audio Alarm | 85 dB at 24 in. (810 mm), variable-tone sound. |
| 9. Visual Alarm | 7/8 in. (22 mm) diameter red lens, "Push-to-silence," NEMA 4, 1 W bulb, 120 VAC. |
| 10. Panel Enclosure | Measures 15.5 in. high x 13.3 in. wide x 6.7 in. deep (394 mm x 338 mm x 170 mm), NEMA 4X rated. Constructed of UV-resistant fiberglass; hinges and latch are stainless steel. Conduit couplings provided. |
| VCOM-AXB1 | 120 VAC, 34 hp, 14 A, single-phase, 60 Hz. |
| VCOM-AXB2 | 240 VAC, 2 hp, 14 A, single-phase, 60 Hz. |

Optional Components

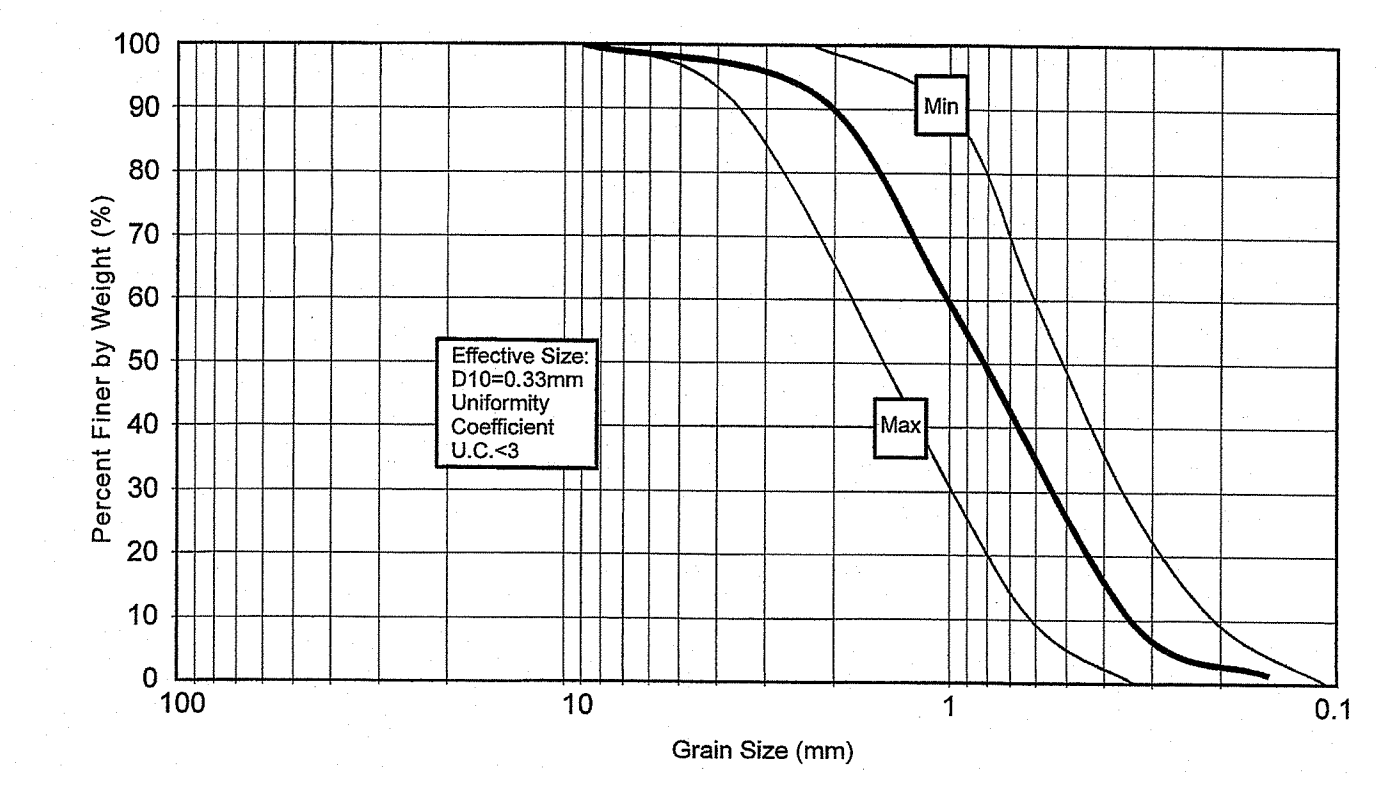
| Feature | Specifications | Product Code/Addr |
|-------------------------------|---|-------------------|
| Pump Run Light | 7/8 in. (22 mm) diameter green lens, NEMA 4, 1 W bulb, 120 VAC. | PRL |
| Anticondensation Heater | Self-adjusting; radiates additional wattage as temperature drops. | HT |
| Programmable Timer | Discharge side timed dosing. | PT |
| UV Disinfection Compatibility | UV grounded power circuit and alarm contacts. Pump disable upon UV failure. | UV |

* See VeriComm® Remote Telemetry Unit (ATD-CP-VCOM-1) and VeriComm® Monitoring System (ATD-WEB-VCOM-1) for more detail.

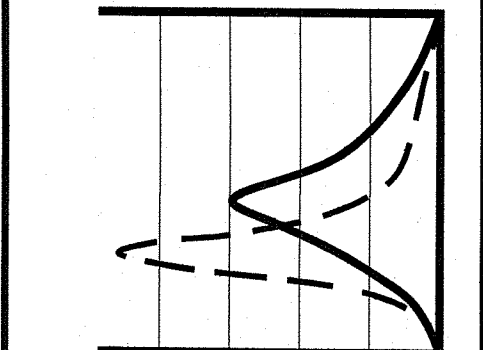
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
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NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



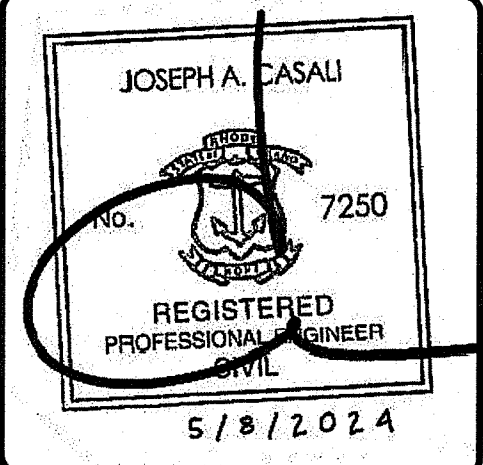
COLD WEATHER ORIFICE SHIELD
NOT TO SCALE



BOTTOMLESS SAND FILTER MEDIA SPECIFICATIONS
NOT TO SCALE



JOCE
JOSEPH A. CASALI ENGINEERING, INC.
CIVIL - SITE DEVELOPMENT - TRANSPORTATION
DRAINAGE - WETLANDS - ISDS - TRAFFIC - FLOODPLAIN
300 W. MAIN ST., SUITE 100A, WARWICK, RI 02886
(401) 944-1300 (401) 944-1313 FAX
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SITE IMPROVEMENT PLANS FOR A PROPOSED SINGLE FAMILY HOME
NIPMUC ROAD
SCITUATE, RHODE ISLAND
AP 50, LOT 35

Environmental Management
MAY - 9 2024
Office of Water Resources

REVISIONS:

| NO. | DATE | DESCRIPTION |
|-----|------------|----------------------------|
| 1 | 7/12/2019 | RIDEM RTC |
| 2 | 12/27/2019 | RIDEM RTC |
| 3 | 3/18/2020 | RIDEM RTC |
| 4 | 6/30/2022 | RIDEM APP. TO ALTER FILING |
| 5 | 1/2/2024 | RIDEM RTC |
| 6 | 5/9/2024 | RIDEM NOTICE |

NOT FOR CONSTRUCTION UNLESS APPROVED BY RIDEM

DRAWN BY: WMLJR
CHECKED BY: JAC
DATE: OCTOBER 2015
PROJECT NO: 03-35

OWTS DETAILS II

SHEET 4 OF 4