

NOTICE OF MEETING
VILLAGE OF FOX POINT
BUILDING BOARD

Schwemer Hall
7200 North Santa Monica Blvd.
Fox Point, WI 53217

Wednesday
October 9, 2024
5:00 P.M.

Join Zoom Meeting

<https://us02web.zoom.us/j/88643620031>

Meeting ID: 886 4362 0031

Dial by your location: 312.626.6799

AGENDA

1. Roll call of board members and quorum confirmation.
2. Discussion, corrections, and approval of the minutes of the September 11, 2024 Building Board meeting.
3. Kathy Sullivan, 413 E Dean Rd, proposed detached garage.
4. Linda Tredupp, 8025 N Whitney Rd, proposed resubmittal of deck.
5. Jody Jostworth, 7865 N Lake Dr, proposed siding.
6. Lars Gulbrandsen, 414 E Daphne Rd, proposed dormer additions.
7. Anthony Klenke, 8313 N Links Way, proposed addition.
8. Adjourn.

Published and Post 10/07/24 at 12:30 p.m.

PLEASE NOTE: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aids. For additional information or to request these services, contact the Village Clerk at 414-351-8900. It is possible that members of, and possibly a quorum of members of, other governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

**VILLAGE OF FOX POINT
BUILDING BOARD MINUTES**

A meeting of the Building Board was held via Zoom, on Wednesday, September 11, 2024, at 5:00 pm. Those present included:

Justin Racinowski
William Feldman
Sharon Celek
Lucille Sells
Brian Tobiczky
Michael Rakow

Notice of the meeting was provided to the North Shore Now and to all others as required by State open meeting laws and posted on the official bulletin boards.

MINUTES

Motion was made by William Feldman to approve the minutes of August 14, 2024. Motion was seconded by Lucille Sells. Motion Caried.

AGENDA

1. **Ellie DeLia, 7633 N Links Way, proposed sunroom.** It was the consensus of the Building Board to approve as submitted contingent on submittal of material specifications.
2. **Brian Wolff, 7528 N Links Way, proposed garage addition.** It was the consensus of the Building Board to approve as submitted.
3. **Lisa Friedel, 7402 N Crossway Rd, proposed window size change.** It was the consensus of the Building Board to approve as submitted contingent on the lower panel to be a composite panel with 2"-2.5" frame, leaving lower sill in place, and eliminate siding as proposed and paint white.
4. **Laurie Bergum, 7630 N Boyd Way, proposed second story addition.** Lucille Sells recused herself. It was the consensus of the Building Board to approve as submitted contingent to add pilaster to the right side of addition, symmetrical with the other pilaster.
5. **Linda Tredupp, 8025 N Whitney Rd, proposed deck.** It was the consensus of the Building Board to table, requesting more information.

ADJOURN

Motion to adjourn Building Board was made by William Feldman. Motion seconded by Lucille Sells. Motion Caried. Building Board adjourned at 5:52 pm.

Respectfully Submitted,



Michael Rakow
Building Inspector
Village of Fox Point



VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B-

OFFICE USE ONLY	
Issued Date	
Zoning	C, 75'

BUILDING PERMIT

Job Address 413 E. Dean Rd., Fox Point, WI 53217	Building Type: Residential ☒ Commercial ☐
Description of Work	
Raze Existing 20'-0" x 20'-0" Detached Garage & Build New 20'-0" x 20'-0" Wood Frame Detached Garage.	
Estimated Cost of Project \$ 35,931.00	

Owner/Occupant	
Business Name n/a	Contact Name Kathy Sullivan
Address 413 E. Dean Rd.	City/State/Zip Fox Point, WI 53217
Phone (414) 315-8190	Email kathysullivan@wi.rr.com

****Cautionary Statement required when homeowner is applying for permit****

Contractor	
Company Name JD Griffiths Company, Inc.	Contact Name Jeremy Schloesser
Address 8401 W. Calumet Rd.	City/State/Zip Milwaukee, WI 53224
Phone (414) 362-7222	Email jeremys@jdgriffiths.com
Dwelling Contractor # DC-079500221	Dwelling Contractor Qualifier # DCQ-081900898

Square Footage Under Construction				
1 st Floor	2 nd Floor	Basement	Addition	Garage

Description	Rate	Amount
Project - Per \$1,000 of estimated cost	\$10.00	\$359.31
Building Board	\$75.00	\$75.00
Footing early start - \$230.00 one and two family; \$305.00 commercial		
Plan Review - \$275.00 one and two family; New Single Family Construction \$330.00 plus \$30.00/unit commercial		
State Seal	\$75.00	
Razing, Interior Demolition \$925.00 max/bld \$95.00 minimum plus	\$0.13/sqft	\$147.00
Moving buildings \$250.00 plus	\$0.13/sqft	
Fuel tanks - Per 1,000 gallons	\$25.00	
Re-inspection	\$100.00	
Work started without permit	Double	
Minimum Fee	\$70.00	
Payable to: Village of Fox Point	Total Permit Fee	\$581.31

Applicant Signature

Date

09.09.2024

Rev 01/22

ISSUED PERMITS are available on the Village website under **PERMITS & LICENSES**

VILLAGE OF FOX POINT
7200 N. SANTA MONICA BLVD
FOX POINT WI 53217

414-351-8900

Receipt No: 1.060683

Sep 9, 2024

413 E DEAN RD

Previous Balance:	.00
LICENSES & PERMITS - BUILDING PLANS - FILING FEE	75.00
24-44440 BUILDING PLANS-FILING FEE	
LICENSES & PERMITS - BUILDING PERMIT	506.31
24-44460 BUILDING PERMIT	

Total:	581.31
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CHECK	Check No: 8864	581.31
Payor: JD GRIFFITHS COMPANY		
Total Applied:		581.31

Change Tendered:	.00
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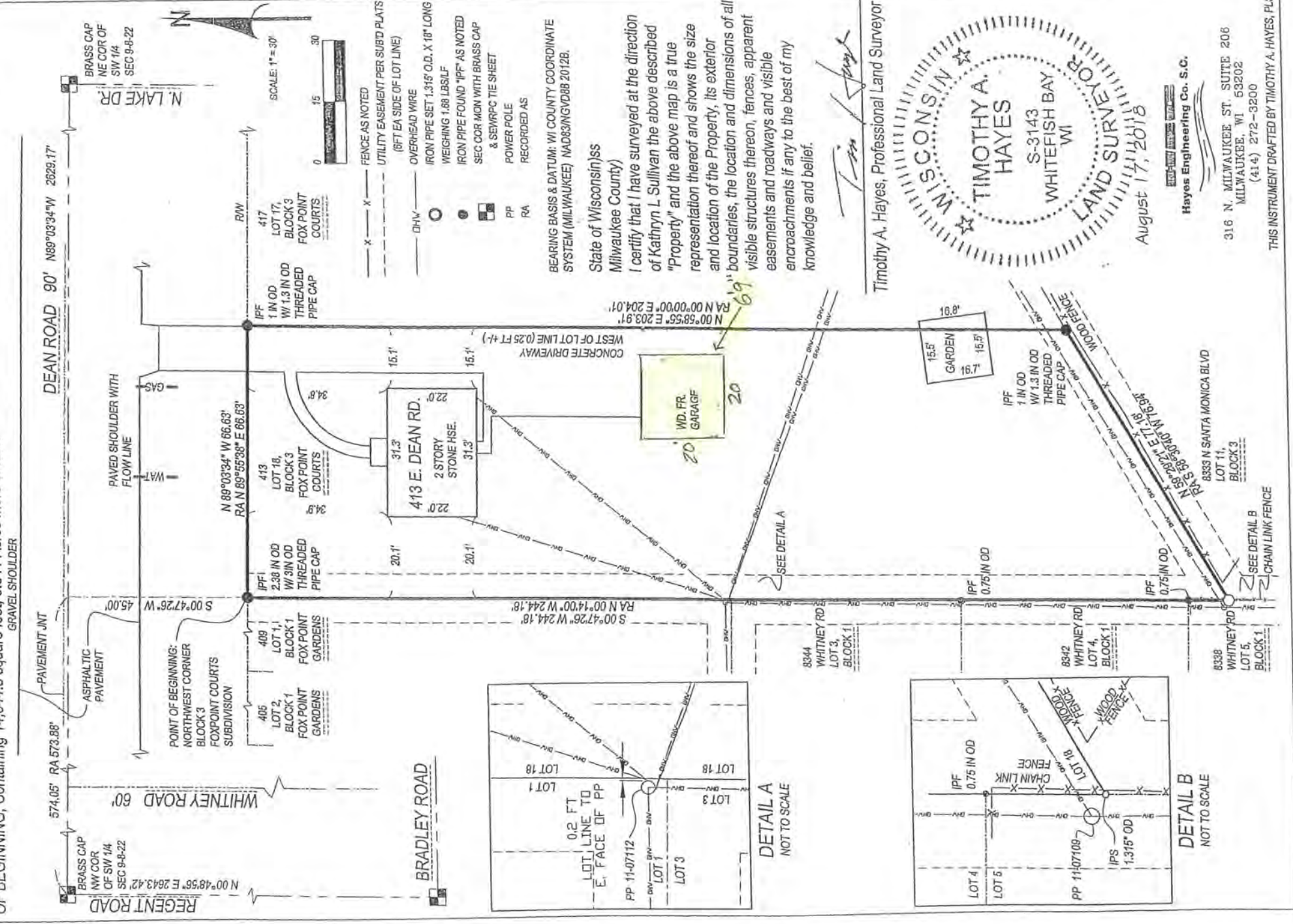
Duplicate Copy

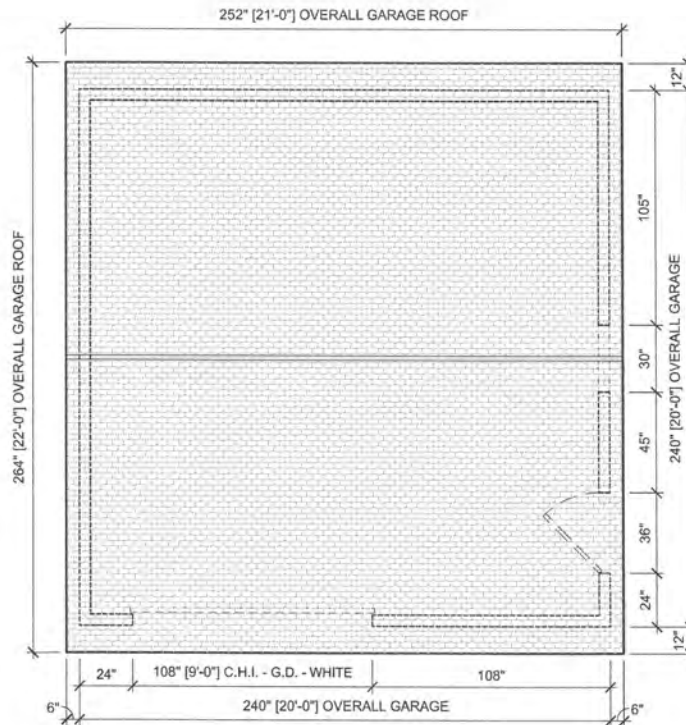
09/09/2024 2:33 PM

Survey for: Katherine L. Sullivan
Location: 413 East Dean Road
Description: Lot Eighteen (18) in
Southwest Quarter of Section N
Fox Point, Milwaukee County, WI

Location: 413 East Dean Road
Description: Lot Eighteen (18) in Block Three (3) Fox Point Courts Subdivision in the North West 1/4 of the Southwest Quarter of Section Nine (9) in Township Eight (8) North, Range Twenty-two (22) East, in the Village of Fox Point, Milwaukee County, Wisconsin.

Survey Description: That part of the North West 1/4 of the South West Quarter of Section Nine (9), Township Eight (8) North, Range Twenty-two (22) East, in the Village of Fox Point, Milwaukee County, Wisconsin, which is bounded and described as follows: Commencing at the North West Corner of Block 3 of Fox Point Courts Subdivision recorded February 27, 1941 as Document Number 2302953, as found monumented with a 2.38in O.D. iron pipe with a 3.0in O.D. threaded cap, said point also being the North West corner of Lot 18 in Block 3, and the POINT OF BEGINNING of the lands to be described herein; Thence S00°47'26" W 244.18 feet along the West line of said Fox Point Courts, also being the East line of Block 1 of Fox Point Gardens Subdivision recorded September 22, 1926 as Document Number 1464208 to a Set 1.315 O.D. Iron Pipe that marks the South West corner of Lot 18; Thence N 59°29'21" E 77.18 feet to the South East corner of Lot 18 as found monumented with a 1.0 in O.D. Iron Pipe with a 1.3 in O.D. threaded cap; Thence N 00°58'55" E 203.91 feet to the North East corner of Lot 18 as found monumented with a 1.0 in O.D. Iron Pipe with a 1.3 in O.D. threaded cap; Thence N 89°03'34" W 66.63 feet to the POINT OF BEGINNING; Containing 14,844.8 square feet, 0.341 Acres more or less.





NOTE: SEE PAGE 6
FOR TYPICAL DETAILS

KATHY SULLIVAN RESIDENCE

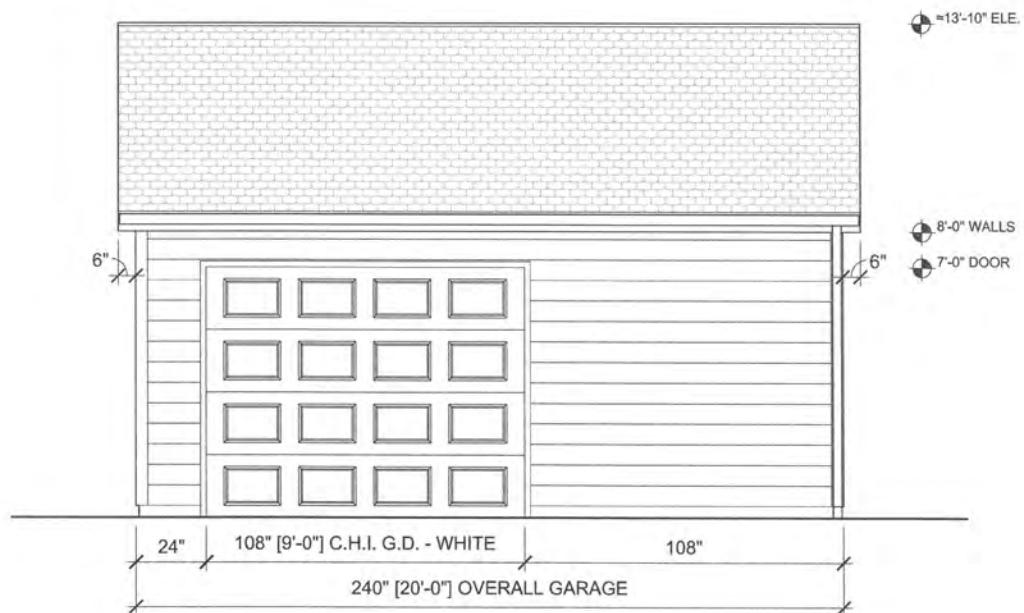
PLAN VIEW

DATE: 09.09.2024

SCALE: 3/16"=1'-0"

PAGE: 1 OF 6





KATHY SULLIVAN RESIDENCE

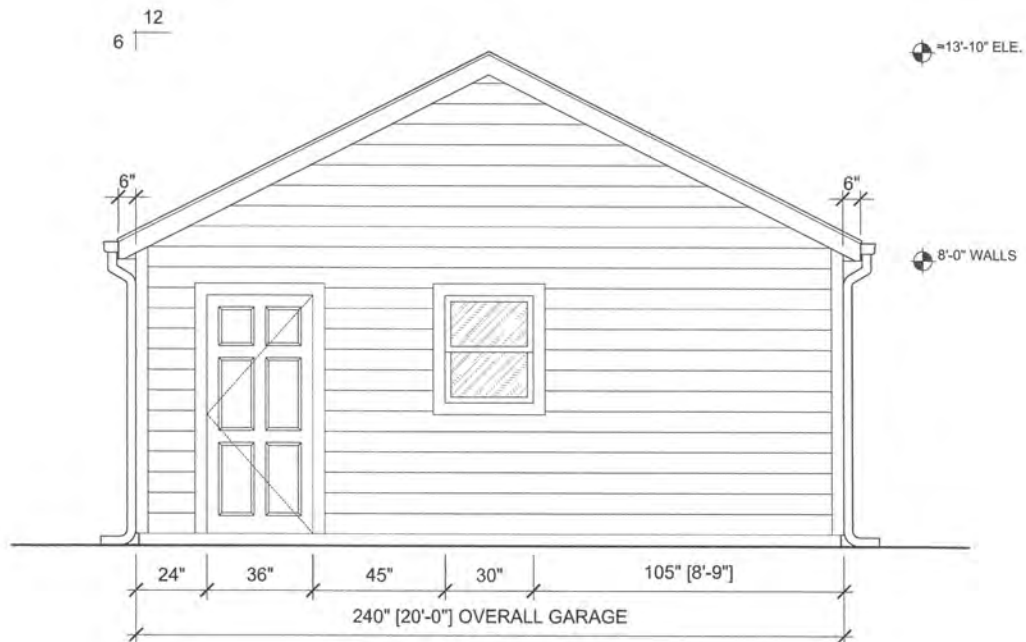
ELEVATION

DATE: 09.09.2024

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

PAGE: 2 OF 6





KATHY SULLIVAN RESIDENCE

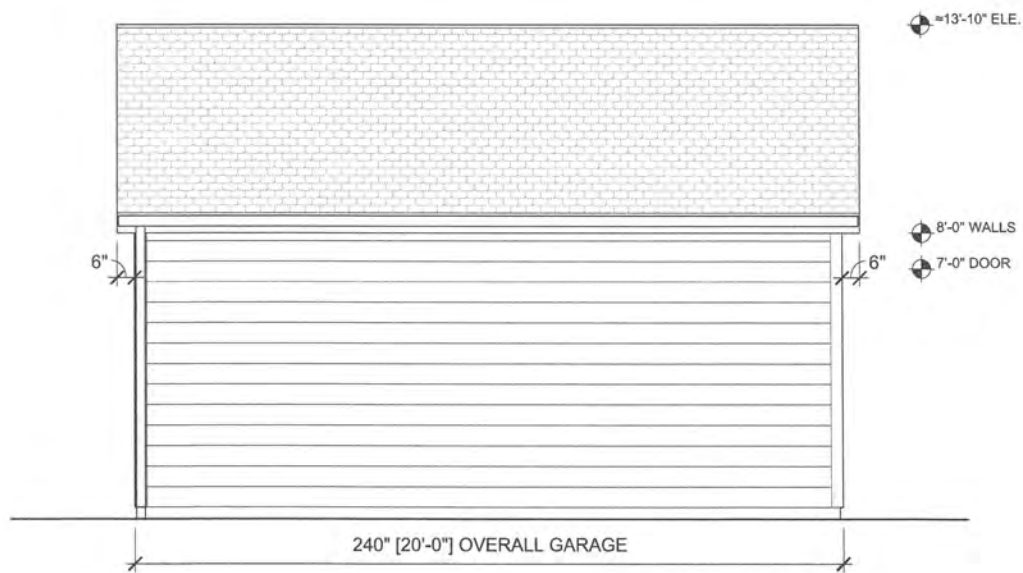
ELEVATION

DATE: 09.09.2024

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

PAGE: 3 OF 6





KATHY SULLIVAN RESIDENCE

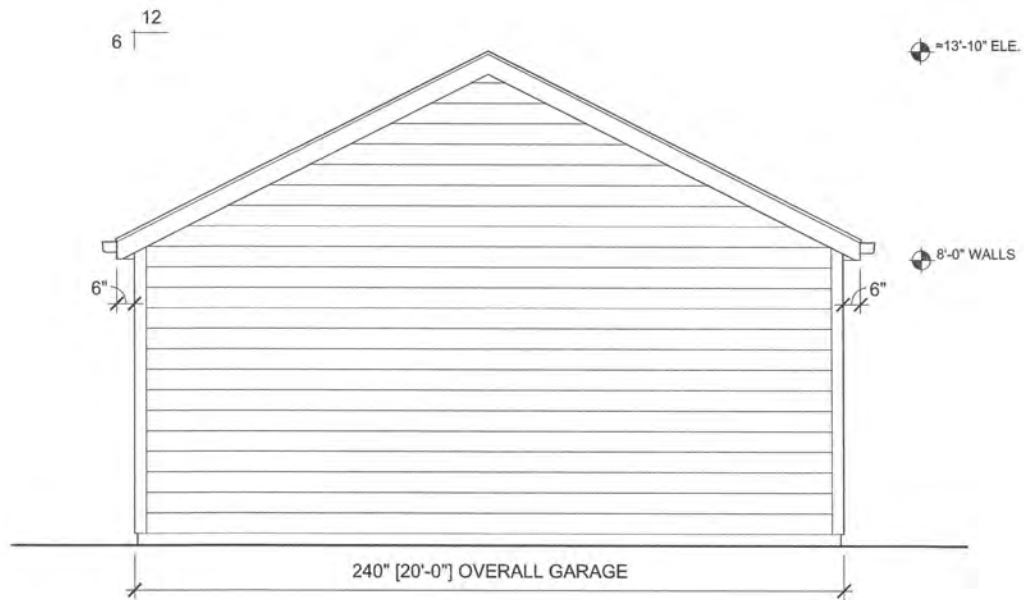
ELEVATION

DATE: 09.09.2024

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

PAGE: 4 OF 6





KATHY SULLIVAN RESIDENCE

ELEVATION

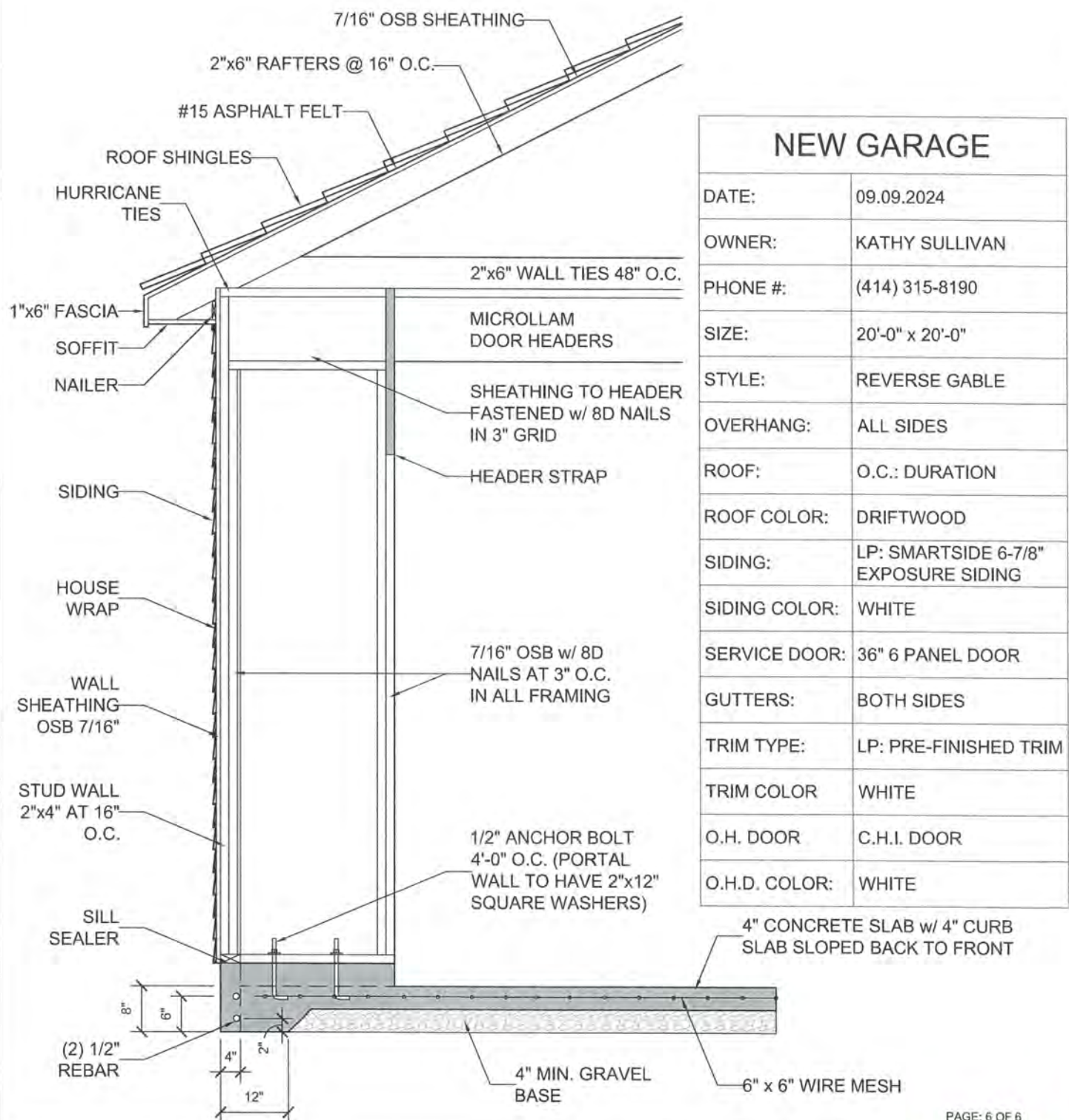
DATE: 09.09.2024

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

PAGE: 5 OF 6



TYPICAL CROSS SECTION



NEW GARAGE

DATE:	09.09.2024
OWNER:	KATHY SULLIVAN
PHONE #:	(414) 315-8190
SIZE:	20'-0" x 20'-0"
STYLE:	REVERSE GABLE
OVERHANG:	ALL SIDES
ROOF:	O.C.: DURATION
ROOF COLOR:	DRIFTWOOD
SIDING:	LP: SMARTSIDE 6-7/8" EXPOSURE SIDING
SIDING COLOR:	WHITE
SERVICE DOOR:	36" 6 PANEL DOOR
GUTTERS:	BOTH SIDES
TRIM TYPE:	LP: PRE-FINISHED TRIM
TRIM COLOR	WHITE
O.H. DOOR	C.H.I. DOOR
O.H.D. COLOR:	WHITE

PAGE: 6 OF 6

OWNER:	KATHY SULLIVAN	GARAGE SIZE:	20'-0" x 20'-0"
ADDRESS:	413 E. DEAN RD. FOX POINT, WI 53217	GARAGE SYTLE:	REVERSE GABLE
		DRAWING SCALE:	1/2" = 1'-0"















VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B-

OFFICE USE ONLY	
Issued Date	
Zoning	C, 60

BUILDING PERMIT

Job Address 8025 N Whitney Road	Building Type: Residential ☒ Commercial ☐
Description of Work	
Building a deck off of the rear of the home.	
**Open Area Calculation - Zone C - to be less than 8000-10500 sq ft	
Open Area Sq Ft Approx = 1,955	
Estimated Cost of Project \$ 30,000	

Owner/Occupant	
Business Name	Contact Name Linda Tredupp
Address 8025 N Whitney Road	City/State/Zip Fox Point, WI 53217
Phone 414-719-2160	Email ltredupp@wi.rr.com

****Cautionary Statement required when homeowner is applying for permit****

Contractor	
Company Name Lakeside Deck Builders	Contact Name Jason Rose
Address 210 N River Road	City/State/Zip West Bend, WI 53095
Phone 262-716-6036	Email lakesidecontracting.anny@gmail.com
Dwelling Contractor # 051500021	Dwelling Contractor Qualifier # 051500001

Square Footage Under Construction				
1 st Floor	2 nd Floor	Basement	Addition 368	Garage

Description	Rate	Amount
Project - Per \$1,000 of estimated cost	\$10.00	
Building Board	\$75.00	
Footing early start - \$230.00 one and two family; \$305.00 commercial		
Plan Review - \$275.00 one and two family; New Single Family Construction \$330.00 plus \$30.00/unit commercial		
State Seal	\$75.00	
Razing, Interior Demolition \$925.00 max/bld	\$95.00 minimum plus	\$0.13/sqft
Moving buildings	\$250.00 plus	\$0.13/sqft
Fuel tanks - Per 1,000 gallons	\$25.00	
Re-inspection	\$100.00	
Work started without permit	Double	
	Minimum Fee	\$70.00
Payable to: Village of Fox Point		Total Permit Fee \$

Applicant Signature Anny L. Mayer **Date** 8/26/2024

Rev 01/22

ISSUED PERMITS are available on the Village website under PERMITS & LICENSES

Receipt No: 18.000045

Aug 26, 2024

Jason Rose

LICENSES & PERMITS

Online Payment	375.00
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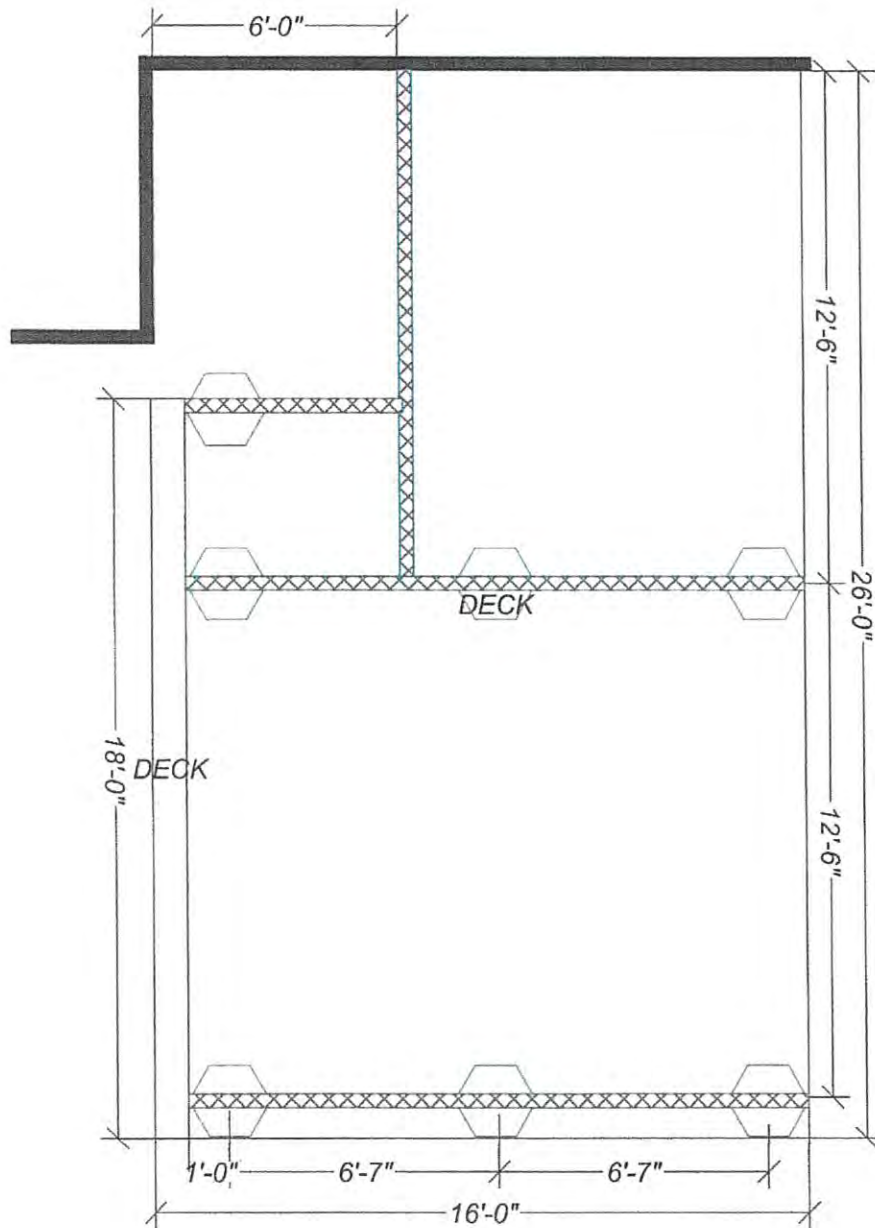
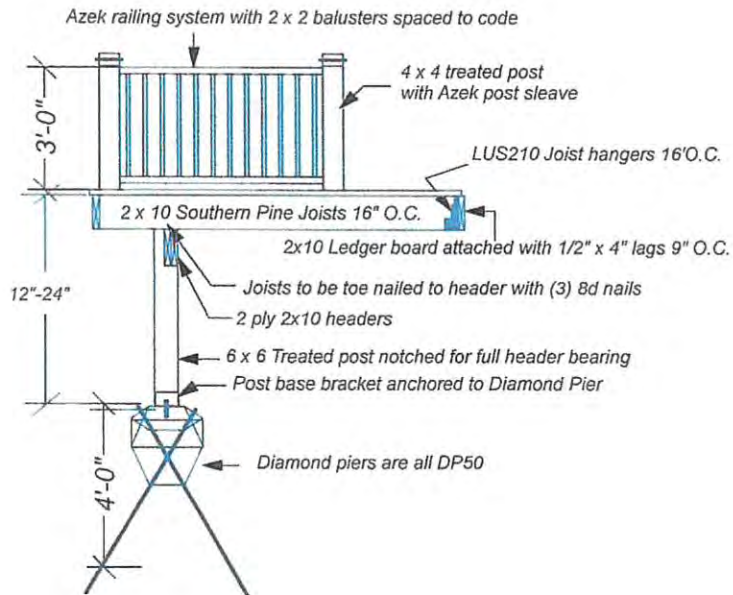
Total:	375.00
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ONLINE - CREDIT CARD	375.00
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Total Applied:	375.00
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Change Tendered:	.00
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08/27/24 07:49AM



I Certify that I have surveyed the above described property (Property), and the above map is a true repre-









VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B-

OFFICE USE ONLY
Issued Date
Zoning

BUILDING PERMIT

Job Address 7865 N Lake Dr	Building Type: Residential ☒ Commercial ☐
Description of Work	
Replace stone veneer siding on east facing facade with new stone; replace stone veneer on north & side facing facade with siding	
Estimated Cost of Project \$38,300	

Owner/Occupant	
Business Name	Contact Name Jody Jostworth
Address 7865 N Lake Dr	City/State/Zip Fox Point, WI 53217
Phone 513-265-9863	Email jostworth36@gmail.com

****Cautionary Statement required when homeowner is applying for permit****

Contractor	
Company Name Art's Chimney & Stonework	Contact Name Art Karos
Address 7455 North Crossway	City/State/Zip Fox Point, WI 53217
Phone 414-436-5434	Email art@arthurkaros.com
Dwelling Contractor #	Dwelling Contractor Qualifier #

Square Footage Under Construction				
1 st Floor	2 nd Floor	Basement	Addition	Garage

Description	Rate	Amount
Project - Per \$1,000 of estimated cost	\$10.00	383.00
Building Board	\$75.00	75.00
Footing early start - \$230.00 one and two family; \$305.00 commercial		
Plan Review - \$275.00 one and two family; New Single Family Construction \$330.00 plus \$30.00/unit commercial		
State Seal	\$75.00	
Razing, Interior Demolition \$925.00 max/bld \$95.00 minimum plus	\$0.13/sqft	
Moving buildings \$250.00 plus	\$0.13/sqft	
Fuel tanks - Per 1,000 gallons	\$25.00	
Re-inspection	\$100.00	
Work started without permit	Double	
	Minimum Fee	\$70.00
Payable to: Village of Fox Point	Total Permit Fee	\$458.00

Applicant Signature

Rev 01/22

Date

9/23/2024

ISSUED PERMITS are available on the Village website under **PERMITS & LICENSES**

VILLAGE OF FOX POINT
7200 N. SANTA MONICA BLVD
FOX POINT WI 53217 414-351-8900

Receipt No: 1.060721 Sep 23, 2024

7865 N LAKE DR

Previous Balance:	.00
LICENSES & PERMITS - BUILDING PERMIT	383.00
24-44460 BUILDING PERMIT	
LICENSES & PERMITS - BUILDING PLANS - FILING FEE	75.00
24-44440 BUILDING PLANS-FILING FEE	

Total:	458.00
--------	--------

CHECK	Check No: 1079	383.00
Payor: JODY JOSTWORTH		
CHECK	Check No: 1078	75.00
Payor: JODY JOSTWORTH		

Total Paid:	458.00
Total Applied:	458.00

Change Tendered:	.00
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09/23/2024 11:56 AM



VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

CAUTIONARY STATEMENT TO OWNERS OBTAINING BUILDING PERMITS

101.65(1r) of the Wisconsin Statutes requires municipalities that enforce the Uniform Dwelling Code to provide an owner who applies for a building permit with a statement advising the owner that:

If the owner hires a contractor to perform work under the building permit and the contractor is not bonded or insured as required under s. 101.654(2)(a), the following consequences might occur:

- (a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.
- (b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one- and two- family dwelling code or an ordinance enacted under sub. (1)(a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

Wetlands Notice to Permit Applicants

You are responsible for complying with state and federal laws concerning the construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the Department of Natural Resources wetlands identification web page or contact a Department of Natural Resources service

Additional Responsibilities for Owners of Projects Disturbing One or More Acre of Soil

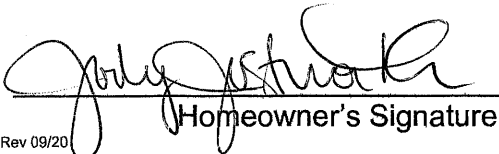
I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and will comply with those standards.

Jody Jostworth

Homeowner's Name – PRINTED

7865 N Lake Dr.

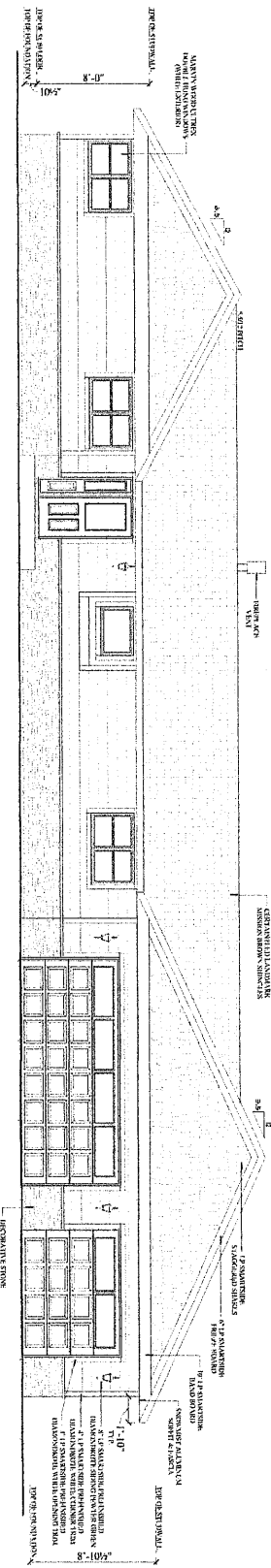
Property Address


Homeowner's Signature

9/23/2024

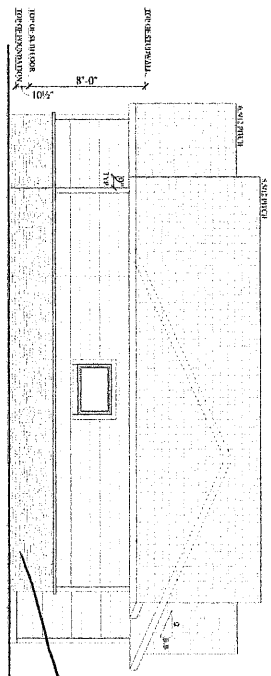
Date

NOTES:
1. ALL DIMENSIONS ARE IN FEET AND INCHES.
2. ALL MATERIALS ARE TO BE OF THE BEST QUALITY AVAILABLE.
3. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.



FRONT (EAST) ELEVATION
SCALE: 1/4" = 1'-0"

replacing old
sponge roof
with new sponge



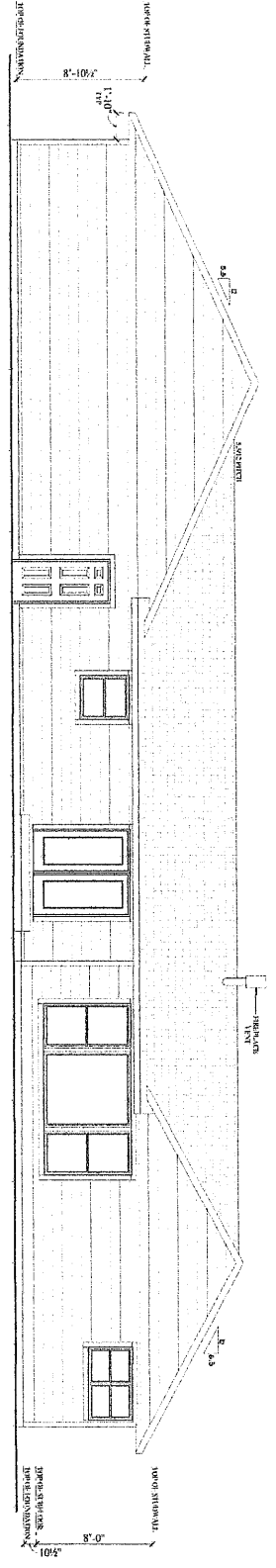
RIGHT (NORTH) ELEVATION
SCALE: 1/4" = 1'-0"

replacing old
sponge roof
with siding

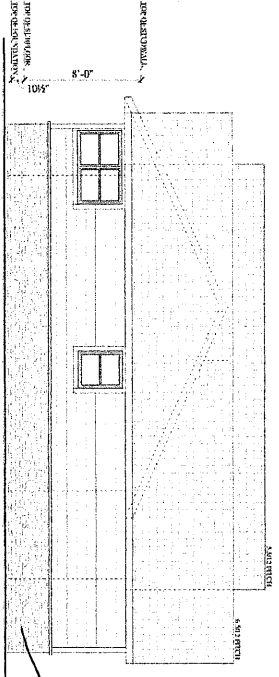
NOTICE:
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IMPORTANT
REVISIONS AND COMMENTS
NOT FOR CONSTRUCTION

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REAR (WEST) ELEVATION



LEFT (SOUTH) ELEVATION

replacing old stone veneer with siding

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FORM / PROPOSAL**Arts Chimney and Stone Work**

7455 North Crossway
 Fox Point, WI 53217
 art@arthurkaros.com
 (414) 436-5434

For: Jodie Jostworth

Job Address: 7865 N Lake Dr
 Fox Point, WI 531217
 jjostworth36@gmail.com
 (513) 265-9863

Job Id 2406-5823674-01 Proposal # 1524 Proposal Date 07/13/2024

Proposal Amount \$38,300.00

#	Description
1	Demo and prep for LP Smart siding Remove veneer siding and backer board install vapor barrier and LP Smart Siding.about (63'x4").
2	Demo and Prep for Veneer stone Remove veneer siding and backer board install vapor barrier
3	Install veneer stone install about 76'x4' of drain n dry laft with flashings. install Scrach coat, and Ledge/Dustin veneer stone and tuckpoint.
Total \$38,300.00	

Customer Signature:*Jodie Jostworth*

08/11/2024

Note:

Color match siding as close as possible.

**Arts Chimney and Stone
Work**

7455 North Crossway
Fox Point, WI 53217
art@arthurkaros.com
(414) 436-5434

Jodie Jostworth/2406-5823674-01
7865 N Lake Dr
Fox Point, WI 531217

Attached Images

1719332397163273.jpg



1719332452208178.jpg



NOTE: Due to our current workload this season, Art Karos LLC. dba Art's Chimney & Stonework cannot guarantee work will be completed immediately. If proposal is accepted, signed and returned with a deposit check of thirty percent (30%) within 30 days, Art's Chimney & Stonework will hold pricing and the work will be scheduled and completed on a rolling queue basis.

PROPOSAL TERMS AND CONDITIONS

The following terms and conditions (these 'Terms') between Art Karos LLC. DBA Art's Chimney & Stonework, ('Arts C+S') and Arts C+S's customer identified in the Proposal to which these Terms are attached ('Contracting Party') (Contracting Party is one of the following: 'Property Owner' or 'Management Company as Authorized Agent for Property Owner' or 'General Contractor'), together with the Proposal, represent the agreement between the parties for construction and other contracted services to be performed at the location listed on the Proposal.

1. **Payment Amount:** The amount due to Arts C+S from Contracting Party is the amount listed on the Proposal as the 'Total', plus the total sum of all change orders referenced in Paragraph 6, and any fees or interest assessed pursuant to these Terms.
2. **Payment Due Date:** As agreed upon by the parties, Arts C+S may require periodic payments during the construction period. Payment in full must be received by Arts C+S no later than the 30th day after the work has been completed.
3. **Late Payments:** Any invoice amounts outstanding after the 30th day following the completion of the work will result in a late payment fee of 1.5% of the outstanding balance, assessed monthly until paid in full. In addition to a late payment fee, Arts C+S reserves its right to pursue all available remedies, including filing and perfection of a lien as described in Paragraph A.
4. **LIEN NOTICE:** AS REQUIRED BY THE WISCONSIN CONSTRUCTION LIEN LAW, Arts C+S HEREBY NOTIFIES CONTRACTING PARTY AND PROPERTY OWNER THAT PERSONS OR COMPANIES PERFORMING, FURNISHING, OR PROCURING LABOR, SERVICES, MATERIALS, PLANS, OR SPECIFICATIONS FOR THE CONSTRUCTION ON PROPERTY OWNER'S LAND MAY HAVE LIEN RIGHTS ON PROPERTY OWNER'S LAND AND BUILDINGS IF NOT PAID. THOSE ENTITLED TO LIEN RIGHTS, IN ADDITION TO Arts C+S, ARE THOSE WHO CONTRACT DIRECTLY WITH THE CONTRACTING PARTY OR PROPERTY OWNER OR THOSE WHO GIVE THE CONTRACTING PARTY OR PROPERTY OWNER NOTICE WITHIN SIXTY (60) DAYS AFTER THEY FIRST PERFORM, FURNISH, OR PROCURE LABOR, SERVICES, MATERIALS, PLANS, OR SPECIFICATIONS FOR THE CONSTRUCTION. ACCORDINGLY, CONTRACTING PARTY OR PROPERTY OWNER PROBABLY WILL RECEIVE NOTICES FROM THOSE WHO PERFORM, FURNISH, OR PROCURE LABOR, SERVICES, MATERIALS, PLANS, OR SPECIFICATIONS FOR THE CONSTRUCTION, AND SHOULD GIVE A COPY OF EACH NOTICE RECEIVED TO CONTRACTING PARTY'S OR PROPERTY OWNER'S MORTGAGE LENDER, IF ANY. Arts C+S AGREES TO COOPERATE WITH THE OWNER AND THE OWNER'S LENDER, IF ANY, TO SEE THAT ALL POTENTIAL LIEN CLAIMANTS ARE DULY PAID.
5. **Work Performed:** All work performed by Arts C+S is subject to the Proposal, which lists all of the work specifications, as well as all change orders (as of the date of the Proposal) contemplated in Paragraph 6.
6. **Changes to Proposed Work:** Any alterations or deviations from the work specifications included in the Proposal that result in additional costs shall be agreed to via written agreement between the parties. Any costs associated with the changes shall be paid by Contracting Party. All written change orders shall be considered a part of the original proposal.
7. **Work Schedule:** Work shall commence on a date agreed upon by both parties. Arts C+S shall perform the work during normal business hours. As the project progresses, the parties may agree to vary the work schedule and adjust the costs accordingly.
8. **Work Completion:** The completion date shall be date Contracting Party receives a final invoice from Arts C+S. Arts C+S shall provide such notice when the work specified in the Proposal has been completed, inclusive of all change orders contemplated in Paragraph 6, and

10. Agreement Applies to General Contractor: Where this agreement includes language making a section applicable to a general contractor, it is assumed that Arts C+S is acting as a subcontractor, was hired by, and will be paid by the general contractor. Where Arts C+S acts as a subcontractor, the guarantees in Paragraph 9 are assumed to be made to the general contractor and not the property owner. In the event that the property owner pursues an action against Arts C+S based on those guarantees, general contractor agrees to indemnify and defend Arts C+S in such action. General Contractor guarantees that the property owner is aware of all responsibilities and liabilities listed in these terms and conditions.
11. Subcontractors: Arts C+S reserves the right to hire subcontractors at its discretion to fulfill the proposed work specifications, and agrees to pay the subcontractors for their efforts at an agreed upon price.
12. Force Majeure: Arts C+S is not liable for the failure to complete the work specifications included in the Proposal when the failure is caused by acts of God, such as, but not limited to, fire, tornado, flooding, and other natural disasters, labor disputes, strikes, materials shortages, terrorist activities, or government action affecting construction.
13. Suspension of Work: Arts C+S may suspend work on account of weather or natural disasters, LATE PAYMENTS BY CONTRACTING PARTY, government action, or other emergencies not anticipated by this agreement. Any additional charges that result from the suspension shall be paid for by Contracting Party.
14. Clean-up: Arts C+S shall dispose of materials used in construction, including hazardous materials, and will leave the worksite in a clean and orderly condition following completion of construction.
15. Arts C+S's Insurance and Hiring Practices: Arts C+S shall carry general liability insurance, employer's liability insurance, worker's compensation insurance, and automotive insurance. Arts C+S shall provide a certificate evidencing such policies upon request by Contracting Party. Arts C+S shall seek and retain qualified and skilled craftspeople to complete the proposed work and will not discriminate on the basis of race, color, sex, age, handicap, veteran's status, religious belief, or national origin when hiring its employees.
16. Information and Access: Contracting Party shall provide Arts C+S directly with all relevant information necessary to complete construction, and shall do so in a timely manner. Contracting Party will be responsible for any resulting defects, damage, or additional costs caused by a failure to provide Arts C+S with such relevant information. Contracting Party shall provide Arts C+S and any subcontractors retained by Arts C+S with ready access to the work site.
17. Property Owner's Insurance: The property owner shall maintain general liability and property insurance, including waiver of subrogation, where applicable. The property owner shall provide a certificate evidencing such policies if requested by Arts C+S.
18. Termination: Arts C+S reserves the right to terminate this agreement, at its discretion, in the event that Contracting Party is late in procuring payment, or if Arts C+S has a reasonable belief that Contracting Party will not pay following the completion of the proposed work.
19. Governing Law and Dispute Resolution: This agreement is governed by the laws of the State of Wisconsin, irrespective of conflicts of laws principles. Any disputes or claims arising under the Proposal, these Terms, or any contract entered into thereunder shall be resolved by binding arbitration administered by a single arbitrator in accordance with the American Arbitration Association's Construction Industry Arbitration Rules in effect as of the date of submission of any such dispute or claim. All disputes or claims shall be aggregated and resolved in one arbitration proceeding. The arbitration proceeding shall take place in Milwaukee, WI.
20. Attorneys' Fees: Contracting Party shall be liable for Arts C+S's attorneys' fees incurred in connection with enforcing these Terms and /or the Proposal, collecting payment, or defending or pursuing claims in which Arts C+S is the prevailing party.
21. Waiver: Any exception made to any of these Terms or any extension granted by Arts C+S to any of the deadlines described in these Terms shall not be considered as a waiver of that provision.
22. Complete Agreement: These Terms shall be read in conjunction with the accompanying Proposal, shall constitute the final and complete agreement of the parties, and shall supersede any conflicting terms contained in any other document, or expressed orally. Any amendments to the Proposal in the form of change orders shall be considered as part of the original agreement and also subject to these

and consequently agrees to be bound by them. CONTRACTING PARTY MAY TERMINATE THIS AGREEMENT WITH Arts C+S BY PROVIDING WRITTEN NOTICE TO Arts C+S OF ITS ELECTION TO DO SO WITHIN THREE DAYS OF THE DATE OF THE PROPOSAL.

If accepted, please sign and return one copy. Thank you.

PAYMENT TO BE MADE UPON COMPLETION OF WORK - Or a 1.5% Service Charge per month for any past due amount along with all attorney fees involved with collection.

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alterations or deviation from above specifications involving extra costs will be executed upon written and/or verbal orders, and will become an extra charge over and above the estimate. This agreement is contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance.

ACCEPTANCE OF PROPOSAL

The work specifications, pricing, payment terms, and other terms and conditions (including the attached Proposal Terms, which are incorporated by reference) are hereby accepted; and Art's Chimney & Stonework is hereby authorized to perform the proposed services in accordance with the foregoing Proposal. Art's Chimney & Stonework reserves the right to withdraw or modify this proposal at any time prior to acceptance.

Jodie Jostworth

8/11/2024



VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B-_____

OFFICE USE ONLY
Issued Date
Zoning

BUILDING PERMIT

Job Address 414 East Daphne Road	Building Type: Residential ☒ Commercial ☐
Description of Work	
Second floor interior alterations and dormer additions above existing garage. New basement bathroom	
Estimated Cost of Project \$175,000 ⁰⁰	

Owner/Occupant	
Business Name -	Contact Name Lars Gulbrandsen
Address 414 East Daphne Road	City/State/Zip Fox Point, WI 53217
Phone 414-277-5137	Email Lars.Gulbrandsen@quarles.com

****Cautionary Statement required when homeowner is applying for permit****

Contractor	
Company Name Crestone Construction	Contact Name Shawn Brown
Address 4544 North Sheffield Avenue	City/State/Zip Shorewood, Wisconsin 53211
Phone 414 405 3066	Email crestone1@sbcglobal.net
Dwelling Contractor # 675929	Dwelling Contractor Qualifier # 675931

Square Footage Under Construction				
1 st Floor 0	2 nd Floor 644	Basement 88	Addition 82 (2nd floor)	Garage 0

Description	Rate	Amount
Project - Per \$1,000 of estimated cost	\$10.00	
Building Board	\$75.00	
Footing early start - \$230.00 one and two family; \$305.00 commercial		
Plan Review - \$275.00 one and two family, New Single Family Construction \$330.00 plus \$30.00/unit commercial		
State Seal	\$75.00	
Razing, Interior Demolition \$925.00 max/bid	\$95.00 minimum plus	\$0.13/sqft
Moving buildings	\$250.00 plus	\$0.13/sqft
Fuel tanks - Per 1,000 gallons		\$25.00
Re-inspection		\$100.00
Work started without permit	Double	
	Minimum Fee	\$70.00
Payable to: Village of Fox Point	Total Permit Fee	\$

Applicant Signature

Rev 01/22

Date

9-25-24

ISSUED PERMITS are available on the Village website under **PERMITS & LICENSES**

VILLAGE OF FOX POINT
7200 N. SANTA MONICA BLVD
FOX POINT WI 53217
414-351-8900

Receipt No: 1.060731
Sep 26, 2024

414 E DAPHNE RD

Previous Balance:	.00
LICENSES & PERMITS - BUILDING PLANS - FILING FEE	75.00
24-44440 BUILDING BOARD - FEE	

Total:	75.00
--------	-------

CHECK	Check No: 3197	75.00
Payor: STRIEGEL-AGACKI STUDIO		

Total Applied:	75.00
----------------	-------

Change Tendered:	.00
------------------	-----

09/26/2024 10:53 AM



VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

CAUTIONARY STATEMENT TO OWNERS OBTAINING BUILDING PERMITS

101.65(1r) of the Wisconsin Statutes requires municipalities that enforce the Uniform Dwelling Code to provide an owner who applies for a building permit with a statement advising the owner that:

If the owner hires a contractor to perform work under the building permit and the contractor is not bonded or insured as required under s. 101.654(2)(a), the following consequences might occur:

- (a) The owner may be held liable for any bodily injury to or death of others or for any damage to the property of others that arises out of the work performed under the building permit or that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.
- (b) The owner may not be able to collect from the contractor damages for any loss sustained by the owner because of a violation by the contractor of the one- and two- family dwelling code or an ordinance enacted under sub. (1)(a), because of any bodily injury to or death of others or damage to the property of others that arises out of the work performed under the building permit or because of any bodily injury to or death of others or damage to the property of others that is caused by any negligence by the contractor that occurs in connection with the work performed under the building permit.

Wetlands Notice to Permit Applicants

You are responsible for complying with state and federal laws concerning the construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the Department of Natural Resources wetlands identification web page or contact a Department of Natural Resources service

Additional Responsibilities for Owners of Projects Disturbing One or More Acre of Soil

I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and will comply with those standards.

Lars Gulbrandsen

Homeowner's Name – PRINTED

414 East Daphne Road

Property Address

9-25-24

Date

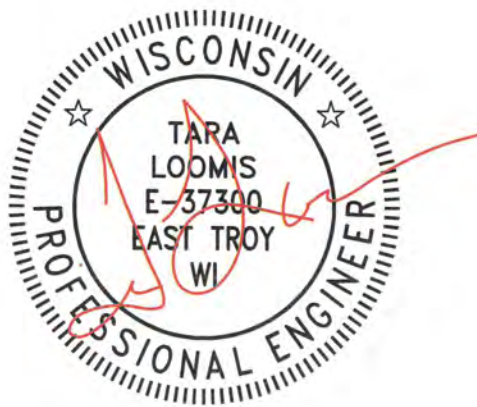

Homeowner's Signature

STRUCTURAL CALCULATIONS

For

Gulbrandsen Residence

414 East Daphne Road
Fox Point, WI 53217



By

LT Engineering LLC

Tara M Loomis, PE

East Troy, WI 53120
(262)488-0192

July 30, 2024

Loads

$$\begin{aligned} DL &= 20 \text{ psf} \\ SL &= 30 \text{ psf} \end{aligned} > \text{Roof}$$

$$\begin{aligned} DL &= 25 \text{ psf} \\ LL &= 40 \text{ psf} \end{aligned} > \text{Floor}$$

Daphne

New Garage Roof

Beam 1

$$\text{Span} = 20'-0"$$

$$DL = 20 (15')$$

$$SL = 30 (15')$$

$$2-20" \text{ LVL}$$

USE ROOF TRUSSES

$$\begin{aligned} R \times N &= 3.2/4.5 \\ &= 7.7K \end{aligned}$$

Beam 2

$$\text{Span} = 14'-0"$$

$$DL = 20 (18)$$

$$SL = 30 (18)$$

$$2-16" \text{ LVL}$$

$$\begin{aligned} R \times N &= 2.6/3.8 \\ &= 6.4 \end{aligned}$$

Roof Joist 1

$$\begin{aligned} \text{Span} &= 17'-0" \\ DL &= 20 \\ SL &= 30 \end{aligned}$$

USE TRUSSES

$$1\frac{3}{4} \times 9\frac{1}{4} \text{ LVL @ } 16" \text{ oc}$$

Roof Joist 2

$$\begin{aligned} \text{Span} &= 10' \\ 2 \times 8 \text{ DFL No 2 @ } 16" \text{ oc} \end{aligned}$$

USE TRUSSES

NEW Headers

Header A

Span = 5'-6"

DL = 20 (18')

SL = 30 (18')

2-7'1/4 LVL R_xN = 2.5K

Header B

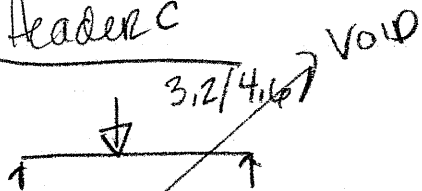
Span = 3'-0"

DL = 20 (18')

SL = 30 (18')

2-2x6 SPF 1/2 R_xN = 1.4K

Header C



2-7'1/4 LVL R_xN = 1.8/2.5

Header D

Span = 3'-0"
20/318



2-7'1/4 LVL R_xN = 3.1/4.2
7.3

Floor Joists

Span = 10'-0"

DL = 20 PSF

LL = 40

2x8 @ 16" OC

Beam 4

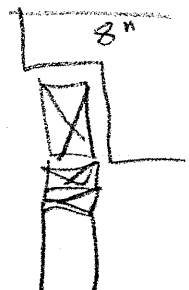
Span = 6'-10"

DL = 25 (6)

LL = 40 (6)

DL = 100 PSF

2-7'1/4 LVL



R_xN = 1.8K

Beam 5

Span = 12'

DL = 25 (1.33)

UL = 40 (1.33)

W wall - 100 pcf

DL = 20 (16)

SL = 30 (16)

2-16" LV

R_xN = 5.8K

Header E

Span = 6'-0"

DL = 25 (10)

UL = 40 (10)

Wt wall = 100

DL = 20 (4)

SL = 30 (4)

Min (2) 2x10 existing window

Beam 7

Span = 16'-0"

DL = 20 (4)

SL = 30 (4)

2-14" LV

DL = 20 (16) 0 to 3
13 to 16

SL = 30 (16) 0 to 3
13 to 16

Beam 6

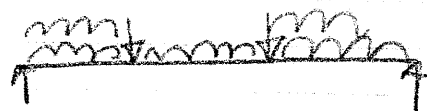
Span = 18'-0"

DL = 25 (2)

UL = 40 (2)

DL = 20 (16)

SL = 30 (16)



P_D = 1.1 c6' / 11.5

P_S = 1.5 c6' / 11.5

3-16" LV

R_xN = 8.1K

Header F

Span = 6'-0"

DL = 25 (6)

UL = 40 (6)

DL = 20 (16)

SL = 30 (16)

2-7/8" LV R_xN = 3.3K

**GO TO CONFIRM
WHAT SUPPORTS
EXISTING ROOF
DUE TO ORIGINAL
RENOVATION**



PROPOSED SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"

NEW 16" DEEP FLOOR TRUSS WITH PARTIAL
CHORD BEARING AT EXISTING WALL.
DESIGN LOADS
DL - 25 PSF
LL - 40 PSF

GT AT END DESIGN FOR EXTERIOR WALL LOAD
DL 250 PLF
SL 400 PLF
OR (2) 1 3/4" X 16" LVL (2.00100)

6X6 WOOD POST

POCKET NEW
BEAM INTO
EXTERIOR WALL
3-2X6 WOOD POST

MINIMUM HEADER SIZE
2-2X12 EXISTING, IF
SMALLER REPLACE WITH
2-1 3/4" X 7 1/4" LVL

JOISTS TO BE
VERIFIED, MINIMUM
2X8@16" OC

EXISTING BEARING
ASSUMED FOR
SECOND FLOOR
JOISTS, GC TO
CONFIRM EXISTING
BEAM SIZE
PROVIDE TO EOR
FOR VERIFICATION

EXISTING 2X
FLOOR JOIST, GC
TO CONFIRM
SECTION LAYOUT

EXISTING BEARING
ASSUMED FOR
SECOND FLOOR
JOISTS, GC TO
CONFIRM

GC TO VERIFY
EXISTING HEADER
SIZE, MINIMUM
2-2X10

BEAM TO POCKET
INTO EXISTING
WALL

3-2X6
2-2X6

BEAM TO POCKET
INTO EXISTING
WALL

3-1 3/4" X 16" LVL (2.00100)
2-1 3/4" X 16" LVL (2.00100)

HEADER AND
JAMBS TO STACK
1" EXISTING CMU
PROVIDE CANT
B-CORNER AS
REQD

3-2X6
2-2X6

NEW POCKET FRAME
ABOVE GC TO
CONFIRM LOAD
PAST UP LOAD AND
CONTRACT EDITION
VERIFICATION

EXISTING BEARING
ASSUMED FOR
SECOND FLOOR
JOISTS, GC TO
CONFIRM



SECOND FLOOR LAYOUT

NEW 30"x30"x12" FOOTING WITH 8#4
BTM BARS EACH WAY
WITH 16"x16" PIER WITH 4#5 VERTICALS
AND #3 TIES AT 12" OC.
PROVIDE SAMPSON ALB66Z POST BASE
FOR NEW WOOD POST.

NEW CONCRETE MB AND
FOOTING SEE STRUCTURAL

NEW POST BASE, ETC
TO EXISTING POST FOR
NEW EXISTING FOOTING
THRU EXISTING
FOOTING TO E-COT FOR
REDUCTION

REBAR/BEAMS BE REMOVED
LOCATION FOR
EXISTING POST
FLOOR, ETC TO
BE PROVIDED TO
E-COT

EXISTING FRAMING
TO BE
DETERMINED

NOT SURVEYED

EXISTING MECHANICAL ROOM

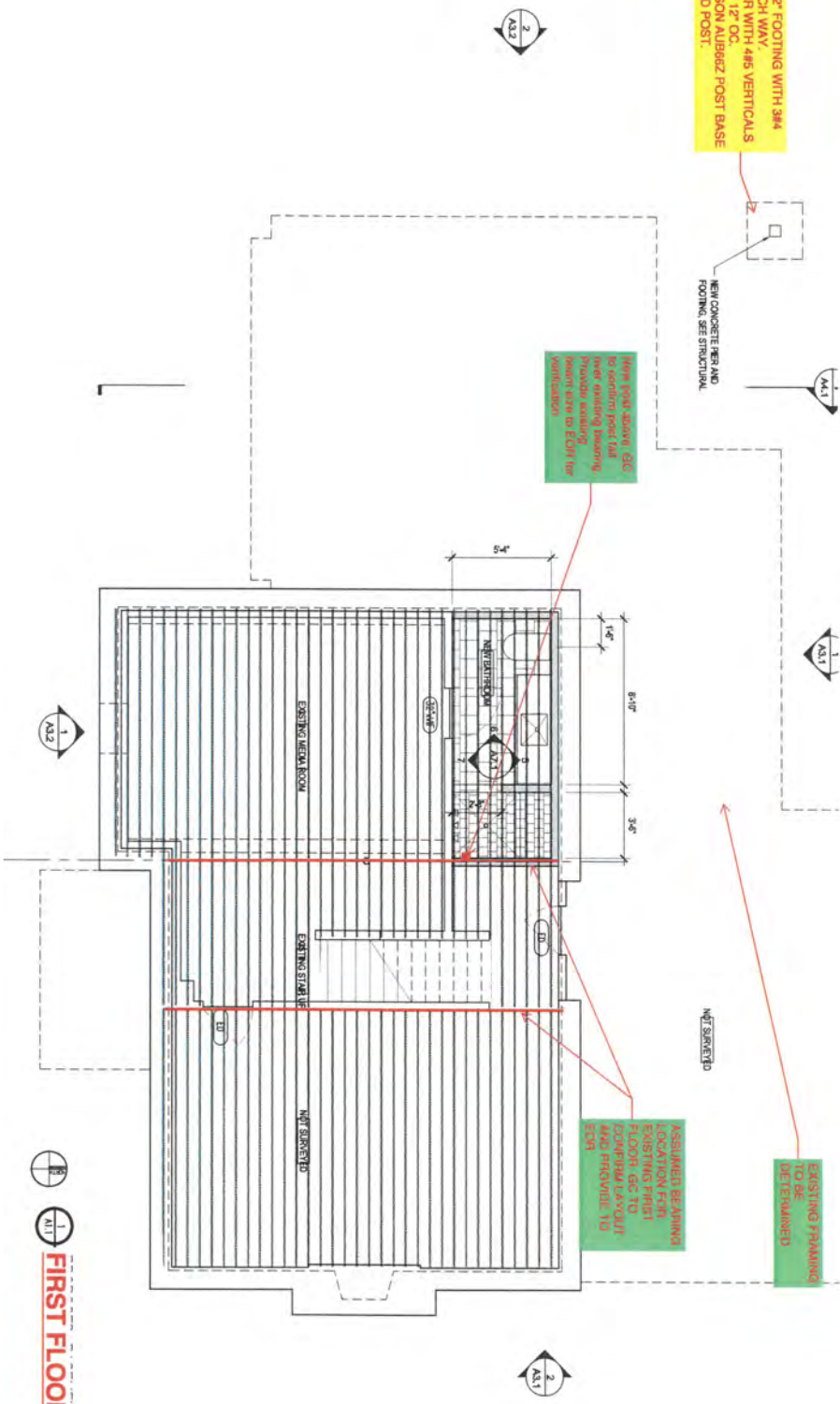
EXISTING STUDY

NOT SURVEYED

1
A1.1

2
A1.2

FIRST FLOOR LAYOUT





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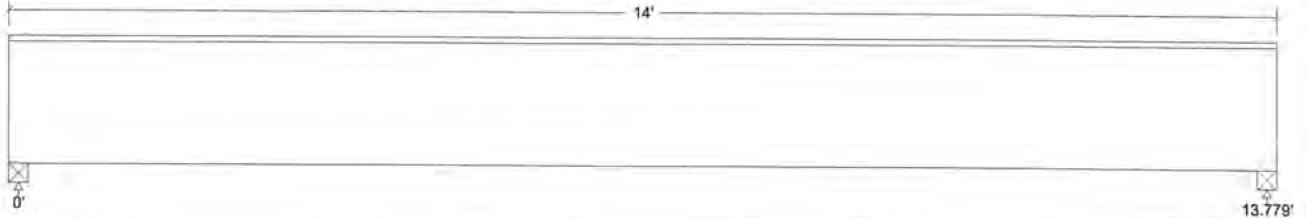
BEAM 2

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00 (18.00')	psf
Load2	Snow	Full Area			30.00 (18.00')	psf
Self-weight	Dead	Full UDL			16.1	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	2631		2631
Snow	3780		3780
Factored:			
Total	6411		6411
Bearing:			
Capacity			
Beam	6949		6949
Support	6411		6411
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	2.65		2.65
Min req'd	2.65**		2.65**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 2

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x16", 2-ply (3-1/2"x16")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 14.0'; Clear span: 13.563'; Volume = 5.4 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 134$	$F_v' = 328$	psi	$f_v/F_v' = 0.41$
Bending(+)	$f_b = 1747$	$F_b' = 3429$	psi	$f_b/F_b' = 0.51$
Live Defl'n	0.20 = L/827	0.46 = L/360	in	0.43
Total Defl'n	0.41 = L/404	0.69 = L/240	in	0.59

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cft	Ci	LC#
Fv'	285	1.15	-	1.00	-	-	-	-	1.00	-	2
Fb'+	3100	1.15	-	1.00	1.000	0.962	-	1.00	1.00	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 6312, V design = 4989 (NDS 3.4.3.1(a)) lbs; M(+) = 21744 lbs-ft

EI = 1254.38e06 lb-in²/ply GA = 7.35e06 lb

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: It is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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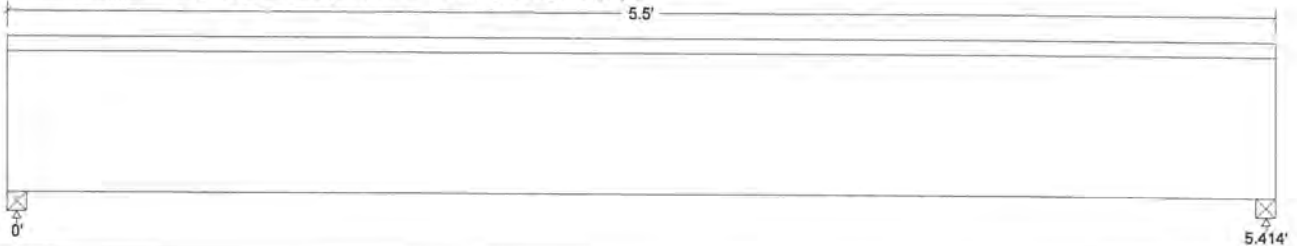
header A

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00 (18.00')	psf
Load2	Snow	Full Area			30.00 (18.00')	psf
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1010		1010
Snow	1485		1485
Factored:			
Total	2495		2495
Bearing:			
Capacity			
Beam	2704		2704
Support	2495		2495
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	1.03		1.03
Min req'd	1.03**		1.03**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

HEADER A

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 5.5'; Clear span: 5.313'; Volume = 1.0 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 110$	$F_v' = 328$	psi	$f_v/F_v' = 0.34$
Bending(+)	$f_b = 1301$	$F_b' = 3818$	psi	$f_b/F_b' = 0.34$
Live Defl'n	$0.05 = L/999$	$0.18 = L/360$	in	0.30
Total Defl'n	$0.11 = L/603$	$0.27 = L/240$	in	0.40

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cx	Cftt	Ci	LC#
Fv'	285	1.15	-	1.00	-	-	-	-	1.00	-	2
Fb'+	3100	1.15	-	1.00	1.000	1.071	-	1.00	1.00	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lx, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 2456, V design = 1869 (NDS 3.4.3.1(a)) lbs; M(+) = 3325 lbs-ft
EI = 116.70e06 lb-in²/ply GA = 3.33e06 lb
Live deflection is due to all non-dead loads (live, wind, snow...)
Total deflection = 1.50 permanent + *live*

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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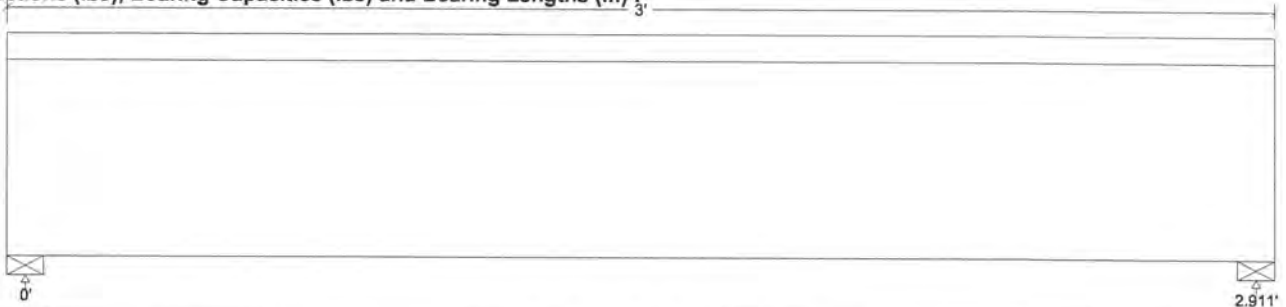
header B

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location (ft) Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00 (18.00')	psf
Load2	Snow	Full Area			30.00 (18.00')	psf
Self-weight	Dead	Full UDL			3.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	545		545
Snow	810		810
Factored:			
Total	1355		1355
Bearing:			
Capacity			
Beam	1355		1355
Support	2241		2241
Des ratio			
Beam	1.00		1.00
Support	0.60		0.60
Load comb	#2		#2
Length	1.06		1.06
Min req'd	1.06		1.06
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.12		1.12
Fcp sup	625		625

HEADER B

Lumber n-ply, S-P-F, No.1/No.2, 2x6, 2-ply (3"x5-1/2")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 3.0'; Clear span: 2.813'; Volume = 0.3 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 78$	$F_v' = 155$	psi	$f_v/F_v' = 0.50$
Bending(+)	$f_b = 759$	$F_b' = 1308$	psi	$f_b/F_b' = 0.58$
Live Defl'n	$0.01 < L/999$	$0.10 = L/360$	in	0.15
Total Defl'n	$0.03 < L/999$	$0.15 = L/240$	in	0.21

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CF	Cfu	Cr	Cf _{rt}	Ci	LC#
F _v '	135	1.15	1.00	1.00	-	-	-	-	1.00	1.00	2
F _b ' +	875	1.15	1.00	1.00	1.000	1.300	-	1.00	1.00	1.00	2
F _{cp} '	425	-	1.00	1.00	-	-	-	-	1.00	1.00	-
E'	1.4 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2
E _{min} '	0.51 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 1315, V design = 861 (NDS 3.4.3.i(a)) lbs; M(+) = 957 lbs-ft

EI = 29.12e06 lb-in²/ply

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.



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HEADER D

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00 (4.00')	psf
Load2	Snow	Full Area			30.00 (4.00')	psf
Load3	Dead	Point		1.50	2600	lbs
Load5	Snow	Point		1.50	3800	lbs
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1431		1431
Snow	2080		2080
Factored:			
Total	3511		3511
Bearing:			
Capacity			
Beam	3805		3805
Support	3511		3511
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	1.45		1.45
Min req'd	1.45**		1.45**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

HEADER c

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2
Total length: 3.0'; Clear span: 2.75'; Volume = 0.5 cu.ft.
Lateral support: top = continuous, bottom = at supports;
This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 199$	$F_v' = 328$	psi	$f_v/F_v' = 0.61$
Bending(+)	$f_b = 1887$	$F_b' = 3818$	psi	$f_b/F_b' = 0.49$
Live Defl'n	$0.03 < L/999$	$0.10 = L/360$	in	0.28
Total Defl'n	$0.06 = L/627$	$0.14 = L/240$	in	0.38

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cftr	Ci	LC#
F_v'	285	1.15	-	1.00	-	-	-	-	1.00	-	2
F_b'	3100	1.15	-	1.00	1.000	1.071	-	1.00	1.00	-	2
F_{cp}'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
E_{min}'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: S=S/2, X=L+S or L+L, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

$V_{max} = 3498$, $V_{design} = 3361$ (NDS 3.4.3.1(a)) lbs; $M(+) = 4822$ lbs-ft
 $EI = 116.70e06$ lb-in²/ply $GA = 3.33e06$ lb
Live deflection is due to all non-dead loads (live, wind, snow...)
Total deflection = 1.50 permanent + *live*

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: It is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus $G = E/16$.



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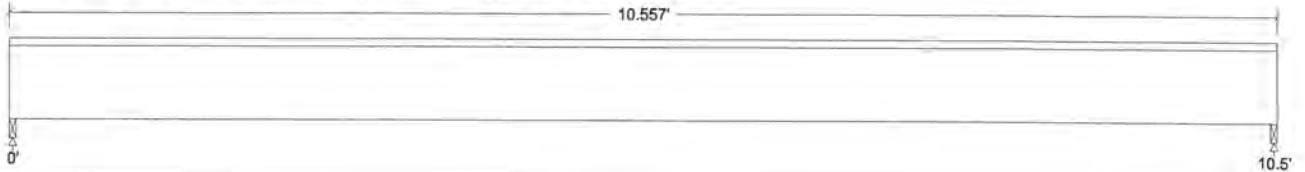
FLOOR JISTS

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00 (16.0")	psf
Load2	Live	Full Area			40.00 (16.0")	psf
Self-weight	Dead	Full UDL			2.2	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	152		152
Live	282		282
Factored:			
Total	434		434
Bearing:			
Capacity			
Joist	434		434
Support	797		797
Des ratio			
Joist	1.00		1.00
Support	0.54		0.54
Load comb	#2		#2
Length	0.68		0.68
Min req'd	0.68		0.68
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.25		1.25
Fcp sup	625		625

FLOOR JOISTS

Lumber-soft, S-P-F, No.1/No.2, 2x8 (1-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Floor joist spaced at 16.0" c/c; Total length: 10.56'; Clear span: 10.438'; Volume = 0.8 cu.ft.

Lateral support: top = continuous, bottom = at supports; Repetitive factor: applied where permitted (refer to online help);

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 52$	$F_v' = 135$	psi	$f_v/F_v' = 0.39$
Bending(+)	$f_b = 1034$	$F_b' = 1207$	psi	$f_b/F_b' = 0.86$
Live Defl'n	0.22 = L/576	0.26 = L/480	in	0.83
Total Defl'n	0.40 = L/317	0.52 = L/240	in	0.75

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CF	Cfu	Cr	Cfrr	Ci	LC#
F_v'	135	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
$F_b' +$	875	1.00	1.00	1.00	1.000	1.200	-	1.15	1.00	1.00	2
F_{cp}'	425	-	1.00	1.00	-	-	-	-	1.00	1.00	-
E'	1.4 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2
E_{min}'	0.51 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + L
Bending(+): LC #2 = D + L
Deflection: LC #2 = D + L (live)
LC #2 = D + L (total)
Bearing : Support 1 - LC #2 = D + L
Support 2 - LC #2 = D + L

D=dead L=live

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 432, V design = 380 (NDS 3.4.3.1(a)) lbs; M(+)= 1133 lbs-ft

EI = 66.69e06 lb-in²

"Live" deflection is due to all non-dead loads (live, wind, snow.)

Total deflection = 1.50 permanent + "live"

Design Notes:

1. Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.

2. Please verify that the default deflection limits are appropriate for your application.

3. Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.



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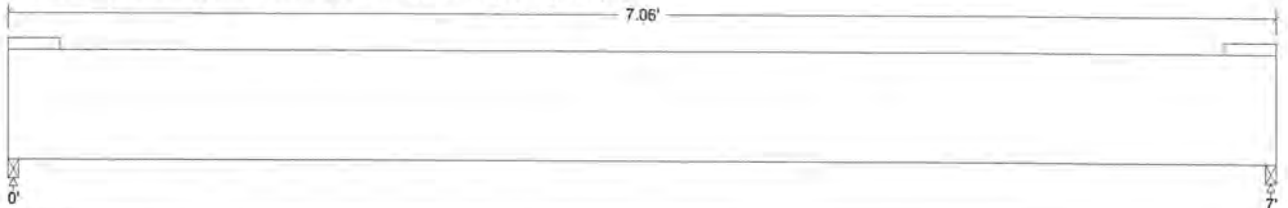
BEAM 4

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			25.00 (6.00')	psf
Load2	Live	Full Area			40.00 (6.00')	psf
Load3	Dead	Full UDL			100.0	plf
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	908		908
Live	847		847
Factored:			
Total	1755		1755
Bearing:			
Capacity			
Beam	1903		1903
Support	1755		1755
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	0.72		0.72
Min req'd	0.72**		0.72**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEA, 4

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 7.06'; Clear span: 6.938'; Volume = 1.2 cu.ft.

Lateral support: top = at supports, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 84$	$F_v' = 285$	psi	$f_v/F_v' = 0.30$
Bending(+)	$f_b = 1192$	$F_b' = 2736$	psi	$f_b/F_b' = 0.44$
Live Defl'n	$0.06 = < L/999$	$0.23 = L/360$	in	0.27
Total Defl'n	$0.16 = L/520$	$0.35 = L/240$	in	0.46

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CV	Cfu	Cx	Cftr	Ci	LC#
Fv'	285	1.00	-	1.00	-	-	-	-	1.00	-	2
Fb'+	3100	1.00	-	1.00	0.824	1.071	-	1.00	1.00	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + L
Bending(+): LC #2 = D + L
Deflection: LC #2 = D + L (live)
LC #2 = D + L (total)
Bearing : Support 1 - LC #2 = D + L
Support 2 - LC #2 = D + L

D=dead L=live

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lx, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

$V_{max} = 1741$, $V_{design} = 1425$ (NDS 3.4.3.1(a)) lbs; $M(+) = 3046$ lbs-ft

$EI = 116.70e06$ lb-in²/ply GA = 3.33e06 lb

Live deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Lateral stability(+): $L_u = 7.00'$ $L_e = 13.25'$ $R_B = 19.4$; b = single ply width

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: It is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus $G = E/16$.



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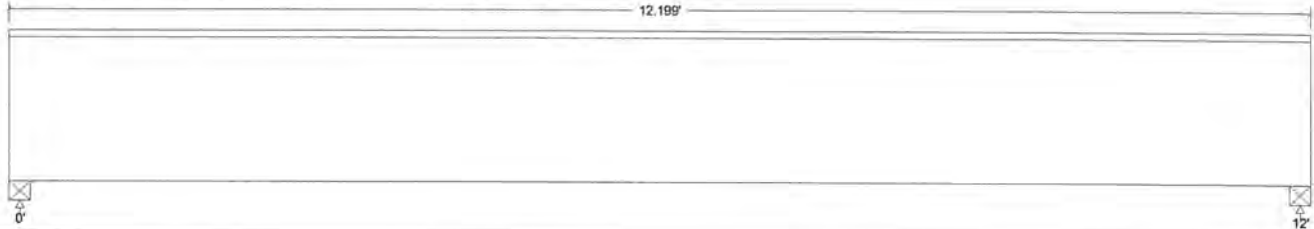
BEAM 5

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			25.00 (1.33')	psf
Load2	Live	Full Area			40.00 (1.33')	psf
Load3	Dead	Full UDL			100.0	plf
Load4	Dead	Full Area			20.00 (16.00')	psf
Load5	Snow	Full Area			30.00 (16.00')	psf
Self-weight	Dead	Full UDL			16.1	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	2861		2861
Live	325		325
Snow	2928		2928
Factored:			
Total	5789		5789
Bearing:			
Capacity			
Beam	6275		6275
Support	5789		5789
Dee ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#4		#4
Length	2.39		2.39
Min req'd	2.39**		2.39**
Ch	1.00		1.00
Ch min	1.00		1.00
Ch support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 5

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x16", 2-ply (3-1/2"x16")

Supports: All - Timber-soft Beam, D Fir-L No.2

Total length: 12.19'; Clear span: 11.813'; Volume = 4.7 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Fv = 116	Fv' = 328	psi	f _v /F _v ' = 0.35
Bending(+)	Fb = 1373	Fb' = 3429	psi	f _b /F _b ' = 0.40
Live Defl'n	0.11 = < L/999	0.40 = L/360	in	0.27
Total Defl'n	0.26 = L/549	0.60 = L/240	in	0.44

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CV	Cfu	Cx	Cfst	Ci	LC#
Fy'	285	1.15	-	1.00	-	-	-	-	1.00	-	4
Fb'	3100	1.15	-	1.00	1.000	0.962	-	1.00	1.00	-	4
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	4
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	4

CRITICAL LOAD COMBINATIONS:

Shear : LC #4 = D + S
Bending (+): LC #4 = D + S
Deflection: LC #4 = D + S (live)
LC #4 = D + S (total)
Bearing : Support 1 - LC #4 = D + S
Support 2 - LC #4 = D + S

D=dead L=live S=snow

All LC's are listed in the Analysis output.

Load Patterns: #=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 5696, V design = 4336 (NDS 3.4.3.1(a)) lbs; M(+) = 17089 lbs-ft

EI = 1254.38e06 lb-in²/ply GA = 7.35e06 lb

Live deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + *live*

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: It is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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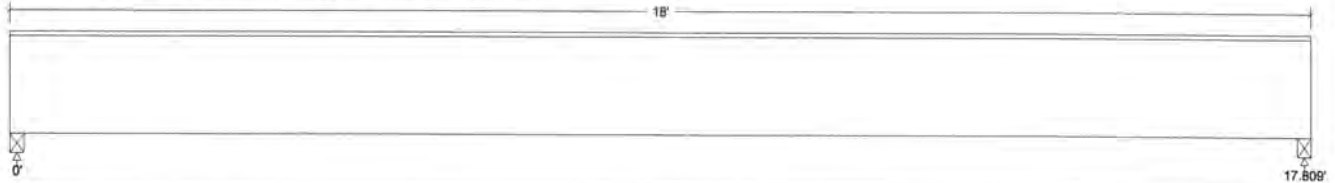
BEAM 6

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft]		Magnitude		Unit
				Start	End	Start	End	
Load1	Dead	Full Area				25.00 (2.00')		psf
Load3	Live	Full Area				40.00 (2.00')		psf
Load4	Dead	Partial Area		0.00	6.00	20.00 (16.00')		psf
Load5	Dead	Partial Area		12.00	18.00	20.00 (16.00')		psf
Load6	Snow	Partial Area		0.00	6.00	30.00 (16.00')		psf
Load7	Snow	Partial Area		12.00	18.00	30.00 (16.00')		psf
Load8	Snow	Point		6.00		1500		lbs
Load9	Snow	Point		12.00		1500		lbs
Load10	Dead	Point		12.00		1100		lbs
Load11	Dead	Point		6.00		1100		lbs
Self-weight	Dead	Full DDL				24.2		pif

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	3686		3686
Live	720		720
Snow	4380		4380
Factored:			
Total	8066		8066
Bearing:			
Capacity			
Beam	9033		9033
Support	8066		8066
Def ratio			
Beam	0.89		0.89
Support	1.00		1.00
Load comb	#4		#4
Length	2.29		2.29
Min req'd	2.29**		2.29**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.07		1.07
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 6

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x16", 3-ply (5-1/4"x16")

Supports: All - Timber-soft Beam, D Fir-L No.2

Total length: 18.0'; Clear span: 17.625'; Volume = 10.5 cu.ft.

Lateral support: top = continuous, bottom = at supports; Repetitive factor: applied where permitted (refer to online help);

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 120$	$F_v' = 328$	psi	$f_v/F_v' = 0.37$
Bending(+)	$f_b = 1727$	$F_b' = 3567$	psi	$f_b/F_b' = 0.48$
Live Defl'n	$0.30 = L/709$	$0.59 = L/360$	in	0.51
Total Defl'n	$0.69 = L/309$	$0.89 = L/240$	in	0.78

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrr	Ci	LC#
F_v'	285	1.15	-	1.00	-	-	-	-	1.00	-	4
F_b'	3100	1.15	-	1.00	1.000	0.962	-	1.04	1.00	-	4
F_{cp}'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	4
E_{min}'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	4

CRITICAL LOAD COMBINATIONS:

Shear : LC #4 = D + S

Bending(+): LC #4 = D + S

Deflection: LC #4 = D + S (live)

LC #4 = D + S (total)

Bearing : Support 1 - LC #4 = D + S

Support 2 - LC #4 = D + S

D=dead L=live S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, W=L+S or L+Lr, _no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

$V_{max} = 7984$, $V_{design} = 6735$ (NDS 3.4.3.1(a)) lbs; $M(+)$ = 32238 lbs-ft

$EI = 1254.38e06$ lb-in²/ply GA = 11.02e06 lb

Live deflection is due to all non-dead loads (live, wind, snow.)

Total deflection = 1.50 permanent + *live*

Design Notes:

1. Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.

2. Please verify that the default deflection limits are appropriate for your application.

3. System factor KH may not apply to field-assembled multi-ply beams.

4. BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.

5. SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches

6. BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.

7. SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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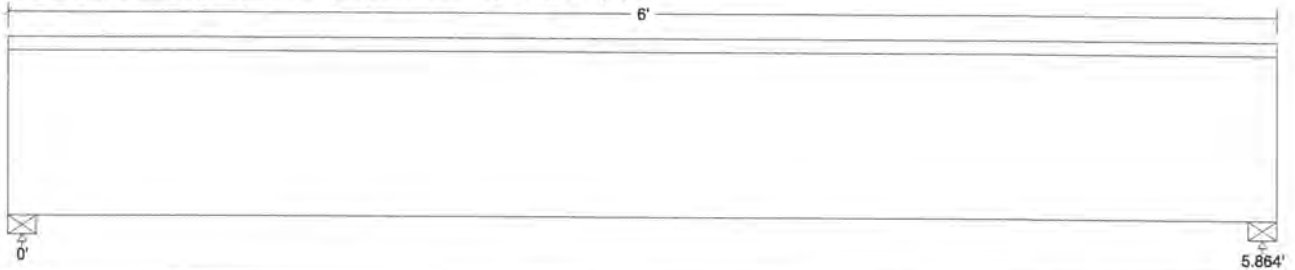
HEADER E

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			25.00 (10.00')	psf
Load2	Live	Full Area			40.00 (10.00')	psf
Load3	Dead	Full Area			20.00 (2.00')	psf
Load4	Snow	Full Area			30.00 (2.00')	psf
Self-weight	Dead	Full UDL			5.6	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	886		886
Live	1200		1200
Snow	180		180
Factored:			
Total	2086		2086
Bearing:			
Capacity			
Beam	2086		2086
Support	3452		3452
Des ratio			
Beam	1.00		1.00
Support	0.60		0.60
Load comb	#2		#2
Length	1.64		1.64
Min req'd	1.64		1.64
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.12		1.12
Fcp sup	625		625

HEADER E

Lumber n-ply, S-P-F, No.1/No.2, 2x10, 2-ply (3"x9-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 6.0'; Clear span: 5.75'; Volume = 1.2 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 79$	$F_v' = 135$	psi	$f_v/F_v' = 0.58$
Bending(+)	$f_b = 839$	$F_b' = 962$	psi	$f_b/F_b' = 0.87$
Live Defl'n	$0.04 = L/999$	$0.20 = L/360$	in	0.20
Total Defl'n	$0.08 = L/868$	$0.29 = L/240$	in	0.28

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CF	Cfu	Cx	Cft	Ci	LC#
F_v'	135	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
F_b'	875	1.00	1.00	1.00	1.000	1.100	-	1.00	1.00	1.00	2
F_{cp}'	425	-	1.00	1.00	-	-	-	-	1.00	1.00	-
E'	1.4 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2
E_{min}'	0.51 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + L
Bending(+): LC #2 = D + L
Deflection: LC #2 = D + L (live)
LC #2 = D + L (total)
Bearing : Support 1 - LC #2 = D + L
Support 2 - LC #2 = D + L

D=dead L=live S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 2039, V design = 1456 (NDS 3.4.3.1(a)) lbs; M(+) = 2990 lbs-ft

EI = 138.50e06 lb-in²/ply

Live deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + *live*

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.



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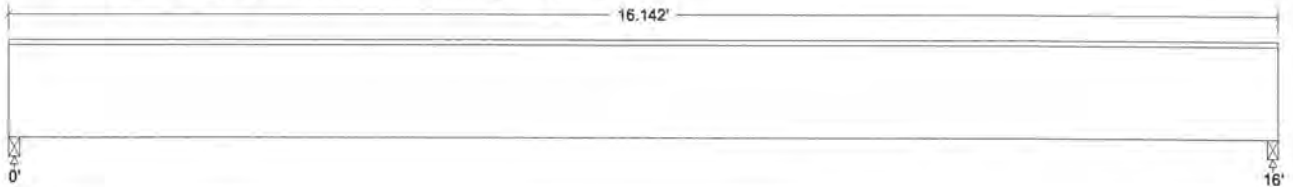
BEAM 7

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load3	Snow	Full Area			30.00 (4.00')	psf
Load4	Dead	Full Area			20.00 (4.00')	psf
Load5	Snow	Partial Area		0.00 3.00	30.00 (16.00')	psf
Load6	Snow	Partial Area		13.00 16.00	30.00 (16.00')	psf
Load7	Dead	Partial Area		0.00 3.00	20.00 (16.00')	psf
Load8	Dead	Partial Area		13.00 16.00	20.00 (16.00')	psf
Self-weight	Dead	Full UDL			14.1	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1727		1710
Snow	2421		2396
Factored:			
Total	4149		4106
Bearing:			
Capacity			
Beam	4496		4450
Support	4149		4106
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	1.71		1.70
Min req'd	1.71**		1.70**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 7

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x14", 2-ply (3-1/2"x14")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 16.13'; Clear span: 15.875'; Volume = 5.5 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 89$	$F_v' = 328$	psi	$f_v/F_v' = 0.27$
Bending(+)	$f_b = 1097$	$F_b' = 3490$	psi	$f_b/F_b' = 0.31$
Live Defl'n	$0.19 < L/999$	$0.53 = L/360$	in	0.35
Total Defl'n	$0.40 = L/484$	$0.80 = L/240$	in	0.50

Additional Data:

FACTORS: F/E (psi) CD CM Ct CL CV Cfu Cr Cfrt Ci LC#
Fv' 285 1.15 - 1.00 - - - 1.00 - 2
Fb'+ 3100 1.15 - 1.00 1.000 0.979 - 1.00 1.00 - 2
Fcp' 750 - 1.00 - - - 1.00 - -
E' 2.1 million - 1.00 - - - 1.00 - 2
Eminy' 1.06 million - 1.00 - - - 1.00 - 2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 4092, V design = 2894 (NDS 3.4.3.1(a)) lbs; M(+) = 10454 lbs-ft
EI = 840.34e06 lb-in²/ply GA = 6.43e06 lb
"Live" deflection is due to all non-dead loads (live, wind, snow...)
Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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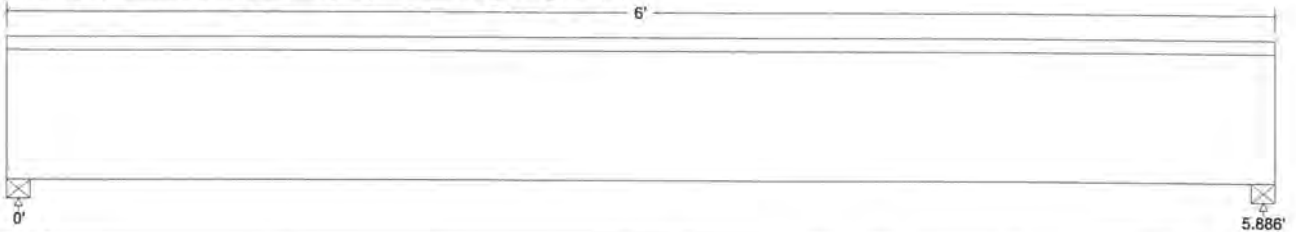
HEADER f

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00 (18.00')	psf
Load2	Snow	Full Area			30.00 (18.00')	psf
Load3	Dead	Full Area			25.00 (6.00')	psf
Load4	Live	Full Area			40.00 (6.00')	psf
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1552		1552
Live	720		720
Snow	1620		1620
Factored:			
Total	3307		3307
Bearing:			
Capacity			
Beam	3584		3584
Support	3307		3307
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#3		#3
Length	1.37		1.37
Min req'd	1.37**		1.37**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

HEADER f

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 6.0'; Clear span: 5.75'; Volume = 1.1 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 149$	$F_v' = 328$	psi	$f_v/F_v' = 0.45$
Bending(+)	$f_b = 1868$	$F_b' = 3818$	psi	$f_b/F_b' = 0.49$
Live Defl'n	$0.08 = L/898$	$0.20 = L/360$	in	0.40
Total Defl'n	$0.18 = L/386$	$0.29 = L/240$	in	0.62

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cft	Ci	LC#
F_v'	285	1.15	-	1.00	-	-	-	-	1.00	-	3
$F_b' +$	3100	1.15	-	1.00	1.000	1.071	-	1.00	1.00	-	3
F_{cp}'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	1.00	-	-	-	-	-	1.00	-	3
E_{min}'	1.06 million	-	1.00	-	-	-	-	-	1.00	-	3

CRITICAL LOAD COMBINATIONS:

Shear : LC #3 = $D + 0.75(L + S)$
Bending(+): LC #3 = $D + 0.75(L + S)$
Deflection: LC #3 = $D + 0.75(L + S)$ (live)
LC #3 = $D + 0.75(L + S)$ (total)
Bearing : Support 1 - LC #3 = $D + 0.75(L + S)$
Support 2 - LC #3 = $D + 0.75(L + S)$

D=dead L=live S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

$V_{max} = 3244$, $V_{design} = 2516$ (NDS 3.4.3.i(a)) lbs; $M(+)$ = 4774 lbs-ft

$EI = 116.70e06$ lb-in²/ply GA = 3.33e06 lb

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

1. Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.

2. Please verify that the default deflection limits are appropriate for your application.

3. BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.

4. SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches

5. BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.

6. SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus $G = E/16$.

New Footing

$$R_{YN} = 5.8 + 1.8 = 7.6K$$

USE 2ft x 2ft x 8" footing x 2 KSF = 8K

Existing Footing Capacity

Assumed Beam 2KSF

Assume 2ft wide footing = $2 \times 2 = 4Klf$

$$\begin{array}{rcl} \text{Ext Wall Load} = & DL = 20(18) & = 360 \\ & SL = 30(18) & = 540 \\ & DL = 20(6) & = 120 \\ & LL = 40(6) & = 240 \\ & \hline & 1260 & \text{OK} \end{array}$$

Even if footing in 18" $\rightarrow 3Klf > 1.3Klf$ OK













PROJECT

CONSULTANTS

DRAWINGS

GULBRANDSEN RENOVATION
14 EAST DAPHNE ROAD
FOX POINT, WI 53217

[illegible]

SCALE: As Noted

COMPUTER FILE:

TITLE
SHEET

T1.0

PLAT OF SURVEY

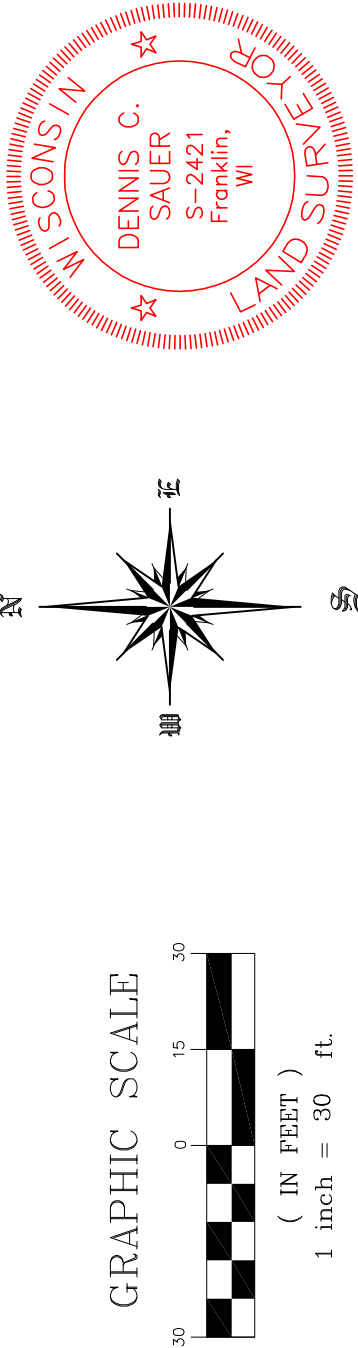
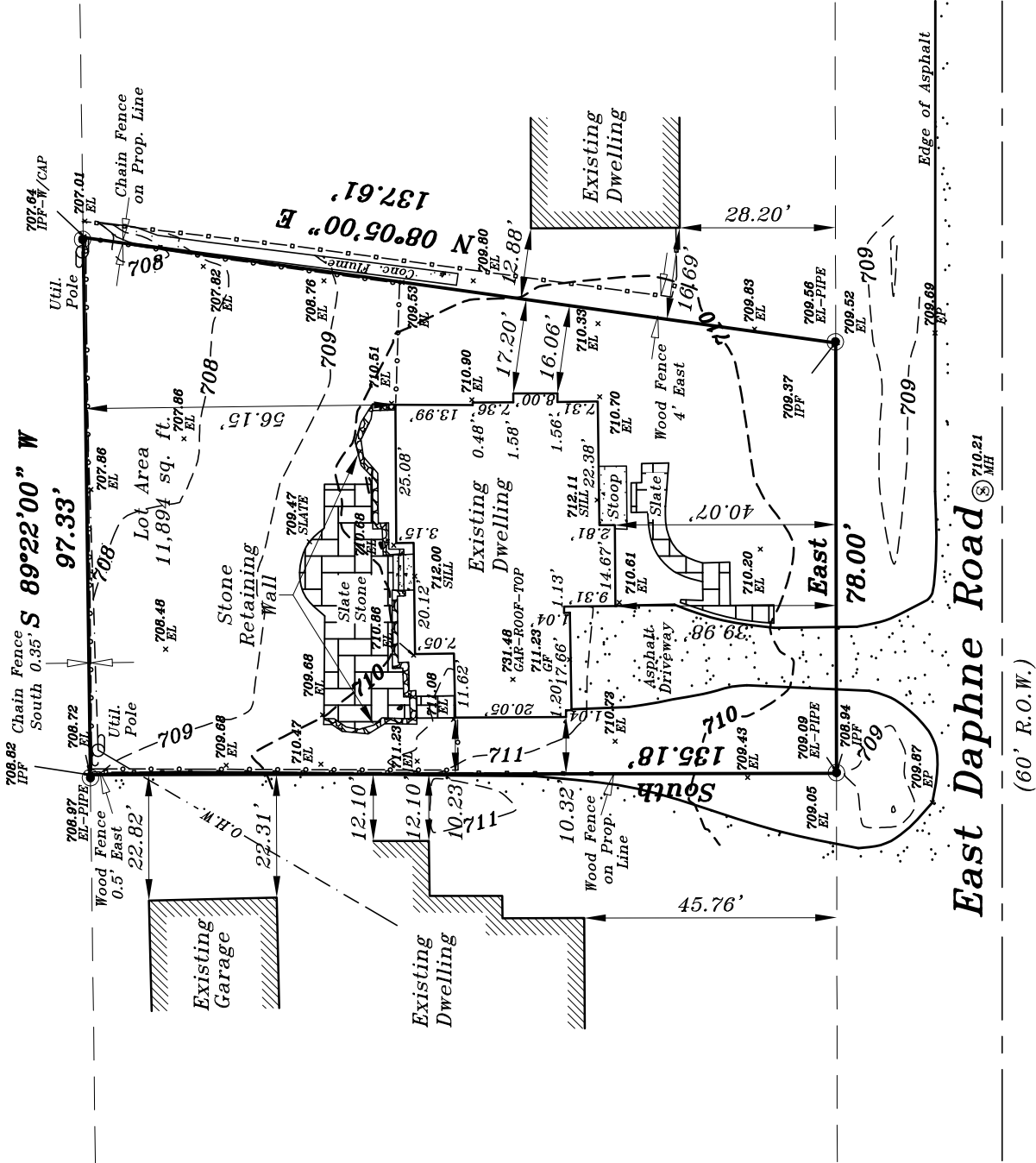
LOCATION: 414 East Daphne Road, Fox Point, Wisconsin

LEGAL DESCRIPTION:

Lot 3 in Block 3 in BIRCHWOOD, being a Subdivision of a part of the Southwest 1/4 of Section 21, Town 8 North, Range 22 East, in the Village of Fox Point, Milwaukee County, Wisconsin.

April 29, 2024

Survey No. 114959



METROPOLITAN SURVEY SERVICE, INC.

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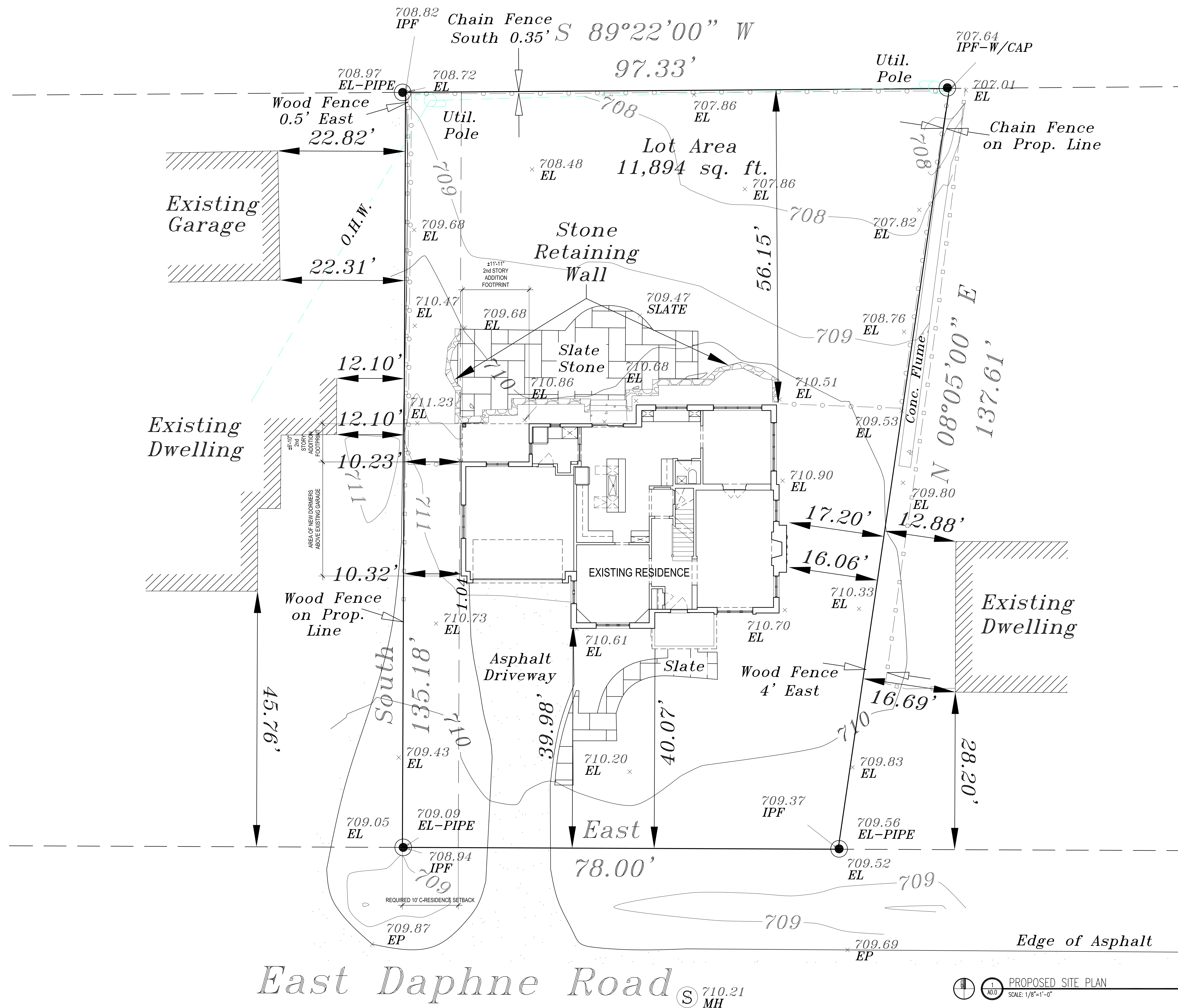
● — Denotes Iron Pipe Found
○ — Denotes Iron Pipe Set

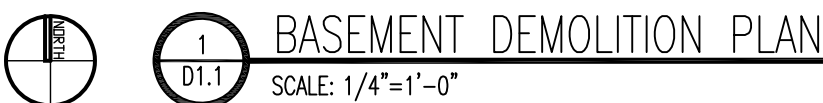
I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY, ITS EXTERIOR BOUNDARIES, THE LOCATION OF ALL VISIBLE STRUCTURES AND DIMENSIONS OF ALL PRINCIPAL BUILDINGS THEREON, BOUNDARY FENCES, APPARENT EASEMENTS AND ROADWAYS AND VISIBLE ENCROACHMENT, IF ANY.

THIS SURVEY IS MADE FOR THE EXCLUSIVE USE OF THE PRESENT OWNERS OF THE PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE, OR GUARANTEE THE TITLE THERETO WITHIN ONE (1) YEAR FROM THE DATE HEREOF.

SIGNED

Dennis C. Sauer
Professional Land Surveyor S-2421





D1.1

A1.1

1. FIELD VERIFY ALL DIMENSIONS, ELEVATIONS ARE AN INDICATION OF DESIGN INTENT - DIMENSIONS WILL VARY FROM ELEVATIONS. DO NOT SCALE DRAWINGS, IN CASES WHERE DIMENSIONS ARE NOT CLEAR, THE DIMENSIONS ARE TO BE VERIFIED BY REQUESTS FOR INFORMATION (RFI). ALL EXTERIOR DIMENSIONS ARE TO EXTERIOR FACE OF FRAMING / FOOTING. ALL INTERIOR DIMENSIONS ARE TO FINISHED FACE OF WALL.
2. PROVIDE ONE LAYER MINIMUM 5/8" TYPE-X GYPSUM BOARD AT CEILINGS, TYPICAL.
3. ALL BEDROOM WINDOWS HAVE NET CLEAR OPENING DIMENSION OF AT LEAST 20" X 24" IRRESPECTIVE OF HEIGHT OR WIDTH TO ALLOW FOR EGRESS.
4. PROVIDE WEATHER RESISTIVE BARRIER AT ALL NEW WOOD FRAMED EXTERIOR WALL IN-FILL. PROVIDE R-21 MINIMUM BATT INSULATION AT EXTERIOR STUD WALL IN-FILL WITH VAPOR BARRIER AT INTERIOR FACE OF STUD WALL. PROVIDE CODE REQUIRED INSULATION AND VAPOR BARRIER ON INTERIOR FACE OF STUDS AT EXISTING SECOND FLOOR KNEE WALL LOCATIONS.
5. ALL ROOMS TO HAVE 8% MINIMUM NATURAL LIGHT THROUGH WINDOW OPENINGS, AND 3.5% MINIMUM NATURAL VENTILATION THROUGH OPERABLE WINDOWS.
6. PROVIDE MINIMUM 2X FIRE BLOCKING AT FLOOR TO CEILING INTERSECTION WITH INTERVENING STUD CAVITIES.
7. GC TO COORDINATE WITH STRUCTURAL IN FIELD FOR FRAMING REQUIREMENTS. GC TO COORDINATE AND VERIFY THE LOAD BEARING CAPACITY OF EXISTING SECOND-FLOOR FRAMING SYSTEM.
8. FUTURE SELECTION, AND COORDINATION INTO ALL ASPECTS OF THE WORK, IS THE RESPONSIBILITY OF THE AND GC. FIELD VERIFY IF ANY DIMENSIONS, DIMENSIONS ARE AN INDICATION OF DESIGN INTENT ONLY - DIMENSIONS WILL VARY IN FIELD. OWNER AND GC ARE RESPONSIBLE FOR COORDINATION WITH FURNITURE MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION AND OPERATION PER MANUFACTURER'S RECOMMENDATIONS.
9. NEW WOOD FLOOR TO MATCH EXISTING FIRST FLOOR SIZE, SPECIES AND FINISH, VERIFY WITH OWNER.
10. GC / OWNER TO COORDINATE DESIGN-BUILD MECHANICAL / PLUMBING FOR REQUIRED PENETRATIONS AND CHASES FROM BASEMENT TO FIRST FLOOR.

	NEW 2x4 INTERIOR WOOD FRAMED WALL WITH 1/2" GYPSUM BOARD UNLESS NOTED OTHERWISE
	EXISTING INTERIOR WALL TO REMAIN
	EXISTING WINDOW TO REMAIN.
	EXISTING WINDOW TO BE REPLACED. WHEN REPLACING, SEE GENERAL NOTES AND GLAZING NOTES SHEET A3.1. VERIFY NEW OPERATION W/ OWNER.
	NEW WINDOW, WIDTH x HEIGHT IN INCHES. SEE GENERAL NOTES AND GLAZING NOTES SHEET A3.1
	NEW WINDOW, WIDTH x HEIGHT IN INCHES.
	EXISTING DOOR TO REMAIN
	EXISTING CONSTRUCTION TO BE REMOVED, VERIFY IN FIELD WITH OWNER

TYPICAL: SEE SHEET G1.0, VERIFY ALL SELECTIONS WITH OWNER/ARCHITECT, VERIFY FLOORING DIRECTION AND PATTERN WITH OWNER PRIOR TO INSTALLATION

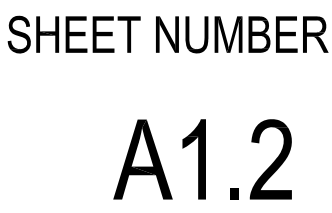
PRESUMED EXISTING FLOOR TO REMAIN. GC TO AUDIT EXISTING WOOD FLOOR LOCATIONS AND REPORT TO OWNER/ARCHITECT, EXISTING WOOD FLOOR TO BE REFINISHED

NEW WOOD FLOOR TO MATCH EXISTING

NEW TILE FLOOR

NEW CIP CONCRETE TERRACE

1. SEE A1 SHEETS FOR DOOR OPERATION TYPE AND SWING, GC TO COORDINATE.
2. PROVIDE 30" WIDE NET CLEAR OPENING PER SPS 321.035 (1).
3. GC TO VERIFY AND AUDIT ALL QUANTITIES AND ROUGH OPENING DIMENSIONS PRIOR TO ORDERING.
4. VERIFY ALL DIMENSIONS SHOWN ON PLAN AND SCHEDULE.
5. NEW DOOR, STYLE, MATERIAL AND FINISH TBD, VERIFY WITH OWNER, TYPICAL.



WINDOW + GLAZING NOTES

1) ALL WINDOWS ARE TO MEET ALL CODE REQUIREMENTS - GC TO COORDINATE WITH SUPPLIER.

2) = TEMPERED SAFETY GLASS PER CODE

3) GC TO VERIFY ALL EXISTING WINDOW AND DOOR ROUGH OPENINGS IN FIELD PRIOR TO ORDERING WINDOW UNITS.

4) GC TO VERIFY WINDOW COLOR, AND HARDWARE COLOR SELECTIONS WITH OWNER PRIOR TO ORDERING WINDOW UNITS.

5) PROVIDE TEMPERED GLASS AT ALL BATHROOM WINDOW LOCATIONS AND NEAR STAIR AND DOOR OPENINGS AS REQUIRED BY CODE. GC AND WINDOW SUPPLIER TO REVIEW AND COORDINATE FOR HAZARDOUS LOCATIONS AND RESULTANT REQUIRED SAFETY GLAZING PER SPS 321.05.

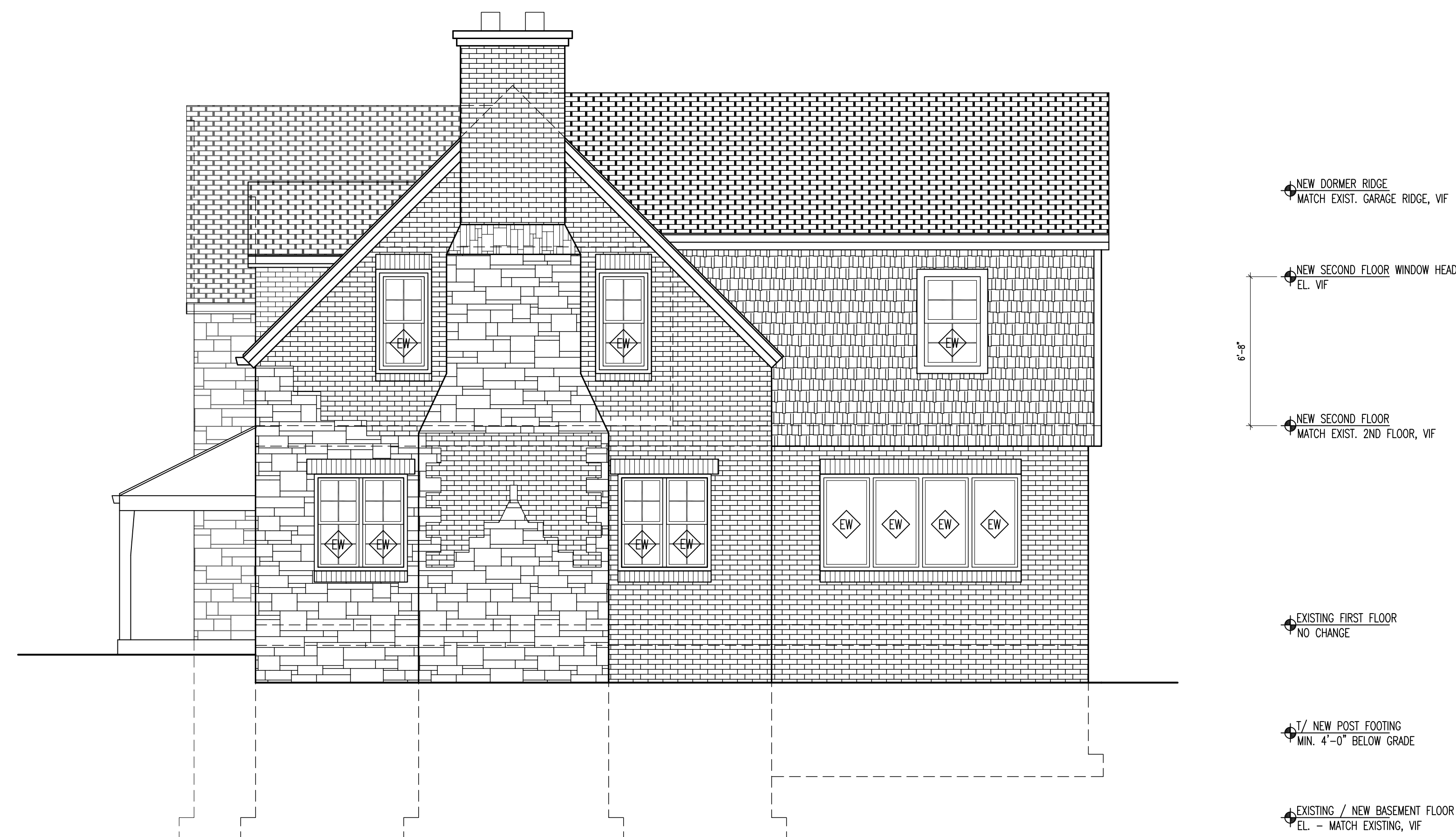
6) ALL BEDROOM WINDOWS TO HAVE NET CLEAR OPENING DIMENSION OF AT LEAST 20" X 24" IRRESPECTIVE OF HEIGHT OR WIDTH TO ALLOW FOR EGRESS; GC TO VERIFY AND REPORT.

7) WINDOW TYPE 'EW' DENOTES EXISTING WINDOWS TO REMAIN; 'EWR' DENOTES REPLACE LIKE FOR LIKE IN EXISTING OPENING.

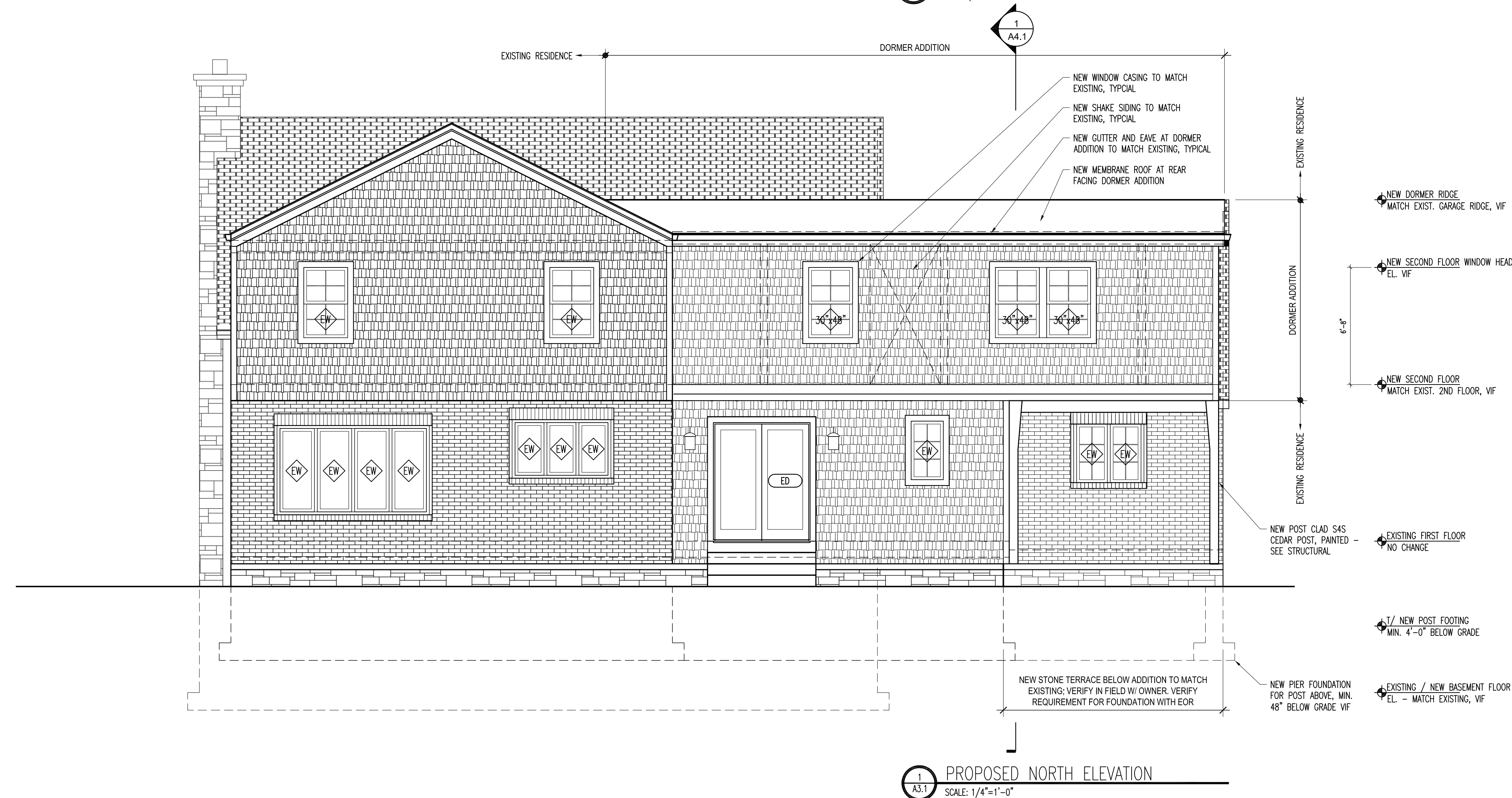
8) WINDOWS WITH SILLS 24" OR CLOSER TO FINISH FLOOR TO HAVE TEMPERED GLAZING.

9) WINDOW U-FACTOR AND SHGC TO MEET WI 322.36 REQUIREMENTS FOR FENESTRATION. NEW WINDOWS TO COMPLY WITH STATE OF WISCONSIN 322.36-1 FOR U-FACTOR AND THERMAL PERFORMANCE.

10.) WINDOW AND DOOR SIZES ARE APPROXIMATE UNIT DIMENSIONS; GC TO VERIFY WINDOW / DOOR UNIT AND ROUGH OPENING DIMENSIONS W/ SUPPLIER / MFR AND COORDINATE REQUIRED ROUGH OPENING SIZE IN FLD BASED ON MANUFACTURER'S RECOMMENDATIONS.



2
A3.1 PROPOSED EAST ELEVATION
SCALE: 1/4"=1'-0"



1
A3.1 PROPOSED NORTH ELEVATION
SCALE: 1/4"=1'-0"

[illegible]

ISSUED FOR REVIEW
NOT FOR CONSTRUCTION

SCALE:	As Noted
COMPUTER FILE:	

DRAWN BY:
PLOT DATE: JULY 22, 2024
JOB NUMBER:
TITLE: EXTERIOR ELEVATIONS

SHEET NUMBER

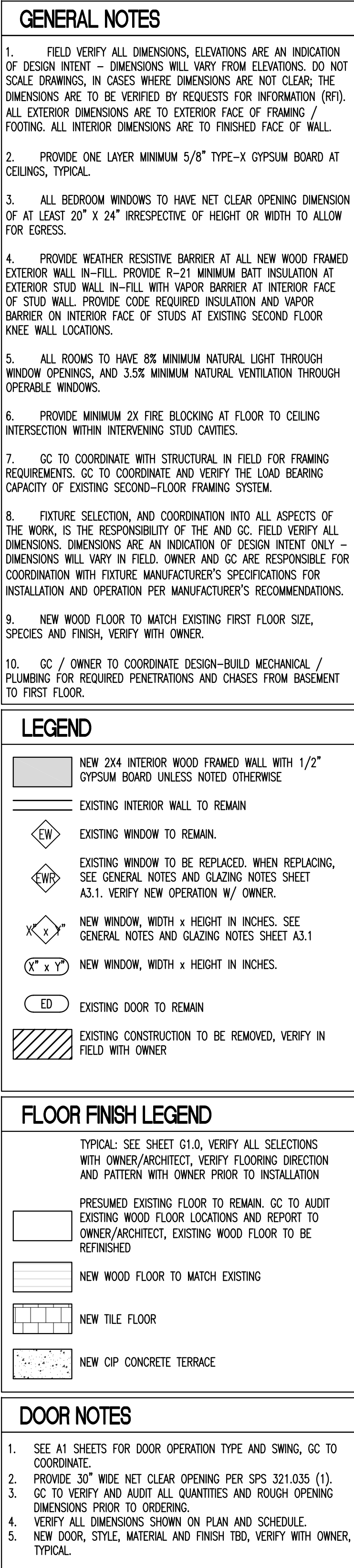
A3.1



A7.1

GUEST BATH ELEVATION





FLOOR FINISH LEGEND

- TYPICAL: SEE SHEET G1.0, VERIFY ALL SELECTIONS
WITH OWNER/ARCHITECT, VERIFY FLOORING DIRECTION
AND PATTERN WITH OWNER PRIOR TO INSTALLATION

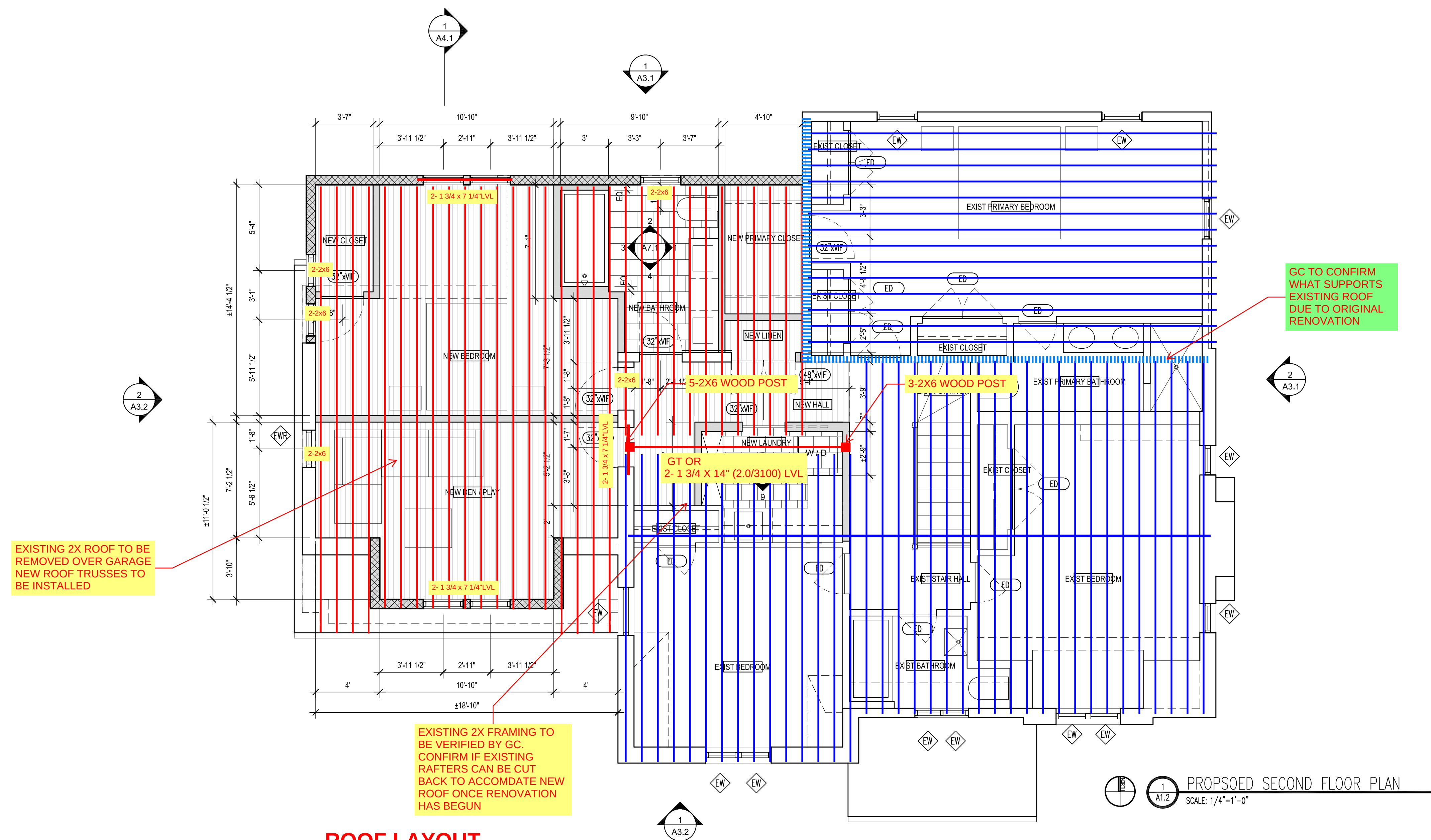
- ## DOOR NOTES

- [illegible]

SCALE: As Noted
COMPUTER FILE:

PROPOSED
SECOND FLOOR PLAN

A1.2

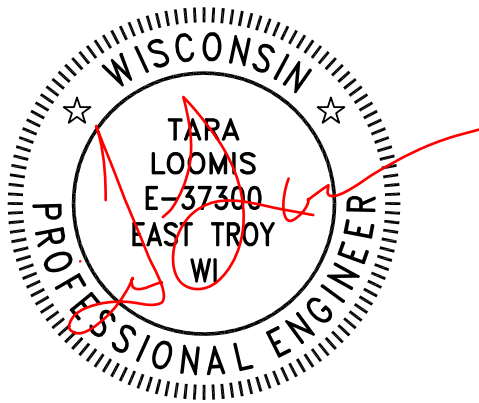


STRUCTURAL CALCULATIONS

For

Gulbrandsen Residence

414 East Daphne Road
Fox Point, WI 53217



By

LT Engineering LLC

Tara M Loomis, PE

East Troy, WI 53120
(262)488-0192

July 30, 2024

Loads

$$\begin{aligned} DL &= 20 \text{ psf} \\ SL &= 30 \text{ psf} \end{aligned} > \text{Roof}$$

$$\begin{aligned} DL &= 25 \text{ psf} \\ LL &= 40 \text{ psf} \end{aligned} > \text{Floor}$$

DaphNE

NEW Garage Roof

Beam 1

$$\text{Span} = 20'-0"$$

$$DL = 20 (15')$$

$$SL = 30 (15')$$

$$2-20" \text{ LVL}$$

USE ROOF TRUSSES

$$\begin{aligned} R \times N &= 3.2/4.5 \\ &= 7.7K \end{aligned}$$

Beam 2

$$\text{Span} = 14'-0"$$

$$DL = 20 (18)$$

$$SL = 30 (18)$$

$$2-16" \text{ LVL}$$

$$\begin{aligned} R \times N &= 26/3.8 \\ &= 6.4 \end{aligned}$$

Roof Joist 1

$$\begin{aligned} \text{Span} &= 17'-0" \\ DL &= 20 \\ SL &= 30 \end{aligned}$$

USE TRUSSES

$$1\frac{3}{4} \times 9\frac{1}{4} \text{ LVL @ } 16" \text{ OC}$$

Roof Joist 2

$$\begin{aligned} \text{Span} &= 10' \\ 2 \times 8 \text{ DFL NO 2 @ } 16" \text{ OC} \end{aligned}$$

USE TRUSSES

New Headers

Header A

Span = 5'-6"

DL = 20 (18')

SL = 30 (18')

2-7'1/4 LVL $R \times N = 2.5K$

Header D

Span = 3'-0"

20/318



2-7'1/4 LVL $R \times N = 3.1/4.2$
7.3

Header B

Span = 3'-0"

DL = 20 (18)

SL = 30 (18)

2-2x6 SP#1/2 $R \times N = 1.4K$

Floor Joists

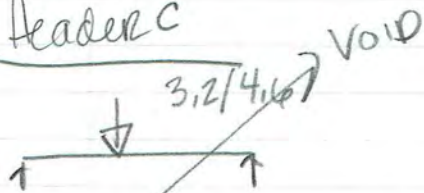
Span = 10'-0"

DL = 20 psf

LL = 40

2x8 @ 16" oc

Header C



2-7'1/4 LVL $R \times N = 1.8/2.5$

Beam 4

Span = 6'-10"

DL = 25 (6)

LL = 40 (6)

DL = 100 pif

2-7'1/4 LVL



$R \times N = 1.8K$

Beam 5

Span = 12'

DL = 25 (1.33)

UL = 40 (1.33)

W wall - 100 plf

DL = 20 (16)

SL = 30 (16)

2-16" LVL

R_xN = 58K

Header E

Span = 6'-0"

DL = 25 (10)

UL = 40 (10)

W + wall = 100

DL = 20 (4)

SL = 30 (4)

Min (2) 2x10 C existing Window

Beam 7

Span = 16'-0"

DL = 20 (4)

SL = 30 (4)

2-14" LVL

DL = 20 (16) 0 to 3
13 to 16

SL = 30 (16) 0 to 3
13 to 16

Beam 6

Span = 18'-0"

DL = 25 (2)

UL = 40 (2)

DL = 20 (16)

SL = 30 (16)



P_D = 1.1 c6' / 11.5

P_S = 1.5 c6' / 11.5

3-16" LVL

R_xN = 8.1K

Header F

Span = 6'-0"

DL = 25 (6)

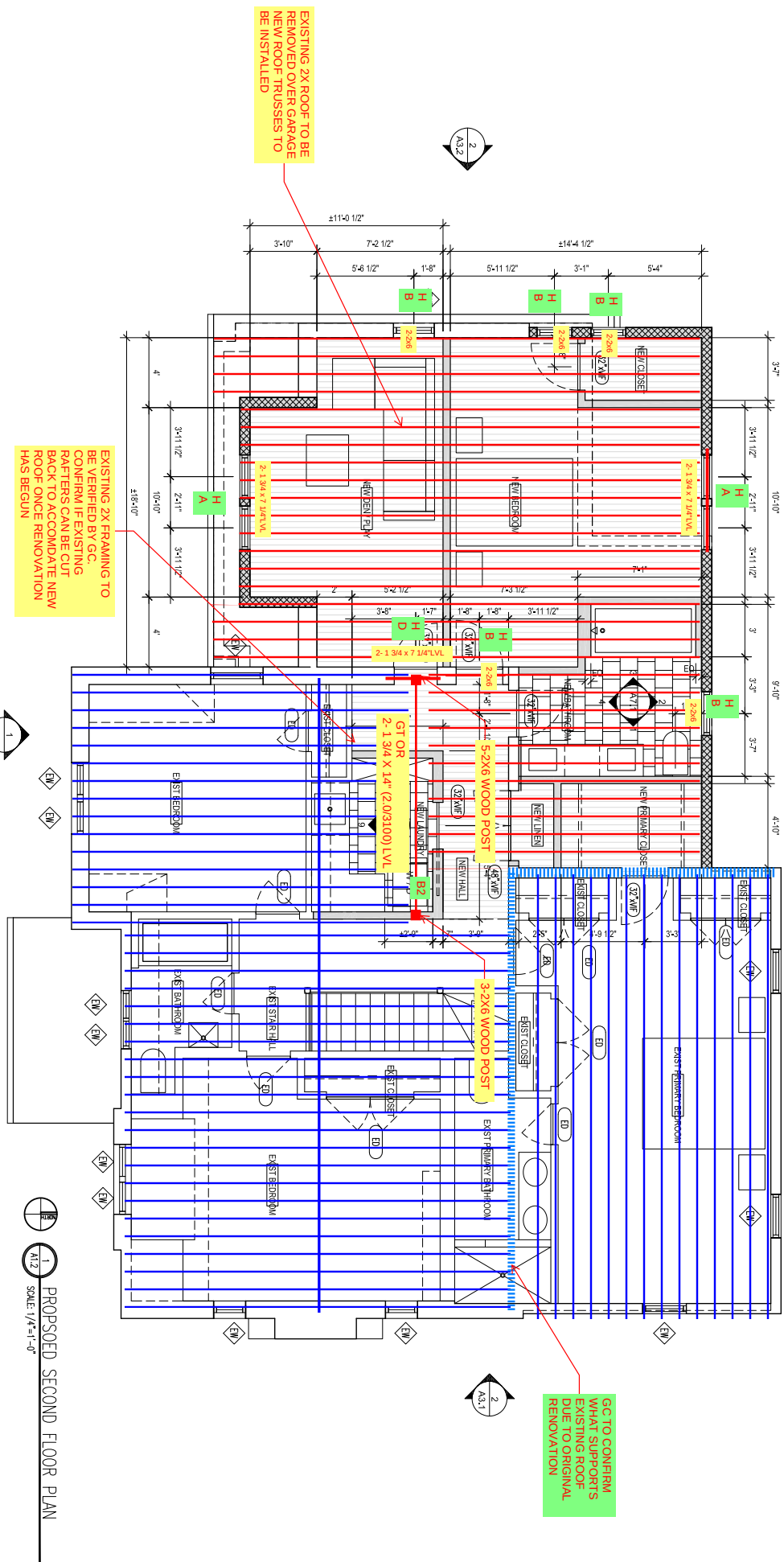
UL = 40 (6)

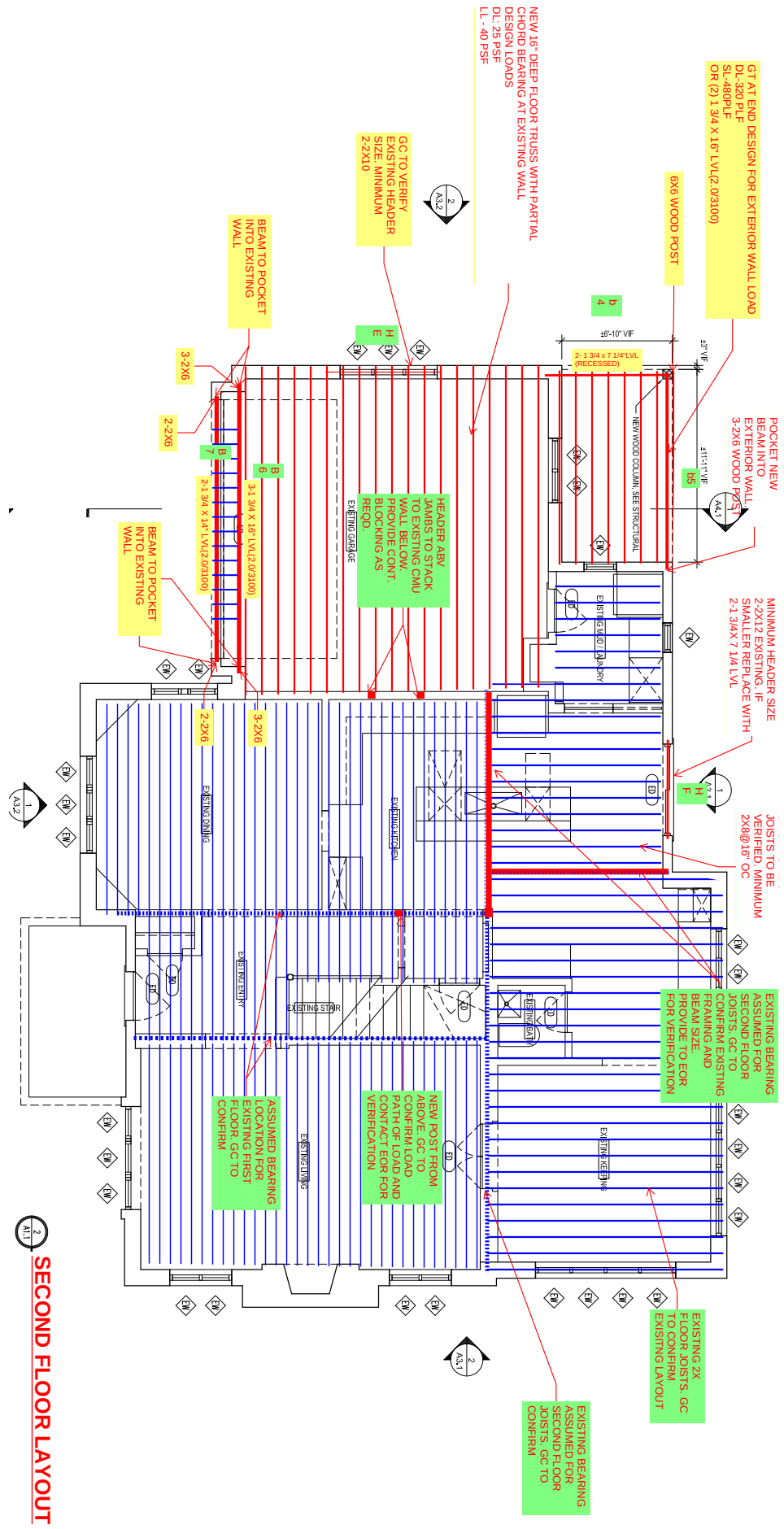
DL = 20 (16)

SL = 30 (16)

2-7 1/4" LVL R_xN = 3.3K

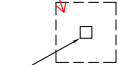
ROOF LAYOUT





SECOND FLOOR LAYOUT

NEW 30"X30"X12" FOOTING WITH 3#4
BTM BARS EACH WAY,
WITH 16X16 PIER WITH 4#5 VERTICALS
AND #3 TIES AT 12" OC.
PROVIDE SIMPSON AUB66Z POST BASE
FOR NEW WOOD POST.



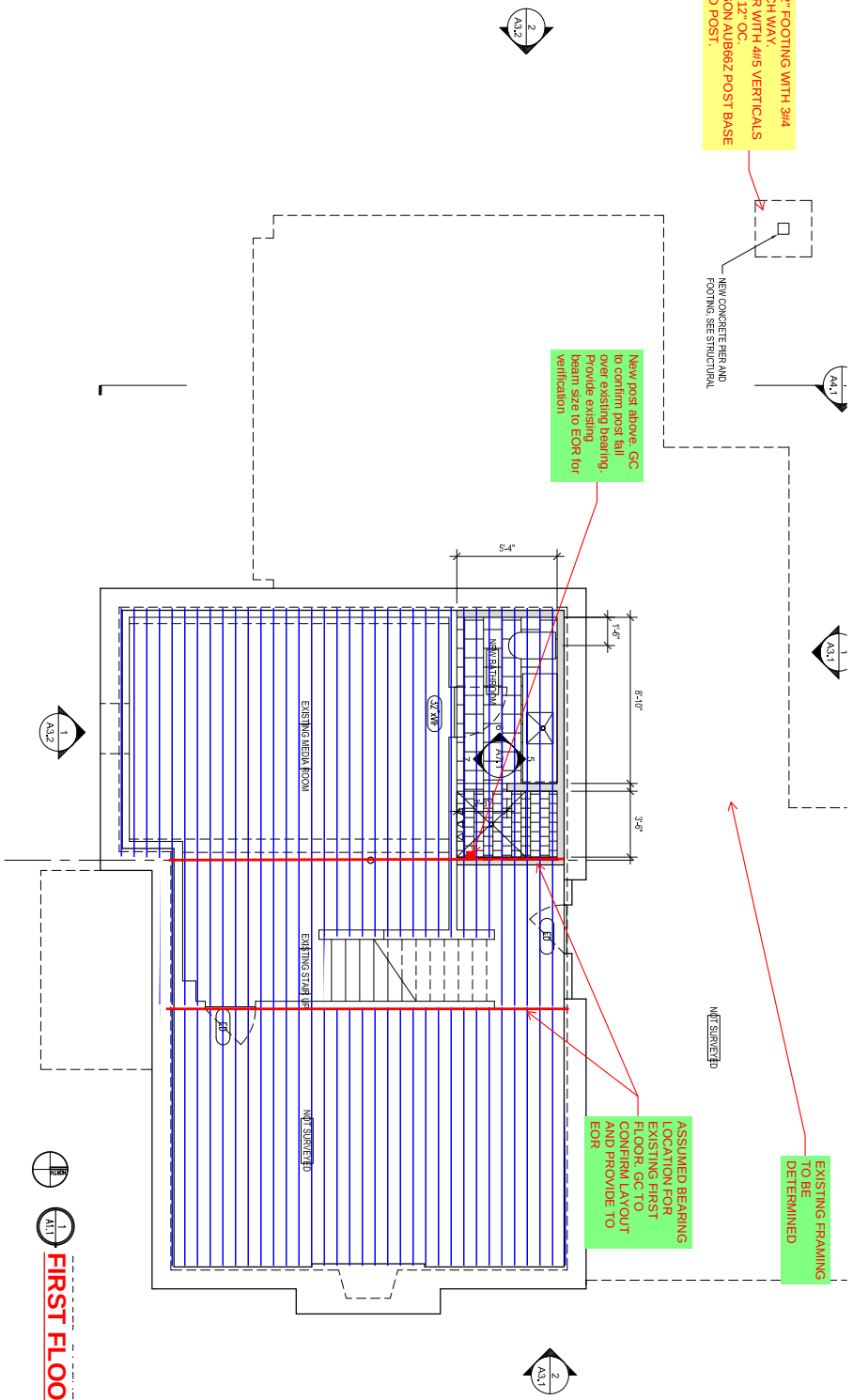
NEW CONCRETE PIER AND
FOOTING. SEE STRUCTURAL

New post above, GC
to confirm post fall
over existing bearing.
Provide existing
beam size to EOR for
verification

ASSUMED BEARING
LOCATION FOR
EXISTING FIRST
FLOOR, GC TO
CONFIRM LAYOUT
AND PROVIDE TO
EOR

EXISTING FRAMING
TO BE
DETERMINED

NOT SURVEYED



FIRST FLOOR LAYOUT



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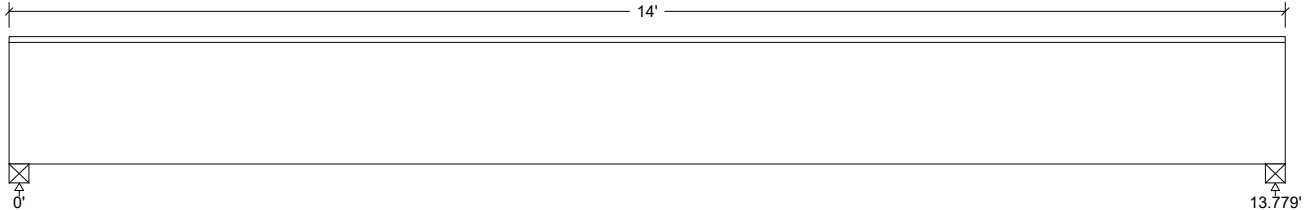
BEAM 2

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00(18.00')	psf
Load2	Snow	Full Area			30.00(18.00')	psf
Self-weight	Dead	Full UDL			16.1	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:	2631	2631
Dead	3780	3780
Snow		
Factored:		
Total	6411	6411
Bearing:		
Capacity		
Beam	6949	6949
Support	6411	6411
Des ratio		
Beam	0.92	0.92
Support	1.00	1.00
Load comb	#2	#2
Length	2.65	2.65
Min req'd	2.65**	2.65**
Cb	1.00	1.00
Cb min	1.00	1.00
Cb support	1.11	1.11
Fcp sup	625	625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 2

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x16", 2-ply (3-1/2"x16")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 14.0'; Clear span: 13.563'; Volume = 5.4 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 134$	$F_v' = 328$	psi	$f_v/F_v' = 0.41$
Bending(+)	$f_b = 1747$	$F_b' = 3429$	psi	$f_b/F_b' = 0.51$
Live Defl'n	$0.20 = L/827$	$0.46 = L/360$	in	0.43
Total Defl'n	$0.41 = L/464$	$0.69 = L/240$	in	0.59

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	LC#
Fv'	285	1.15	-	1.00	-	-	-	-	1.00	-	2
Fb'+	3100	1.15	-	1.00	1.000	0.962	-	1.00	1.00	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	1.00	-	-	-	-	-	1.00	-	2
Eminy'	1.06 million	-	1.00	-	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 6312, V design = 4989 (NDS 3.4.3.1(a)) lbs; M(+) = 21744 lbs-ft

EI = 1254.38e06 lb-in²/ply GA = 7.35e06 lb

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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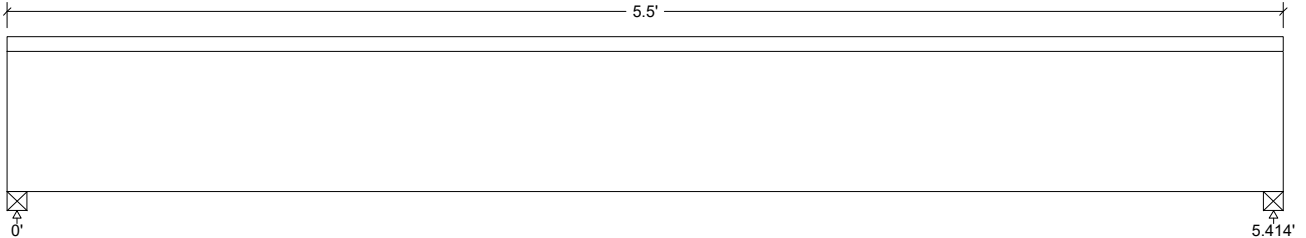
header A

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00(18.00')	psf
Load2	Snow	Full Area			30.00(18.00')	psf
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1010		1010
Snow	1485		1485
Factored:			
Total	2495		2495
Bearing:			
Capacity			
Beam	2704		2704
Support	2495		2495
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	1.03		1.03
Min req'd	1.03**		1.03**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

HEADER A

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D Fir-L No.2

Total length: 5.5'; Clear span: 5.313'; Volume = 1.0 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Fv = 110	FV' = 328	psi	Fv/FV' = 0.34
Bending(+)	Fb = 1301	Fb' = 3818	psi	Fb/Fb' = 0.34
Live Defl'n	0.05 = < L/999	0.18 = L/360	in	0.30
Total Defl'n	0.11 = L/603	0.27 = L/240	in	0.40

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	LC#
Fv'	285	1.15	-	1.00	-	-	-	-	1.00	-	2
Fb'+	3100	1.15	-	1.00	1.000	1.071	-	1.00	1.00	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S

Bending(+): LC #2 = D + S

Deflection: LC #2 = D + S (live)

LC #2 = D + S (total)

Bearing : Support 1 - LC #2 = D + S

Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 2456, V design = 1869 (NDS 3.4.3.1(a)) lbs; M(+) = 3325 lbs-ft

EI = 116.70e06 lb-in^2/ply GA = 3.33e06 lb

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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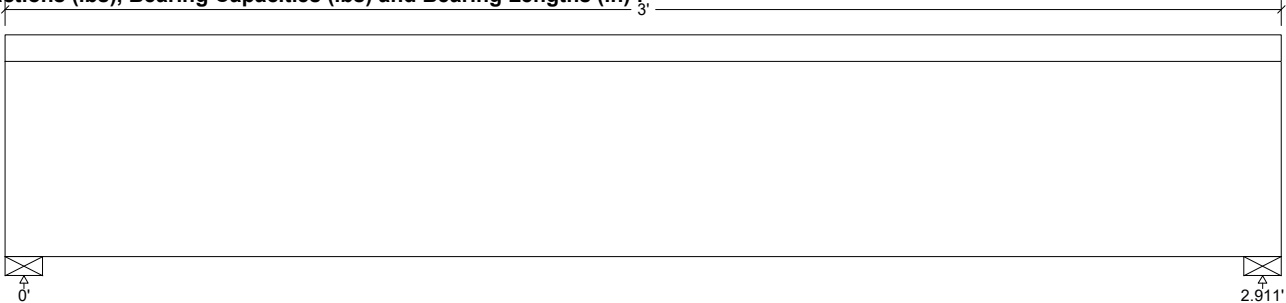
header B

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00(18.00')	psf
Load2	Snow	Full Area			30.00(18.00')	psf
Self-weight	Dead	Full UDL			3.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	545		545
Snow	810		810
Factored:			
Total	1355		1355
Bearing:			
Capacity			
Beam	1355		1355
Support	2241		2241
Des ratio			
Beam	1.00		1.00
Support	0.60		0.60
Load comb	#2		#2
Length	1.06		1.06
Min req'd	1.06		1.06
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.12		1.12
Fcp sup	625		625

HEADER B

Lumber n-ply, S-P-F, No.1/No.2, 2x6, 2-ply (3"x5-1/2")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 3.0'; Clear span: 2.813'; Volume = 0.3 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 78$	$F_v' = 155$	psi	$f_v/F_v' = 0.50$
Bending(+)	$f_b = 759$	$F_b' = 1308$	psi	$f_b/F_b' = 0.58$
Live Defl'n	$0.01 = < L/999$	$0.10 = L/360$	in	0.15
Total Defl'n	$0.03 = < L/999$	$0.15 = L/240$	in	0.21

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CF	Cfu	Cr	Cfrt	Ci	LC#
Fv'	135	1.15	1.00	1.00	-	-	-	-	1.00	1.00	2
Fb'+	875	1.15	1.00	1.00	1.000	1.300	-	1.00	1.00	1.00	2
Fcp'	425	-	1.00	1.00	-	-	-	-	1.00	1.00	-
E'	1.4 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2
Emin'	0.51 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 1315, V design = 861 (NDS 3.4.3.1(a)) lbs; M(+) = 957 lbs-ft

EI = 29.12e06 lb-in²/ply

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.
- BUILT-UP BEAMS:** it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.



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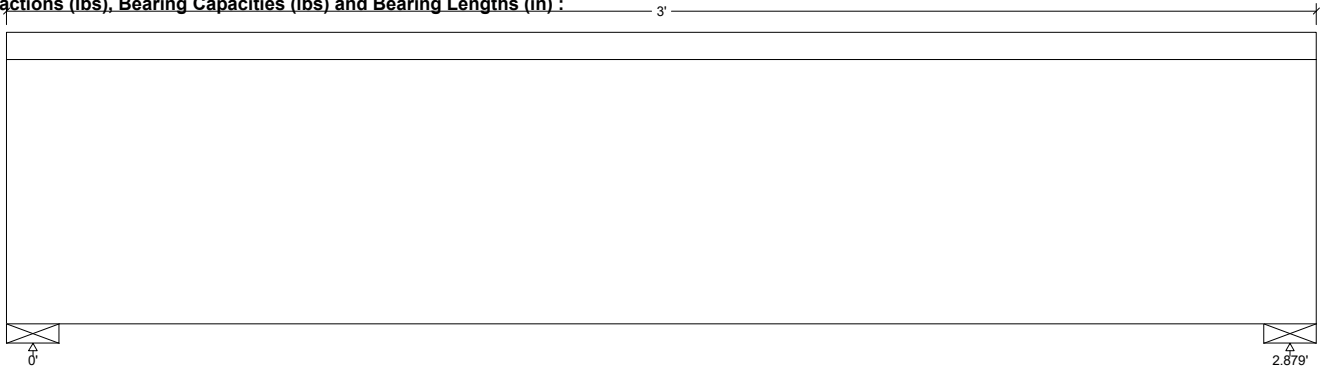
HEADER D

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00(4.00')	psf
Load2	Snow	Full Area			30.00(4.00')	psf
Load3	Dead	Point		1.50	2600	lbs
Load5	Snow	Point		1.50	3800	lbs
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1431		1431
Snow	2080		2080
Factored:			
Total	3511		3511
Bearing:			
Capacity			
Beam	3805		3805
Support	3511		3511
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	1.45		1.45
Min req'd	1.45**		1.45**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

HEADER c

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D Fir-L No.2
Total length: 3.0'; Clear span: 2.75'; Volume = 0.5 cu.ft.
Lateral support: top = continuous, bottom = at supports;
This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 199$	$F_v' = 328$	psi	$f_v/F_v' = 0.61$
Bending(+)	$f_b = 1887$	$F_b' = 3818$	psi	$f_b/F_b' = 0.49$
Live Defl'n	$0.03 = < L/999$	$0.10 = L/360$	in	0.28
Total Defl'n	$0.06 = L/627$	$0.14 = L/240$	in	0.38

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	LC#
F_v'	285	1.15	-	1.00	-	-	-	-	1.00	-	2
F_b'	3100	1.15	-	1.00	1.000	1.071	-	1.00	1.00	-	2
F_{cp}'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
E_{min}'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S
Bending(+): LC #2 = D + S
Deflection: LC #2 = D + S (live)
LC #2 = D + S (total)
Bearing : Support 1 - LC #2 = D + S
Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, =no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

$V_{max} = 3498$, $V_{design} = 3361$ (NDS 3.4.3.1(a)) lbs; $M(+)$ = 4822 lbs-ft
 $EI = 116.70e06$ lb-in²/ply $GA = 3.33e06$ lb
"Live" deflection is due to all non-dead loads (live, wind, snow...)
Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus $G = E/16$.



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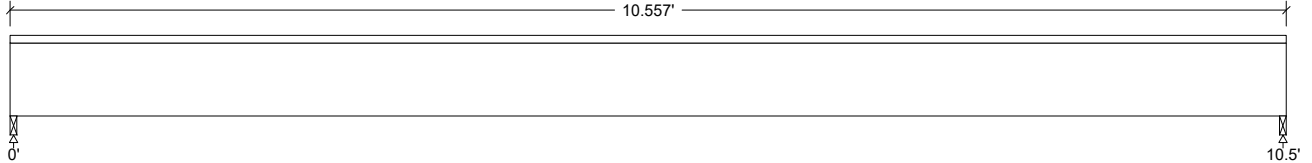
FLOOR JISTS

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00(16.0")	psf
Load2	Live	Full Area			40.00(16.0")	psf
Self-weight	Dead	Full UDL			2.2	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	152		152
Live	282		282
Factored:			
Total	434		434
Bearing:			
Capacity			
Joist	434		434
Support	797		797
Des ratio			
Joist	1.00		1.00
Support	0.54		0.54
Load comb	#2		#2
Length	0.68		0.68
Min req'd	0.68		0.68
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.25		1.25
Fcp sup	625		625

FLOOR JOISTS

Lumber-soft, S-P-F, No.1/No.2, 2x8 (1-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Floor joist spaced at 16.0" c/c; Total length: 10.56'; Clear span: 10.438'; Volume = 0.8 cu.ft.

Lateral support: top = continuous, bottom = at supports; Repetitive factor: applied where permitted (refer to online help);

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 52$	$F_v' = 135$	psi	$f_v/F_v' = 0.39$
Bending(+)	$f_b = 1034$	$F_b' = 1207$	psi	$f_b/F_b' = 0.86$
Live Defl'n	$0.22 = L/576$	$0.26 = L/480$	in	0.83
Total Defl'n	$0.40 = L/317$	$0.52 = L/240$	in	0.75

Additional Data:

FACTORS:	F/E(ksi)	CD	CM	Ct	CL	CF	Cfu	Cr	Cfrt	Ci	LC#
Fv'	135	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Fb'+	875	1.00	1.00	1.00	1.000	1.200	-	1.15	1.00	1.00	2
Fcp'	425	-	1.00	1.00	-	-	-	-	1.00	1.00	-
E'	1.4 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2
Emin'	0.51 million	1.00	1.00	-	-	-	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + L
Bending(+): LC #2 = D + L
Deflection: LC #2 = D + L (live)
LC #2 = D + L (total)
Bearing : Support 1 - LC #2 = D + L
Support 2 - LC #2 = D + L

D=dead L=live

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 432, V design = 380 (NDS 3.4.3.1(a)) lbs; M(+) = 1133 lbs-ft

EI = 66.69e06 lb-in^2

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.



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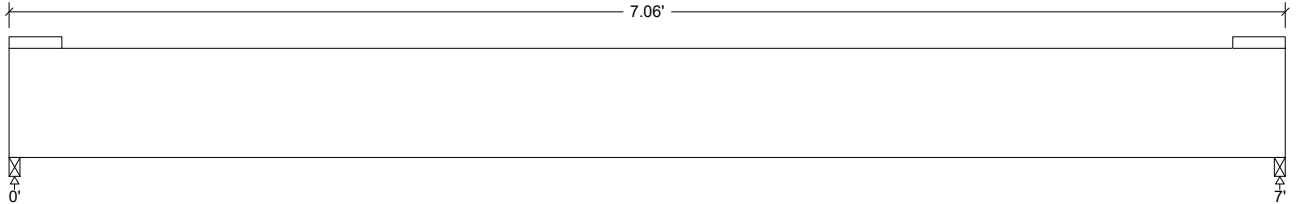
BEAM 4

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			25.00(6.00')	psf
Load2	Live	Full Area			40.00(6.00')	psf
Load3	Dead	Full UDL			100.0	plf
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	908		908
Live	847		847
Factored:			
Total	1755		1755
Bearing:			
Capacity			
Beam	1903		1903
Support	1755		1755
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	0.72		0.72
Min req'd	0.72**		0.72**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEA, 4

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 7.06'; Clear span: 6.938'; Volume = 1.2 cu.ft.

Lateral support: top = at supports, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Fv = 84	Fv' = 285	psi	Fv/Fv' = 0.30
Bending(+)	Fb = 1192	Fb' = 2736	psi	Fb/Fb' = 0.44
Live Defl'n	0.06 = < L/999	0.23 = L/360	in	0.27
Total Defl'n	0.16 = L/520	0.35 = L/240	in	0.46

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	LC#
Fv'	285	1.00	-	1.00	-	-	-	-	1.00	-	2
Fb'+	3100	1.00	-	1.00	0.824	1.071	-	1.00	1.00	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + L
Bending(+): LC #2 = D + L
Deflection: LC #2 = D + L (live)
LC #2 = D + L (total)
Bearing : Support 1 - LC #2 = D + L
Support 2 - LC #2 = D + L

D=dead L=live

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 1741, V design = 1425 (NDS 3.4.3.1(a)) lbs; M(+) = 3046 lbs-ft

EI = 116.70e06 lb-in^2/ply GA = 3.33e06 lb

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Lateral stability(+): Lu = 7.00' Le = 13.25' RB = 19.4; b = single ply width

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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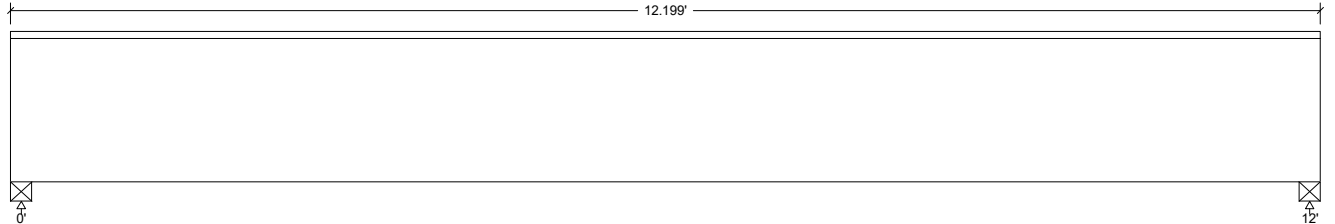
BEAM 5

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			25.00(1.33')	psf
Load2	Live	Full Area			40.00(1.33')	psf
Load3	Dead	Full UDL			100.0	plf
Load4	Dead	Full Area			20.00(16.00')	psf
Load5	Snow	Full Area			30.00(16.00')	psf
Self-weight	Dead	Full UDL			16.1	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	2861		2861
Live	325		325
Snow	2928		2928
Factored:			
Total	5789		5789
Bearing:			
Capacity	6275		6275
Beam	5789		5789
Support			
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#4		#4
Length	2.39		2.39
Min req'd	2.39**		2.39**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 5

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x16", 2-ply (3-1/2"x16")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 12.19'; Clear span: 11.813'; Volume = 4.7 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 116$	$F_v' = 328$	psi	$f_v/F_v' = 0.35$
Bending(+)	$f_b = 1373$	$F_b' = 3429$	psi	$f_b/F_b' = 0.40$
Live Defl'n	$0.11 = < L/999$	$0.40 = L/360$	in	0.27
Total Defl'n	$0.26 = L/549$	$0.60 = L/240$	in	0.44

Additional Data:

FACTORS: F/E(psi) CD CM Ct CL CV Cfu Cr Cfrt Ci LC#
Fv' 285 1.15 - 1.00 - - - 1.00 - 4
Fb'+ 3100 1.15 - 1.00 1.000 0.962 - 1.00 1.00 - 4
Fcp' 750 - - 1.00 - - - 1.00 - -
E' 2.1 million - 1.00 - - - 1.00 - 4
Eminy' 1.06 million - 1.00 - - - 1.00 - 4

CRITICAL LOAD COMBINATIONS:

Shear : LC #4 = D + S
Bending(+): LC #4 = D + S
Deflection: LC #4 = D + S (live)
LC #4 = D + S (total)
Bearing : Support 1 - LC #4 = D + S
Support 2 - LC #4 = D + S

D=dead L=live S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 5696, V design = 4336 (NDS 3.4.3.1(a)) lbs; M(+) = 17089 lbs-ft
EI = 1254.38e06 lb-in²/ply GA = 7.35e06 lb
"Live" deflection is due to all non-dead loads (live, wind, snow...)
Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: It is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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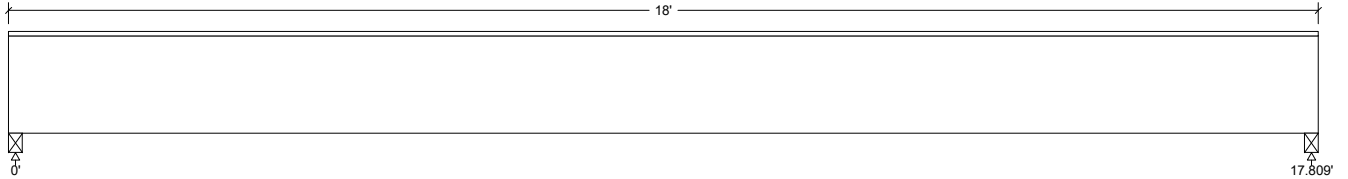
BEAM 6

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			25.00(2.00')	psf
Load3	Live	Full Area			40.00(2.00')	psf
Load4	Dead	Partial Area		0.00 6.00	20.00(16.00')	psf
Load5	Dead	Partial Area		12.00 18.00	20.00(16.00')	psf
Load6	Snow	Partial Area		0.00 6.00	30.00(16.00')	psf
Load7	Snow	Partial Area		12.00 18.00	30.00(16.00')	psf
Load8	Snow	Point		6.00	1500	lbs
Load9	Snow	Point		12.00	1500	lbs
Load10	Dead	Point		12.00	1100	lbs
Load11	Dead	Point		6.00	1100	lbs
Self-weight	Dead	Full UDL			24.2	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	3686		3686
Live	720		720
Snow	4380		4380
Factored:			
Total	8066		8066
Bearing:			
Capacity			
Beam	9033		9033
Support	8066		8066
Des ratio			
Beam	0.89		0.89
Support	1.00		1.00
Load comb	#4		#4
Length	2.29		2.29
Min req'd	2.29**		2.29**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.07		1.07
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 6

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x16", 3-ply (5-1/4"x16")

Supports: All - Timber-soft Beam, D Fir-L No.2

Total length: 18.0'; Clear span: 17.625'; Volume = 10.5 cu.ft.

Lateral support: top = continuous, bottom = at supports; Repetitive factor: applied where permitted (refer to online help);

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 120$	$F_v' = 328$	psi	$f_v/F_v' = 0.37$
Bending(+)	$f_b = 1727$	$F_b' = 3567$	psi	$f_b/F_b' = 0.48$
Live Defl'n	$0.30 = L/709$	$0.59 = L/360$	in	0.51
Total Defl'n	$0.69 = L/399$	$0.89 = L/240$	in	0.78

Additional Data:

FACTORS: F/E(psi) CD CM Ct CL CV Cfu Cr Cfrt Ci LC#
Fv' 285 1.15 - 1.00 - - - 1.00 - 4
Fb' 3100 1.15 - 1.00 1.000 0.962 - 1.04 1.00 - 4
Fcp' 750 - - 1.00 - - - 1.00 - -
E' 2.1 million - 1.00 - - - 1.00 - 4
Eminy' 1.06 million - 1.00 - - - 1.00 - 4

CRITICAL LOAD COMBINATIONS:

Shear : LC #4 = D + S
Bending(+): LC #4 = D + S
Deflection: LC #4 = D + S (live)
LC #4 = D + S (total)
Bearing : Support 1 - LC #4 = D + S
Support 2 - LC #4 = D + S

D=dead L=live S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, =no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 7984, V design = 6735 (NDS 3.4.3.1(a)) lbs; M(+) = 32238 lbs-ft
EI = 1254.38e06 lb-in^2/ply GA = 11.02e06 lb
"Live" deflection is due to all non-dead loads (live, wind, snow...)
Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- System factor KH may not apply to field-assembled multi-ply beams.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



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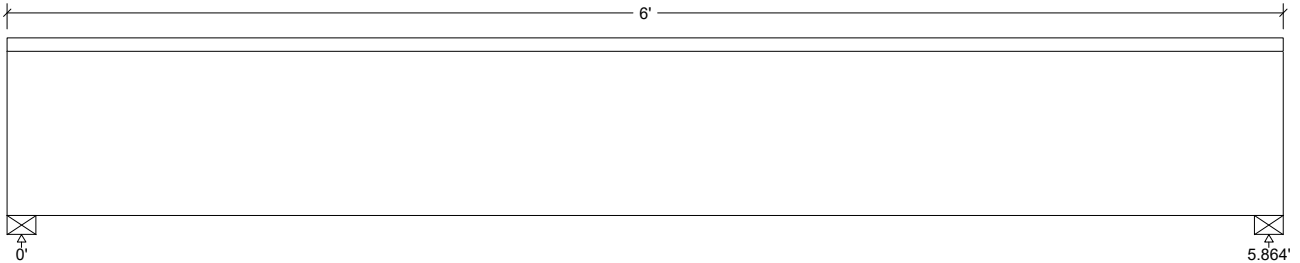
HEADER E

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			25.00(10.00')	psf
Load2	Live	Full Area			40.00(10.00')	psf
Load3	Dead	Full Area			20.00(2.00')	psf
Load4	Snow	Full Area			30.00(2.00')	psf
Self-weight	Dead	Full UDL			5.6	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	886		886
Live	1200		1200
Snow	180		180
Factored:			
Total	2086		2086
Bearing:			
Capacity			
Beam	2086		2086
Support	3452		3452
Des ratio			
Beam	1.00		1.00
Support	0.60		0.60
Load comb	#2		#2
Length	1.64		1.64
Min req'd	1.64		1.64
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.12		1.12
Fcp sup	625		625

HEADER E

Lumber n-ply, S-P-F, No.1/No.2, 2x10, 2-ply (3"x9-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 6.0'; Clear span: 5.75'; Volume = 1.2 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 79$	$F_v' = 135$	psi	$f_v/F_v' = 0.58$
Bending(+)	$f_b = 839$	$F_b' = 962$	psi	$f_b/F_b' = 0.87$
Live Defl'n	$0.04 < L/999$	$0.20 = L/360$	in	0.20
Total Defl'n	$0.08 = L/868$	$0.29 = L/240$	in	0.28

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CF	Cfu	Cr	Cf _{rt}	Ci	LC#
F _v '	135	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
F _b '	875	1.00	1.00	1.00	1.000	1.100	-	1.00	1.00	1.00	2
F _{cp} '	425	-	1.00	1.00	-	-	-	-	1.00	1.00	-
E'	1.4 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
E _{min} '	0.51 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + L
Bending(+): LC #2 = D + L
Deflection: LC #2 = D + L (live)
LC #2 = D + L (total)
Bearing : Support 1 - LC #2 = D + L
Support 2 - LC #2 = D + L

D=dead L=live S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V_{max} = 2039, V_{design} = 1456 (NDS 3.4.3.1(a)) lbs; M(+) = 2990 lbs-ft

EI = 138.50e06 lb-in²/ply

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.



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BEAM 7

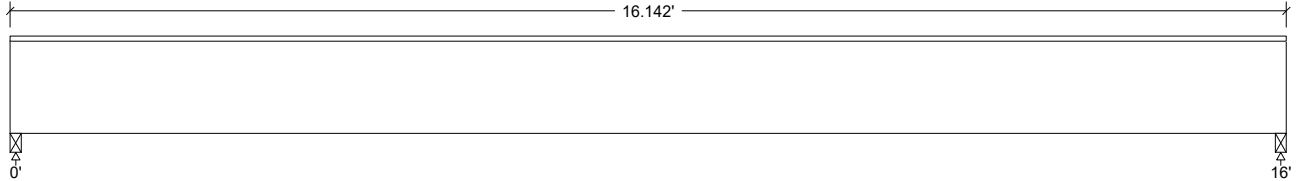
Design Check Calculation Sheet

WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load3	Snow	Full Area			30.00(4.00')	psf
Load4	Dead	Full Area			20.00(4.00')	psf
Load5	Snow	Partial Area		0.00 3.00	30.00(16.00')	psf
Load6	Snow	Partial Area		13.00 16.00	30.00(16.00')	psf
Load7	Dead	Partial Area		0.00 3.00	20.00(16.00')	psf
Load8	Dead	Partial Area		13.00 16.00	20.00(16.00')	psf
Self-weight	Dead	Full UDL			14.1	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1727		1710
Snow	2421		2396
Factored:			
Total	4149		4106
Bearing:			
Capacity			
Beam	4496		4450
Support	4149		4106
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#2		#2
Length	1.71		1.70
Min req'd	1.71**		1.70**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

BEAM 7

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x14", 2-ply (3-1/2"x14")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 16.13'; Clear span: 15.875'; Volume = 5.5 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 89$	$F_v' = 328$	psi	$f_v/F_v' = 0.27$
Bending(+)	$f_b = 1097$	$F_b' = 3490$	psi	$f_b/F_b' = 0.31$
Live Defl'n	$0.19 < L/999$	$0.53 = L/360$	in	0.35
Total Defl'n	$0.40 = L/484$	$0.80 = L/240$	in	0.50

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrr	Ci	LC#
Fv'	285	1.15	-	1.00	-	-	-	-	1.00	-	2
Fb'+	3100	1.15	-	1.00	1.000	0.979	-	1.00	1.00	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	2
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D + S

Bending(+): LC #2 = D + S

Deflection: LC #2 = D + S (live)

LC #2 = D + S (total)

Bearing : Support 1 - LC #2 = D + S

Support 2 - LC #2 = D + S

D=dead S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, _=no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

V max = 4092, V design = 2894 (NDS 3.4.3.1(a)) lbs; M(+) = 10454 lbs-ft

EI = 840.34e06 lb-in^2/ply GA = 6.43e06 lb

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

1. Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.

2. Please verify that the default deflection limits are appropriate for your application.

3. BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.

4. SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches

5. BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.

6. SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus G = E/16.



WoodWorks®
SOFTWARE FOR WOOD DESIGN

COMPANY
LT Engineering
262.488.0192
July 28, 2024 08:04

PROJECT

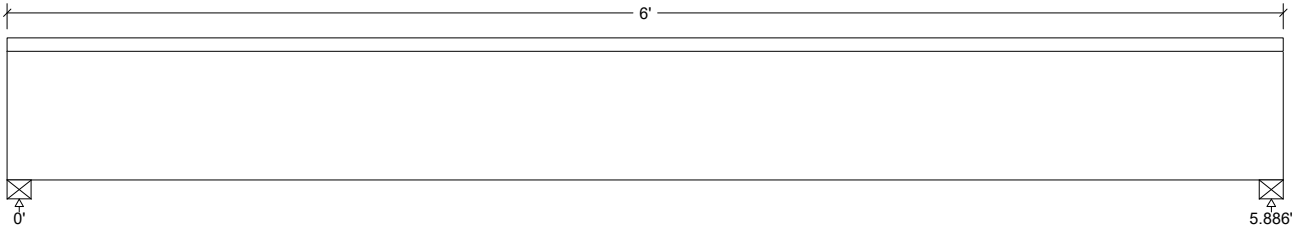
HEDER f

Design Check Calculation Sheet
WoodWorks Sizer 2023

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full Area			20.00(18.00')	psf
Load2	Snow	Full Area			30.00(18.00')	psf
Load3	Dead	Full Area			25.00(6.00')	psf
Load4	Live	Full Area			40.00(6.00')	psf
Self-weight	Dead	Full UDL			7.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1552		1552
Live	720		720
Snow	1620		1620
Factored:			
Total	3307		3307
Bearing:			
Capacity			
Beam	3584		3584
Support	3307		3307
Des ratio			
Beam	0.92		0.92
Support	1.00		1.00
Load comb	#3		#3
Length	1.37		1.37
Min req'd	1.37**		1.37**
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.11		1.11
Fcp sup	625		625

**Minimum bearing length governed by the required width of the supporting member.

HEADER f

LVL n-ply, 2.0E, 3100Fb, 1-3/4"x7-1/4", 2-ply (3-1/2"x7-1/4")

Supports: All - Timber-soft Beam, D.Fir-L No.2

Total length: 6.0'; Clear span: 5.75'; Volume = 1.1 cu.ft.

Lateral support: top = continuous, bottom = at supports;

This section PASSES the design code check.

Analysis vs. Allowable Stress and Deflection using NDS 2018 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 149$	$F_v' = 328$	psi	$f_v/F_v' = 0.45$
Bending(+)	$f_b = 1868$	$F_b' = 3818$	psi	$f_b/F_b' = 0.49$
Live Defl'n	$0.08 = L/898$	$0.20 = L/360$	in	0.40
Total Defl'n	$0.18 = L/386$	$0.29 = L/240$	in	0.62

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfvt	Ci	LC#
Fv'	285	1.15	-	1.00	-	-	-	-	1.00	-	3
Fb'+	3100	1.15	-	1.00	1.000	1.071	-	1.00	1.00	-	3
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-
E'	2.1 million	-	-	1.00	-	-	-	-	1.00	-	3
Eminy'	1.06 million	-	-	1.00	-	-	-	-	1.00	-	3

CRITICAL LOAD COMBINATIONS:

Shear : LC #3 = $D + 0.75(L + S)$
Bending(+): LC #3 = $D + 0.75(L + S)$
Deflection: LC #3 = $D + 0.75(L + S)$ (live)
LC #3 = $D + 0.75(L + S)$ (total)
Bearing : Support 1 - LC #3 = $D + 0.75(L + S)$
Support 2 - LC #3 = $D + 0.75(L + S)$

D=dead L=live S=snow

All LC's are listed in the Analysis output

Load Patterns: s=S/2, X=L+S or L+Lr, =no pattern load in this span

Load combinations: ASD Basic from ASCE 7-16 2.4

CALCULATIONS:

$V_{max} = 3244$, $V_{design} = 2516$ (NDS 3.4.3.1(a)) lbs; $M(+)$ = 4774 lbs-ft

$EI = 116.70e06$ lb-in²/ply $GA = 3.33e06$ lb

"Live" deflection is due to all non-dead loads (live, wind, snow...)

Total deflection = 1.50 permanent + "live"

Design Notes:

- Analysis and design are in accordance with the ICC International Building Code (IBC 2021) and the National Design Specification (NDS 2018), using Allowable Stress Design (ASD). Design values are from the NDS Supplement.
- Please verify that the default deflection limits are appropriate for your application.
- BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
- SCL: Structural composite lumber design has assumed: - dry service conditions - no preservative or fire-retardant treatment - no notches
- BUILT-UP SCL: Contact manufacturer for connection details when side-loaded or when loads are not applied equally to all plies.
- SCL: Shear deflection is calculated using true modulus of elasticity E and shear modulus $G = E/16$.

New Footing

$$R_N = 5.8 + 1.8 = 7.6K$$

$$\text{Use } 2\text{ft} \times 2\text{ft} \times 8\text{'' footing} \times 2\text{KSF} = 8K$$

Existing Footing Capacity

Assumed Beam 2KSF

$$\text{Assume } 2\text{ft wide footing} = 2 \times 2 = 4\text{KSF}$$

$$\begin{aligned} \text{Ext Wall Load} = & \quad DL = 20(18) = 360 \\ & SL = 30(18) = 540 \\ & DL = 20(6) = 120 \\ & LL = 40(6) = 240 \\ & \hline & 1260 \quad \text{OK} \end{aligned}$$

$$\text{Even if footing in 18''} \rightarrow 3\text{KSF} > 1.3\text{KSF} \underline{\text{OK}}$$



VILLAGE OF FOX POINT
7200 N Santa Monica Blvd
Fox Point, WI 53217
(414) 247-6622
www.villageoffoxpoint.com

Permit Number:

B-

OFFICE USE ONLY

Issued Date

Zoning B, 60-

BUILDING PERMIT

Job Address 8313 N Links	Building Type: Residential ☒ Commercial ☐
Description of Work Rebuild house	
Estimated Cost of Project \$	

Owner/Occupant	
Business Name A and J Renovations	Contact Name Anthony Klenke
Address	City/State/Zip
Phone 414-687-6640	Email Anthony.Klenke@hotmail.com

****Cautionary Statement required when homeowner is applying for permit****

Contractor	
Company Name	Contact Name
Address	City/State/Zip
Phone	Email
Dwelling Contractor #	Dwelling Contractor Qualifier #

Square Footage Under Construction				
1st Floor	2nd Floor	Basement	Addition	Garage

Description	Rate	Amount
Project - Per \$1,000 of estimated cost	\$10.00	
Building Board	\$75.00	75
Footing early start - \$230.00 one and two family; \$305.00 commercial		
Plan Review - \$275.00 one and two family; New Single Family Construction \$330.00 plus \$30.00/unit commercial		
State Seal	\$75.00	
Razing, Interior Demolition \$925.00 max/bld	\$95.00 minimum plus	
Moving buildings	\$250.00 plus	
Fuel tanks - Per 1,000 gallons	\$25.00	
Re-inspection	\$100.00	
Work started without permit	Double	
	Minimum Fee	\$70.00
Payable to: Village of Fox Point	Total Permit Fee	\$ 75.00

Applicant Signature

Rev 01/22

Date

9/27/24

ISSUED PERMITS are available on the Village website under **PERMITS & LICENSES**

VILLAGE OF FOX POINT
7200 N. SANTA MONICA BLVD
FOX POINT WI 53217

414-351-8900

Receipt No: 1.060738

Sep 27, 2024

8313 N LINKS WAY

Previous Balance:	.00
LICENSES & PERMITS - BUILDING PLANS - FILING FEE	75.00
24-44440 BUILDING BOARD - FEE	
Total:	75.00
CHECK	75.00
Check No: 3648	
Payor: KLENKE PROPERTY MANAGEMENT	
Total Applied:	75.00
Change Tendered:	.00

Duplicate Copy

09/27/2024 8:16 AM

8313 N LINKS WAY EXTERIOR PHOTOS

FRONT/EAST EXTERIOR ELEVATION



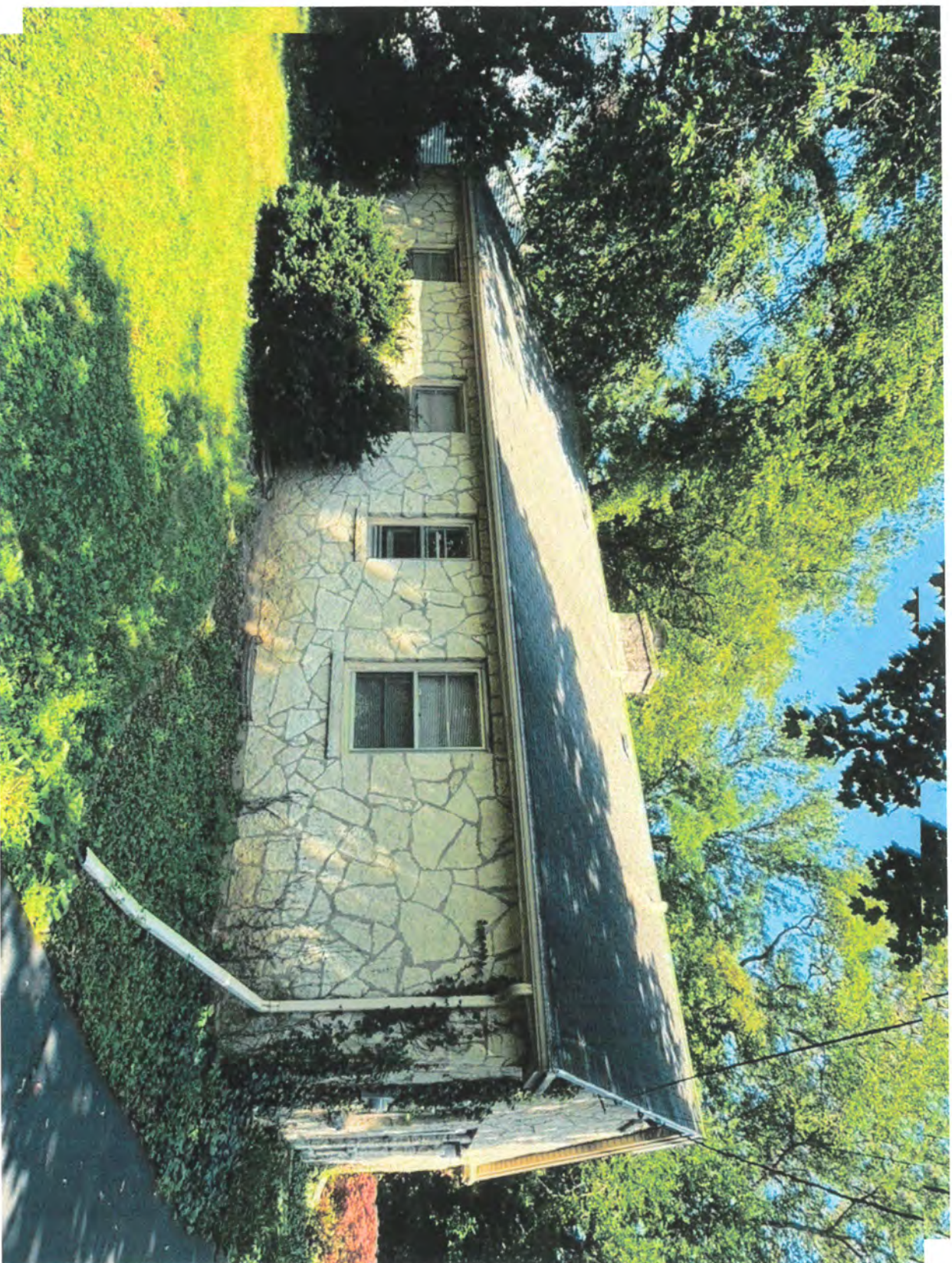
8313 N LINKS WAY EXTERIOR PHOTOS

SIDE/NORTH EXTERIOR ELEVATION



8313 N LINKS WAY EXTERIOR PHOTOS

REAR/WEST EXTERIOR ELEVATION



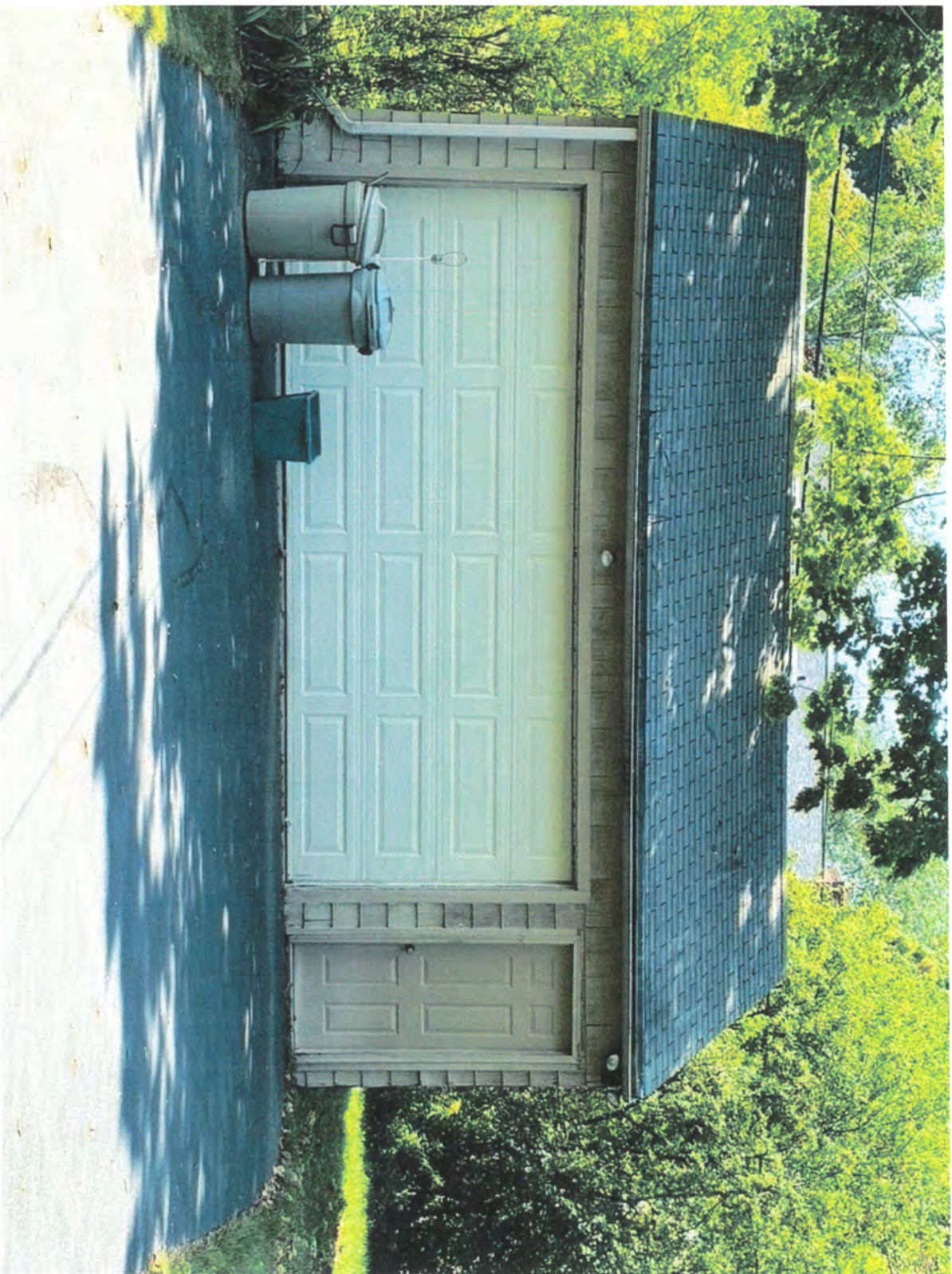
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SIDE/SOUTH EXTERIOR ELEVATION



8313 N LINKS WAY EXTERIOR PHOTOS

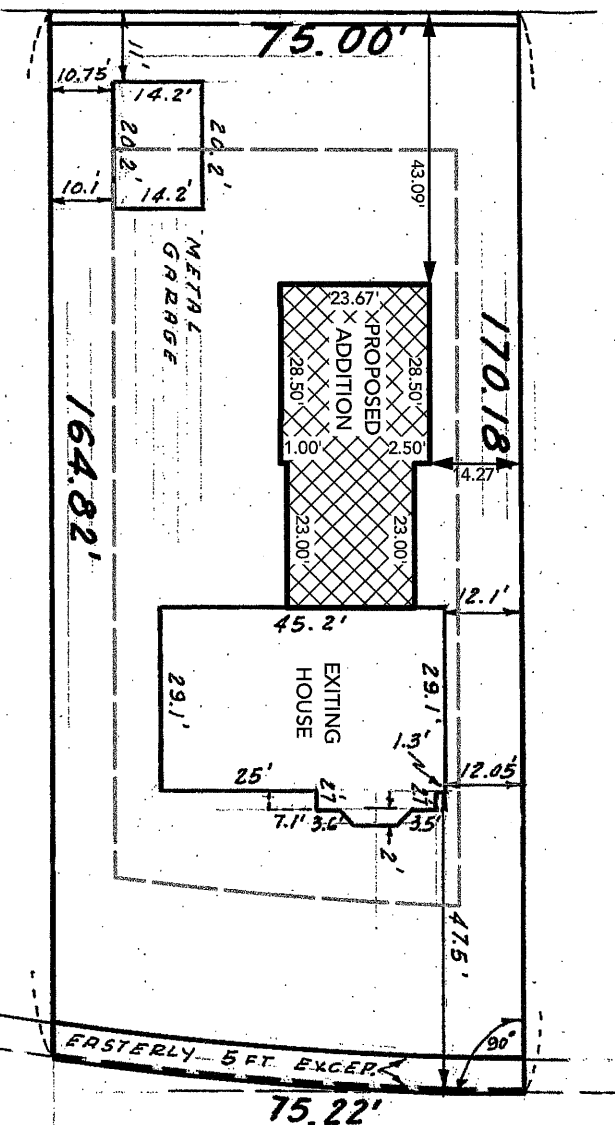
GARAGE FRONT ELEVATION



**PHONE CONCORD 4-3782
823 W. ATKINSON AVE.
MILWAUKEE 6, WIS.**

PLAT OF SURVEY

Vincent F. & Marie Ryb Owner
5 , except therefrom the easterly 1/4 of
a part of the North West 1/4 of
age of Whitefish Bay, Milwaukee
for Point Court



NOTE:
THE PROPOSED ADDITION INCLUDED ON THIS SURVEY
WAS NOT DRAWN BY A LICENSED SURVEYOR AND IS NOT
PRESENTED AS AN OFFICIAL LEGAL DOCUMENT;
DRAWING IS TO BE USED FOR DESIGN REVIEW ONLY
9/25/2024

EAST WAY

Prepared for FIRST WISCONSIN NATIONAL BANK

State of Wisconsin,
County of Milwaukee } **ss.**

I hereby certify that on the 21st day of MAY, 1957, I have accurately surveyed the above described property and that the above plat is a correct representation thereof and shows the exterior boundary lines and location of buildings and other improvements on said property and the correct measurements thereof.

Plat No. 57-452

Signed Anna E. Dele
Survivor

Reg. No. 5-3

8-22-09-3-0187

DESIGN REVIEW DOCUMENTS for a
WHOLE-HOUSE REMODEL
with ADDITION at
8313 N LINKS WAY in
FOX POINT, WISCONSIN

SHEET INDEX

G101	PROJECT TITLE AND SHEET INDEX
C101	EXISTING/DEMOLITION SITE PLAN WITH EXISTING ROOF PLAN, PROPOSED SITE PLAN WITH PROPOSED ROOF PLAN, AND OPEN AREA CALCULATION
D101	EXISTING/DEMOLITION FLOOR PLANS AND EXISTING/DEMOLITION EXTERIOR ELEVATIONS
A101	PROPOSED FIRST FLOOR PLAN, WALL FILL KEY, AND MISCELLANEOUS NOTES
A102	PROPOSED SECOND FLOOR PLAN, WALL FILL KEY, AND ABBREVIATIONS LIST
A201	PROPOSED EXTERIOR ELEVATIONS, WINDOW AND EXTERIOR DOOR SCHEDULE, AND DIVISION 8 WINDOW AND EXTERIOR DOOR NOTES
A202	PROPOSED EXTERIOR ELEVATIONS AND WINDOW AND EXTERIOR DOOR SCHEDULE
A301	PROPOSED BUILDING SECTIONS AND CONSTRUCTION DETAILS
S101	PROPOSED FOOTING/FOUNDATION PLAN WITH EXISTING BASEMENT AND WALL FILL KEY

DESIGN REVIEW DOCUMENT
ISSUE DATE: 09/24/2024

The Garret Studio, Inc.

2572 N 62nd Street
Wauwatosa, Wisconsin 53213
p.1 (414) 364-6368
e. thegarretstudio@me.com

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REVISIONS

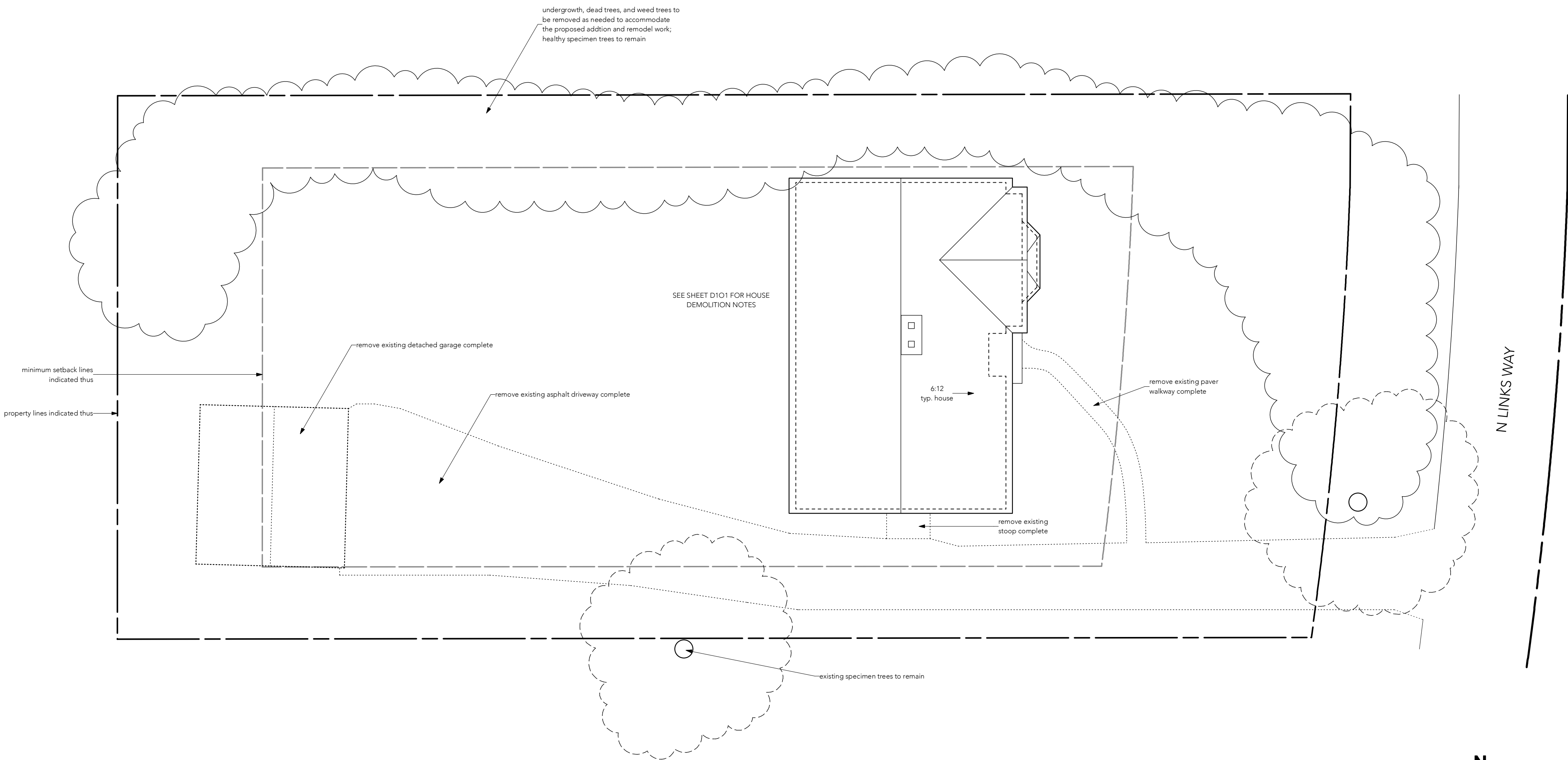
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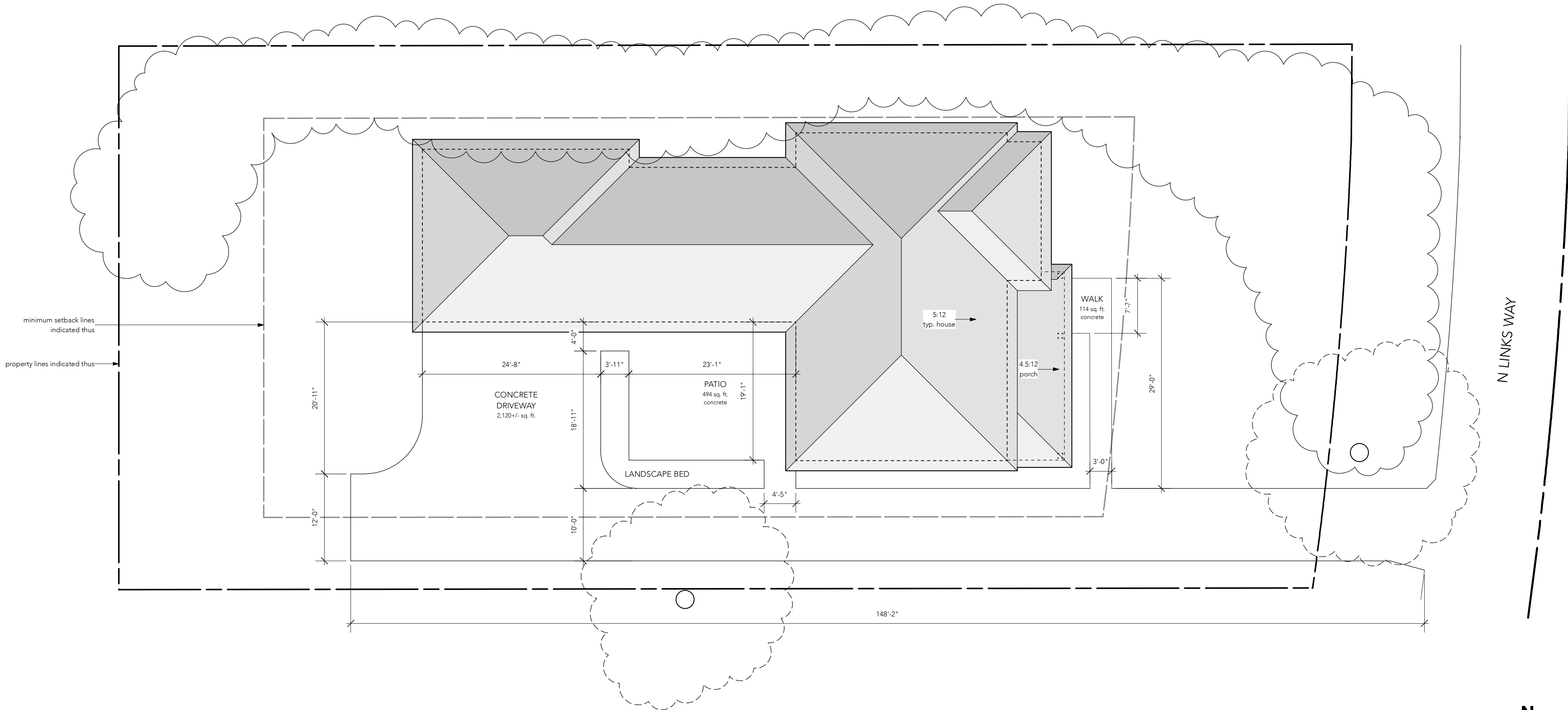
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sheet contents:
PROJECT TITLE
SHEET INDEX

SHEET G101



1 EXISTING/DEMOLITION SITE PLAN AND EXISTING HOUSE ROOF PLAN
Scale: 1" = 10'-0"



2 PROPOSED SITE PLAN AND HOUSE ROOF PLAN
Scale: 1" = 10'-0"

OPEN AREA CALCULATION:

LOT AREA: 12,626 sq. ft.
EXISTING HOUSE: 1,395 +/- sq. ft.
EXISTING GARAGE: 450 +/- sq. ft.

PROPOSED HOUSE 1ST FLOOR: 1,847 sq. ft.
PROPOSED GARAGE: 672 sq. ft.
PROPOSED FRONT PORCH: 218 sq. ft.
TOTAL HOUSE, PORCH & GARAGE: 2,737 sq. ft.
% LOT COVERAGE: 21.7% (<30% maximum)

PROPOSED SECOND FLOOR: 2,511 sq. ft.
TOTAL HOUSE 1ST & 2ND FLOORS: 4,358 sq. ft.

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ISSUE DATE: 09/24/2024

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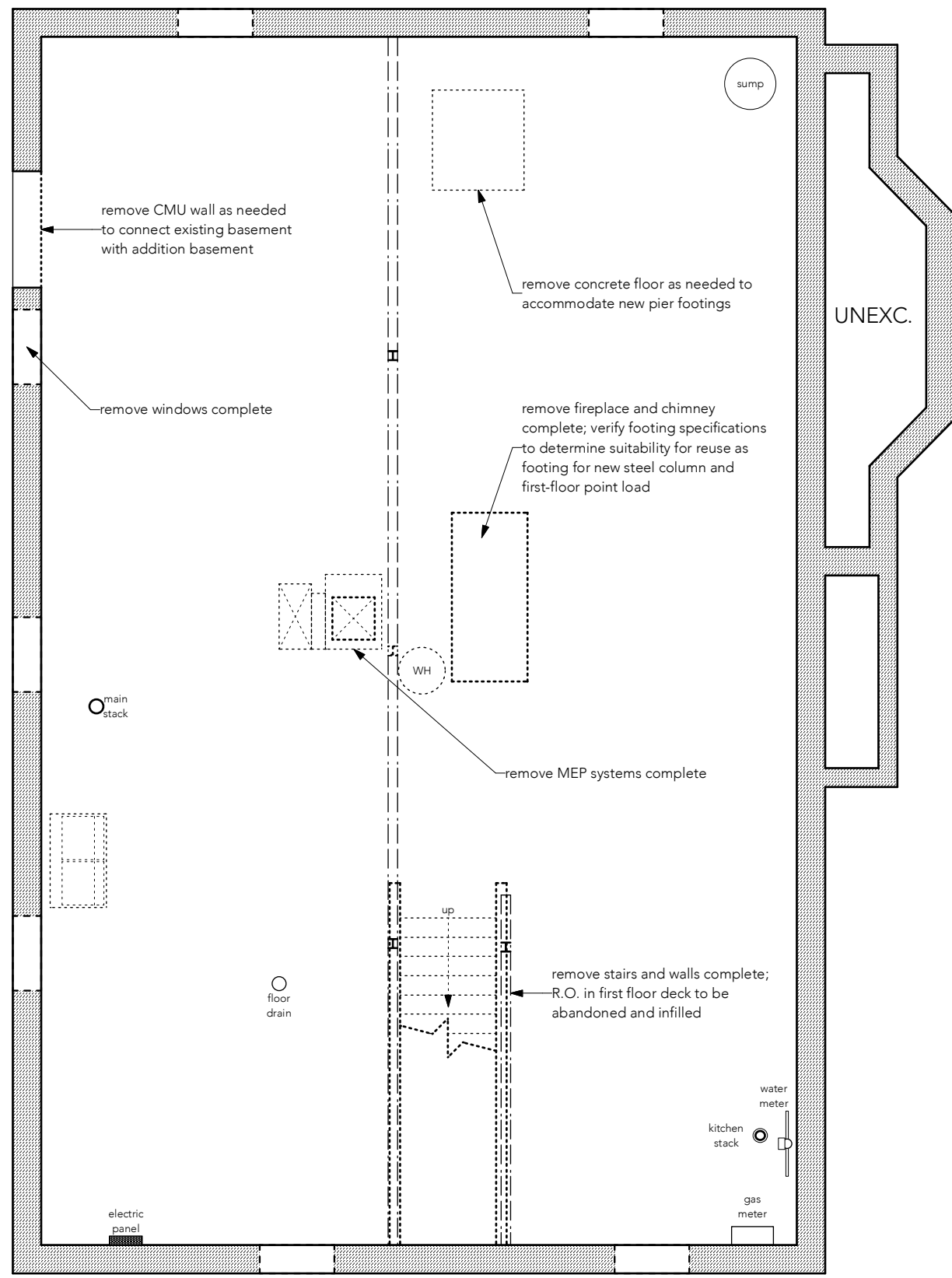
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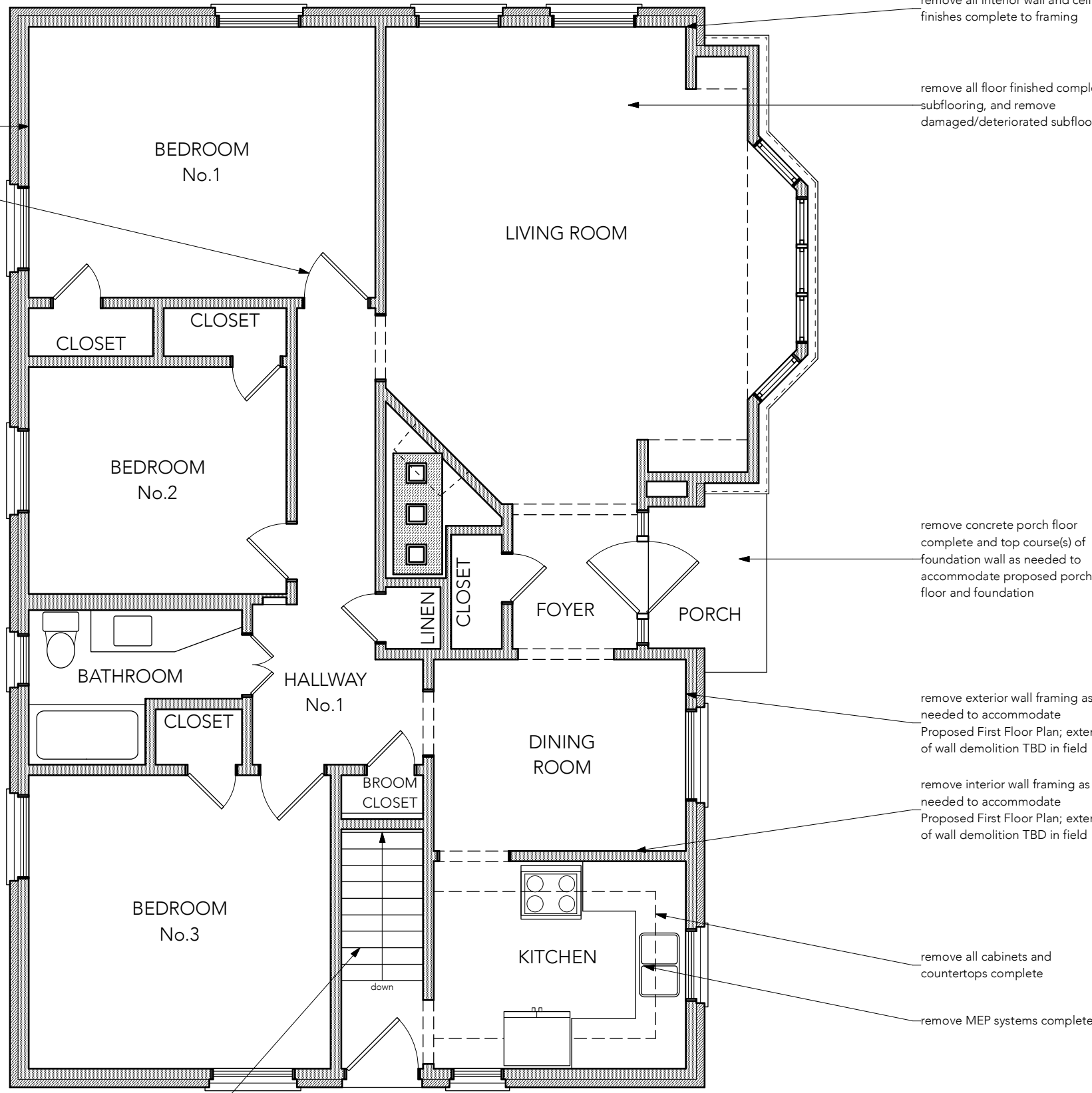
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sheet contents:
EXISTING/DEMOLITION SITE PLAN WITH
EXISTING HOUSE ROOF PLAN
PROPOSED SITE PLAN WITH PROPOSED
HOUSE ROOF PLAN
OPEN AREA DATA

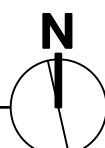
SHEET C101



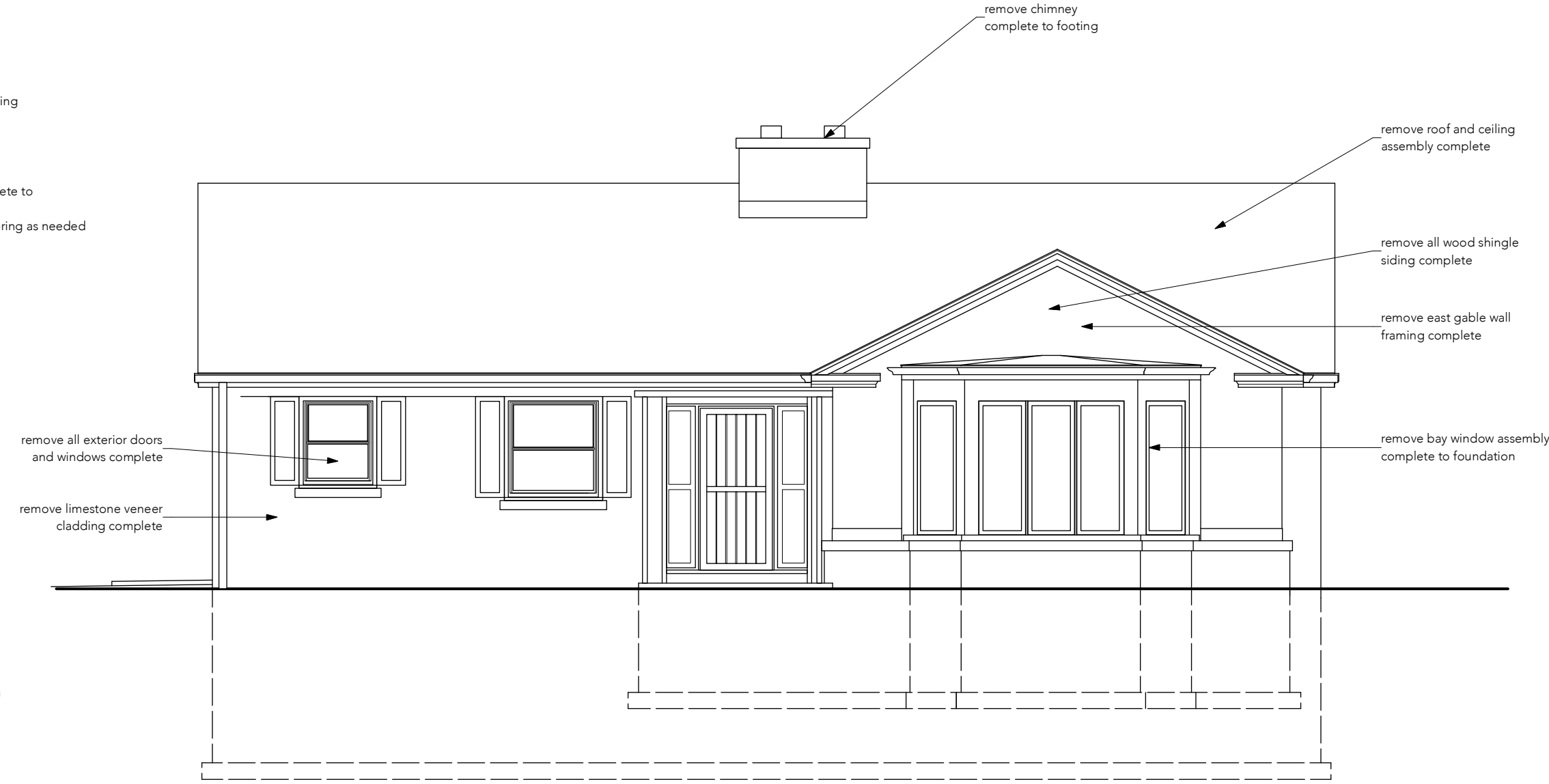
1 EXISTING/DEMOLITION BASEMENT FLOOR PLAN
D101 Scale: 3/16" = 1'-0"



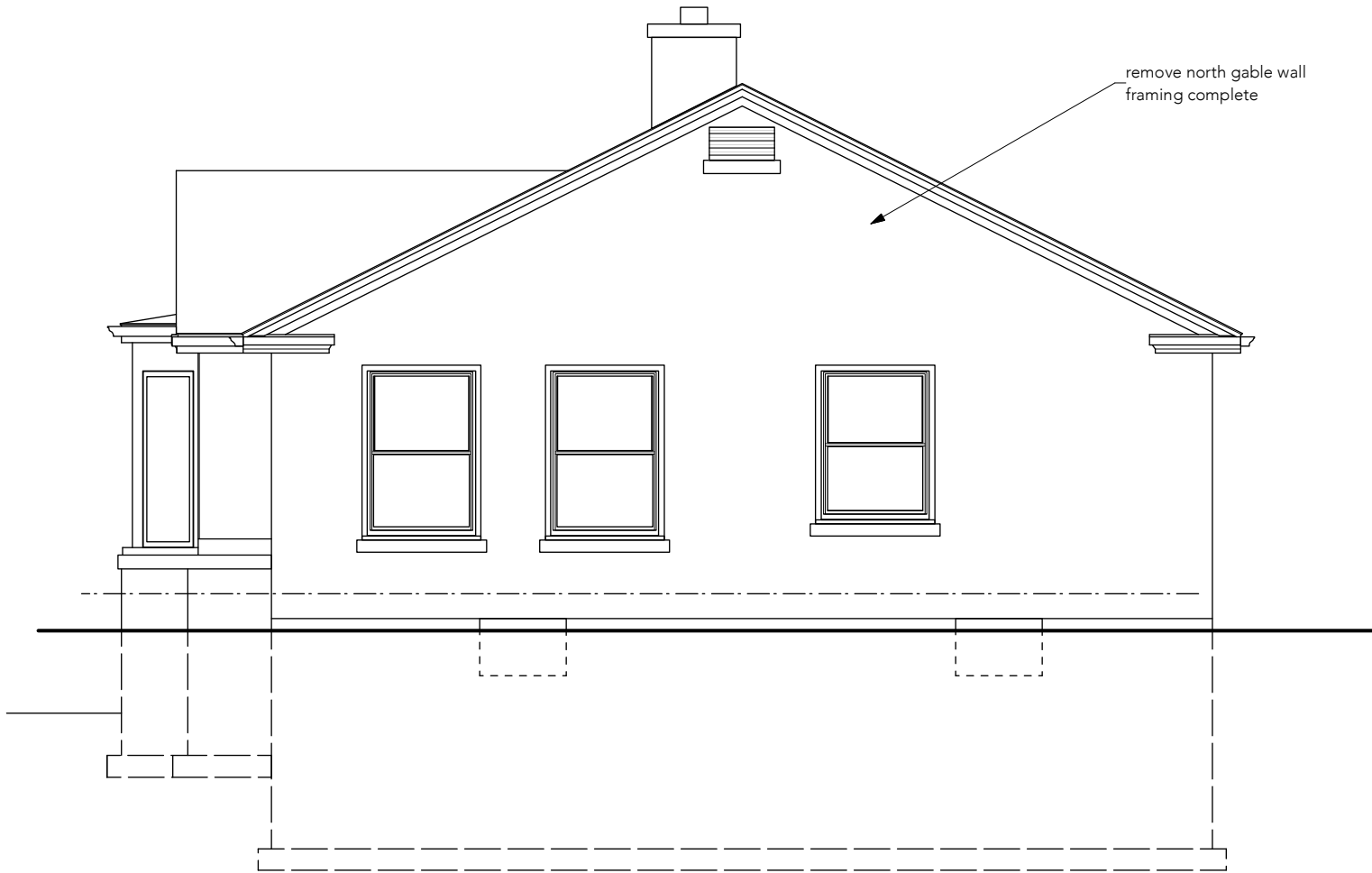
2 EXISTING/DEMOLITION FIRST-FLOOR FLOOR PLAN
D101 Scale: 3/16" = 1'-0"



NOTE:
Due to the extensive nature of the proposed demolition work, and in the interest of maintaining drawing legibility, features slated for removal on the First-Floor Floor Plan and Exterior Elevations ARE NOT indicated by dashed lines as is typical on demolition documents, but are noted with callouts



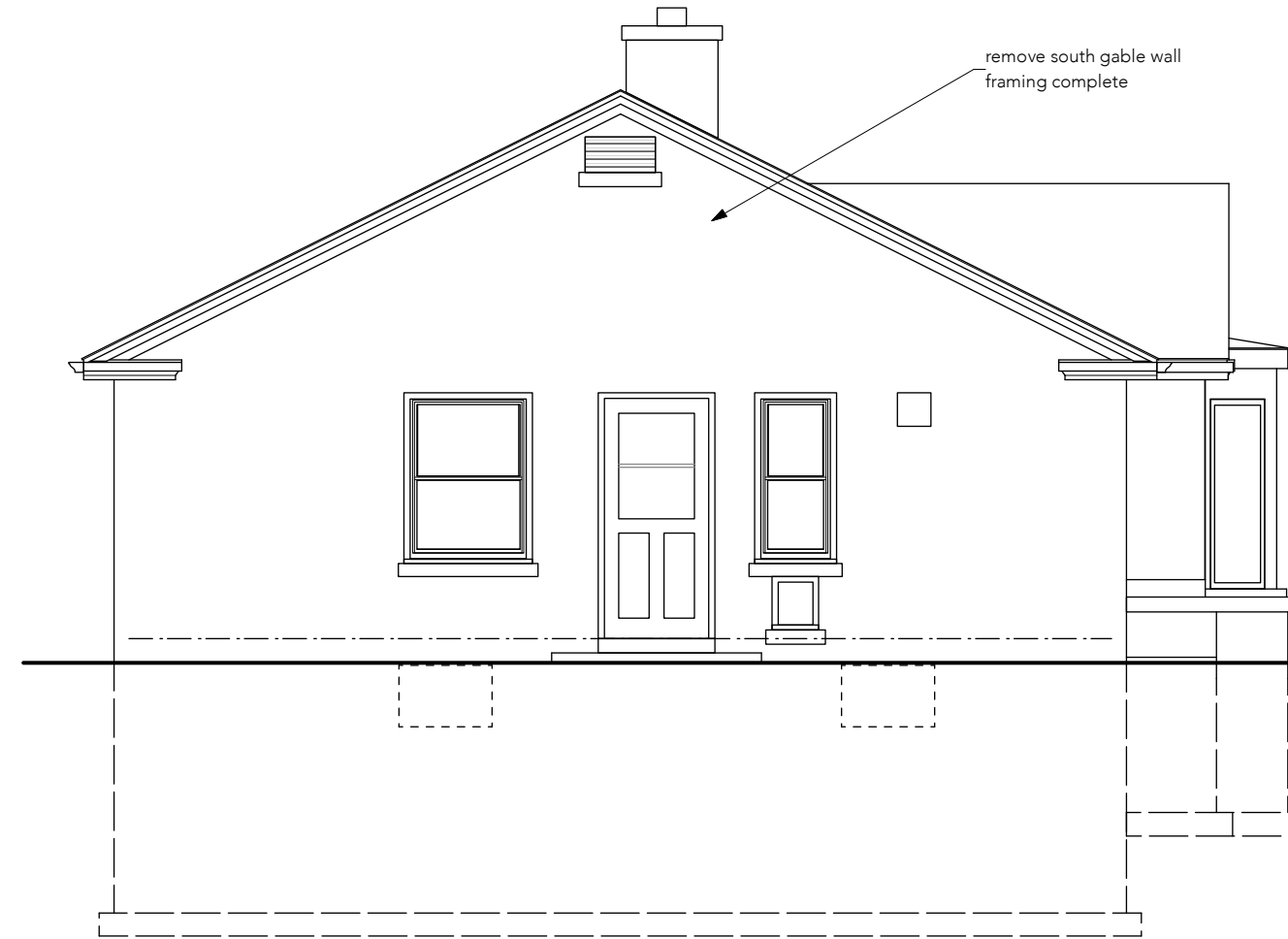
3 EXISTING/DEMOLITION FRONT/EAST EXTERIOR ELEVATION
D201 SCALE: 3/16" = 1'-0"



4 EXISTING/DEMOLITION SIDE/NORTH EXTERIOR ELEVATION
D101 SCALE: 3/16" = 1'-0"



5 EXISTING/DEMOLITION REAR/WEST EXTERIOR ELEVATION
D101 SCALE: 3/16" = 1'-0"



6 EXISTING/DEMOLITION SIDE/SOUTH EXTERIOR ELEVATION
D101 SCALE: 3/16" = 1'-0"

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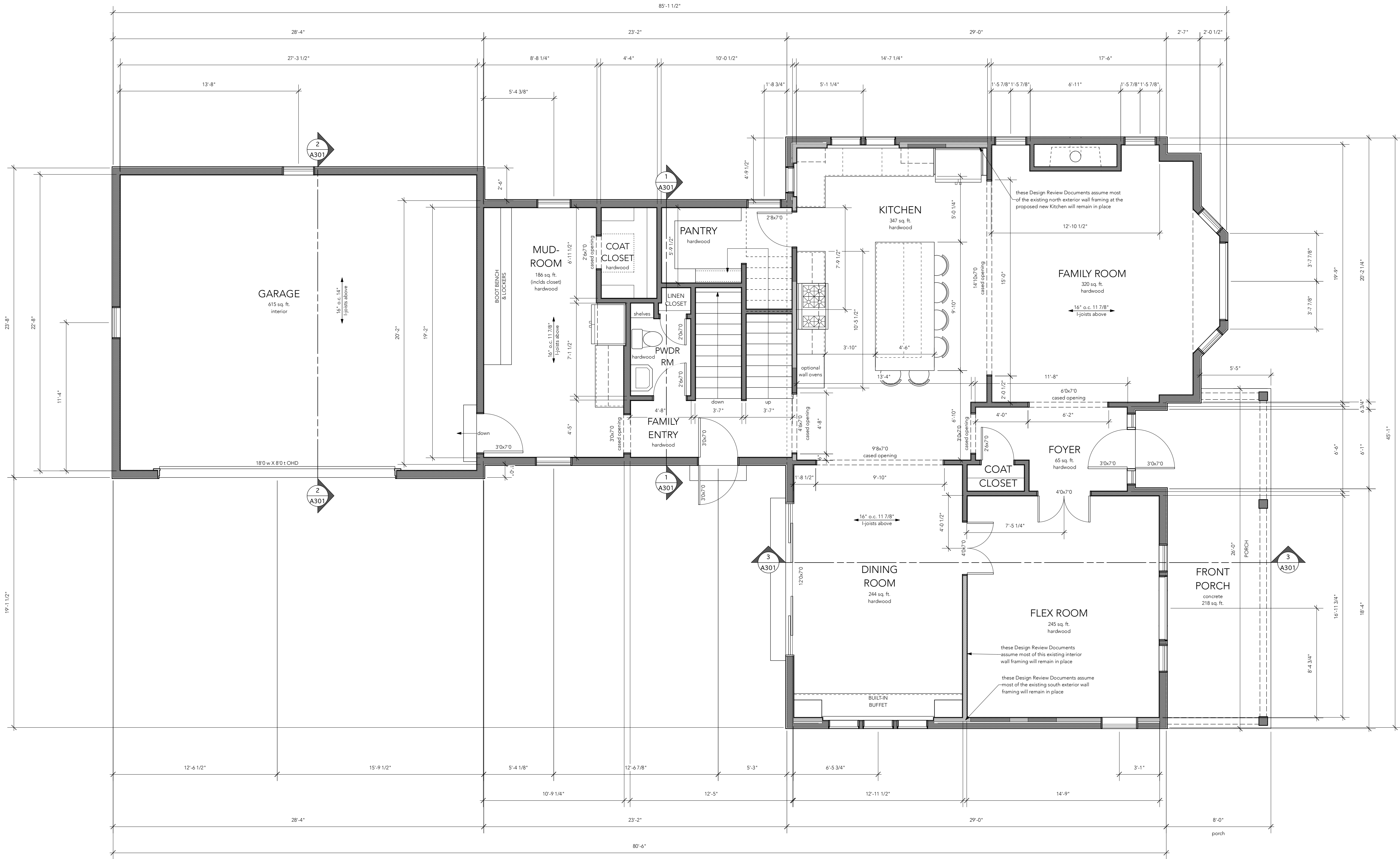
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EXISTING/DEMOLITION FLOOR PLAN

DEMOLITION WALL FILL KEY

EXISTING/DEMOLITION EXTERIOR
ELEVATIONS



1
A101 PROPOSED FIRST-FLOOR FLOOR PLAN
Scale: 1/4" = 1'-0"

WALL FILL KEY	
	EXISTING MASONRY WALLS TO REMAIN
	EXISTING MASONRY VENEER TO REMAIN
	EXISTING FRAME WALLS TO REMAIN
	NEW CIP CONCRETE WALLS
	NEW CMU WALLS
	NEW FRAME WALLS
	NEW STONE OR BRICK VENEER

- GENERAL NOTES
- MEP systems to be Design-Build by their respective trades
 - See Owner's Scope of work for interior finishes and fixtures specifications

- INSULATION SPECIFICATIONS
- House addition Foundation walls: R-10 rigid foam installed on outside face of walls from top of footing to top of walls; exposed insulation above grade covered with Tuff2 or similar
 - Addition box sills: R-21 closed-cell spray foam or equal
 - New and any existing 2x6 exterior walls: R-21 fiberglass batts or equal
 - Any existing exterior walls framed with 2x4 studs: R-13 fiberglass batts or equal
 - Cantilevered second floor decks and/or second floor decks at unfinished areas including above Garage: R-40 fiberglass batts or equal
 - Sloped ceilings: R-38 batts, spray foam, or equal
 - Attic at flat ceilings: R-50 blown-in fiberglass or equal
 - Garage ceiling: R-40 fiberglass batts or equal; any in-floor plumbing to be on warm side of insulation
 - Baffle chutes to be provided at truss bays as needed
 - Vapor barriers to be provided per insulation Manufacturers' specifications
 - Existing house foundation walls: No change

- FLOOR PLAN DIMENSIONING NOTES
- Foundation dimensions assume location of outside face of foundation is offset in 2" from outside face of wall sheathing on house, and aligned with outside face of wall sheathing on garage
 - Dimensions for exterior walls are measured to and from outside face of wall sheathing
 - Interior dimensions are measured to and from face of wall framing

- LATERAL BRACING NOTES
- All lateral bracing for new exterior walls to be achieved by Continuous Sheathed Wood Structural Panels method per SPS Table 321.25-G in the Uniform Dwelling Code OR per pending Engineering Submittals
 - South first-floor exterior Garage walls to be portal-framed per figure SPS 321.25-A in the Uniform Dwelling Code OR per pending Engineering Submittals
 - Locations of and specifications for interior walls as used as braced walls TBD in pending Engineering Submittals

2
A101 MISCELLANEOUS NOTES
Scale: 1/4" = 1'-0"

DESIGN REVIEW DOCUMENT
ISSUE DATE: 09/24/2024

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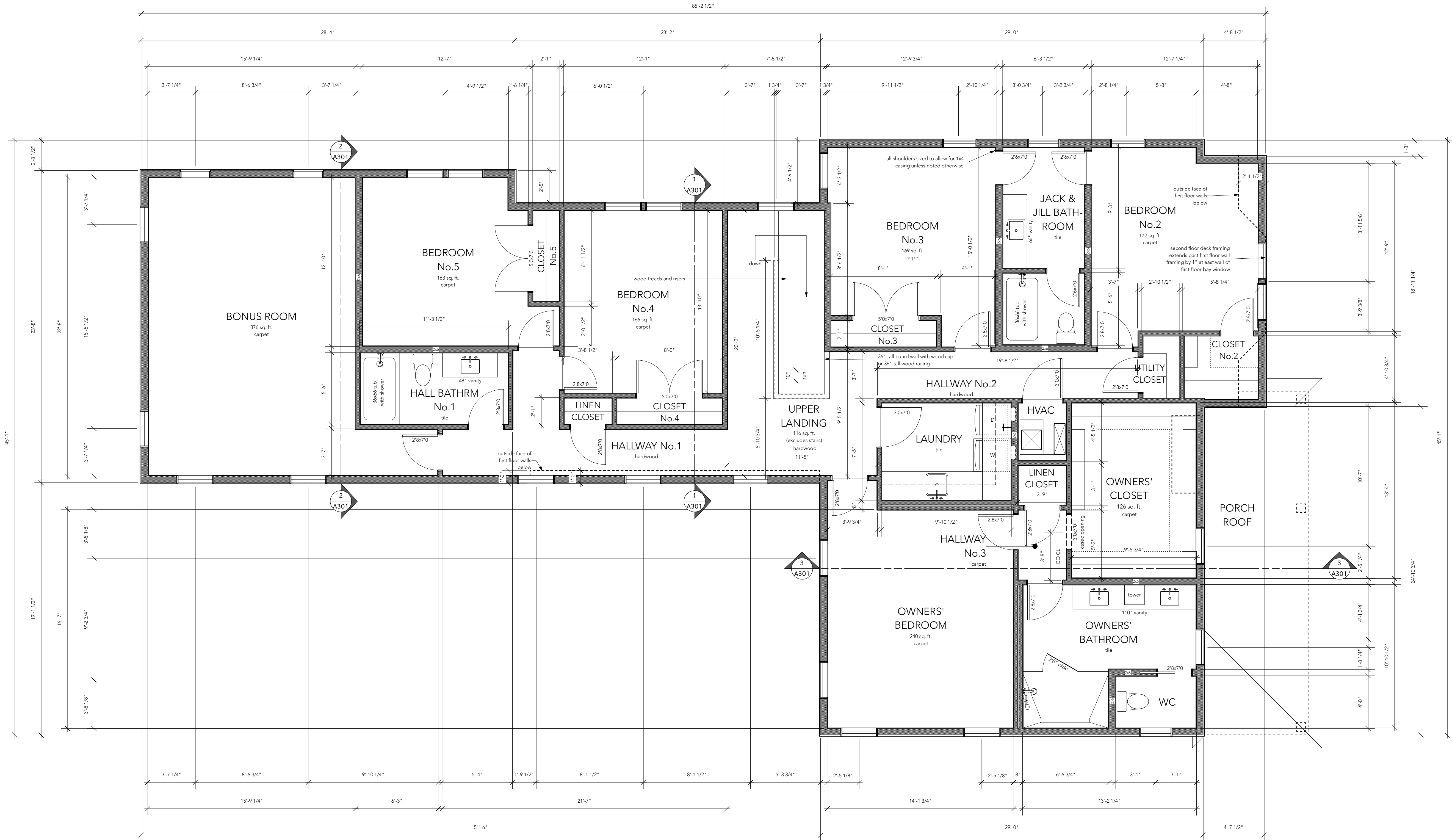
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sheet contents:
PROPOSED FIRST-FLOOR FLOOR
PLAN

WALL FILL KEY

MISCELLANEOUS NOTES

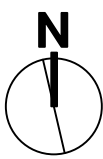
SHEET A101



1 PROPOSED SECOND-FLOOR FLOOR PLAN
A102 Scale: 1/4" = 1'-0"

- WALL FILL KEY
- EXISTING MASONRY WALLS TO REMAIN
 - EXISTING MASONRY VENEER TO REMAIN
 - EXISTING FRAME WALLS TO REMAIN
 - NEW CIP CONCRETE WALLS
 - NEW CMU WALLS
 - NEW FRAME WALLS
 - NEW STONE OR BRICK VENEER

- ABBREVIATIONS
- AFF: Above Finished Floor
 - Alum.: Aluminum
 - ALT.: Alternate/Alternative
 - Carp.: Carpenter
 - CE: Civil Engineer
 - CIP: Cast In Place (Concrete)
 - Conc.: Concrete
 - Config.: Configuration
 - Cont.: Continuous
 - DW: Dishwasher
 - Dbl.: Double
 - DWO: Double Wall Ovens
 - D: Clothes Dryer
 - Extg: Existing
 - Ext.: Exterior
 - GWB: Gypsum Wall Board
 - HVAC: Heating Ventilation and Air Conditioning
 - IBC: International Building Code
 - IEBC: International Existing Building Code
 - Int.: Interior
 - KSI/Ksf: Kips per Square Inch
 - Kips: 1,000 pounds
 - LVL: Laminated Veneer Lumber
 - MEP: Mechanical, Electrical, Plumbing
 - M.O.: Masonry Opening
 - NEC: National Electrical Code
 - O.C.: On Center
 - O.D.: Outside Diameter
 - PE: Structural Engineer
 - P.T.: Pressure Treated
 - R.O.: Rough Opening
 - Subfr: Subfloor
 - T&G: Tongue and Groove
 - TBD: To Be Determined
 - TRV: To Be Verified
 - Typ.: Typical
 - UBC: Uniform Building Code
 - UDC: Uniform Dwelling Code
 - UNO: Unless Noted Otherwise
 - VB: Vapor Barrier
 - W: Washing Machine
 - WIC: Walk-In Closet
 - W.C.: Water Closet



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sheet contents:
PROPOSED SECOND-FLOOR FLOOR PLAN

WALL FILL KEY

ABBREVIATIONS LIST

SHEET A102

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DESIGN REVIEW DOCUMENT
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HOUSE REMODEL with ADDITION at
8313 N LINKS WAY in
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FIELD VERIFY DIMENSIONS
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sheet contents:
PROPOSED EXTERIOR ELEVATIONS

WINDOW AND EXTERIOR DOOR SCHEDULE

DIVISION 8 WINDOW AND EXTERIOR DOOR

NOTES

SHEET A201

WINDOW AND EXTERIOR DOOR SCHEDULE				
WINDOW MARK	BRAND	TYPE	UNIT NUMBER/SIZE	NOTES
A	Elevate by Marvin	double-hung	ELDH 3456	
B	Elevate by Marvin	double-hung	ELDH 2660	
C	Elevate by Marvin	double-hung picture	ELDHP 6260	
D	Elevate by Marvin	double-hung picture	ELDHP 7260	custom width
E	Elevate by Marvin	double-hung	ELDH 3252	
F	Elevate by Marvin	double-hung	ELDH 3060	
G	Elevate by Marvin	casement	ELCA 2943	
H	TBD	glider	field-verify	vinyl basement glider units in existing M.O.s
I	Elevate by Marvin	glider	ELGL 6048	include prefab egress well with ladder and cover
J	Elevate by Marvin	casement	ELCA 2543	
K	Elevate by Marvin	double-hung	ELDH 3460	
1	TBD	entry door	3'-0" X 7'-0"	include (2) 1'-0" wide factory-mulled side lights
2	Elevate by Marvin	patio door	ELSPD 12070 OXXO	
1	TBD	overhead door	18'-0" X 8'-0"	insulated steel with opener
4	Elevate by Marvin	patio door	ELFID 3070 XL	include hinged screen door

DIVISION 8 WINDOW AND EXTERIOR DOOR NOTES

- Choose stock sizes from Manufacturer's catalog as close to specified Marvin Elevate sizes as possible if alternate brand is used in field
- Window Vendor to verify that specified windows meet any and all egress, daylight opening, and natural ventilation codes
- Multi-window groupings to be individual units separated by double-stud structural mullions, no factory-mulled units
- Muntin grids per Elevation Drawings; muntins to be Marvin SDL units
- All glazing to be thermal glass with low-E coating and Argon gas fill
- Bathroom double hung units to have obscure glass in lower sash
- Tempered glass adjacent to doors per code
- Tempered glass in or adjacent to interior and exterior stairways; and steps per code
- Tempered glass over or adjacent to tubs and showers per code
- Dashed arrows on casement and awning windows indicate direction of opening; casements and awnings with no arrows indicate fixed units
- Operable windows to have full screens

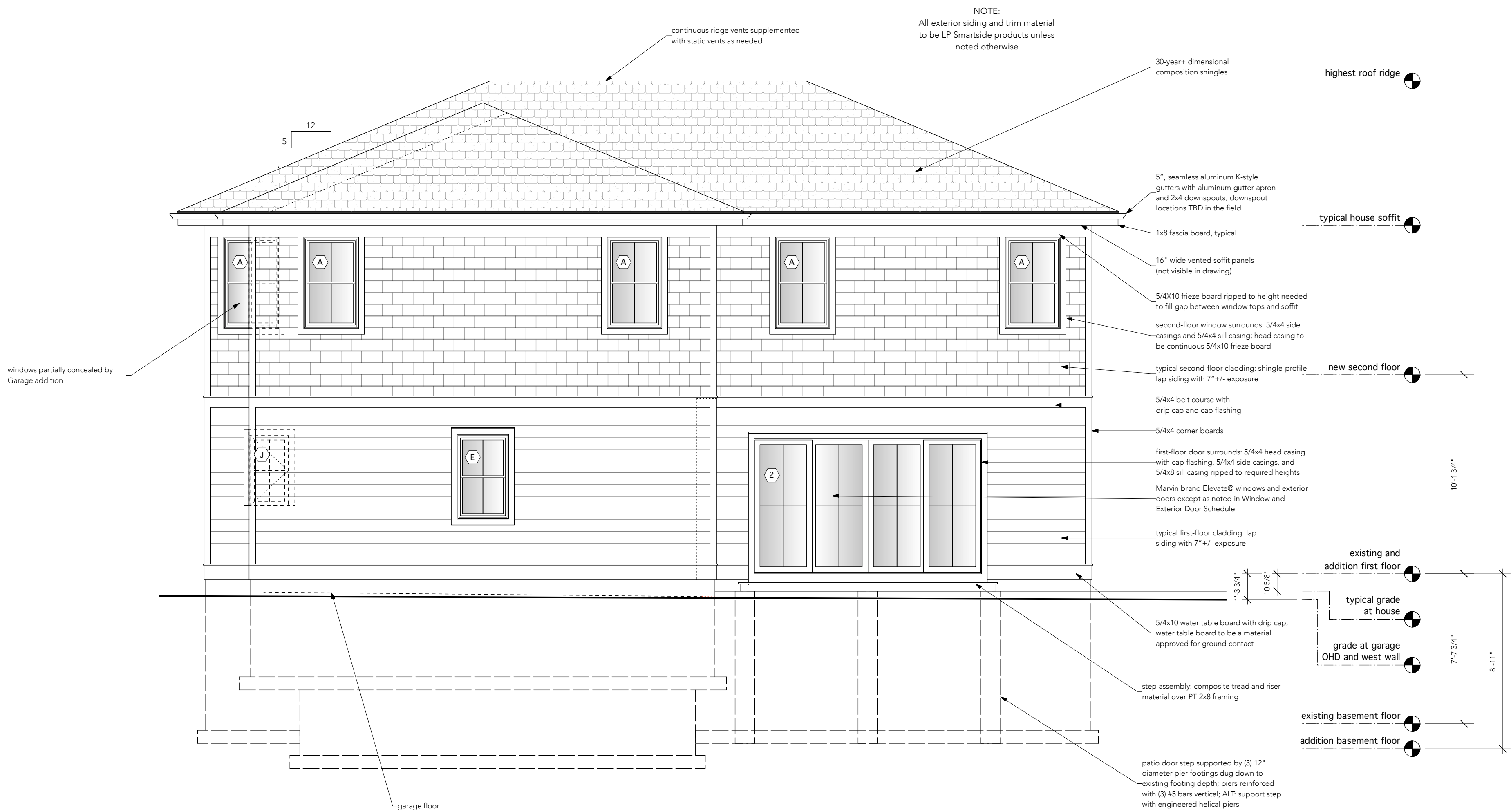
3 WINDOW SCHEDULE AND DIVISION 8 WINDOW AND EXTERIOR DOOR NOTES
A201 NO SCALE



1 PROPOSED FRONT/EAST EXTERIOR ELEVATION
A201 SCALE: 1/4" = 1'-0"



2 PROPOSED SIDE/NORTH EXTERIOR ELEVATION
A201 SCALE: 1/4" = 1'-0"



1
A202
PROPOSED REAR/WEST EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



2
A202
PROPOSED SIDE/SOUTH EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

WINDOW AND EXTERIOR DOOR SCHEDULE				
WINDOW MARK	BRAND	TYPE	UNIT NUMBER/SIZE	NOTES
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B	Elevate by Marvin	double-hung	ELDH 2660	
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E	Elevate by Marvin	double-hung	ELDH 3252	
F	Elevate by Marvin	double-hung	ELDH 3060	
G	Elevate by Marvin	casement	ELCA 2943	
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1	TBD	entry door	3'-0" X 7'-0"	include (2) 1'-0" wide factory-mulled side lights
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REVISIONS

DESCRIPTION

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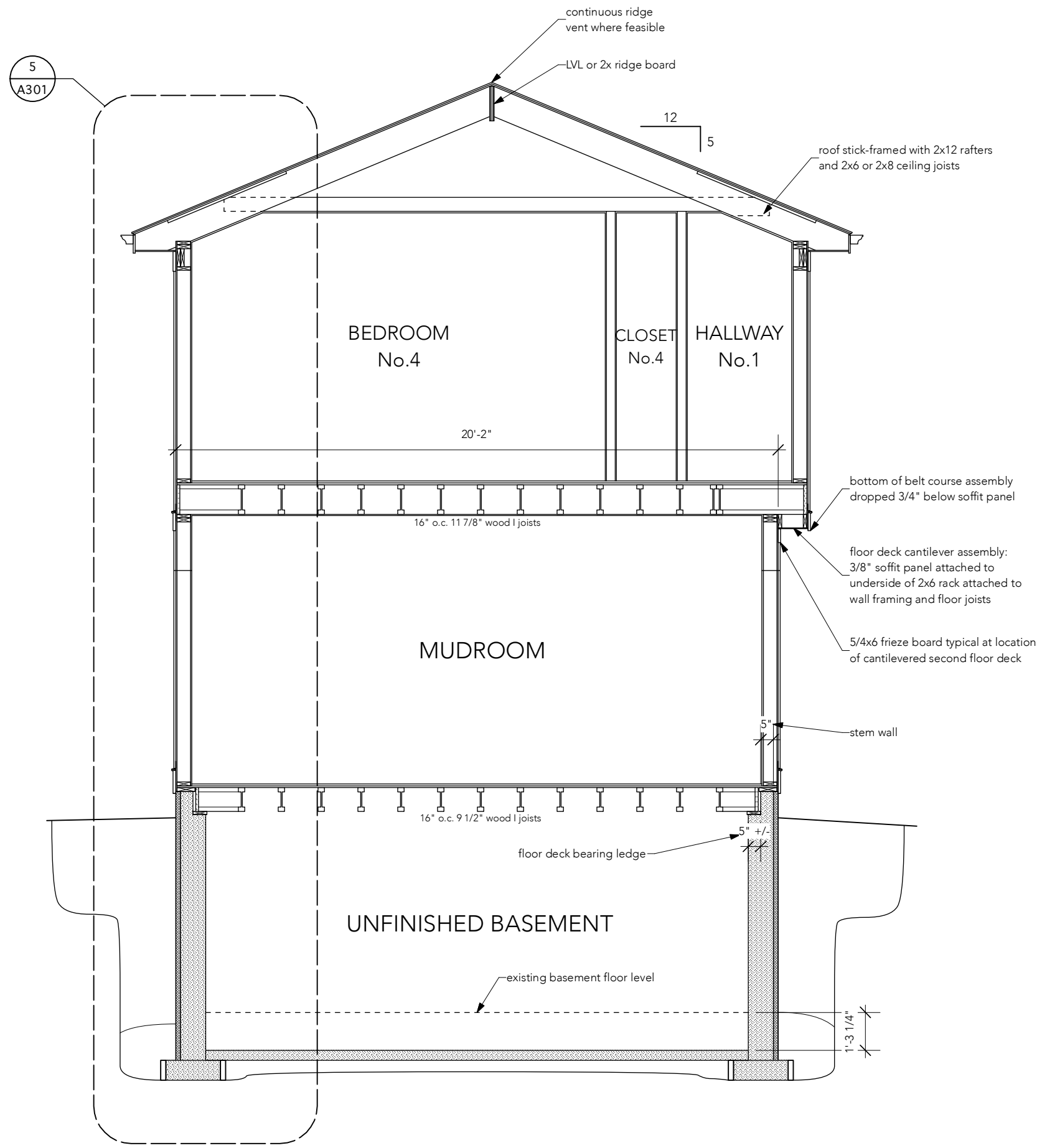
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sheet contents:
PROPOSED BUILDING SECTIONS

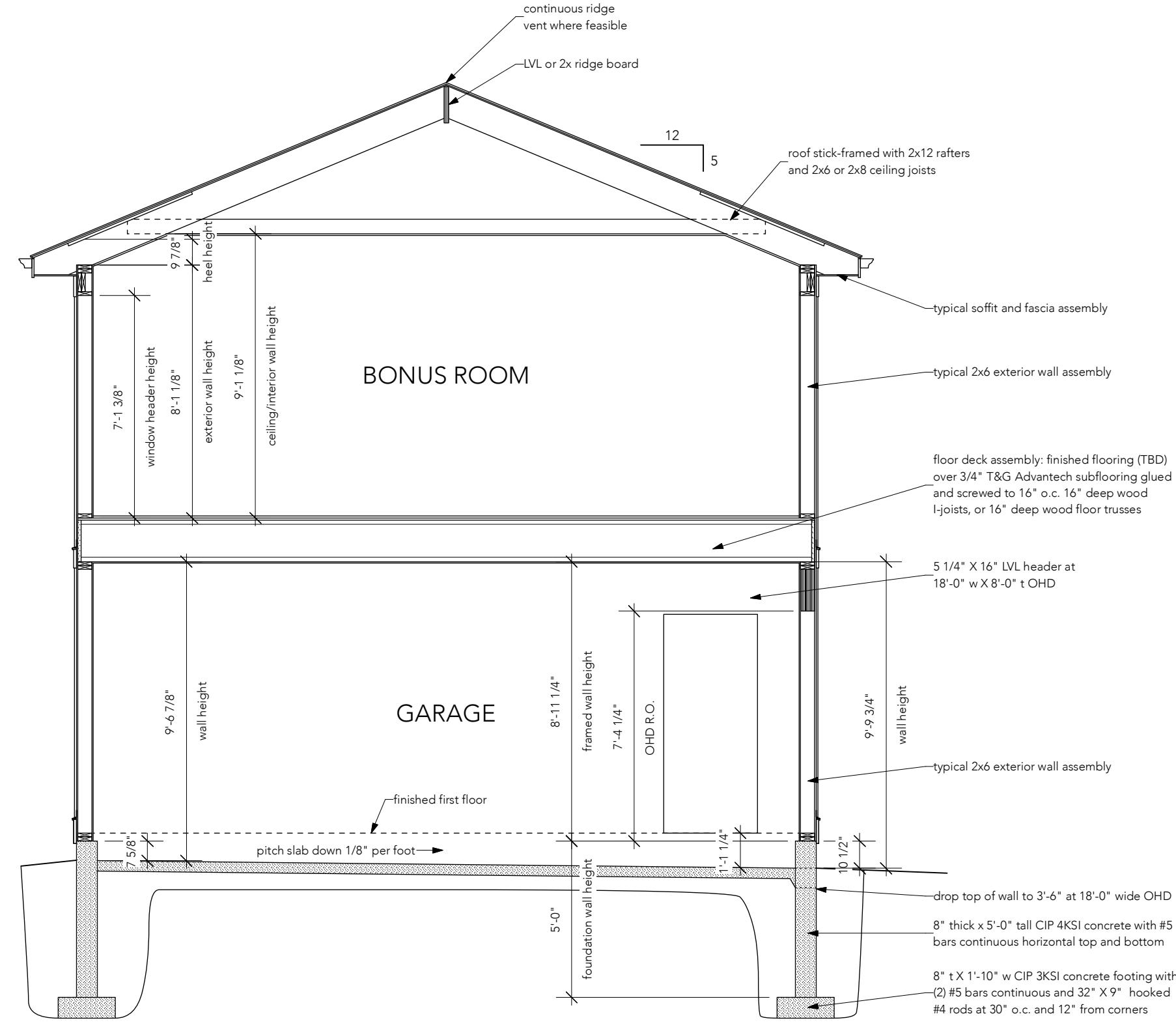
PROPOSED DETAIL AT EXISTING FIRST-FLOOR
EXTERIOR WALLS

BUILDING SECTION DETAIL AT PROPOSED
ADDITION

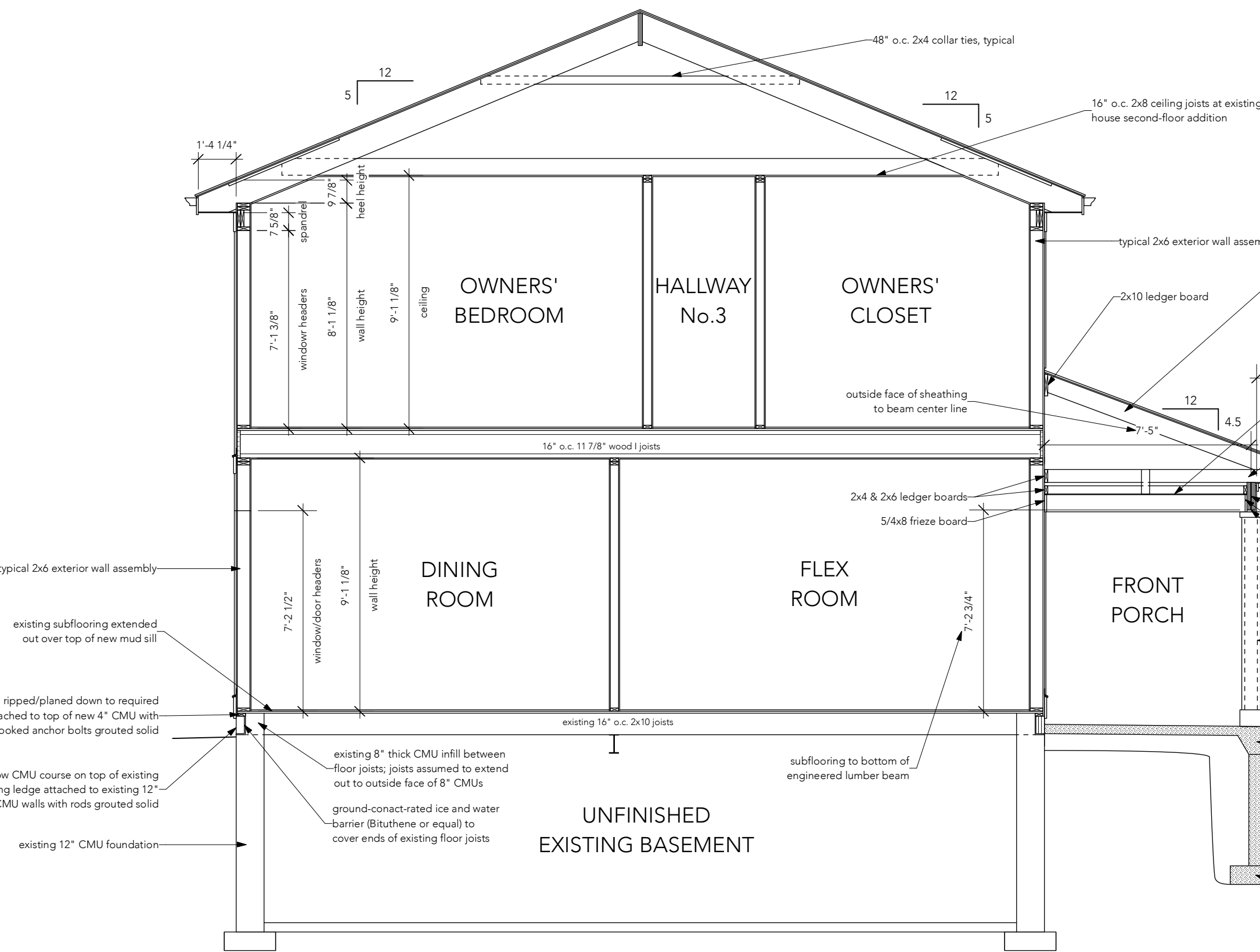
SHEET A301



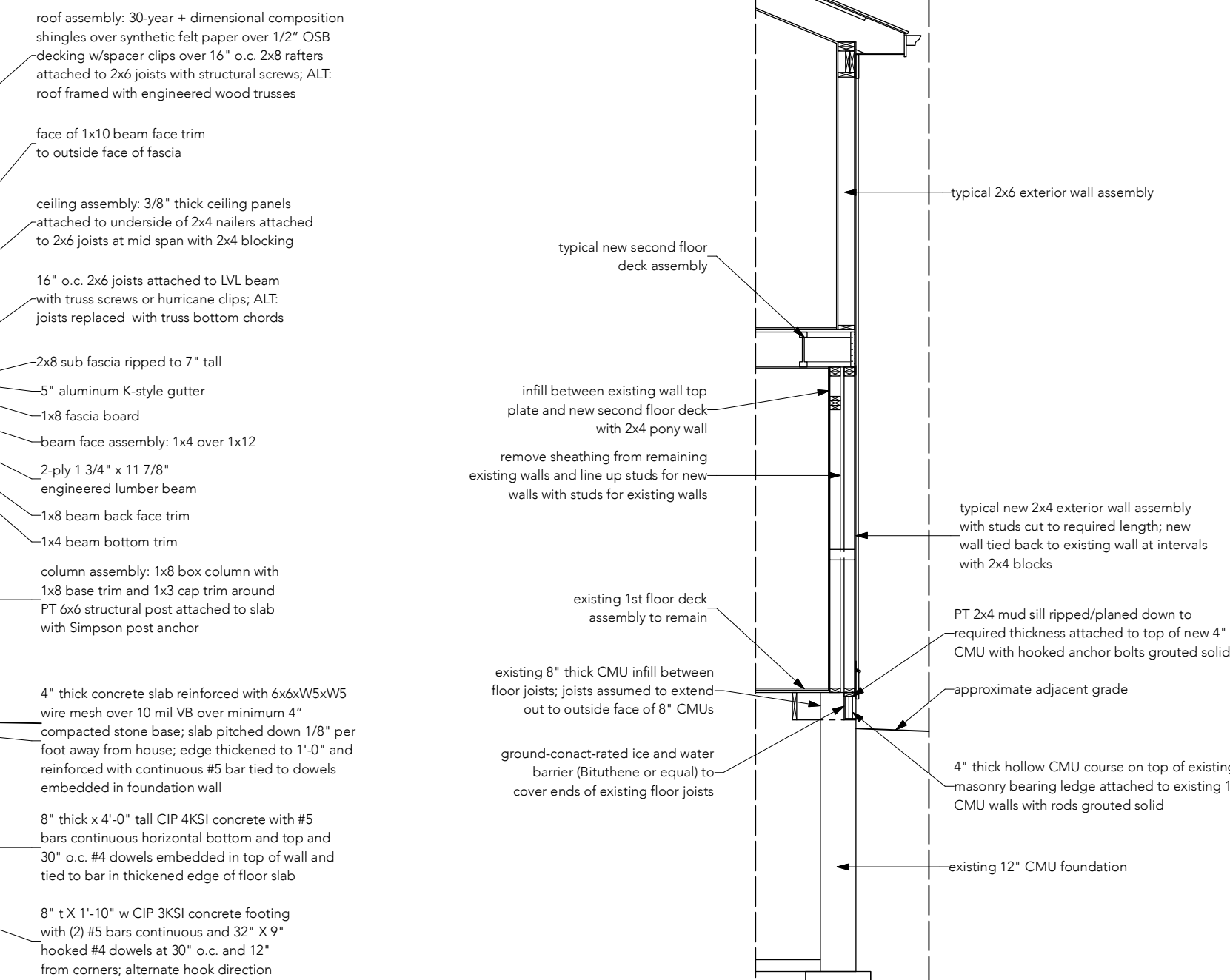
1 PROPOSED 2-STORY ADDITION BUILDING SECTION AT MUDROOM
Scale: 1/4" = 1'-0"



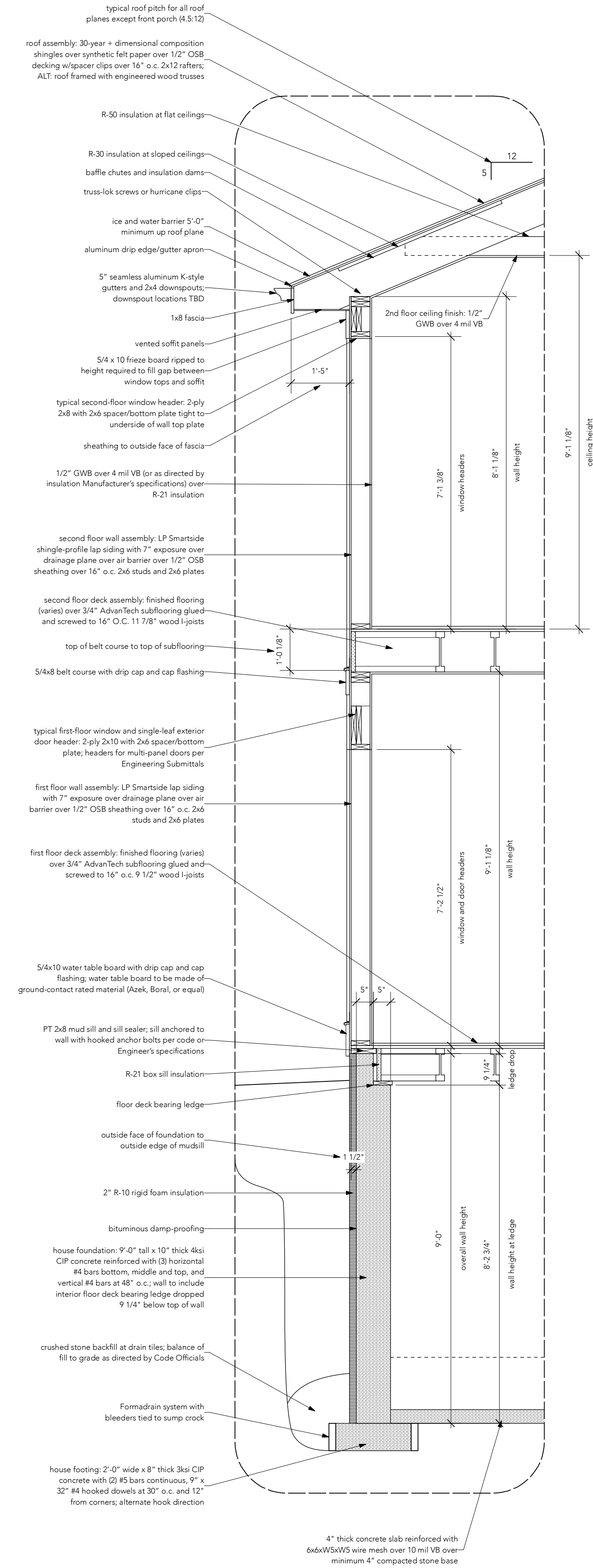
2 PROPOSED 2-STORY ADDITION BUILDING SECTION AT GARAGE
Scale: 1/4" = 1'-0"



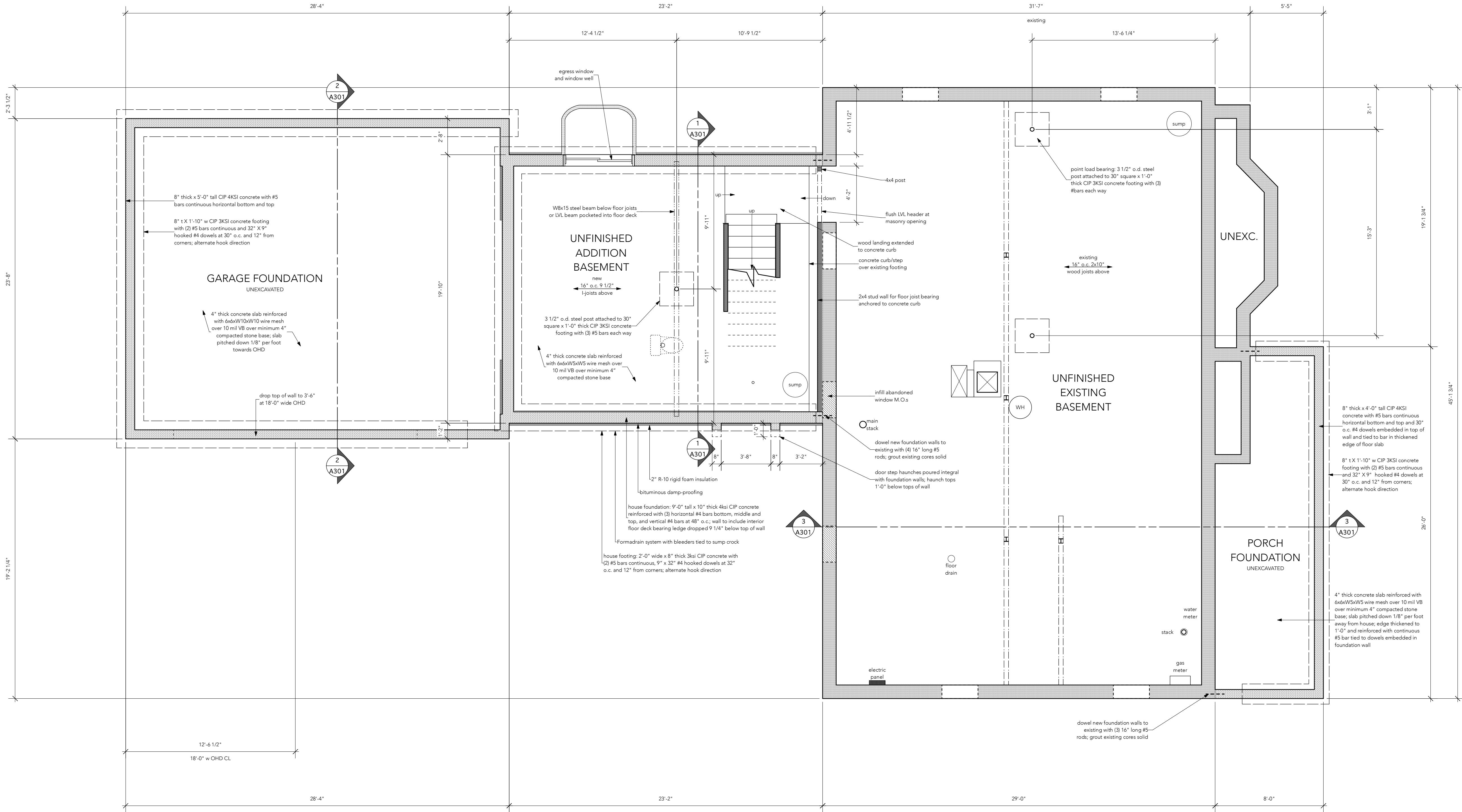
3 PROPOSED 2ND-STORY ADDITION BUILDING SECTION AT EXISTING HOUSE
Scale: 1/4" = 1'-0"



4 PROPOSED DETAIL AT EXISTING 1ST-FLOOR EXTERIOR WALLS
Scale: 1/4" = 1'-0"



5 BUILDING SECTION DETAIL AT PROPOSED ADDITION
Scale: 1/2" = 1'-0"



1
S101

PROPOSED FOOTING/FOUNDATION PLAN WITH EXISTING BASEMENT
Scale: 1/4" = 1'-0"

WALL FILL KEY

	EXISTING MASONRY WALLS TO REMAIN
	EXISTING MASONRY VENEER TO REMAIN
	EXISTING FRAME WALLS TO REMAIN
	NEW CIP CONCRETE WALLS
	NEW CMU WALLS
	NEW FRAME WALLS
	NEW STONE OR BRICK VENEER

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