

## **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](mailto:info@gesenor.com)

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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

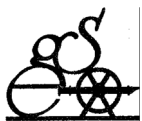
Page 1 of 2

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

Thank you for your consideration.

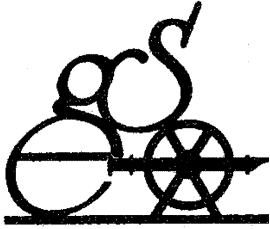
Very Truly Yours,

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



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90 N Central Park Avenue

Hartsdale, NY 10530

*Tel:* (914) 422-0070

*Fax:* (914) 422-3009

*E-Mail:* info@gesenor.com

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04/11/2021

**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 comments received 03/18/2021

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 that were dated 03/18/2021.

1. Upon review of the submitted architectural floor plans and elevations, it appears that the lower level of the residence only includes a garage and crawl space as opposed to a partial or full basement, presumably to reduce required rock removal. However, while the cross section indicates internal stairs to a basement level and first and second floors, the floor plan illustrates a garage with an external access to the first floor entrance. This should be clarified and coordinated on the plans. We would recommend that, at a minimum, the design of the residence include an internal access stair to the garage. Any required mechanical space should be illustrated as well.
  - The basement plan has been revised to clarify the ambiguities and provide access from the garage to the house from the interior.
2. As previously requested, the plans should include a cut and fill calculation to provide an estimate of the rock removal required and an anticipated duration. At the request of the Planning Board, the applicant has prepared a Rock Removal Plan to describe the proposed method of rock removal, required pre-inspection of structures on adjoining properties and the recommended maximum allowable vibration. The plan, however, should also include, as requested by the Board, a discussion regarding warning levels to be monitored before maximum thresholds are experienced, provisions and protocol for immediate shut-down should the maximum allowable vibration be detected, reporting requirements, and methods of notification to the Town, owner, contractor, design professional and adjacent property owners in the event the threshold is met.

- The rock removal plan now includes an approximate length of time it will take to remove the rock and an estimated quantity. All additional questions regarding the rock removal plan have also been addressed in the rock removal plan/summary.
3. As previously requested, for clarity and ease of review, the applicant shall provide a separate Site Plan and Grading and Utility Plan in addition to the Existing Conditions Plan. Due to the drawing scale and abundance of data included on a single sheet, it is difficult to decipher the various improvements from one another. 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.
    - Separate Plan sheets have been created for clarity.
  4. As previously requested, the applicant shall demonstrate zoning compliance with respect to building height. As defined by Town Code, the average grade used to determine building height in cases where the finished ground level slopes away from the exterior walls, as this does, the average grade shall be the lowest point within six (6) feet from the perimeter of the building. The applicant has provided average grade calculations; however, it appears that the elevations were taken immediately adjacent to the building. The calculation and supporting data should be revised accordingly and verified by the Building Inspector.
    - Building Height Schematics are attached.
  5. As previously requested, the applicant shall provide a maximum wall height calculation to demonstrate compliance with Section 355-26 D, which limits height to 34 feet for the R-5, One-Family Residence Zoning District. Based on the building elevations provided, and the need to verify the average grade as noted above, the maximum wall height calculation should be provided to the Building Inspector for verification that an area variance would not be required.
    - Max wall height calculations and schematic is attached.
  6. As proposed, the development of the site requires clearing a majority of 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. This office is concerned with the ability to plant the trees, as proposed, given the shallow depth to rock encountered on the site.
  7. As previously requested, sight distance profiles have been provided; however, they shall be corrected to illustrate adequate sight distance for a minimum of 200 feet in each direction. It is difficult to verify compliance based on the imagery provided. We would suggest importing the GIS topography and planimetric data to generate the profile as opposed to working from an image. The sight profile shall establish the driver's eye set 3.5 feet above grade, 14 feet back from the edge of the road with a line of sight to an object in the road two (2) feet above grade. The elevations shall use the same datum as the submitted plans and correspond to the grades in the profiles.
    - Sight Distance analysis provided as you requested.

8. As previously requested, the driveway profile shall be revised to include vertical curve data and existing and proposed station elevations, to demonstrate compliance with Sections 355-59 B (1) and (3) of the Town Code. The platform at the garage is proposed at 6% then increases to a slope of 14%, the maximum permitted by Code. While the grades are acceptable, we recommended that the driveway platform by the garage be lengthened to at least 20 feet to avoid parking vehicles on a 14% grade.
  - There is no existing driveway. The platform at the garage is now 1%. There is a parking area designated for cars to park that is not 14%. Will provide vertical curve data at stormwater approval.
9. The submitted Stormwater Pollution Prevention Plan (SW-1) is illegible, therefore a thorough review could not be conducted. The applicant has removed all walls previously proposed to be greater than or equal to six (6) feet in height. However, it appears the proposed grading has not been adjusted to accommodate this. The applicant shall revise the plan, as necessary, to illustrate how the removal of the walls will impact the grading on the site. In addition, it appears that the proposed grading at either side of the house will result in the front stairs and foundation walls being exposed 4-8 feet. The applicant should consider terraced walls and/or landscaping to reduce the exposure of the foundation walls for consideration by the Board.
  - The SWEC is now legible. The stormwater /grading plan has not shown those walls since our submittal in August 2020. Please see plans attached for any clarifications.
10. The plan proposes a retaining wall to be constructed immediately adjacent to the southern property line. Because the applicant's property sits lower than the adjacent site, it is not clear how the wall will be constructed without impacting the adjacent property. Please clarify and adjust the wall location/design as needed.
  - No wall needed anymore
11. The applicant has provided stormwater design calculations to mitigate the net increase in runoff generated for the 100-year, 24-hour design storm event. Upon review, however, there appears to be inconsistencies between the land cover areas used for the curve number calculations, specifically related to the amount of ledge and vegetated areas under pre- and post-developed conditions. The curve number for ledge (pre-developed) shall be revised to a CN of 98. The land areas used in the model shall be revised, as necessary. All invert elevations for the components of the stormwater detention system and outlet structures shall be coordinated between the plan, details and the calculations. This office is available to meet with the applicant for a technical review, if desired.
  - Ok. We will review the plans and make sure all stormwater related issues are corrected prior to applying for any permits.
12. A detail has been provided for the new water service connection, as previously requested. However, the Trench Restoration Detail shall be revised to comply with North Castle Highway Department Standards. The detail shall indicate k-crete backfill for the full depth of the trench. All saw cut lines shall be tack coated and all joints crack seal. The property line curb stop shall be shown on the plan.
  - Trench Restoration shown on detail sheet as well as curb stop on plan.
13. As previously requested, the stormwater calculations shall be removed from Drawing SW-2, since they are provided in a separate report.
14. As previously requested, the plans include a fence detail. The plan shall clarify the location and height of the fence.
  - All fencing is shown on landscape plan
15. As previously noted, the proposed slot drain (trench drain) detail does not appear to be adequate for vehicle loading and shall be replaced with a drain suitable for H-20 vehicle loading for use in the driveway.

- Revised

16. As previously requested, erosion control measures shall be illustrated on the proposed grading plan, including, but not limited to, inlet protection and tree protection. The limit of disturbance shall be revised to illustrate and quantify all areas of disturbance on and off site. The detail for the stormwater management system shall be revised to match the elevations used in the hydrologic / hydraulic model.

- All trees on property are being removed. We cannot encroach on anyones property without written permission. Limits of disturbance have been adjusted. All final details will be buttoned up in regards to stormwater and erosion control on the review prior to permitting.

Should you have any additional comments or questions concerning the above, please feel free to contact me.

Very truly yours,

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

## **22 NETHERMONT AVE ROCK REMOVAL PLAN / SUMMARY**

Rock removal will be performed in accordance with the recommendations of Geotechnical Engineering Services, P.C., written by Ziad Maad, P.E., which is attached to this Rock Removal Plan as *Exhibit A*.

The rock removal portion of this project is expected to take approximately 7 – 10 days. The estimated quantity of rock to be removed is approximately 260 CY. Not more than 20 days nor less than two days prior to a scheduled hammering, the permit holder shall serve a notice of intent to hammering, stating when and where activity is scheduled to occur, on each occupant or user of each structure, adjoining or abutting the parcel of property on which the hammering is to take place, regardless of the distance an adjoining owner is from site. The notice shall include the building permit number, the permit holder's name, and emergency telephone numbers for police, fire and ambulance service. A copy of the notice of intent must be submitted to the Building Inspector for his review and approval prior to distribution. Notice of Intent is Attached as *Exhibit B*.

The notice of intent to remove rock may be served by posting a copy of such notice in each building or dwelling in a conspicuous place where it is reasonable to believe that persons entering or leaving the premises will see such notification.

A pre-hammering inspection report providing an existing condition of the site and all structures adjacent to the site shall be performed. The report shall be accompanied with a videotape showing the external and interior characteristics of each building and structure adjacent to the property. If access is not provided for such inspection, the applicant will not be held liable for any damage which may occur. Any property owner adjacent to the property shall be furnished a copy of the report upon request. The applicant shall make a copy of the inspection report available to the Building Inspector.

When an instrument is used to measure the seismic effect of hammering, the particle velocity on any one component of an instrument measuring three-component motion shall not exceed 1.00 inches per second at 0-100 feet. As previously stated at the October 26, 2020 Planning Board meeting by Ziad Maad, P.E., the Geotechnical Professional, 1.00 inches per second at 0-100 feet is the “Warning Level” or magnitude at which work should immediately stop. This warning level has been determined by the Geotechnical Professional, because this is the threshold (warning level) that he has used on projects in New York City to avoid damage to historical landmarks. For this reason, he has set this velocity as the warning level. The locations and placement of the seismograph instruments on each structure will be determined by Geotechnical Engineering Services, P.C., Ziad Maad, P.E., and monitored by Ziad Maad P.E., Eliot Senor P.E. (design engineer), Town of North Castle Building Inspector, and any additional party deemed necessary by the Town of North Castle.

Should the “Warning Level” be reached, the operator will be notified immediately via an application, and will be required to stop work immediately. In addition to the operator, the following individuals will also be notified of the alert; Ziad Maad, P.E. (the geotechnical professional), Eliot Senor P.E., the Building Inspector, and each neighbor within 100 feet of the excavation, if they choose to download the application and accept notification.

The measuring instrument transducer shall be firmly coupled.

In addition, the following seismograph information must be recorded with a duplicate copy provided to the Building Inspector:

1. The seismograph serial number.
2. The range/gain setting.
3. The date of last shake table calibration.
4. The exact seismograph location and location in relation to the hammering. Placement will be as required by Building Inspector
5. The peak particle velocity readout.
6. The name of the operator.

For any additional questions regarding the technicalities of the operation, please call the Building Inspector who will connect you with the Geotechnical Engineer, Ziad Maad.



# EXHIBIT A



Geotechnical Engineering Services, P.C.

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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.

**EXHIBIT B**

**ROCK REMOVAL NOTIFICATION FORM**

**BUILDING PERMIT #:**

**PERMIT HOLDER NAME:**

**EMERGENCY TELEPHONE NUMBERS**

**FIRE – North Castle South Fire District - (914) 761-4545**

**POLICE - 911**

**AMBULANCE – 911**

**NOTICE IS HEREBY GIVEN** that the **Rock Removal Operations at 22 Nethermont Ave, White Plains, NY 10603** of the Town of North Castle will be occurring on on the above referenced premises on, Starting on \_\_\_\_\_,20\_\_\_\_ at \_\_\_\_\_ am/pm and Ending on \_\_\_\_\_,20\_\_\_\_ at \_\_\_\_\_ am/pm

Attached to this notice is the Rock Removal Plan for your reference.

Please Contact the Building Inspector with any comments or concerns regarding the removal operations at (914) 273-3000 ext. 44.

\_\_\_\_\_  
BUILDING INSPECTOR

\_\_\_\_\_  
DATE



# *Westchester Modular Homes*

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Construction Corp.

To whom it may concern:

Westchester modular homes has been to the site at Nethermont Ave in the town North Castle .

Our crane will back up onto the property and Have the modules one at a time

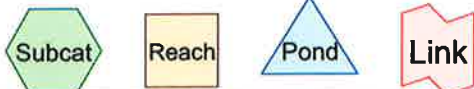
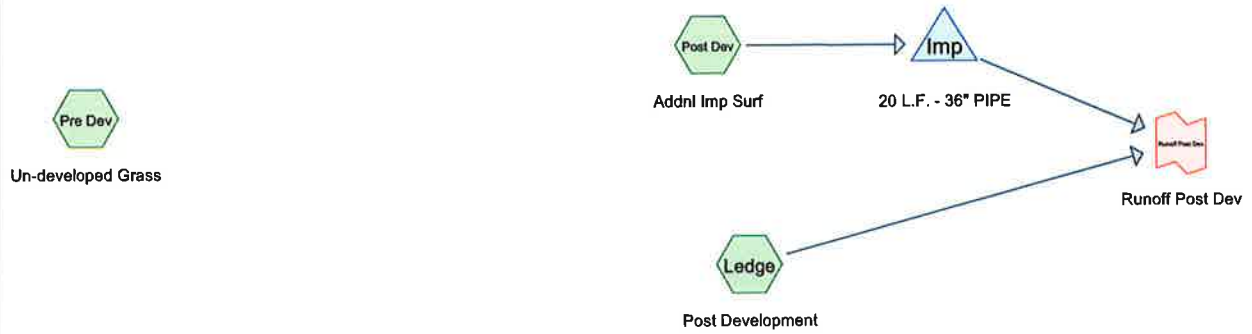
Pull up in front of crane and pick the Modules off the road and Place them on

The foundation.

If you have any questions please feel free to call.

Alfie Muoio

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.

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Printed 8/2/2020

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## 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)
<b>0.319</b>	<b>95</b>	<b>TOTAL AREA</b>

# NETHERMONT HYDROCAD

Prepared by Gabriel E Senor P.C.

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Printed 8/2/2020

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## 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
<b>0.319</b>		<b>TOTAL AREA</b>

**NETHERMONT HYDROCAD**

Prepared by Gabriel E Senor P.C.

Printed 8/2/2020

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**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
<b>0.000</b>	<b>0.068</b>	<b>0.000</b>	<b>0.000</b>	<b>0.251</b>	<b>0.319</b>	<b>TOTAL AREA</b>	



**NETHERMONT HYDROCAD**

NRCC 24-hr C 25 YEAR Rainfall=6.41"

Prepared by Gabriel E Senor P.C.

Printed 8/2/2020

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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  $dt$

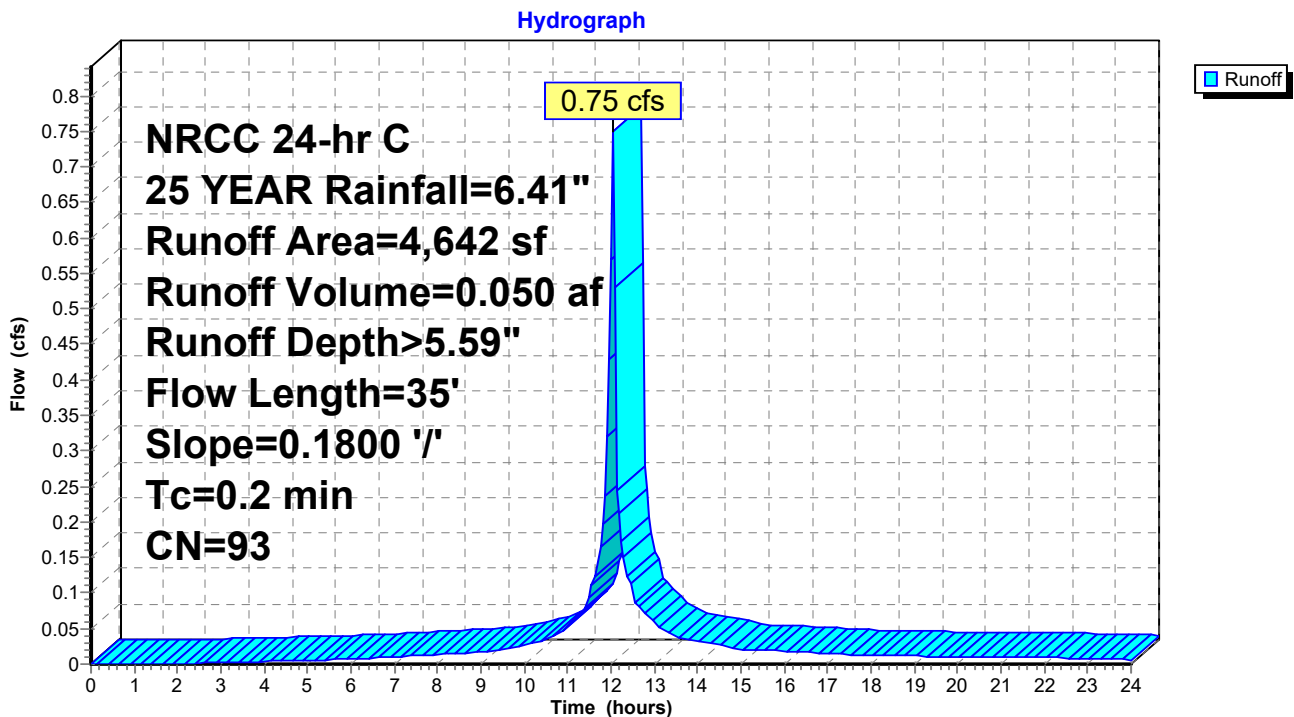
Runoff = 0.75 cfs @ 12.05 hrs, Volume= 0.050 af, Depth> 5.59"

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

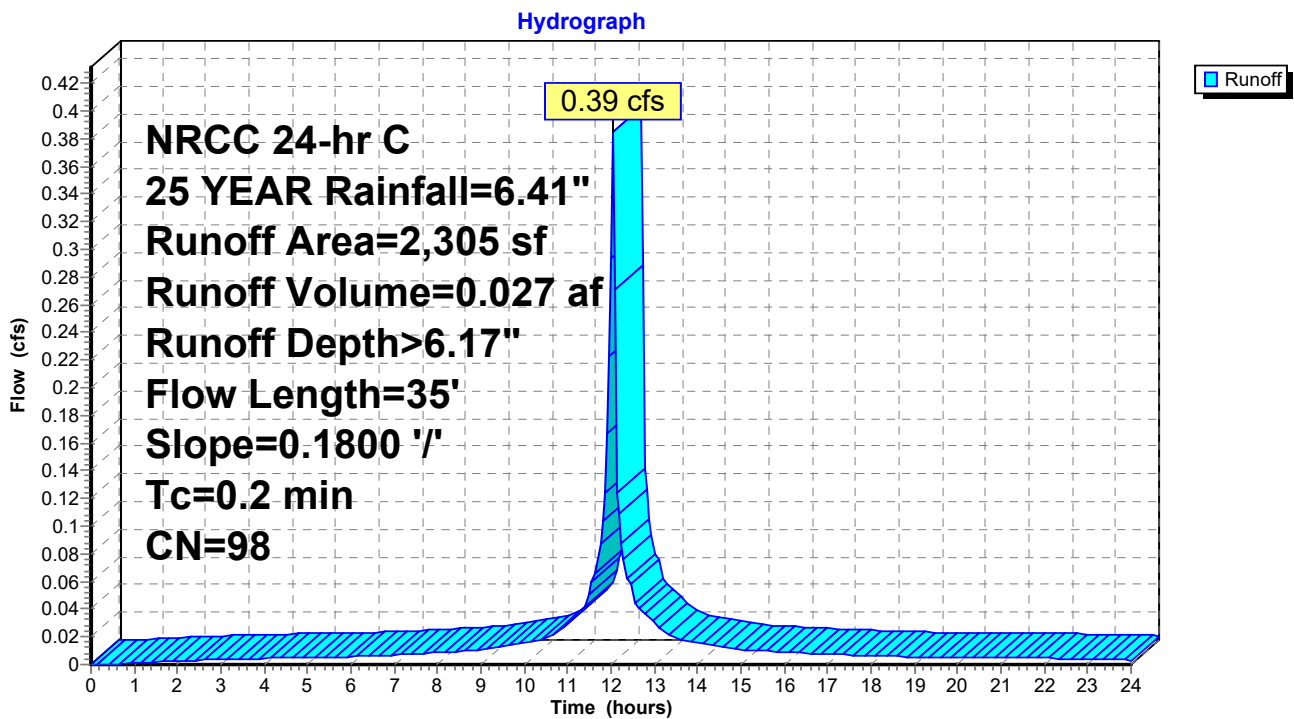
Runoff = 0.39 cfs @ 12.05 hrs, Volume= 0.027 af, Depth> 6.17"

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

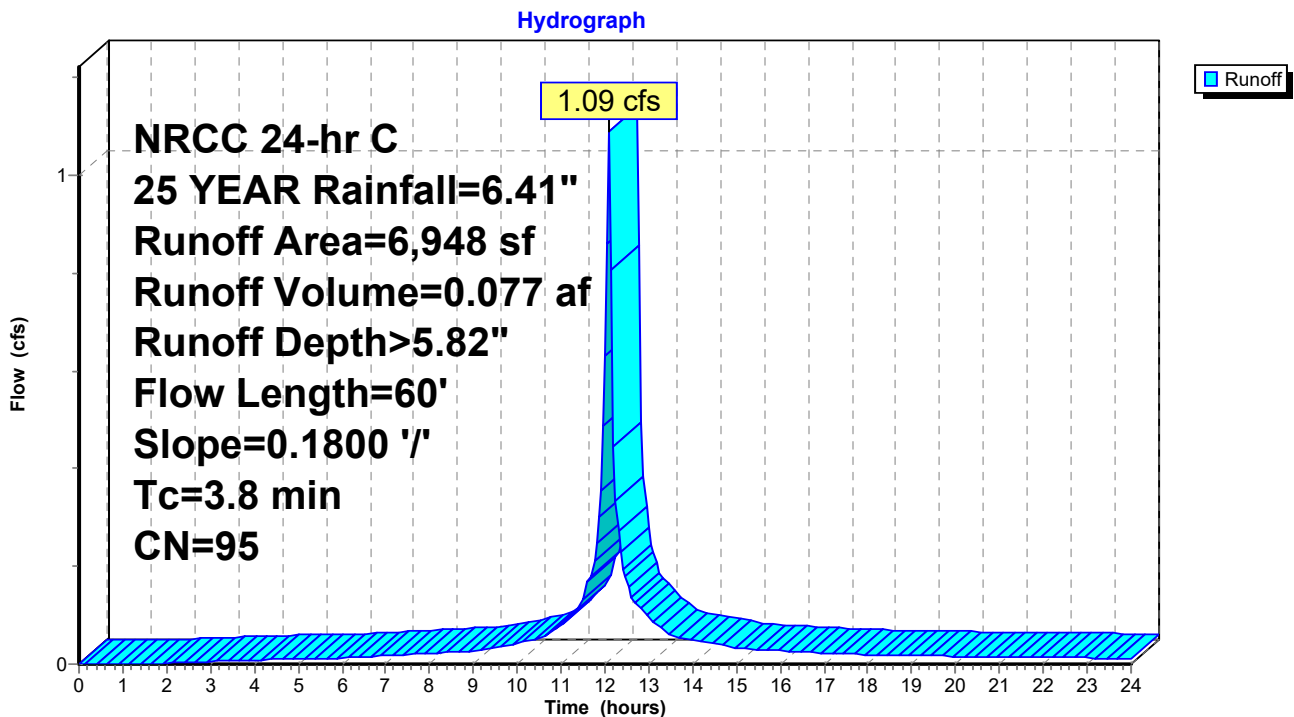
Runoff = 1.09 cfs @ 12.10 hrs, Volume= 0.077 af, Depth> 5.82"

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 )

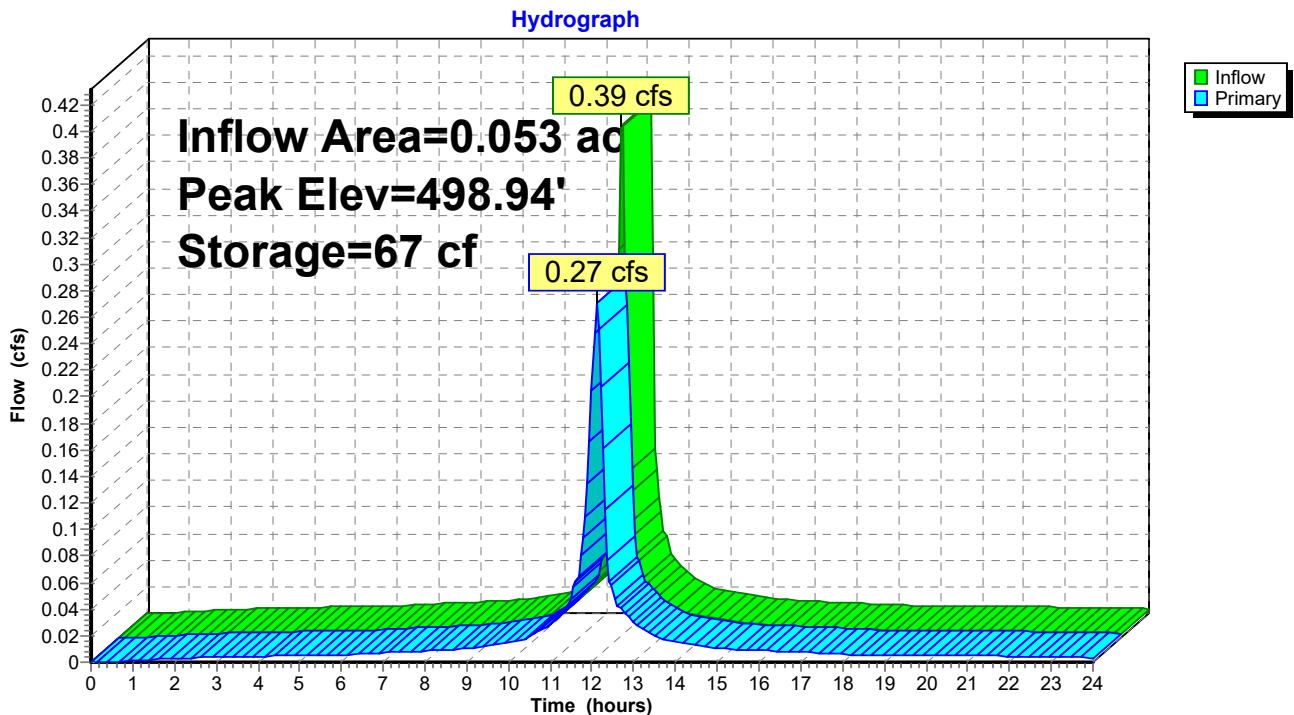
Volume	Invert	Avail.Storage	Storage Description
#1	497.50'	141 cf	<b>36.0" Round Pipe Storage</b> L= 20.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	497.50'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#2	Primary	500.00'	<b>2.0' long Sharp-Crested Rectangular Weir</b> 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**

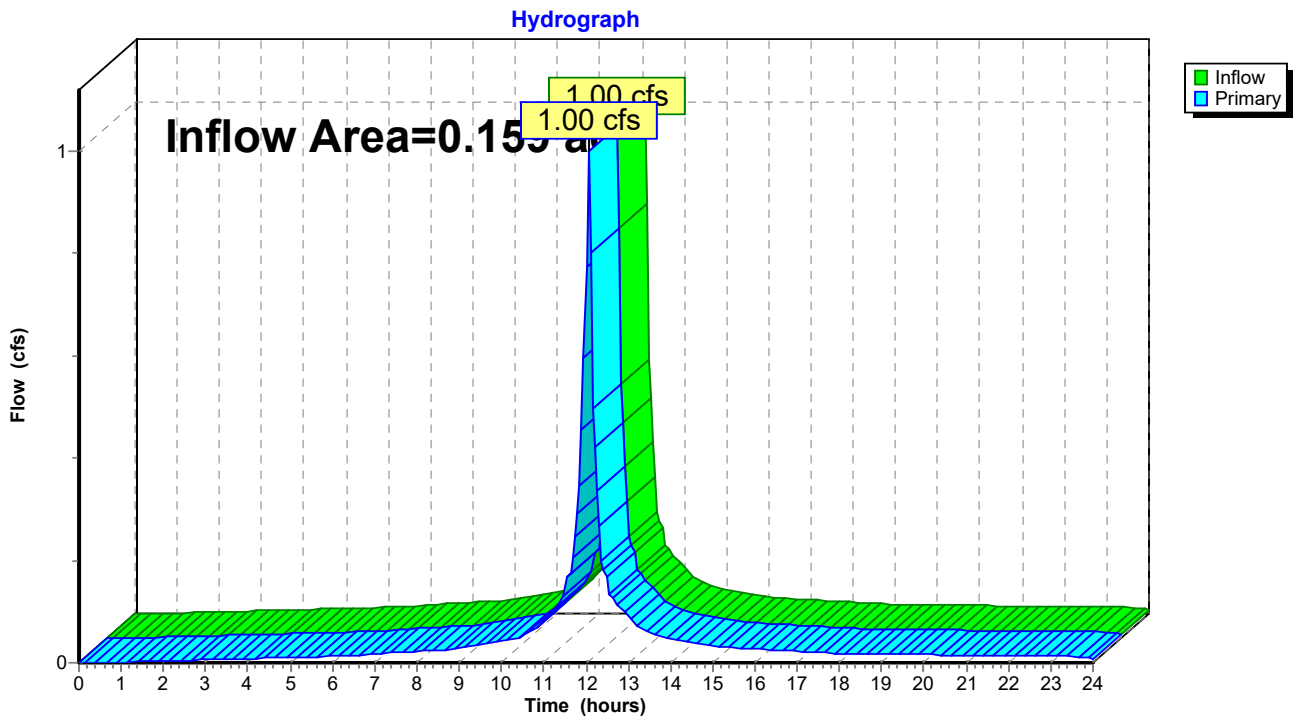


**Summary for Link Runoff Post Dev: Runoff Post Dev**

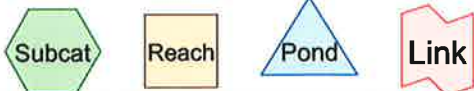
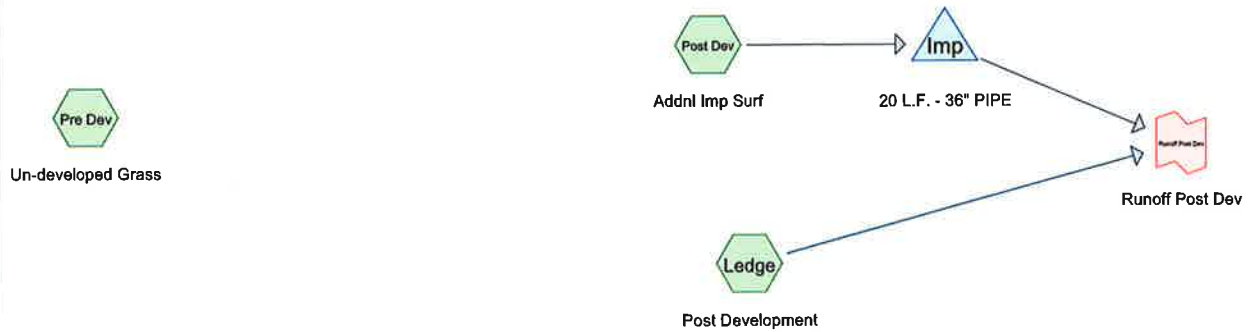
Inflow Area = 0.159 ac, 82.15% Impervious, Inflow Depth > 5.78" for 25 YEAR event  
Inflow = 1.00 cfs @ 12.05 hrs, Volume= 0.077 af  
Primary = 1.00 cfs @ 12.05 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min

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.

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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)
<b>0.319</b>	<b>95</b>	<b>TOTAL AREA</b>



# NETHERMONT HYDROCAD

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## 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
<b>0.319</b>		<b>TOTAL AREA</b>

**NETHERMONT HYDROCAD**

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**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
<b>0.000</b>	<b>0.068</b>	<b>0.000</b>	<b>0.000</b>	<b>0.251</b>	<b>0.319</b>	<b>TOTAL AREA</b>	

**NETHERMONT HYDROCAD**

*NRCC 24-hr C 100 year Rainfall=9.23"*

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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  $dt$

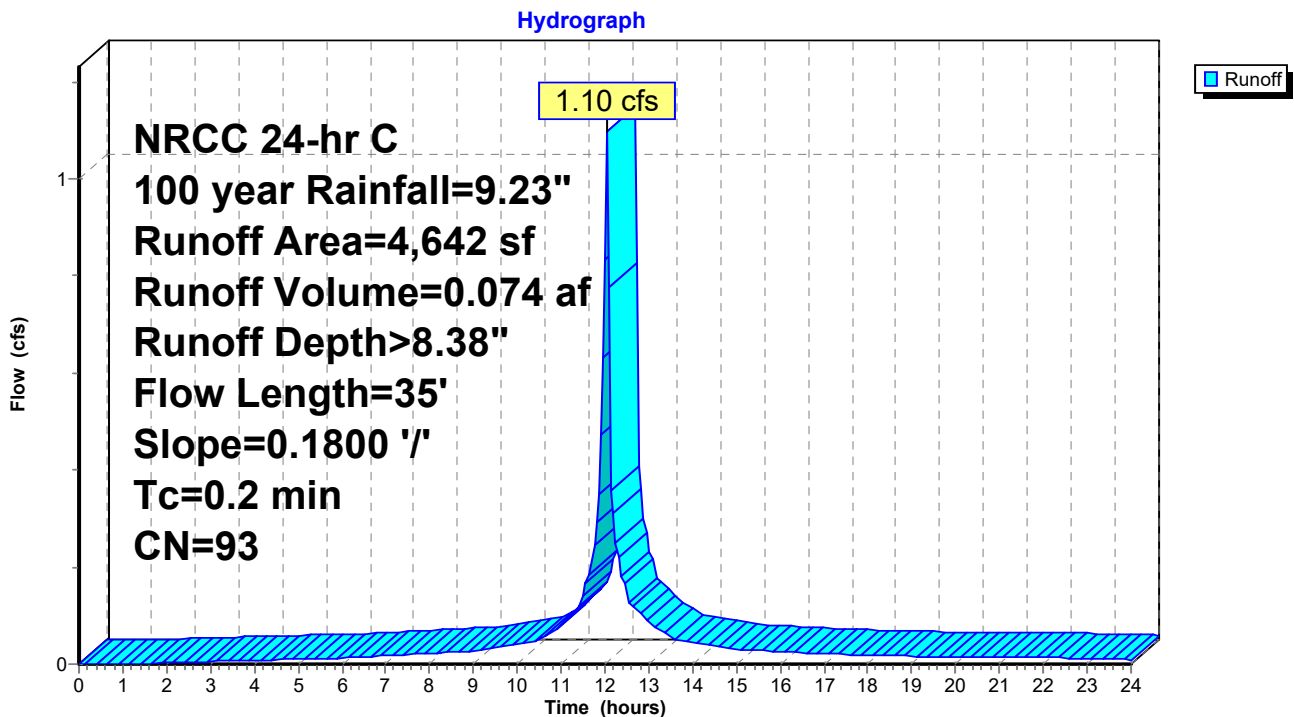
Runoff = 1.10 cfs @ 12.05 hrs, Volume= 0.074 af, Depth> 8.38"

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

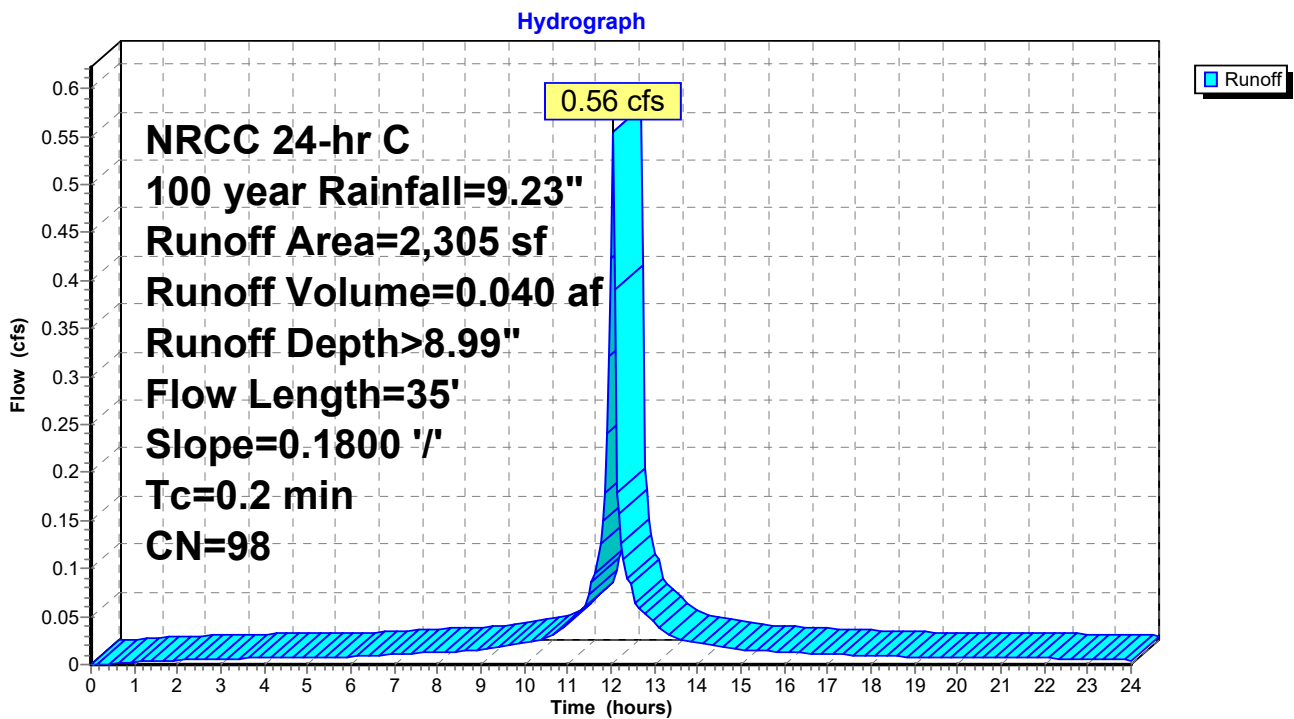
Runoff = 0.56 cfs @ 12.05 hrs, Volume= 0.040 af, Depth> 8.99"

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

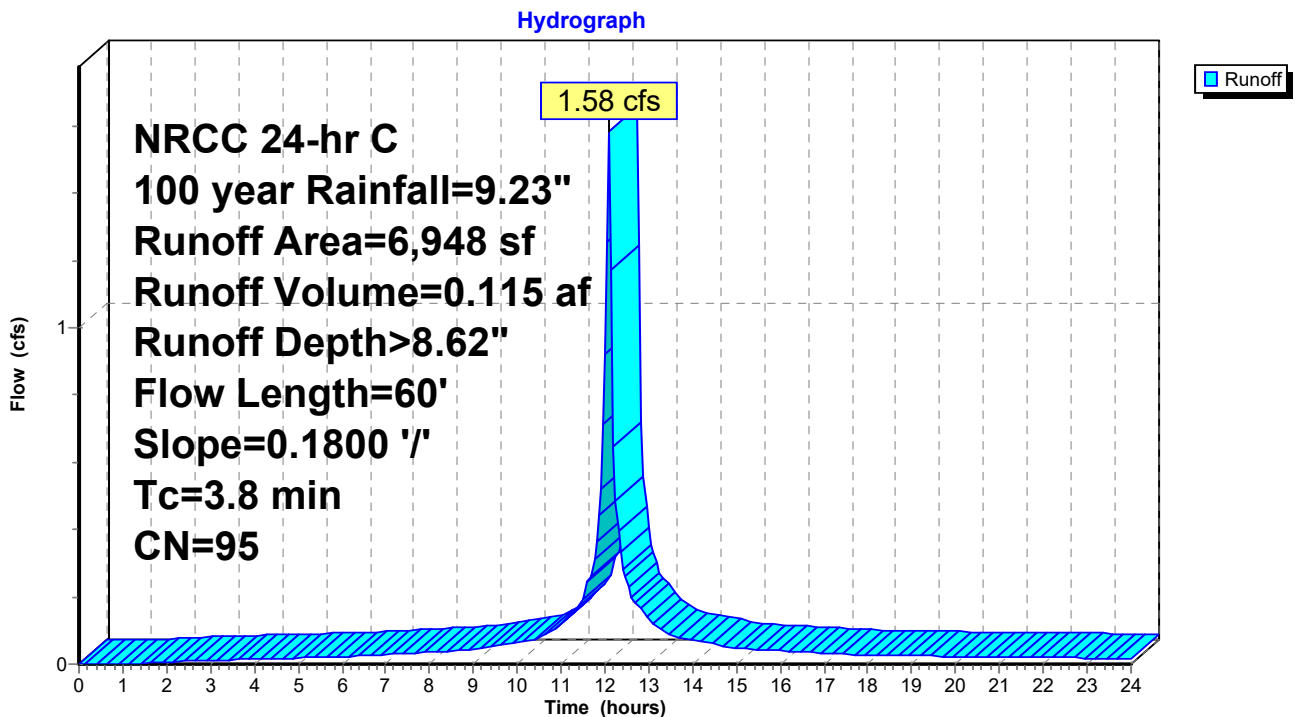
Runoff = 1.58 cfs @ 12.10 hrs, Volume= 0.115 af, Depth> 8.62"

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 )

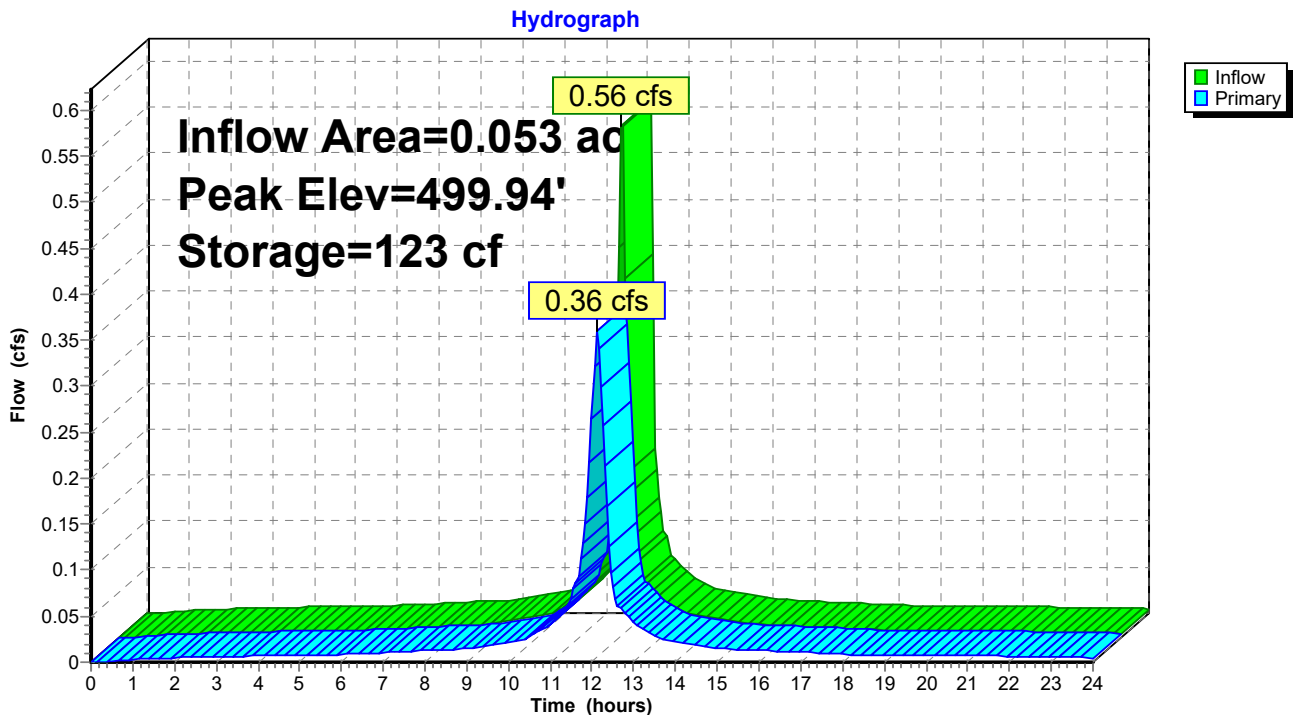
Volume	Invert	Avail.Storage	Storage Description
#1	497.50'	141 cf	<b>36.0" Round Pipe Storage</b> L= 20.0'

Device	Routing	Invert	Outlet Devices
#1	Primary	497.50'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#2	Primary	500.00'	<b>2.0' long Sharp-Crested Rectangular Weir</b> 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**

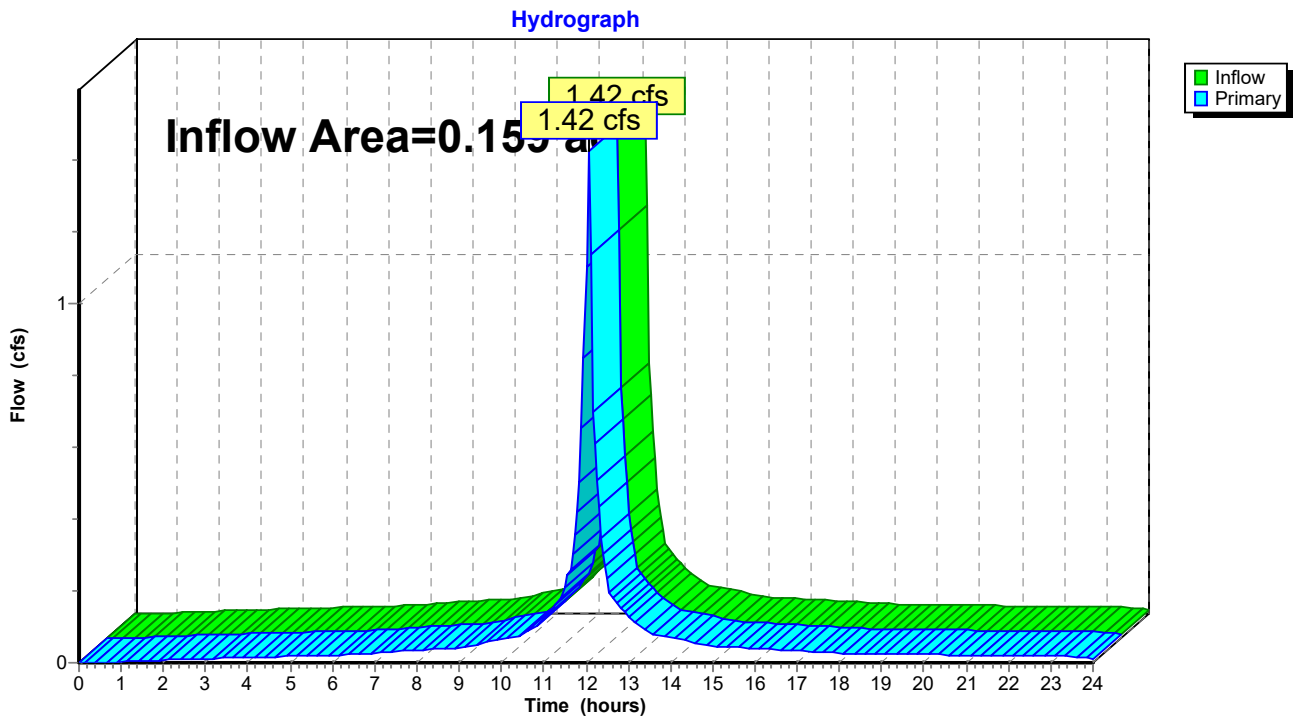


**Summary for Link Runoff Post Dev: Runoff Post Dev**

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](http://www.northcastleny.com)

FLOOR AREA CALCULATIONS WORKSHEET

Application Name or Identifying Title: PLANNING BOARD APPLICATION # 19-039 Date: 07/31/2020  
ODORDI - 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)

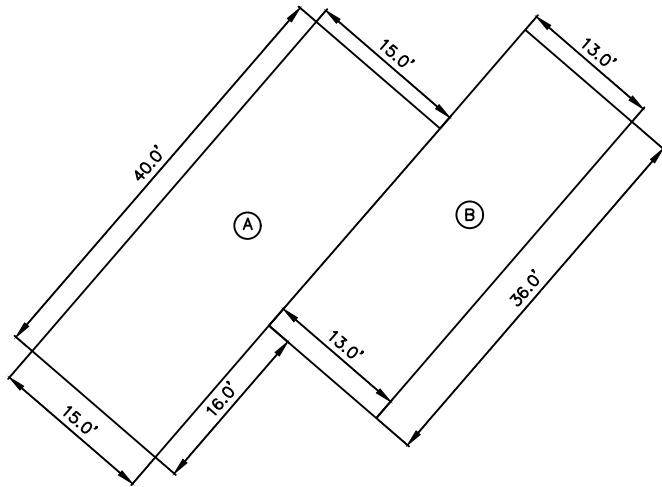
If Line 10 is less than or equal to Line 2, your proposal **complies** with the Town's maximum floor area regulations and the project may proceed to the Residential Project Review Committee for review. If Line 10 is greater than Line 2 your proposal does not comply with the Town's regulations.

  
 Signature and Seal of Professional Preparing Worksheet  


08/02/2020  
 Date

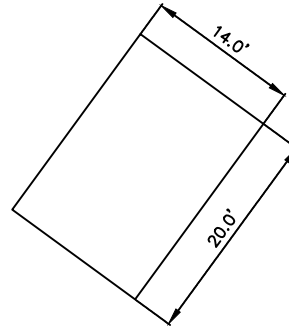
22 NETHERMONT  
GROSS FLOOR AREA CALCULATIONS

FIRST FLOOR GFA CALCULATIONS



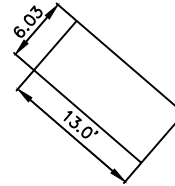
A - 15' X 40' = 600 SF  
 B - 13' X 36' = 468 SF  
 FIRST FLOOR TOTAL AREA = 1,068 SF

GARAGE GFA CALCULATIONS



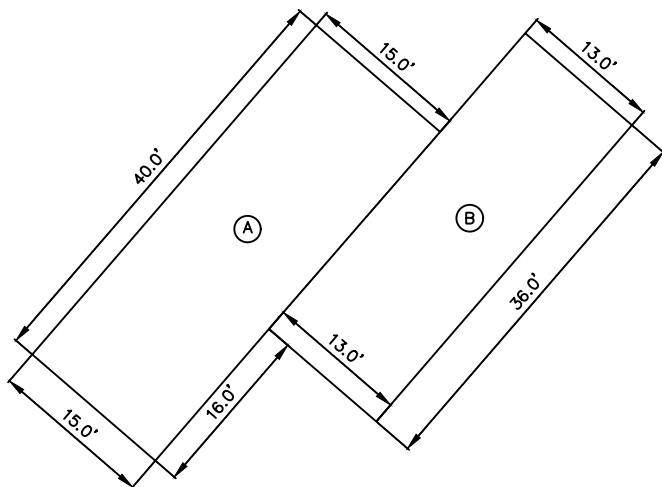
GARAGE TOTAL AREA = 14' X 20' = 280 SF

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

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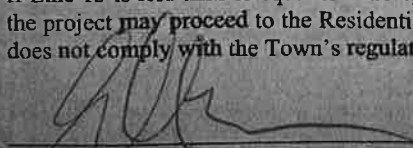
**GROSS LAND COVERAGE CALCULATIONS WORKSHEET**

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

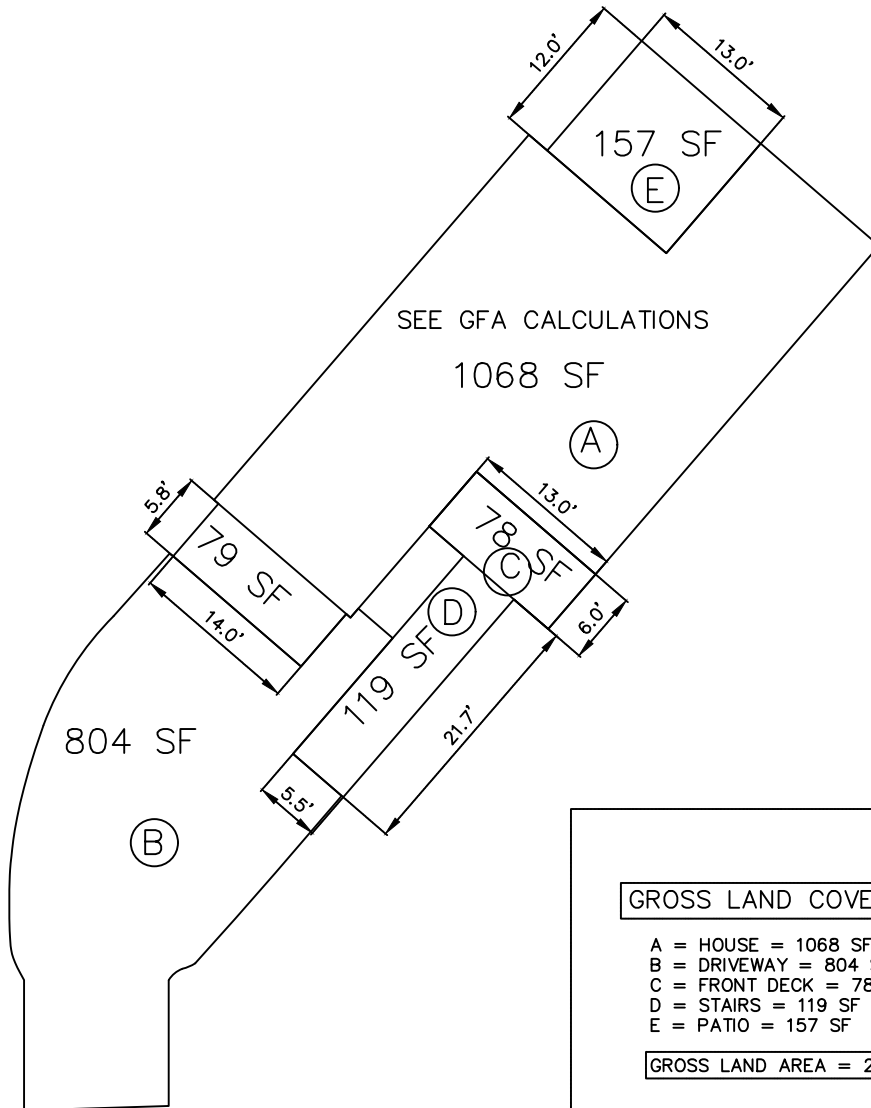
1. Total lot Area (Net Lot Area for Lots Created After 12/13/06): 6,948 SF
2. **Maximum** permitted gross land coverage (per Section 355-26.C(1)(a)): 3,084.4 SF
3. **BONUS** maximum gross land cover (per Section 355-26.C(1)(b)):  
 Distance principal home is beyond minimum front yard setback  
0 x 10 = 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



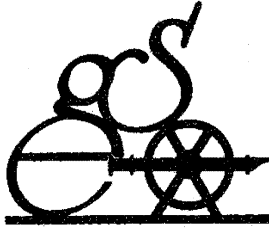
08/02/2020  
 Date



**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.

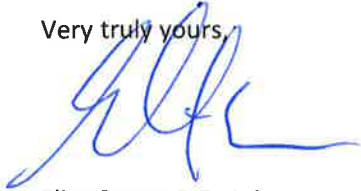


6. As proposed, the development of the site requires clearing the site and the removal of fourteen (14) trees. A landscaping plan has been submitted for the Board's consideration. The Board should consider whether the amount of tree removal is appropriate and if additional screening is needed between 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.

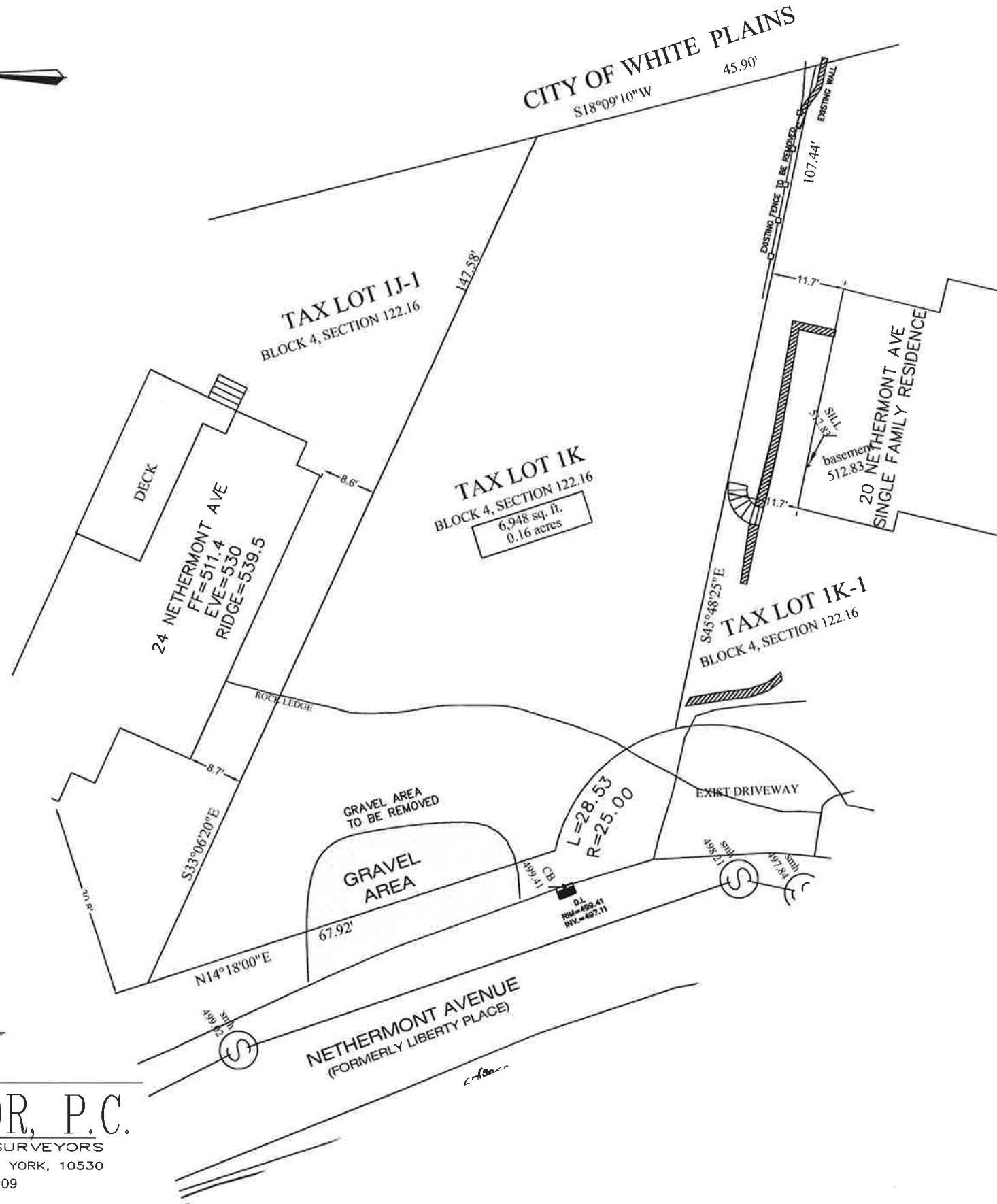
12. Provide stormwater mitigation and design calculations for the runoff generated by the net increase in impervious surfaces for the 100-year, 24-hour design storm event. All invert elevations of the stormwater detention system and outlet structures shall be coordinated between the plan, details and 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.



Possession NOT indicated

This is to certify that this map and the survey on which it is based were made in accordance with the "Minimum Standard" Detail Requirements for New York State Association of Land Surveyors. This Survey is a representation of the property as surveyed on March 25, 2021, the date that the field work was performed. Subsequent revision dates do not constitute an updated survey.

*[Signature]*  
 Eliot Senor, L.S. New York State Lic. No. 049822

Copies of the survey map not bearing the land surveyor's original blue signature and embossed seal shall not be considered to be a true and valid copy. Copyright Gabriel E. Senor, P.C., 2018. ALL RIGHTS RESERVED.

A Title report lists easements and restrictions if the report was not provided these easements and or restrictions may not be shown. A copy of the title report was not provided. A copy of the deed was provided. Survey may be subject to easements not shown.

Surface elevations and underground appurtenances, if any, whether or not shown are not guaranteed. Fences or possession lines generally do not follow a straight line. The survey shows straight lines between located points. Any dimensions shown are to the surveyed point only. Labeled dimensions cannot be used for any other point along the line.

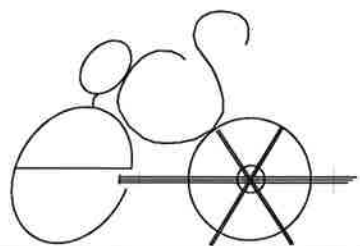
Unauthorized alteration or additions to the survey map is a violation of Section 7209 sub-section 2 of the New York State Education Law

NOT FOR TITLE TRANSFER

**SURVEY OF 22 NETHERMONT AVE**  
**TAX ID: SECTION 122.16 BLOCK 4 LOT 7**  
 AS SHOWN ON THE OFFICIAL TAX MAP OF  
**NORTH CASTLE**  
 LOCATED IN THE  
**TOWN OF NORTH CASTLE**  
**P.O. BOX: WHITE PLAINS, NY**  
**WESTCHESTER COUNTY, NEW YORK.**

SCALE: 1" = 20'

DATE: JANUARY 11, 2020  
 REV: July 31, 2020  
 REV: MARCH 25, 2021



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

**SYMBOLS LEGEND**

- CATCH BASIN
- DRAIN INLET
- UTILITY POLE
- SIGN POST
- HYDRANT
- WATER VALVE
- GAS VALVE
- LIGHT POLE
- TRAFFIC POLE
- TELE. MANHOLE
- ⊗ ELECTRIC BOX
- SEWER MANHOLE
- WATER MANHOLE
- ELECTRIC MANHOLE
- DRAIN MANHOLE
- MANHOLE
- MONITORING WELL
- VALVE
- 14 TREE
- SIZE
- +242.5 EXIST ELEV.
- +242.5 PROP'D ELEV.
- 14 TREE
- (TO BE REMOVED)
- III SILT FENCE
- III or HAYBALES AS REQ'D

ID	Date	Common	Botanical	Height	DBH	Health	Tag #	Qty	Objective
1	2020-01-10 12:33:40	Bur Oak	Quercus macrocarpa	50'	12"	60% - Fair		1	In proposed driveway
2	2020-01-10 10:00:24	Northern Red Oak	Quercus rubra	29'	6-8"	40% - Poor		2	In proposed driveway
3	2020-01-10 13:02:03	Birch	Prunus serotina	12'	6"	40% - Poor		3	In proposed driveway
4	2020-01-10 13:02:38	Cedar	Prunus serotina	9'	6"	50% - Poor		4	In the same location as steps to entrance of home
5	2020-01-10 13:04:02	Eastern Red Cedar	Juniperus virginiana	11'	6"	60% - Fair		5	Finish Grade is Higher than Existing Grade
6	2020-01-10 13:05:53	Black Cherry	Prunus serotina	16'	14-18"	40% - Poor		6	In foot print of proposed home
7	2020-01-10 13:07:56	Northern Red Oak	Quercus rubra	9'	6"	40% - Poor		7	In foot print of proposed home
8	2020-01-10 13:10:18	Northern Red Oak	Quercus rubra	9'	7"	40% - Poor		8	In foot print of proposed home
9	2020-01-10 13:11:49	Northern Red Oak	Quercus rubra	29'	10"	40% - Poor		9	Finish Grade is Lower than Existing Grade
10	2020-01-10 13:12:50	Northern Red Oak	Quercus rubra	22'	10"	40% - Poor		10	Finish Grade is Lower than Existing Grade
11	2020-01-10 13:15:19	Northern Red Oak	Quercus rubra	29'	10"	40% - Poor		11	Finish Grade is Lower than Existing Grade
12	2020-01-10 13:18:57	Northern Red Oak	Quercus rubra	30'	6"	40% - Poor		12	Finish Grade is Lower than Existing Grade

Table shown above was produced by a Licensed Arborist who works with EMERALD TREE & SHRUB CARE COMPANY. Additional supporting documents are attached to the submittal.

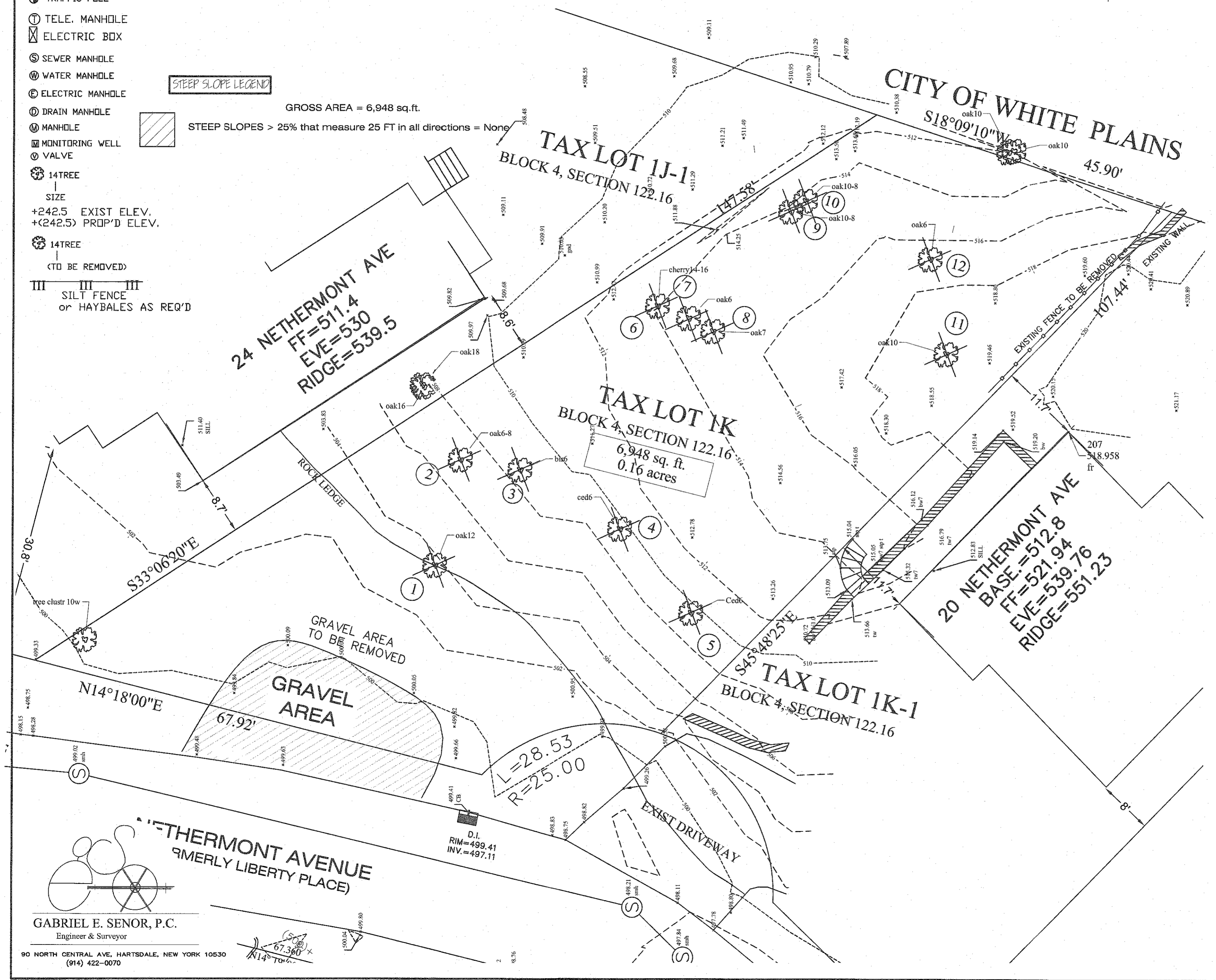
**NOTES:**  
 - Table show above was produced by a Licensed Arborist who works with EMERALD TREE & SHRUB CARE COMPANY. Additional supporting documents are attached to the submittal.  
 - Existing Gravel area to be removed.  
 - See Stormwater Plan for Erosion Control Details.  
 - See Stormwater Plan for Erosion Control notes.

TOPOGRAPHIC MAPPING PREFORMED BY THE UNDERSIGNED ON FEB. 19, 2003  
 UPDATED  
 JUNE 11, 2009 AND MARCH 25, 2021

JOB NUMBER: R.O.24483

**NOTES:**  
 Locations, sizes and descriptions of all utilities are based on field survey location of surface appurtenances and available record plate data. Same is subject to scale and method limitations. Exact location for existing service installations may require verification by the respective utility companies (call 800-962-7962) and by excavation. The location, material and size of existing underground improvements or encroachments hereon are not certified underground routing cannot be guaranteed. Exact connections for existing service installations may require verification by excavation or dye testing. Such tests will be subject to additional fee based on time. Underground utilities may not always follow a straight line between surface appurtenances and should be confirmed by excavation and the respective companies. Please note that there are usually no utility company records of the location of on-site utilities connections.

1	04/11/2021	PB COMM	GC



**STEEP SLOPE LEGEND**  
 GROSS AREA = 6,948 sq. ft.  
 STEEP SLOPES > 25% that measure 25 FT in all directions = None

**TOPOGRAPHIC MAP, TREE REMOVAL**  
 TAX ID: SECTION 122.16 BLOCK 4 LOT 7  
 AS SHOWN ON THE OFFICIAL TAX MAP OF NORTH CASTLE  
 LOCATED IN THE TOWN OF NORTH CASTLE  
 P.O. BOX: WHITE PLAINS, NY  
 WESTCHESTER COUNTY, NEW YORK.  
 NOTE: CONTOUR ELEVATIONS ARE ASSUMED.

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

SCALE: 1" = 10'  
 DATE: JANUARY 11, 2020  
 DRAWN BY: GC  
 CHECKED BY: ES.

**GABRIEL E. SENOR, P.C.**  
 ENGINEER & SURVEYOR  
 90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK 10530  
 (914) 422-0070

TS - 1  
 SHEET 1 of 5

**GENERAL NOTES**

- Gabriel E. Senor, P.C. is not responsible for construction supervision unless retained under separate contract.
- Gabriel E. Senor, P.C. must be notified prior to backfilling any storm water system for inspection if The Engineering Dept. will require a final letter of certification from the design engineer for the storm water approval, site work and drainage installation.
- Any changes made to these plans shall be approved by Gabriel E. Senor, P.C. Any changes must be filed and approved by the appropriate Department as amendments.
- Gabriel E. Senor, P.C. is not responsible for damages if changes are made and not approved as in item 1 above.
- All conditions, locations, dimensions shall be verified by the Contractor or Owner and must report all discrepancies to the Design Engineer prior to the start of construction.
- All work and materials shall comply with all applicable codes including, but not limited to the following: NYS Building Code, Local Zoning Code, ACI and AISC.
- The Contractor is responsible for all construction means and methods to implement the designs shown.
- Safety during construction is the responsibility of the Contractor and shall conform to all Local, State and Federal Agencies' requirements.
- The Contractor shall apply for and receive all necessary permits to perform the work shown on these plans prior to the start of construction.
- Final grading shall be sloped away from the building and foundations.
- Unless noted, all drainage piping on this plan is to be 6" Rigid HDPE ASTM F810-07 or better.
- This storm water design plan is not designed to accept footing drains. Refer to Architectural plans for footing drain design. Do not connect footing drains or sump pumps to this surface water drainage system.
- If the drainage system is to be built in a filled area, the fill should be well drained material with a settling period of one to three months prior to the system installation. Additional percolations are required after the settling period and the system design will be revised as necessary.
- Proposed Silt Fence to be installed along existing and proposed contours.
- Orange Construction Fence to be installed along the limits of the proposed disturbance limits line.
- Roof leaders to be connected to the drainage system with 6" rigid HDPE pipe at 2% min. slope or as shown.
- The Contractor and all Sub-Contractors must submit a "Contractor Certification Statement" as per section 294-8 of the NYSDEC "Stormwater Pollution Prevention Plan" manual prior to the start of construction.
- If imported fill material is required, it shall be certified in writing by a New York State licensed Professional Engineer as non-contaminated, clean fill suitable for the intended use. Percolation tests shall be performed by the Design Engineer to demonstrate that the stormwater management practice will draw down the entire water quality volume within 48 hours. The results of the percolation test (s) shall be submitted to the Municipal Engineer for review and approval.
- All proposed temporary seeding mixture shall be in accordance with the New York State Standards and Specifications for Urban Erosion Control, dated August 2005.
- New sewer laterals are required for all new construction. Laterals must be extra heavy cast iron or ductile iron pipe or as directed by Municipal Engineer.
- Connection permits are required from the Department of Public Works for Sewer, Water, and Storm Water System overflows.
- All trenches in the Municipality Right of Way must be backfilled with controlled density fill (k-crete) or as directed by Municipal Engineer.
- A street opening permit must be obtained from the Municipality, all work in the Right of Way and an inspection performed prior to back filling and final approvals.
- Replace or re-lay stone curb as directed by Municipal Engineer.
- A non-conversion agreement for the basement in Special Flood Hazard Zone must be signed and filed prior to the issuance of a C. of O. for properties subjected to flooding.
- Curb cut permit is required from the Department of Public Works. Curb cut maximum width is 18 feet.
- The contractor shall schedule with the Municipality a rough grading inspection prior to any framing of a building above the first floor braced decking. Excess soils of significance shall be removed and disposed of upon completion of the rough grading.
- The structures for the storm water management system shall be installed at the earliest date possible when the structure's roof is complete. The contractor shall consult with the Municipality and schedule this work upon completion and inspection of the rough grading activities.
- The contractor shall secure a Street Opening Permit with the Municipality for all work to take place on the right of way including construction of a new driveway apron, and installation of new service laterals.
- If necessary, the Contractor shall secure a Tree Removal Permit with the Municipality prior to the commencement of construction activities.
- Contractor required to provide Dig Safe NY ticket prior to issuance of permits.

**22 NETHERMONT AVE - AVERAGE GRADE CALCULATIONS**

**FRONT LEFT CORNER TO FRONT RIGHT CORNER OF HOUSE**

Point #	ELEV	ELEV	DIST	AVG ELEV	(DIST) X (AVG ELEV)	
A-B	502.0	502.0	14.0	502.0	7028.0	7028.0
B-Z	502.0	502.0	5.8	502.0	2911.6	2911.6
Z-C	502.0	511.5	16.0	506.8	8108.0	8108.0
C-D	511.5	511.5	13.0	511.5	6649.5	6649.5
<b>D-E</b>	<b>511.5</b>	<b>514.8</b>	<b>36.0</b>	<b>513.1</b>	<b>18472.5</b>	<b>18472.5</b>

**RIGHT SIDE OF HOUSE**

Point #	ELEV	ELEV	DIST	AVG ELEV	(DIST) X (AVG ELEV)	
E-F	514.8	514.8	13.0	514.8	6891.8	6891.8
F-G	517.8	515.5	12.0	516.6	6199.5	6199.5
G-H	515.5	513.0	15.0	514.3	7713.8	7713.8

**REAR OF HOUSE**

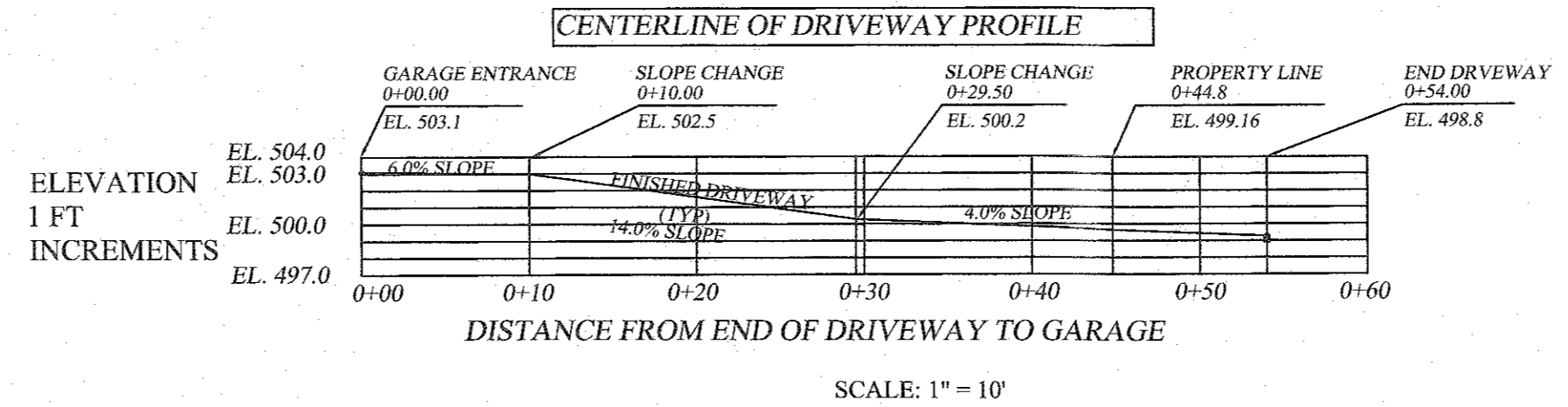
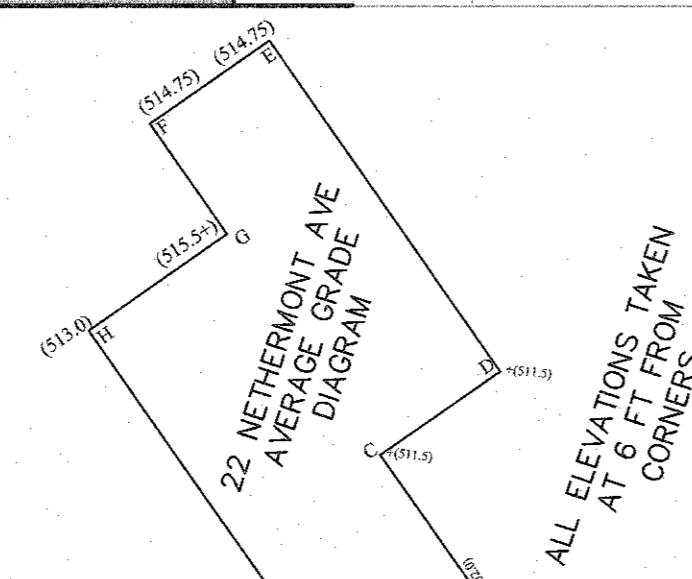
Point #	ELEV	ELEV	DIST	AVG ELEV	(DIST) X (AVG ELEV)	
H-Y	513.0	505.0	34.2	509.0	17407.8	17407.8
Y-A	505.0	502.8	5.8	503.9	2922.6	2922.6

**LEFT SIDE OF HOUSE**

Point #	ELEV	ELEV	DIST	AVG ELEV	(DIST) X (AVG ELEV)	
H-Y	513.0	505.0	34.2	509.0	17407.8	17407.8
Y-A	505.0	502.8	5.8	503.9	2922.6	2922.6

**TOTAL DISTANCE = 164.8**      **TOTAL DISTANCE X ELEV = 84105.0**

**AVG. GRADE ELEV. = 510.3**



APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED: \_\_\_\_\_ DATE: \_\_\_\_\_

CHRISTOPHER CARTHY, CHAIRMAN  
TOWN OF NORTH CASTLE PLANNING BOARD

ENGINEERING PLANS REVIEWED FOR CONFORMANCE TO RESOLUTION: \_\_\_\_\_ DATE: \_\_\_\_\_

JOSEPH M. CERMELE, P.E.  
KELLARD SESSIONS CONSULTING  
CONSULTING TOWN ENGINEERS

- LEGEND**
- UTILITY POLE
  - SIGN POST
  - HYDRANT
  - WATER VALVE
  - GAS VALVE
  - LIGHT POLE
  - GUY WIRES
  - TELE. MANHOLE
  - SEWER MANHOLE
  - WATER MANHOLE
  - ELECTRIC MANHOLE
  - DRAIN MANHOLE
  - MANHOLE
  - ELECTRIC BOX
  - EXISTING GRADE (102)
  - PROPOSED GRADE
  - 14 TREE
  - SIZE
  - TREE TO BE REMOVED
  - SILT FENCE
  - HAYBALES AS REQ'D

**EROSION CONTROL NOTES**

- INSTALLATION & MAINTENANCE OF EROSION CONTROL**
- CONSTRUCTION SCHEDULE**  
NOTIFY APPROPRIATE MUNICIPAL AGENCY HAVING JURISDICTION AT LEAST 5 DAYS PRIOR TO START.
- EROSION CONTROL MEASURES**
- Install all erosion control measures prior to start of construction.
  - Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 Days prior to finish.
- INSPECTION BY MUNICIPALITY**
- MAINTENANCE (TO BE PERFORMED DURING ALL PHASES OF CONSTRUCTION)**
- After any rain causing runoff, Contractor to inspect silt fences, etc. and remove any excessive sediment and inspect stockpiles and correct and problems with seed establishment.
  - Inspections shall be documented in writing and submitted to the appropriate Municipal Agency having jurisdiction.
- STOCK PILING OF EXCAVATED MATERIAL**
- Strip Topsoil and Stockpile.
  - Stockpile Excavation Subgrade.
  - Seed piles with 1 lb. total annual ryb or remove from site within two days.
- INSPECTION BY MUNICIPALITY**
- FINAL GRADING**
- Remove unneeded subgrade from site.
  - Call for inspection from the appropriate Municipal Agency having jurisdiction at least 2 days prior to finish.
- INSPECTION BY MUNICIPALITY**
- LANDSCAPING**
- Spread topsoil evenly over areas to be seeded. Hand rake level.
  - Broadcast 1 25lb. bag of Jonathan Green "Fastgrow" mix or equal over areas to be seeded.

**DRAINAGE CALCULATIONS**

The analysis was performed utilizing the Soil Conservation Service (SCS) TR-20 and TR-55 methodologies. Rainfall intensity was utilized for 100 Year storm event at 9.23" for a 24 hour rainfall in Westchester County. The development is the construction of a single family residence with associated impervious areas. For purposes of calculations, the pre-existing condition of the lot was 5,245 SF of Ledge and 1,703 SF of grass area. For the post development condition, excess surface stormwater generated by the impervious surfaces of the proposed construction shall be stored in a drainage detention structures to be constructed on-site which will have a controlled outlet structure entering the existing storm drain system on Nethermont Ave.

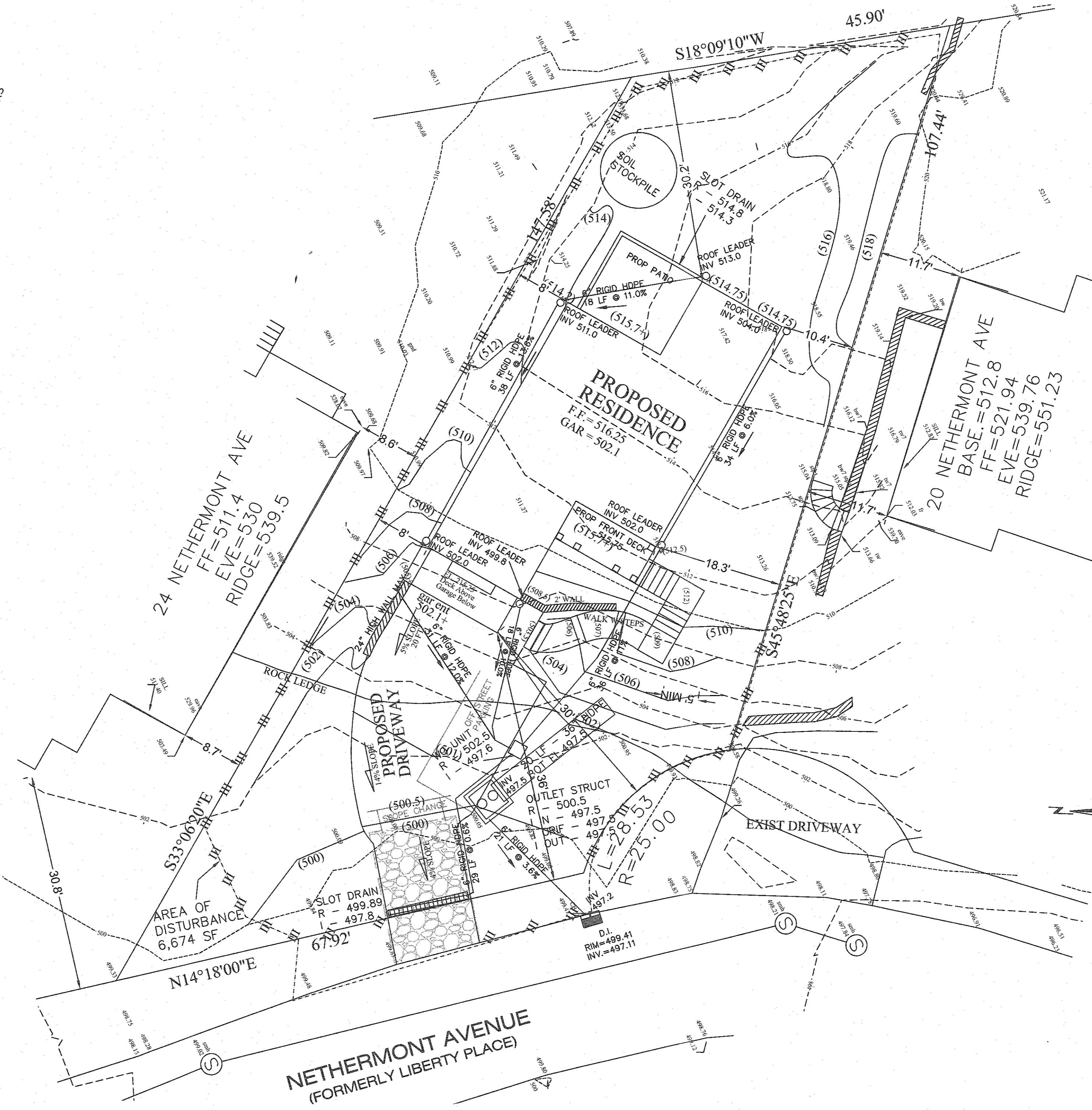
**Pre-Development 25 Year Storm**  
The Soil Conservation Service's TR-20 method (a more accurate and precise calculation methodology than TR-55) as incorporated in the HydroCAD software was used to determine the pre-development and post-development runoff rates of the building, driveway and walkway areas.

For purposes of calculations an area of 5,245 SF of Ledge and 1,703 SF of grass area was used. Runoff for pre-development is 1.58 cfs. using a 100 year storm. (9.23 inch rainfall).

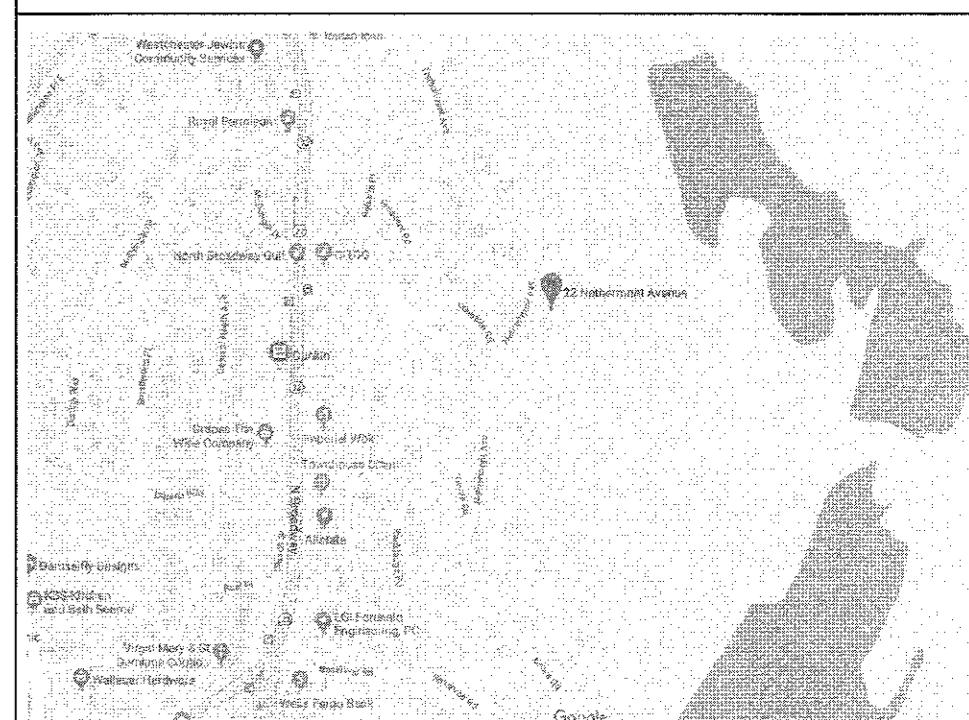
**Post-Development 25 Year Storm**  
Runoff is to be mitigated by a system of 20 L.F. of 36" HDPE which will be connected to the roof leader system of the entire house. The outlet structure will control the outflow of the system. The entire system has been calculated to show that the outflow to the village system will be approximately 1.42 cfs.

Design Storm (yr)	Total Pre-development Peak Runoff (cfs)	Total Post-Development Peak Runoff (cfs) basin
25	1.58	1.42

Given the Post Development basin routing runoff rates for the selected storms shown peak runoff has no significant net increase of those of the Pre Development condition. It is concluded that the proposed design satisfactorily meets the Village regulation of no net increase in the rate of offsite storm water discharge.



**LOCATION MAP**



NO	DATE	DESC	BY
5	04/19/2021	REVISIONS	GC
4	04/11/2021	PB COMMENTS	GC
3	02/13/2021	ARB COMMENTS	GC
2	01/13/2021	WALL NEXT DRIVEWAY	GC
1	03/10/2020	PB COMM	GC

**REVISIONS**

**GRADING, STORMWATER AND EROSION CONTROL 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

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

SCALE: 1" = 10'

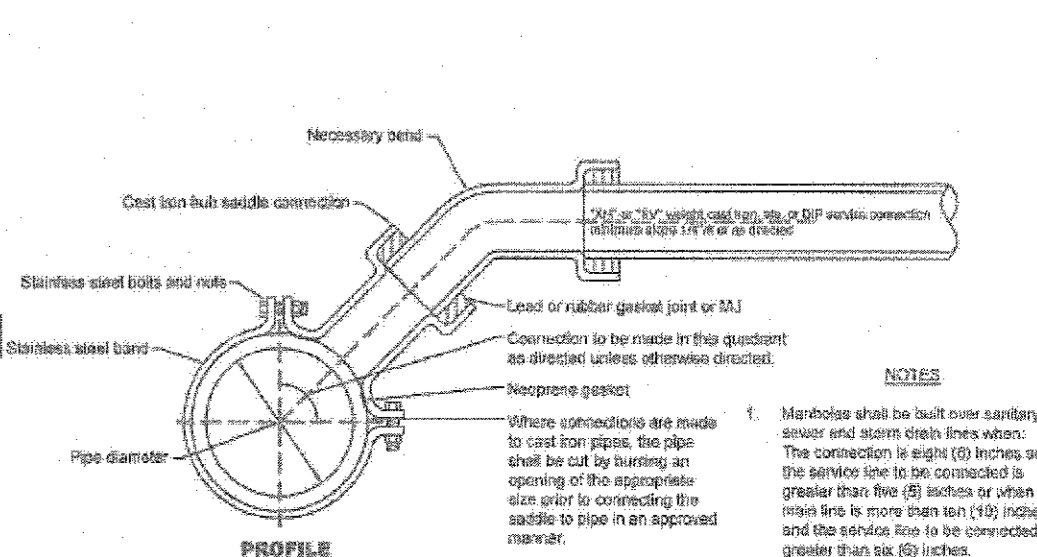
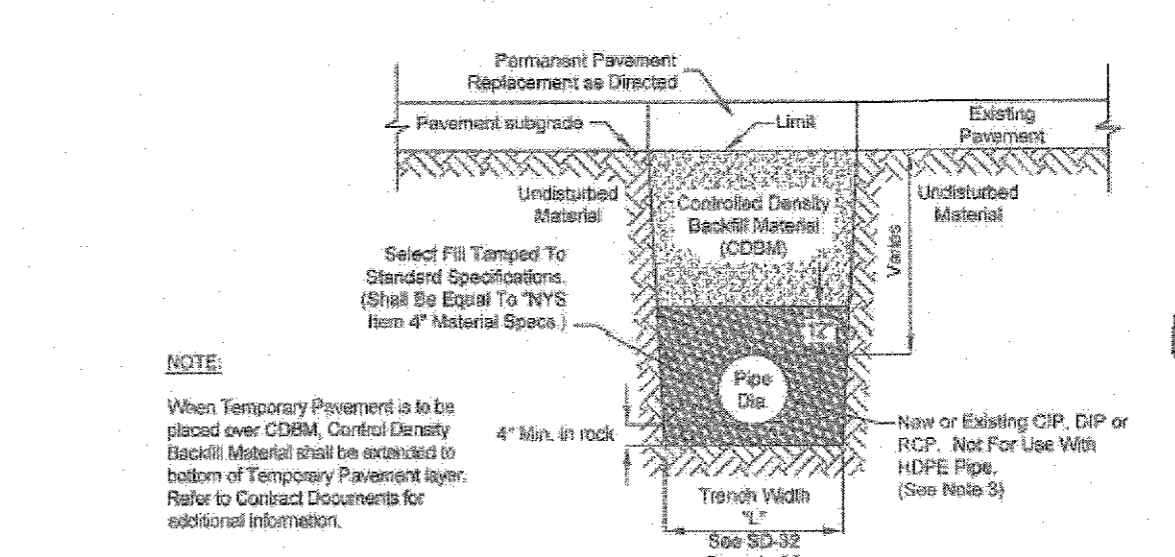
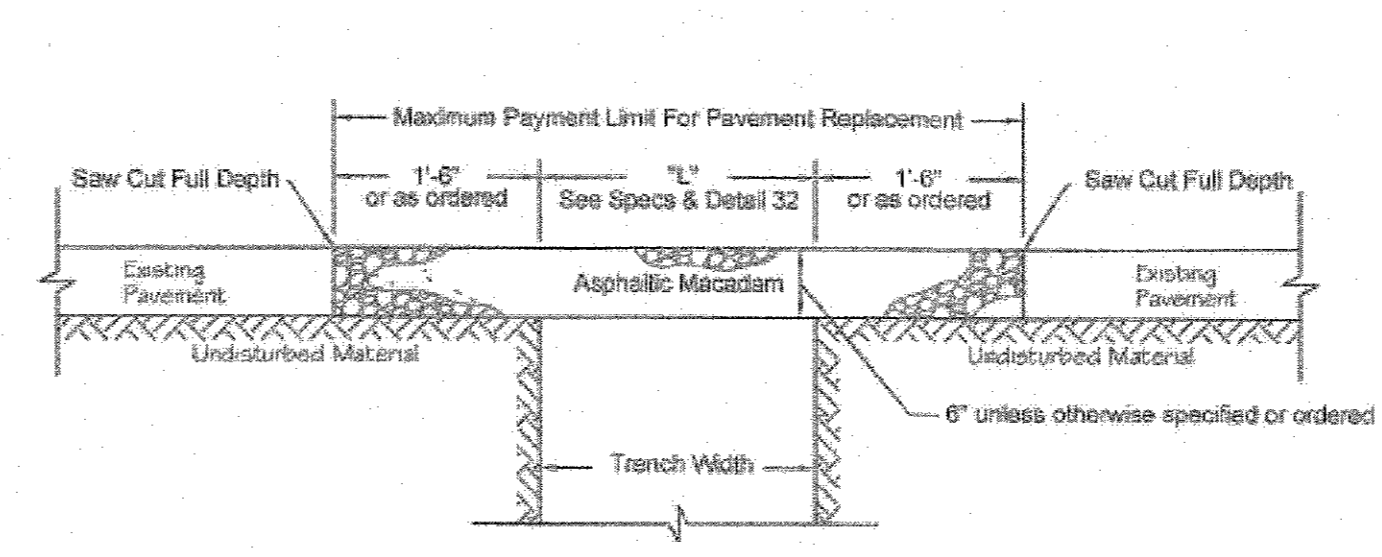
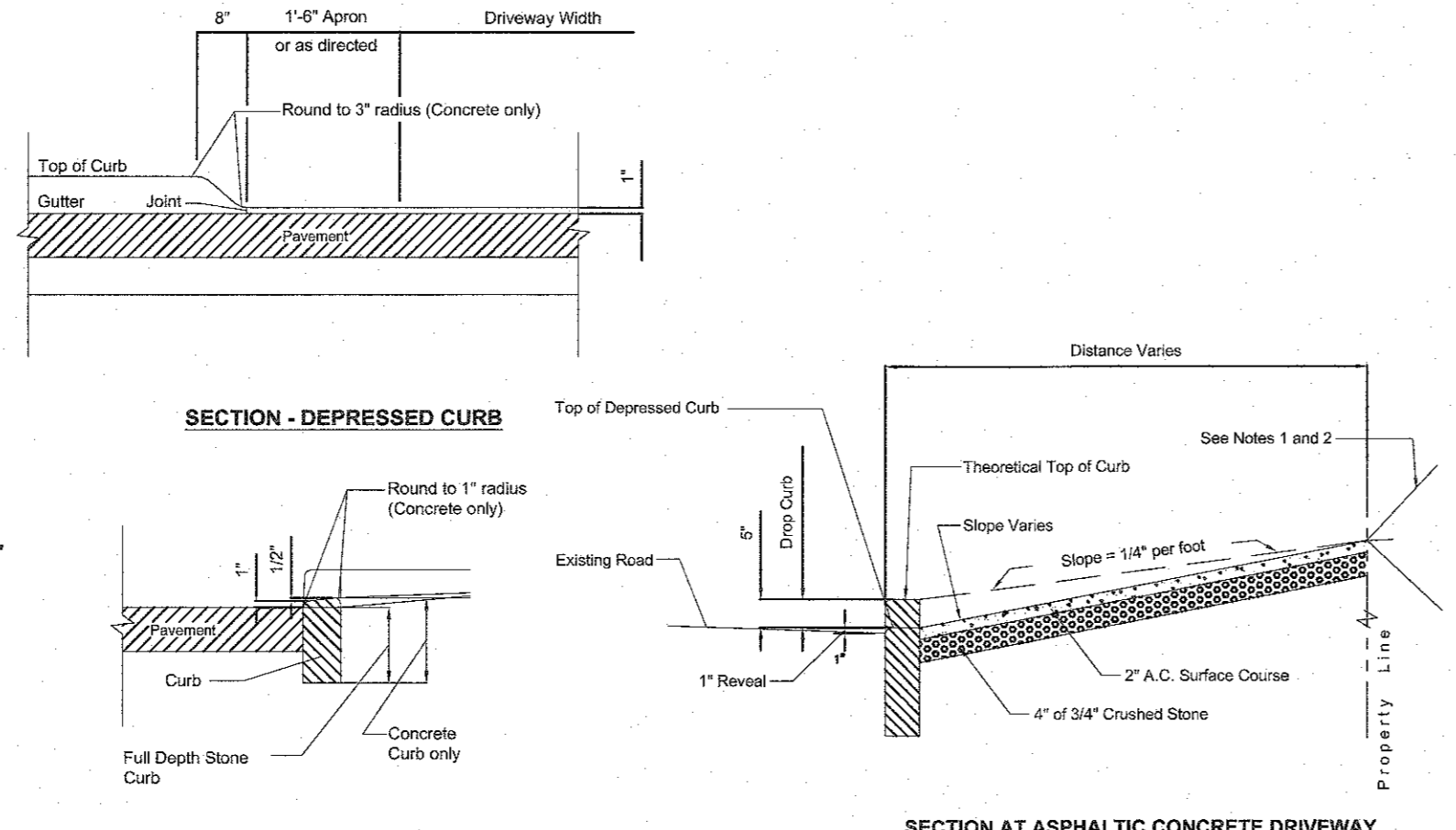
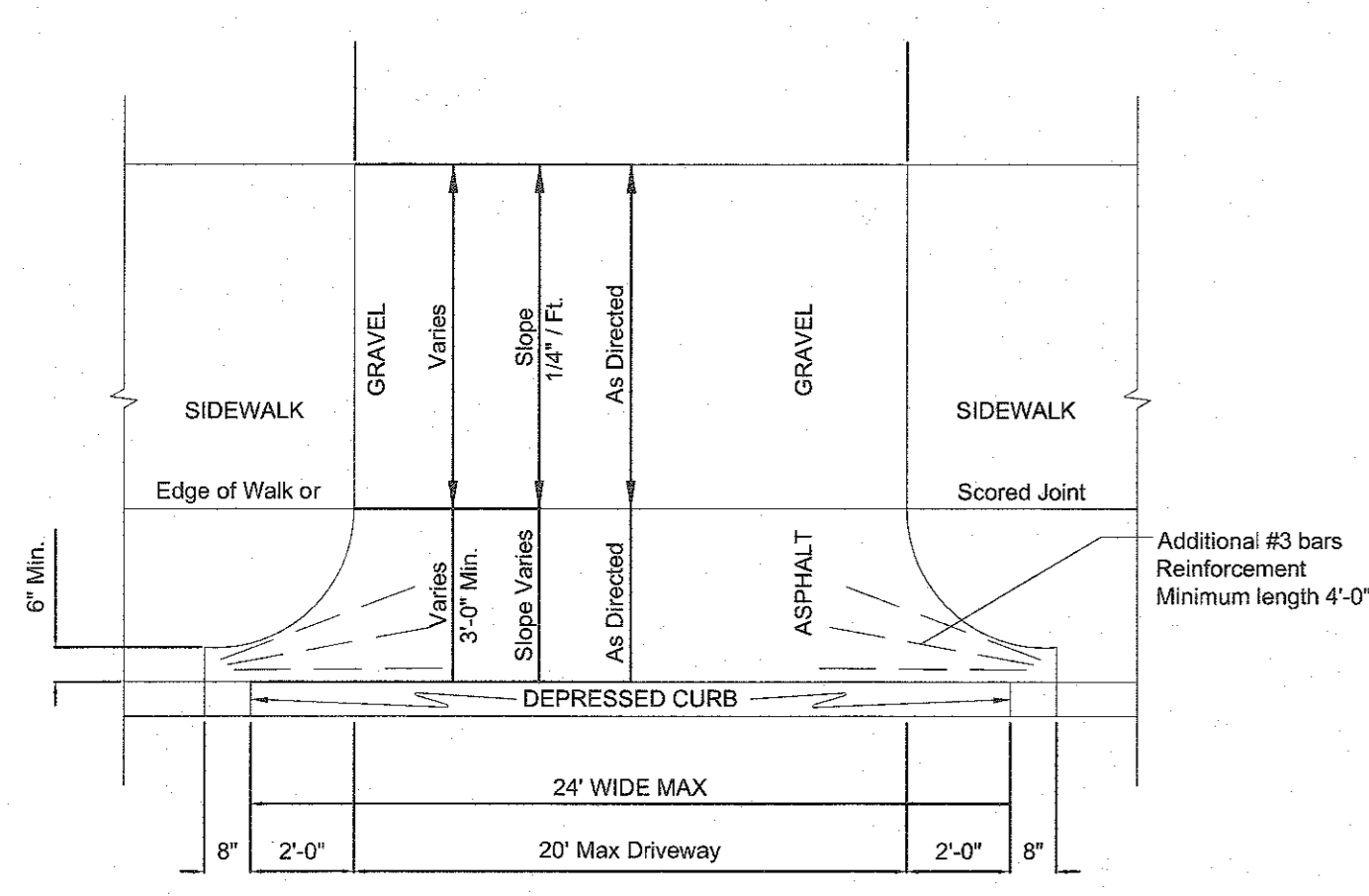
DATE: JANUARY 10, 2020

DRAWN BY: GC      CHECKED BY: ES.

SW-1

SHEET 2 of 5

- ADDITIONAL NOTES:**
- All retaining walls on the property are proposed.
  - Garbage will be kept in trash bins in the garage until the day prior to pick up and be brought to the end of the driveway in enclosed lockable bins the day prior to trash pick up.

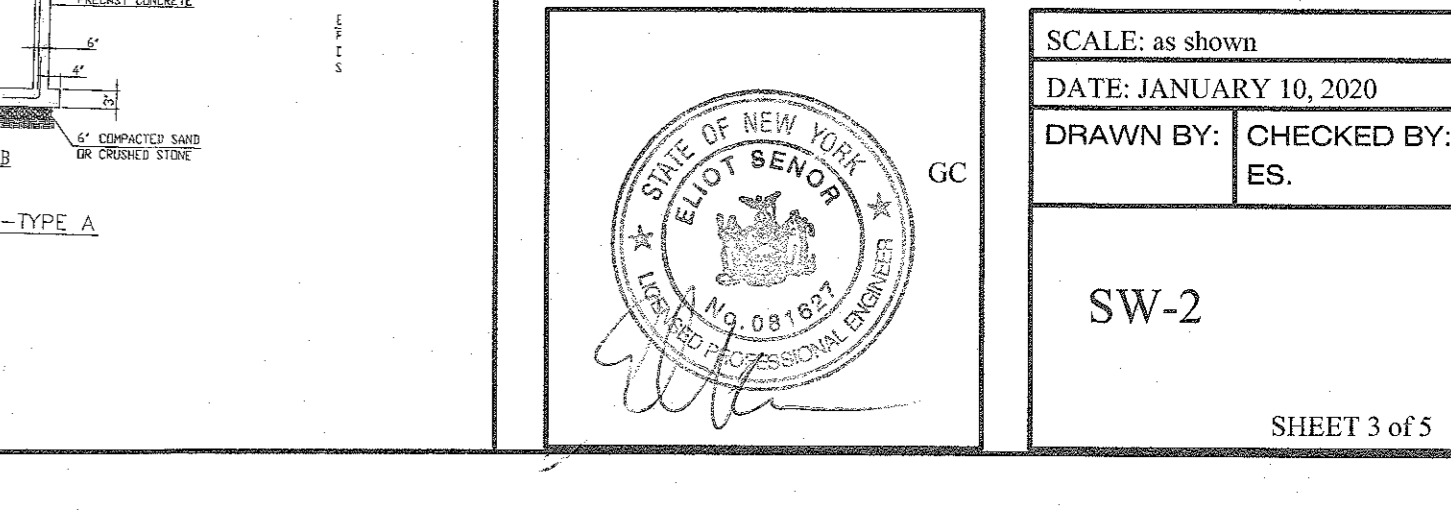
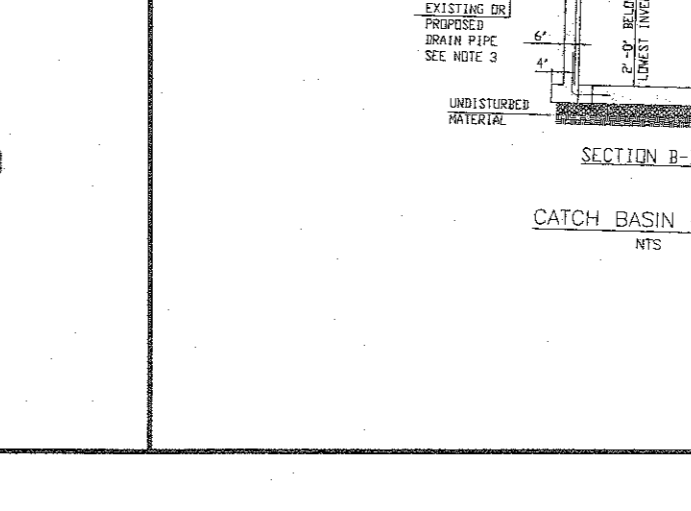
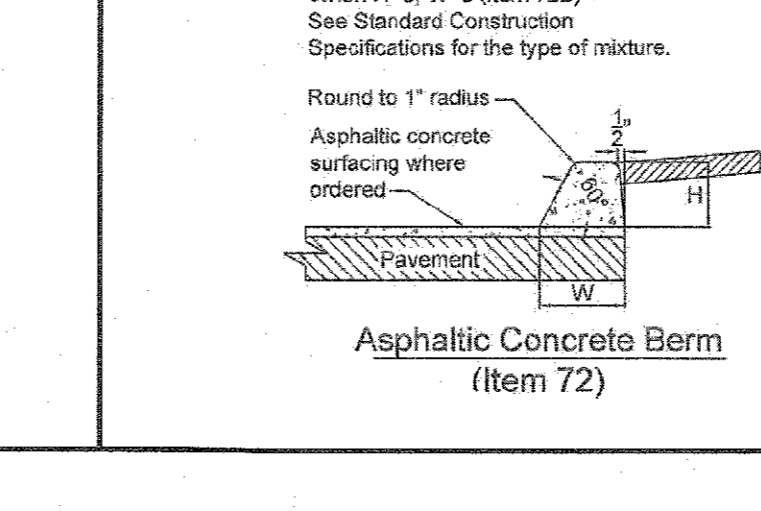
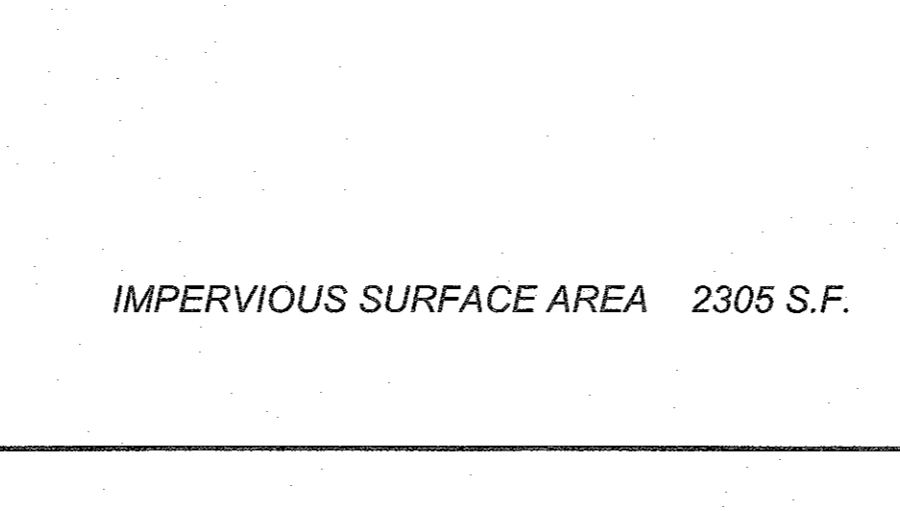
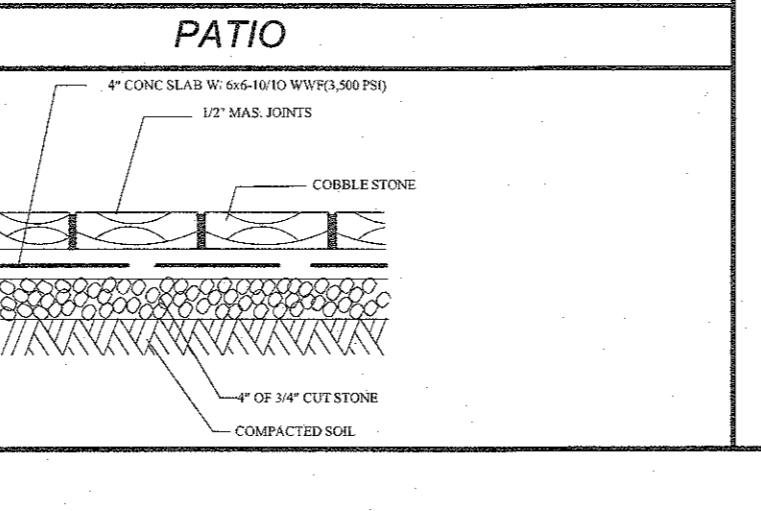
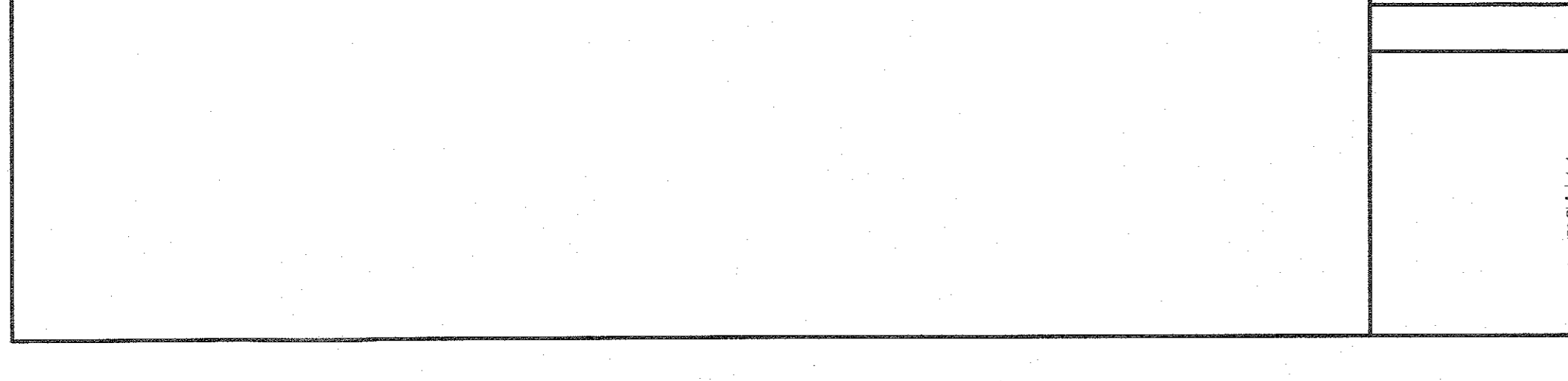
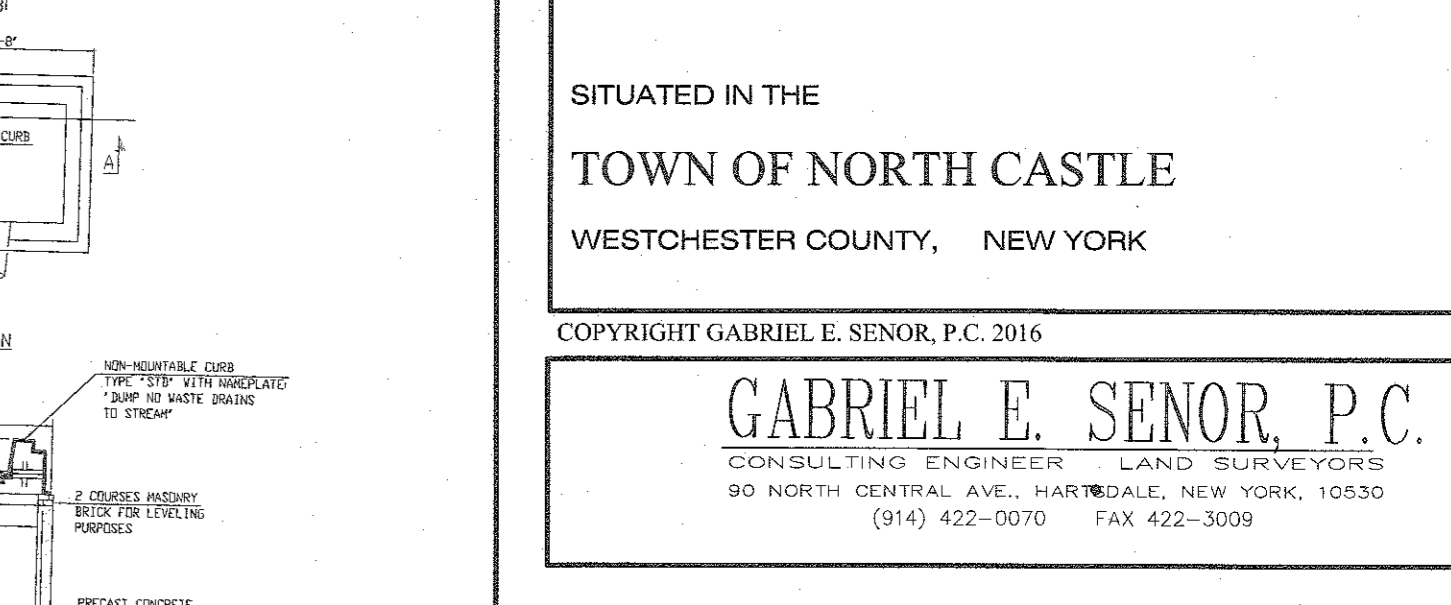
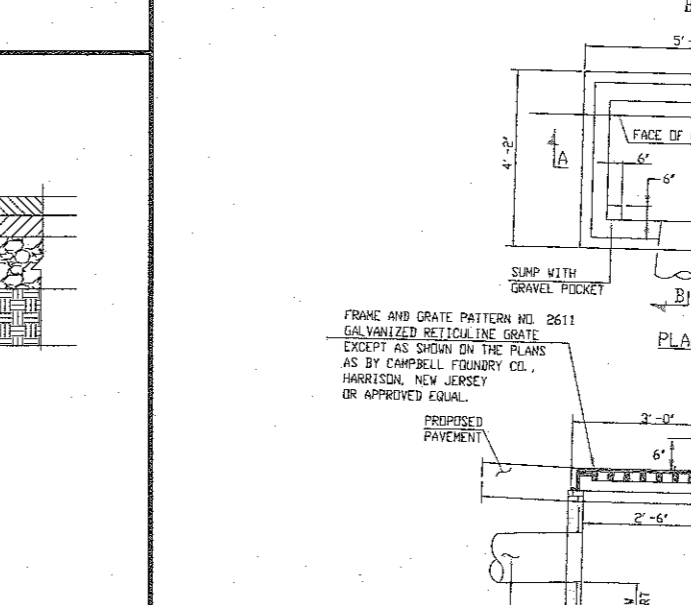
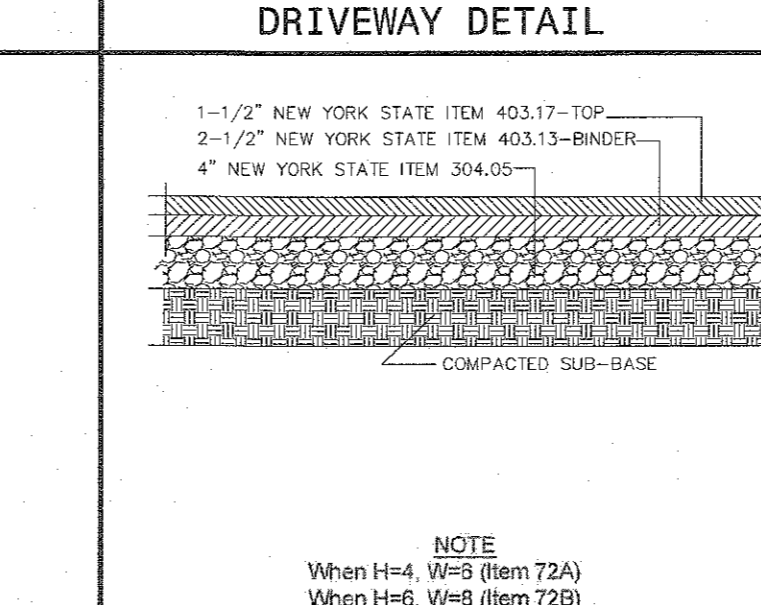
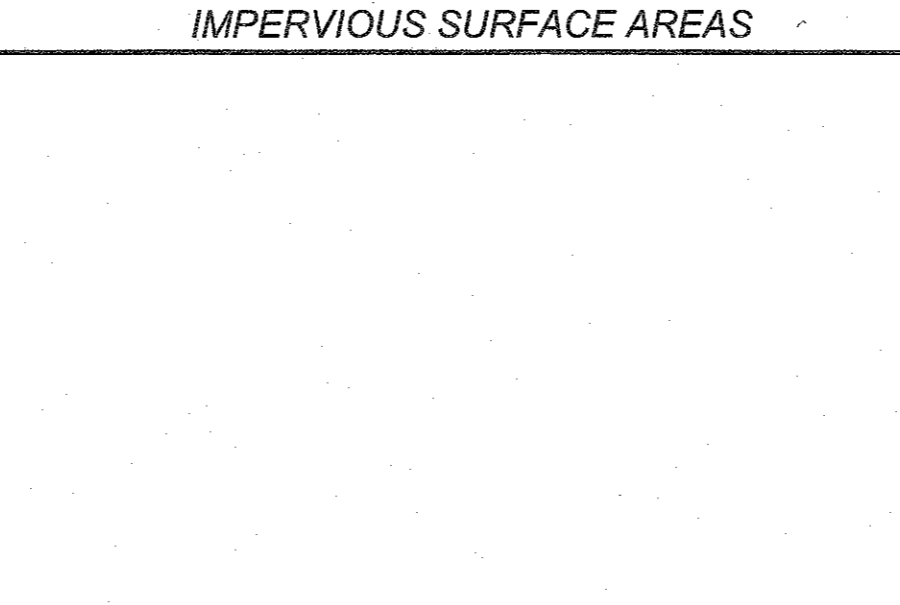
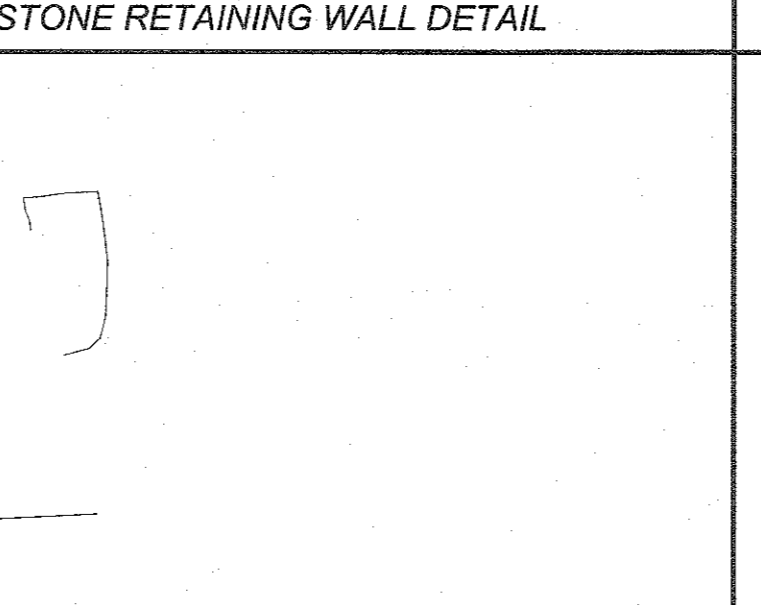
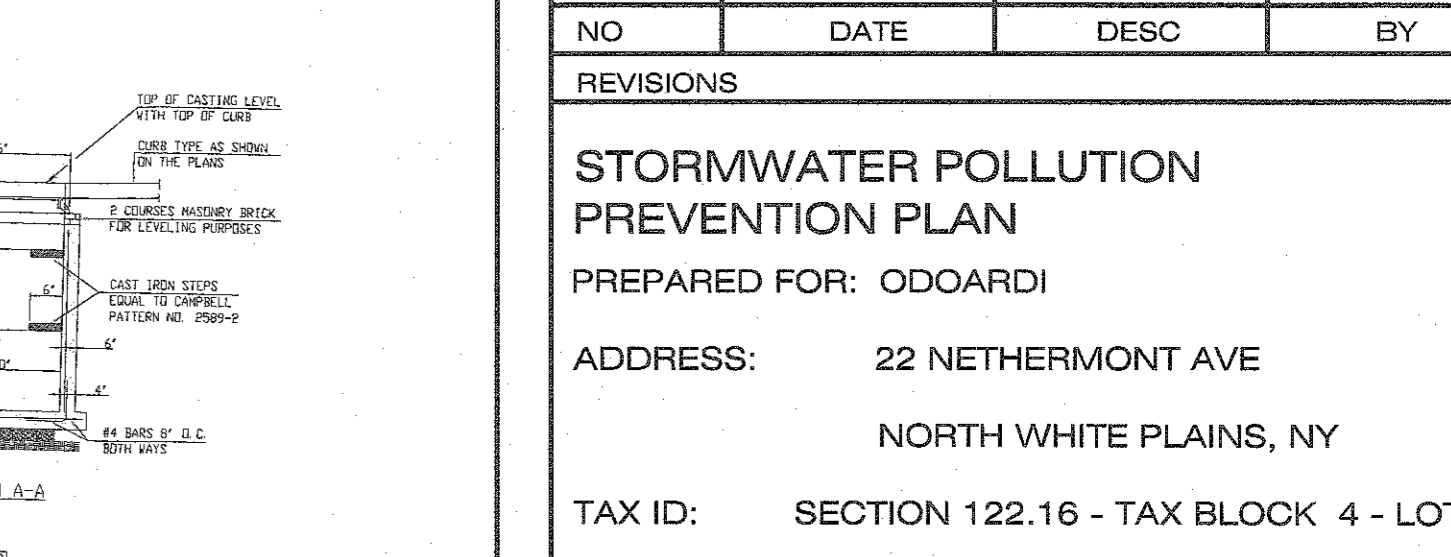
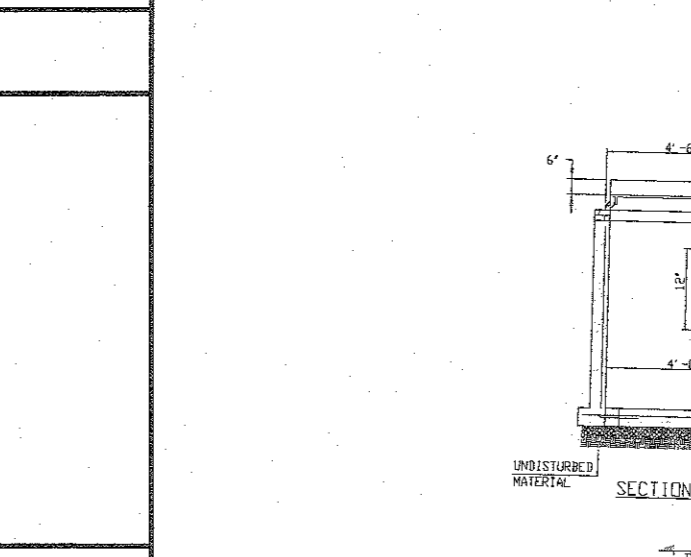
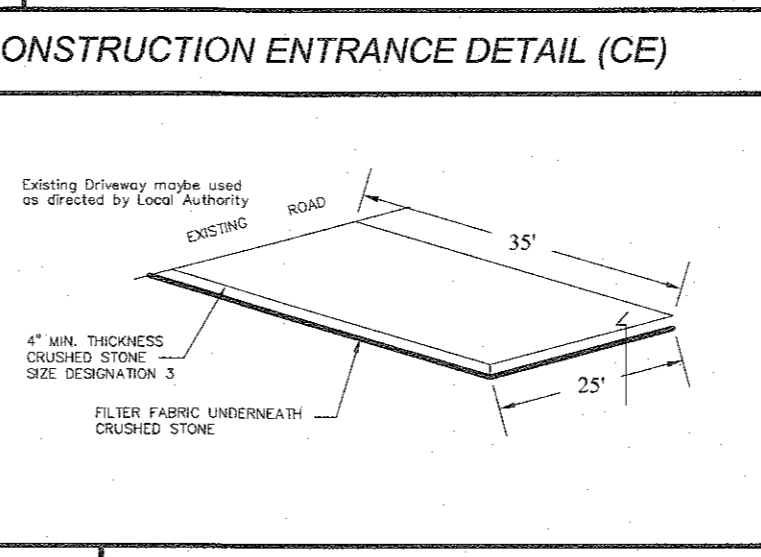
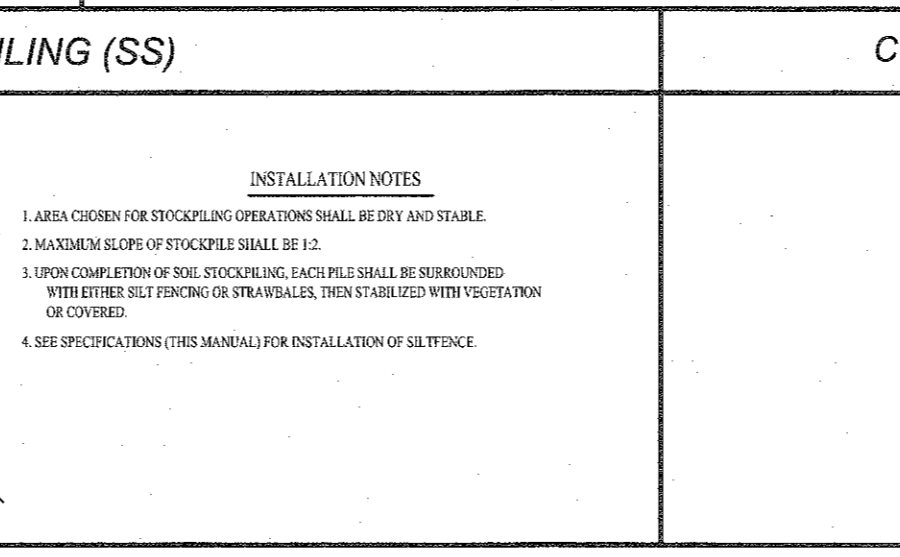
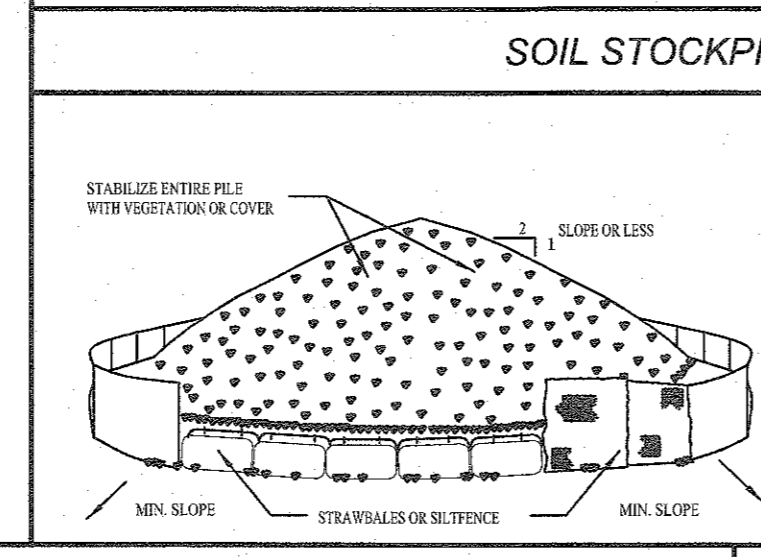
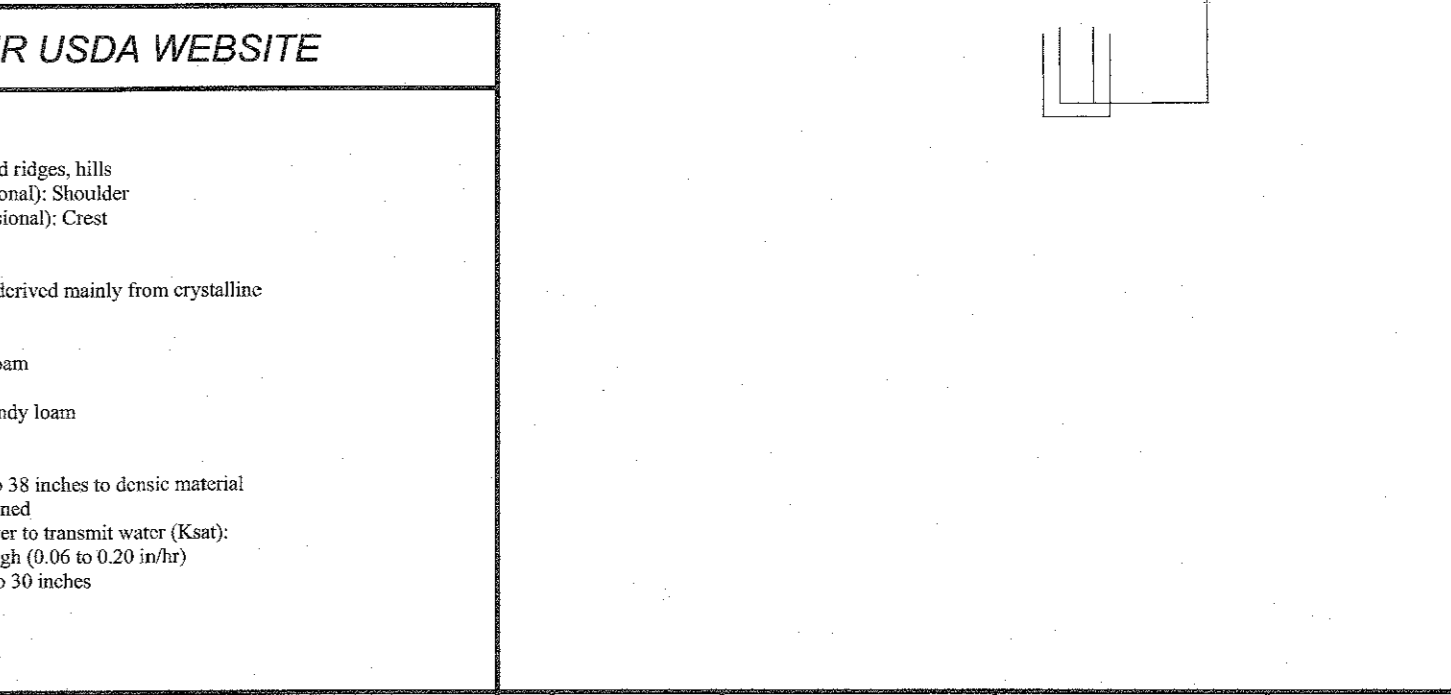
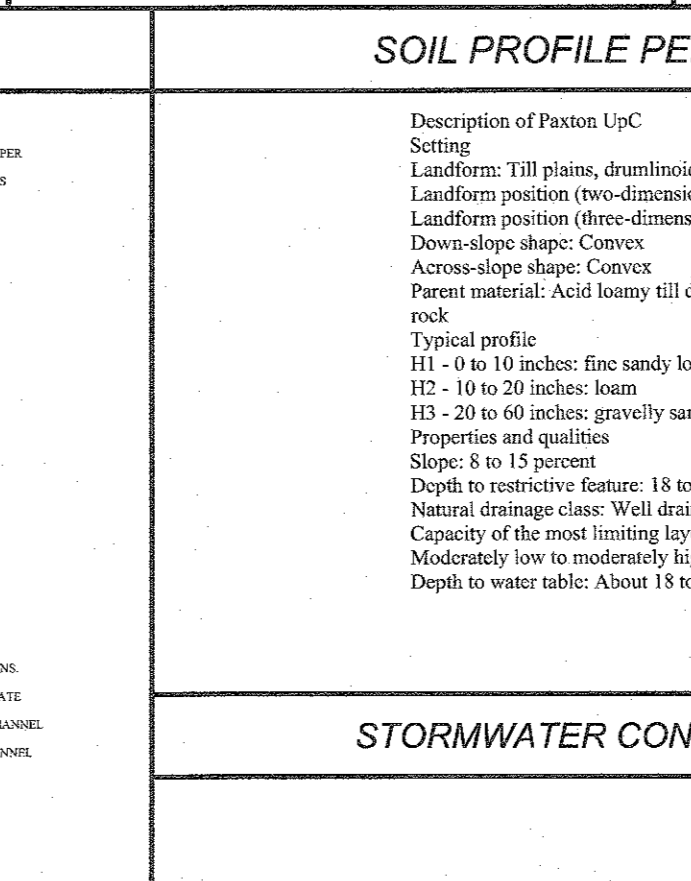
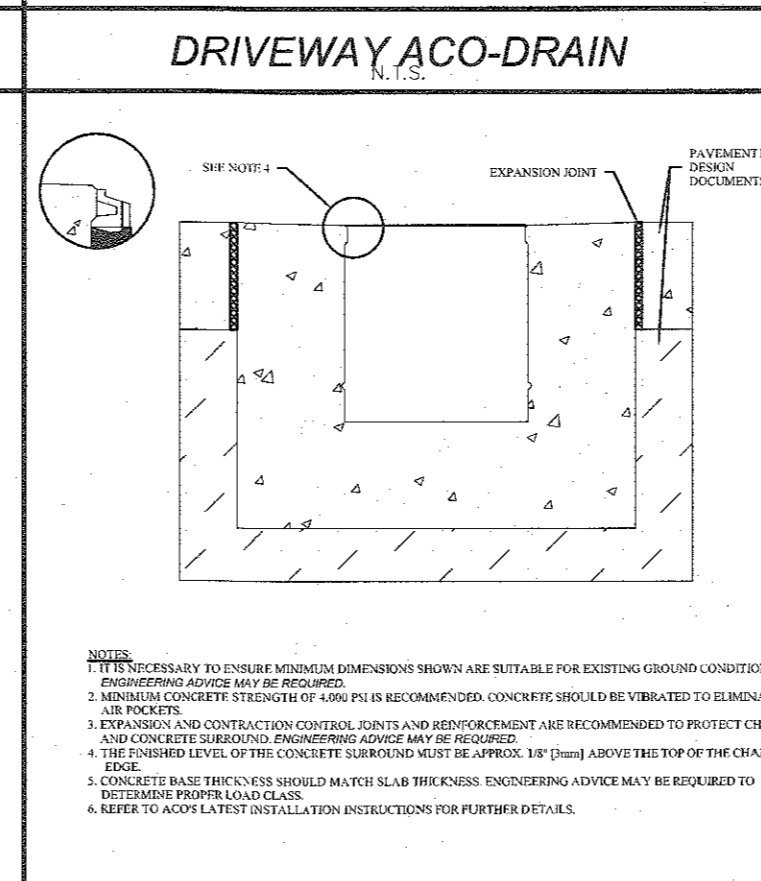
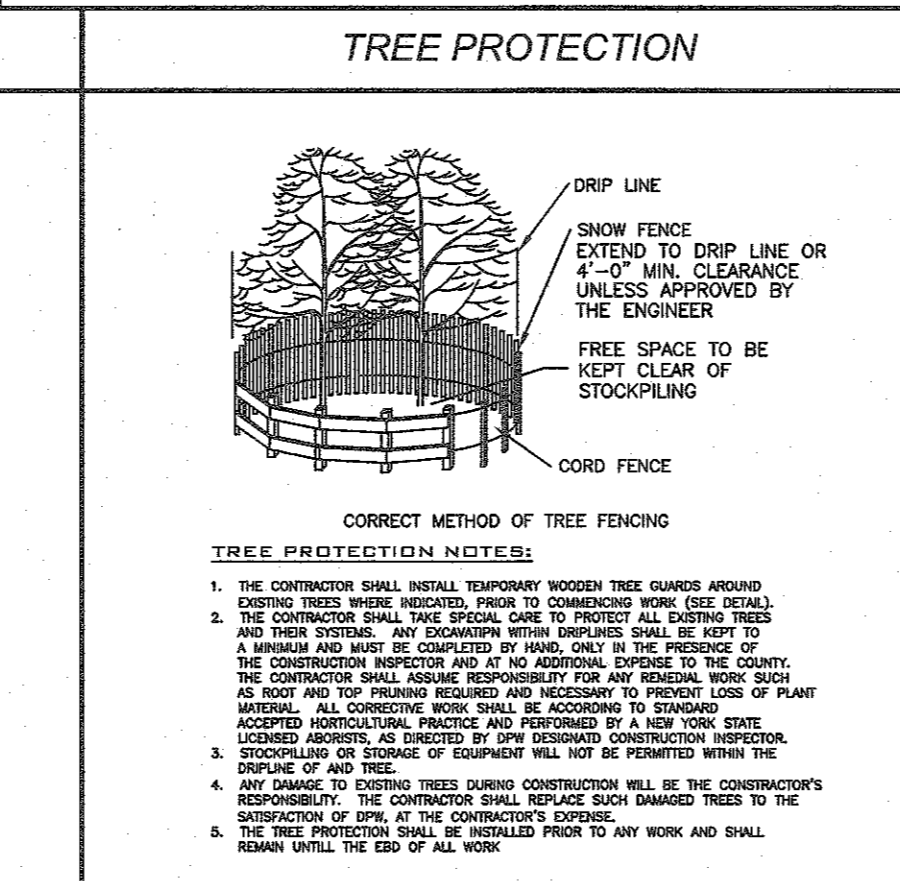
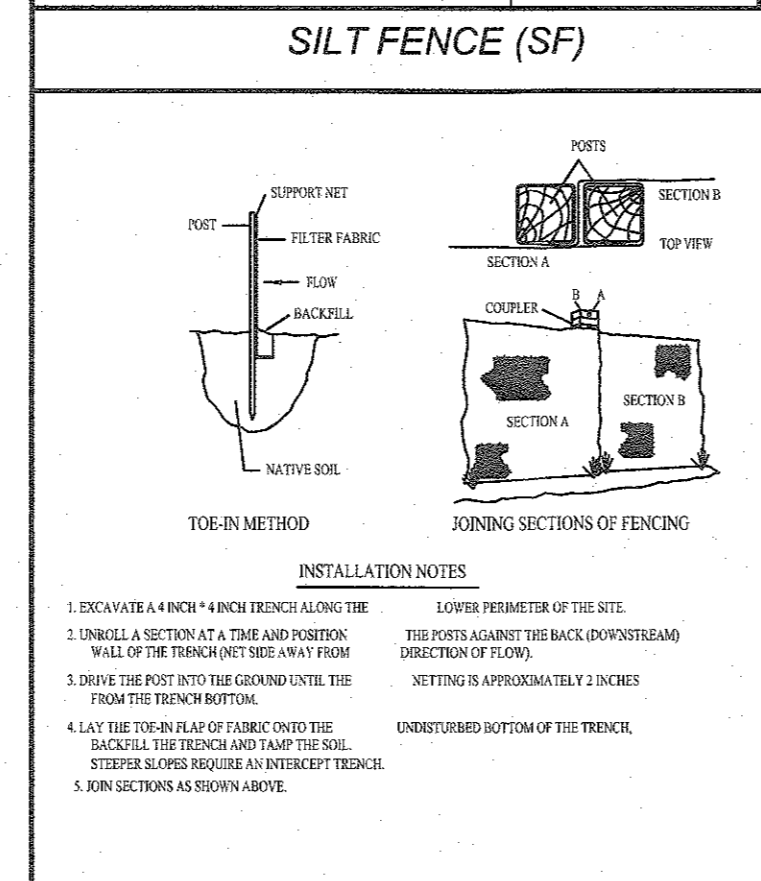
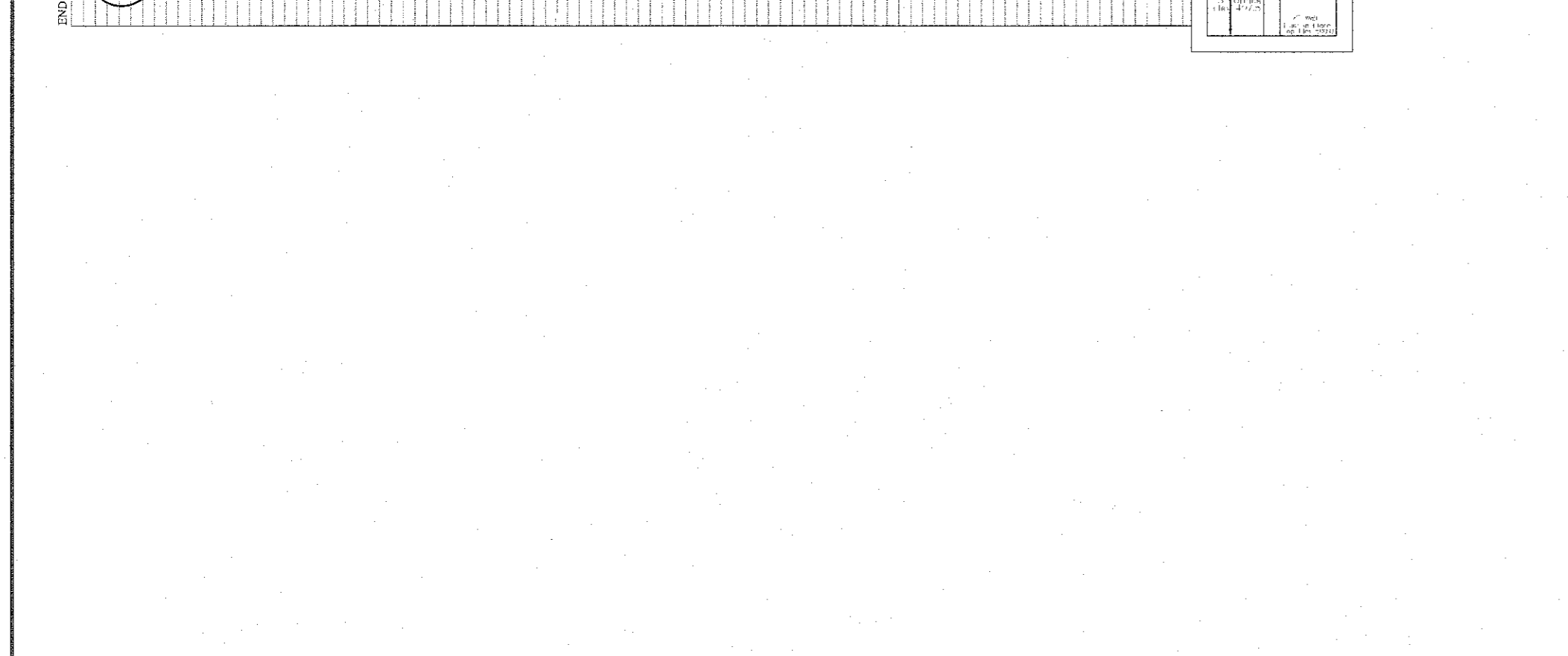
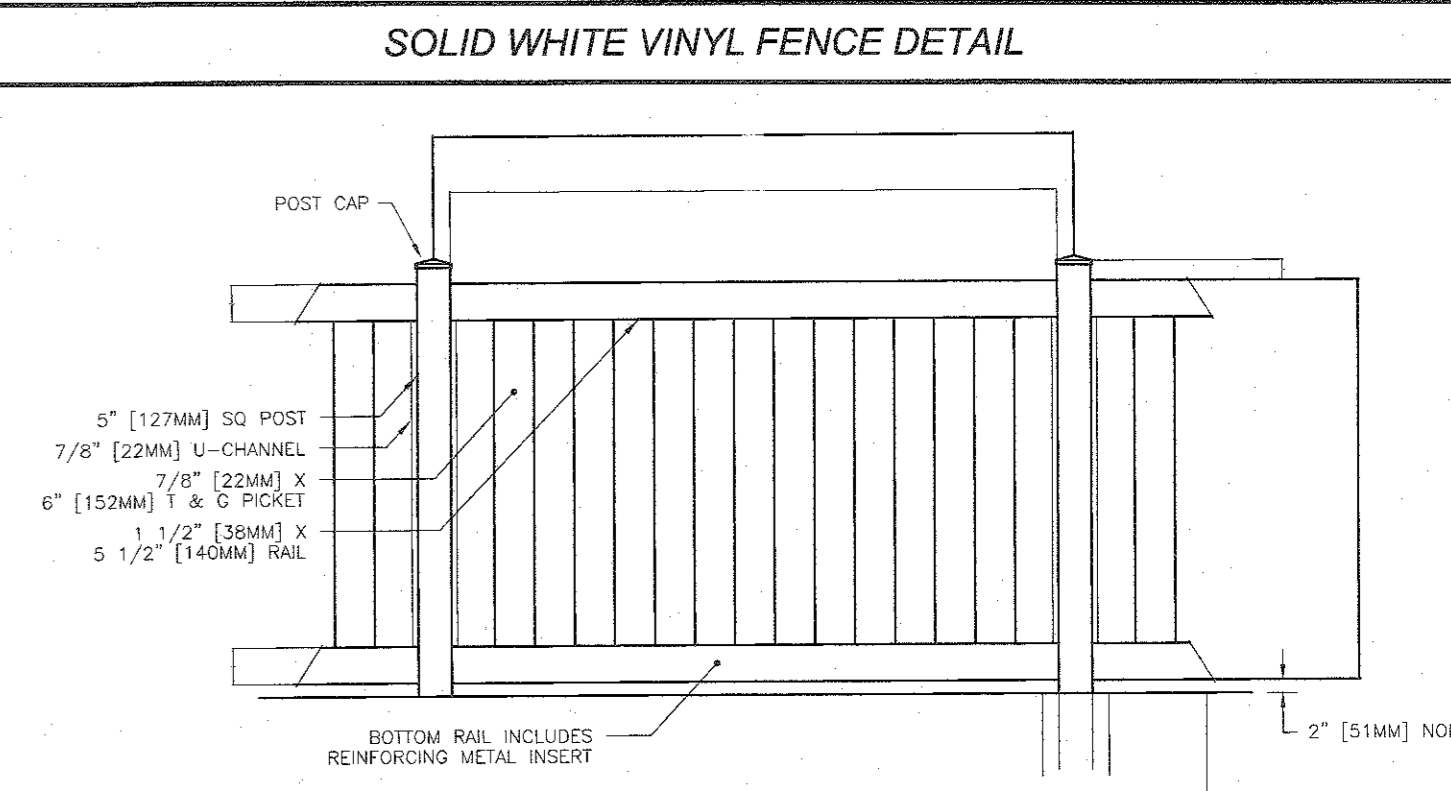
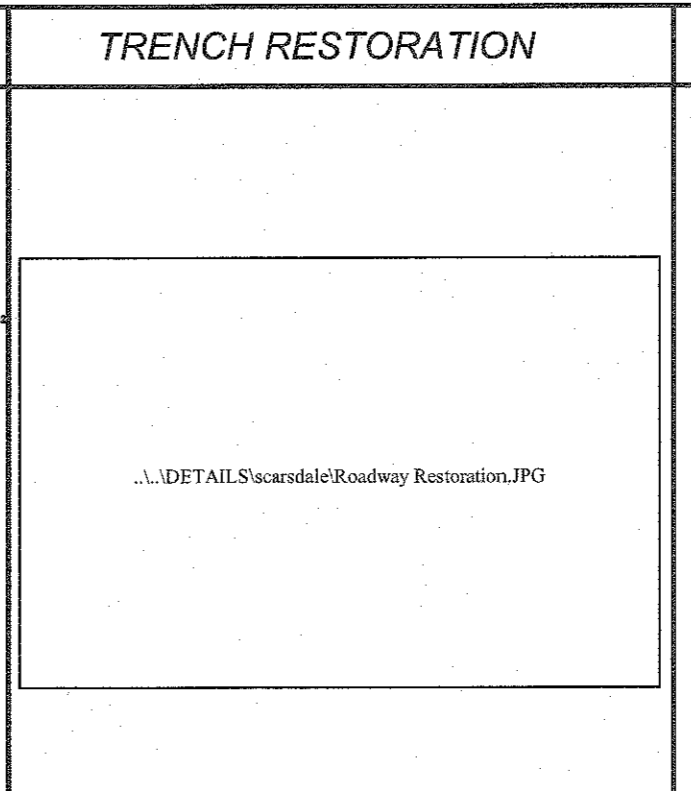
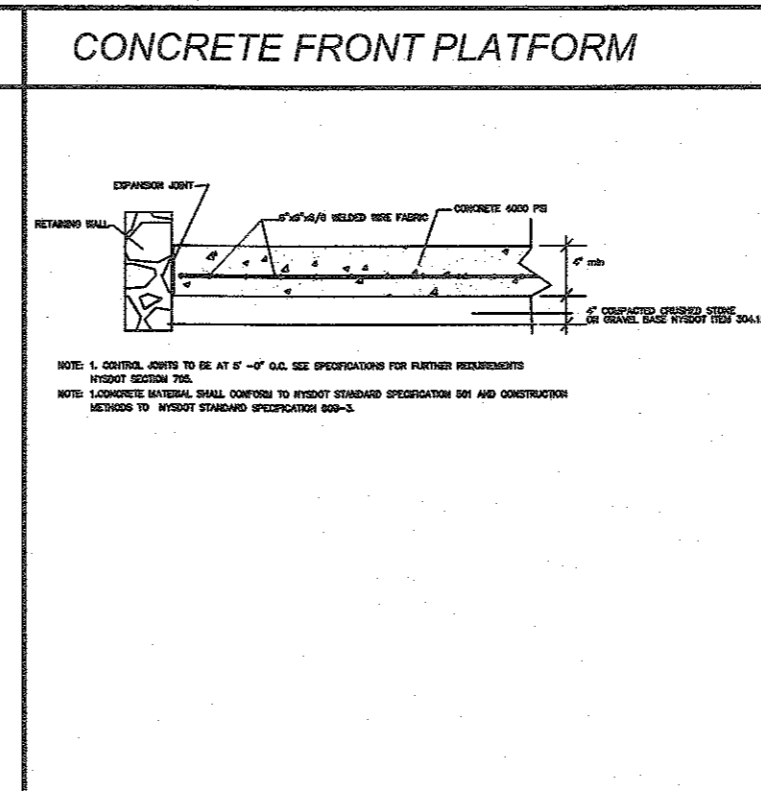
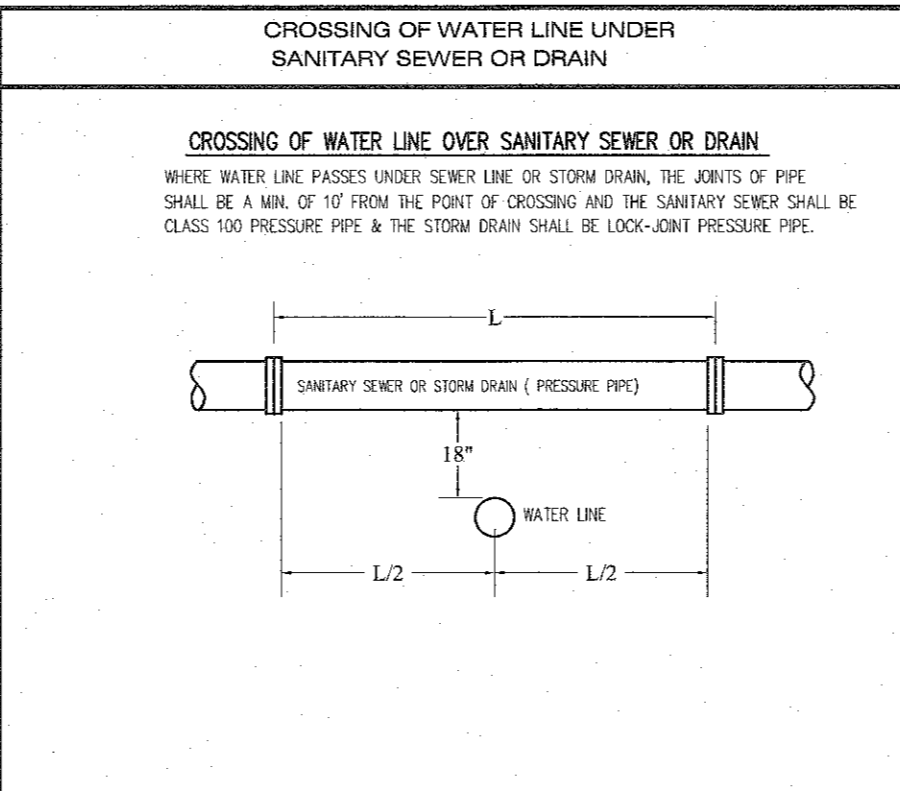
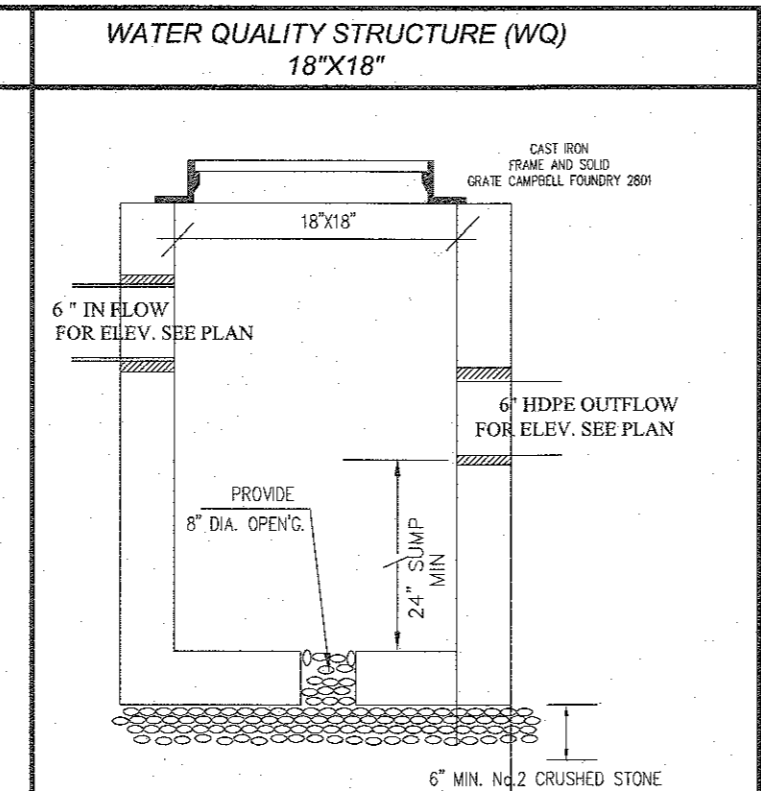
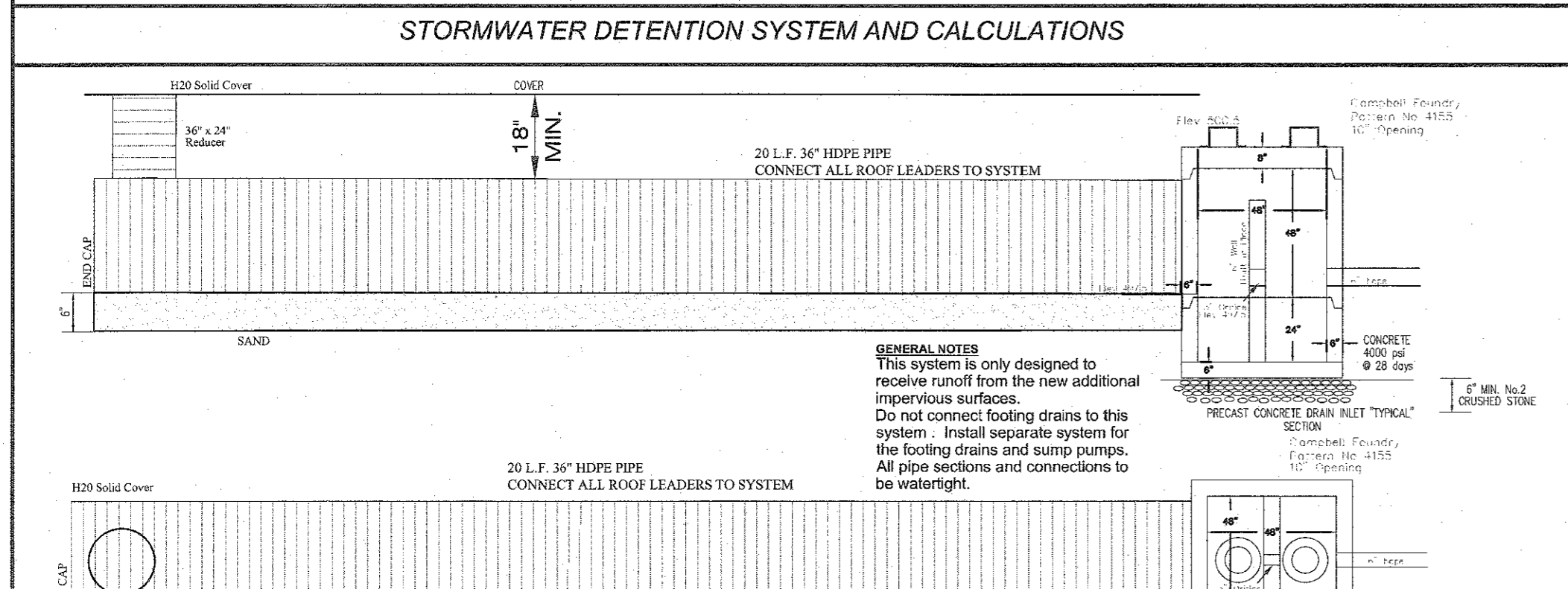


**GENERAL NOTES:**

- See Contract Documents for the type of trench backfill required.
- No direct payment to be made for Select Fill or Controlled Density Backfill Material. Cost to be included in the various items bid. (See Contract Documents).
- For HDPE pipe refer to "Trench Backfill", Page 3 of 3.

**NOTES:**

- Manholes shall be built over sanitary sewer and storm drain lines when the connection is eight (8) inches and the sanitary line to be connected is greater than five (5) inches or when the manhole is more than ten (10) inches and the sanitary line to be connected is greater than six (6) inches.
- The connection shall be made by a plumber licensed by the City of Public Plans and all work approved by the Bureau of Sewers.



NO	DATE	DESC	BY
2	04/11/2021	PB COMM	GC
1	03/10/2020	PB COMM	GC

**STORMWATER POLLUTION PREVENTION 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

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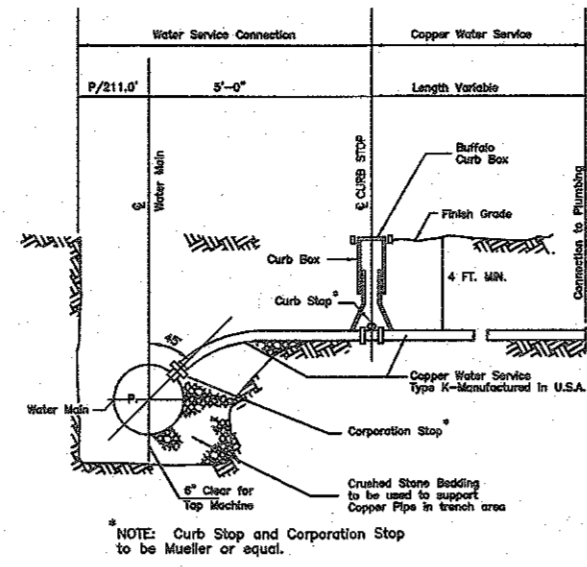
**GABRIEL E. SENOR, P.C.**  
CONSULTING ENGINEER AND SURVEYORS  
90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530  
(914) 422-0070 FAX 422-3009

SCALE: as shown  
DATE: JANUARY 10, 2020  
DRAWN BY: CHECKED BY: ES.  
SW-2  
SHEET 3 of 5

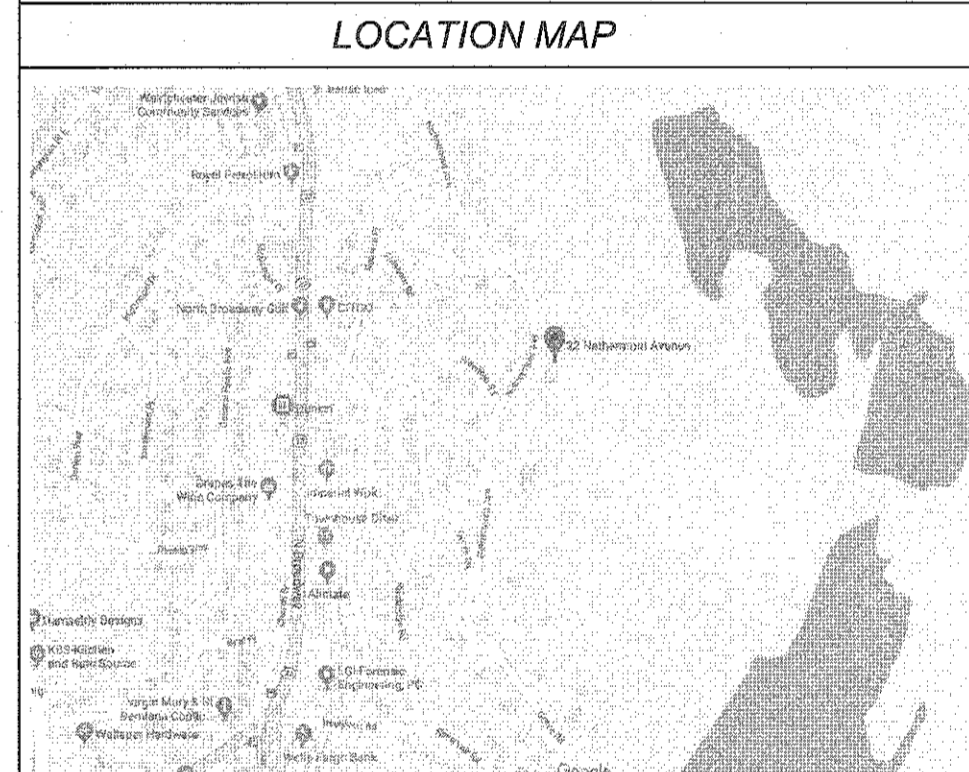
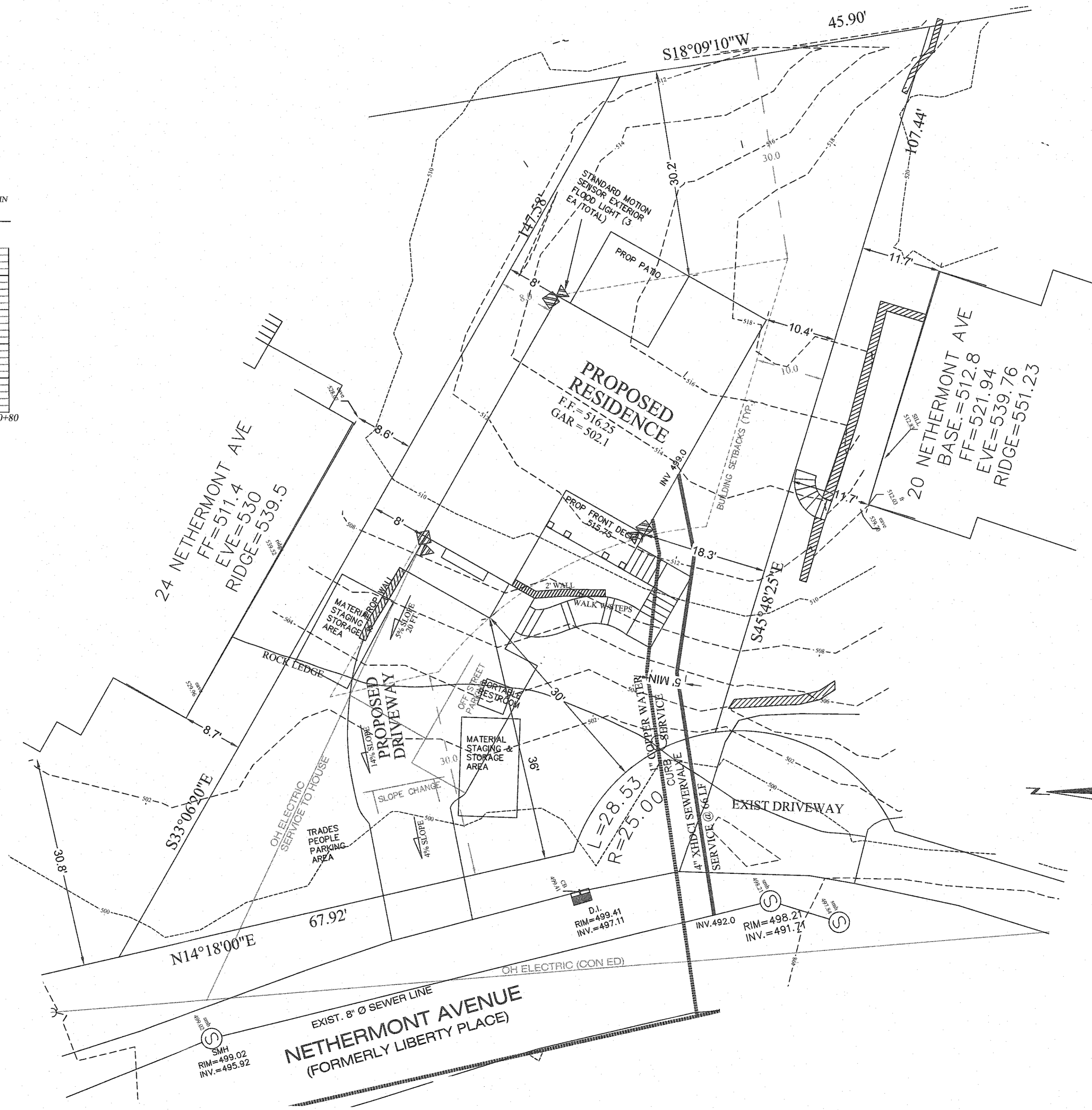
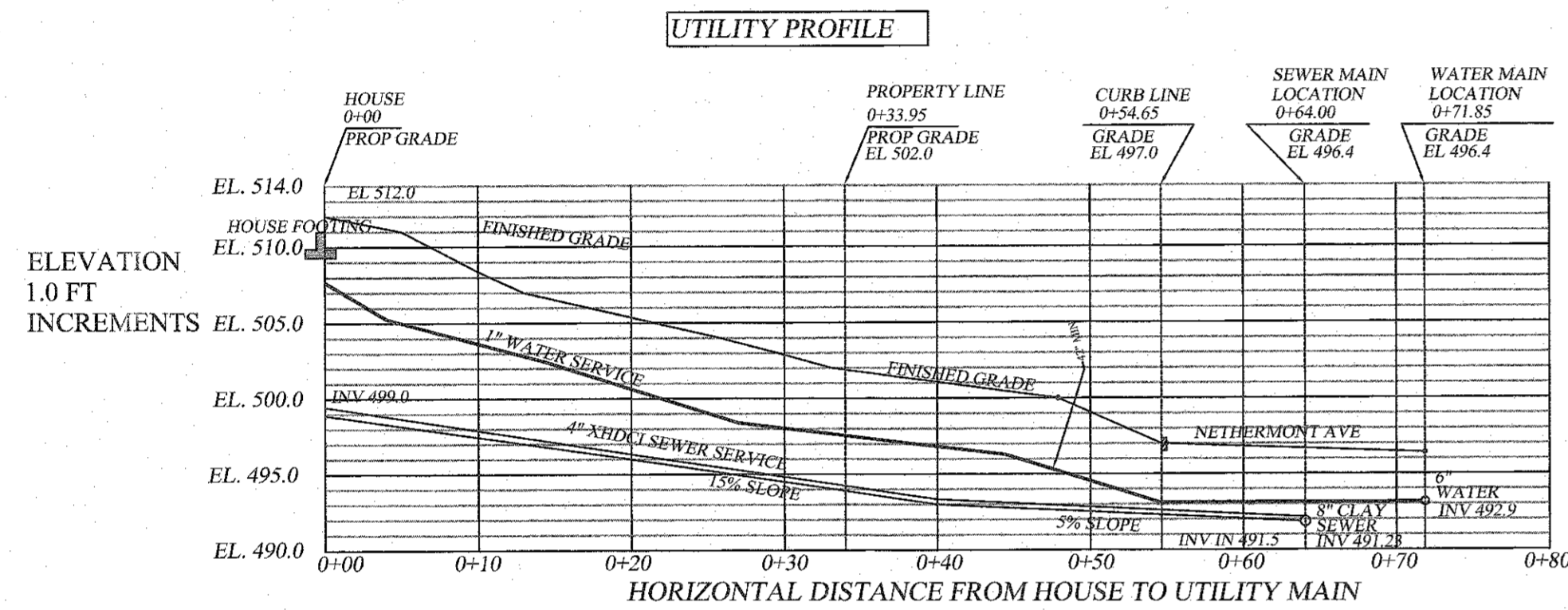
ZONING TABLE - 22 NETHERMONT AVE				
ZONE: SINGLE FAMILY RESIDENCE DISTRICT "R-5"				
TOTAL LOT AREA: 0.16 Acres (6,948 SF)				
DESCRIPTION	MIN/REQUIRED		PROPOSED	
MINIMUM LOT AREA	5000	SF	6,948	SF
75% WETLAND AREA	-		N/A	SF
50% STEEP SLOPE AREA	-		0	SF
NET LOT AREA	-		6,948	SF
MIN LOT FRONTAGE	50	FT	96.5	FT
MIN LOT WIDTH	50	FT	71.2 (AVG)	FT
MIN LOT DEPTH	100	FT	127.5 (AVG)	FT
FRONT YARD SETBACK	30	FT	30.0	FT
SIDE SETBACK	8	FT	8.0	FT
SECOND SIDE SETBACK	Total Both Sides - 18		18.4	FT
REAR YARD SETBACK	30	FT	30.2	FT
OFF-STREET PARKING	2	FT	2.0	FT
OFF-STREET LOADING	1	FT	1.0	FT
MAX BUILDING HEIGHT	34	FT	33.7	FT
MAX BUILDING COVERAGE	30	%	15.3	%

NOTES:  
- ALL DETAILS ARE ON STORMWATER POLLUTION PREVENTION PLAN SW-2.

WATER MAIN CONNECTION DETAIL



- LEGEND
- UTILITY POLE
  - SIGN POST
  - ⊗ HYDRANT
  - WATER VALVE
  - GAS VALVE
  - LIGHT POLE
  - GUY WIRES
  - ⊕ TELE. MANHOLE
  - ⊙ SEWER MANHOLE
  - ⊙ WATER MANHOLE
  - ⊙ ELECTRIC MANHOLE
  - ⊙ DRAIN MANHOLE
  - ⊙ MANHOLE
  - ⊗ ELECTRIC BOX
  - 102 ---  
EXISTING GRADE (102)
  - ---  
PROPOSED GRADE
  - ⊗ 14 TREE  
SIZE
  - ⊗ TREE TO BE REMOVED
  - III III III  
SILT FENCE  
or HAYBALES AS REQ'D









NO	DATE	REVISIONS	GC	BY
5	04/19/2021	REVISIONS	GC	

**MATERIAL STAGING, ZONING, UTILITY PLAN**  
 PREPARED FOR: ODOARD!  
 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

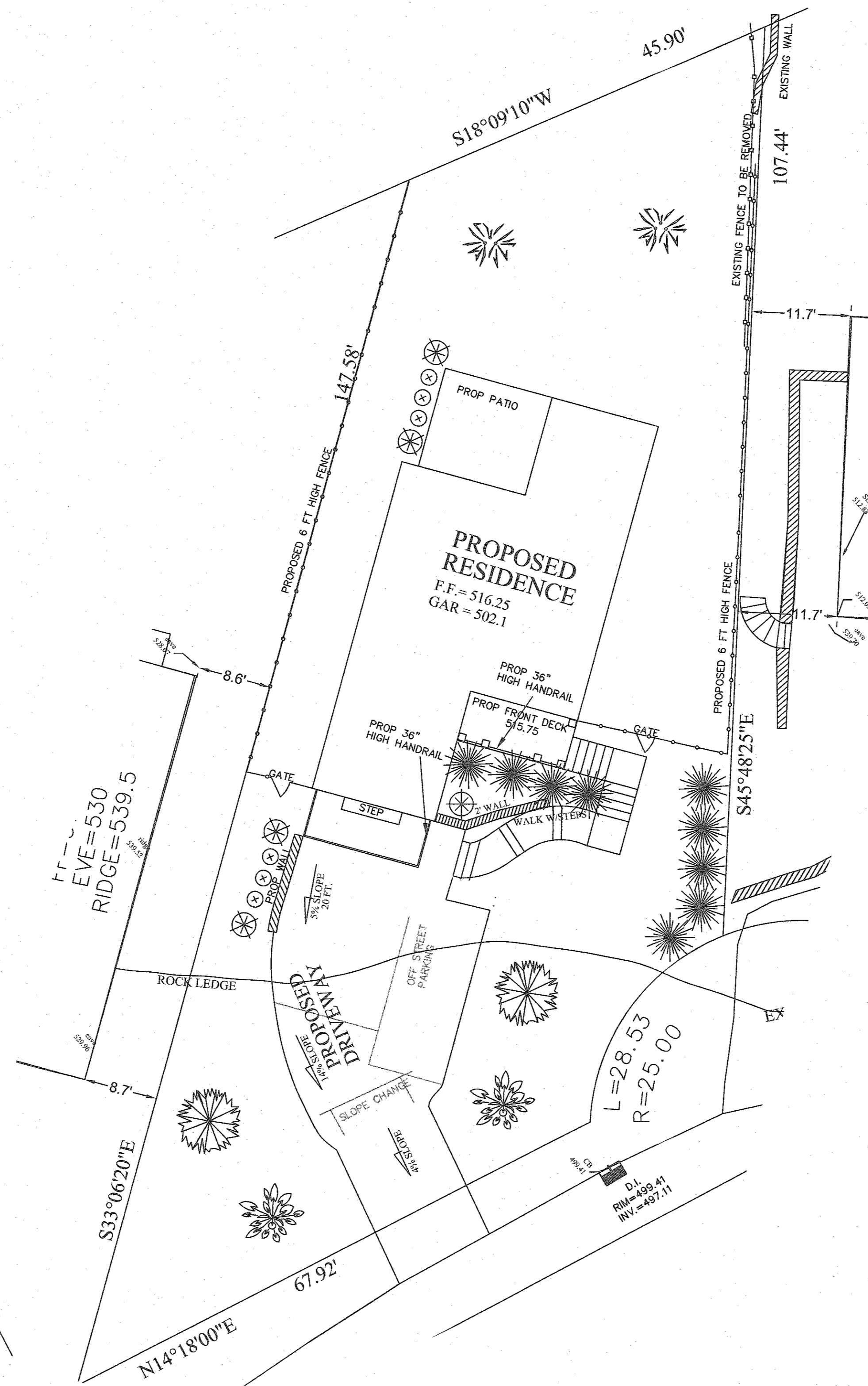
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**GABRIEL E. SENOR, P.C.**  
 CONSULTING ENGINEER LAND SURVEYORS  
 90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530  
 • (914) 422-0070 FAX 422-3009

SCALE: 1" = 10'  
 DATE: APRIL 11, 2021  
 DRAWN BY: GC  
 CHECKED BY: ES.  
 ZU-1

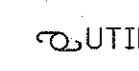
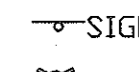
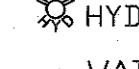
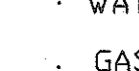
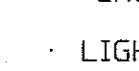


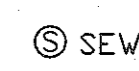


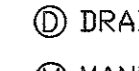

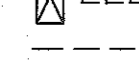
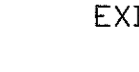
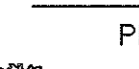
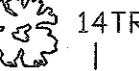

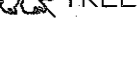
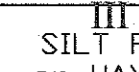


-  Eastern Red Cedar  
(Juniperus Virginiana)
-  GIANT ARBORVITAE  
(Thuja Plicata)
-  Eastern Red Bud  
(Cercis Canadensis)
-  CHINEESE HOLLY  
(Ilex crenata convexa)
-  INKBERRY "Shamrock"  
(Ilex glabra "Compacta")
-  COMMON FLOWERING DOGWOOD  
(Cornus florida)

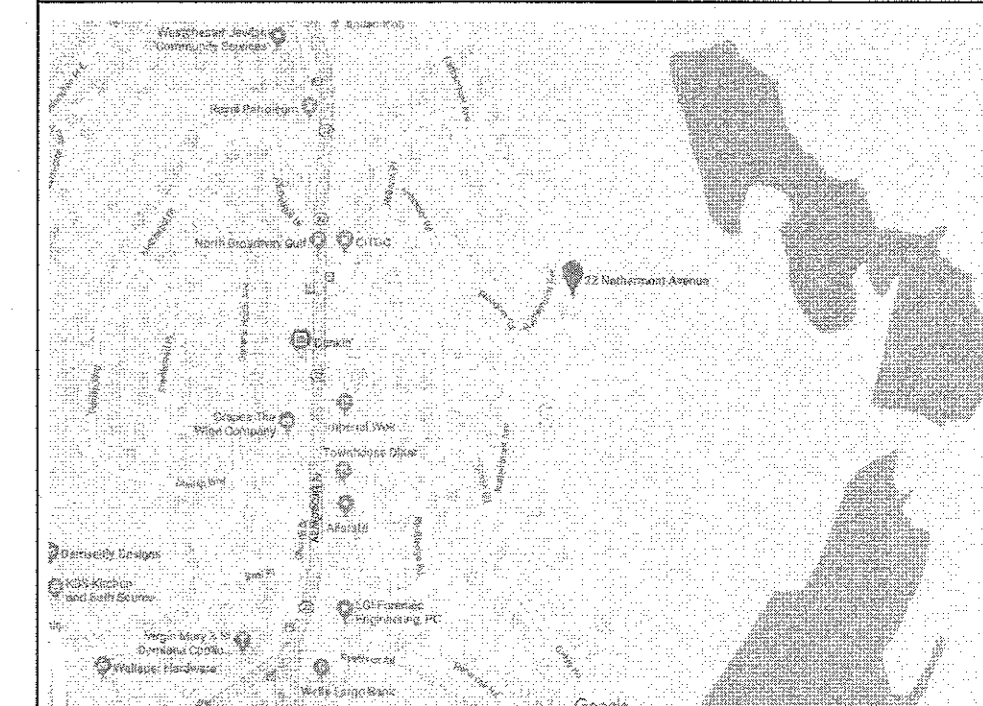
TREES TO BE PLANTED		
TYPE/NAME	SIZE	COUNT
EASTERN RED CEDAR	2" - 3" CAL	2
GIANT ARBORVITA	6' - 7' HEIGHT	9
EASTERN REDBUD	2" - 3" CAL	2
CHINEESE HOLLY	3.5' - 4' HEIGHT	5
INKBERRY "Shamrock"	2' - 2.5' HEIGHT	6
FLOWERING DOGWOOD	2.5" - 3" cal.	2



LEGEND

-  UTILITY POLE
-  SIGN POST
-  HYDRANT
-  WATER VALVE
-  GAS VALVE
-  LIGHT POLE
-  GUY WIRES
-  TELE. MANHOLE
-  SEWER MANHOLE
-  WATER MANHOLE
-  ELECTRIC MANHOLE
-  DRAIN MANHOLE
-  MANHOLE
-  ELECTRIC BOX
-  EXISTING GRADE  
(102)
-  PROPOSED GRADE
-  TREE SIZE
-  TREE TO BE REMOVED
-  SILT FENCE  
or HAYBALES AS REQ'D

LOCATION MAP



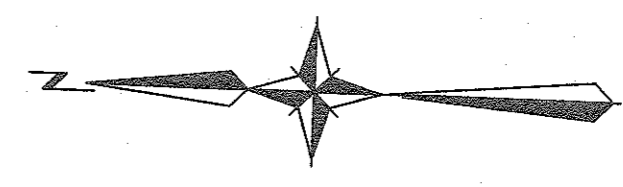
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1	03/10/2020	PB COMM	GC

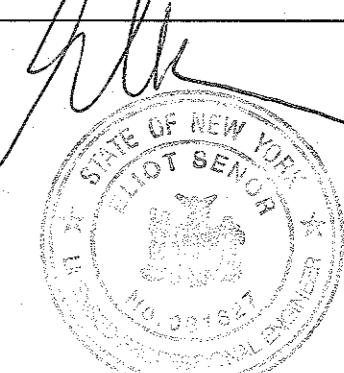
REVISIONS

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

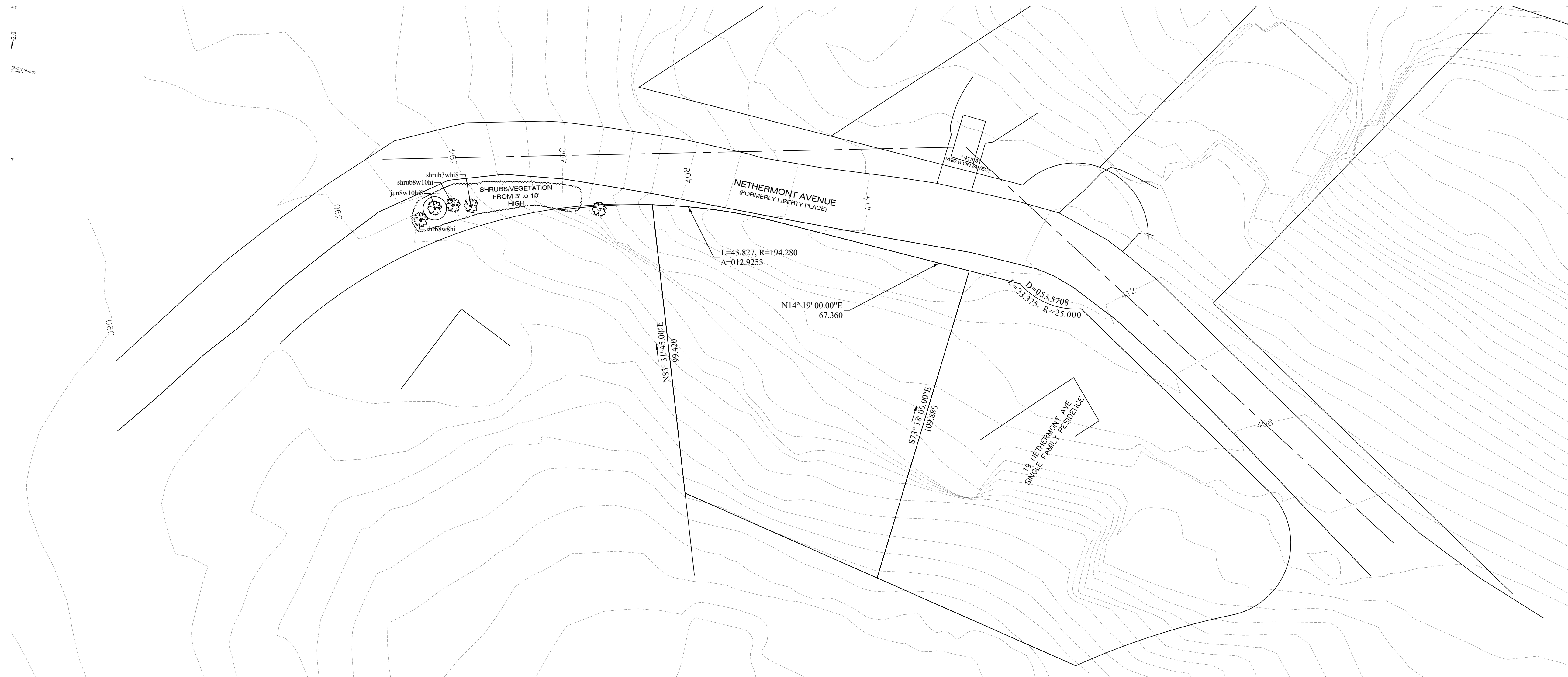
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**GABRIEL E. SENOR, P.C.**  
 CONSULTING ENGINEER - LAND SURVEYORS  
 90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530  
 • (914) 422-0070 FAX 422-3009



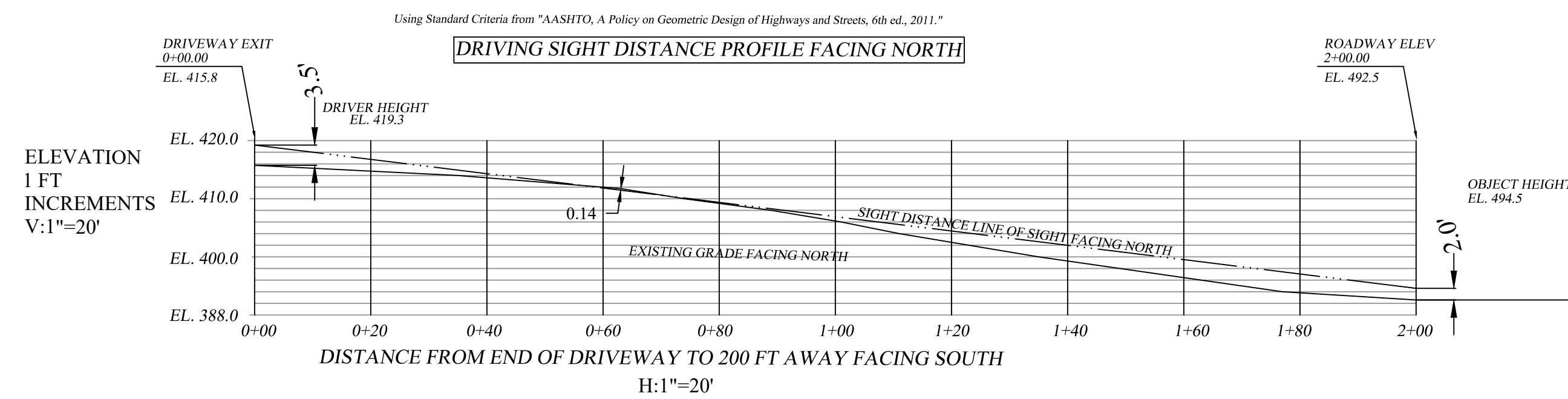
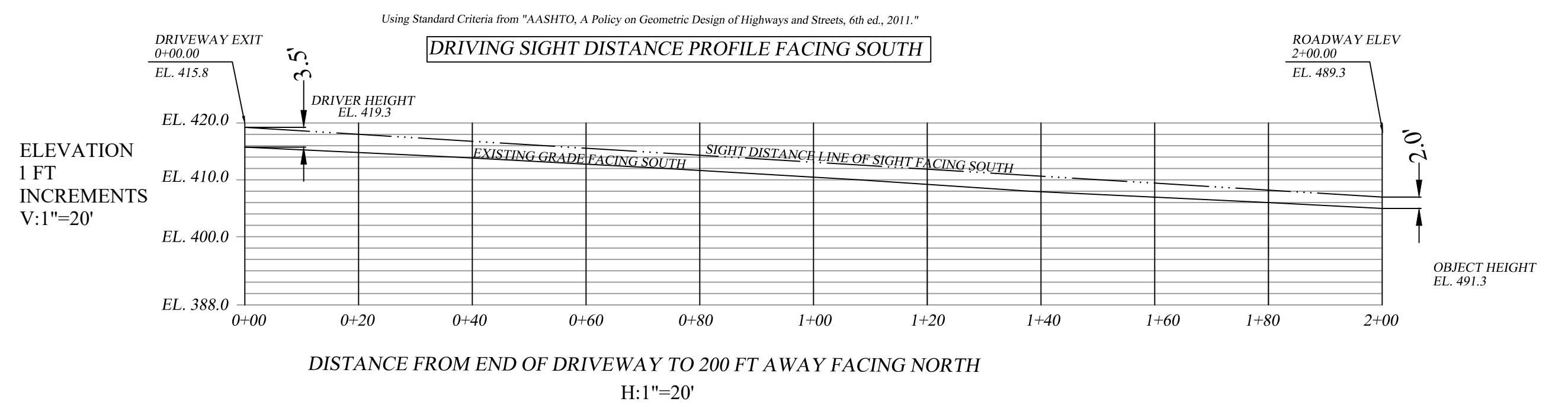


SCALE: 1" = 10'  
 DATE: JANUARY 10, 2020  
 DRAWN BY: CHECKED BY:  
 ES.

LS-1



TOPOGRAPHIC DATA USED IN THE SIGHT DISTANCE ANALYSIS WAS TAKEN FROM WESTCHESTER COUNTY GIS



NO	DATE	DESC	BY
REVISIONS			

**SIGHT DISTANCE ANALYSIS**

PREPARED FOR: ODOARDI  
 ADDRESS: 22 NETHERMONT AVE  
 NORTH CASTLE, NY (WHITE PLAINS P.O.)  
 TAX ID: SECTION 122.16 - TAX BLOCK 4

SITUATED IN THE  
**TOWN OF NORTH CASTLE**  
 WESTCHESTER COUNTY, NEW YORK

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

SCALE: 1"=20'

DATE: APRIL 11, 2021


DRAWN BY: GC  
 CHECKED BY: ES.

SD-1


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:

1. 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.
2. ENERGY COMPLIANCE IS SHOWN THROUGH THE USE OF RESCHECK SOFTWARE AND IS IN COMPLIANCE WITH CHAPTER 11 OR THE CODE.
3. 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.
4. 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.
5. THERE ARE NO LOT LINE SEPARATION REQUIREMENTS FOR THIS DWELLING AS LOCATED ON THIS LOT.

NOTES:

1. ALL ITEMS NOTED AS "B/P" REFER TO THE BUILDER AND/OR PURCHASER OF THE HOME.
2. 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.
3. 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)
4. 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

**ANTHONY S. PISARRI, P.E.**  
DESIGN PROFESSIONAL  
3 ROSALIND DRIVE  
CORTLANDT MANOR, NY 10567  
(914) 739-6580

**P.F.S. CORPORATION**  
3RD PARTY INSPECTION AGENCY  
1115 OLD BERWICK ROAD  
BLOOMSBURG, PA 17815  
(570) 784-8396

SEE STANDARD NOTES & DETAILS DWG #8

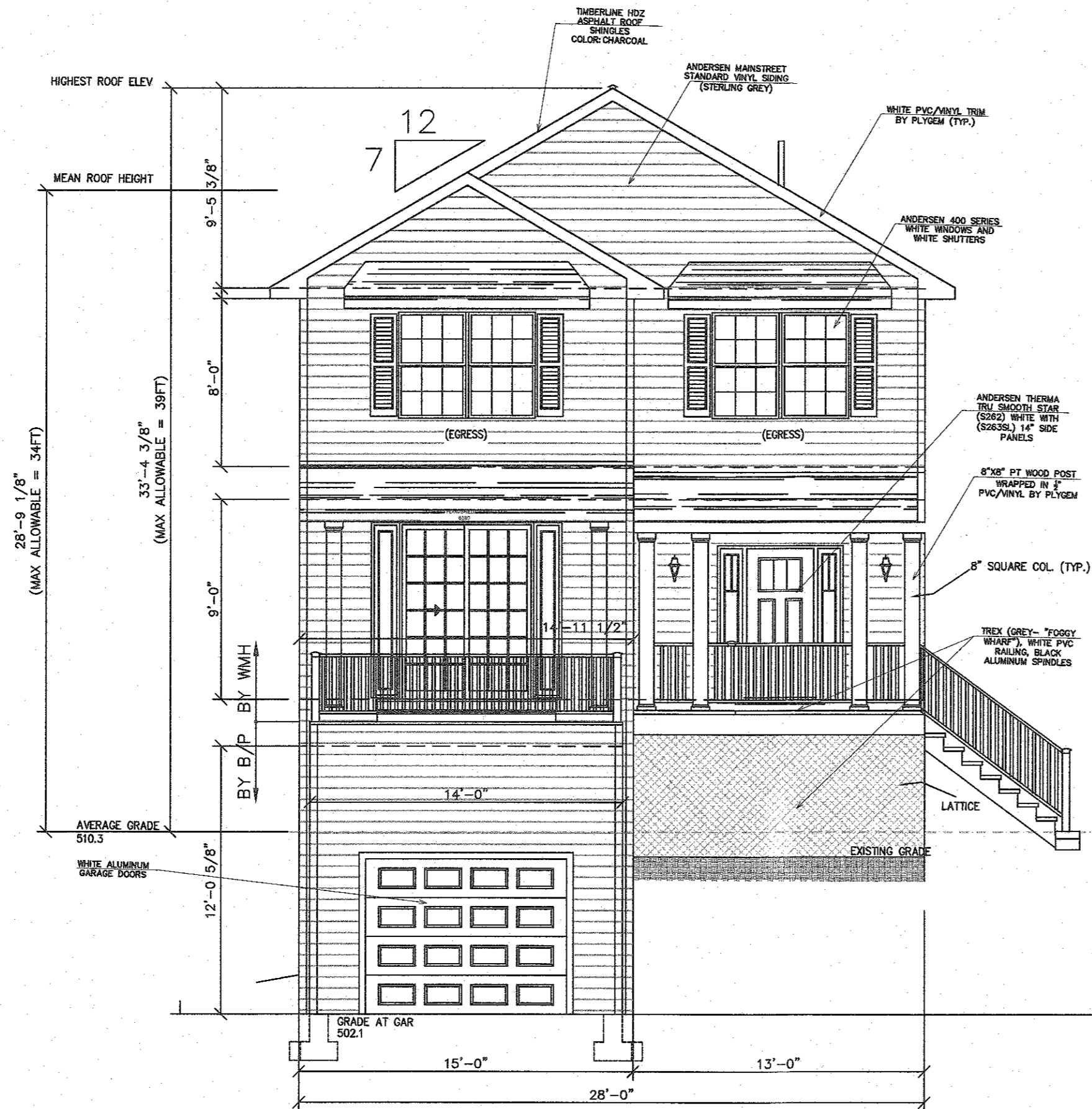
<b>SERIAL No.</b> 19022	<b>PRODUCTION No.</b>	<b>REVISION</b>	<b>DATE</b>	<b>DATE</b>	<b>DATE</b>
		RS	06/18/2019		
		RS	06/25/2019		
		CHECK			
		STD REVISION			08/08/18

<b>BUILDER:</b> WMHCC 1995 ROUTE 22 BREWSTER, NY 10509	<b>HOMEOWNER:</b> DINO & BRUNO OBOARDI <b>SITE:</b> 21 NETHERMOUNT AVE NORTH CASTLE, NY 10603	<b>NEW YORK 2 STORY COVER SHEET</b>	<b>Westchester Modular Homes Inc</b> 30 Reagans Mill Road, Wingdale, New York, 12594 Tel (845)832-9400 Fax (845)832-6698
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<b>USE GROUP:</b> DETACHED SINGLE FAMILY DWELLING	<b>CONST. TYPE:</b> WOOD FRAME UNPROTECTED	<b>DESIGNER:</b> RS	<b>DATE:</b> 02/05/2019	<b>SCALE:</b> N/A	<b>PAGE:</b> 0
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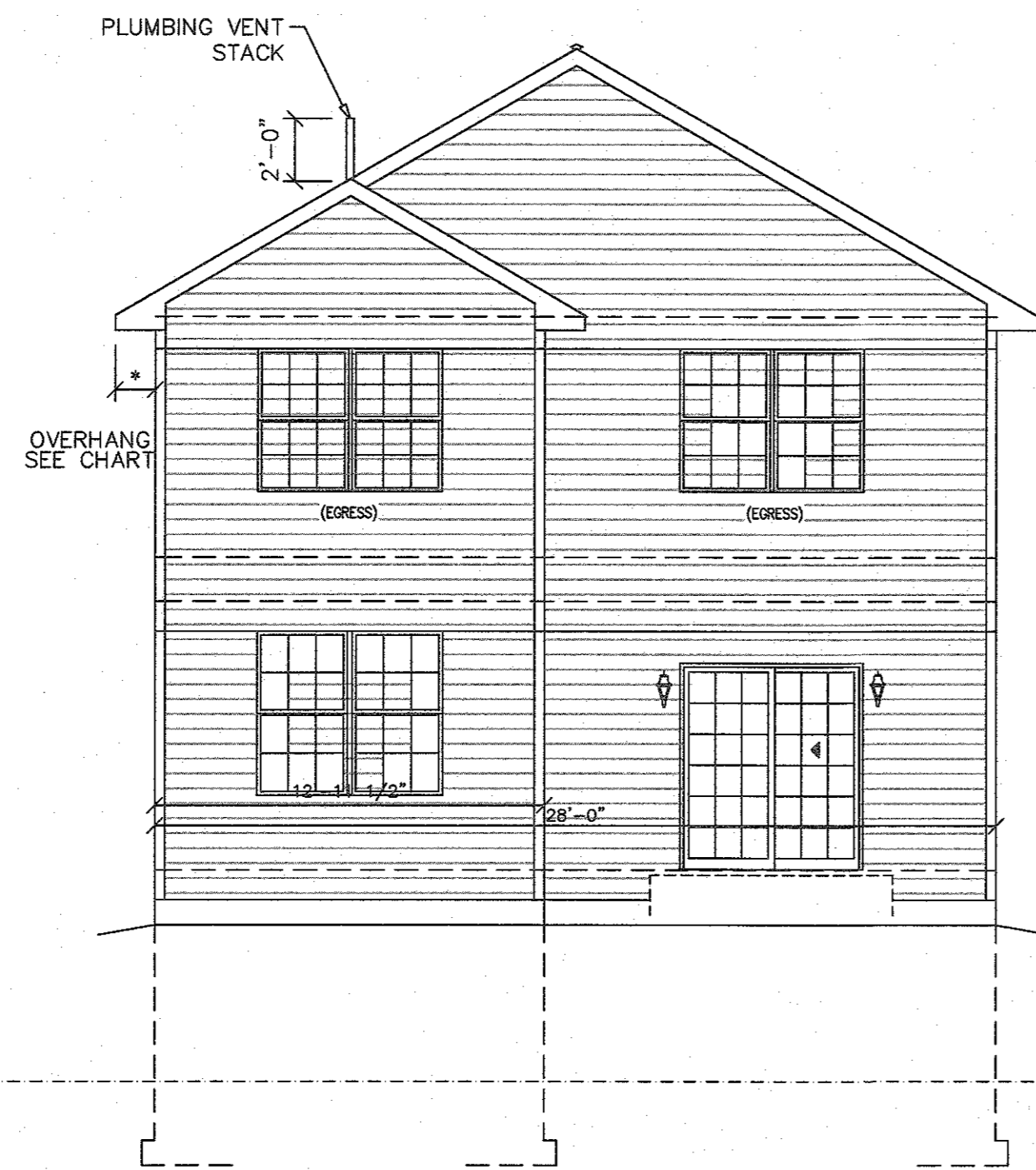
SCHEDULE OF MATERIALS

	Name	Type	Color
Siding	Andersen	MainStreet Standard	Sterling Grey
Windows	Andersen	400 Series	White (Standard)
Trim	Fly 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	HDZ Shingles	Charcoal
Stone/Brick	NONE	NONE	NONE
Decking	Trex	Composite	Grey "Foggy Wharf"
Deck Railing	Vinyl & Black Aluminum Spindles	Transcend Railing	Classic White
Style	Colonial		
Gross Floor Area (See GFA Worksheet Attached)		Gross Floor Area: 2,494 SF	

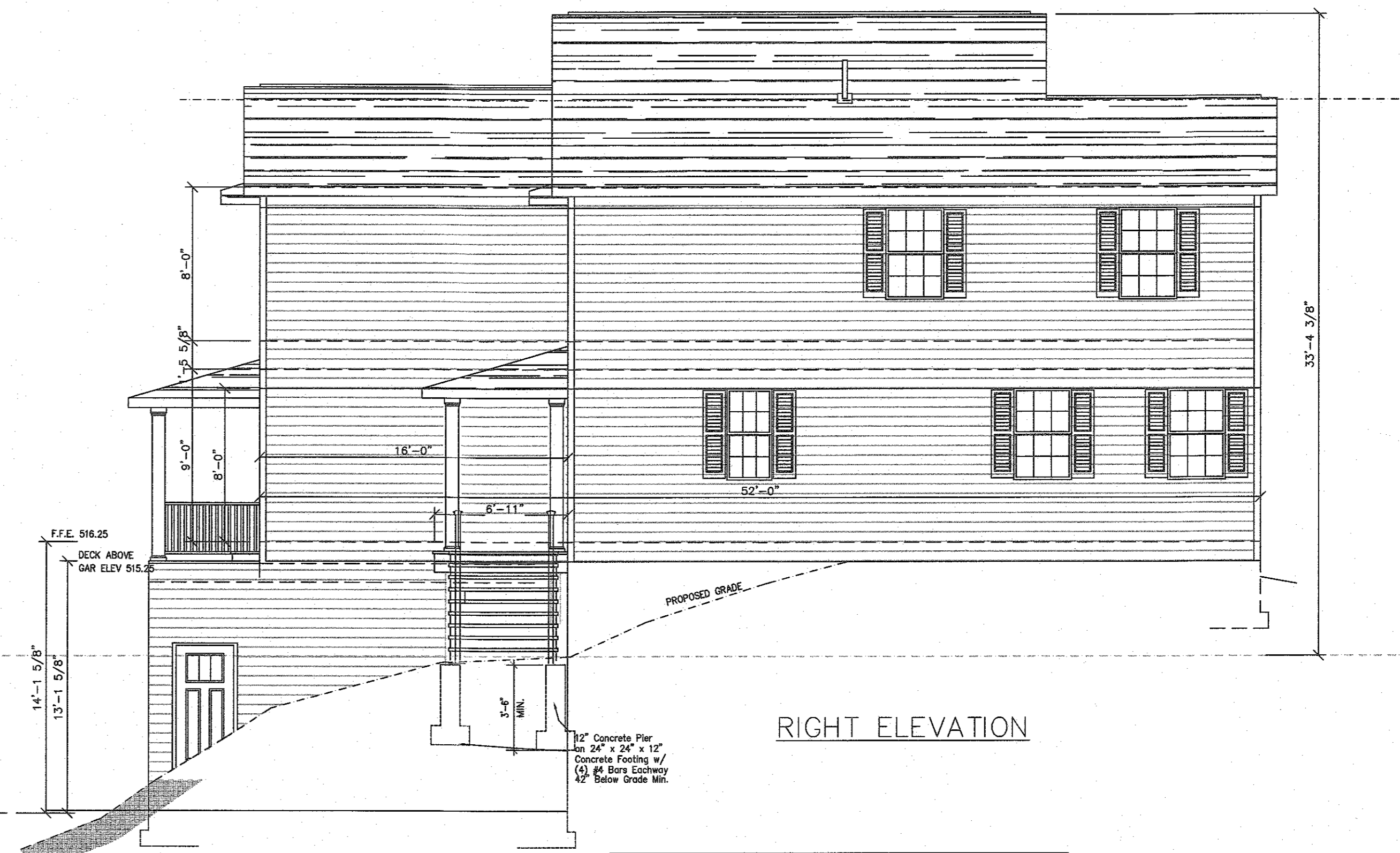


FRONT ELEVATION

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

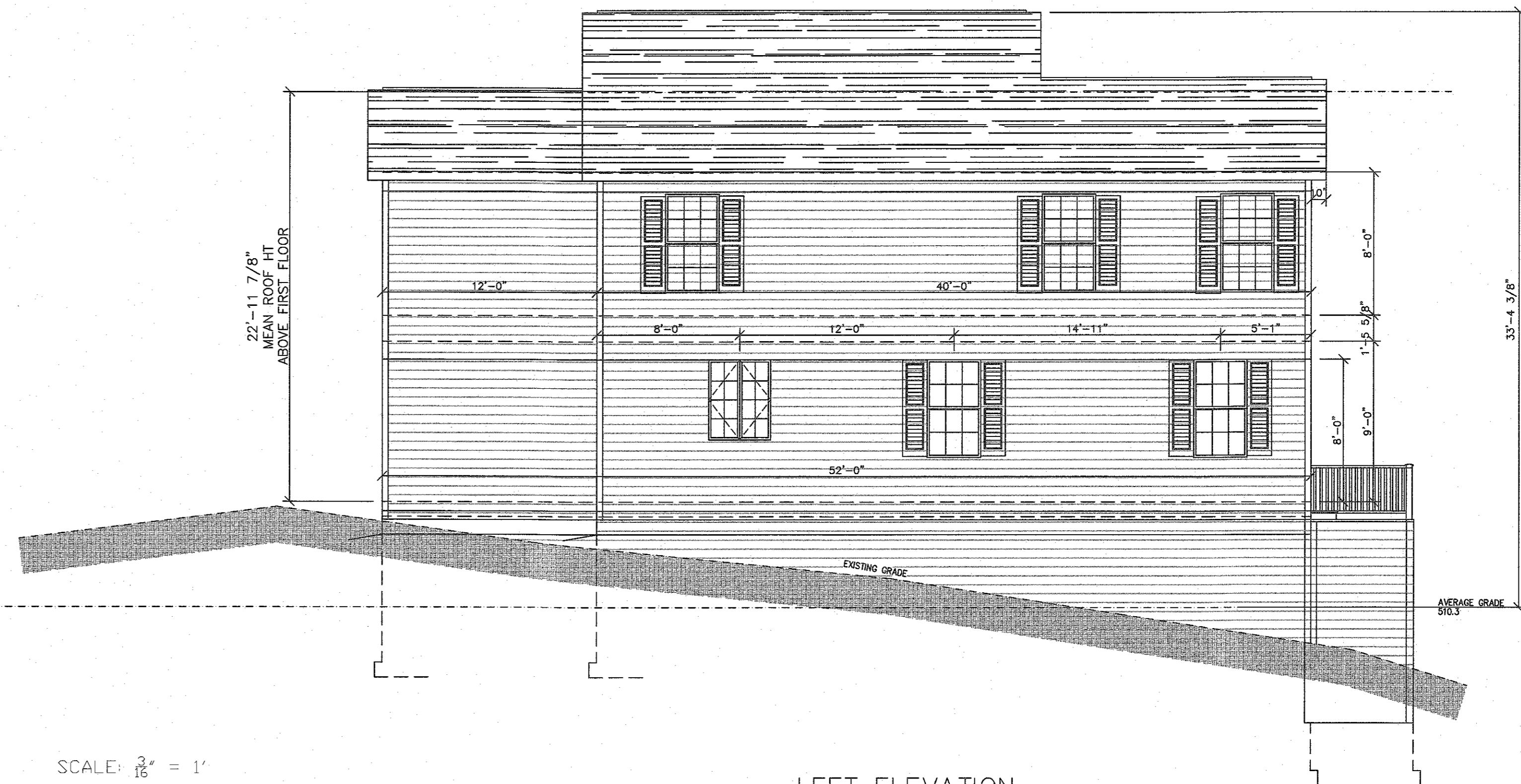


REAR ELEVATION



RIGHT ELEVATION

HEIGHT OF BUILDING DEFINITION:  
- The proposed structure does not exceed 34 FT in height measured from the average grade to the weighted mean level between the eaves and the proposed structure does not exceed 39 FT in height measured from average grade to the highest section plane of the roof.



LEFT ELEVATION

SCALE: 3/16" = 1'

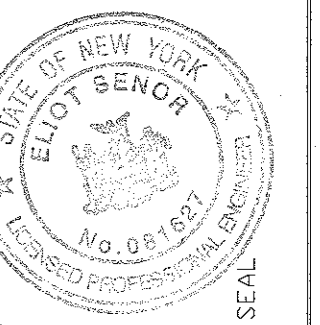
A-001

DATE - 01/01/2020

NO.	DATE	DESCRIPTION
1.	02/20/2021	BAR COM
2.	04/11/2021	AVG GRADE
3.	04/23/2021	GRADE

FINAL ELEVATION VIEW  
BUILDING HEIGHTS  
WITH GARAGE ADDITION  
22 NETHERMONT AVE

PROPOSED RESIDENCE WITH  
ADDITION TO GARAGE  
22 NETHERMONT AVE



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

SEE WESTCHESTER MODULAR DRAWINGS FOR INFORMATION ON MODULAR STRUCTURE

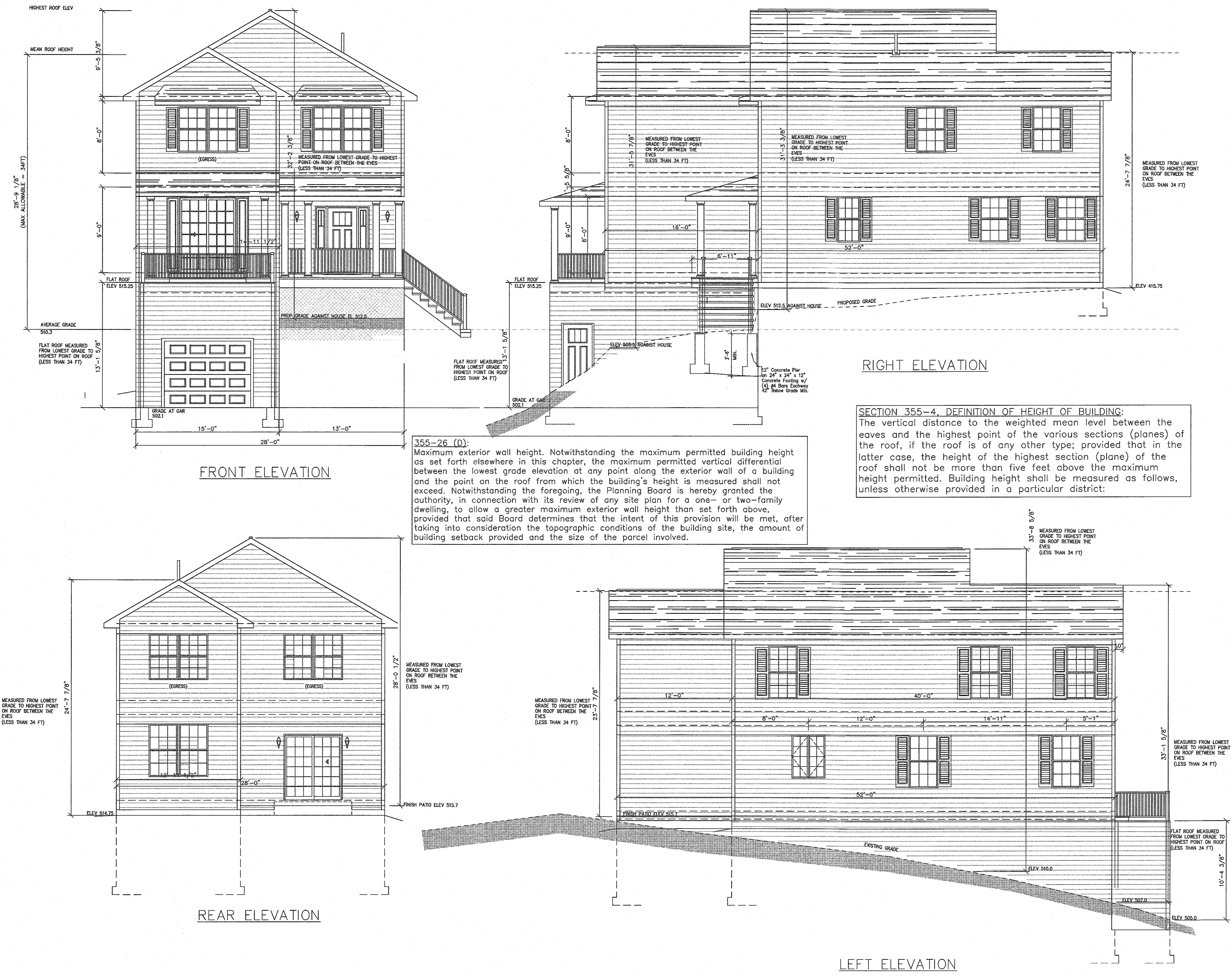
REVISIONS NO.	DATE	DESCRIPTION
1.	04/23/2021	GRADE

MAXIMUM EXTERIOR WALL HEIGHT CALCULATIONS  
22 NETHERMONT AVE

PROPOSED RESIDENCE WITH ADDITION TO GARAGE  
22 NETHERMONT AVE



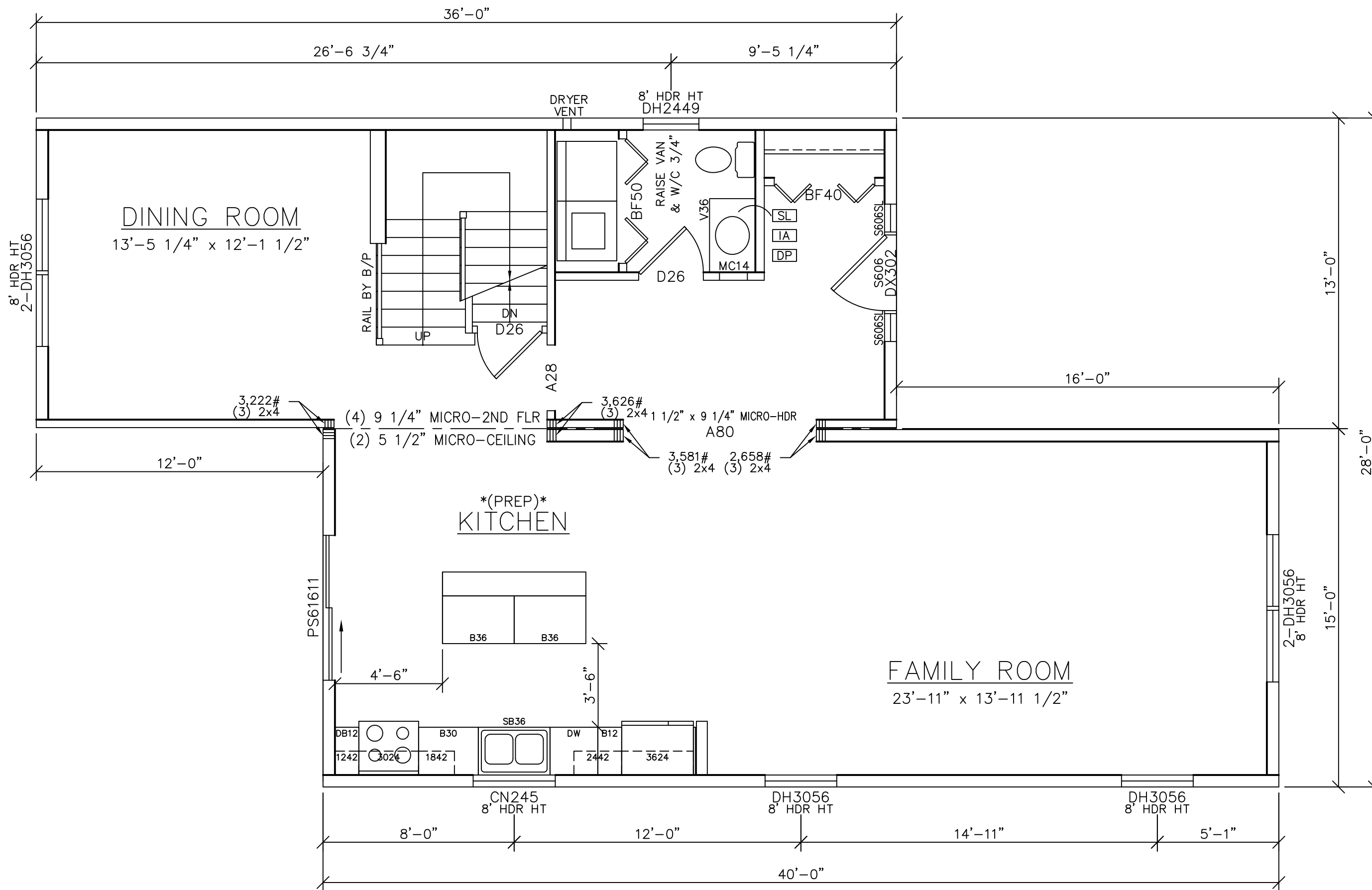
**Gabriel E. Senor, P.C.**  
Engineers Surveyors  
90 North Central Ave.  
Hartsdale, NY 10530  
914-422-0070



**355-26 (D):**  
Maximum exterior wall height. Notwithstanding the maximum permitted building height as set forth elsewhere in this chapter, the maximum permitted vertical differential between the lowest grade elevation at any point along the exterior wall of a building and the point on the roof from which the building's height is measured shall not exceed. Notwithstanding the foregoing, the Planning Board is hereby granted the authority, in connection with its review of any site plan for a one- or two-family dwelling, to allow a greater maximum exterior wall height than set forth above, provided that said Board determines that the intent of this provision will be met, after taking into consideration the topographic conditions of the building site, the amount of building setback provided and the size of the parcel involved.

**SECTION 355-4. DEFINITION OF HEIGHT OF BUILDING:**  
The vertical distance to the weighted mean level between the eaves and the highest point of the various sections (planes) of the roof, if the roof is of any other type; provided that in the latter case, the height of the highest section (plane) of the roof shall not be more than five feet above the maximum height permitted. Building height shall be measured as follows, unless otherwise provided in a particular district:

SCALE: 3/16" = 1'



**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

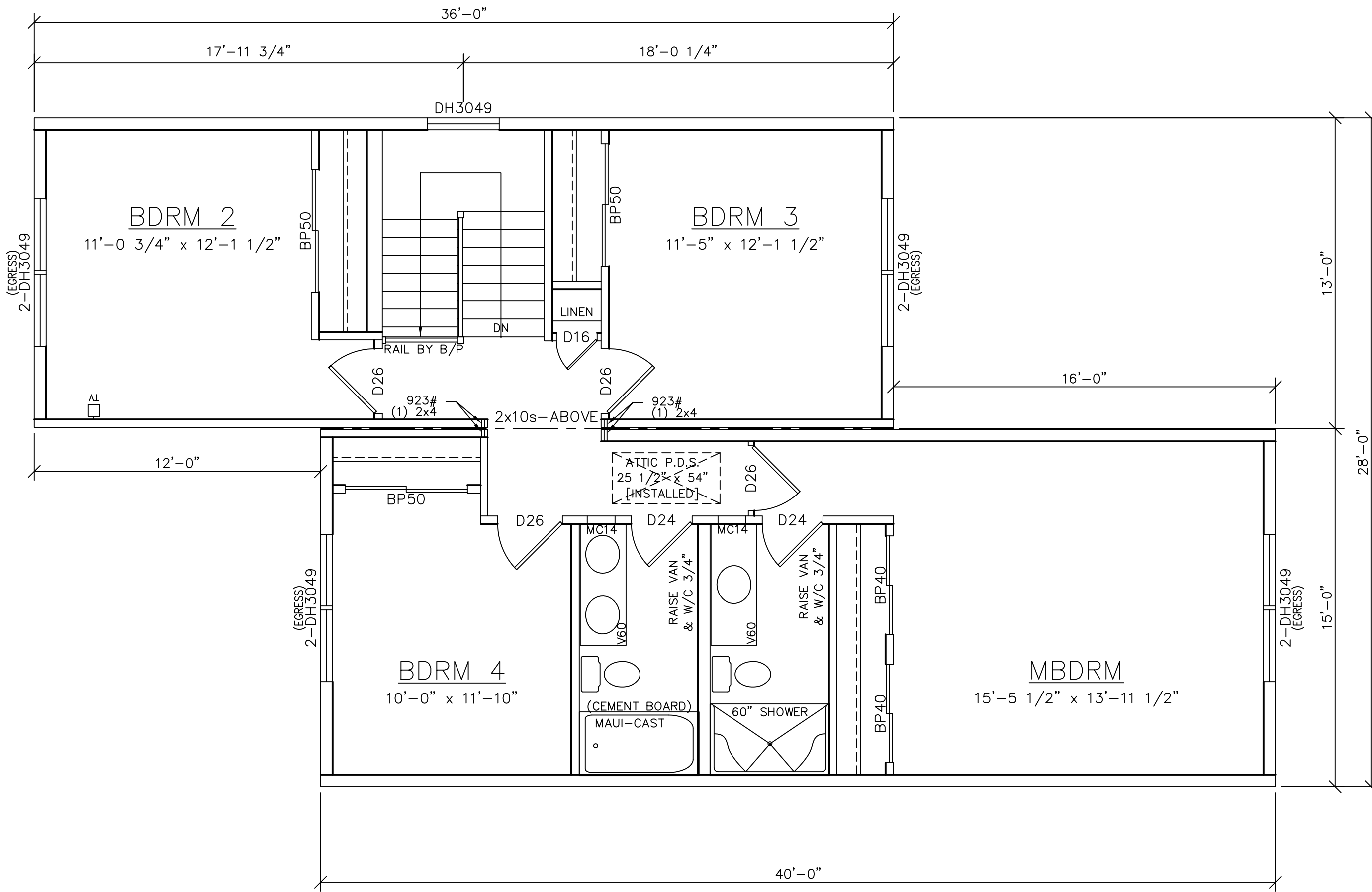
- NOTES:**
- 2x10 JOISTS @ 12" O.C. ILO 16" O.C. IN B&D BOXES ONLY
  - ANDERSEN 200 SERIES WINDOWS, W/ GBG
  - 8' HDR HT's ON 1ST FLR WINDOWS
  - 5 1/4" NECK BASE
  - 3 1/2" COLONIAL CASING

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. <b>19022</b> PRODUCTION No.	THIRD PARTY INSPECTION AGENCY <div style="text-align: center;">   <i>Anthony &amp; Pisarra, P.E.</i> </div>
DESIGNER: <b>RS</b>		REVISION RS RS		DATE 06/18/2019 06/25/2019
DATE: 02/05/2019 SCALE: 1/4" = 1'-0" PAGE: <b>3A</b>		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

- 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	SERIAL No. <b>19022</b>	THIRD PARTY INSPECTION AGENCY
CONSTR. TYPE: WOOD FRAME UNPROTECTED	DESIGNER: <b>RS</b>	SITE: 21 NETHERMOUNT AVE NORTH CASTLE, NY 10603	PRODUCTION No.	PE / RA
DATE: 02/05/2019	DATE: 06/18/2019	DATE: 06/25/2019	REVISION	DATE
SCALE: 1/4" = 1'-0"	CHECK	DATE	RS	DATE
PAGE: <b>3B</b>				

**COLONIAL CTM-L SECOND FLOOR PLAN**

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

STATE OF NEW YORK  
 ARCHITECT & ENGINEER  
 Anthony & Pisgari  
 [Signature]

NO.	DATE	DESCRIPTION
1	04/11/2021	P8 CDM
2	04/20/2021	GRADES

**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 fit 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 work shall be stone concrete with a minimum 28 day compressive strength of 5,500 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 per ACI301.
- 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 D1557-78) 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 or 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'-3" 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.
- All masonry openings greater than 8'-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, mold, asbestos, hazardous waste, asbestos, lead paint, lead piping, and similar substances.
- All new or relocated windows and doors shall be weec for burglar alarms. (Convent to existing). Work to be performed by others but coordinated by General Contractor.
- New finished elevations to match existing.
- Install hand-wired smoke detectors with battery backup as per Code. (i.e., install one in second floor hall in 30 foot max from all bedrooms, within all bedrooms, and one per level). Install carbon monoxide detectors at main sleeping bedrooms, and basement.
- All windows and sliding doors to meet the "Anderson" permeable (shaded) 400 series double hung, double glass with low "E" film and insect screens. Provide all finishing 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", max. height 24" clear.
- All pipes in unheated spaces shall be wrapped and sealed with 1/2" thick insulation.
- Provide shut-off valves at all plumbing fixtures. Label tag valves at lower level units. All piping shall be adequately secured to framing.
- Supply and install exterior 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 of solid enamel. Colors to be selected. Painting to include all areas delineated by the work.
- Exterior painting - All exterior siding, trim, fascia and soffits to be primed and painted with 2 coats of "Olympic" pigmented stain. Color to be selected.
- Exterior painting - All siding, trim fascia 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 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.I. lumber.
- Electrical features/ "high hats" shall be "Lightstar" (white bath #117) with 100-watt lamp.
- All light switches and dimmer controls shall be "Leviton-Coveck".
- 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 called 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 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. silt fencing and hay bales).
- Structural lumber shall be Douglas Fir (DF) or Spruce-Pine-Fir (SPF) S-P-F. Stress grade to be marked on lumber. All lumber to be free of splits/ cracks and knots. 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:

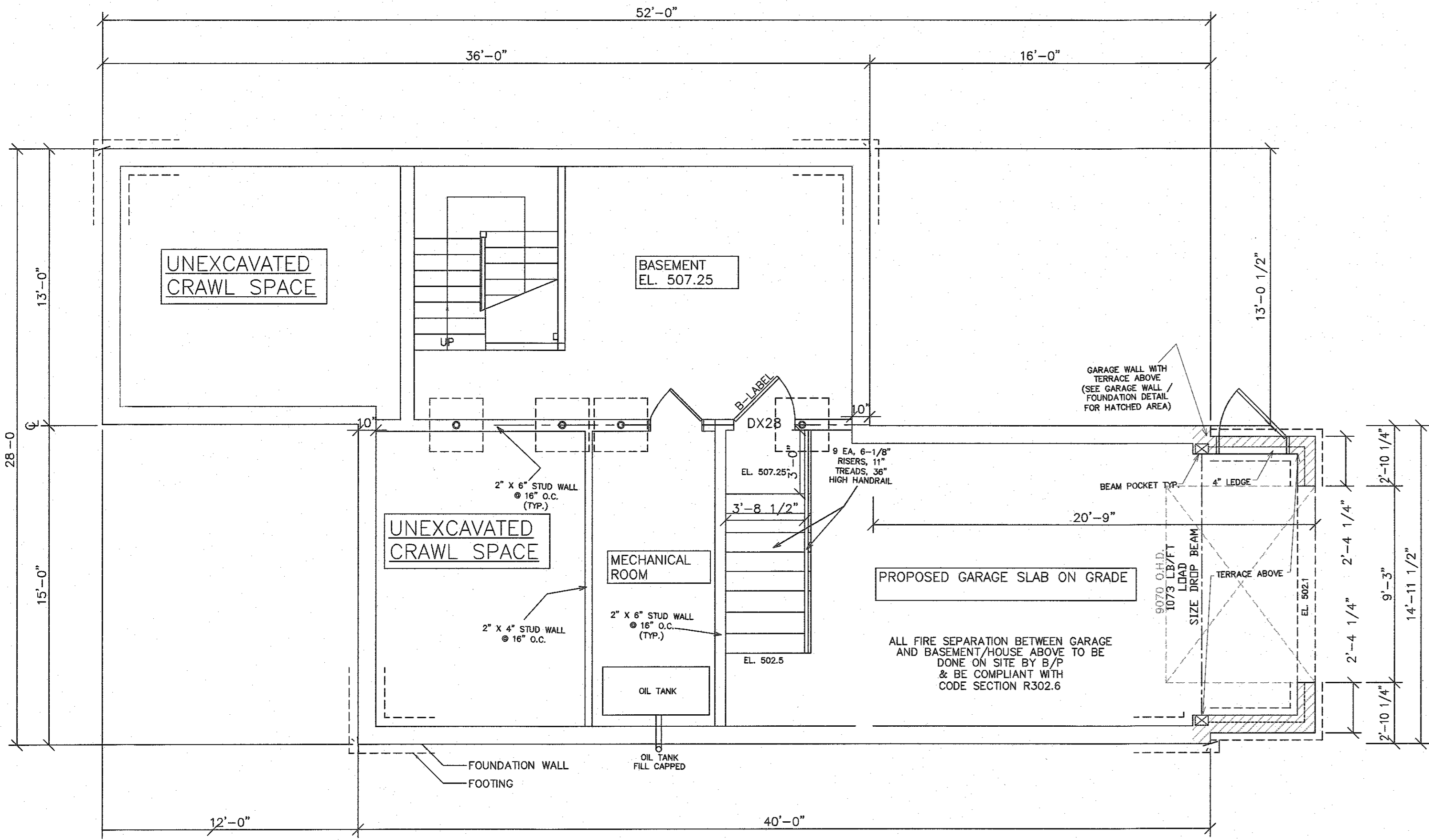
Grade	Min. Comp.	Max. Comp.	Min. Density	Max. Density	Min. Moisture	Max. Moisture
1	87%	92%	110	120	10	15
2	87%	92%	110	120	10	15
3	87%	92%	110	120	10	15
4	87%	92%	110	120	10	15
5	87%	92%	110	120	10	15
6	87%	92%	110	120	10	15
7	87%	92%	110	120	10	15
8	87%	92%	110	120	10	15
9	87%	92%	110	120	10	15
10	87%	92%	110	120	10	15

- 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 65" 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 @ 40" max.
- All footing shall bear on virgin soil (2 tons/ SF 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 R round, 18" long anchor bolts @ 8" O.C. (20" 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)

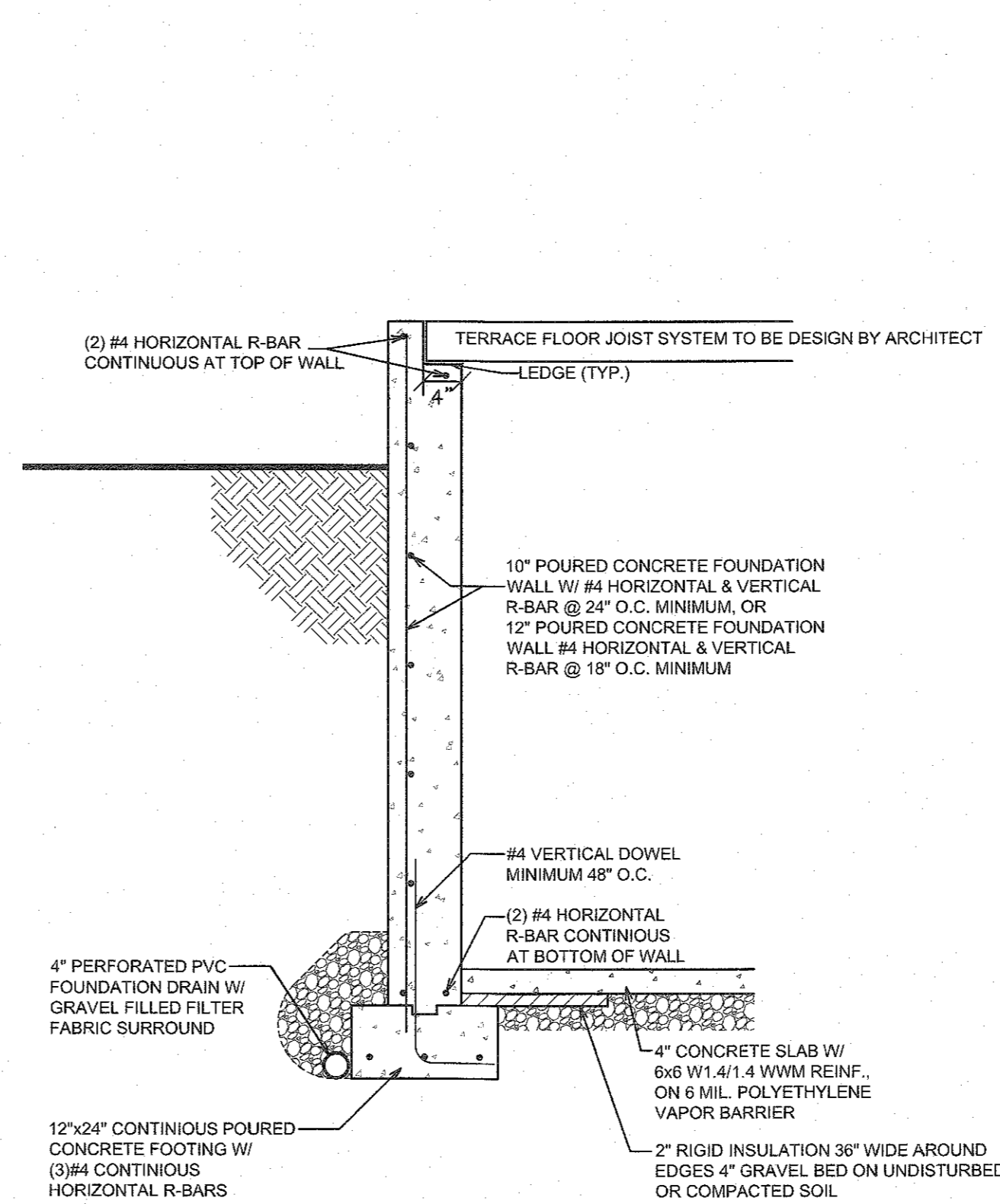
Winter design dry bulb temperature 7°  
Summer design dry bulb temperature 84°  
Coincident wet bulb temperature 73°  
Climate Zone 4

Climate Zone	Winter Design Dry Bulb Temperature (°F)	Summer Design Dry Bulb Temperature (°F)	Coincident Wet Bulb Temperature (°F)
1	7	84	73
2	7	84	73
3	7	84	73
4	7	84	73
5	7	84	73
6	7	84	73
7	7	84	73
8	7	84	73
9	7	84	73
10	7	84	73

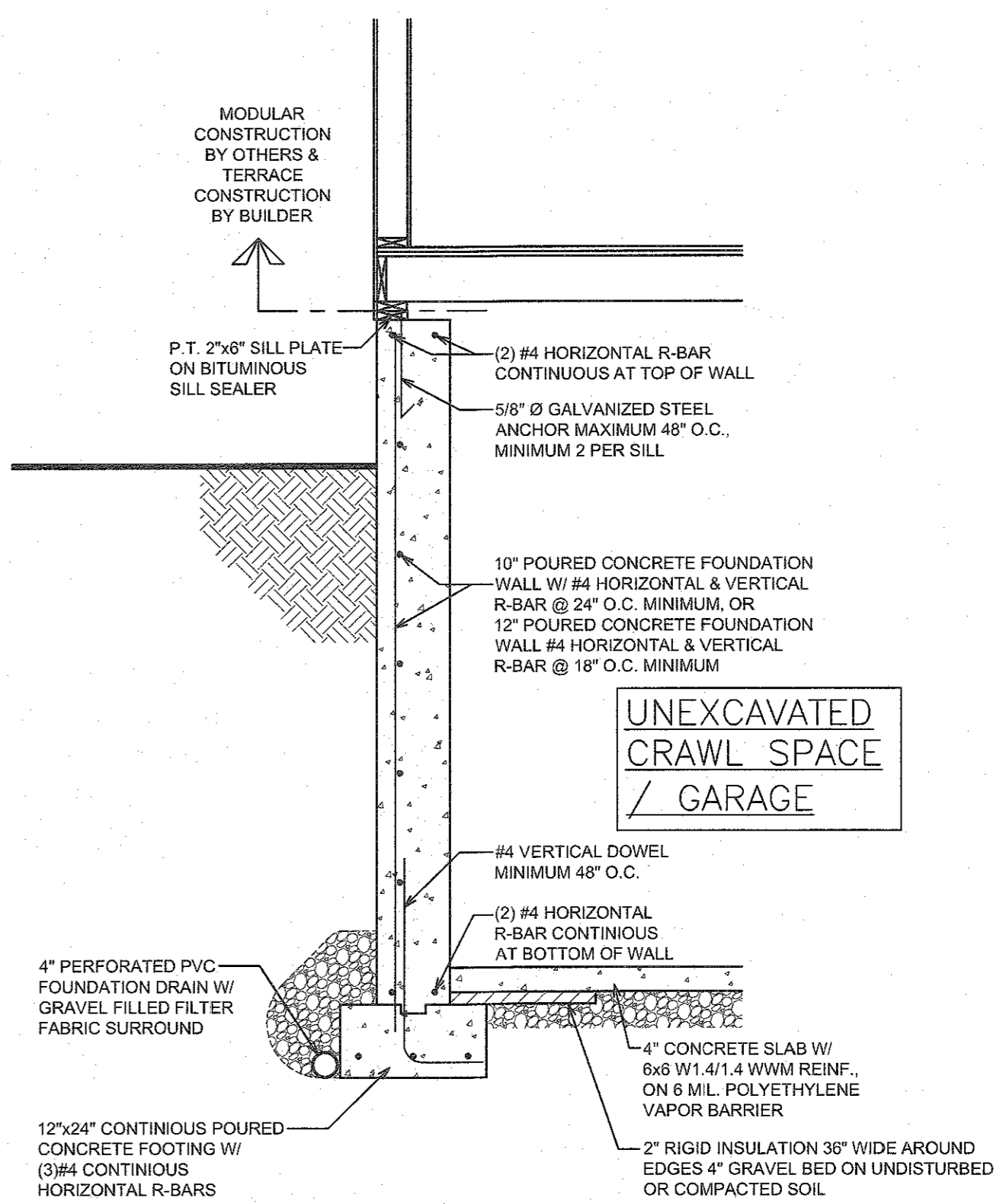
I, Eliot Senor, Professional Engineer, certify that these plans and specifications comply with the Residential Code of New York and the NYS Energy Conservation Code (2016).



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

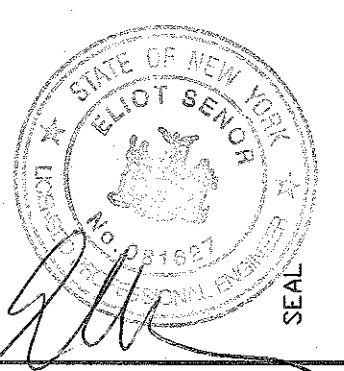


TYPICAL GARAGE WALL SECTION (TERRACE ABOVE)  
SCALE: 1/2"=1'-0"



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

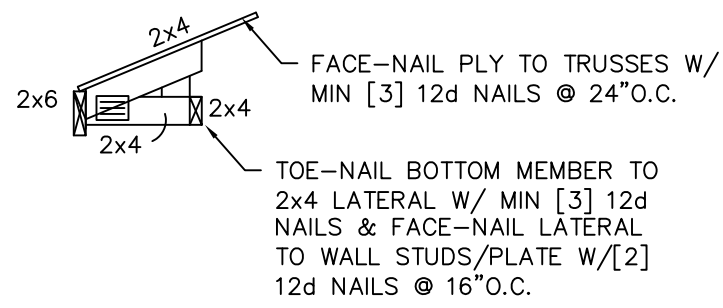
FOUNDATION & BASEMENT PLAN  
22 NETHERMONT AVE



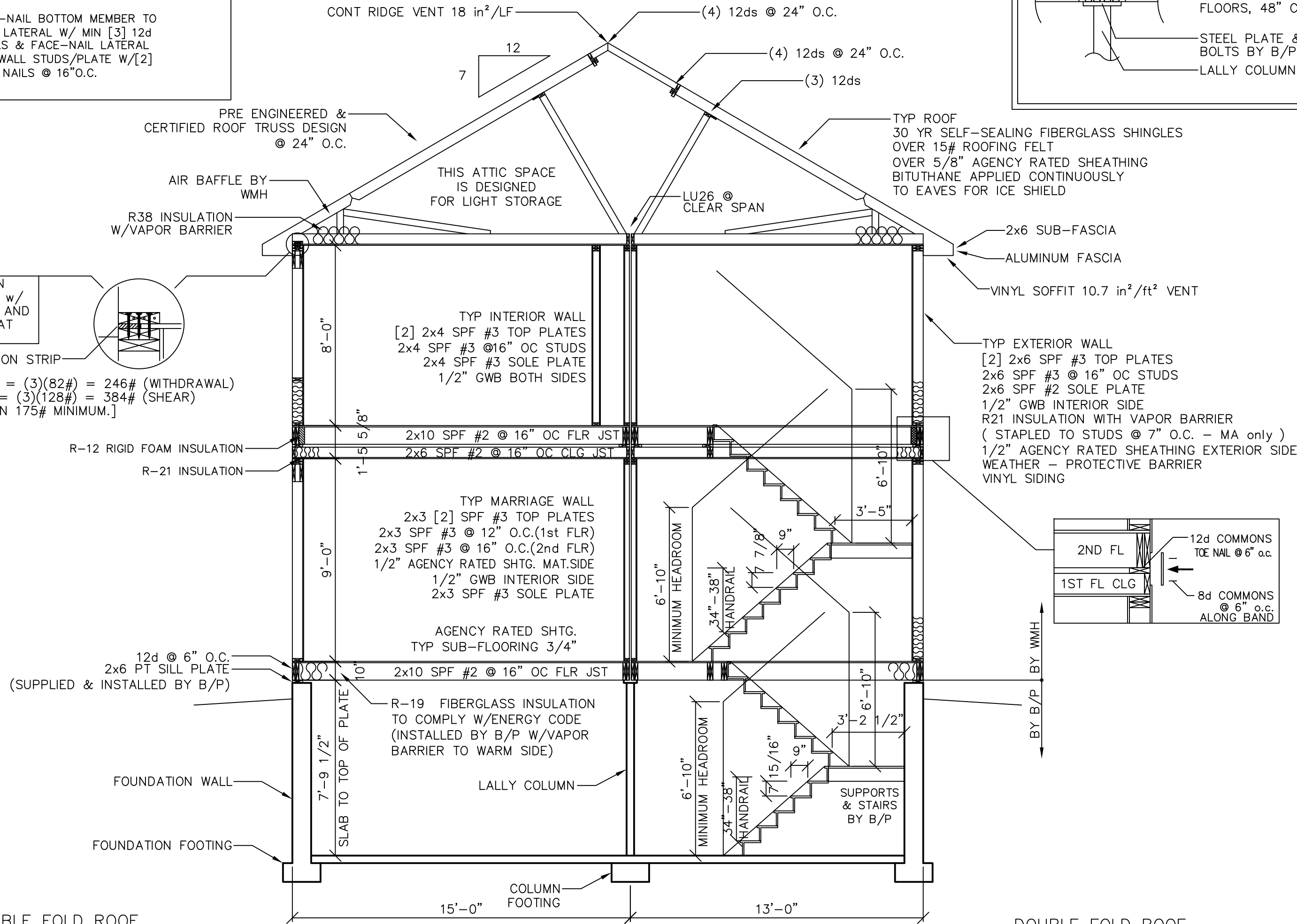
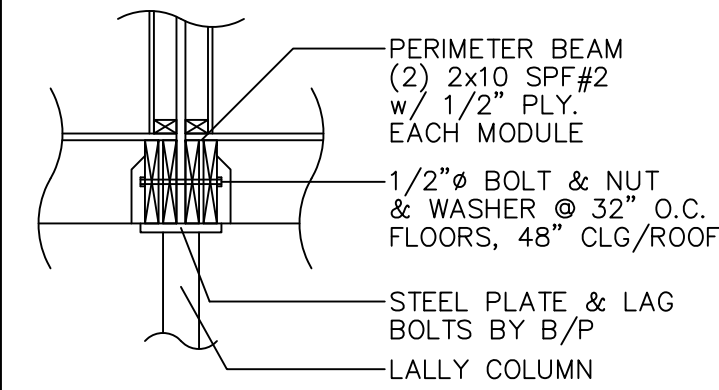
**Gabriel E. Senor, P.C.**  
Engineers Surveyors  
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Hartsdale, NY 10530  
914-422-0070



**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

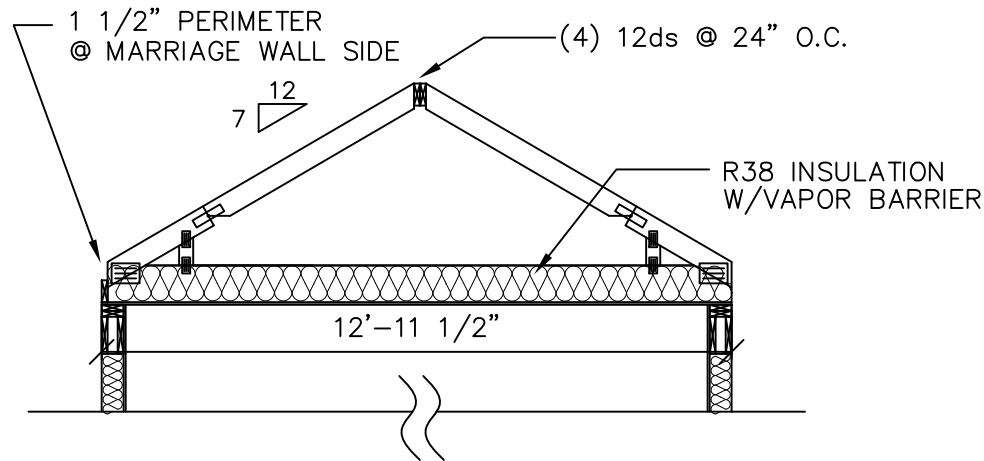
5/8" COMPRESSION STRIP

(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**



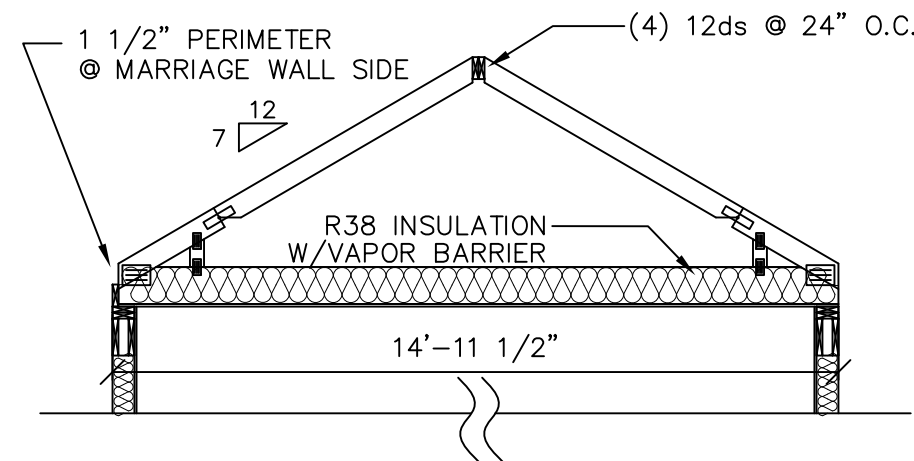
**NOTE:**  
WALL & CLG GYPSUM FASTENED PER TABLE R702.3.5 (UNLESS OTHERWISE NOTED)

**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		
RS	06/25/2019		
		P. McHUGH	11/16/09

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  
CONST. TYPE: WOOD FRAME UNPROTECTED  
DESIGNER: RS  
DATE: 02/05/2019  
SCALE: 1/4" = 1'-0"  
PAGE: **4**

Table: EXTERIOR DOOR SCHEDULE. Columns: DOOR, TYPE, SIZE, GLASS (SP), VENT (SP), U" VALUE, MATERIAL, REMARKS. Includes rows for DHX30(S606) and DS606(SL) with specifications for hinged and sidelights.

Table: ANDERSEN WINDOW SCHEDULE. Columns: WINDOW, SERIES/STYLE, GLASS (SP), VENT (SP), U" VALUE, SHGC, ROUGH OPENING, UNIT AREA (SF). Includes rows for DH3056, DH3049, DH2449, and CN245.

Table: ANDERSEN DOORS. Columns: DOOR, TYPE, SIZE, GLASS (SP), VENT (SP), U" VALUE, MATERIAL. Includes row for PS61611 (PERMA-SHIELD GLIDING).

Notes for windows and doors: THESE UNITS MEET OR EXCEED A CLEAR OPENABLE AREA OF 5.7 SQ. FT., WIDTH OF 20", & HEIGHT OF 24". Notes for door installation and compliance with code requirements.

FLOOR PLAN NOTES

DWV NOTES: 1) MATERIALS ARE PVC SCHEDULE 40. 2) DRAINAGE AND VENT PIPING SHALL BE SECURELY ATTACHED TO THE BUILDING AT NO GREATER SUPPORT INTERVALS THAN SPECIFIED.

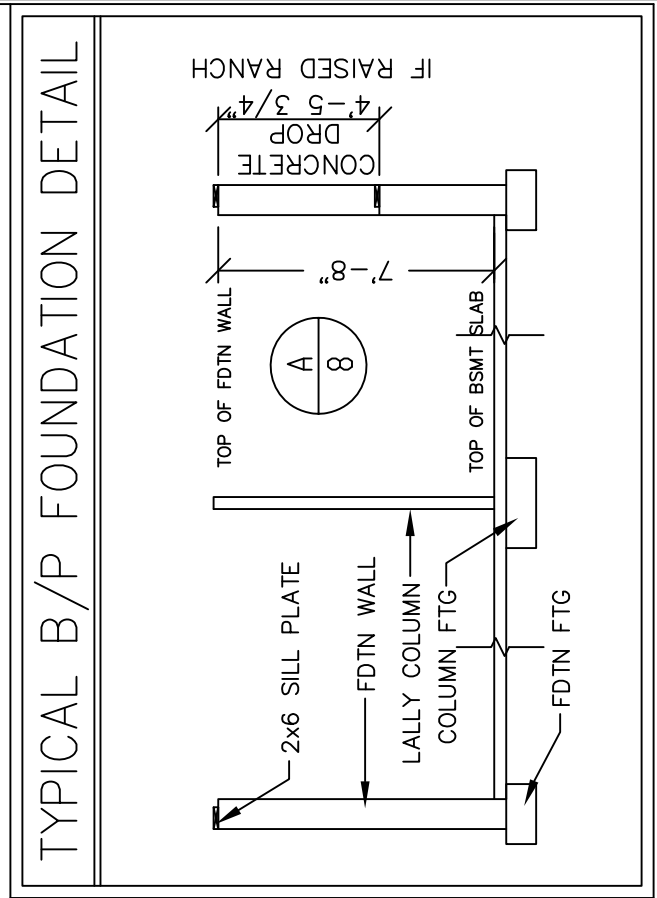
SUPPLY NOTES: 1) MATERIALS ARE TYPE A PEX. 2) WATER SUPPLY SHALL BE SECURELY ATTACHED TO THE BUILDING AT NOT GREATER DISTANCES BETWEEN SUPPORT INTERVALS THAN SPECIFIED.

ELECTRICAL NOTES

Electrical Notes (continued): 9) WIRELESS DOOR BELL TO BE SHIPPED LOOSE (INCLUDES 2 BUTTONS). 10) ONE GFI CIRCUIT SHALL BE INSTALLED IN BASEMENT BY B/P.

Electrical Notes (continued): 1) ELECTRICAL PANEL IS RATED 200 AMPS (UNLESS OTHERWISE NOTED) AND LOCATED PER PLAN. 2) NON-METALLIC SHEATHED CABLE IS TYPE NM-B.

ELECTRICAL NOTES



EBB (ELECTRICAL BASEBOARD) HEATING NOTES: 1) ELECTRIC BASEBOARD HEATING CIRCUITS ARE 20 AMP, 220 VOLTS WITH 12-2 NON-METALLIC SHEATHED CABLE TYPE NM-B.

FHW (FORCED HOT WATER) BASEBOARD HEATING NOTES: 1) BASEBOARD RATINGS ARE BASED ON 190°F WATER TEMPERATURE AT 1 GPM FLOW RATE WITH 65° ENTERING AIR.

Notes for window and door installation and compliance with code requirements.

Form section: SERIAL No. 19022, PE / RA, and a blue professional seal for Anthony & Pignataro Inc., Professional Engineer, State of New York.

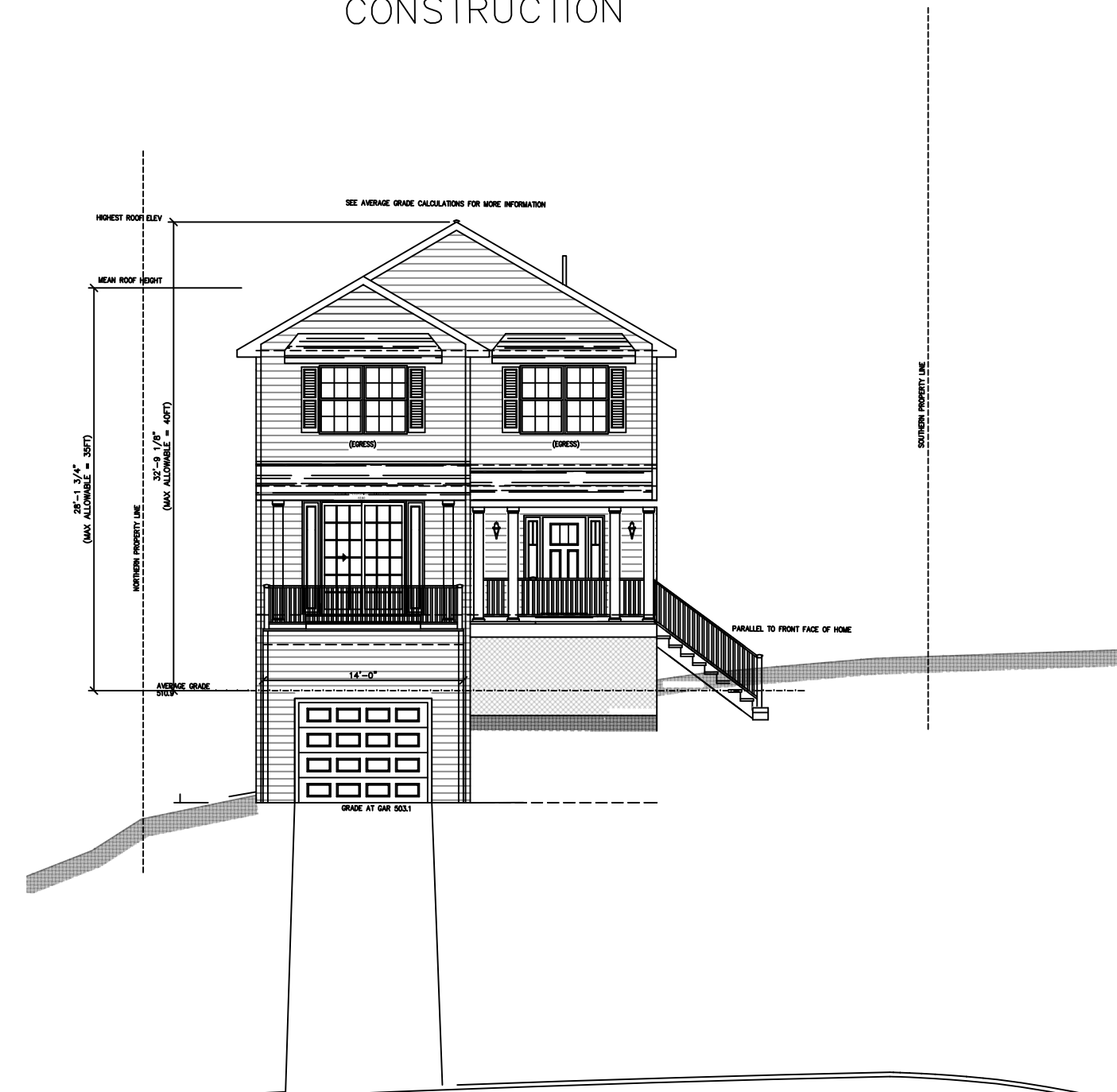
Form section: USE GROUP, DETACHED SINGLE FAMILY DWELLING, CONSTRUCTION details, and WESTCHESTER MODULAR HOMES INC. logo and address.

Form section: DESIGNER: RS, DATE: 02/05/2019, SCALE: N/A, and page number 8.

20 NETHERMONT  
AVE SINGLE FAMILY  
RESIDENCE



22 NETHERMONT  
AVE PROPOSED  
CONSTRUCTION



24 NETHERMONT  
AVE SINGLE  
FAMILY RESIDENCE



# NETHERMONT AVENUE



21 NETHERMONT  
AVE VACANT LOT



19 NETHERMONT  
AVE SINGLE  
FAMILY RESIDENCE

SS-1

DATE - 01/01/2020

REVISIONS NO.	DATE	DESCRIPTION

STREET SCAPE PHOTOS  
22 NETHERMONT AVE

STREETSCAPE PHOTOS  
22 NETHERMONT AVE

SEAL

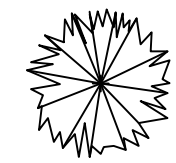
**Gabriel E. Senor, P.C.**  
 Engineers Surveyors  
 90 North Central Ave.  
 Hartsdale, NY 10530  
 914-422-0070



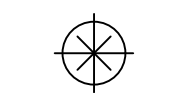
Eastern Red Cedar  
(Juniperus Virginiana)



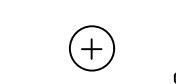
GIANT ARBORVITAE  
(Thuja Plicata)



Eastern Red Bud  
(Cercis Canadensis)



CHINESE HOLLY  
(Ilex crenata convexa)

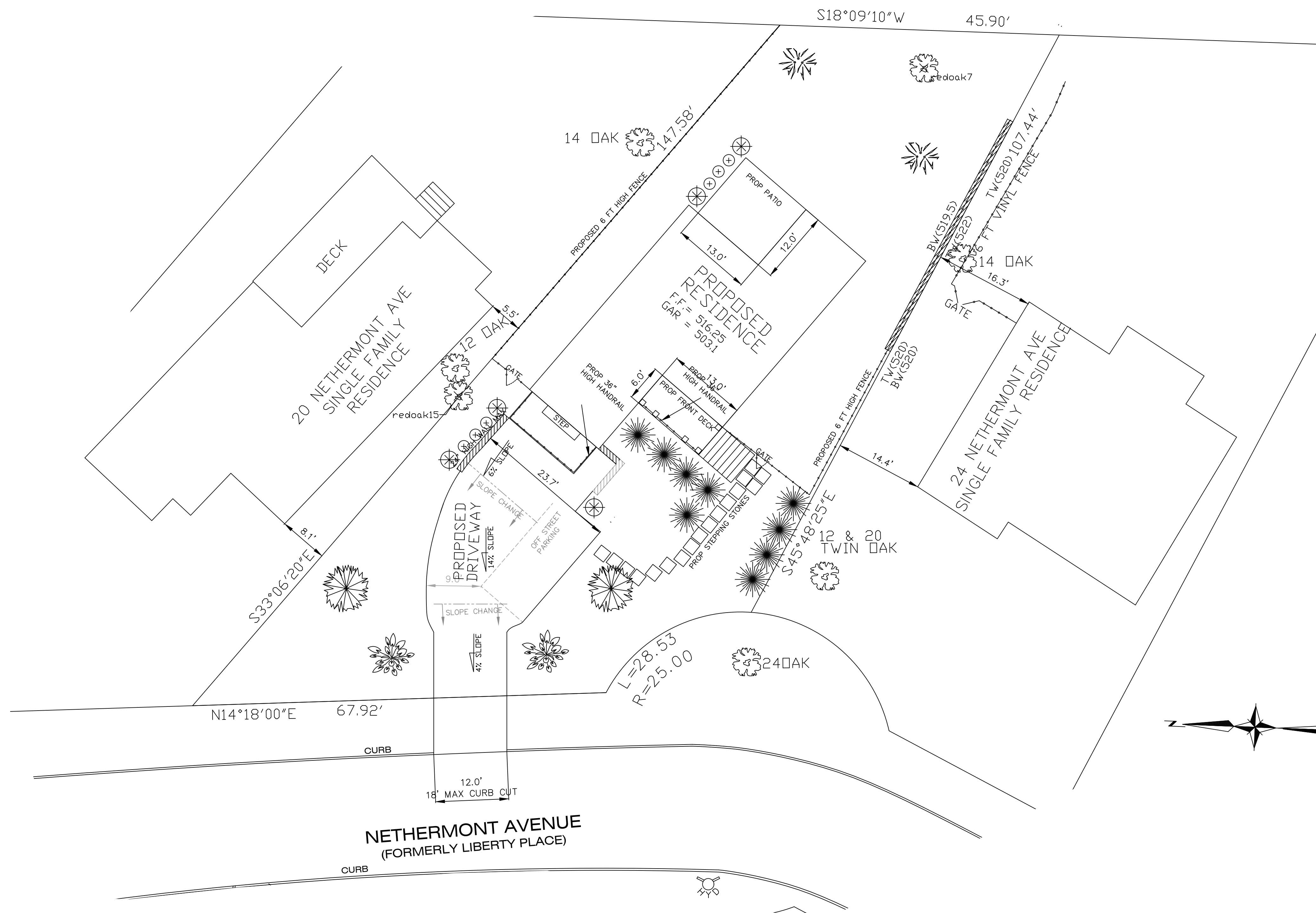


INKBERRY 'Shamrock'  
(Ilex glabra 'Compacta')



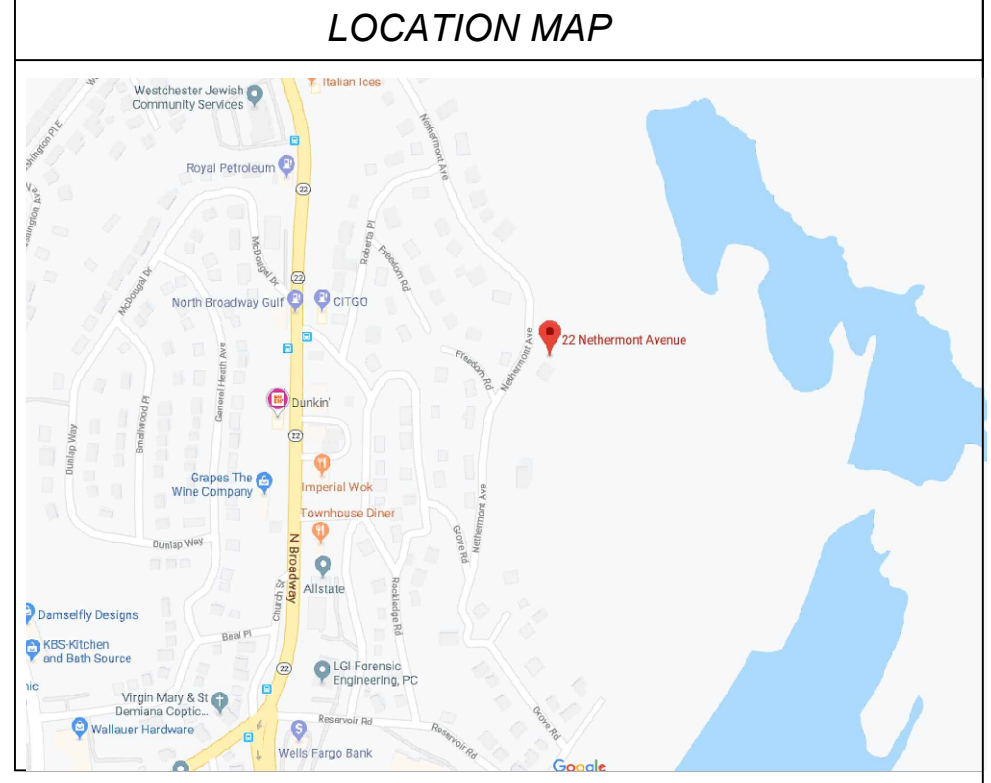
COMMON FLOWERING DOGWOOD  
(Cornus Florida)

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



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

REVISIONS

**LANDSCAPE PLAN**

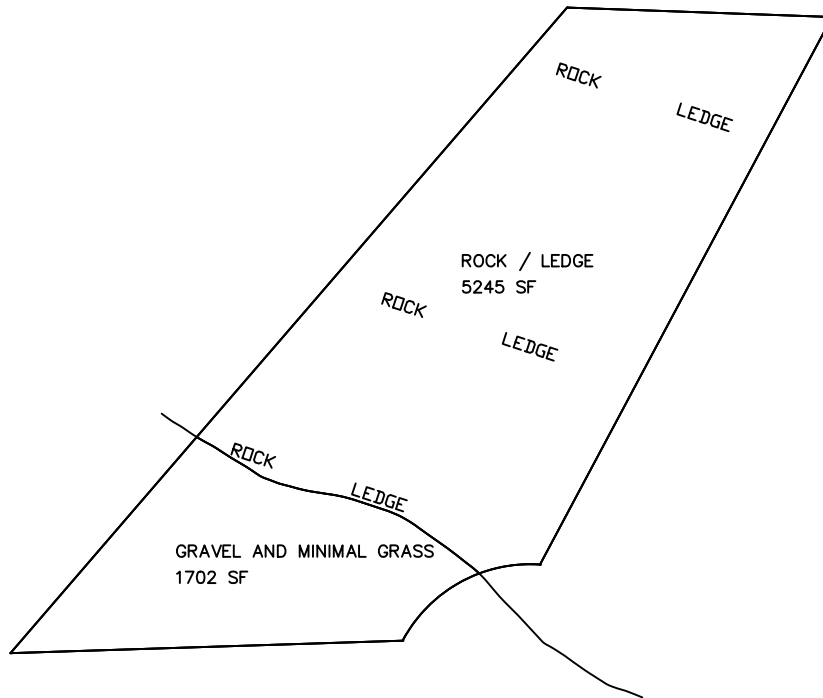
PREPARED FOR: ODOARDI  
 ADDRESS: 22 NETHERMONT AVE  
 NORTH WHITE PLAINS, NY  
 TAX ID: SECTION 122.16 - TAX BLOCK 4 - LOT 7

SITUATED IN THE  
 TOWN OF NORTH CASTLE  
 WESTCHESTER COUNTY, NEW YORK

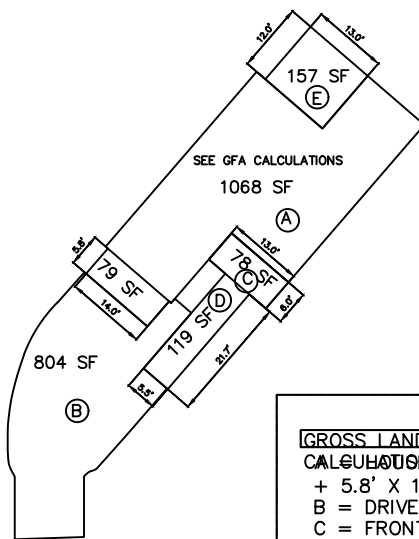
COPYRIGHT GABRIEL E. SENOR, P.C. 2019  
**GABRIEL E. SENOR, P.C.**  
 CONSULTING ENGINEER LAND SURVEYORS  
 90 NORTH CENTRAL AVE., HARTSDALE, NEW YORK, 10530  
 ● (914) 422-0070 FAX 422-3009

SCALE: 1" = 10'  
 DATE: JANUARY 10, 2020  
 DRAWN BY: GC CHECKED BY: ES.  
 LS-1  
 SHEET 4 of 5

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.



**GROSS LAND COVERAGE**  
 CALCULATIONS = 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**

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

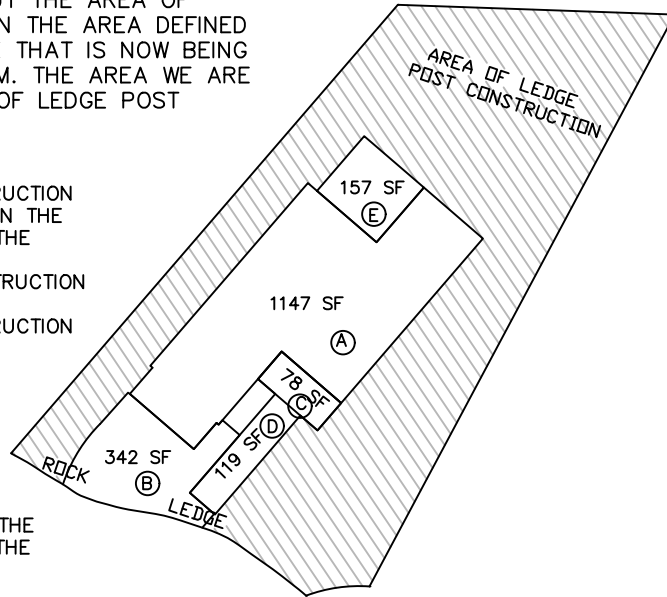
TOTAL AREA OF LEDGE PRE CONSTRUCTION  
 = 5,245 SF

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

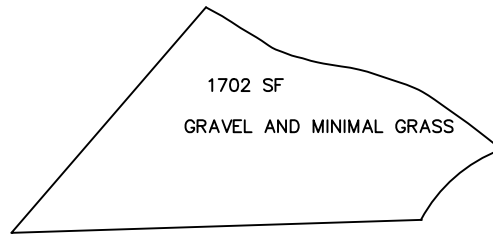
IMPERVIOUS SURFACE AREA WITHIN THE  
 LEDGE LIMITS BEING CAPTURED BY THE  
 DETENTION PIPE = 1,843 SF

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

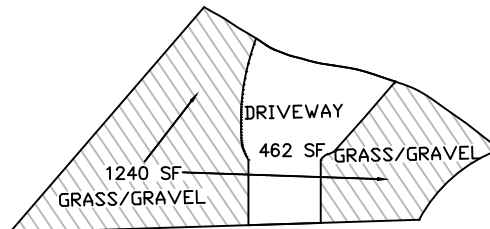
TOTAL AREA OF LEDGE POST CONSTRUCTION  
 = 3,402 SF



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.



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)<sup>1</sup> and the Rock Quality Designation (RQD)<sup>2</sup> 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.

---

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

<sup>2</sup> 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.

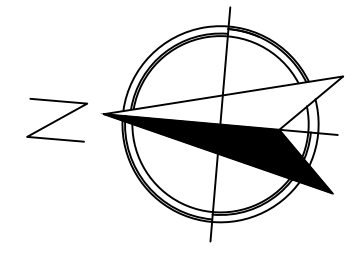
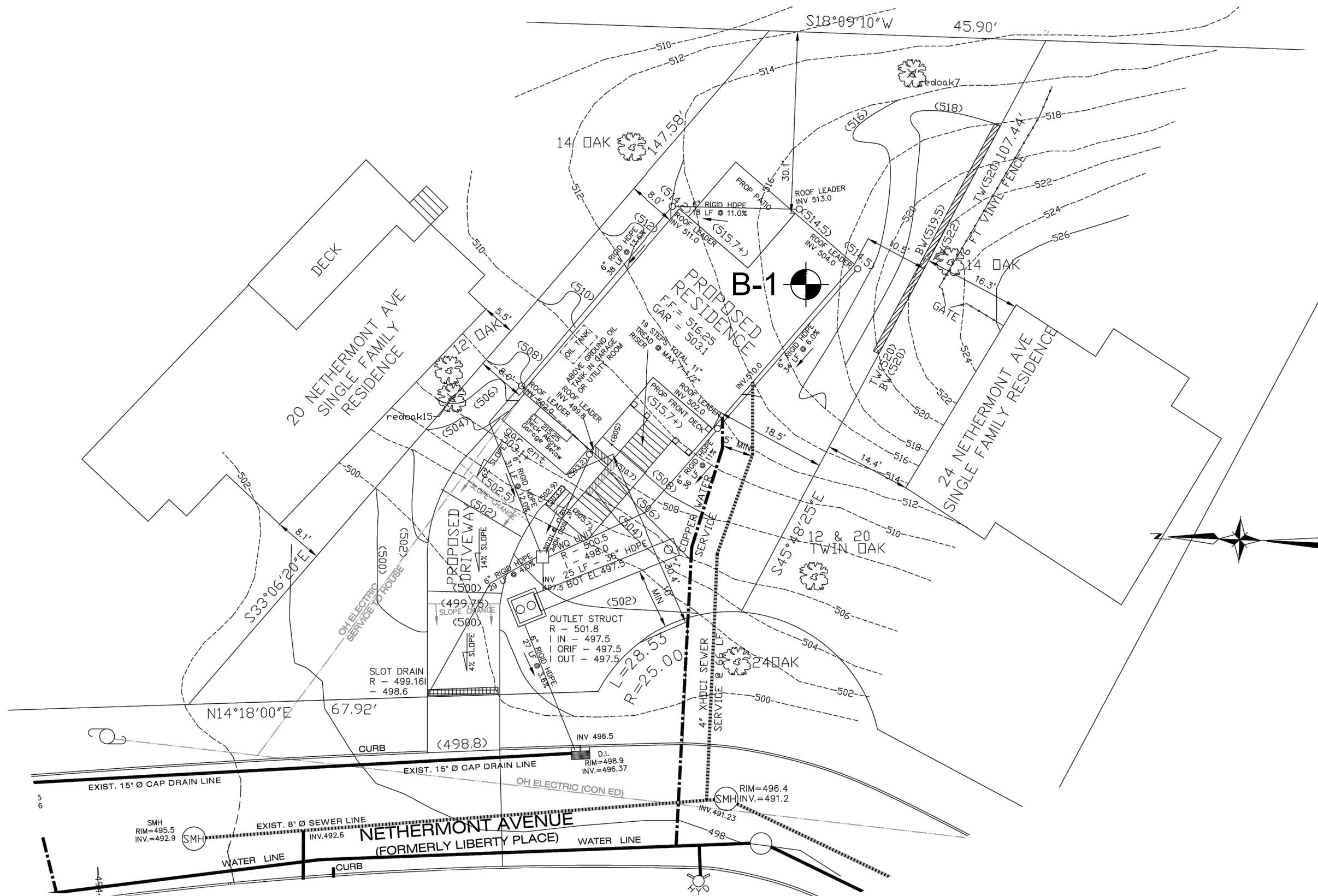
Very truly yours,

**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



No.	DESCRIPTION	DATE	BY

**GES**  
**GEOTECHNICAL ENGINEERING SERVICES, P.C.**  
 6 BAYBERRY ROAD  
 ELMSFORD, NEW YORK 10523  
 PHONE: 914-592-4616 FAX: 914-592-0416

**22 NETHERMONT AVENUE**  
**WHITE PLAINS, NY**

BLOCK:            LOT:            ZONE:            MAP:

**BORING**  
**LOCATION PLAN**

UNAUTHORIZED ALTERATION OR ADDITION TO THIS PLAN IS A VIOLATION OF SECTION 7209 OF THE NYS EDUCATION LAW. COPIES OF THIS PLAN NOT BEARING THE PROFESSIONAL ENGINEER'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

PROFESSIONAL ENGINEER _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>PROJECT #:</td> <td>2020031</td> </tr> <tr> <td>SCALE:</td> <td>NTS</td> </tr> <tr> <td>DATE:</td> <td>06/21/2020</td> </tr> <tr> <td>DRAWING NO:</td> <td>B-100.00</td> </tr> <tr> <td>SHEET NO:</td> <td>1 OF 1</td> </tr> </table>	PROJECT #:	2020031	SCALE:	NTS	DATE:	06/21/2020	DRAWING NO:	B-100.00	SHEET NO:	1 OF 1
PROJECT #:	2020031										
SCALE:	NTS										
DATE:	06/21/2020										
DRAWING NO:	B-100.00										
SHEET NO:	1 OF 1										

# Log of Boring B-1

<b>Project: 22 Nethermont Avenue</b>				<b>Project Number: 2020031</b>			
<b>Location: White Plains, NY</b>							
Date(s) Drilled	6/16/20 - 6/16/20		Inspector	Haykel Melaouhia, PhD., Aflaaz Saleem		Coordinates <b>North:</b>	
Drilling Agency	Municipal Testing Laboratory (MTL)		Foreman	Fiad Khan		Approximate Surface Elevation (feet) <b>± 517</b>	
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 <b>4" and NX</b>
Boring Location <b>See Boring Location Plan (Figure 1)</b>						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					Switched to NX Double Tube core barrel at 1.5 ft
				C-3	75	43		Intermediate to medium Hard, Weathered, Gray and light brown Granite, trace Schist, Weathered joints					
5				C-4	92	85		Medium Hard to Hard, slightly weathered, gray and light brown Granite, trace Schist, slightly weathered joints					
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



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.