

- NOTES:
- CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
 - DESIGNED FOR H-20 LOADING, 1 TO 5 FEET OF COVER.
 - 24" OF CRUSHED STON AT ALL SIDES AND UNDERSIDE OF TANK

GALLONS	A (HGT)	B (CL)	ITEM NO.	WEIGHT
1000	4'-6"	3'-8"	TK-1000CDW	19,270#
1500	6'-2"	5'-4"	TK-1500CDW	12,503#
2200	9'-0"	8'-2"	1000+4 RISER	15,506#
2800	10'-8"	9'-10"	1000+6 RISER	18,230#

C	ITEM NO.	GALLONS	WEIGHT
4'-6"	TK-4RSCDW	1200	5,236#
8'-2"	TK-8RSCDW	1800	7,980#

**DRY WELL CYLINDRICAL
8' DIAMETER COMMERCIAL LINE
2,800 GALLON TANK**

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0" - 6"	A	L	5 YR 4/4	NONE	NONE
6" - 12"	B	SL	5 YR 4/3	NONE	NONE
12" - 120"	C1	CS	10 YR 4/3	MINOR MOTTLING	STONES COBBLES

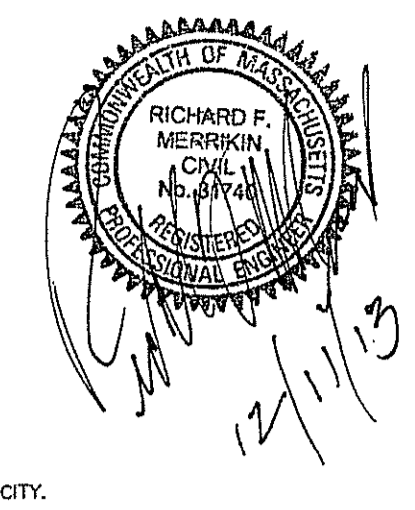
DEEP OBSERVATION HOLE LOG
GENERAL SOIL CONDITIONS FOR THE AREA PERFORMED AT 78 LOVETT ROAD BY RAV & ASSOCIATES, INC.
HOLE NUMBER: TP - 1 DATED: 08/28/12
GENERAL SITE CONDITIONS:
GRASS AND TREES.

PERCOLATION TEST HOLE PT - 1
TEST HOLE AT 2.5'
PERCOLATION RATE AT 30 MIN/INCH RECHARGE SYSTEM TO BE OVERSIZED DUE TO SLOW PERCOLATION RATE

LEGEND

- UTILITY POLE
- WATER GATE
- ⊕ HYDRANT
- ⊕ GAS GATE
- ⊕ SEWER MANHOLE
- ⊕ DRAIN MANHOLE
- ⊕ CATCH BASIN
- TREE
- ⊕ LIGHT POLE
- ⊕ SIGN
- TBR TO BE REMOVED
- TBA TO BE ABANDONED
- TH#1 DEEP TEST HOLE
- PT#1 PERCOLATION TEST
- 71.4 X SPOT ELEVATION
- 71 - PROPOSED CONTOUR
- 71 - EXISTING CONTOUR
- D DRAIN LINE
- W WATER LINE
- SS SEWER LINE
- G GAS LINE
- X FENCE
- STONEWALL
- HEDGE
- TREE LINE
- CO CLEAN OUT
- TOW TOP OF WALL
- BOW BOTTOM OF WALL
- TOC TOP OF CURB
- BOC BOTTOM OF CURB

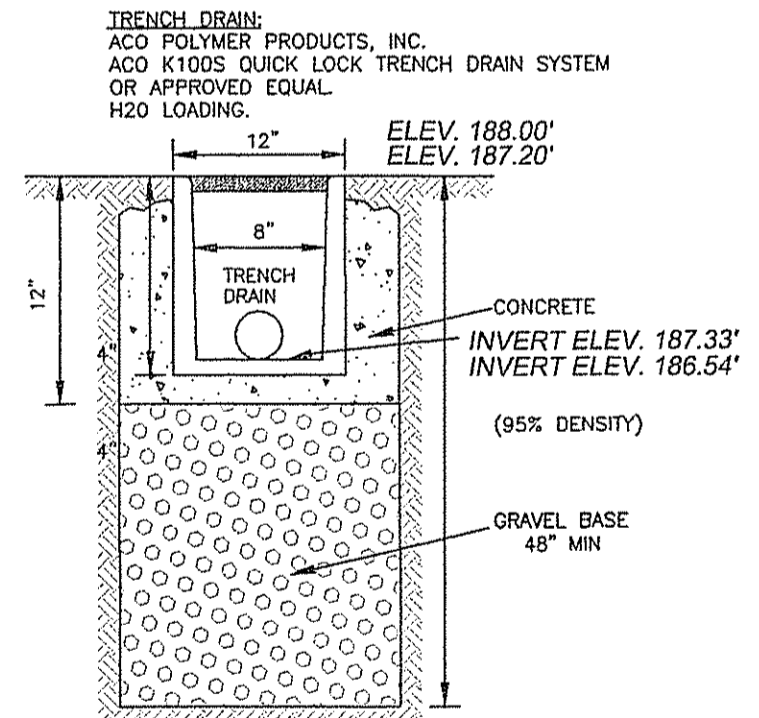
- NOTES**
- ELEVATIONS REFER TO CITY OF NEWTON DATUM.
 - THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED AND EXISTING UTILITIES.
 - MASSACHUSETTS STATE LAW REQUIRES UTILITY NOTIFICATION AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL DIG-SAFE AT 1-888-344-7233 IN ORDER TO COMPLY WITH STATE LAW.
 - ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS, LATEST EDITION, PREPARED AND ISSUED BY THE NEWTON ENGINEERING DEPARTMENT. COPIES MAY BE OBTAINED AT THE OFFICE OF THE CITY ENGINEER. REFER TO NOTE 29 FOR DETAILS.
 - PROPOSED SEWER PIPE SHALL BE 6" PVC SDR 35.
 - PROPOSED WATER SERVICE SHALL BE 1" TYPE K COPPER.
 - THIS PLAN IS THE RESULT OF AN INSTRUMENT SURVEY DONE ON THE GROUND JUNE, 13, 2012.
 - ALL WORK SHALL BE SUBJECT TO THE INSPECTION BY AND APPROVAL OF THE CITY ENGINEER.
 - NO EXCAVATION SHALL BE MADE BY THE CONTRACTOR IN ANY PUBLIC WAY OR UTILITY EASEMENT UNLESS AT LEAST FORTY-EIGHT (48) HOURS, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS, BEFORE THE PROPOSED EXCAVATION IS TO BE MADE. HE HAS SUBMITTED, BY REGISTERED MAIL, WRITTEN NOTICE OF THE PROPOSED EXCAVATION TO THE FOLLOWING:
 - SUCH PUBLIC UTILITY COMPANIES AS SUPPLY GAS, ELECTRICITY, AND TELEPHONE SERVICE IN THE CITY.
 - SUCH PRIVATE COMPANIES AS PROVIDE CABLE TELEVISION SERVICE IN THE CITY.
 - CITY OF NEWTON WATER & SEWER DEPARTMENT.
 - SUCH NOTICE SHALL SET FORTH THE STREET NAME AND A REASONABLY ACCURATE DESCRIPTION OF THE LOCATION OF THE EXCAVATION.
 - THE CONTRACTOR SHALL PROVIDE CITY OF NEWTON POLICE OFFICERS FOR THE DIRECTION AND CONTROL OF TRAFFIC, AS REQUIRED BY THE CITY ENGINEER.
 - NO WORK SHALL BE PERFORMED UNTIL THE NECESSARY PERMITS ARE OBTAINED FROM THE CITY OF NEWTON PUBLIC WORKS DEPARTMENT.
 - ALL TRENCHES IN PAVED STREETS SHALL BE TEMPORARILY PATCHED WITH 1.5 INCH DEPTH OF BITUMINOUS CONCRETE, LAID HOT AND MAINTAINED UNTIL THE PERMANENT PATCH IS INSTALLED.
 - WARNING SIGNS SHALL CONFORM TO PAGE 12 OF THE CITY OF NEWTON GENERAL CONSTRUCTION DETAILS.
 - ALL TOPSOIL, SUBSOIL OR IMPERVIOUS SOIL MUST BE EXCAVATED AND REMOVED BELOW THE LEACHING SYSTEM AND TO A DISTANCE 5' LATERALLY IN ALL DIRECTIONS BEYOND THE SIDES OF THE GALLEYS, BAGGELS, AS REQUIRED WITH A CLEAN FINE SAND, FREE FROM ORGANIC MATTER AND OILY/TOXIC SUBSTANCES. THE SAND SHALL HAVE A PERCOLATION RATE OF 2 MINUTES PER INCH OR FASTER.
 - IN CASES WHERE LEDGE OR BOULDERS ARE ENCOUNTERED, RAV & ASSOCIATES, INC. WILL NOT BE RESPONSIBLE FOR THE AMOUNT OF ROCK ENCOUNTERED.
 - IF ANY PART OF THIS DESIGN IS TO BE ALTERED IN ANY WAY, THE DESIGN ENGINEER, AS WELL AS THE APPROVING AUTHORITIES, SHALL BE NOTIFIED IN WRITING BEFORE CONSTRUCTION.
 - THE ROOF RUNOFF FROM THE ROOF SURFACES SHALL BE COLLECTED BY GUTTERS AND DIRECTED TO THE STORM WATER DRAINAGE SYSTEM.
 - PRIOR TO AN OCCUPANCY PERMIT BEING ISSUED, AN AS-BUILT PLAN SHOULD BE SUBMITTED TO THE ENGINEERING DIVISION IN BOTH DIGITAL FORMAT AND HAND. THE PLAN SHOULD SHOW ALL UTILITIES AND FINAL GRADES, TIES TO ALL GATES, VALVES, CLEAN-OUTS, CONNECTION POINTS AT MAINS, STRUCTURE ACCESS/MAINTENANCE COVERS, ANY EASEMENTS AND FINAL GRADING.
 - THE APPLICANT WILL HAVE TO APPLY FOR A STREET OPENING & UTILITIES CONNECTION PERMITS AS WELL AS A SIDEWALK CROSSING PERMIT WITH THE DPW.
 - THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGN ENGINEER FOR INSPECTIONS OR AS-BUILT LOCATIONS. RAV & ASSOCIATES, INC. WILL NOT PROVIDE AS-BUILT CERTIFICATION TO UNINSPECTED BACKFILLED UTILITIES. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED PRIOR TO INSPECTIONS.
 - ANY PROPOSED PVC PIPES UNDER PAVING OR CONCRETE WITH LESS THAN 30" OF COVER MUST BE ENCASED IN CONCRETE. (SEE PAGE 21, CITY OF NEWTON GENERAL CONSTRUCTION DETAILS.)
 - THE EXISTING WATER & SEWER SERVICES SHALL BE CUT AND CARPED AT THE MAIN AND BE COMPLETELY REMOVED FROM THE SITE, REPLACED AS SPECIFIED AND PROPERLY BACKFILLED. THE ENGINEERING DIVISION MUST INSPECT THIS WORK; FAILURE TO HAVE THIS WORK INSPECTED MAY RESULT IN THE DELAY OF ISSUANCE OF THE UTILITY CONNECTION PERMIT.
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 48 HOURS IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE DRAINAGE SYSTEM, WATER & SEWER SERVICES INSPECTED. THE SYSTEM & UTILITIES MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM & UTILITIES MAY THEN BE BACKFILLED.
 - THE EXISTING CONTOURS OF THE LAND ARE NOT TO BE ALTERED BY MORE THAN THREE (3) FEET AS A RESULT OF THE PLACEMENT OR REMOVAL OF SOIL, LOAM, CLAY, GRAVEL OR STONE, OR OTHER SOLID MATERIAL.
 - IF A CERTIFICATE OF OCCUPANCY IS REQUESTED PRIOR TO ALL SITE WORK BEING COMPLETED, THE APPLICANT WILL BE REQUIRED TO POST A CERTIFIED BANK CHECK IN THE AMOUNT TO COVER THE REMAINING WORK. THE CITY ENGINEER SHALL DETERMINE THE VALUE OF THE UNCOMPLETED WORK.
 - NO WORK IS ALLOWED WITHIN A CITY OF NEWTON RIGHT-OF-WAY BETWEEN NOVEMBER 15TH AND APRIL 15TH, IF AN EMERGENCY EXISTS OR THERE ARE EXTENUATING CIRCUMSTANCES, APPLICANT MAY REQUEST PERMISSION FROM THE CITY ENGINEER. IF ALLOWED, SPECIAL CONSTRUCTION REQUIREMENTS WILL BE REQUIRED, AND AS SUCH IT IS RECOMMENDED THAT THE APPLICANT OR APPLICANT'S REPRESENTATIVE CONTACT THE CITY OF NEWTON ENGINEERING DEPARTMENT PRIOR TO START OF WORK FOR CLARIFICATION.
 - AT THE END OF CONSTRUCTION, ALL DRAINAGE STRUCTURES ARE TO BE CLEANED OF SILT, STONES AND OTHER DEBRIS.
 - DURING CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED ONCE PER WEEK AND WITHIN 24 HOURS OF ANY STORM EVENT GENERATING MORE THAN 1/2" OF RAINFALL. THE EROSION CONTROL MEASURES SHALL BE CLEANED REGULARLY AND ADJUSTED IF NECESSARY TO ENSURE THAT NO SILT OR DEBRIS LEAVES THE SITE.
 - WITH EXCEPTION OF GAS UTILITY SERVICES, ALL UTILITY TRENCHES WITHIN ANY CITY OF NEWTON RIGHT-OF-WAY WILL BE BACKFILLED WITH TYPE I (EXCAVATABLE) CONTROLLED DENSITY FILL, AS SPECIFIED BY THE CITY OF NEWTON ENGINEERING SPECIFICATIONS.
 - ALL CONSTRUCTION ACTIVITIES WITHIN THE CITY OF NEWTON RIGHT-OF-WAY MUST FULLY COMPLY WITH ALL OF CITY OF NEWTON CONSTRUCTION SPECIFICATIONS AS WELL AS CHAPTER 21.00 AND 22.00.
 - THE NEW SEWER SERVICE LINE MUST BE PRESSURE TESTED PRIOR TO USE. THE RESULT OF THE TEST MUST BE PROVIDED TO THE ENGINEERING DIVISION PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
 - THE CONTRACTOR NEEDS TO NOTIFY THE ENGINEERING DIVISION 48 HOURS IN ADVANCE AND SCHEDULE AN APPOINTMENT TO HAVE THE DRAINAGE SYSTEM INSPECTED. THE SYSTEM MUST BE FULLY EXPOSED FOR THE INSPECTOR. ONCE THE INSPECTOR IS SATISFIED, THE SYSTEM MAY THEN BE CONSTRUCTED.
 - ALL SILTATION CONTROL NEEDS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER'S OFFICE FOR APPROVAL PRIOR TO COMMENCEMENT.
 - ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MGL CHAPTER 82A, TRENCH EXCAVATION SAFETY REQUIREMENTS, TO PROTECT THE GENERAL PUBLIC FROM UNAUTHORIZED ACCESS TO UNATTENDED TRENCHES. A TRENCH EXCAVATION PERMIT IS REQUIRED. THIS APPLIES TO ALL TRENCHES.



N/F CHALAMISH

N/F FREEMAN

#78
EXISTING 2.5
STORY SINGLE
FAMILY DWELLING
F.F.=189.50±
TOF=188.16±
GF=187.50±



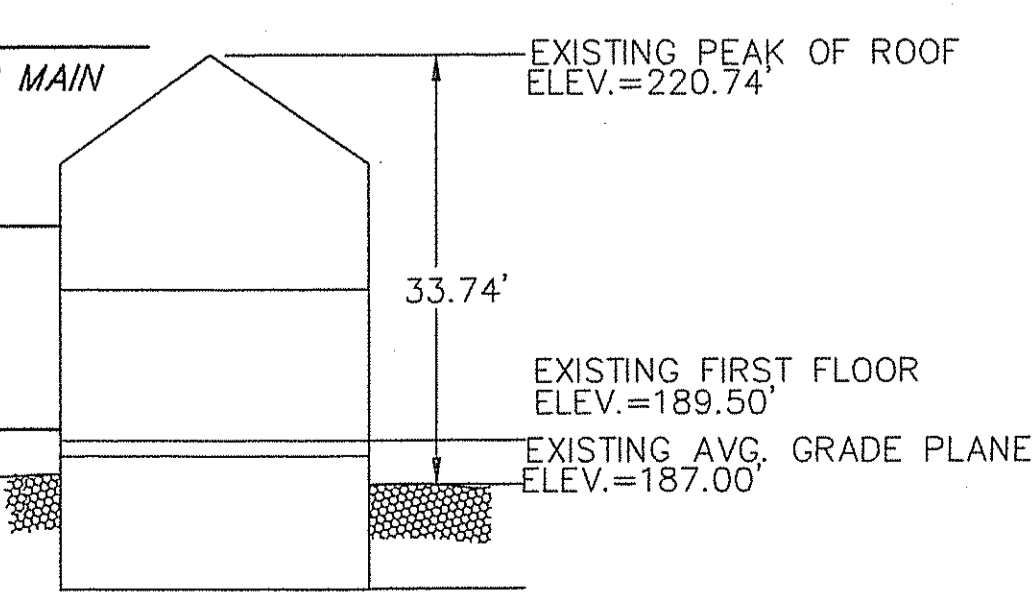
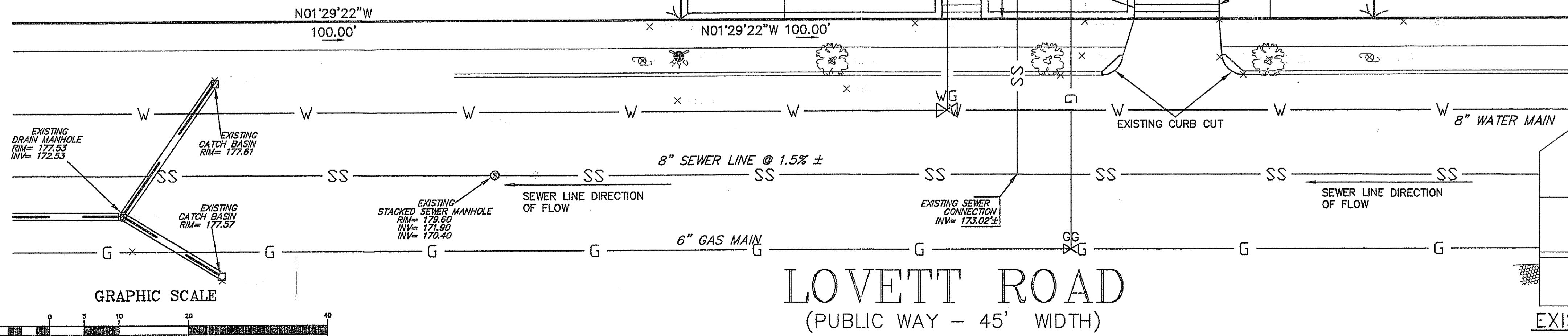
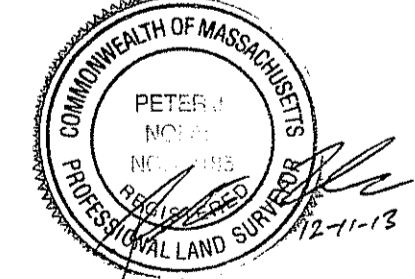
TRENCH DRAIN DETAIL

ZONING LEGEND

ZONING DISTRICT: SINGLE RESIDENCE 2 (LOT CREATED AFTER 12-07-1953)

	REQUIRED	EXISTING	COMPLIANCE
MIN. AREA	15,000 S.F.	16,004± S.F.	YES
MIN. FRONTAGE	100'	100'	YES
MIN. YARD FRONT	30'	30.5'	YES
SIDE	15'	15.5'	YES
REAR	15'	59.3'	YES
MAX. BLDG. HEIGHT	36'	33.74'	YES
MAX. STORIES	2.5	2.5	YES

- NOTES:**
- INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY PETER NOLAN & ASSOCIATES LLC ON 09-11-13.
 - DEED REFERENCE BOOK 51468 PAGE 311, MIDDLESEX SOUTH REGISTRY OF DEEDS. PLAN BOOK 10445 PAGE 36.
 - THIS PLAN IS NOT INTENDED TO BE RECORDED.
 - ANY ELEVATIONS SHOWN ARE CITY OF NEWTON DATUM.



**EXISTING HOUSE PROFILE
NOT TO SCALE**

DATE	REVISION

REVISED DRAINAGE & WALL SPECIAL PERMIT PLAN

78 LOVETT ROAD,
NEWTON, MASSACHUSETTS

PETER NOLAN & ASSOCIATES LLC
LAND SURVEYORS/CIVIL ENGINEERING CONSULTANTS
697 CAMBRIDGE STREET, SUITE 103, BRIGHTON MA 02135
PHONE: 857 891 7478/617 782 1533 FAX: 617 782 1533
EMAIL: pnolan@pnasurveyors.com

SCALE: 1" = 10'

APPROVED: R.F.M.	DESIGNED BY: E.S.	DRAWING No. S-1001
DATE: 12/09/13	DRAWN BY: K.B.	CHECKED BY: R.F.M.

