



Commonwealth of Massachusetts
Executive Office of Environmental Affairs

**Department of
Environmental Protection**
Western Regional Office

JAN 12 1995

William F. Weld
Governor

Trudy Coxe
Secretary, EOE

Thomas B. Powers
Acting Commissioner

December 21, 1994

Dian Mandle
351 Potwine Lane
Amherst, MA 01002

Re: Amherst-DWPC-Title 5
Variance-Mandle
Transmittal # 58599
Project # 94-251

Dear Ms. Mandle:

The Department of Environmental Protection, Division of Water Pollution Control has received a plan of sewage disposal designed by Alan Weiss, R.S. of Belchertown, MA titled:

PROPOSED SEPTIC REPAIR PLAN FOR
DIAN MANDLE 351 POTWINE LA.,
AMHERST, MA.

Drawing Number 94-404-0822, Date: 10/21/94

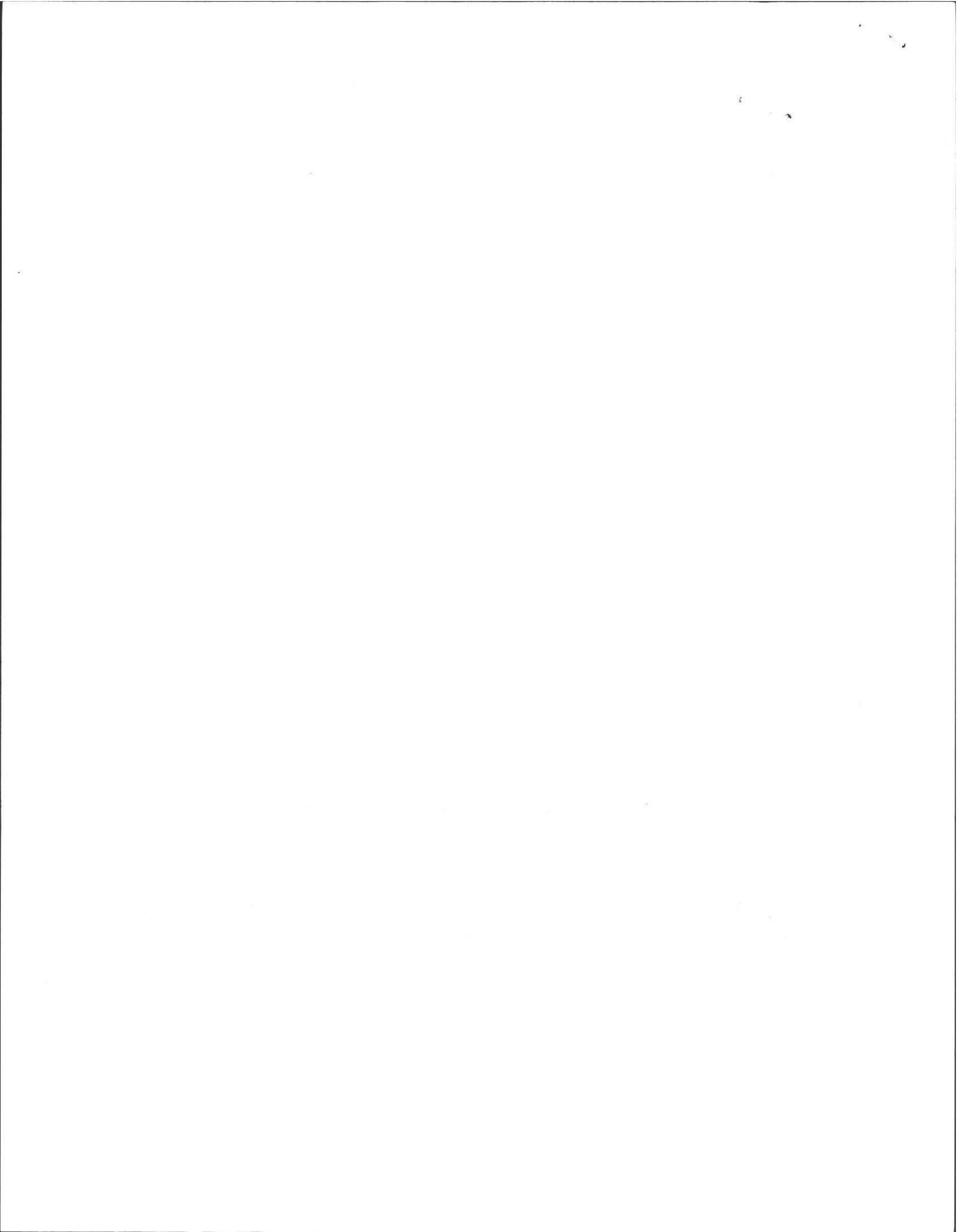
The plan received by the Department on November 18, 1994 proposes to replace the failing subsurface disposal system at this existing four bedroom home with a 1,000 gallon septic tank, a 1,000 gallon dosing tank, a distribution box and 960 square feet of leaching bed. The design for the leaching facility is based on an 8.0 minute per inch percolation rate. The Amherst Health Department submitted an approval for the variances requested in a letter dated November 19, 1994.

The plan requires the following variances to 310 CMR 15.00:

1. 310 CMR 15.02(17) Due to the limited lot size, the requirement to remove impervious materials for 25 feet around the leaching facility cannot be met. Excavation to remove impervious materials can only be done for 10 feet for this leaching facility.
2. 310 CMR 15.03(6) Due to the limited lot size and high seasonal ground water elevation, the leaching facility will be constructed in fill to meet the separation distance requirement. However, due to problems relating to surface water run off, the designing sanitarian has proposed to construct the leaching facility with three feet separation to the maximum ground water elevation instead of the four feet required under Title 5.
3. 310 CMR 15.03(7) Due to the limited lot size, distance from leaching facility to cellar wall will be 14 feet instead of the required 20 feet.

The designer has shown that the proposed repair will afford the same degree of environmental protection required under this Title and that the strict enforcement thereof would do manifest injustice.

The Department acting in accordance with the provisions of 310 CMR 15.20 hereby approves of these variances subject to the following provisions:



- 1) That a Disposal Works Construction Permit be obtained from the Amherst Health Department prior to the start of construction.
- 2) That no changes be made in the approved plan without the prior written approval of the Department.
- 3) That the designing sanitarian certify in writing to the Amherst Health Department with a copy to this office that the system has been constructed in accordance with the approved plan prior to the system being used.
- 4) That a notice be placed with the deed and recorded in the appropriate Registry of Deeds indicating that the subsurface disposal system for this property required variances to Title 5. A copy of the notice to the deed must be submitted to the Department within 30 days of the date of this letter or the approval will no longer be valid.

Enclosed is a copy of the stamped approved plan for your files. A second copy of the stamped approved plan is being sent to the Amherst Health Department. An additional stamped approved copy is being returned to the designing sanitarian so that it may be kept on site and used for construction purposes.

Any person aggrieved by the decision of the Department of Environmental Protection may seek relief therefrom within thirty (30) days in superior court, as provided by the laws of the Commonwealth.

If there are any questions pertaining to this matter, please contact Minh Tonthat of this office.

Very truly yours,

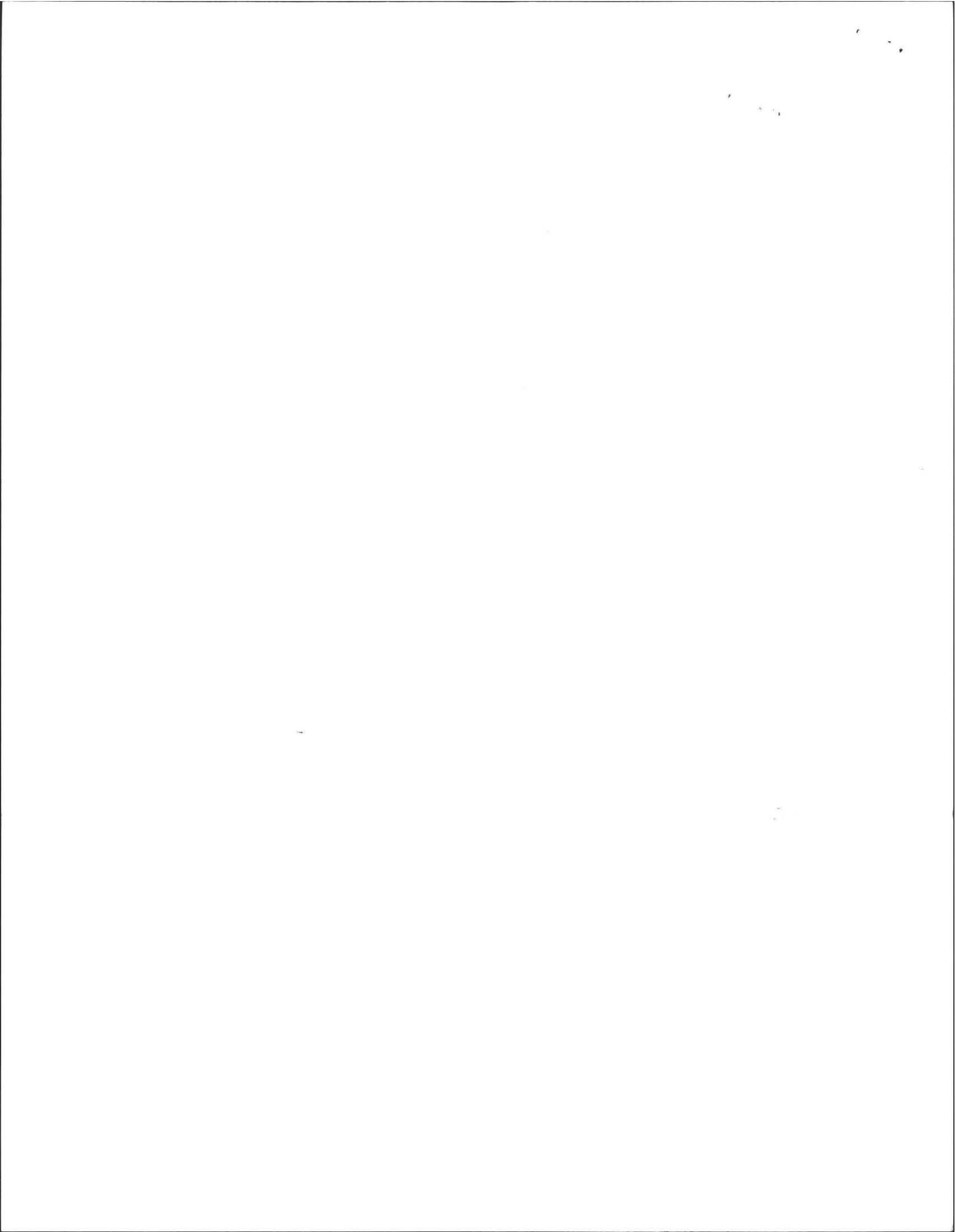


Shirleen M. Wetherbee
Regional Engineer
Bureau of Resource Protection

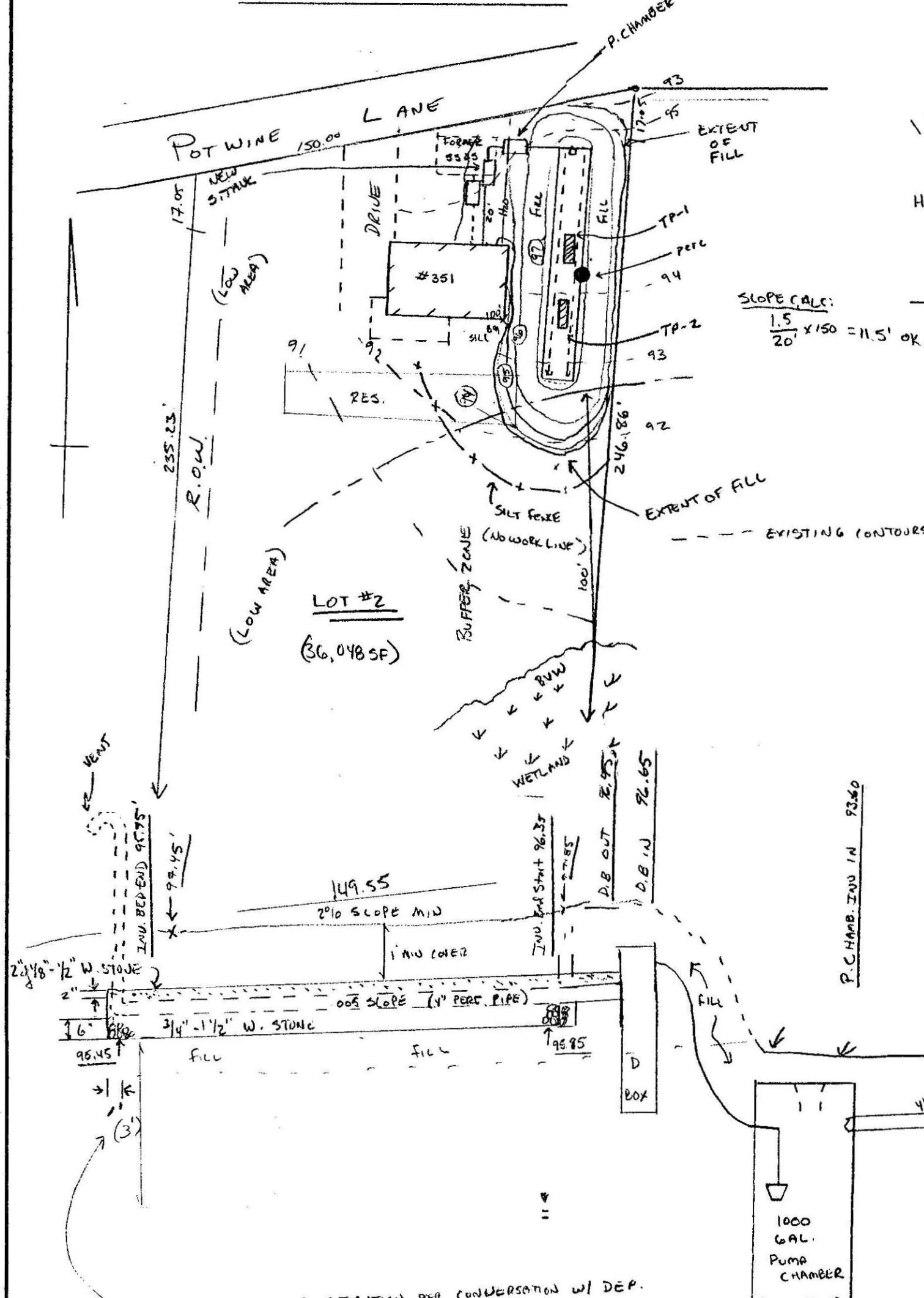
MT/mt/kz
wpc108/t5mandle

Enclosure

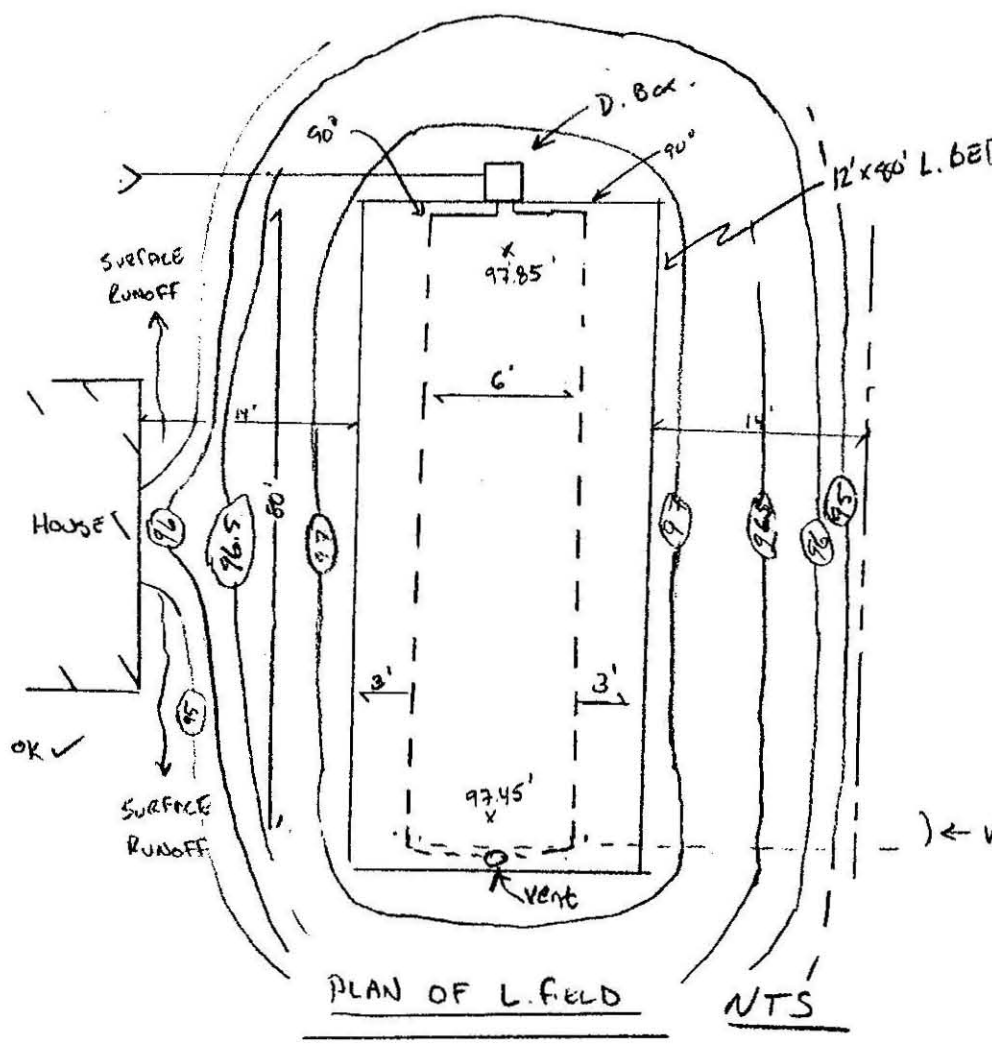
cc: Amherst Health Department/Enclosure
Christos Dimisioris, DWPC/Boston
Cold Spring Env. Consultants, 350 Old Enfield Rd, Belchertown, MA



LOT PLAN (SCALE: 1"=40')



SLOPE CALC:
 $\frac{1.5}{20} \times 150 = 11.5'$ OK ✓



SOIL LOGS

TP-2	DESCRIPTION	TP-1 (94.45')
0-6"	TOPSOIL + SUBSOIL	0-8"
6"-26"	BROWN SAND + GRAVEL	8"-36"
26"-10'	GRAY VARIED CLAY, LITTLE SILT, TR. F. SAND, OXIDES AT 24" H ₂ O at 7'	36"-11'

PERC RATE AT 30" = 4 MIN/IN ON 10/7/94 BY A WEISS, ES.

DESIGN NOTES

- DESIGN BASED ON PERC RATE OF 4 MIN/IN - DESIGN RATE (8 MIN/IN)
- DESIGN CRITERIA: 4 BR x 110 GAL/BE ⇒ 530 GAL/DAY, x 125 ⇒ 550 GAL/DAY ✓
- ONE 12' x 80' LENCH BED = 960 SF x 0.63 GAL/SF ⇒ 605 GAL/DAY ✓
- ASSUME TWO PIPES 78' LONG, W/6' SPACING
- NO GARBAGE DISPOSAL ALLOWED
- FILL TO BE PLACED IN ACCORDANCE WITH TITLE II & AMHERST ADVISORY [REMOVE ALL TOPSOIL FIRST]
- SANITARIAN TO INSPECT: SUBGRADE, SEWER & FINAL SYSTEM
- OUTLET PIPES FROM D. BOX TO BE LEVEL FOR AT LEAST 2'
- NO WELLS W/IN 100' OF SSDS, TOWARD H₂O SUPPLIED.
- USE PUMP & PUMP CHAMBER (GOULD WOODHA 1/2" OR EQUIVALENT) W/ ALARMS AND 1000 GAL CHAMBER. (310 CMR 15.05).

WETLAND REQUIREMENTS

- WORK SUBJECT TO WETLANDS REQS. BIO CAPR 10.00 (DETERMINATION OF APPLICABILITY)
- ALL WORK IN BUFFER ZONE AS NOTED
- ESTABLISH NO WORK ZONE WITH SILT FENCE.
- NO WORK WITHIN 50' OF RESOURCE AREA.
- APPROXIMATELY 1200 SF IN BUFFER ZONE

DEP VARIANCES REQUIRED

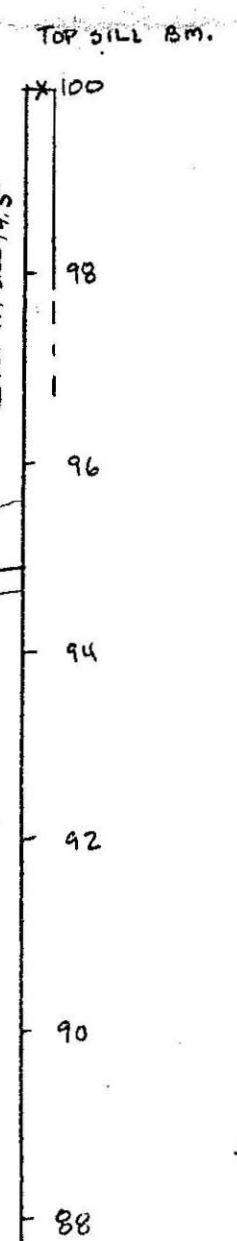
- VARIANCE FROM REQUIREMENT OF 4' OF NAT'L OVERLIEING MAT'L. (310, 15.03 (6)). [3' DESIGN].
- " " OF 25' OF FILL AROUND L. BED. (310, 15.02 (17)).
- " FROM 4' G.W. SEPARATION REQ'T. (TO 2'), BECAUSE OF RUNOFF CONCERNS.

SEPTIC TANK BOUNCANCY CALCS.

* AT 3' SUBMERGED 3' x 41 SF x 62.4 $\frac{lb}{CF}$ = 7,675 lb ✓ OK
 WEIGHT OF EMPTY TANK (NO SOIL COVER) 8,800 lb ✓ OK
 (REF: KELLOGG BROS.)

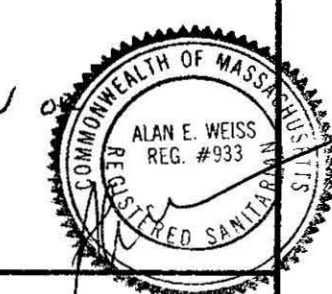
** NOTE: BASEMENT MUST BE REBUILT TO ACCOMMODATE SILL DISCHARGE ELEV.

CROSS-SECTION OF SSDS



DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DIVISION OF WATER POLLUTION CONTROL
 Review and Approval of
 Variance(s) Sought Under 310 CMR 15.20
 (Not Plan Approval)
 DATE 10/21/94 *Jmetherbee*

PROPOSED SEPTIC REPAIR PLAN FOR DIAN MANDLE 351 POTWINE LA., AMHERST, MA.		
SCALE:	APPROVED BY	DRAWN BY AW
DATE: 10/21/94		
COLD SPRING ENVIRONMENTAL, INC. BELCHERTOWN, MA. 323-5957		
DRAWING NUMBER 94-404-0822		



OCT 24 1994