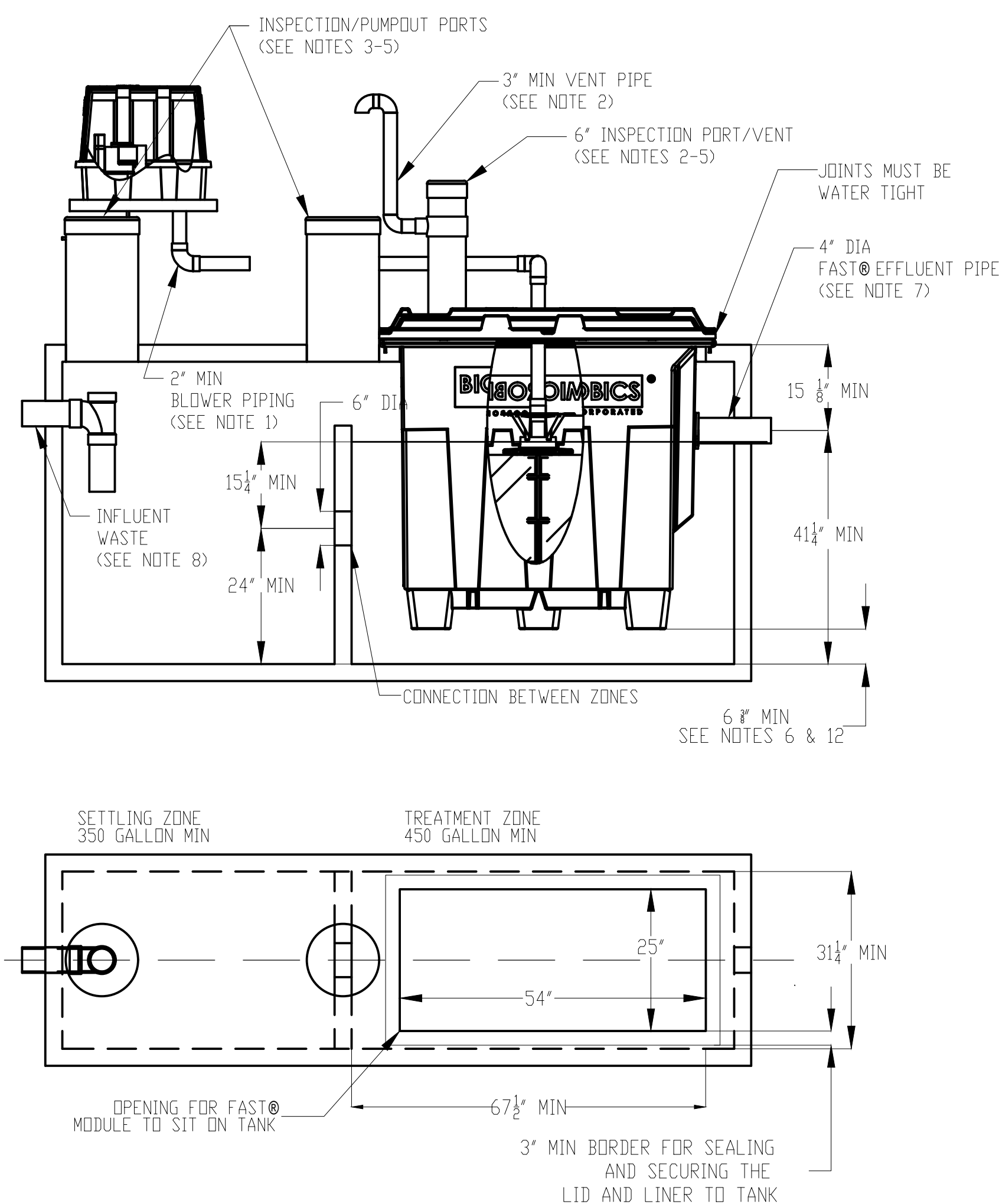


MICROFAST NOTES:

- AIRLINE PIPING TO FASTO MAY NOT EXCEED 100 FEET TOTAL LENGTH AND SHALL HAVE A MAXIMUM OF FOUR ELBOWS IN THE PIPING SYSTEM. FOR DISTANCES GREATER THAN 100 FEET CONSULT FACTORY. BLOWER MUST BE LOCATED ABOVE FLOOD LEVELS ON A CONCRETE BASE 25"x20"x2" MINIMUM.
- VENT TO DESIRED LOCATION AND COVER OPENING WITH A VENT GRATE WITH AT LEAST 7 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS. VENT PIPING MUST NOT ALLOW CONDENSATE BUILDUP OR CREATE BACK PRESSURE. VENT MUST BE ABOVE FINISHED GRADE OR HIGHER.
- ALL APPURTENANCES TO FASTO (E.G. TANKS, ACCESS PORTS, ELECTRICAL, ETC.) MUST CONFORM TO ALL APPLICABLE COUNTY, STATE, PROVINCE, AND LOCAL PLUMBING AND ELECTRICAL CODES. PUMP-OUT ACCESS SHALL BE ADEQUATE TO THOROUGHLY CLEAN OUT BOTH ZONES.
- ALL INSPECTION, VIEWING AND PUMP-OUT PORTS MUST BE SECURED TO PREVENT ACCIDENTAL OR UNAUTHORIZED ACCESS.
- TANK, PIPING, CONDUIT, ETC. SHALL BE PROVIDED BY INSTALLATION CONTRACTOR. BLOWER CONTROL SYSTEM BY BIO-MICROBICS, INC. (SEE INSTALLATION MANUAL.)
- IF LESS THAN THE SPECIFIED MINIMUMS ARE CONSIDERED NECESSARY, CONSULT FACTORY FOR GUIDANCE.
- ALL PIPING AND ANCILLARY EQUIPMENT INSTALLED AFTER FAST MUST NOT IMPEDE OR RESTRICT FREE FLOW OF EFFLUENT.
- THE TANK(S) SHALL BE DESIGNED TO PREVENT AIR PASSAGE BETWEEN THE SETTLING ZONE/TANK AND THE TREATMENT ZONE AND PREVENTING AN AIR LOCK. EXAMPLES INCLUDE A Baffle WALL SEALED TO THE LID OR TREATMENT ZONE INLET LINE WITH A PIPE CAP. CONSULT FACTORY FOR GUIDANCE.
- INSTALLATIONS USING A FASTO SYSTEM LID ARE CAPABLE OF WITHSTANDING A AASHTO H-10 EQUIVALENT LOADS. ANY INSTALLATION IN WHICH A FAST LID IS BURIED DEEPER THAN 3 FEET, OR WHERE ADDITIONAL LOADING CONDITIONS MAY OCCUR, A PROFESSIONAL ENGINEER SHOULD BE CONSULTED. FASTO WITH FEET OPTION SHOULD BE CONSIDERED. REFER TO INSTALLATION MANUAL FOR MORE DETAILS.
- THE AIR SUPPLY LINE INTO THE FASTO UNIT MUST BE SECURED TO PREVENT VIBRATION INDUCED DAMAGE. THE AIR SUPPLY LINE SHOULD BE SECURED WITH A NON-CORROSIVE CLAMP EVERY 2' MIN.
- SPECIALIZED TREATMENT LEVELS MAY REQUIRE SPECIFIC FEATURES TO BE INCORPORATED INTO THE DESIGN. CONSULT FACTORY FOR GUIDANCE.
- MINIMUM HEIGHT MAY BE REDUCED. CONSULT FACTORY AND REFERENCE "LOW PROFILE MODULE PROCEDURE.PDF".
- THE TANK CONTAINING THE MICROFAST TREATMENT UNIT SHALL BE AN H2O PRECAST CONCRETE TANK AS MANUFACTURED BY WIGGIN MEANS PRECAST COMPANY, INC. OF POCASSET, MA.
- THE CONTROL AND ALARM PANELS FOR THE MICROFAST TREATMENT UNIT SHALL BE MOUNTED ON THE OUTSIDE FACE OF THE WALL OF THE STRUCTURE IN A LOCATION DESIGNATED BY THE OWNER. THE VENT AND BLOWER LOCATIONS SHALL ALSO BE LOCATED AS DIRECTED BY THE OWNER AND WITHIN THE GUIDELINES PROVIDED BY BIO-MICROBICS, INC.



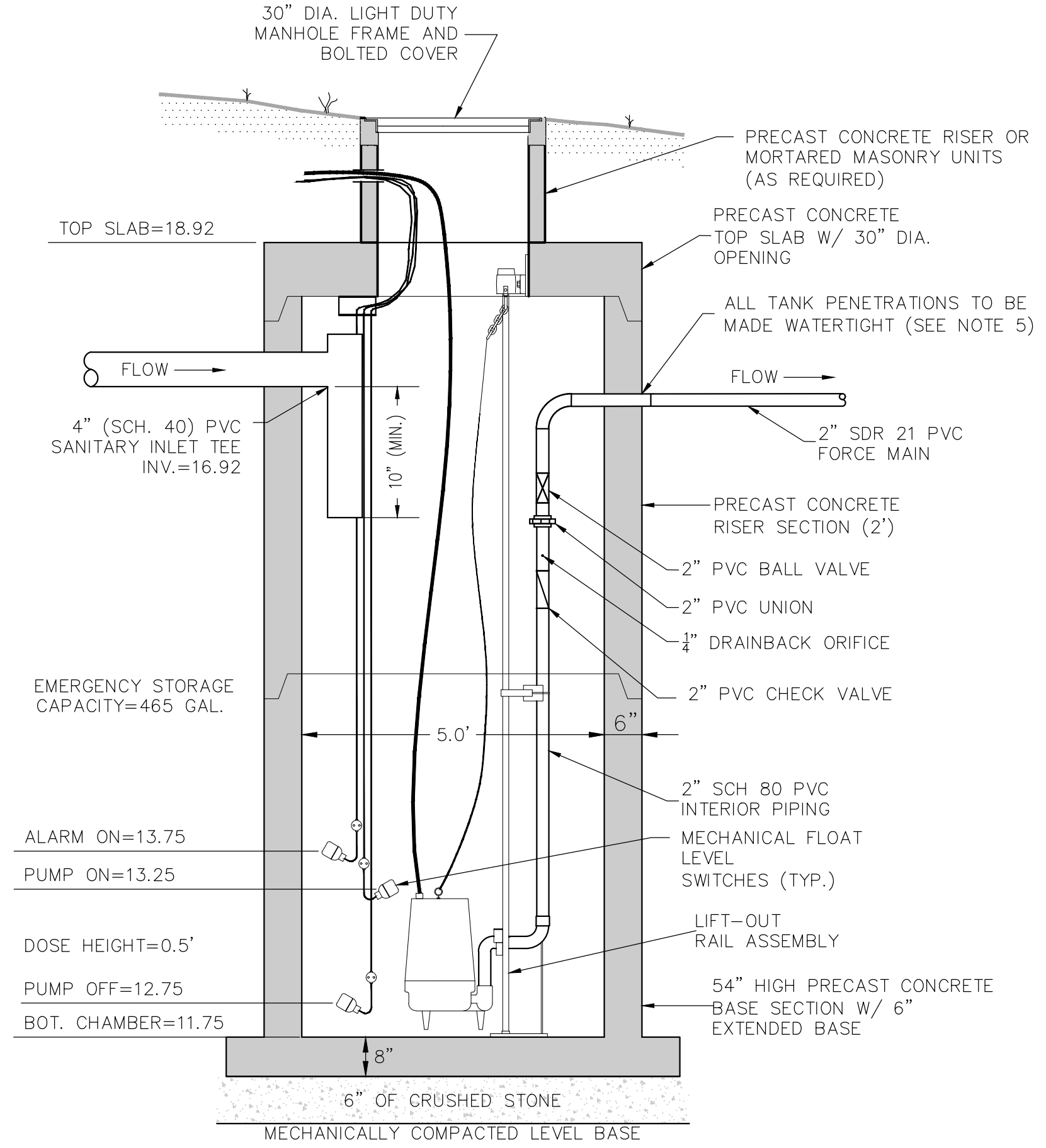
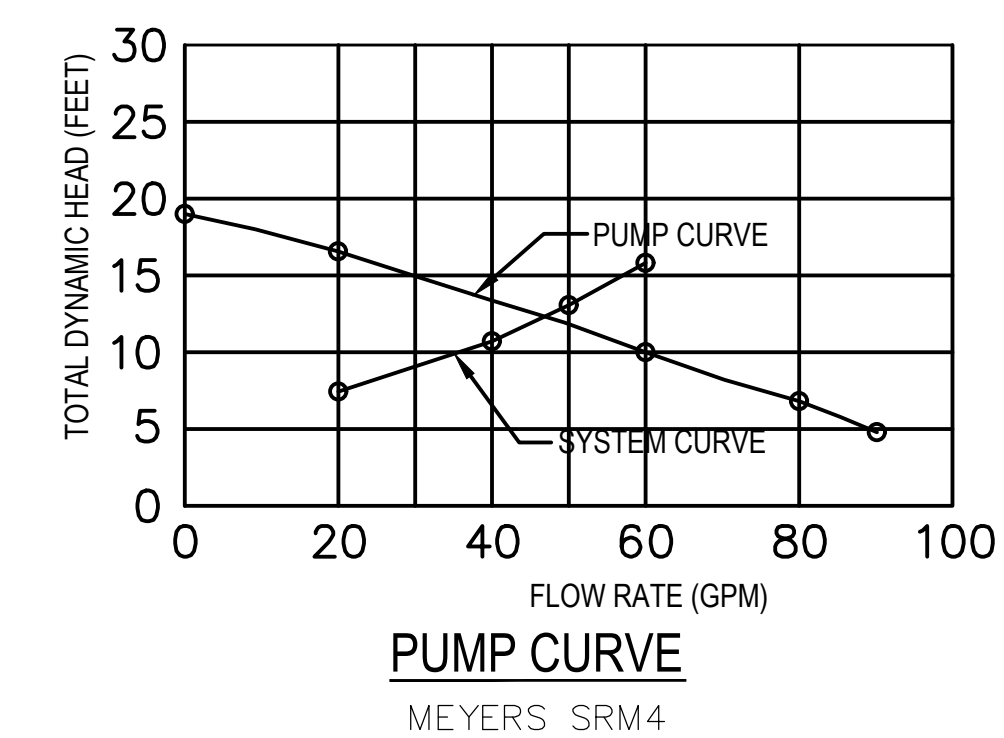
BIO-MICROBICS MICROFAST 0.5 TREATMENT SYSTEM
 NOT TO SCALE
 (DETAIL AND NOTES PROVIDED BY BIO-MICROBICS, INC.)

EJECTOR PUMP NOTES:

- GENERAL**— FURNISH AND INSTALL A COMPLETE PUMPING SYSTEM CONSISTING OF A SUBMERSIBLE SEWAGE PUMP AND MOTOR, DISCHARGE PIPING AND VALVES, FLOAT SWITCH LEVEL CONTROLS, HIGH WATER ALARM, SIMPLEX CONTROL PANEL AND A PRECAST CONCRETE PUMP CHAMBER. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS AND SHALL BE WARRANTED FOR AT LEAST ONE YEAR. THE CONTRACTOR SHALL PROVIDE A SUFFICIENT QUANTITY OF CLEAN WATER TO CONDUCT ONE PUMP OPERATION TEST.
- PUMP CHAMBER**— THE PUMP CHAMBER SHALL BE A 5' DIAMETER REINFORCED PRECAST CONCRETE MANHOLE STRUCTURE IN FULL CONFORMANCE WITH ASTM C478 AND SHALL BE WATERPROOFED WITH AN APPROVED BITUMINOUS COATING. CONSTRUCTION JOINTS AND OPENINGS SHALL BE SEALED WITH HYDRAULIC CEMENT OR OTHERWISE MADE WATERTIGHT. THE CHAMBER SHALL BE INSTALLED SUCH THAT ITS TOP SLAB IS WITHIN ONE FOOT OF FINISH GRADE. STRUCTURE SHALL BE A 5-FOOT INSIDE DIAMETER SEWER MANHOLE AS MANUFACTURED BY WIGGIN MEANS PRECAST CO., INC. OR APPROVED EQUAL.
- PUMP AND MOTOR**— PUMP AND MOTOR SHALL BE A MYERS SUBMERSIBLE SEWAGE PUMP. PUMP AND MOTOR SHALL BE FULLY SUBMERSIBLE AND SHALL OPERATE AT 1650 RPM WITH A 230V, 60 CYCLE, SINGLE PHASE AC POWER SOURCE. (NOTE: ELECTRICAL CONTRACTOR SHALL VERIFY AVAILABLE VOLTAGE AT THE PUMP CONTROL PANEL PRIOR TO CONSTRUCTION.) PUMP SHALL BE RATED AS FOLLOWS:
 HP: 0.4 HP
 RATE: 47 GPM
 TDH: 12.8 FEET
 MODEL: MYERS SRM4 (REQUESTS TO PROVIDE ALTERNATE PUMPS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.)
- PIPING**— 2-INCH (SCHEDULE 80) PVC PIPE AND FITTINGS SHALL BE USED FOR INTERIOR PUMP STATION DISCHARGE PIPING AND FITTINGS. THE SEWAGE FORCE MAIN SHALL BE 2-INCH DIAMETER SDR 21 PVC PIPE. THE DISCHARGE LINES WITHIN THE PUMP CHAMBER SHALL INCLUDE THE FOLLOWING:
 1) IN THE VERTICAL POSITION: A 2-INCH PVC CHECK VALVE
 2) IN THE HORIZONTAL POSITION: A 2-INCH PVC BALL VALVE
 ALL PIPING OUTSIDE THE PUMP CHAMBER WITH LESS THAN 4- FEET OF SOIL COVER SHALL BE INSULATED WITH 2-INCH THICK POLYSTYRENE INSULATION. (SEE NOTE 8)
- LEVEL CONTROLS**— SEALED MECHANICAL FLOAT SWITCHES SHALL BE SUPPLIED TO CONTROL THE PUMP LEVEL AND ALARM SIGNAL. THREE FLOAT SWITCHES SHALL BE PROVIDED: ONE EACH FOR PUMP "ON" AND FOR PUMP "OFF" AND A THIRD SWITCH SHALL BE PROVIDED WITH A POWER SOURCE SEPARATE FROM THE PUMP POWER AND SHALL BE FOR THE ALARM UNIT. THE ALARM SHALL BE LOCATED IN THE PRIMARY RESIDENCE. FLOAT SWITCHES SHALL BE OF THE MECHANICAL TUBE TYPE SEALED IN POLYURETHANE FLOATS. THE FLOAT LEVEL CONTROLS SHALL BE SET TO OPERATE AT THE ELEVATIONS INDICATED ON THE PLANS.
- CONTROL PANEL**— THE SIMPLEX CONTROL PANEL SHALL BE EQUIPPED WITH A RUN LIGHT FOR THE SEWAGE PUMP, PROPERLY SIZED PUMP CIRCUIT BREAKERS, A TRANSFORMER TO GIVE PROPER VOLTAGE TO THE CONTROL CIRCUITS AND A THREE-WAY HAND CONTROL SWITCH. THE SWITCH POSITIONS SHALL BE AS FOLLOWS:
 1) PUMP OFF
 2) AUTOMATIC PUMP ON
 3) MANUAL PUMP ON
 THE CONTROL PANEL SHALL BE HOUSED IN A NEMA-1 CONTROL BOX FOR 220V, SINGLE PHASE OPERATION. PANEL SHALL BE INSTALLED IN A SUITABLE LOCATION INSIDE THE PROPOSED DWELLING.
- ALARM**— A HIGH WATER ALARM SHALL BE SUPPLIED WITH BOTH AUDIBLE AND VISUAL ALARM WITH A SEPARATE POWER SUPPLY FROM THE PUMP. THE ALARM SHALL BE MOUNTED IN A NEMA-1 ENCLOSURE SEPARATE FROM THE CONTROL PANEL. AN ALARM SILENCER BUTTON SHALL BE PROVIDED TO SILENCE THE AUDIBLE ALARM WHILE THE VISUAL ALARM REMAINS ILLUMINATED UNTIL MANUALLY RESET.
- PIPE INSULATION**— FORCE MAIN WITH LESS THAN 4- FEET OF COVER SHALL BE COVERED WITH 2-INCH, THICK RIDGED POLYSTYRENE INSULATION TO A DISTANCE OF AT LEAST 1-FOOT ON EITHER SIDE OF THE PIPE CENTERLINE.

NOTES:

- PUMP CHAMBER SHALL BE A 5' DIAMETER PRECAST CONCRETE MANHOLE CONFORMING TO ASTM C478 OF LATEST REVISION.
- ADJUSTING RINGS SHALL BE GROUTED WITH NON-SHRINK GROUT.
- ALL JOINTS BETWEEN MANHOLE SECTIONS SHALL BE SEALED WITH BUTYL RUBBER SEALANT.
- ALL OUTSIDE SURFACES OF PRECAST UNITS SHALL BE WATERPROOFED W/ APPROVED BITUMINOUS COATING.
- ALL CHAMBER PENETRATIONS SHALL BE MADE WATERTIGHT WITH NEOPRENE SEALS OR EQUIVALENT.



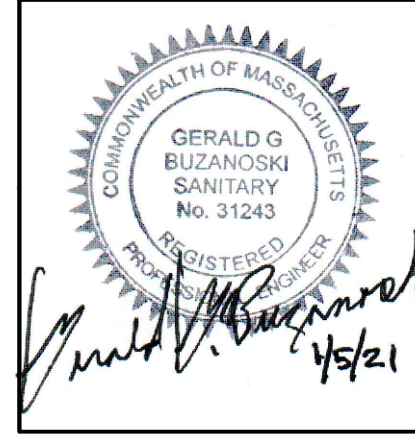
PUMP CHAMBER
 (NOT TO SCALE)

SEWAGE DISPOSAL SYSTEM PLAN

2 SEVEN MILE LANE
 NANTUCKET, MASSACHUSETTS
 (ASSESSOR'S MAP 72/PARCEL 52)

DATE: JANUARY 5, 2021
 REVISED: JANUARY 29, 2021 (ADD LOCAL VARIANCE REFERENCE) SCALE: AS NOTED

OWNER/APPLICANT:
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