

PROFILE SCALE VERT. 1 in = 8 ft., HORIZ. 1 in = 20 ft. DATUM TBM = 1 ELEV. = 100.00 (ASSUMED)

**DESIGN CRITERIA** Ref. The State Environmental Code, Title 5 Minimum Requirements For The Subsurface Disposal Of Sanitary Sewage.

**PERCOLATION TEST RESULTS** See Note #20

HOLE	'B'	'B1'	'G'	'C'	'L'	'F'	HOLE
BOT. EL.	92.5	93.0	92.5	92.8	92.5	92.5	
RATE	disc.	10 min/in	14 min/in	8 min/in	11 min/in	24 min/in	
DATE	9/13/84	9/25/84	7/22/86	9/25/84	7/22/86	7/22/86	
ENGR.	MSA	MSA	ALD	MSA	ALD	ALD	
INSP.	C.A.	C.A.	J.B.	C.A.	J.B.	J.B.	

**DEEP OBSERVATION HOLE LOGS** See Note #20

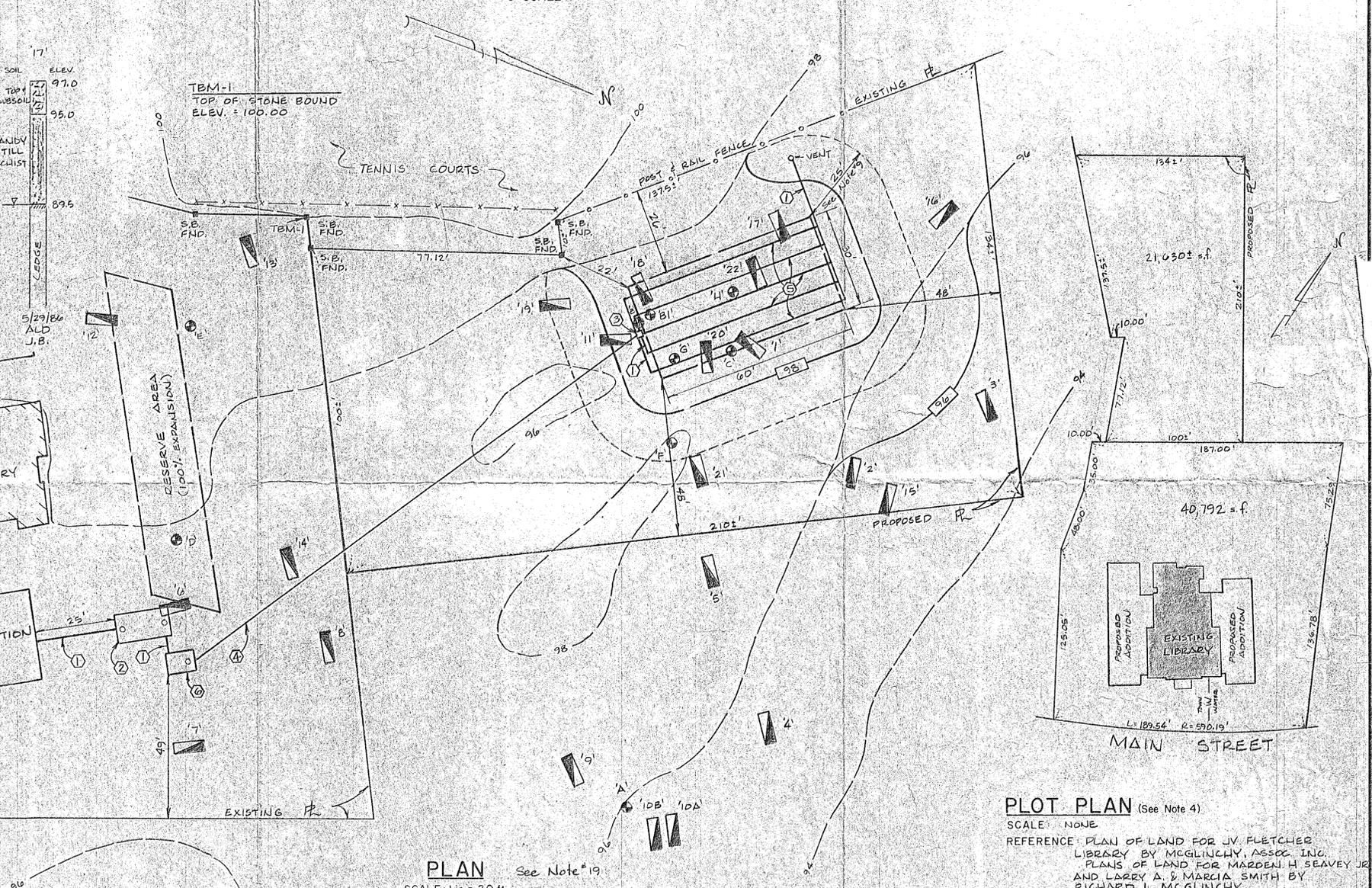
DATE	ENGR.	INSP.	SOIL	ELEV.								
4/27/84	ALD	M.G.	TOP	97.0								
5/29/86	ALD	J.B.	SANDY TILL W/SCHIST	96.0	SANDY TILL W/SCHIST	89.0	SANDY TILL W/SCHIST	89.5	SANDY TILL W/SCHIST	89.5	SANDY TILL W/SCHIST	89.5
5/29/86	ALD	J.B.	SANDY TILL W/SCHIST	95.5	SANDY TILL W/SCHIST	88.0	SANDY TILL W/SCHIST	88.5	SANDY TILL W/SCHIST	88.5	SANDY TILL W/SCHIST	88.5
7/22/86	ALD	J.B.	SANDY TILL W/SCHIST	97.0	SANDY TILL W/SCHIST	87.0						
5/29/86	ALD	J.B.	SANDY TILL W/SCHIST	97.0	SANDY TILL W/SCHIST	87.0						

**CALCULATIONS**

OCCUPANCY: JV FLETCHER LIBRARY  
 DAILY SEWAGE FLOW: 720 G.P.D. (See Note #17)  
 PERCOLATION RATE: 15 MIN/IN  
 LEACHING REQUIREMENTS:  
 SIDEWALL AREA: 1.5 SF/GAL, 0.66 GAL/SF  
 BOTTOM AREA: 2.3 SF/GAL, 0.43 GAL/SF  
 SEPTIC TANK REQUIREMENTS:  
 CAPACITY: 150% x 720 gal = 1080 gal  
 LEACHING AREA PROVIDED (FIELD):  
 SIDEWALL: N/A  
 BOTTOM: 60 ft. x 30 ft. = 1800 sq. ft.  
 DAILY SEWAGE FLOW CAPACITY PROVIDED:  
 SIDEWALL: N/A  
 BOTTOM: 1800 sq. ft. x 0.43 gal/sq. ft. = 774 G.P.D.  
 TOTAL: 774 G.P.D.  
 SEPTIC TANK CAPACITY PROVIDED: 1,500 gal

**GENERAL NOTES**

- THIS PLAN IS INTENDED FOR THE LOCATION AND DESIGN OF THE SEWAGE DISPOSAL SYSTEM ONLY.
- THE LOCATION, SIZE AND ORIENTATION OF THE BUILDING AS SHOWN IS SUGGESTED IN ACCORDANCE WITH CLIENT INSTRUCTIONS OR MAY BE OTHERWISE ASSUMED. SHOULD CHANGES OCCUR WHICH ALTER THE SYSTEM/BUILDING RELATIONSHIP, THE DESIGN ENGINEER SHALL BE NOTIFIED FOR REVISIONS TO THIS DESIGN. CONFORMANCE WITH ZONING BY-LAWS SHALL BE THE RESPONSIBILITY OF THE CLIENT.
- GROUNDWATER ELEVATIONS AT THE FOUNDATION HAVE NOT BEEN DETERMINED. IT SHALL BE THE RESPONSIBILITY OF THE CLIENT TO ENSURE THAT CELLAR SLABS ARE CONSTRUCTED ABOVE THE GROUNDWATER ELEVATION AND/OR TO PROVIDE PROPER DRAINAGE.
- SURVEY DATA SHOWN IS COMPILED FROM EXISTING INFORMATION. NO CERTIFICATION IS MADE REGARDING THE CORRECTNESS OF THIS DATA.
- THERE ARE NO EXISTING WELLS WITHIN 100 FT. OF THE PROPOSED LEACHING AREA AND 50 FT. OF THE SEPTIC TANK.
- THERE ARE NO SURFACE WATER SUPPLIES OR TRIBUTARIES TO RESERVOIRS WITHIN 100 FT. OF THE PROPOSED LEACHING AREA AND 50 FT. OF THE SEPTIC TANK.
- THE LOCATION OF THE PROPOSED WELL WHEN SHOWN IS SUGGESTED ONLY. ALL NEW WELLS CONSTRUCTED SHALL BE 100 FT. (MIN.) FROM ALL LEACHING AREAS, 50 FT. (MIN.) FROM ALL SEPTIC TANKS, AND 10 FT. FROM ALL PROPERTY LINES.
- THERE ARE NO EXISTING OR PROPOSED CATCHBASINS, SUBSURFACE DRAINS (INCLUDING FOUNDATION DRAINS) OR DRY WELLS WITHIN 25 FT. OF THE PROPOSED LEACHING AREA AND 25 FT. OF THE PROPOSED SEPTIC TANK.
- ALL LARGE BOULDERS, TOPSOIL, AND ORGANIC MATERIAL SHALL BE REMOVED FROM THE LEACHING AREA AND FOR A DISTANCE OF 25 FT. AROUND THE LEACHING AREA.
- THIS SYSTEM IS NOT DESIGNED FOR GARBAGE DISPOSAL UNITS.
- THIS PLAN SHOWS FEATURES WHICH WERE VISUALLY APPARENT AT THE TIME THE TOPOGRAPHIC SURVEY WAS PERFORMED. NO DETERMINATION AS TO THE EXISTENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. HAS BEEN MADE AND THE ABSENCE OF SAME IS NOT IMPLIED OR INTENDED.
- IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCY BETWEEN OBSERVED FIELD CONDITIONS AND CONDITIONS AS DESCRIBED ON THIS PLAN BEFORE PROCEEDING WITH THE INSTALLATION.
- DEVIATION FROM AN APPROVED PLAN IS PERMISSIBLE ONLY WITH THE CONSENT OF THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
- ALL CONSTRUCTION ACTIVITY WITHIN 100 FT. OF A WETLAND AREA REQUIRES FILING IN ACCORDANCE WITH THE WETLAND PROTECTION ACT MGL. 131 SECT. 40.
- ALL FILL REQUIRED FOR THE CONSTRUCTION OF THE LEACHING FACILITY SHALL CONFORM TO TITLE 5, SECT. 15.02 (17) SPECIFICATIONS, AND SHALL BE INSTALLED IN 6" LIFTS USING A VIBRATORY COMPACTOR.
- DESIGNATIONS SHOWN AS (MIN.) OR (MAX.) ONLY INDICATE THAT THE DIMENSION SHOWN IS SPECIFICALLY LIMITED AND DOES NOT IMPLY THAT THE VALUE GIVEN CAN BE LIBERALLY INCREASED OR DECREASED, RESPECTIVELY.
- DAILY SEWAGE FLOW IS BASED ON ACTUAL METER READINGS FOR SIMILARLY SIZED LIBRARIES AND HAVE BEEN INCREASED TO 200% OF ACTUAL FLOW AS REQUIRED BY 310 CMR 15.02 (13)(1). THE 2" DIAMETER PRESSURE PIPE SHALL BE INSULATED TO PREVENT FREEZING WHERE THE DEPTH OF COVER IS LESS THAN FOUR (4) FEET.
- ALL SYSTEM COMPONENTS LOCATED BENEATH DRIVEWAYS OR PARKING AREAS SHALL BE CAPABLE OF WITHSTANDING H-20 LOADING.
- FOR ADDITIONAL TEST RESULTS REFER TO THE DEEP OBSERVATION HOLE AND PERCOLATION TEST CERTIFICATES PREVIOUSLY SUBMITTED BY THIS OFFICE.



**LEGEND**

EXISTING CONTOURS: --- 100 ---  
 PROPOSED CONTOURS: --- 100 ---  
 WATER LINE (pressure): --- W ---

DEEP OBSERVATION HOLE: [Symbol]  
 PERCOLATION TEST HOLE: [Symbol]  
 REFERENCE TO SECTIONS (above): [Symbol]

TOPOGRAPHIC SURVEY BY: VEA DATE: 10/4/85

REPRODUCTION OF THIS PLAN IN WHOLE OR PART IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE DESIGN ENGINEER OR FIRM.

PLAN SCALE: 1 in = 20 ft. See Note #19

**PLOT PLAN** (See Note 4)  
 SCALE: NONE  
 REFERENCE: PLAN OF LAND FOR JV FLETCHER LIBRARY BY MCGLINCHY, ASSOC. INC. PLANS OF LAND FOR MARDEN H SEAVEY JR AND LARRY A & MARCIA SMITH BY RICHARD L MCGLINCHY.

<b>SUBSURFACE SEWAGE DISPOSAL SYSTEM</b>			Design: ALD
SCALE AS SHOWN DATE: SEPT. 15, 1986			Draft: ALD
MAIN STREET WESTFORD, MA			Check: CML
DATE	REVISION	BY	Appvd: JAV
Designed for: ARCHITECTS DESIGN GROUP II 593 WASHINGTON STREET WELLESLEY, MA			Job No. 85-216
<b>VISNIEWSKI ENGINEERING ASSOCIATES, INC.</b> CIVIL ENGINEERS & LAND SURVEYORS 6 COURTHOUSE LN CHELMSFORD MA 01824 (617) 937-0700			Sheet: 1 of 1 Dwg No. 6542