

TOWN OF COLUMBIA
ZONING BOARD OF APPEALS
THURSDAY, JULY 23, 2020 - 7:00 P.M.
ADELLA G. URBAN ADMINISTRATIVE OFFICES CONFERENCE ROOM
323 ROUTE 87, COLUMBIA, CT

Regular Meeting – to be held on Zoom Meeting Download free app at Zoom.us

Meeting link is <https://tinyurl.com/yayermuo> also on ColumbiaCT.org

Meeting ID: 822 7102 1457 Password: 411213

or join by phone 1-646-558-8656 same ID and password

AS THIS IS A VIRTUAL MEETING WE ARE OPERATING UNDER THE FOLLOWING PROCEDURES:

THIS SESSION IS BEING BOTH VIDEO AND AUDIO-RECORDED. ATTENDEES, COMMISSIONERS AND STAFF WILL GENERALLY REMAIN ON MUTE EXCEPT WHEN SPEAKING OR VOTING AND WILL GENERALLY BE KEEPING VIDEO OF THEMSELVES ON THROUGHOUT THE MEETING. IF A MEMBER OF THE PUBLIC CREATES AN AUDIO OR VIDEO DISRUPTION, THEY MAY BE MANUALLY EJECTED FROM THE MEETING UPON RECOMMENDATION OF STAFF OR THE CHAIR.

AGENDA

CALL TO ORDER

ROLL CALL (Designation of Alternates, as needed)

CHANGES/ADDITIONS TO AGENDA

APPROVAL OF REGULAR MEETING MINUTES OF November 21, 2019

AUDIENCE OF CITIZENS (Comments on matters not on the Agenda)

SUSPEND REGULAR MEETING

OPEN PUBLIC HEARING:

1. **ZBA-1920-02:** Application of Robert & Mary Sullivan/Agent: Wesley J Wentworth PE, to demolish existing cottage and rebuild a single-family residence with a new drilled well and septic system.

RESUME REGULAR MEETING

NEW BUSINESS

1. **ZBA-1920-02:** Application of Robert & Mary Sullivan/Agent: Wesley J Wentworth PE, to demolish existing cottage and rebuild a single-family residence with a new drilled well and septic system.

UNFINISHED BUSINESS

BOARD OPEN DISCUSSION

CORRESPONDENCE

ADJOURNMENT

TOWN OF COLUMBIA
ZONING BOARD OF APPEALS
THURSDAY, NOVEMBER 21, 2019 - 7:00 P.M.
ADELLA G. URBAN ADMINISTRATIVE OFFICES CONFERENCE ROOM
323 ROUTE 87, COLUMBIA, CT
REGULAR MEETING MINUTES

Members Present: Chair Joseph Narkawicz, Vice-Chair Carole Williamson, Secretary Jeffery Vose, Keith Peck, William Petrone. Edward DiGiovanni (Alternate)

Members Absent: Andrea Drabicki (Alternate)

Staff Present: ZEO Constance Kisluk, Board Clerk Flo Polek

Others Present: David and Bessie Paul

CALL TO ORDER: J. Narkawicz called the meeting to order at 7:00 pm.

ROLL CALL (Designation of Alternates, as needed): None

CHANGES/ADDITIONS TO AGENDA: J. Vose would like to add a discussion at the end of the meeting regarding restrictions put on and how enforceable the restrictions. All members agreed to the discussion.

APPROVAL OF REGULAR MEETING MINUTES OF May 23, 2019: J. Vose **MOVED** to **APPROVE** the meeting minutes of May 23, 2019; W. Petrone **SECONDED; MOTION CARRIED 6:0:0**

AUDIENCE OF CITIZENS (Comments on matters not on the Agenda) None

SUSPEND REGULAR MEETING: J. Narkawicz **SUSPENDED** the regular meeting at 7:02 pm and **OPENED** the public hearing.

OPEN PUBLIC HEARING:

1. ZBA-1920-01: Application of David and Bessie Paul (Owners/Applicant) are requesting a variance at 18 Whitney Road, Columbia, CT, Assessor's Map 004, Lot 043. The variance will allow the addition of a two-car carport 24'w x 20'd x 8'h. The variance requested from Sec. 10.4.2 (non-conforming lots) for reduced side yard setback from 20 ft to 10 ft along the southerly property line.

J. Narkawicz read the application of D. and B. Paul along with the neighbor's letter, Donna M. Mack. J. Narkawicz had visited the site.

D. and B. Paul introduced themselves and provided design renderings of the carport that will be built.

J. Vose thought it looked like a garage. D. Paul stated it starts as a carport. He also noted that sometime in the future sides and doors could be added. J. Vose asked if they would do that. D. Paul responded that he and his wife would like to add sides. Doors could be added but not at this time. C. Williamson questioned C. Kisluk as to whether this is a garage. C. Kisluk indicated that it depends on the structure. From the standpoint of the setback, it is a structure and it does not matter what it is, a garage, hut, or carport. C. Williamson indicated to the applicants that they could change the application to indicate that, in the future, there will be a garage built. D. Paul asked if the wording in the application should be changed. J. Narkawicz indicated that if you install doors and then it becomes a garage.

D. Paul stated that the structure is 8ft tall, probably overhead doors in the future. J. Narkawicz stated the applicants should state in the application that a carport will be built with sides. The applicants amended the application to build a carport with walls as proposed with a possibility of a door.

J. Narkawicz cited the regulations of the State of Connecticut which gives the Board of Appeals the power to make a decision based on the regulations and general code. The Board is required to explicitly explain the facts.

J. Narkawicz commented on the site noting that the septic is at the end of the driveway and the driveway is steep. D. Paul stated that the carport will be placed on the asphalt and professionally installed. C. Kisluk noted that there was no place to put the carport because of the driveway. C. Kisluk visited the site, measured, and enough room exists for the carport only in the proposed location.

J. Vose voiced concern that the property line is not clearly marked and could not envision that there will be enough room. C. Kisluk noted the pin and stake on the property line. C. Williamson mentioned that people need to stake where the variance will be. J. Vose commented that the area should be marked. C. Kisluk indicated that if the application is approved, the area will be staked out to know where the carport will exactly go before it is placed so there are no questions.

J. Vose **MOTIONED** to **CLOSE** the public hearing; C. Williamson **SECONDED**;
MOTION CARRIED 6:0:0

RESUME REGULAR MEETING: The regular meeting **RESUMED** at 7:18 pm.

NEW BUSINESS:

1. ZBA-1920-01: Application of David and Bessie Paul (Owners/Applicant) are requesting a variance at 18 Whitney Road, Columbia, CT, Assessor's Map 004, Lot 043. The variance will allow the addition of an enclosed two-car carport 24'w x 20'd x 8'h. The variance requested from Sec. 10.4.2 (non-conforming lots) for reduced side yard setback from 20 ft to 10 ft along the southerly property line.

J. Vose **MOVED** to **APPROVE** the application of David and Bessie Paul (Owners/Applicant) for a variance of Section 10.4.2 of the Columbia Zoning Regulations for a reduced side yard setback from 20 feet to 10 feet to allow the addition of a two-car enclosed carport 24'w x 20'd x 8'h at 18 Whitney Road, Columbia, CT, Assessor's Map 004, Lot 043 in the RA zone as shown on a Plot Plan, and statements made by the applicant, due to the unusual hardship created by the slope of the lot, ledge on lot, limited road sightlines, location of utility lines to the house, and location of septic on the site.

K. Peck **SECONDED**; A discussion was held between Board Members regarding the variance to the property as approved.

MOTION CARRIED 6:0:0.

2. ZBA 2020 Meeting Schedule

C. Williamson **MOVED** to **APPROVE** the ZBA 2020 Meeting Schedule; J. Vose **SECONDED**;
MOTION CARRIED 6:0:0.

3. Election of Officers

J. Vose **MOVED** to **CARRY THE CURRENT SLATE**; W. Petrone **SECONDED**;
MOTION CARRIED 6:0:0

UNFINISHED BUSINESS: None

BOARD OPEN DISCUSSION:

J. Vose questioned whether the building department looks at the restrictions before approving a building permit. C. Kisluk noted that the Planning and Zoning Commission (PZC) approves the uses of buildings. The committee discussed issues of ZBA placing restrictions.

CORRESPONDENCE: None

ADJOURNMENT:

J. Vose **MOVED** to **ADJOURN**; C. Williamson **SECONDED**;
MOTION CARRIED 6:0:0
The meeting was **ADJOURNED** at 7:42 pm.

Respectfully submitted by Flo Polek, Board Clerk

Please see the minutes of subsequent meetings for approval of these minutes and any corrections hereto.



TOWN OF COLUMBIA

323 Jonathan Trumbull Highway, Columbia, CT 06237
(860) 228-0440 FAX: (860) 228-2847

JUN 11 2020

TOWN OF COLUMBIA
BUILDING & LAND USE

Date Submitted: _____

Fee Paid: \$660.00
CHIC # 2829

Application # ZBA 1920-02

Fee: \$660 \$150 ZBA fee + \$450 LN cost + \$60 state fee

ZONING BOARD OF APPEALS SPECIAL PERMIT APPLICATION

Application deadline is four weeks prior to the scheduled ZBA meeting

See Sections 52, 10 and 71 of the Columbia Zoning Regulations for specific requirements.

Location of Property

Address: 7 Nuhfer Drive Columbia, CT

Assessor's Map 012B Lot 034 Zone LAR Lot Area 12,500 sf

Purpose of Application (attach a Detailed Statement)

Purpose of Application: New Construction Single Family Residence

Action Requested of ZBA: Special Permit per Sect. 10.4.2

Applicant/Agent Information

Primary Contact

Name: Applicant: Robert & Mary Sullivan /Agent: Wesley J Wentworth PE

Business Name: _____ /Wentworth Civil Engineers, LLC
177 West Town St.

Business Mailing Address: _____ Lebanon, CT 06249

Phone: 860-642-7255 Cell: _____ Email: wes@lebanongreen.com

Interest in property: Owner Option Lessee Legal Engr Survey Other

Property Owner Information (if different from applicant)

Primary Contact

Name: Mary B. Sullivan

Address: 10 Maple Valley Rd. Bolton, CT 06043

Phone: 860-559-1995 Cell: _____ Email: rsullivan@standardbuilders.com

ZBA SPECIAL PERMIT APPLICATION CHECKLIST

Applications are considered complete only when all of the information as required is received. After filing an application, additional materials and/or revisions must be received at least 10 days prior to the hearing. Failure to submit, or formally request a waiver, all the required items is grounds for denial by the Commission. In addition to the items below, the Commission may require additional information in order to determine if the proposal conforms to the Regulations.

Office Applicant* ALL APPLICATIONS

	x	Completed Application with original signatures (plus 10 copies)
	x	Detailed Statement of the exact purpose of this application and the exact action requested of the ZBA (10 copies)
	x	Names and addresses of property owners within 500' of subject property

FOR EXPANSION OF AN EXISTING NON-CONFORMING BUILDING

	x	Four (4) copies of a full scale plot plan based on an A2 survey, plus ten (10) reduced copies at 11" x 17" (a site plan prepared by an engineer may be required) the plan shall be drawn to scale and include the following information:
	x	• Lot dimensions showing required setbacks; easements, deed restrictions, adjacent roads and abutter information noted
	x	• Existing and proposed structures including decks and outbuildings, with actual dimensions and height, and distances from property lines
	x	• Existing and proposed well and septic systems, driveway and other hard surface areas
	x	• Other pertinent information such as steep slopes, wetlands and waterbodies, drainage swales and other site features (stone walls, trees, ledges)
	x	• Table of proposed frontage, setbacks, and coverage with Zoning requirements
	x	• Date, scale, north arrow, and if applicable, seals & signatures of engineer , surveyor and other professional
	x	Four (4) copies of architectural plans plus ten (10) reduced copies at 11" x 17" the plan shall be drawn to scale and include the following:
	x	• Elevations of all sides of the building
	x	• Outside dimensions
	x	• Proposed exterior materials
	x	• Height within setbacks, and height within reduced setbacks
	x	Copy of the Zoning denial, if applicable

* For each item listed, indicate the following

X = provided **NA** = not applicable **W** = written waiver request attached

Other Information

Is the property located within 500' of Columbia's town boundary? Yes No

If yes, name of Town _____

Is the property within a FIRM Flood Zone A, A1-30? Yes No

Have applications been submitted to other Commissions? Yes No

If yes, date of application 3/27/20 to IWC Commission

Reason for application Activity in uplands review area

Required Information at the time of submitting application in order for public hearing date to be set

1. Completed and signed Special Permit Application, Checklist and a Detailed Statement
2. Detailed plot plan, or site plan if required, with information listed on checklist
3. Stakes, or markers, placed to indicate the location of proposed construction
4. Architectural plans
5. Copy of Assessor's Card for the property
6. Application fee – Check payable to the Town of Columbia
7. If owner will not attend the hearing, the owner must submit a letter authorizing the applicant to act for the owner at the public hearing.

Prior to submitting an application,

applicants are strongly encouraged to discuss the potential application with the ZBA Professional Staff at 860-228-0440 or ZEO@ColumbiaCT.org

By signing this application I am certifying that all information submitted is true and accurate and that I have submitted all required documentation. I hereby permit Columbia staff and Commission members to enter onto and inspect this site during reasonable hours for the purpose of reviewing the site before and after a permit is granted.

Signature of Owner (required) Mary B Sullivan Date 6/10/20

Signature of Applicant Mary B Sullivan Date 6/10/20

Signature of Authorized Agent [Signature] Date 6/10/20



WENTWORTH CIVIL ENGINEERS LLC

177 West Town Street
Lebanon, Connecticut 06249
Tel. (860) 642-7255
Fax. (860) 642-4794
Email: Wes@WentworthCivil.com

ZBA Special Permit Application Narrative
Robert & Mary Sullivan
7 Nuhfer Drive
Columbia, CT

Project & Site

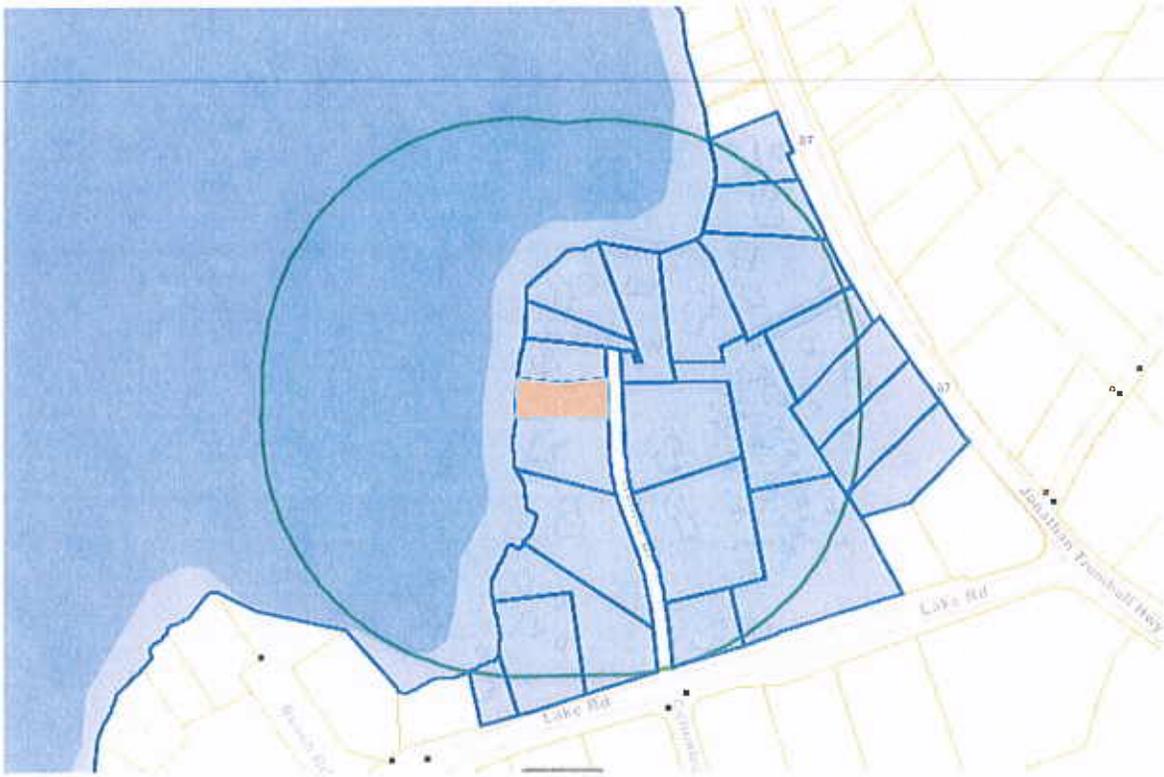
The site lies on the western side of Nuhfer Drive and with frontage on Columbia Lake. An existing cottage currently sits on the lot. The lot is 12,500 sf in size and is located in the LAR zone.

The application proposes to demolish the existing cottage and build a new single family residence on the lot. A new drilled well and new septic system are proposed.

Per Section 10.4.2 of the Columbia Zoning Regulations, a special permit is being applied for:

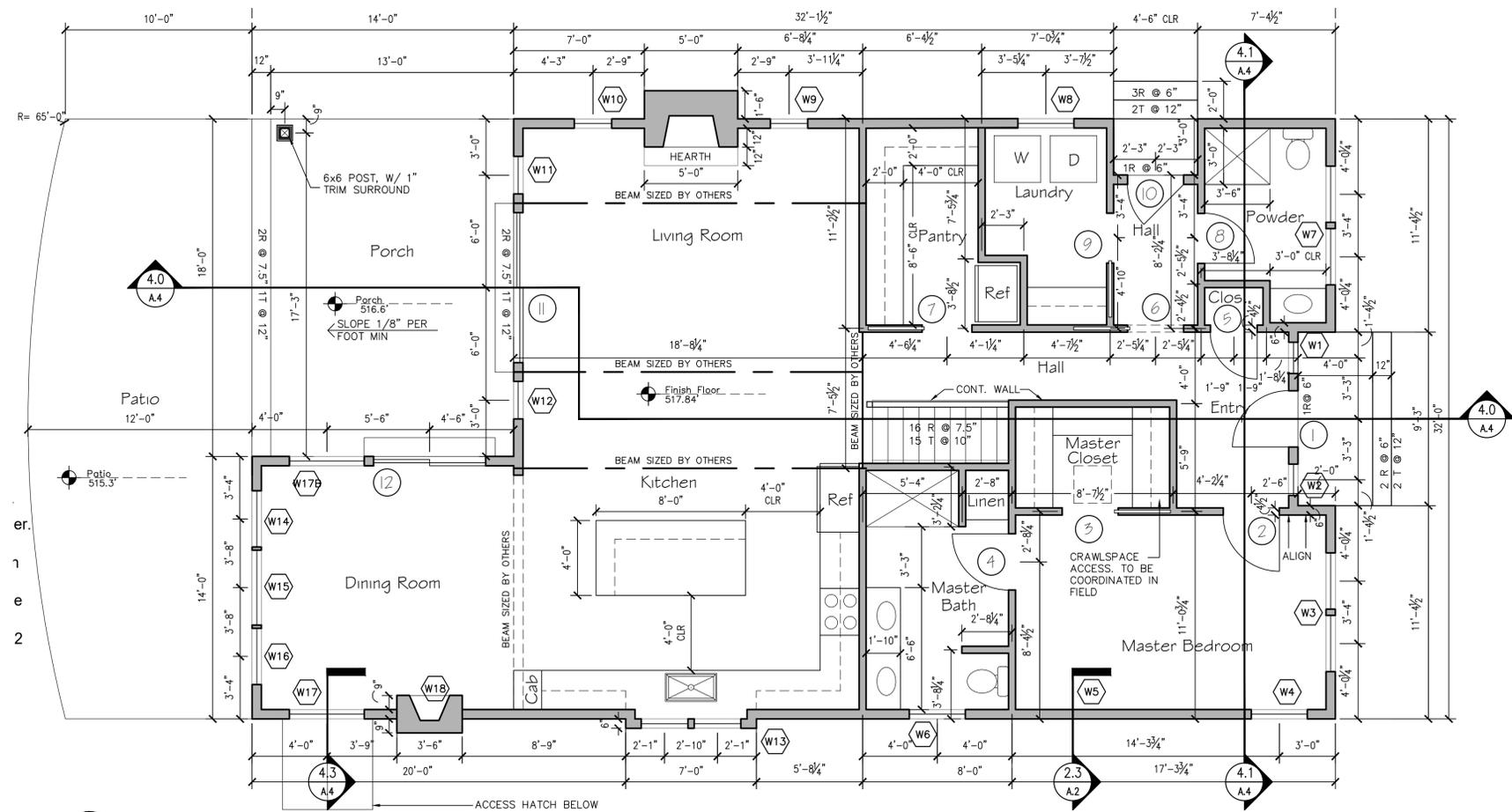
- i. An increase of the maximum lot coverage not to exceed 15%. The proposed house coverage is 1,854 sf (14.83%).
- ii. A reduction of the rear setback to no less than 30 feet. The rear of the house is proposed to be approximately 41 feet from the rear property line.
- iii. A reduction of the side setbacks for frontage lots to be no less than 15 feet. The north side of the house is proposed to be 15.6 feet from the property line. The south side of the house is proposed to be 16.6 feet from the property line.

Note: The proposed bulkhead for cellar access will be closer than the 15 foot allowable minimum to the south property line. However, the entire bulkhead falls within the nonconforming footprint of the existing cottage.

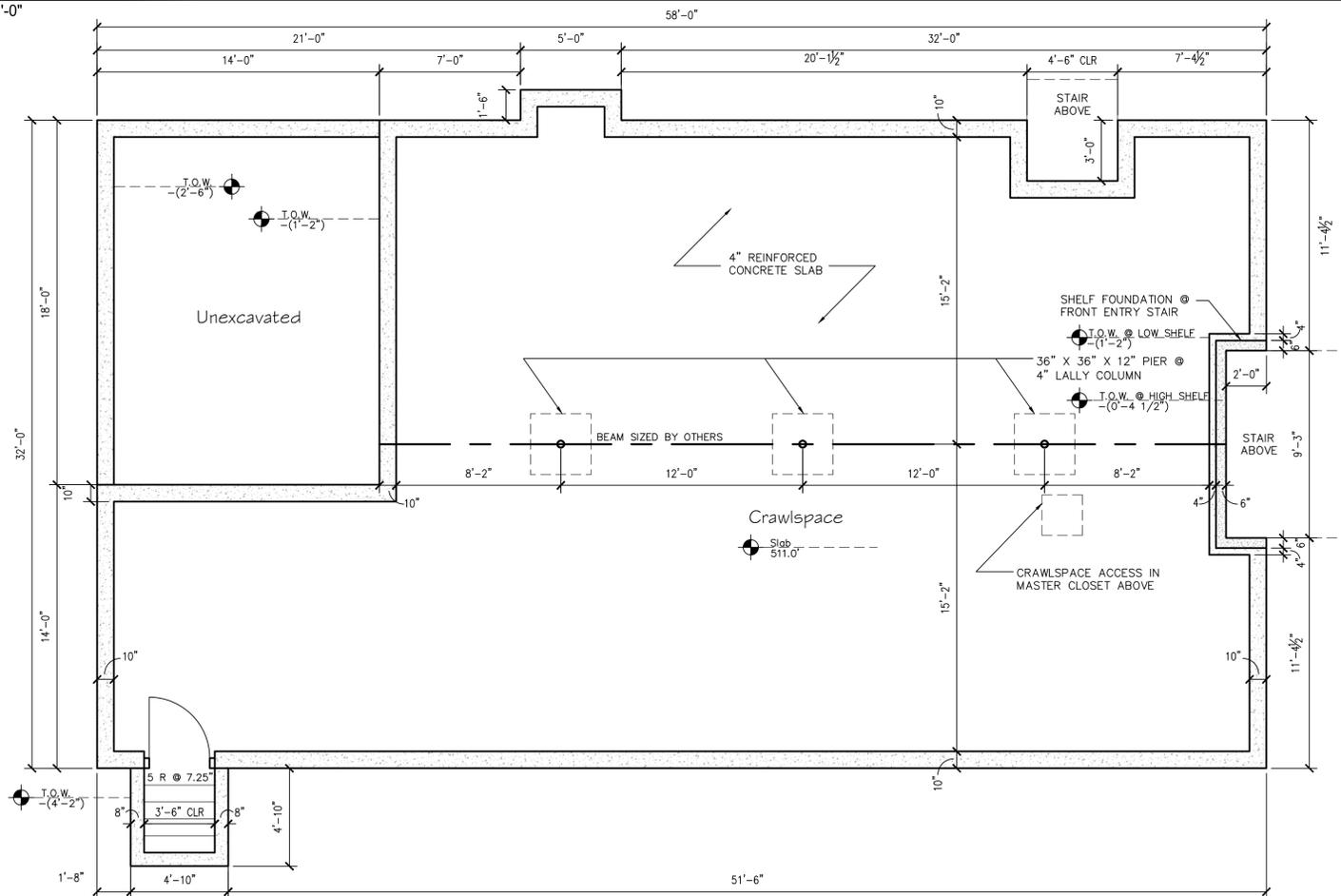


500 ft radius map
7 Nuhfer Drive
Columbia, CT
Land of Mary B. Sullivan
Not to Scale

BMP REVISED PLAN		Town of Columbia, Connecticut		
Nutrient Allocation - Land Use Worksheet				
Overall Watershed Areal P Export Allocation=		0.32	lb P Acre ⁻¹ Year ⁻¹	
		0.32	lb P Acre ⁻¹ Year-2	
		0.37	lb P Acre ⁻¹ Year-3	
		0.42	lb P Acre ⁻¹ Year-4	
Base Loading Areal TP Allocations:				
Undisturbed Woodlands=	0.1	lb P Acre ⁻¹ Year ⁻¹		
Semi-Pervious Area=	1	lb P Acre ⁻¹ Year ⁻¹		
Impervious Area=	1.5	lb P Acre ⁻¹ Year ⁻¹		
Land Owner:	Robert & Mary Sullivan			
Address:	7 Nuhfer Dr. Columbia, CT			
Assessors Location Map, Block, Parcel:				
Parcel Area=	12,500	sq ft	0.286961	Acres
				12500
Parcel Allocation=	Watershed District A	0.091827	lb P Year ⁻¹ Sq. Feet	
	Watershed District B	0.106175	lb P Year-2	
	Watershed District C	0.120523	lb P Year-3	
Residential Use:				
No BMP Credits				
	sq ft	Est P Load (lb P / acre / yr)	LOAD	
Roof	995	1.3	0.029695	
Driveway/Road	0	1.5	0	
Lawn	10390	1	0.238522	
Woodland	1115	0.1	0.00256	
Pond Surface	0	0.2	0	
TOTAL	12500	Total Estimated Load	0.270776	
Application of BMPs and Export Assignments:				
Residential Use:				
No BMP Credits				
AREAS NOT SERVED BY A BMP:				
	sq ft	Est P Load (lb P / acre / yr)	LOAD	
Roof	124	1.3	0.003701	
Driveway/Road	1330	1.5	0.045799	
Lawn	7576	1	0.173921	
Woodland	1115	0.1	0.00256	
Pond Surface	0	0.2	0	
AREAS SERVED BY A BMP:				
	sq ft	Est P Load (lb P / acre / yr)	LOAD	Notes:
Simulated Woods		0.2	0	
1" First Flush Infiltration	2355	0.2	0.010813	Roof Drn & Perm. Pavers
1/2" First Flush Infiltration	0	0.4	0	& West Driveway
Detention Pool (1/2 inch)	0	0.6	0	
Treatment Wetland		0.4	0	
Total Area=	12500	Total Estimated Load=	0.236793	



1.1 FIRST FLOOR PLAN
1/4" = 1'-0"



1.0 FOUNDATION PLAN
1/4" = 1'-0"

DRAWING INDEX

- A.1 BASEMENT PLAN, FIRST FLOOR PLAN & GENERAL NOTES
- A.2 SECOND FLOOR PLAN, ROOF PLAN & WALL SECTION @ DORMER
- A.3 EXTERIOR ELEVATIONS
- A.4 BUILDING SECTIONS & WALL SECTION @ CRAWLSPACE ACCESS
- A.5 BRACED FRAME DIAGRAM

GENERAL NOTES

All work shall be in accordance with the current State of Connecticut Building Code and all Local Codes, Laws Standards, and Regulations.

The Contractor shall maintain a current and complete set of Contract Documents at the site during all phases of construction for use by all trades.

The Contractor shall review all documents for coordination prior to commencement of construction. For example, coordinate positioning of floor joists with location of recessed lighting.

The Contractor shall verify all dimensions in field. The Contractor shall notify the Architect immediately if there is a conflict.

All dimensions are to the centerline of structure (posts), centerline of interior partition studs, centerline of doors and windows and to outside face of stud at exterior walls unless otherwise specified.

All interior doors on the First Floor shall be 3'-0" wide except #5 shall be 2'-6" wide. All doors on the Second Floor shall be 2'-6" wide u.n.o.

Windows shall be furnished and installed in accordance with R301.2.1.2 of the International Residential Code.

All Structural Elements including, but not limited to, Dimensional Lumber, Roof Rafters, Floor Joists, LVL or Steel Beams, Posts, Trusses, Concrete mix, reinforcing, shall be specified by a licensed structural engineer prior to the start of construction.

All Foundations, Footings and Slabs shall bear on undisturbed no-organic material, compacted structural fill or crushed stone.

All Foundation Footings shall be 3'-6" minimum below grade.



Cheryl Newton
Architects LLC
1917 Main Street,
Glastonbury, CT 06033
(860)633-2477

Revisions:
Issued for Planning & Zoning
Review

Sullivan Lake House
7 Nuhfer Drive
Columbia, CT 06237

Drawing Name:
Foundation Plan,
First Floor Plan &
General Notes

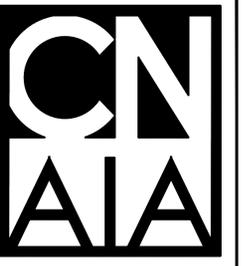
Scale: AS NOTED

Drawn By: CN / PS

Date: July 14, 2020

Drawing Number:

A.1



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Glastonbury, CT 06033
(860)633-2477

Revisions:
Issued for Planning & Zoning
Review

Sullivan Lake House
7 Nuhfer Drive
Columbia, CT 06237

Drawing Name:
Second Floor Plan
Roof Plan & Wall
Section @ Dormer

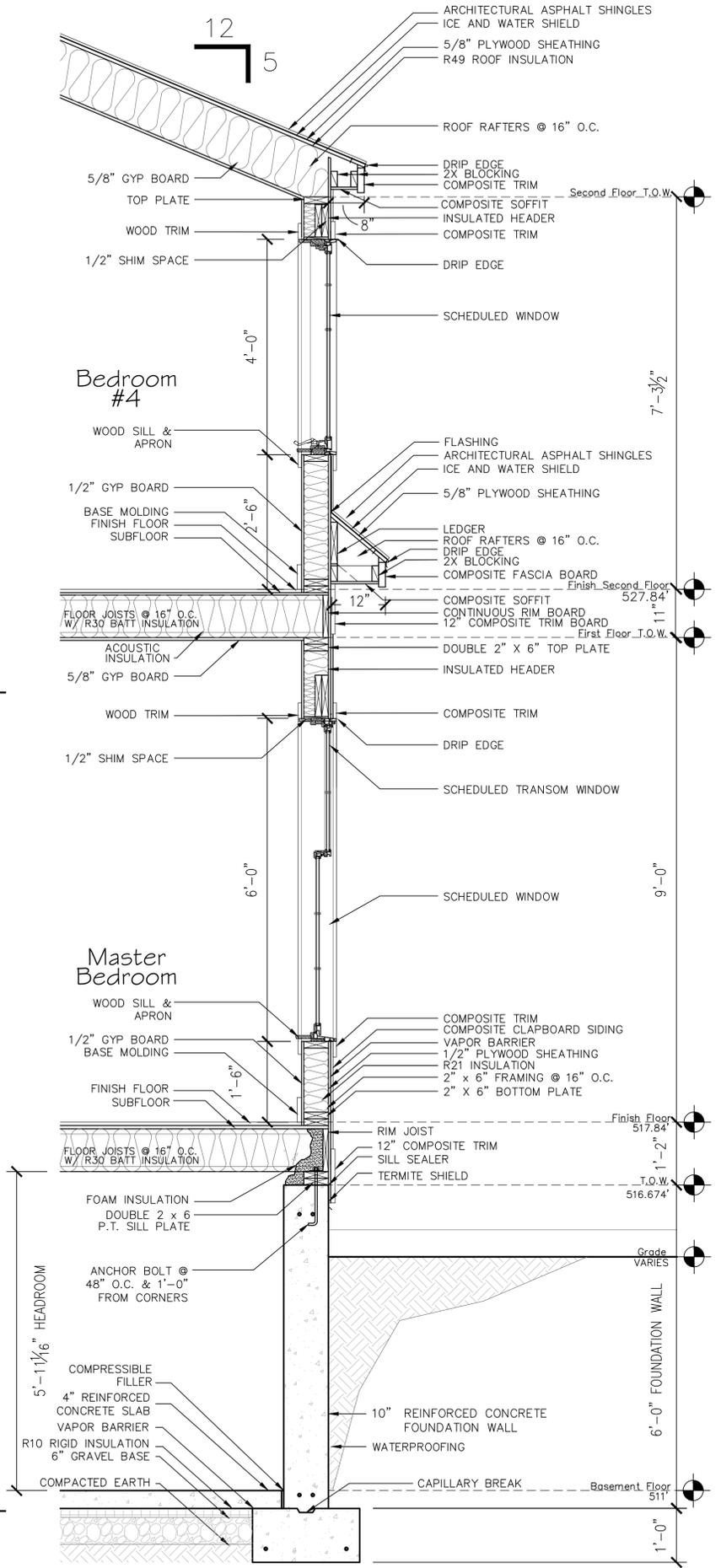
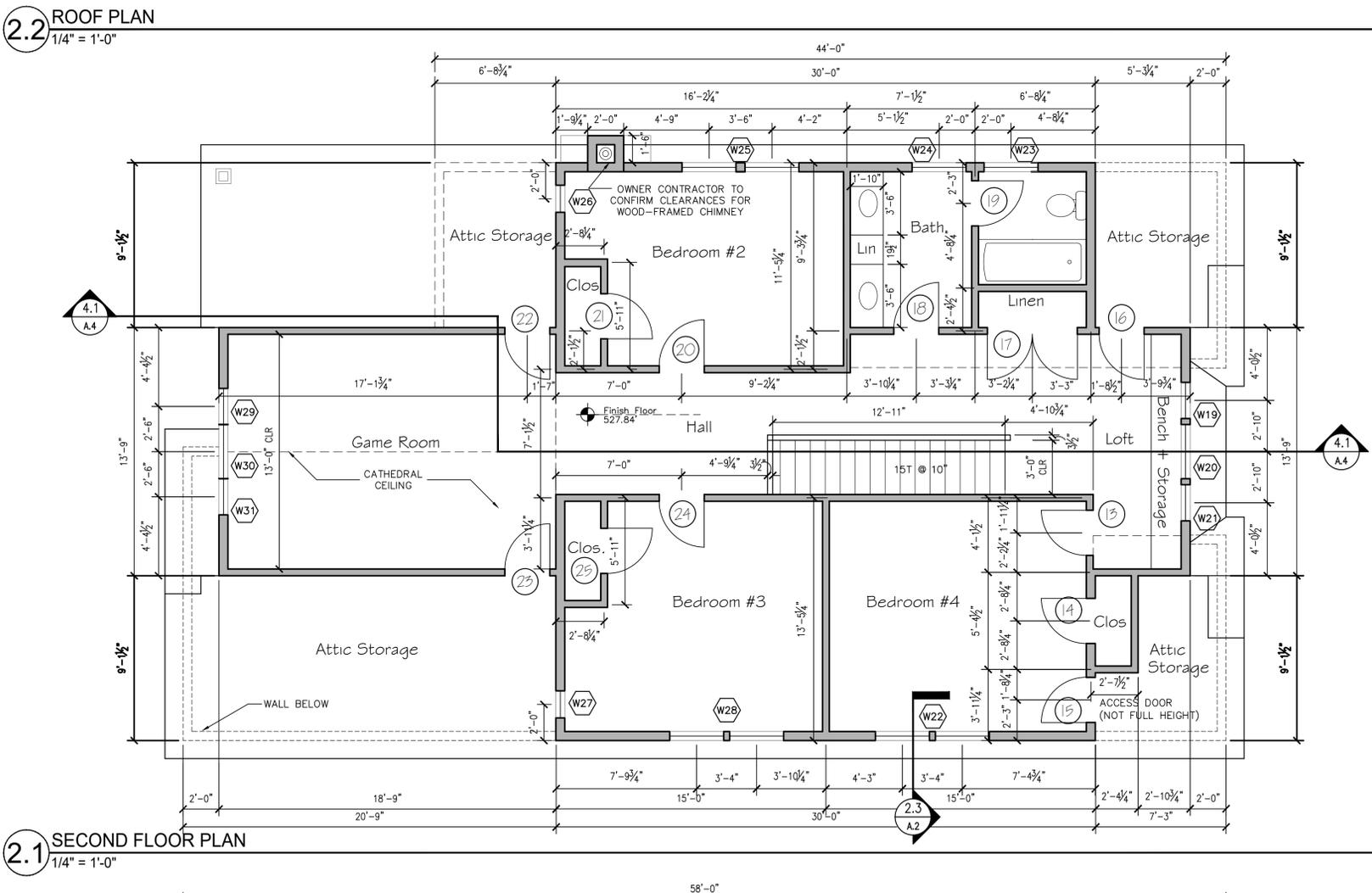
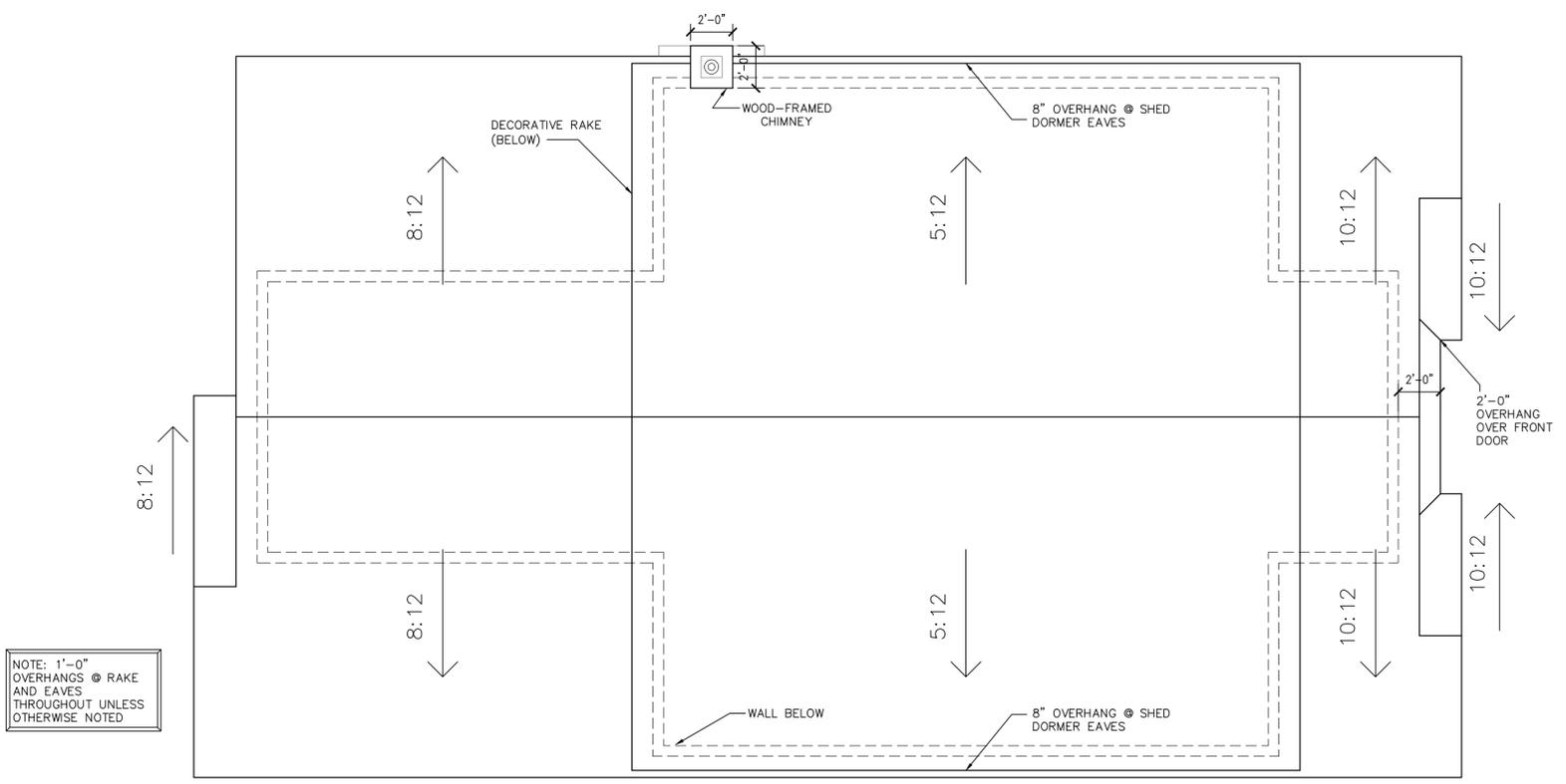
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Drawn By: CN / PS

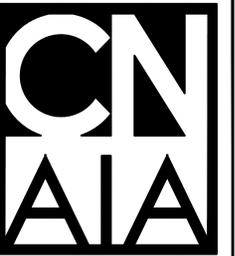
Date: July 14, 2020

Drawing Number:

A.2



2.3 WALL SECTION @ SHED DORMER
3/4" = 1'-0"



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Revisions:
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Review

Sullivan Lake House

7 Nuhfer Drive
Columbia, CT 06237

Drawing Name:
Exterior
Elevations

Scale: 1/4" = 1'-0"

Drawn By: CN / PS

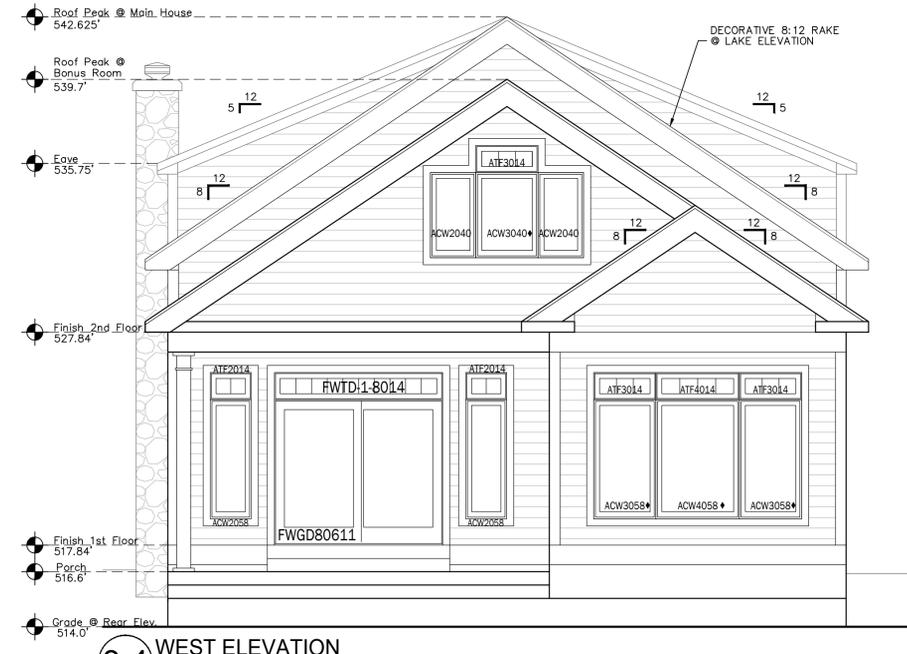
Date: July 14, 2020

Drawing Number:

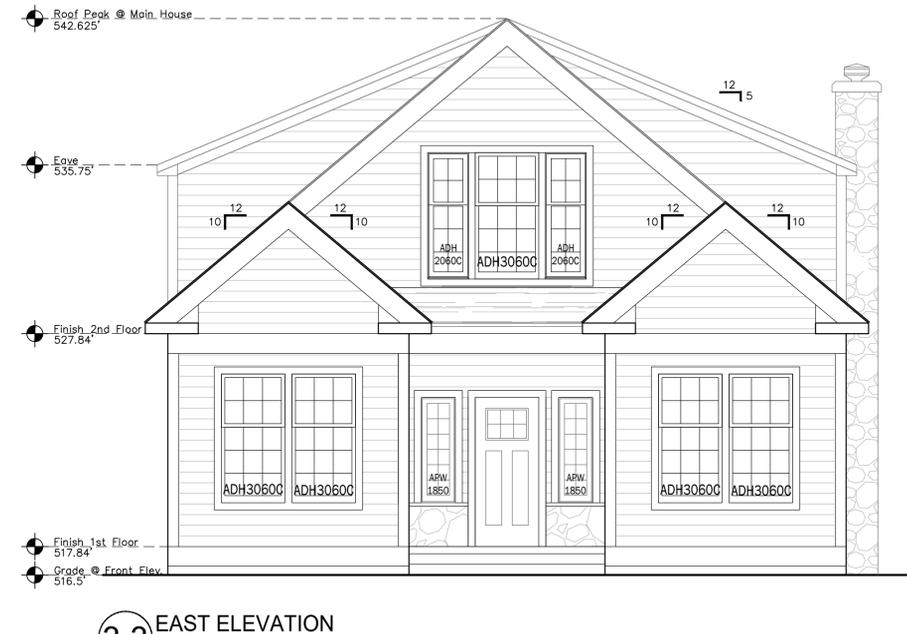
A.3



3.2 NORTH ELEVATION



3.4 WEST ELEVATION



3.3 EAST ELEVATION



3.1 SOUTH ELEVATION

Revisions:
Issued for Planning & Zoning
Review

Sullivan Lake House
7 Nuhfer Drive
Columbia, CT 06237

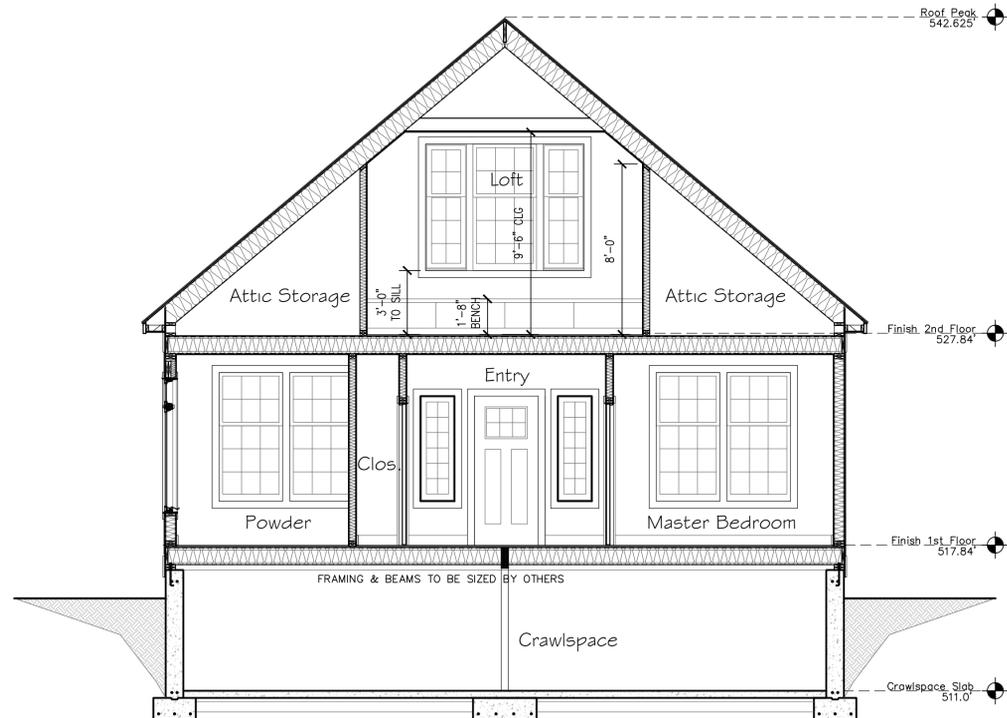
Drawing Name:
Building Sections &
Wall Section @
Crawlspace Access

Scale: AS NOTED

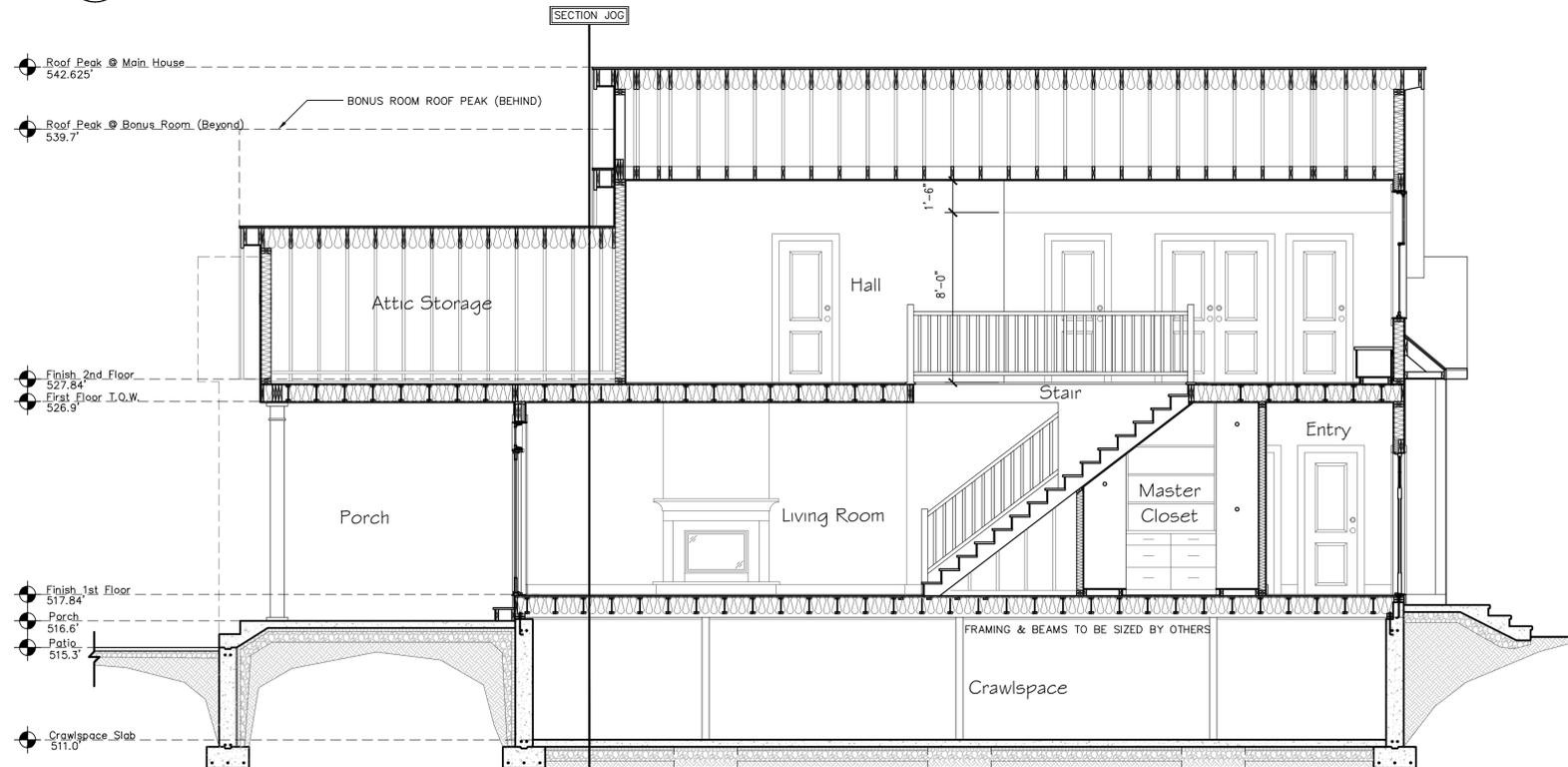
Drawn By: CN / PS

Date: July 14, 2020

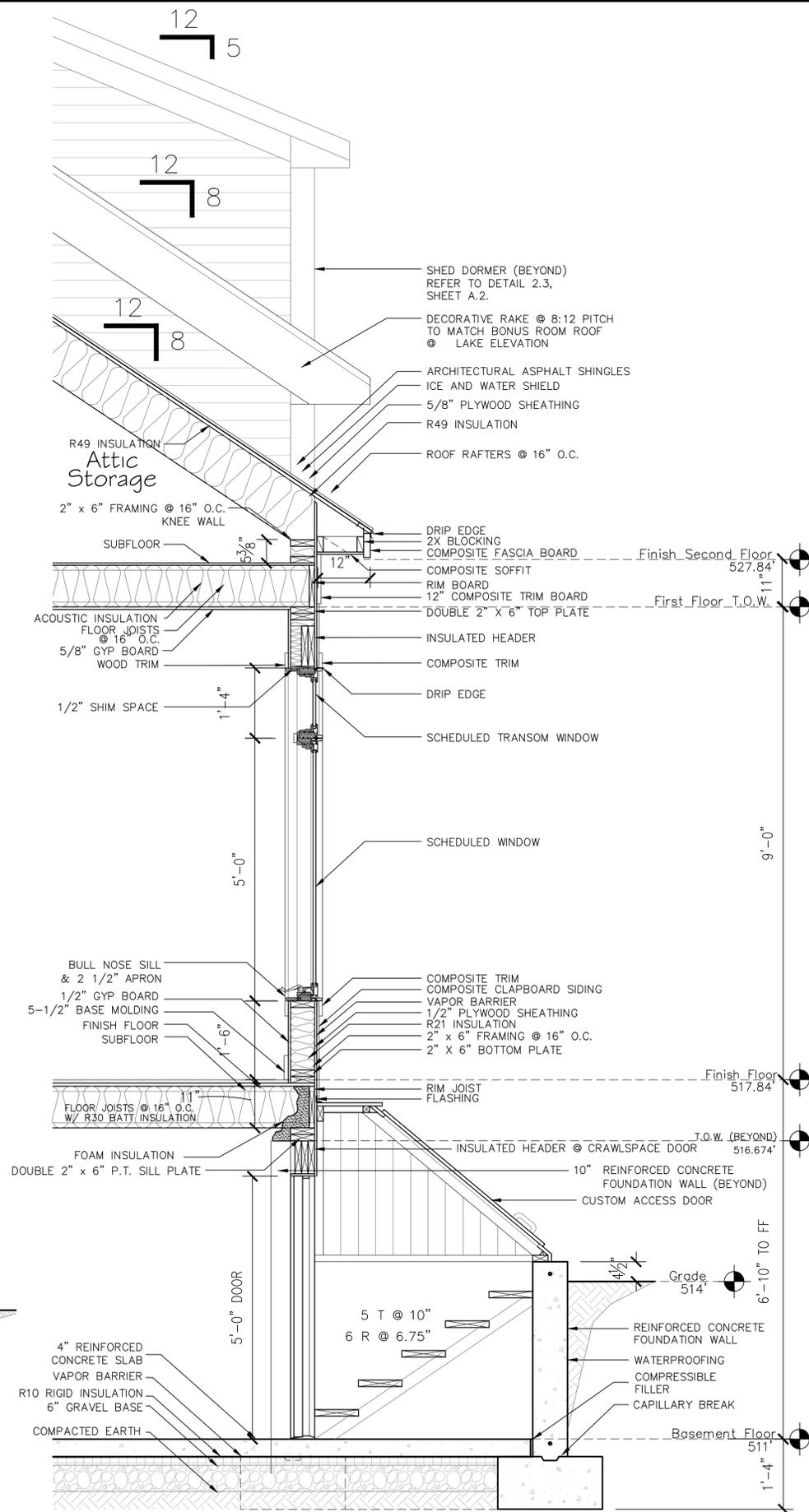
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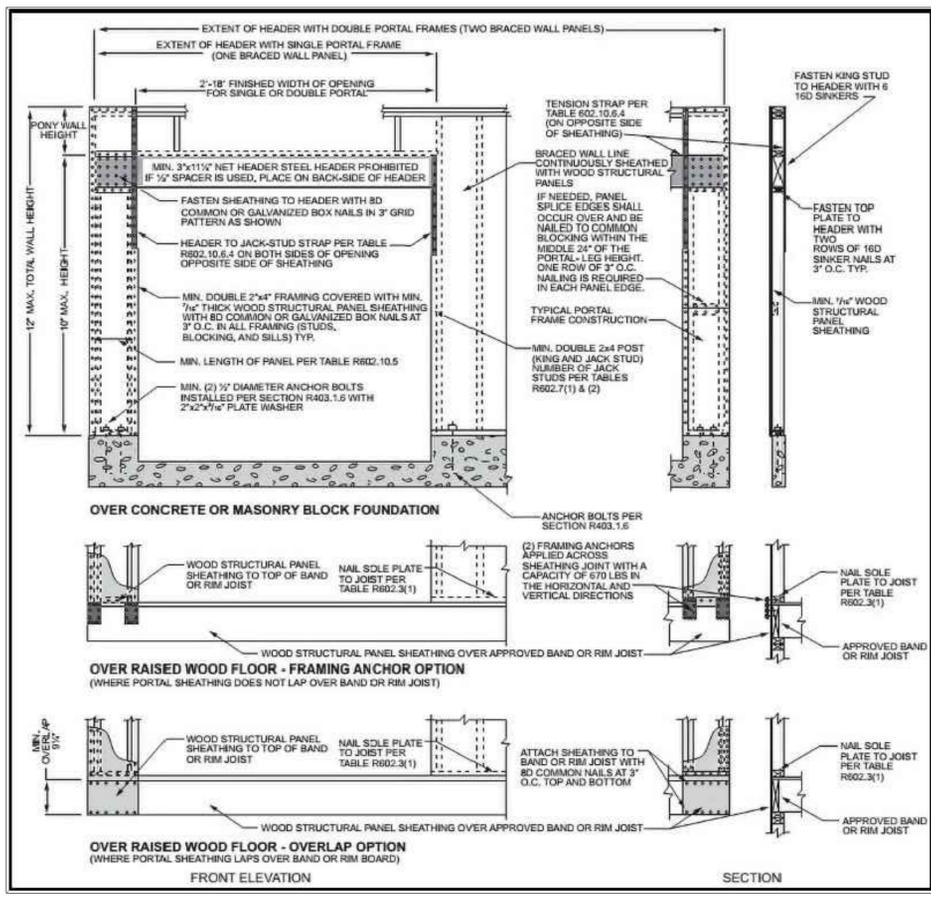
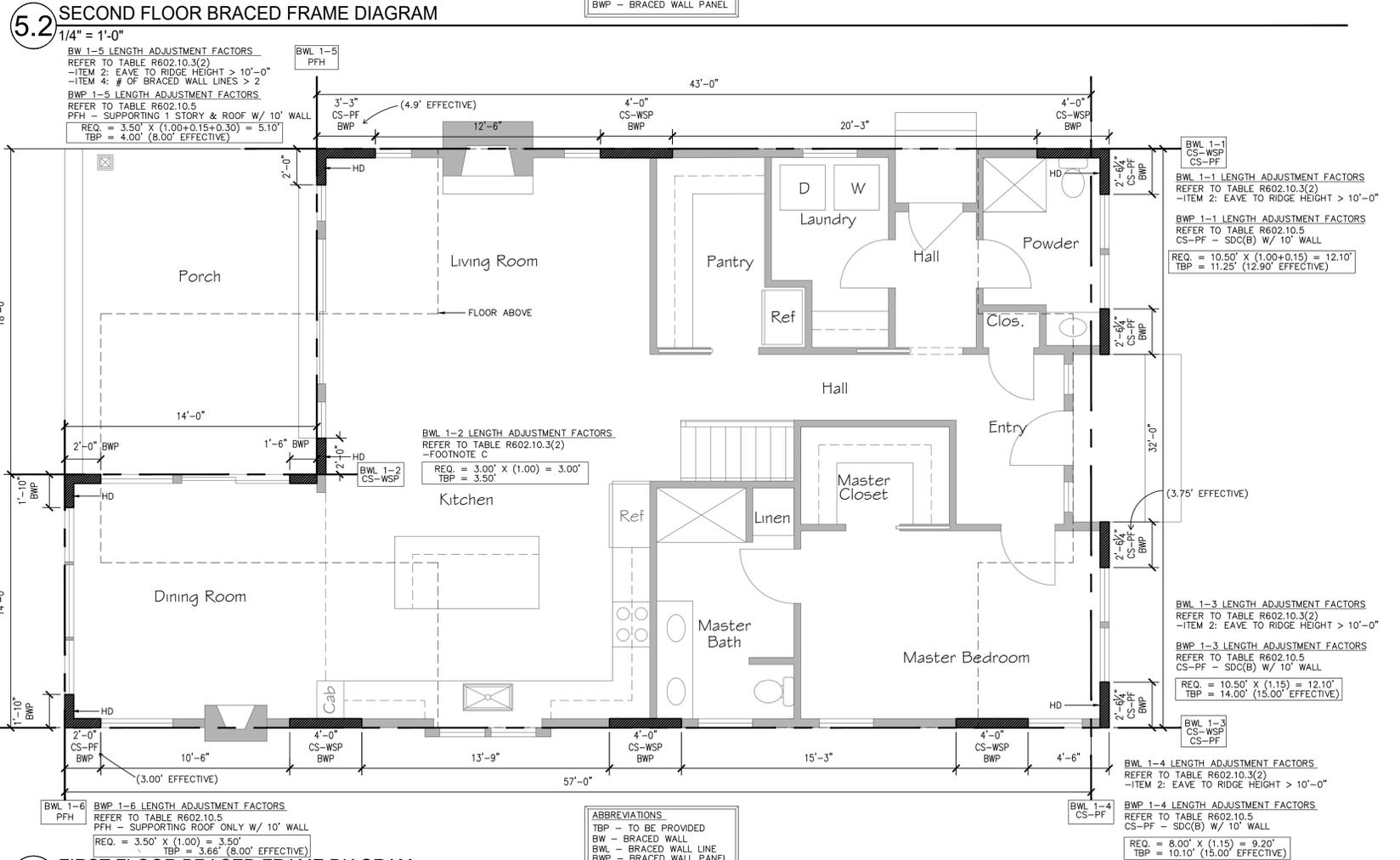
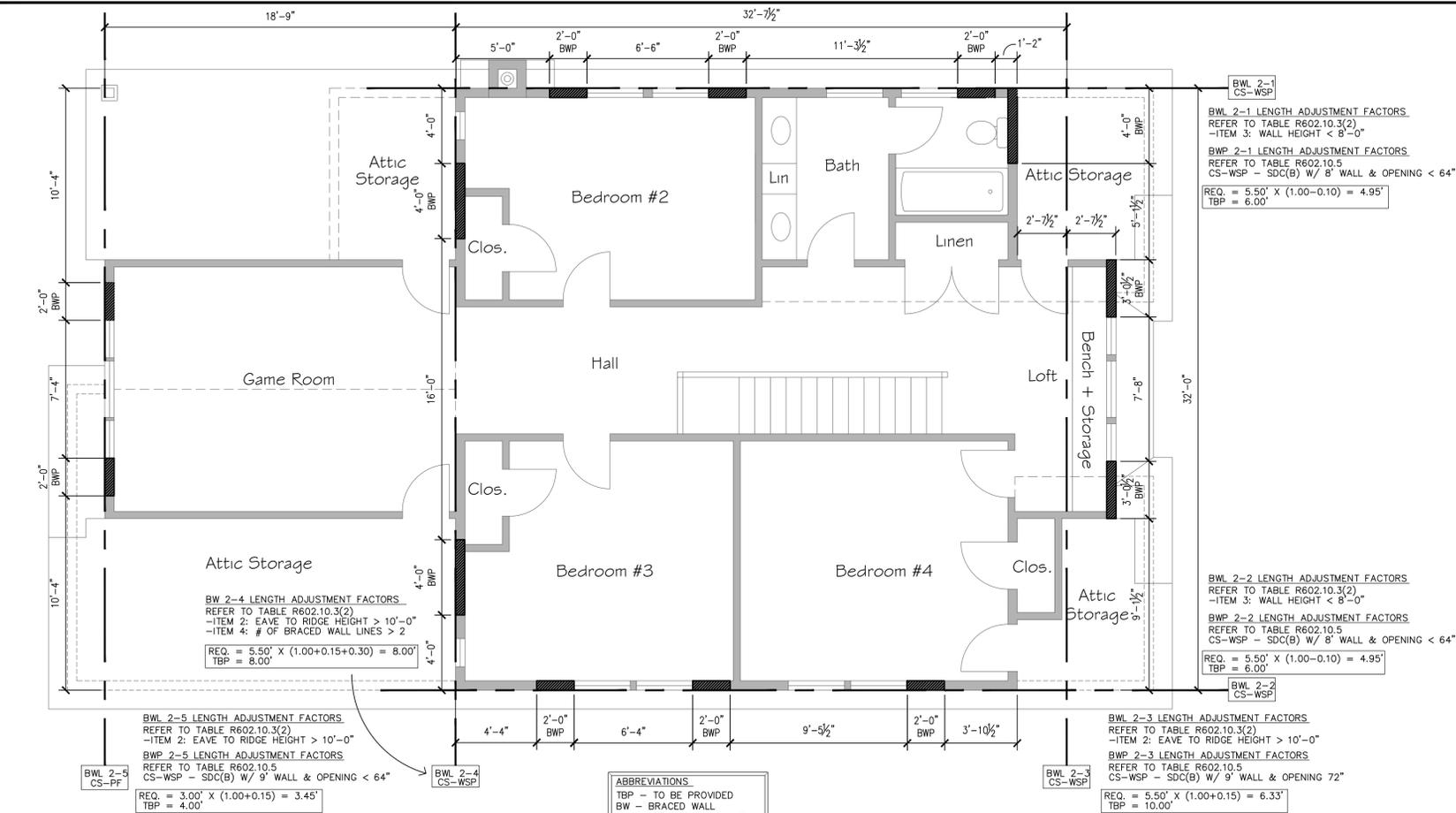
4.1 CROSS SECTION
1/4" = 1'-0"



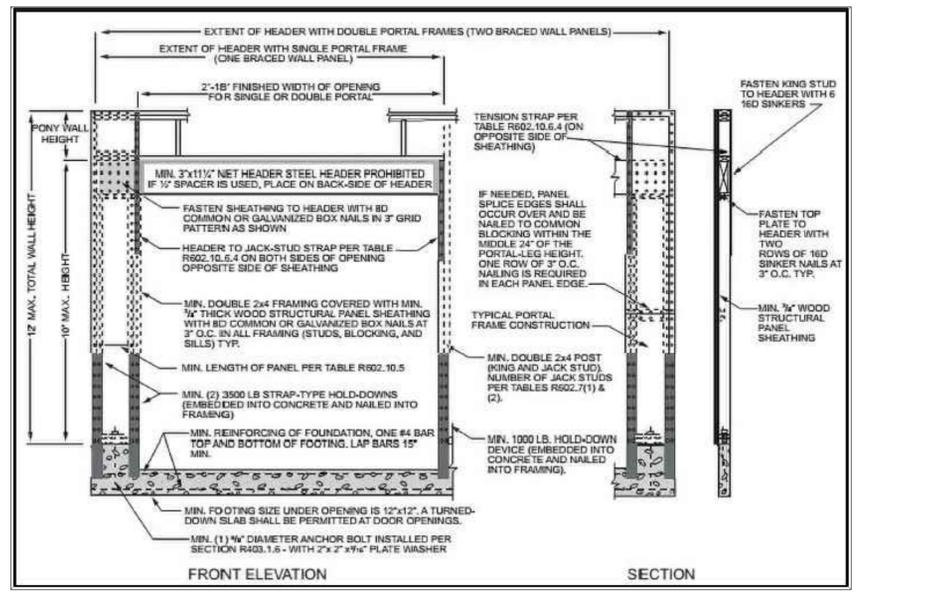
4.2 LONGITUDINAL SECTION
1/4" = 1'-0"



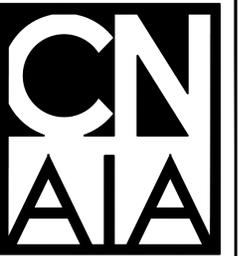
4.3 WALL SECTION @ CRAWLSPACE ACCESS
3/4" = 1'-0"



5.3 FIGURE 602.10.6.2 METHOD CSPF - CONT. SHEATHING & PORTAL FRAME



5.4 FIGURE 602.10.6.2 METHOD PFH - PORTAL FRAME WITH HOLD-DOWNS



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Revisions:
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Sullivan Lake House

7 Nuhfer Drive
Columbia, CT 06237

Drawing Name:
Ext. Elevations w/
ZBA Height
Restrictions

Scale: 1/4" = 1'-0"

Drawn By: CN / PS

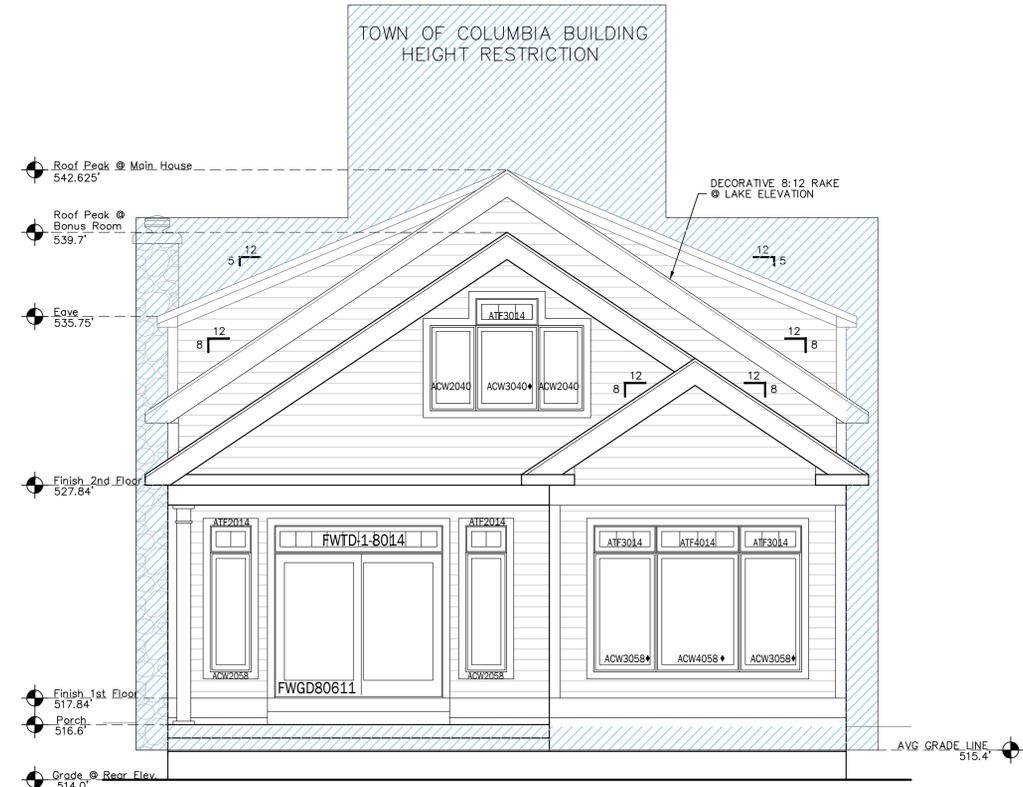
Date: July 14, 2020

Drawing Number:

SK5.4(R)



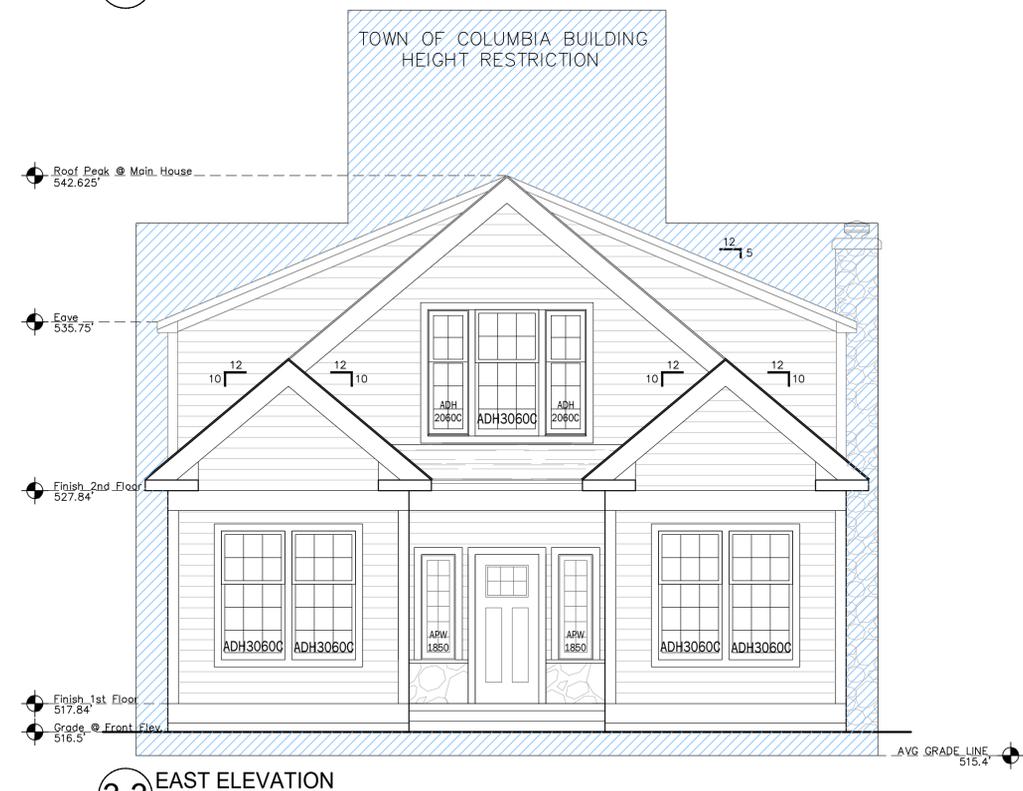
3.2 NORTH ELEVATION



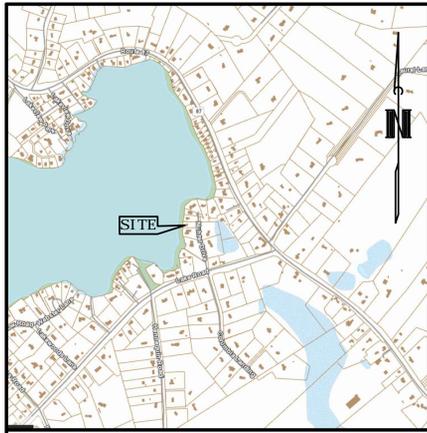
3.4 WEST ELEVATION



3.1 SOUTH ELEVATION



3.3 EAST ELEVATION



LOCATION MAP
SCALE: 1"=1000'

SITE PLAN 7 NUHFER DRIVE

PREPARED FOR

ROBERT & MARY SULLIVAN COLUMBIA, CONNECTICUT

ZONING DATA

ZONE:	LAR	**	PROPOSED
FRONT YARD	50FT	30FT	76'
REAR YARD	50 FT	30 FT	41'
SIDE YARD	25 FT	15 FT	15.6' (N) / 17.6' (S)

LOT AREA: 12,500 SF
FRONTAGE: 76.48'

BUILDING COVERAGE: 1,875 SF (MAX. ALLOWED)
(**15% MAX. ALLOWED)

PROP. HOUSE: 1,854 SF (PROPOSED)
(**14.83% PROPOSED)

**PER 10.3.2 COLUMBIA ZONING REGULATIONS
SPECIAL PERMIT REQUIRED

INDEX TO SHEETS

COVER SHEET	SHEET 1
BOUNDARY SURVEY	SHEET 2
DEMOLITION PLAN	SHEET 3
SITE DEVELOPMENT PLAN	SHEET 4
GROUND COVER PLAN	SHEET 5
EROSION & SEDIMENTATION CONTROL PLAN	SHEET 6
NOTES & DETAILS	SHEET 7

(860) 228-0853
(860) 228-1360 (FAX)
32 MAIN STREET
HEBRON, CT. 06248
hellstromsurveying@yahoo.com
www.hellstromsurveying.com

R
ROB HELLSTROM
LAND SURVEYING LLC
Mailing Address:
P.O. BOX 497
COLUMBIA, CT. 06237-0497

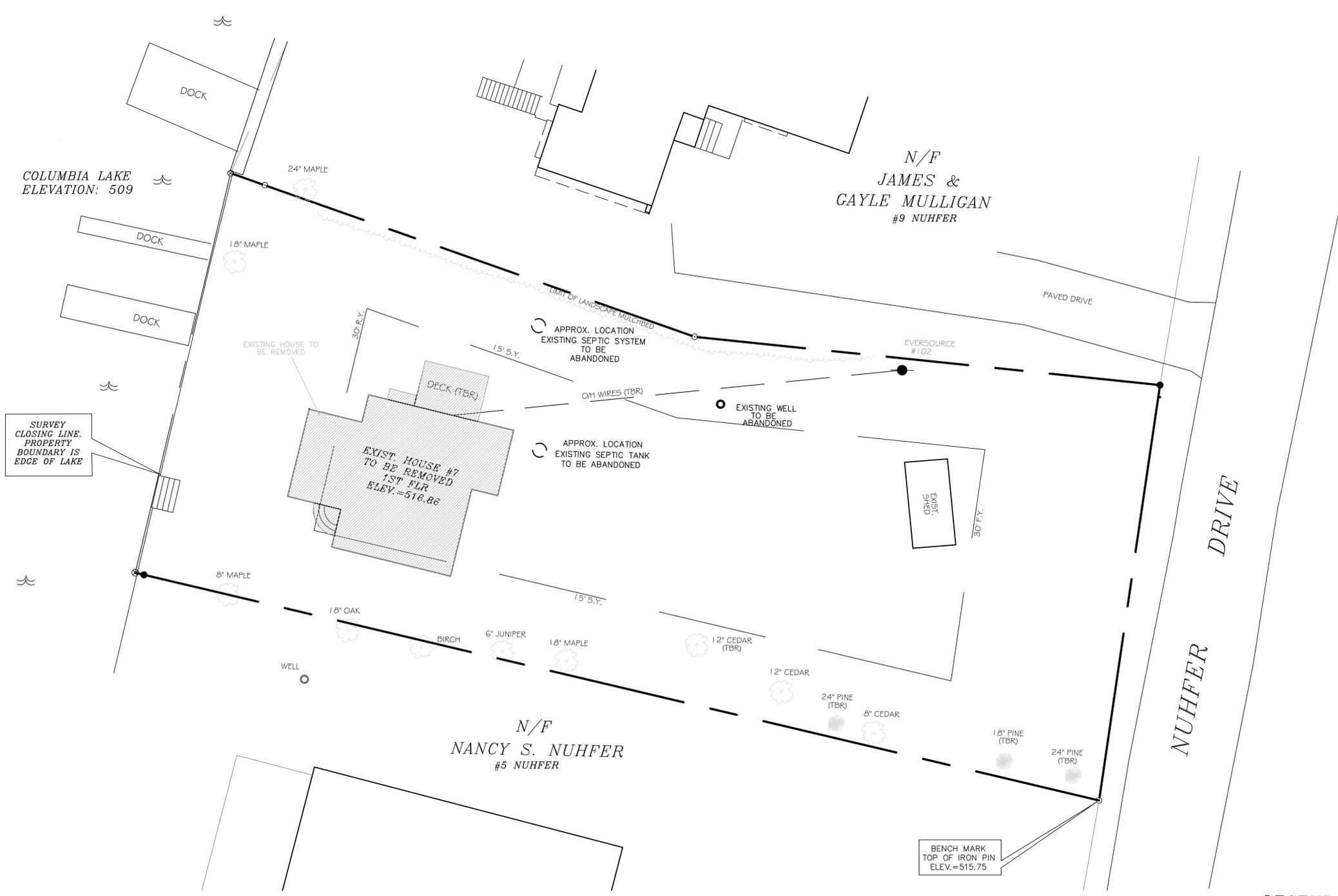
WENTWORTH CIVIL
ENGINEERS LLC
177 WEST TOWN ST.
LEBANON, CT 06249
TEL: (860) 642-7255
FAX: (860) 642-7255
web: wentworthcivil.com

NOTE: UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE ONLY.
 VERIFY ALL LOCATIONS IN THE FIELD BEFORE START OF CONSTRUCTION.

WARNING: THESE PLANS NOT TO BE USED FOR LOCATION OF UNDERGROUND UTILITIES.
 CALL BEFORE YOU DIG 1-800-922-4455 TWO WORKING DAYS BEFORE YOU DIG.

TOPOGRAPHY IS BASED ON ACTUAL FIELD SURVEY.

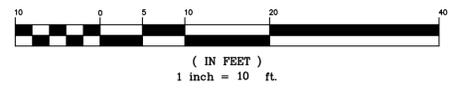
ALL PROPOSED ELEVATIONS ARE IN RELATION TO CONTOURS SHOWN.
 FINAL ELEVATIONS MAY BE ADJUSTED AS FIELD CONDITIONS WARRANT.



LEGEND

- PROPERTY LINE
- IP FND IRON PIN OR PIPE FOUND
- MON FND MONUMENT FOUND

GRAPHIC SCALE



I HEREBY DECLARE TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS SUBSTANTIALLY CORRECT.

WESLEY J. WENTWORTH
P.E. # 20380

WENTWORTH CIVIL ENGINEERS LLC

177 WEST TOWN ST.
LEBANON, CT 06249
TEL: (860) 642-7355
FAX: (860) 642-4794
WEB: WENTWORTHCIVIL.COM

SITE DEMOLITION PLAN
 7 NUHFER DRIVE
 PREPARED FOR
ROBERT & MARY SULLIVAN
 COLUMBIA, CONNECTICUT

DATE: 2-12-20
 SCALE: 1"=10'
 SHEET 3 OF 7
 MAP NO. 19-023-1DM

REV. 7-10-20
 REV. 6-05-20

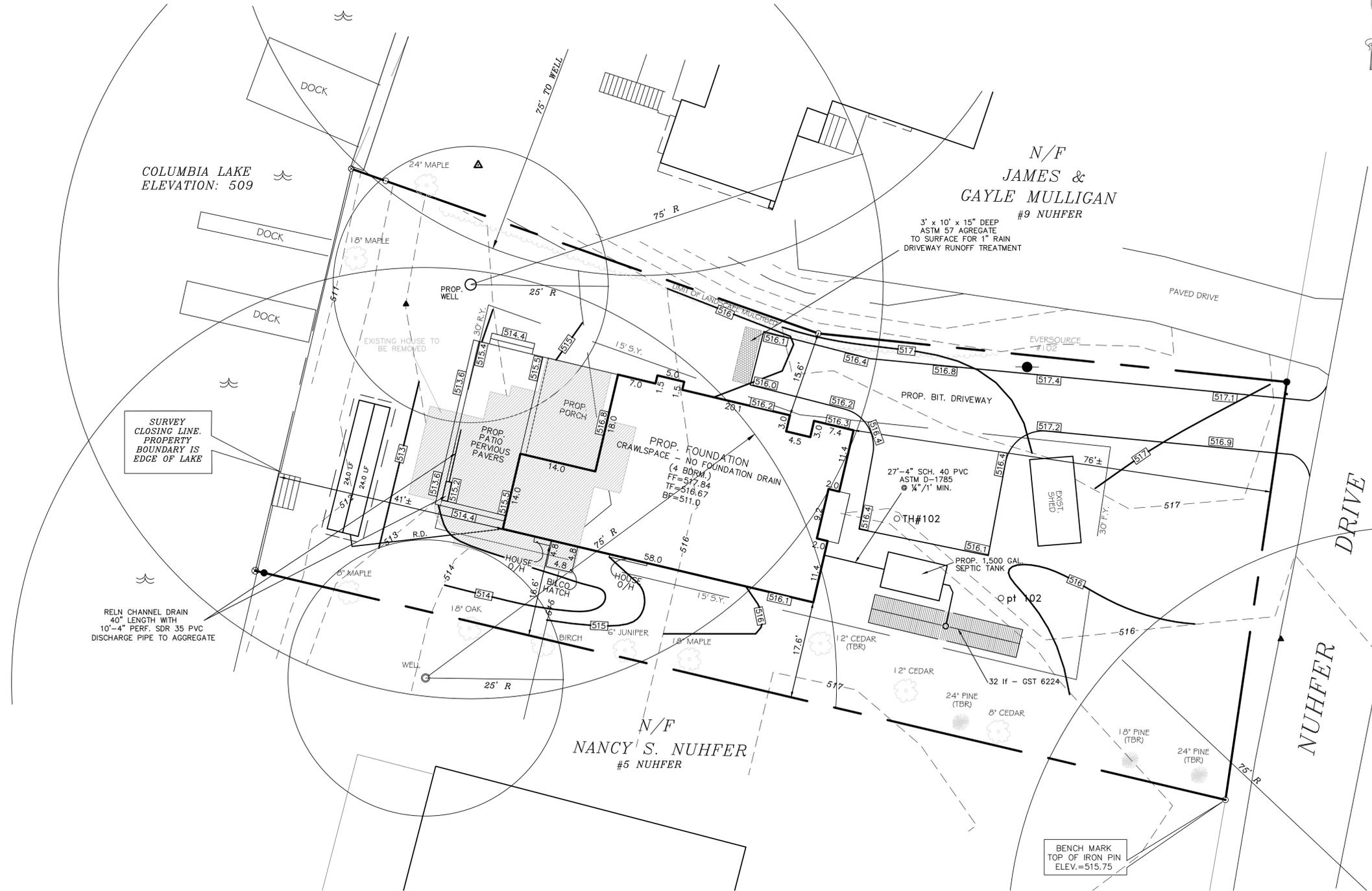
VERIFY FOUNDATION DIMENSIONS PRIOR TO CONSTRUCTION

NOTE: UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE ONLY.
VERIFY ALL LOCATIONS IN THE FIELD BEFORE START OF CONSTRUCTION.

WARNING: THESE PLANS NOT TO BE USED FOR LOCATION OF UNDERGROUND UTILITIES.
CALL BEFORE YOU DIG 1-800-922-4455 TWO WORKING DAYS BEFORE YOU DIG.

TOPOGRAPHY IS BASED ON ACTUAL FIELD SURVEY.

ALL PROPOSED ELEVATIONS ARE IN RELATION TO CONTOURS SHOWN.
FINAL ELEVATIONS MAY BE ADJUSTED AS FIELD CONDITIONS WARRANT.



**WESTERN PORTION PAVED DRIVEWAY
TREATMENT CALCULATIONS**

-RAIN VOLUME
DRIVEWAY AREA = 150 SF
PROVIDE STORAGE FOR 1" OF RAINFALL
 $180 \text{ SF} \times 1" \times (1'/12") = 15 \text{ CF}$ (REQUIRED VOLUME STORAGE)

-STONE BASE SIZING
PROVIDE STORAGE FOR 1" OF RAINFALL
 $(15 \text{ CF} / (3 \text{ FT} \times 10 \text{ FT SF} \times .4 \text{ VOID SPACE})) \times 12"/1 \text{ FT}$
= 15" CRUSHED STONE DEPTH FOR DRIVEWAY TREATMENT (MIN. REQUIRED)
15" DEEP \times 3 FT \times 10 FT ASTM 57 CRUSHED AGGREGATE (PROVIDED)

**PERVIOUS PAVER PATIO
TREATMENT CALCULATIONS**

-RAIN VOLUME
PATIO AREA = 3600 SF
PROVIDE STORAGE FOR 1" OF RAINFALL
 $360 \text{ SF} \times 1" \times (1'/12") = 30 \text{ CF}$ (REQUIRED VOLUME STORAGE)

-STONE BASE SIZING
PROVIDE STORAGE FOR 1" OF RAINFALL
 $(30 \text{ CF} / (360 \text{ SF} \times .4 \text{ VOID SPACE})) \times 12"/1 \text{ FT}$
= 3" CRUSHED STONE DEPTH UNDER PATIO (MIN. REQUIRED)
12" ASTM 57 CRUSHED AGGREGATE (PROVIDED)

**ROOF DRAIN
TREATMENT CALCULATIONS**

-RAIN VOLUME
ROOF AREA = 1,845 SF
PROVIDE STORAGE FOR 1" OF RAINFALL
 $1,845 \text{ SF} \times 1" \times (1'/12") = 154 \text{ CF}$

-DRYWELL SIZING
USE 16" HIGH CAPACITY QUICK 4 INFILTRATORS
BACKFILLED WITH STONE
HIGH CAPACITY QUICK 4 INFILTRATORS + STONE
= 3.1 CF STORAGE PER LINEAR FOOT

$154 \text{ CF} \div 3.1 \text{ CF/LF} = 50 \text{ LF}$ OF INFIL. W/ STONE (REQUIRED)
PROVIDE TOTAL INFILTRATOR ROW W/ STONE OF 48.0 LF
W/ 1.0 STONE ON ENDS = 50 LF (PROVIDED)

TOTAL PARCEL AREA
= 12,500 S.F.±

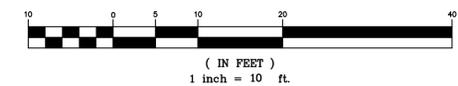
BUILDING COVERAGE

PROPOSED HOUSE = 1,854 S.F. (*14.83%)
PER 10.3.2 COLUMBIA ZONING REGULATIONS
SPECIAL PERMIT REQUIRED

LEGEND

--- PROPERTY LINE
○ IP FND IRON PIN OR PIPE FOUND
□ MON FND MONUMENT FOUND

GRAPHIC SCALE



I HEREBY DECLARE TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS SUBSTANTIALLY CORRECT.

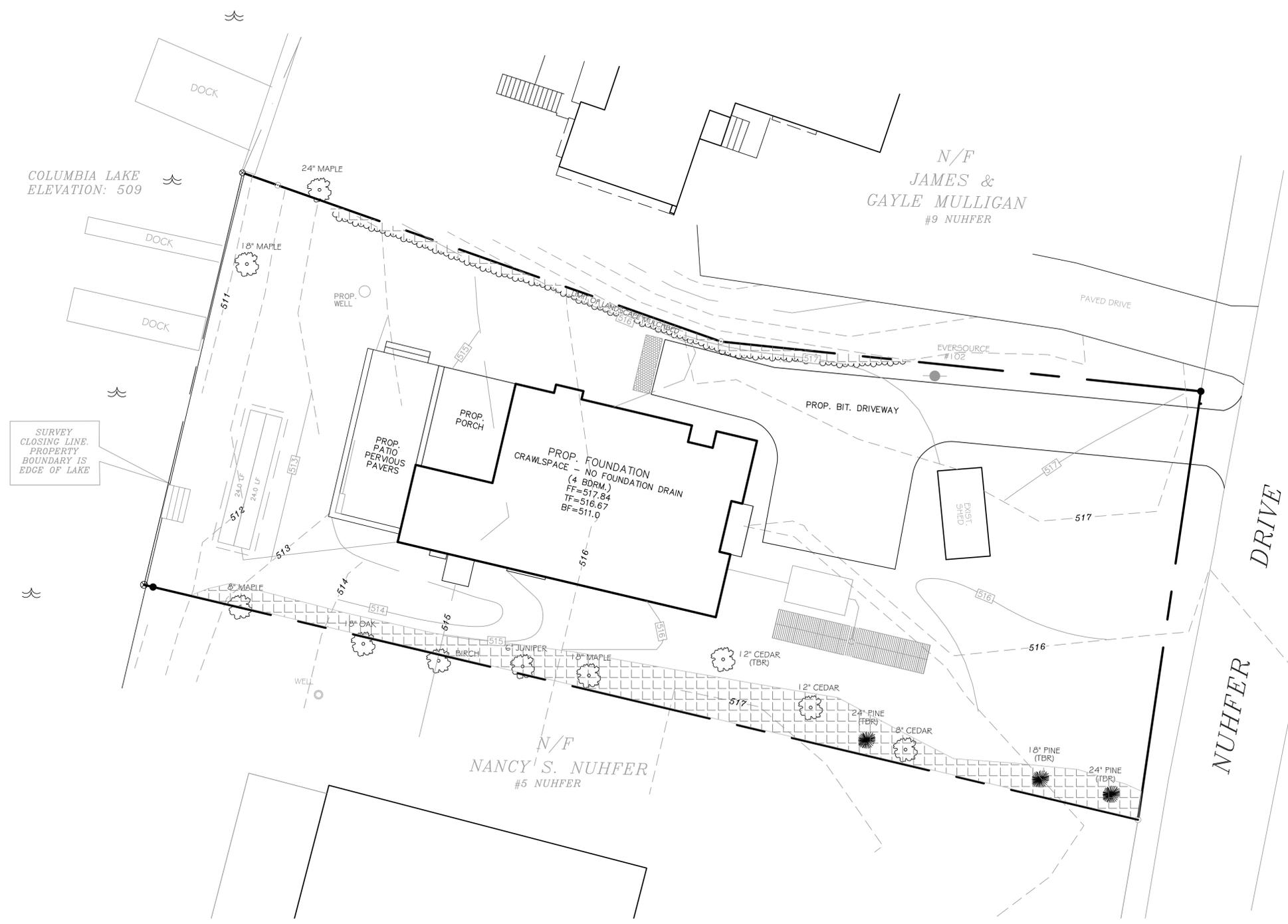
**WENTWORTH CIVIL
ENGINEERS LLC**
177 WEST TOWN ST.
LEBANON, CT 06249
TEL: (860) 642-7355
FAX: (860) 642-4794
WEB: WENTWORTHCIVIL.COM



SITE DEVELOPMENT PLAN
7 NUHFER DRIVE
PREPARED FOR
ROBERT & MARY SULLIVAN
COLUMBIA, CONNECTICUT

DATE: 2-12-20
SCALE: 1"=10'
SHEET 4 OF 7
MAP NO. 19-023-1SP

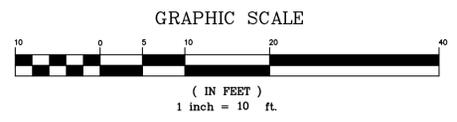
REV 7-10-20
REV 6-05-20



SURVEY CLOSING LINE. PROPERTY BOUNDARY IS EDGE OF LAKE

LEGEND

- PROPERTY LINE
- IP FND IRON PIN OR PIPE FOUND
- MON FND MONUMENT FOUND
- EXISTING WOODED / LANDSCAPE BED TO REMAIN



I HEREBY DECLARE TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS SUBSTANTIALLY CORRECT.

WESLEY J. WENTWORTH P.E. # 20380

WENTWORTH CIVIL ENGINEERS LLC

177 WEST TOWN ST.
LEBANON, CT 06249
TEL: (860) 642-7355
FAX: (860) 642-4794
WEB: WENTWORTHCIVIL.COM

GROUND COVER PLAN
7 NUHFER DRIVE
PREPARED FOR
ROBERT & MARY SULLIVAN
COLUMBIA, CONNECTICUT

DATE: 2-12-20
SCALE: 1"=10'
SHEET 5 OF 7
MAP NO. 19-023-1L

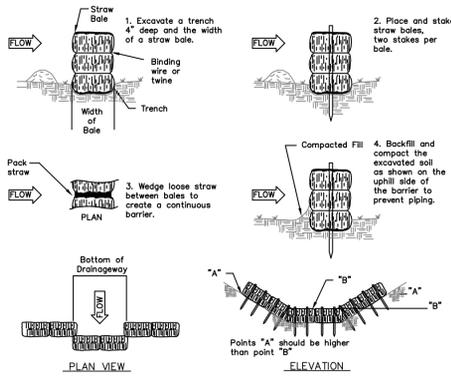
REV. 7-10-20
REV. 6-05-20

CONSTRUCTION SEQUENCING NARRATIVE

1. INSTALL SILTFENCE/HAYBALE ROWS. INSTALL CONSTRUCTION ENTRANCE
2. REMOVE EXISTING COTTAGE. ABANDON EXISTING WELL AND SEPTIC SYSTEM PER STATE OF CONNECTICUT HEALTH CODE
3. REMOVE TREES AND STUMPS NOT TO REMAIN ON SITE.
4. INSTALL WELL.
5. EXCAVATE & INSTALL FOUNDATION. ROUGH GRADE LOT & IMMEDIATELY AFTER FOUNDATION INSTALLATION.
6. INSTALL SEPTIC SYSTEM AND REMAINING UTILITIES. INSTALL PATIO, RETAINING WALLS & SITE DRAINAGE SYSTEMS. INSTALL AND PAVE DRIVEWAY.
7. FINAL LOAM, SEED & MULCH ALL REMAINING DISTURBED AREAS. IF OUTSIDE PROPER SEEDING SEASON, DOUBLE MULCH APPLICATION RATE TO STABILIZE AREAS UNTIL FINAL SEEDING CAN TAKE PLACE.
8. FINALIZE SITE LANDSCAPING.
9. AFTER VEGETATION HAS BEEN ESTABLISHED AND SITE IS STABILIZED, REMOVE E&S CONTROL MEASURES.

EROSION CONTROL MANAGEMENT

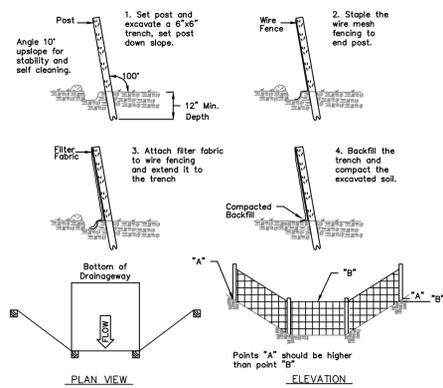
RESPONSIBLE PARTY: ROBERT SULLIVAN
 10 MAPLE VALLEY ROAD
 BOLTON, CT 06043
 TEL. 860-559-1995



Source: U.S. Department of Agriculture, Soil Conservation Service, Storrs, Connecticut

PLACEMENT AND CONSTRUCTION OF A STRAW BALE BARRIER

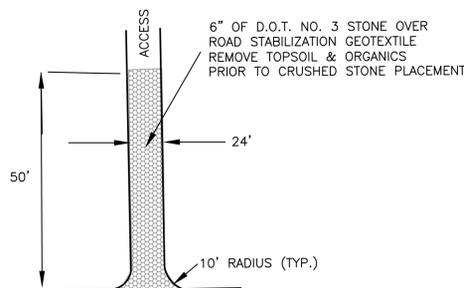
NOT TO SCALE



Source: U.S. Department of Agriculture, Soil Conservation Service, Storrs, Connecticut

PLACEMENT AND CONSTRUCTION OF A SYNTHETIC FILTER BARRIER

NOT TO SCALE



CONSTRUCTION ENTRANCE DETAIL

NO SCALE

GENERAL

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INsofar AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS, AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES AND WATERBODIES, AND TO PREVENT, INsofar AS POSSIBLE, EROSION ON THE SITE.

CONSTRUCTION METHODS, IN GENERAL, SHALL BE IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE STATE OF CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION AND TOWN OF MANGHESTER PUBLIC IMPROVEMENT STANDARDS.

LAND GRADING

- GENERAL:
1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING BASIC CRITERIA:
 - A) NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE, OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSE OR WATERBODY.
 - B) INSTALLATION OF SEDIMENT AND EROSION CONTROLS SUCH AS HAY BALES AND SILT FENCES SHALL BE ESTABLISHED PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITIES. ALL SEDIMENT AND EROSION CONTROL STRUCTURES MUST BE MONITORED AND MAINTAINED BY THE CONTRACTOR UNTIL THE SOIL SURFACE IS STABILIZED.
 - C) HAY BALES SHALL BE STAKED AND SILT FENCES SHALL BE PROPERLY SECURED. SEDIMENT WILL BE REMOVED FROM ALL CATCHMENTS AS NECESSARY.
 - D) PRIOR TO ANY REGRADING, STONE APRON SHALL BE PLACED BY THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.
 - E) EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING OR CRACKING.

TOPSOILING

- GENERAL:
1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH AND MAINTENANCE OF VEGETATION.
 2. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS, AND CONSTRUCTION DEBRIS.
 3. APPLY LIME ACCORDING TO SOIL TEST OR AT THE RATE OF TWO (2) TONS PER ACRE.
- MATERIAL:
1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
 2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
 3. AN ORGANIC MATTER CONTENT OF OVER TWO (2%) PERCENT IS HIGHLY DESIRABLE. AVOID LIGHT COLORED LOWER SUBSOIL MATERIAL.
- APPLICATION:
1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
 2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST FOUR (6") INCHES.

EROSION CHECKS

- GENERAL:
1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND, OR SEDIMENT FILTER FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

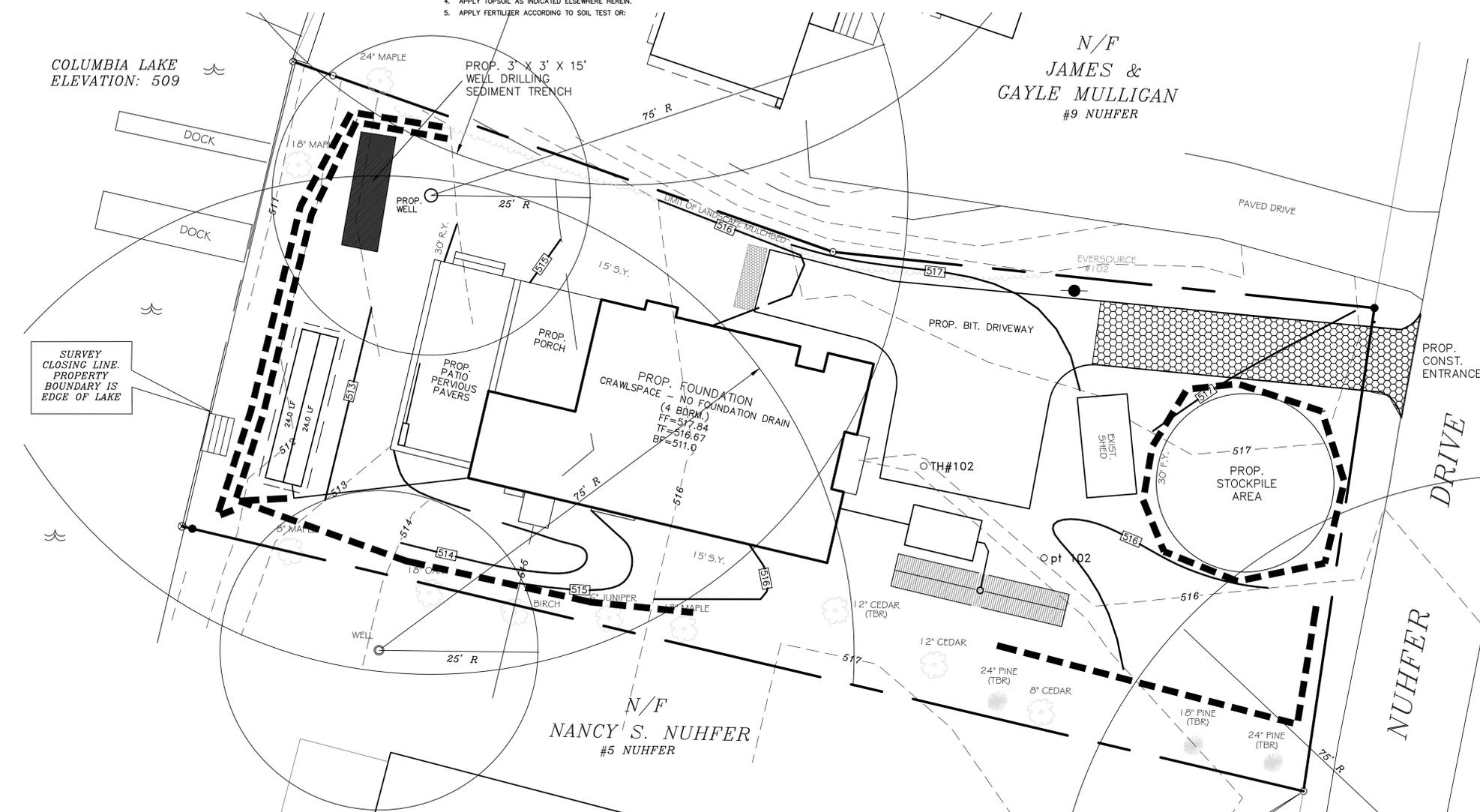
TEMPORARY AND/OR PERMANENT VEGETATIVE COVER

- GENERAL:
1. PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.
- SITE PREPARATION:
1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
 2. REMOVE LOOSE ROCK, STONE AND CONSTRUCTION DEBRIS FROM AREA.
 3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
 4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
 5. APPLY FERTILIZER ACCORDING TO SOIL TEST OR:

SUNNY TO PARTIALLY SUNNY SITES

- GENERAL:
- SPRING SEEDING:
WORK DEEPLY IN SOIL, BEFORE SEEDING, 300 LBS OF 10-10-10 FERTILIZER PER ACRE (7 LBS PER 1,000 SQUARE FEET); THEN SIX (6) TO EIGHT (8) WEEKS LATER APPLY ON THE SURFACE AN ADDITIONAL 300 LBS OF 10-10-10 FERTILIZER PER ACRE.
 - FALL SEEDING:
WORK DEEPLY IN SOIL, BEFORE SEEDING, 600 LBS OF 10-10-10 FERTILIZER PER ACRE (14 LBS PER 1,000 SQUARE FEET).
- ESTABLISHMENT:
1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
 2. SELECT ADAPTED SEED MIXTURE AS FOLLOWS. NOTE RATES AND THE SEEDING DATES.
- | | LBS./ACRE | LBS./1000 S.F. |
|---------------------|-----------|----------------|
| KENTUCKY BLUEGRASS | 20 | 0.50 |
| CREeping RED FESCUE | 20 | 0.50 |
| PERENNIAL RYEGRASS | 05 | 0.10 |
| TOTAL | 45 | 1.10 |

3. FINAL SEEDING SHALL TAKE PLACE PRIOR TO OCTOBER 1ST AS SEEDING AFTER THIS DATE RUNS A DISTINCT CHANCE OF FAILURE DUE TO ADVERSE WEATHER. ANY AREAS THAT ARE DISTURBED BETWEEN OCTOBER 1ST AND APRIL 1ST SHALL BE STABILIZED BY NON-VEGETATIVE MEANS SUCH AS HEAVY MULCHING WITH A BINDER OR JUTE MATTING WHICH WILL HAVE TO BE REMOVED BEFORE FINAL SEEDING AND THEN REPLACED AFTER FINAL SEEDING.
4. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
5. COVER GRASS AND LEGUME SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
6. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO THE GUIDELINES IN THE "GUIDELINES".
7. USE PROPER INOCULANT ON ALL LEGUME SEEDINGS, USE FOUR (4) TIMES NORMAL RATE WHEN HYDROSEEDING.



STORMWATER RUNOFF MANAGEMENT

RESPONSIBLE PARTY: ROBERT SULLIVAN
 10 MAPLE VALLEY ROAD
 BOLTON, CT 06043
 TEL. 860-559-1995

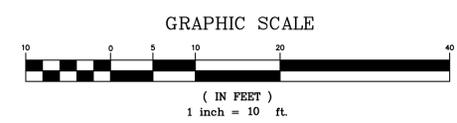
- DRIVEWAY / SNOW REMOVAL
KEEP WINTER SANDING TO A MINIMUM. REMOVE LEAVES AND DEBRIS FROM DRIVEWAY AND CRUSHED STONE RECHARGE AREA.
- ROOF DRAIN DRYWELL
KEEP GUTTERS CLEAN.
- INSPECT DRYWELLS EVERY 5 YEARS TO ENSURE NO SEDIMENT ACCUMULATION WITHIN CHAMBERS.
- PERVIOUS PATIO PAVERS
AVOID SANDING IN WINTER. USE RECOMMENDED DE-ICING AGENTS. SWEEP EXCESS DE-ICING AGENTS IN SPRING AND RINSE PATIO THOROUGHLY WITH WATER. REGULARLY SWEEP PATIO CLEAN TO REMOVE LEAVES, DETRITUS AND OTHER ORGANIC MATTER.

ADDITIONAL NOTES:

- SILTFENCING ABOVE LAKE WALL TO BE DOUBLE ROW OR BACKED WITH STAKED HAYBALES.
- ALL SOIL STOCKPILES ARE TO BE COVERED WITH PLASTIC SHEETING.

LEGEND

- IP FND IRON PIN OR PIPE FOUND
- MON FND MONUMENT FOUND
- STAKED HAYBALES



I HEREBY DECLARE TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS SUBSTANTIALLY CORRECT.

WESLEY J. WENTWORTH
 P.E. # 20360

WENTWORTH CIVIL ENGINEERS LLC
 177 WEST TOWN ST.
 LEBANON, CT 06249
 TEL. (860) 642-7355
 FAX (860) 642-4794
 WEB: WENTWORTHCIVIL.COM

EROSION & SEDIMENTATION CONTROL PLAN
 7 NUHFER DRIVE
 PREPARED FOR
ROBERT & MARY SULLIVAN
 COLUMBIA, CONNECTICUT

DATE: 2-12-20
 SCALE: 1"=10'
 SHEET 6 OF 7
 MAP NO. 19-023-1ES

REV. 7-10-20
 3-0



Eastern Highlands Health District

4 South Eagleville Road Phone: (860) 429-3325 Fax: (860) 429-3321

Septic Plan Review Approval

June 24, 2020

Wesley Wentworth
177 WEST TOWN ST.
LEBANON CT 06249

RE: Septic Plan Review,

Address: 7 NUHFER DR Columbia
Reference #: SPR-20-95

Dear Wesley Wentworth:

Your Application for the above referenced project has been reviewed for compliance with the Connecticut Public Health Code and Technical Standards. The plan is approved with the following conditions:

Prior to any system construction, the system must be field staked by a licensed surveyor under the supervision of the engineer. Upon completion of field staking and prior to septic permit approval, the supervising engineer must submit a completed and signed "Staking Verification Memo" (EHHD Form) to the health district.

There is no guaranteed or implied perpetual approval for this plan. This subsurface sewage disposal system design and well location plan is approved based on the conditions depicted on the plan and the requirements of the Public Health Code and Technical Standards in effect at the time of our review. Plan revisions may be necessary if there are changes in Code requirements or the Technical Standards prior to permit approval or changes to site conditions prior to system construction.

Existing well will need to be properly abandoned a well application permit form a Connecticut licensed well drill will be required

Existing septic system will need to be properly abandoned.

Proposed Building will have no foundation drains.

It appears the sewer line from house to septic tank is around 10' - 11' not 27' feet as described, pitch on sewer line could be field adjusted to allow the septic elevation to be set higher is needed

Please note that this plan approval is not an approval to construct the sewage disposal system. If not already done, a completed application and fee for the Permit to Construct the Sewage Disposal System must be submitted to the Health District for review and approval. The permit will be approved when all above noted conditions of approval have been met.

If you have any questions, please contact me.

Sincerely,

Glenn H Bagdoian RS

Glenn Bagdoian, RS Sanitarian II

860-742-4064
bagdoian@ehhd.org