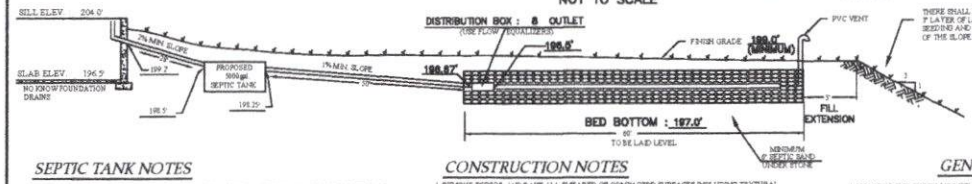
TYPICAL PROFILE DETAIL

NOT TO SCALE

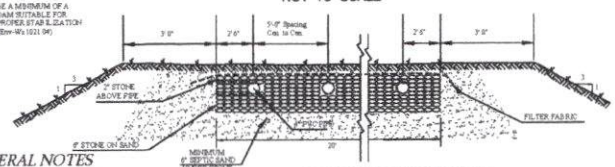


OPEN EXCAVATIONS SHALL BE PROTECTED FROM STORM RUNOFF TO PREVENT THE ENTRANCE OF SILT AND DEBRIS AND FINISH GRADING SHOULD SHED STORM WATER AWAY FROM SYSTEM

THERE SHALL BE A MINIMUM OF A 5" LAYER OF LOAM SUITABLE FOR SEED BED AND PROPER STABILIZATION OF THE SLOPE (Env-Wq 1021.04)

TYPICAL CROSS – SECTION DETAIL

NOT TO SCALE



SEPTIC TANK NOTES

1. THE SEPTIC TANK IS TO MEET Env-Wq 1015 SPECIFICATIONS. ACCESS SHALL BE PROVIDED TO EACH COMPARTMENT BY MEANS OF EITHER A REMOVABLE COVER OR A 24" MANHOLE AT A DEPTH OF NO MORE THAN 6" BELOW THE FINISH GRADE.
2. SEPTIC TANKS SHOULD BE PUMPED AS REQUIRED IN NH Env-Wq 1023.01.
3. SEAL ALL PIPES LEADING TO AND EXITING FROM THE SEPTIC TANK AND D-BOX WITH EITHER NON-SHRINK MORTAR, THICK PLASTIC CEMENT OR OTHER SEALANT (Env-Wq 1016.08).
4. PROVIDE APPROPRIATE INLET AND OUTLET BAFFLES AT SEPTIC TANK AS REQUIRED IN Env-Wq 1016.07.
5. THIS DESIGN DOES ALLOW FOR THE USE OF A RAW SEWAGE PUMP IN THE BASEMENT. THE SEPTIC TANK SIZE HAS BEEN INCREASED PER Env-Wq 1016.01.
6. THIS DESIGN DOES NOT ALLOW FOR THE USE OF A GARBAGE DISPOSAL. SHOULD ONE BE INSTALLED THE SEPTIC TANK SIZE MUST BE INCREASED PER Env-Wq 1016.01.
7. SEPTIC TANK TO COMPLY WITH ENV-WQ 1016.04(C) AND THE TANK SHALL BE MADE FROM PLASTIC OR COATED WITH A SEALANT TO PREVENT INFILTRATION AND EXFILTRATION.

CONSTRUCTION NOTES

1. REMOVE TOPSOIL AND RAKE ALL SMEARED OR COMPACTED SURFACES INCLUDING TEXTURAL CHANGES TO A DEPTH OF 1" OR MORE BEFORE PLACING FILL OR CRUSHED STONE. THIS IS ESSENTIAL IN ORDER TO PROTECT THE NATURAL ABSORPTION QUALITIES OF THE SOIL BY PREVENTING AN UNRESTRICTED TRANSITION BETWEEN MATERIALS.
2. MATERIAL USED TO FILL UNDER BED SHALL BE CLEAN SANDY RUN SAND, FREE OF TOPSOIL, HUMUS, DECAYED MATERIAL OR STONES MORE THAN 4" IN ANY DIMENSION, EXCEPT THAT THE FIRST 6" OF MATERIAL DIRECTLY UNDER THE SYSTEM SHALL BE SAND MEETING THE ASTM C-33 SPECIFICATIONS OR EQUIVALENT.
3. SUPPLY LINES FROM THE D-BOX TO THE LATERALS SHALL BE SOLID PIPE LAID AT THE SAME PITCH. ENDS OF LEACH FIELD PIPES TO BE CONNECTED WITH 4" PVC AND VENTED.
4. LEACH LINES SHALL BE 4" PERFORATED RIGID PIPE WITH HOLES POSITIONED AT THE 5 AND 7 O'CLOCK POSITIONS. A MINIMUM OF 6" OF STONE BELOW THE PIPE AND 2" OF STONE ABOVE THE PIPE (12" TOTAL) IS REQUIRED. USE SDR35 PIPE OR EQUIVALENT.
5. BEFORE PLACING EARTH BACKFILL OVER SYSTEM, THE STONE SHALL BE COVERED WITH FILTER FABRIC.

GENERAL NOTES

1. USAGE OF THIS SYSTEM IS INTENDED AND DESIGNED STRICTLY FOR NORMAL HOUSEHOLD DOMESTIC USE. DRAINS OF ANY KIND (HOUSE, ROOF, ETC.) SAUNAS, HOT TUBS, WATER SOFTENERS ETC. MUST NOT BE INCORPORATED INTO THIS SYSTEM.
2. THERE ARE NO VERY POORLY DRAINED WETLANDS WITHIN 75 FEET OF THE PROPOSED SYSTEM.
3. THERE ARE NO POORLY DRAINED WETLANDS WITHIN 75 FEET OF THE PROPOSED SYSTEM.
4. CONTRACTOR TO VERIFY ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF WORK. DESIGNER TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
5. ALL SYSTEMS ARE TO BE INSPECTED AND APPROVED BY STATE AND/OR LOCAL MUNICIPAL AUTHORITIES AS REQUIRED BEFORE BACKFILLING.
6. THIS PLAN IS NOT A BOUNDARY SURVEY. THE BOUNDARIES ON THIS PLAN ARE AS DEPICTED BY RECORD PLANS AND/OR DEEDS.

* * STONE SPECIFICATIONS * *

SEPTIC STONE SHALL BE CLEAN, UNIFORMLY SIZED WASHED CRUSHED STONE, WASHED ROCK, OR SIMILAR AGGREGATE, 1.5 INCH, FREE OF FINES, WITH A RANGE OF 0.75 INCHES TO 2 INCHES. (SEE ENV-WQ 1014.04 TABLE 1014-2).

LEGEND

GRANITE BOUND FOUND	STONE WALL
IRON ROD FOUND	FENCE
IRON PIPE FOUND	WATER SHUTOFF VALVE
DRILL HOLE FOUND	UTILITY POLE
250.0 PROPOSED SPOT GRADE	WELL OR WATER LINE
198.0 PROPOSED GRADE	EXISTING CONTOUR
	PROPOSED CONTOUR
	EDGE OF WETLANDS

ELEVATION REFERENCE: ASSUMED
ELEVATION BENCHMARK SET: (SEE PLAN)

TEST PIT DATA – TP#1

TEST PIT BY: PDS
DATED: 10/21/2025
DEPTH TO LEDGE: NO
ESTIMATED SEASONAL HIGH WATER TABLE: NO
DEPTH TO OBSERVED WATER TABLE: NO
DEPTH TO ROOTLINE: 12"

0" – 1"	LOAMY TOPSOIL
1" – 12"	10YR4/6 SANDY LOAM BLOCKY, FRIABLE
12" – 72"	2.5Y5/4 LOAMY F. SAND BLOCKY, FRIABLE
72" – 84"	2.5Y5/4 MED. SAND GRANULAR, LOOSE

* * SOIL DATA * *

USDA SOIL SURVEY CLASSIFICATION: WOB-SPODOSOL LOAM SAND
SYMBOLS: 252-B-FC-S
PERCOLATION RATE: 3MIN/IN

REFERENCE PLAN

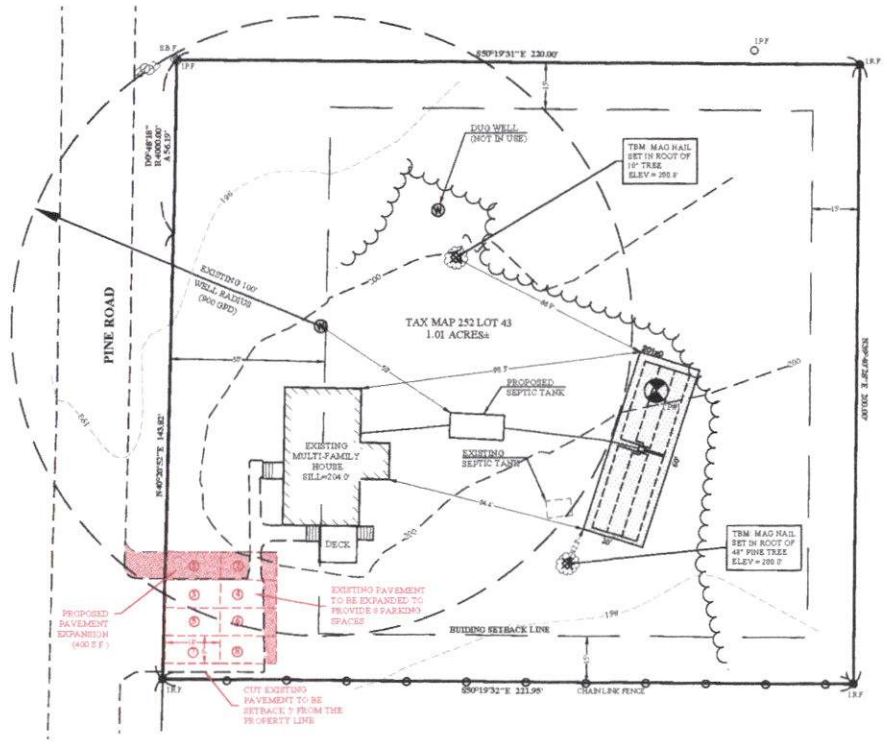
1. "PLAN OF PART OF LAND OF WALTER & GERTRUDE KENNEDY PINE ROAD HUDSON, NH". PREPARED BY NED SPAULDING P.E. DATED SEPTEMBER 1962. H.C.R.D. PLAN NO. 9987.

PROPOSED PIPE & STONE SANITARY SYSTEM PLAN

(LOT IS SERVED BY AN EXISTING ON-SITE WELL)

* * LOT LOADING CALCULATIONS * *

SCS SOIL GROUP: WhD-WINDSOR LOAM SAND - Group 1
LOT SIZE: 1.01 ACRES
MINUS WELL RADIUS: 0.55 Acres
EFFECTIVE LOT AREA: 0.46 Acres
LOT SIZE = (Q(GPD)/2000(GPD/ACRE)) x FACTOR
0.46 ACRES = (Q/2000) x 1
TOTAL Q = 920 GPD



DESIGN NOTES

1. THE INTENT OF THIS PLAN IS TO DEMONSTRATE THAT THE LOT CAN SUPPORT A SEPTIC SYSTEM DESIGNED TO ACCOMMODATE THE EXISTING THREE ONE-BEDROOM DWELLING UNITS AND THE PROPOSED FORTH ONE-BEDROOM DWELLING UNIT, FOR A TOTAL DESIGN FLOW OF 900 GPD.
2. A VARIANCE HAS BEEN GRANTED TO PERMIT A PROPOSED 1-BEDROOM DWELLING UNIT TO BE ADDED IN THE BASEMENT (SEE HUDSON ZBA CASE #252-045).

WETLAND NOTE

WETLANDS WERE DELINEATED ON THE BASIS OF HYDROLOGY IN ACCORDANCE WITH THE TECHNIQUES OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1", JANUARY 1987. THE HYDRIC SOIL COMPONENT WAS DETERMINED BY USING THE "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 2", JULY 1998." THERE ARE NO WETLANDS ON THE LOT.

* * LEACH BED CALCULATIONS * *

USE: FOUR 1-BDRM APARTMENTS
ESTIMATED SEWAGE LOAD: 900 G.P.D.
LEACHING AREA REQUIRED: 1125 S.F.
LEACHING AREA PROVIDED: 20' x 60' = 1200 S.F.

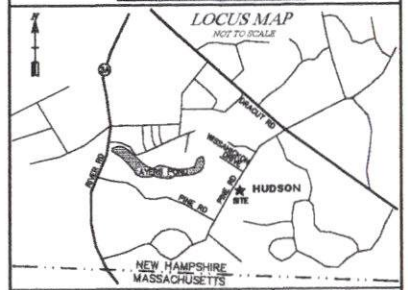
* * DESIGN INTENT * *

201.0' HIGHEST CONTOUR
-84" (E.S.H.W.T.)
-60" (SEPARATION)
197.0' (BED BOTTOM)

THE MOST UPSLOPE CORNER OR SIDE OF THE BED IS TO BE NO MORE THAN 6.5' BELOW THE ORIGINAL GROUND.

LOCUS MAP

NOT TO SCALE



DATE	REVISION	BY
10/23/25	REVISED TANK SIZE	PDS

SCALE: 1" = 20'
GRAPHIC SCALE

NEW HAMPSHIRE Designer of Subsurface Disposal Systems * * * Peter D. Stoddard No. 1404 Department of Environmental Services

REVIEWED AND APPROVED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NH DEPT OF ENVIRONMENTAL SERVICES
Date: 10/23/2025
#eCA2025102307

TAX MAP 252 LOT 43

INDIVIDUAL SEWERAGE SYSTEM DESIGN PLAN

PREPARED FOR
JOHN GRANFIELD
SITE LOCATION
26 PINE RD–HUDSON–NEW HAMPSHIRE

SCALE: 1" = 20'	DATE: OCTOBER 22, 2025	SHEET 1 OF 1	REV

JOB #2025204

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