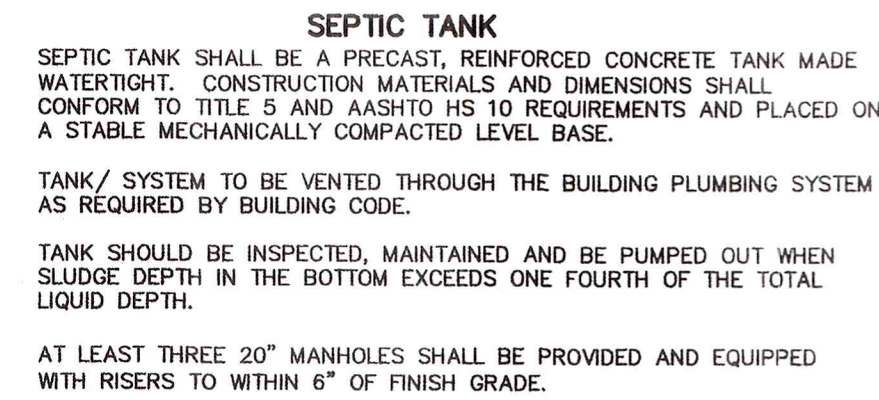
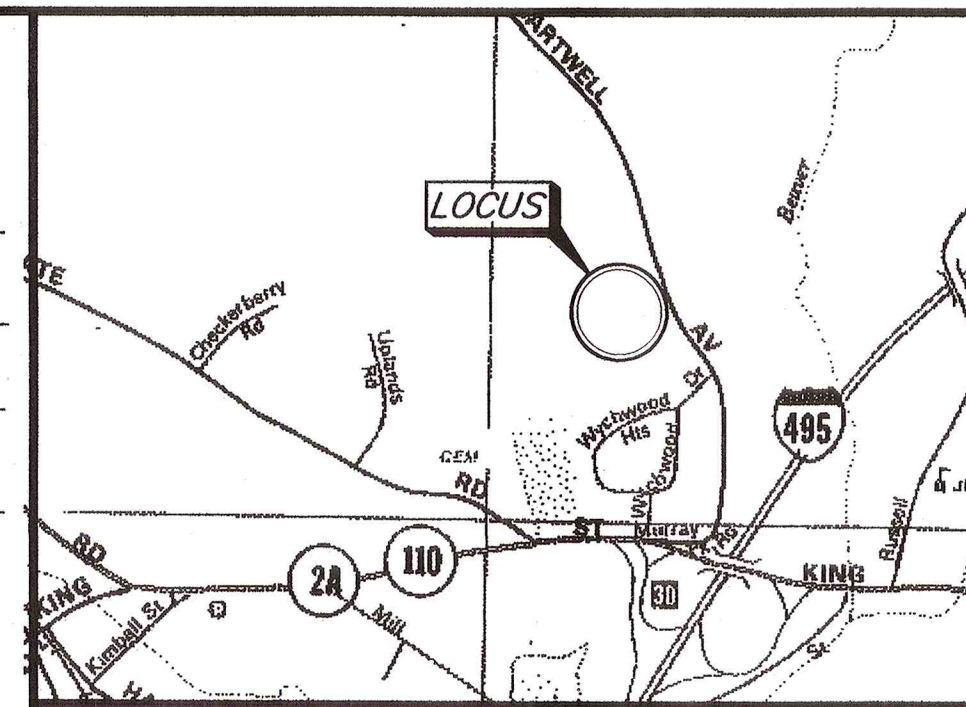
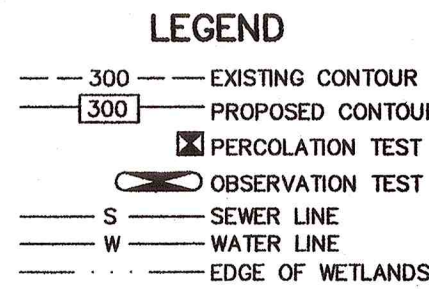


1121-6; ELEV. = 230.6'	1121-7; ELEV. = 230.6'
Ap 0' - 12" FINE SANDY LOAM	Ap 0' - 12" FINE SANDY LOAM
Bw 12" - 30" LOAMY SAND	Bw 12" - 30" LOAMY SAND
C 30" - 120" MEDIUM SAND	C 30" - 120" MEDIUM SAND
NO MOTTLING	NO MOTTLING
NO GROUNDWATER OBSERVED	NO GROUNDWATER OBSERVED
NO REFUSAL	NO REFUSAL
E.S.H.W.T. AT >120' (220.6')	E.S.H.W.T. AT >120' (220.1')



LEACHING TRENCH		
SCHEDULE OF ELEVATIONS	PROPOSED	AS-BUILT
TOP CONCRETE FOUNDATION	245.0	
INVERT AT FOUNDATION	241.75	
INVERT TANK INLET	241.50	
INVERT TANK OUTLET	241.25	
TOP SEPTIC TANK	242.6±	
INV. "D" BOX INLET	231.82	
INV. "D" BOX OUTLET	231.65	
GROUNDWATER OFFSET REQUIRED	5'	
GROUNDWATER OFFSET UTILIZED	5'	

NO PLASTIC RISERS, FRAMES, OR COVERS ARE ALLOWED ON PROPOSED SEPTIC TANKS OR DISTRIBUTION BOXES.

PROPERTY LINES TAKEN FROM A PLAN ENTITLED, "PLAN OF LAND IN LITTLETON, MASS PREPARED FOR HARTWELL HILL HOMES, LLC" DATED APRIL, 2023 BY DAVID E. ROSS ASSOCIATES, INC. (ROBERT T. CONWAY, PLS#56614)

[illegible]

PERC. TESTS: PERFORMED BY DANIEL WOLFE, D.E.R.A., INC.  
WITNESSED BY JIM CARPPEL NABOH

[illegible]

SEPTIC TANK REQUIRED: ( 1500 GAL. MIN.)  
440 GPD X 2.0 = 880 GAL. TANK

**LEACHING AREA PROVIDED:**

A. BASIS 2 MIN./IN. PERCOLATION RATE

B. SIDEWALL AREA PROVIDED 300 S.F.  
300 S.F. X 0.74 GPD/SF = 222 GPD

C. BOTTOM AREA PROVIDED = 300 S.F.  
300 S.F. X 0.74 GPD/SF = 222 GPD

D. TOTAL G.P.D. PROVIDED 444

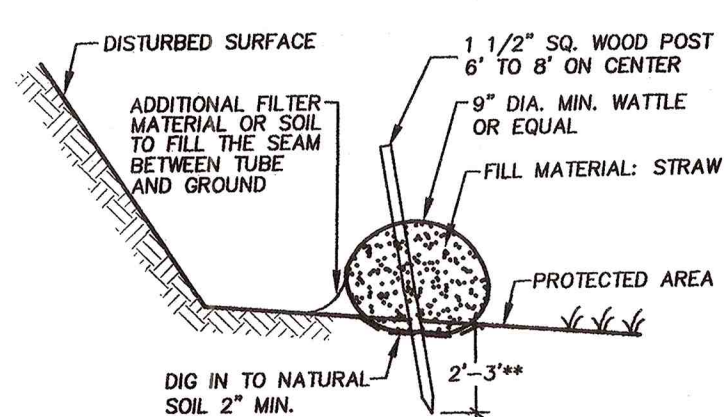
E. TOTAL SF. PROVIDED 600

**SYSTEM IN FILL** ☐ **REQUIRED** ☐ **NOT REQUIRED**

IF ANY PORTION OF THE PROPOSED LEACHING AREA IS LOCATED ABOVE EXISTING GRADE OR WITHIN TOPSOIL, PEAT OR OTHER UNSUITABLE OR IMPERVIOUS SOIL LAYER, THEN THE PLACEMENT OF FILL IS REQUIRED. BEFORE THE PLACEMENT OF FILL, ALL UNSUITABLE OR IMPERVIOUS SOIL SHALL BE REMOVED TO A DEPTH OF 12 INCHES LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE SOIL ABSORPTION SYSTEM TO THE DEPTH OF NATURALLY OCCURRING IMPERVIOUS MATERIAL. THE FILL SHALL BE SELECTED, PLACED, AND IMPORTED SOIL, CONSISTING OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES. MIXTURES OF SAND AND GRAVEL ARE ALLOWED. THE FILL SHALL BE PLACED IN LIFT SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES. A SIEVE ANALYSIS USING A #4 SIEVE, SHALL BE PERFORMED ON A MINIMUM OF 100 LBS. OF THE FILL. A MINIMUM OF 15% OF THE FILL SAMPLE MAY BE RETAINED IN THE #4 SIEVE. SIEVE ANALYSES SHALL ALSO BE PERFORMED ON THE FRACTION OF FILL SAMPLE REMAINING ON THE #4 SIEVE. THE FILL SHALL BE PLACED SUCH THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 MM	100%
# 50	0.30 MM	10%-100%
#100	0.15 MM	0%-20%
#200	0.075 MM	0%-5%

**WETLAND PROTECTION ACT (C131 S40)**  
PRIOR TO INITIATING ANY ALTERATIONS (REMOVAL OF VEGETATION, EXCAVATIONS, GRADING, ETC.) WITHIN 100' OF WETLANDS (PONDS, BROOKS, SWAMPS, ETC.) OR WITHIN 200' OF AN AREA SUBJECT TO THE RIVER'S ACT (PERENNIALY FLOWING RIVER, BROOK OR STREAM), A REQUEST FOR DETERMINATION OF APPLICABILITY OR A NOTICE OF INTENT UNDER THE WETLANDS PROTECTION ACT (310 CMR 10.00) SHOULD BE FILED WITH THE TOWN'S CONSERVATION COMMISSION. LOCAL BYLAWS MAY ALSO APPLY.



**SILTATION BARRIER  
WATTLE DETAIL**

**NOT TO SCALE**

LOCUS MAP  
NOT TO SCALE

PROPERTY LINES TAKEN FROM A PLAN ENTITLED, "PLAN OF LAND IN LITTLETON, MASS PREPARED FOR HARTWELL HILL HOMES, LLC" DATED APRIL, 2023 BY DAVID E. ROSS ASSOCIATES, INC. (ROBERT T. CONWAY, PLS#56614)

SURV.: GSN/JPS	CALC.: SPM	DRAFT: PJT
NB: 833-63,67	DEED: 79438-166	CHECK: DBW

REVISIONS	
5/2/22	Original endorsement
7/25/22	Added Effluent Filter and access
3/28/23	Revised plan note

COMMONWEALTH OF MASSACHUSETTS  
 DANIEL B. WOLFE  
 CIVIL  
 No. 86503  
 REGISTERED  
 PROFESSIONAL ENGINEER


*Daniel B. Wolfe*  
 3-28-23

SHEET TITLE:  
SEWAGE DISPOSAL SYSTEM

DESIGNED FOR:  
DUTCHCO BUILDERS, LLC

ADDRESS: HARTWELL AVENUE  
LITTLETON, MA

LOT NO.:	ASSESSOR MAP:	ASSESSOR PARCEL:
2	R17	Portion of Parcel 3



**DAVID E. ROSS  
ASSOCIATES, INC.**

**CIVIL ENGINEERS - LAND SURVEYORS  
ENVIRONMENTAL CONSULTANTS**

6 Lancaster County Road  
P.O. Box 795  
Harvard, MA 01451-0795

SCALE:	1"=20'	DATE:	MAY, 2022
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REF.: L-14520, L-14517	PLAN NO.: L-14544
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JOB NO.: 33895 SHEET NO.: 1 of 1