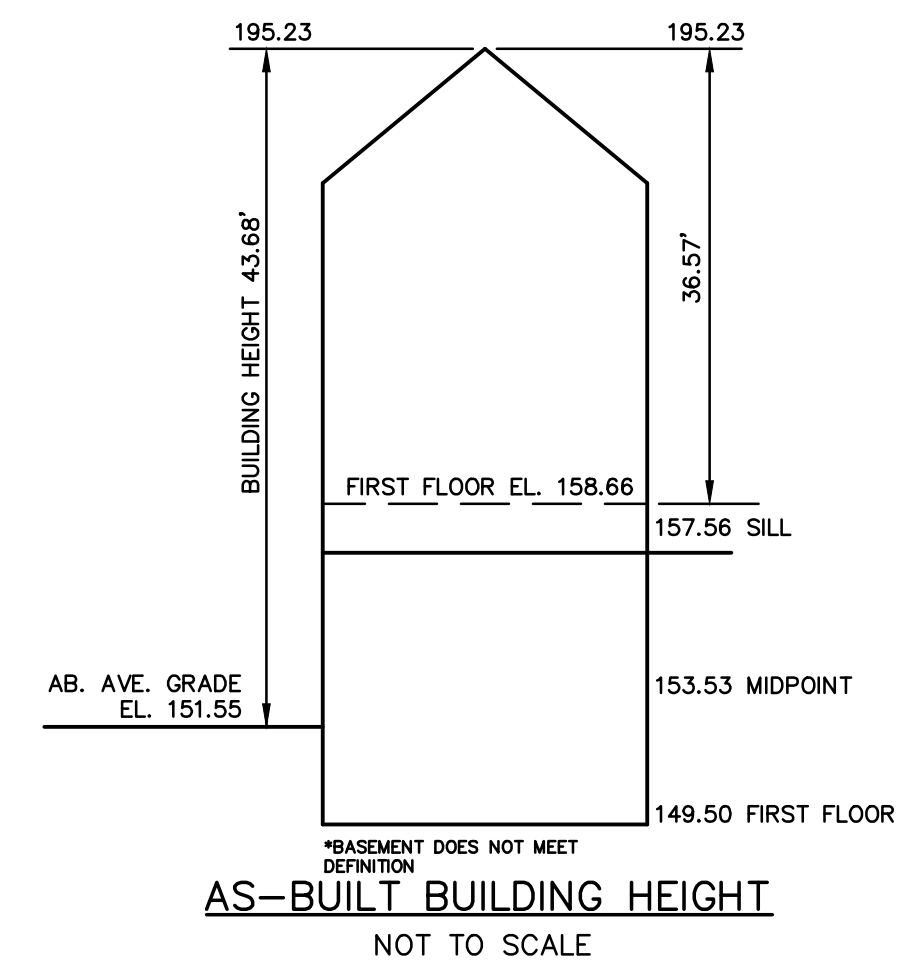


214221_00.dwg (2/2017)

LEGEND

- BUILDING
- PROPERTY LINE W/ BEARING DISTANCE S81°56'34"E
116.23'
- CONTOUR 70
- STOCKADE FENCE
- CHAINLINK FENCE
- PICKET FENCE
- SEWER LINE S
- DRAIN LINE D
- WATER LINE W
- GAS LINE G
- ELECTRICAL LINE E
- GAS VALVE
- WATER VALVE
- DRAIN MANHOLE
- SEWER MANHOLE
- ELECTRICAL MANHOLE
- CATCH BASIN
- UTILITY POLE
- LIGHT POLE
- DECIDUOUS TREE DEC. 22"
- CONIFEROUS TREE CON. 12"

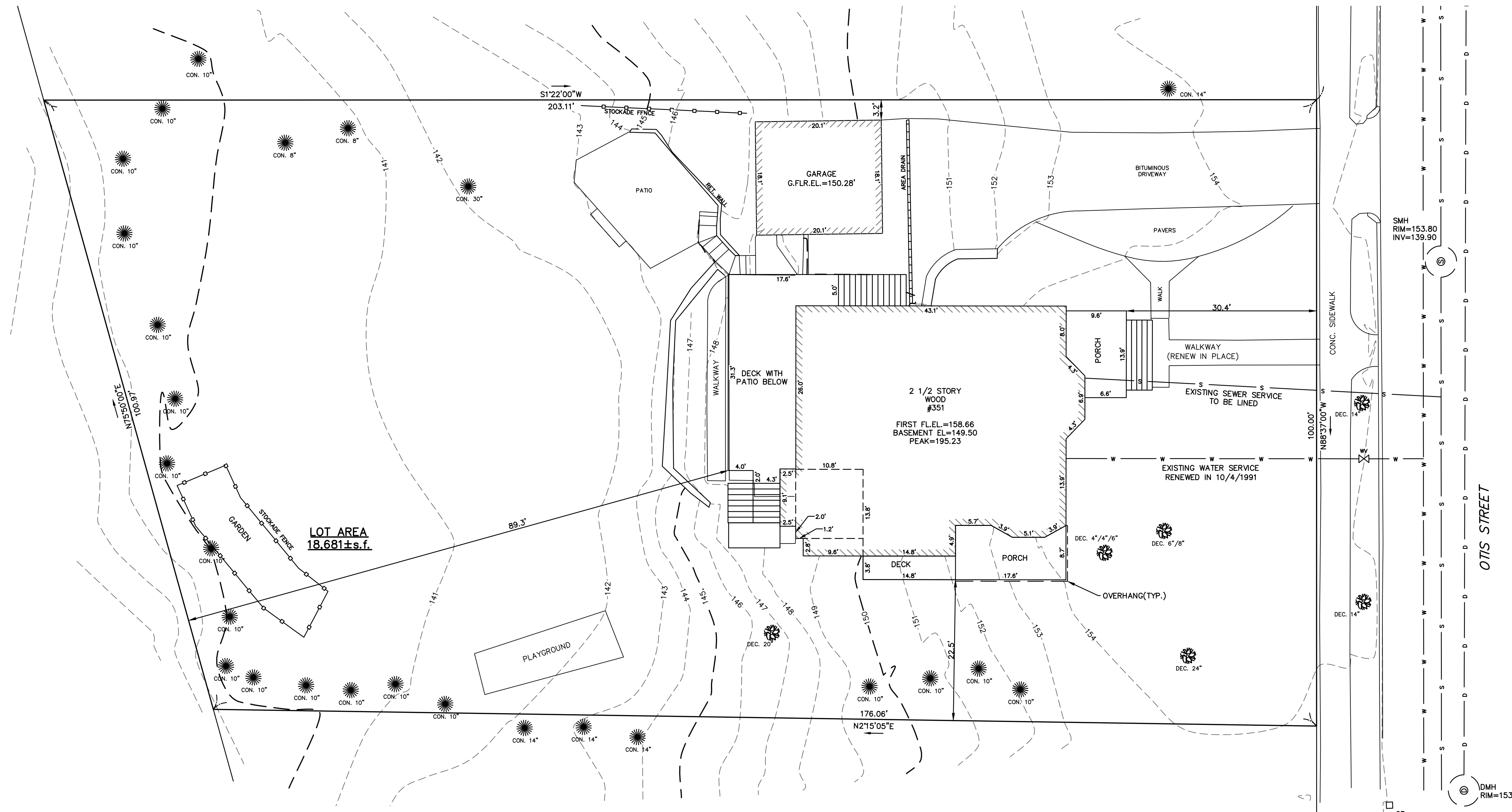


Address: #351 Otis Street, Newton

Length Weighted Mean
As-Built Average Grade Calculation

Segment	A	B	C	D	E	F
	Length Of Segment in Feet	Height of High Point of Segment	Height of Low Point of Segment	Height of Segment	Area (C+D)/2 x B	F=BxE
1	17.63	153.78	151.56	152.67	2691.59 Sq. Ft.	
2	24.30	151.99	148.61	150.30	3652.33 Sq. Ft.	
3	9.14	148.28	147.72	148.00	1352.71 Sq. Ft.	
4	26.10	148.37	148.19	148.28	3870.20 Sq. Ft.	
5	20.04	150.38	148.41	149.40	2993.90 Sq. Ft.	
6	16.23	153.80	150.38	152.09	2468.38 Sq. Ft.	
7	6.86	153.79	153.80	153.79	1055.03 Sq. Ft.	
8	9.60	154.08	153.95	154.02	1478.55 Sq. Ft.	
9	13.85	154.46	154.24	154.35	2137.71 Sq. Ft.	
10	6.60	154.64	154.59	154.62	1020.47 Sq. Ft.	
11	22.52	154.71	154.06	154.39	3476.77 Sq. Ft.	
Total	172.87				26197.64 Sq. Ft.	

Total Column F / Total Column B = Average Grade
Average Grade: 151.55'



ZONING CHART
NEWTON, MASSACHUSETTS

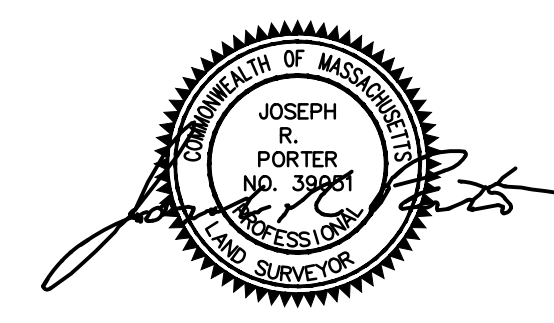
ZONE: SR-2 (OLD) SUBMISSION: AS-BUILT

REGULATION	REQUIRED	EXISTING	PROPOSED	AS-BUILT
LOT AREA	10,000s.f.	18,681±s.f.	N/C	N/C
LOT FRONTAGE	80.0'	100.0'	N/C	N/C
FRONT SETBACK	25.0'	30.3'	29.8'	30.4'
SIDE SETBACK	7.5'	21.9'	22.1'	22.5'
REAR SETBACK	15.0'	84.2'	85.6'	89.3'
BUILDING HEIGHT	36.0'	43.93' *	43.16' *	43.68' *
AVERAGE GRADE	—	151.30	152.07	151.55
LOT COVERAGE	30.0%	14.0%	12.5%	12.4%
OPEN SPACE	50.0%	77.4%	80.6%	79.5%

* DOES NOT MEET THE REQUIREMENTS

TOPOGRAPHIC SITE PLAN
NEWTON, MASSACHUSETTS
SHOWING AS-BUILT CONDITIONS AT
#351 OTIS STREET

SCALE: 1in.=10ft. DATE: JULY 16, 2019



PROJECT: 214221
VTP
ASSOCIATES
INC.

LAND SURVEYORS - CIVIL ENGINEERS. 132
ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 332-8271



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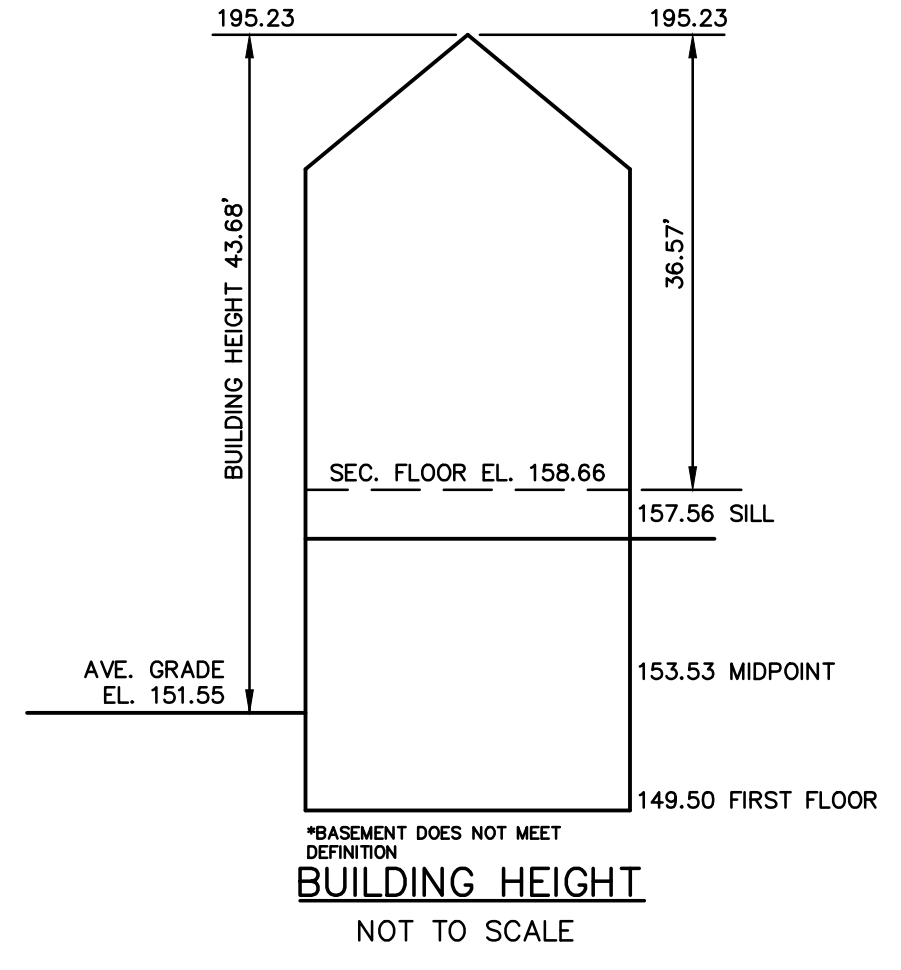
214221_06.dwg (2/2017) © 2017 VTP ASSOCIATES, INC.

LEGEND

BUILDING	
PROPERTY LINE W/ BEARING DISTANCE	S81°56'34"E 116.23'
CONTOUR	70'
STOCKADE FENCE	
CHAINLINK FENCE	
PICKET FENCE	
SEWER LINE	S
DRAIN LINE	D
WATER LINE	W
GAS LINE	G
ELECTRICAL LINE	E
GAS VALVE	
WATER VALVE	
DRAIN MANHOLE	
SEWER MANHOLE	
ELECTRICAL MANHOLE	
CATCH BASIN	
UTILITY POLE	
LIGHT POLE	
DECIDUOUS TREE	DEC. 22"
CONIFEROUS TREE	CON. 12"

TESTPIT LOG

TESTPIT #1 (ELEV.=142.05)
0-12" TOPSOIL
12-36" SUBSOIL
36-96" SANDY LOAM WITH GRAVEL & FEW COBBLES
MOTTLING @ 70"
NO REFUSAL
PERC RATE 8MPI±
TESTPIT #2 (ELEV.=141.84)
0-10" TOPSOIL
10-30" SUBSOIL
30-108" SANDY LOAM WITH GRAVEL & FEW COBBLES
WATER @ 90"
MOTTLING @ 70"
NO REFUSAL
PERC RATE 8MPI±

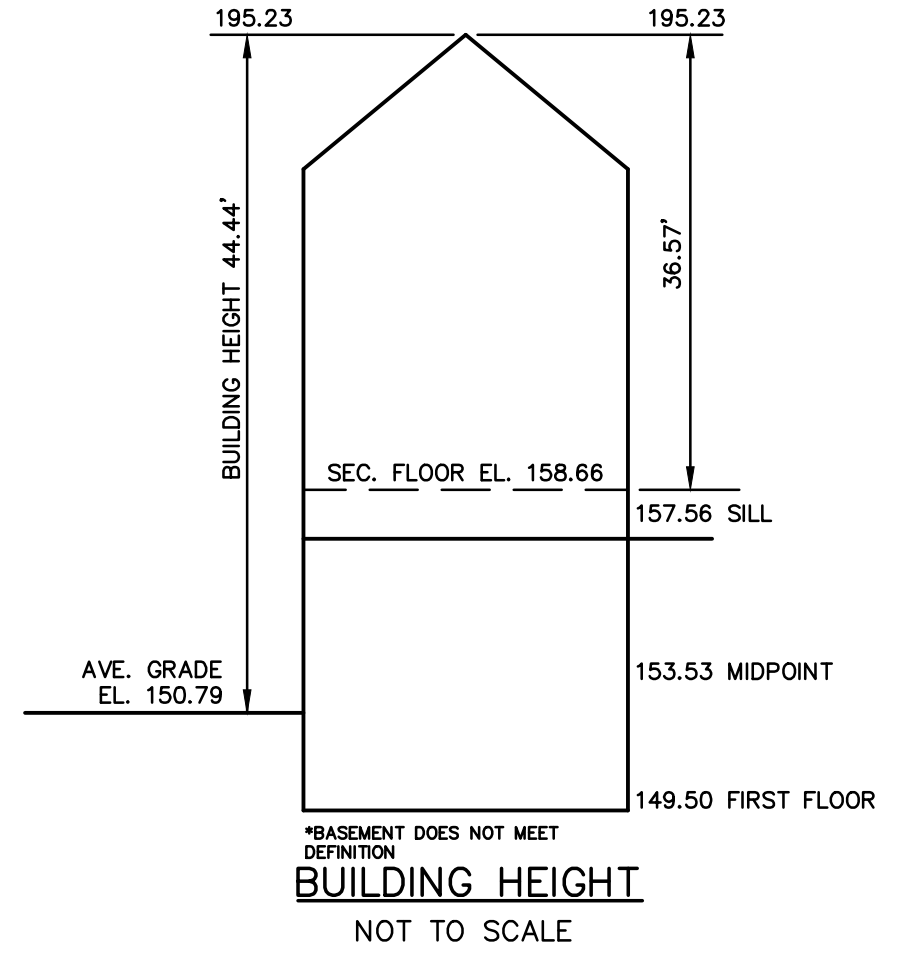


Address: #351 Otis Street, Newton

Length Weighted Mean As-Built Average Grade Calculation

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	17.63	153.78	151.56	152.67	2691.59 Sq. Ft.
2	24.30	151.99	148.61	150.30	3652.33 Sq. Ft.
3	9.14	148.28	147.72	148.00	1352.71 Sq. Ft.
4	26.10	148.37	148.19	148.28	3870.20 Sq. Ft.
5	20.04	150.38	148.41	149.40	2993.90 Sq. Ft.
6	16.23	153.80	150.38	152.09	2468.38 Sq. Ft.
7	6.86	153.79	153.80	153.79	1055.03 Sq. Ft.
8	9.60	154.08	153.95	154.02	1478.55 Sq. Ft.
9	13.85	154.46	154.24	154.35	2137.71 Sq. Ft.
10	6.60	154.64	154.59	154.62	1020.47 Sq. Ft.
11	22.52	154.71	154.06	154.39	3476.77 Sq. Ft.
Total	172.87				26197.64 Sq. Ft.

Total Column F / Total Column B = Average Grade
Average Grade: 151.55'

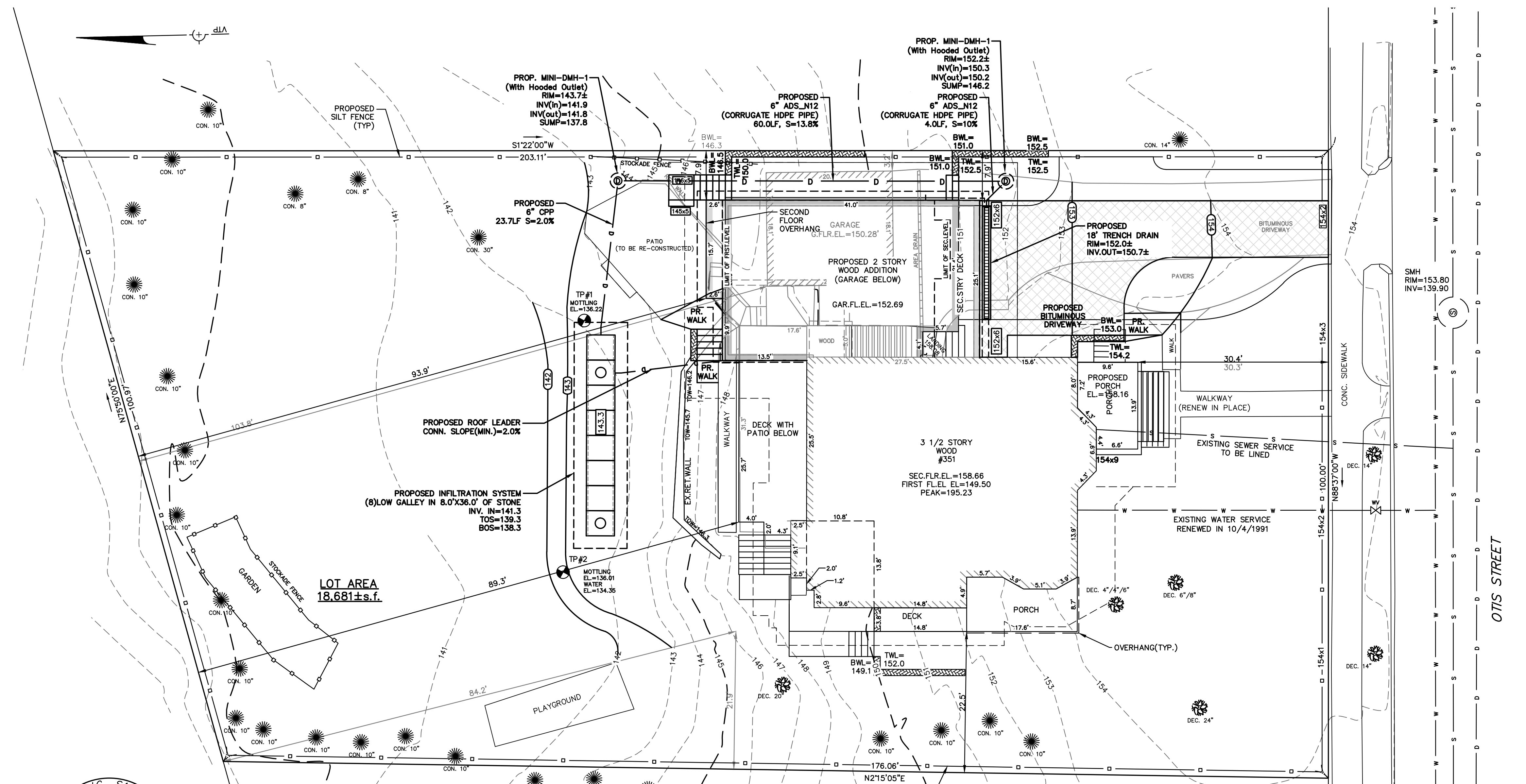


Address: #351 Otis St

Length Weighted Mean Proposed Average Grade Calculation

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	13.90	154.60	154.30	154.45	2146.86 Sq. Ft.
2	6.60	154.76	154.65	154.71	1021.05 Sq. Ft.
3	13.90	154.80	154.71	154.76	2151.09 Sq. Ft.
4	8.70	154.77	154.15	154.46	1343.80 Sq. Ft.
5	17.60	154.04	151.61	152.83	2689.72 Sq. Ft.
6	14.80	152.16	150.00	151.08	2235.98 Sq. Ft.
7	9.60	150.13	148.62	149.38	1434.00 Sq. Ft.
8	9.10	148.52	148.30	148.41	1350.53 Sq. Ft.
9	25.50	148.52	148.40	148.46	3785.73 Sq. Ft.
10	13.50	148.40	147.90	148.15	2000.03 Sq. Ft.
11	5.00	147.40	144.50	145.95	729.75 Sq. Ft.
12	4.90	144.50	144.40	144.45	707.81 Sq. Ft.
13	15.70	144.50	144.40	144.45	2267.87 Sq. Ft.
14	4.00	149.50	148.00	148.75	595.00 Sq. Ft.
15	34.20	151.00	150.00	150.50	5147.10 Sq. Ft.
16	5.40	152.50	151.50	152.00	820.80 Sq. Ft.
17	25.10	152.60	152.00	152.30	3822.73 Sq. Ft.
18	15.60	152.60	152.50	152.55	2379.78 Sq. Ft.
19	9.60	154.20	153.00	153.60	1474.56 Sq. Ft.
Total	252.70				38104.18 Sq. Ft.

Total Column F / Total Column B = Average Grade
Average Grade: 150.79'



IMPERVIOUS AREA

LOT AREA	18,681
EXISTING IMPERVIOUS AREA	4,250.60
PROPOSED IMPERVIOUS AREA	4,854.40
4% LOT AREA (400 sf MAX): INCREASE IN IMPERVIOUS AREA (s.f.)	747.20
603.8 > 400.00 (DRAINAGE REQUIRED)	

ZONING CHART
NEWTON, MASSACHUSETTS

ZONE: SR-2 (OLD) SUBMISSION: PROPOSED

REGULATION	REQUIRED	EXISTING	PROPOSED
LOT AREA	10,000s.f.	18,681±s.f.	N/C
LOT FRONTAGE	80.0'	100.0'	N/C
FRONT SETBACK	25.0'	30.4'	N/C
SIDE SETBACK	7.5'	22.5'	7.9'
REAR SETBACK	15.0'	89.3'	N/C
BUILDING HEIGHT	36.0'	43.68' *	44.44' **
AVERAGE GRADE	-	151.55	150.79
LOT COVERAGE	30.0%	12.4%	16.2%
OPEN SPACE	50.0%	79.5%	77.3%

* DOES NOT MEET THE REQUIREMENTS
** SPECIAL PERMIT REQUIRED

TOPOGRAPHIC SITE PLAN
NEWTON, MASSACHUSETTS
SHOWING PROPOSED CONDITIONS AT
#351 OTIS STREET
SCALE: 1in.=10ft. DATE: MARCH 9, 2020



PROJECT: 214221
VTP ASSOCIATES INC.
LAND SURVEYORS - CIVIL ENGINEERS. 132
ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 332-8271

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SCALE: 1" = 10'