

SANITARY SYSTEM DESIGN

NUMBER OF BEDROOMS 3
PERCOLATION RATE 13 MIN./IN.
ABSORPTION AREA REQUIRED 675 S.F. (MIN.)
USE 4' WIDE TRENCHES 225 L.F. REQ'D
USE 2 TRENCHES 113 L.F. EACH
SEPTIC TANK CAPACITY 1000 GAL. (MIN.)

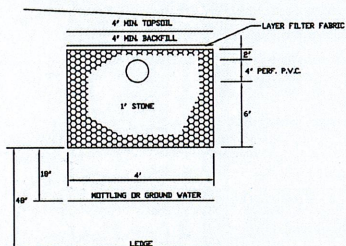
SANITARY SYSTEM ELEVATIONS

	#1	#2
BOTTOM OF TRENCH	562.4	562.0
FL DISTRIBUTION LINE	562.9	562.5
DISTRIBUTION BOX OUTLET	563.05	562.5
DISTRIBUTION BOX INLET	562.9	562.65
SEPTIC TANK OUTLET	563.4	
SEPTIC TANK INLET	563.65	
FL 4" C.I.P. @ FDN. WALL	564.2	
TOP OF FOUNDATION	567.0	
BASEMENT FLOOR	558.4±	
TOP OF SEPTIC TANK	564.4±	

* INDICATES REVERSE DISTRIBUTION BOX

MLSS CALCULATIONS

RESTRICTIVE LAYER: 18"
SLOPE: 4.2 %
PERCOLATION RATE: 13 MIN./IN.
NUMBER OF BEDROOMS: 3
MLSS = HF X PF X FF
MLSS = (42) X (1.5) X (1.5) = 95 LF



4' WIDE TRENCH DETAIL
NOT TO SCALE

NOTES: (THE FOLLOWING NOTES MAY APPLY)

THE LEACHING AREA IS TO BE STRIPPED OF ALL UNSUITABLE SOILS AND FILLED WITH CLEAN SAND, LAID IN SIX INCH LIFTS. FILL TO BE MECHANICALLY COMPACTED TO 90% MAXIMUM DENSITY. A MINIMUM SEPARATION DISTANCE OF 18" BETWEEN THE MOTTLING/GROUND WATER LAYER AND BOTTOM OF THE LEACHING AREA MUST BE MAINTAINED.

INSTALLATION OF ALL SEWAGE DISPOSAL SYSTEMS SHALL NOT OCCUR DURING WET WEATHER TO AVOID SOIL SMEARING.

FILLING OF STRIPPED AREAS SHALL NOT BE PERMITTED WHILE SMEARING OF THE SOILS OCCURS. ALL SMEARED SURFACES SHALL BE RAKED OR FLOWED PRIOR TO ANY FILLING AND AS DIRECTED BY THE TOWN HEALTH DEPARTMENT.

- "SELECT FILL MATERIAL" AND "SELECT BACK FILL MATERIAL" PLACED WITHIN AND ADJACENT TO PROPOSED LEACHING AREAS SHALL BE COMPOSED OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:
- THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THREE (3) INCHES.
- UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
- THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
- THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING
#4	70% - 100%
#10	10% - 50%
#40	0% - 20%
#100	0% - 5%
#200	0% - 5%

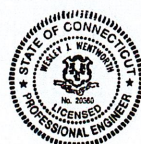
NOTE: PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

THE RESPONSIBILITY FOR THE PREPARATION OF A LEACHING AREA UTILIZING "SELECT MATERIAL" IS THAT OF THE LICENSED INSTALLER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVERCOMPACTION AND SEDIMENTATION ONCE EXPOSED.

- HIGH LEVEL OVERFLOWS TO BE A MINIMUM OF 2"
- NO SOURCE OF POLLUTION WITHIN 75' OF WELL
- ENDS OF TRENCHES TO BE CAPPED

REFERENCE MADE TO MAPS TITLED:

- "DUBALDO SUBDIVISION PROPERTY OF VICTOR J. DUBALDO WEST STREET ANDOVER, CONN NOV. 12, 1981 REV 2/19/1982 DOUGLAS PRIORIM L.S"
- "PROPOSED RIGHT OF WAY ACROSS LAND OF MICHAEL & HELEN BARNO ET AL ANDOVER, COLUMBIA, CT. APRIL 1965 REV. 7/14/65"
- "BOUNDARY SURVEY SHOWING COLUMBIA LOT AND RECONFIGURED ANDOVER LOT PREPARED FOR K+M PROPERTIES 147 WEST STREET COLUMBIA & ANDOVER, CT." BY ROB HELLSTROM L.S. HEBRON, CT JOB #2002-006, SCALE 1"=50', DATE: 7/8/03.



I HAVE REVIEWED THE WETLAND BOUNDARIES AS SHOWN ON THIS PLAN AND AM OF THE OPINION THAT THEY REPRESENT THE SOIL BOUNDARIES MARKED BY ME IN THE FIELD

WESLEY J. WENTWORTH
SOIL SCIENTIST

I HEREBY DECLARE TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS SUBSTANTIALLY CORRECT.

WESLEY J. WENTWORTH

P.E. # 20360

SOILS DATA BY TOWN OF ANDOVER & WENTWORTH CIVIL ENGINEERS, LLC 3/27/03 - 5/29/03

TP 100
0 - 8" TOPSOIL
8 - 20" DENSE FINE SANDY LOAM
20-64" MOD. COMPACT TILL
LEDGE: NONE
GROUNDWATER: 26"
MOTTLING: 18"
STANDPIPE: 36" (AVERAGE)

TP 101
0 - 8" TOPSOIL
8 - 20" BROWN FINE SANDY LOAM
20-72" COMPACT TILL
LEDGE: 72" ?
GROUNDWATER: 24"
MOTTLING: 17"
ROOTS: 36"

TP 102
0 - 10" TOPSOIL
10-19" BROWN FINE SANDY LOAM
19-72" OLIVE GREY/BROWN COMPACT TILL
LEDGE: 72" ?
GROUNDWATER: 30"
MOTTLING: 18"
STANDPIPE: 30" (AVERAGE)

TP 103
0 - 10" TOPSOIL
10-20" BROWN FINE SANDY LOAM - DENSE
20-70" GREY/BROWN COMPACT TILL
LEDGE: 70" ?
GROUNDWATER: 28"
MOTTLING: 19"
STANDPIPE: 31" (AVERAGE)

TP 116
MOTTLING: 15" - UNACCEPTABLE

TP 117
0 - 7" TOPSOIL
7 - 18" BROWN FINE SANDY LOAM
18-70" MOD. COMPACT TILL
LEDGE: NONE
GROUNDWATER: 24"
MOTTLING: 18"
ROOTS: 24"
STANDPIPE: 20" (AVERAGE)

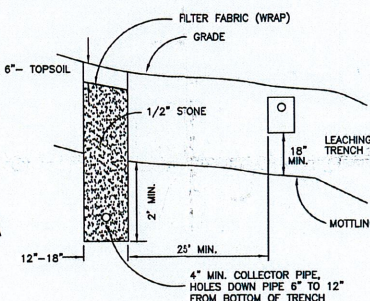
TP 118
0 - 8" TOPSOIL
8 - 23" LIGHT BROWN FINE SANDY LOAM
23-72" GREY/BROWN MOD. COMPACT TILL
LEDGE: 72" ?
GROUNDWATER: 24"
MOTTLING: 19"
ROOTS: 20"
STANDPIPE: 23" (AVERAGE)

SP 119
STANDPIPE: 28" (AVERAGE)

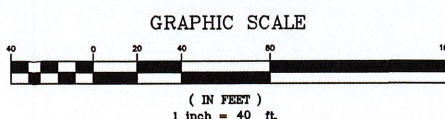
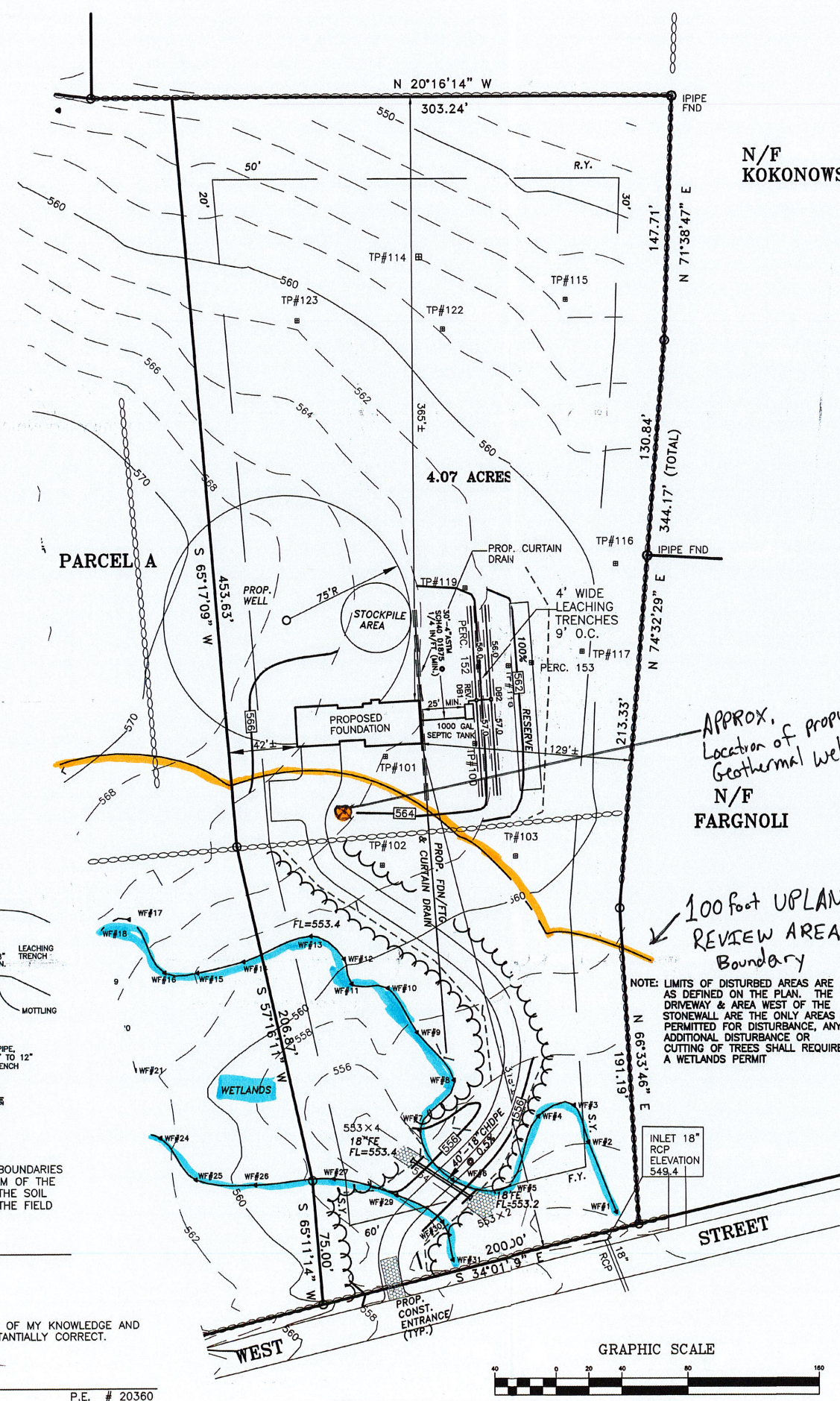
PERC. HOLE 152
PERC. RATE: 13 MIN./IN

PERC. HOLE 153
PERC. RATE: 13 MIN./IN

CURTAIN DRAIN DETAIL



NOT TO SCALE



HOUSE SITE DEVELOPMENT

PLOT PLANS FOR LOT SHALL INDICATE PROPOSED SEDIMENTATION AND EROSION CONTROLS. THE PROPOSED HOUSE LOCATION, LOT GRADING, LIMIT OF TREE CLEARING, DRIVEWAY DESIGN, SEPTIC SYSTEM DESIGN AND SITE DRAINAGE PLAN SHALL ALSO BE SHOWN. THESE PLANS SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE TOWN.

ALL DRIVEWAY SHOULDERS SHOULD BE STABILIZED IMMEDIATELY UPON COMPLETION OF ROUGH GRADING. SHOULDER SEED BED PREPARATION SHOULD FOLLOW THE GENERAL NOTES PROVIDED. HAY BALES OR SILT FENCE SHOULD BE USED TO ENTRAP ANY SEDIMENT GENERATED FROM EXPOSED SOIL SURFACES. DRIVEWAY ROADSIDES SHALL BE STABILIZED WITH COMPACTED ROAD AGGREGATE AS SOON AS POSSIBLE.

TOPSOIL AND EXCAVATED SUBSOIL FROM THE FOUNDATION AREA SHOULD BE STOCKPILED WITHIN THE AREA OF DISTURBANCE IF NOT USED FOR ON SITE REGRADING. EACH STOCKPILE MUST BE ADEQUATELY RINGED WITH SEDIMENT CONTROL MATERIALS (I.E. HAY BALES AND / OR SILT FENCE).

ANY ADDITIONAL STOCKPILING OF LUMBER OR BUILDING MATERIALS SHOULD ALSO BE CONFINED TO THE AREA OF DISTURBANCE. SIMILARLY, VEHICULAR MOVEMENT SHOULD BE DIRECTED TO ESTABLISHED PARKING AREAS. PROPOSED LEACHING SYSTEM AREAS MUST NOT BE IMPACTED BY VEHICULAR TRAFFIC OR UTILIZED AS PARKING AREAS. DEVELOPMENT OF SEWAGE DISPOSAL LEACHING AREAS SHOULD BE STAGED TO FOLLOW HOUSE SITE PREPARATION. ONLY THE PRIMARY LEACHING SYSTEM NEED BE CLEARED OF EXISTING VEGETATION IN COORDINATION WITH THE APPROVED SEPTIC SYSTEM DESIGN. RESERVE AREAS SHOULD REMAIN UNALTERED IF SITE CONDITIONS PERMIT.

CONTRACTORS SHALL PROVIDE DUMPSTERS AT EACH HOUSE SITE DURING CONSTRUCTION FOR DISPOSAL OF CONSTRUCTION WASTE MATERIALS. THERE SHALL BE NO OUTSIDE STOCKPILES OF CONSTRUCTION WASTE MATERIALS OR DEBRIS.

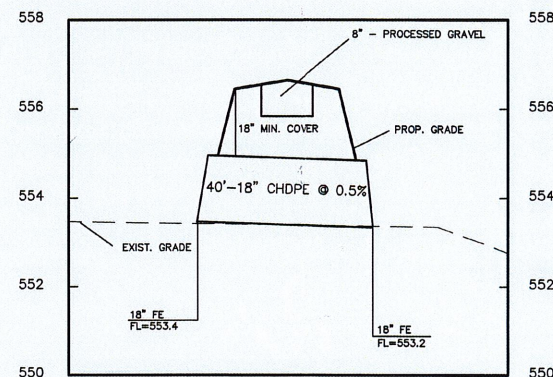
NOTE: UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE ONLY. VERIFY ALL LOCATIONS IN THE FIELD BEFORE START OF CONSTRUCTION. (SEE NOTE BELOW)

WARNING: THESE PLANS NOT TO BE USED FOR LOCATION OF UNDERGROUND UTILITIES. CALL BEFORE YOU DIG 1-800-922-4455 TWO WORKING DAYS BEFORE YOU DIG.

TOPOGRAPHY TAKEN FROM REFERENCED MAP AND IS BASED ON ACTUAL FIELD SURVEY.

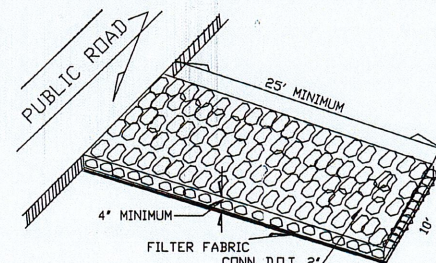
ALL PROPOSED ELEVATIONS ARE IN RELATION TO CONTOURS SHOWN. FINAL ELEVATIONS MAY BE ADJUSTED AS FIELD CONDITIONS WARRANT. VERIFY ALL GRADES IN THE FIELD

VERIFY FOUNDATION DIMENSIONS PRIOR TO CONSTRUCTION



CULVERT DETAIL

SCALE: 1"=20' H
1"=2' V



CONSTRUCTION ENTRANCE NOT TO SCALE

LEGEND

- PROPERTY LINE
- BUILDING LINE
- IP FND
- MON FND
- DH FND
- IP SET
- MON SET
- DH SET
- STONE WALL
- SILT FENCE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- CLEARING LIMIT
- IRON PIN OR PIPE FOUND
- MONUMENT FOUND
- DRILL HOLE FOUND
- IRON PIN TO BE SET
- MONUMENT TO BE SET
- DRILL HOLE SET

Map Standard Notes

1. This survey has been prepared in accordance with section 20-3006-20 of the regulation of Connecticut state agencies "Minimum standard for surveys and maps in the state of Connecticut as endorsed by the Connecticut Association of Land Surveyors, Inc. The type of survey performed is

Boundary determination is based on

Resurvey of property and conforms to

A-2 class of accuracy.

2.) Topographic features if shown hereon, were prepared in accordance with class T-2

To the best of my knowledge and belief this map is substantially correct as noted hereon

Robert W. Hellstrom Llc. 13626

No declaration is expressed or implied unless this map bears the original signature and embossed seal of the above named land surveyor.

WENTWORTH CIVIL ENGINEERS, LLC

177 WEST TOWN ST.
LEBANON, CT. 06249

(860) 642-7255

SHEET# 2003-027-1

ROB HELLSTROM
LAND SURVEYING

32 MAIN STREET
HEBRON, CT.

P.O. BOX 497
COLUMBIA, CT. 06237-0497
(860) 228-9853

DATE: AUGUST 27, 2003

IMPROVEMENT LOCATION PLAN
PARCEL "B"

PREPARED FOR

CONCEPTS OF CONSTRUCTION, LLC
WEST STREET
ANDOVER, CONNECTICUT

SHEET# 1 OF 1

SCALE 1"=40'

JOB# 2003-57

FILE #

Modified by Agent for IWWC 21-10 6-29-2021 (to show wetlands + well location)
Bore