

CAPIZZI LAW OFFICES

205 Fairview Avenue
Westwood, NJ 07670

MATTHEW G. CAPIZZI, ESQ. 201 266 8300 (o)
N.J., N.Y., & D.C. Bars 201 266 8301 (f)
Capizzilaw.com

August 5, 2025

Initial Submittal for Completeness Review

Via Overnight Mail

Jane Wondergem – Secretary
Ridgewood Zoning Board of Adjustment
131 N Maple Avenue
Ridgewood, NJ 07450

Re: Rayabarapu/Nomula – Ridgewood ZBA (the “Applicant”)
370 Upper Boulevard; Block 1910, Lot 3 (the “Property”)

Dear Ms. Wondergem:

Please be advised this office represents the above-referenced Applicant in connection with their application before the Ridgewood Zoning Board of Adjustment seeking to renovate and expand the existing single-family dwelling by 1) constructing a second-story addition above the existing first floor, 2) constructing a two-story addition on the left (northerly) side of the dwelling, 3) adding a covered porch along Upper Boulevard, and 4) expanding the driveway. To that end, enclosed please find the following:

1. Village of Ridgewood Board of Adjustment Application with Reasons for Relief and Survey Affidavit attached thereto (5 copies);
2. Site Plan prepared by McClellan Engineering consisting of one (1) sheet dated March 12, 2025 (5 copies);
3. Topographic Survey prepared by Lantelme, Kurens & Associates, PC dated September 7, 2024 (5 copies);
4. Retaining Walls Construction Drawings prepared by Onello Engineering consisting of seven (7) sheets dated June 16, 2025 (5 copies);
5. Retaining Walls/Design & Calculations prepared by Onello Engineering dated June 16, 2025 (5 copies);
6. Schematic Landscape Plan prepared by Christopher L. Karach dated July 17, 2029 consisting one (1) sheet (5 copies);
7. Architectural Plan prepared by Jordan Rosenberg Architects & Associates consisting of three (3) sheets dated January 30, 2025 and last revised as of June 16, 2025 (5 copies);
8. Deed to Property (5 copies);

Jane Wondergem - Secretary

August 5, 2025

Page 2 of 2

9. Photo Exhibit (5 copies); and

10. Applicant's Checks & W9:

- Check # 370 in the amount of \$600.00 (Application Fee)
- Check # 371 in the amount of \$1,800.00 (Escrow Fee).

Kindly advise when this matter has been deemed complete and assigned a public hearing date before the Ridgewood Zoning Board of Adjustment.

Thank you.

Very truly yours,

Karissa Vittorio

Karissa Vittorio, Paralegal

MGC/kv
Enclosures

APPLICATION FORM VILLAGE OF RIDGEWOOD BOARD OF ADJUSTMENT

(THIS BOX FOR OFFICIAL USE ONLY)		
DATE RECEIVED: _____	BLOCK(S): <u>1910</u>	LOT(S): <u>3</u>
ADDRESS OF SUBJECT PROPERTY: <u>370 Upper Boulevard, Ridgewood NJ 07450</u>		
APPLICANT NAME: <u>Pavan Rayabarapu and Rajani Nomula c/o Matthew G. Capizzi, Esq.</u>	APPLICATION NO.: _____	

TYPE OF APPLICATION(S) - check all that apply	Application Fee(s)	Escrow Deposit(s)
<input checked="" type="checkbox"/> "C" Variance (§190-33) - \$200 per variance, max. \$1,000	\$600.00	\$1,800.00
<input type="checkbox"/> "D" Variance (§190-34) - \$1,000 each for prohibited use, expansion of nonconforming use, or density; \$500 each for building height at least 10% over maximum		
<input type="checkbox"/> Appeal of Zoning Officer Decision (§190-29)		
<input type="checkbox"/> Interpretation of Zoning Regulations (§190-30)		
<input type="checkbox"/> Certification of Nonconforming Use/Structure (§190-126G)		
<input type="checkbox"/> Minor Subdivision (§190-45)		
<input type="checkbox"/> Preliminary Major Subdivision (§190-46)		
<input type="checkbox"/> Final Major Subdivision (§190-47)		
<input type="checkbox"/> Exception from Subdivision Design Standards (§190-60)		
<input type="checkbox"/> Permit for Area on Official Map (§190-31)		
<input type="checkbox"/> Permit for Lot not Abutting Street (§190-32)		
<input type="checkbox"/> Extension of Approval (§190-36D, -45H, -46C(3), -46D, -47D, -47E, -47J, -47K, -51 or -97E)		
TOTAL	\$600.00	\$1,800.00

Instructions to Applicants: All applicants are required to complete the cover sheet and Parts I, II, III and IV. The various attachments must be completed if they apply to your application. If any parts of the form do not apply to your application, please state "not applicable", "none", etc. If you have any questions, please contact the Board Secretary.

PART I. APPLICANT AND OWNER INFORMATION

- A. Applicant Name Pavan Rayabarapu and Rajani Nomula c/o Matthew G. Capizzi, Esq.
- B. Applicant's Mailing Address 205 Fairview Avenue, Westwood NJ 07675
- C. Applicant Telephone No. 201-266-8300 If unlisted, check here
- D. Applicant Email matthew@capizzilaw.com
- E. Applicant's Attorney Name Matthew G. Capizzi, Esq.
- F. Applicant's Attorney Address Same as above
- G. Attorney Telephone No. _____ Attorney Email _____
- H. Property Owner's Name Same as Applicant
- I. Property Owner's Mailing Address 370 Upper Boulevard, Ridgewood NJ 07450
- J. Applicant's interest in land, if not owner (e.g., contract purchaser, owner's agent, etc.)
N/A - Applicant is the Owner

PART II. EXISTING PROPERTY INFORMATION

- A. Street Address of Property to be Developed 370 Upper Boulevard, Ridgewood NJ 07450
- B. Tax Map Block Number(s) 1910 Lot Number(s) 3
- C. Zone District(s) R-2
- D. Does the owner or applicant now own or have any interest in any other property that adjoins the premises which are the subject of this application? (check one) Yes No
If yes, describe the adjacent property by block and lot numbers from the current tax map.

E. Are there any deed restrictions, protective covenants, easements, etc. affecting the subject property (check one) Yes No If yes, describe below or on a separate sheet.

[Redacted area]

F. I have obtained from the Secretary of the Board a summary and/or a resolution concerning all prior decisions concerning development applications for the premises and have submitted these documents with this application. (check one) Yes No

Note: This certification must be submitted with the application or the application will be incomplete.

G. Existing Use (check all that apply).

Single Family Residence.

Two Family Residence

Other Use (Explain): _____

H. Describe the existing development of the property (buildings, paved areas, etc.).

See attached Reasons for Relief.

[Redacted area]

PART III. PROPOSED DEVELOPMENT INFORMATION

A. Proposed Use (check all that apply).

Single Family Residence.

Two Family Residence

Other Use (Explain):

B. Proposed Development (describe all site modifications for which approval is being sought, including buildings, paving, utilities, storm drainage, lighting, signs, landscaping, fencing, etc. and any alterations to existing improvements).

See attached Reasons for Relief.

[Redacted area]

C. Required approvals or reviews by other governmental agencies other than the Board of Adjustment, before construction may start (check all that apply). If in doubt, ask the Board Secretary for information.

- | | |
|--|---|
| <input type="checkbox"/> Historic Preservation Commission | <input type="checkbox"/> Road Opening Permit |
| <input type="checkbox"/> Health Department | <input type="checkbox"/> Bergen/Passaic County |
| <input type="checkbox"/> Construction Code Official | <input type="checkbox"/> Other Municipality |
| <input type="checkbox"/> Soil Movement Permit | <input type="checkbox"/> N.J. DEP (e.g., wetlands) |
| <input type="checkbox"/> Retaining Wall Permit | <input type="checkbox"/> N.J. DOT (e.g., State highway) |
| <input type="checkbox"/> Flood Hazard Area Construction Approval | <input type="checkbox"/> Other (describe below) |

N/A

PART IV. PROPOSED VIOLATIONS OF THE LAND USE ORDINANCE (Chapter 190)

The following must be completed if the application is seeking a variance from the zoning regulations in Chapter 190, *Land Use and Development*.

A. The following violations of Chapter 190 are proposed by this application (reference the proposed violations by section and paragraph number in the ordinance):

1. Minimum Front Yard Setback as to Upper Boulevard: (40' Minimum Required v. 38' Existing and Proposed);
2. Minimum Front Yard Setback from Covered Porch as to Upper Boulevard: (40' Minimum Required v. 35' Proposed);
3. Minimum Rear Yard Setback: (30' Minimum Required; 19.8' Existing; 11' Proposed); and
4. Maximum Height for Retaining Wall with Fence: (4' Maximum Allowed v. 11' Proposed).

B. On a separate sheet, indicate the reasons why you believe that the Board should grant relief of the above ordinance requirements, using the following criteria (check all that apply): **See attached Reasons for Relief**

- Permit for Area on Official Map (see §190-31F(1) through (3))
- Permit for Lot not Abutting Street - Official Map (see §190-32F(1) and (2))
- "C" Variance (see §190-33G(1), (2) and (3))
- "D" Variance (see §190-34G(1)(a), (b) and (c))


PART V. SIGNATURES AND AUTHORIZATIONS

The undersigned applicant and owner do hereby certify that all the statements contained in this application are true to the best of their knowledge.

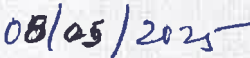
The undersigned applicant and owner agree that if any of the information presented in this application changes prior to the issuance of any permits by the Village for the subject application, I/we will promptly notify the Board of such changes prior to the issuance of such permits.

The undersigned applicant and owner consent to the entering and inspection of the subject premises by the Board and its staff as necessary for the review of this application.


The undersigned agree to keep current all escrow accounts for review of this application and to pay any outstanding balances.



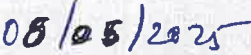
Applicant/Appellant



Date



Owner



Date

CAPIZZI LAW OFFICES

205 Fairview Avenue
Westwood, NJ 07675

MATTHEW G. CAPIZZI, ESQ. 201 266 8300 (o)
N.J., N.Y., & D.C. Bars 201 266 8301 (f)
Capizzilaw.com

August 5, 2025

Reasons for Relief

Chairman Gregory Brown and Members of the Board
Ridgewood Zoning Board of Adjustment
131 North Maple Ave.
Ridgewood, NJ 07450

Re: Rayabarapu/Nomula – Ridgewood ZBA (the “Applicant”)
370 Upper Boulevard; Block 1910, Lot 3 (the “Property”)

Dear Mr. Chairman and Members of the Board:

The Property is a corner lot located in the Villages R-2 Zone, contains a lot area of 9,372 square feet where 14,700 square feet is the minimum required and an average lot depth of 116.76’, where 120’ is the minimum required. The Property is improved with a single-family dwelling with an open front and side porch. Due to the undersized nature of the lot as to area and depth, the existing improvements are non-conforming as to (1) Minimum Front Yard Setback as to Upper Boulevard: (40’ Minimum Required v. 38’ Existing), and (2) Minimum Rear Yard Setback: (30’ Minimum Required v. 19.8’ Existing).

The Applicants seek to renovate and expand the existing single-family dwelling by 1) constructing a second-story addition above the existing first floor, 2) constructing a two-story addition on the left (northerly) side of the dwelling, 3) adding a covered porch along Upper Boulevard, and 4) expanding the driveway. The aforementioned work is collectively referred to as the “Application”.

The Application requires the variance relief described below:

- Minimum Front Yard Setback as to Upper Boulevard: (40’ Minimum Required v. 38’ Existing and Proposed) – The variance results from adding the second-story addition atop the existing first floor and the two-story addition along the left (north) side of the dwelling. The additions are being placed so as not to further encroach into the required yard.
- Minimum Front Yard Setback from Covered Porch as to Upper Boulevard: (40’ Minimum Required v. 35’ Proposed) – The proposed covered front porch will improve the property’s functionality and curb appeal. It is consistent with neighboring properties.

- **Minimum Rear Yard Setback:** (30' Minimum Required; 19.8' Existing; 11' Proposed) – The proposed two-story addition would reduce the rear yard setback to approximately 11 feet. This variance results from the home being set closer to the Northerly property line, providing for an enhanced setback along Glen Avenue, but creating a shallow rear yard. The variance also results from the shallowness of the lot as to lot depth. Lastly, the variance results from the property having two front yards, causing the norther property line to be designated a rear yard even though this yard functions as a side yard. Given the layout of the existing home, the expansion needs to occur towards the North. The design enhances the overall functionality and aesthetics of the home without resulting in any substantial detriment to neighboring properties due to the building height and coverages being conforming.
- **Maximum Height for Retaining Wall with Fence:** (4' Maximum Allowed v. 11' Proposed) – The Property, along the existing driveway, is improved with existing retaining walls that provide a height of 5.5'. New walls are proposed at the reconfigured driveway that will provide a height of 7'. Given the height of the walls, fall protection is required and will be provided by way of a 4' fence. The combined height of the fence and retaining wall is necessary to work with existing grading. The Applicant is proposing substantial landscaping to screen the walls from adjacent properties and the streetscape.

Based upon the above, the variances, individually and collectively, can be granted without causing a substantial negative impact to the neighborhood. Therefore, the Applicant requests their Application be granted.

Thank you.

Very truly yours,

Matthew G. Capizzi, Esq. /s

Matthew G. Capizzi, Esq.

MGC/hs

Survey Affidavit

STATE OF NEW JERSEY
COUNTY OF Bergen

} SS:

say(s) under oath:

- 1. Representations.** If only one person signs this Affidavit, the word "we" shall mean "I." The statements in this Affidavit are true to the best of our knowledge, information and belief.
- 2. Property.** We are the present owners (or duly authorized officers, partners, or members of the present owner), of Property located at 370 Upper Blvd, Ridgewood NJ (called this "Property") which we now own and possess _____ to.
- 3. Survey.** We have examined the attached survey of this Property dated 9/7/2024 made by Lantelme, Kurens, & Associates, PC.
- 4. No Change.** The survey shows this Property in its present condition. There have been no changes in the boundary lines of this Property. There have been no changes in the principle building, accessory building, fences, driveway, sidewalks, patios, decks. There has been no installation of any new improvements such as a shed, patio, deck, relocation of sidewalk, patios or decks.
- 5. Reliance.** We are aware that the Village of Ridgewood, Zoning Board of Adjustment will rely on the truthfulness and the statements made in this Affidavit in connection with the Variance Application that is submitted to the Zoning Board of Adjustment of the Village of Ridgewood.

Signed and sworn to before me on (date)

Rajani Nomula

Rajani Nomula

Pavan Rayabarapu

Pavan Rayabarapu

Photo Exhibit

Pavan Rayabarapu and Rajani Nomula

370 Upper Boulevard, Ridgewood NJ

Block: 1910, Lot: 3

View of Front Elevation



View of Left-Side Elevation



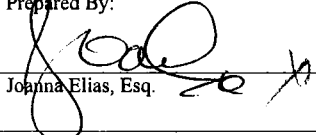
View of Right-Side
Elevation



104 – Deed – Bargain and Sale (Covenant as to Grantor's Acts)
Corp. to Ind. or Corp. – Plain Language

D RVS --1

DEED

Prepared By:

Joanna Elias, Esq.

This Deed is made on August 12, 2008

BETWEEN

Ocwen REO LLC

80364 Deed > 350,000
Kathleen A. Donovan Recording Fee 70.00
Bergen County Clerk
Recorded 08/28/2008 08:32

having its principle office at 12650 Ingenuity Drive, Orlando, FL 32826 referred to as the Grantor.

AND

Pavan Rayabarapu and Rajani Nomula, **HUSBAND AND WIFE**,

Consideration : 360000.00
Realty Transfer Fee : 2831.00
State Portion : 1976.00
County Portion : 540.00
Municipality Portion : 315.00

whose post office address is 370 Upper Boulevard, Ridgewood, NJ 07450, referred to as the Grantee.

The word "Grantor" and "Grantee" shall mean all Grantors and Grantees listed above.

1. Transfer of Ownership. The Grantor grants and conveys (transfers ownership of) property described below to the Grantee. This Transfer is made for the sum of **THREE HUNDRED SIXTY THOUSAND DOLLARS 00/100 (\$360,000.00)**. The Grantor acknowledges receipt of this money.

2. Tax Map Reference. (N.J.S.A. 46:15-1.1) Municipality of Village of Ridgewood
Block No. 1910 Lot No. 3 Account No.

No property tax identification number is available on the date of this Deed. (Check box if applicable)

3. Property. The Property consists of the land and all the buildings and structures on the land in the Village of Ridgewood, County of Bergen and State of New Jersey. The legal description is:

ALL that certain lot, parcel or tract of land, situate and lying in the Village of Ridgewood, County of Bergen and State of New Jersey being more particularly described as follows:

BEGINNING at an iron pipe in the southwesterly sideline of Glen Avenue, a 50 foot wide right-of-way, distant 80.00 feet on a bearing of North 65 degrees 42 minutes 00 seconds West from the produced intersection of said sideline with the northwesterly sideline of Upper Boulevard, a 50 foot wide right-of-way, and running thence;

- (1) South 24 degrees 18 minutes 00 seconds West 116.76 feet along the southeasterly line of land now or formerly of Oscasio to a point; thence
- (2) South 70 degrees 26 minutes 00 seconds east 93.84 feet along the northerly line of land now or formerly of Walla to a point on a curve in the aforesaid sideline of Upper Boulevard; thence
- (3) Northeasterly, a distance of 85.46 feet along said sideline and along the arc of a curve bearing to the right and having a radius of 267.77 feet to a point of tangency; thence
- (4) North 24 degrees 18 minutes 00 seconds East 5.00 feet along the same to a point of curvature; thence
- (5) Northerly, a distance of 31.42 feet along the arc of a curve bearing to the left and having a radius of 20.00 feet to a point of tangency in the aforesaid sideline of Glen Avenue; thence
- (6) North 65 degrees 42 minutes 00 seconds West 60.00 feet along said sideline to the point or place of BEGINNING.

COMMONLY KNOWN AS: 370 Upper Boulevard, Ridgewood, NJ 07450 (For Informational Purposes only)

FOR INFORMATIONAL PURPOSES ONLY: Also known as Lot 3 in Block 1910 on the Village of Ridgewood Tax Map.

BK 09600 PG 278

104 -- Deed -- Bargain and Sale (Covenant as to Grantor's Acts)
Corp. to Ind. or Corp. -- Plain Language

D RVS --1

SB

THE SAME LAND AND PREMISES which became vested in Ocwen REO LLC by deed from Leo P. McGuire, Sheriff of the County of Bergen , dated May 5, 2008, recorded June 2, 2008 in Deed Book 9549, Page 315 in the Bergen County Clerk's/Register's Office.

Being the same land and premises vested in Yanique N. Dixon by deed from Matthew T. Stewart, dated June 30, 2006, recorded September 7, 2006 in Deed Book 9146, Page 185 in the Bergen County Clerk's/Register's Office.

BK 09600 PG 279

4. Promises by Grantor. The Grantor promises that the Grantor has done no act to encumber the Property. This promise is called a "covenant as to grantor's acts" (N.J.S.A 46:4-6). This promise means that the Grantor has not allowed anyone else to obtain any legal rights that affect the property (such as by making a mortgage or allowing a judgment to be entered against the Grantor).

5. Signatures. The Grantor signs this Deed as of the date at the top of the first page. (Print name below each signature).

Attested by:

[Signature]

Ocwen REO LLC

By:

[Signature]
KEITH CHAPMAN
VA REO Closing Manager

STATE OF FL

, County of Orange

SS:

I Certify that on August 12, 2008, 2008 personally came before me and this person acknowledged under oath, to my satisfaction that:

Keith Chapman, Closing Mgr.

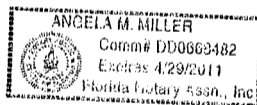
- (a) was the maker of this Deed;
- (b) was authorized to and did execute this Deed as of Ocwen REO LLC, the entity named in this Deed;
- (c) made this Deed for \$360,000.00 as the full and actual consideration paid or to be paid for the transfer of title. (Such consideration is defined in N.J.S.A. 46:15-5); and
- (d) executed this Deed as the act of the entity.

Signed and sworn to before me on

August 12, 2008.

[Signature]

Notary



<u>DEED</u>		Dated: Aug 12, 2008
Ocwen REO LLC	Grantor	Record and Return to: DAVID J. OBER COUNSELLOR AT LAW OAK HILL PARK 1680 ROUTE 23 NO. STE 130 WAYNE, NJ 07470
To Pavan Rayabarapu and Rajani Nomula	Grantee	

BK 09600 PG 280



State of New Jersey
SELLER'S RESIDENCY CERTIFICATION/EXEMPTION
 (C.55, P.L. 2004)

GIT/REP-3
 (12-07)

(Please Print or Type)

SELLER(S) INFORMATION (See Instructions, Page 2)

Name(s)

Ocwen REO LLC

Current Resident Address:

Street: **12650 Ingenuity Drive**

City, Town, Post Office

State

Zip Code

Orlando

FL

32826

PROPERTY INFORMATION (Brief Property Description)

Block(s)

Lot(s)

Qualifier

1910

3

Street Address:

370 Upper Boulevard

City, Town, Post Office

State

Zip Code

Ridgewood

NJ

07450

Seller's Percentage of Ownership

Consideration

Closing Date

100

\$360,000.00

8/21/08

SELLER ASSURANCES (Check the Appropriate Box) (Boxes 2 through 8 apply to NON-residents)

1. I am a resident taxpayer (individual, estate, or trust) of the State of New Jersey pursuant to N.J.S.A. 54A:1-1 et seq. and will file a resident gross income tax return and pay any applicable taxes on any gain or income from the disposition of this property.
2. The real property being sold or transferred is used exclusively as my principal residence within the meaning of section 121 of the federal Internal Revenue Code of 1986, 26 U.S.C. s. 121.
3. I am a mortgagor conveying the mortgaged property to a mortgagee in foreclosure or in a transfer in lieu of foreclosure with no additional consideration.
4. Seller, transferor or transferee is an agency or authority of the United States of America, an agency or authority of the State of New Jersey, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Government National Mortgage Association, or a private mortgage insurance company.
5. Seller is not an individual, estate or trust and as such not required to make an estimated payment pursuant to N.J.S.A.54A:1-1 et seq.
6. The total consideration for the property is \$1,000 or less and as such, the seller is not required to make an estimated payment pursuant to N.J.S.A. 54A:5-1-1 et seq.
7. The gain from the sale will not be recognized for Federal income tax purposes under I.R.C. Section 721, 1031, 1033 or is a cemetery plot. (CIRCLE THE APPLICABLE SECTION). If such section does not ultimately apply to this transaction, the seller acknowledges the obligation to file a New Jersey income tax return for the year of the sale (see instructions).
 No non-like kind property received.
8. Transfer by an executor or administrator of a decedent to a devisee or heir to effect distribution of the decedent's estate in accordance with the provisions of the decedent's will or the intestate laws of this state.

SELLER(S) DECLARATION

The undersigned understands that this declaration and its contents may be disclosed or provided to the New Jersey Division of Taxation and that any false statement contained herein could be punished by fine, imprisonment, or both. I furthermore declare that I have examined this declaration and, to the best of my knowledge and belief, it is true, correct and complete.

August 12, 2008
 Date

RCC
 Signature

(Seller) Please indicate if Power of Attorney or Attorney In Fact
 VA RECO Closing Form 2004

Date

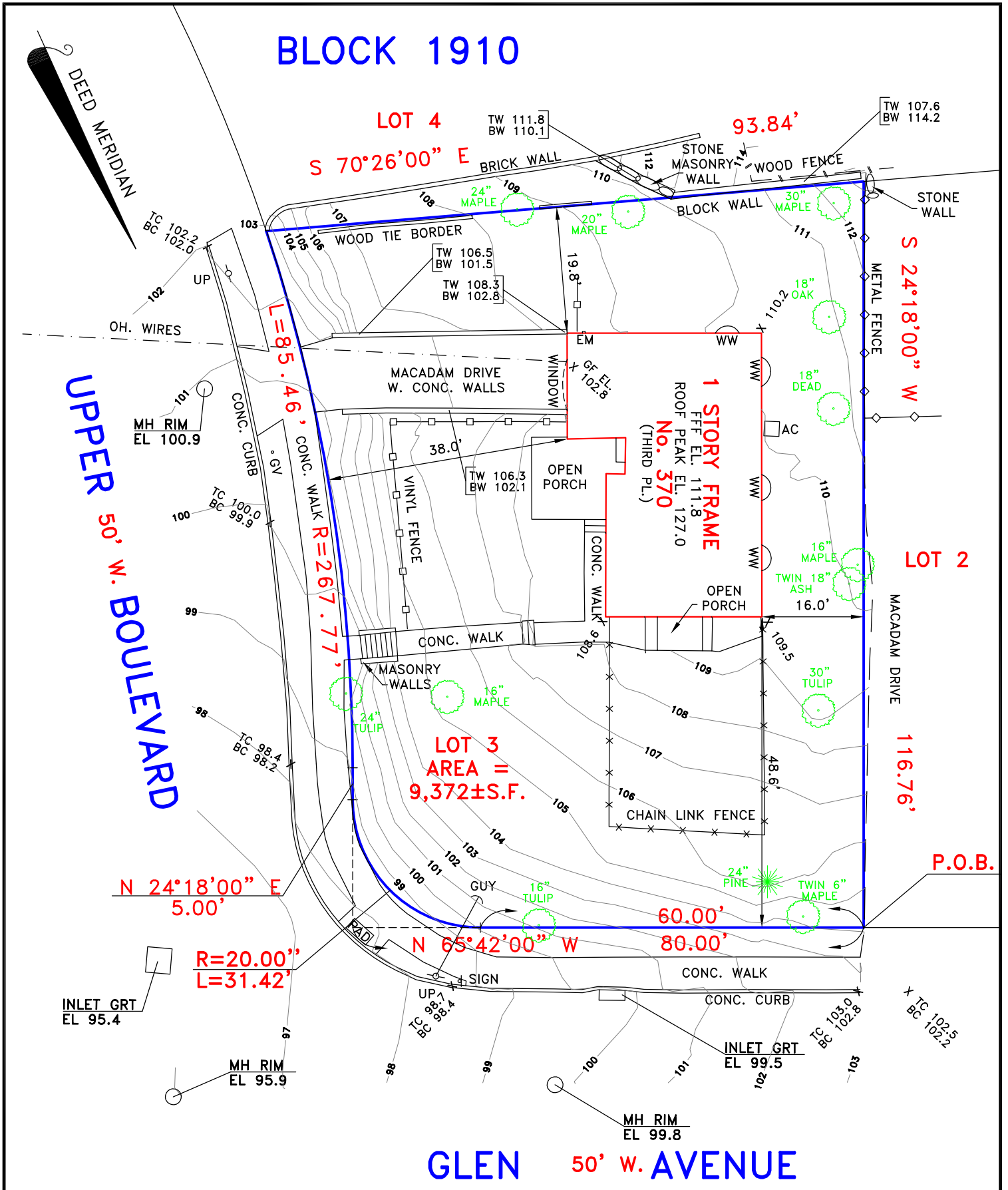
Signature

(Seller) Please indicate if Power of Attorney or Attorney In Fact

ABSTRACTED

BK 09600 PG 281

END OF DOCUMENT



HOLD RECORD DESCRIPTION.

A WRITTEN WAIVER AND DIRECTION NOT TO SET CORNER MARKERS HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO P.L.2003, c.14(c45-8-36.3) AND NJAC 13:40-5.1(d).

THIS SURVEY IS SUBJECT TO ANY FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.

TOPOGRAPHIC SURVEY - 370 UPPER BOULEVARD

PROPERTY SITUATED IN: VILLAGE OF RIDGEWOOD, BERGEN COUNTY, NEW JERSEY

CERTIFIED TO: PAVAN RAYABARAPU.

LOT NO.: 3 (TAX MAP)

BLOCK NO.: 1910 (TAX MAP)

MAP SOURCE: TAX ASSESSMENT MAP OF THE VILLAGE OF RIDGEWOOD, BERGEN COUNTY, NEW JERSEY.

LAND SURVEYOR
Christopher J. Lantelme
P.E. & L.S. 39580

SCALE: 1"=20'

DATE: 09/07/24

PARTY: JN/VD

DRAWN BY: DR

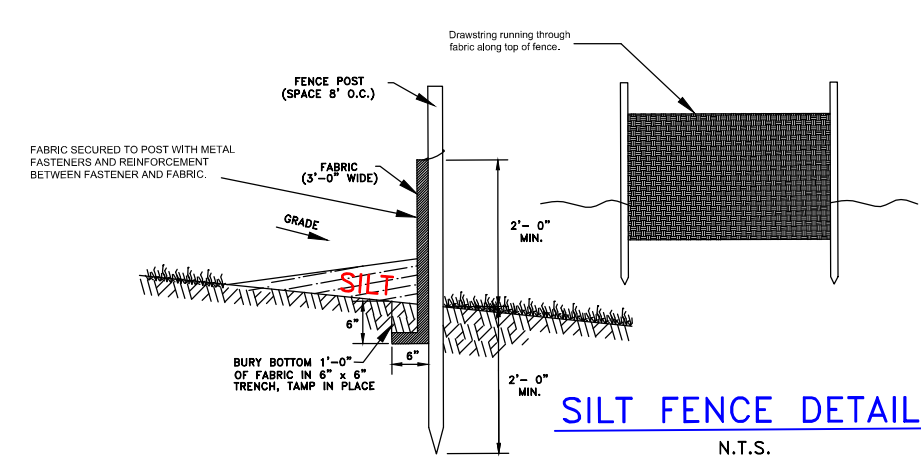
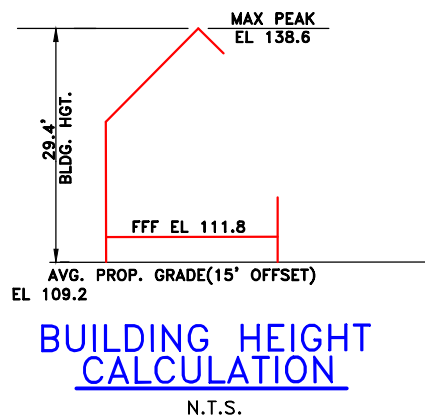
Residence R-2 Zone				
	Required	Existing	Proposed	Variance Required
Lot Area	14,700 sf	9,372 sf	9,372 sf	No*
Lot Area within 140 ft	14,700 sf	9,372 sf	9,372 sf	No*
Lot Width at Front Setback	75 ft	80.42 ft	80.42 ft	No
Lot Depth	120 ft	116.76 ft	116.76 ft	No*
Setbacks				
Front Yard(Upper)	40 ft	38.0 ft	38.0 ft/35.0 ft	Yes*/Yes+
Front Yard(Glen)	40 ft	48.6 ft	48.6 ft	No
Side Yard	10 ft	16.0 ft	16.0 ft	No
Combined Side Yard	33% lot width(26.5 ft)	NA	NA	No
Rear Yard	30 ft	19.8 ft	11.0 ft	Yes*
No. of Stories	2 1/2 Story	1 Story	2 Story	No
Building Height	30 ft	18.1 ft	29.4 ft	No*
Coverage by Above Grade Structures	20%	1368 sf/14.6%	1544 sf/16.5%	No
Gross Building Area**	Lesser of 34%/3360 sf	1134 sf/12.1%	2838 sf/30.3%	No
Coverage by Improvements	Lesser of 45%/5600 sf	2110 sf/22.5%	2598 sf/27.7%	No

* Existing non-conformance.
 ** See Architectural plans.
 + Front yard setback to covered porch
 Additional Variance:
 Retaining Wall Plus Fence Height 11 ft Proposed vs. 4 ft Allowed

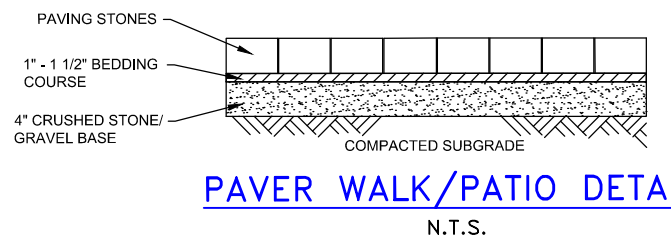
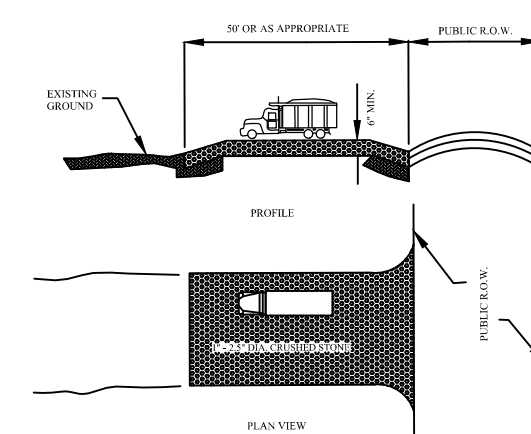
LOT COVERAGE CALCULATIONS

EXISTING	PROPOSED
DWELLING 1166 sf	DWELLING 1478 sf
PORCH 202	COVERED PORCH 66
TOTAL BUILDING 1368 sf = 14.6%	TOTAL BUILDING 1544 sf = 16.5%
WALKS/STEPS 276	WALKS/STEPS 200
MECH. PADS 6	MECH. PADS 16
DRIVEWAY 460	REAR STEPS 18
TOTAL 2,110 sf = 22.5%	DRIVEWAY 820
	TOTAL 2,598 sf = 27.7%

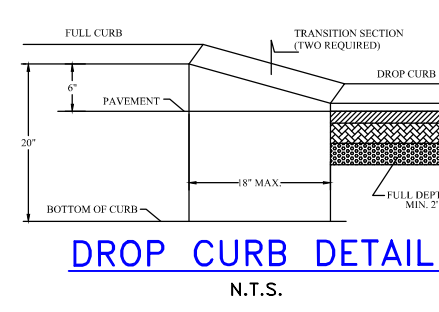
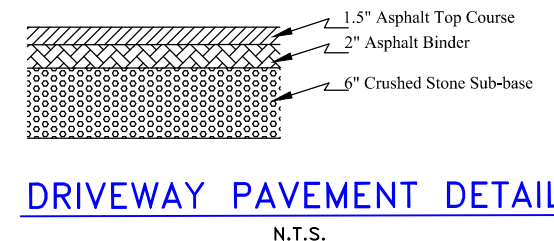
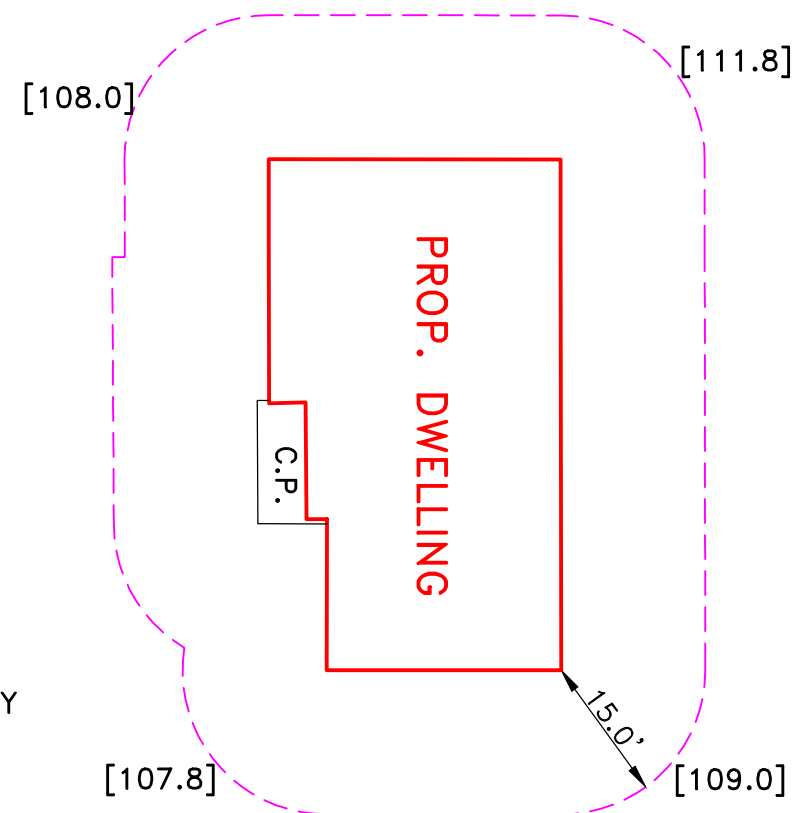
Prop. Ground Elev.	
108.0	
111.8	
109.0	
107.8	
Avg. Elev. 15' from Fnd. - 109.2	



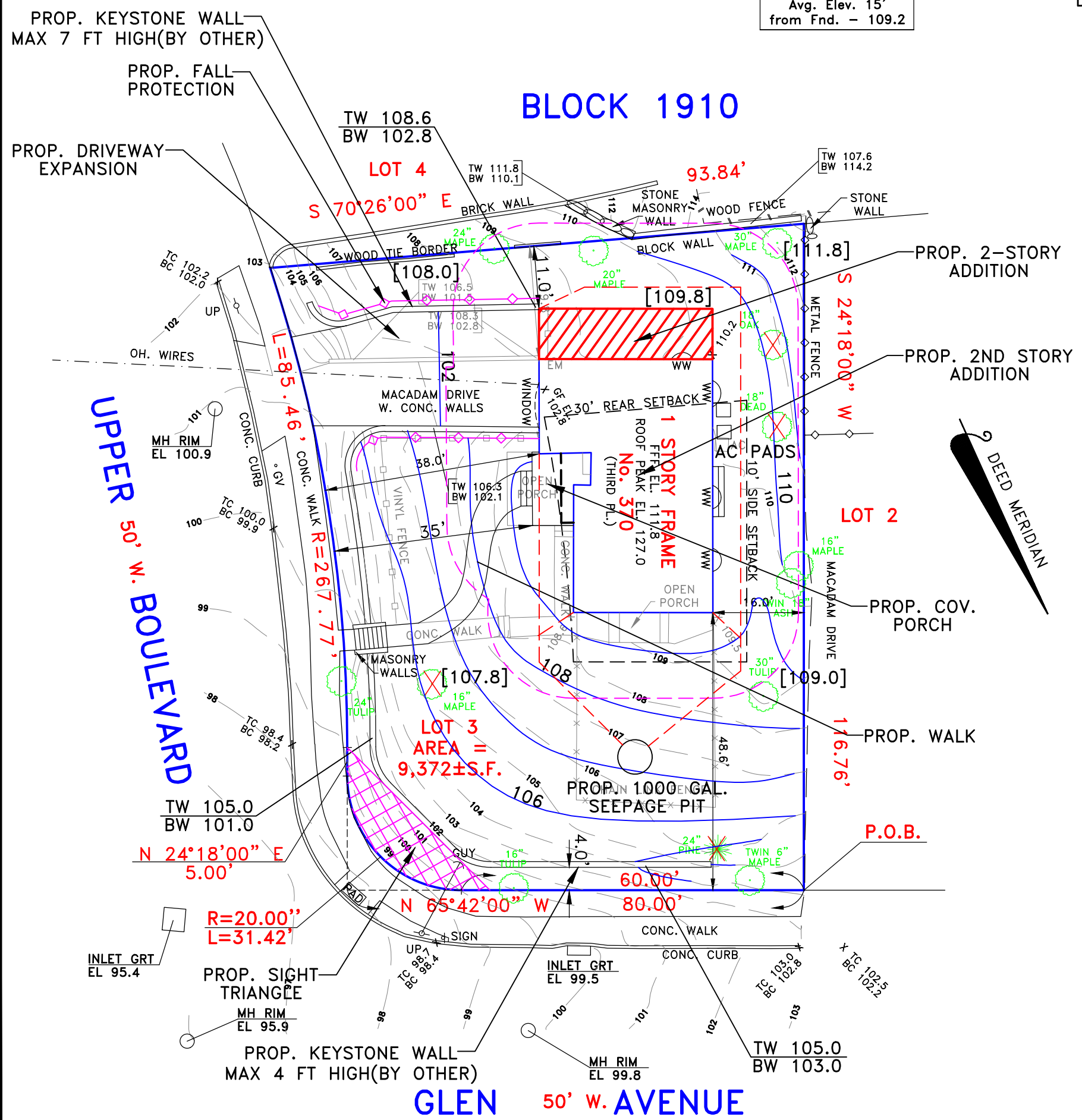
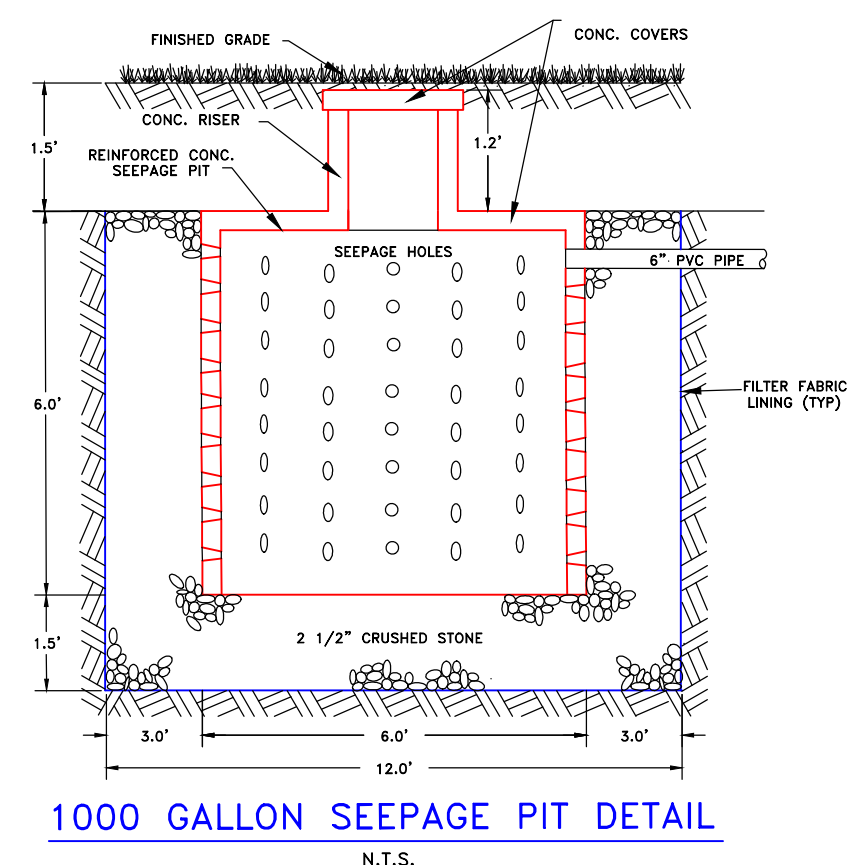
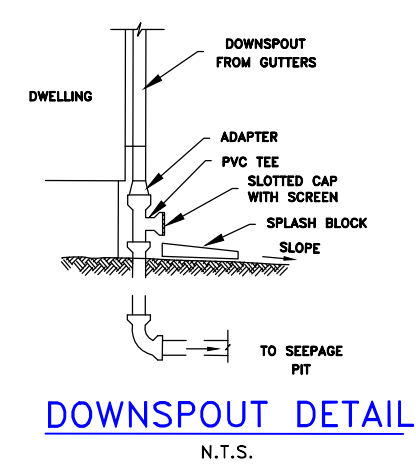
Soil Moving Requirements	
Basement	
Area = 268 sf	Area w/1.5' overdig = 346 sf
Avg. Cut = 7.0 ft	
Cut = (346 sf)(7.0 ft) = 90	
Total Cut = 90	90 yds cut
Backfill = (346-268)(7.0)	20 yds fill
Driveway - 360 sf x 5 ft	
67 yds cut	
Front - 3000 sf x 1.5 ft	
166 yds fill	
Seepage Pits	
48 yds cut	
8 yds fill	
Total Cut	205 yds cut
Total Fill	194 yds fill
Net Soil Exported from Site	11 yds



- NOTES:**
1. Applicant: Pavan Rayabharapu
 2. Property address: 370 Upper Boulevard Ridgewood, New Jersey.
 3. Property known as Block 1910, Lot 3 in accordance with the Tax Assessment Map of the Village of Ridgewood.
 4. Property is located in the Residence R-2 zone.
 5. Elevations based on an assumed datum.
 6. Existing spot elevations indicated with an X. Proposed spot elevations in [].
 7. Underground utility locations to be verified and marked-out in the field prior to commencement of construction activities.
 8. Existing utility connections from previous structure are to be inspected. If same are not in acceptable condition, new service connections shall be installed in accordance with Borough specifications.
 9. Roof leaders shall be connected to proposed seepage pits as shown.
 10. The applicant shall be responsible for the replacement of any curbing or pavement damaged or destroyed as a result of construction activities or in disrepair as determined by the Village Engineer. The applicant shall be responsible to immediately remove any soil tracked or washed onto the street.
 11. Survey and Topography performed on September 7, 2024 by Lantelme, Kurens & Associates.



DRAINAGE CALCULATIONS (3 Inch Rainfall Event)	
Roofed Areas	1,544 sf
1,544 sf x 144 in/sf =	222,336 si
Storage Required = 222,336 si x 3 in =	667,008 ei
	= 2,887 gal
Storage Provided 1 x 3,030 gal =	3,030 gal



McClellan Engineering

84 Gettysburg Way Lincoln Park, New Jersey (862) 668-1160

SCALE: 1"=20'
 DATE: MARCH 12, 2025
 PREPARED BY: SPM
 LOT No. 3
 BLOCK No. 1910
 FILE No. SP370UPPER

SITE PLAN FOR PAVAN RAYABHARAPU
 Lot 3 Block 1910 370 Upper Boulevard
 Village of Ridgewood, Bergen County, N.J.
 PROPERTY SITUATED IN THE VILLAGE OF RIDGEWOOD, BERGEN COUNTY,
 NEW JERSEY.

Sean P. McClellan
 P.E. 45194

June 16, 2025

Rayabarapu, Ridgewood – Retaining Walls / Design & Calculations

Capizzi Law Offices
Matthew Capizzi Esq
Karissa Vittorio
205 Fairview Avenue
Westwood, New Jersey 07675

Village of Ridgewood
Division of Engineering
131 North Maple Avenue
Ridgewood, New Jersey 07450
Christopher J Rutishauser PE

**Re: Retaining Walls Construction Drawings / Design Drawings & Structural Stability Calculations
#370 Upper Boulevard
Lot 3 - Block 1901
Village of Ridgewood
Bergen County, New Jersey**

Enclosures

Item	Description	Date	#
A	Retaining Walls Retaining Walls for Rayabarapu, #370 Upper Boulevard, Lot 3 – Block 1910, Village of Ridgewood, Bergen County, New Jersey, prepared by Onello Engineering, Angelo Onello PE	June 16, 2025	6

In support of the above referenced residential property improvements project (with home renovation / addition, and overall site work for a driveway widening, grading, & drainage), the enclosed Onello Engineering plan-set includes retaining walls design drawings and construction details for the same, whereas the following structural stability calculations have been prepared for each of the critical cross-sections (ranging from 4' minimum height to 7' maximum design height)

The retaining walls are designed with standard 8" unit manufactured concrete modular blocks and high strength roll-back geogrid. For this application, the proposed wall block is Anchor Wall / Belgard Diamond Pro 8", and geo-grid by Tencate Geosynthetics Mirafi 3XT

Drawing #4 – Retaining Walls, Grading Elevations & Drainage: the highest plan-design retaining wall section is approximately 6'-4" (at both sides of the garage face at the residence foundation) – however, as site grading conditions may vary slightly during actual construction, conservatively, the retaining walls have been assumed with an additional 8" block course, for up to 7 feet maximum exposed face height (abutting the garage foundation, as per plan)

Thick, hearty landscaping is proposed along top the retaining walls; however, due to most of the wall sections along the driveway being 5 feet height (and higher), a 4 feet height fence is specified atop the walls for the purposes of fall protection. As per Village ordinance §190-124 F (3) (d) [5] – the wall height is defined as the exposed face height plus the height of the fence-atop, whereas a maximum height 7 feet wall plus the 4 feet height fence equates to 11 feet total height

Continued on next page

Drawing #5 – Retaining Walls, Section Locations 'A' – 'H': cross-section location lines 'A-A' through 'H-H' are provided, which relate to the incremental critical cross-sections as provided on Drawing #7 - Retaining Walls, Construction Details & Wall Sections; and the following structural stability retaining walls calculations are directly in-support of the same

We trust all is in order for review



Angelo Onello III PE
201-774-1444
Angelo@OnelloEng.com

Cc: Rayabarapu, Pavan & Rajani Nomula
McClellan Engineering, Sean P McClellan PE
Jordan Rosenberg Architects & Associates

Appendix – Retaining Walls Design Calculations Report

Rayabarapu, #370 Upper Boulevard, Lot 3 - Block 1910, Village of Ridgewood, Bergen County, New Jersey

Section #1 = 'H-H'

Section #4 = 'E-E'

Section #7 = 'B-B'

Section #2 = 'G-G'

Section #5 = 'D-D'

Section #8 = 'A-A'

Section #3 = 'F-F'

Section #6 = 'C-C'

Pages #1 through 31 via AnchorWall Software 7.6.0.6484
Prepared by Onello Engineering, June 16, 2025



Angelo Onello III PE
New Jersey #49284

Client Rayabarapu Ridgewood
Name Rayabarapu Ridgewood Retaining Walls **Number** BCRDG2501

Site #370 Upper Boulevard, Lot 3 - Block 1910, Village of Ridgewood **Designer:**ountOnello Engineering, Angelo Onello PE

Revision 1 **Created** 5/9/2025 **Modified** 6/16/2025

Standard National Concrete Masonry Association 3rd Edition

Comments

Rayabarapu, Ridgewood
 #370 Upper Boulevard
 Lot 3 - Block 1910
 Village of Ridgewood
 Bergen County, New Jersey

Notes:
 This is a preliminary quantity estimate for facing and reinforcement. It does not include additional materials that may or may not be required to construct the wall(s) including but not limited to waste, filter fabric, drain tile, or other materials to address drop structures and other obstructions in the reinforced zone. It is the responsibility of the Contractor to verify these quantities provided through their own estimate. The provider or author of the Software accepts no responsibility for any discrepancies between quantities provided in this estimate and quantities required by the final approved Design Drawings.

Quantities

Wall	Facing	Wall/Cap Length [ft]	Facing Units [#]	TOW Steps [#]	BOW Steps [#]	Facing Area [ft²]	Total Wall Area [ft²]
Wall 1	Diamond Pro	81	471	7	2	471	498
		81	471	7	2	471	498

Wall Unit	Wall 1
Diamond Pro	472

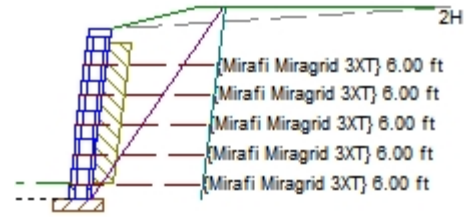
Wall	Leveling Pad [yd³]	Reinforced Fill [yd³]	Drainage Fill [yd³]	Core Fill [yd³]
Wall 1	5	69	14	8
Totals:	5	69	14	8

Reinforcements

Wall	3XT [yd²]
Wall 1	190
Totals:	190

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #1 at Station 0.00
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licenser/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft³]	Cohesion Cf [lb/ft²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	7.67	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	7.67 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	0.76 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced

External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSSc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT Supplier: TenCate Geosynthetics, Fill Type: Sands

Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static

External Static		FS	
Bearing Capacity	16.60	Bearing Pressure	1095.48 lb/ft²
Overturning	9.81	Max Eccentricity	0.00 ft
Base Sliding	5.11		
Crest Toppling	5.44		
Internal Sliding	6.48		

Internal Static Layer	Elevation [ft]	Rein.	Length [ft]	Internal Sliding		Tensile Overstress	
				FS	FS	FS	FS
5	107.33	3XT	6.00	26.48	7.93	29.83	
4	106.00	3XT	6.00	15.21	11.68	20.30	
3	104.67	3XT	6.00	10.53	14.07	14.05	
2	103.33	3XT	6.00	8.03	16.61	10.75	
1	102.00	3XT	6.00	6.48	19.19	8.70	

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
5	107.33	3XT	6.00	14.13	
4	106.00	3XT	6.00	11.13	
3	104.67	3XT	6.00	8.75	
2	103.33	3XT	6.00	7.50	
1	102.00	3XT	6.00	6.72	

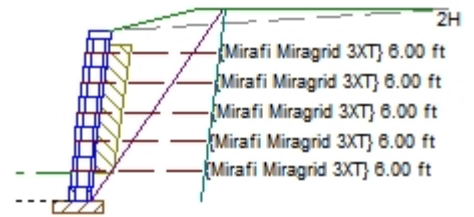
Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
3	7	2	2.25	Pass
1	10	1	2.46	Pass
2	5	4	2.53	Pass
1	9	3	2.82	Pass
4	5	6	2.99	Pass
1	8	5	3.13	Pass
1	7	7	3.79	Pass
5	4	8	3.83	Pass
1	5	9	5.16	Pass
9	1	10	5.97	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #2 at Station 10.50
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licenser/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft³]	Cohesion Cf [lb/ft²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	7.67	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	7.63 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	1.23 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSp0	Pullout	1.50	FSSc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT Supplier: TenCate Geosynthetics, Fill Type: Sands

Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static

External Static		FS	
Bearing Capacity	18.27	Bearing Pressure	1090.31 lb/ft²
Overturning	9.88	Max Eccentricity	0.00 ft
Base Sliding	5.13		
Crest Toppling	14.99		
Internal Sliding	7.21		

Internal Static Layer	Elevation [ft]	Rein.	Length [ft]	Internal Sliding		Tensile Overstress	
				FS	Pullout FS	FS	FS
5	107.33	3XT	6.00	41.40	9.02	61.09	
4	106.00	3XT	6.00	19.71	10.65	26.51	
3	104.67	3XT	6.00	12.59	12.87	16.77	
2	103.33	3XT	6.00	9.18	15.34	12.27	
1	102.00	3XT	6.00	7.21	11.34	6.12	

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
5	107.33	3XT	6.00	26.55	
4	106.00	3XT	6.00	13.49	
3	104.67	3XT	6.00	9.79	
2	103.33	3XT	6.00	8.07	
1	102.00	3XT	6.00	4.49	

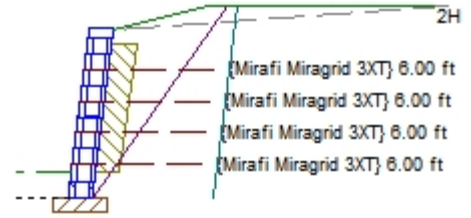
Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
1	5	1	1.94	Pass
3	6	3	2.36	Pass
1	9	2	2.52	Pass
4	6	5	2.71	Pass
1	8	4	2.95	Pass
3	4	7	3.32	Pass
1	7	6	3.41	Pass
1	6	8	4.34	Pass
4	3	9	4.65	Pass
1	4	10	6.63	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #3 at Station 20.25
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licensors/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft³]	Cohesion Cf [lb/ft²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	7.00	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	6.99 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	1.03 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced

External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSSc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT Supplier: TenCate Geosynthetics, Fill Type: Sands

Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static

External Static		FS	
Bearing Capacity	19.22	Bearing Pressure	999.39 lb/ft²
Overturning	11.29	Max Eccentricity	0.00 ft
Base Sliding	5.49		
Crest Toppling	5.56		
Internal Sliding	8.04		

Internal Static Layer	Elevation [ft]	Rein.	Length [ft]	Internal Sliding		Tensile Overstress	
				FS	FS	FS	FS
4	106.00	3XT	6.00	26.67	9.70	30.06	
3	104.67	3XT	6.00	15.28	13.37	20.31	
2	103.33	3XT	6.00	10.56	15.60	14.04	
1	102.00	3XT	6.00	8.04	11.36	6.76	

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
4	106.00	3XT	6.00	14.22	
3	104.67	3XT	6.00	11.12	
2	103.33	3XT	6.00	8.74	
1	102.00	3XT	6.00	4.71	

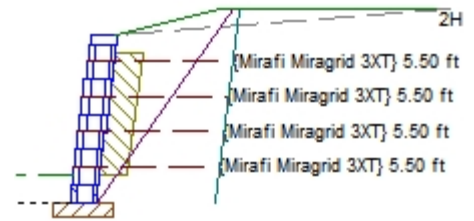
Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
1	5	1	1.98	Pass
2	6	3	2.51	Pass
1	10	2	2.65	Pass
4	6	5	2.96	Pass
1	9	4	3.17	Pass
1	8	6	3.77	Pass
3	4	7	3.81	Pass
1	6	8	5.14	Pass
8	1	9	5.99	Pass
1	1	10	7.77	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #4 at Station 30.00
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licensors/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft³]	Cohesion Cf [lb/ft²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	6.33	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	6.33 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	1.02 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced

External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSSc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT Supplier: TenCate Geosynthetics, Fill Type: Sands

Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static

External Static		FS	
Bearing Capacity	19.72	Bearing Pressure	907.18 lb/ft²
Overturning	11.13	Max Eccentricity	0.00 ft
Base Sliding	5.42		
Crest Toppling	13.48		
Internal Sliding	8.62		

Internal Static Layer	Elevation [ft]	Rein.	Length [ft]	Internal Sliding		Tensile Overstress	
				FS	Pullout FS	FS	FS
4	106.00	3XT	5.50	38.82	10.11	57.97	
3	104.67	3XT	5.50	18.54	11.30	25.88	
2	103.33	3XT	5.50	11.83	13.46	16.47	
1	102.00	3XT	5.50	8.62	9.93	7.55	

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
4	106.00	3XT	5.50	25.31	
3	104.67	3XT	5.50	13.23	
2	103.33	3XT	5.50	9.65	
1	102.00	3XT	5.50	4.98	

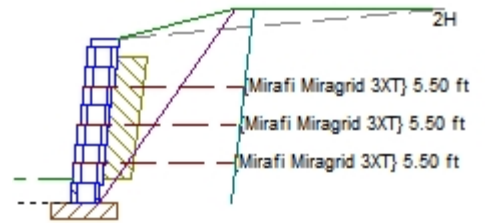
Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
1	4	1	2.01	Pass
3	6	3	2.61	Pass
1	9	2	2.65	Pass
4	5	5	3.19	Pass
1	8	4	3.29	Pass
1	7	6	4.11	Pass
8	4	7	4.49	Pass
1	5	8	6.26	Pass
1	2	9	9.00	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #5 at Station 40.50
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licenser/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft³]	Cohesion Cf [lb/ft²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	5.67	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	5.63 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	0.82 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced

External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSsc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT Supplier: TenCate Geosynthetics, Fill Type: Sands

Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static

External Static		FS	
Bearing Capacity	21.19	Bearing Pressure	808.82 lb/ft²
Overturning	13.24	Max Eccentricity	0.00 ft
Base Sliding	5.91		
Crest Toppling	5.78		
Internal Sliding	10.07		

Internal Static Layer	Elevation [ft]	Rein.	Length [ft]	Internal Sliding	Pullout	Tensile Overstress
				FS	FS	FS
3	104.67	3XT	5.50	25.89	10.31	30.34
2	103.33	3XT	5.50	14.66	13.90	20.25
1	102.00	3XT	5.50	10.07	9.95	8.64

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength
				FS
3	104.67	3XT	5.50	14.31

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
2	103.33	3XT	5.50	11.07	
1	102.00	3XT	5.50	5.37	

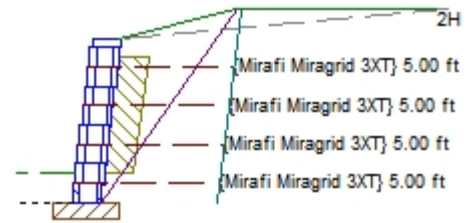
Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
1	5	1	2.11	Pass
1	9	2	2.86	Pass
5	7	3	2.88	Pass
1	8	4	3.71	Pass
6	5	5	3.74	Pass
1	6	6	5.00	Pass
7	2	7	6.08	Pass
1	2	8	7.91	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #6 at Station 50.25
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licensors/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft³]	Cohesion Cf [lb/ft²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	5.67	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	5.65 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	1.00 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSsc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT		Supplier: TenCate Geosynthetics, Fill Type: Sands					
Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static		FS	
Bearing Capacity	20.39	Bearing Pressure	810.06 lb/ft²
Overturning	10.98	Max Eccentricity	0.00 ft
Base Sliding	5.34		
Crest Toppling	14.01		
Internal Sliding	8.16		

Internal Static Layer	Elevation [ft]	Rein.	Length [ft]	Internal Sliding		Tensile Overstress	
				FS	FS	FS	FS
4	104.67	3XT	5.00	37.75	8.71	58.57	
3	103.33	3XT	5.00	17.76	10.25	25.88	
2	102.00	3XT	5.00	11.25	12.52	16.43	
1	100.67	3XT	5.00	8.16	15.00	12.04	

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
4	104.67	3XT	5.00	25.53	
3	103.33	3XT	5.00	13.21	
2	102.00	3XT	5.00	9.61	
1	100.67	3XT	5.00	7.94	

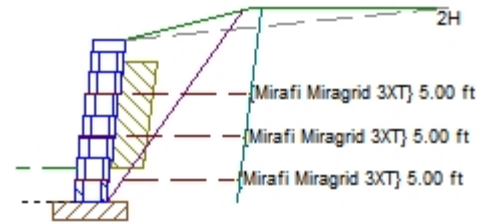
Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
5	7	2	2.56	Pass
1	8	1	2.61	Pass
7	6	4	3.15	Pass
1	8	3	3.27	Pass
1	6	5	4.02	Pass
9	4	6	4.47	Pass
1	5	7	6.20	Pass
1	3	8	9.13	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #7 at Station 60.00
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licenser/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft ³]	Cohesion Cf [lb/ft ²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	5.00	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	5.00 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	1.00 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSSc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT Supplier: TenCate Geosynthetics, Fill Type: Sands

Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static		FS	
Bearing Capacity	22.98	Bearing Pressure	718.72 lb/ft ²
Overturning	13.09	Max Eccentricity	0.00 ft
Base Sliding	5.83		
Crest Toppling	5.44		
Internal Sliding	9.44		

Internal Static		Internal Sliding		Tensile Overstress	
Layer	Elevation [ft]	Rein.	Length [ft]	FS	FS
3	103.33	3XT	5.00	24.29	29.19
2	102.00	3XT	5.00	13.75	19.87
1	100.67	3XT	5.00	9.44	13.75

Facing Static		Connection Strength	
Layer	Elevation [ft]	Rein.	Length [ft]
3	103.33	3XT	5.00

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
2	102.00	3XT	5.00	10.90	
1	100.67	3XT	5.00	8.57	

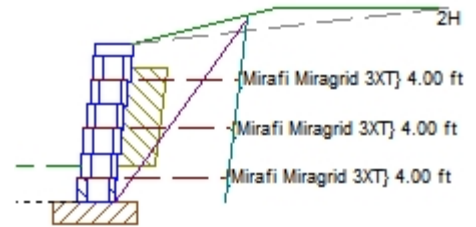
Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
1	9	1	2.77	Pass
6	7	2	2.81	Pass
1	8	3	3.64	Pass
10	6	4	3.65	Pass
1	6	5	4.79	Pass
9	3	6	6.00	Pass
1	3	7	7.74	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section #8 at Station 70.50
Report Date June 16, 2025
Designer Onello Engineering, Angelo Onello PE
Design Standard National Concrete Masonry Association 3rd Edition
Design Static
Unit of Measure U.S./Imperial
Selected Facing Unit
Licenser/Product Line: Anchor Wall Systems, Inc.
Name: Diamond Pro
Seismic As N/A



Soil Parameters

Soil Zone	Soil Type	Friction Angle	In Situ	
			Density [lb/ft³]	Cohesion Cf [lb/ft²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Section Details

Section Height	4.33	Back Slope	14.00°	LL Surcharge	0	DL Surcharge	0
Design Height	4.33 ft	Crest Offset	4.00 ft	LL Offset	0.00 ft	DL Offset	0.00 ft
Embedment	1.00 ft	Wall Batter	7.13°	Toe Slope	0.00°	Toe Offset	0.00 ft

Minimum Factors of Safety

Reinforced

External		Value	Internal		Value	Facing		Value
FSsl	Base Sliding	1.50	FSsl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSsc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Reinforcements

3XT - Mirafi Miragrid 3XT Supplier: TenCate Geosynthetics, Fill Type: Sands

Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

Analysis Results

- * Analysis includes Vertical Forces
- * Embedment is included in Bearing Capacity
- * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

External Static

External Static		FS	
Bearing Capacity	22.62	Bearing Pressure	616.73 lb/ft²
Overturning	11.42	Max Eccentricity	0.00 ft
Base Sliding	5.38		
Crest Toppling	13.60		
Internal Sliding	10.72		

Internal Static		Rein.	Length [ft]	Internal Sliding	Pullout	Tensile Overstress
Layer	Elevation [ft]			FS	FS	FS
3	103.33	3XT	4.00	42.84	6.02	56.87
2	102.00	3XT	4.00	17.87	8.24	25.33
1	100.67	3XT	4.00	10.72	10.70	16.11

Facing Static		Rein.	Length [ft]	Connection Strength
Layer	Elevation [ft]			FS
3	103.33	3XT	4.00	24.82

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Facing Static Layer	Elevation [ft]	Rein.	Length [ft]	Connection Strength	
				FS	
2	102.00	3XT	4.00	12.94	
1	100.67	3XT	4.00	9.43	

Internal Compound Stability

10 Lowest Static

Radius Point	Entry Point	Exit Point	Result	Status
1	6	1	2.81	Pass
10	7	2	2.99	Pass
4	8	3	3.95	Pass
10	5	4	4.39	Pass
5	6	5	6.03	Pass
1	6	6	9.06	Pass

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Project Information

Client	Rayabarapu Ridgewood	Number	BCRDG2501
Name	Rayabarapu Ridgewood Retaining Walls	Designer	Onello Engineering, Angelo On
Site	#370 Upper Boulevard, Lot 3 - Block 1910, Village of Ridgewood, Bergen County, New Jersey	Modified	6/16/2025
Revision	1	Created	5/9/2025
Standard	National Concrete Masonry Association 3rd Edition		
Seismic As	N/A		
Comments	Rayabarapu, Ridgewood #370 Upper Boulevard Lot 3 - Block 1910 Village of Ridgewood Bergen County, New Jersey		

Selected Facing Unit

Licenser/Product Line:	Anchor Wall Systems, Inc.
Name:	Diamond Pro

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Project Design Inputs

Design Standard National Concrete Masonry Association 3rd Edition

Minimum Factors of Safety

Conventional

External		Value	Internal		Value	Facing	Value
FSSl	Base Sliding	1.50	FSSl	Internal Sliding	1.50		
FSbc	Bearing Capacity	2.00	FSsc	Shear Capacity	1.50		
FSot	Overturning	1.50					

MultiDepth

External		Value	Internal		Value	Facing	Value
FSSl	Base Sliding	1.50					
FSbc	Bearing Capacity	2.00					
FSSH	Interface Shear	1.50					
FSot	Overturning	1.50					

No Fines

External		Value	Internal		Value	Facing	Value
FSSl	Base Sliding	1.50					
FSbc	Bearing Capacity	2.00					
FSot	Overturning	1.50					

Reinforced

External		Value	Internal		Value	Facing		Value
FSSl	Base Sliding	1.50	FSSl	Internal Sliding	1.50	FScs	Connection Strength	1.50
FSbc	Bearing Capacity	2.00	FSpO	Pullout	1.50	FSsc	Facing Shear	1.50
FSct	Crest Toppling	1.50	FSto	Tensile Overstress	1.50			
FSot	Overturning	1.50						

Design Factors

Term	Description	Minimum (as appl.)	Maximum (as appl.)
RC	Reinforced coverage ratio	1.00	0.00

Selected Facing Unit

Licenser/Product Line: Anchor Wall Systems, Inc.

Name: Diamond Pro

Facing Height	Hu	0.67 ft
Facing Width	Lu	1.50 ft
Facing Depth	Wu	1.00 ft
Facing Weight	Xu	120 lb/ft ³
Center of Gravity	Gu	0.50 ft
Setback	u	0.08 ft
Batter		7.13 °
Cap Height	Hcu	0.33 ft
Initial Shear Capacity	au	1180.97 lb/ft
Apparent Shear Angle	u	45.00 °
Maximum Shear Capacity	Vu(max)	2660.97 lb/ft

Selected Reinforcement Types

Reinforcements

3XT - Mirafi Miragrid 3XT		Supplier: TenCate Geosynthetics, Fill Type: Sands					
Tult	3,500.09 lb/ft	RFcr	1.44	RFd	1.10	LTDS	2,104.43 lb/ft
RFid	1.05	Cds	0.80	Ci	0.80		

Connection/Shear Properties

cs1	801.02 lb/ft	IP-1	1,000.42 lb/ft	cs2	1,782.25 lb/ft	IP-2	2,183.79 lb/ft
cs max	2,085.80 lb/ft	au	1,181.32 lb/ft	u	45.00 lb/ft	Vu(max)	2,660.70 lb/ft

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Selected Soil Types

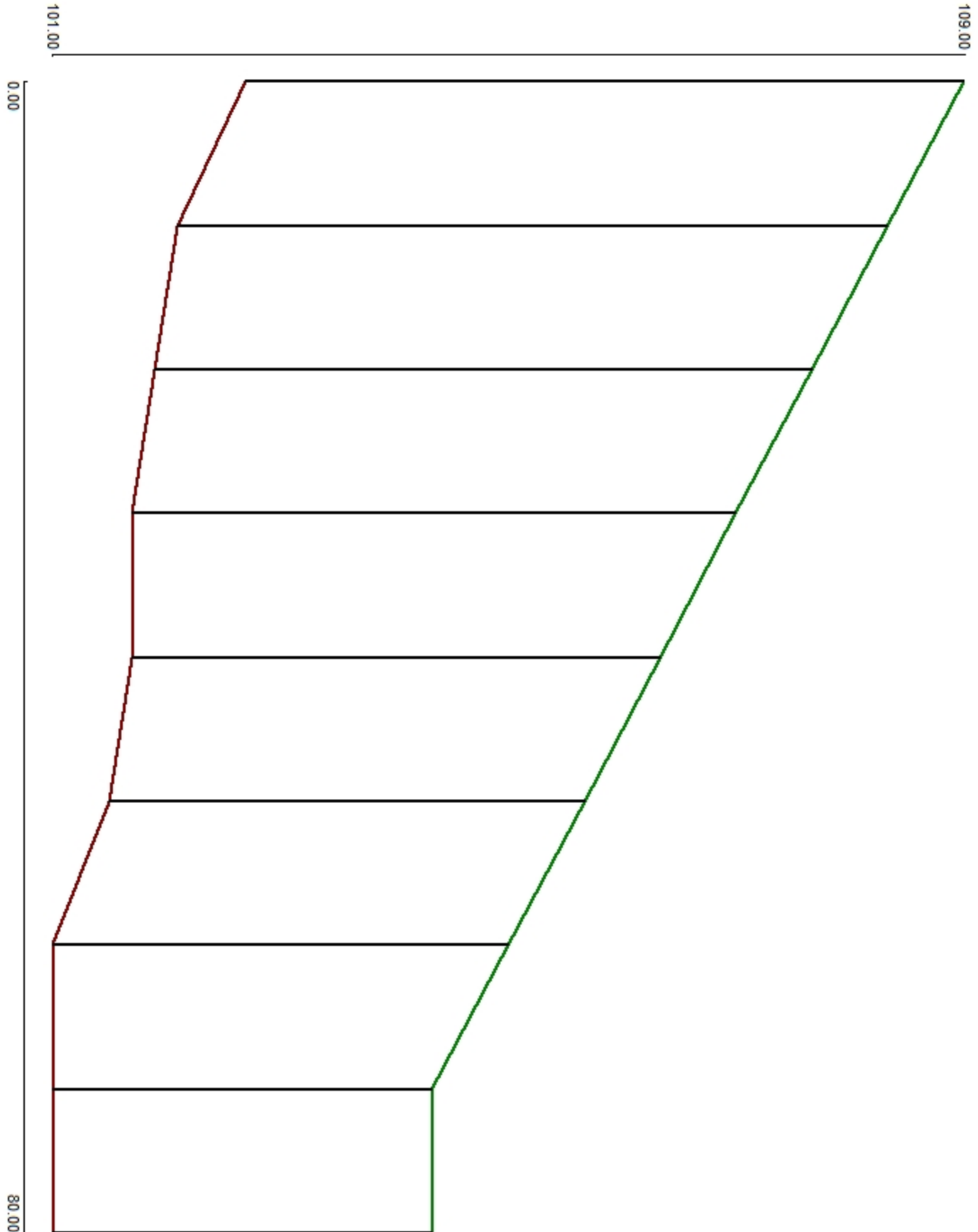
Soil Zone	Soil Type	In Situ		
		Friction Angle	Density [lb/ft ³]	Cohesion Cf [lb/ft ²]
Infill (i)	SM	34°	125.03	n/a
Retained (r)	SM	34°	125.03	n/a
Foundation (f)	SM	34°	125.03	0.00
Base (b)	GP	38°	115.00	n/a
Drainage (d)	GP	38°	115.00	n/a

Soil Glossary

CH:	Inorganic clays, high plasticity
CL:	Inorganic clays, low to medium plasticity, gravelly, sandy, silty, lean clays
GC:	Clayey gravels, poorly graded gravel-sand-clay mixtures
GM:	Silty gravels, poorly graded gravel-sand-silt mixtures
GP:	1/2"-3/4" clean crushed stone or crushed gravel
GW:	Well-graded gravels, gravel-sand. Little or no fines.
MH:	Inorganic clayey silts, elastic silts
ML:	Inorganic silts, very fine sands, silty or clayey, slight plasticity
SC:	Clayey sands, poorly graded sand-clay mixtures
SM:	Silty sands, poorly graded sand-silt mixtures
SP:	Poorly-graded sands, gravelly sands. Little or no fines.
SW:	Well-graded sands, gravelly sands. Little or no fines.

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Station Detail



NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Note: Station Layout is the face view of the wall, looking at it from left to right

**NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER**

Analysis Summary

Lowest Values - Reinforced

Static Analysis

Test	Description	Section	Layer/ Course	Minimum Requirement	Result	Status
FSl	Base Sliding	1		1.50	5.11	Pass
FSbc	Bearing Capacity	1		2.00	16.60	Pass
FSct	Crest Toppling	1	9	1.50	5.44	Pass
FSot	Overturning	1		1.50	9.81	Pass
FSl	Internal Sliding	1	1	1.50	6.48	Pass
FSpo	Pullout	8	3	1.50	6.02	Pass
FSto	Tensile Overstress	2	1	1.50	6.12	Pass
FScs	Connection Strength	2	1	1.50	4.49	Pass
Rs	Max. Reinforcement Separation	7		0.0000	1.3333	Pass
RsBottom	Max. multiple of Hu at bottom	8		0.0000	1.0000	Pass
RsTop	Max. multiple of Hu at top	2		0.0000	1.5000	Pass
La	Min. Anchorage Length	8		1.0000	1.0430	Pass
L/H Ratio	Min. L/H Ratio	1		0.6000	0.7826	Pass
L	Min. Reinforcement Length	8		4.0000	4.0000	Pass

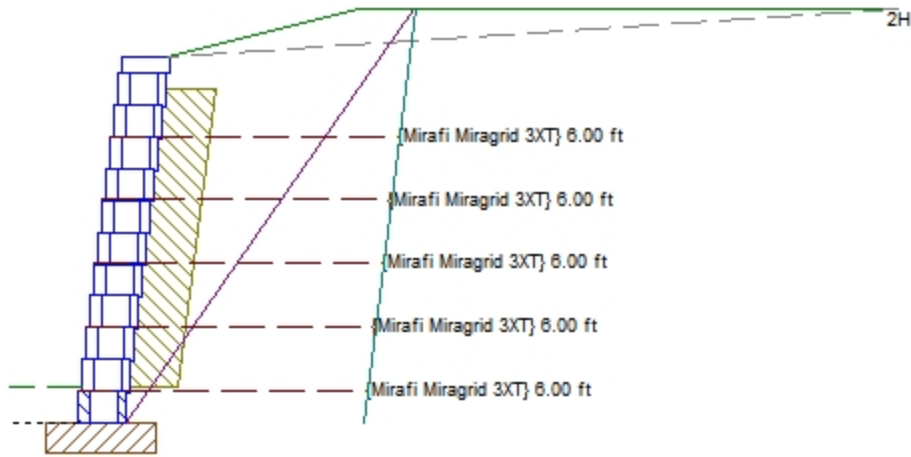
Below Standard Values

None

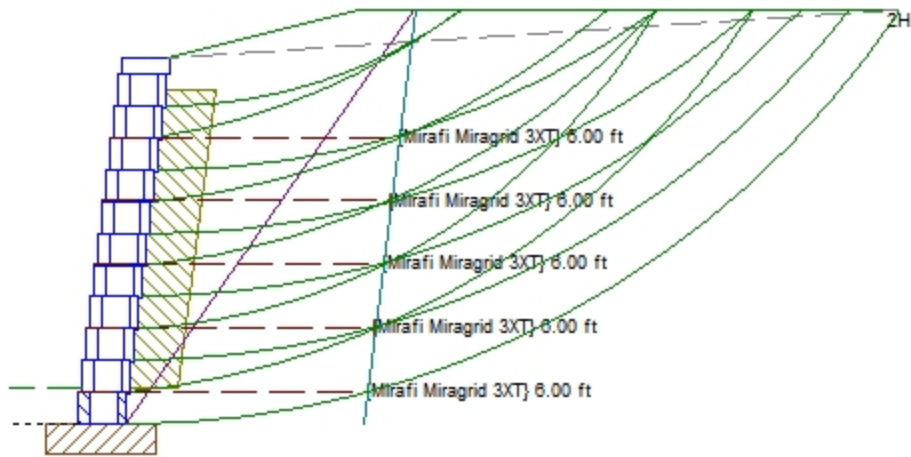
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section 1 Details

Section 1 Cross-section



Section 1 Static ICS Cross-section



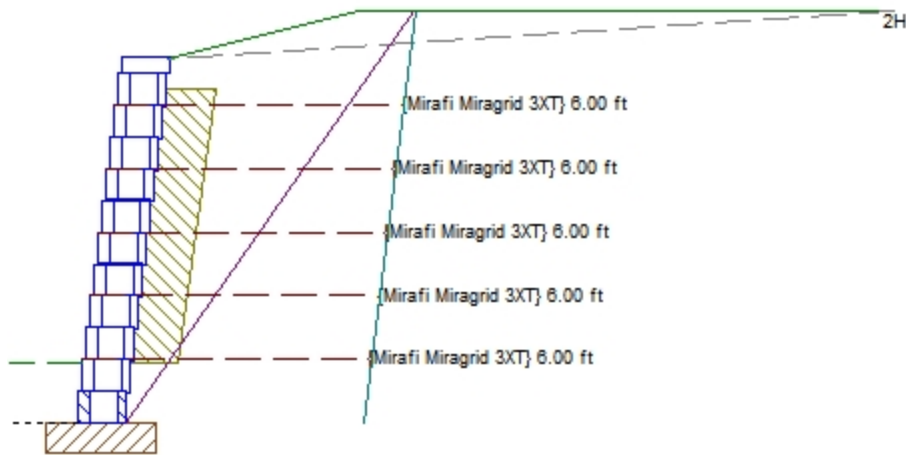
Section 1 Cross-section Details

Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		109.00 ft
Bottom Grade		102.09 ft
Base of Section		101.33 ft
Design Height	H	7.67 ft
Embedment Depth	Hemb	0.76 ft
* Analysis does not use External Horiz.Accel Coeff		
* Analysis includes Vertical Forces		
* Embedment is included in Bearing Capacity		
* Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$		

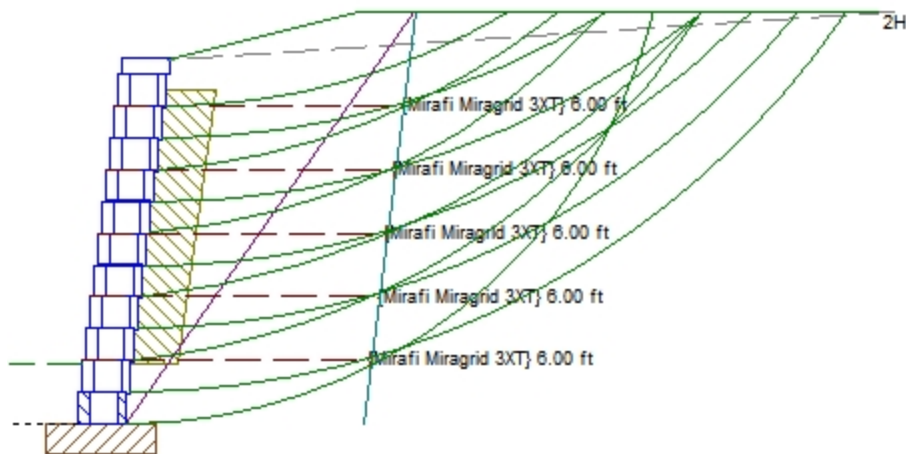
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section 2 Details

Section 2 Cross-section



Section 2 Static ICS Cross-section



Section 2 Cross-section Details

Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		108.33 ft
Bottom Grade		101.90 ft
Base of Section		100.67 ft
Design Height	H	7.63 ft
Embedment Depth	Hemb	1.23 ft

* Analysis does not use External Horiz.Accel Coeff

* Analysis includes Vertical Forces

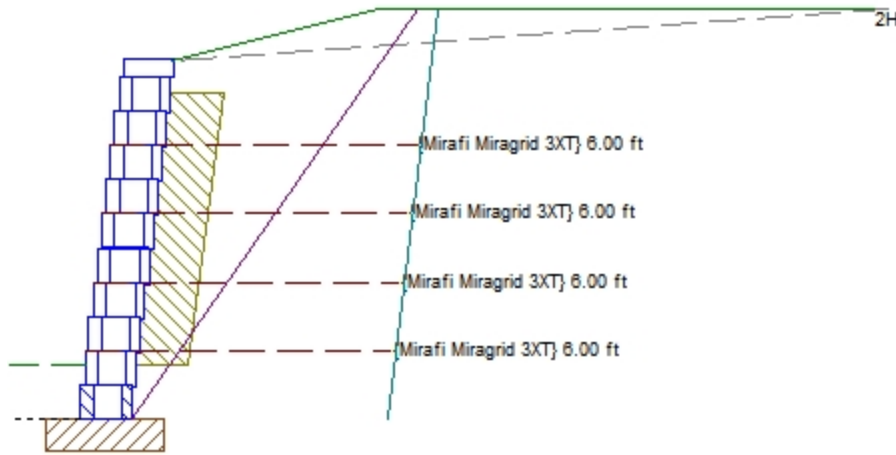
* Embedment is included in Bearing Capacity

* Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

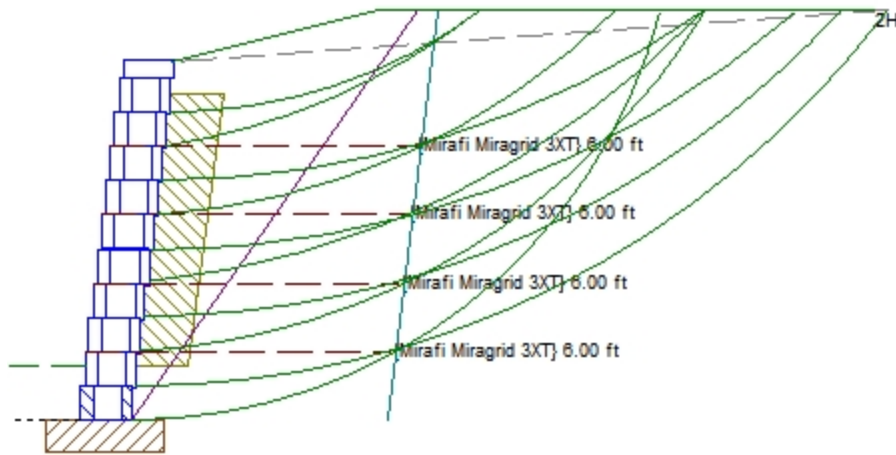
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
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Section 3 Details

Section 3 Cross-section



Section 3 Static ICS Cross-section



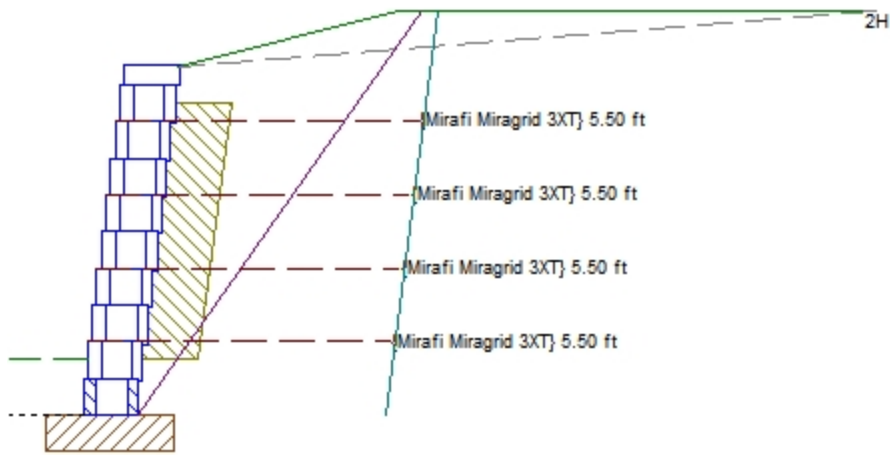
Section 3 Cross-section Details

Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		107.67 ft
Bottom Grade		101.70 ft
Base of Section		100.67 ft
Design Height	H	6.99 ft
Embedment Depth	Hemb	1.03 ft
* Analysis does not use External Horiz.Accel Coeff		
* Analysis includes Vertical Forces		
* Embedment is included in Bearing Capacity		
* Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$		

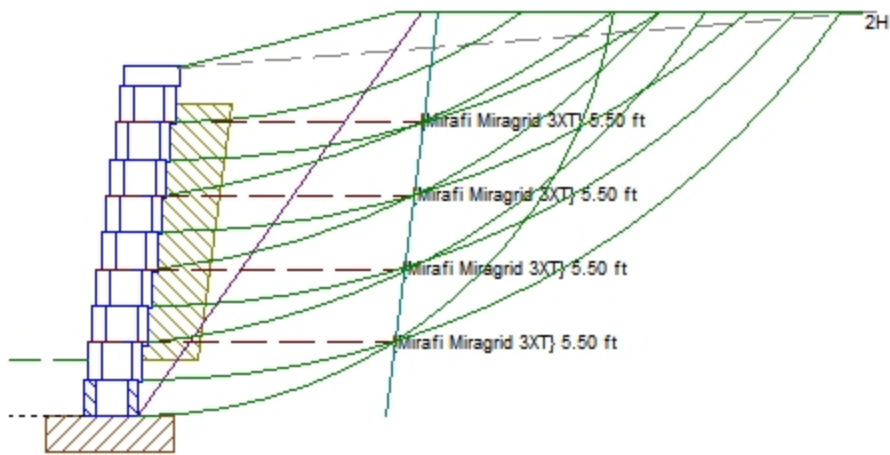
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section 4 Details

Section 4 Cross-section



Section 4 Static ICS Cross-section



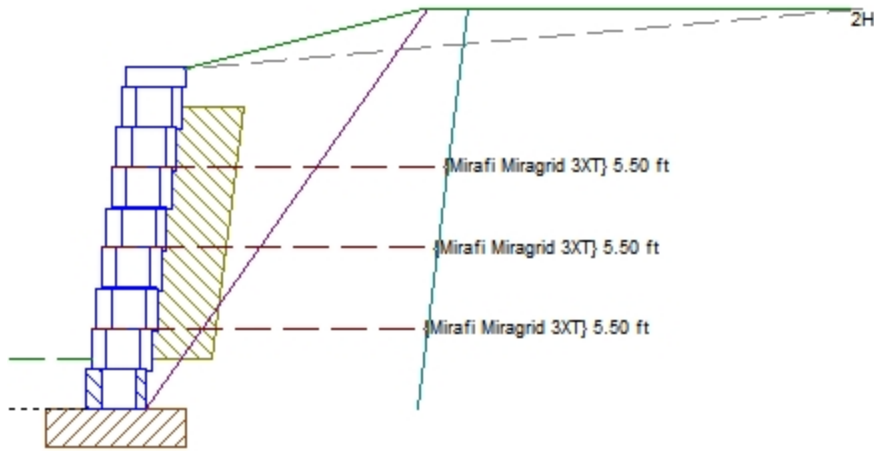
Section 4 Cross-section Details

Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		107.00 ft
Bottom Grade		101.69 ft
Base of Section		100.67 ft
Design Height	H	6.33 ft
Embedment Depth	Hemb	1.02 ft
* Analysis does not use External Horiz.Accel Coeff		
* Analysis includes Vertical Forces		
* Embedment is included in Bearing Capacity		
* Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$		

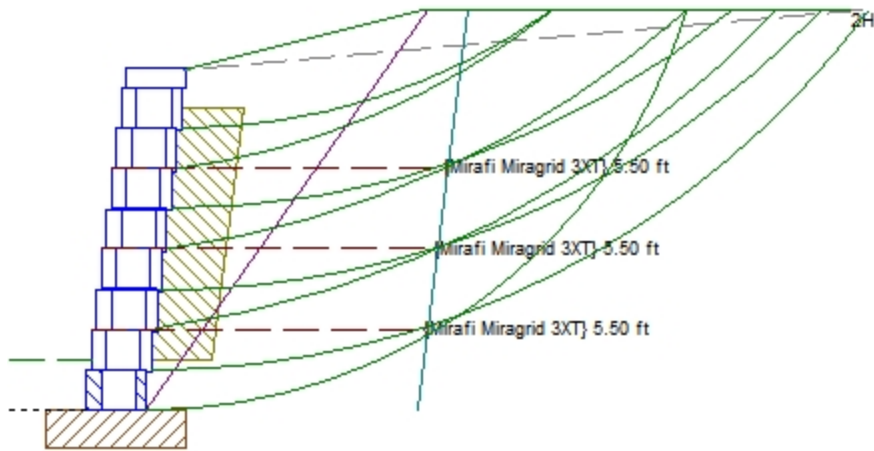
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section 5 Details

Section 5 Cross-section



Section 5 Static ICS Cross-section



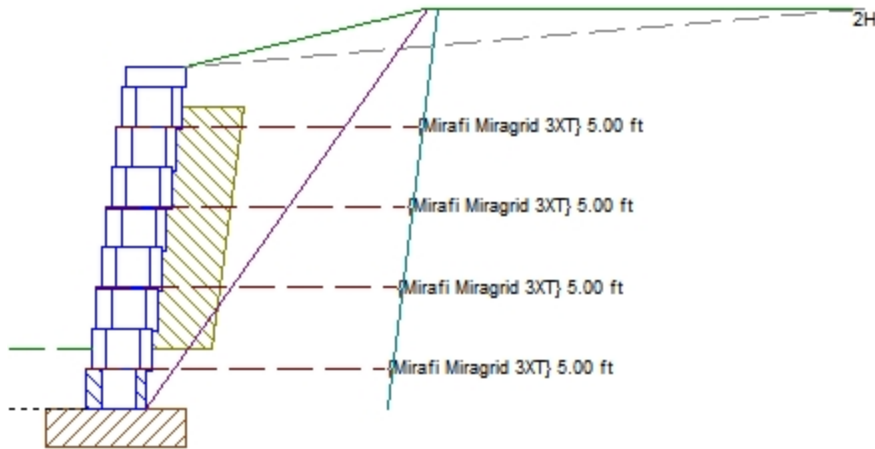
Section 5 Cross-section Details

Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		106.33 ft
Bottom Grade		101.49 ft
Base of Section		100.67 ft
Design Height	H	5.63 ft
Embedment Depth	Hemb	0.82 ft
* Analysis does not use External Horiz.Accel Coeff		
* Analysis includes Vertical Forces		
* Embedment is included in Bearing Capacity		
* Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$		

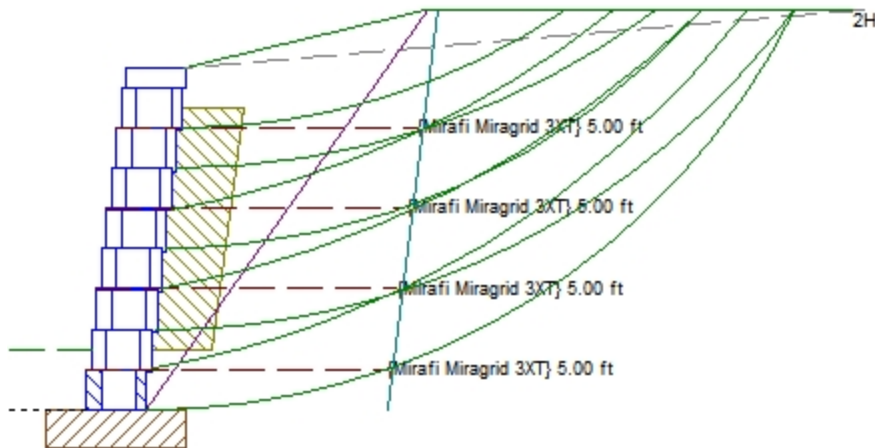
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section 6 Details

Section 6 Cross-section



Section 6 Static ICS Cross-section



Section 6 Cross-section Details

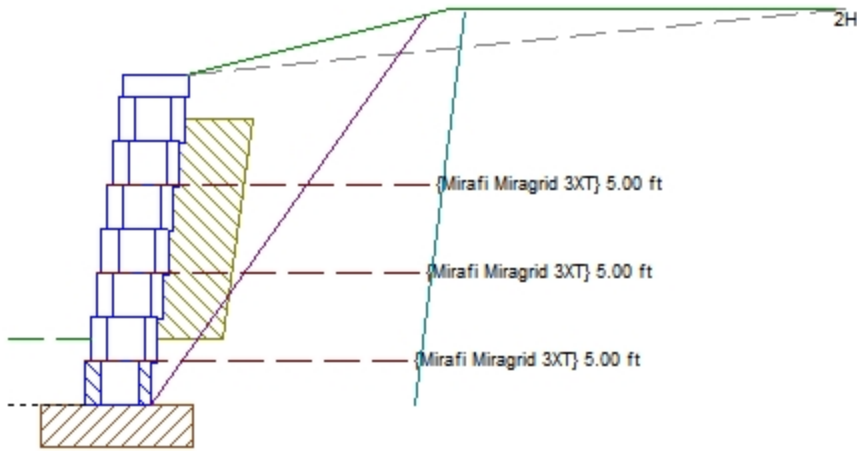
Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		105.67 ft
Bottom Grade		101.00 ft
Base of Section		100.00 ft
Design Height	H	5.65 ft
Embedment Depth	Hemb	1.00 ft

* Analysis does not use External Horiz.Accel Coeff
 * Analysis includes Vertical Forces
 * Embedment is included in Bearing Capacity
 * Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$

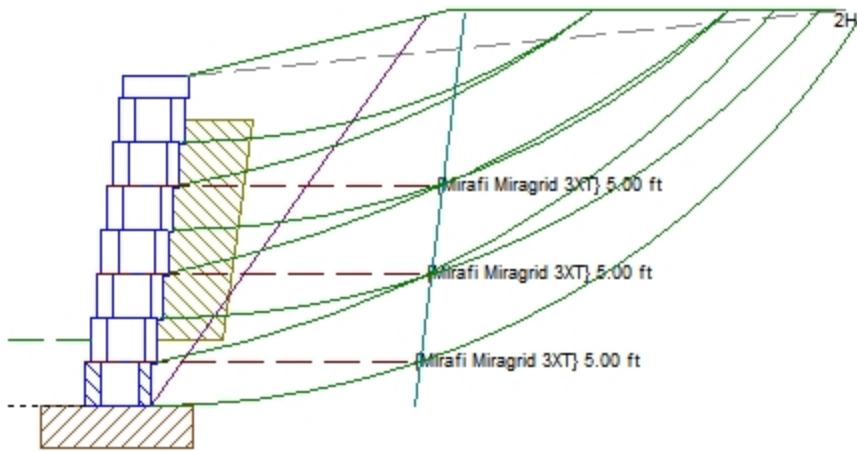
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section 7 Details

Section 7 Cross-section



Section 7 Static ICS Cross-section



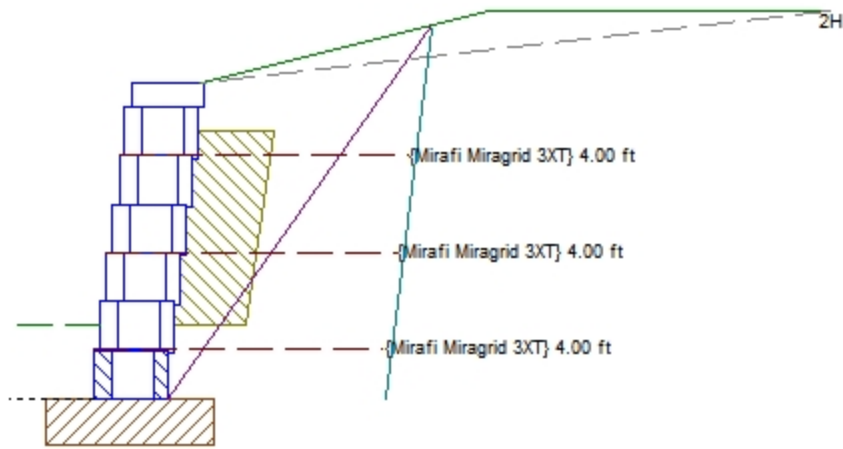
Section 7 Cross-section Details

Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		105.00 ft
Bottom Grade		101.00 ft
Base of Section		100.00 ft
Design Height	H	5.00 ft
Embedment Depth	Hemb	1.00 ft
* Analysis does not use External Horiz.Accel Coeff		
* Analysis includes Vertical Forces		
* Embedment is included in Bearing Capacity		
* Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$		

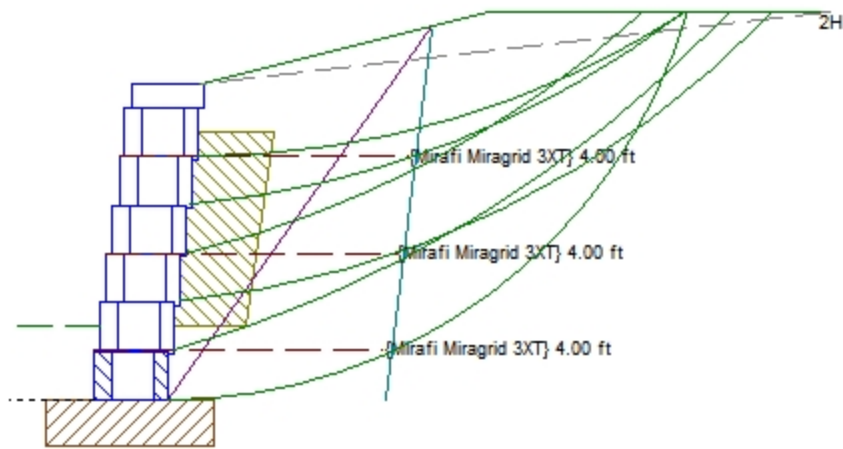
NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

Section 8 Details

Section 8 Cross-section



Section 8 Static ICS Cross-section



Section 8 Cross-section Details

Upper Slope Angle		14.00 °
Crest Offset		4.00 ft
Live Load	ql	0 lb/ft ²
Live Offset	qlofs	0.00 ft
Dead Load	qd	0 lb/ft ²
Dead Offset	qdofs	0.00 ft
Top of Section		104.33 ft
Bottom Grade		101.00 ft
Base of Section		100.00 ft
Design Height	H	4.33 ft
Embedment Depth	Hemb	1.00 ft
* Analysis does not use External Horiz.Accel Coeff		
* Analysis includes Vertical Forces		
* Embedment is included in Bearing Capacity		
* Analysis uses Auto-run Trial Wedge method for Seismic when $-aTan(kh) - < 0$		

NOTE: THESE CALCULATIONS, QUANTITIES, AND LAYOUTS ARE FOR PRELIMINARY DESIGN ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION WITHOUT REVIEW BY A QUALIFIED ENGINEER

CONTRACTOR NOTES

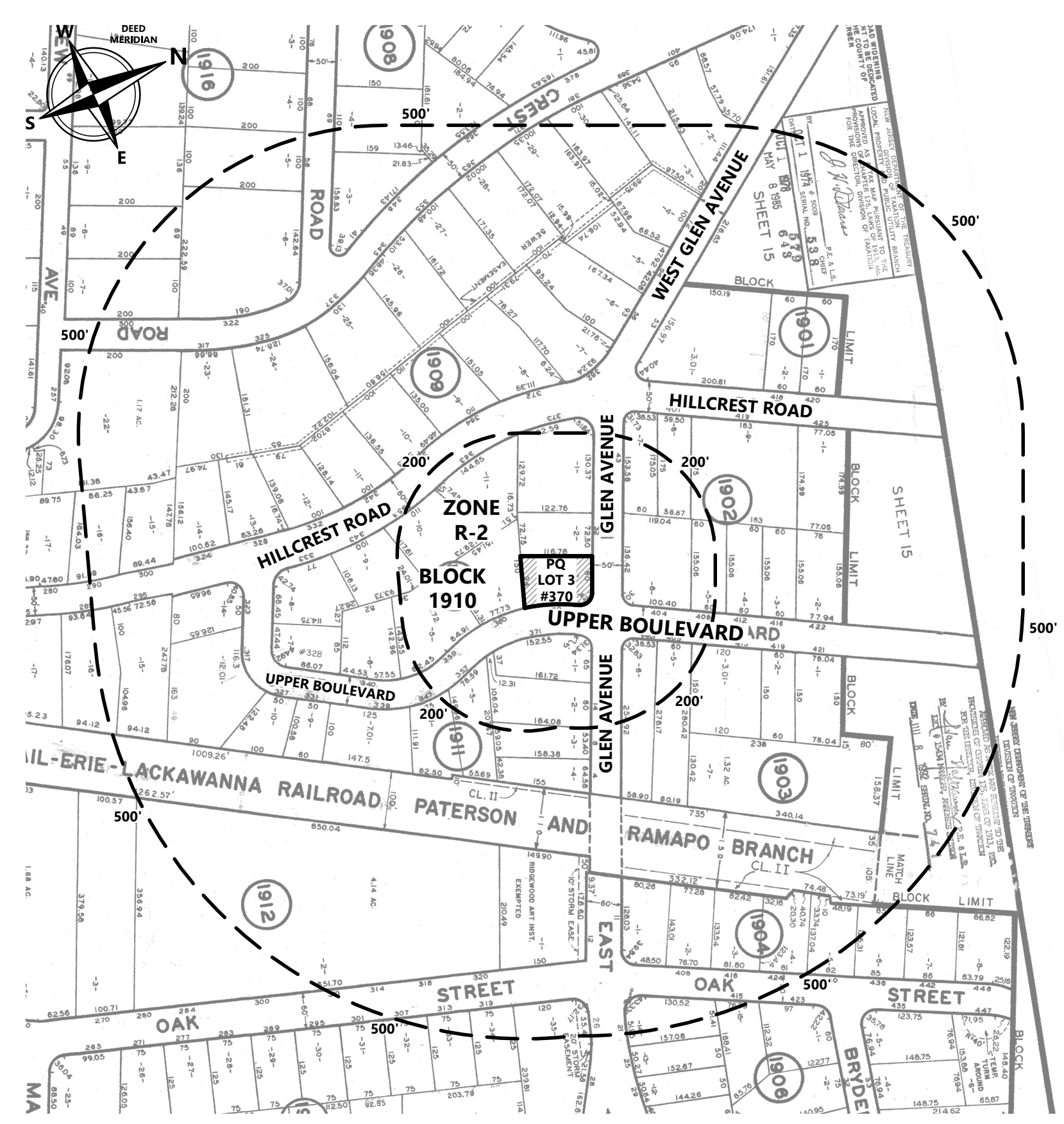
- 1. PRIOR TO ANY SITE WORK BEING PERFORMED AS PER THIS CONSTRUCTION DESIGN PLAN SET: THE OWNER, GENERAL CONTRACTOR, AND/OR SUB-CONTRACTOR(S) ASSOCIATED WITH ANY WORK AS PER THIS CONSTRUCTION DESIGN PLAN SET SHALL PROVIDE ONELLO ENGINEERING FIVE (5) BUSINESS DAYS ADVANCE NOTIFICATION TO SCHEDULE A PRE-CONSTRUCTION MEETING... 2. FIVE (5) BUSINESS DAYS ADVANCE NOTIFICATION TO ONELLO ENGINEERING IS REQUIRED PRIOR TO THE START OF ANY ADDITIONAL WORK PHASES AS SITE CONDITIONS MAY OR MAY NOT HAVE CHANGED DURING CONSTRUCTION ACTIVITY... 3. CONTRACTOR(S) SHALL CONTACT ONELLO ENGINEERING TO VERIFY SITE ELEVATION BENCH-MARK(S) AND ANY PERMANENT OBJECT(S) USED AS A BASIS FOR MEASUREMENTS TO SET LOCATIONS FOR THE INSTALLATION OF ANY IMPROVEMENTS... 4. CONTRACTOR SHALL IMMEDIATELY NOTIFY ONELLO ENGINEERING SHOULD ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, WHICH MAY AFFECT THE VERTICAL AND/OR HORIZONTAL POSITION OF ANY PROPOSED STRUCTURES AND IMPROVEMENTS... 5. ALL CONSTRUCTION ACTIVITY AND EQUIPMENT STAGING SHALL BE CONFINED WITHIN THE LIMIT OF DISTURBANCE AS SPECIFIED WITHIN THE APPROVED SOIL EROSION CONTROL PLAN... 6. EXCAVATION CONTRACTOR TO CALL FOR UTILITY MARK-OUT PRIOR TO ANY EXCAVATION. OWNER & GENERAL CONTRACTOR SHALL CONFIRM... 7. CONTRACTOR SHALL VERIFY ALL UTILITY(S) LOCATIONS AND CONNECTIONS FOR ALL EXISTING AND PROPOSED SERVICE FACILITIES, RETROFITS, AND/OR NEW CONNECTIONS... 8. AS PER LOCAL PUBLIC SERVICE UTILITY(S) COMPANY(S), THERE IS A POSSIBILITY FOR AN EXISTING BLANKET EASEMENT TO UTILIZE LAND ALONG RIGHT-OF-WAY FRONTAGE AND/OR OTHER PORTIONS OF THE SUBJECT PROPERTY(S)... 9. PENDING UTILITY MARK-OUT AND VERIFICATION(S) OF THE SAME, OWNER & CONTRACTOR SHALL COORDINATE ANY MODIFICATIONS WITH THE UTILITY(S) COMPANY(S)... 10. ANY ENCOUNTERED UNDERGROUND STORAGE TANKS 'UST' (STORING PETROLEUM OR HAZARDOUS SUBSTANCES), SUB-SURFACE SEPTIC SYSTEMS, AND/OR WELLS SHALL BE ABANDONED AS PER STATE OF NEW JERSEY STANDARDS & PROCEDURES... 11. ON-SITE SEEPAGE PITS FOR DRAINAGE DRYWELL OR SANITARY SEPTIC AND/OR OTHER SUB-SURFACE CHAMBERS MAY EXIST, WHICH MAY NOT CONFORM TO TRAFFIC-LOADING REQUIREMENTS... 12. CONTRACTOR SHALL SUBMIT MATERIAL SHOP DRAWINGS AND PRODUCT DATA TO ONELLO ENGINEERING FOR REVIEW IN-COMPARISON WITH DESIGN SPECIFICATIONS... 13. CONTRACTOR SHALL REQUEST ANY CHANGE-ORDERS VIA OWNER TO ONELLO ENGINEERING FOR REVIEW AND CONFIRMATION... 14. ONELLO ENGINEERING SHALL NOT BE RESPONSIBLE FOR ANY WORK PERFORMED, WHICH IS NOT IN CONFORMANCE WITH THE DESIGN IMPROVEMENTS AS SPECIFIED WITHIN THIS PLAN SET

PROPOSED IMPROVEMENTS SEQUENCE OF INSTALLATION & VERIFICATIONS

THIS NOTES SECTION SHALL BE APPLICABLE TO ALL PROPOSED CONDITIONS, INCLUDING, BUT NOT LIMITED TO: BUILDING(S), POOLS(S), & ANY HARDSCAPE IMPROVEMENTS TO BE INSTALLED AS PER THESE DESIGN PLANS

- 1. PRE-CONSTRUCTION MEETING REQUIRED, AS LISTED WITHIN THE PLAN SET SECTION ENTITLED: 'CONTRACTOR NOTES'
2. CONTRACTOR SHALL RETAIN NEW JERSEY LICENSED SURVEYOR VIA ONELLO ENGINEERING TO PROVIDE THE FOLLOWING CONSTRUCTION SEQUENTIAL TASK-ITEM CONSTRUCTION SERVICES
3. SITE ELEVATION BENCH-MARK(S) SHALL BE SET, ESTABLISHED, CONFIRMED, AND VERIFIED FOR CONTINUAL USE THROUGHOUT CONSTRUCTION...
4. IF SITE ELEVATION BENCH-MARK IS COMPROMISED, IMMEDIATELY CONTACT ONELLO ENGINEERING AND PROJECT SURVEYOR FOR A NEW SITE ELEVATION BENCH MARK TO BE SET...
5. STAKE-OUT BUILDING AND HARDSCAPE LOCATIONS AND PROVIDE A LAYOUT MAP WITH STAKE BACK-SHOT LOCATIONS AND ELEVATIONS (AT GRADE LEVEL) FOR REVIEW AND USE BY CONTRACTOR AND ENGINEER
6. IF NO FOOTINGS ARE REQUIRED FOR FOUNDATION BUILDING WALL OR HARDSCAPE COMPONENTS TO BE INSTALLED UPON...
7. IF DESIGN PLANS CALL FOR FOUNDATION FOOTINGS, AFTER FOUNDATION FOOTINGS FORMS ARE INSTALLED, PERFORM FOOTING AS-BUILT PRIOR TO CONCRETE INSTALLATION TO VERIFY HORIZONTAL ALIGNMENT AND VERTICAL ELEVATIONS
8. AFTER FOUNDATION FOOTINGS ARE CURED, FOUNDATION WALL AND/OR HARDSCAPE WALL CORNERS & MID-POINTS SHALL BE PINNED, AND SUBSEQUENTLY, THE TOP OF FOOTING ELEVATION SHALL BE VERIFIED (ALSO KNOWN AS: PINNING THE FOOTINGS & FOOTING AS-BUILT SURVEY)...
9. IF MASONRY WALL IS TO BE 'CAST-IN-PLACE' (STEEL REINFORCED CONCRETE), AFTER FORMS HAVE BEEN SET, A WALL FORM AS-BUILT SURVEY SHALL BE PROVIDED, WHICH SHALL VERIFY THE FOUNDATION LOCATION, (HORIZONTAL ALIGNMENT AND VERTICAL ELEVATIONS)
10. AFTER FORMS HAVE BEEN POURED AND CURED, A FOUNDATION LOCATION AS-BUILT SURVEY SHALL BE PROVIDED, WHICH SHALL VERIFY THE FOUNDATION LOCATION AND TOP OF FOUNDATION ELEVATION (HORIZONTAL ALIGNMENT AND VERTICAL ELEVATIONS)
11. IF FOUNDATION WALLS ARE CONSTRUCTED WITH INDIVIDUAL CONCRETE MASONRY UNITS (CMU WALL), AFTER COMPLETION, A WALL LOCATION AS-BUILT SURVEY SHALL BE PROVIDED, WHICH SHALL VERIFY THE FOUNDATION LOCATION AND TOP OF FOUNDATION ELEVATION (HORIZONTAL ALIGNMENT AND VERTICAL ELEVATIONS)
12. IF FOUNDATION WALLS ARE PRE-CASTED AND INSTALLED ON-SITE, AFTER COMPLETION, A FOUNDATION LOCATION AS-BUILT SURVEY SHALL BE PROVIDED, WHICH SHALL VERIFY THE PROPOSED FOUNDATION LOCATION AND TOP OF FOUNDATION ELEVATION (BOTH HORIZONTALLY & VERTICALLY)
13. INTERIM AS-BUILT LOCATION AND ELEVATION VERIFICATION TASK ITEMS MAY BE OMITTED / WAIVED BY THE OWNER AND THE GENERAL CONTRACTOR PROVIDING NOTICE TO ONELLO ENGINEERING WITH FULL ACKNOWLEDGMENT BY ALL PARTIES...
14. A FOUNDATION LOCATION AS-BUILT SURVEY IS REQUIRED TO BE PROVIDED TO THE MUNICIPAL BUILDING DEPARTMENT PRIOR TO THE RELEASE OF A FRAMING PERMIT...
15. CONTRACTOR RESPONSIBLE FOR PROVIDING SURVEY FIELD-CREW WITH PEDESTRIAN ACCESS TO TOP-OF-FOUNDATION LOCATIONS FOR AS-BUILT SURVEY REQUIREMENTS (AS APPLICABLE AND NECESSARY)...
16. PRIOR TO FOUNDATION BACK-FILL, ALL SUB-GRADE FOUNDATION SURFACES SHALL BE WATERPROOFED AS PER STANDARDS WITHIN THESE DESIGN PLANS AND/OR AS PER THE STANDARDS ENTAILED WITHIN THE APPROVED ARCHITECTURAL DRAWINGS
17. REGARDLESS OF ARCHITECTURAL REQUIREMENTS, THE FOUNDATION SHALL BE WATERPROOFED WITH COATED SEALANT AND DRAINAGE DIMPLE-BOARD LEADING TO A VIABLE AND APPROVED DRAINAGE DISCHARGE OR CONVEYANCE LOCATION
18. EXPOSED FOUNDATION WINDOW WELLS & CASINGS SHALL BE WATER-PROOFED; INSET WINDOW-WELL GRADE SURFACE SHALL BE MINIMUM 4" THICKNESS CLEAN-CRUSHED STONE (OVER GEOTEXTILE FABRIC) AND SET 8" BELOW THE WINDOW'S MASONRY SILL WITH AN INTERNAL DRAIN LEADING TO FOUNDATION DRAIN AND/OR SUMP-PUMP...
19. A FULLY OPERATIONAL MECHANICAL 'SUMP-PUMP' SHALL BE INSTALLED WITHIN A CHAMBER WITHIN THE FOUNDATION BASEMENT FLOOR WITH AN EMERGENCY BATTERY BACK-UP AND ALARM...
20. ONELLO ENGINEERING ACCEPTS NO RESPONSIBILITY TO ANY FOUNDATION DAMAGES RESULTING FROM THE OCCURRENCE OF GROUNDWATER...
21. IT IS THE RESPONSIBILITY OF THE OWNER & ARCHITECT TO PROVIDE FOR THE SAFEGUARD OF BUILDING FOUNDATIONS AGAINST GROUNDWATER CONDITIONS...
22. ANY WAIVERS OF REQUIRED WATER-PROOFING COMPONENTS ARE THE RESPONSIBILITY OF THE OWNER & CONTRACTOR
23. ALL ASSOCIATED FEES AS PER THE ABOVE LISTED CRITERIA AND TASK-ITEM SERVICES ARE THE RESPONSIBILITY OF THE OWNER AND/OR GENERAL CONTRACTOR
24. IF NECESSARY, OWNER & CONTRACTOR(S) SHALL CONTACT ONELLO ENGINEERING FOR FURTHER CLARIFICATION, DIRECTION, AND VERIFICATIONS

RETAINING WALLS FOR RAYABARAPU #370 UPPER BOULEVARD LOT 3 - BLOCK 1910 VILLAGE OF RIDGEWOOD BERGEN COUNTY, NEW JERSEY



VILLAGE OF RIDGEWOOD ORDINANCE REFERENCES

- 1910-124 SPECIAL REGULATIONS FOR CERTAIN USES AND STRUCTURES
F - FENCES, FREESTANDING WALLS, AND RETAINING WALLS
(3) MAXIMUM HEIGHT
(a) IN DETERMINING THE HEIGHT OF FENCES, FREESTANDING WALLS AND RETAINING WALLS, THE FOLLOWING SHALL APPLY:
[1] FOR FENCES AND WALLS THAT ARE NOT UNIFORM IN HEIGHT ALONG THE TOP OF THE FENCE, THE HEIGHT SHALL BE MEASURED TO THE HIGHEST POINT OF THE FENCE, EXCEPT AS PROVIDED OTHERWISE HEREIN
[2] NOTWITHSTANDING THE MAXIMUM HEIGHT LIMITATIONS APPLICABLE TO FENCES AND WALLS HEREIN, FENCE POSTS AND GATES MAY EXCEED THE MAXIMUM PERMITTED FENCE HEIGHT BY UP TO ONE FOOT
[3] FOR FENCES AND WALLS LOCATED ON SLOPING GROUND, THE HEIGHT SHALL BE MEASURED FROM THE GROUND DIRECTLY BELOW THE POINT OF MEASUREMENT
[4] THE HEIGHT OF FENCES AND FREESTANDING WALLS SHALL BE MEASURED AS SET FORTH IN § 190-119(D)
[5] IN THE CASE OF FENCES, GUARD RAILS OR OTHER BARRIERS LOCATED AT THE TOP OF RETAINING WALLS, THE COMBINED HEIGHT OF THE BARRIER AND THE RETAINING WALL SHALL NOT EXCEED THE PERMITTED HEIGHT FOR EITHER FENCES OR WALLS, UNLESS THE BARRIER AND WALL ARE SEPARATED AS PROVIDED IN SUBSECTION §190-124(F)(2)(D)

GENERAL PLAN NOTES

- 1. SUBJECT PROPERTY KNOWN AS: LOT 3 IN BLOCK 1910 ON MUNICIPAL TAX MAP #19, #370 UPPER BOULEVARD, VILLAGE OF RIDGEWOOD, COUNTY OF BERGEN, STATE OF NEW JERSEY 07450
2. DEED BOOK #80364, PAGE #TBD, DATED AUGUST 28, 2008, RECORDED AUGUST 28, 2008
3. PROPERTY LOCATED IN THE R-2 ZONE, SINGLE-FAMILY DISTRICT. BULK ZONING AS PER VILLAGE OF RIDGEWOOD CODE SECTIONS §190 LAND USE AND DEVELOPMENT
4. EXISTING CONDITIONS ARE REPRESENTATIVE WITHIN THIS PLAN SET AS PER THE REFERENCED PROPERTY SURVEY
5. THERE ARE NO KNOWN COVENANTS AND/OR DEED RESTRICTIONS AFFECTING THE SITE, WHICH HAVE BEEN DISCLOSED TO ONELLO ENGINEERING. OWNER SHALL VALIDATE IF REQUIRED BY REVIEW AGENCY(S)
6. OWNER AND/OR CONTRACTOR SHALL OBTAIN ALL APPLICABLE AND REQUIRED APPROVALS, CERTIFICATIONS, AND PERMITS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY
7. PRE-CONSTRUCTION MEETING REQUIRED, AS LISTED WITHIN THE PLAN SET SECTION ENTITLED: 'CONTRACTOR NOTES'
8. CONTRACTOR SHALL RETAIN AN OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON-SITE AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES
9. ALL REMOVED MATERIALS DURING DEMOLITION AND CONSTRUCTION SHALL BE DISCARDED AND/OR RECYCLED AS PER SUITABLE STANDARDS OF THE VILLAGE OF RIDGEWOOD, COUNTY OF BERGEN, STATE OF NEW JERSEY, AND FEDERAL INTER-STATE
10. NO WORK SHALL BE PERFORMED NOR DISTURB ADJACENT PROPERTIES (WHICH ARE NOT UNDER COMMON OWNERSHIP) WITHOUT AUTHORIZED WRITTEN CONSENT OF ADJACENT PROPERTY OWNER(S); GRADING AND DRAINAGE PATTERNS SHALL NOT ADVERSELY IMPACT ADJACENT PROPERTIES
11. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ANY DAMAGES TO EXISTING IMPROVEMENTS, WHICH ARE SPECIFIED TO REMAIN, AT ITS EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR VILLAGE OF RIDGEWOOD
12. ALL CONTRACTORS SHALL INDEMNIFY AND HOLD HARMLESS ONELLO ENGINEERING AND ITS SUB-CONSULTANTS (TO THE FULLEST EXTENT PERMITTED BY LAW) AGAINST ANY DAMAGES AND LIABILITIES (INCLUDING OF ATTORNEY'S FEES) ARISING FROM CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S) IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE
13. UPPER BOULEVARD IS A VILLAGE OF RIDGEWOOD ROADWAY AND GLEN AVENUE IS A COUNTY OF BERGEN ROADWAY, EACH WITHIN A RIGHT-OF-WAY. ALL CONTRACTORS AND PERSONS ASSOCIATED WITH THE PROJECT SHALL ABIDE BY THE SPEED LIMIT OF ALL ROADWAYS. CONTRACTOR IS RESPONSIBLE FOR ROAD OPENING PERMITS(S). ALL TRAFFIC CONTROL DEVICES SHALL CONFIRM TO THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

- 14. EXISTING DRIVEWAY AND/OR ALTERNATE CONSTRUCTION ACCESS LOCATION (AS PER PLAN) SHALL BE USED FOR CONSTRUCTION ACCESS. INSTALL CONSTRUCTION ACCESS WHEEL BLANKET AS PER PLAN OR IF AND WHERE DIRECTED BY VILLAGE OF RIDGEWOOD ENGINEER / OFFICIAL AND/OR SOIL CONSERVATION DISTRICT OFFICIAL (AS NECESSARY)
15. ALL LIMIT OF DISTURBANCE FENCING, SILT FENCING AND TREE PROTECTION (AND OTHER APPLICABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES) MUST BE INSTALLED AND INSPECTED PRIOR TO RELEASE OF PERMITS. CONTRACTOR SHALL ABIDE BY ANY VILLAGE OF RIDGEWOOD ORDINANCES STIPULATING AREAS OF NO DISTURBANCE
16. ANY SOILS TRACKED ONTO THE STREET (ROADWAY) MUST BE IMMEDIATELY REMOVED. IF TRACKED SOIL REMAINS OVERNIGHT, THE VILLAGE OF RIDGEWOOD DEPARTMENT OF PUBLIC WORKS SHALL REMOVE IT AND ASSESS THE OWNER FOR THOSE COSTS. THE VILLAGE OF RIDGEWOOD WILL NOT TOLERATE ANY OFFSITE SILT AND SOIL TRACKING. ANY BREACH OF SILT CONTROLS WILL RESULT IN AN IMMEDIATE STOP WORK ORDER BEING ISSUED UNTIL ALL SOIL EROSION CONTROLS ARE REPAIRED AND REPLACED
17. THE APPLICANT SHALL BE RESPONSIBLE FOR THE IN-KIND REPLACEMENT OF ANY CURB, SIDEWALK, ROADWAY SECTIONS, STORMWATER DRAINAGE FACILITIES, SANITARY SEWER FACILITIES, (AND/OR OTHER UTILITIES, FACILITIES, & IMPROVEMENTS, ET CETERA), REMOVED OR DAMAGED IN CONNECTION WITH CONSTRUCTION ACTIVITY, TO THE STANDARDS & SATISFACTION OF THE VILLAGE OF RIDGEWOOD
18. EXISTING ON-SITE SINGLE-FAMILY RESIDENCE BUILDING IS CONSIDERED TO BE A LEGALLY EXISTING STRUCTURE WITH A VALID CERTIFICATE OF OCCUPANCY FOR THE ENTIRETY OF THE PREMISES ON-FILE WITH THE VILLAGE OF RIDGEWOOD
19. THE APPLICANT SHALL APPLY SEPARATELY TO THE VILLAGE OF RIDGEWOOD FOR ALL NECESSARY TREE REMOVALS AND SHALL PROVIDE REPLACEMENT TREES & LANDSCAPE MITIGATION AS REQUIRED
20. A COPY OF THE APPROVED AND AUTHORIZED SOIL EROSION & SEDIMENT CONTROL PLAN IN DIRECT RELATION TO THE ASSOCIATED CERTIFICATION THEREOF SHALL REMAIN AT THE SITE ACCESSIBLE TO VILLAGE OF RIDGEWOOD (AND SOIL CONSERVATION DISTRICT OFFICIALS, IF APPLICABLE) AT ALL TIMES THROUGHOUT CONSTRUCTION UNTIL COMPLETION OF THE PROJECT
21. THIS PLAN-SET SHALL ONLY BE CONSIDERED A COMPLETE PLAN SET IF ALL SHEETS ARE INCLUSIVE AS PER THE SHEET INDEX PROVIDED ON DRAWING SHEET #1. ALL PLAN SHEETS SHALL MATCH THE EXACT AND CONSISTENT REVISION DATE THROUGHOUT. ALL PLAN SHEETS SHALL BE SIGNED AND SEALED BY THE ORIGINAL DESIGN ENGINEER FROM ONELLO ENGINEERING
22. OWNER & CONTRACTOR SHALL CONFIRM THE LAST REVISED PLAN-SET DATE WITH ONELLO ENGINEERING PRIOR TO THE IMPLEMENTATION OR INSTALLMENT

APPLICANT REPRESENTATION

APPLICANT & OWNER
LOT 3 - BLOCK 1910
RAYABARAPU, PAVAN & RAJANI NOMULA
370 UPPER BOULEVARD, RIDGEWOOD, NEW JERSEY 07450
RAJPAV2000@GMAIL.COM

PROJECT ENGINEER
MCELLELLAN ENGINEERING
SEAN P MCELLELLAN PE
84 GETTYSBURG WAY, LINCOLN PARK, NEW JERSEY 07035
862-668-1160, R. VENTURA, 23@YAHOO.COM

RETAINING WALLS ENGINEER
ONELLO ENGINEERING
ANGELO ONELLO PE
5 BEECHNUT STREET, HILLSDALE, NEW JERSEY 07642
201-774-1444, ANGELO@ONELLO.ENG.COM

ARCHITECT
JORDAN ROSENBERG ARCHITECTS & ASSOCIATES
JORDAN ROSENBERG RA
27 NORTH BROAD STREET, RIDGEWOOD, NEW JERSEY 07450
201-669-8614, JRAARCHITECT@GMAIL.COM

SURVEYOR
LANTELME, KUBENS & ASSOCIATES P.C.
CHRISTOPHER J LANTELME NJ PLS #39580
101 WEST STREET, SUITE #9, HILLSDALE, NEW JERSEY 07642
201-666-2450, CL11@VERIZON.NET

SHEET SET INDEX

Table with 2 columns: DWG # and DESCRIPTION. Rows include #1 PROJECT INFORMATION & NOTES, #2 EXISTING SITE CONDITIONS, #3 DESIGN LAYOUT & BULK ZONING ANALYSIS, #4 GRADE ELEVATIONS & DRAINAGE, #5 SECTION LINE LOCATIONS 'A' - 'H', #6 SOIL EROSION CONTROL, #7 CONSTRUCTION DETAILS & WALL SECTIONS



Know what's below. Call before you dig.

NEW JERSEY

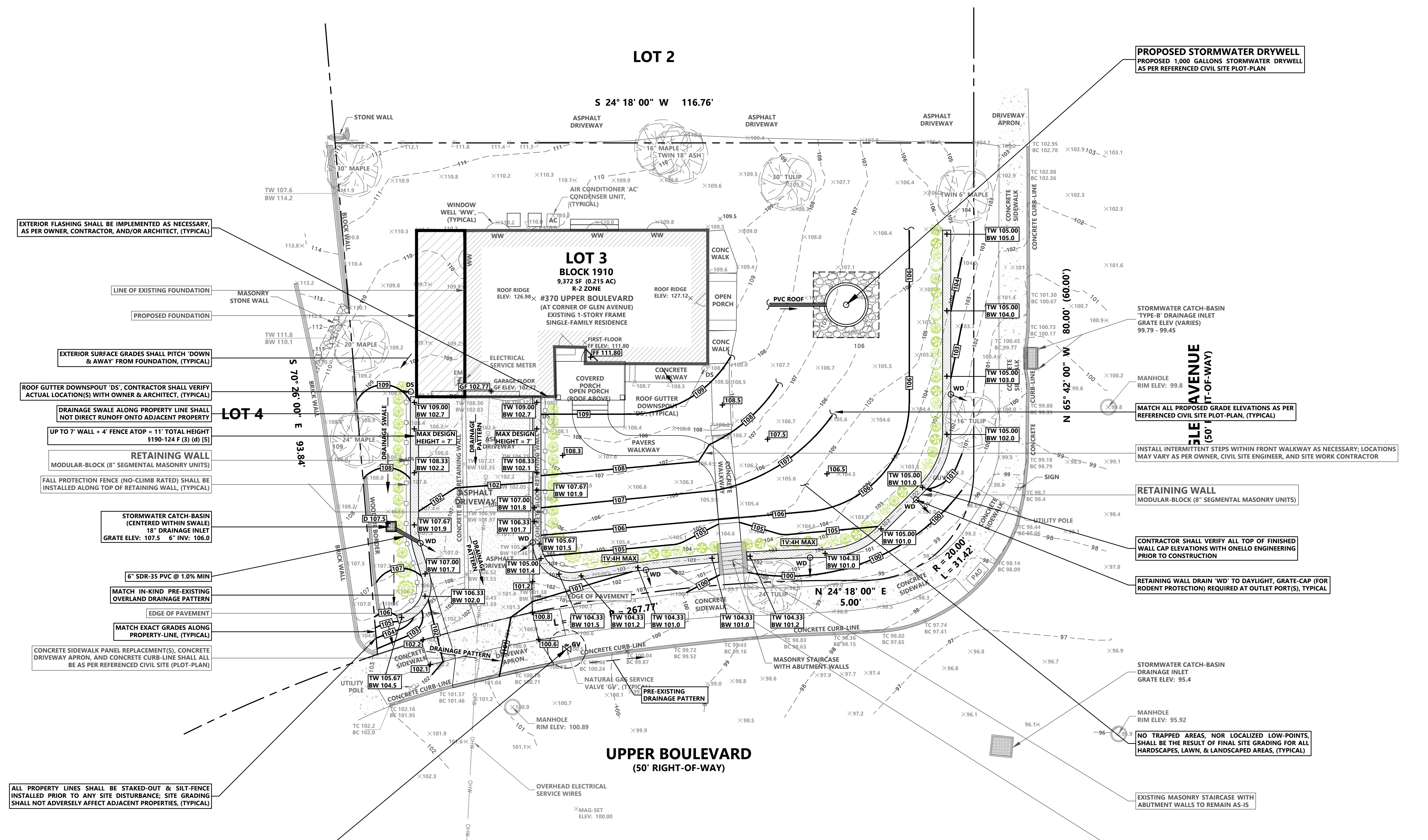
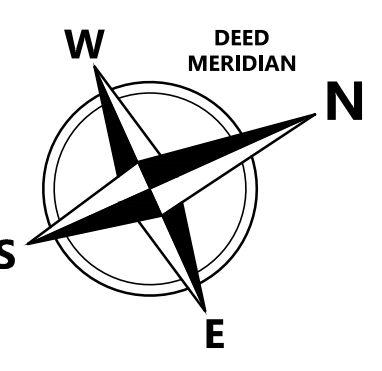


CALL BEFORE YOU DIG
1-800-272-1000
CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE REQUIREMENTS OF THE NEW JERSEY ONE-CALL DAMAGE PREVENTION SYSTEM AS IN THE "UNDERGROUND FACILITY PROTECTION ACT."

ONELLO ENGINEERING
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HILLSDALE, NEW JERSEY 07642
201-774-1444 Angelo@OnelloEng.com
NEW JERSEY CERTIFICATE OF AUTHORIZATION #246GA28215400

FOR DESIGN REVIEW ONLY NOT FOR CONSTRUCTION
ANGELO ONELLO III, PE
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE #246GE04928400

2025 JUNE 16 ORIGINAL PLAN DATE
RETAINING WALLS CONSTRUCTION DRAWINGS
RAYABARAPU #370 UPPER BOULEVARD LOT 3 - BLOCK 1910 VILLAGE OF RIDGEWOOD BERGEN COUNTY, NEW JERSEY
DWG # 1 OF 7



EXTERIOR FLASHING SHALL BE IMPLEMENTED AS NECESSARY, AS PER OWNER, CONTRACTOR, AND/OR ARCHITECT, (TYPICAL)

LINE OF EXISTING FOUNDATION
PROPOSED FOUNDATION

EXTERIOR SURFACE GRADES SHALL PITCH 'DOWN & AWAY' FROM FOUNDATION, (TYPICAL)

ROOF GUTTER DOWNSPOUT 'DS', CONTRACTOR SHALL VERIFY ACTUAL LOCATION(S) WITH OWNER & ARCHITECT, (TYPICAL)

DRAINAGE SWALE ALONG PROPERTY LINE SHALL NOT DIRECT RUNOFF ONTO ADJACENT PROPERTY

UP TO 7' WALL + 4' FENCE ATOP = 11' TOTAL HEIGHT \$190-124 F (3) (d) [5]

RETAINING WALL
MODULAR-BLOCK (8" SEGMENTAL MASONRY UNITS)

FALL PROTECTION FENCE (NO-CLIMB RATED) SHALL BE INSTALLED ALONG TOP OF RETAINING WALL, (TYPICAL)

STORMWATER CATCH-BASIN (CENTERED WITHIN SWALE) 18" DRAINAGE INLET GRATE ELEV. 107.5 6" INV. 106.0

6" SDR-35 PVC @ 1.0% MIN

MATCH IN-KIND PRE-EXISTING OVERLAND DRAINAGE PATTERN

EDGE OF PAVEMENT

MATCH EXACT GRADES ALONG PROPERTY-LINE, (TYPICAL)

CONCRETE SIDEWALK PANEL REPLACEMENT(S), CONCRETE DRIVEWAY APRON, AND CONCRETE CURB-LINE SHALL ALL BE AS PER REFERENCED CIVIL SITE (PLOT-PLAN)

ALL PROPERTY LINES SHALL BE STAKED-OUT & SILT-FENCE INSTALLED PRIOR TO ANY SITE DISTURBANCE. SITE GRADING SHALL NOT ADVERSELY AFFECT ADJACENT PROPERTIES, (TYPICAL)

CAUTION! - GAS
NATURAL GAS SERVICE VALVE

PROPOSED STORMWATER DRYWELL
PROPOSED 1,000 GALLONS STORMWATER DRYWELL AS PER REFERENCED CIVIL SITE PLOT-PLAN

STORMWATER CATCH-BASIN
'TYPE-B' DRAINAGE INLET GRATE ELEV (VARIES) 99.79 - 99.45

MATCH ALL PROPOSED GRADE ELEVATIONS AS PER REFERENCED CIVIL SITE PLOT-PLAN, (TYPICAL)

INSTALL INTERMITTENT STEPS WITHIN FRONT WALKWAY AS NECESSARY; LOCATIONS MAY VARY AS PER OWNER, CIVIL SITE ENGINEER, AND SITE WORK CONTRACTOR

RETAINING WALL
MODULAR-BLOCK (8" SEGMENTAL MASONRY UNITS)

CONTRACTOR SHALL VERIFY ALL TOP OF FINISHED WALL CAP ELEVATIONS WITH ONELLO ENGINEERING PRIOR TO CONSTRUCTION

RETAINING WALL DRAIN 'WD' TO DAYLIGHT, GRATE-CAP (FOR RODENT PROTECTION) REQUIRED AT OUTLET PORT(S), TYPICAL

STORMWATER CATCH-BASIN
DRAINAGE INLET GRATE ELEV. 95.4

MANHOLE RIM ELEV. 95.92

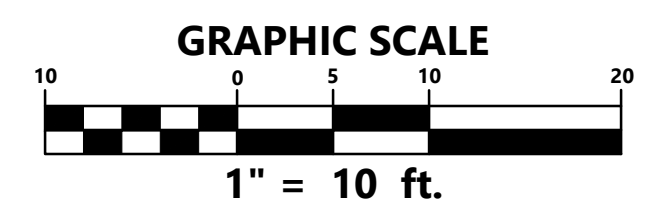
NO TRAPPED AREAS, NOR LOCALIZED LOW-POINTS, SHALL BE THE RESULT OF FINAL SITE GRADING FOR ALL HARDSCAPES, LAWN, & LANDSCAPED AREAS, (TYPICAL)

EXISTING MASONRY STAIRCASE WITH ABUTMENT WALLS TO REMAIN AS-IS

RETAINING WALL
MODULAR-BLOCK (8" SEGMENTAL MASONRY UNITS)

RESIDENTIAL (CIVIL SITE) PLOT PLAN REFERENCES

1. THIS ONELLO ENGINEERING PLAN-SET SET HAS BEEN PROVIDED TO SUPPLEMENT A RESIDENTIAL (CIVIL SITE) PLOT PLAN (AS REFERENCED HEREIN BELOW) FOR THE ENGINEERING DESIGN & CONSTRUCTION RELATED TO THE NEW / PROPOSED ON-SITE RETAINING WALLS
2. THE LOCATIONS, EXTENTS, DIMENSIONS & AREAS, OF ANY AND ALL PROPOSED CONDITIONS IMPROVEMENTS (RESIDENCE ADDITIONS, PATIOS, WALKWAYS, DRIVEWAY, RETAINING WALLS, ET CETERA) SHALL BE AS PER THE RESIDENTIAL (CIVIL SITE) PLAN REFERENCED HEREIN BELOW
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6. OWNER / CONTRACTOR SHALL CONFIRM LATEST & GREATEST (CIVIL SITE) PLOT PLAN IS AS PER REFERENCED ABOVE, AND IS APPROVED FOR CONSTRUCTION BY ALL APPLICABLE REVIEW AGENCIES
7. DUE TO THE POSSIBILITY OF CONTINUED PLOT PLAN REVISIONS WITH DESIGN AMENDMENTS BEYOND THE DATE OF THE ABOVE REFERENCED (CIVIL SITE) PLOT PLAN, THE OWNER / CONTRACTOR SHALL CONTACT ONELLO ENGINEERING TO REVIEW ANY UPDATED PLANS IN-RELATION TO THIS RETAINING WALL(S) CONSTRUCTION PLAN



THIS DRAWING HAS BEEN FORMATTED TO PLAN-SHEET SIZE: 24" x 36"

ONELLO ENGINEERING
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 201-774-1444
 Angelo@OnelloEng.com
 NEW JERSEY CERTIFICATE OF AUTHORIZATION #24GA28215400

**RETAINING WALLS
GRADE ELEVATIONS & DRAINAGE**

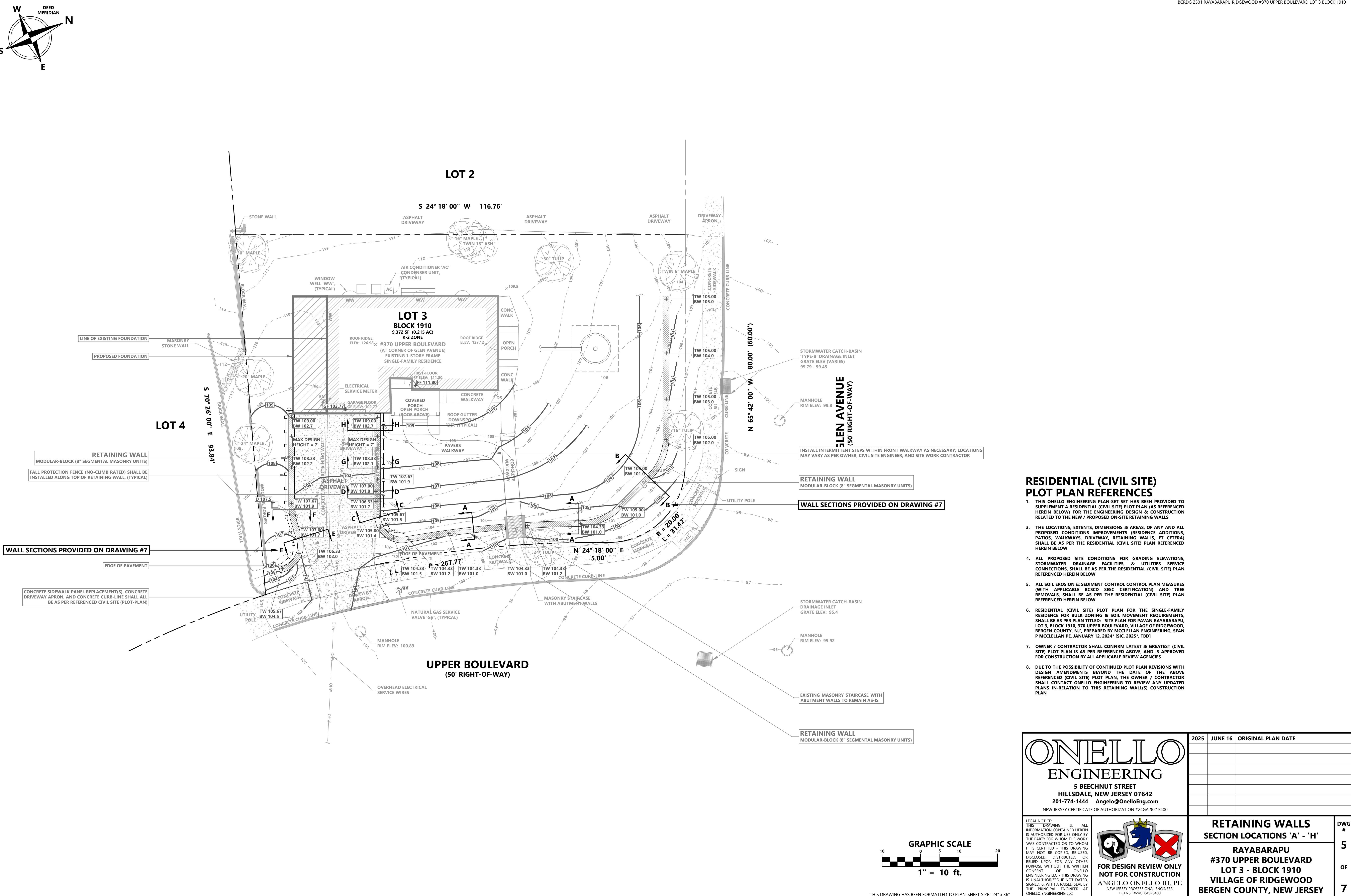
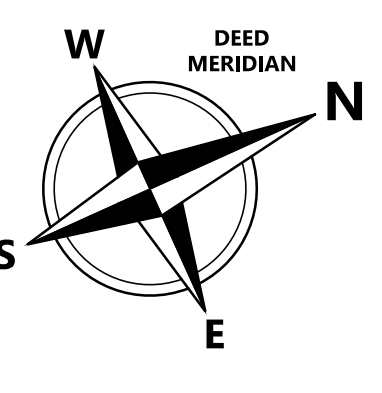
**RAYABARAPU
#370 UPPER BOULEVARD
LOT 3 - BLOCK 1910
VILLAGE OF RIDGEWOOD
BERGEN COUNTY, NEW JERSEY**

FOR DESIGN REVIEW ONLY
NOT FOR CONSTRUCTION

ANGELO ONELLO III, PE
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE #24GE04928400

DATE	DESCRIPTION	DWG #
2025 JUNE 16	ORIGINAL PLAN DATE	4
		OF
		7

BCRDG2501 RAYABARAPU RIDGEWOOD Site Engineering.dwg



RESIDENTIAL (CIVIL SITE) PLOT PLAN REFERENCES

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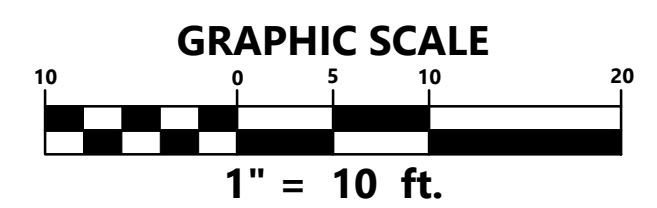
RETAINING WALLS SECTION LOCATIONS 'A' - 'H'

RAYABARAPU #370 UPPER BOULEVARD LOT 3 - BLOCK 1910 VILLAGE OF RIDGEWOOD BERGEN COUNTY, NEW JERSEY

FOR DESIGN REVIEW ONLY
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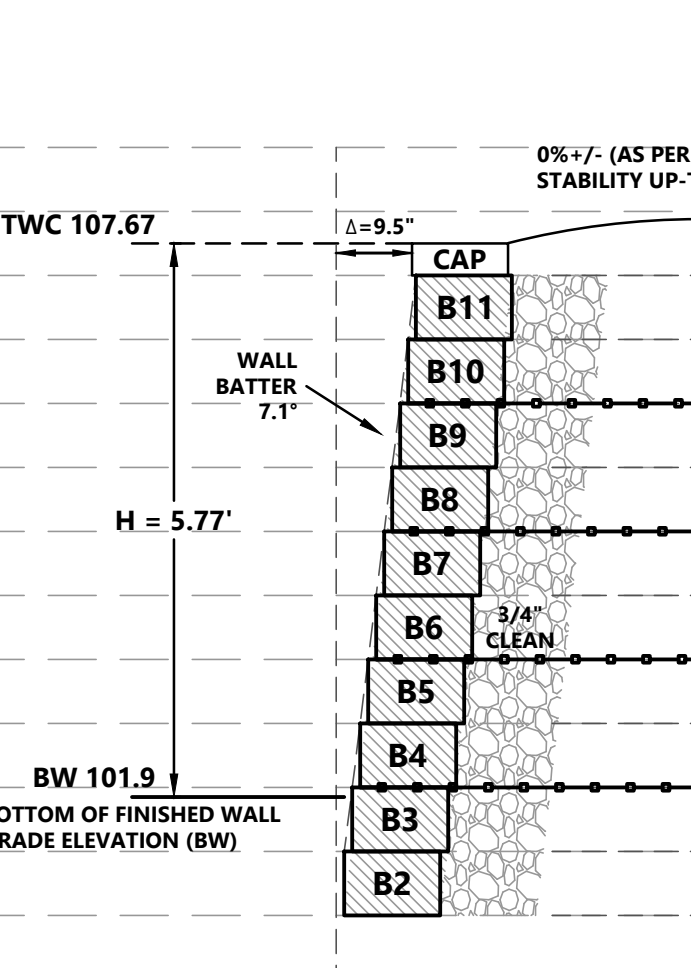
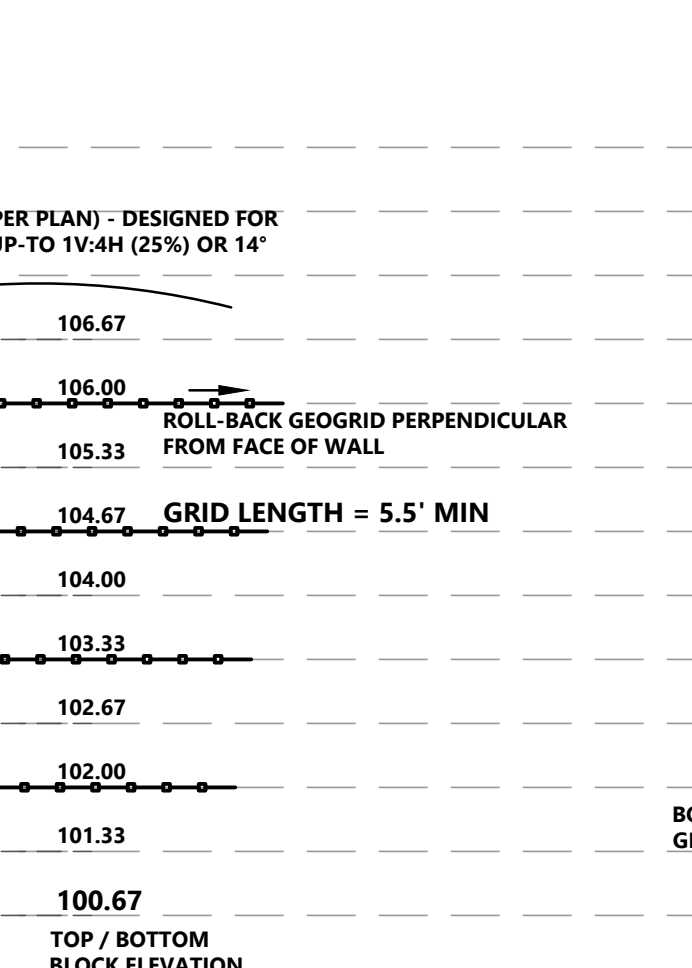
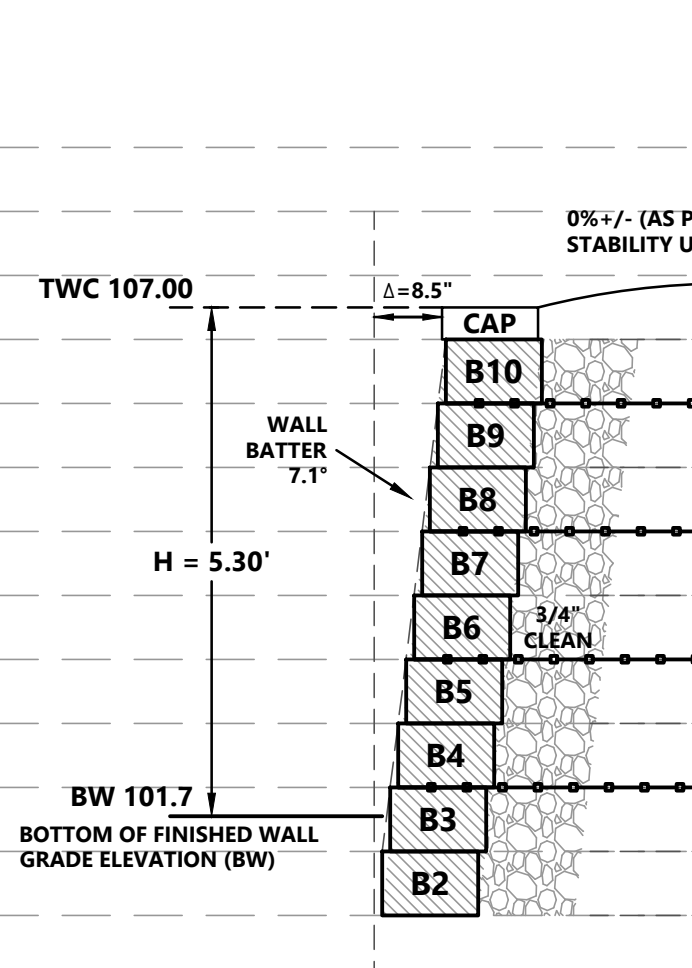
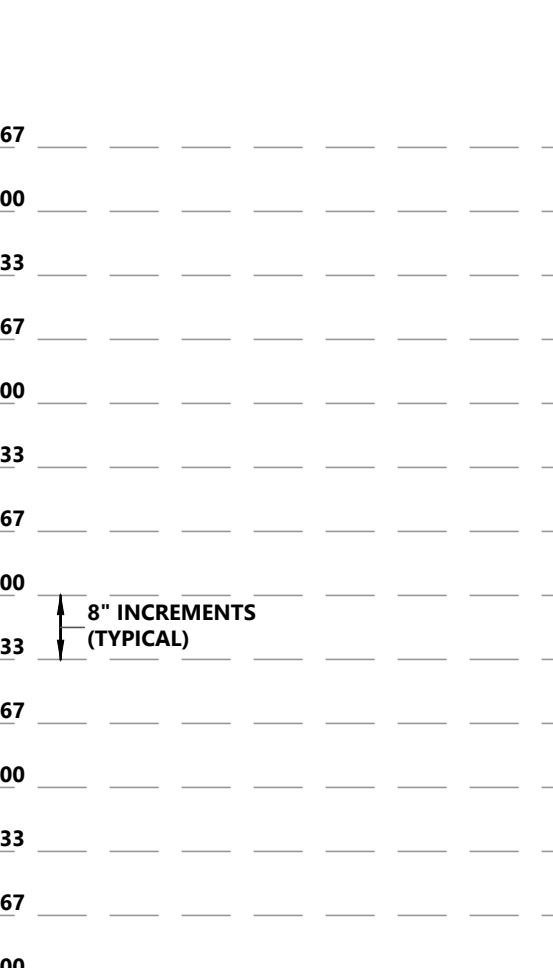
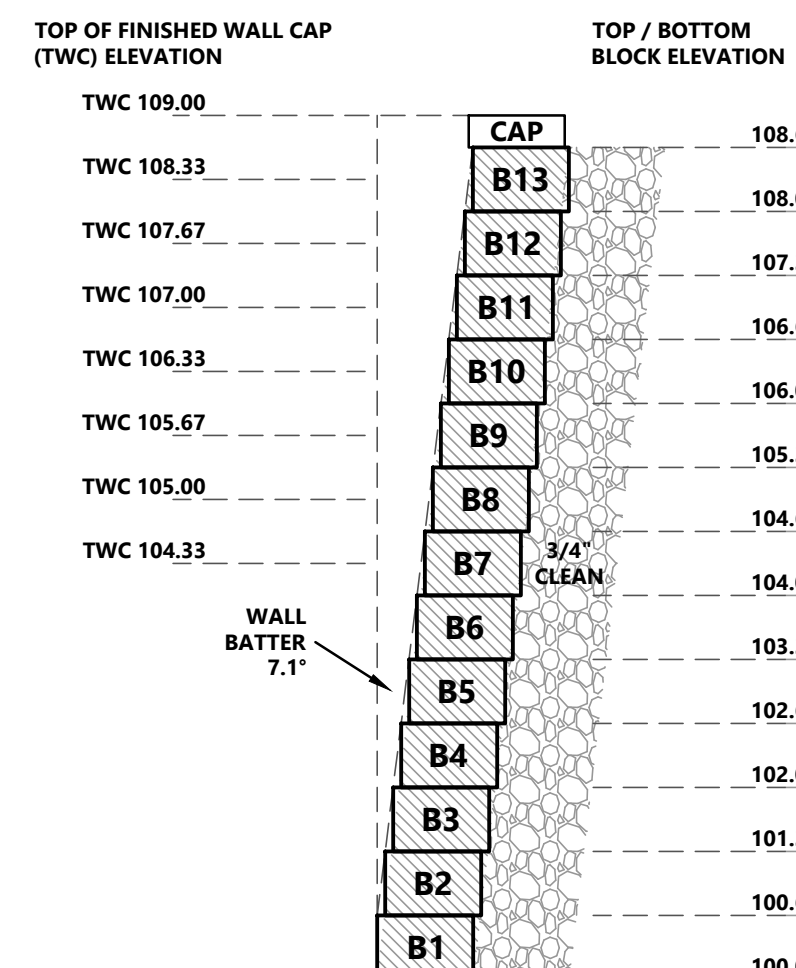
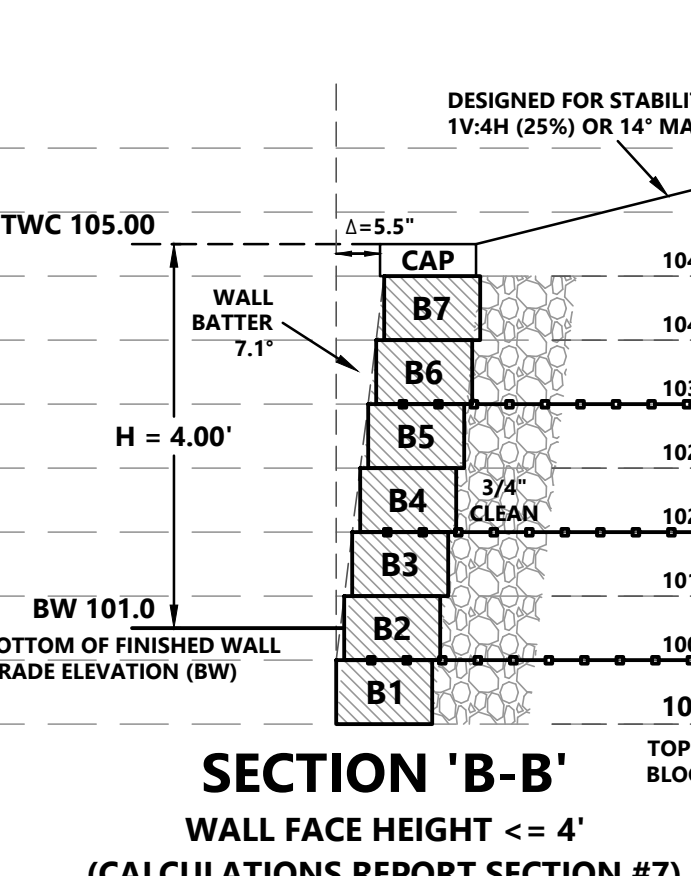
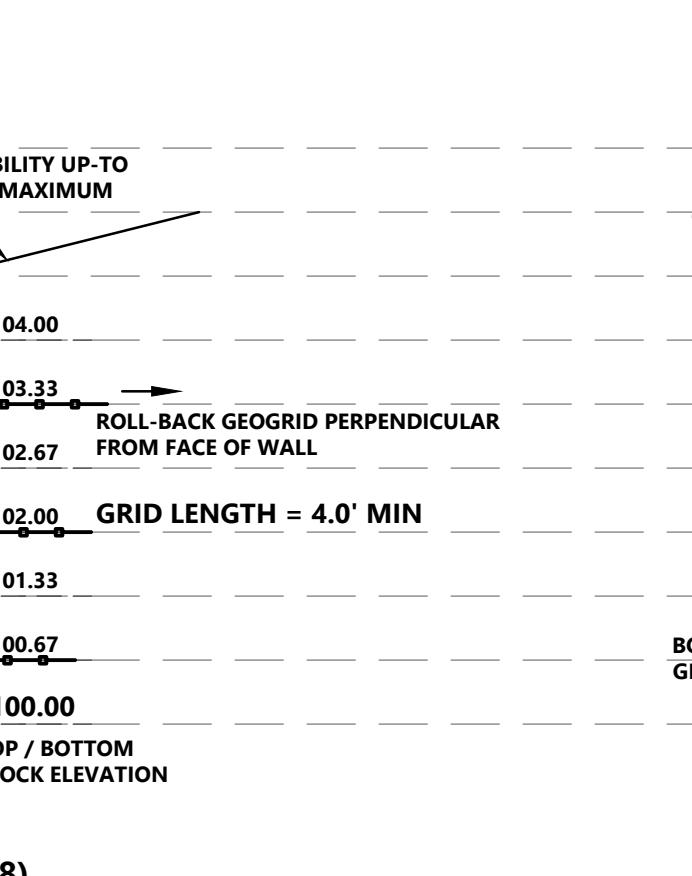
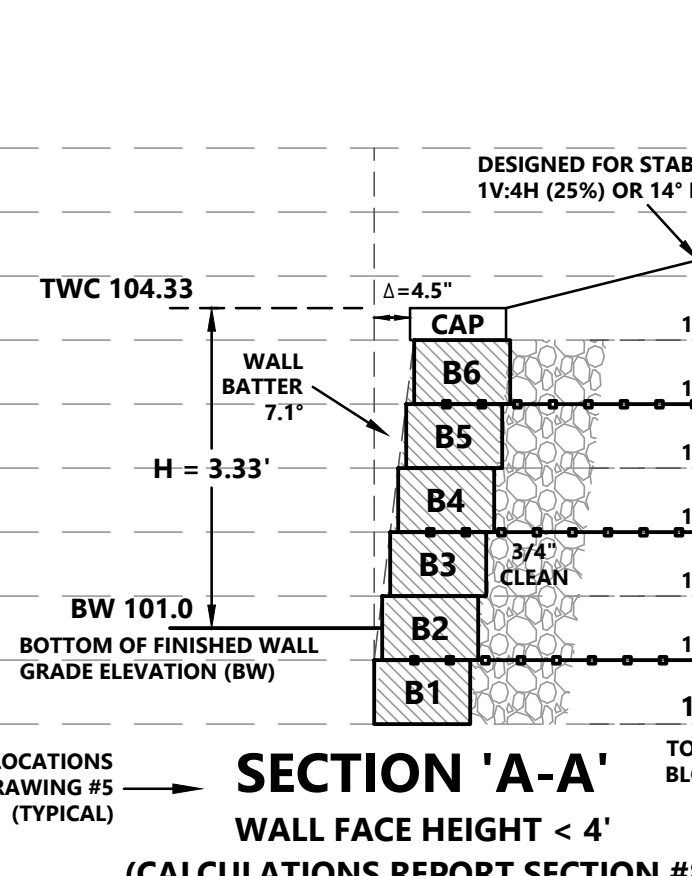
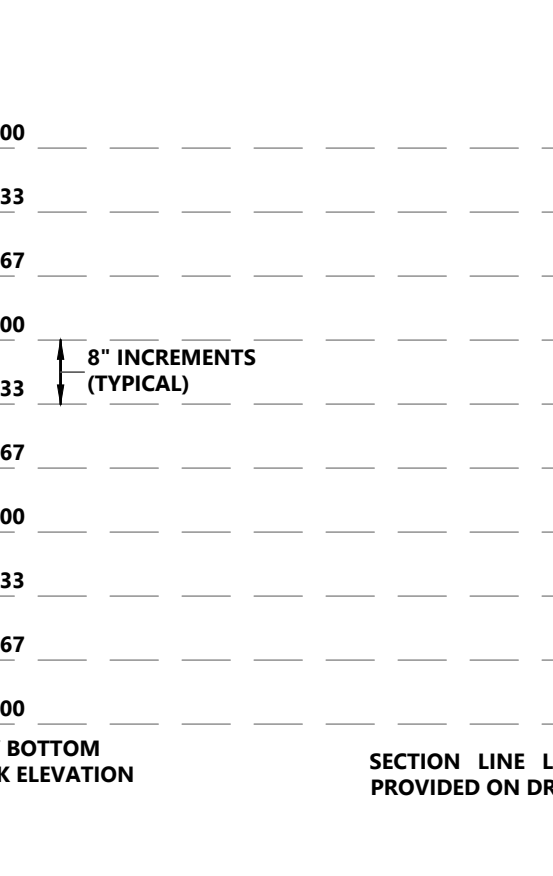
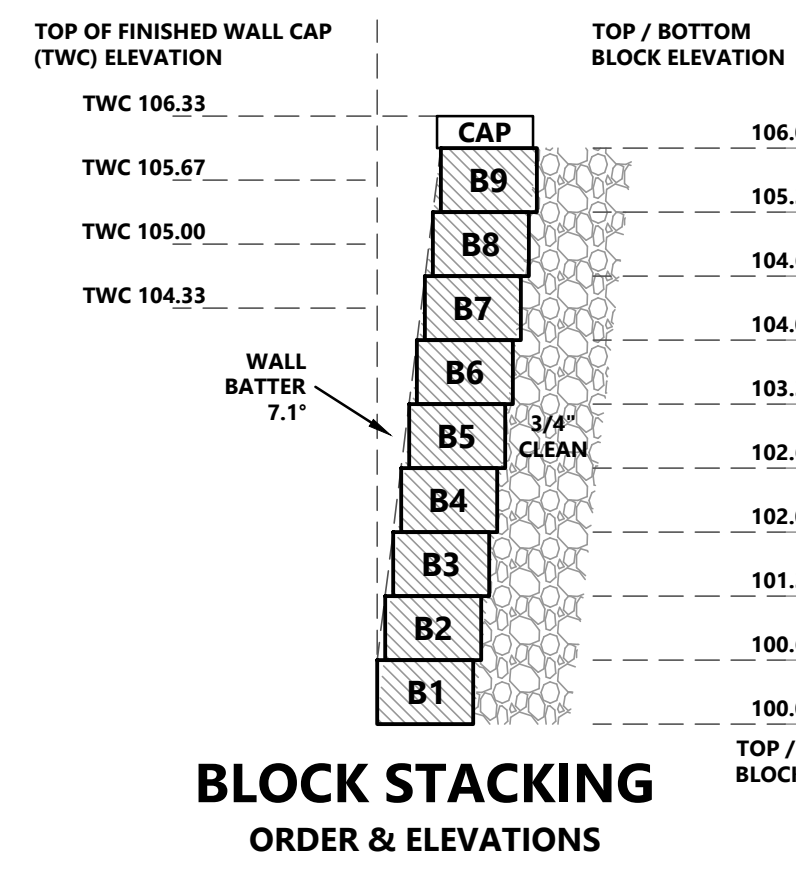
ANGELO ONELLO III, PE
 NEW JERSEY PROFESSIONAL ENGINEER
 LICENSE #24GE04928400

2025	JUNE 16	ORIGINAL PLAN DATE



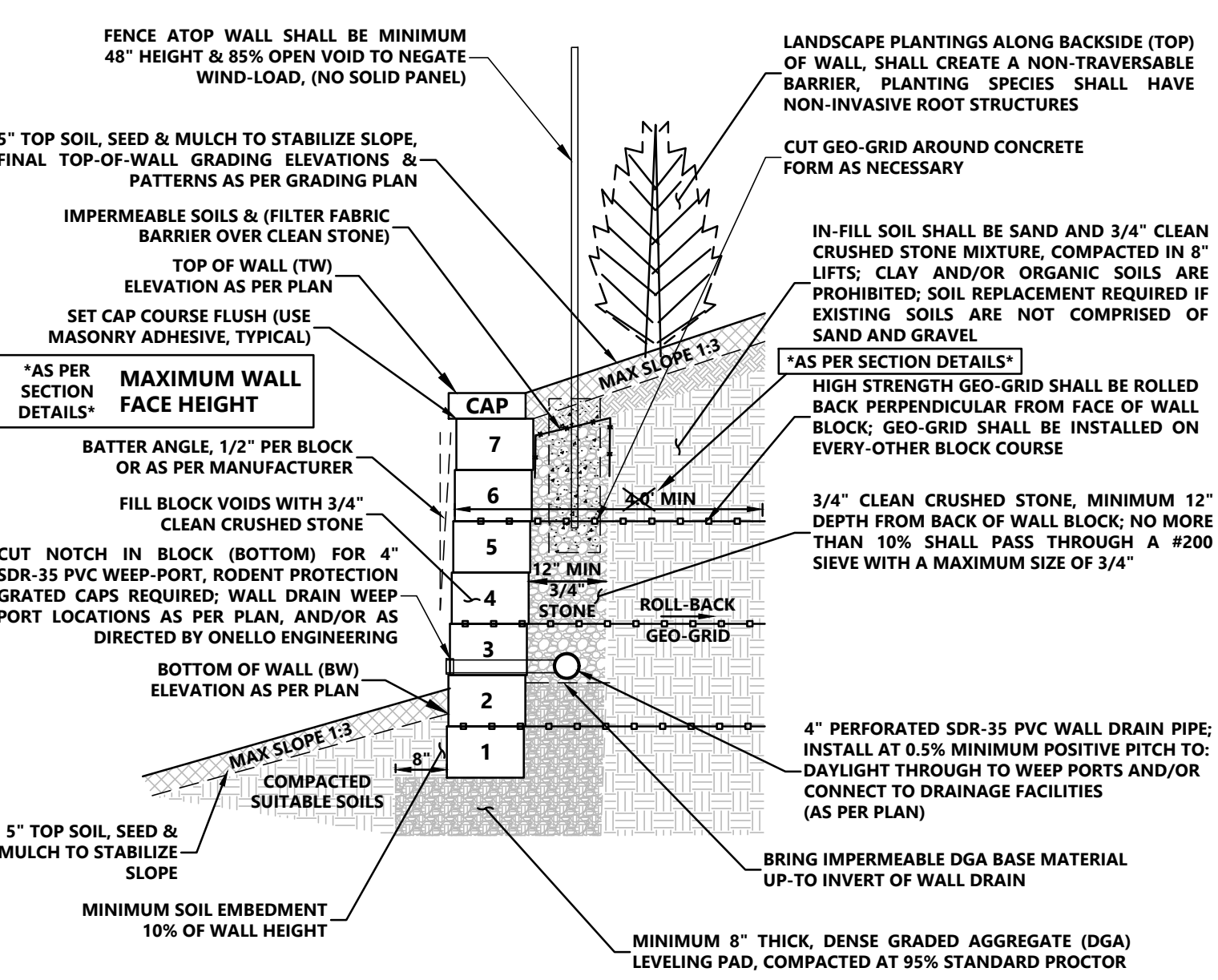
THIS DRAWING HAS BEEN FORMATTED TO PLAN-SHEET SIZE: 24" x 36"

Site Engineering.dwg

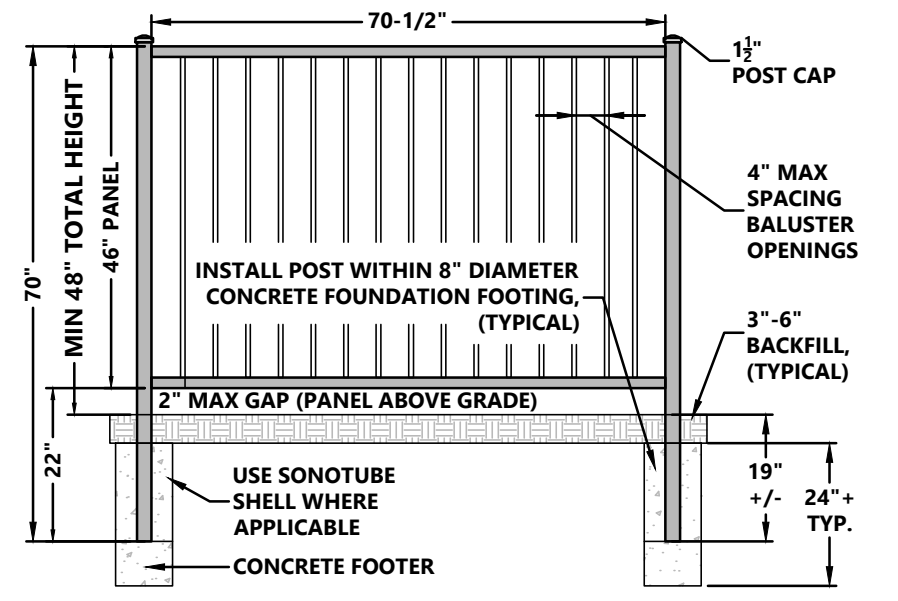


WALL CONSTRUCTION NOTES

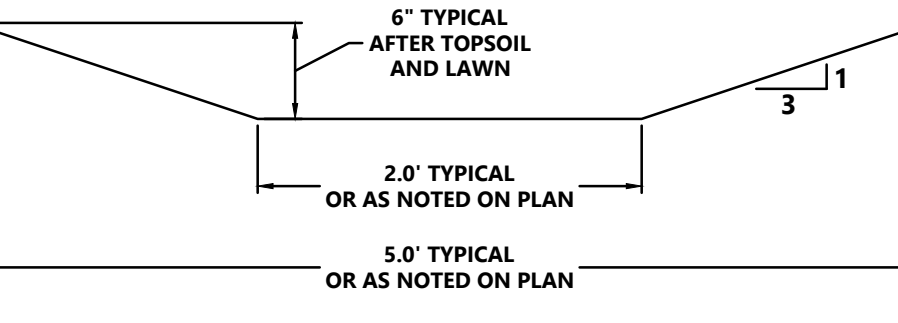
- 1. CONTRACTOR SHALL CONTACT ONELLO ENGINEERING PRIOR TO ANY CONSTRUCTION ACTIVITY IN RELATION TO RETAINING WALLS
2. MODULAR BLOCK AND GEO-GRID MANUFACTURERS & PRODUCT MODELS SHALL BE APPROVED BY ONELLO ENGINEERING
3. RETAINING WALL(S) SHALL BE INSPECTED DURING CONSTRUCTION BY ONELLO ENGINEERING OR SUB-AFFILIATE ENGINEER...



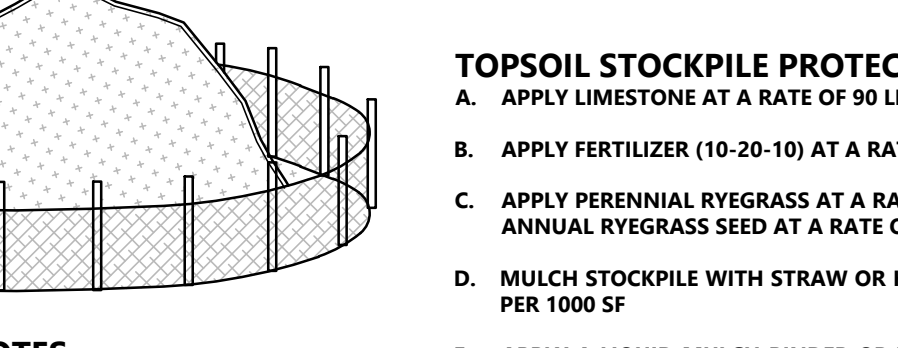
WALL BLOCK: ANCHOR WALL / BELGARD - DIAMOND PRO 8"
GEO-GRID: TENCATE GEOSYNTHETICS - MIRAFIX 3XT (OR EQUAL)



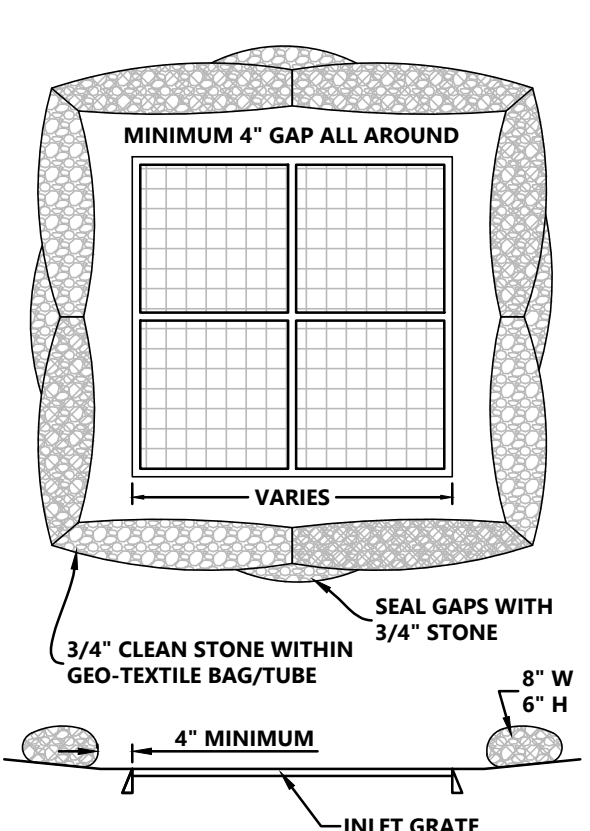
JERITH MANUFACTURING CO, INC
OVATION SERIES: 4" (48") MINIMUM HEIGHT
MODEL #04V8USN - NOT TO SCALE



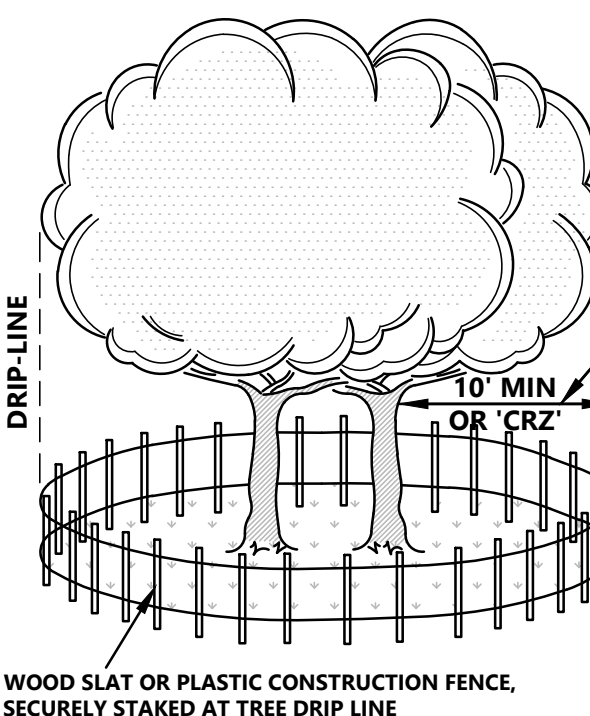
GRADED DRAINAGE SWALE NOT TO SCALE



TOPSOIL STOCKPILE PROTECTION
A. APPLY LIMESTONE AT A RATE OF 90 LBS PER 1000 SF
B. APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS PER 1000 SF...



SOIL EROSION CONTROL INLET FILTER DETAIL FOR STORMWATER CATCH-BASIN GRATES NOT TO SCALE



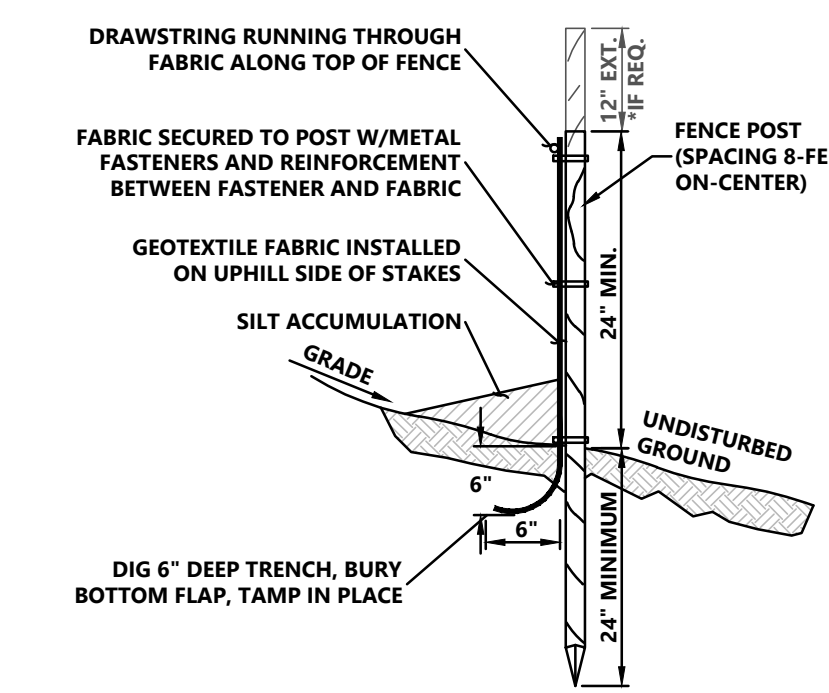
TREE PROTECTION DETAIL NOT TO SCALE

INLET FILTER NOTES

- 1. GEOTEXTILE TO BE WOVEN POLYPROPYLENE PRODUCT GEOTEX 117F, BY PROPEX GEOTEXTILE SYSTEMS, OR APPROVED EQUAL
2. 3/4" CLEAN STONE CORE SHALL BE COMPLETELY CONTAINED WITHIN GEOTEXTILE TUBE/BAG, SEAMS SHALL BE SEWN OR CLOSED BY SUITABLE MECHANICAL MEANS TO PREVENT LEAKAGE OF STONE...

TREE PROTECTION NOTES

- 1. ALL SPECIMEN TREES AS SHOWN ON THE PLANS ARE TO BE PROTECTED DURING CONSTRUCTION
2. THE CONTRACTOR SHALL INSTALL SNOW FENCING AT THE DRIP LINE OF EACH SPECIMEN TREE BEFORE WORKING IN VICINITY OF THE TREE...



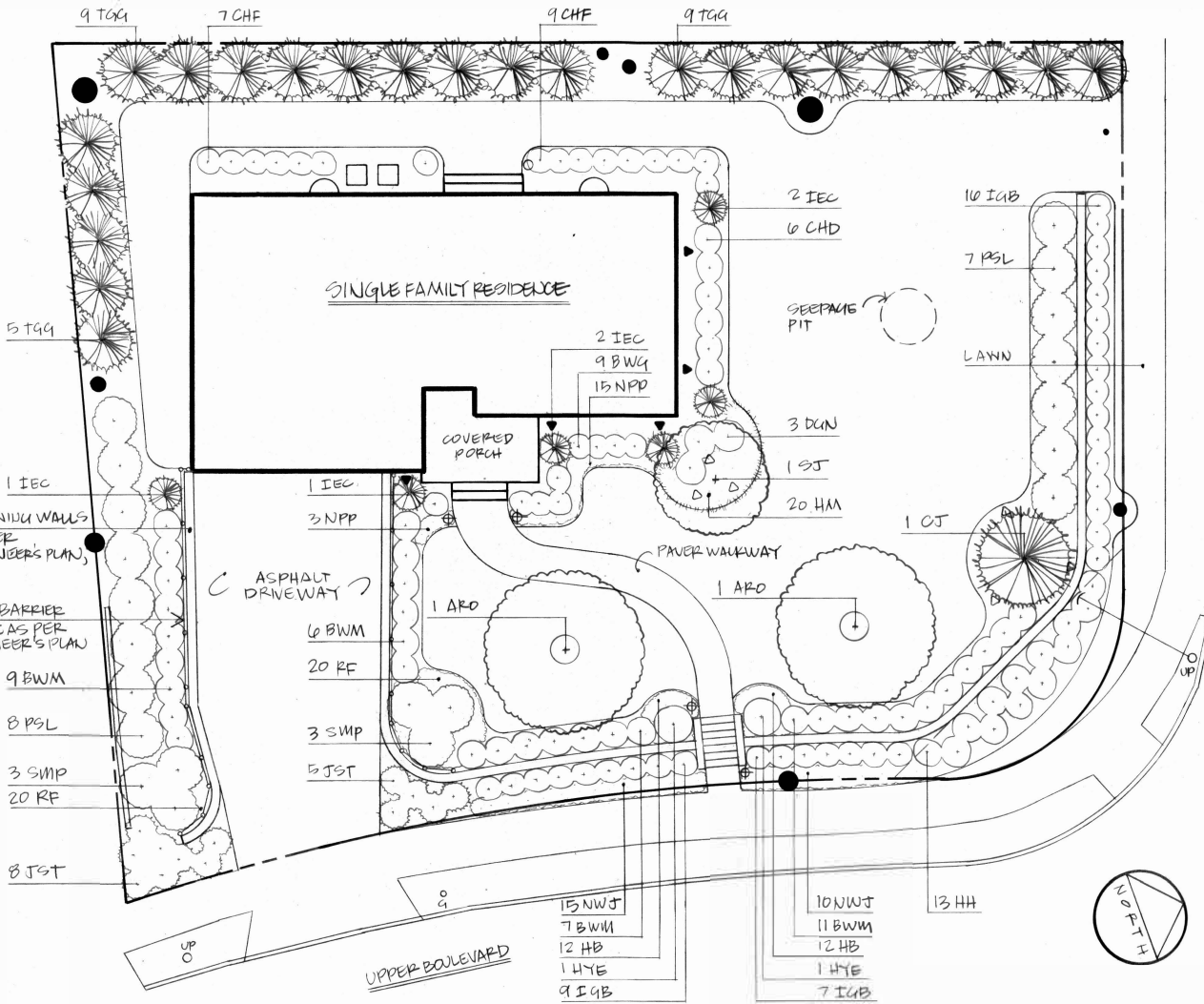
SILT FENCE DETAIL NOT TO SCALE

REQUIREMENTS FOR SILT FENCE

- 1. FENCE POSTS SHALL BE SPACED 8 FEET ON-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND.
2. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FT. HEIGHT MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT...

ONELLO ENGINEERING
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HILLSDALE, NEW JERSEY 07642
201-774-1444
Angelo@OnelloEng.com

Table with columns: DATE, ORIGINAL PLAN DATE, and content: RETAINING WALLS CONST DETAILS & WALL SECTIONS, RAYABARAPU #370 UPPER BOULEVARD LOT 3 - BLOCK 1910 VILLAGE OF RIDGEWOOD BERGEN COUNTY, NEW JERSEY



RETAINING WALLS AS PER ENGINEER'S PLAN, TYP.

FALL BARRIER FENCE AS PER ENGINEER'S PLAN

ASPHALT DRIVEWAY

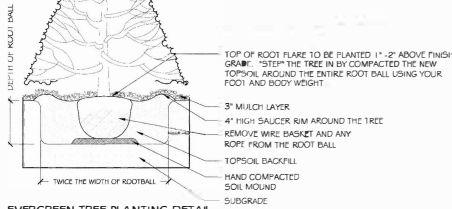
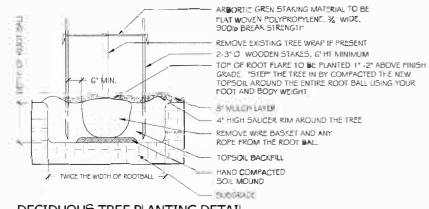
PAVER WALKWAY

UPPER BOULEVARD

GALEN AVENUE

Lighting Key

Symbol	Description	Qty	Manuf.	Model	Volt.	Finish	Bulb	Accessories/Notes
◁	Up Light	6	Cast	SLMR162W27	12	Bronze	2W LED	40 degree
◀	Wall Wash	5	Cast	SLMR162M27	12	Bronze	2W LED	30 degree
⊕	Path Light	4	Cast	CCH2CB	12	Bronze	n/a	CALED2 LED Module



Master Plant List

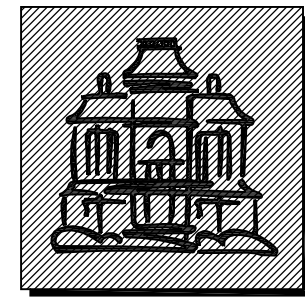
Key	Botanical Name	Common Name	Qty.	Size	Spacing	Mature ht.
Trees						
ARO	Acer rubrum 'October Glory'	October Glory Red Maple	2	2'-2.5' cal.		40'-50' ht.
CJ	Cryptomeria japonica	Japanese Cedar	1	9'-10' ht.		40'-50' ht.
SJ	Styrax japonicus	Japanese Snowbell	1	2'-2.5' cal.		20'-30' ht.
TGG	Thuja plicata 'Green Giant'	Green Giant Arborvitae	23	7'-8' ht.	6' o.c.	30'-40' ht.
Shrubs						
BWG	Buxus 'Winter Green'	Winter Green Boxwood	9	24" ht.	30" o.c.	3'-4' ht.
BWM	Buxus 'Winter Gem'	Winter Gem Boxwood	33	30" ht.	36" o.c.	3'-4' ht.
CHD	Cephalotaxus 'Dukes Garden'	Dukes Garden Plum Yew	6	30" ht.	36" o.c.	3'-4' ht.
CHF	Cephalotaxus 'Fastigiata'	Upright Plum Yew	16	24" ht.	24" o.c.	5'-6' ht.
DGN	Deutzia gracilis 'Nikko'	Nikko Slender Deutzia	3	3g	36" o.c.	12'-24" ht.
HH	Hypericum x 'Hidcote'	Hidcote St. John's Wort	13	3g	36" o.c.	24'-30" ht.
HYE	Hydrangea 'Endless Summer'	Endless Summer Hydrangea	2	5g		3'-4' ht.
IEC	Ilex 'Emerald Colonnade'	Emerald Colonnade Holly	6	4'-5' ht.		8'-10' ht.
IGB	Ilex glabra 'Gem Box'	Gem Box Inkberry	32	24" ht.	24" o.c.	2'-3' ht.
JST	Juniperus 'Tamariscifolia'	Tam Juniper	13	3g	36" o.c.	1.5'-3' ht.
PSL	Prunus 'Skip Laurel'	Skip Laurel Cherry Laurel	15	5'-6' ht.	5' o.c.	10'-12' ht.
SMP	Syringa meyeri 'Palibin'	Compact Meyer Lilac	6	3' ht.	5' o.c.	4'-5' ht.
Perennials/Groundcovers						
HB	Stachys officinalis 'Hummelo'	Hummelo Betony	24	1g	12" o.c.	18"-24" ht.
NPP	Nepeta 'Picture Perfect'	Picture Perfect Catmint	18	1g	18" o.c.	10"-12" ht.
NWJ	Nepeta 'Walkers Low Jr.'	Walkers Low Jr. Catmint	25	1g	24" o.c.	14"-16" ht.
RF	Rudbeckia 'Goldstrum'	Goldstrum Coneflower	40	1g	24" o.c.	18"-24" ht.
Grasses/Sedges/Rushes						
HM	Hakonechloa 'All Gold'	All Gold Hakone Grass	20	2g	24" o.c.	18" ht.

Planting Notes

- All plantings shall conform to the work detailed in the Drawings and described in the Notes. The Contractor, and all sub-Contractors where applicable, shall furnish all materials, equipment, and labor necessary to execute such work.
- The Contractor shall schedule the planting work in coordination with all other work of the project.
- The Contractor shall verify all quantities of plant materials shown on the Drawing and Plant List, and shall bring all discrepancies to the immediate attention of the Landscape Architect. Without such notice, all discrepancies shall be resolved in favor of the higher quantity, at the Contractor's expense.
- Plant materials shall be provided in accordance with the American Association of Nurserymen Standards for size, health, and typical habit or growth. No plant substitutions will be permitted without the consent of the Landscape Architect.
- The site shall be properly prepared prior to the commencement of all planting operations. This includes: proper grading, in accordance with the Engineer's Drawings, and the preparation of plantings beds.
- For all plantings, beds shall be a full depth of backfilled, or rototilled, topsoil mixture, consisting of seven parts topsoil to one part humus. Topsoil shall be obtained from outside sources provided by the Contractor. Edges for planting beds shall be as per drawings. Depth of shrub beds shall be a minimum of six inches wider than the nearest plant ball, and not less than 18" deep; beds for groundcovers shall be 12" deep. For individual trees or major shrubs, planting holes shall be twelve inches larger in diameter and six inches deeper than the ball of the plant. Contractor shall test the soil, and provide lime or fertilizer as necessary.
- Unless so specifically requested otherwise, the Contractor shall lay out all plant material in accordance with the Drawings.
- Planting operations shall be executed in accordance with the best practices of the industry. Plants shall be properly protected and handled at all times. Plants shall be planted straight and true, and at the proper depths. All tags, labels, non-biodegradable ball material, branch bindings, and bailing shall be removed immediately after plants are backfilled. Unless otherwise requested by the Landscape Architect, all trees over one and one half inch caliper shall be staked or guyed; the Contractor shall use cedar stakes with wire and protective hose. Newly planted materials shall be pruned by the Contractor as directed by the Landscape Architect.
- All planting beds shall be mulched with two to three inches of double shredded hardwood mulch, or as currently used on site.
- The Contractor shall properly maintain all plantings prior to Final Acceptance.
- All planting work shall be guaranteed for a period of one year after Final Acceptance. During this period of guarantee, all plants in which at least fifty percent of the branches are dead shall be replaced at no cost to the Owner. Provided that, in the opinion of the Landscape Architect, there has been reasonable and adequate care for the plantings, by the Owner. This shall be a one-time only replacement.

Ryabarapu Residence
 370 Upper Boulevard Ridgewood, NJ
 Christopher L. Karach • Landscape Architect
 PO Box 114 Cresskill, NJ 07626
 Phone: 201-501-8577 Fax: 201-501-8677
Sheet Title: Schematic Landscape Plan
 Scale: 1"=10'-0" Drawn by: Christopher Karach NJLLA AS00923
 Lot: 3 Block: 1910 Sheet 1 of 1
 Date: July 17, 2025 Drawing #: L-2539

Christopher L. Karach NJLLA AS00923



Jordan Rosenberg
ARCHITECTS
& ASSOCIATES

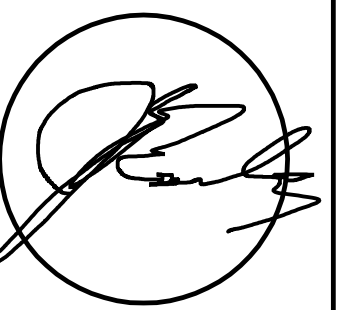
27 N. Broad Street
Second Floor
(201) 669-8614
www.jrarchitect.com
JRarchitect@gmail.com

SET ISSUES & DATES:
DATE: 1-30-25
ISSUE: CONCEPTUAL DESIGN DRAWINGS
1-30-25 REVISIONS AS PER CLIENT COMMENTS
2-10-25 PHASE 1 CONCEPTUAL DESIGN DRAWINGS 100% COMPLETE
2-24-25 FOR ZONING REVIEW SUBMISSION AND ZONING BOARD OF
5-1-25 ADJUSTMENTS SUBMISSION

PRIVATE RESIDENCE
ADDITION / RENOVATION TO
SINGLE FAMILY RESIDENCE

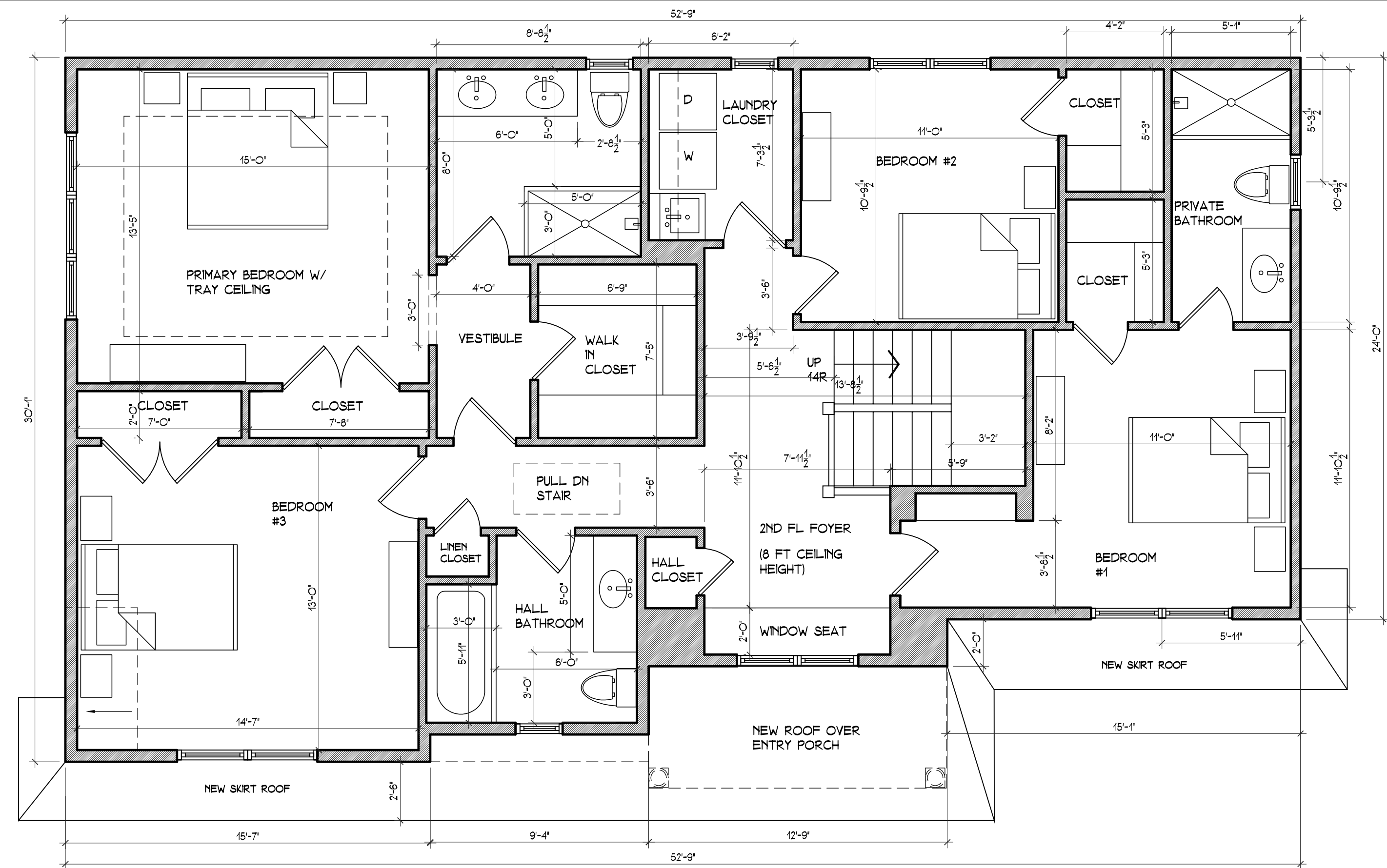
370 UPPER BOULEVARD, RIDGEWOOD, NJ

JORDAN ROSENBERG, P.A.
NJ ARCHITECT: #16495

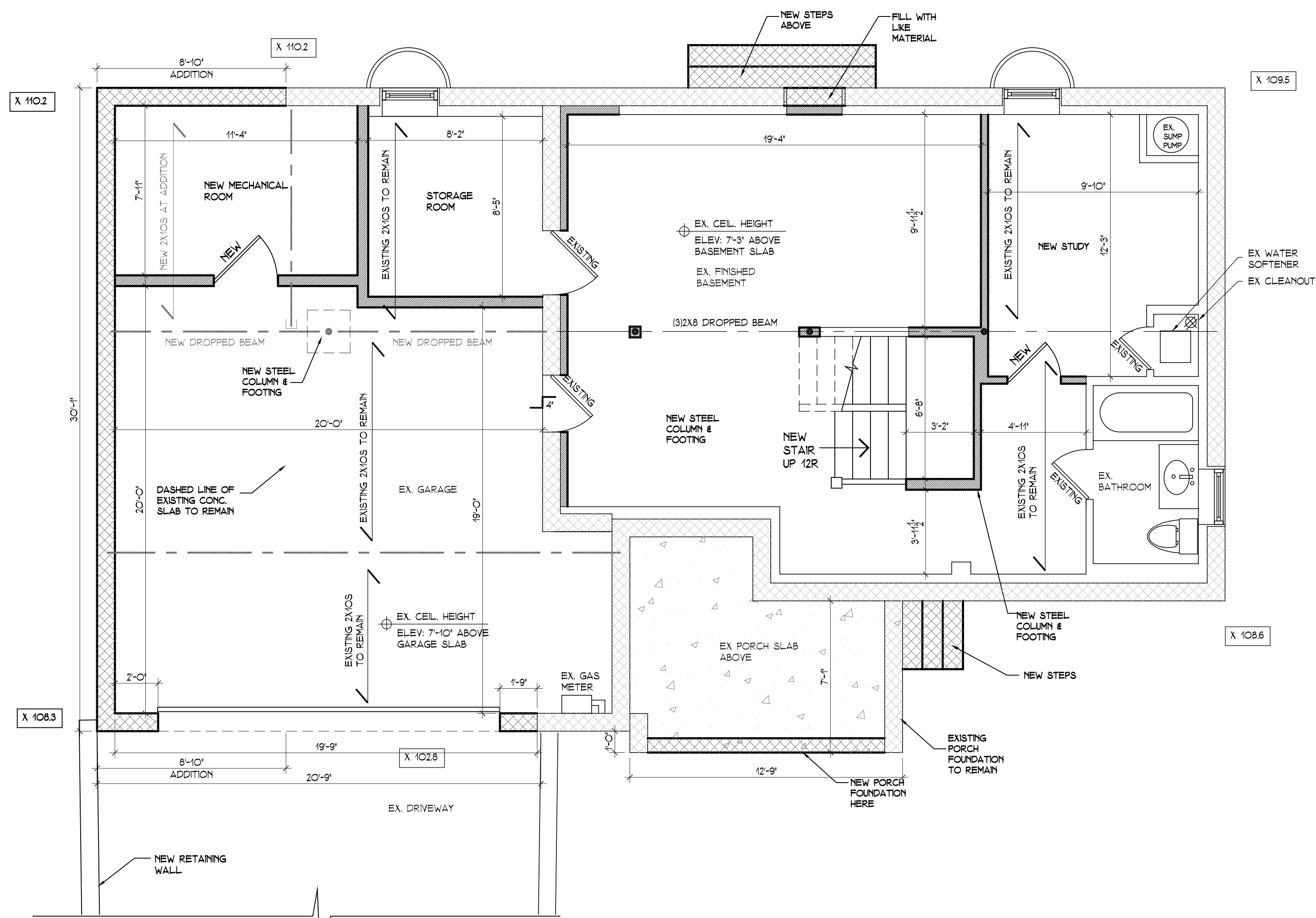


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SCALE: SEE DRAWING TITLE
DRAWN BY: JR
A-01

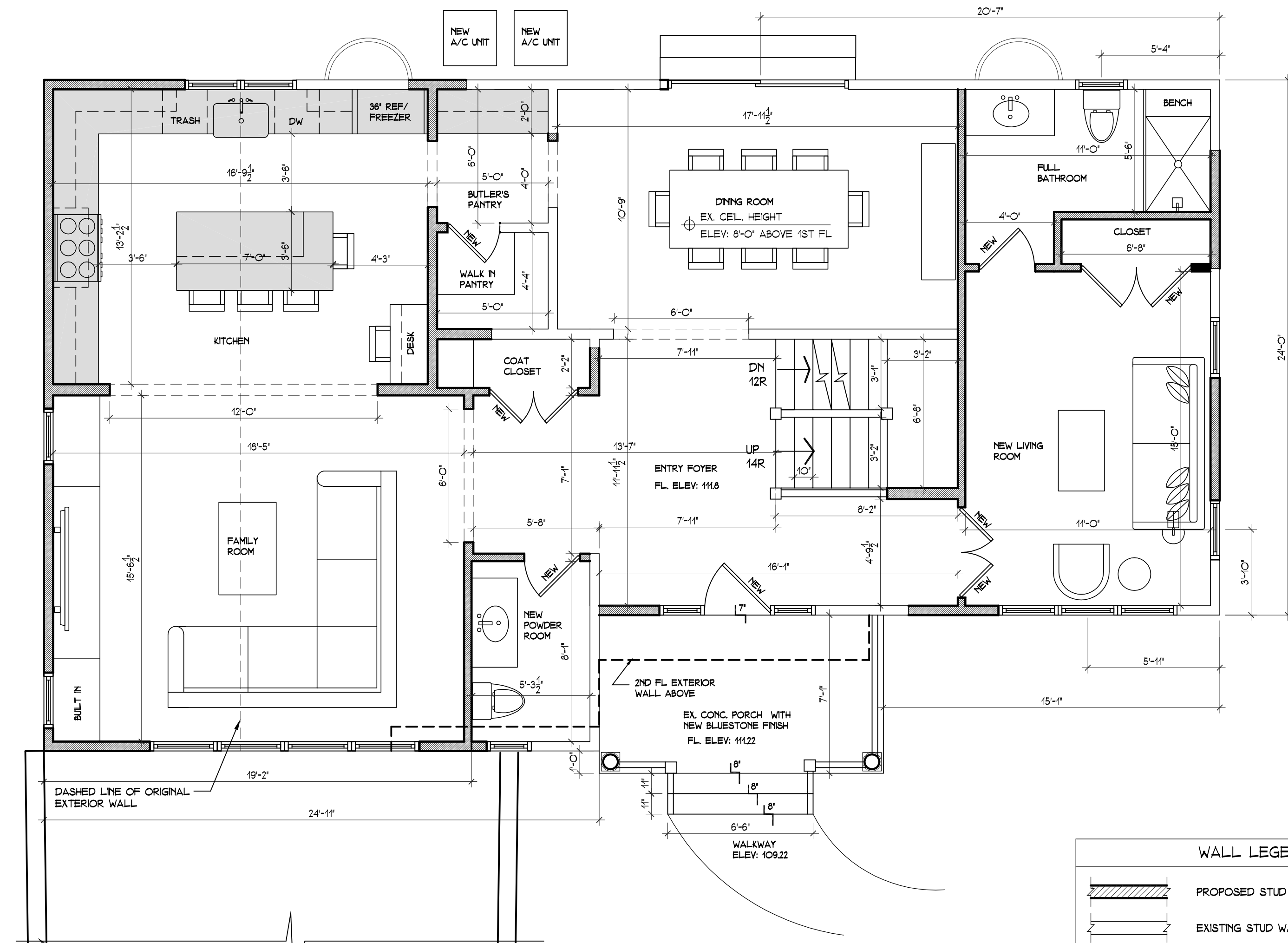
PROPOSED GROSS BUILDING AREA	
1ST FL:	1,417 SF
2ND FL:	1,431 SF
TOTAL:	2,848 SF



3 PROPOSED 2ND FL PLAN
A-01 SCALE: 1/4" = 1'-0"

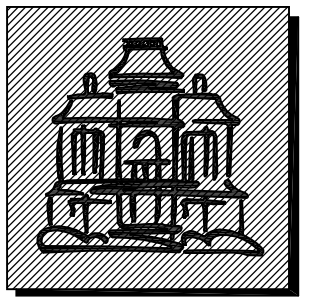


1 PROPOSED GARAGE/BASEMENT PLAN
A-01 SCALE: 1/4" = 1'-0"



2 PROPOSED 1ST FL PLAN
A-01 SCALE: 1/4" = 1'-0"

WALL LEGEND	
	PROPOSED STUD WALL
	EXISTING STUD WALL TO REMAIN
	EXISTING CONC. WALL TO REMAIN
	PROPOSED CONC. WALL



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ARCHITECTS
& ASSOCIATES

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SET ISSUES & DATES:

DATE	ISSUE
1-30-25	CONCEPTUAL DESIGN DRAWINGS
2-10-25	REVISED DRAWINGS AS PER CLIENT COMMENTS
2-24-25	PHASE 1 CONCEPTUAL DESIGN DRAWINGS 100% COMPLETE
5-1-25	FOR ZONING REVIEW SUBMISSION AND ZONING BOARD OF ADJUSTMENTS SUBMISSION

PRIVATE RESIDENCE
ADDITON / RENOVATION TO
SINGLE FAMILY RESIDENCE
370 UPPER BOULEVARD, RIDGEWOOD, NJ

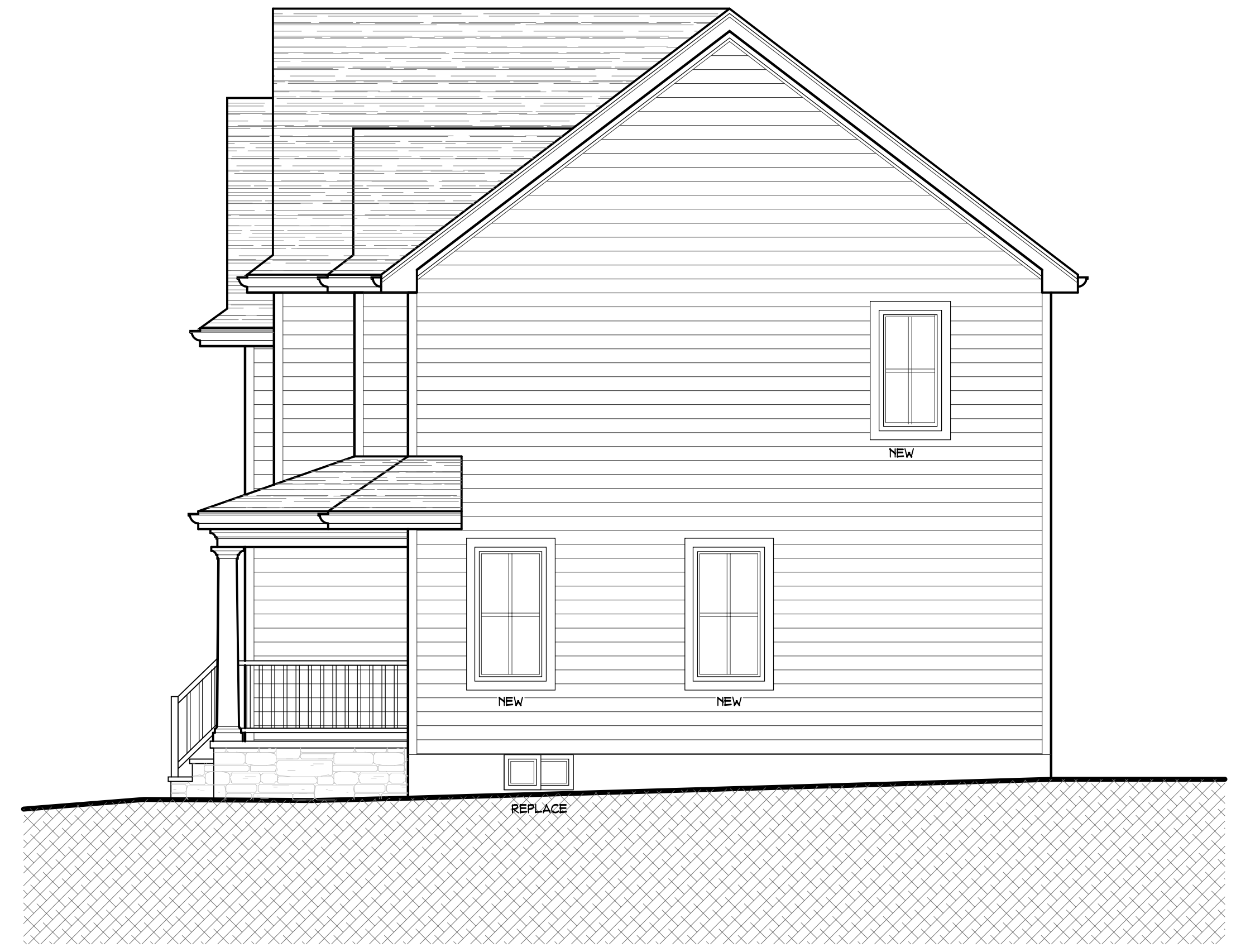
JORDAN ROSENBERG, P.A.
NJ ARCHITECT: #16495

DRAWING TITLE:	DATE
SEE DRAWING TITLE	5-1-25
DRAWN BY:	EX-02
JR	

- TOP OF ROOF RIDGE
ELEV: 138.55
26.75 FT ABOVE 1ST FL.
- NEW 2ND FL. CEILING
ELEV: 8 FT ABOVE 2ND FL.
- LOW WALL PLATE
ELEV: 6 FT ABOVE 2ND FL.
- NEW 2ND FL.
ELEV: 8'-10" ABOVE 1ST FL.
- EX 1ST FLOOR CLG
ELEV: 8 FT ABOVE 1ST FL.
- TOP OF WINDOW
ELEV: 6'-8" ABOVE 1ST FL.
- EX 1ST FLOOR
ELEV: 111.8 AS PER CIVL.
- AVG. PROP. GRADE (AS PER CIVL)
ELEV: 109.2
- EX GARAGE SLAB
ELEV: 102.8 AS PER CIVL.



1 PROPOSED FRONT ELEVATION (UPPER BLVD)
A-02 SCALE: 1/4" = 1'-0"



2 PROPOSED FRONT ELEVATION (W. GLEN)
A-02 SCALE: 1/4" = 1'-0"

- TOP OF ROOF RIDGE
ELEV: 138.55
26.75 FT ABOVE 1ST FL.
- NEW 2ND FL. CEILING
ELEV: 8 FT ABOVE 2ND FL.
- NEW 2ND FL.
ELEV: 8'-10" ABOVE 1ST FL.
- EX 1ST FLOOR CLG
ELEV: 8 FT ABOVE 1ST FL.
- TOP OF WINDOW
ELEV: 6'-8" ABOVE 1ST FL.
- EX 1ST FLOOR
ELEV: 111.8 AS PER CIVL.
- AVG. PROP. GRADE (AS PER CIVL)
ELEV: 109.2
- EX GARAGE SLAB
ELEV: 102.8 AS PER CIVL.



3 PROPOSED SIDE ELEVATION
A-02 SCALE: 1/4" = 1'-0"

- TOP OF ROOF RIDGE
ELEV: 138.55
26.75 FT ABOVE 1ST FL.
- NEW 2ND FL. CEILING
ELEV: 8 FT ABOVE 2ND FL.
- NEW 2ND FL.
ELEV: 8'-10" ABOVE 1ST FL.
- EX 1ST FLOOR CLG
ELEV: 8 FT ABOVE 1ST FL.
- TOP OF WINDOW
ELEV: 6'-8" ABOVE 1ST FL.
- EX 1ST FLOOR
ELEV: 111.8 AS PER CIVL.
- AVG. PROP. GRADE (AS PER CIVL)
ELEV: 109.2
- EX GARAGE SLAB
ELEV: 102.8 AS PER CIVL.



4 PROPOSED REAR ELEVATION
A-02 SCALE: 1/4" = 1'-0"