



MEMORANDUM

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To:	<u>Jack O'Connell</u>	Date:	<u>12/31/12</u>
From:	<u>Elizabeth Mainini</u>	Copies:	<u>Amanda Cavaliere, Hayley Franz</u>
Subject:	<u>Boston Post Road Site, Wayland, Massachusetts</u>		
	<u>Soil Testing</u>		
	<u>T&H No. 3184</u>		

On Wednesday December 26, 2012, Tata & Howard, Inc. inspected five (5) test pits excavated by the Town of Wayland Department of Public Works to determine the suitability of the soils for locating a Title V leaching field for the proposed River's Edge development located at 484-490 Boston Post Road. Due to several site constraints including the location of the firing range, existing stockpiles, pre-existing septage receiving facility and 100-foot buffer zone to the boarding vegetated wetlands, the test pits were limited to the accessible portions of the site, and are shown on the attached figure. Three of the test pits were located in areas of hard-packed fill and two located in grassy areas.

In each of the three test pits located in the hard-packed fill, Test Pit Nos. 1-3, there was approximately three and a half to four feet of fill material over naturally occurring material. No A-layer was seen at any of these test pits. However Test Pit Nos. 1 and 3 had six to ten inches of a sandy loam B-layer.

Test Pits No. 4 and 5 were located in grassy areas adjacent to the access road to the septage receiving facility. Test Pit No. 4 included a fine sandy loam A-layer and small but distinguishable B-layer of Loamy Sand. Test Pit 5 had similar top soil and sub soil layers over a gravelly material consistent with the material found at the C-layer throughout the site. However, at approximately four feet below grade there are dark, loamy layers that appeared to be remnants of the original A and B layers. It is probable that when the tanks and building at the westerly side of the site were excavated, the material was placed as fill in this area. If a leaching field were to be located in this area, careful attention should be paid to excavate all of the fill material and get below the old top and sub soil layers.

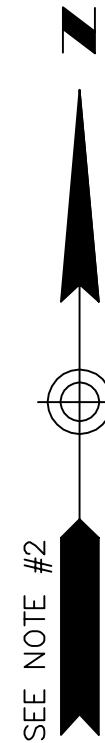
The C-layer in all five pits consisted of course sand and gravel with a varying percentage of cobbles. In all cases, the material would be classified as Well Draining Class A soils, considered well suited for a Title V leaching field. Each test pit was excavated to approximately ten feet below grade with no sign of high groundwater. Given the characteristics of the soil found and the elevation of the wetlands adjacent to the site, approximately 128 feet, it is likely that groundwater is not far below the elevation exposed during excavation of the test pits.

Based on the results of the soil exploration conducted, the entire site appears to have Class A soils with groundwater a minimum of 10 feet below the existing grade throughout the site.

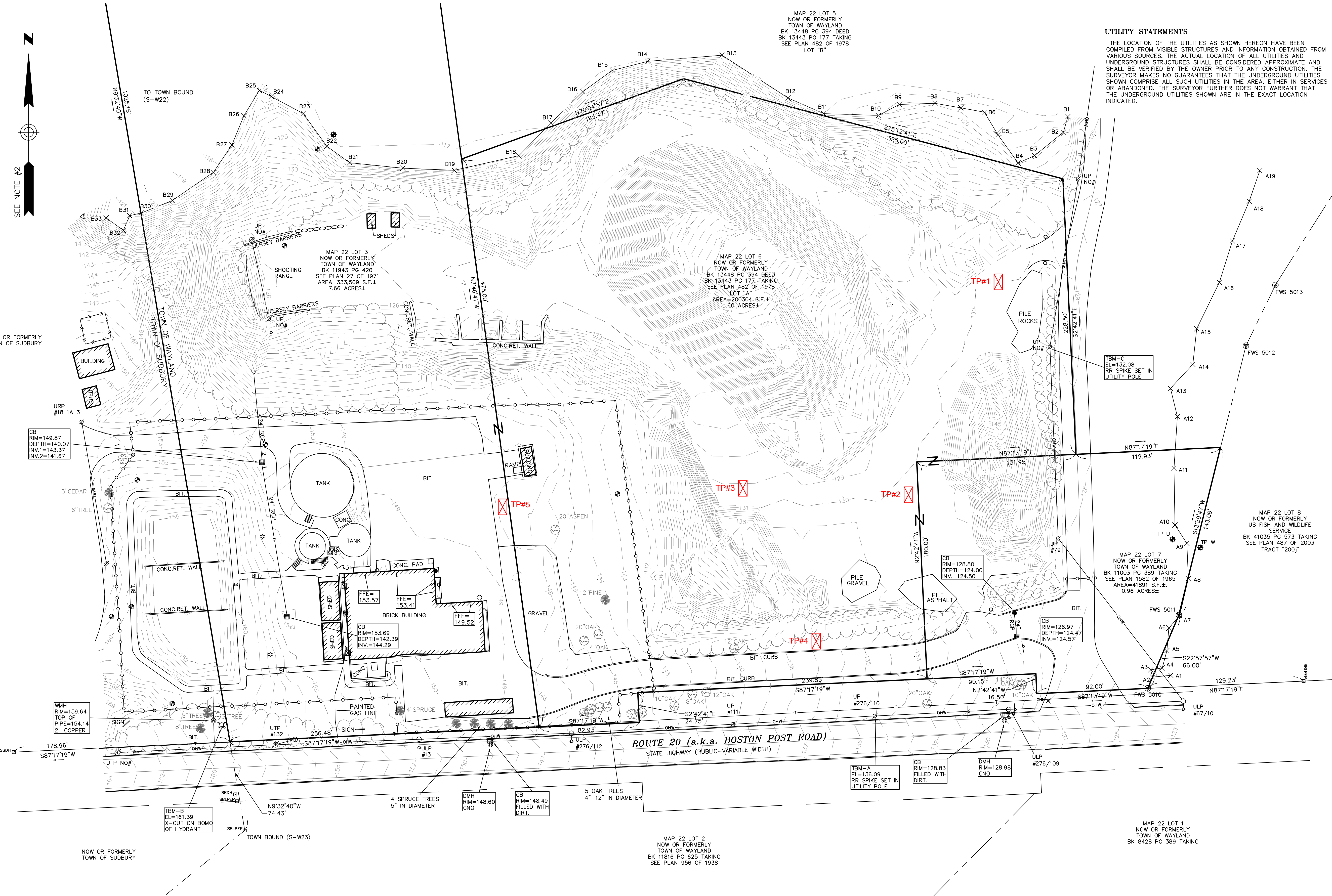
Signature: Elizabeth Mainini

Main Office Marlborough, MA

Branch Offices Goodyear, AZ Lakeville, MA Meriden, CT Nashua, NH Portland, ME



NOW OR FORMERLY
TOWN OF SUDBURY



UTILITY STATEMENTS

THE LOCATION OF THE UTILITIES AS SHOWN HEREON HAVE BEEN COMPILED FROM VISIBLE STRUCTURES AND INFORMATION OBTAINED FROM VARIOUS SOURCES. THE ACTUAL LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHALL BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER PRIOR TO ANY CONSTRUCTION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICES OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

LOCUS MAP (N.T.S.)

NOTES

1. THIS PLAN WAS PREPARED FROM AN ACTUAL ON THE GROUND FIELD SURVEY CONDUCTED BY WSP SELLS ON NOVEMBER 5-16, 2012.
2. THE HORIZONTAL DATUM SHOWN HEREON REFERENCES MASSACHUSETTS MAINLAND STATE PLANE COORDINATE SYSTEM NAD83.
3. THE VERTICAL DATUM SHOWN HEREON REFERENCES NAVD88.

PLAN REFERENCES

1. MASSACHUSETTS STATE HIGHWAY LAYOUT 493 SHEET 4.
2. MASSACHUSETTS STATE HIGHWAY LAYOUT 840 SHEET 1.
3. 1904 STATE HARBOR AND LAND COMMISSION'S TOWN LINE ATLAS.
4. PLAN OF LAND IN WAYLAND MASS. DATED DECEMBER 12, 1962. RECORDED IN THE MIDDLESEX REGISTRY OF DEEDS SOUTHERN DISTRICT AS PLAN NUMBER 1582 OF 1965.
5. COMPILED PLAN OF LAND IN WAYLAND MASS. SHOWING PROPOSED LAND TAKINGS FOR DUMP PURPOSES. DATED DECEMBER 16, 1966. RECORDED IN THE MIDDLESEX REGISTRY OF DEEDS SOUTHERN DISTRICT AS PLAN NUMBER 758 OF 1967.
6. PLAN OF LAND IN WAYLAND, MASS. SHOWING LAND TO BE ACQUIRED FOR DUMP PURPOSES. DATED SEPTEMBER 24, 1969. RECORDED IN THE MIDDLESEX REGISTRY OF DEEDS SOUTHERN DISTRICT AS PLAN NUMBER 27 OF 1971.
7. PLAN OF LAND IN WAYLAND, MASS. SHOWING LAND OWNED BY WILLIAM W. AND MARY P. LORD. DATED FEBRUARY 28, 1978. RECORDED IN THE MIDDLESEX REGISTRY OF DEEDS SOUTHERN DISTRICT AS PLAN NUMBER 482 OF 1978.
8. UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE GREAT MEADOWS NATIONAL WILDLIFE REFUGE UNKNOWN OWNERS TRACT (2000). TOWN OF WAYLAND, MIDDLESEX COUNTY, MASSACHUSETTS. RECORDED IN THE MIDDLESEX REGISTRY OF DEEDS SOUTHERN DISTRICT AS PLAN NUMBER 487 OF 2003.

PROGRESS PRINT

Nov 29, 2012 - 9:28am

GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

EXISTING CONDITIONS SURVEY
484-490 BOSTON POST ROAD
WAYLAND, MASSACHUSETTS
PREPARED FOR
TATA & HOWARD

WSP • SELLS
Transportation & Infrastructure

155 Main Dunstable Rd. Suites 120 & 125 • Nashua, NH 03060 • 603.595.7900
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Drawn By	ES, MS	Date	NOVEMBER 29, 2012	Job No.	123128
Surveyed By	CG, TO, BC, JL	Scale	1" = 40'	Sheet No.	1 OF 1
Checked By	DJH				
Book No.	N-256				

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LEGEND

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|-----------------------------|------------------|-------------------------------|--------------------------|-------------------|-------------------------|-----------------------|
| DISK | CULVERT | ROOF DRAIN | COMMON OWNERSHIP | ABUTTERS LOT LINE | WATER LINE | SHRUB LINE |
| STONE BOUND WITH DRILL HOLE | NO LABEL MANHOLE | UTILITY POLE WITH LIGHT | POST | PROPERTY LINE | GAS LINE (PAINTED) | TREE LINE |
| STONE BOUND LEAD PLUG E/PIN | ELECTRIC BOX | UTILITY POLE WITH TRANSFORMER | MONITORING WELL | RIGHT OF WAY | TELEPHONE LINE (RECORD) | INTERMEDIATE CONTOURS |
| STONE BOUND | SEWER HANDHOLE | DECIDUOUS TREE | LIGHT POLE | CHAIN LINK FENCE | OVERHEAD WIRES | INDEX CONTOURS |
| D-SHAPED CATCH BASIN | ELECTRIC METER | CONIFER TREE | TEST PIT | TOWN LINE | WETLAND LINE | STONE WALL |
| CATCH BASIN | FIRE HYDRANT | SIGN (SINGLE POSTED) | COULD NOT OBSERVE | DRAIN LINE | | |
| | | | BIT. BITUMINOUS CONCRETE | | | |