

Gabriel E. Senior, P.C.

Engineers Planners Surveyors

90 N Central Park Avenue

Hartsdale, NY 10530

Tel: (914) 422-0070

Fax: (914) 422-3009

E-Mail: info@gesenor.com

August 3, 2020

Alan R. Kaufman, AICP
Director of Planning
Town of North Castle
17 Bedford Rd.
Armonk, NY 10504

**Re: ODOARDI – Vacant Lot
22 Nethermont Ave. – New House Construction
Tax ID: Section 122.16 – Block 4 – Lot 7**

Dear Mr. Kaufman & Members of the Board,

This letter accompanies a response to comments and revisions to plans, in response to the comments received from the Planning Board Staff and Town Consulting Engineer.

The tax ID of the property is, Section 122.16 – Block 4 – Lot 7, and is in zoning district R-5 with a total land area of 0.16 acres (6,948 Sq. Ft). The property is situated on the easterly side of Nethermont Ave, approximately 180 feet from the intersection of Freedom Road.

The purpose of the application is to construct one (1) single family residence, which will be constructed to conform with all the Town of North Castle code requirements (Zoning, Building, Engineering, etc.). The existing lot is currently vacant with vegetation on the majority of the lot and a small gravel area along Nethermont Avenue. The lot currently has fourteen (14) trees located within the property lines (See Tree Inventory table on “Existing Conditions and Removals” plan, sheet 2 of 4) that have a caliper of 6” or greater. There are a total of twelve (12) trees proposed for removal, and ten (10) out of the twelve (12) trees proposed for removal are between 6” to 8” in caliper, while the remaining two (2) trees being removed are 12” and 16” in caliper. The two (2) trees that are not proposed for removal, are mature trees at 10” and 16” in caliper. There is a proposed landscape/planting plan included in the submittal which shows replacement trees for the proposed removals.

This application was presented to the board on January 27, 2020. At the planning board meeting the board expressed concerns regarding rock removal and the aesthetics of the home. In addition there were comments issued from both the members of the planning board and the town engineer. As part of this submittal we have addressed all comments issued by the board and the town engineer on January 24, 2020, including the concern of rock removal and the aesthetics of the home. The applicant has retained Geotechnical Engineering Services, P.C., to analyze the rock on the building site and advise on the methods of removal. A report has been included with the submittal.



GABRIEL E SENOR P.C.

Odoardi – Vacant Lot – 22 Nethermont Ave., White Plains, NY 10603

New House Construction – Tax ID: Section 122.16 – Block 4 – Lot 41

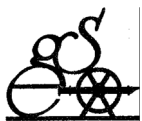
Page 1 of 2

If you have any additional questions, comments or concerns regarding the project, please feel free to contact our office.

Thank you for your consideration.

Very Truly Yours,

Eliot Senor, P.E., L.S.

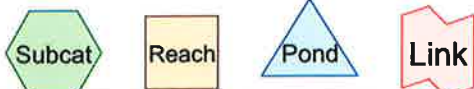
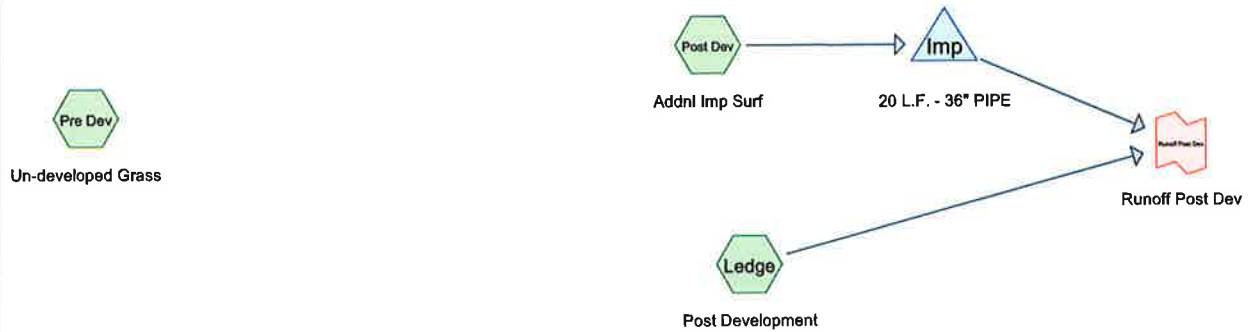


GABRIEL E SENOR P.C.

Odoardi – Vacant Lot – 22 Nethermont Ave., White Plains, NY 10603
New House Construction – Tax ID: Section 122.16 – Block 4 – Lot 41

Page 2 of 2

22 NETHERMONT AVENUE
25 YEAR - 24 HOUR RAINFALL CALCULATIONS



Routing Diagram for NETHERMONT HYDROCAD
Prepared by Gabriel E Senor P.C., Printed 8/2/2020
HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

NETHERMONT HYDROCAD

Prepared by Gabriel E Senor P.C.

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Printed 8/2/2020

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.068	79	<50% Grass cover, Poor, HSG B (Ledge, Pre Dev)
0.053	98	Impervious Area Constructed (Post Dev)
0.078	98	Ledge (Ledge)
0.120	100	Rock-Ledge (Pre Dev)
0.319	95	TOTAL AREA

NETHERMONT HYDROCAD

Prepared by Gabriel E Senor P.C.

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Printed 8/2/2020

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.068	HSG B	Ledge, Pre Dev
0.000	HSG C	
0.000	HSG D	
0.251	Other	Ledge, Post Dev, Pre Dev
0.319		TOTAL AREA

NETHERMONT HYDROCAD

Prepared by Gabriel E Senor P.C.

Printed 8/2/2020

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.068	0.000	0.000	0.000	0.068	<50% Grass cover, Poor	Ledge , Pre Dev
0.000	0.000	0.000	0.000	0.053	0.053	Impervious Area Constructed	Post Dev
0.000	0.000	0.000	0.000	0.078	0.078	Ledge	Ledge
0.000	0.000	0.000	0.000	0.120	0.120	Rock-Ledge	Pre Dev
0.000	0.068	0.000	0.000	0.251	0.319	TOTAL AREA	

NETHERMONT HYDROCAD

NRCC 24-hr C 25 YEAR Rainfall=6.41"

Prepared by Gabriel E Senor P.C.

Printed 8/2/2020

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Ledge: Post Development Runoff Area=4,642 sf 73.29% Impervious Runoff Depth>5.59"
Flow Length=35' Slope=0.1800 '/' Tc=0.2 min CN=93 Runoff=0.75 cfs 0.050 af

Subcatchment Post Dev: Addnl Imp Surf Runoff Area=2,305 sf 100.00% Impervious Runoff Depth>6.17"
Flow Length=35' Slope=0.1800 '/' Tc=0.2 min CN=98 Runoff=0.39 cfs 0.027 af

Subcatchment Pre Dev: Un-developed Grass Runoff Area=6,948 sf 75.49% Impervious Runoff Depth>5.82"
Flow Length=60' Slope=0.1800 '/' Tc=3.8 min CN=95 Runoff=1.09 cfs 0.077 af

Pond Imp: 20 L.F. - 36" PIPE Peak Elev=498.94' Storage=67 cf Inflow=0.39 cfs 0.027 af
Outflow=0.27 cfs 0.027 af

Link Runoff Post Dev: Runoff Post Dev Inflow=1.00 cfs 0.077 af
Primary=1.00 cfs 0.077 af

Total Runoff Area = 0.319 ac Runoff Volume = 0.154 af Average Runoff Depth = 5.80"
21.18% Pervious = 0.068 ac 78.82% Impervious = 0.251 ac

Summary for Subcatchment Ledge: Post Development

[49] Hint: $T_c < 2dt$ may require smaller dt

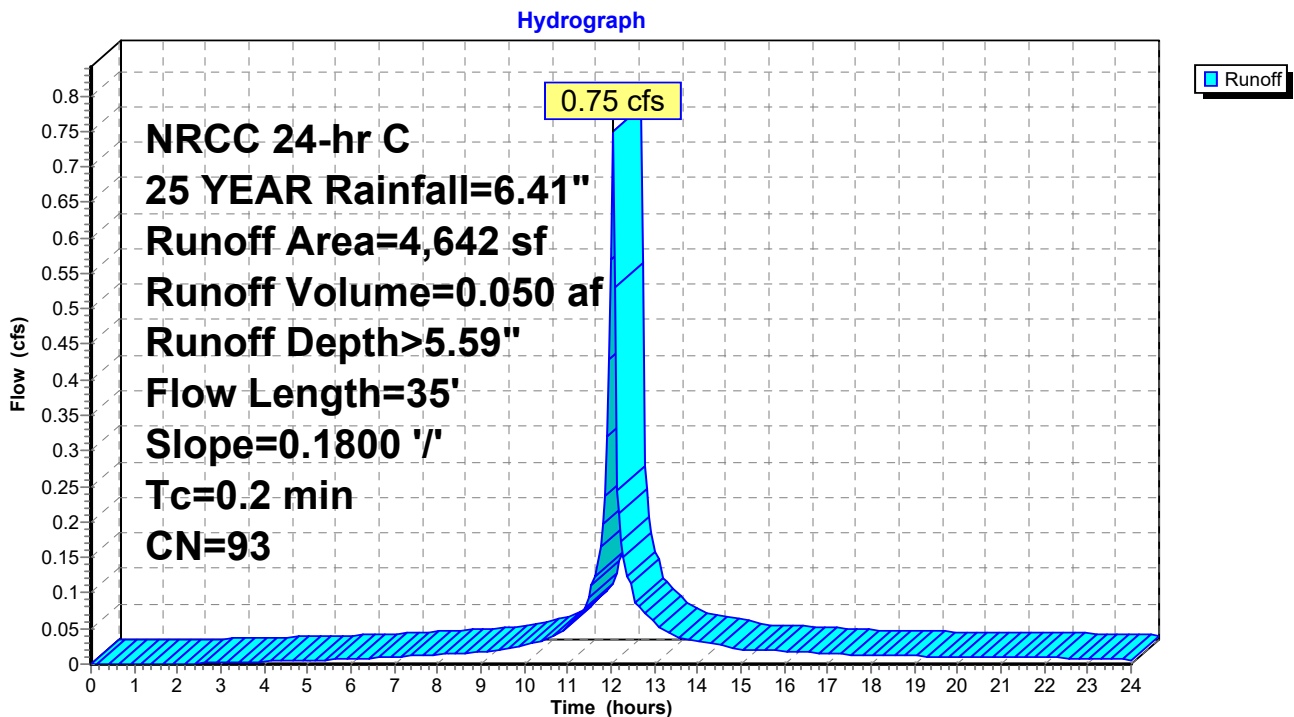
Runoff = 0.75 cfs @ 12.05 hrs, Volume= 0.050 af, Depth> 5.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, $dt= 0.05$ hrs
 NRCC 24-hr C 25 YEAR Rainfall=6.41"

	Area (sf)	CN	Description
*	3,402	98	Ledge
	1,240	79	<50% Grass cover, Poor, HSG B
	4,642	93	Weighted Average
	1,240		26.71% Pervious Area
	3,402		73.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	35	0.1800	2.81		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.50"

Subcatchment Ledge: Post Development



Summary for Subcatchment Post Dev: Addnl Imp Surf

[49] Hint: Tc<2dt may require smaller dt

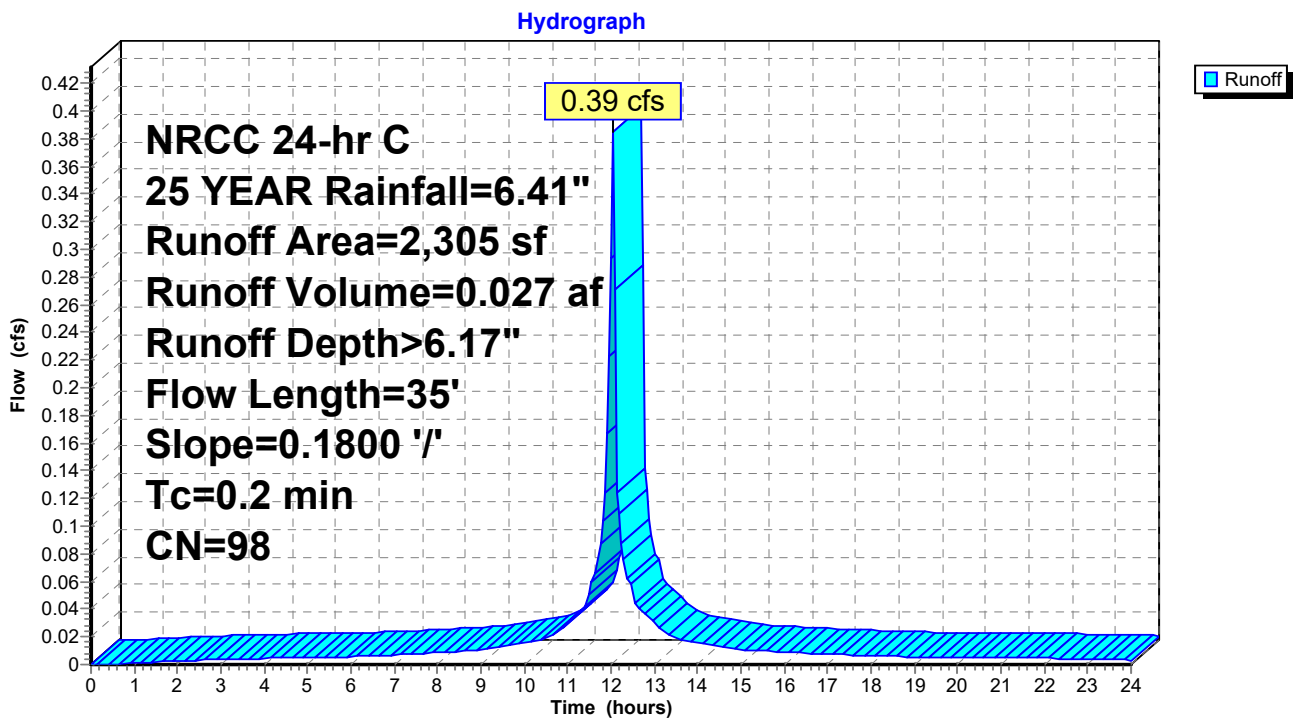
Runoff = 0.39 cfs @ 12.05 hrs, Volume= 0.027 af, Depth> 6.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25 YEAR Rainfall=6.41"

Area (sf)	CN	Description
* 2,305	98	Impervious Area Constructed
2,305		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	35	0.1800	2.81		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.50"

Subcatchment Post Dev: Addnl Imp Surf



Summary for Subcatchment Pre Dev: Un-developed Grass

[49] Hint: $T_c < 2dt$ may require smaller dt

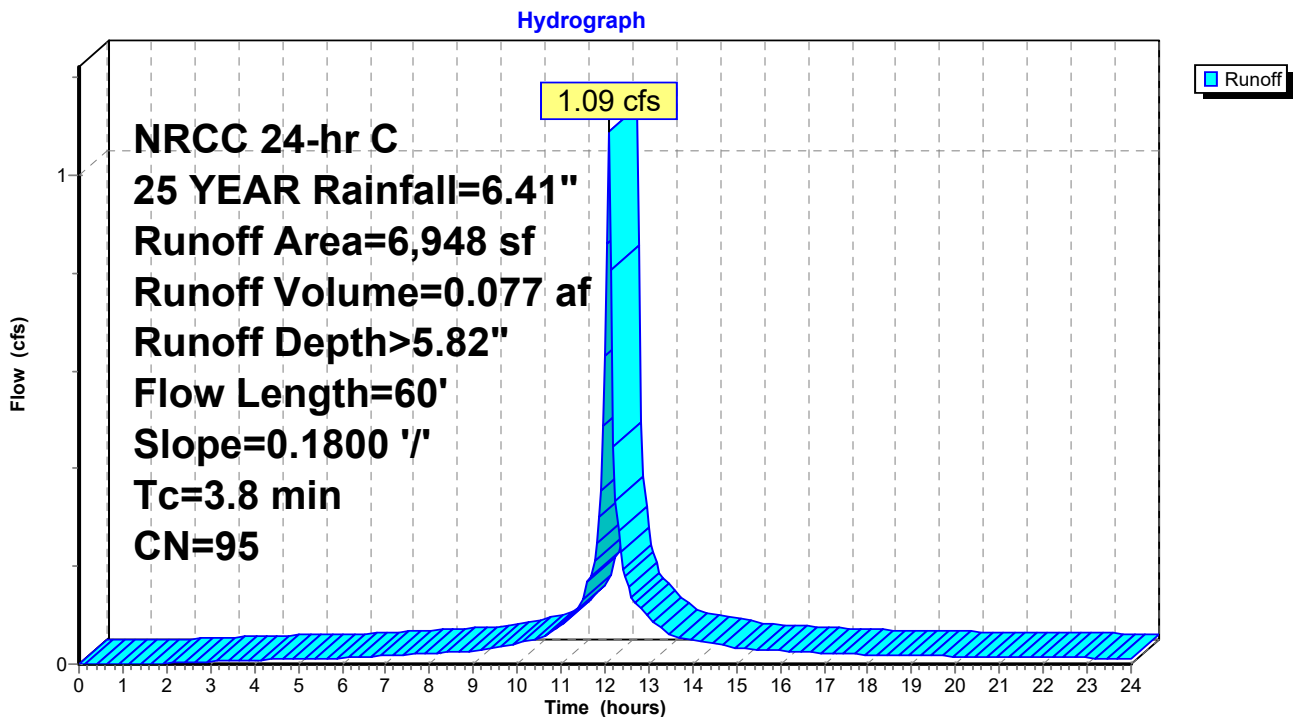
Runoff = 1.09 cfs @ 12.10 hrs, Volume= 0.077 af, Depth> 5.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25 YEAR Rainfall=6.41"

Area (sf)	CN	Description
1,703	79	<50% Grass cover, Poor, HSG B
* 5,245	100	Rock-Ledge
6,948	95	Weighted Average
1,703		24.51% Pervious Area
5,245		75.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	60	0.1800	0.27		Sheet Flow, Grass: Dense n= 0.240 P2= 3.50"

Subcatchment Pre Dev: Un-developed Grass



Summary for Pond Imp: 20 L.F. - 36" PIPE

Inflow Area = 0.053 ac, 100.00% Impervious, Inflow Depth > 6.17" for 25 YEAR event
 Inflow = 0.39 cfs @ 12.05 hrs, Volume= 0.027 af
 Outflow = 0.27 cfs @ 12.10 hrs, Volume= 0.027 af, Atten= 30%, Lag= 3.2 min
 Primary = 0.27 cfs @ 12.10 hrs, Volume= 0.027 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 498.94' @ 12.10 hrs Surf.Area= 60 sf Storage= 67 cf

Plug-Flow detention time= 1.8 min calculated for 0.027 af (100% of inflow)
 Center-of-Mass det. time= 1.6 min (741.5 - 739.8)

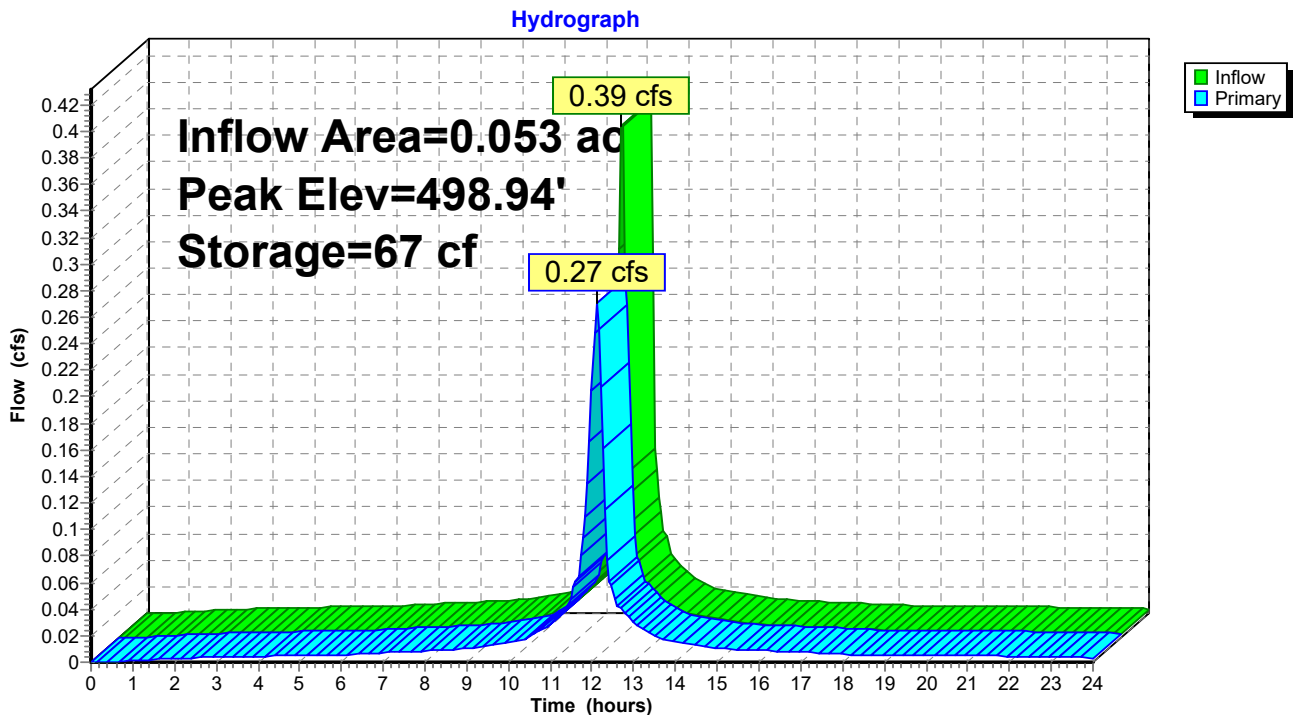
Volume	Invert	Avail.Storage	Storage Description
#1	497.50'	141 cf	36.0" Round Pipe Storage L= 20.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	497.50'	3.0" Vert. Orifice/Grate C= 0.600
#2	Primary	500.00'	2.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.27 cfs @ 12.10 hrs HW=498.93' (Free Discharge)

- 1=Orifice/Grate (Orifice Controls 0.27 cfs @ 5.50 fps)
- 2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond Imp: 20 L.F. - 36" PIPE

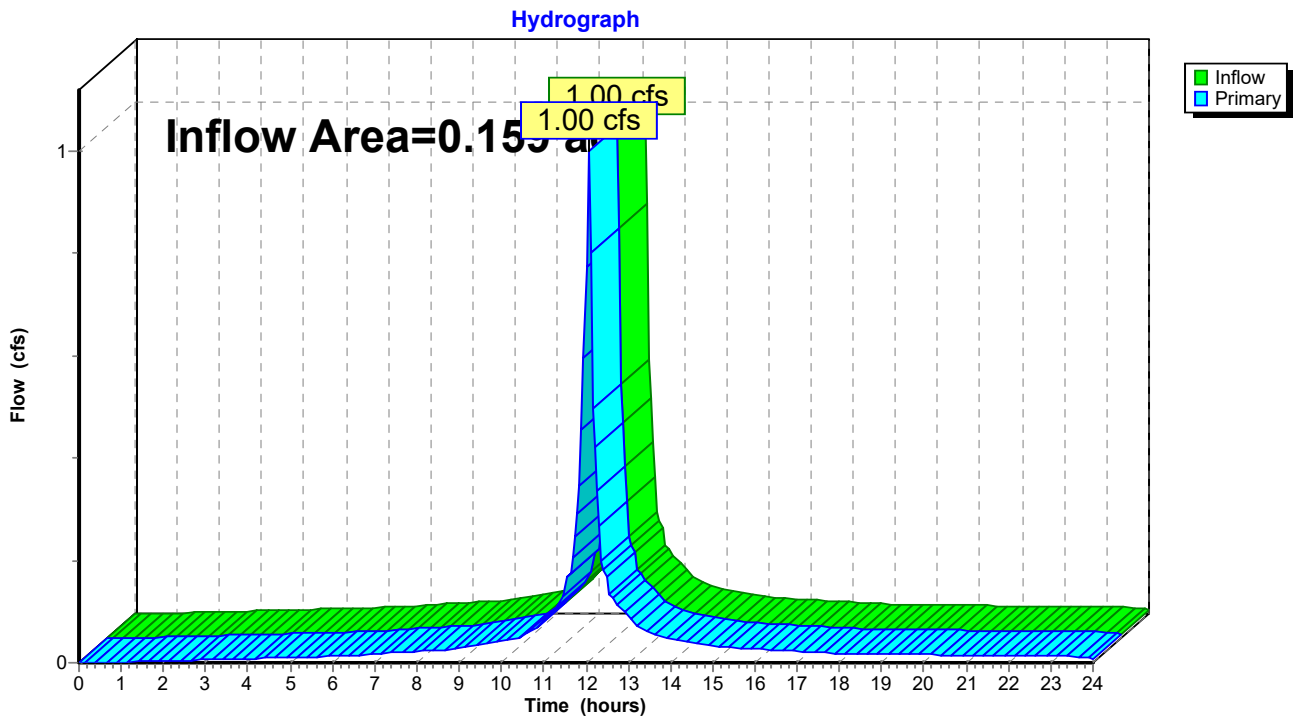


Summary for Link Runoff Post Dev: Runoff Post Dev

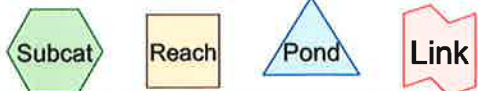
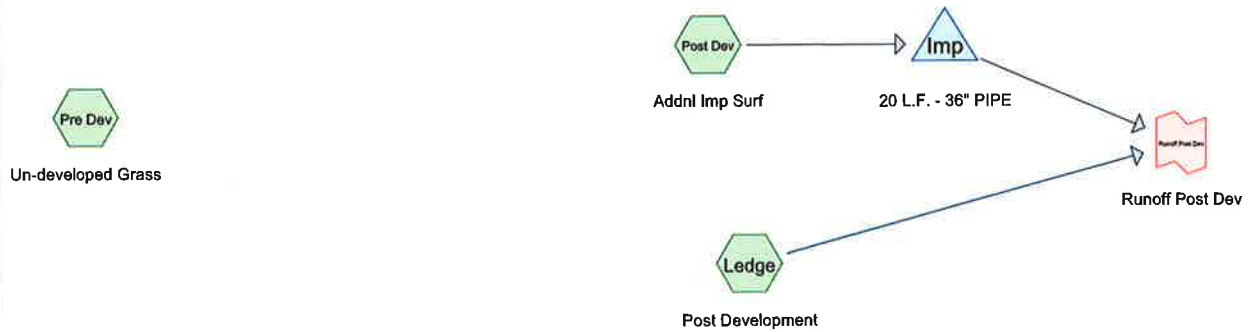
Inflow Area = 0.159 ac, 82.15% Impervious, Inflow Depth > 5.78" for 25 YEAR event
Inflow = 1.00 cfs @ 12.05 hrs, Volume= 0.077 af
Primary = 1.00 cfs @ 12.05 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link Runoff Post Dev: Runoff Post Dev



22 NETHERMONT AVE
100 YEAR - 24 HOUR RAINFALL CALCULATIONS



NETHERMONT HYDROCAD

Prepared by Gabriel E Senor P.C.

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Printed 8/2/2020

Page 2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.068	79	<50% Grass cover, Poor, HSG B (Ledge, Pre Dev)
0.053	98	Impervious Area Constructed (Post Dev)
0.078	98	Ledge (Ledge)
0.120	100	Rock-Ledge (Pre Dev)
0.319	95	TOTAL AREA

NETHERMONT HYDROCAD

Prepared by Gabriel E Senor P.C.

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Printed 8/2/2020

Page 3

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.068	HSG B	Ledge, Pre Dev
0.000	HSG C	
0.000	HSG D	
0.251	Other	Ledge, Post Dev, Pre Dev
0.319		TOTAL AREA

NETHERMONT HYDROCAD

Prepared by Gabriel E Senor P.C.

Printed 8/2/2020

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Page 4

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.068	0.000	0.000	0.000	0.068	<50% Grass cover, Poor	Ledge , Pre Dev
0.000	0.000	0.000	0.000	0.053	0.053	Impervious Area Constructed	Post Dev
0.000	0.000	0.000	0.000	0.078	0.078	Ledge	Ledge
0.000	0.000	0.000	0.000	0.120	0.120	Rock-Ledge	Pre Dev
0.000	0.068	0.000	0.000	0.251	0.319	TOTAL AREA	

NETHERMONT HYDROCAD

NRCC 24-hr C 100 year Rainfall=9.23"

Prepared by Gabriel E Senor P.C.

Printed 8/2/2020

HydroCAD® 10.00-25 s/n 01594 © 2019 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Ledge: Post Development Runoff Area=4,642 sf 73.29% Impervious Runoff Depth>8.38"
Flow Length=35' Slope=0.1800 '/' Tc=0.2 min CN=93 Runoff=1.10 cfs 0.074 af

Subcatchment Post Dev: Addnl Imp Surf Runoff Area=2,305 sf 100.00% Impervious Runoff Depth>8.99"
Flow Length=35' Slope=0.1800 '/' Tc=0.2 min CN=98 Runoff=0.56 cfs 0.040 af

Subcatchment Pre Dev: Un-developed Grass Runoff Area=6,948 sf 75.49% Impervious Runoff Depth>8.62"
Flow Length=60' Slope=0.1800 '/' Tc=3.8 min CN=95 Runoff=1.58 cfs 0.115 af

Pond Imp: 20 L.F. - 36" PIPE Peak Elev=499.94' Storage=123 cf Inflow=0.56 cfs 0.040 af
Outflow=0.36 cfs 0.040 af

Link Runoff Post Dev: Runoff Post Dev Inflow=1.42 cfs 0.114 af
Primary=1.42 cfs 0.114 af

Total Runoff Area = 0.319 ac Runoff Volume = 0.229 af Average Runoff Depth = 8.60"
21.18% Pervious = 0.068 ac 78.82% Impervious = 0.251 ac

Summary for Subcatchment Ledge: Post Development

[49] Hint: $T_c < 2dt$ may require smaller dt

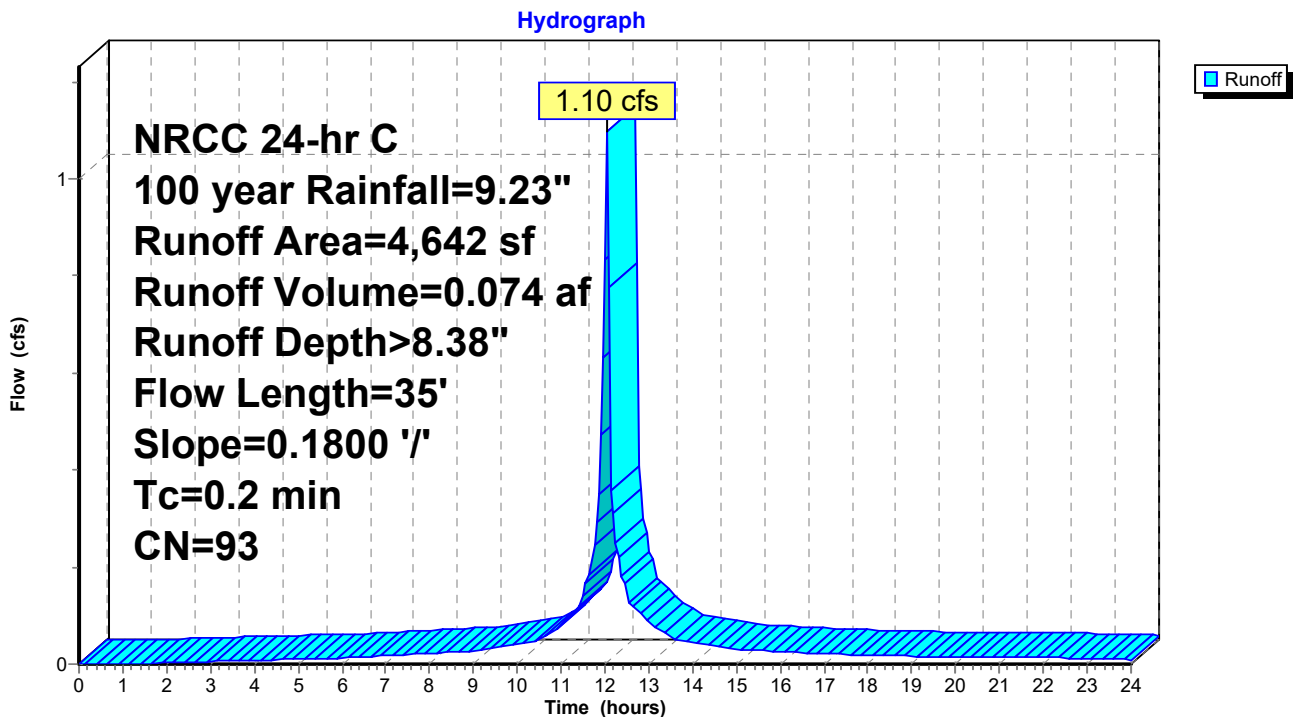
Runoff = 1.10 cfs @ 12.05 hrs, Volume= 0.074 af, Depth> 8.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100 year Rainfall=9.23"

	Area (sf)	CN	Description
*	3,402	98	Ledge
	1,240	79	<50% Grass cover, Poor, HSG B
	4,642	93	Weighted Average
	1,240		26.71% Pervious Area
	3,402		73.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	35	0.1800	2.81		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.50"

Subcatchment Ledge: Post Development



Summary for Subcatchment Post Dev: Addnl Imp Surf

[49] Hint: Tc<2dt may require smaller dt

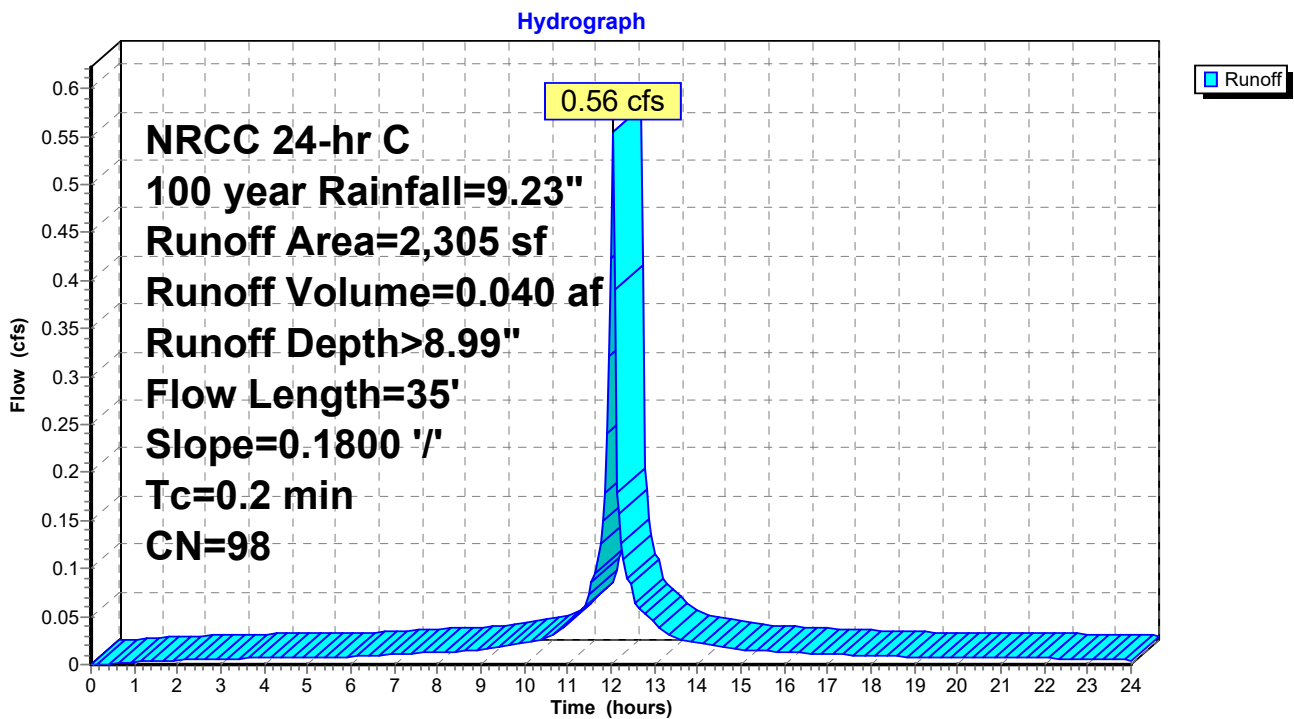
Runoff = 0.56 cfs @ 12.05 hrs, Volume= 0.040 af, Depth> 8.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100 year Rainfall=9.23"

Area (sf)	CN	Description
* 2,305	98	Impervious Area Constructed
2,305		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	35	0.1800	2.81		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.50"

Subcatchment Post Dev: Addnl Imp Surf



Summary for Subcatchment Pre Dev: Un-developed Grass

[49] Hint: $T_c < 2dt$ may require smaller dt

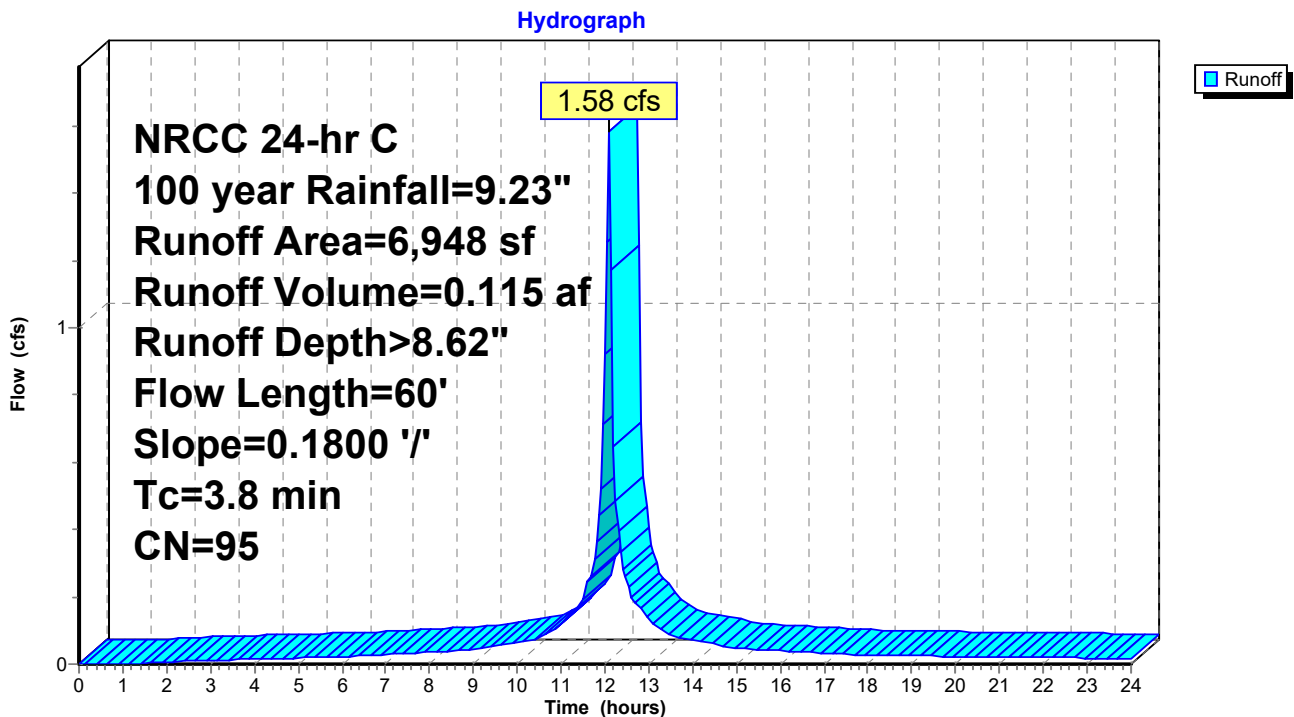
Runoff = 1.58 cfs @ 12.10 hrs, Volume= 0.115 af, Depth> 8.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100 year Rainfall=9.23"

Area (sf)	CN	Description
1,703	79	<50% Grass cover, Poor, HSG B
* 5,245	100	Rock-Ledge
6,948	95	Weighted Average
1,703		24.51% Pervious Area
5,245		75.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	60	0.1800	0.27		Sheet Flow, Grass: Dense n= 0.240 P2= 3.50"

Subcatchment Pre Dev: Un-developed Grass



Summary for Pond Imp: 20 L.F. - 36" PIPE

Inflow Area = 0.053 ac, 100.00% Impervious, Inflow Depth > 8.99" for 100 year event
 Inflow = 0.56 cfs @ 12.05 hrs, Volume= 0.040 af
 Outflow = 0.36 cfs @ 12.11 hrs, Volume= 0.040 af, Atten= 35%, Lag= 3.7 min
 Primary = 0.36 cfs @ 12.11 hrs, Volume= 0.040 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 499.94' @ 12.11 hrs Surf.Area= 47 sf Storage= 123 cf

Plug-Flow detention time= 2.1 min calculated for 0.040 af (100% of inflow)
 Center-of-Mass det. time= 2.0 min (736.8 - 734.9)

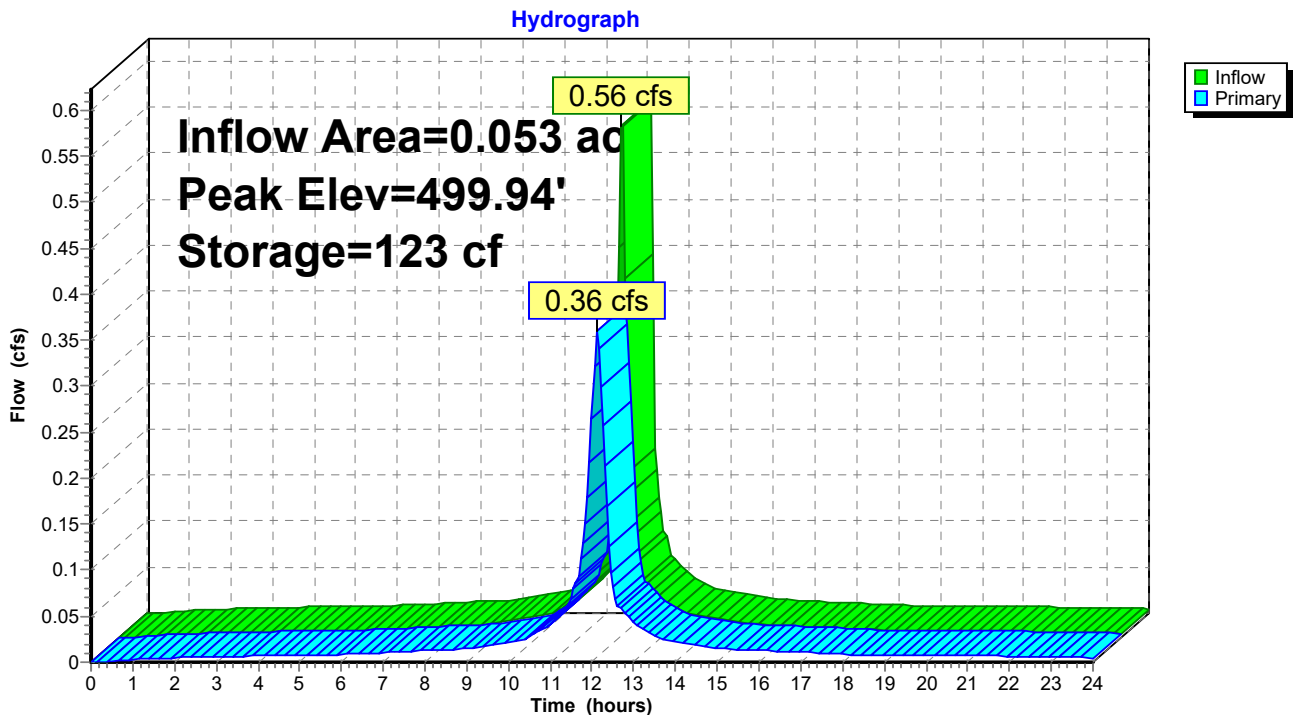
Volume	Invert	Avail.Storage	Storage Description
#1	497.50'	141 cf	36.0" Round Pipe Storage L= 20.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	497.50'	3.0" Vert. Orifice/Grate C= 0.600
#2	Primary	500.00'	2.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.36 cfs @ 12.11 hrs HW=499.89' (Free Discharge)

- 1=Orifice/Grate (Orifice Controls 0.36 cfs @ 7.25 fps)
- 2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond Imp: 20 L.F. - 36" PIPE

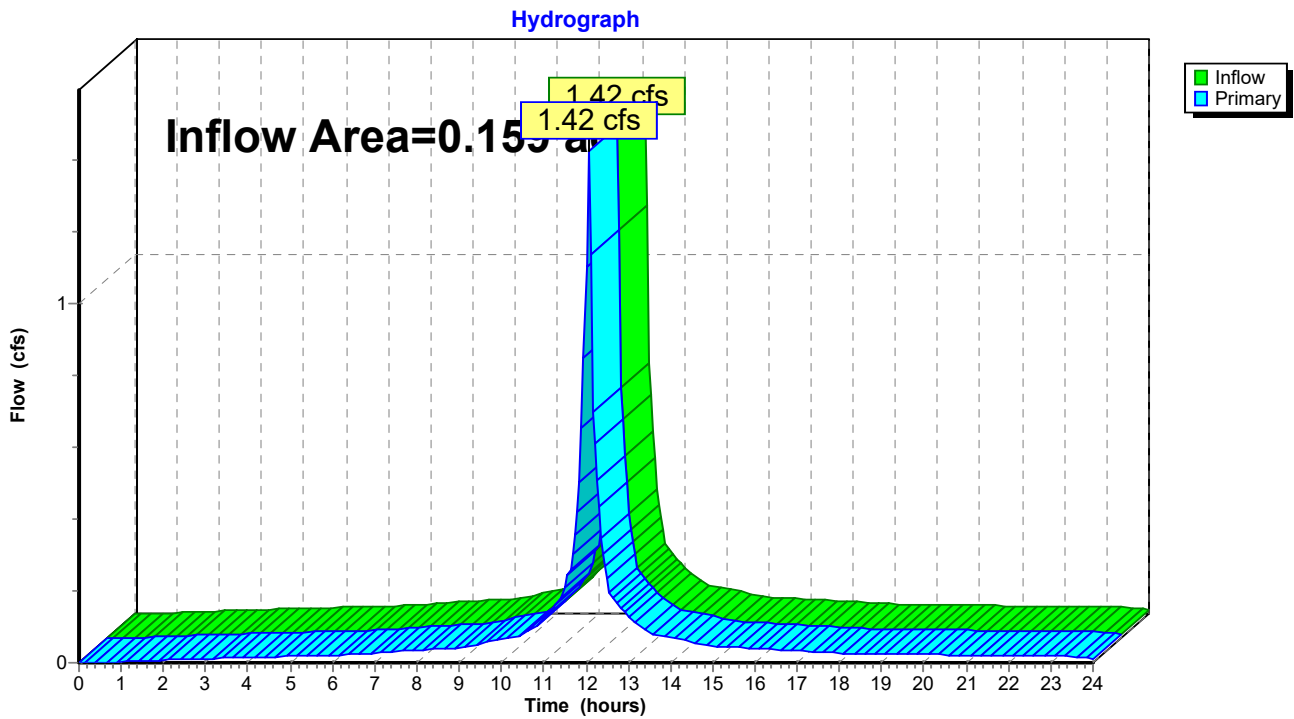


Summary for Link Runoff Post Dev: Runoff Post Dev

Inflow Area = 0.159 ac, 82.15% Impervious, Inflow Depth > 8.58" for 100 year event
Inflow = 1.42 cfs @ 12.05 hrs, Volume= 0.114 af
Primary = 1.42 cfs @ 12.05 hrs, Volume= 0.114 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link Runoff Post Dev: Runoff Post Dev





TOWN OF NORTH CASTLE
 WESTCHESTER COUNTY
 17 Bedford Road
 Armonk, New York 10504-1898

PLANNING DEPARTMENT
 Adam R. Kaufman, AICP
 Director of Planning

Telephone: (914) 273-3542
 Fax: (914) 273-3554
www.northcastleny.com

FLOOR AREA CALCULATIONS WORKSHEET

Application Name or Identifying Title: PLANNING BOARD APPLICATION # 19-039 Date: 07/31/2020
ODOARDI - 22 NEHEMONT AVE
 Tax Map Designation or Proposed Lot No.: S: 122.16-4-7

Floor Area

1. Total Lot Area (Net Lot Area for Lots Created After 12/13/06): 6,948 SF
2. Maximum permitted floor area (per Section 355-26.B(4)): 2,987 SF
3. Amount of floor area contained within first floor:
0 existing + 1,068.0 proposed = 1,068.0 SF
4. Amount of floor area contained within second floor:
0 existing + 1,068.0 proposed = 1,068.0 SF
5. Amount of floor area contained within garage:
0 existing + 280 proposed = 280 SF
6. Amount of floor area contained within porches capable of being enclosed:
0 existing + 78.2 proposed = 78.2 SF
7. Amount of floor area contained within basement (if applicable – see definition):
0 existing + 0 proposed = 0 SF
8. Amount of floor area contained within attic (if applicable – see definition):
0 existing + 0 proposed = 0 SF
9. Amount of floor area contained within all accessory buildings:
0 existing + 0 proposed = 0 SF
10. Proposed floor area: Total of Lines 3 – 9 = 2,494.2 SF (circled)

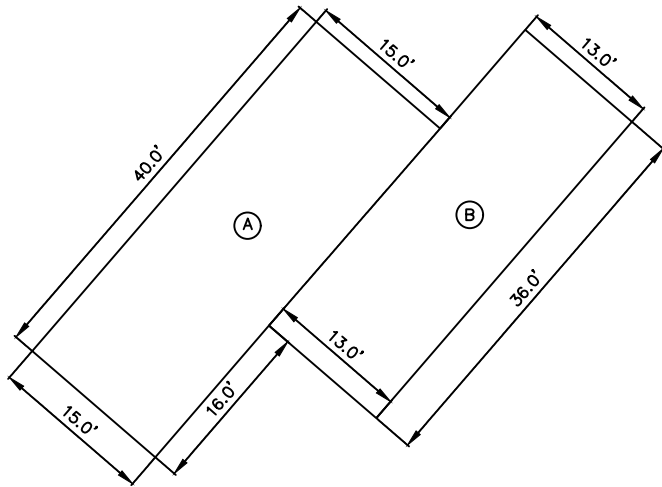
If Line 10 is less than or equal to Line 2, your proposal **complies** with the Town's maximum floor area regulations and the project may proceed to the Residential Project Review Committee for review. If Line 10 is greater than Line 2 your proposal does not comply with the Town's regulations.


 Signature and Seal of Professional Preparing Worksheet


08/02/2020
 Date

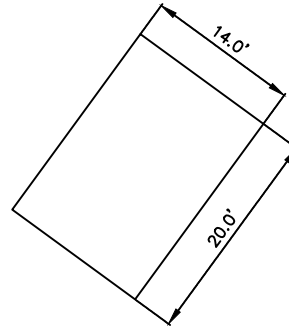
22 NETHERMONT
GROSS FLOOR AREA CALCULATIONS

FIRST FLOOR GFA CALCULATIONS



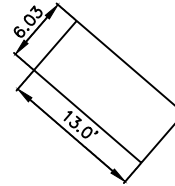
A - 15' X 40' = 600 SF
 B - 13' X 36' = 468 SF
 FIRST FLOOR TOTAL AREA = 1,068 SF

GARAGE GFA CALCULATIONS



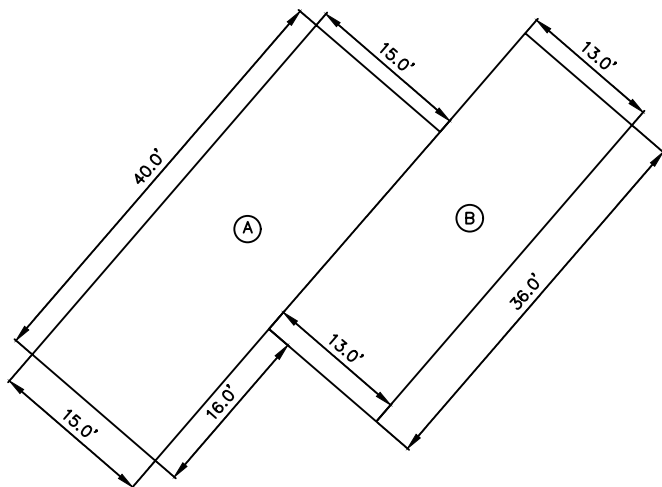
GARAGE TOTAL AREA = 14' X 20' = 280 SF

FRONT PORCH GFA CALCULATIONS



FRONT PORCH TOTAL AREA = 6.03' X 13' = 78.2 SF

SECOND FLOOR GFA CALCULATIONS



A - 15' X 40' = 600 SF
 B - 13' X 36' = 468 SF
 SECOND FLOOR TOTAL AREA = 1,068 SF

GROSS FLOOR AREA CALCULATIONS

FIRST FLOOR TOTAL AREA = 1,068 SF
 SECOND FLOOR TOTAL AREA = 1,068 SF
 FRONT PORCH TOTAL AREA = 6.03' X 13' = 78.2 SF
 GARAGE TOTAL AREA = 14' X 20' = 280 SF

GROSS FLOOR AREA = 2,494.2



TOWN OF NORTH CASTLE
 WESTCHESTER COUNTY
 17 Bedford Road
 Armonk, New York 10504-1898

PLANNING DEPARTMENT
 Adam R. Kaufman, AICP
 Director of Planning

Telephone: (914) 273-3542
 Fax: (914) 273-3554
www.northcastleny.com

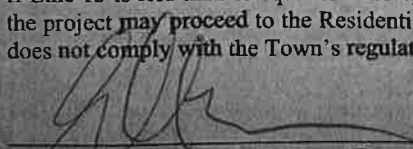
GROSS LAND COVERAGE CALCULATIONS WORKSHEET

Application Name or Identifying Title: PLANNING BOARD APPLICATION # 19-039 Date: 07/31/2020
ODDARDY - 22 NETHERMENT AVE
 Tax Map Designation or Proposed Lot No.: S: 122.16 B: 4 L: 7

Gross Lot Coverage

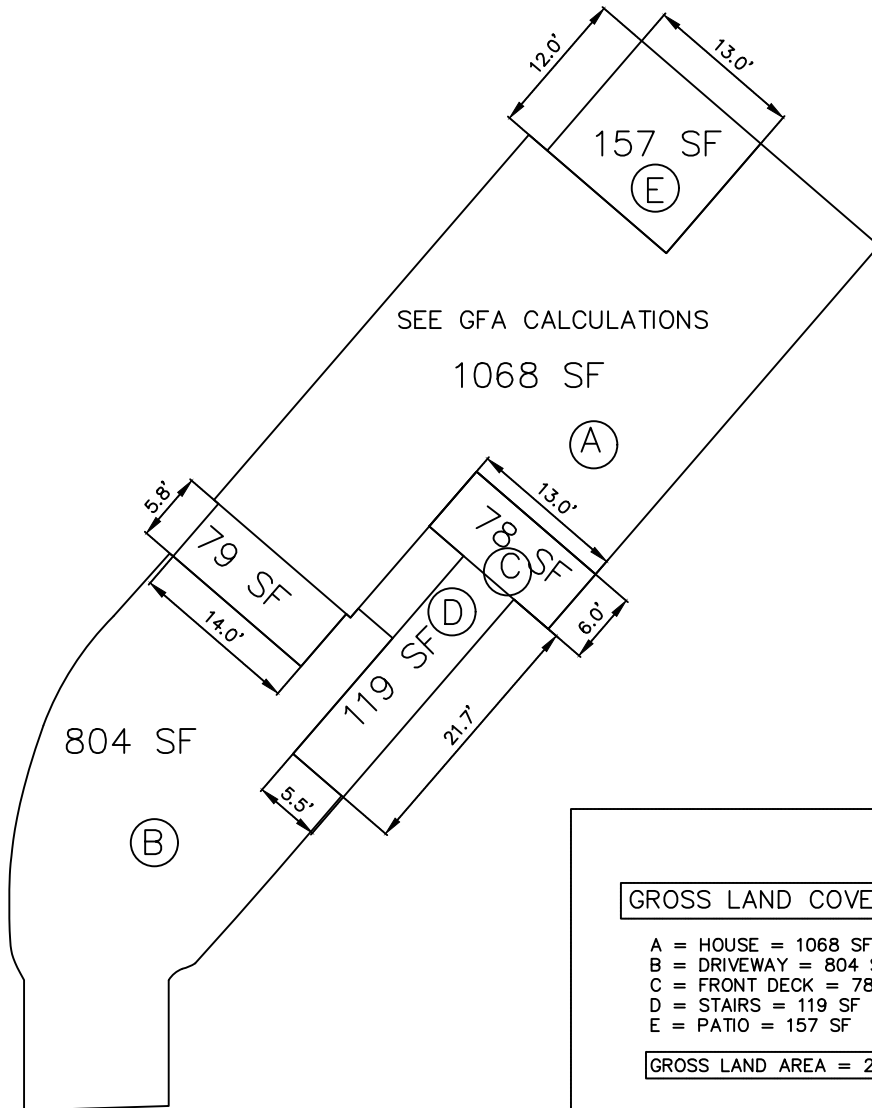
1. Total lot Area (Net Lot Area for Lots Created After 12/13/06): 6,948 SF
2. **Maximum** permitted gross land coverage (per Section 355-26.C(1)(a)): 3,084.4 SF
3. **BONUS** maximum gross land cover (per Section 355-26.C(1)(b)):
 Distance principal home is beyond minimum front yard setback
0 x 10 = 0 SF
4. **TOTAL Maximum Permitted** gross land coverage = Sum of lines 2 and 3 3,084.4 SF
5. **Amount of lot area covered by principal building:**
0 existing + 1,068 proposed = ~~1,068~~ 1,147 SF
6. **Amount of lot area covered by accessory buildings:**
0 existing + 0 proposed = 0 SF
7. **Amount of lot area covered by decks:**
0 existing + 78 proposed = 78 SF
8. **Amount of lot area covered by porches:**
0 existing + 0 proposed = 0 SF
9. **Amount of lot area covered by driveway, parking areas and walkways:**
0 existing + 804 proposed = 804 SF
10. **Amount of lot area covered by terraces:**
0 existing + 157 proposed = 157 SF
11. **Amount of lot area covered by tennis court, pool and mechanical equip:**
0 existing + 0 proposed = 0 SF
12. **Amount of lot area covered by all other structures:**
0 existing + 119 proposed = 119 SF
13. **Proposed gross land coverage:** Total of Lines 5 - 12 = ~~2,226 SF~~ 2,305 SF

If Line 13 is less than or equal to Line 4, your proposal complies with the Town's maximum gross land coverage regulations and the project may proceed to the Residential Project Review Committee for review. If Line 13 is greater than Line 4 your proposal does not comply with the Town's regulations.


 Signature and Seal of Professional Preparing Worksheet



08/02/2020
 Date



SEE GFA CALCULATIONS
1068 SF

(A)

5.8'
14.0'
79 SF

(B)

804 SF

13.0'
6.0'
78 SF
119 SF (D)
5.5'
21.7'

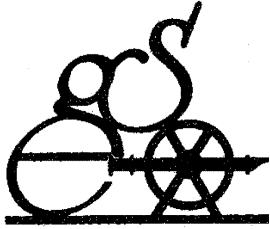
13.0'
6.0'
78 SF (C)

12.0'
13.0'
157 SF (E)

GROSS LAND COVERAGE CALCULATIONS

- A = HOUSE = 1068 SF + 5.8' X 14' = 1,147 SF
- B = DRIVEWAY = 804 SF
- C = FRONT DECK = 78 SF
- D = STAIRS = 119 SF
- E = PATIO = 157 SF

GROSS LAND AREA = 2,305 SF



Gabriel E. Senor, P.C.

Engineers Planners Surveyors

90 N Central Park Avenue

Hartsdale, NY 10530

Tel: (914) 422-0070

Fax: (914) 422-3009

E-Mail: info@gesenor.com

07/31/2020

TO: **Members of the Town of North Castle Planning Board**

Joseph M. Cermele, P.E., CFM

Kellard Sessions Consulting

Consulting Town Engineers

CC: **Adam Kaufman, AICP**

Town Planner

Re: **Site Plan Approval**

22 Nethermont Ave

Section 122.16, Block 4, Lot 7

G.E.S Revisions/Written Response to Comments addressing the Planning Board Staff Report, dated January 24, 2020, and Revisions/Written Response to Comments Received from Kellard Sessions (Town Consulting Engineer), dated January 24, 2020.

Dear Members of the Town of North Castle Planning Board and Joseph M. Cermele, P.E., CFM (Town Consulting Engineer),

To follow are our revisions/responses to all comments received from the above referenced parties.

TOWN OF NORTH CASTLE STAFF COMMENTS DATED 01/24/2020:

Staff Recommendations

1. The Applicant should be directed to address all outstanding staff and consultant’s comments.
 - Applicant has addressed all outstanding staff and consultant comments.

2. The Planning Board will need to determine whether the project is compatible with the Comprehensive Plan.
 - Not applicable to our revisions or response.

Procedural Comments

1. The Proposed Action would be classified as a Type II Action pursuant to the State Environmental Quality Review Act (SEQRA).
 - Not applicable to our revisions or response.

2. Pursuant to Section 12-18(1) of the Town Code, all site development plans submitted to the Planning Board are required to be referred to the Architectural Review Board (ARB) for review and comment.
 - The applicant is aware that ARB submittal is required.
3. The site plan should be forwarded to the Chief of Police, Fire Inspector and the North White Plains Fire Chief so that they may make any pertinent recommendations to the Planning Board including, but not limited to, the designation of no-parking zones, emergency vehicle access or any other issued deemed important to providing emergency services.
 - The site plan has been sent to the Chief of Police, Fire Inspector and the North White Plains Fire Chief. Police Chief Peter Simonsen via Website
Andrew Seicol, North WP Fire Chief via E Mail - chief2321@nwpfd.com
Robert Melillo, Fire Inspector via Website
4. The site plan should be forwarded to the Sewer and Water Department so that they may make any pertinent recommendations to the Planning Board including, but not limited to, the ability to provide water and sewer capacity for the proposed house.
 - The site plan has been sent to the Sal Misiti (smisiti@northcastleny.com) at the sewer and water department.
5. The Applicant will be required to obtain a curbcut permit from the North Castle Highway Department.
 - The applicant will obtain a curb cut permit prior to construction.
6. A neighbor notification meeting regarding the proposed site plan will need to be scheduled.
 - We are willing and able to attend a neighbor notification meeting. Please advise further as to when and where this takes place.
7. The site plan application will need to be referred to the Westchester County Planning Board pursuant to § 239-m of New York State General Municipal Law (GML) since the site is within 500 feet of the City of White Plains.
 - Ok.
8. The neighbor notification notice will need to be sent to the City of White Plains City Clerk pursuant to § 239-nn of New York State General Municipal Law (GML). This referral is required because the subject site is located within 500 feet of the City of White Plains.
 - Ok.
9. The Planning Board should schedule a site visit.
 - The board has performed a site visit.

Procedural Comments

1. The lot is highly constrained by steep slopes and lot width. In addition, the proposed house is placed at a skewed angle as compared to the property to the south.

It is recommended that additional screening be proposed along both side lot lines. In addition, it is recommended that the proposed side elevations be significantly improved aesthetically (window placement, number and detail) since the sides of the proposed house will be visible to the direct neighbors.

- The property to the south is 9 ft +- higher than our home. The difference in elevation means that the view of the house is less intrusive. In addition, we have added a 6 ft fence along the southern property line and added windows, as well as a front porch to enhance the view from the property to the south. The

combination of the proposed landscaping, 6 ft fence, side view of the front porch, additional windows and the elevation difference between the property to the south and our property will improve the aesthetics of the home when looking at the home from the southern property line.

2. It is noted that the submitted site plan does not depict a rear patio area. Typically, homeowners would expect to have this type of outdoor amenity when purchasing a new home. The Applicant should give consideration to securing approval for such an improvement at this time.
 - A rear patio has been added to the plan.
3. The site plan depicts one off-street parking space in the proposed garage. The submitted site plan should be revised to depict two unimpeded, accessible, off-street parking spaces. Parking spaces can be provided in a garage or in a driveway. *(Staff Notes: As proposed, the site plan requires a vehicle to be parked in the driveway behind the car in the garage, which is not acceptable as the garage space is inaccessible if a car is in the driveway or vice versa.)*
 - An additional parking spot has been added to the plan.
4. The Applicant should give consideration to providing a front porch on the proposed house. The porch would be functional and improve the aesthetics of the home. Additionally, a small roof covering the rear sliding doors should also be considered.
 - A front porch has been added to the home to improve the aesthetics. The owner does not want to add any roof/covering to the rear at this time.
5. The site plan depicts walls in excess of six feet in height. Pursuant to Section 355-15.G of the Town Code, retaining walls in excess of 6 feet in height require Planning Board site plan approval. *(Staff Notes: The Applicant should provide a narrative response as how the proposed wall would comply with the requirements of Section 355-15.G of the Town Code.)*
 - All walls in excess of 6 ft have been removed.
6. The site plan depicts the removal of 12 (all but one) Town-regulated trees. *(Staff Notes: Pursuant to Section 308-15 of the Town Code the Applicant should submit a tree survey indicating the size, species and condition of the trees on the property. In addition, the Applicant should provide a plan that details the replacement proposed to mitigate the impacts from the proposed tree removal. It is recommended that additional planting be provided along the side lot lines.)*
 - A tree survey (Sheet TS-1), arborist table/letter (Table on sheet TS-1 and Letter Included in Submittal), and replacement tree plantings (Sheet LS-1) have all been provided.
7. The Applicant has indicated that a steep slope permit would not need to be issued for this property. *(Staff Notes: The Town Engineer should confirm that a steep slope permit would not be required.)*
 - Ok
8. The Applicant should provide a building height exhibit for review.
 - A building height exhibit has been provided. See sheet BH-1 of the submittal.
9. The Applicant should provide a maximum exterior wall height exhibit for review.
 - All walls have been significantly reduced below the 6 ft maximum allowable height.

10. The Applicant should submit the required Gross Floor Area Calculations Worksheet and backup data for review.
 - Gross Floor Area Worksheet has been attached.
11. The Applicant should submit the required Gross Land Coverage Calculations Worksheet and backup data for review.
 - Gross Land Coverage Worksheet has been attached.
12. The site plan depicts the installation of a fence along the northern property line. A fence detail should be submitted for review.
 - Detail of Fence has been added to SWEC Detail Sheet.

KELLARD SESSIONS CONSULTING, TOWN CONSULTING ENGINEERS, COMMENTS DATED 01/24/2020:

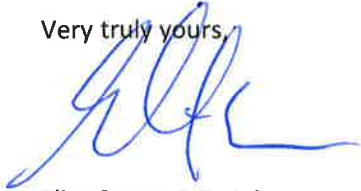
1. As required, the applicant has provided a property survey for the subject parcel; however, metes and bounds shall be indicated for the entire property and shall be included on the site plan. The survey shall be signed and sealed by a NYS Licensed Land Surveyor.
 - Metes and Bounds have been added to the survey.
2. There appears to be existing improvements (parking, paved/gravel driveways) on the subject property being used by the neighboring property owners. These improvements shall be shown on the site plans. The plans shall clarify whether these improvements will require removal or if easements shall be established between the property owners.
 - The existing conditions are shown on the existing conditions and removals plan TS-1. The gravel limits are shown, and it is noted to be removed.
3. The applicant has submitted an Existing Conditions Plan (Sheet TS-1). It appears that some of the proposed improvements are shown on this plan. Please revise the plan, as necessary, to illustrate only the existing conditions on the site and proposed removals.
 - Plan has been revised to show only existing conditions.
4. For clarity and ease of review, the applicant should prepare a site plan that includes all proposed improvements including, but not limited to, proposed residence, walkways, patios, driveway including dimensions, a zoning compliance table, the minimum building envelope illustrating building setbacks and dimensions, retaining walls and existing neighboring buildings and driveways. Proposed grading, utilities, erosion controls, etc., should be illustrated on separate plan sheets.
 - All proposed development shown on the SWEC plan Sheet 2 of 5.
5. The applicant shall demonstrate zoning compliance with respect to building height and maximum wall height. Average grade calculations and cross sections, as necessary, shall be submitted supporting this determination.
 - Average grade calculations shown on SWEC Plan Sheet 2 of 5.

6. As proposed, the development of the site requires clearing the site and the removal of fourteen (14) trees. A landscaping plan has been submitted for the Board's consideration. The Board should consider whether the amount of tree removal is appropriate and if additional screening is needed between the proposed house and neighboring properties.
 - N/A to Gabriel E Senior.
7. Sight distance profiles shall be provided to demonstrate that the required 200 foot minimum sight distance is achieved in both directions. Westchester County GIS topographic data may be used to obtain the required existing elevations for the road profile. The contour elevations should be in the same datum as the contours provided on the submitted plans.
 - Applicant has addressed all outstanding staff and consultant comments.
8. The driveway profile shall be revised to include both horizontal and vertical scales, vertical curve data including high and low point elevations, length of vertical curve and existing and proposed station elevations. The profile shall be revised to demonstrate compliance with Sections 355-59 B (1) and (3) of the Town Code, related to maximum grades and limits of the 4% entry apron at the curb cut.
 - Applicant has addressed all outstanding staff and consultant comments.
9. The plan proposes retaining walls as high as six (6) feet. . The applicant must demonstrate compliance with the provisions of Section 355-15 G(l). The Board should review the walls and consider whether they are aesthetically pleasing and compatible with the surrounding residential character. The Site Plan shall include notes stating that "All walls greater than four (4) feet in height shall be designed by a NYS Licensed Professional Engineer prior to issuance of a Building Permit" and "The construction of all retaining walls greater that four (4) feet in height must be certified by the Design Professional prior to issuance of a Certificate of Occupancy."
 - We have eliminated any walls greater than or equal to 6 ft.
10. The proposed grading is shown to extend over the northern property line onto the neighboring property. The grading plan shall be revised to avoid this. In addition, the grading in the rear of the proposed residence appears to be incomplete. Revise the grading plan accordingly.
 - The grading errors have been corrected.
11. The proposed grading at the north side of the house illustrates a swale that will direct runoff toward the neighboring property to the north. The proposed grading shall be revised to avoid this condition.
 - I have revised the swales to keep runoff on our property. In general, surface runoff has always ran from the applicants property toward the front and rear yard of the neighbor to the north. We are improving the situation with the addition od our swales confining the runoff to our side of the property and out to the street.

12. Provide stormwater mitigation and design calculations for the runoff generated by the net increase in impervious surfaces for the 100-year, 24-hour design storm event. All invert elevations of the stormwater detention system and outlet structures shall be coordinated between the plan, details and the calculations.
 - We have provided the calculations for a 25 year and 100 year, 24 hour rain storm.
13. Stormwater design calculations shall include drainage maps for the pre- and post-developed conditions to illustrate the drainage areas used in the design calculations. Hydrologic calculations for proposed conditions appear to be missing and must be provided.
 - Drainage areas associated with HydroCAD calculations has been attached to this submittal showing the areas used for pre and post calculations.
14. The proposed stormwater mitigation practice is located less than one (1) foot from the front property line. All stormwater practices shall be located a minimum of ten (10) feet from all property lines. The plans shall be revised accordingly.
 - The stormwater mitigation system has been relocated .
15. The proposed invert elevations for the drainage components provide minimal cover over the proposed pipes. A minimum of one (1) foot of cover in non-paved areas and two (2) feet of cover in paved areas is recommended.
 - We have adjusted the inverts to provide maximum cover.
16. The plan proposes a trench drain in the driveway along the front property line. As proposed, a six (6) inch pipe will cross diagonally under the driveway with minimal cover. It is recommended that the pipe be relocated to discharge from the opposite side of the trench drain and run parallel to the driveway to improve cover requirements.
 - The 6" pipe exiting the slot drain has been routed according to your suggestion and cover has been maximized.
17. The plan shall note that all curb cuts shall be a maximum of 18 feet wide.
 - Max curb cut noted at driveway exit.
18. The plan indicates a new one (1) inch water service that will be connected to an existing water main in Nethermont Avenue. A detail shall be provided for the new water line connection to the existing main. The Trench Restoration Detail shall be revised to comply with North Castle Highway Department Standards.
 - Water main connection detail has been added to the utility plan.
19. Erosion control measures shall be illustrated on the proposed grading plan, including, but not limited to, silt fence, inlet protection, construction entrance and tree protection. The limit of disturbance shall be revised to illustrate and quantify all areas of disturbance on and off site.
 - All erosion control measures are now shown on the grading/stormwater plan.

Should you have any additional comments or questions concerning the above, please feel free to contact me. Thank you for your consideration in this matter.

Very truly yours,

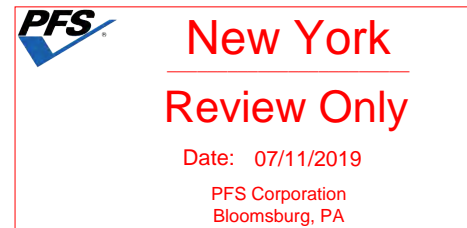
A handwritten signature in blue ink, appearing to read 'Eliot Senor', with a long horizontal flourish extending to the right.

Eliot Senor, P.E., L.S.


WMH DRAWING LIST	
PAGE #	
1	ELEVATIONS
2	FOUNDATION PLAN
3A,3B	FLOOR PLAN
3W	BRACED WALL PLAN
4	CROSS SECTION
5A,5B	PLUMBING PLAN
6A,6B	ELECTRICAL PLAN
8	STD. NOTES & DETAILS

TOTAL AREA	= 2,134 SQ. FT.
USE GROUP	= DETACHED SINGLE FAMILY DWELLING
CONST. TYPE	= WOOD FRAME UNPROTECTED
GROUND SNOW LOAD	= 40 LB/SF
SEISMIC DESIGN CAT.	= C
SOIL SITE CLASS	= D
WIND SPEED (Vult)	= 115 MPH
EXPOSURE CATEGORY	= B
FLOOD ZONE	= NO
FLOOR LIVE LOAD	=
	1st FL. = 40 LB/SF
	2nd FL. = 30 LB/SF
CLIMATE ZONE	4 (5470 HDD)

THIRD PARTY INSPECTION AGENCY



New York
Review Only
Date: 07/11/2019
PFS Corporation
Bloomsburg, PA



PE / RA

DESIGNED TO THE FOLLOWING:

- NYS UNIFORM CODE (WHICH INCORPORATES BY REFERENCE):
- 2017 UNIFORM CODE SUPPLEMENT, PUBLICATION DATE JULY 2017 (2017 UCS), WHICH REPLACES THE 2016 UNIFORM CODE SUPPLEMENT (2016 UCS)
 - REFERENCES THE INTERNATIONAL CODE COUNCIL PUBLICATIONS (2015 IRC, 2015 IBC, 2015 IPC, 2015 IMC, 2015 IFGC, 2015 IFC, 2015 IPMC, AND 2015 IEBC), WITH SPECIFIC CODE PRINTINGS, APPENDICES, AND REFERENCED STANDARDS AS IDENTIFIED IN THE 2017 UCS.
- NYS ENERGY CODE (WHICH INCORPORATES BY REFERENCE):
- 2016 SUPPLEMENT TO THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE, PUBLICATION DATE AUGUST 2016, REVISED AUGUST 2016 (2016 ECS). ALL REFERENECES WITHIN THE 2016 ECS TO THE 2016 UCS, SHALL BE DEEMED TO BE AMENDED TO BE A REFERENCE TO THE 2017 UCS.
 - REFERENCES THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE (2015 IECC), AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL, WITH SPECIFIC CODE PRINTING, APPENDICES, AND REFERENCED STANDARDS AS IDENTIFIED IN THE 2016 ECS.
 - ASHREA 90.1-2013, PRINTING AS IDENTIFIED IN THE 2016 ECS.
 - OTHER REFERENCED STANDARDS MENTIONED IN 19 NYCRR PART 1240.
- 2014 NATIONAL ELECTRICAL CODE

- NOTES:
- THE PLANS AND SPECIFICATIONS OF THIS PERMIT PLAN SET ARE DERIVED FROM AND CONSISTENT WITH THE SYSTEMS SET OF PLANS AND SPECIFICATIONS ON FILE WITH THE DEPARTMENT OF STATE, UNDER SYSTEMS NUMBER M0659-2016-073.
 - ENERGY COMPLIANCE IS SHOWN THROUGH THE USE OF RESCHECK SOFTWARE AND IS IN COMPLIANCE WITH CHAPTER 11 OR THE CODE.
 - BLOWER DOOR TESTING SHALL BE PERFORMED ON SITE BY A QUALIFIED HERS RATER IN ACCORDANCE WITH N1102.4.1.2. RATING COMPANY TO BE USED IS GLENN HOOPER, PO BOX 1013, SMITHTOWN, NY 11787.
 - WHOLE HOUSE VENTILATION SYSTEM TO BE DESIGNED, SUPPLIED, AND INSTALLED ON SITE BY B/P WITH A MINIMUM CONTINUOUS FLOW RATE OF PER TABLE M1507.3.3(1). WITH A MINIMUM CONTINUOUS FLOW RATE OF 45cfm.
 - THERE ARE NO LOT LINE SEPARATION REQUIREMENTS FOR THIS DWELLING AS LOCATED ON THIS LOT.

- NOTES:
- ALL ITEMS NOTED AS "B/P" REFER TO THE BUILDER AND/OR PURCHASER OF THE HOME.
 - B/P SHALL BE RESPONSIBLE TO SUPPLY AND INSTALL ALL MATERIALS ON SITE IN ACCORDANCE WITH MANUFACTURE'S SPECIFICATIONS AND STATE AND LOCAL CODES INCLUDING BUT NOT LIMITED TO THE FOLLOWING ITEMS: ALL PORCHES, DECKS, STAIRS, RAILS AND GUARDS, ALL SUPPORTING STRUCTURE FROM THE BOTTOM OF THE MODULES TO GRADE AND BELOW, ALL PLUMBING PIPING BELOW THE 1ST FLOOR SHEATHING (INCLUDING CLEANOUTS), HOT WATER HEATER, ALL ELECTRICAL SERVICE TO THE PANEL BOX LOCATION, ALL EQUIPMENT REQUIRED FOR HEATING AND COOLING OF THE RESIDENCE NOT INSTALLED BY WMH.
 - B/P SHALL BE RESPONSIBLE TO COMPLETE TO FOLLOWING ITEMS PARTIALLY DONE IN THE FACTORY: INSTALL ALL REMAINING SIDING AND ACCESSORIES, CONNECT PLUMBING VENT THROUGH ROOF, CONNECT PIPING TO HOT WATER HEATER, INSTALL GWB AT MATING LINE, INSTALL ALL WIRING AND BREAKERS TO ELECTRIC PANEL BOX, AND LOCATE ROOF TRUSS TYPE SIGNAGE AT THE ELECTRIC METER (SUPPLIED BY WMH AND INSTALLED ON SITE BY B/P)
 - ALL CUTTING, BORING, AND NOTCHING OF STRUCTURAL MEMBERS SHALL BE DONE IN ACCORDANCE WITH R502.7, R602.6, R802.7 OR AS APPROVED BY A QUALIFIED DESIGN PROFESSIONAL.

NOTE:
UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209, ARTICLE 145 OF THE NYS EDUCATION LAW.

PROJECT ADDRESS
21 NETHERMOUNT AVE
NORTH CASTLE, NY 10603
"WESTCHESTER" COUNTY

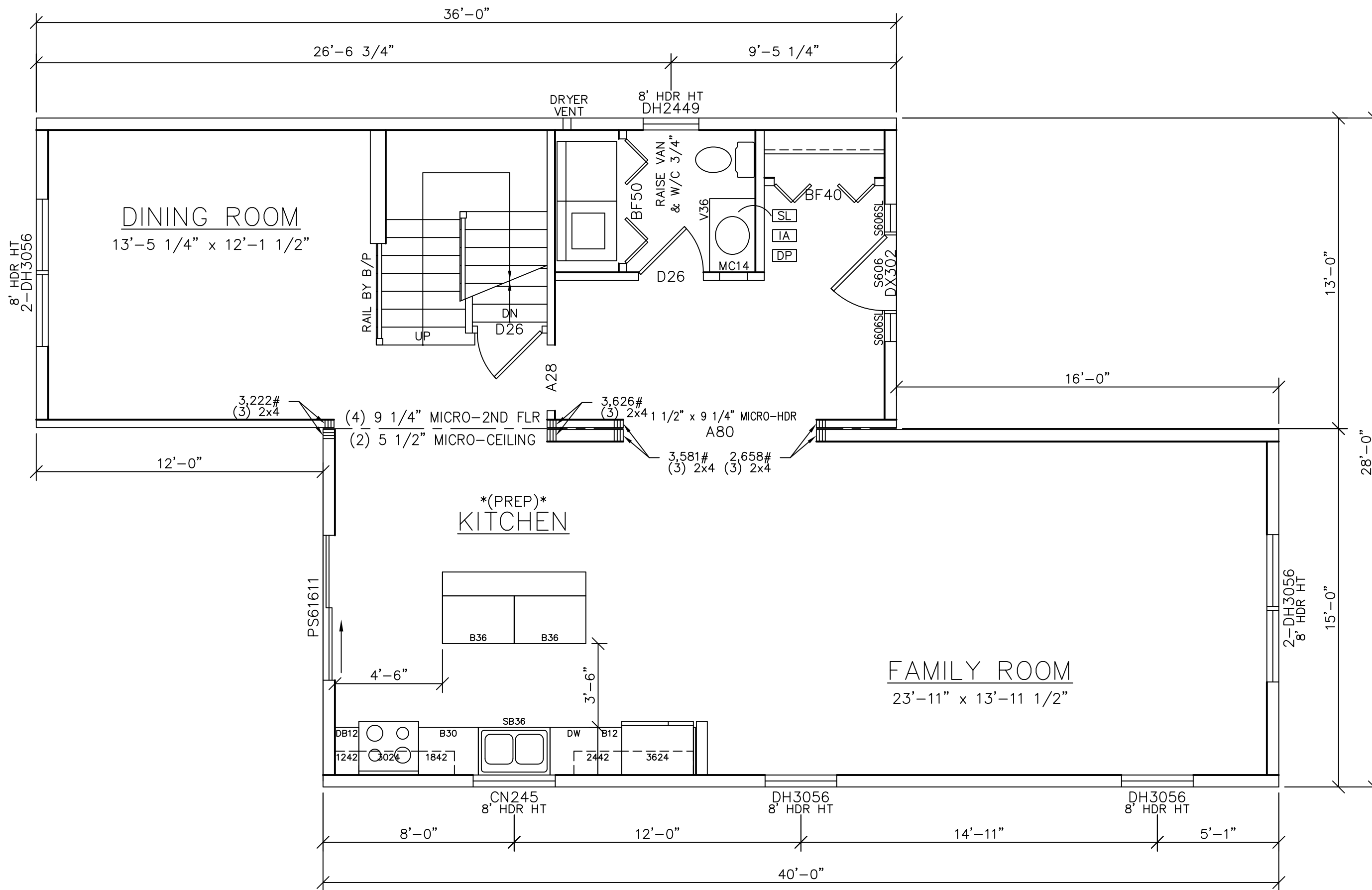
<p>ANTHONY S. PISARRI, P.E. DESIGN PROFESSIONAL 3 ROSALIND DRIVE CORTLANDT MANOR, NY 10567 (914) 739-6580</p>	<p>P.F.S. CORPORATION 3RD PARTY INSPECTION AGENCY 1115 OLD BERWICK ROAD BLOOMSBURG, PA 17815 (570) 784-8396</p>
--	--

SEE STANDARD NOTES & DETAILS DWG #8

SERIAL No.	19022	DATE	06/18/2019	DATE	08/08/18
PRODUCTION No.		REVISION	RS	RS	CHECK
HOMEOWNER:	DINO & BRUNO OBOARDI				
BUILDER:	WMHCC				
SITE:	21 NETHERMOUNT AVE NORTH CASTLE, NY 10603				
BUILDING:	1995 ROUTE 22 BREWSTER, NY 10509				
USE GROUP:	DETACHED SINGLE FAMILY DWELLING				
CONST. TYPE:	WOOD FRAME UNPROTECTED				
DESIGNER:	RS				
DATE:	02/05/2019				
SCALE:	N/A				
PAGE:	0				

NEW YORK 2 STORY COVER SHEET

Westchester Modular Homes Inc
30 Reagans Mill Road, Wingdale, New York, 12594
Tel (845)832-9400 Fax (845)832-6698



NOTE:
 ALL WINDOWS WITH A SILL HEIGHT LESS THAN 24" ABOVE FINISHED FLOOR AND WITH A EXT. HEIGHT OF GREATER THAN 6'-0" TO GRADE SHALL BE EQUIPPED WITH FALL PROTECTION SUPPLIED AND INSTALLED ON SITE BY B/P IN ACCORDANCE W/ R312.2



9'-0" FIRST FLOOR CEILING HEIGHT
 ENTIRE FIRST FLOOR

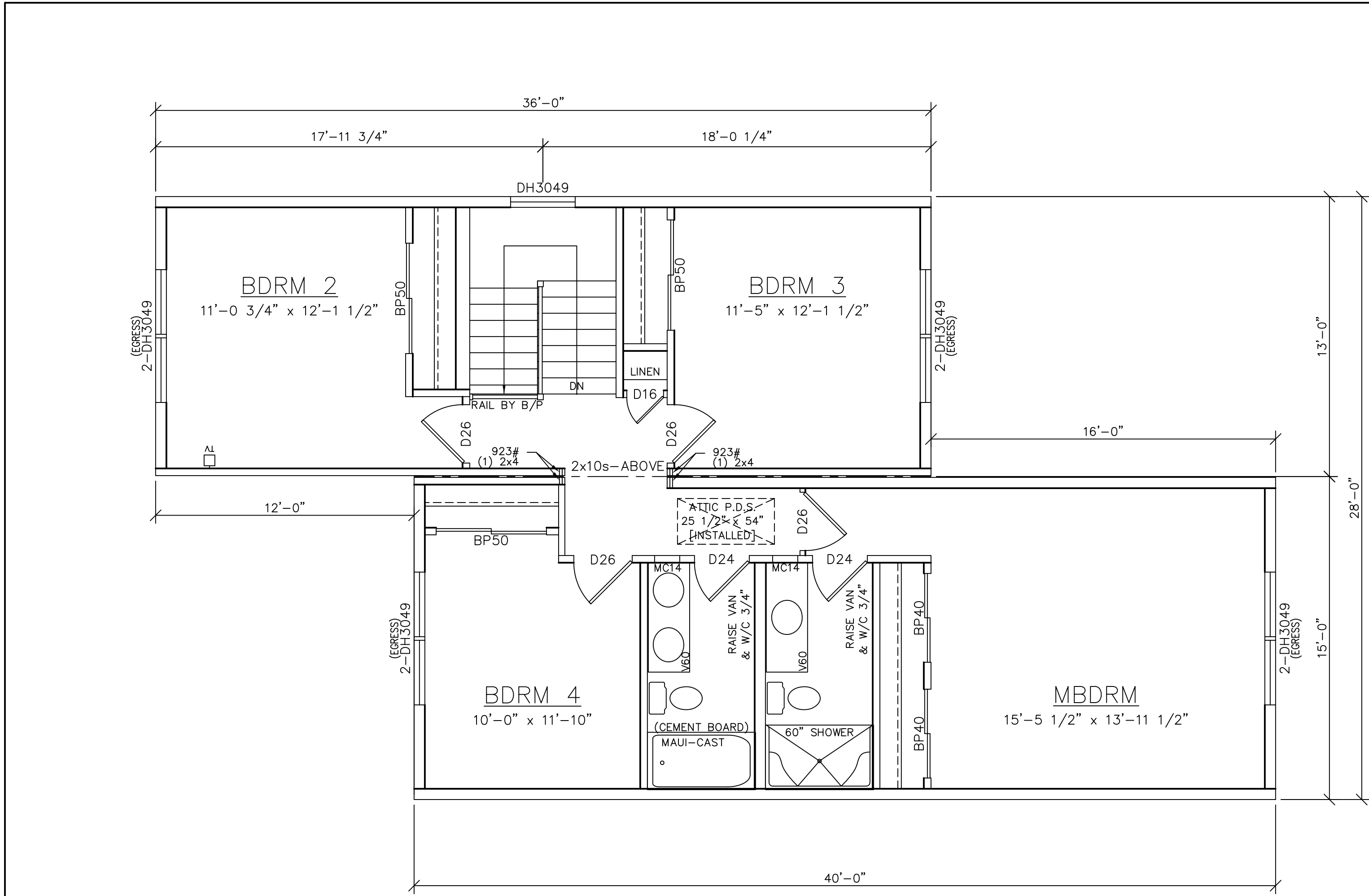
- NOTES:**
- 2x10 JOISTS @ 12" O.C. ILO 16" O.C. IN B&D BOXES ONLY
 - ANDERSEN 200 SERIES WINDOWS, W/ GBG
 - 8' HDR HT's ON 1ST FLR WINDOWS
 - 5 1/4" NECK BASE
 - 3 1/2" COLONIAL CASING

LIGHT & VENTILATION SCHEDULE (SF)					
ROOM	AREA	LIGHT		VENT	
		REQUIRED	SUPPLIED	REQUIRED	SUPPLIED
DINING RM	163	13.0	23.6	6.52	13.54
KITCHEN	218	17.4	43.1	8.70	25.16
FAMILY RM	335	26.8	47.2	13.4	27.08
.
.

A
FRONT
B

SEE STANDARD NOTES & DETAILS DWG #8

USE GROUP: DETACHED SINGLE FAMILY DWELLING CONST. TYPE: WOOD FRAME UNPROTECTED	BUILDER: WMHCC 1995 ROUTE 22 BREWSTER, NY 10509	HOMEOWNER: DINO & BRUNO ODOARDI SITE: 21 NETHERMOUNT AVE NORTH CASTLE, NY 10603	SERIAL No. 19022 PRODUCTION No.	THIRD PARTY INSPECTION AGENCY <div style="text-align: center;">  </div>	REVISION RS RS	DATE 06/18/2019 06/25/2019	CHECK 	DATE 	
COLONIAL CTM-L FIRST FLOOR PLAN			Westchester Modular Homes Inc 30 Reagans Mill Road, Wingdale, New York, 12594 Tel (845)832-9400 Fax (845)832-6698			<div style="text-align: center;">  </div>			3A



FRONT

NOTE:
 ALL WINDOWS WITH A SILL HEIGHT LESS THAN 24" ABOVE FINISHED FLOOR AND WITH A EXT. HEIGHT OF GREATER THAN 6'-0" TO GRADE SHALL BE EQUIPPED WITH FALL PROTECTION SUPPLIED AND INSTALLED ON SITE BY B/P IN ACCORDANCE W/ R312.2

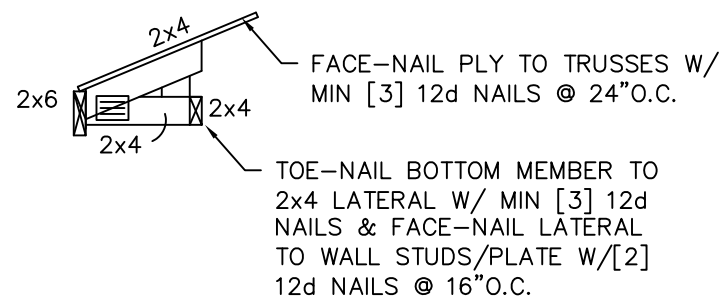
- NOTES:**
- 2x10 JOISTS @ 12" O.C. ILO 16" O.C. IN B&D BOXES ONLY
 - ANDERSEN 200 SERIES WINDOWS, W/ GBG
 - 8' HDR HT's ON 1ST FLR WINDOWS
 - 5 1/4" NECK BASE
 - 3 1/2" COLONIAL CASING

LIGHT & VENTILATION SCHEDULE (SF)					
ROOM	AREA	LIGHT		VENT	
		REQUIRED	SUPPLIED	REQUIRED	SUPPLIED
BDRM 2	134	10.7	19.8	5.37	11.52
BDRM 3	139	11.2	19.8	5.58	11.52
BDRM 4	118	9.5	19.8	4.73	11.52
MBDRM	218	17.4	19.8	8.72	11.52

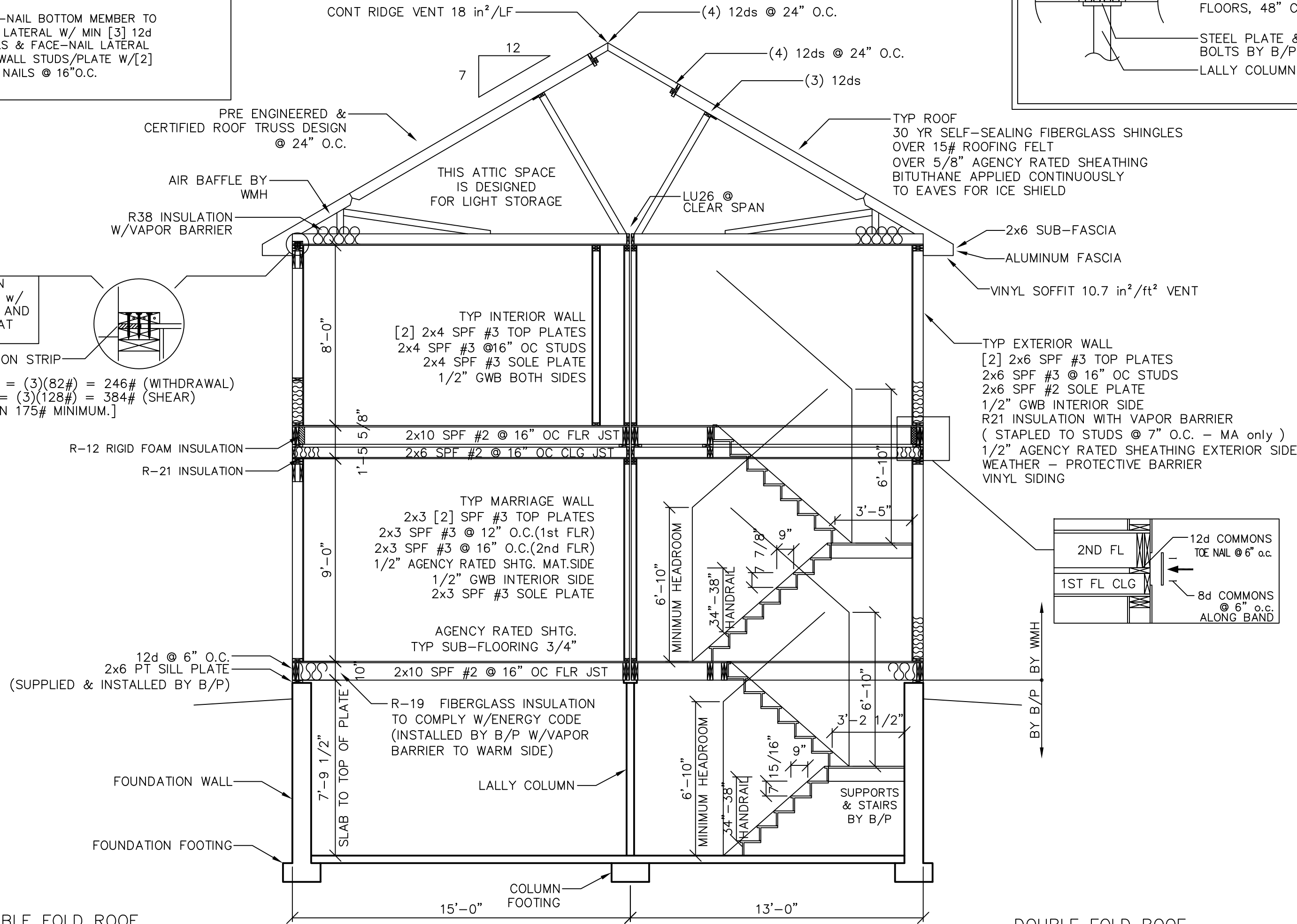
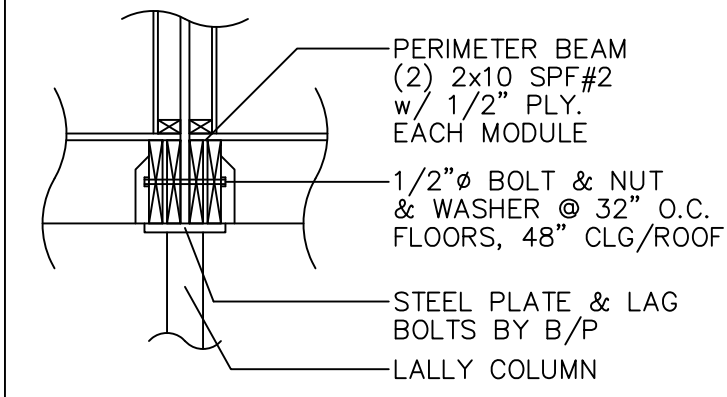
SEE STANDARD NOTES & DETAILS DWG #8

USE GROUP: DETACHED SINGLE FAMILY DWELLING	BUILDER: WMHCC 1995 ROUTE 22 BREWSTER, NY 10509	HOMEOWNER: DINO & BRUNO ODOARDI	THIRD PARTY INSPECTION AGENCY
CONSTR. TYPE: WOOD FRAME UNPROTECTED	SITE: 21 NETHERMOUNT AVE NORTH CASTLE, NY 10603	SERIAL No. 19022	
DESIGNER: RS	COLONIAL CTM-L SECOND FLOOR PLAN	PRODUCTION No.	
DATE: 02/05/2019		REVISION	CHECK
SCALE: 1/4" = 1'-0"		RS	RS
PAGE: 3B	Westchester Modular Homes Inc 30 Reagans Mill Road, Wingdale, New York, 12594 Tel (845)832-9400 Fax (845)832-6698	DATE	DATE

**S/L OVERHANG
DETAIL**



PERIMETER BEAM DETAIL



2x6 BLOCK BETWEEN EVERY OTHER TRUSS w/ (3) 12d FACE-NAILS AND (3) 12d END-NAILS AT EACH END OF BLOCK

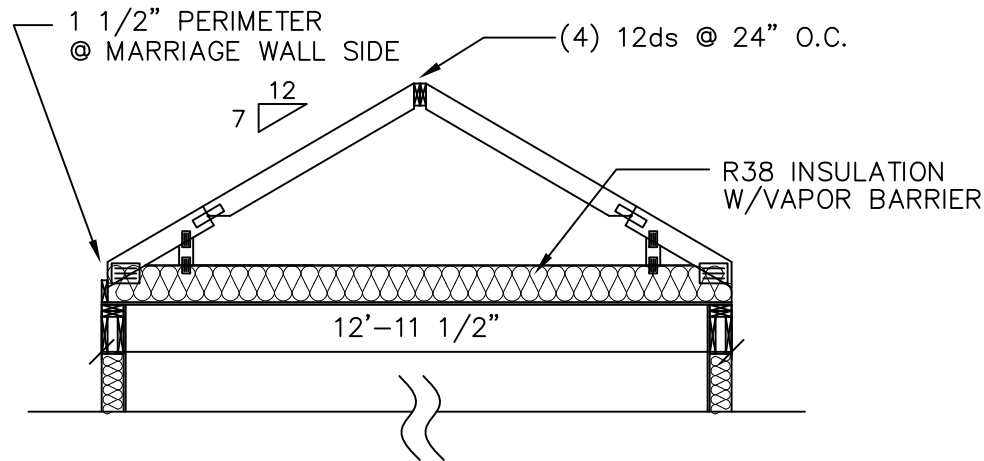
5/8" COMPRESSION STRIP

(3) 12d FACE-NAILS = (3)(82#) = 246# (WITHDRAWAL)
(3) 12d END-NAILS = (3)(128#) = 384# (SHEAR)
[BOTH GREATER THAN 175# MINIMUM.]

12d @ 6" O.C.
2x6 PT SILL PLATE
(SUPPLIED & INSTALLED BY B/P)

FOUNDATION WALL
FOUNDATION FOOTING

**DOUBLE FOLD ROOF
CROSS SECTION**



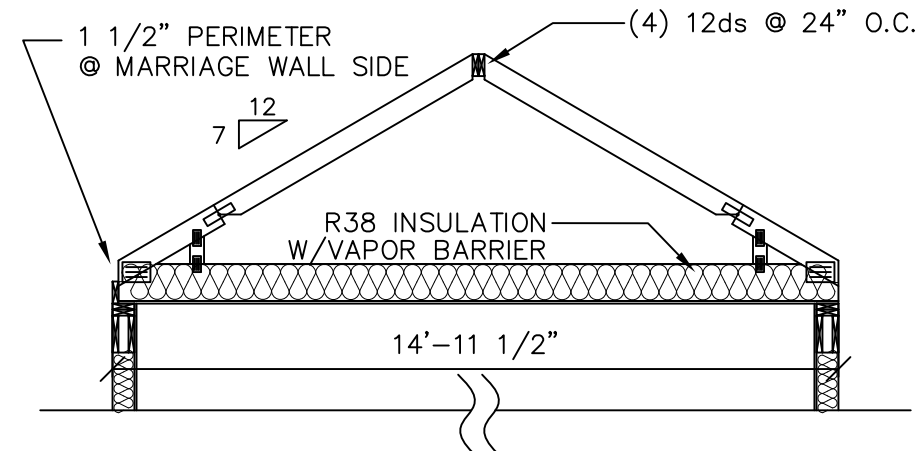
NOTE:
WALL & CLG GYPSUM FASTENED PER TABLE R702.3.5 (UNLESS OTHERWISE NOTED)

FLAMESPREAD NOTES:
1. WALL AND CEILING FINISHES SHALL HAVE A FLAME SPREAD INDEX OF NOT GREATER THAN 200, PER R302.9.1
2. INSULATION MATERIALS SHALL HAVE A FLAME SPREAD INDEX OF NOT GREATER THAN 25, PER R302.10.1

JOIST/HDR NOTES:
1. ALL FLOOR JOISTS ARE 2x10 @ 16" O.C. SPF#2 PER TABLE R502.3.1(2) W/MAX SPAN OF 15'-5".
2. ALL WINDOW/DOOR HEADERS ARE [2] 2x10 SPF#2 PER TABLE R602.7(1), UNLESS OTHERWISE NOTED.

WINDOW/DOOR NOTES:
1. ALL WINDOWS AND DOORS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS FOR ANCHORAGE PER R609.7
2. MULLED UNITS TO BE INSTALLED USING (1) 2x4 SUPPORT MULLION PER ANDERSEN COMBINATION DESIGNS FOR 200 SERIES D/H WINDOWS AND WILL SUPPORT A PRESSURE OF 30psf FROM MANUFACTURER TO COMPLY WITH R609.3
3. ALL WINDOWS AND DOORS LABELED FROM MANUFACTURER TO COMPLY WITH R609.3
4. ALL WINDOW INSTALLATION AND FLASHING TO BE COMPLIANT PER R609
5. WIND PRESSURE FOR WINDOWS/DOORS [PER TABLE R301.2(2)]

**DOUBLE FOLD ROOF
CROSS SECTION**



SEE STANDARD NOTES & DETAILS DWG #8

THIRD PARTY INSPECTION AGENCY

PE / RA

SERIAL No. **19022**
PRODUCTION No.



REVISION	DATE	CHECK	DATE
RS	06/18/2019	P. McHUGH	11/16/09
RS	06/25/2019		

HOMEOWNER:
DINO & BRUNO ODOARDI
SITE:
21 NETHERMOUNT AVE
NORTH CASTLE, NY 10603

BUILDER:
WMHCC
1995 ROUTE 22
BREWSTER, NY 10509

**COLONIAL CTM-L
CROSS SECTION**

Westchester Modular Homes Inc
30 Reagans Mill Road, Wingdale, New York, 12594
Tel (845)832-9400 Fax (845)832-6698

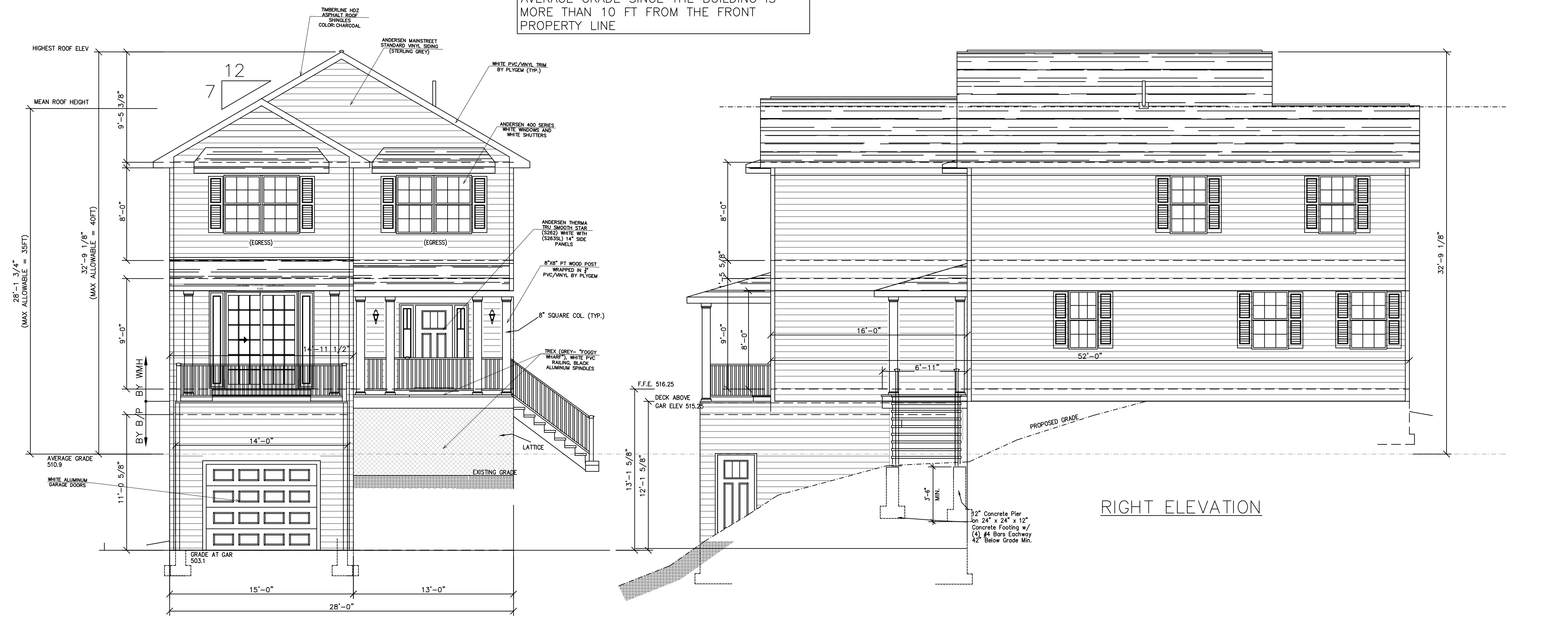
USE GROUP:
DETACHED SINGLE FAMILY DWELLING
CONSTR. TYPE:
WOOD FRAME UNPROTECTED
DESIGNER:
RS
DATE:
02/05/2019
SCALE:
1/4" = 1'-0"
PAGE:

4

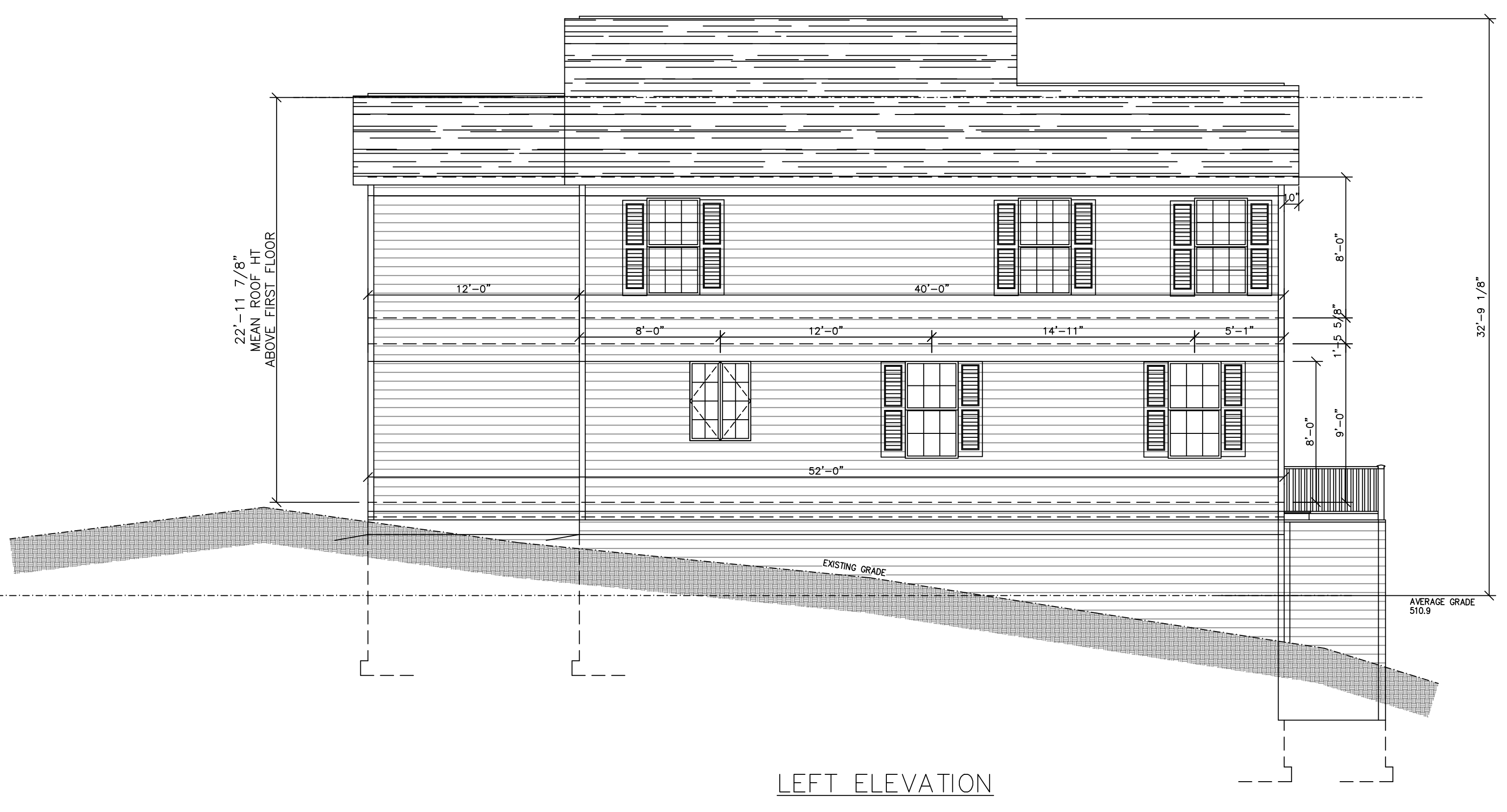
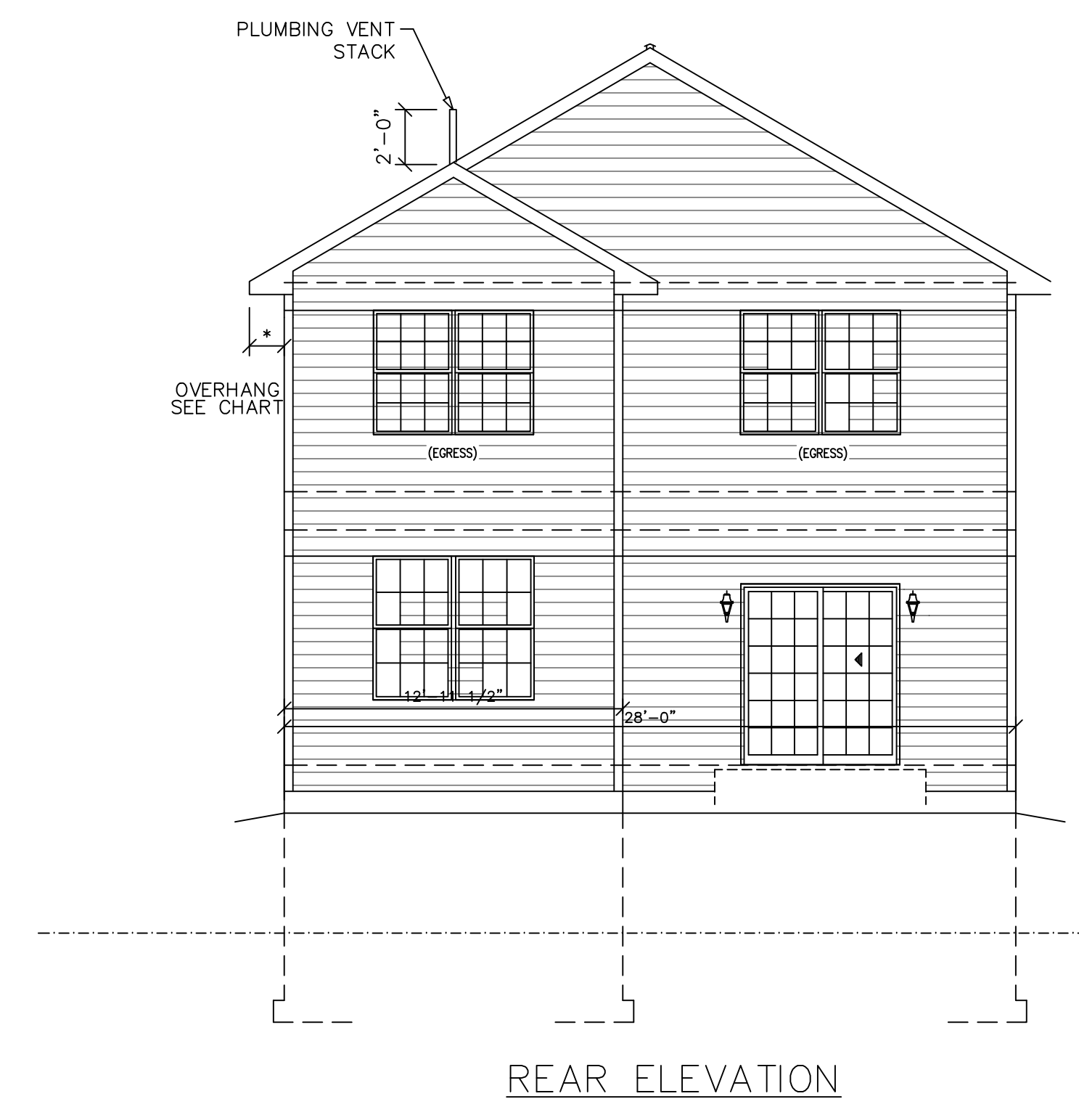
SCHEDULE OF MATERIALS

	Name	Type	Color
Siding	Andersen	MainStreet Standard	Sterling Grey
Windows	Andersen	400 Series	White (Standard)
Trim	Ply Gem	PVC Trim Board	White
Ext. Door	Andersen	Therma Tru Smooth Star (S262)	White
Ext. Door (Transom)	Andersen	Therma Tru Smooth Star (S263SL)	White
Roofing	Timberline	HD2 Shingles	Charcoal
Stone/Brick	NONE	NONE	NONE
Decking	Trex	Composite	Grey "Foggy Wharf"
Deck Railing Style	Vinyl & Black Aluminum Spindles	Transcend Railing	Classic White
Gross Floor Area (See GFA Worksheet Attached)	Gross Floor Area: 2,494 SF		

BUILDING HEIGHT NOTE:
BUILDING HEIGHT IS MEASURED FROM AVERAGE GRADE SINCE THE BUILDING IS MORE THAN 10 FT FROM THE FRONT PROPERTY LINE



NOTE:
VENT FLASHING SHALL BE INSTALLED AT VENT PIPE PENETRATION PER R3103.3



SEE WESTCHESTER MODULAR DRAWINGS FOR INFORMATION ON MODULAR STRUCTURE

A-001
DATE - 01/01/2020
REVISIONS
NO. DATE DESCRIPTION
1. 02/20/2021 BAR COMM

FINAL ELEVATION VIEW
BUILDING HEIGHTS
WITH GARAGE ADDITION
22 NETHERMONT AVE

PROPOSED RESIDENCE WITH
ADDITION TO GARAGE
22 NETHERMONT AVE

SEAL

Gabriel E. Senor, P.C.
Engineers Surveyors
90 North Central Ave.
Hartsdale, NY 10530
914-422-0070

Foundations & Footings:

- All footings shall bear on minimum 4000 pounds per square foot virgin sand or compacted fill approved by Architect or Engineer. Contractor to verify soil bearing capacity prior to construction of footings. No footings are to be cast on uncontrolled fill, soil, organic material, frozen ground, mud, soft clays or other objectionable or unapproved materials.
- Sub-base for slabs on grade to 4" crushed rock on virgin grade or approved compacted fill.
- Base of footing exposed to weather or in unheated space shall be placed a minimum of 3'-6" below grade.
- Contractor shall take all necessary de-watering precautions to properly cast new footings in areas with high water table.
- Footings shall be reinforced as shown and dowelled to receive the pier or wall above.
- Reinforcing dowels between footing and foundation wall shall be tied in place prior to placing concrete (dowels shall not be "wet set.")
- All lumber bearing on masonry is to be pressure treated.
- All framing lumber shall be rigidly assembled, plumbed and accurately fitted in place.
- All concrete blocks to comply with ASTM-C90 standard minimum grade "N", type "T", sizes as shown on plan. All mortar to be type "S".
- Key all first courses of concrete block to footings, fill top courses solid for joint bearings, and fill solid full height for girder bearing points.
- Provide horizontal masonry reinforcement continuous at every other course (full width of block).
- Location of anchors (1/2" diameter) to be 1'-0" maximum from each end of corner and 4'-0" maximum on centers, min. 2 per sill, embedded 16" into masonry.
- Provide dampproofing or waterproofing on exterior wall surfaces below grade.
- Provide exterior perimeter footing drains, pitch to low point.

Cast in Place Concrete:

- All work shall comply with the requirements of the ACI building code, AC318, latest edition, and the Building Code of New York State.
- All concrete for cast in place wall shall be stone concrete with a minimum 28 day compressive strength of 3,500 psi.
- No admixtures shall be allowed without prior review and acceptance by the architect or engineer.
- All requirements for batching, mixing, finishing, curing etc. shall be as per AC301.
- All reinforcing steel shall conform to ASTM A615 grade 60, except that reinforcing steel welded directly to structural steel shall be ASTM A706.
- All welded wire fabric shall conform to ASTM A-185.
- All reinforcement shall be securely tied in place and adequately supported. All bars marked continuous (cont.) shall be lapped 40 bar diameters, unless otherwise noted.

Backfill:

- All fill shall be placed in eight to twelve inch loose lifts (maximum) compacted with vibratory rollers. Fill material shall be tested by modified proctor density method (ASTM D1557-79) and must qualify as select, with less than 10% passing through the no. 200 sieve. Soil shall be placed with moisture content and energy to provide 92% of maximum dry density. In place density tests shall be taken for each 500 S.F. in each lift. For acceptance of soil, average of density tests must exceed specified compaction. No tests shall be permitted to fall below 87% compaction.

Structural Steel:

- All structural steel shall conform to the requirements of the AISC "specifications for structural steel for buildings"- latest edition and all current supplements. For other code and specification requirements, see the contract specifications.
- All welding work shall conform to the American Welding Society Code AWS D1.1. All welding work shall be done by AWS certified welders. Field welding shall be done by the manual shielded metal arc welding method.
- All steel shaped, plates, bars, rod, and anchor bolts, shall conform to ASTM A36 or A992 for all C-channels and W shapes.
- All steel pipes shall conform to ASTM 53; steel tubes shall conform to ASTM A500, grade B.
- All bolts shall be 3/4" diameter ASTM A325 bolts in bearing type connections, unless otherwise noted specifically on the drawings. Provide a minimum of two bolts per connection.
- Where a weld is required, and no weld is shown on the drawings, provide a 1/2" fillet weld all around, unless a larger weld is required as a minimum weld size as per AISC.
- All groove welds shall be AWS pre-qualified complete joint penetration groove welds, unless otherwise noted on the drawings.
- The contractor shall submit shop drawings of the steel to the architect or engineer for his review prior to fabrication.
- All steel shall be cleaned as per SSPC SP2 hand tool cleaning, or SSPC SP3 power tool cleaning and painted with a zinc rich primer (red or brown, one coat shop paint). A finish coat shall be applied - coordinated with the architect and engineer, and shall be weather resistant as required for long periods of exposure during construction or permanent exposure to weather. All connections shall be painted after installation.
- Contractor must provide shop drawings prepared by technical personnel under the supervision of a qualified engineer licensed by the State of New York, for review & approval by the project engineer or architect prior to fabrication.

Masonry lintel notes:

- All steel lintels shall have a minimum of 6" bearing at each end. Hollow CMU at bearing points shall be grouted solid minimum three courses below.
- For masonry openings 4'-0" wide or less use one L 3 1/2 x 3 1/4 x 3/8" for each 4" of masonry thickness.
- For masonry openings 4'-0" wide to 6'-0" wide, use one L 5 x 3 1/4 x 3/8" (LLV) for each 4" of masonry thickness.
- For masonry openings 6'-0" wide to 8'-0" wide, use one L 6 x 3 1/4 x 3/8" (LLV) for each 4" of masonry thickness.
- For masonry openings greater than 6'-0" wide, refer to the plan for size.

GENERAL NOTES AND SPECIFICATIONS:

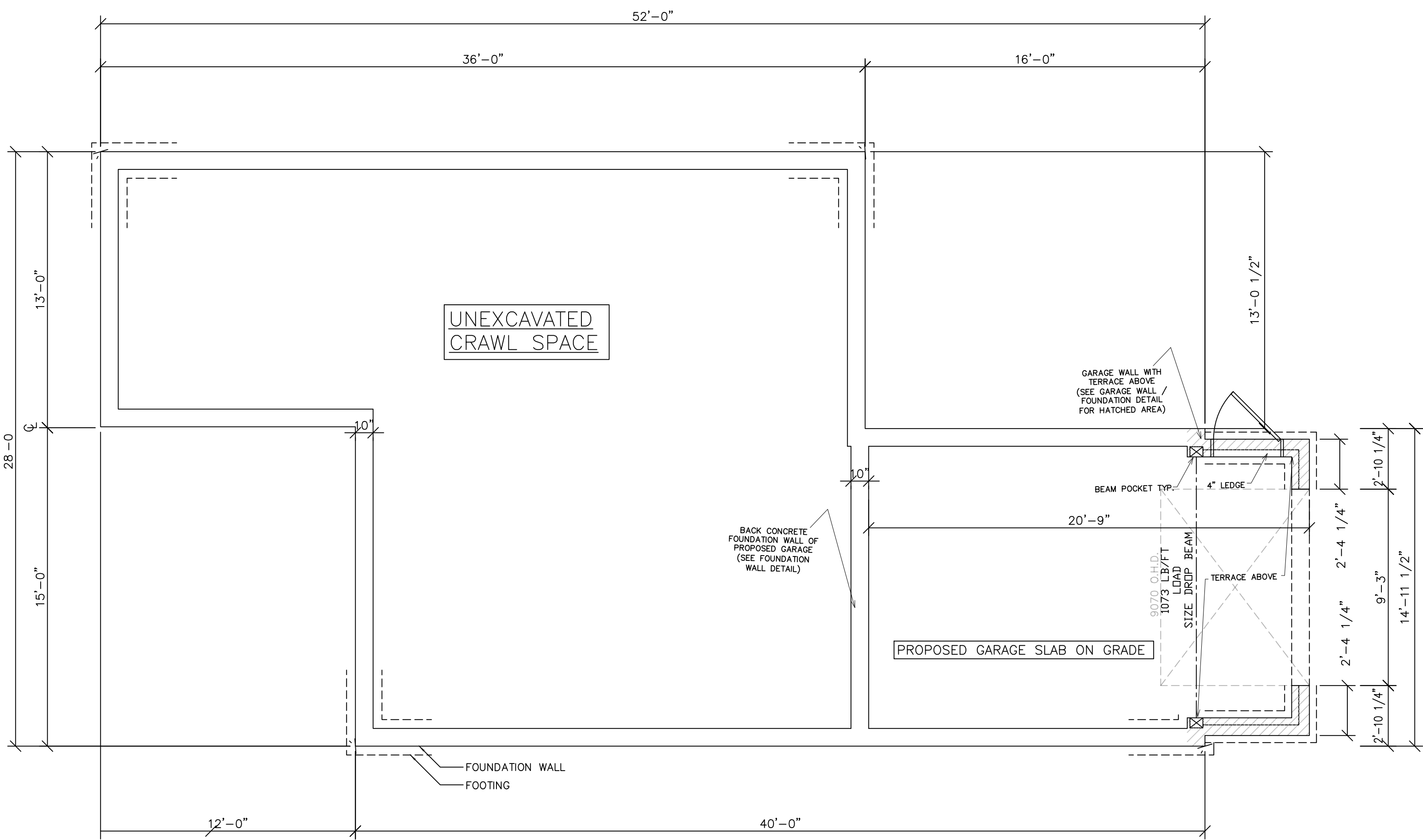
- Contractor shall provide a warranty on all labor and materials for a period of one year.
- The Engineer shall not be responsible for the identification, removal, testing and/or certification of removal relative to any hazardous substance including, but not limited to, PCB, petroleum, oil, mud, hazardous waste, asbestos, lead paint, lead piping, and similar substances.
- All new or relocated windows and doors shall be wired for burglar alarms. (Connect to existing). Work to be performed by others but coordinated by General Contractor.
- New finished elevations to match existing.
- Install hard-wired smoke detectors with battery backup as per Code. (i.e.: install units in second floor hall at 10' max from all bedrooms, within all bedrooms, and one per level). Install carbon monoxide detectors at halls adjoining bedrooms, and basements.
- All windows and sliding doors as noted to be "Anderson" genuine shield (shaded) 400 series double hung, double glass with low "E" film and insect screens. Provide all flashing and trim. Window sizes indicated on plans are approximate only. All sleeping areas are provided with escape windows as per Code 5.7.5.4 opening - Min. width 20", min. height 24" clear.
- All pipes in unheated spaces shall be wrapped and sealed with 1/2" thick foam insulation.
- Provide shut-off valves at all plumbing fixtures. Label/ tag valves at lower level areas. All piping shall be adequately secured to framing.
- Supply and install interior wood door, window trim, sills and base and hardware to match existing.
- All interior finishes are to be 1/2" gypsum board and 3 coats of spackle/ sanded.
- Interior painting - Prime and paint all walls and ceilings with 2 coats of "Benjamin Moore" latex flat. All base, doors and trim to be semi-gloss. Windowsills, frames and trim to be oil based enamel. Color to be selected. Painting to include all areas disturbed by the work.
- Exterior painting - All cedar siding, trim, fascias and soffits to be primed and painted with 2 coats of "Olympic" pigmented stain. Color to be selected.
- Exterior painting - All siding, trim fascias and soffits to be primed and painted with 2 coats of "Benjamin Moore" exterior grade latex satin finish. Color to be white.
- Install latex caulking at intersections of dissimilar materials (i.e.: siding with trim, trim with trim, trim with window/ door frames).
- All material specified herein or indicated on the drawing shall be new and of first quality.
- All deck lumber shall be pressure treated. All fasteners to be approved for A.C.Q. lumber.
- Electrical fixtures/ "high hats" shall be "lightolier" (white ballfin #1171) with 100-watt lamps.
- All light switches and dimmer controls shall be "Leviton Decora".
- Colors of switches, receptacles and plates to be selected by owner.
- The General Contractor has visited the site and is familiar with all building conditions and systems.
- The General Contractor shall verify all dimensions and existing conditions. The Architect shall be informed of all discrepancies prior to proceeding with the work.
- Written dimensions on drawings shall take precedence over scaled dimensions.
- All framing shall be left exposed until the Building Inspector has approved all work. No work shall commence until all permits have been issued.
- The General Contractor shall obtain all required permits and approvals including the Certificate of Occupancy.
- The General Contractor shall maintain Workman's Compensation liability and automobile insurance during the work.
- All work to be performed in an orderly, clean and "grade A" workmanlike manner.
- The General Contractor shall maintain the site (remove rubbish) and protect the owner's property. Provide shielding at areas adjoining the work. Disturbed lawn areas shall be reseeded. Install new driveways as located on site plan. Secure property at the end of each workday. Provide protection to adjoining properties during construction (i.e. sit fencing and hay bales).
- Structural lumber shall be Douglas fir (DF) 56 + 875 F.5.1. Stress grade to be marked on lumber. All lumber to be free of splits/ cracks and mould. Sill plates to be pressure treated.

Design Load	Floor/ Deck	60 lbs/ SF
Stairs	100 lbs/ SF	
Attic	40 lbs/ SF	
Roof	45 lbs/ SF	

NYS Residential Code requirements:

SUBJECT TO QUALITY RISK									
Year	Month	Day	Month	Year	Month	Year	Month	Year	Month
10/29	10	0	10/29	10	0	10/29	10	0	10/29

SUBJECT TO DENSITY RISK									
Year	Month	Day	Month	Year	Month	Year	Month	Year	Month
10	29	10	29	10	29	10	29	10	29



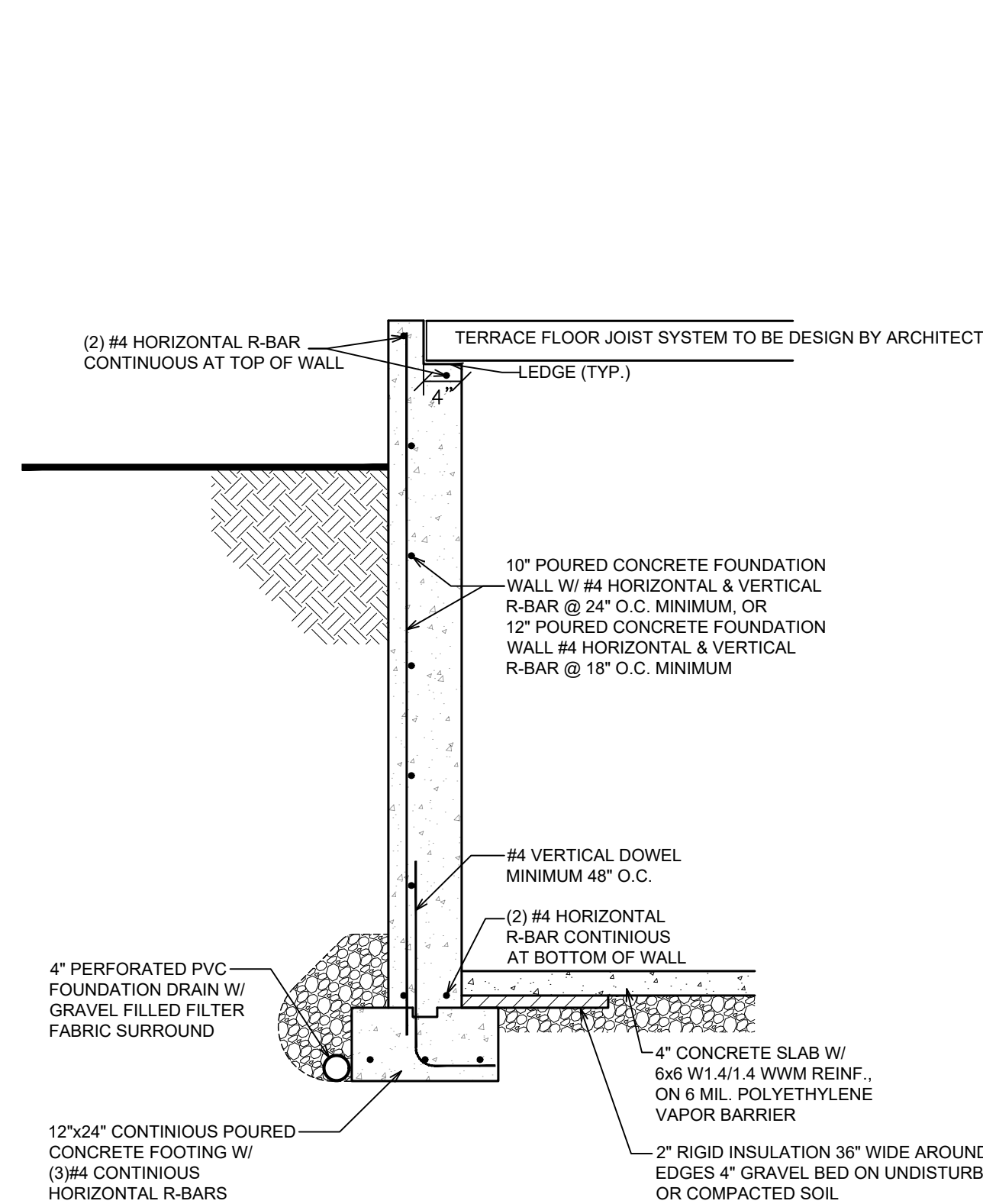
FOUNDATION PLAN
SCALE: 1/4"=1'-0"

- All sheathing plywood shall have exterior glue.
- Provide 2 - 2" x 10" header with 2 - 2" x 4" (6") joists at all windows and doors unless otherwise noted. All doors to be 6'8" high.
- Double floor joists under tub.
- Double floor joists below partitions running parallel to framing.
- Floor joists to be set with crowned edge facing up.
- Provide bridging between joists @ 8'0" max.
- All footing shall bear on virgin soil (2 tons/ 5' min. capacity).
- Fire-stop all concealed spaces at each story/ ceiling.
- Concrete shall be 3,000 P.S.I. 3,500 P.S.I. concrete compressive strength is to be used for horizontal surfaces exposed to the weather - including porches, steps, walks and garage floor slabs.
- First and top courses of concrete block to be solid.
- Provide 1/2" round, 18" long anchor bolts @ 8'0" O.C. (2'0" max. from corners).
- Backfill materials shall be free of debris, vegetation and wood.
- All finished exterior grades shall be positively pitched away from the structure.
- All filled areas shall be compacted.
- Do not backfill until framing has been completed.
- Insulation shall be fiberglass batt with vapor barriers (foil) on warm side.
- All materials shall be installed in accordance with manufacturer's instructions.
- All closet shelving to be birch.
- All interior doors to be hollow core birch. Exterior doors to be solid core and weather-stripped. Provide doorstops at all swinging doors.
- All work shall comply with the Residential Code of New York State and the NYS Energy Code (2015) as well as all local municipal ordinances.
- Electrical work shall comply with U.L. requirements and the National Electric Code.
- N.Y.S. Energy Code (2016)

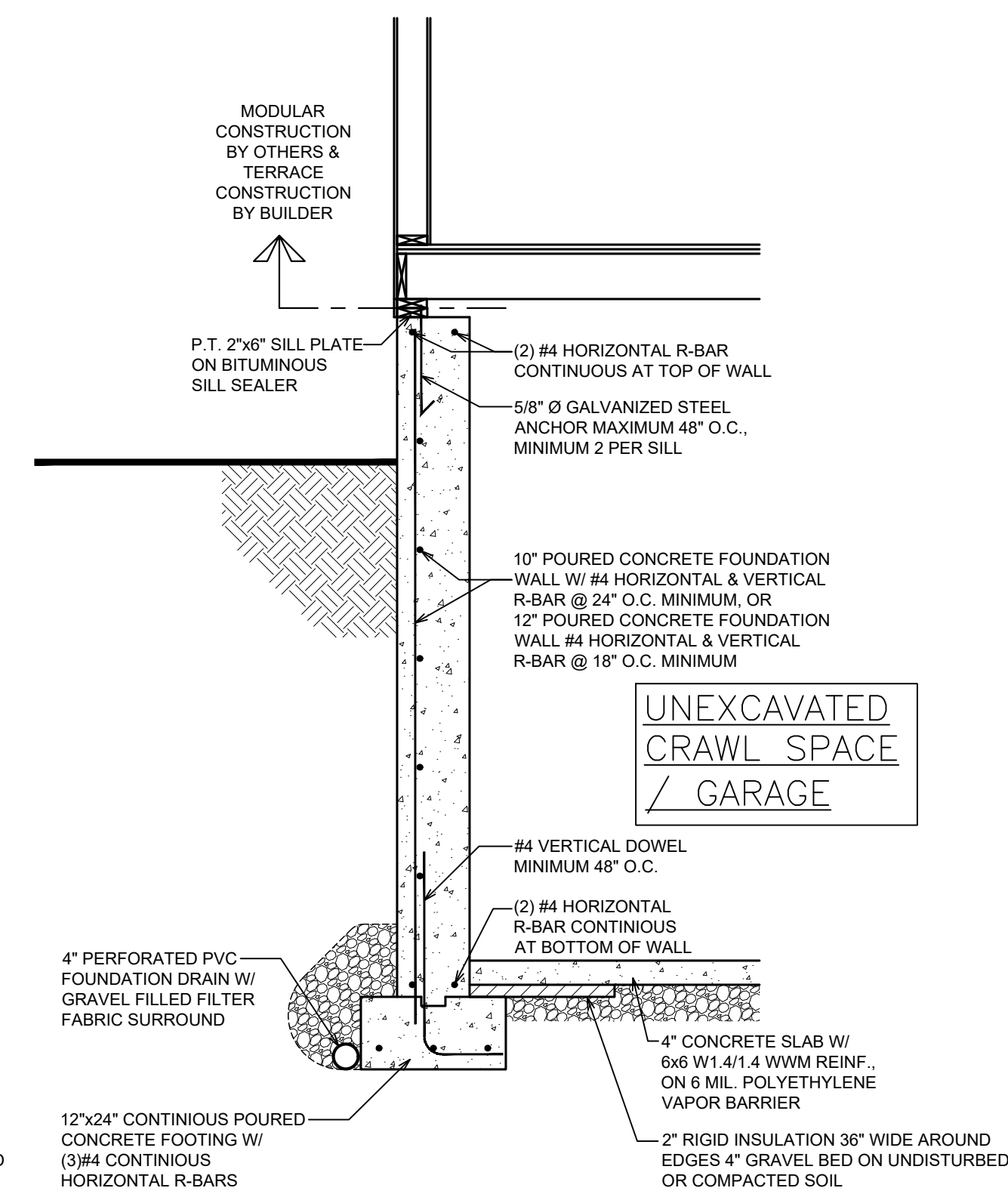
Building and Foundation Requirements by Component									
Climate Zone	Water design dry bulb temperature	Summer design dry bulb temperature	Condensation wet bulb temperature	Climate Zone	Water design dry bulb temperature	Summer design dry bulb temperature	Condensation wet bulb temperature	Climate Zone	Water design dry bulb temperature
4	71	84	73	4	71	84	73	4	71

- R-values are minimums. U-factors: R-19 insulation shall be permitted to be compressed into 2x6 cavity.
- The fenestration u-factors column excludes skylights.
- The first R-value applies to continuous insulation, the second framing cavity insulation; either insulation meets the requirements. Based on 5,750-degree days, non-electrical heating, 4" depth in foundation walls below grade.

L. Elzer Senor, Professional Engineer, certifies that these plans and specifications comply with the Residential Code of New York and the NYS Energy Conservation Code (2016).



TYPICAL GARAGE WALL SECTION (TERRACE ABOVE)
SCALE: 1/2"=1'-0"



TYPICAL WALL FOUNDATION SECTION
SCALE: 1/2"=1'-0"

ARCH

DATE - 1/01/2021

REVISIONS
NO. DATE DESCRIPTION

FOUNDATION PLAN
22 NETHERMONT AVE

SEAL

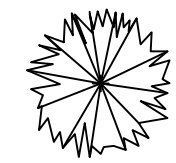
Gabriel E. Senor, P.C.
Engineers Surveyors
90 North Central Ave.
Hartsdale, NY 10530
914-422-0070



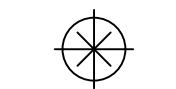
Eastern Red Cedar
(Juniperus Virginiana)



GIANT ARBORVITAE
(Thuja Plicata)



Eastern Red Bud
(Cercis Canadensis)



CHINESE HOLLY
(Ilex crenata convexa)

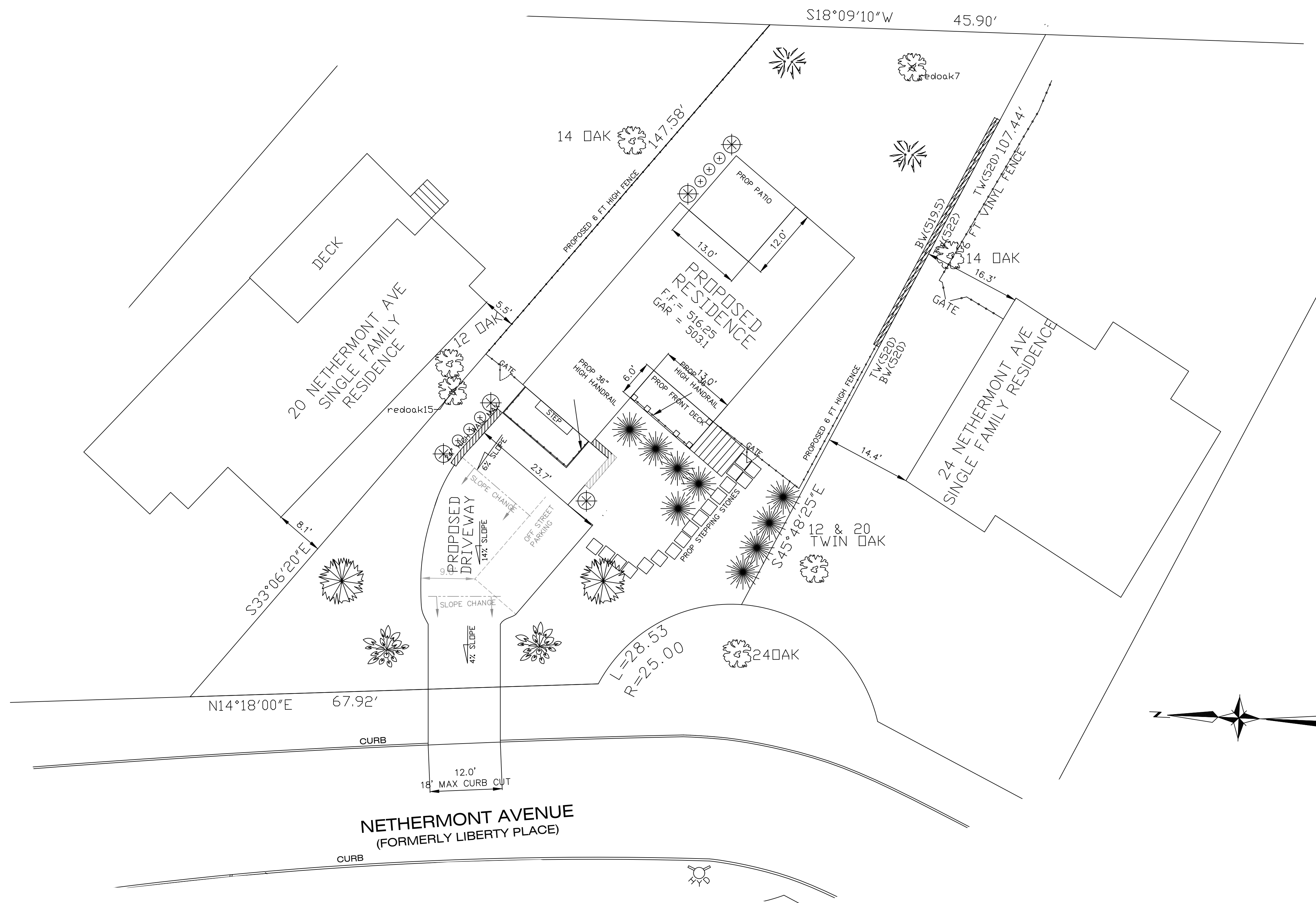


INKBERRY 'Shamrock'
(Ilex glabra 'Compacta')



COMMON FLOWERING DOGWOOD
(Cornus Florida)

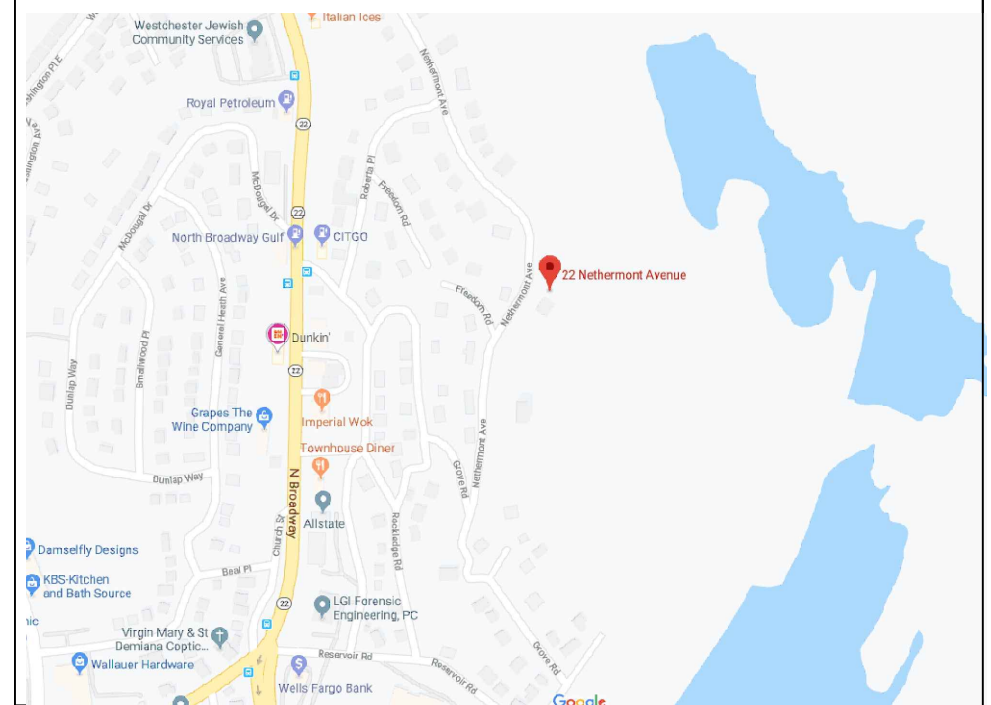
TREES TO BE PLANTED		
TYPE/NAME	SIZE	COUNT
EASTERN RED CEDAR	2" - 3" CAL	2
GIANT ARBORVITA	6' - 7' HEIGHT	9
EASTERN REDBUD	2" - 3" CAL	2
CHINEESE HOLLY	3.5' - 4' HEIGHT	5
INKBERRY 'Shamrock'	2' - 2.5' HEIGHT	6
FLOWERING DOGWOOD	2.5" - 3" cal.	2



LEGEND

- UTILITY POLE
- ▽ SIGN POST
- ⊗ HYDRANT
- ⊗ WATER VALVE
- ⊗ GAS VALVE
- ☆ LIGHT POLE
- GUY WIRES
- ① TELE. MANHOLE
- ② SEWER MANHOLE
- ③ WATER MANHOLE
- ④ ELECTRIC MANHOLE
- ⑤ DRAIN MANHOLE
- ⑥ MANHOLE
- ⊗ ELECTRIC BOX
- 102 —
EXISTING GRADE
(102)
- — — — —
PROPOSED GRADE
- 14 TREE
|
SIZE
- ⊗ TREE TO BE REMOVED
- — — — —
SILT FENCE
or HAYBALES AS REQ'D

LOCATION MAP



NO	DATE	DESC	BY
2	02/17/2021	ARB COMM	GC
1	03/10/2020	PB COMM	GC

LANDSCAPE PLAN

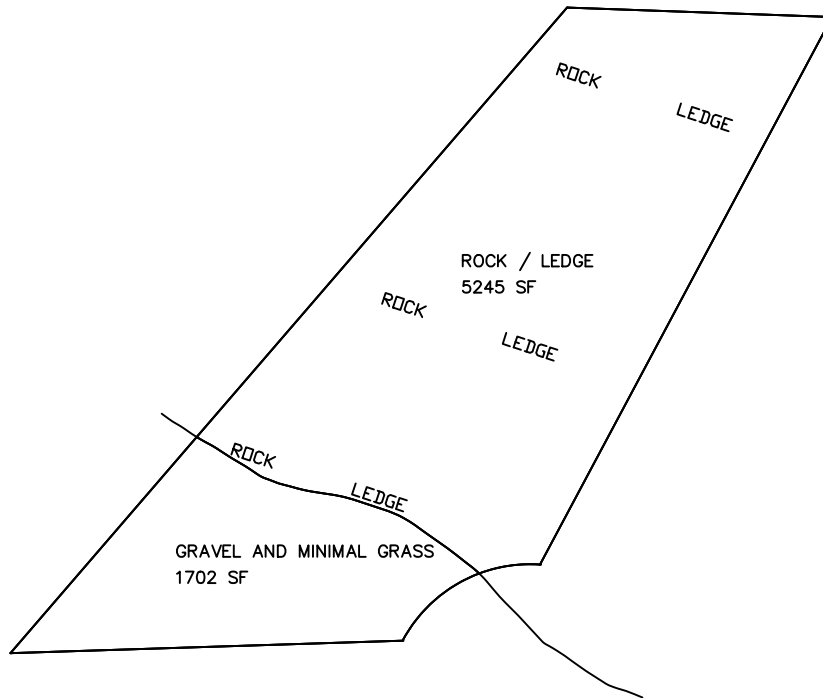
PREPARED FOR: ODOARDI
 ADDRESS: 22 NETHERMONT AVE
 NORTH WHITE PLAINS, NY
 TAX ID: SECTION 122.16 - TAX BLOCK 4 - LOT 7
 SITUATED IN THE
 TOWN OF NORTH CASTLE
 WESTCHESTER COUNTY, NEW YORK

CONSULTING ENGINEER LAND SURVEYORS
GABRIEL E. SENOR, P.C.
 90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530
 ● (914) 422-0070 FAX 422-3009

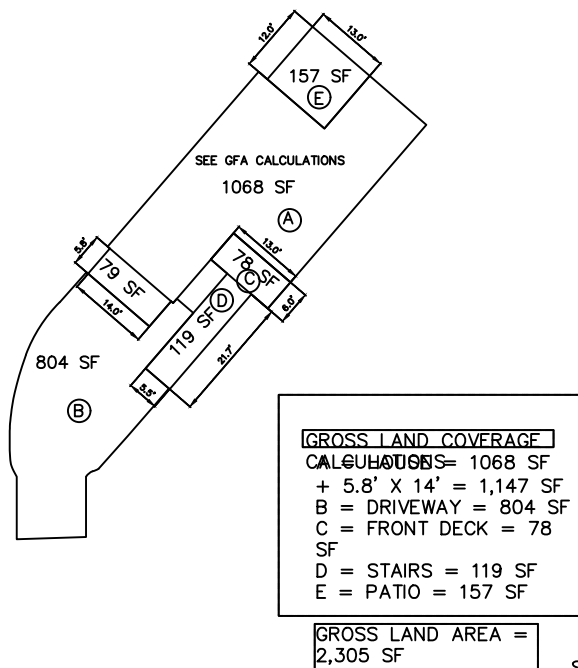
SCALE: 1" = 10'
 DATE: JANUARY 10, 2020
 DRAWN BY: GC CHECKED BY: ES.

LS-1

22 NETHERMONT
 PRE DEVELOPED AREAS USED IN
 CALCULATIONS



THE GROSS LAND COVERAGE IS EQUAL TO THE AMOUNT OF IMPERVIOUS SURFACE BEING CAPTRUED BY THE DETENTION SYSTEM. ACCORDING TO THE GROSS LAND COVERAGE WORKSHEET, THE TOTAL IMPERVIOUS SURFACE OF THE LOT BEING CAPTURED BY THE DETENTION PIPE IS 2,305 SF. THIS VALUE IS BEING USED AS THE "POST DEVELOPMENT ADDITIONAL IMPERVIOUS SURFACE" AREA IN HYDROCAD.



NOW WE HAVE TO SUBTRACT OUT THE AREA OF IMPERVIOUS SURFACE LOCATED WITHIN THE AREA DEFINED AS LEDGE PRE CONSTRUCTION, SINCE THAT IS NOW BEING CAPTURED BY THE DETENTION SYSTEM. THE AREA WE ARE LEFT OVER WITH IS THE AREA OF LEDGE POST CONSTRUCTION.

TOTAL AREA OF LEDGE PRE CONSTRUCTION
 - IMPERVIOUS SURFACE AREA WITHIN THE LEDGE LIMITS BEING CAPTURED BY THE DETENTION PIPE =
 TOTAL AREA OF LEDGE POST CONSTRUCTION

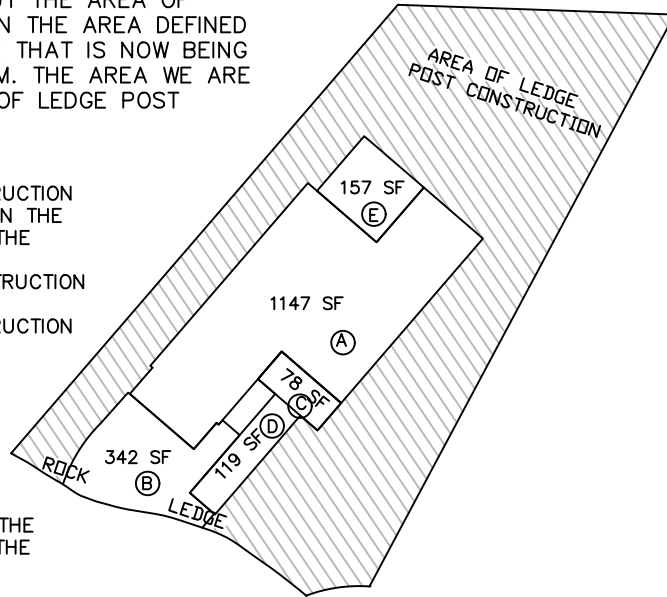
TOTAL AREA OF LEDGE PRE CONSTRUCTION
 = 5,245 SF

- A = HOUSE = 1,147 SF
- B = DRIVEWAY = 342 SF
- C = FRONT DECK = 78 SF
- D = STAIRS = 119 SF
- E = PATIO = 157 SF

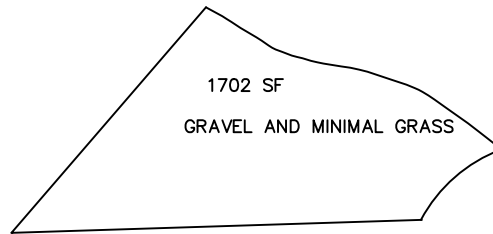
IMPERVIOUS SURFACE AREA WITHIN THE LEDGE LIMITS BEING CAPTURED BY THE DETENTION PIPE = 1,843 SF

5,245 sf - 1,843 sf = TOTAL AREA OF LEDGE POST CONSTRUCTION

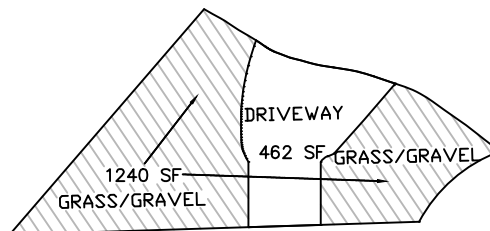
TOTAL AREA OF LEDGE POST CONSTRUCTION
 = 3,402 SF



THE FINAL AREA TO ACCOUNT FOR IN OUR CALCULATIONS IS THE TOTAL AREA OF GRAVEL/GRASS POST CONSTRUCTION. OUR PRE DEVELOPMENT CALCULATIONS TOLD US THAT THE TOTAL AREA OF GRAVEL/GRASS IS 1,702 SF. 15% OF THE AREA WAS GRAVEL AND 85% OF THE AREA WAS GRASS.

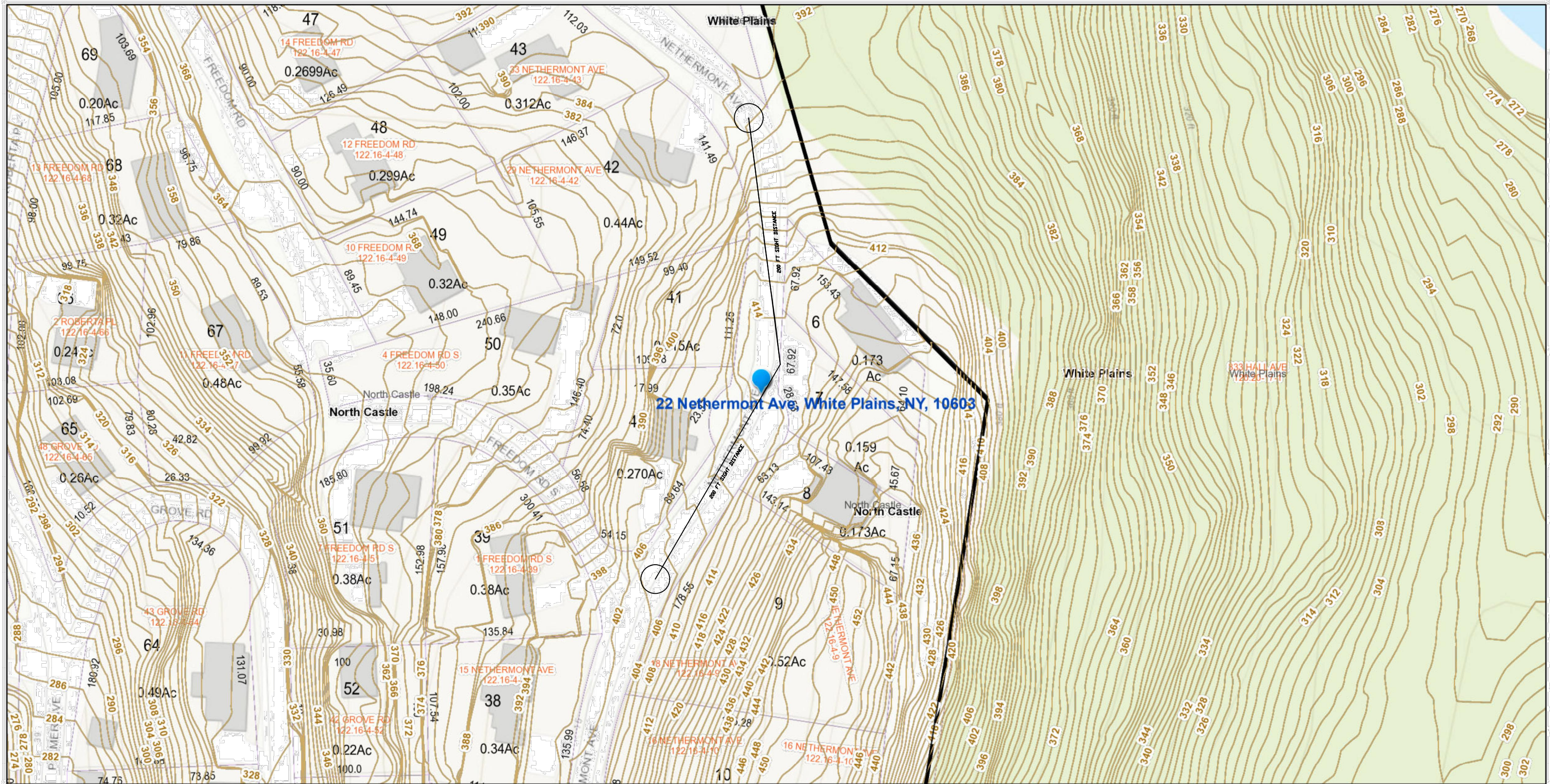


OUR POST DEVELOPMENT CALCULATIONS SHOW US THAT THERE IS 1,240 SF OF GRASS/GRAVEL AREA REMAINING POST CONSTRUCTION. WHICH CAN BE OBTAINED BY:
 1,702 SF - 462 SF (DRIVEWAY AREA) = 1,240 SF OF GRASS/GRAVEL.



1,240 SF OF GRASS/GRAVEL IS USED IN THE POST DEVELOPMENT CALCULATIONS.

Mapping Westchester County



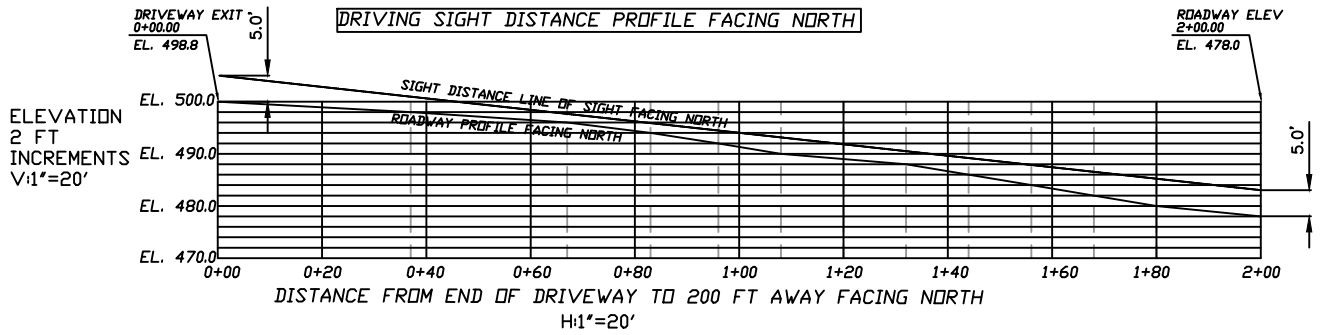
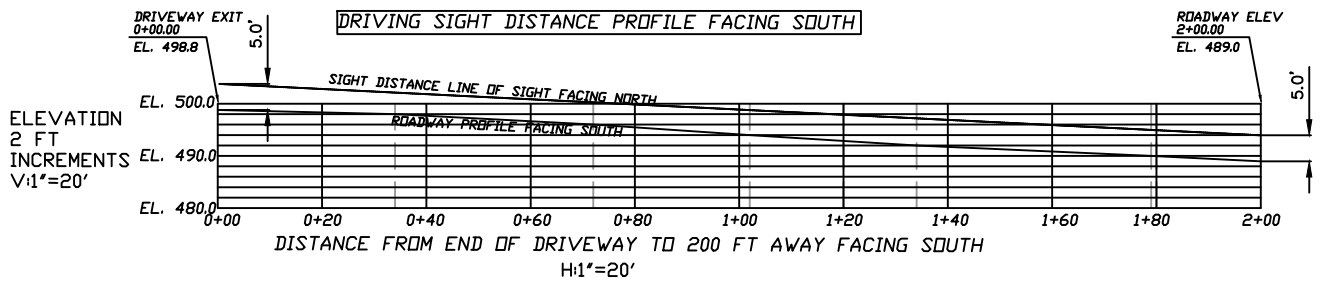
District Boundaries
Municipal Boundaries



1:1,128 August 2, 2020


GIS
<http://giswww.westchestergov.com>
Michaelian Office Building
148 Martine Avenue Rm 214
White Plains, New York 10601

SIGHT DISTANCE PROFILES





June 23, 2020

Alan R. Kaufman, AICP
Director of Planning
Town of North Castle
17 Bedford Rd.
Armonk, NY 10504

**Re: Letter Report – Geotechnical Investigation
22 Nethermont Avenue
White Plains, New York**

Dear Mr. Kaufman:

As described by our April 2, 2020 proposal, this letter report outlines the findings resulting from the drilling of one (1) geotechnical boring within the open lot at the above referenced address, for the purpose of constructing a new two-story residence. One (1) geotechnical boring was drilled on Tuesday, June 22, 2020 by Municipal Testing Laboratory, Inc. (MTL), by a Portable Gas-Powered Drill Rig, under continuous inspection by Messrs. Haykel Melaouhia, Ph. D. and Aflaaz Saleem of Geotechnical Engineering Services, P.C. (GES). We understand the proposed construction includes a new two-story single-family house, with a garage and driveway in front, and rear porch, located 22 Nethermont Avenue, in Westchester County, White Plains, New York. The site is currently undeveloped, and currently covered by exposed bedrock, trees and grass.

Please refer to our attached Boring Location Plan for the approximate as-drilled location of the boring, as well as a typed boring log for the stratigraphy and sample descriptions. Elevations noted on the base plan for the Boring Location Plan are based on an “Existing Conditions, Removals, Erosion Control and Steep Slopes Plan”, which shows “assumed” ground surface elevations range across the site from about el. +522 (near the southeast corner of the proposed new building) to about el. +499 at street level. No datum for these elevations was provided in any of the drawings provided to us. GES did not perform any surveying, and measurements of the boring location in this letter report are from fixed points. Boring B-1 was performed from about el. +517, and elevations referenced in this letter report refer to the Plan discussed above.

METHODOLOGY

One (1) geotechnical boring, referred to as B-1, was drilled in approximately the location shown on the attached Boring Location Plan, as measured from fixed locations around the property. The boring was drilled utilizing the mud-rotary drilling method. Since there was only a small amount of fill overlying bedrock, no soil samples were obtained, and core drilling was performed from ground surface, first using an oversized 4-inch-diameter single tube core barrel, then an NX-Size,

double tube, core barrel, with a diamond bit, for which the length of Core Recovery (REC)¹ and the Rock Quality Designation (RQD)² were recorded. All rock samples were transported to GES's Office for classification and storage.

FINDINGS

The following general descriptions of the subsurface strata are based on our interpretations of the results of the field investigation. The purpose for our investigation was to take rock core samples of the bedrock. SPT split-spoon sampling was not relevant to this particular investigation, and therefore was not performed:

Stratum 1 – Fill: The Fill generally consists of a very thin layer of brown topsoil, with rock fragments and gravel, with varying amounts of sand and silt, as is indicative of miscellaneous fill. No soil samples were taken within this stratum. The fill generally covers the surface of the rock. Soil description is based on the appearance of cuttings at the top of the boring.

Stratum 2 – Bedrock: Other than a six-inch zone of weathered rock, from a depth of about 1 to 1.5 feet below grade (about el. +516 to +515.5, respectively), generalized subsurface conditions at the boring location consist of intermediate to hard, slightly weathered, gray and light brown Granite, with trace amounts of schist, and weathered joints. Rock Core Recovery ranged from 60 to 100 percent, while RQD ranged from 43 to 100 percent. Boring B-1 was terminated at a depth of about 10.5 feet, after extending to and at least five (5) feet into competent bedrock, to about el. +506.5.

RECOMMENDATIONS

Based on our experience with very similar projects and the information provided to us regarding the proposed construction, we recommend that, based on the rock samples collected, the rock mass be removed using conventional equipment, such as hoe ramming or ripping along the joints. At this point of the project, no blasting is needed or recommended.

It is recommended that the planned construction be supported on footings bearing on Stratum 2 (Bedrock), with a maximum allowable bearing pressure of 20 tons per square foot (tsf). Settlement under the building loads is expected to be less than ½ inch, and would occur during construction. Should the rock at the design subgrade elevation be found to be weaker than expected, new footing requirements should be reviewed with the structural engineer to confirm the rock present can support the design bearing pressures. All new footing or wall footing subgrades must be inspected and approved by a Professional Engineer, licensed in New York State.

¹ The Core Recovery is defined as the ratio (expressed as a percent) of the total length of recovered core to the length cored.

² The Rock Quality Designation (RQD) is defined as the ratio (expressed as a percentage) of the total length of recovered core samples having a length of at least twice the core diameter (e.g., about 4 in for NX-core) to the total length of core.

CLOSING

Thank you for this great opportunity to work with you on this project. If you have any questions or would like to discuss the contents of this letter, please don't hesitate to call me in the office at 914-592-4616 or on my mobile at 973-727-7329.

Very truly yours,

Geotechnical Engineering Services, P.C.

Ziad H. Maad, P.E., D. GE.

Attachments:

- Boring Location Plan
- Typed Boring Log (Boring B-1)
- Rock Core Photo Log

Log of Boring B-1

Project: 22 Nethermont Avenue				Project Number: 2020031			
Location: White Plains, NY							
Date(s) Drilled	6/16/20 - 6/16/20		Inspector	Haykel Melaouhia, PhD., Aflaaz Saleem		Coordinates North:	
Drilling Agency	Municipal Testing Laboratory (MTL)		Foreman	Fiad Khan		Approximate Surface Elevation (feet) ± 517	
Drilling Equipment	Portable Gas		Drilling Method	Mud Rotary		Completion Depth (feet)	Rock Depth (feet)
Casing Size/Type	4" Steel		Size/Type of Bit	NA		Sampler Type(s)	NA
Groundwater Level and Date Measured	NA		Hammer Wt/Drop	NA	Casing Hammer Wt/Drop	NA	Size/Type of Core Barrel
Boring Location See Boring Location Plan (Figure 1)						No. of Samples	Dist.: 0 Undist.: 0 Core (ft): 11

Depth, feet	Soil Samples			Rock Coring			Graphic Log	DESCRIPTION	Liquid Limit	Plastic Limit	Water Cont. (%)		REMARKS	
	Type, Number	Recov. (ft)	Pen. Resist. (blows/6 in)	Run Number	Recov. (%)	RQD (%)					%	Fines		
0				C-1	100	100		Medium Hard, Slightly weathered, Gray and light brown Granite, weathered joints					Cored from grade to 1.5 ft with 4" single tube core barrel	
				C-2	60	0		Decomposed, Weathered Gray and light brown Granite, broken						
								Intermediate to medium Hard, Weathered, Gray and light brown Granite, trace Schist, Weathered joints						Switched to NX Double Tube core barrel at 1.5 ft
				C-3	75	43								
5								Medium Hard to Hard, slightly weathered, gray and light brown Granite, trace Schist, slightly weathered joints						
				C-4	92	85								
10														
								Boring completed to 10.5 ft below ground. Boring backfilled with cuttings upon completion						
15														
20														

Template: GENERAL GES LOGO Proj ID: 22 NETHERMONT AVENUE.GPJ



**GEOTECHNICAL ENGINEERING
SERVICES, P.C.**
6 Bayberry Road
Elmsford, NY 10523

ROCK CORE PHOTOGRAPHIC PLATE

Boring No.	Core No.	Depth (ft)	Rec %	RQD %
B-1	C-3	1.5 - 5.5	75	43
	C-4	5.5 - 10.5	92	85

Project Name: 22 Nethermont Avenue

Project Location: Northeast of Intersection of Nethermont Ave and Freedom Rd, White Plains, NY

Dwg No. Plate 1

Drawn By: DJG **Project No:** 2020031

Ch'ked By: ZM **Date:** 6/18/2020



Geotechnical Engineering Services, P.C.

October 13, 2020

Alan R. Kaufman, AICP
Director of Planning
Town of North Castle
17 Bedford Rd.
Armonk, NY 10504

**Re: Rock Excavation - Letter
22 Nethermont Avenue
White Plains, New York**

Dear Mr. Kaufman:

This letter is intended to provide additional recommendations with regard to rock removal, for the proposed construction at 22 Nethermont Avenue in White Plains, New York.

We previously performed a geotechnical investigation at the above-referenced address, and provided rock excavation recommendations during construction, as discussed in our August 2020 Geotechnical Letter Report. In this report, we recommended the usage of line drilling along the limits of the excavation, wherever excavation is to proceed within 25 feet of adjacent properties, to reduce the amount of rock overbreak and to limit vibrations. We also recommended a limit of 1 in/sec for vibrations, as recorded by seismographs placed within nearby properties.

In accordance with recent discussions between Gabriel E. Senor, P.C. and Mr. Ziad H. Maad, P.E., D. GE. of Geotechnical Engineering Services, P.C. (GES), we understand that the Town has requested recommendations for alternate rock excavation methods, if vibration exceedances occur. Therefore, if vibrations are measured to exceed 1 in/sec in the seismographs within adjacent structures, we recommend that the work be temporarily stopped, and the means and methods modified to reduce vibration levels. Such modifications may include using smaller sized excavation or drilling equipment, smaller drill holes, or additional distance from adjacent properties for the usage of the hoe-ram. Should there be additional exceedances, we recommend that rock excavation is performed within 25 feet of adjacent structures using small hydraulic rock splitters, chipping guns, or other hand-held equipment with an air compressor. Nearby or adjacent properties must be protected at all times during rock excavation from adverse impacts of the work. No blasting is needed or recommended for this project.

Alan R. Kaufman, AICP – Town of North Castle
22 Nethermont Avenue – White Plains, New York
Letter – October 13, 2020
Page 2 of 2

CLOSING

Thank you for this great opportunity to work with you on this project. If you have any questions or would like to discuss the contents of this letter report, please don't hesitate to call me in the office at 914-592-4616 or on my mobile at 973-727-7329.

Very truly yours,

Geotechnical Engineering Services, P.C.

Ziad Maad, P.E.

Ziad H. Maad, P.E., D. GE.