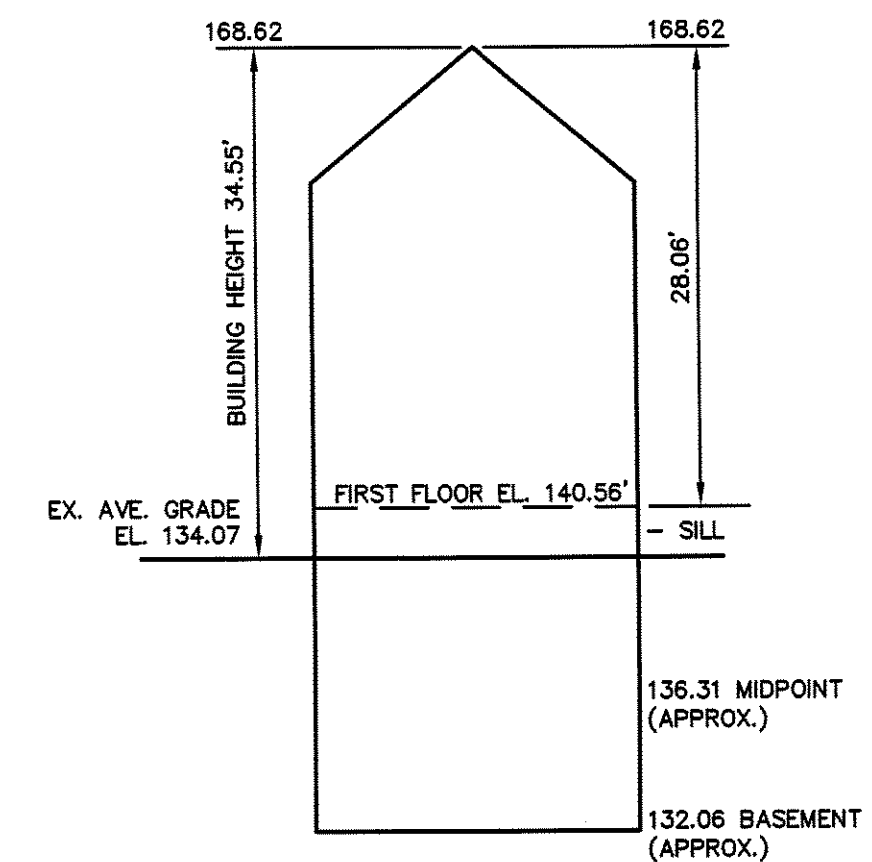
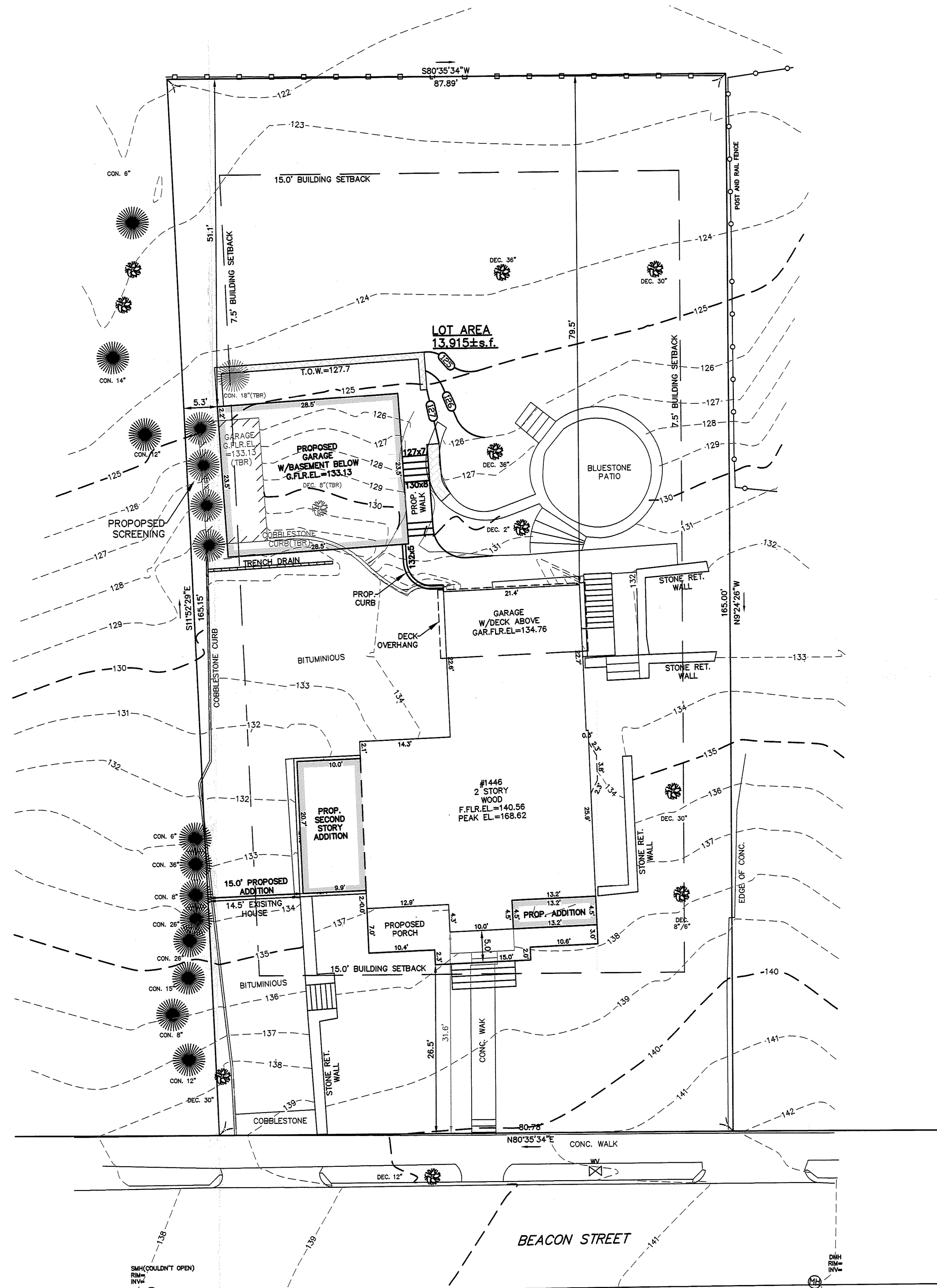


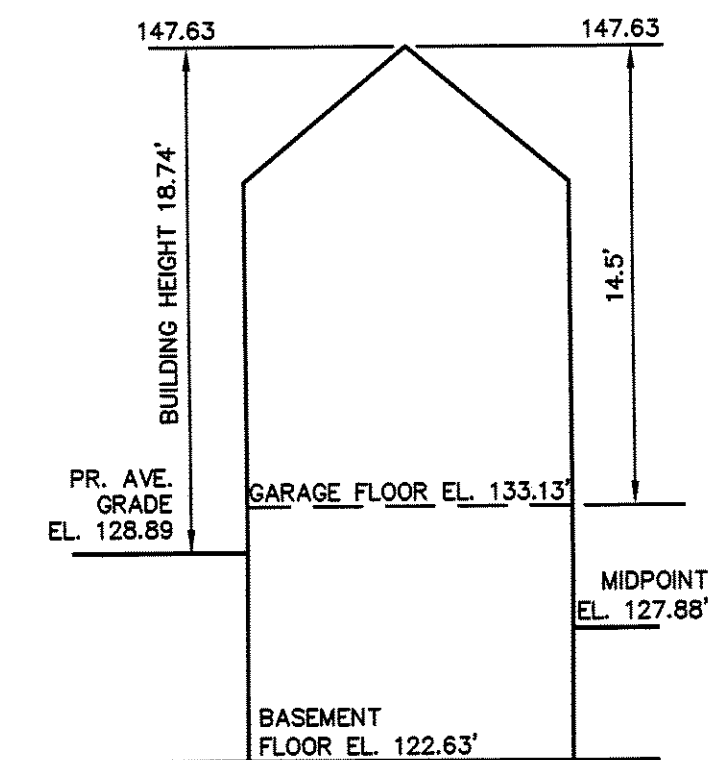
2141499.dwg (2/2014)

**LEGEND**

- BUILDING
- PROPERTY LINE W/ BEARING DISTANCE
- CONTOUR
- STOCKADE FENCE
- CHAINLINK FENCE
- PICKET FENCE
- SEWER LINE
- DRAIN LINE
- WATER LINE
- GAS LINE
- GAS VALVE
- WATER VALVE
- DRAIN MANHOLE
- SEWER MANHOLE
- CATCH BASIN
- UTILITY POLE
- LIGHT POLE
- DECIDUOUS TREE
- CONIFEROUS TREE



**EXISTING BUILDING HEIGHT**  
NOT TO SCALE



**PROPOSED GARAGE HEIGHT**  
NOT TO SCALE

Address: #1446 Beacon St, Newton

**Length Weighted Mean**

**Existing Conditions Average Grade Calculation**

A	B	C	D	E	F
Segment	Length Of Segment in Feet	Height of High Point of Segment	Height of Low Point of Segment	E=(C+D)/2 Average Segment Height	F=BxE
1	12.92	137.31	136.94	137.13	1771.66 Sq. Ft.
2	10.42	137.10	133.84	135.47	1411.60 Sq. Ft.
3	21.65	133.69	131.36	132.53	2869.17 Sq. Ft.
4	10.47	133.19	131.46	132.33	1385.44 Sq. Ft.
5	14.30	134.65	133.36	134.01	1916.27 Sq. Ft.
6	22.62	134.64	134.28	134.46	3041.49 Sq. Ft.
7	21.95	131.53	130.82	131.18	2879.29 Sq. Ft.
8	11.50	133.09	124.29	128.69	1479.94 Sq. Ft.
9	9.70	133.70	132.50	133.10	1291.07 Sq. Ft.
10	16.10	137.61	134.08	135.85	2187.10 Sq. Ft.
11	13.16	137.90	137.25	137.58	1810.49 Sq. Ft.
12	10.54	139.32	138.26	138.79	1462.85 Sq. Ft.
<b>Total</b>	<b>175.33</b>				<b>23506.35 Sq. Ft.</b>

Total Column F / Total Column B = Average Grade  
**Average Grade: 134.07'**

Address: #1446 Beacon Street-Garage

**Length Weighted Mean**

**Proposed Average Grade Calculation**

A	B	C	D	E	F
Segment	Length Of Segment in Feet	Height of High Point of Segment	Height of Low Point of Segment	E=(C+D)/2 Average Segment Height	F=BxE
1	28.50	133.13	132.50	132.82	3785.23 Sq. Ft.
2	23.50	133.00	124.32	124.29	2920.82 Sq. Ft.
4	28.50	127.80	127.70	127.75	3640.88 Sq. Ft.
5	23.50	132.50	127.70	130.10	3057.35 Sq. Ft.
<b>Total</b>	<b>104.00</b>				<b>13404.27</b>

Total Column F / Total Column B = Average Grade  
**Average Grade: 128.89'**

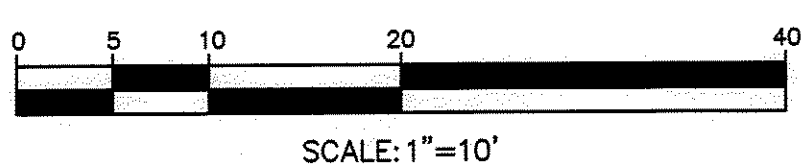
EXISTING IMPERVIOUS AREA: 4,831.3s.f.  
 PROPOSED IMPERVIOUS AREA: 5,591.21s.f.  
 TOTAL INCREASE IN IMPERVIOUS AREA: 759.91s.f.  
 (13,915s.f. x 4%) / 100 = 556.6s.f.  
 759.91s.f. > 556.6s.f. (DRAINAGE REQUIRED)

**ZONING CHART ACCESSORY BLDG**  
NEWTON, MASSACHUSETTS

REGULATION	REQUIRED	EXISTING	PROPOSED
FRONT SETBACK	5.0'	92.25'	90.3'
SIDE SETBACK	5.0'	2.1'	5.3'
REAR SETBACK	5.0'	52.97'	51.1'
BUILDING HEIGHT	22.0'	-	18.74'
AVERAGE GRADE	-	-	128.89'

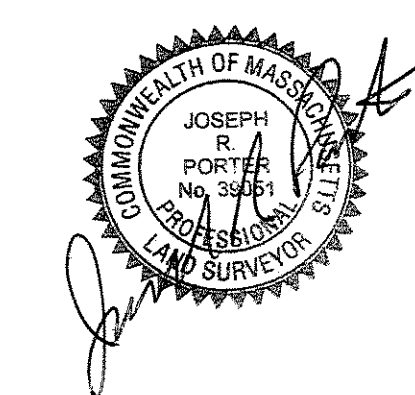
**ZONING CHART**  
NEWTON, MASSACHUSETTS

REGULATION	REQUIRED	EXISTING	PROPOSED
LOT AREA	10,000s.f.	13,915s.f.	N/C
LOT FRONTAGE	80.0'	80.78'	N/C
FRONT SETBACK	25.0'	31.6'	26.5'
SIDE SETBACK	7.5'	14.5'	N/C
REAR SETBACK	15.0'	79.5'	N/C
BUILDING HEIGHT	35.0'	34.55'	-
AVERAGE GRADE	-	-	134.07'
LOT COVERAGE	30.0%	13.7%	19.0%
OPEN SPACE	50%	72.7%	62.3%



**TOPOGRAPHIC SITE PLAN**  
NEWTON, MASSACHUSETTS

SHOWING PROPOSED CONDITIONS AT  
 #1446 BEACON STREET  
 SCALE: 1in.=10ft. DATE: JULY 2, 2014  
 REVISED DATE: OCTOBER 14, 2014, NOVEMBER 19, 2014  
 PROJECT: 214149



**VTP**  
ASSOCIATES  
INC.

LAND SURVEYORS - CIVIL ENGINEERS. 132  
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