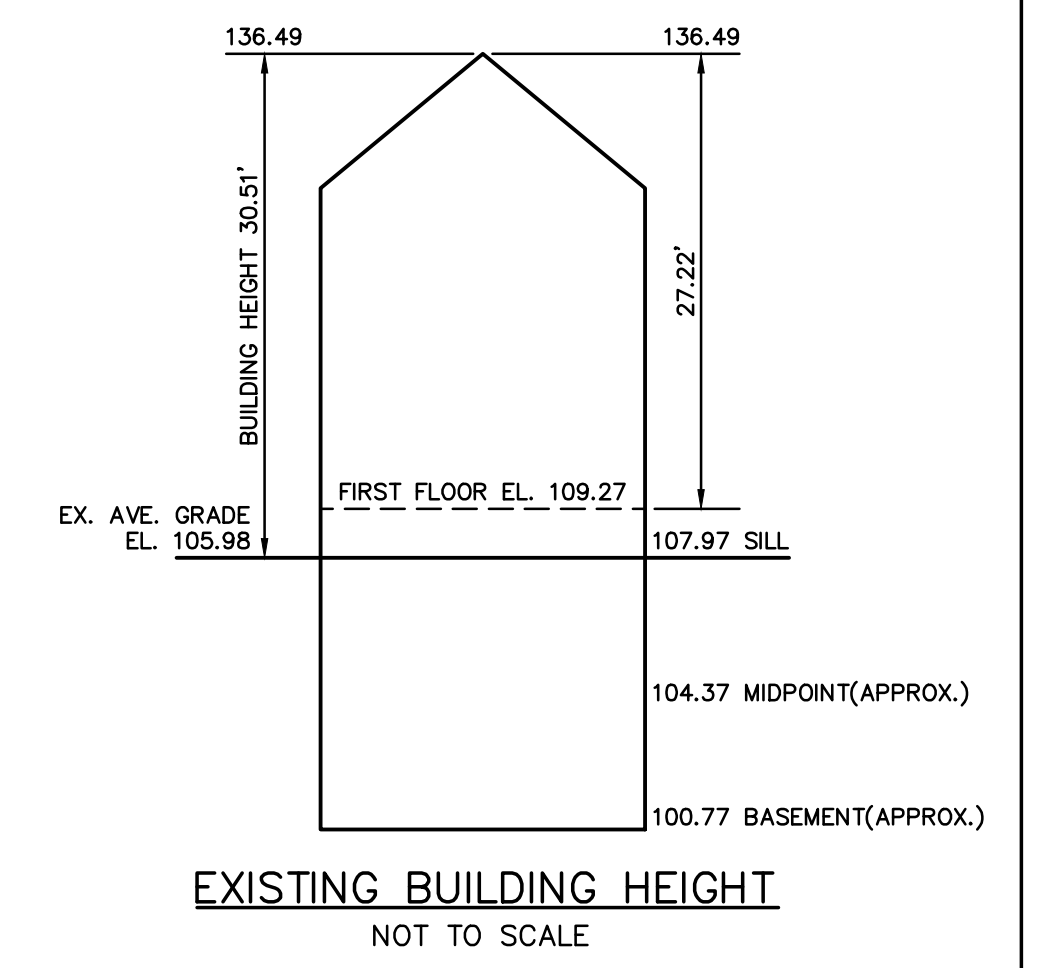
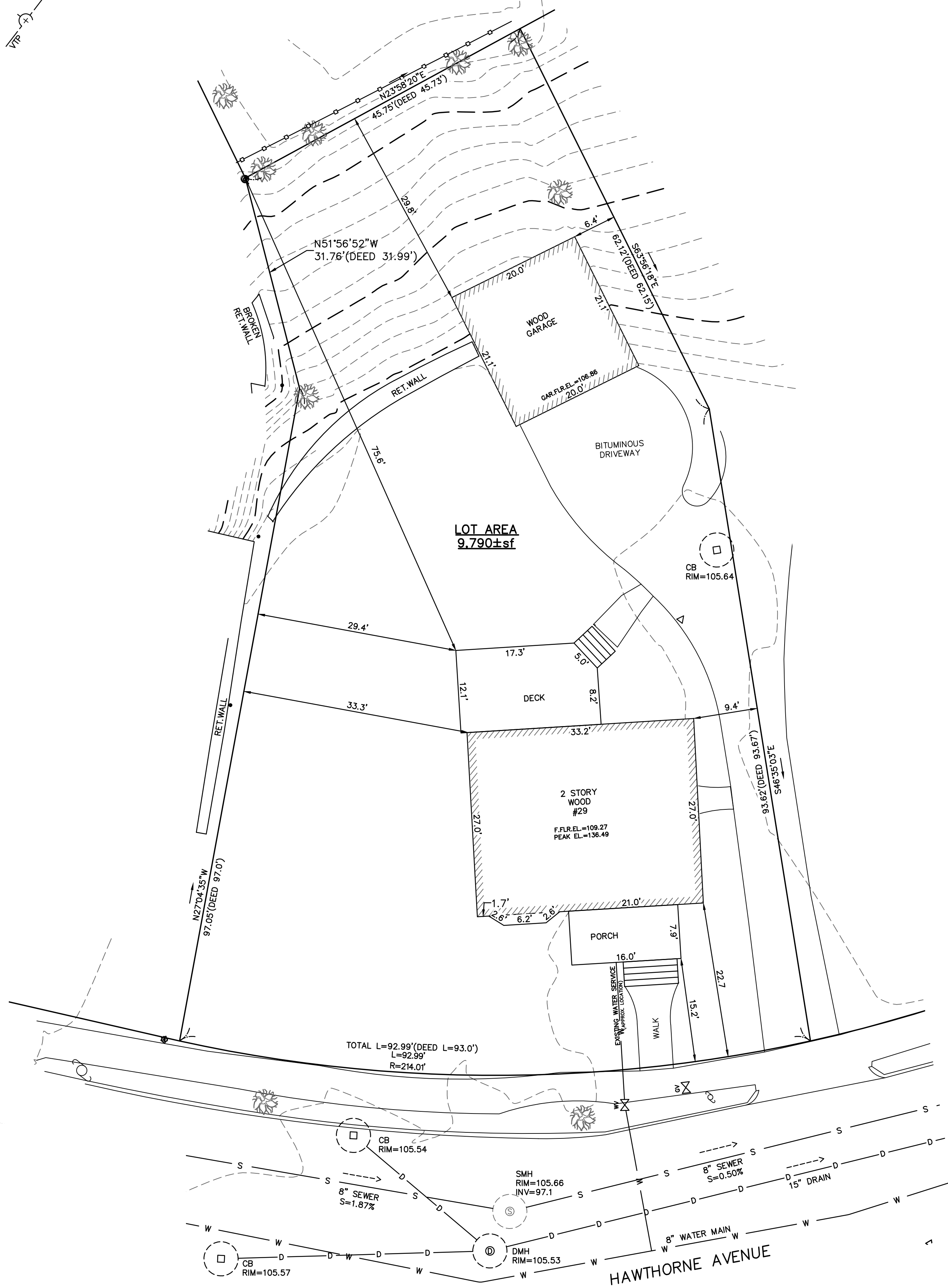
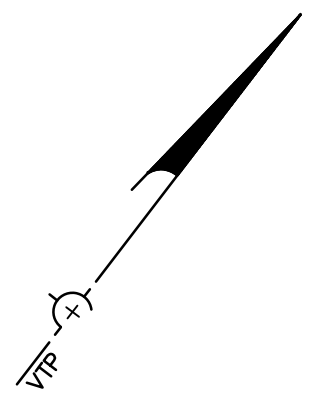


216198.ec.dwg (2-2019) © 2019 VTP ASSOCIATES, INC.

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
GAS VALVE	
WATER VALVE	
DRAIN MANHOLE	
SEWER MANHOLE	
CATCH BASIN	
UTILITY POLE	
LIGHT POLE	
DECIDUOUS TREE	DEC. 22"
CONIFEROUS TREE	CON. 12"
HYDRANT	



Length Weighted Mean Proposed Conditions Average Grade Calculation

A Segment	B Length Of Segment In Feet	C Height of High Point of Segment	D Height of Low Point of Segment	E E=(C+D)/2 Average Segment Height	F F=BxE
1	13.50	106.11	105.97	106.04	1431.54 Sq. Ft.
2	7.90	106.00	105.97	105.99	837.28 Sq. Ft.
3	16.00	105.95	105.84	105.90	1694.32 Sq. Ft.
4	7.90	105.79	105.78	105.79	835.70 Sq. Ft.
5	27.00	105.94	105.75	105.85	2857.82 Sq. Ft.
6	33.20	106.15	105.94	106.05	3520.69 Sq. Ft.
7	27.00	106.16	106.11	106.14	2865.65 Sq. Ft.
Total	132.50				14043.00 Sq. Ft.

Total Column F / Total Column B = Average Grade
Average Grade: 105.98'

ZONING CHART
NEWTON, MASSACHUSETTS

ZONE: SR-2 (OLD) SUBMISSION: EXISTING

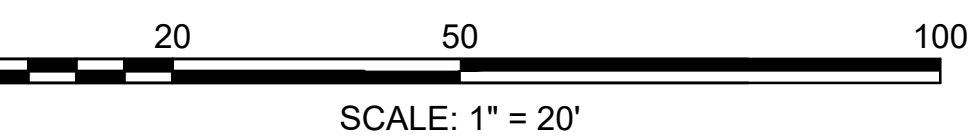
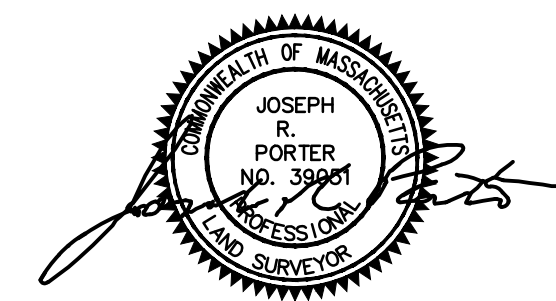
REGULATION	REQUIRED	EXISTING
LOT AREA	10,000s.f.	9,790±s.f.
LOT FRONTAGE	80.0'	92.99'
FRONT SETBACK	25.0'	15.2'
SIDE SETBACK	7.5'	9.4'
REAR SETBACK	15.0'	75.6'
BUILDING HEIGHT	36.0'	30.51'
AVERAGE GRADE	-	105.98
LOT COVERAGE	30.0%	14.7%
OPEN SPACE	50.0%	72.0%

TOPOGRAPHIC SITE PLAN
NEWTON, MASSACHUSETTS
SHOWING EXISTING CONDITIONS AT
#29 HAWTHORNE AVENUE
SCALE: 1in.=10ft. DATE: AUGUST 20, 2019

PROJECT: 216198
VTP
ASSOCIATES
INC.

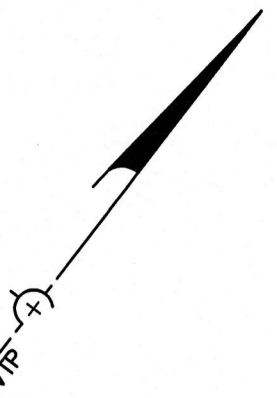
LAND SURVEYORS - CIVIL ENGINEERS 132
ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 332-8271

SHEET 1 OF 1



LEGEND

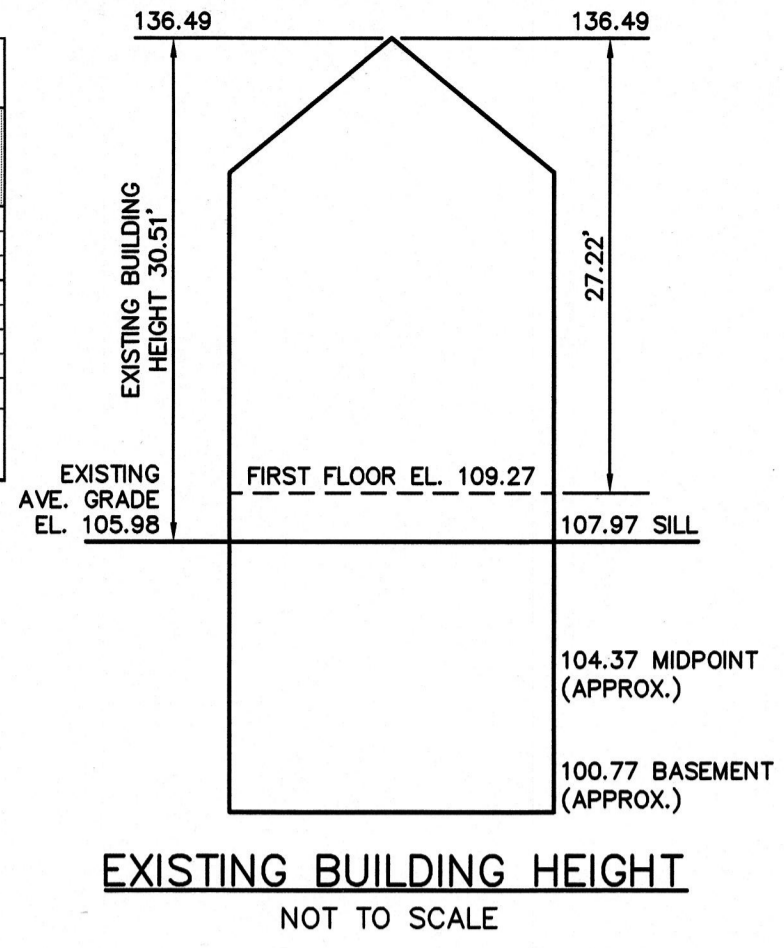
- BUILDING: [Symbol]
- PROPERTY LINE W/ BEARING DISTANCE: $S81^{\circ}56'34"E$
116.23'
- CONTOUR: 70'
- STOCKADE FENCE: [Symbol]
- CHAINLINK FENCE: [Symbol]
- PICKET FENCE: [Symbol]
- SEWER LINE: S
- DRAIN LINE: D
- WATER LINE: W
- GAS LINE: G
- GAS VALVE: [Symbol]
- WATER VALVE: [Symbol]
- DRAIN MANHOLE: [Symbol]
- SEWER MANHOLE: [Symbol]
- CATCH BASIN: [Symbol]
- UTILITY POLE: [Symbol]
- LIGHT POLE: [Symbol]
- DECIDUOUS TREE: DEC. 22"
- CONIFEROUS TREE: CON. 12"
- HYDRANT: [Symbol]



Length Weighted Mean Proposed Conditions Average Grade Calculation

Segment	Length of Segment in Feet	Height of High Point of Segment	Height of Low Point of Segment	ENCLD/2 Average Segment Height	Ft/Inch
1	13.50	108.11	108.97	108.04	1431.84 Sq. Ft.
2	7.90	106.00	105.97	105.99	837.28 Sq. Ft.
3	16.00	105.98	108.84	105.90	1694.32 Sq. Ft.
4	7.90	105.79	105.78	105.79	838.70 Sq. Ft.
5	27.00	105.94	105.78	105.85	2897.82 Sq. Ft.
6	33.20	106.15	108.94	106.05	3520.60 Sq. Ft.
7	27.00	106.18	106.11	106.14	2885.88 Sq. Ft.
Total	132.60				14043.00 Sq. Ft.

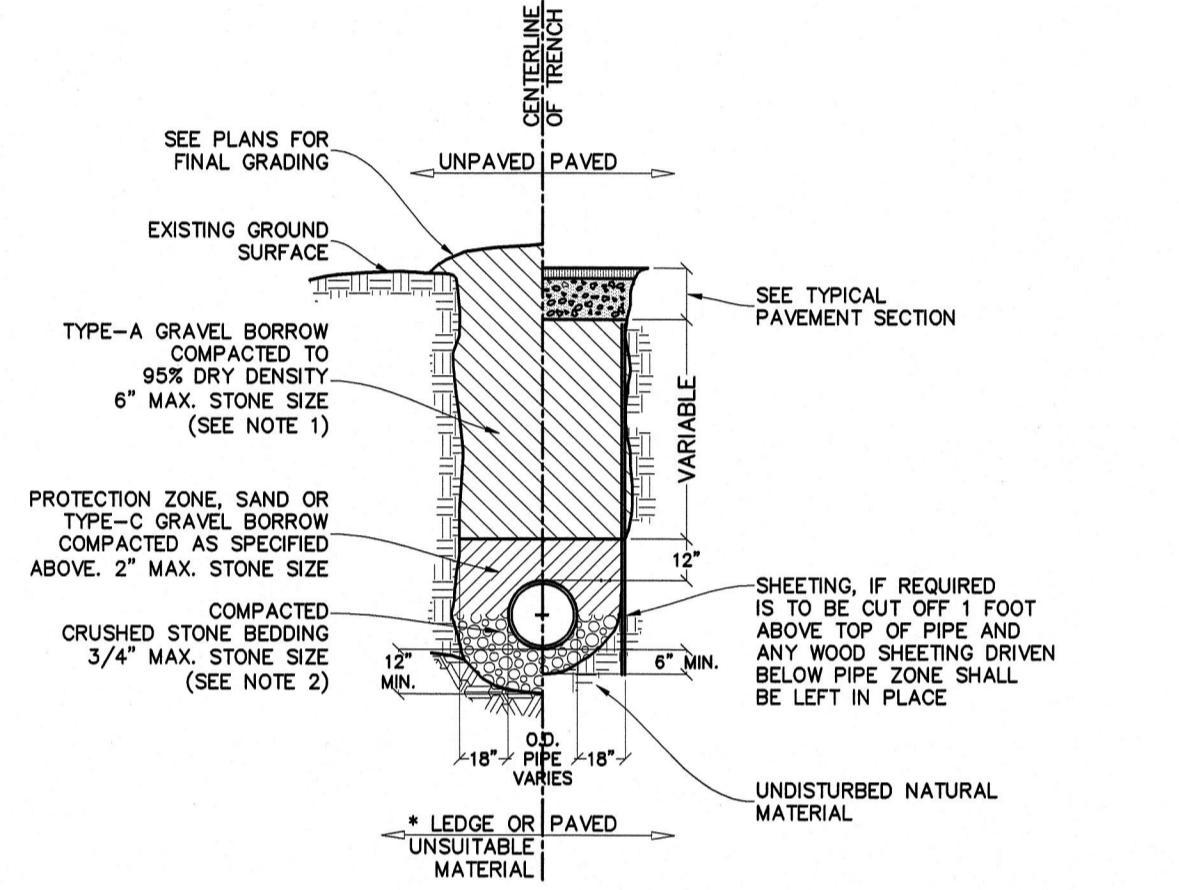
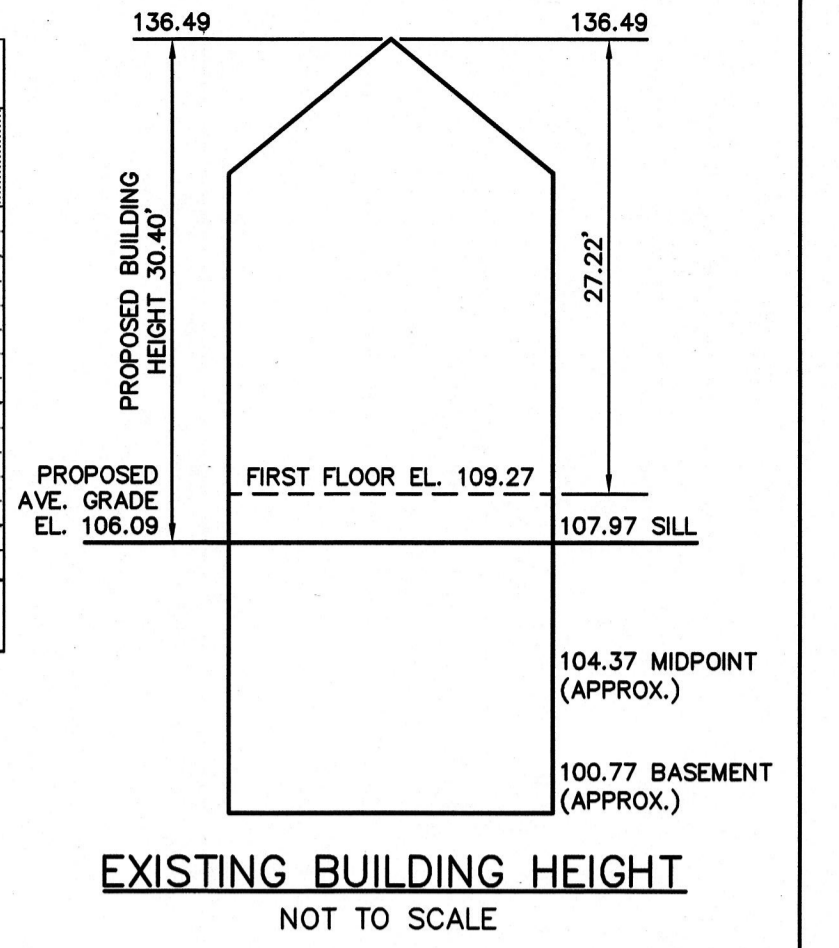
Total Column F / Total Column B = Average Grade
Average Grade: 105.98'



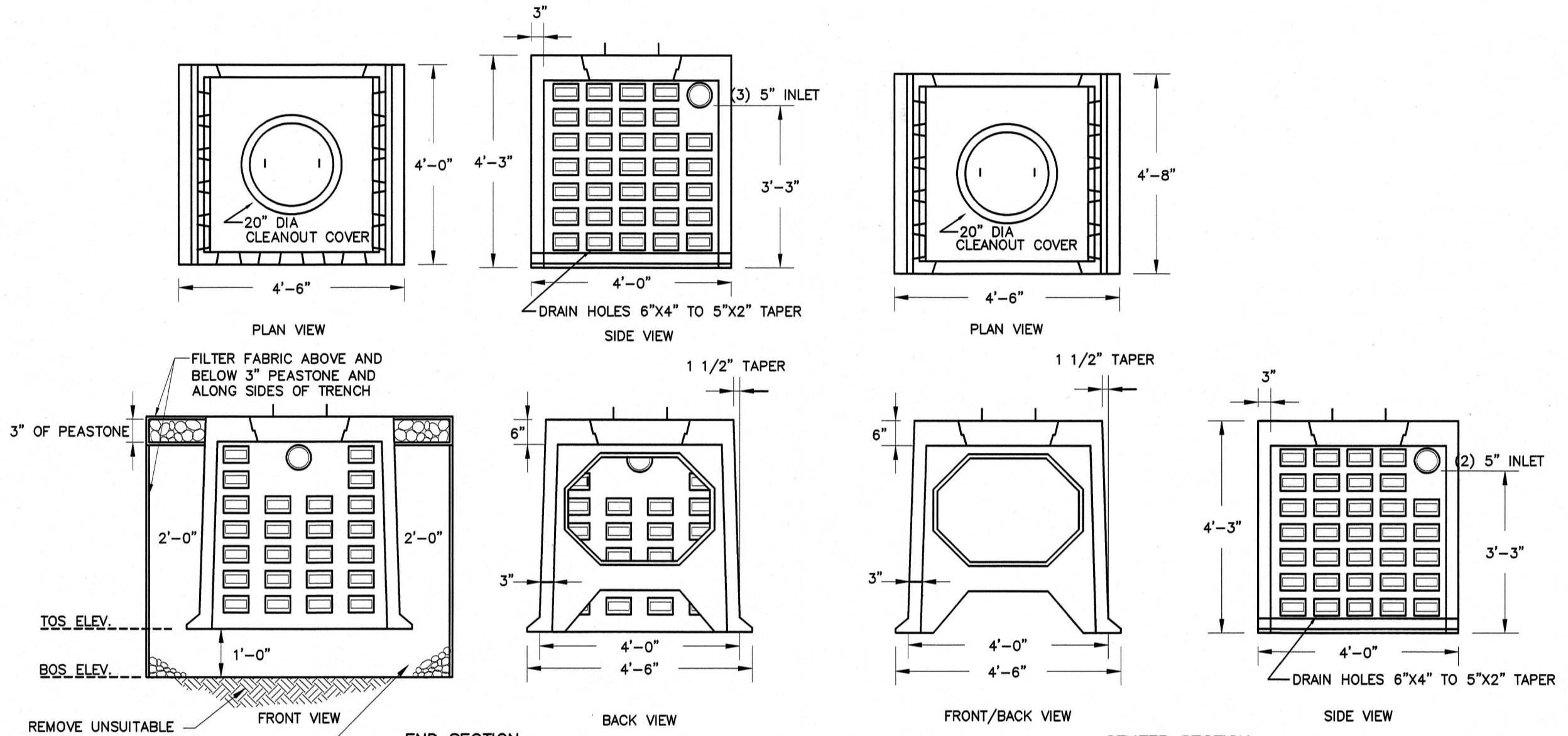
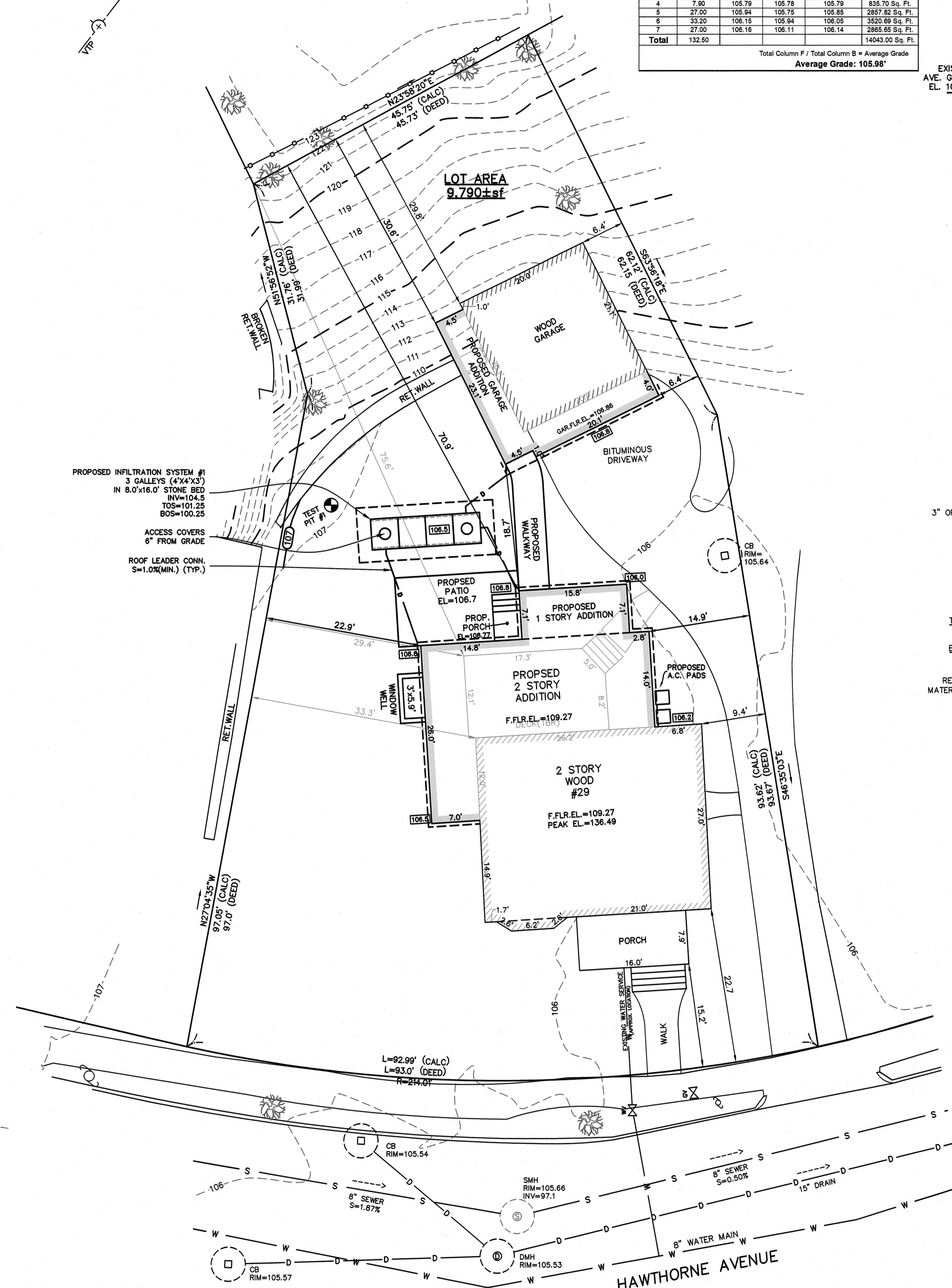
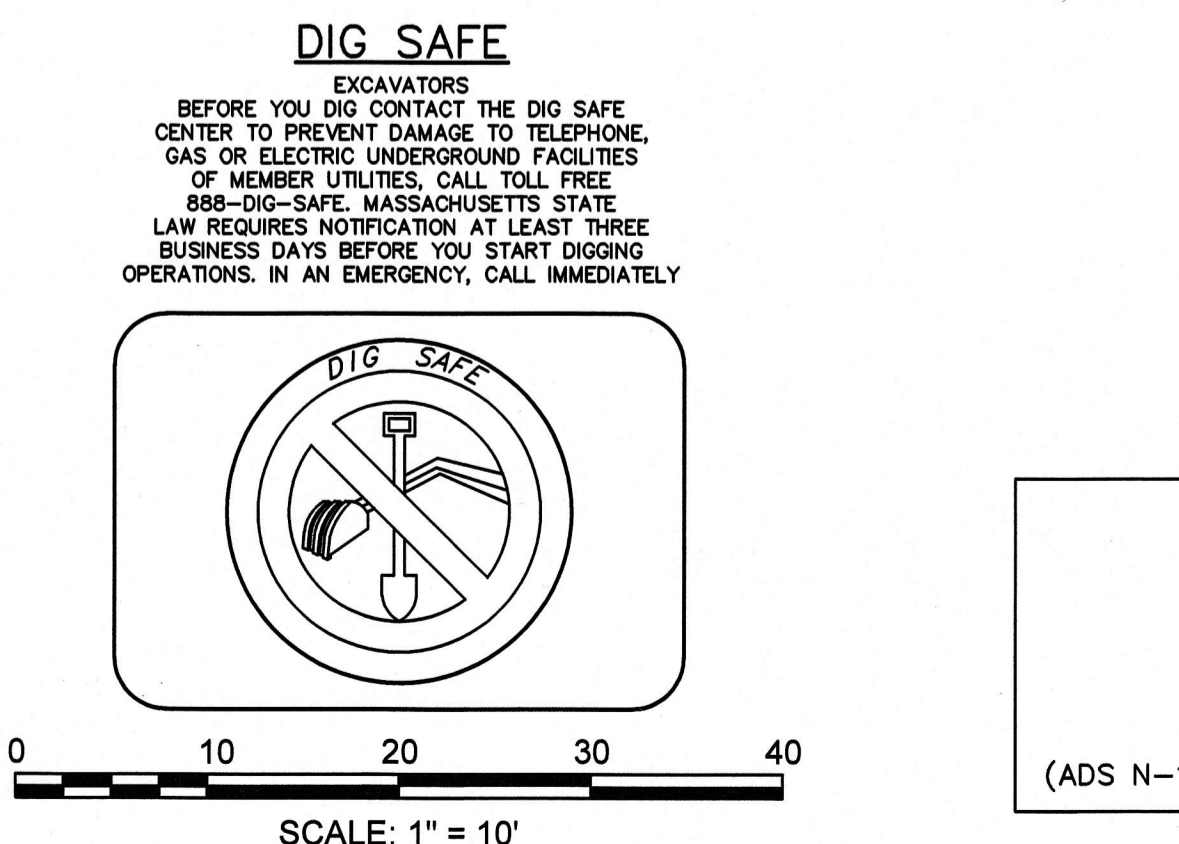
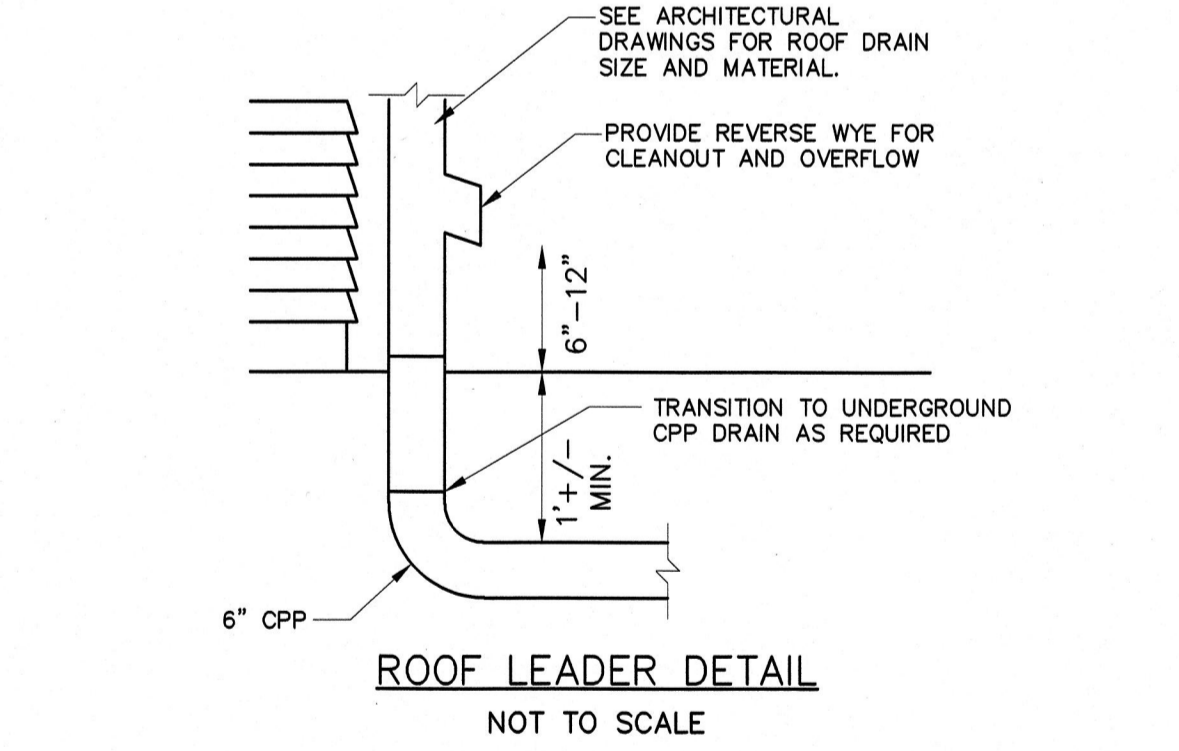
Length Weighted Mean Proposed Conditions Average Grade Calculation

Segment	Length of Segment in Feet	Height of High Point of Segment	Height of Low Point of Segment	ENCLD/2 Average Segment Height	Ft/Inch
1	13.50	108.11	105.92	105.97	1430.93 Sq. Ft.
2	7.90	106.17	106.11	106.14	838.51 Sq. Ft.
3	16.00	106.17	106.94	106.08	1698.88 Sq. Ft.
4	7.90	105.79	105.77	105.78	836.68 Sq. Ft.
5	27.00	105.84	105.73	105.84	2897.55 Sq. Ft.
6	6.80	106.24	106.94	106.09	721.41 Sq. Ft.
7	14.00	105.68	105.85	105.92	1482.81 Sq. Ft.
8	7.10	105.91	105.85	105.88	751.75 Sq. Ft.
9	15.80	106.14	106.00	106.07	1676.91 Sq. Ft.
10	7.10	106.70	106.70	106.70	787.51 Sq. Ft.
11	14.80	106.70	106.70	106.70	1576.18 Sq. Ft.
12	28.00	106.18	106.07	106.12	2758.99 Sq. Ft.
13	7.00	106.17	106.05	106.11	742.77 Sq. Ft.
14	14.90	106.12	106.11	106.12	1581.11 Sq. Ft.
Total	185.80				19710.60 Sq. Ft.

Total Column F / Total Column B = Average Grade
Average Grade: 106.09'



P.V.C. DRAIN TRENCH DETAIL
NOT TO SCALE



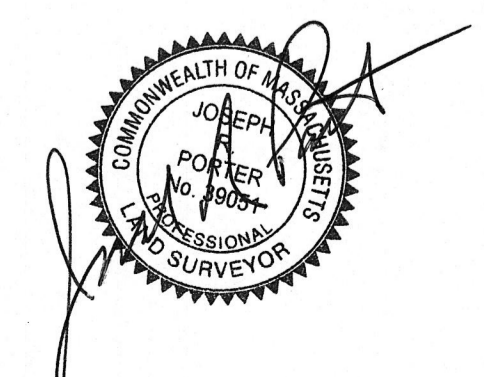
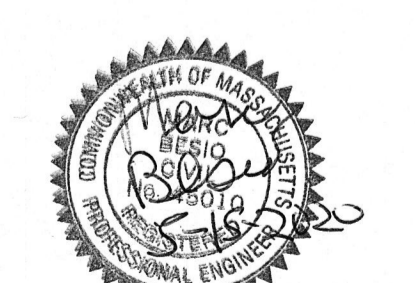
TESTPIT LOG
AT EL=107
0-15" TOPSOIL
15-40" SUBSOIL
40-114" COARSE-MED M SAND WITH FEW GRAVEL & FEW COBBLES
NO WATER
NO REFUSAL
A' SOIL

IMPERVIOUS AREA

LOT AREA	9,790.0 s.f.
EXISTING IMPERVIOUS AREA	2,704.0 s.f.
PROPOSED IMPERVIOUS AREA	3,730.0 s.f.
4% LOT AREA	391.6 s.f.
INCREASE IN IMPERVIOUS AREA	1,026.0 s.f.
1,026.0s.f. > 391.6 s.f (DRAINAGE REQUIRED)	

ZONING CHART
NEWTON, MASSACHUSETTS

ZONE: SR-2 (OLD)	SUBMISSION: BUILDING PERMIT		
REGULATION	REQUIRED	EXISTING	PROPOSED
LOT AREA	10,000s.f.	9,790±s.f.	N/C
LOT FRONTAGE	80.0'	92.99'	N/C
FRONT SETBACK	25.0'	15.2'	N/C
SIDE SETBACK	7.5'	9.4'	N/C
REAR SETBACK	15.0'	75.6'	70.9'
BUILDING HEIGHT	36.0'	30.51'	30.40'
AVERAGE GRADE	-	105.98	106.09
LOT COVERAGE	30.0%	14.7%	23.7%
OPEN SPACE	50.0%	72.0%	66.3%



TOPOGRAPHIC SITE PLAN
NEWTON, MASSACHUSETTS
SHOWING PROPOSED CONDITIONS AT
#29 HAWTHORNE AVENUE
SCALE: 1in.=10ft. DATE: APRIL 14, 2020
MAY 15, 2020
PROJECT: 216198
VTP ASSOCIATES INC.
LAND SURVEYORS - CIVIL ENGINEERS, 132
ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 332-8271
SHEET 1 OF 1