

EDA CROSS SECTION (NOT TO SCALE)

WASHED MEDIUM TO COARSE CONCRETE SAND OR EQUIV. MAXIMUM 2% FINES PASSING A #200 SIEVE, EFFECTIVE SIZE 0.25 TO 2.0 mm AND NO PARTICLES LARGER THAN 3/4 INCH. APPROVED SEPTIC STONE SHALL BE 1.5" STONE WITH A RANGE OF .75" TO 2.5" AND BE FREE OF FINES. APPROVED SEPTIC STONE SHALL MEET THE SEVER SIZE AND PERCENT PASSING BY WEIGHT REQUIREMENTS IN ACCORDANCE WITH ASSHTO, 17TH EDITION, TEST METHOD T 11-85 WHICH APPLIES TO SEPTIC STONE AVAILABLE FOR RETAIL PURCHASE.

INCHES TO FEET

1/16" = .0052'	1" = .0833'
3/32" = .0078'	2" = .1667'
1/8" = .0104'	3" = .2500'
3/16" = .0156'	4" = .3333'
1/4" = .0208'	5" = .4167'
5/16" = .0260'	6" = .5000'
3/8" = .0312'	7" = .5833'
1/2" = .0417'	8" = .6667'
5/8" = .0521'	9" = .7500'
3/4" = .0625'	10" = .8333'
7/8" = .0729'	11" = .9167'

CRITICAL ELEVATIONS TO 100ths OF A FOOT

FINISH GRADE @ HOUSE - 99.7'
SEWER OUTLET - 98.75'
TANK INLET - 98.00'
TANK OUTLET - 97.75'
FINISH GRADE @ TANK - 99.00'
13.24" VERTICAL HEAD
10" BOX INLET - 98.67'
10" BOX OUTLET - 98.50'
EDA BED BOTTOM - 98.00'
FINISH GRADE @ EDA - 100.00'

TEMPORARY BENCHMARKS (TBM) WERE ESTABLISHED BY DIFFERENTIAL LEVELING USING A TOTAL STATION SURVEY INSTRUMENT.

TBM 6 - PK NAIL W/DISC SET IN ROOT COLLAR OF 16" OAK ELEV. = 101.89'
TBM 7 - PK NAIL W/DISC SET IN ROOT COLLAR OF 18" PINE ELEV. = 97.63'
TBM 27 - "X" MARK ON CONCRETE SILL ELEV. = 91.24'

TEST PIT 1 DATE: 07/26/18

ESHWY = 37" PERCHED ON RESTRICTIVE SOIL LAYER @ 37" W/ REDOX. FEATURES > 2% STONES = 10% SHARP ANGULAR STONES ROOTS TO 18" COARSE TREE ROOTS FREE WATER @ NOT OBSERVED

0' - 2" ORGANIC MATERIAL
0' - 12" EXISTING SYSTEM FILL 100.0'
0' - 8" 10YR3/3 DARK BROWN FINE SANDY LOAM, MOIST, WEAK FINE GRANULAR, VERY FRIABLE
8' - 20" 2.5Y6/6 LIGHT OLIVE BROWN, FINE SANDY LOAM, MOIST, WEAK FINE GRANULAR, FIRM
20' - 37" 2.5Y6/3 LIGHT YELLOWISH BROWN, LOAMY FINE SAND, MOIST, MASSIVE, FIRM IN PLACE FRIABLE IN HAND
37' - 65" 2.5Y8/4 LIGHT YELLOWISH BROWN, LOAMY FINE SAND, MOIST, STRONG PLATY, FIRM IN PLACE FRIABLE IN HAND

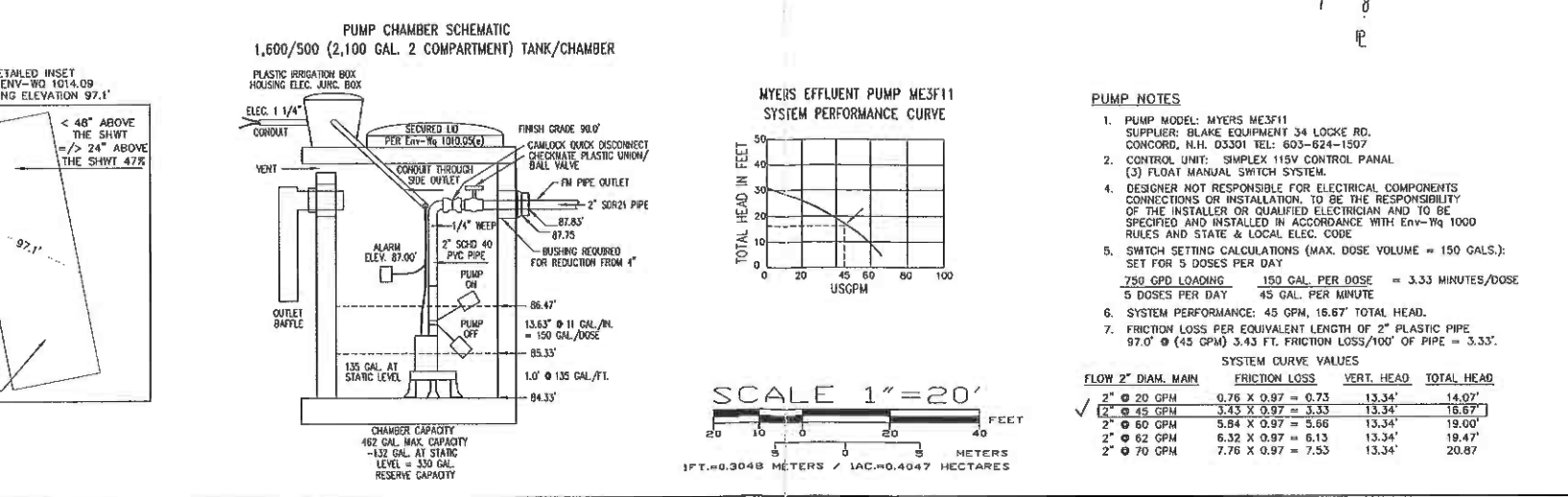
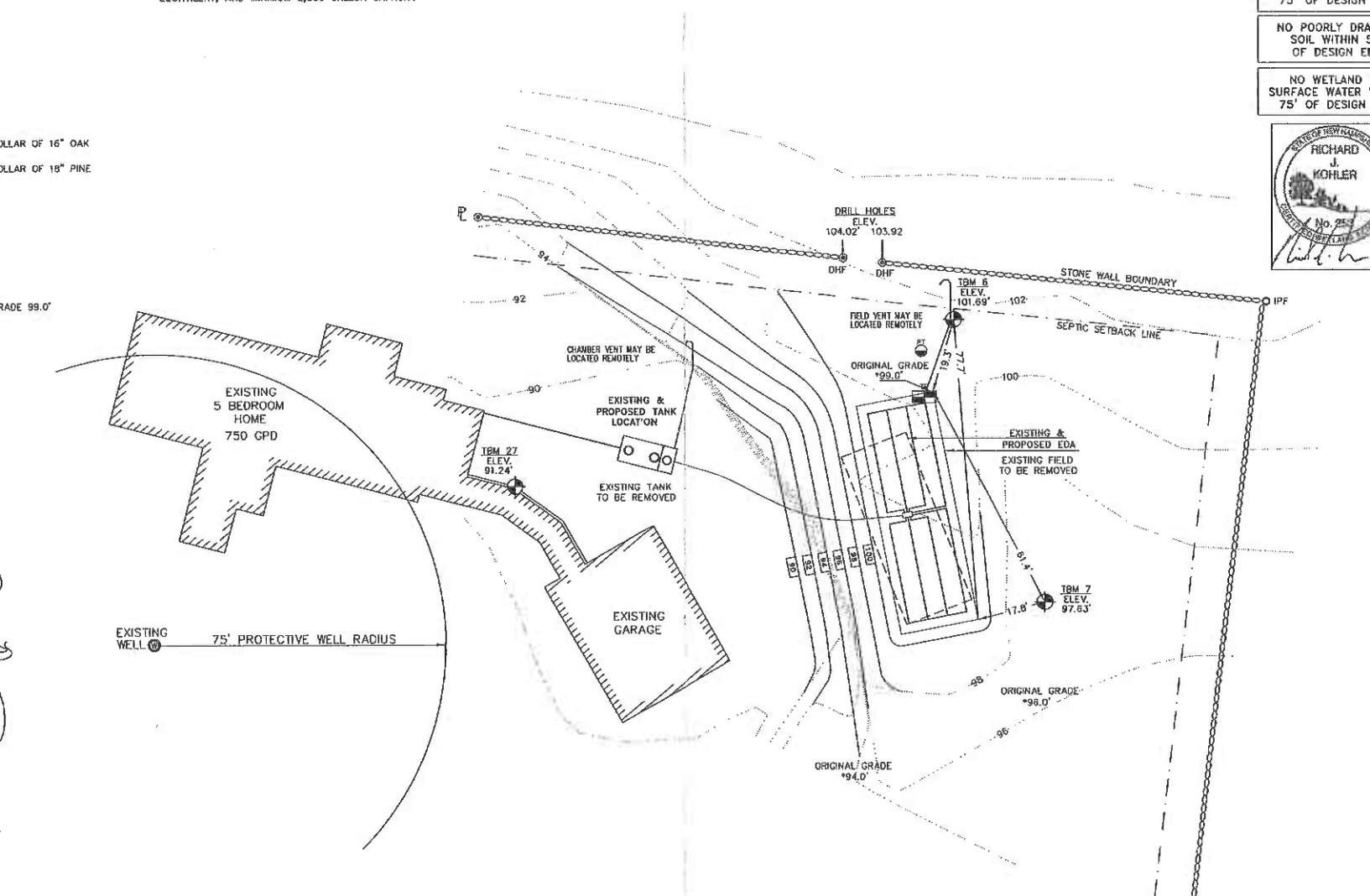
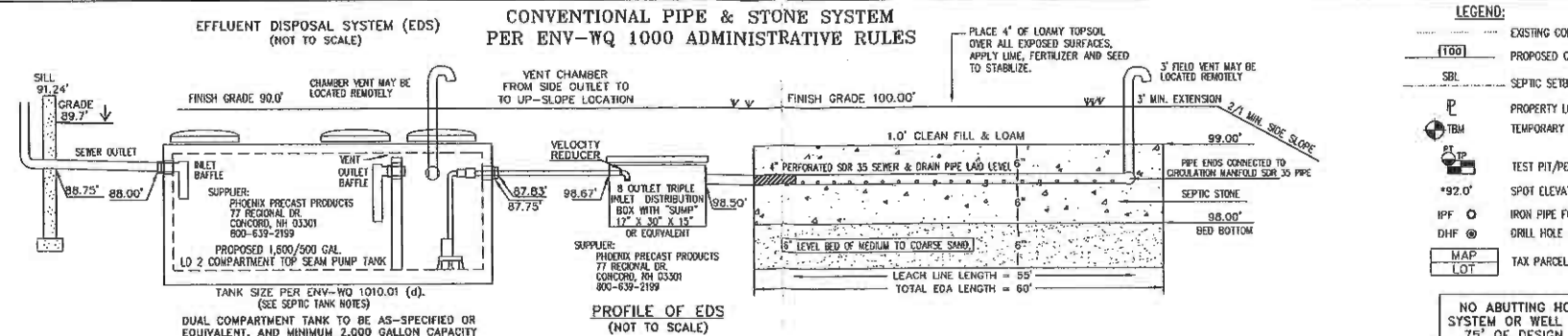
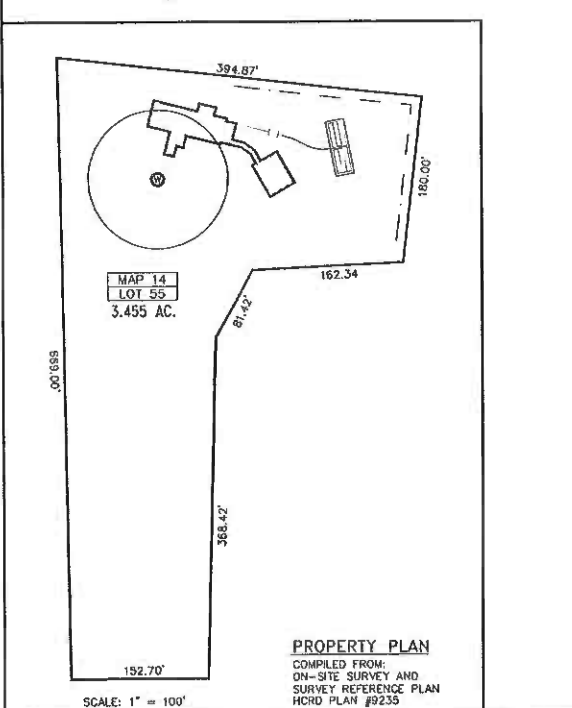
REFUSAL = N/O
PERCOLATION RATE = 6 MIN./IN. @ 22"

SOIL TYPE:
CmC CANTON FINE SANDY LOAM
8 TO 15% SLOPES, VERY STONY
SOURCE: NRCS WEB SOIL SURVEY

PERCOLATION TEST DATA:
DATE TEST CONDUCTED: 07/26/18
6 MIN./INCH @ 22"
BED SIZE FOR STONE & PIPE PER ENV-WQ 1000 RULES
NO. OF BEDROOMS: 5
BEDROOM RESIDENTIAL DWELLING
PROPOSED DAILY FLOW: 750 GPD
750 GPD @ 6 MIN./IN. = 1133 S.F. REQUIRED PER ENV-WQ 1016
PROVIDE 1200 S.F. IN AN EDA BED 20' X 60' (4 LINES (5.0' O.C.) @ 55'/LINE).

TOPD AND SEPTIC SYSTEM: ELECTRONIC TOTAL STATION INSTRUMENT SURVEY BY THIS OFFICE

LOT SIZE CALCULATIONS ENV-WQ 1005.03 TABLE 1005-1
MIN. LOT SIZE = 750 gpd / 2000 X (1.43 FACTOR, CATEGORY 2 SOIL) = 0.34 AC. REQUIRED > 0.60 AC. EXISTING EXCLUDING: WETLANDS, POORLY & VERY POORLY DRAINED SOILS, EXCESSIVE SLOPES AND THE PROTECTIVE WELL RADIUS.



LEGEND:

- (---) EXISTING CONTOUR
- (---) PROPOSED CONTOUR
- SBL SEPTIC SETBACK LINE
- PLM PROPERTY LINE
- PT TP TEMPORARY BENCHMARK
- PT TP TEST PIT/PERC TEST
- *92.0' SPOT ELEVATION
- IPF IRON PIPE FOUND
- DHF DRILL HOLE FOUND
- MAP LOT TAX PARCEL IDENTIFIER

GENERAL NOTES:

- SYSTEM MAY HAVE TO BE REBUILT IN PLACE IF FAILURE OCCURS.
- ALL SYSTEMS MUST COMPLY TO STATUTORY REQUIREMENTS OF RSA 408-A. THE INSTALLER IS RESPONSIBLE FOR VERIFYING SITE CONDITIONS. ANY DISCREPANCIES IN THE APPROVED PLAN AND THE ACTUAL SITE CONDITIONS MUST BE REPORTED BY THE INSTALLER TO THE DESIGNER PRIOR TO CONSTRUCTION. OMISSIONS IN THE PLANS DO NOT RELIEVE INSTALLER OF RESPONSIBILITIES.
- SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES CHAPTER ENV-WQ 1000.
- FOR MAINTENANCE PROCEDURES SEE NH WATER SUPPLY AND POLLUTION CONTROL DIVISION'S PAMPHLET "YOU AND YOUR SEPTIC SYSTEM".

DESIGN NOTES:

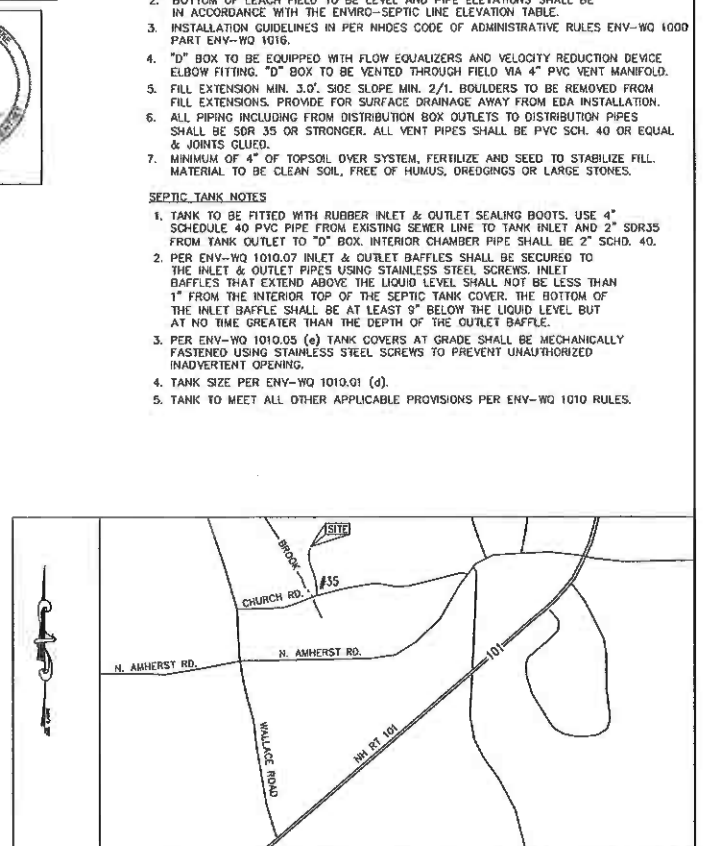
- THE ENTIRE SYSTEM MUST BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE APPROVED PLAN. ANY CHANGES MUST BE APPROVED BY THE DESIGNER BEFORE CONSTRUCTION BEGINS.
- ANY DISCREPANCIES BETWEEN THE APPROVED PLAN AND THE ACTUAL SITE CONDITIONS MUST BE REPORTED TO THE DESIGNER BY THE INSTALLER PRIOR TO CONSTRUCTION.
- VENTING IS MADE PART OF THIS DESIGN. MINIMUM VERTICAL SEPARATION DISTANCE BETWEEN THE ROOF STACK VENT AND THE LOW VENT = 10' LOW VENT MIN. HEIGHT = 3'.
- THIS SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE DISPOSAL, EFFLUENT PUMP, HIGH VOLUME TUB OR TO RECEIVE WATER CONDITIONER BACKWASH.
- DESIGN INTENT: THE BOTTOM OF THE EFFLUENT DISPOSAL AREA (EDA) SHALL BE CONSTRUCTED AT 98.00' ELEVATION; THE SYSTEM BOTTOM IS 1.0' BELOW ORIGINAL GRADE ELEVATION 99.0' AT THE HIGH CONTOUR SEPARATION TO THE SHWT ON THE HIGH CONTOUR 99.0 = 25'. SEPARATION TO THE SHWT ON THE LOW CONTOUR 95.8 = 64'. PER ENV-WQ 1014.08 AT LEAST 50% OF THE EDA MEETS THE MINIMUM SEPARATION DISTANCE OF 2.5' (30") USING THE PRESCRIBED TECHNOLOGY.

CONSTRUCTION NOTES:

- EXCAVATE THE PROPOSED EFFLUENT DISPOSAL AREA (EDA) AND SCARIFY SOIL TO 1.0' BELOW BED BOTTOM ELEVATION. REMOVE AND REPLACE EXISTING TANK.
- BOTTOM OF LEACH FIELD TO BE LEVEL AND PIPE ELEVATIONS SHALL BE IN ACCORDANCE WITH THE ENV-WQ SEPTIC LINE ELEVATION TABLE.
- INSTALLATION GUIDELINES IN PER NHDES CODE OF ADMINISTRATIVE RULES ENV-WQ 1000 PART ENV-WQ 1016.
- "D" BOX TO BE EQUIPPED WITH FLOW EQUALIZERS AND VELOCITY REDUCTION DEVICE ELBOW FITTING. "D" BOX TO BE VENTED THROUGH FIELD VIA 4" PVC VENT MANIFOLD.
- FILL EXTENSION MIN. 3.0'. SIDE SLOPE MIN. 2/1. BOULDERS TO BE REMOVED FROM FILL EXTENSIONS. PROVIDE FOR SURFACE DRAINAGE AWAY FROM EDA INSTALLATION.
- ALL PIPING INCLUDING FROM DISTRIBUTION BOX OUTLETS TO DISTRIBUTION PIPES SHALL BE SDR 35 OR STRONGER. ALL VENT PIPES SHALL BE PVC SCH. 40 OR EQUAL & JOINTS GLUED.
- MINIMUM OF 4" OF TOPSOIL OVER SYSTEM, FERTILIZE AND SEED TO STABILIZE FILL MATERIAL TO BE CLEAN SOIL, FREE OF HUMUS, DREGGINGS OR LARGE STONES.

SEPTIC TANK NOTES:

- TANK TO BE FITTED WITH RUBBER INLET & OUTLET SEALING BOOTS. USE 4" SCHEDULE 40 PVC PIPE FROM EXISTING SEWER LINE TO TANK INLET AND 2" SDR35 FROM TANK OUTLET TO "D" BOX. INTERIOR CHAMBER PIPE SHALL BE 2" SCHD. 40.
- PER ENV-WQ 1010.07 INLET & OUTLET Baffles SHALL BE SECURED TO THE INLET & OUTLET PIPES USING STAINLESS STEEL SCREWS. INLET Baffles THAT EXTEND ABOVE THE LIQUID LEVEL SHALL NOT BE LESS THAN 1" FROM THE INTERIOR TOP OF THE SEPTIC TANK COVER. THE BOTTOM OF THE INLET Baffle SHALL BE AT LEAST 9" BELOW THE LIQUID LEVEL BUT AT NO TIME GREATER THAN THE DEPTH OF THE OUTLET Baffle.
- PER ENV-WQ 1010.05 (e) TANK COVERS AT GRADE SHALL BE MECHANICALLY FASTENED USING STAINLESS STEEL SCREWS TO PREVENT UNAUTHORIZED INADVERTENT OPENINGS.
- TANK SIZE PER ENV-WQ 1010.01 (d).
- TANK TO MEET ALL OTHER APPLICABLE PROVISIONS PER ENV-WQ 1010 RULES.



PLAN OF REPLACEMENT EFFLUENT DISPOSAL SYSTEM

OWNERS: MICHAEL FEDDER, 35 CHURCH ROAD, BEDFORD, N.H. 03110
SITE: 35 CHURCH ROAD, MAP 14 LOT 55, BEDFORD, NH

PREVIOUS CONSTRUCTION APPROVAL: #54131 OPERATION APPROVAL DATE 12/1/78
CONSTRUCTION APPROVAL: [Signature]
OPERATION APPROVAL DATE: [Signature]

PREPARED FOR: SC ELLIOTT CO., 65 PINE ECHO RD., NEW BOSTON, NH 03070
DATE: 08/05/2018

DESIGNER: RICHARD J. KOHLER, LAND USE CO., PO BOX 992 NEW BOSTON, NH 03070
Professional Services/Septic Design
Land Use Planning & Permitting

REVIEWED AND APPROVED: [Signature]
DATE: 8/14/18
#6CA2018081307

COHLER ENVIRONMENTAL, LLC
RICHARD J. KOHLER, LICENSED WETLAND SCIENTIST CWS 253
LICENSED SUB-SURFACE SYSTEM DESIGNER #1562