



## ENERGY REQ'S:

NOTE: IF EXISTING CAVITIES ARE EXPOSED OR NEW, THE FOLLOWING INSULATION IS REQUIRED.

WALLS	R-21 (2x6 WALLS) R-15 (2x4 WALLS)
FLOORS	R-30 FULL DEPTH + 1" AIR GAP (VAULTED)
ROOFS/CEILINGS	R-49 (FLAT)
WINDOWS AND DOORS	U-FACTOR ≤ 0.30
HVAC SYSTEMS (IF REPLACED)	SYSTEM MUST MEET CURRENT ENERGY CODE REQ'S AND DUCTS TESTED (R403)
HOT WATER SYSTEM	NEW WATER HEATING EQUIPMENT MUST MEET CURRENT ENERGY CODE REQ'S (R403.5)
LIGHT FIXTURES	90% OF ALL LAMPS MUST BE HIGH EFFICACY (R404.1)

## PROJECT DATA

<b>PARCEL #:</b>	866140-0040
<b>SITE ADDRESS:</b>	5330 BUTTERWORTH RD. MERCER ISLAND, WA 98040
<b>OWNER:</b>	ROGER & NANCY MACPHERSON
<b>DESIGNER &amp; BUILDER:</b>	MACPHERSON CONSTRUCTION & DESIGN, LLC CONTACT: ROGER MACPHERSON 21626 SE 28TH STREET, SAMMAMISH, WA 98075-7125 P: (425) 391-3333 F: (425) 557-2841
<b>ENGINEER:</b>	MULHERN & KULP RESIDENTIAL STRUCTURAL ENGINEERING CONTACT: RICKY J. ZABEL, PM 7220 TRADE STREET, SUITE 350 SAN DIEGO, CA 92121 P: (619) 650-0010 x166

## LEGAL DESCRIPTION

LOTS 3 AND 4, TONJA ESTATES, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 77 OF PLATS, PAGE 64, IN KING COUNTY, WASHINGTON,

EXCEPT THAT PORTION OF SAID LOT 3, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 3;

THENCE SOUTH 01° 35' 04" WEST ALONG THE EASTERLY LINE OF LOT 3 A DISTANCE OF 75.31 FEET;

THENCE NORTH 10° 03' 02" WEST A DISTANCE OF 74.73 FEET;

THENCE NORTH 76° 21' 57" WEST A DISTANCE OF 10.15 FEET, MORE OR LESS, TO THE NORTH LINE OF SAID LOT 3;

THENCE SOUTH 88° 24' 56" EAST ALONG SAID NORTH LINE 25.00 FEET TO THE POINT OF BEGINNING, AND THE END OF THIS EXCEPTION;

TOGETHER WITH AN UNDIVIDED 1/7TH INTEREST IN LOT 1 OF SAID PLAT; AND

TOGETHER WITH AN UNDIVIDED 1/2 INTEREST IN TRACT A OF SAID PLAT;

(ALSO KNOWN AS THE ROSA LINE REVISION, CITY OF MERCER ISLAND FILE NO. 94-0467, RECORDED UNDER RECORDING NUMBER 9606139004).

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

## JURISDICTION/CODES

<b>LEAD AGENCY:</b>	CITY OF MERCER ISLAND DEVELOPMENT SERVICES - BUILDING & PLANNING 9611 SE 36th ST, MERCER ISLAND, WA 98040 PH: 206.275.7605
<b>BUILDING CODE:</b>	2021 (IRC) MERCER ISLAND MUNICIPAL CODE - CH. 19
<b>ENERGY CODE:</b>	2021 WASHINGTON STATE ENERGY CODE (WSEC)
<b>SEISMIC DESIGN CATEGORY:</b>	D
<b>BASIC WIND SPEED:</b>	110 MPH
<b>MINIMUM SNOW LOAD:</b>	25 LB/SF

## BUILDING DATA

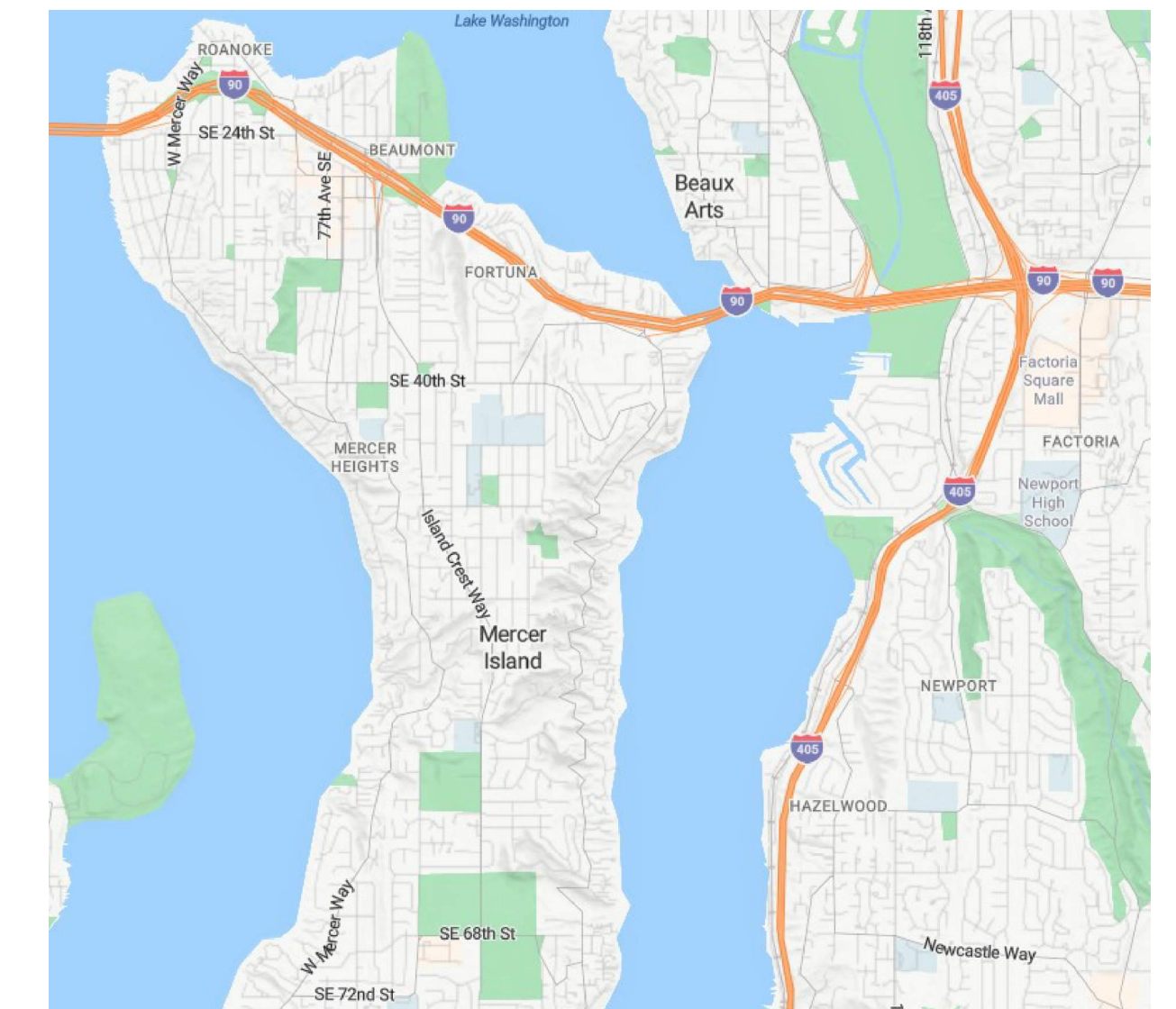
**DESCRIPTION:** PARTIAL DEMOLITION OF AN EXISTING 2-STORY HOUSE. REMODEL OF EXISTING HOUSE, NEW AND REPLACEMENT OF EXISTING HVAC SYSTEM, NEW ELECTRICAL, PLUMBING AS NECESSARY FOR REMODEL SCOPE. **NO EXPANSION OF EXISTING FOOTPRINT.**

REFER TO SITE PLAN A1.0 FOR FLOOR AREA CALCS.

## SHEET INDEX

A0.0	COVER SHEET
A0.1	GENERAL NOTES
1 OF 1	SITE SURVEY
C1.0	DEMO AND TESC PLAN
C1.1	DRAINAGE PLAN
A1.0	SITE PLAN
A2.0	LOWER FLOOR PLAN
A2.1	MAIN FLOOR PLAN
A2.2	UPPER FLOOR PLAN
A2.3	ROOF PLAN
A3.0	BUILDING ELEVATIONS
A3.1	BUILDING ELEVATIONS
A4.0	BUILDING SECTIONS
A4.1	BUILDING SECTIONS
A5.0	ARCHITECTURAL DETAILS
S-0.0	STRUCTURAL NOTES
S-1.0	FOUNDATION PLAN
S-2.0	PARTIAL UPPER FLOOR FRAMING
S-2.1	PARTIAL UPPER FLOOR FRAMING
S-3.0	ROOF FRAMING PLAN
SD-1	STRUCTURAL DETAILS
SD-2	STRUCTURAL DETAILS
SD-3	STRUCTURAL DETAILS
SD-4	STRUCTURAL DETAILS
SD.01	FOUNDATION DETAILS

## VICINITY MAP



SCALE THIS DRAWING, IN FEET



**MacPherson**  
Construction & Design  
21626 SE 28TH ST. SAMMAMISH, WA 98075-7125  
PH. 425.391.3333 FAX 425.557.2841

## BUTTERWORTH - HOUSE 1

5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040

COVER SHEET

DATE	REV.	BY	DESCRIPTION
6/11/24		DAN	PERMIT SUBMITTAL
	△		
	△		
	△		

SHEET #:

**A0.0**



**ALTA/NSPS LAND TITLE SURVEY**  
**LOCATED IN THE S.E. 1/4, OF THE N.E. 1/4,**  
**OF SECTION 19, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M.,**  
**KING COUNTY, WASHINGTON**

**SCHEDULE B, PART 2, EXCEPTIONS:**

(PER CHICAGO TITLE COMPANY OF WASHINGTON, COMMITMENT NO. 0246999--ETU COMMITMENT - THIRD, DATED JANUARY 11, 2024)

**SPECIAL EXCEPTIONS:**

1. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: MERCER ISLAND SEWER DISTRICT, A MUNICIPAL CORPORATION  
 PURPOSE: SEWER PIPELINE AND ALL NECESSARY APPURTENANCES  
 RECORDING DATE: JUNE 19, 1964  
 RECORDING NO.: 5750989  
 RECORDING DATE: JULY 8, 1964  
 RECORDING NO.: 5758750  
 AFFECTS: A PORTION OF SHORELANDS LYING WITHIN STRIP OF LAND 10 FEET IN WIDTH

(EASEMENT(S) ARE DEPICTED HEREON IN AN APPROXIMATE LOCATION, WITHIN THE SHORELANDS)

2. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SHOWN IN THE DOCUMENT:

RECORDING DATE: APRIL 23, 1965  
 RECORDING NO.: 5870467  
 PURPOSE: STORM DRAINAGE AND UTILITIES  
 AFFECTS: WESTERLY TO FEET OF LOT 3, TRACT A, AND OTHER PROPERTY ADJOINING BUTTERWORTH ROAD

(EASEMENT(S) ARE DEPICTED HEREON)

3. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF MERCER ISLAND  
 PURPOSE: UNDERGROUND STORM DRAIN RECORDING  
 DATE: APRIL 23, 1965  
 RECORDING NO.: 5870467  
 AFFECTS: THE NORTH 10 FEET OF LOT 1 AND ALL OF TRACT A

(EASEMENT(S) ARE DEPICTED HEREON)

4. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: MERCER ISLAND SEWER DISTRICT, A MUNICIPAL CORPORATION  
 PURPOSE: UNDERGROUND RIGID CONDUITS  
 RECORDING DATE: MAY 12, 1965  
 RECORDING NO.: 5878038  
 AFFECTS: PORTION OF TRACT A

(EASEMENT IS DEPICTED HEREON)

5. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SHOWN IN THE DOCUMENT

RECORDING DATE: SEPTEMBER 11, 1996  
 RECORDING NO.: 9609110173  
 PURPOSE: INGRESS AND EGRESS  
 AFFECTS: PORTION OF LOT 4 DESCRIBED AS FOLLOWS:  
 BEGINNING AT THE MOST WESTERLY CORNER OF SAID LOT 4, THEN SOUTH 22°26'49" EAST ALONG THE WESTERLY LINE OF SAID LOT 4 A DISTANCE OF 23.56 FEET; THENCE SOUTH 7°10'02" EAST ALONG THE SOUTHERLY LINE OF SAID LOT 4 A DISTANCE OF 35.00 FEET; THENCE NORTH 53°05'50" WEST A DISTANCE OF 53.14 FEET TO THE POINT OF BEGINNING.

(EASEMENT IS DEPICTED HEREON)

6. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF MERCER ISLAND  
 PURPOSE: PUBLIC STORM DRAINAGE  
 RECORDING DATE: DECEMBER 29, 2000  
 RECORDING NO.: 20001229000271  
 AFFECTS: SOUTHEASTERLY PORTION OF SAID PREMISES

(EASEMENT IS DEPICTED HEREON, SEE NOTE)

7. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SHOWN IN THE DOCUMENT

RECORDING DATE: AUGUST 15, 2002  
 RECORDING NO.: 20020815001275  
 PURPOSE: UTILITIES TOGETHER WITH MAINTENANCE THEREOF  
 AFFECTS: SOUTHERLY PORTION OF SAID PREMISES

(EASEMENT(S) ARE DEPICTED HEREON)

8. COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, ENCROACHMENTS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON MERCER ISLAND BOUNDARY LINE REVISION NO. M.I. 92-09-43.

RECORDING NO: 9212299014

(EASEMENT IS DEPICTED HEREON)

9. COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, ENCROACHMENTS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON THE BOUNDARY LINE ADJUSTMENT NO. 94-0467.

RECORDING NO: 9606139004

(EASEMENT(S) ARE DEPICTED HEREON)

10. EXCEPTIONS AND RESERVATIONS CONTAINED IN DEED WHEREBY THE GRANTOR EXCEPTS AND RESERVES ALL OIL, GASES, COAL, ORES, MINERALS, FOSSILS, ETC., AND THE RIGHT OF ENTRY FOR OPENING, DEVELOPING AND WORKING THE SAME AND PROVIDING THAT SUCH RIGHTS SHALL NOT BE EXERCISED UNTIL PROVISION HAS BEEN MADE FOR FULL PAYMENT OF ALL DAMAGES SUSTAINED BY REASON OF SUCH ENTRY

GRANTOR: STATE OF WASHINGTON  
 RECORDING NO.: 1579699

RIGHT OF THE STATE OF WASHINGTON OR ITS SUCCESSORS, SUBJECT TO PAYMENT OF COMPENSATION, TO ACQUIRE RIGHTS OF WAY FOR PRIVATE RAILROADS, SKID ROADS, FLUMES, CANALS, WATER COURSES OR OTHER EASEMENTS FOR TRANSPORTING AND MOVING TIMBER, STONE, MINERALS AND OTHER PRODUCTS FROM THIS AND OTHER LAND, AS RESERVED IN ABOVE-REFERENCED DEED.

AFFECTS: SECOND CLASS SHORELANDS

11. COVENANTS, CONDITIONS, RESTRICTIONS, LIABILITY FOR ASSESSMENTS, AND EASEMENTS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, SOURCE OF INCOME, GENDER, GENDER IDENTITY, GENDER EXPRESSION, MEDICAL CONDITION OR GENETIC INFORMATION, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH IN THE DOCUMENT

RECORDING DATE: APRIL 23, 1965  
 RECORDING NO.: 5870467

(EASEMENTS ARE DEPICTED HEREON)

12. AGREEMENT, AND THE TERMS AND CONDITIONS THEREOF:

RECORDING DATE: DECEMBER 8, 1955  
 RECORDING NO.: 4641177  
 REGARDING: ESTABLISHING THE NORTH BOUNDARY LINE OF SECOND CLASS SHORELANDS ADJOINING LOT 1

(AGREEMENT NOTE IS DEPICTED HEREON)

**SCHEDULE B, PART 2, EXCEPTIONS (CONTINUED):**

13. AGREEMENT, AND THE TERMS AND CONDITIONS THEREOF:

RECORDING DATE: AUGUST 4, 1977  
 RECORDING NO.: 7708040844  
 REGARDING: THE BUILDING AND MAINTENANCE OF A DOCK ON THE SECOND CLASS SHORELANDS

(AGREEMENT NOTE IS DEPICTED HEREON)

14. AGREEMENT TO REMOVE AND REPLACE ENCROACHMENTS WITHIN PUBLIC RIGHT-OF-WAY, AND THE TERMS AND CONDITIONS THEREOF:

RECORDING DATE: NOVEMBER 25, 1997  
 RECORDING NO.: 9711251057

(IT IS UNCLEAR FROM THE DOCUMENT IF ANY ENCROACHMENTS HAVE BEEN OR WILL BE REMOVED UPON CITY NOTICE)

15. ANY QUESTION THAT MAY ARISE DUE TO SHIFTING AND CHANGING IN THE COURSE, BOUNDARIES OR HIGH WATER LINE OF LAKE WASHINGTON.

16. RIGHTS OF THE STATE OF WASHINGTON IN AND TO THAT PORTION, IF ANY, OF THE LAND WHICH LIES BELOW THE LINE OF ORDINARY HIGH WATER OF LAKE WASHINGTON.

17. ANY PROHIBITION OR LIMITATION OF USE, OCCUPANCY OR IMPROVEMENT OF THE LAND RESULTING FROM THE RIGHTS OF THE PUBLIC OR RIPARIAN OWNERS TO USE ANY PORTION WHICH IS NOW OR WAS FORMERLY COVERED BY WATER.

18. PARAMOUNT RIGHTS AND EASEMENTS IN FAVOR OF THE UNITED STATES FOR COMMERCE, NAVIGATION, FISHERIES AND THE PRODUCTION OF POWER.

19. RESERVATIONS AND EXCEPTIONS IN UNITED STATES PATENTS OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF; INDIAN TREATY OR ABORIGINAL RIGHTS.

24. ANY RIGHTS, INTERESTS OR CLAIMS WHICH MAY EXIST OR ARISE BY REASON OF THE FOLLOWING MATTERS DISCLOSED BY AN INSPECTION AND BY SURVEY PREPARED BY M.W. MARSHALL DATED OCTOBER 5, 1992, UNDER JOB NO. 1260-E:

A) QUESTION OF THE LOCATION OF A HEDGE AND A CHAIN LINK FENCE ALONG A PORTION OF THE NORTH BOUNDARY LINE THAT DO NOT CONFORM TO THE PROPERTY LINE;

B) QUESTION OF THE LOCATION OF PLANTINGS ALONG THE WEST LINE OF THE PROPERTY THAT DO NOT CONFORM TO THE PROPERTY LINE;

C) QUESTION OF THE LOCATION OF PLANTINGS AND VEGETATION ALONG THE SOUTH LINE OF THE PROPERTY THAT DO NOT CONFORM TO THE PROPERTY LINE.

**NOTES:**

- MONUMENTS VISITED ON 03/15/2024.
- THIS SURVEY WAS PERFORMED ON THE GROUND BETWEEN THE DATES OF 02/12/24 AND 03/15/2024 UNDER THE GUIDELINES OF THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS AS ADOPTED BY ALTA AND NSPS.
- NO EVIDENCE OF CEMETARIES, BURIAL GROUNDS OR LAKES BORDER OR RUN THROUGH THESE PREMISES. AN EXISTING STREAM WITH SMALL MAN-MADE PONDS BORDERS THE SOUTHERN BOUNDARY HEREON AND IS DEPICTED.
- UTILITIES LOCATED AND MAPPED BY DIRECT FIELD OBSERVATIONS AND UTILITY COMPANY MARKED LOCATIONS. UTILITIES LOCATED AND MARKED THE WEEK OF MARCH 11, 2024 BY MT. VIEW LOCATING SERVICES.
- NO EVIDENCE OF ANY RECENT EARTH WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WERE OBSERVED DURING THIS SURVEY.
- NO PROPOSED CHANGES IN STREET RIGHT-OF-WAY LINES OR EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WAS OBSERVED DURING THIS SURVEY.
- NO WETLANDS MARKERS WERE FOUND DURING THIS SURVEY.
- THE REVISED PROPERTY AREA AS SHOWN ON THE ROSA LINE REVISION (RLR) EQUALS 83,107 SQ. FT., EXCLUSIVE OF EASEMENT FOR INGRESS & EGRESS. OUR CALCULATED AREA EQUALS 83,106 SQ. FT. THESE AREAS ARE TO THE ROCK SEAWALL (HIGH WATER LINE) AS DEPICTED ON THE REVISION. AS-BUILT LOCATIONS OF THE CURRENT ROCK SEAWALL DIFFER SLIGHTLY FROM THE 1996 REVISION. PROPERTY AREAS TO THE APPROXIMATE CURRENT FACE OF SEAWALL ARE AS FOLLOWS: 83,640 SQ. FT. (INCLUDING EASEMENT) AND 83,320 SQ. FT. EXCLUDING EASEMENT.
- THE SEAWALL LOCATION WAS SURVEYED AND MEASURED ON FEB. 12, 2024. IT WAS MEASURED AT THE APPROXIMATE FACE (WATER SIDE) OF 2-MAN OR LARGER ROCKS AT POINTS OF ANGLE OR END POINTS. THESE MEASURED POINTS ARE ARBITRARY AS ROCK FACES ARE NOT ALIGNED IN CONTINUOUSLY STRAIGHT SECTIONS AND CONTAIN UNEVEN SURFACES. THE FACE OF SEAWALL IS SUBJECT TO CHANGE DUE TO NATURAL CAUSES. ACTUAL OWNERSHIP LINES EXTEND TO THE LIMITS OF SECOND CLASS SHORELANDS ADJOINING. NO ATTEMPT WAS MADE TO SURVEY THESE LIMITS.

**REFERENCE SURVEYS:**

- PLAT OF TONJA ESTATES, VOL. 77, PAGE 64, KING COUNTY, WA.
- ROSA LINE REVISION, CITY OF MERCER ISLAND FILE NO. 94-0467, REC. NO. 9606139004
- FELTIS-EYRING BOUNDARY LINE REVISION, MERCER ISLAND FILE NO. M.I. 92-09-43, REC. NO. 9212299014

**LEGEND:**

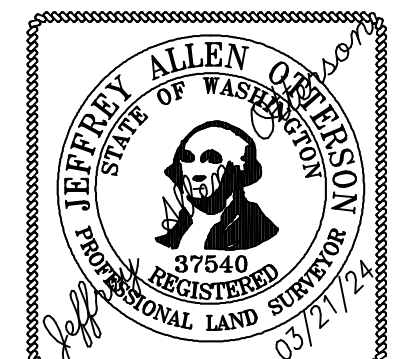
- FOUND CONCRETE MONUMENT IN CASE W/ 3/8" BRASS PLUG & PUNCH
- SET 1/2" REBAR & CAP "CASCADE LS 37540"
- FOUND REBAR & CAP OR IRON PIPE & CAP AS DESCRIBED
- SET OR FOUND NAIL & WASHER AS DESCRIBED
- CATCH BASIN
- AREA DRAIN
- SANITARY SEWER MANHOLE
- GAS VALVE
- GAS METER
- FIRE HYDRANT
- WATER VALVE
- WATER METER
- WATER HOT BOX
- WATER FAUCET
- TELEPHONE OR COMM RISER
- PT POWER TRANSFORMER
- PV POWER VAULT
- ELECTRIC BOX
- UTILITY POLE
- GUY ANCHOR
- MAIL BOX
- CONIFER TREE
- LEYLAND CYPRESS IN ROW
- DECIDUOUS TREE
- OVERHEAD ELECTRICAL AND/OR COMM LINES
- UNDERGROUND ELECTRICAL LINES
- UNDERGROUND GAS MAIN
- UNDERGROUND COMM LINES
- SANITARY SEWER MAIN
- UNDERGROUND WATER MAIN
- IRON FENCE ON CONC. FOOTING
- CHAIN LINK FENCE
- ROCKERY
- (P) PLAT OF TONJA ESTATES
- (RLR) ROSA LINE REVISION REC. NO. 9606139004
- CLF CHAIN LINK FENCE
- G GATE
- CP CONCRETE PILLAR
- EA EDGE OF PAVEMENT
- EC EXTRUDED CURB
- APP APPLE
- CW COTTONWOOD
- MAG MAGNOLIA
- SPR SPRUCE
- K KATSURA
- C CEDAR
- F FIR
- PE PAULOWNIA/EMPRESS
- CC CHINESE CATALPA
- DT DECIDUOUS TREE
- M MAPLE
- JS JAPANESE STEWARTIA
- P PINE
- L LAUREL
- J JUNIPER
- B BIRCH
- PC PHOTINIA CV.
- 26.30 SPOT ELEVATION
- (A) PROPERTY CORNER NOTE
- (I) EXCEPTION REFERENCE NO. PER SCHEDULE B
- AREAS OF GRAVEL
- AREAS OF STONE PAVERS
- AREAS OF CONCRETE
- AREAS OF CONCRETE PAVERS

**ALTA/NSPS LAND TITLE SURVEY CERTIFICATION**

TO ROGER MACPHERSON RESIDENTIAL TRUST AND NANCY MACPHERSON RESIDENTIAL TRUST AND TO CHICAGO TITLE COMPANY OF WASHINGTON:

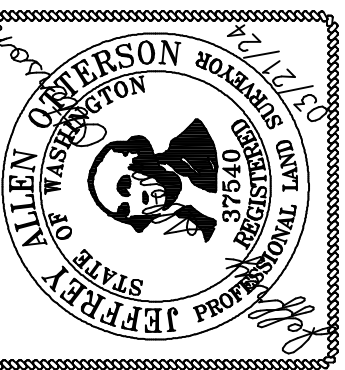
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 4 AND 5 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON MARCH 15, 2024.

DATE OF PLAT MAP: 03/21/24  
 NAME: Jeffrey Allen Otterson  
 REGISTRATION NO. 37540

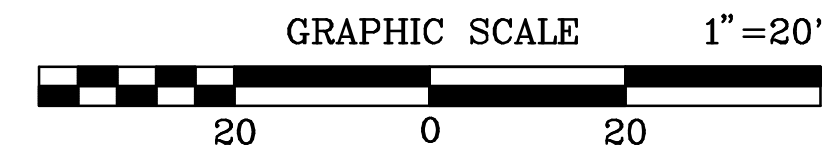


**CASCADE LAND SURVEYING**  
 Complete Land Surveying Services  
 16009 AP TUBBS RD E., BUCKLEY, WA 98321  
 PHONE: (253) 820-4016  
 Email: jeff@cascadelands.com  
 CHECKED BY: JAO  
 SCALE: N/A

**ALTA/NSPS LAND TITLE SURVEY**  
**FOR: MACPHERSON RESIDENTIAL TRUST**  
**5930 BUTTERWORTH ROAD**  
**MERCER ISLAND, WA 98040**



**SURVEYOR'S CERTIFICATE**  
 THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF ROGER MACPHERSON RESIDENTIAL TRUST AND NANCY MACPHERSON RESIDENTIAL TRUST  
 Jeffrey Allen Otterson  
 P.L.S. CERTIFICATE NO. 37540



**BASIS OF BEARINGS:**

THE CENTERLINE OF BUTTERWORTH ROAD, BEING NORTH 20°10'45" EAST PER THE PLAT OF TONJA ESTATES, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 77 OF PLATS, PAGE 64, IN KING COUNTY, WASHINGTON.

**VERTICAL DATUM:**

NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

**BENCHMARK:**

LAKE WASHINGTON WATER SURFACE ELEVATION PER U.S. ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT, WATER MANAGEMENT, ELEVATION = 17.17 NAVD 88 ON MARCH 1, 2024 AT 10:30 A.M.

**CONTOUR INTERVAL:**

2 FEET

**LEGAL DESCRIPTION:**

(PER CHICAGO TITLE COMPANY OF WASHINGTON COMMITMENT NO. 0246999-ETU, THIRD, DATED JANUARY 11, 2024)

LOTS 3 AND 4, TONJA ESTATES, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 77 OF PLATS, PAGE 64, IN KING COUNTY, WASHINGTON.

EXCEPT THAT PORTION OF SAID LOT 3, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 3;

THENCE SOUTH 01°35'04" WEST ALONG THE EASTERLY LINE OF LOT 3 A DISTANCE OF 75.31 FEET;

THENCE NORTH 10°03'02" WEST A DISTANCE OF 74.73 FEET;

THENCE NORTH 76°21'57" WEST A DISTANCE OF 10.15 FEET, MORE OR LESS, TO THE NORTH LINE OF SAID LOT 3;

THENCE SOUTH 88°24'56" EAST ALONG SAID NORTH LINE 25.00 FEET TO THE POINT OF BEGINNING, AND THE END OF THIS EXCEPTION;

TOGETHER WITH AN UNDIVIDED 1/7TH INTEREST IN LOT 1 OF SAID PLAT; AND

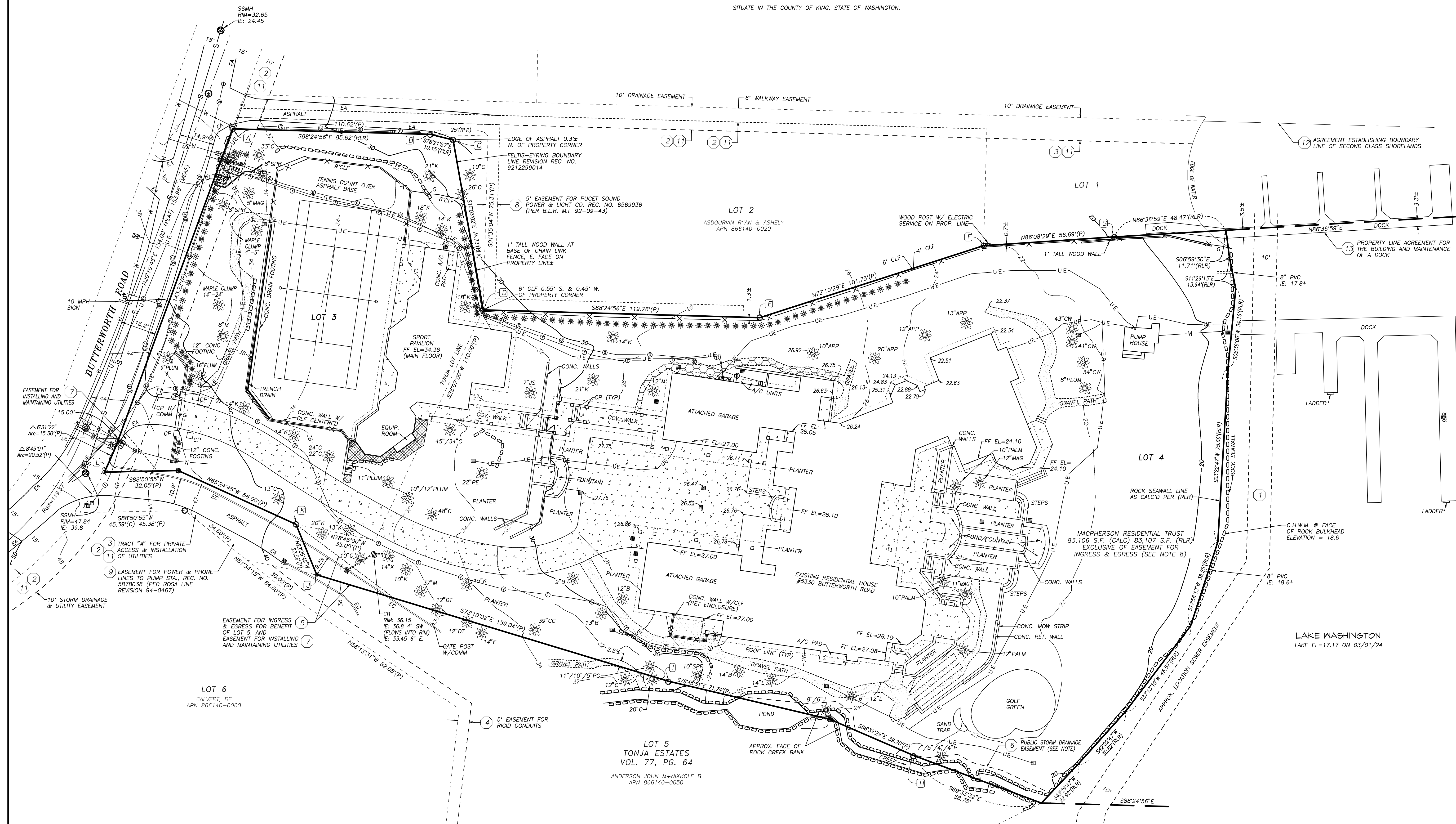
TOGETHER WITH AN UNDIVIDED 1/2 INTEREST IN TRACT A OF SAID PLAT;

(ALSO KNOWN AS THE ROSA LINE REVISION, CITY OF MERCER ISLAND FILE NO. 94-0467, RECORDED UNDER RECORDING NUMBER 9606139004).

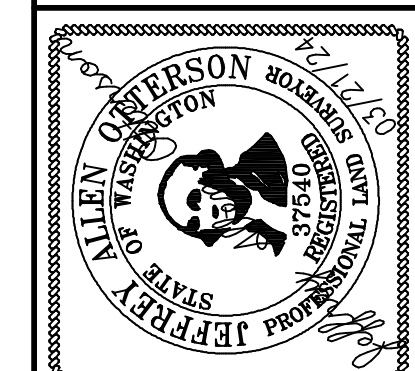
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**FOUND/SET PROPERTY CORNER LEGEND:**

- (A) FOUND 3/4" IRON PIPE & CAP "LS 20764" S49°E 0.09'
- (B) FOUND 3/4" IRON PIPE & CAP W/TACK "LS 20764" S38°W 0.09'
- (C) FOUND 1/2" REBAR & CAP "TERRANE 15025 56664 52088 57176"
- (D) FOUND 3/4" IRON PIPE & CAP W/TACK "LS 20764" S26°W 0.16'
- (E) FOUND 1/2" REBAR & CAP "TERRANE 15025 56664 52088 57176"
- (F) FOUND 3/4" IRON PIPE & CAP W/TACK "LS 20764" S51°E 0.08'
- (G) FOUND 3/4" IRON PIPE & CAP W/TACK "LS 20764" S4°W 0.17'
- (H) FOUND 3/4" IRON PIPE & CAP W/TACK "LS 20764" S34°W 0.41'
- (I) FOUND 3/4" IRON PIPE & CAP W/TACK "LS 20764" S22°W 0.22'
- (J) FOUND MAG NAIL & WASHER "37427" N49°E 0.09'
- (K) FOUND 1/2" REBAR & CAP "TRIAD ASSOC 19620 22335 21402 18094"
- (L) SET MAG NAIL & I.D. WASHER "LS 37540"



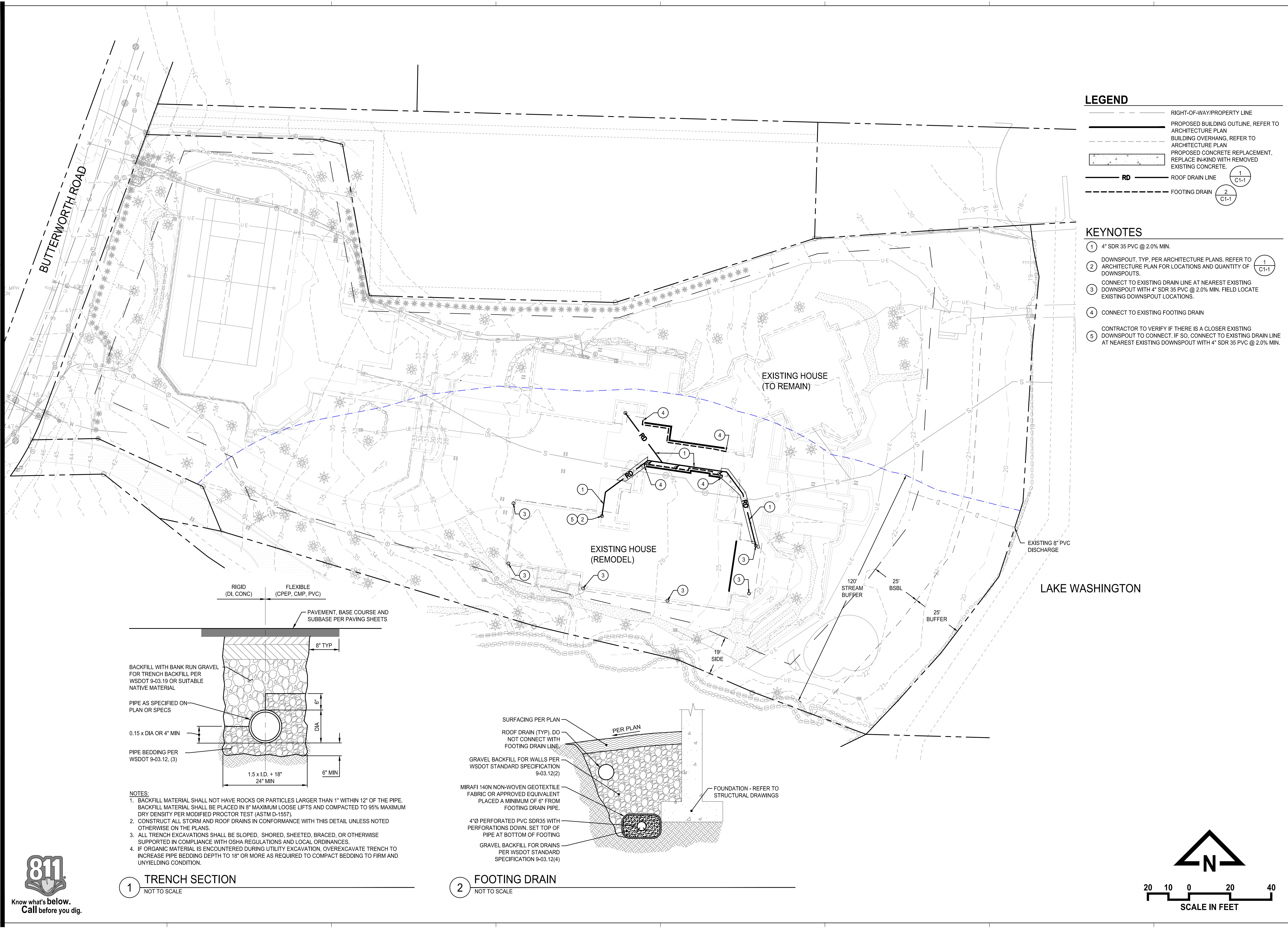
**SURVEYOR'S CERTIFICATE**  
 THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF ROGER MACPHERSON RESIDENTIAL TRUST IN AND NANCY MACPHERSON RESIDENTIAL TRUST  
 Jeffrey Allen Otterson  
 P.L.S. CERTIFICATE NO. 37540



**ALTA/NSPS LAND TITLE SURVEY**  
**FOR: MACPHERSON RESIDENTIAL TRUST**  
**5330 BUTTERWORTH ROAD**  
**MERCER ISLAND, WA 98040**

**CASCADE LAND SURVEYING**  
 Complete Land Surveying Services  
 16009 AP TUBBS RD E, BUCKLEY, WA 98321  
 PHONE: (253) 820-4016  
 Email: jeff@cascadelands.com  
 CHECKED BY: JAO  
 SCALE: 1" = 20'  
 DRAWN BY: JAO  
 JOB NO.: 2024-003  
 DATE: Thu., Mar. 21, 2024  
 SHEET: 2 OF 2

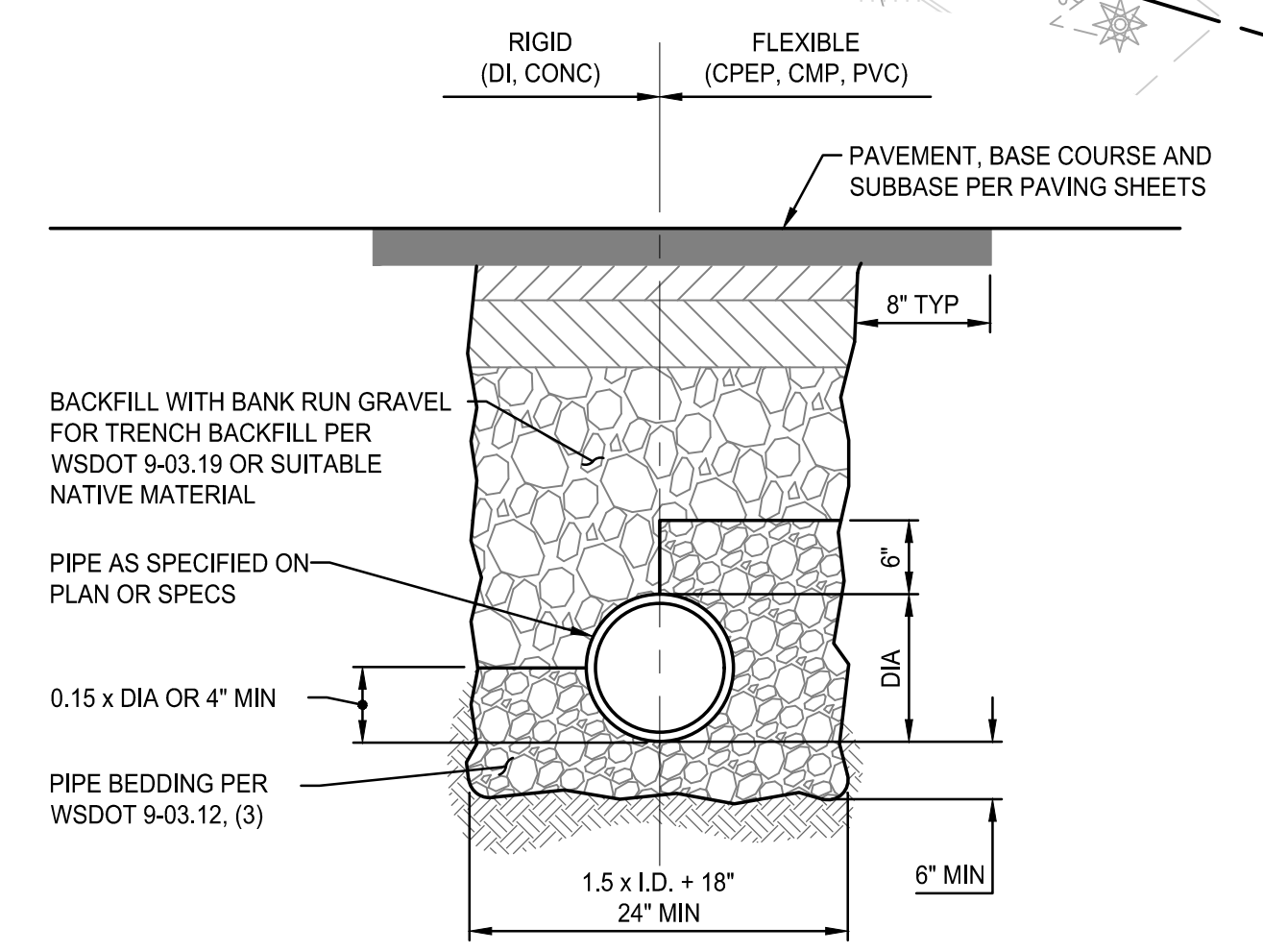




**LEGEND**

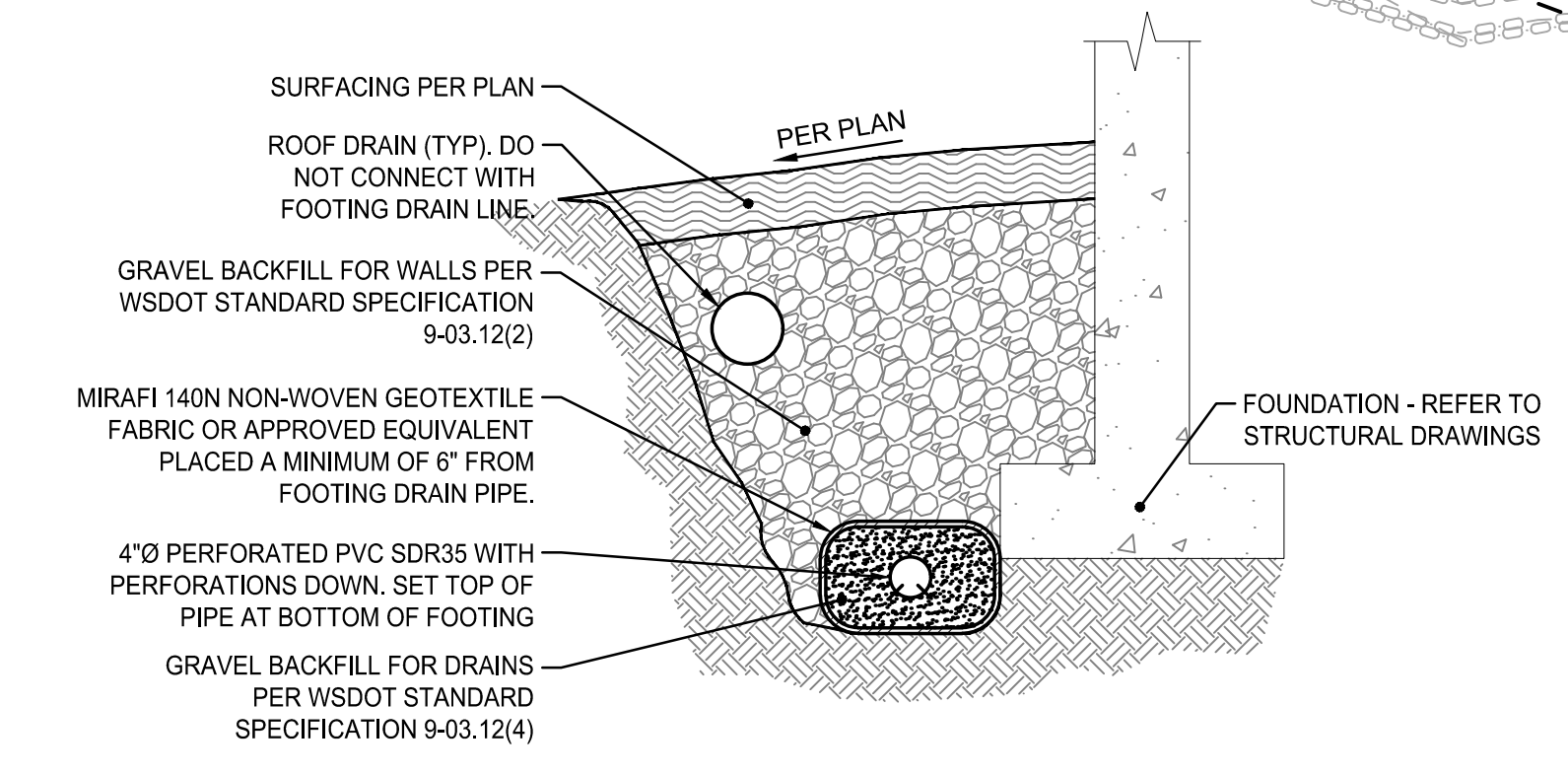
	RIGHT-OF-WAY/PROPERTY LINE
	PROPOSED BUILDING OUTLINE, REFER TO ARCHITECTURE PLAN
	BUILDING OVERHANG, REFER TO ARCHITECTURE PLAN
	PROPOSED CONCRETE REPLACEMENT, REPLACE IN-KIND WITH REMOVED EXISTING CONCRETE.
	ROOF DRAIN LINE <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">1 C1-1</span>
	FOOTING DRAIN <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2 C1-1</span>

- KEYNOTES**
- ① 4" SDR 35 PVC @ 2.0% MIN.
  - ② DOWNSPOUT, TYP, PER ARCHITECTURE PLANS. REFER TO ARCHITECTURE PLAN FOR LOCATIONS AND QUANTITY OF DOWNSPOUTS. 1  
C1-1
  - ③ CONNECT TO EXISTING DRAIN LINE AT NEAREST EXISTING DOWNSPOUT WITH 4" SDR 35 PVC @ 2.0% MIN. FIELD LOCATE EXISTING DOWNSPOUT LOCATIONS.
  - ④ CONNECT TO EXISTING FOOTING DRAIN
  - ⑤ CONTRACTOR TO VERIFY IF THERE IS A CLOSER EXISTING DOWNSPOUT TO CONNECT. IF SO, CONNECT TO EXISTING DRAIN LINE AT NEAREST EXISTING DOWNSPOUT WITH 4" SDR 35 PVC @ 2.0% MIN.



- NOTES:**
1. BACKFILL MATERIAL SHALL NOT HAVE ROCKS OR PARTICLES LARGER THAN 1" WITHIN 12" OF THE PIPE. BACKFILL MATERIAL SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY PER MODIFIED PROCTOR TEST (ASTM D-1557).
  2. CONSTRUCT ALL STORM AND ROOF DRAINS IN CONFORMANCE WITH THIS DETAIL UNLESS NOTED OTHERWISE ON THE PLANS.
  3. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES.
  4. IF ORGANIC MATERIAL IS ENCOUNTERED DURING UTILITY EXCAVATION, OVEREXCAVATE TRENCH TO INCREASE PIPE BEDDING DEPTH TO 18" OR MORE AS REQUIRED TO COMPACT BEDDING TO FIRM AND UNYIELDING CONDITION.

**1 TRENCH SECTION**  
NOT TO SCALE



**2 FOOTING DRAIN**  
NOT TO SCALE

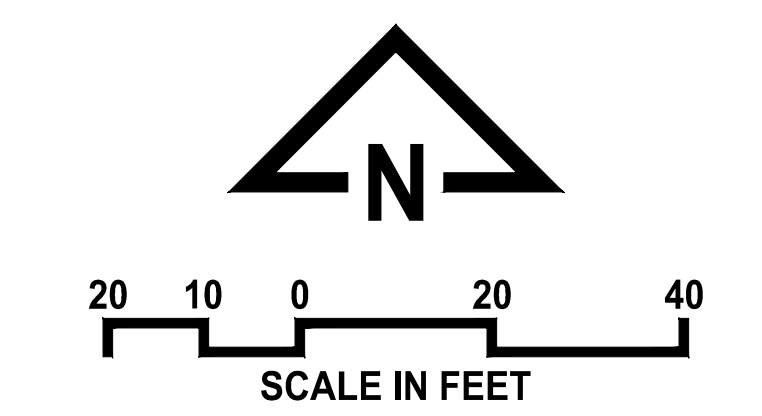
**BUTTERWORTH ROAD REMODEL**  
5330 BUTTERWORTH ROAD  
MERCER ISLAND, WA 98040

PERMIT SET

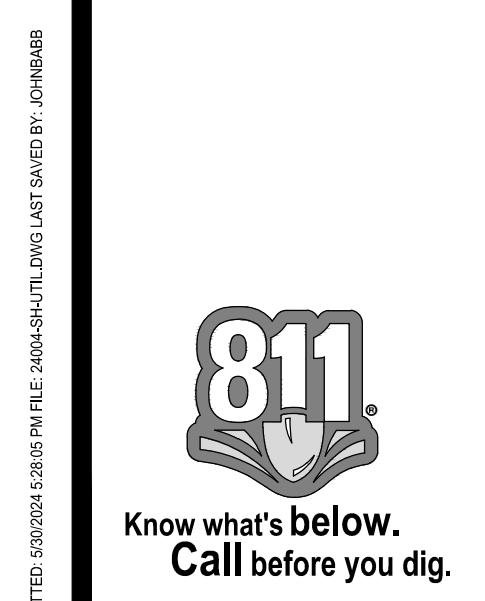


#	DATE	DESCRIPTION

24004  
05/31/2024  
**SITE PLAN**



**C1-1**



PLOTTED: 05/02/2024 12:05 PM FILE: 24004-SH-TITLE.DWG LAST SAVED BY: JONHAR

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48

SCALE THIS DRAWING, IN FEET

### DEMOLITION NOTES

**REMOVAL OF EXISTING STRUCTURES:**  
 ANY EXISTING STRUCTURE IDENTIFIED ON THE PLAN FOR DEMOLITION, IS TO BE COMPLETELY DEMOLISHED DOWN TO THE FOUNDATION. THIS INCLUDES, BUT IS NOT LIMITED TO, ALL WALLS, ROOFING, FLOORS, FIXTURES, AND UTILITIES WITHIN THE DESIGNATED DEMOLITION AREA.  
 ALL DEBRIS, INCLUDING CONSTRUCTION MATERIALS, WASTE, AND HAZARDOUS SUBSTANCES, MUST BE PROPERLY REMOVED AND DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS AND ENVIRONMENTAL GUIDELINES.

**PROTECTION OF ADJACENT STRUCTURES AND AREAS:**  
 PRIOR TO DEMOLITION, ENSURE THAT ALL ADJACENT STRUCTURES AND AREAS NOT DESIGNATED FOR DEMOLITION ARE ADEQUATELY PROTECTED TO PREVENT ANY DAMAGE. ERECT TEMPORARY BARRIERS AND SAFETY FENCING AS NEEDED TO SECURE THE DEMOLITION SITE AND PROTECT WORKERS.

**UTILITY DISCONNECTIONS AND SAFETY MEASURES:**  
 ALL UTILITIES (ELECTRICAL, GAS, WATER, SEWAGE, ETC.) MUST BE SAFELY DISCONNECTED OR CAPPED OFF BEFORE THE COMMENCEMENT OF DEMOLITION WORK. FOLLOW ALL SAFETY PROTOCOLS AND GUIDELINES AS PER OSHA AND LOCAL SAFETY STANDARDS TO ENSURE A SAFE DEMOLITION PROCESS.

**SITE RESTORATION:**  
 UPON COMPLETION OF DEMOLITION, THE SITE MUST BE CLEARED OF ALL DEBRIS AND WASTE MATERIALS. THE SITE MUST BE GRADED AS NECESSARY AND RESTORED TO MATCH THE EXISTING SURROUNDINGS, INCLUDING ANY LANDSCAPING FEATURES. THIS INCLUDES ENSURING PROPER DRAINAGE AND PREVENTING EROSION BY STABILIZING THE SOIL.

### GROSS FLOOR AREA

**DESCRIPTION:** TOTAL SQUARE FOOTAGE OF FLOOR AREA, BOUNDED BY THE EXTERIOR FACES OF THE BUILDING. (PER KING COUNTY ASSESSOR'S)

**EXISTING FLOOR AREA:**  
 BASEMENT 760 SF  
 MAIN 8,410 SF  
 UPPER 3,010 SF  
 GARAGE 2,160 SF  
 TOTAL: 14,340 SF

**REMOVED FLOOR AREA:**  
 MAIN 1,050 SF  
 UPPER 555 SF  
 TOTAL: 1,605 SF

**NEW/ADDITION FLOOR AREA:**  
 UPPER 1,500 SF

**TOTAL FLOOR AREA:**  
 BASEMENT 760 SF  
 MAIN 7,360 SF  
 UPPER 3,955 SF  
 GARAGE 2,160 SF  
 TOTAL: 14,235 SF -105 SF FROM EXISTING

### PROJECT NARRATIVE

**GENERAL DESCRIPTION:** THIS PROJECT PROPOSES TO REMODEL AN EXISTING 12,180 SF SINGLE FAMILY RESIDENCE BY REMOVING A PORTION OF THE EXISTING HOUSE AND EXPANDING OVER THE EXISTING GARAGE.

**DEMOLITION:** INCLUDES REMOVING THE MIDDLE PORTION OF THE HOUSE, SEVERAL TRELISES, COLUMNS AND ROOF OVERHANGS, A PERGOLA OFF THE BACK PATIO AND A FIREPLACE CHIMNEY.

**NEW CONSTRUCTION:** LIMITED TO THE SOUTHERLY PORTION OF THE HOUSE WHICH WILL INCLUDE REMOVAL OF EXISTING INTERIOR WALLS, WINDOW/DOOR OPENINGS, AND AN EXPANSION ON THE UPPER FLOOR OVER THE EXISTING GARAGE. NO PROPOSED EXPANSION OF THE EXISTING HOUSE FOOTPRINT.

### GRADING

**DEFINITION:** APPROXIMATE VOLUME OF CUT/FILL OUTSIDE OF BUILDING FOOTPRINT

NO PROPOSED GRADING

### LOT ZONING (MICC 19.02.020)

**LOT ZONING:** R-15  
**TOTAL LOT AREA:** 82,425 sf (PER SURVEY)  
**MAX LOT COVERAGE:** 40% (>15% LOT SLOPE) = 32,970 SF MAX (IMPERVIOUS SURFACES)  
**GROSS FLOOR AREA:** 12,000 SF OR 40% LOT AREA (WHICHEVER IS LESS)  
**MAX BUILDING HEIGHT:** 30' (FROM AVG. BLDG. ELEV.)  
 30' MAX TO PLATE ON DOWNHILL SLOPE

### SETBACKS/YARDS

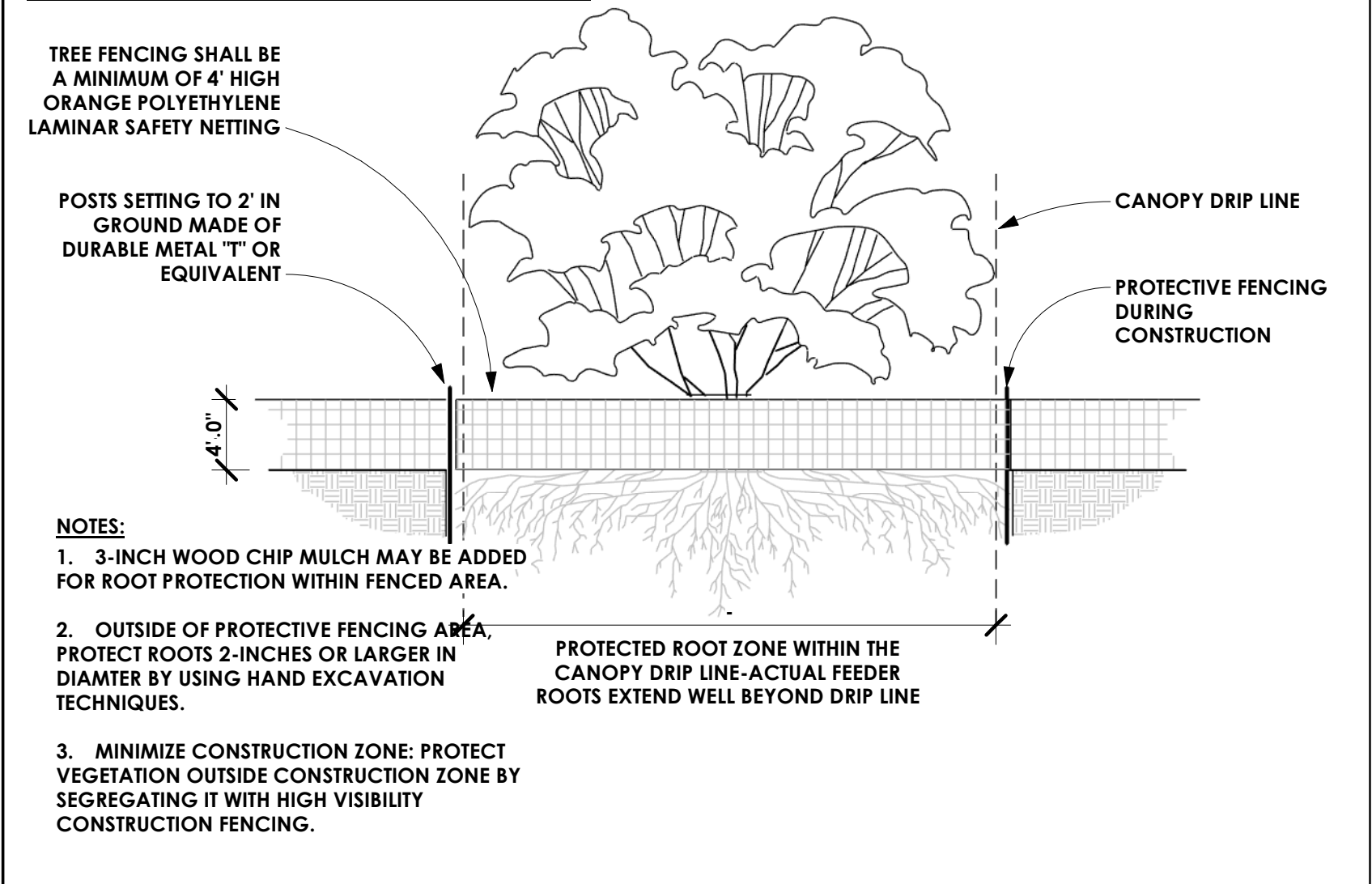
**FRONT YARD:** 20'-0" MIN  
**SHORELINE:** 25'-0" BUFFER FROM OHWM  
 25'-0" SETBACK  
**SIDE YARD:** 26'-6" COMBINED (15' WIDE x 17%)  
 7'-6" MIN.

### TREE RETENTION (MICC 19.10.060)

**THE FOLLOWING TREES SHALL BE PRIORITIZED FOR RETENTION:**  
 A. EXCEPTIONAL TREES;  
 B. TREES WITH A DIAMETER OF MORE THAN 24 INCHES;  
 C. TREES THAT HAVE A GREATER LIKELIHOOD OF LONGEVITY; AND  
 D. TREES THAT ARE PART OF A HEALTHY GROVE.

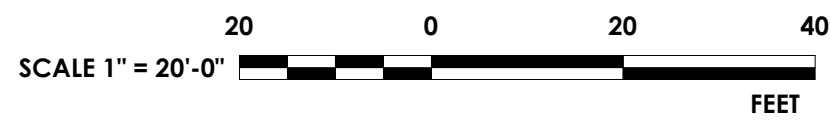
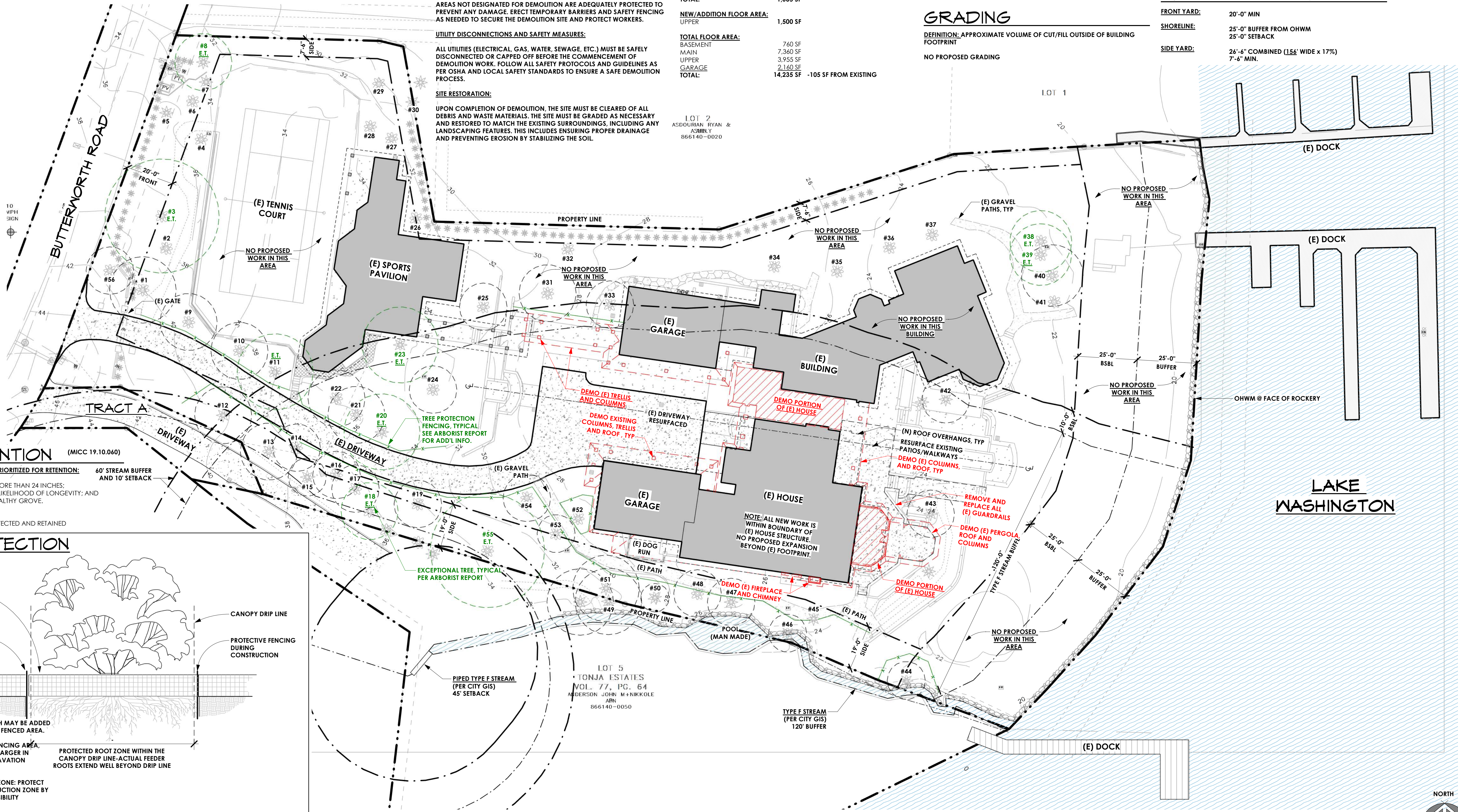
**PROPOSAL:**  
 ALL TREES ON SITE ARE TO BE PROTECTED AND RETAINED

### TREE PROTECTION

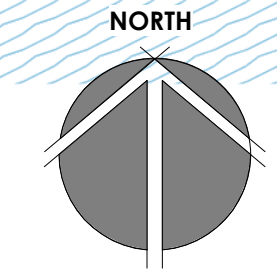


**REASON:** TO REDUCE EROSION BY PRESERVING NATURAL VEGETATION WHEREVER PRACTICABLE.

**SYMBOL:**



## SITE PLAN



**MacPherson**  
 Construction & Design  
 21626 SE 28TH ST. SAMMAMISH, WA 98075-7125  
 PH. 425.391.3333 FAX 425.557.2841

**BUTTERWORTH ROAD**  
 5330 BUTTERWORTH RD.  
 MERCER ISLAND, WA 98040  
 PARCEL #: 866140-0040  
**SITE PLAN-REMODEL**

DATE	REV.	BY	DESCRIPTION
6/10/24		DAN	PERMIT SUBMITTAL

SHEET #:  
**A1.0**

**GENERAL DEMO NOTES**

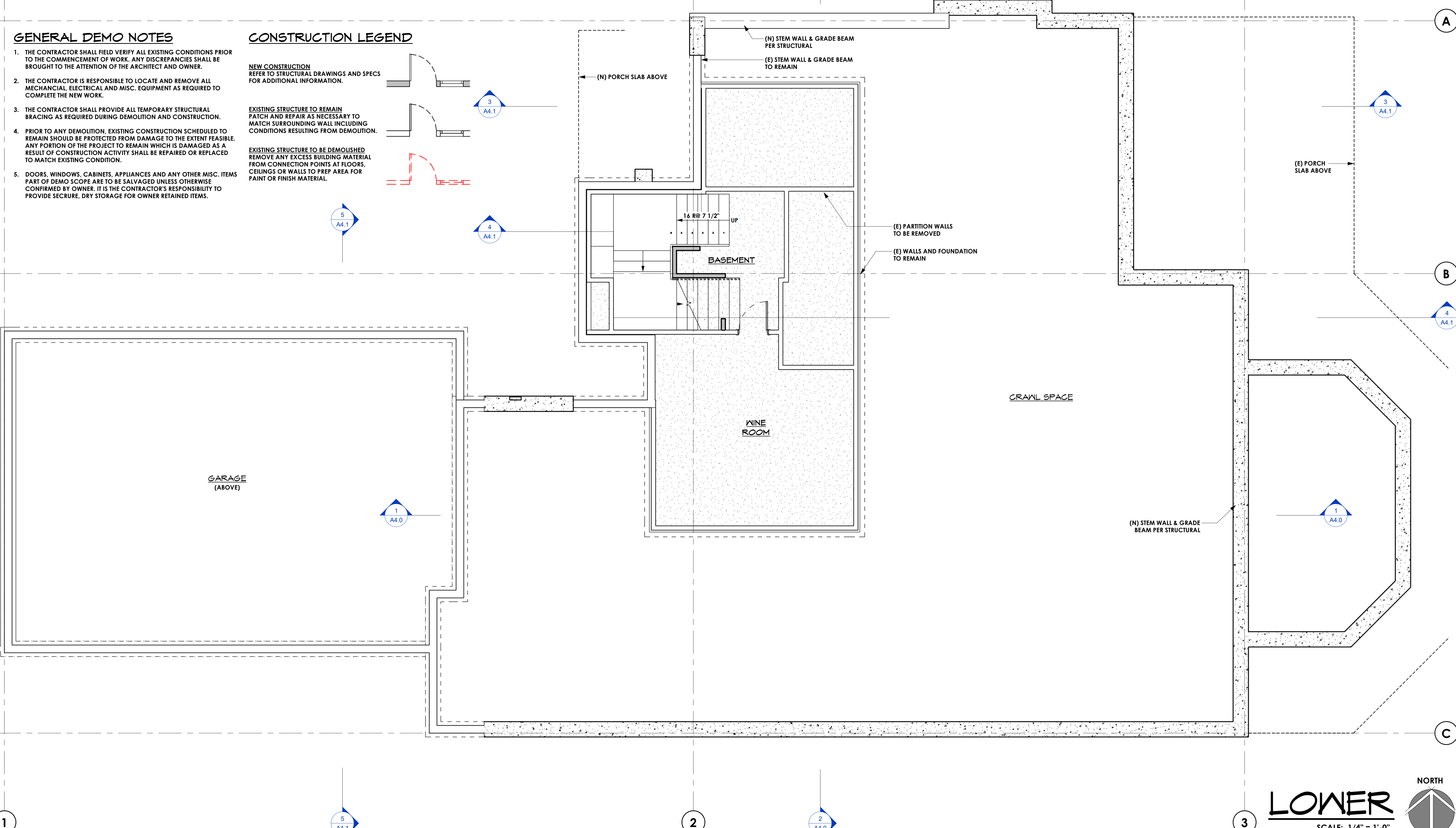
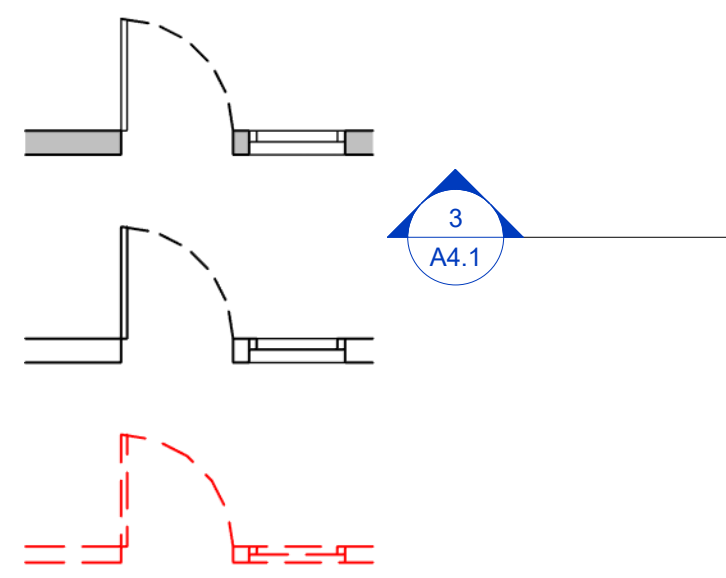
1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OWNER.
2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND REMOVE ALL MECHANICAL, ELECTRICAL AND MISC. EQUIPMENT AS REQUIRED TO COMPLETE THE NEW WORK.
3. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY STRUCTURAL BRACING AS REQUIRED DURING DEMOLITION AND CONSTRUCTION.
4. PRIOR TO ANY DEMOLITION, EXISTING CONSTRUCTION SCHEDULED TO REMAIN SHOULD BE PROTECTED FROM DAMAGE TO THE EXTENT FEASIBLE. ANY PORTION OF THE PROJECT TO REMAIN WHICH IS DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED TO MATCH EXISTING CONDITION.
5. DOORS, WINDOWS, CABINETS, APPLIANCES AND ANY OTHER MISC. ITEMS PART OF DEMO SCOPE ARE TO BE SALVAGED UNLESS OTHERWISE CONFIRMED BY OWNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SECURE, DRY STORAGE FOR OWNER RETAINED ITEMS.

**CONSTRUCTION LEGEND**

**NEW CONSTRUCTION**  
REFER TO STRUCTURAL DRAWINGS AND SPECS FOR ADDITIONAL INFORMATION.

**EXISTING STRUCTURE TO REMAIN**  
PATCH AND REPAIR AS NECESSARY TO MATCH SURROUNDING WALL INCLUDING CONDITIONS RESULTING FROM DEMOLITION.

**EXISTING STRUCTURE TO BE DEMOLISHED**  
REMOVE ANY EXCESS BUILDING MATERIAL FROM CONNECTION POINTS AT FLOORS, CEILINGS OR WALLS TO PREP AREA FOR PAINT OR FINISH MATERIAL.



SCALE THIS DRAWING, IN FEET

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48

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

NORTH

**MacPherson**  
Construction & Design  
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PH. 425.391.3333 FAX 425.557.2841

**BUTTERWORTH - HOUSE 1**  
5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040  
**FLOOR PLAN - LOWER**

DATE	REV.	BY	DESCRIPTION
6/11/24		DAN	PERMIT SUBMITTAL
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	△		
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SHEET #:  
**A2.0**

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NOTE:  
FOR ADDITIONAL INFORMATION,  
SEE GENERAL NOTES AND  
STRUCTURAL DRAWINGS

**GENERAL DEMO NOTES**

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**CONSTRUCTION LEGEND**

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- EXISTING STRUCTURE TO REMAIN**  
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- EXISTING STRUCTURE TO BE DEMOLISHED**  
REMOVE ANY EXCESS BUILDING MATERIAL FROM CONNECTION POINTS AT FLOORS, CEILING OR WALLS TO PREP AREA FOR PAINT OR FINISH MATERIAL.

DEMO EXISTING COLUMNS, TRELLIS AND ROOF OVERHANG, TYP

DEMO (E) BRICK SIDING

DEMO (E) STAIRS TO UPPER FLOOR

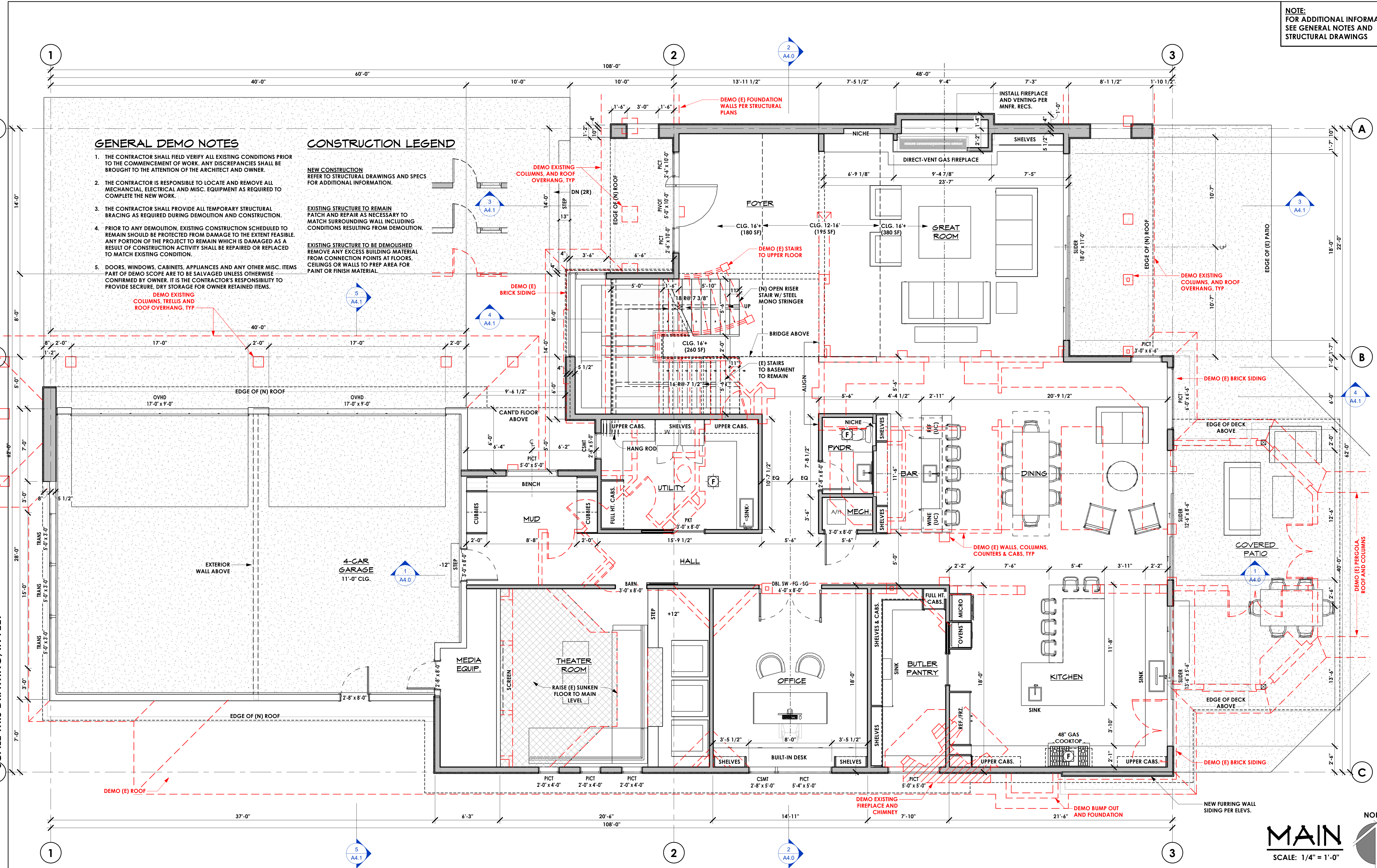
DEMO (E) BRICK SIDING

DEMO (E) WALLS, COLUMNS, COUNTERS & CABS, TYP

DEMO (E) PERGOLA, ROOF AND COLUMNS

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48

SCALE THIS DRAWING, IN FEET



**MAIN**  
SCALE: 1/4" = 1'-0"  
NORTH

**BUTTERWORTH - HOUSE 1**  
5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040  
FLOOR PLAN - MAIN

DATE	REV.	BY	DESCRIPTION
6/11/24		DAN	PERMIT SUBMITTAL

SHEET #:  
**A2.1**

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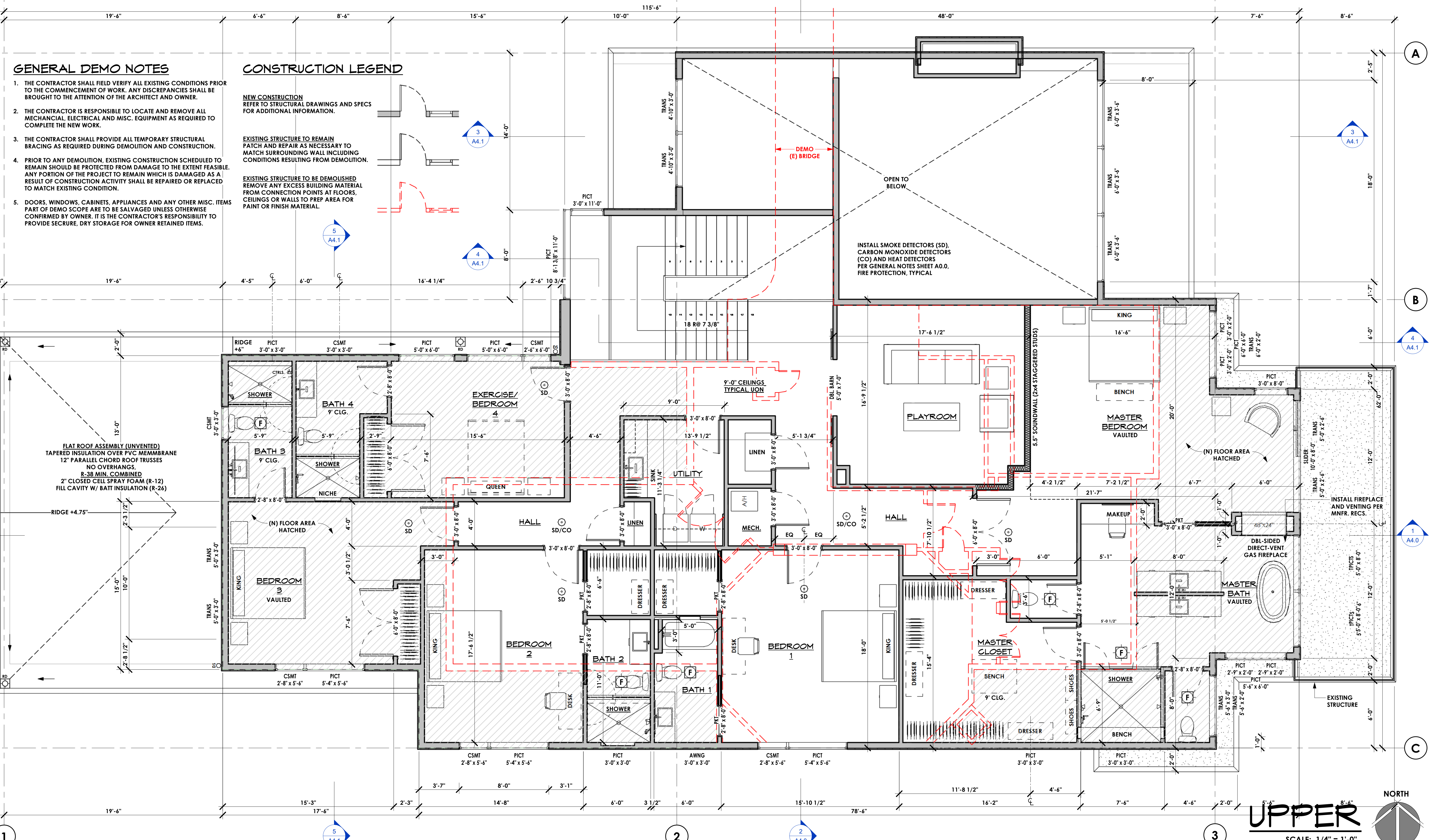
NOTE:  
FOR ADDITIONAL INFORMATION,  
SEE GENERAL NOTES AND  
STRUCTURAL DRAWINGS

**GENERAL DEMO NOTES**

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**CONSTRUCTION LEGEND**

- NEW CONSTRUCTION**  
REFER TO STRUCTURAL DRAWINGS AND SPECS FOR ADDITIONAL INFORMATION.
- EXISTING STRUCTURE TO REMAIN**  
PATCH AND REPAIR AS NECESSARY TO MATCH SURROUNDING WALL INCLUDING CONDITIONS RESULTING FROM DEMOLITION.
- EXISTING STRUCTURE TO BE DEMOLISHED**  
REMOVE ANY EXCESS BUILDING MATERIAL FROM CONNECTION POINTS AT FLOORS, CEILINGS OR WALLS TO PREP AREA FOR PAINT OR FINISH MATERIAL.



SCALE THIS DRAWING, IN FEET  
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48

**UPPER**  
SCALE: 1/4" = 1'-0"  
NORTH

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**BUTTERWORTH - HOUSE 1**  
5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040  
**FLOOR PLAN - UPPER**

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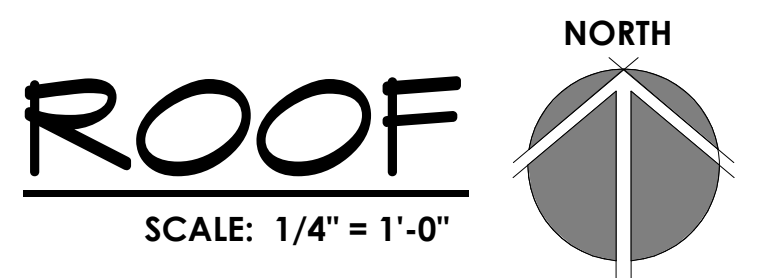
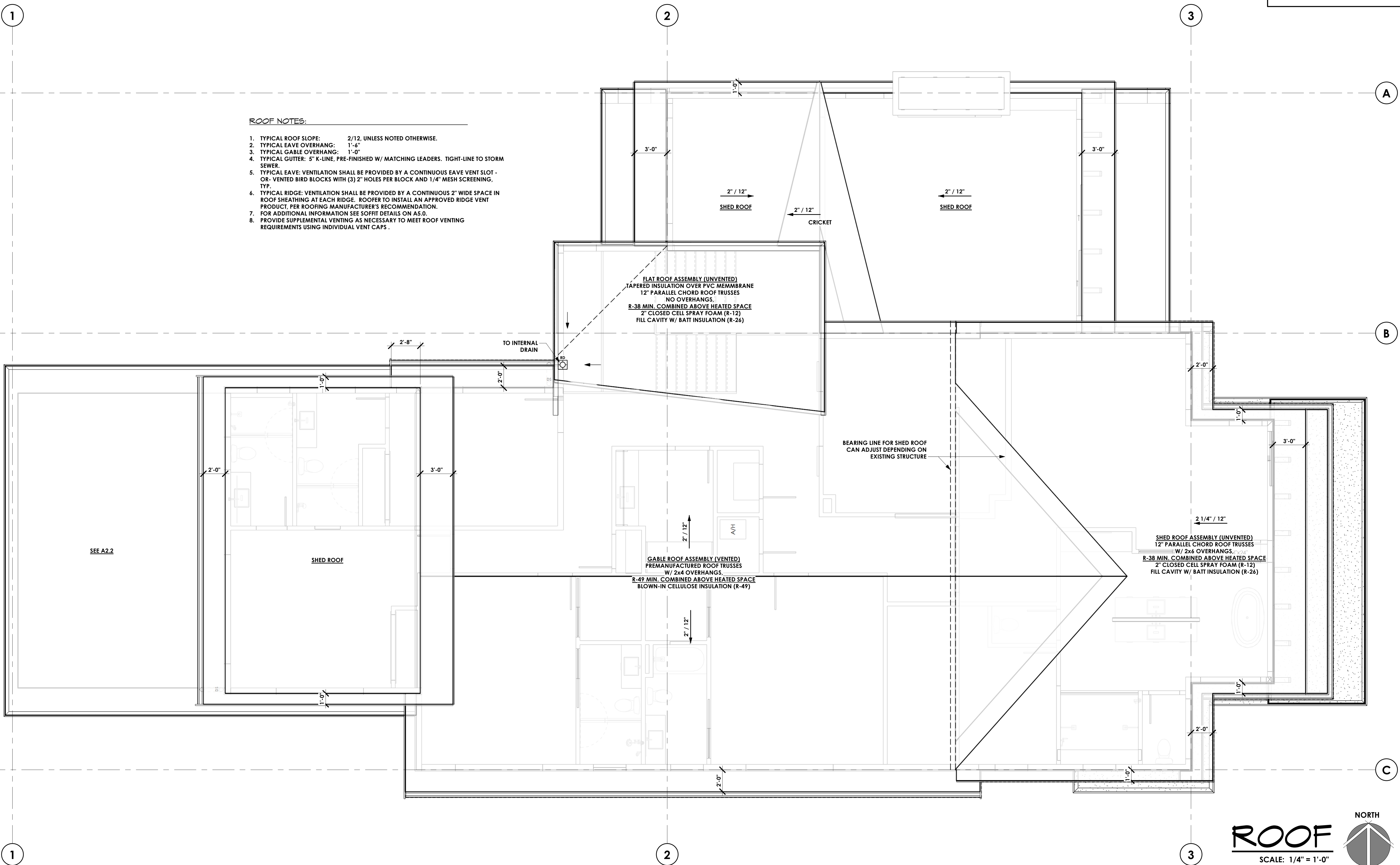
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**A2.2**

NOTE:  
FOR ADDITIONAL INFORMATION,  
SEE GENERAL NOTES AND  
STRUCTURAL DRAWINGS

- ROOF NOTES:**
1. TYPICAL ROOF SLOPE: 2/12, UNLESS NOTED OTHERWISE.
  2. TYPICAL EAVE OVERHANG: 1'-6"
  3. TYPICAL GABLE OVERHANG: 1'-0"
  4. TYPICAL GUTTER: 5" K-LINE, PRE-FINISHED W/ MATCHING LEADERS. TIGHT-LINE TO STORM SEWER.
  5. TYPICAL EAVE: VENTILATION SHALL BE PROVIDED BY A CONTINUOUS EAVE VENT SLOT - OR - VENTED BIRD BLOCKS WITH (3) 2" HOLES PER BLOCK AND 1/4" MESH SCREENING, TYP.
  6. TYPICAL RIDGE: VENTILATION SHALL BE PROVIDED BY A CONTINUOUS 2" WIDE SPACE IN ROOF SHEATHING AT EACH RIDGE. ROOFER TO INSTALL AN APPROVED RIDGE VENT PRODUCT, PER ROOFING MANUFACTURER'S RECOMMENDATION.
  7. FOR ADDITIONAL INFORMATION SEE SOFFIT DETAILS ON A5.0.
  8. PROVIDE SUPPLEMENTAL VENTING AS NECESSARY TO MEET ROOF VENTING REQUIREMENTS USING INDIVIDUAL VENT CAPS.

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SCALE THIS DRAWING, IN FEET



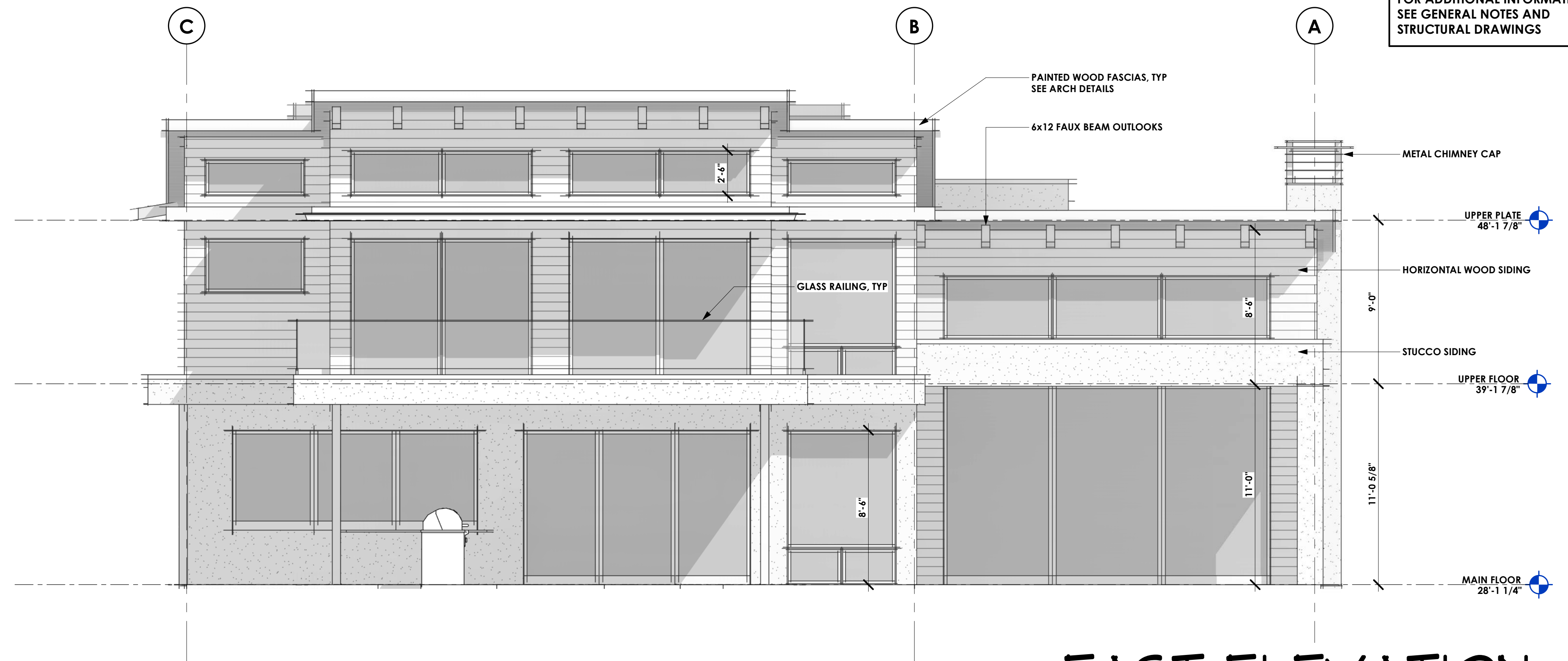
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**BUTTERWORTH - HOUSE 1**  
5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040  
**ROOF PLAN**

DATE	REV.	BY	DESCRIPTION
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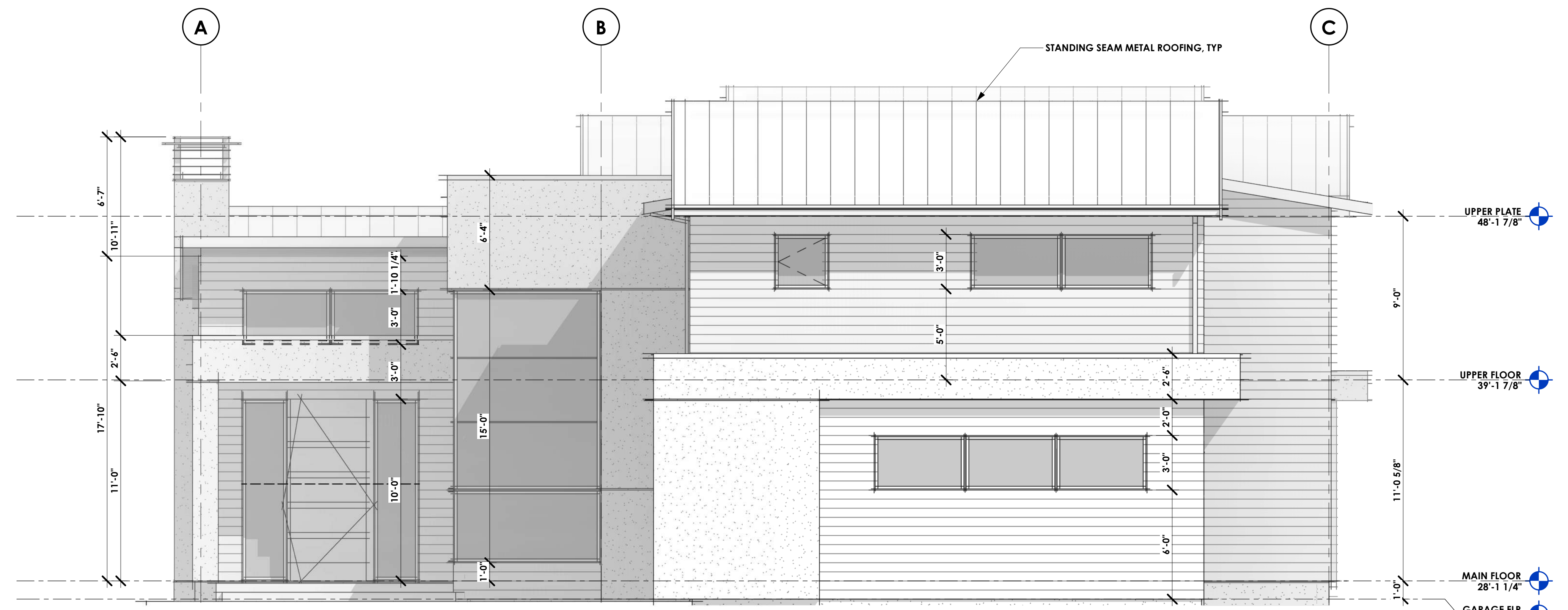
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NOTE:  
FOR ADDITIONAL INFORMATION,  
SEE GENERAL NOTES AND  
STRUCTURAL DRAWINGS



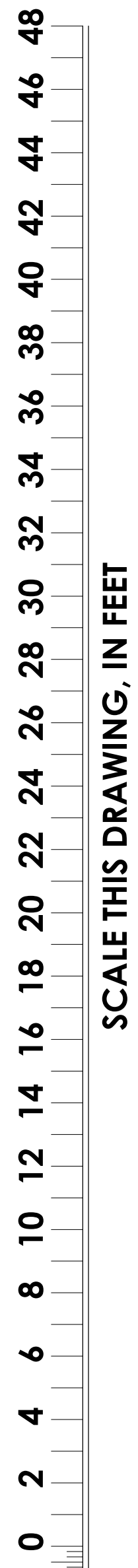
# EAST ELEVATION

1/4" = 1'-0"

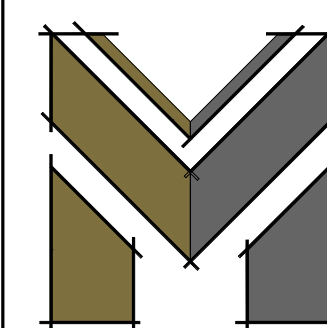


# WEST ELEVATION

1/4" = 1'-0"



SCALE THIS DRAWING, IN FEET



**MacPherson**  
Construction & Design

21626 SE 28TH ST. SAMMAMISH, WA 98075-7125  
PH. 425.391.3333 FAX 425.557.2841

## BUTTERWORTH - HOUSE 1

5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040

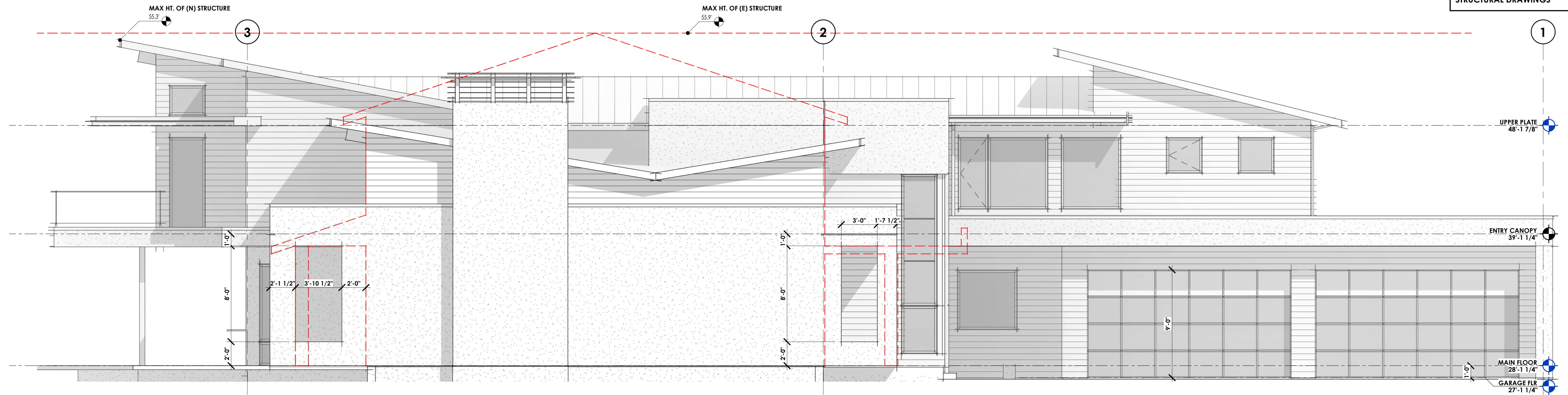
EXTERIOR ELEVATIONS

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	△		
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SHEET #:

**A3.0**

NOTE:  
FOR ADDITIONAL INFORMATION,  
SEE GENERAL NOTES AND  
STRUCTURAL DRAWINGS



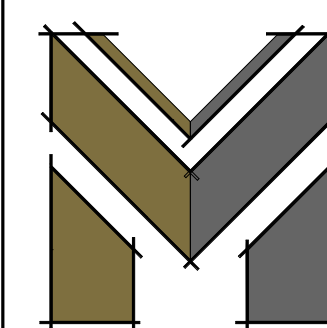
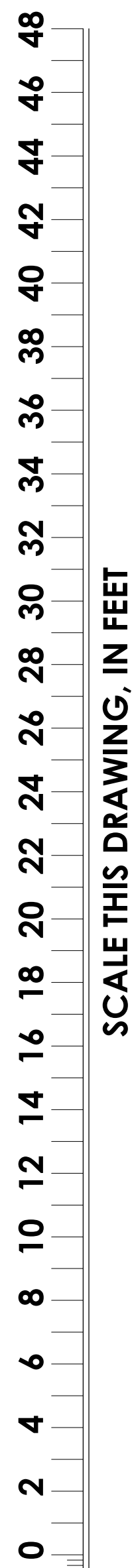
# NORTH ELEVATION

1/4" = 1'-0"



# SOUTH ELEVATION

1/4" = 1'-0"



**MacPherson**  
Construction & Design  
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## BUTTERWORTH - HOUSE 1

5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040

EXTERIOR ELEVATIONS

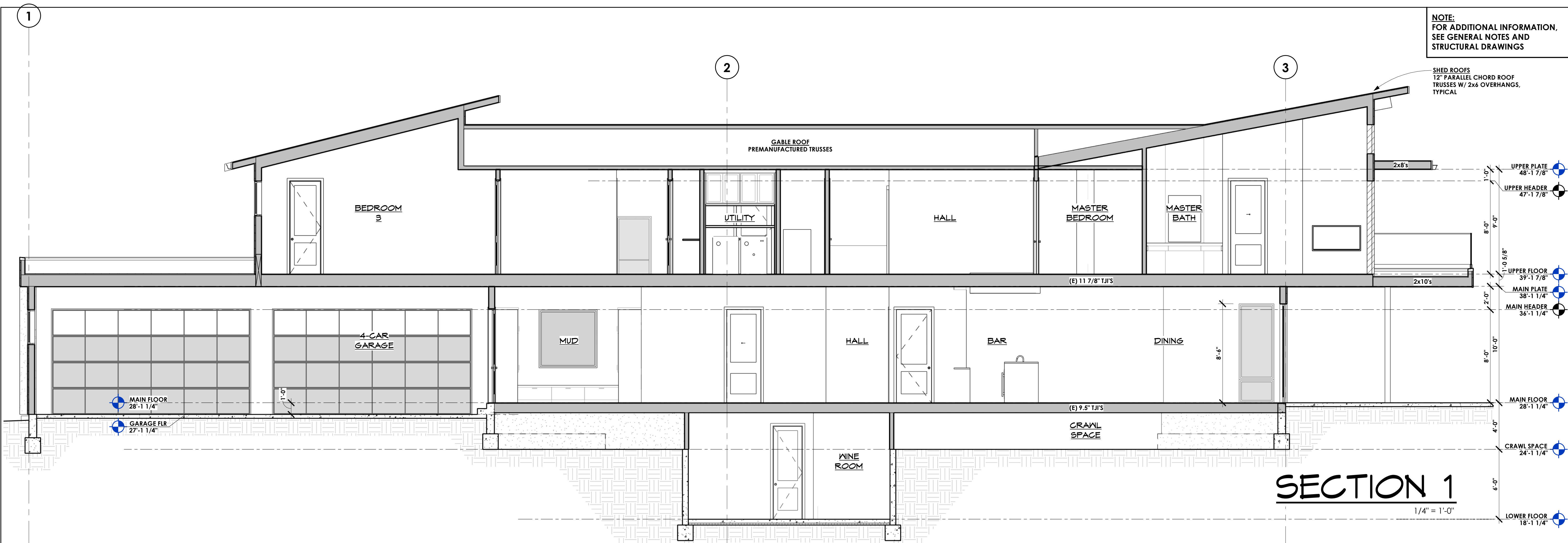
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6/11/24		DAN	PERMIT SUBMITTAL
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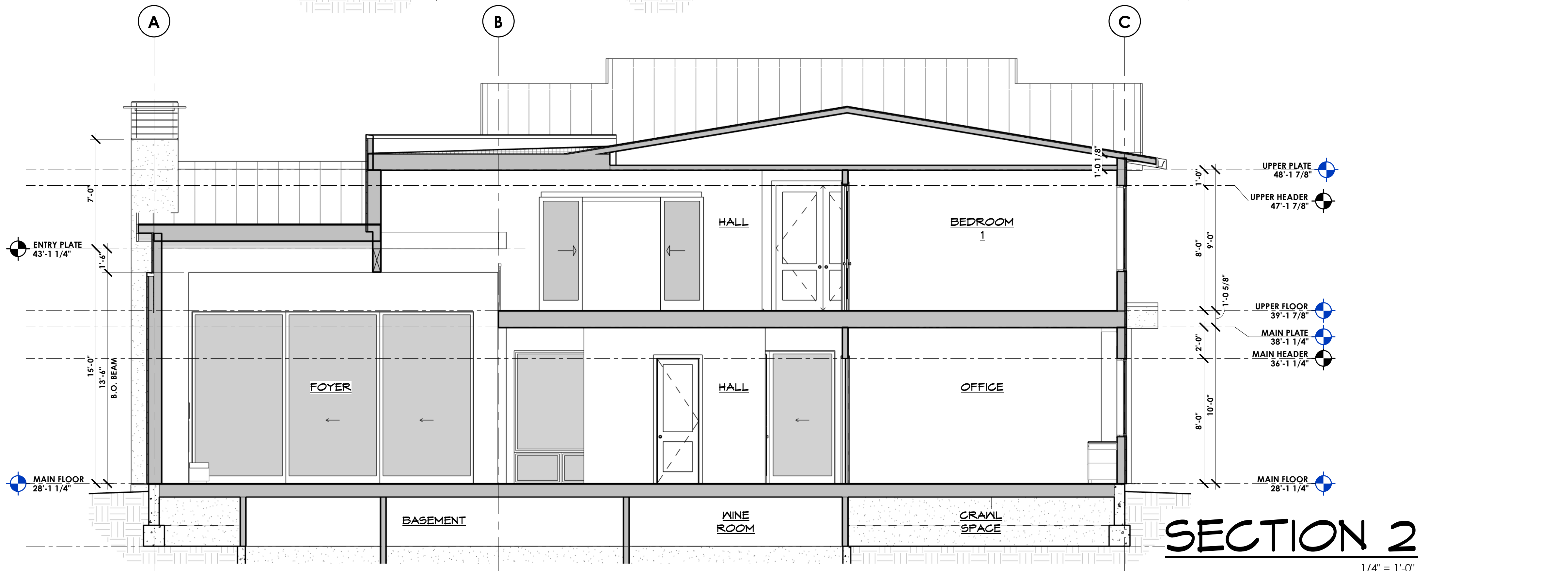
**A3.1**

NOTE:  
FOR ADDITIONAL INFORMATION,  
SEE GENERAL NOTES AND  
STRUCTURAL DRAWINGS

SHED ROOFS  
12" PARALLEL CHORD ROOF  
TRUSSES W/ 2x6 OVERHANGS,  
TYPICAL



**SECTION 1**  
1/4" = 1'-0"



**SECTION 2**  
1/4" = 1'-0"

SCALE THIS DRAWING, IN FEET  
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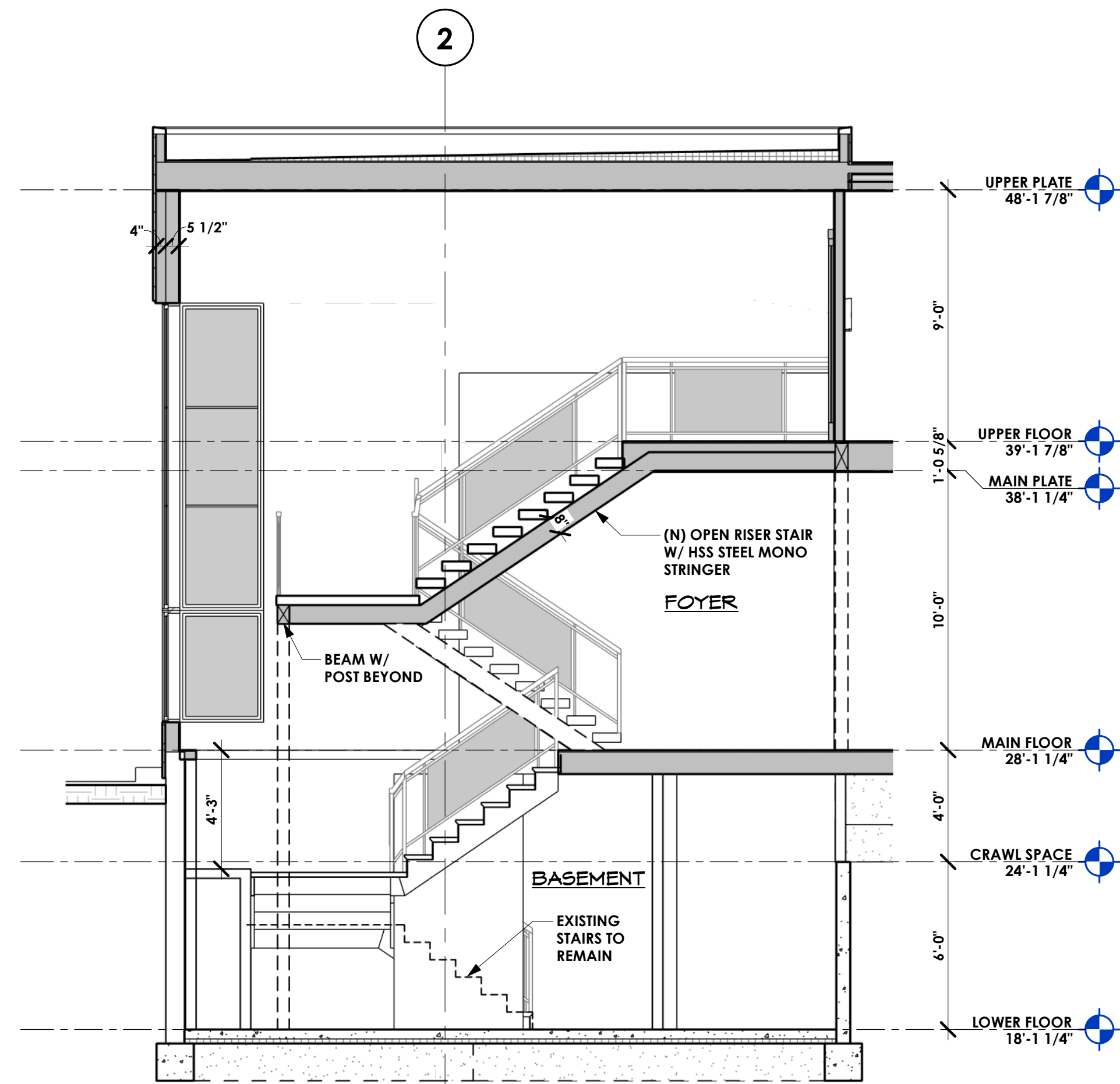
**MacPherson**  
Construction & Design  
21626 SE 28TH ST. SAMMAMISH, WA 98075-7125  
PH. 425.391.3333 FAX 425.557.2841

**BUTTERWORTH - HOUSE 1**  
5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040  
**BUILDING SECTIONS**

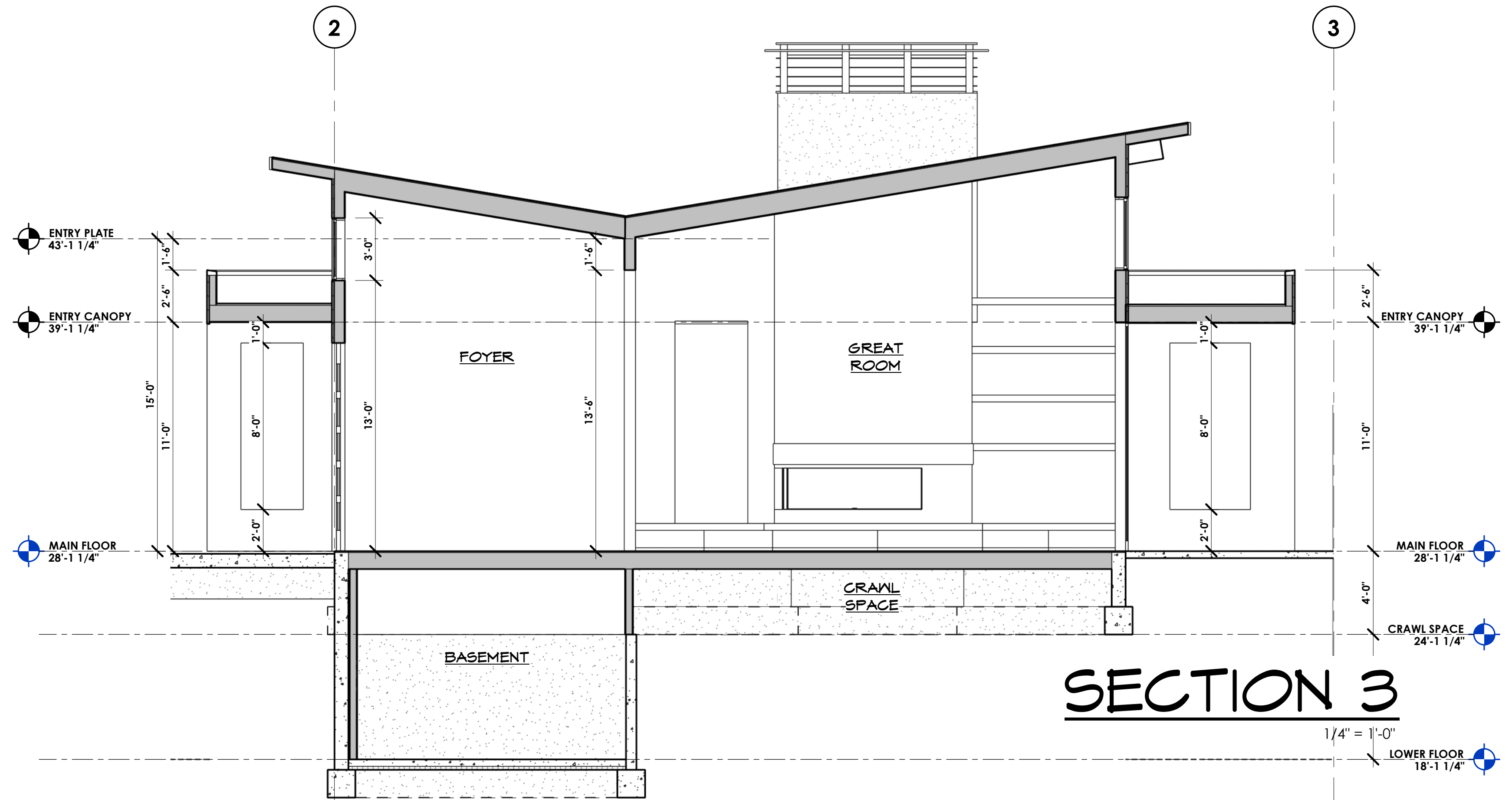
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6/11/24		DAN	PERMIT SUBMITTAL
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SHEET #:  
**A4.0**

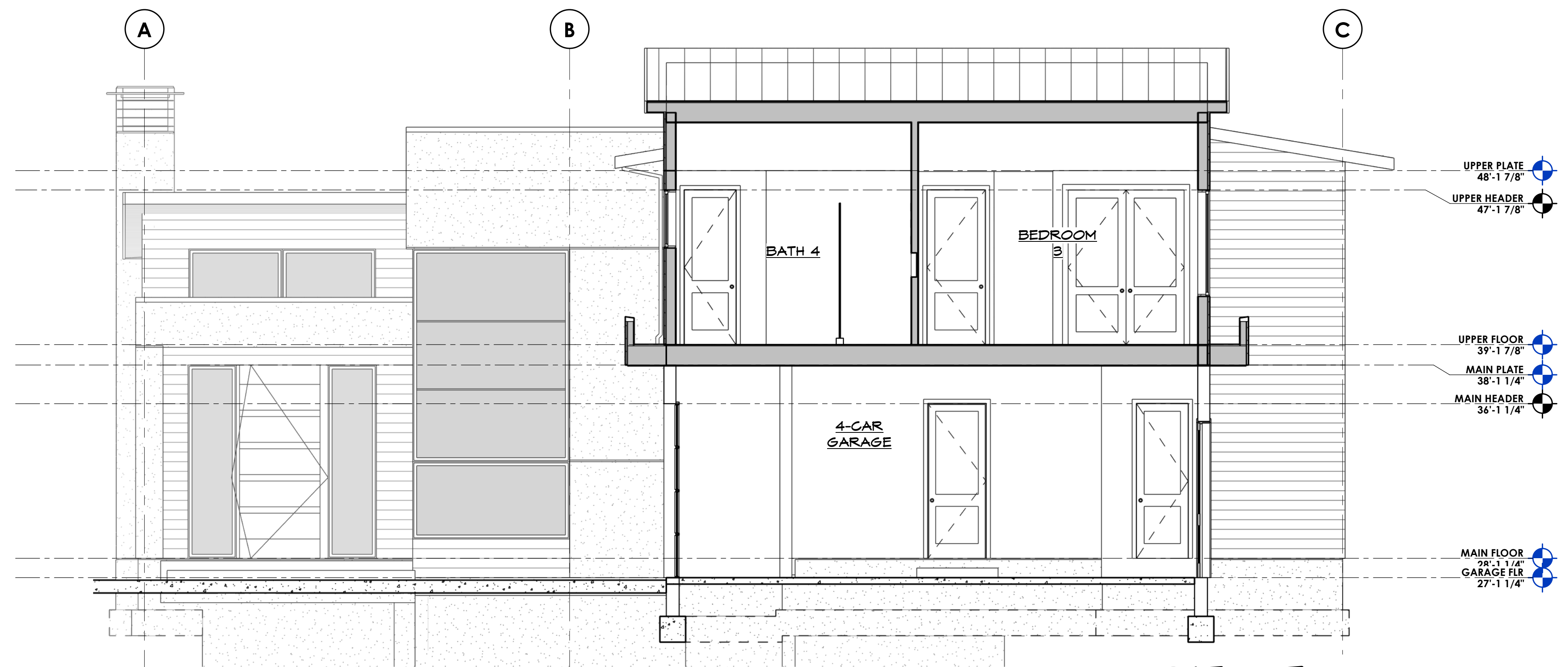
NOTE:  
FOR ADDITIONAL INFORMATION,  
SEE GENERAL NOTES AND  
STRUCTURAL DRAWINGS



**SECTION 4**  
1/4" = 1'-0"

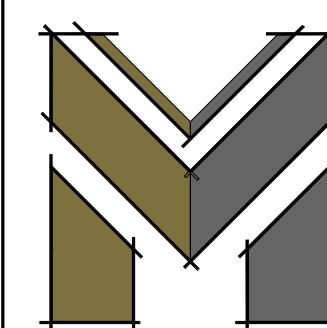


**SECTION 3**  
1/4" = 1'-0"



**SECTION 5**  
1/4" = 1'-0"

SCALE THIS DRAWING, IN FEET  
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**BUTTERWORTH - HOUSE 1**

5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040

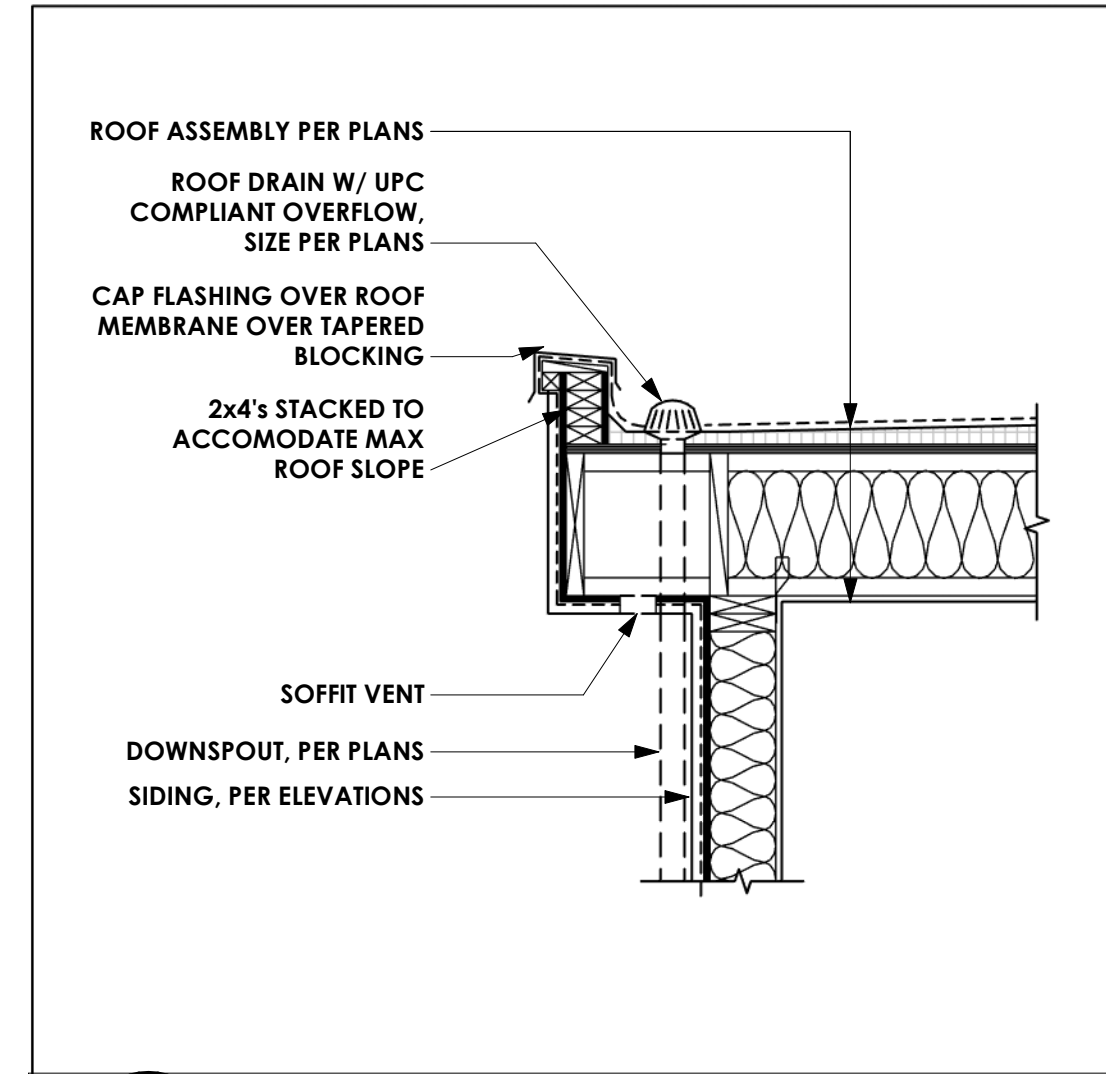
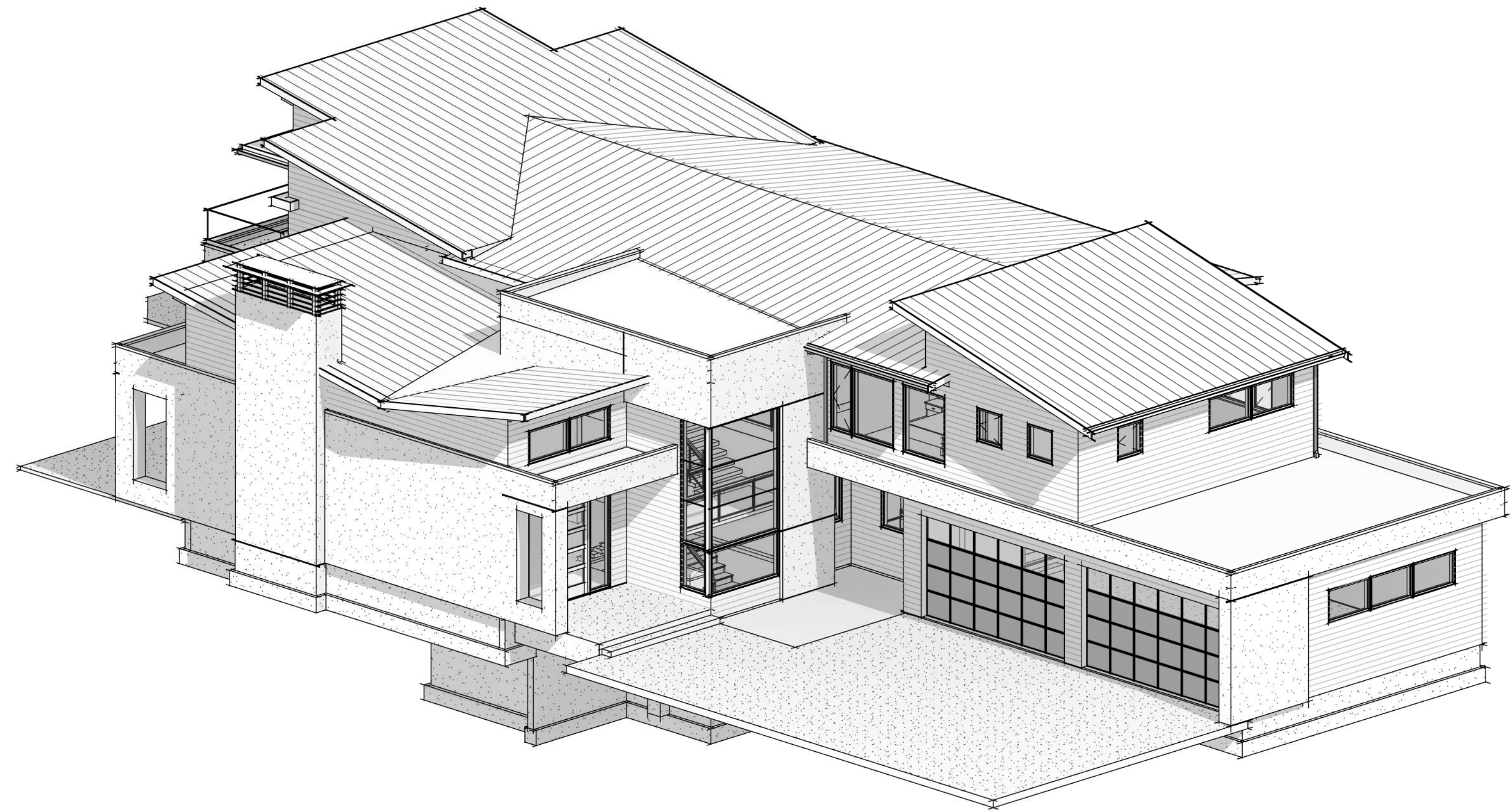
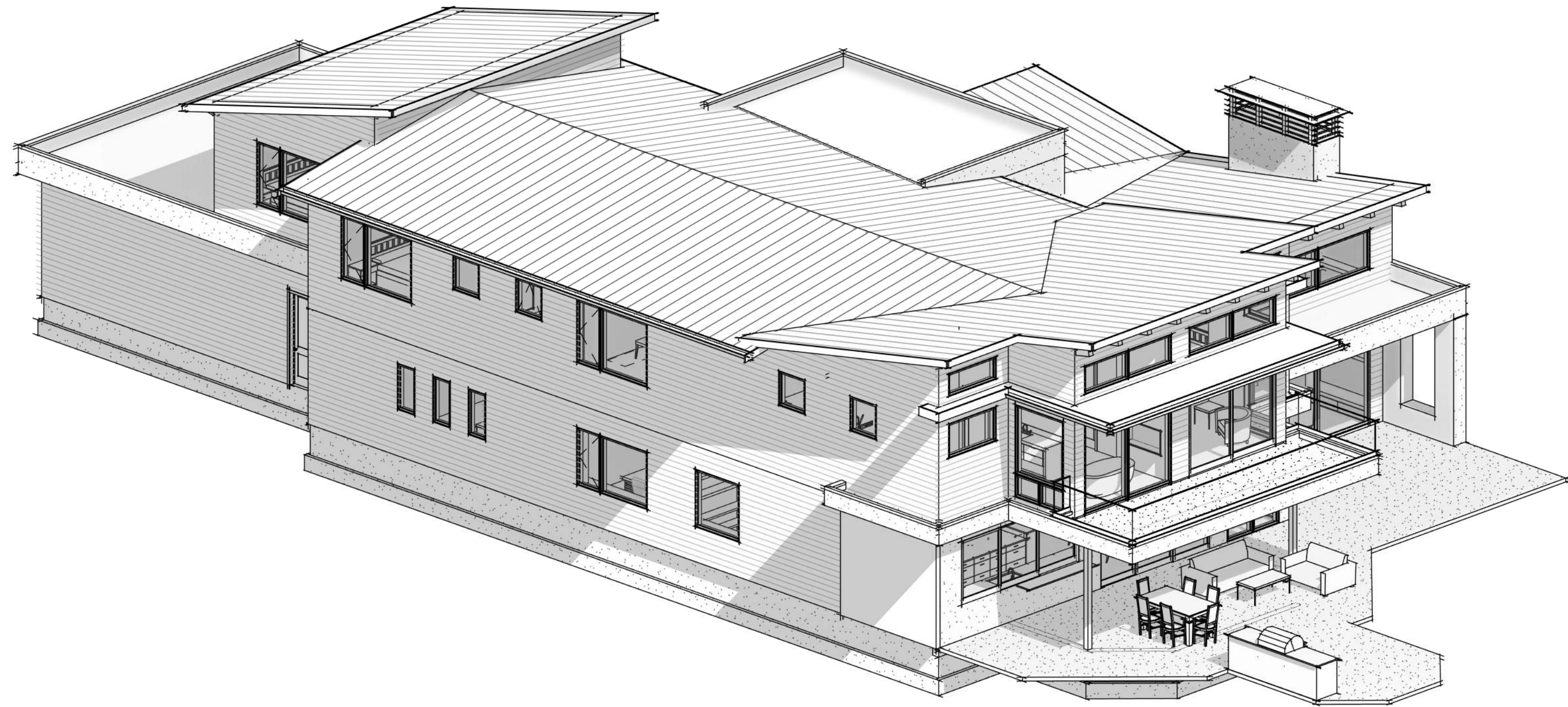
**BUILDING SECTIONS**

DATE	REV.	BY	DESCRIPTION
6/11/24		DAN	PERMIT SUBMITTAL
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	△		

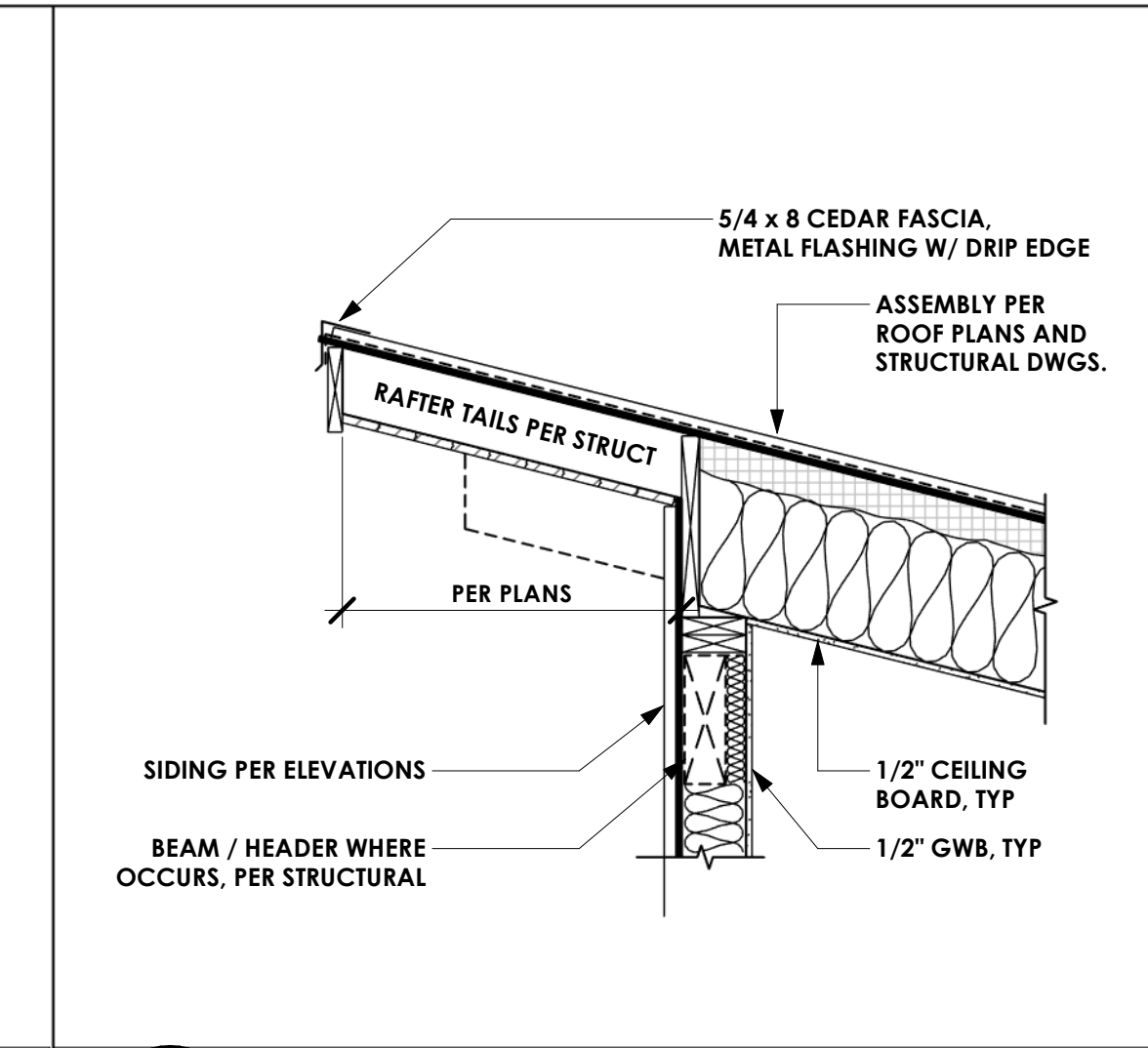
SHEET #:

**A4.1**

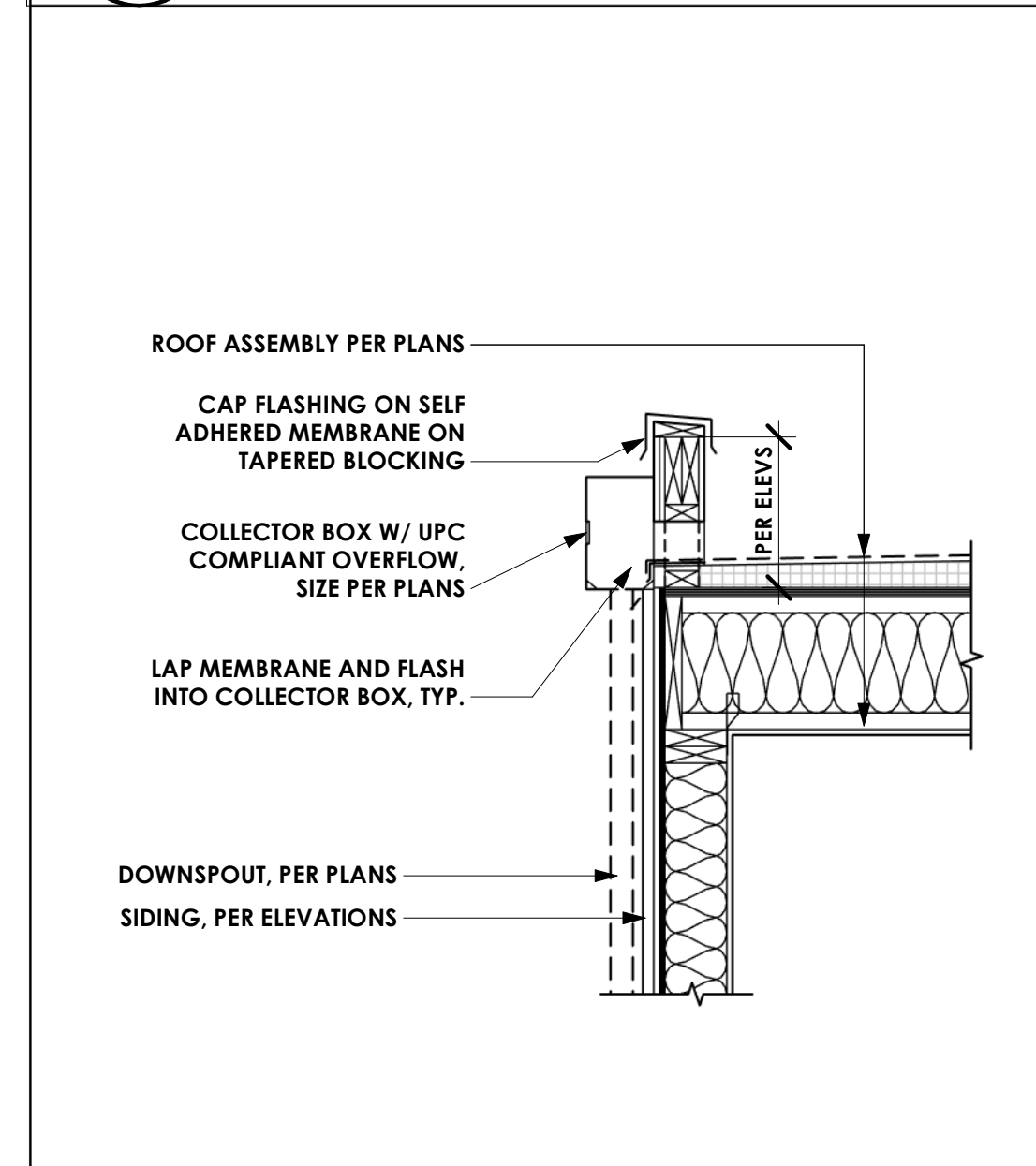
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SCALE THIS DRAWING, IN FEET



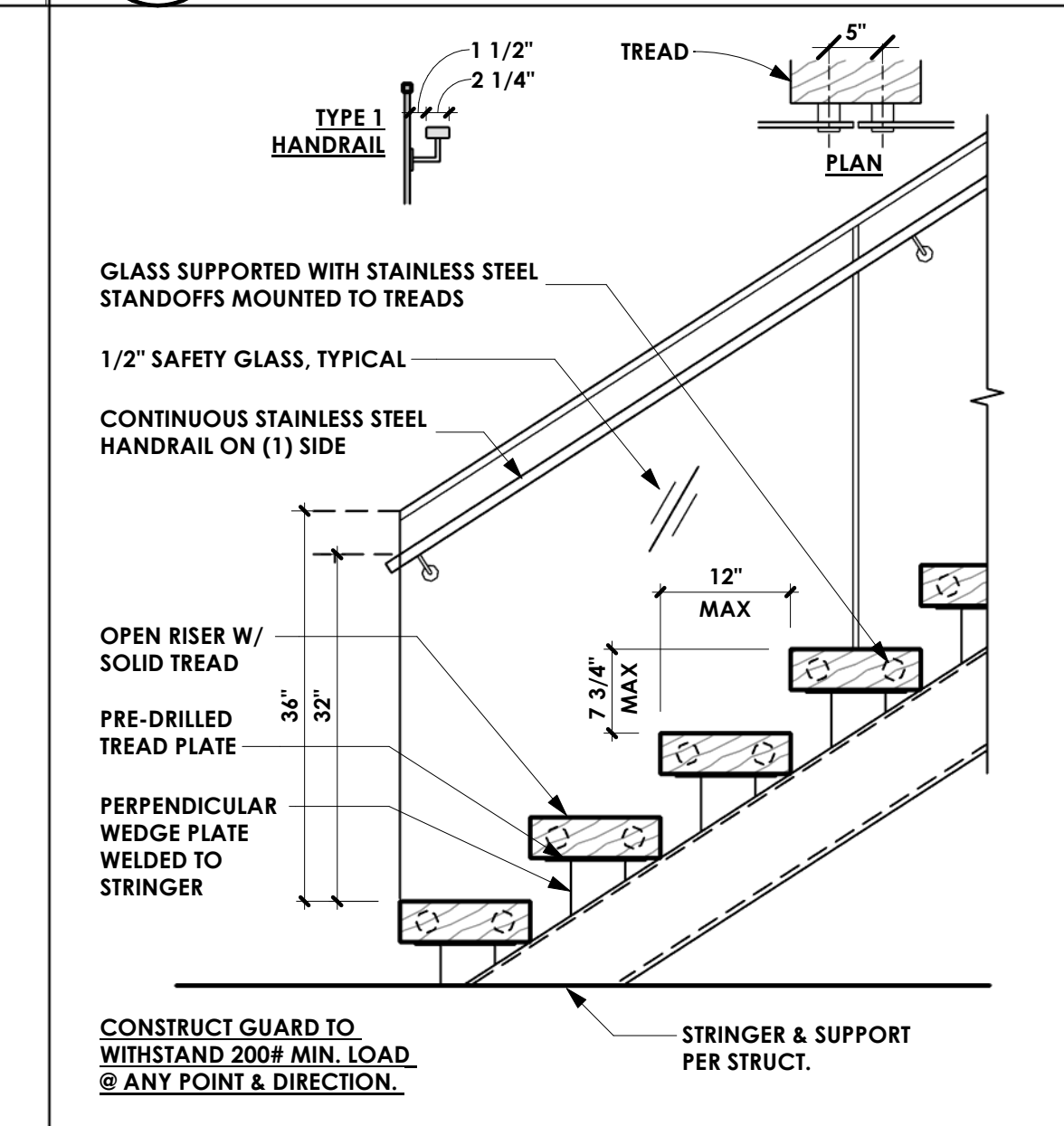
**6** FLAT ROOF - PARAPET W/ ROOF DRAIN  
SCALE: 3/4" = 1'-0"



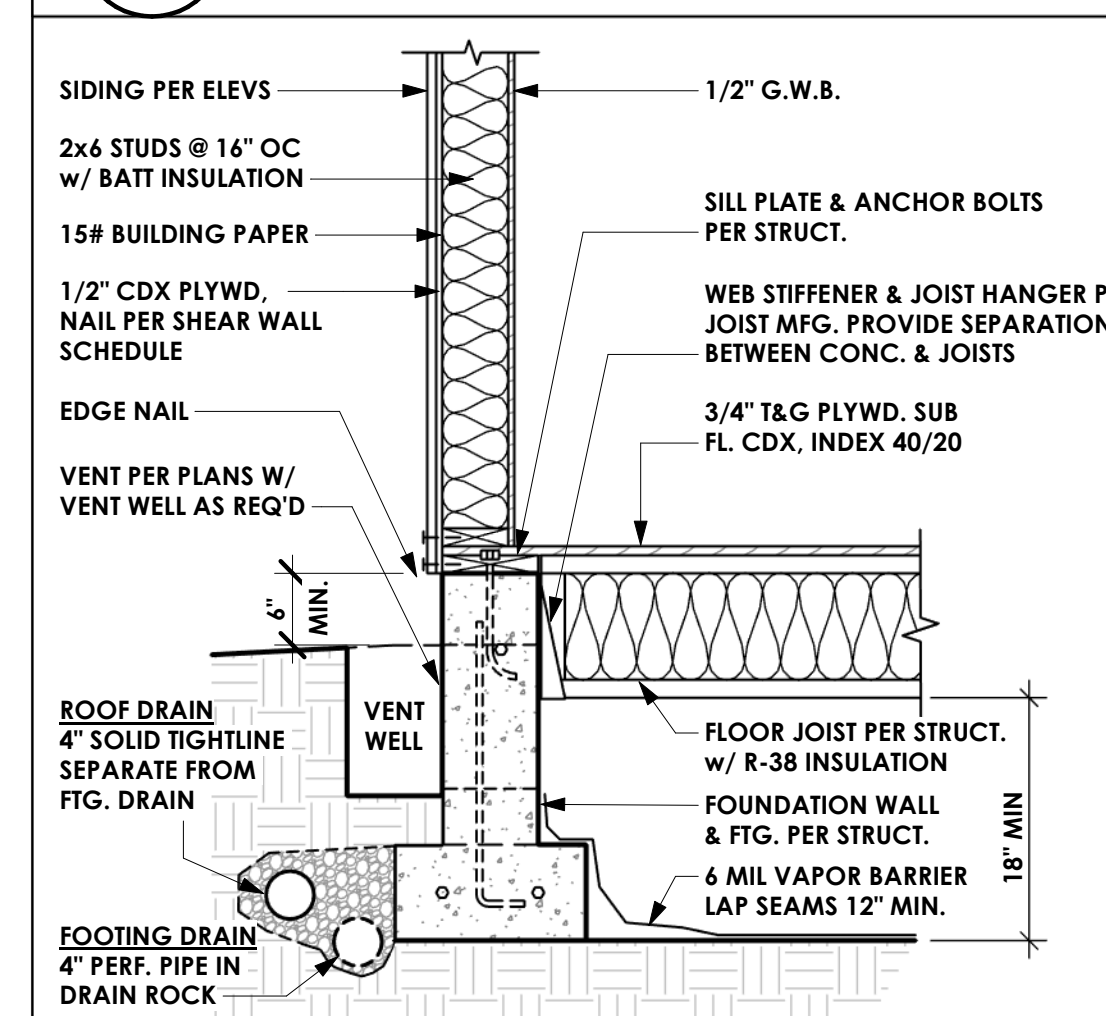
**5** MCD ROOF SHED-TJI  
SCALE: 3/4" = 1'-0"



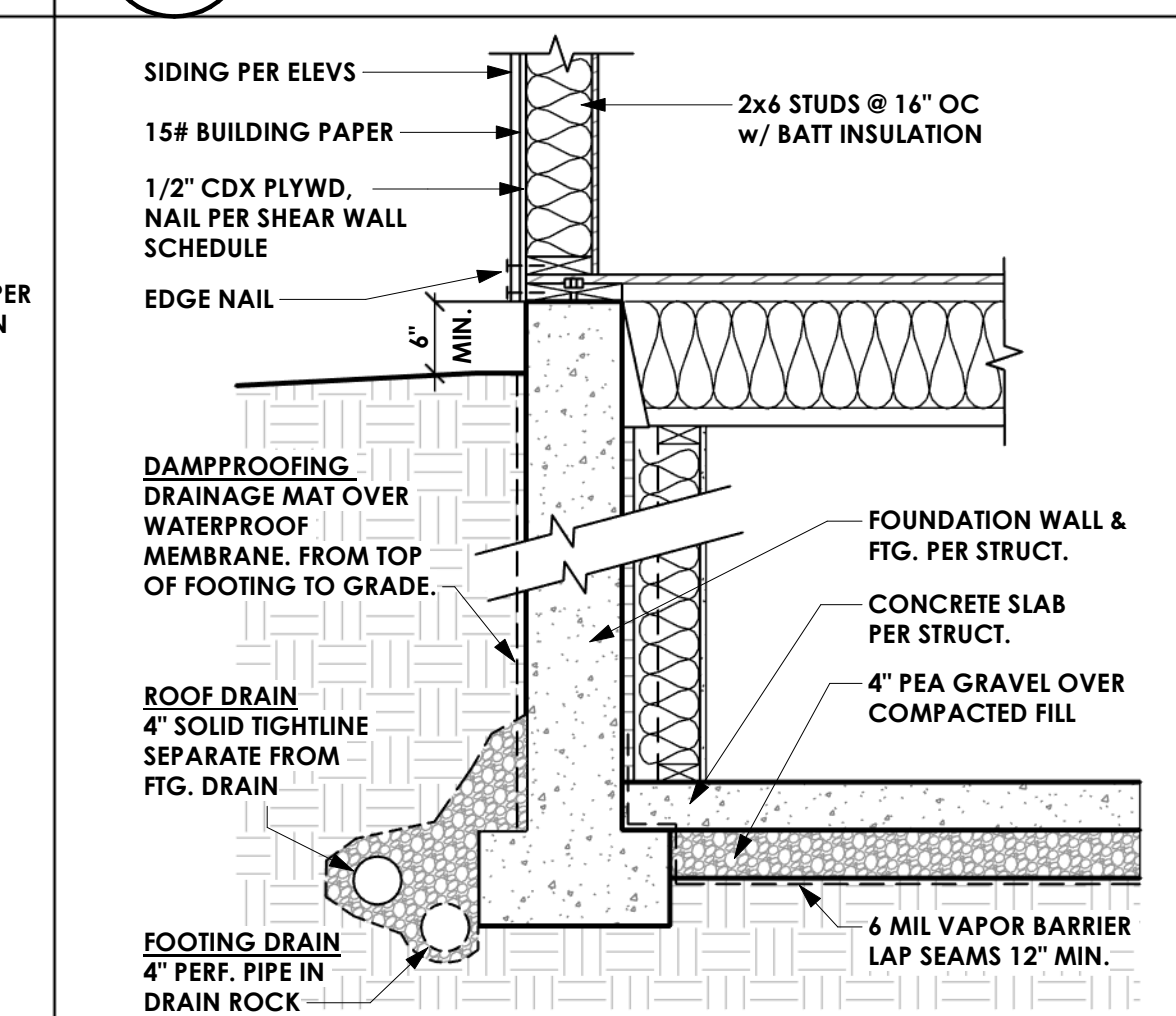
**4** FLAT ROOF - PARAPET W/ SCUPPER BOX  
SCALE: 3/4" = 1'-0"



**3** TYP OPEN RISER STAIR  
SCALE: 3/4" = 1'-0"



**2** TYP FOUNDATION @ CRAWL SPACE  
SCALE: 3/4" = 1'-0"



**1** TYP FOUNDATION @ BASEMENT (HEATED)  
SCALE: 3/4" = 1'-0"

DATE	REV.	BY	DESCRIPTION
6/11/24		DAN	PERMIT SUBMITTAL

**MacPherson**  
Construction & Design  
21626 SE 28TH ST. SAMMAMISH, WA 98075-7125  
PH. 425.391.3333 FAX 425.557.2841

**BUTTERWORTH - HOUSE 1**  
5330 BUTTERWORTH RD.  
MERCER ISLAND, WA 98040  
PARCEL #: 866140-0040  
**ARCHITECTURAL DETAILS**

SHEET #:  
**A5.0**  
6/12/2024 2:30:37 PM

PILE STRUCTURAL NOTES
<u>GRADE BEAM ON PIPE PILING:</u>
<ul style="list-style-type: none"> <li>PILES SHALL BE INSTALLED TO SUPPORT DESIGN LOAD OF 10- TONS/PILE MINIMUM (SAFE LOAD). - 4" MIN. DIA., SCHEDULE 40, GALVANIZED, ASTM A-53 GRADE "A" PIPE PILES</li> <li>PILING CONTRACTOR SHALL CONFIRM THE PILES, ARE ADEQUATE BY TESTING A MINIMUM 3% OF PILES (1 MINIMUM). TEST PILES MUST BE TESTED TO 200% OF THE DESIGN CAPACITY IN ACCORDANCE WITH ASTM STANDARD D 1143-81 FOR PILES UNDER STATIC AXIAL COMPRESSIVE LOAD. USE OF THE QUICK LOAD TEST METHOD IN THE STANDARD IS THE MINIMUM REQUIRED.</li> <li>PILES SHALL BE DRIVEN TO REFUSAL (15-30' ANTICIPATED) WITH A MINIMUM 850-LB HYDRAULIC HAMMER AND REFUSAL OF 16 SECONDS PER INCH FOR 3 CONSECUTIVE INCHES. FOR A 2000-LB HYDRAULIC HAMMER REFUSAL IS 4 SECONDS PER INCH FOR 3 CONSECUTIVE INCHES. GEOTECH TO COORDINATE THE DRIVING CRITERIA BASED ON THE ACTUAL HAMMER SIZE SELECTED BY THE CONTRACTOR.</li> <li>PILES SHALL BE DRIVEN IN NOMINAL SECTIONS AND CONNECTED WITH COMPRESSION FITTED COUPLERS. DO NOT WELD PIPE JOINTS TOGETHER.</li> <li>GEOTECH OF RECORD OR HIS/HER REPRESENTATIVE SHALL BE PRESENT TO OBSERVE PIN PILE INSTALLATION &amp; LOAD TEST.</li> </ul>

BASEMENT SLAB
4" CONC. SLAB ON 10 MIL VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL
GARAGE SLAB
4" CONC. SLAB ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL
PORCH SLAB
4" CONC. SLAB ON GRADE ON 10 MIL VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GENERAL STRUCTURAL NOTES
<b>FOUNDATION</b>
<ul style="list-style-type: none"> <li>DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE &amp; 2021 INTERNATIONAL EXISTING BUILDING CODE</li> <li>DESIGN LOADS: SOIL: 1500 PSF ALLOWABLE BEARING PRESSURE GEOTECH TO VERIFY</li> <li>CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS IN 28 DAYS, UNO. FC = 3000 PSI ..... FOUNDATION WALLS 3000 PSI ..... FOOTINGS 3000 PSI ..... GRADE BEAMS 2500 PSI ..... INTERIOR SLABS ON GRADE 3500 PSI ..... GARAGE &amp; EXT. SLABS ON GRADE F<sub>y</sub> = 60,000 PSI</li> <li>ALL CONCRETE HAS BEEN DESIGNED FOR 2500 PSI, ANYTHING GREATER THAN THIS SPECIFICATION IS FOR WEATHERING ONLY.</li> <li>ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.</li> <li>FOUNDATION WALL DESIGN IS BASED ON BACKFILL SOIL PRESSURE OF 55 PCF AT-REST, 35 PCF ACTIVE &amp; 7% SEISMIC SURCHARGE.</li> <li>TYPICAL REINFORCEMENT DETAILS: LAP ALL REBAR 24" MIN. BEND BARS AND LAP AT CORNERS; PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT; PROVIDE 3" MINIMUM COVER AT THE BOTTOM BARS AND 1 1/2" COVER AT THE SIDES.</li> <li>FOUNDATION WALLS SHALL BE BRACED PRIOR TO BACKFILLING, BY EITHER ADEQUATE TEMPORARY BRACING OR INSTALLATION OF FIRST FLOOR DECK.</li> <li>ALL FOOTINGS SHALL BEAR BELOW FROST LINE. CONSULT SOILS REPORT/LOCAL MUNICIPALITY FOR MINIMUM DEPTH BELOW GRADE.</li> <li>FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.</li> <li>PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP. (15'-0" O.C.)</li> <li>FASTEN SILL PLATES TO FOUNDATION WALLS WITH 3/8" DIA. ANCHOR BOLTS W/ MIN. 3"x3"x1/2" PLATE WASHERS. EDGE OF WASHER TO BE LOCATED WITHIN 1/2" OF EXTERIOR EDGE OF SILL PLATE PROVIDE A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAXIMUM FROM PLATE ENDS, UNO. (SEE FND. DETAILS).</li> <li>ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE OR MASONRY FOUNDATION SHALL BE PRESERVATIVE TREATED HEM FIR #2.</li> <li>ARCH/BUILDER TO VERIFY ALL DIMENSIONS.</li> </ul>

HOLD-DOWN SCHEDULE	
SYMBOL	SPECIFICATION
▶ HD-1	SIMPSON HIT5 TENSION TIE
▶ HD-5	SIMPSON C516 STRAP TIE (14" END LENGTH)
▶ HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)
▶ HD-7	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)

MEANS & METHODS NOTES
<p>THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN DETAIL AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.</p> <p>STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING BUT NOT LIMITED TO, FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.</p>

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER
<p>ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN. MULHERN &amp; KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.</p> <p>TRUSSES SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES OR GIRDER TRUSSES DOES NOT EXCEED THE FOLLOWING:</p> <p>A. ROOF TRUSSES: 1/4" DEAD LOAD</p> <p>B. FLOOR TRUSSES, ATTIC TRUSSES, &amp; I-JOISTS: 1/8" DEAD LOAD</p> <p>C. FLOOR TRUSSES &amp; ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS: LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)</p>

LOADING AND DESIGN PARAMETERS	
<b>GRAVITY DESIGN LOADS:</b>	
DEAD LOAD (PSF):	
ROOF TRUSS TOP CHORD :	10
ROOF TRUSS BOT. CHORD :	T
FLOOR (JOISTS) :	10
DECK (JOISTS) :	10
TILE FLOORS :	10
LIVE LOAD (PSF):	
ROOF :	20
RESIDENTIAL LIVING AREAS :	40
RESIDENTIAL SLEEPING AREAS :	30
RESIDENTIAL WOOD DECKS/ROOFTOP DECK :	60
GARAGE :	50
SNOW LOAD :	
GROUND SNOW LOAD (PSF) :	25
ROOF SNOW LOAD (PSF) :	25
SNOW EXPOSURE FACTOR (C <sub>e</sub> ) :	0.4
SNOW LOAD IMPORTANCE FACTOR (I) :	1.0
THERMAL FACTOR (C <sub>t</sub> ) :	1.2
<b>LATERAL DESIGN LOADS:</b>	
WIND LOAD: (IBC 1609)	
SPEED (V <sub>ult</sub> ) (MPH) :	100
WIND RISK CATEGORY :	II
IMPORTANCE FACTOR (I <sub>w</sub> ) :	1.0
EXPOSURE CATEGORY :	C
INTERNAL PRESSURE COEFF. (GC <sub>pi</sub> ) :	0.18
TOPOGRAPHIC FACTOR (K <sub>zt</sub> ) :	1.0
SEISMIC LOAD: (IBC 1601)	
SEISMIC RISK CATEGORY :	II
SEISMIC IMPORTANCE FACTOR (I <sub>s</sub> ) :	1.0
MAPPED SPECTRAL RESPONSE:	
S <sub>e</sub> 1.4S1	S <sub>e</sub> 0.443
SITE CLASS :	D
SPECTRAL RESPONSE COEFF. :	S <sub>e</sub> 1.50
SEISMIC DESIGN CATEGORY:	
BASIC SEISMIC-FORCE-RESISTING SYS. :	
LIGHT FRAME WALLS	
W/ WOOD STRUCTURAL PANELS	
& ORDINARY STEEL MOMENT FRAMES	
ULTIMATE BASE SHEAR:	
TRANS: 28k	LONG: 28k
SEISMIC RESPONSE COEFF. (C <sub>w</sub> ) :	LONG: 0.11
TRANS: 0.11	LONG: 0.11
RESPONSE MODIFICATION FACTOR (R) :	
WOOD STRUCTURAL PANELS:	
TRANS: 6.5	LONG: 6.5
STEEL MOMENT FRAME:	
TRANS: 3.5	LONG: N/A
PROCEDURE USED:	
EQUIVALENT LATERAL FORCE	

DEMOLITION/RENOVATION NOTES
<ul style="list-style-type: none"> <li>FRAMING AND FOUNDATION PLANS HAVE BEEN DESIGNED TO BE STRUCTURALLY SOUND UPON COMPLETION OF THE WORK. THE MEANS AND METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR (UNLESS SPECIFICALLY NOTED ON PLANS).</li> <li>DURING DEMOLITION AND CONSTRUCTION, IT IS THE BUILDER/CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE TEMPORARY SHORING/BRACINGS OF EXISTING ELEMENTS INTENDED TO REMAIN.</li> <li>THE STRUCTURAL PLANS HAVE BEEN PREPARED WITH EXISTING FRAMING/FOUNDATION ASSUMPTIONS AS NOTED ON THE PLANS. IT IS THE BUILDER/CONTRACTOR'S RESPONSIBILITY TO CONTACT MKK STRUCTURAL ENGINEERING IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS DEPICTED ON THE CONSTRUCTION DOCUMENTS.</li> </ul>

LATERAL BRACING NOTES
<p>THIS HOME HAS BEEN ENGINEERED TO RESIST LATERAL FORCES RESULTING FROM: 100 MPH WIND SPEED, EXP. C (ASCE 7-16 WIND MAP, PER IRC R301.2.1.1) RISK CAT. 2 &amp; SEISMIC CAT. D2.</p> <p><u>100 MPH WIND IN 2021 IRC MAP</u> ENGINEERED DESIGN WAS COMPLETED PER 2021 IBC (SECTION 1609 &amp; 1613) &amp; ASCE 7-16, AS PERMITTED BY R301.3 OF THE 2021 IRC. ACCORDINGLY, THIS HOME, AS DOCUMENTED AND DETAILED HEREIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES, AND DOES NOT NEED TO CONFORM TO THE PRESCRIPTIVE PROVISIONS OF R602.10.</p>

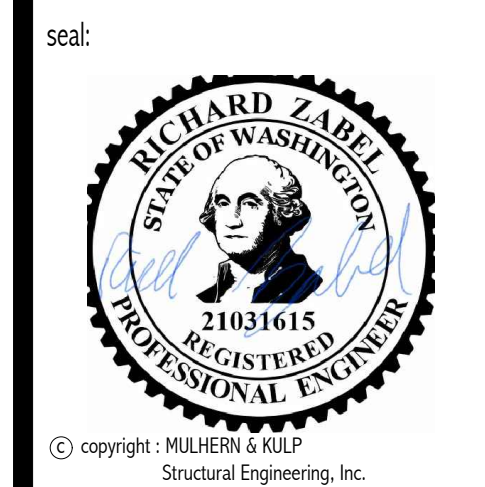
STANDARD EXTERIOR WALL SHEATHING SPECIFICATIONS
<u>(INTERIOR WALL SPECIFICATION WHERE NOTED ON PLANS)</u>
<ul style="list-style-type: none"> <li>1/2" OSB OR 1/2" PLYWOOD: FASTEN SHEATHING W/ 2 1/2"x0.131" NAILS @ 6" O.C. AT ALL SUPPORTED PANEL EDGES AND 12" O.C. IN THE PANEL FIELD. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED PER THIS SPECIFICATION UNO. ON PLANS.</li> </ul>
3" O.C. EDGE NAILING
<u>(WHERE NOTED ON PLANS)</u>
<ul style="list-style-type: none"> <li>1/2" OSB OR 1/2" PLYWOOD: ONLY AT LOCATIONS INDICATED ON PLANS - SHEATH WALL SHOWN WITH 1/2" OSB. FASTEN SHEATHING W/ 2 1/2"x0.131" NAILS @ 3" O.C. AT EDGES AND 12" O.C. AT CENTER. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE AND 3" O.C. FASTENING.</li> </ul>

NOTES:
<ol style="list-style-type: none"> <li>LATERAL ANALYSIS ASSUMES STUD SPACING @ 16" O.C.</li> <li>ALL SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES FASTENED TOGETHER W/ 3"x0.131" NAILS @ 8" O.C. USE (1235"x0.131" NAILS AT EACH LAP SPlice, (6) EACH SIDE OF JOINT (TYP. UNO.)</li> <li>ALL EXTERIOR WALLS ARE CONTINUOUSLY SHEATHED.</li> <li>ALL INTERIOR SHEAR WALLS AND EXTERIOR WALLS ARE SHEATHED ABOVE AND BELOW OPENINGS.</li> </ol>

LEGEND
<ul style="list-style-type: none"> <li>▬ INTERIOR BEARING WALL</li> <li>▬ BEARING WALL ABOVE (B.W.A.) OR SHEARWALL ABOVE (S.W.A.)</li> <li>▬ BEAM / HEADER</li> <li>▬ INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL W/ 3" O.C. EDGE NAILING</li> <li>▬ AREA OF OVERFRAMING</li> <li>JL METAL HANGER</li> <li>* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.</li> <li>▶ INDICATES HOLD-DOWN.</li> </ul>

GENERAL STRUCTURAL NOTES
<b>DESIGN PARAMETERS</b>
<ul style="list-style-type: none"> <li>DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE &amp; 2021 INTERNATIONAL EXISTING BUILDING CODE</li> <li>WOOD FRAME ENGINEERING IS BASED ON NDS, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - LATEST EDITION.</li> </ul>
<b>GENERAL FRAMING</b>
<ul style="list-style-type: none"> <li>EXTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (#F) "STD" GRADE LUMBER, OR BETTER, UNO.</li> <li>INTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (#F) "STD" GRADE LUMBER, OR BETTER, UNO.</li> <li>ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x "STD" GRADE MEMBERS SPACED @ 24" O.C. (MAX.)</li> <li>ALL WALLS TALLER THEN TYP. PLATE HEIGHT SHALL BE CONSIDERED BALLOON FRAMED &amp; SHALL BE CONSTRUCTED FROM FLOOR TO UNDERSIDE OF FRAMING AT NEXT LEVEL. B.F. WALLS SHALL BE 2x6 HEM FIR (#F) #2 GRADE LUMBER, OR BETTER, UNO.</li> <li>ALL SHEATHING AND LEDGERS ARE TO BE DIRECTLY APPLIED AND FASTENED TO FRAMING. DO NOT PROVIDE CONTINUOUS INSULATION BETWEEN FRAMING AND SHEATHING/LEDGERS.</li> <li>ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD &amp; (1)2x KING STUD MINIMUM. - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, UNO.</li> <li>BUILT-UP POSTS SHALL BE 2x4 OR 2x6 HEM FIR (#F) "STD" GRADE LUMBER, OR BETTER, UNO. &amp; SOLID WOOD COLUMNS SHALL BE SPRUCE PINE FIR (SPF) #2 GRADE LUMBER, OR BETTER, UNO.</li> <li>ALL 2x6 AND LARGER SOLID SAWN BEAMS/HEADERS SHALL BE HEM FIR #2 (#F #2) OR BETTER. ALL 4x6 AND LARGER SOLID SAWN LUMBER SHALL BE DOUG FIR #2 (DF #2) OR BETTER.</li> <li>ALL FRAMING LUMBER SHALL BE KILN DRIED TO 15% MC (KD-15).</li> <li>ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN GENERAL NOTES, IN DETAILS, OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER WALLS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING 3/8" NAILS.</li> <li>FASTEN ALL BEAMS TO COLUMNS, OR FLUSH BEAMS TO SUPPORTING BEAMS, W/ (4) 3"x0.131" TOENAILS (MIN), TYP. UNO.</li> <li>PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS &amp; HOLD-DOWNS CONTINUOUS TO FOUNDATION/BEARINGS. BLOCKING TO MATCH POST ABOVE.</li> <li>ENGINEERED LUMBER TO MEET OR EXCEED THE FOLLOWING: • LSL MEMBERS - Fb=2325 PSI; Fv=310 PSI; E=155x10<sup>6</sup> PSI • LVL MEMBERS - Fb=2610 PSI; Fv=285 PSI; E=2.0x10<sup>6</sup> PSI • GLB MEMBERS - Fb=2400 PSI; Fv=1850 PSI; Fv=265 PSI; E=1.8x10<sup>6</sup> PSI; DF/DF; 24F-V4 (UNO.)</li> <li>ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING: • LVL MEMBERS - Fb=2400 PSI; Fc1=2500 PSI; E=1.8x10<sup>6</sup> PSI</li> <li>FACE NAIL MULTI-PLY 2x BEAMS &amp; HEADERS W/ 3-ROWS OF 3"x0.131" NAILS (MIN) @ 12" O.C. STAGGERED. APPLY NAILING FROM BOTH FACES @ 3-PLY OR MORE CONDITIONS. UTILIZE 2 ROWS OF NAILS FOR 2x6 &amp; 2x8 MEMBERS.</li> <li>TRUSS SHOP DWGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PROPOSED CONSTRUCTION SHALL BE SUBMITTED TO BUILDING DESIGNER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY IN ACCORDANCE WITH TPI-1 2.3.2.3 &amp; 2.3.4.3.</li> <li>REFER TO IRC FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. UNO.</li> <li>BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER &amp; HARDWARE SUPPLIERS TO COORD. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A655 TYPE G65 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.</li> </ul>
<b>FLOOR FRAMING</b>
<ul style="list-style-type: none"> <li>I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/860 LIVE LOAD DEFLECTION CRITERIA AND SHALL RUN CONTINUOUS OVER SUPPORTS WHEREVER POSSIBLE. ALL LOADS SHOWN ON PLAN FOR MANUF. DESIGNS ARE ASD LEVEL LOADS, UNO. (EXCLUDES STONE/MARBLE OR NET BED CONSTRUCTED FLOORS - CONTACT MKK FOR EXCLUDED DESIGNS).</li> <li>ALL METAL I-JOIST/TRUSS HANGERS SHALL BE SPECIFIED BY I-JOIST/TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.</li> <li>2x FLOOR JOISTS HAVE BEEN DESIGNED TO MEET OR EXCEED L/360 LIVE LOAD DEFLECTION CRITERIA.</li> <li>TYPICAL 2x JOIST HANGERS (UNO. ON PLANS): SINGLE PLY: SIMPSON LUS210 DOUBLES: SIMPSON LUS210-2</li> <li>FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED "STURD-I-FLOOR" 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ 6/16 AND 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES &amp; @ 12" O.C. FIELD.</li> <li>ALL FLUSH CONNECTIONS SHALL BE CONNECTED WITH HANGER APPROPRIATE FOR MEMBER SIZE, UNO.</li> <li>FASTEN HANGERS TO SINGLE PLY FLUSH BEAMS W/ 1/2" LONG NAILS.</li> </ul>

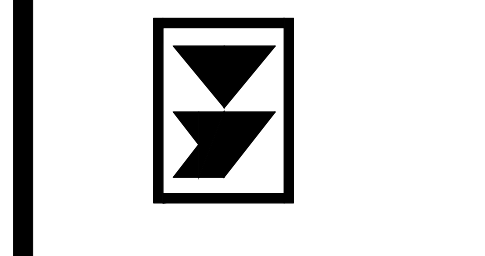
ROOF FRAMING
<ul style="list-style-type: none"> <li>FASTEN EACH ROOF TRUSS TO TOP PLATE W/ (4) 3"x0.131" TOENAILS (MIN) &amp; (1) SIMPSON H25T CLIP @ ALL BEARING POINTS. PROVIDE (2) SIMPSON H25T CLIPS AT 2-PLY GIRDER TRUSSES, (2) SIMPSON H25T CLIPS AT 3-PLY GIRDER TRUSSES AT ALL BEARING POINTS.</li> <li>FASTEN EACH ROOF RAFTER TO TOP PLATE WITH (1) SIMPSON H25T CLIP. PROVIDE (2) SIMPSON H25T CLIPS AT FLUSH BEAMS IN THE ROOF - AT ALL BEARING POINTS.</li> <li>ROOF SHEATHING SHALL BE 7/8" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS W/ 2 1/2" x 0.131" NAILS @ 6" O.C. AT PANEL EDGES @ 6" O.C. AT INTERMEDIATE SUPPORTS. ROOF SHEATHING SHALL EXTEND BELOW ALL INSTANCES OF OVERFRAMING. BLOCKING SHALL BE INSTALLED AS REQUIRED TO LIMIT ROOF SHEATHING SPANS TO 24" MAX.</li> <li>ALL METAL HANGERS SHALL BE SPECIFIED BY THE TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.</li> <li>ROOF TRUSS SHOP DRAWINGS &amp; CALCULATIONS SHALL BE DESIGNED FOR UNBALANCED SNOW LOADING PER ASCE 7-16, SECTION 7.6.</li> <li>ERECT AND INSTALL ROOF TRUSSES PER ITC &amp; TPI'S BC61 I-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING &amp; BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."</li> <li>FASTEN OVER-FRAMED TRUSS SETS TO TRUSSES BELOW W/ (2) 3"x0.131" TOENAILS AT EA. TRUSS.</li> <li>FASTEN ALL INTERIOR NON-BEARING PARTITION WALLS TO TRUSS BOTTOM CHORD ABOVE WITH SIMPSON STC CLIPS AT 24" O.C. MAX. PROVIDE BLOCKING BETWEEN THE TRUSS BOTTOM CHORDS AS REQUIRED FOR THE PARALLEL CONDITIONS.</li> </ul>



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M&K project number:	306-24003
project mgr:	RJZ
drawn by:	RJD
issue date:	04-24-24
REVISIONS:	
date:	initial:

**MACPHERSON CONSTRUCTION**

**STRUCTURAL NOTES**

**5330 BUTTERWORTH RD**  
**HOUSE 1**  
**MERCER ISLAND, WASHINGTON**

sheat:

**S.O.O**

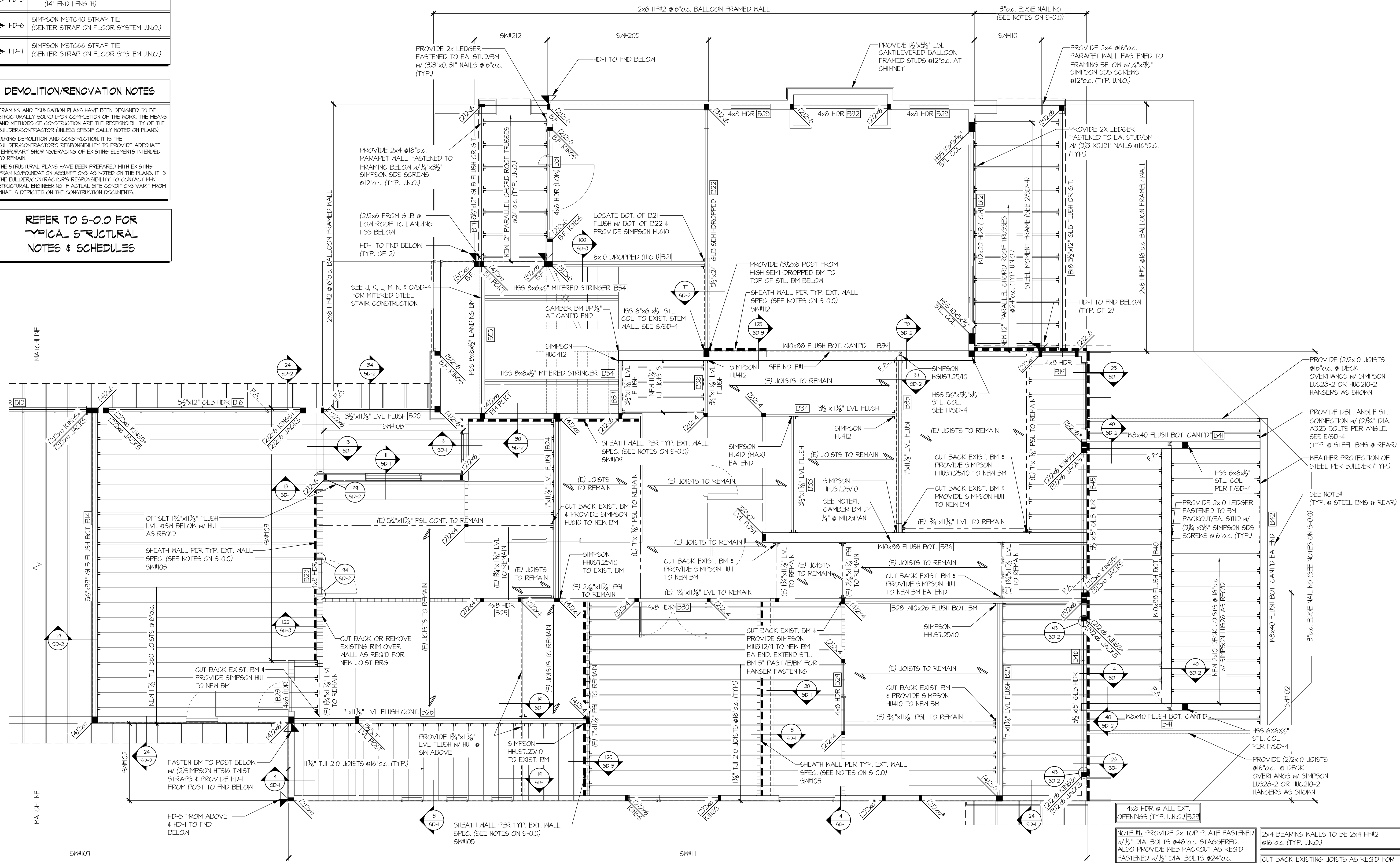


HOLD-DOWN SCHEDULE	
SYMBOL	SPECIFICATION
▶ HD-1	SIMPSON HTS5 TENSION TIE
▶ HD-5	SIMPSON CS16 STRAP TIE (14" END LENGTH)
▶ HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)
▶ HD-7	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)

**DEMOLITION/RENOVATION NOTES**

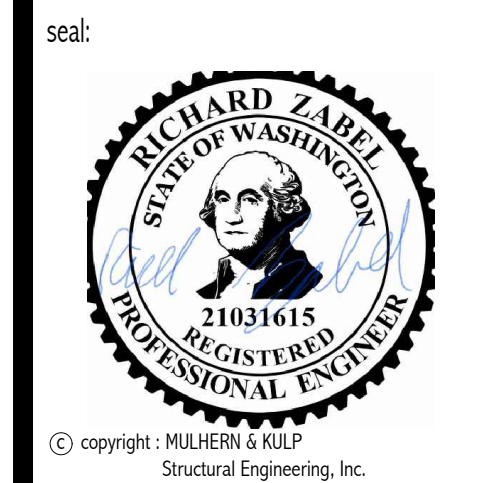
- FRAMING AND FOUNDATION PLANS HAVE BEEN DESIGNED TO BE STRUCTURALLY SOUND UPON COMPLETION OF THE WORK. THE MEANS AND METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR (UNLESS SPECIFICALLY NOTED ON PLANS).
- DURING DEMOLITION AND CONSTRUCTION, IT IS THE BUILDER/CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE TEMPORARY SHORING/BRACING OF EXISTING ELEMENTS INTENDED TO REMAIN.
- THE STRUCTURAL PLANS HAVE BEEN PREPARED WITH EXISTING FRAMING/FOUNDATION ASSUMPTIONS AS NOTED ON THE PLANS. IT IS THE BUILDER/CONTRACTOR'S RESPONSIBILITY TO CONTACT MKK STRUCTURAL ENGINEERING IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS DEPICTED ON THE CONSTRUCTION DOCUMENTS.

**REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES**



**PARTIAL UPPER FLOOR FRAMING PLAN**  
SCALE: 1/4"=1'-0"

- 4x8 HDR @ ALL EXT. OPENINGS (TYP. U.N.O.) B23
- NOTE #1: PROVIDE 2x TOP PLATE FASTENED w/ 1/2" DIA. BOLTS @ 48" O.C. STAGGERED. ALSO PROVIDE WEB PACKOUT AS REQ'D FASTENED w/ 1/2" DIA. BOLTS @ 24" O.C.
- FASTEN STEEL BEAMS TO WOOD FRAMING BELOW PER D/SD-2 (TYP.)
- VERIFY EXISTING EXTERIOR SHEATHING MEETS REQUIREMENTS PER PLAN & S-0.0 OR PROVIDE NEW SHEATHING & NAILING
- 2x4 BEARING WALLS TO BE 2x4 HF#2 @ 16" O.C. (TYP. U.N.O.)
- CUT BACK EXISTING JOISTS AS REQ'D FOR NEW BEAM INSTALLATION & PROVIDE SIMPSON MJU.81/11 HANGERS AS REQ'D (TYP.)
- UPSET STEEL BMS 1/2" AS REQ'D TO HIDE GAP PLATES @ FINISHED SPACES (TYP.)



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M&K project number: 306-24003  
project mgr: R.JZ  
drawn by: RJD  
issue date: 04-24-24

REVISIONS:  
date: initial:

**MACPHERSON CONSTRUCTION**

**UPPER FLOOR FRMG PLAN**  
**5330 BUTTERWORTH RD**  
**HOUSE 1**  
MERCER ISLAND, WASHINGTON

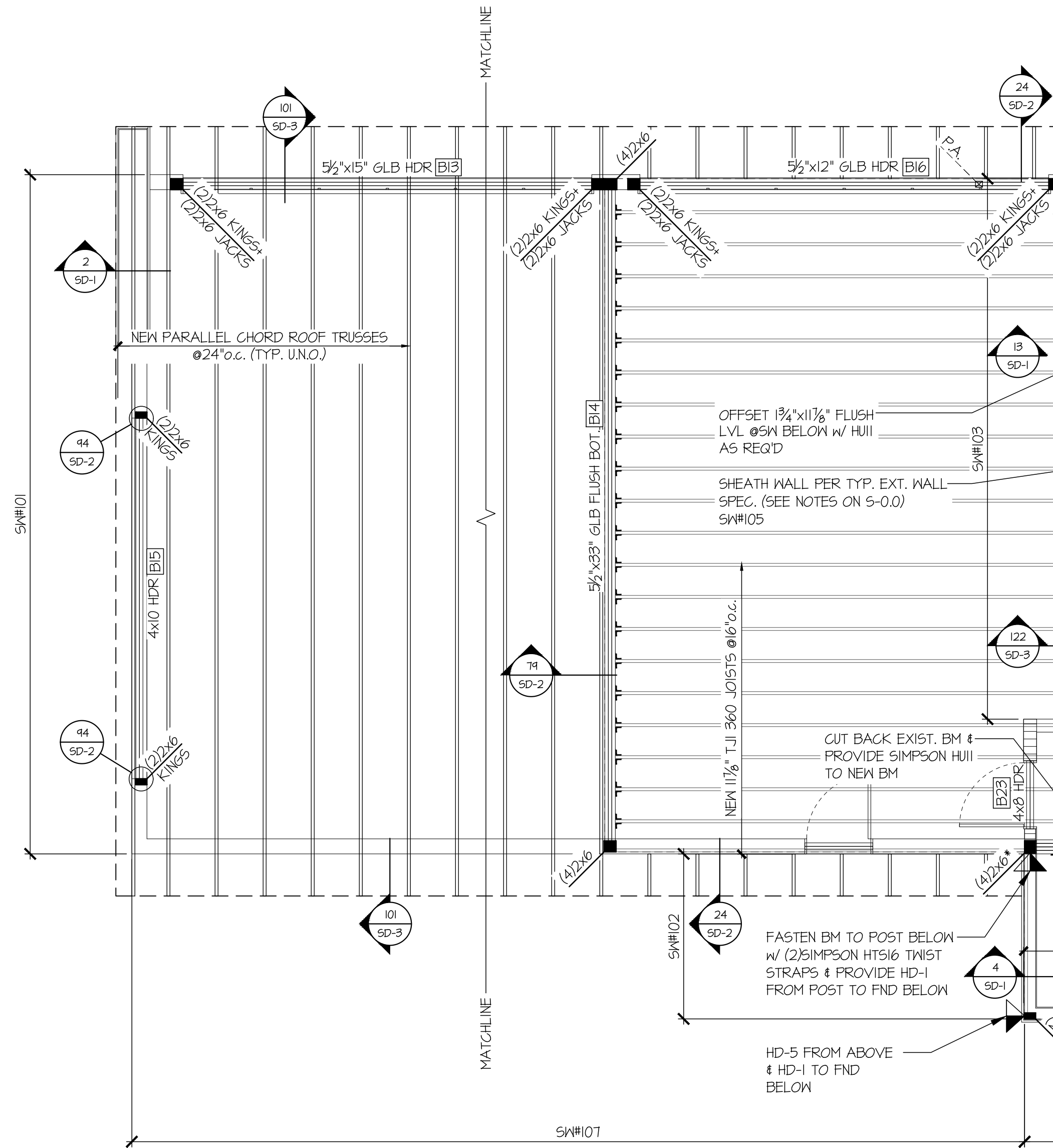
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HOLD-DOWN SCHEDULE	
SYMBOL	SPECIFICATION
	SIMPSON HTTS TENSION TIE
	SIMPSON CS16 STRAP TIE (14" END LENGTH)
	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)
	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)

**DEMOLITION/RENOVATION NOTES**

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REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES



**PARTIAL UPPER FLOOR FRAMING PLAN**  
SCALE: 1/4"=1'-0"

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- NOTE #1: PROVIDE 2x TOP PLATE FASTENED w/ 1/2" DIA. BOLTS @48" o.c. STAGGERED. ALSO PROVIDE WEB PACKOUT AS REQ'D FASTENED w/ 1/2" DIA. BOLTS @24" o.c.
- FASTEN STEEL BEAMS TO WOOD FRAMING BELOW PER D/SD-2 (TYP.)
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- UPSET STEEL BMS 1/2" AS REQ'D TO HIDE GAP PLATES @ FINISHED SPACES (TYP.)



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project mgr: RJZ  
drawn by: RJD  
issue date: 04-24-24

REVISIONS:  
date: initial:

MACPHERSON  
CONSTRUCTION

UPPER FLOOR FRMG PLAN  
5330 BUTTERWORTH RD  
HOUSE 1  
MERCER ISLAND, WASHINGTON

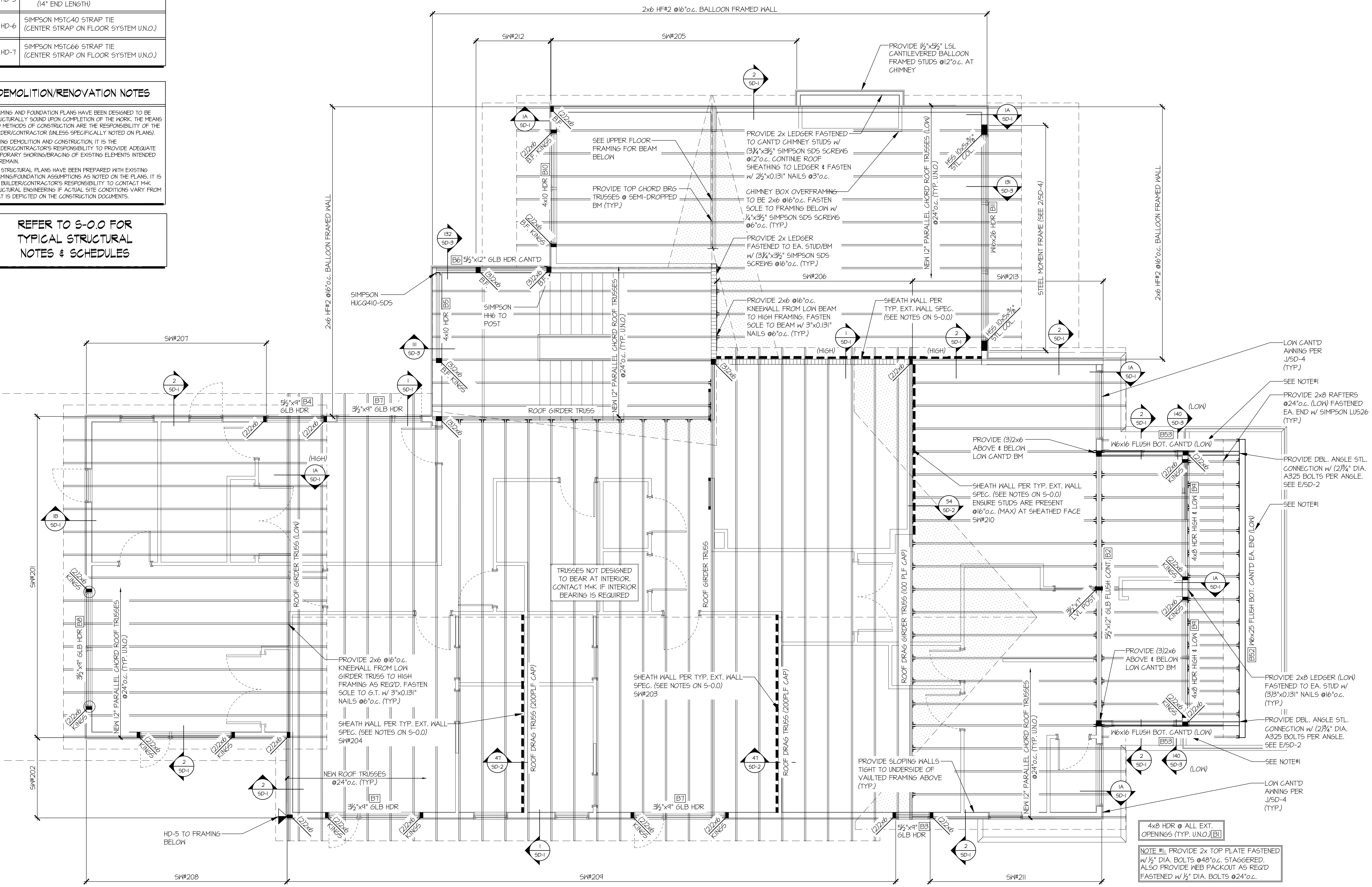
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HOLD-DOWN SCHEDULE	
SYMBOL	SPECIFICATION
▶ HD-1	SIMPSON HTTS TENSION TIE
▶ HD-5	SIMPSON CS16 STRAP TIE (14" END LENGTH)
▶ HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)
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**DEMOLITION/RENOVATION NOTES**

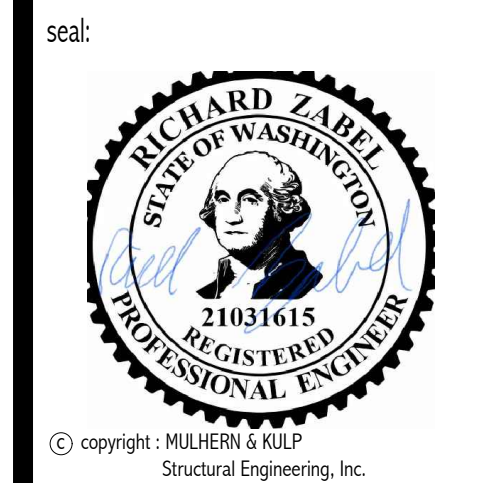
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**REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES**



**1 ROOF FRAMING PLAN**  
SCALE: 1/4"=1'-0"

- 4x8 HDR @ ALL EXT. OPENINGS (TYP. U.N.O.)
- NOTE #1: PROVIDE 2x TOP PLATE FASTENED w/ 1/2" DIA. BOLTS @48" O.C. STAGGERED. ALSO PROVIDE WEB PACKOUT AS REQ'D FASTENED w/ 1/2" DIA. BOLTS @24" O.C.
- FASTEN STEEL BEAMS TO WOOD FRAMING BELOW PER D/SD-2 (TYP.)
- VERIFY EXISTING EXTERIOR SHEATHING MEETS REQUIREMENTS PER PLAN # S-0.0 OR PROVIDE NEW SHEATHING & NAILING



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**306-24003**

project mgr: R.JZ  
drawn by: RJD  
issue date: 04-24-24

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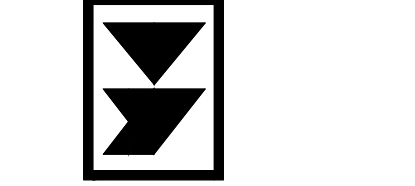
**MACPHERSON CONSTRUCTION**

**ROOF FRAMING PLAN**  
**5330 BUTTERWORTH RD**  
**HOUSE 1**  
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sheet:  
**S-3.0**



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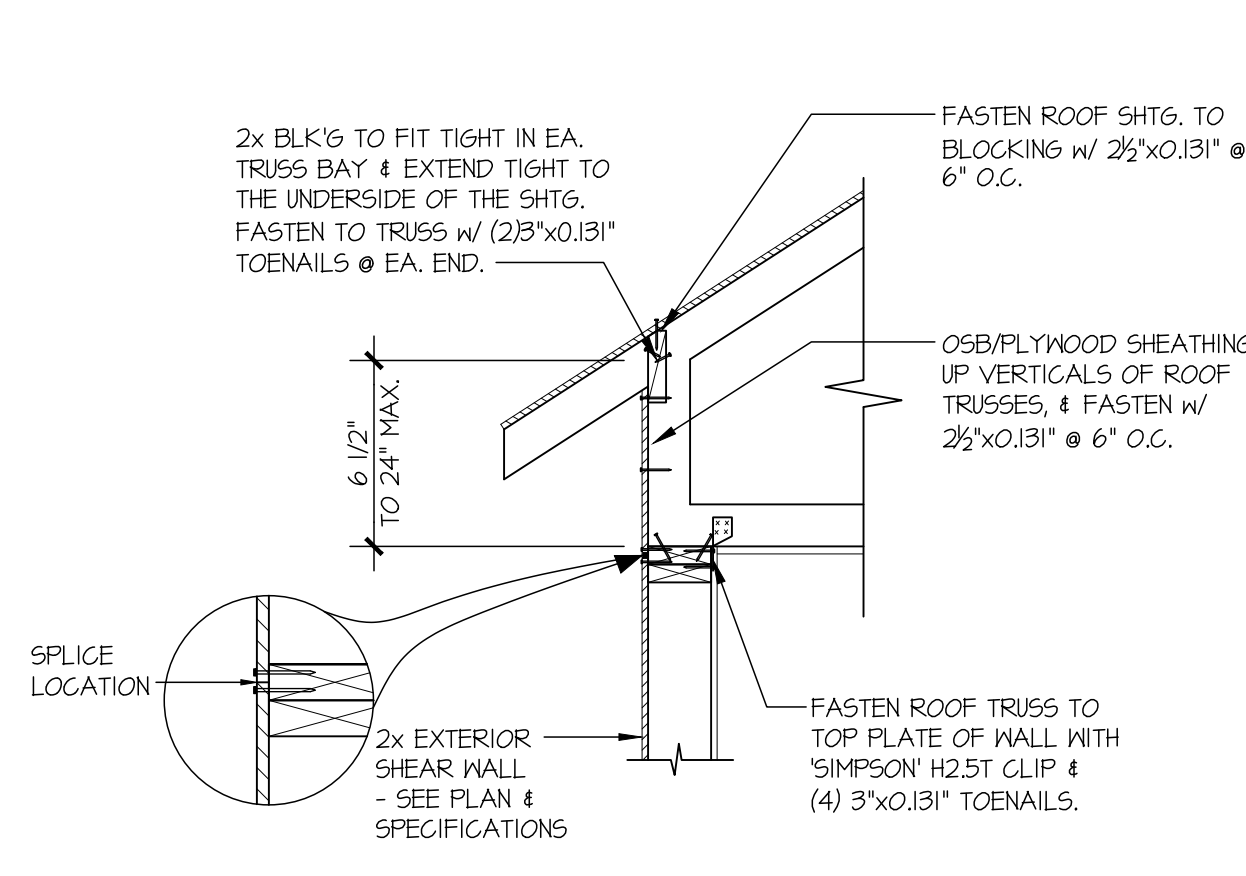
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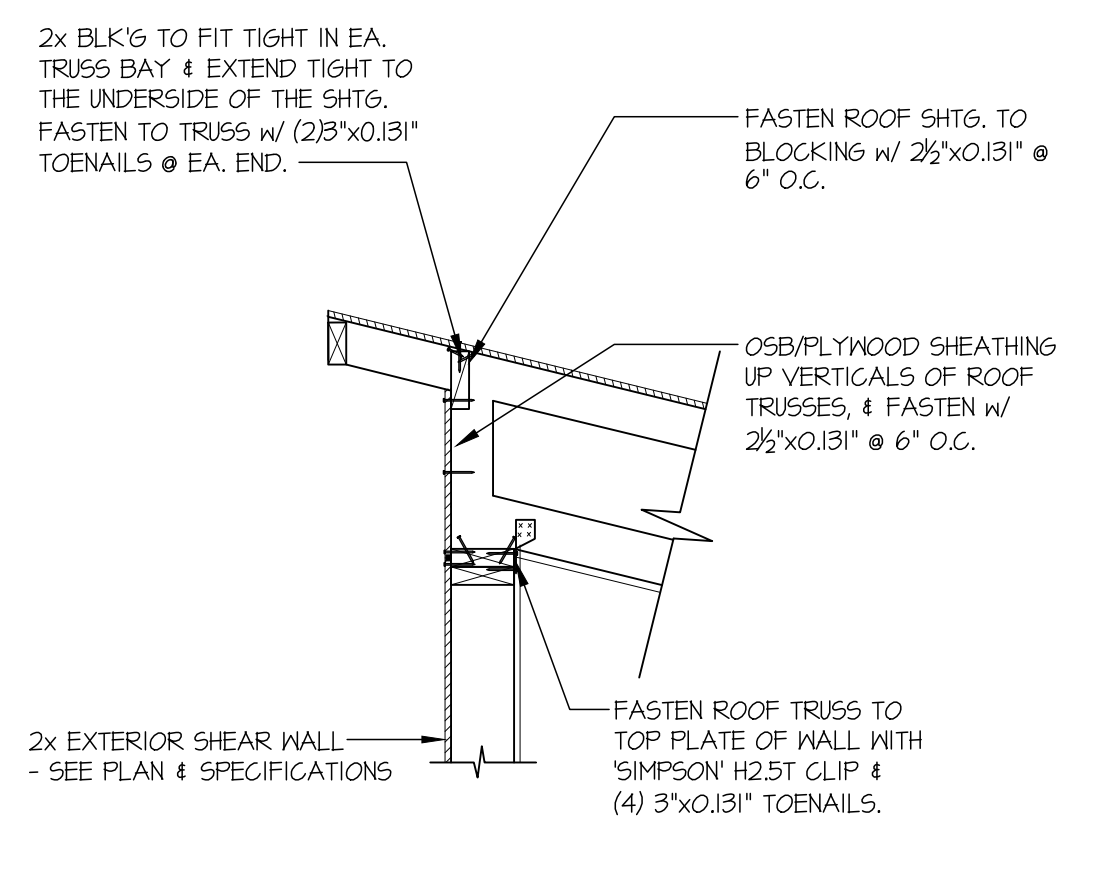
**MACPHERSON  
CONSTRUCTION**

**STRUCTURAL DETAILS**  
**5330 BUTTERWORTH RD**  
**HOUSE 1**  
MERCER ISLAND, WASHINGTON

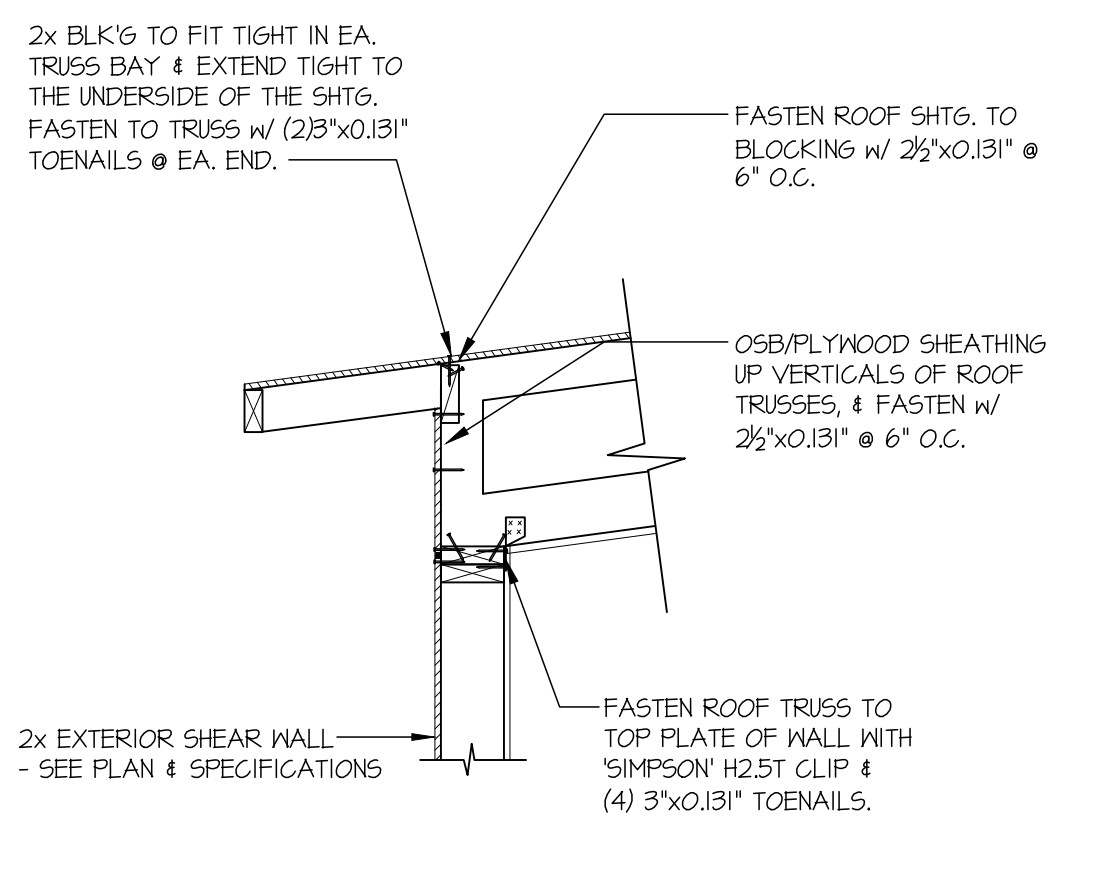
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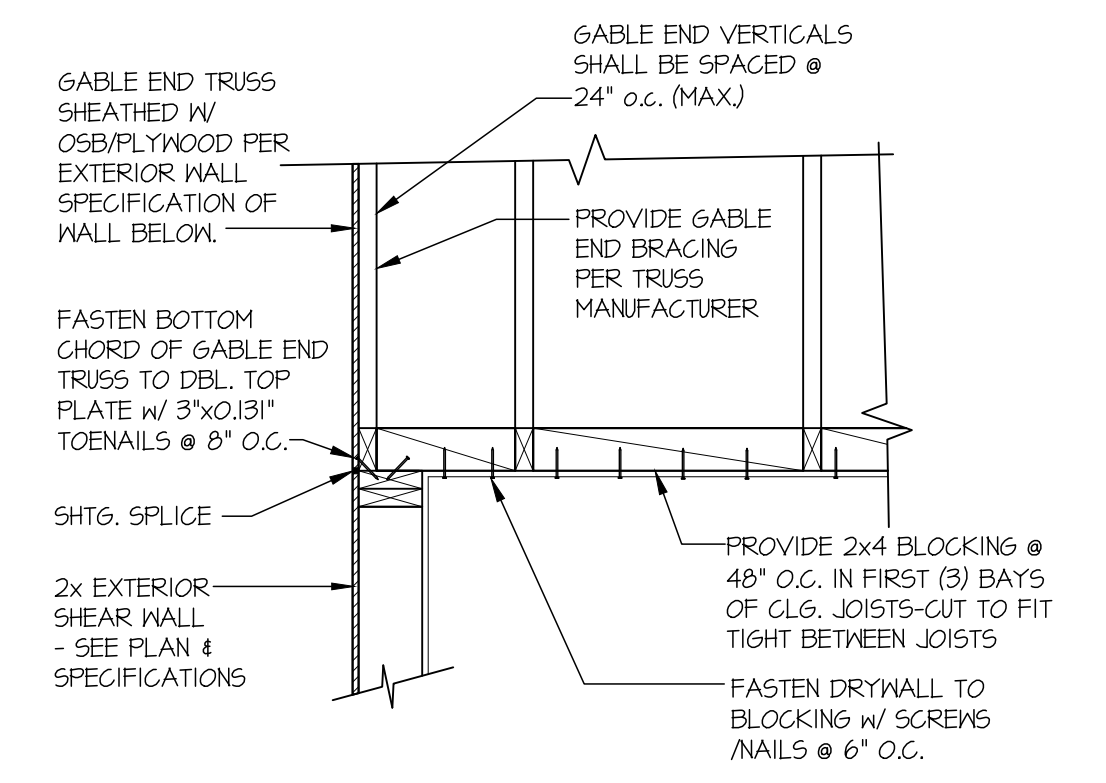
**1** TYPICAL SHEAR TRANSFER  
DETAIL @ RAISED HEEL TRUSS  
SCALE: 3/4"=1'-0" HEEL HEIGHT UP TO 24" MAX.



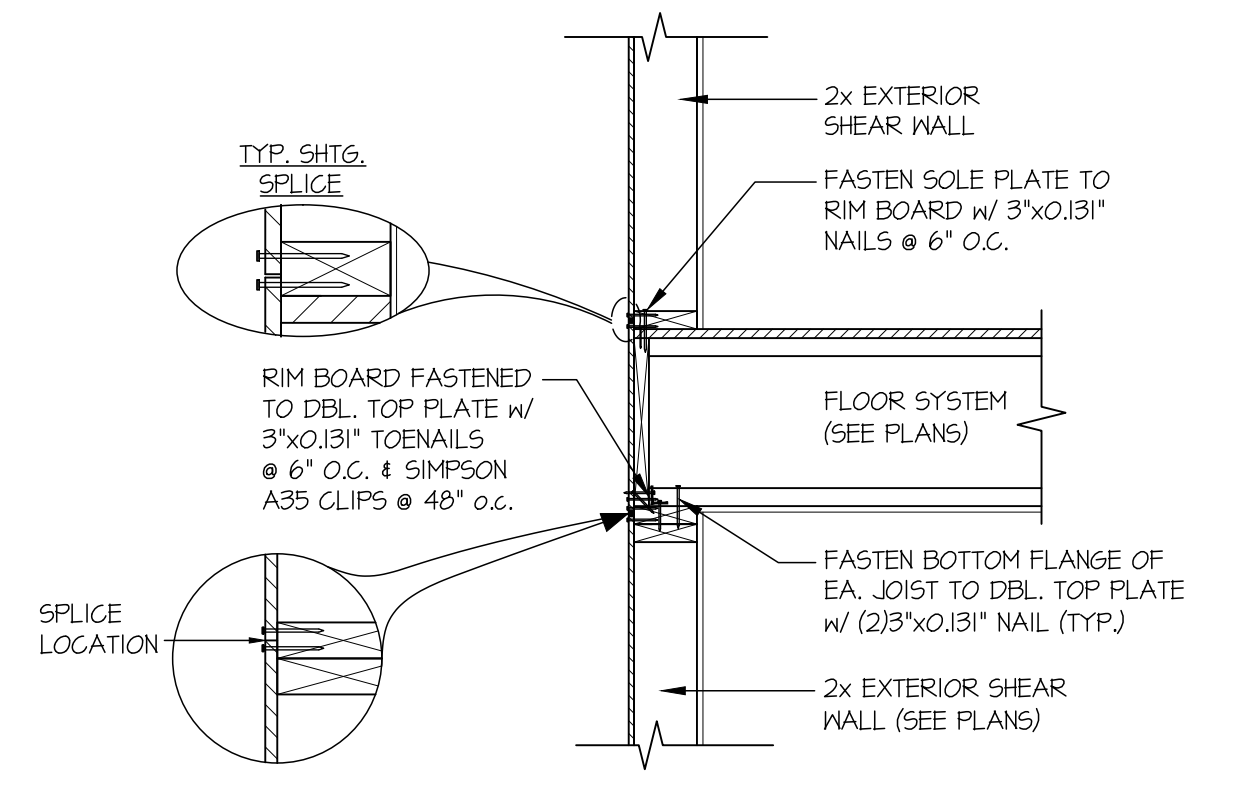
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DETAIL @ RAISED HEEL TRUSS  
SCALE: 3/4"=1'-0"



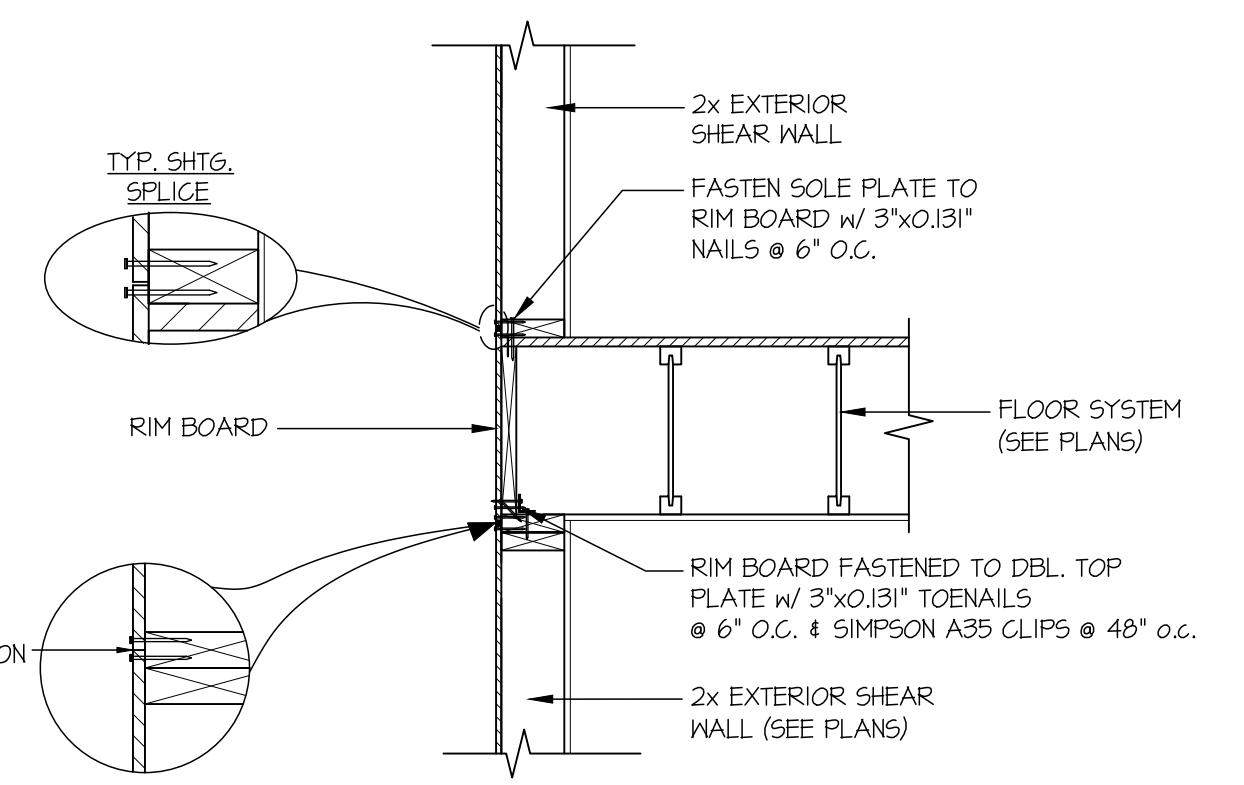
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DETAIL @ RAISED HEEL TRUSS  
SCALE: 3/4"=1'-0"



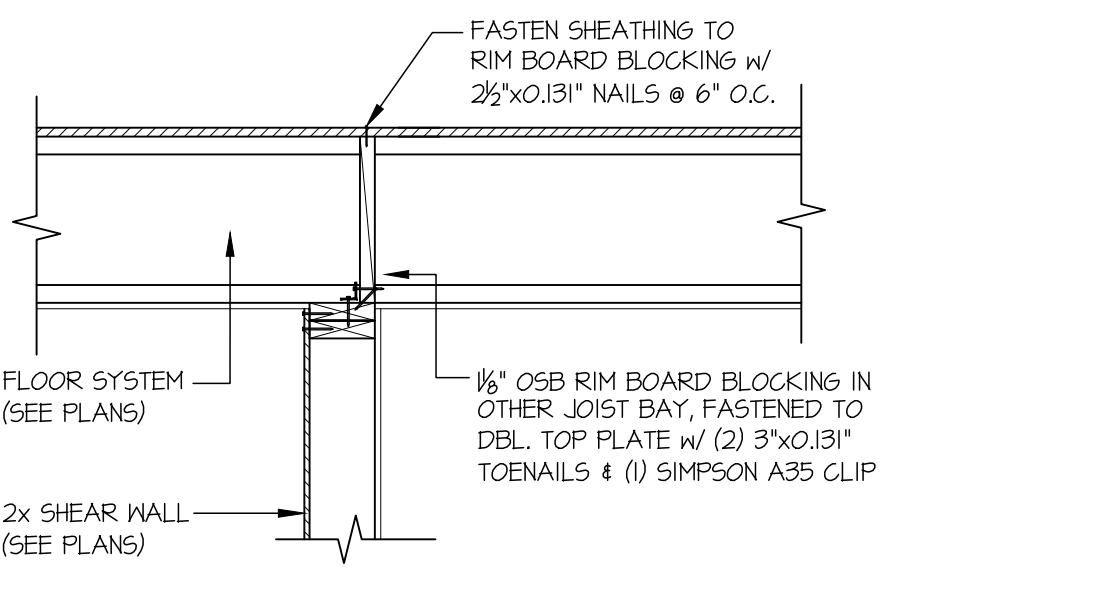
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SCALE: 3/4"=1'-0"



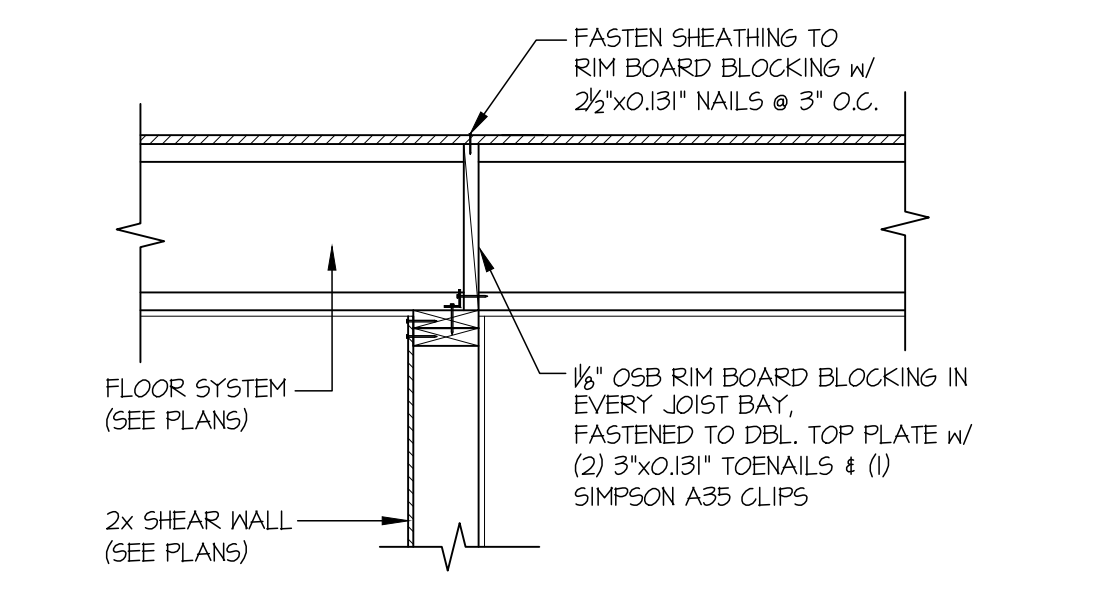
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BETWEEN FLOORS @ EXTERIOR WALL  
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



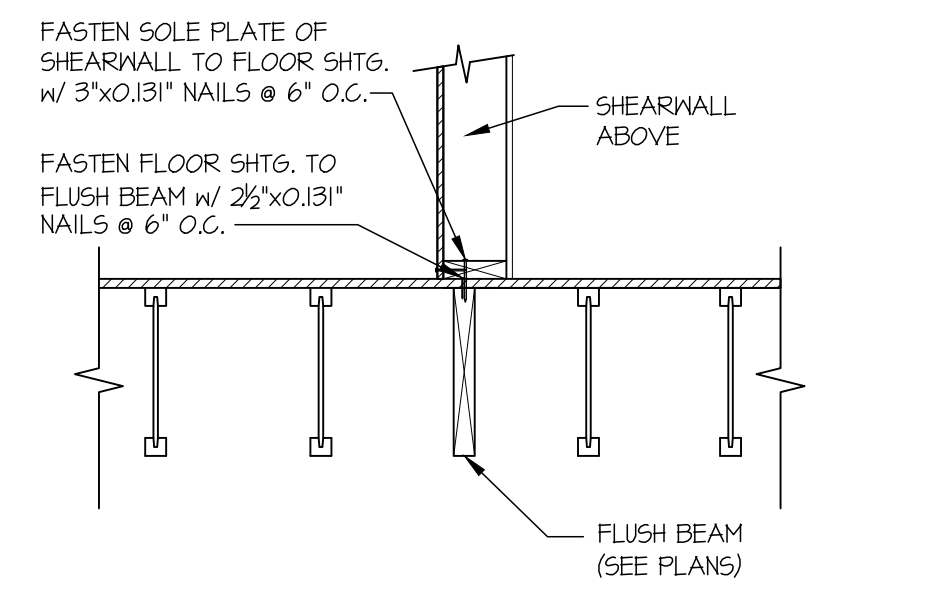
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BETWEEN FLOORS @ EXTERIOR WALL  
SCALE: 3/4"=1'-0" PARALLEL FRAMING



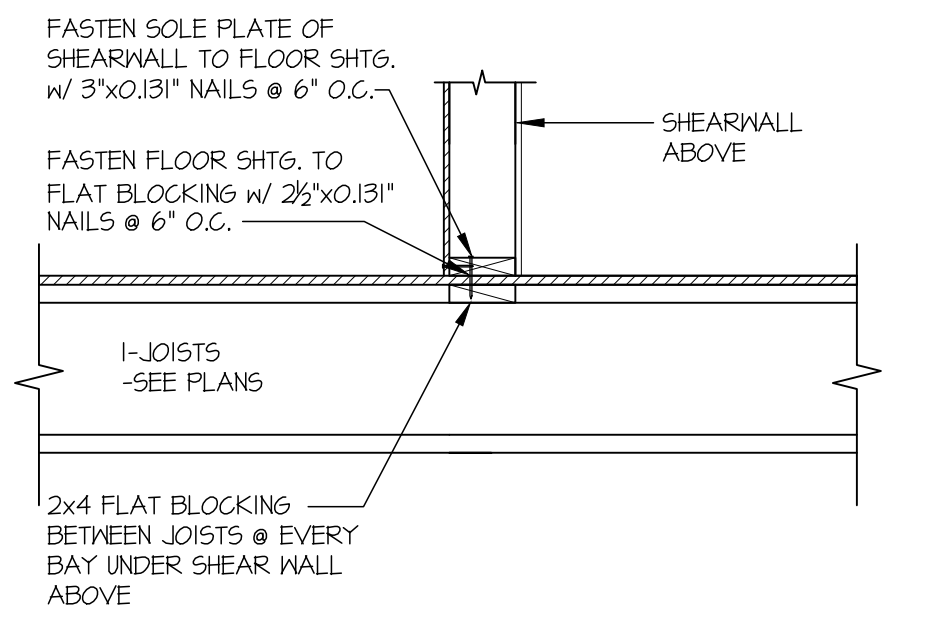
**13** SHEAR TRANSFER DETAIL  
@ INTERIOR SHEAR WALL  
SCALE: 3/4"=1'-0"



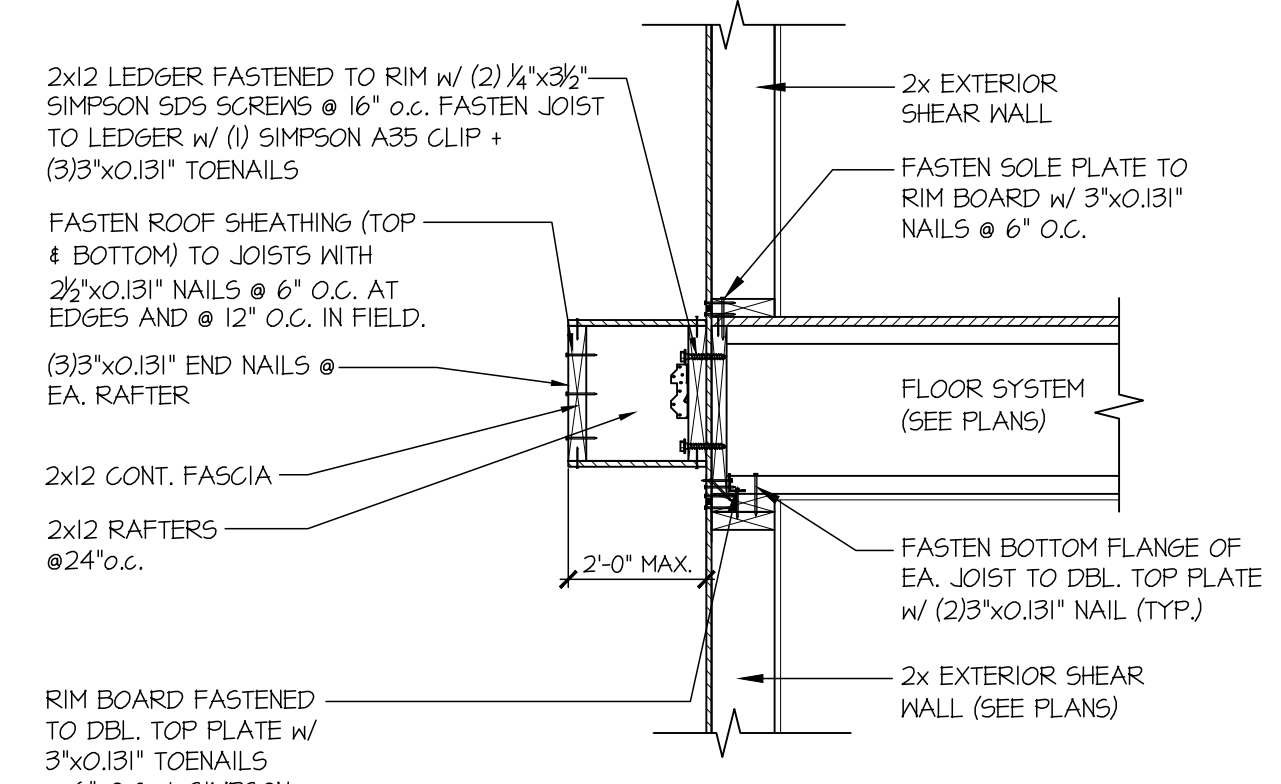
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@ INTERIOR SHEAR WALL  
SCALE: 3/4"=1'-0"



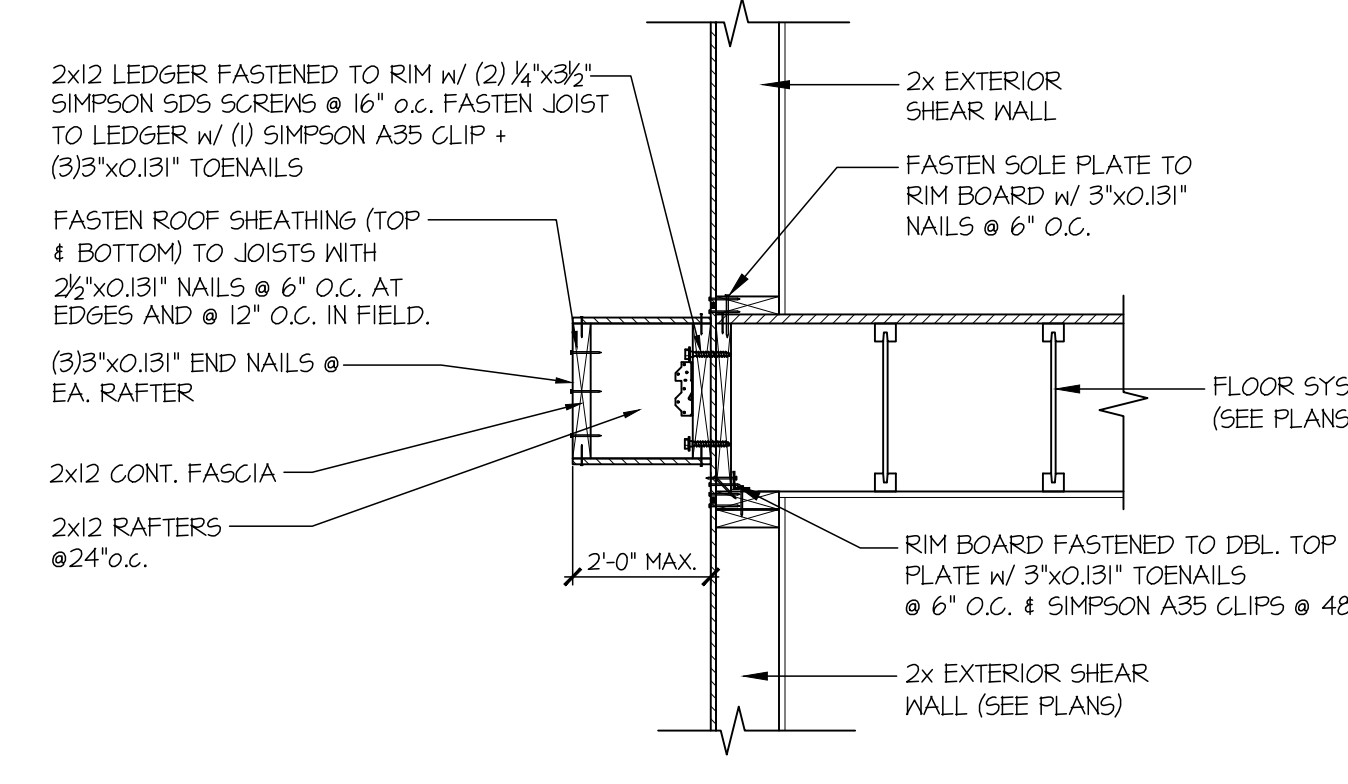
**19** SHEAR TRANSFER DETAIL @  
INTERIOR SHEARWALL ABOVE  
SCALE: 3/4"=1'-0" PARALLEL FRAMING



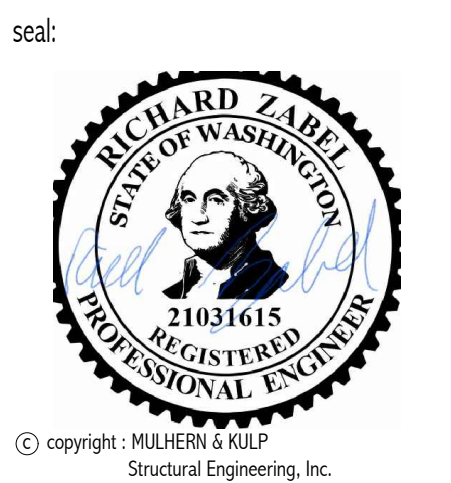
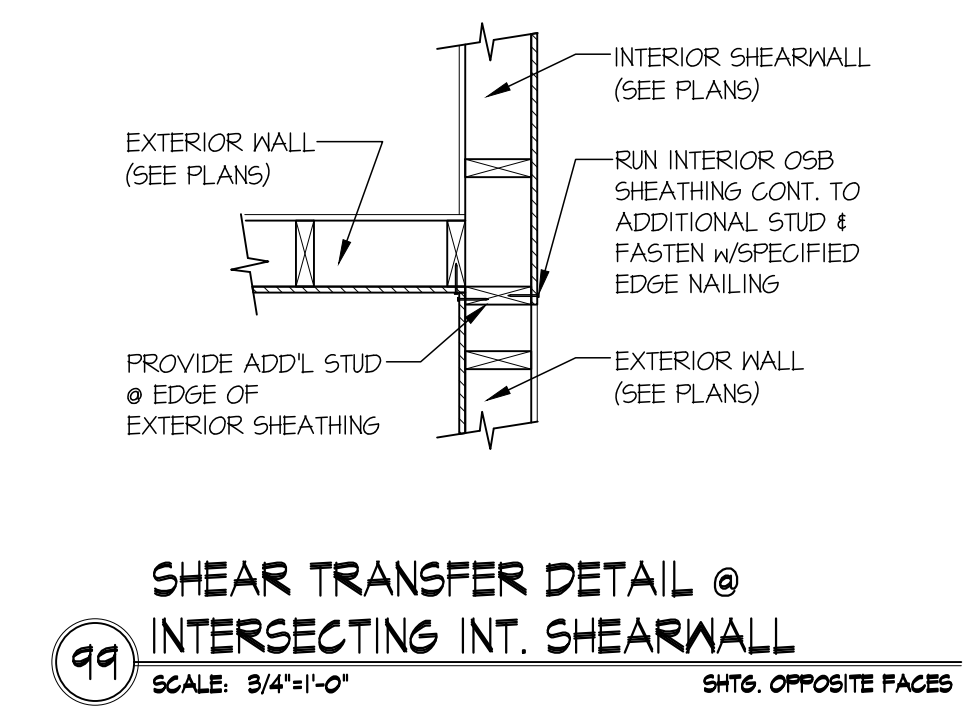
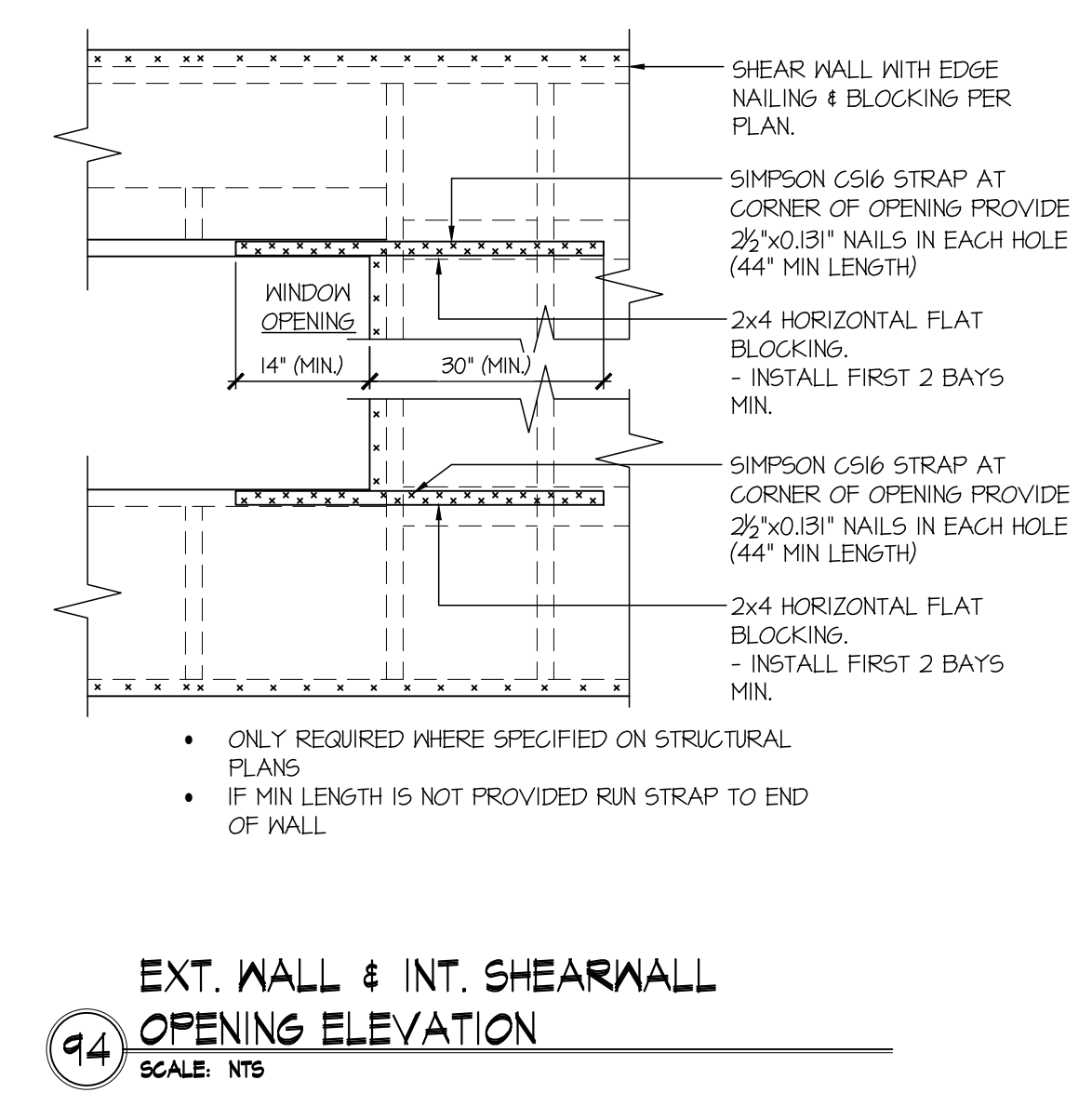
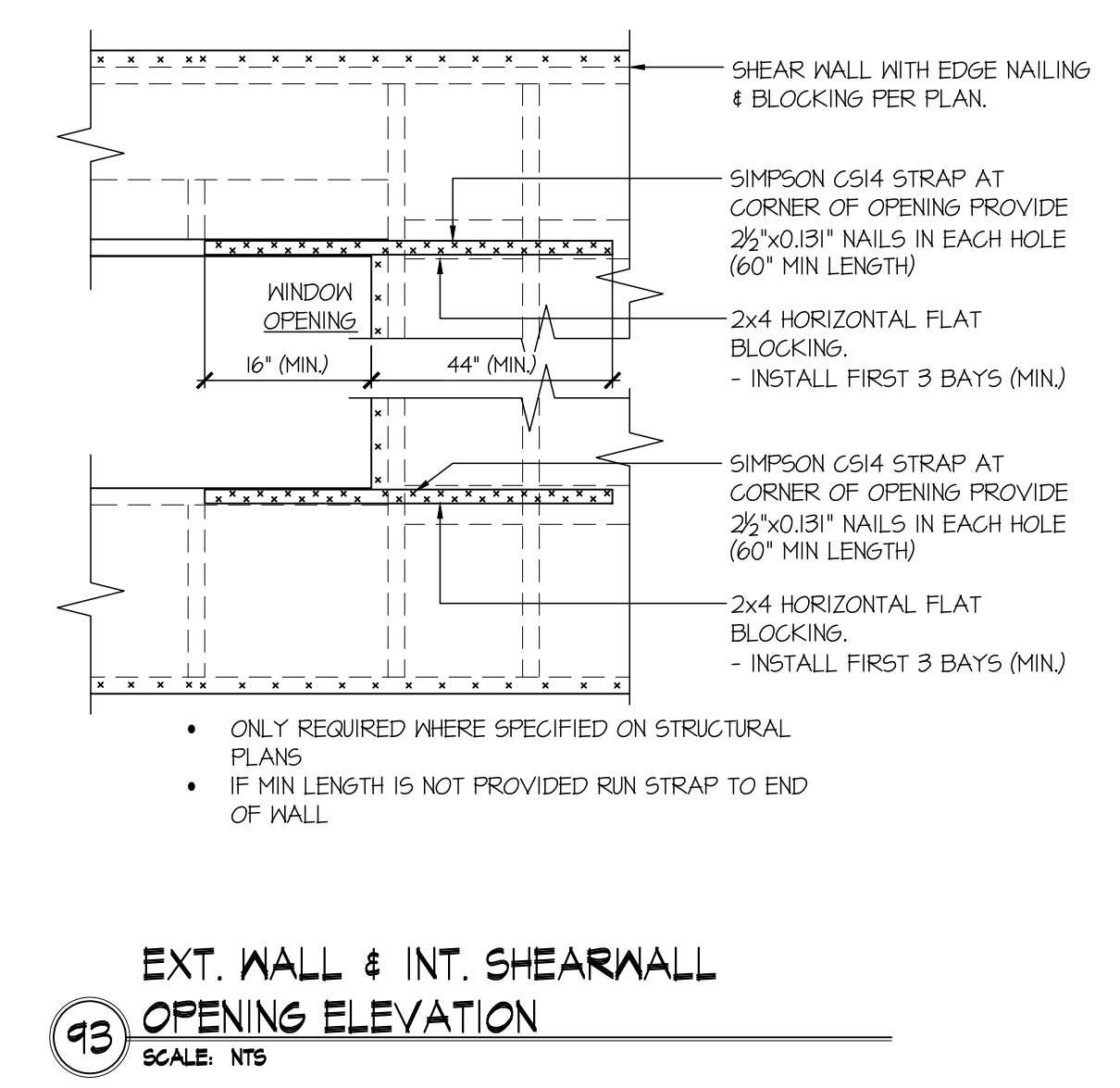
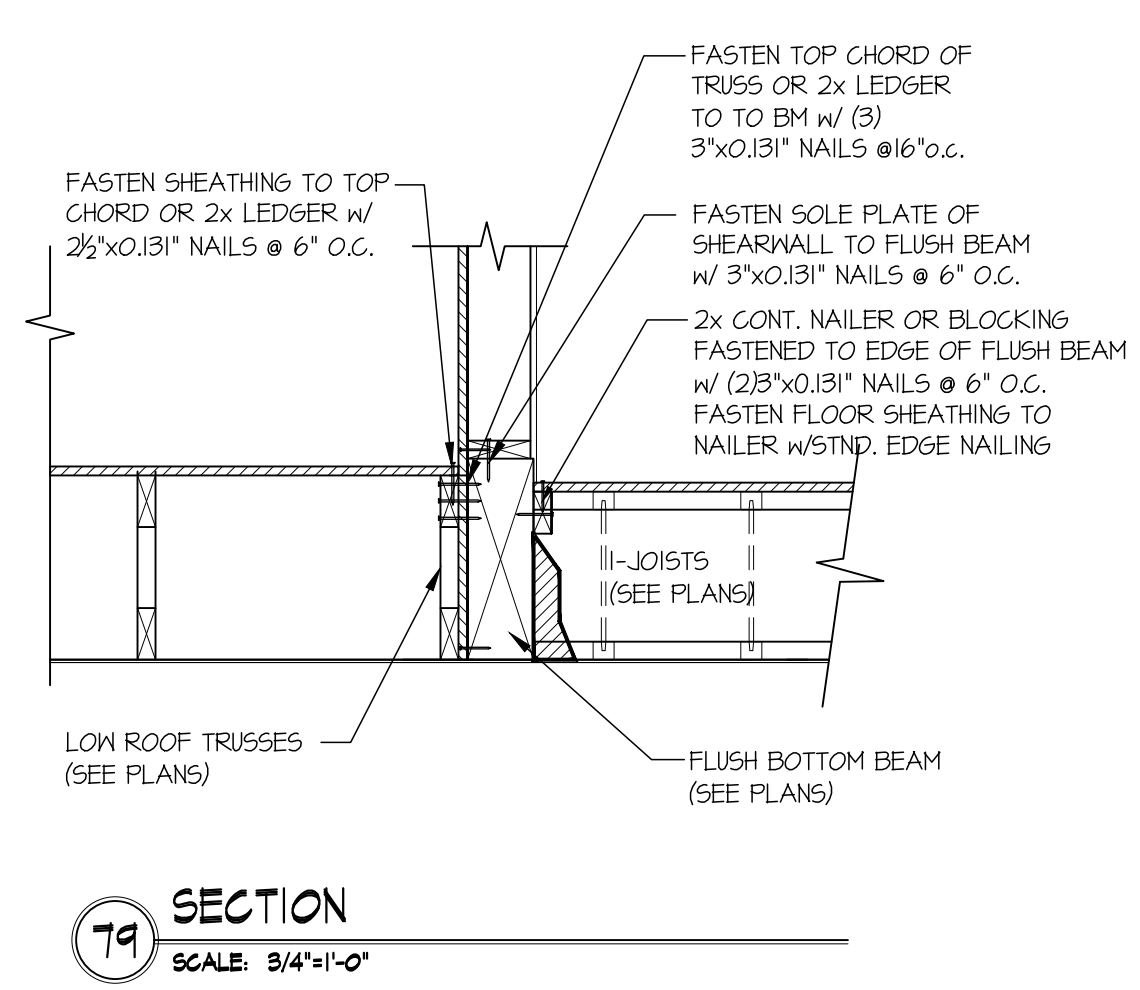
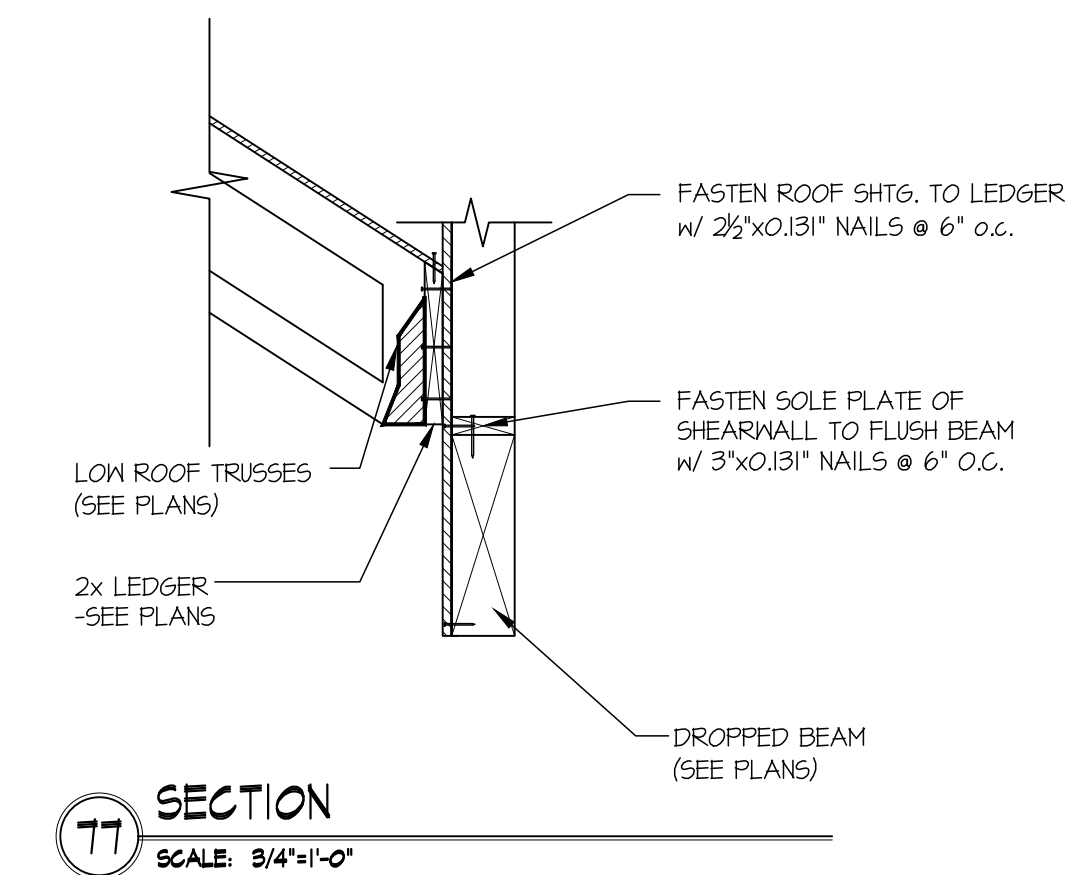
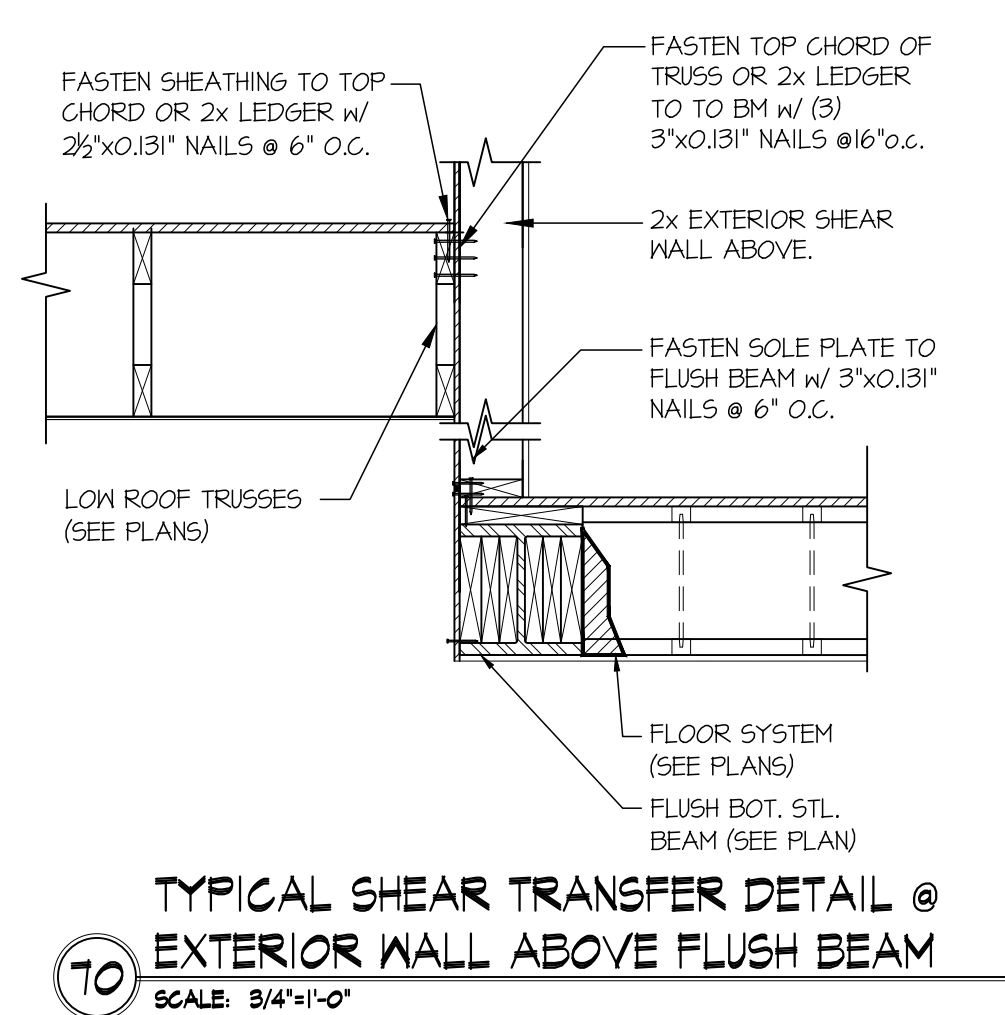
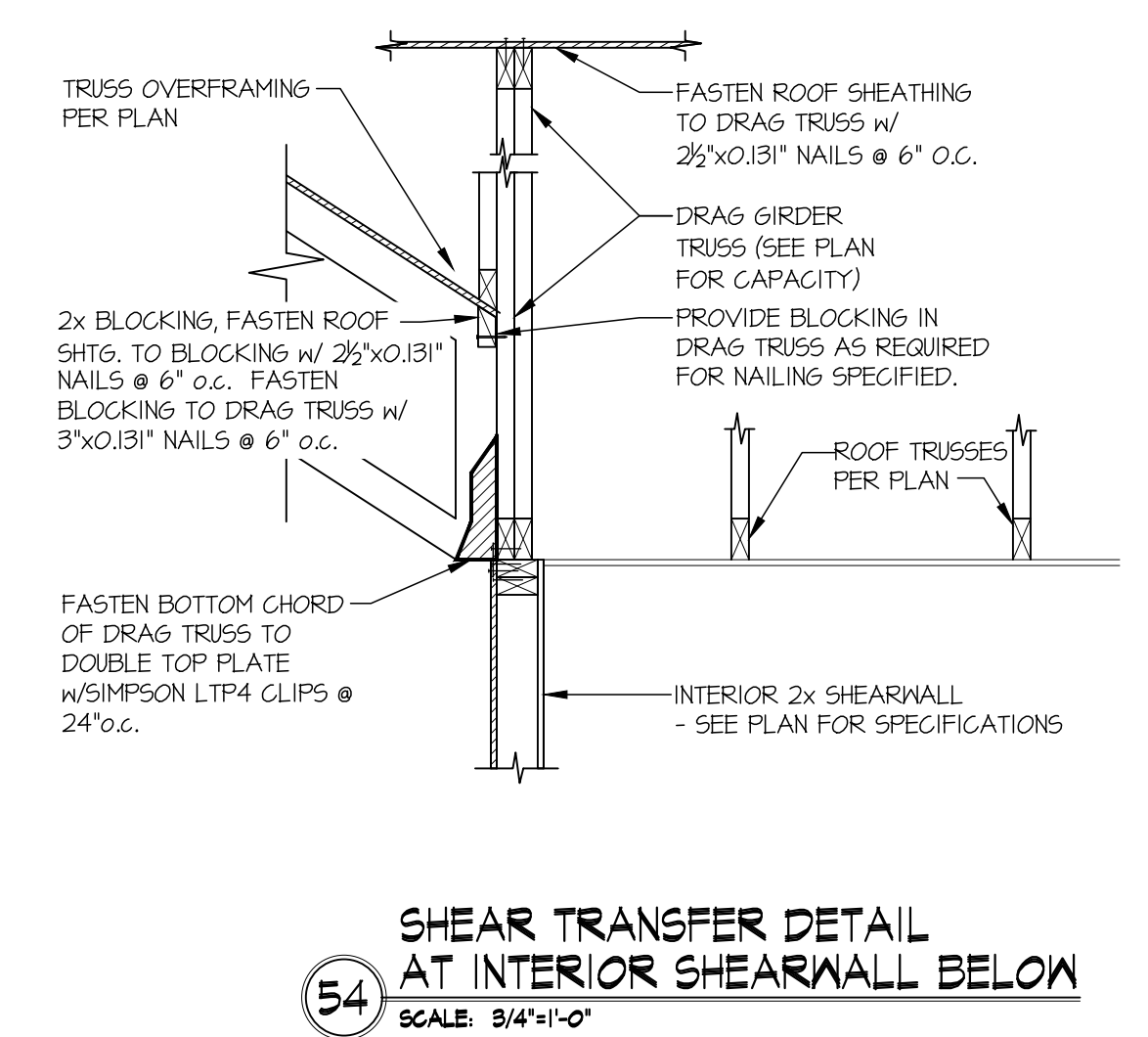
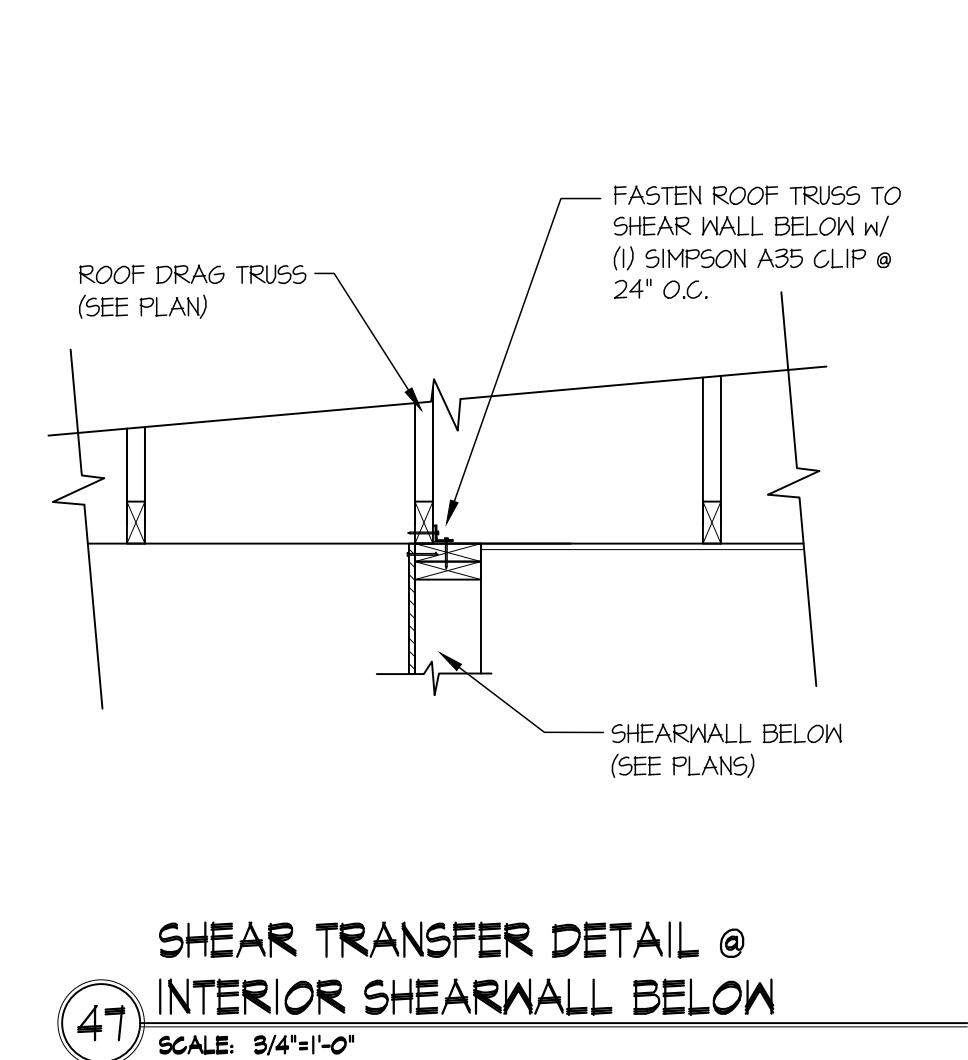
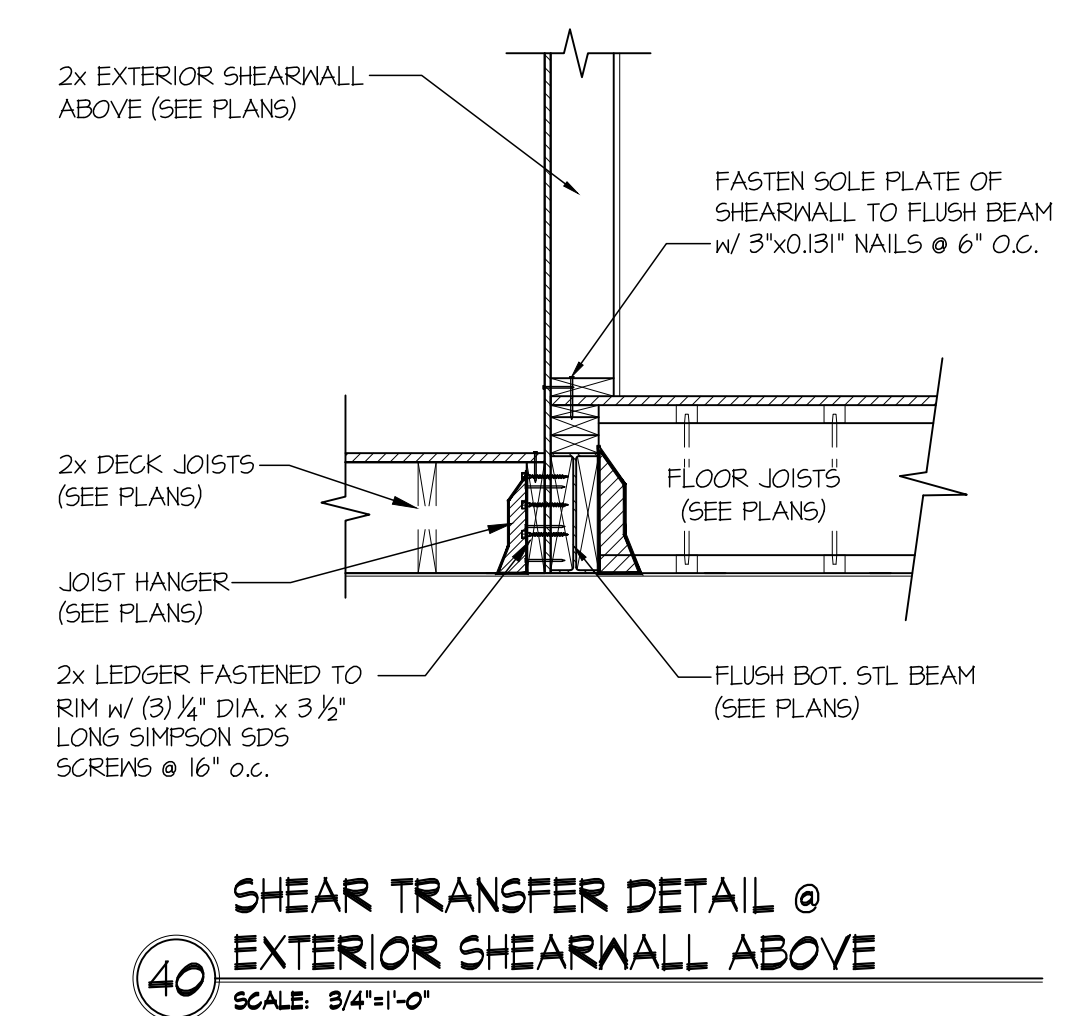
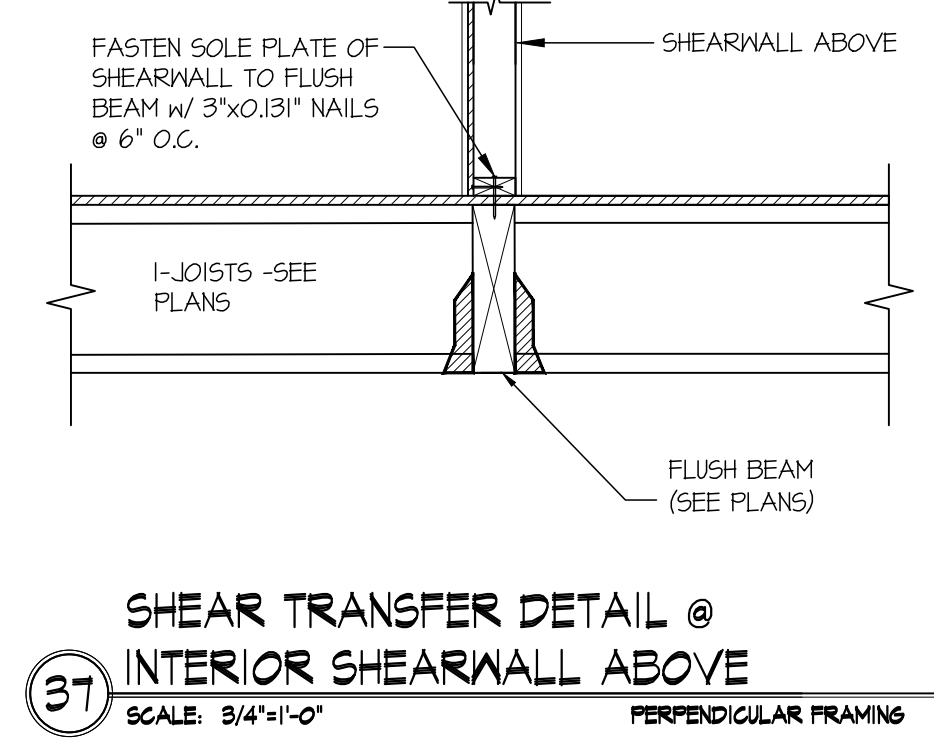
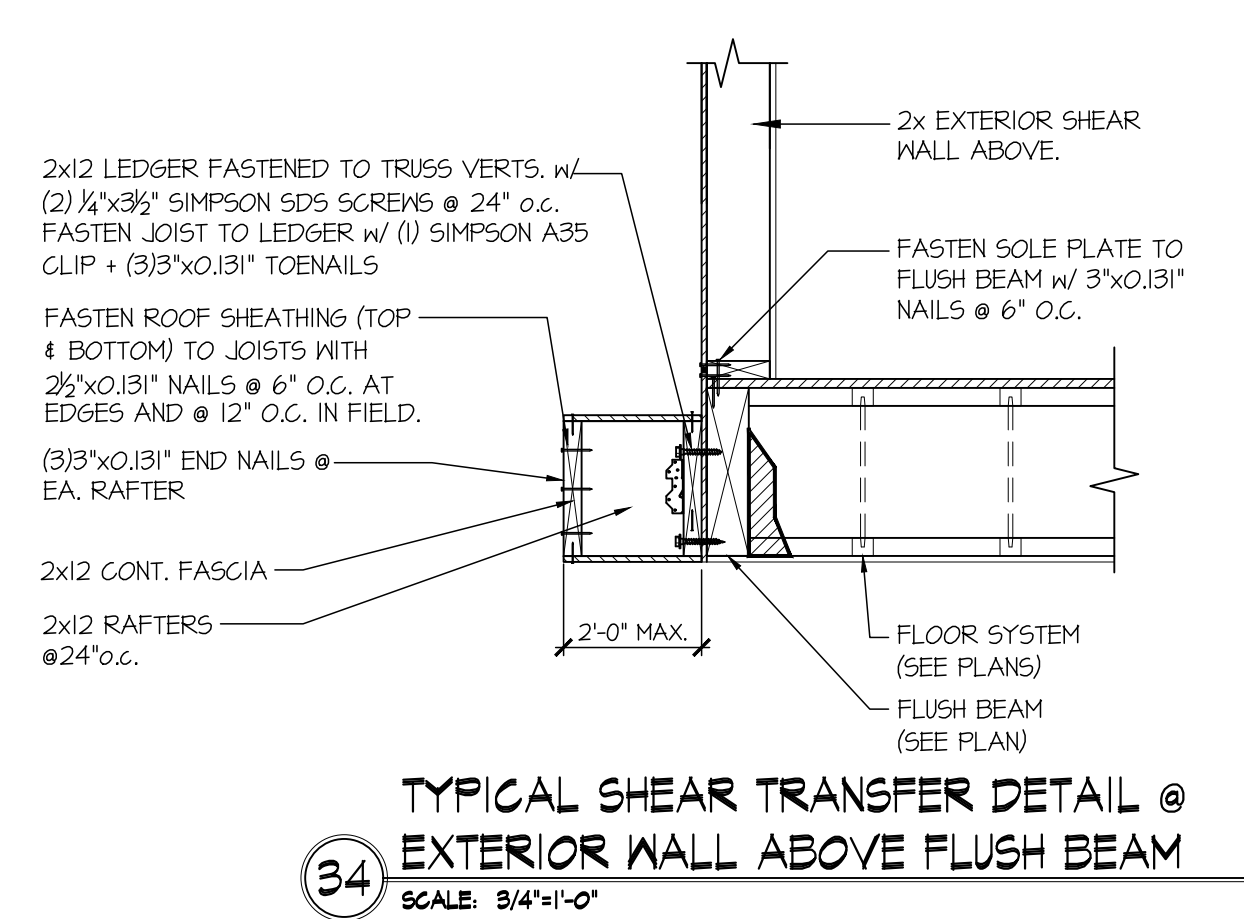
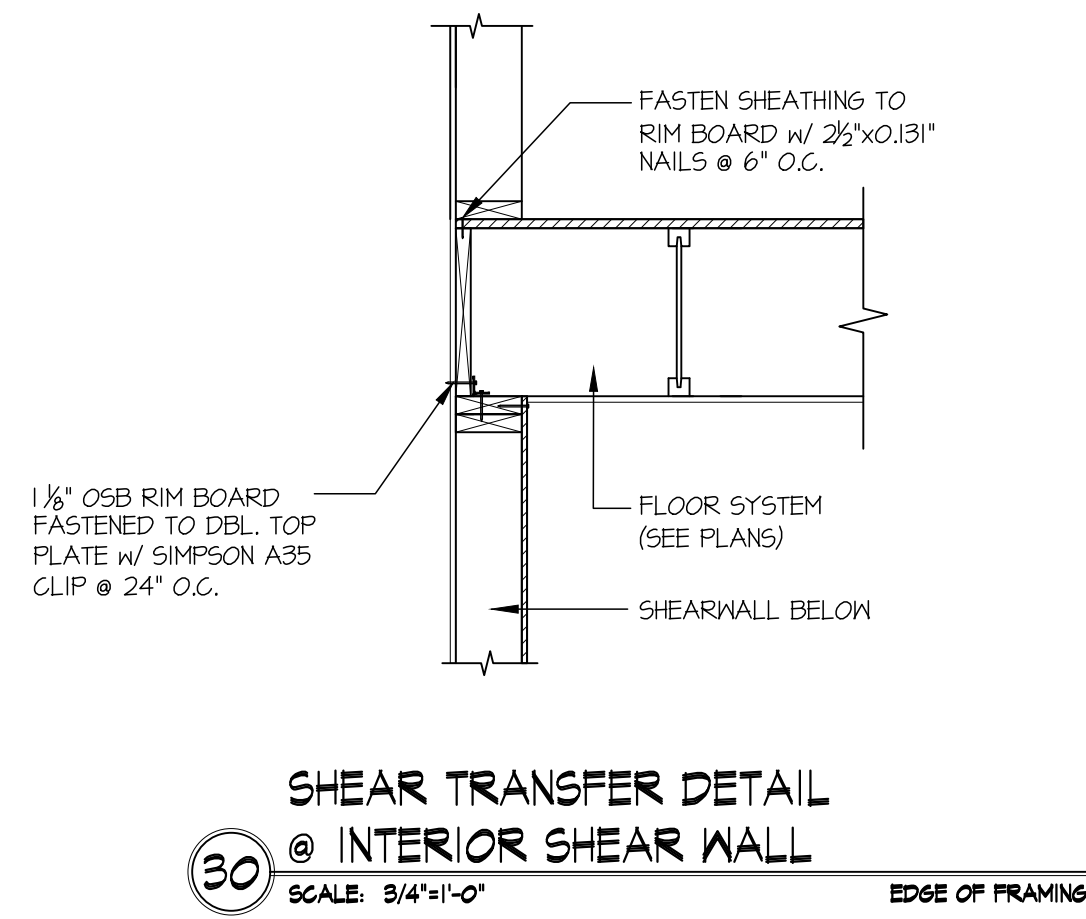
**20** SHEAR TRANSFER DETAIL  
@ INT. SHEARWALL ABOVE  
SCALE: 3/4"=1'-0"



**23** TYPICAL SHEAR TRANSFER DETAIL  
BETWEEN FLOORS @ EXTERIOR WALL  
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



**24** TYPICAL SHEAR TRANSFER DETAIL  
BETWEEN FLOORS @ EXTERIOR WALL  
SCALE: 3/4"=1'-0" PARALLEL FRAMING



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M&K project number:  
306-24003

project mgr: RJZ  
drawn by: RJD  
issue date: 04-24-24

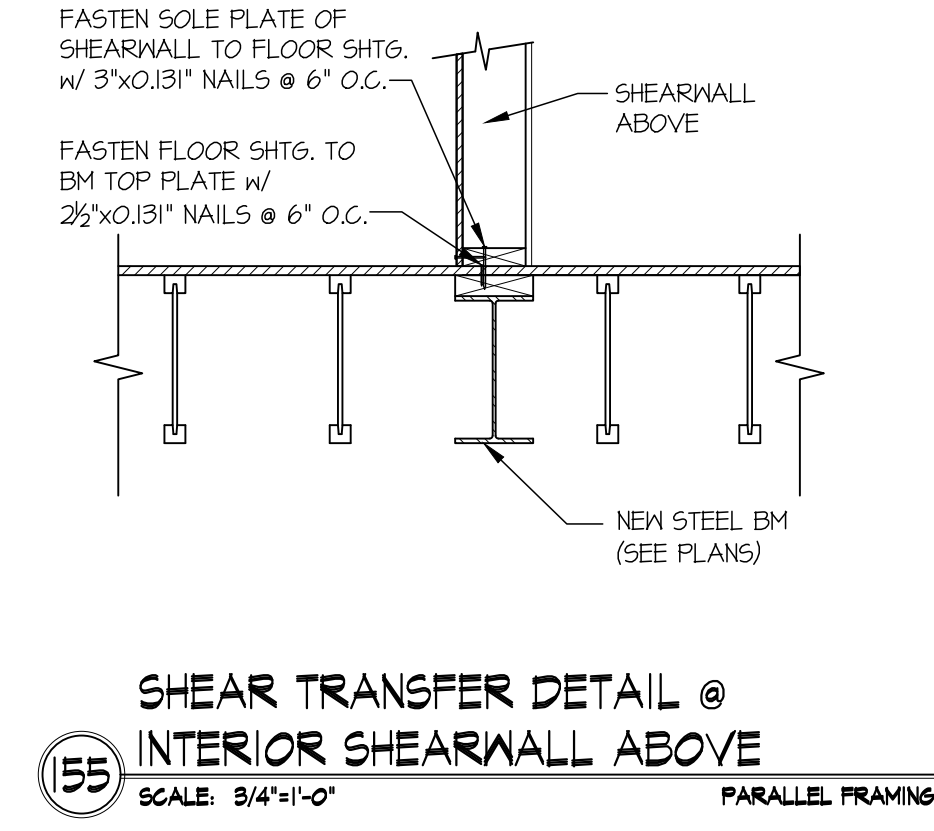
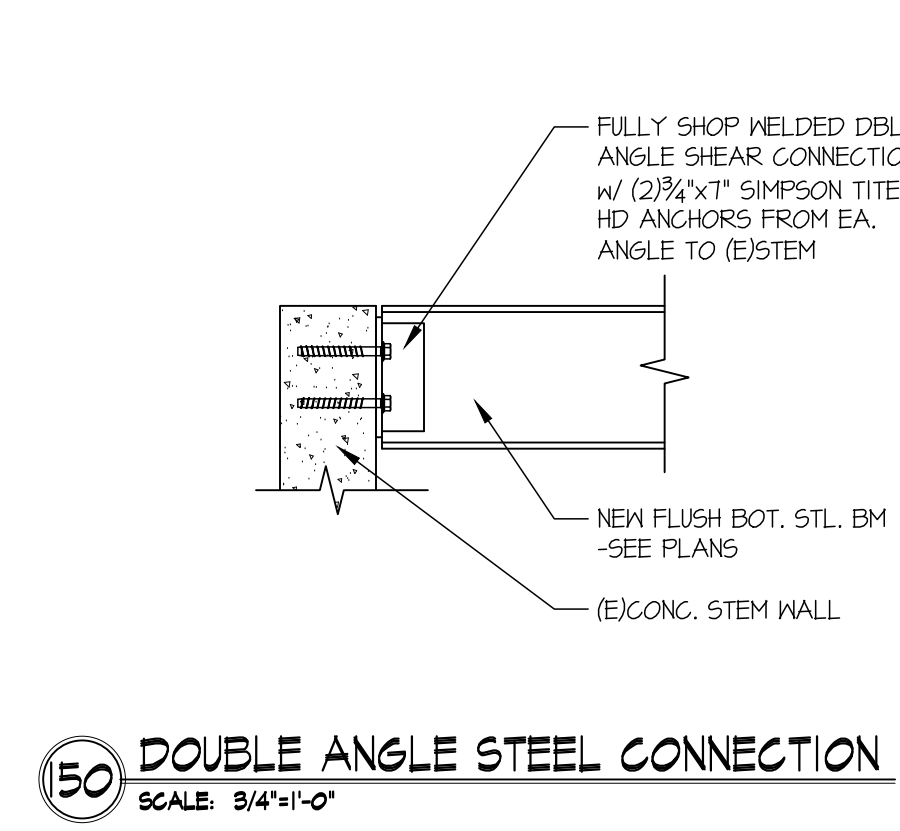
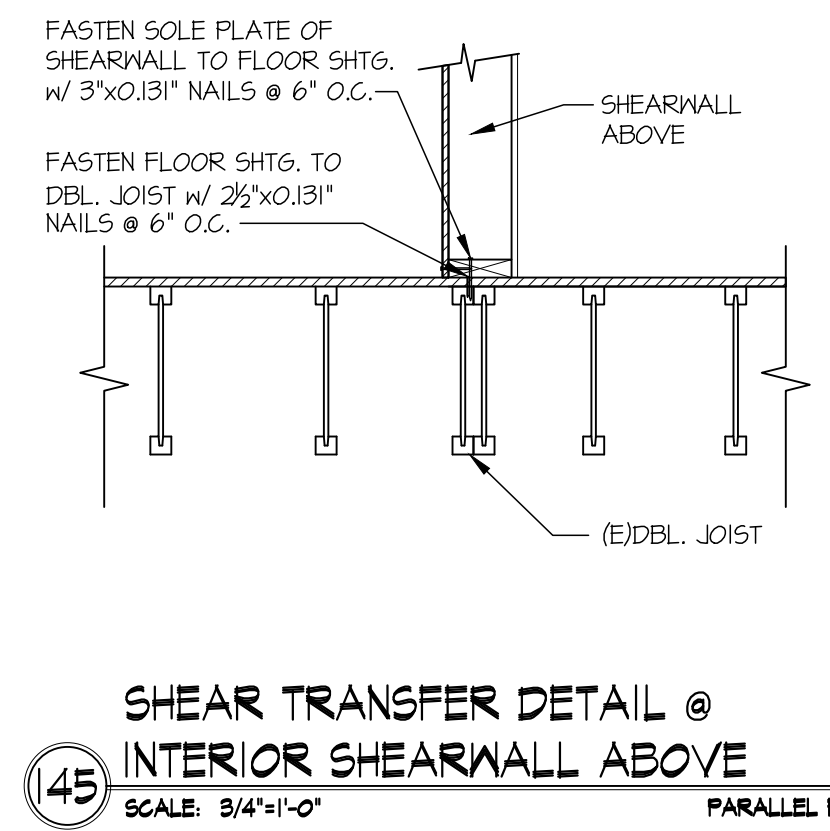
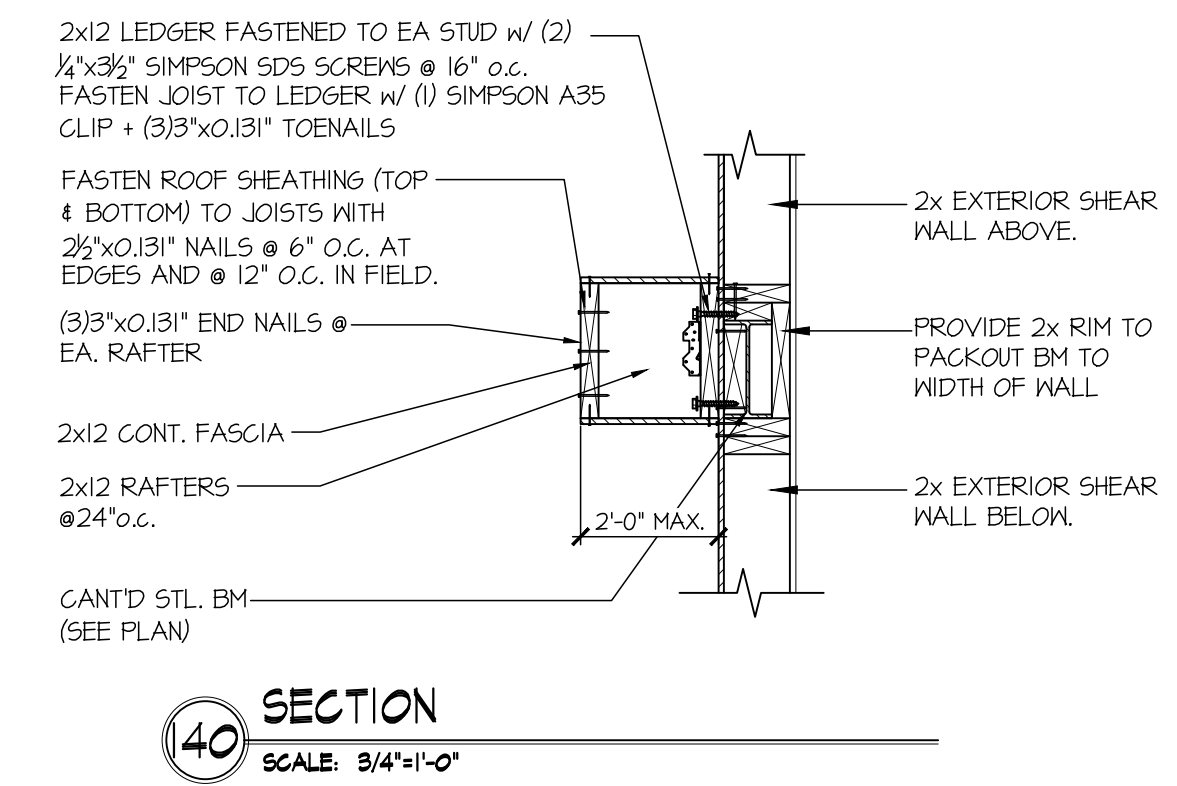
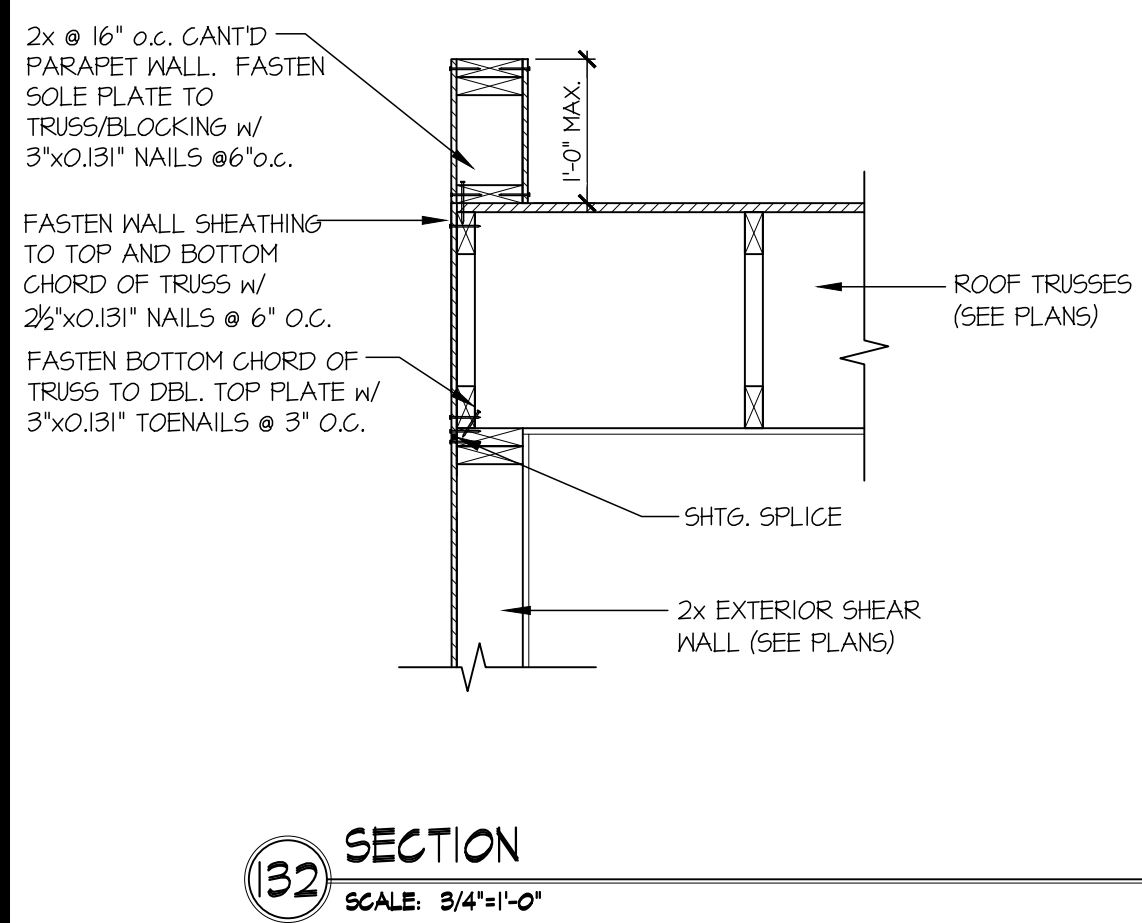
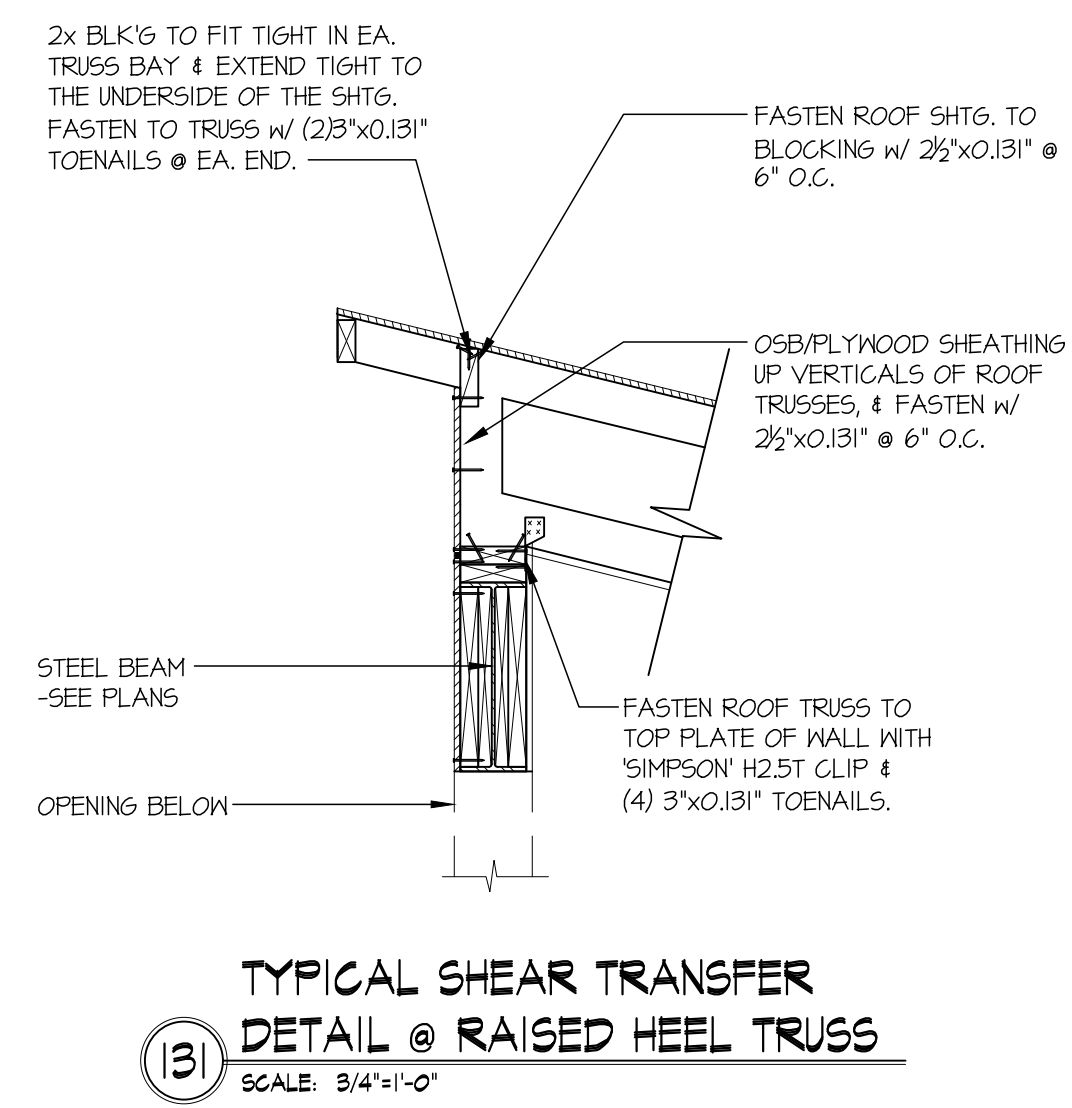
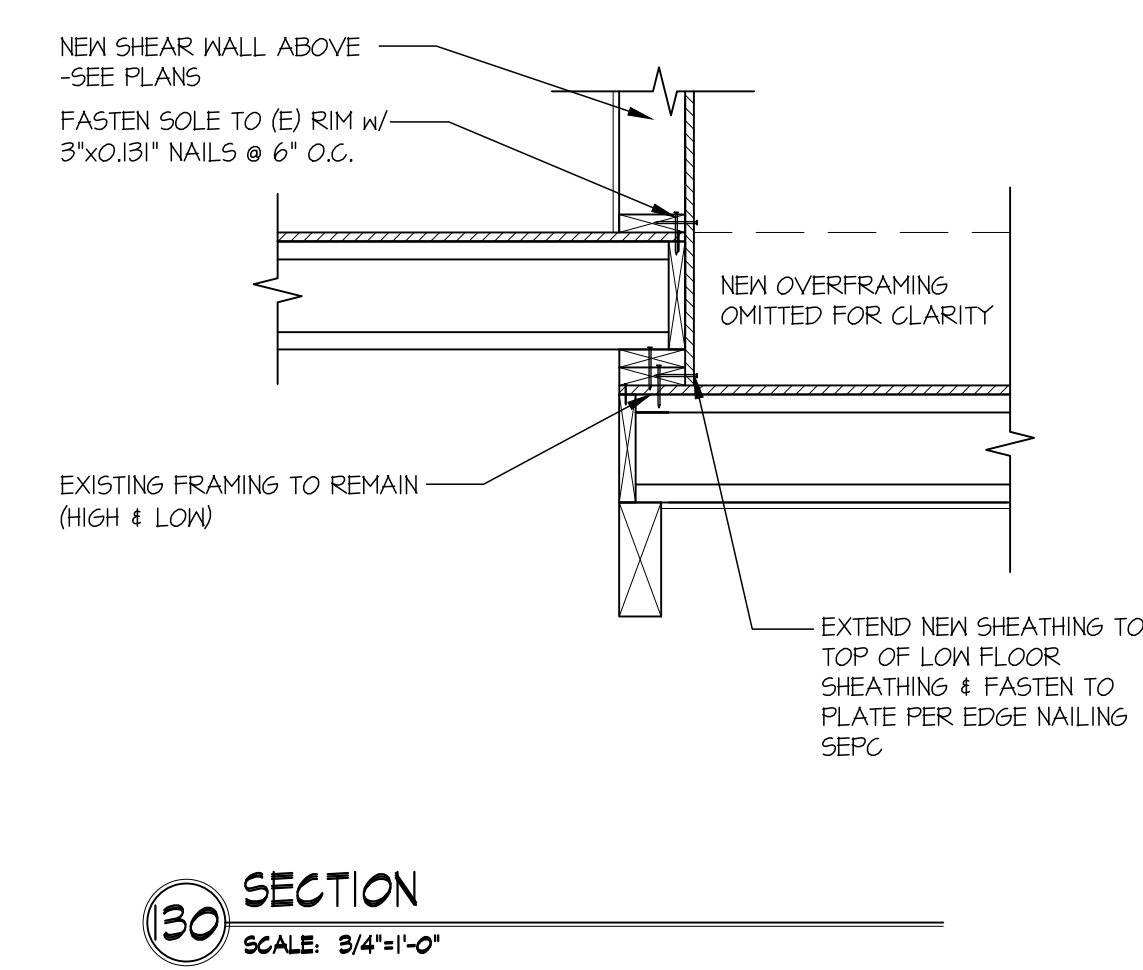
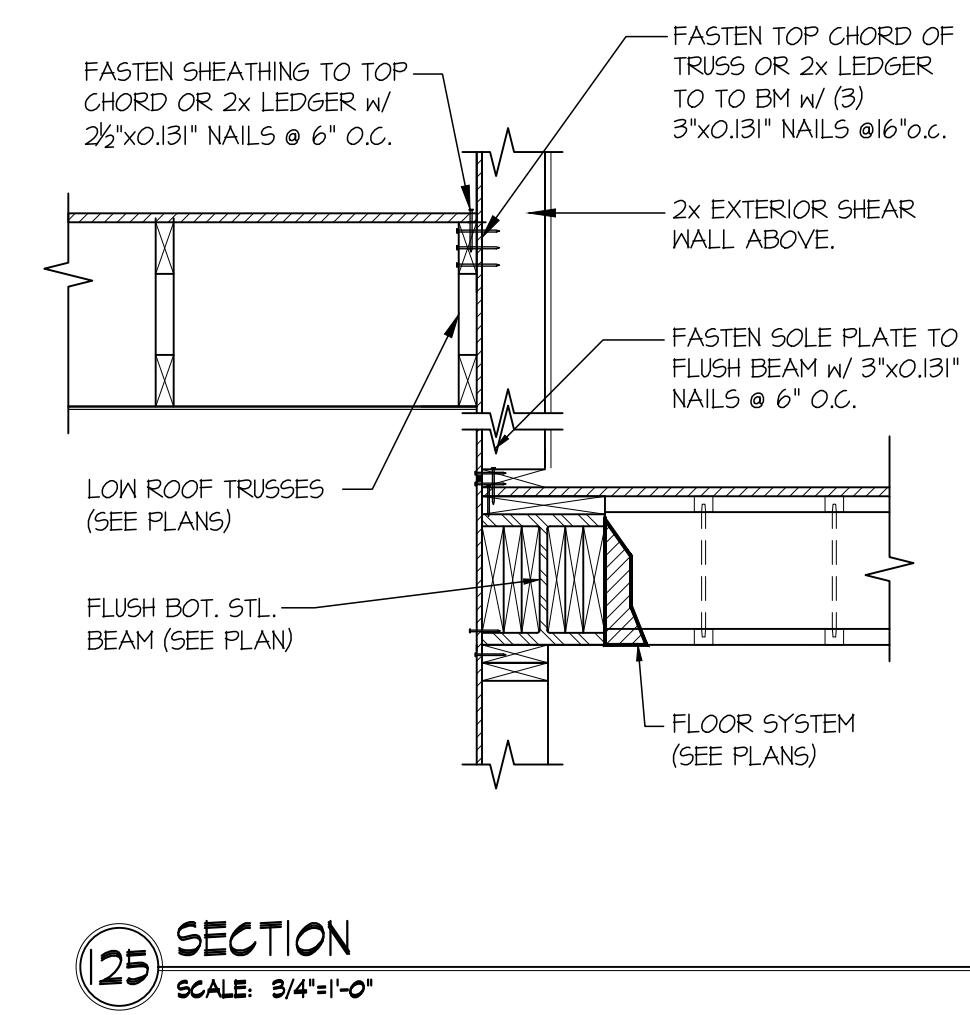
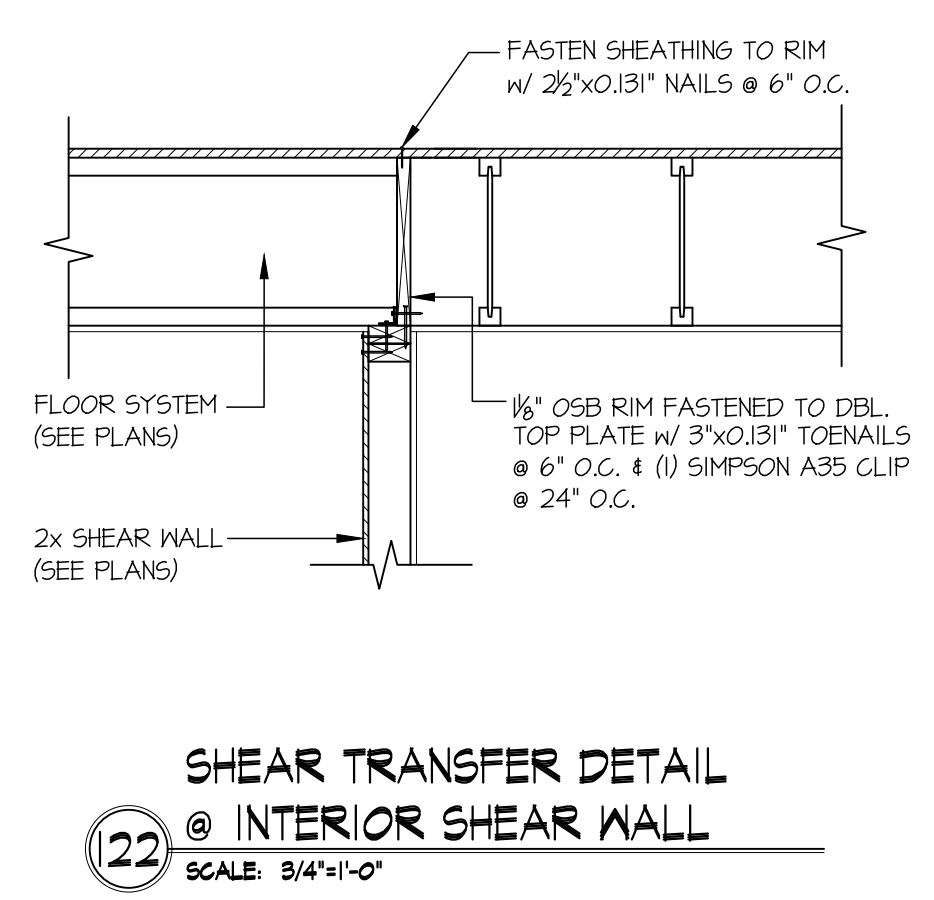
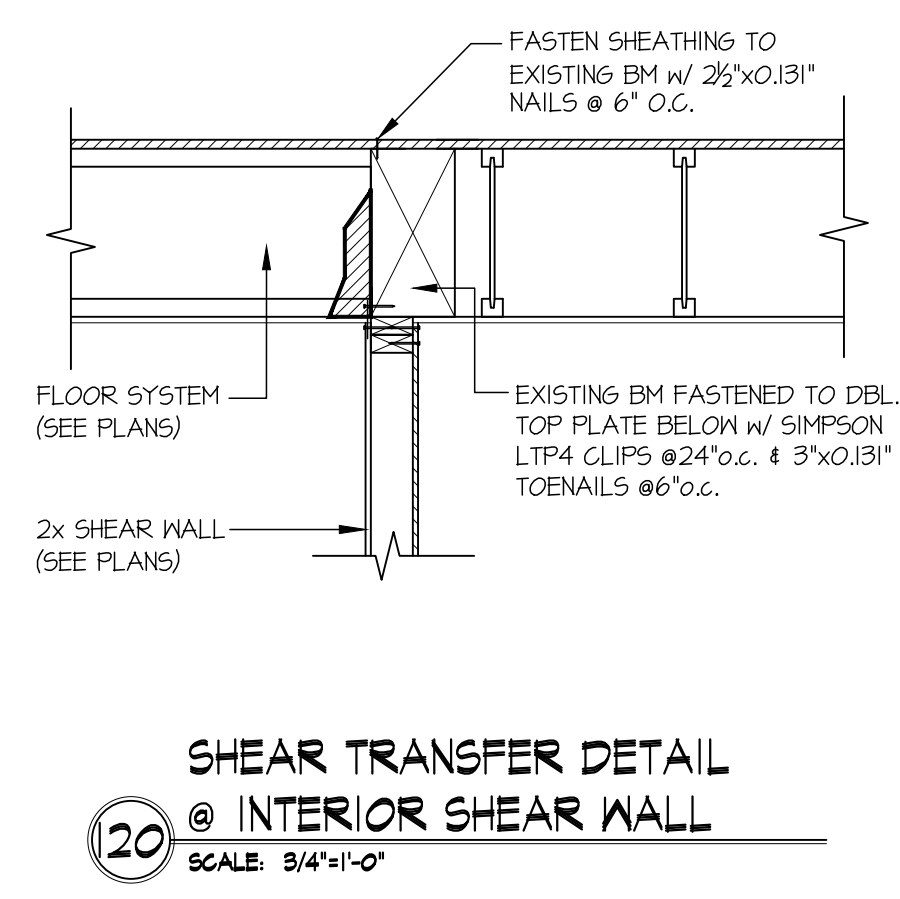
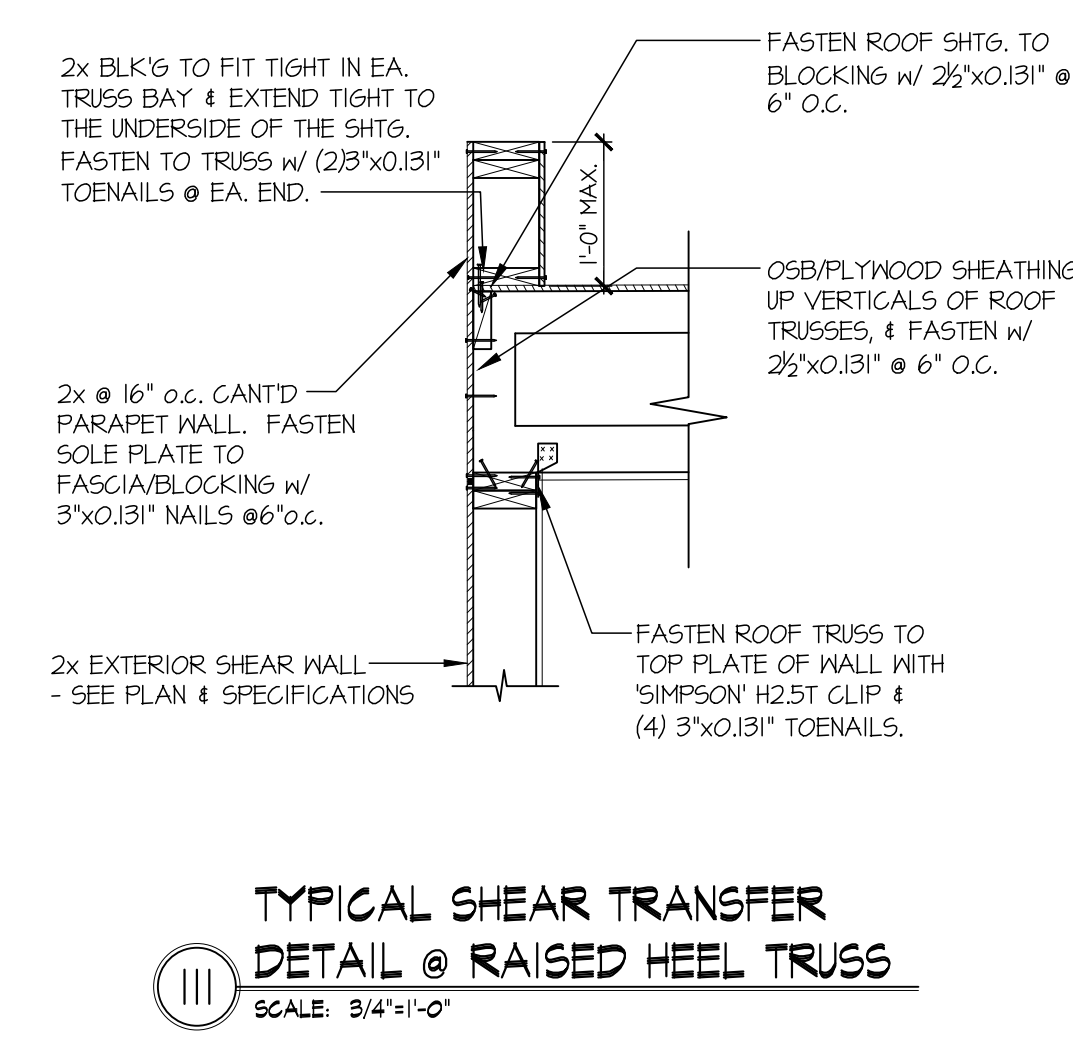
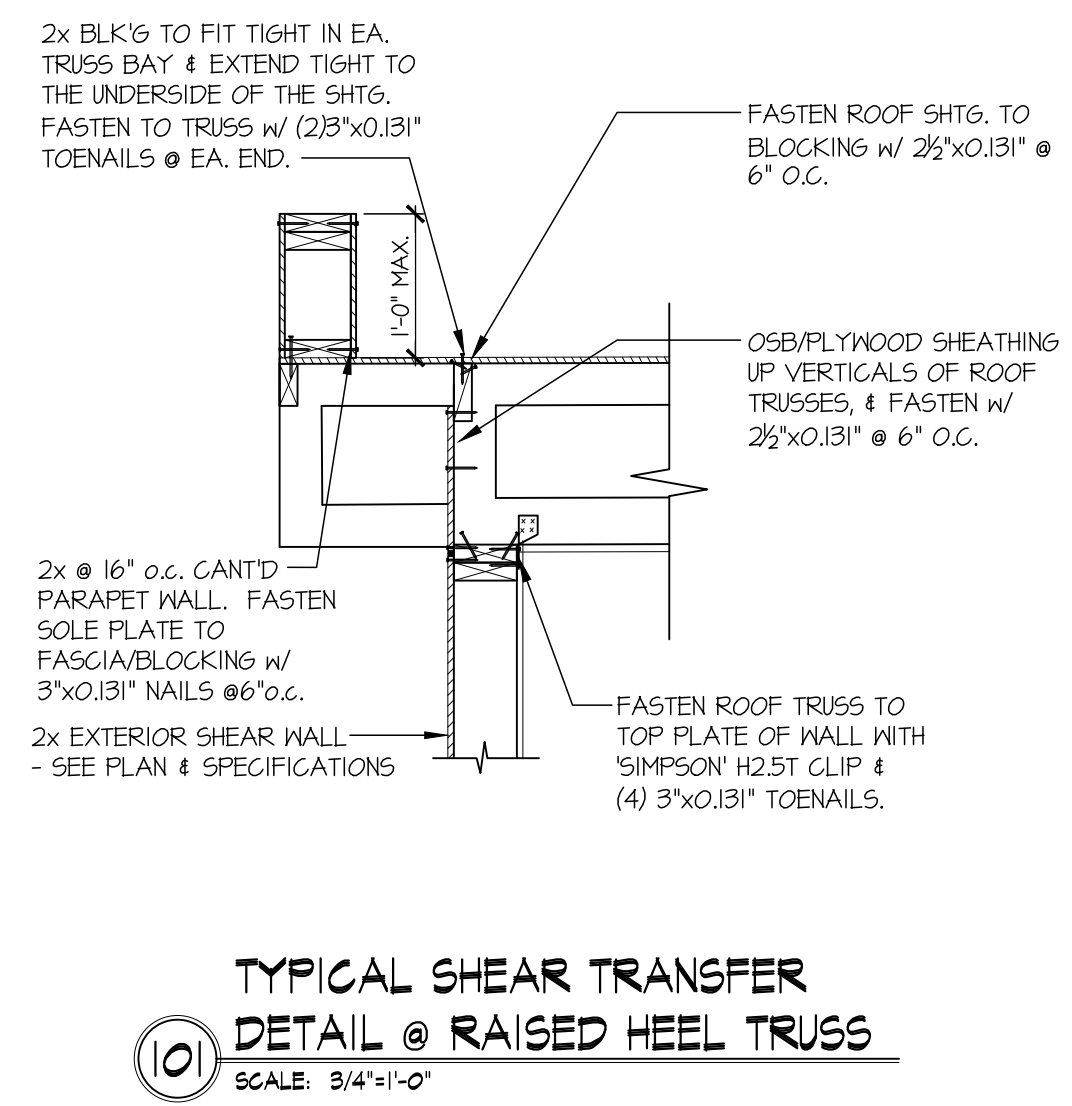
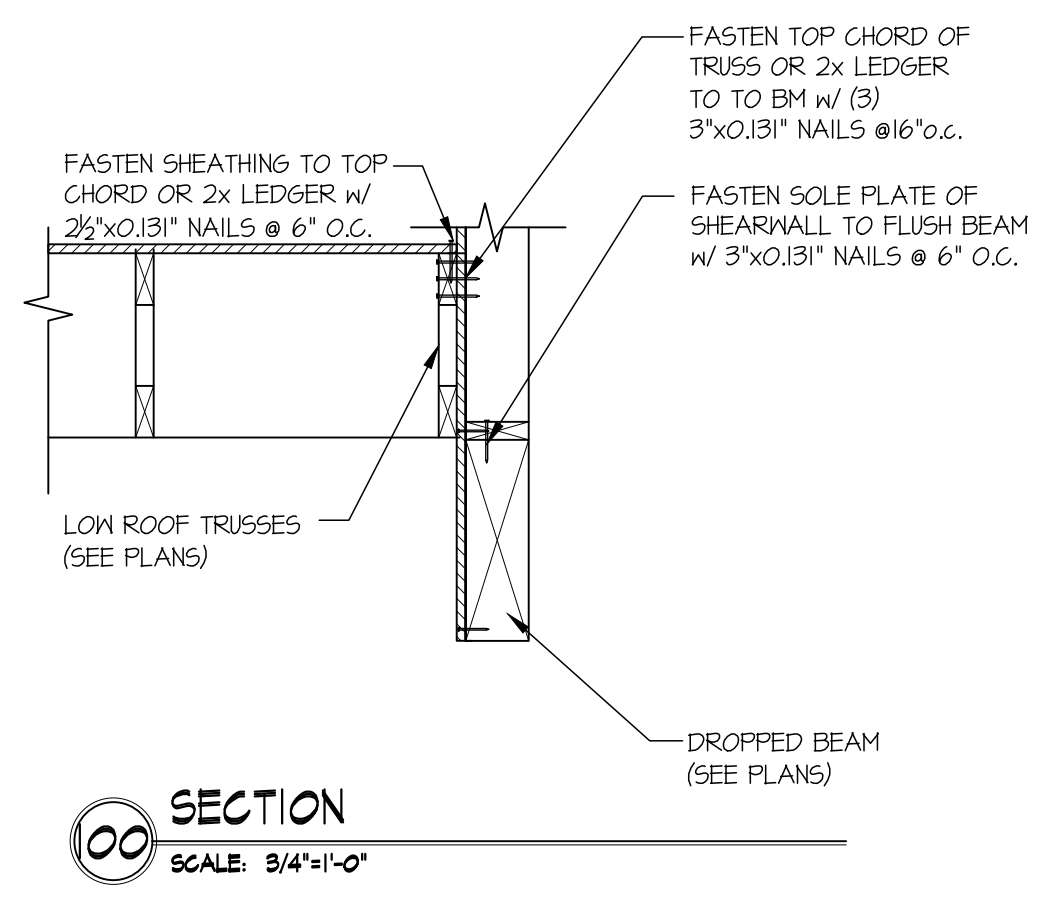
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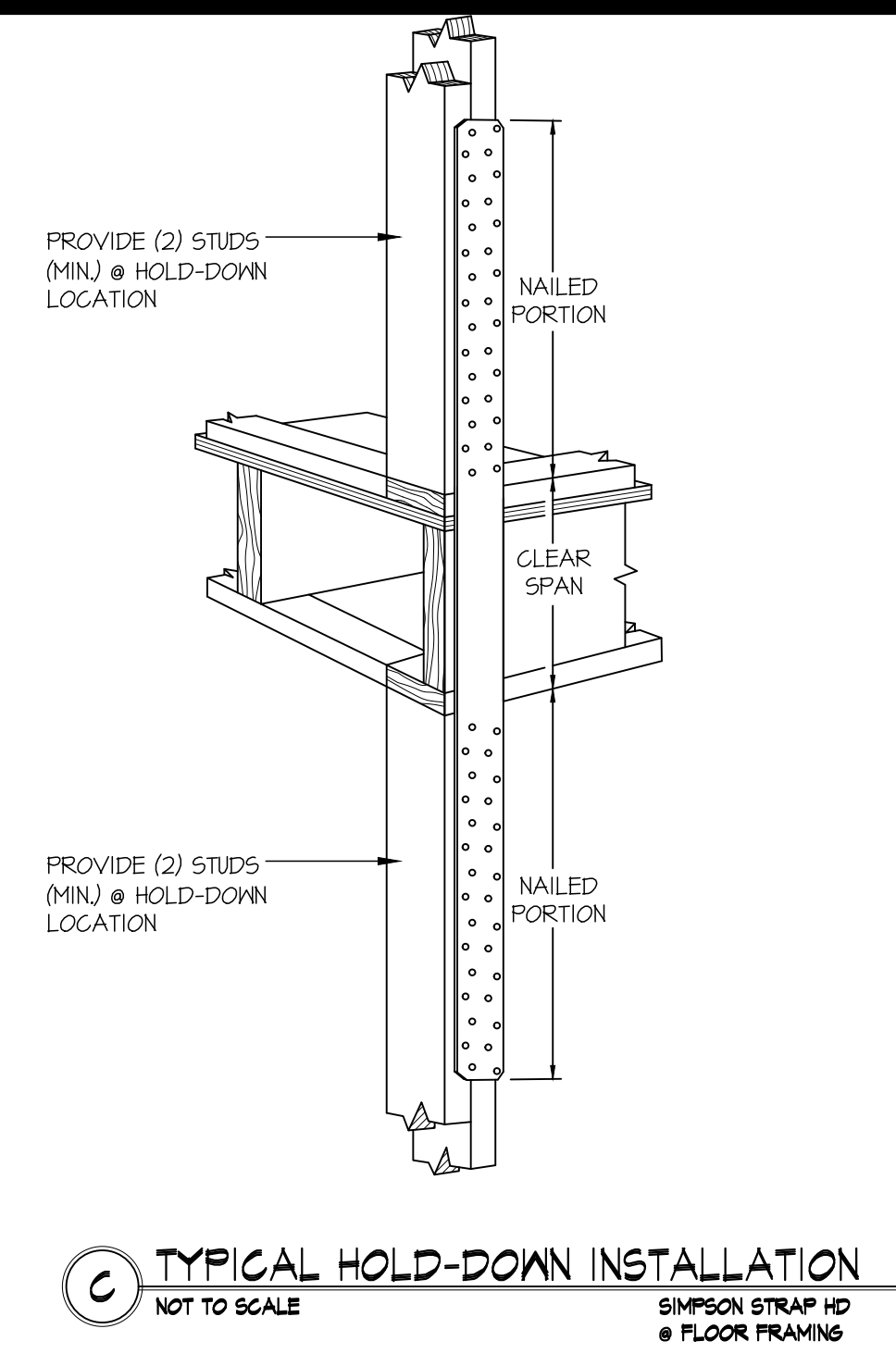
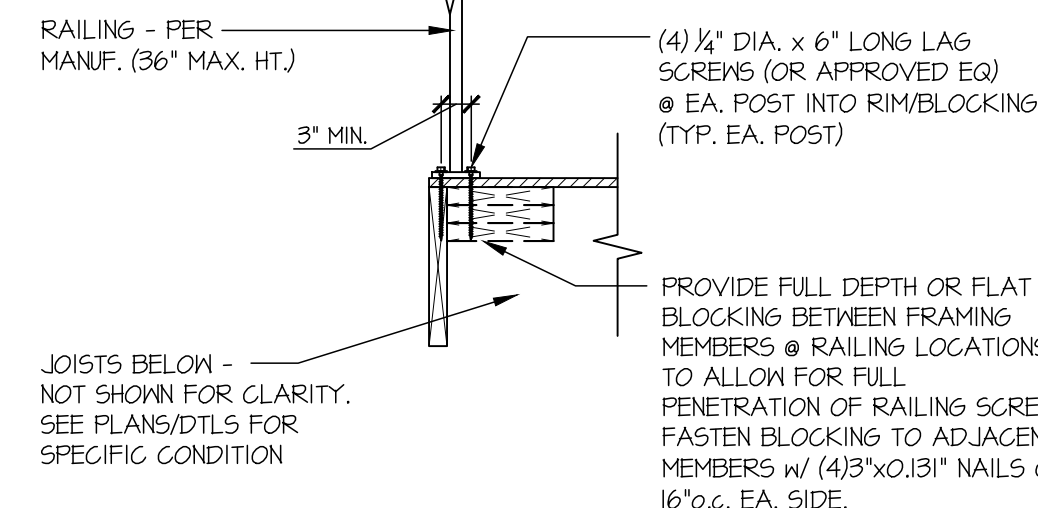
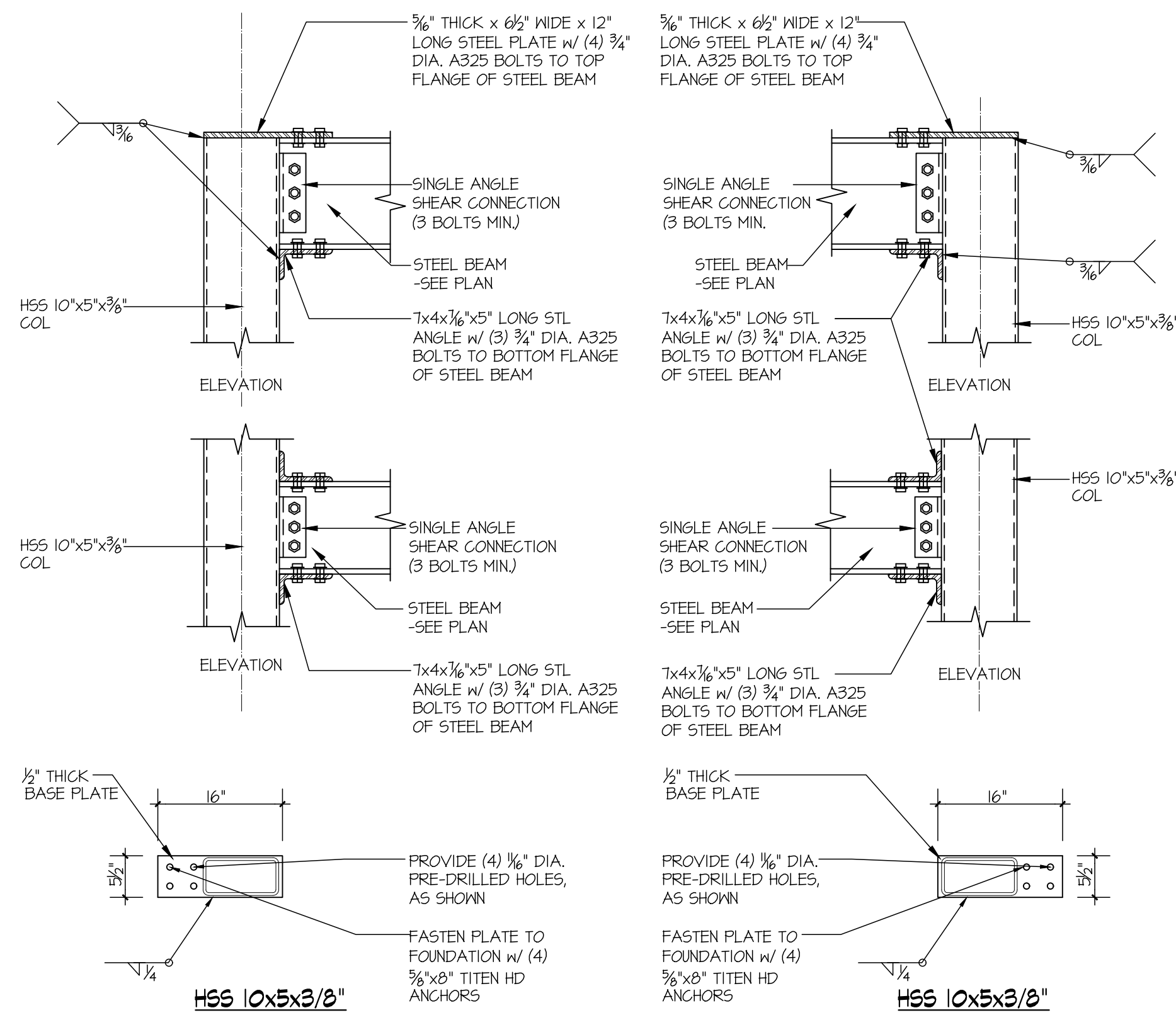
**MACPHERSON CONSTRUCTION**

**STRUCTURAL DETAILS**

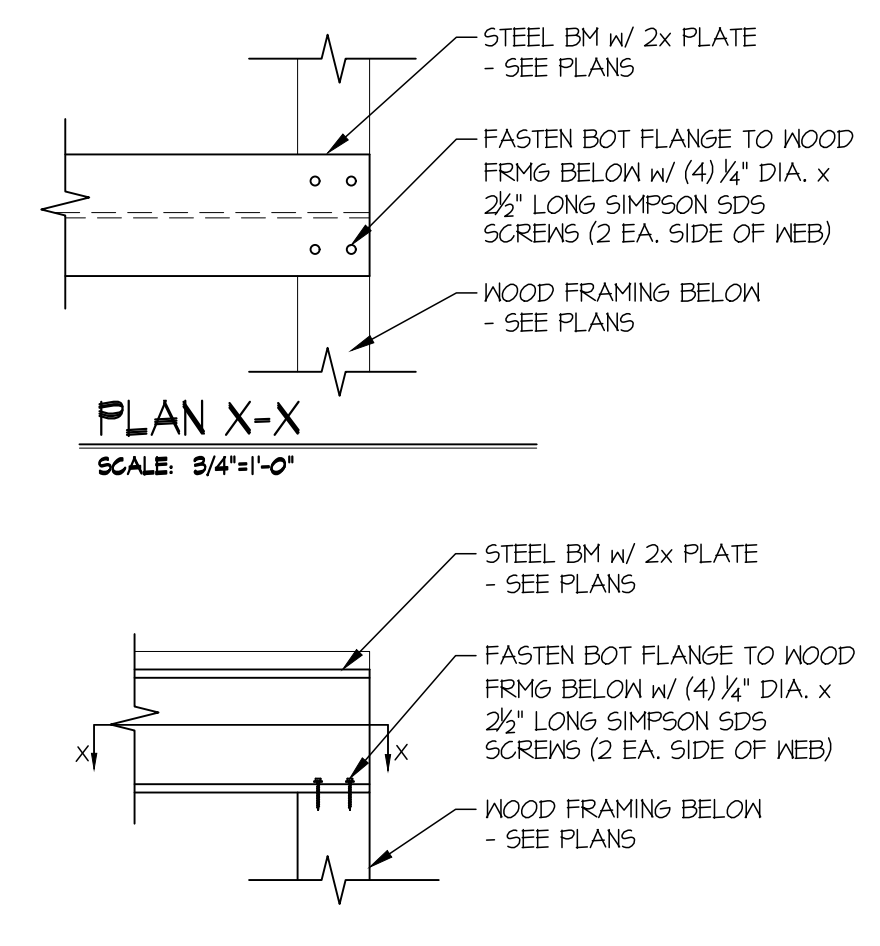
**5330 BUTTERWORTH RD**  
**HOUSE 1**  
MERCER ISLAND, WASHINGTON

sheet:  
**SD-2**





**2 TYPICAL MOMENT CONNECTION DETAILS**  
SCALE: 3/4"=1'-0"



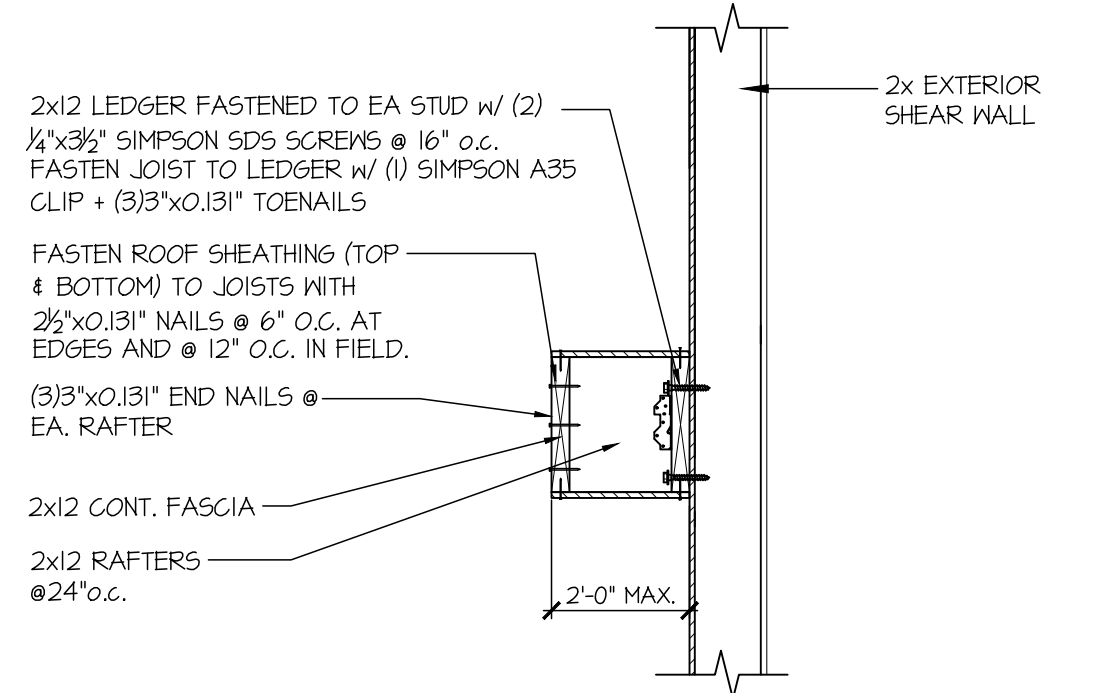
**D STL BM TO WOOD FRMG CONNECTION**  
SCALE: 3/4"=1'-0"

**E DOUBLE ANGLE STEEL CONNECTION**  
SCALE: 3/4"=1'-0"

**F STL COL CONNECTION**  
SCALE: 3/4"=1'-0"

**G STL COL CONNECTION**  
SCALE: 3/4"=1'-0"

**H STL COL CONNECTION**  
SCALE: 3/4"=1'-0"



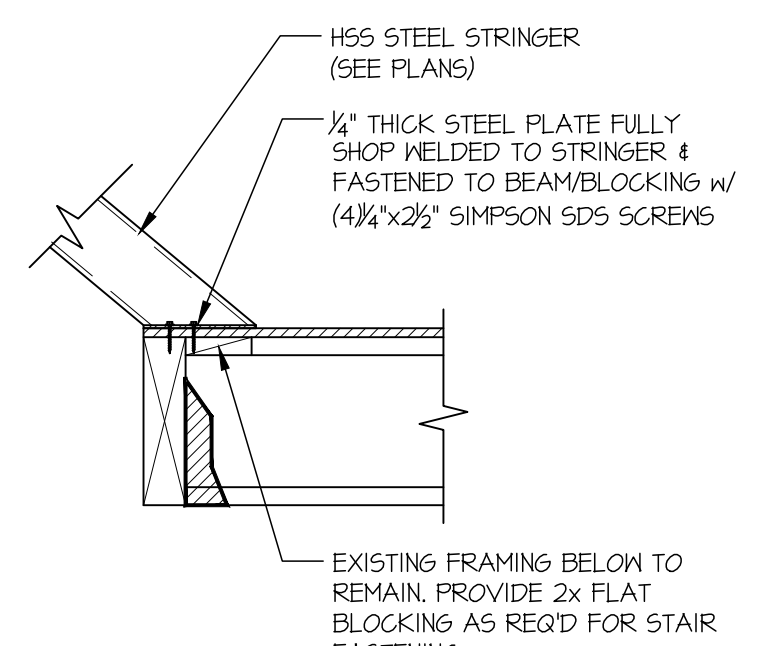
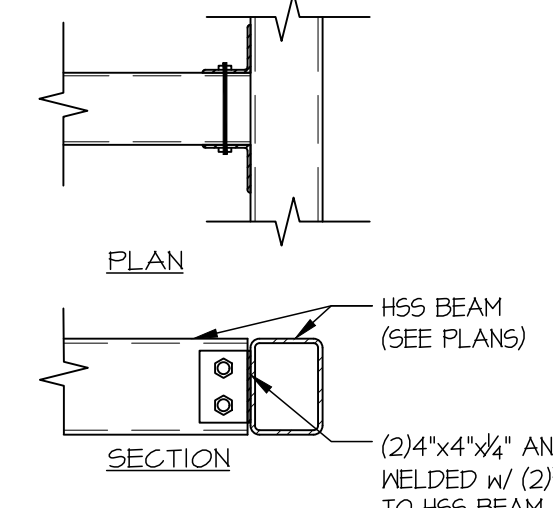
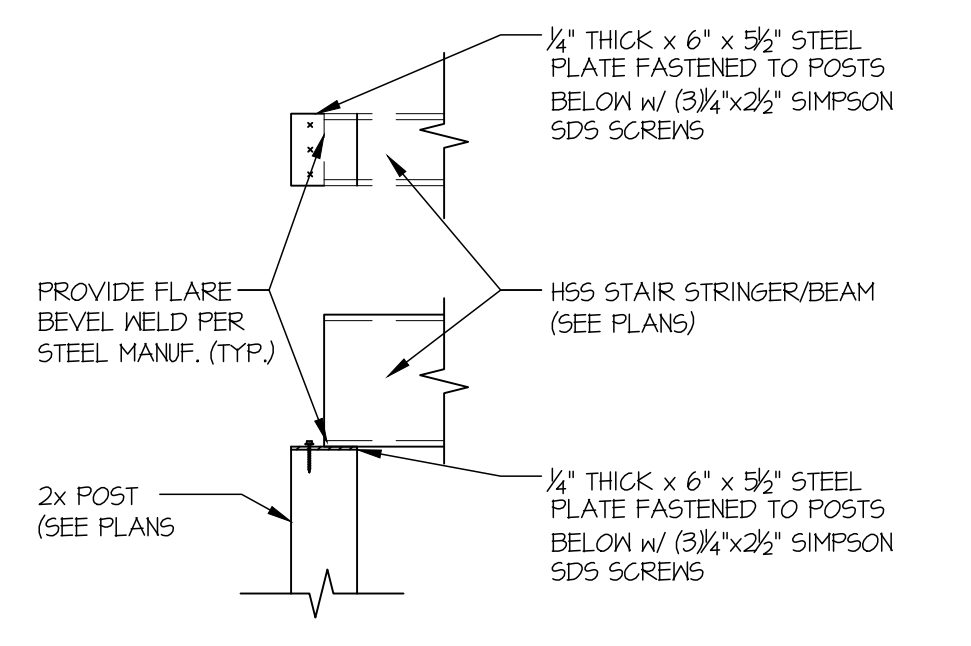
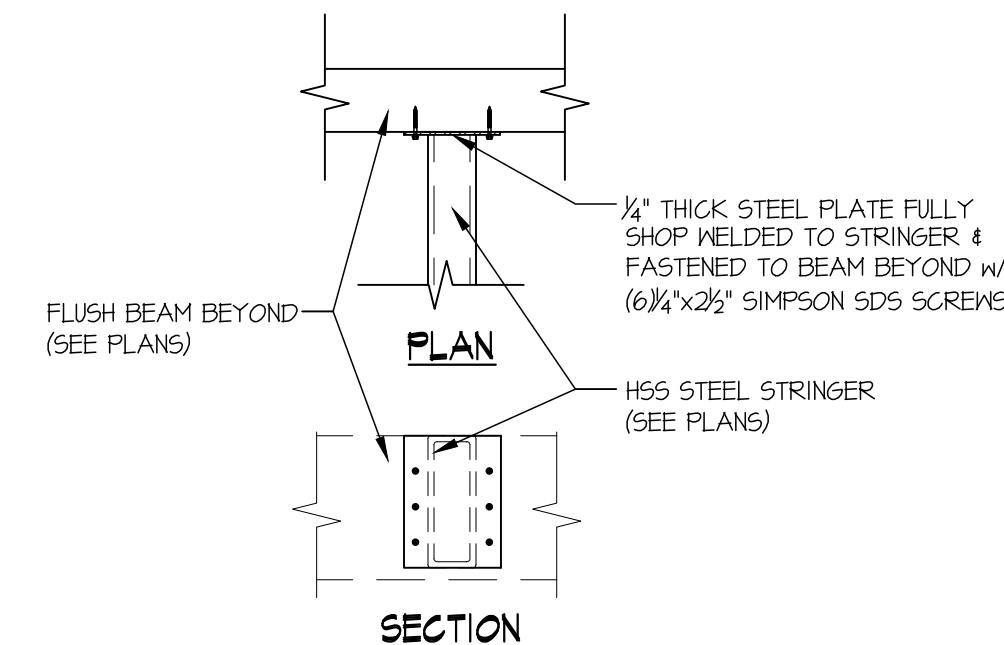
**K SECTION**  
SCALE: N.T.S.

**L STL STRINGER TO WOOD BEAM**  
SCALE: 3/4"=1'-0"

**M STL STRINGER TO WOOD POST**  
SCALE: 3/4"=1'-0"

**N STL BEAM TO STL BEAM CONN.**  
SCALE: 3/4"=1'-0"

**O SECTION**  
SCALE: N.T.S.



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306-24003

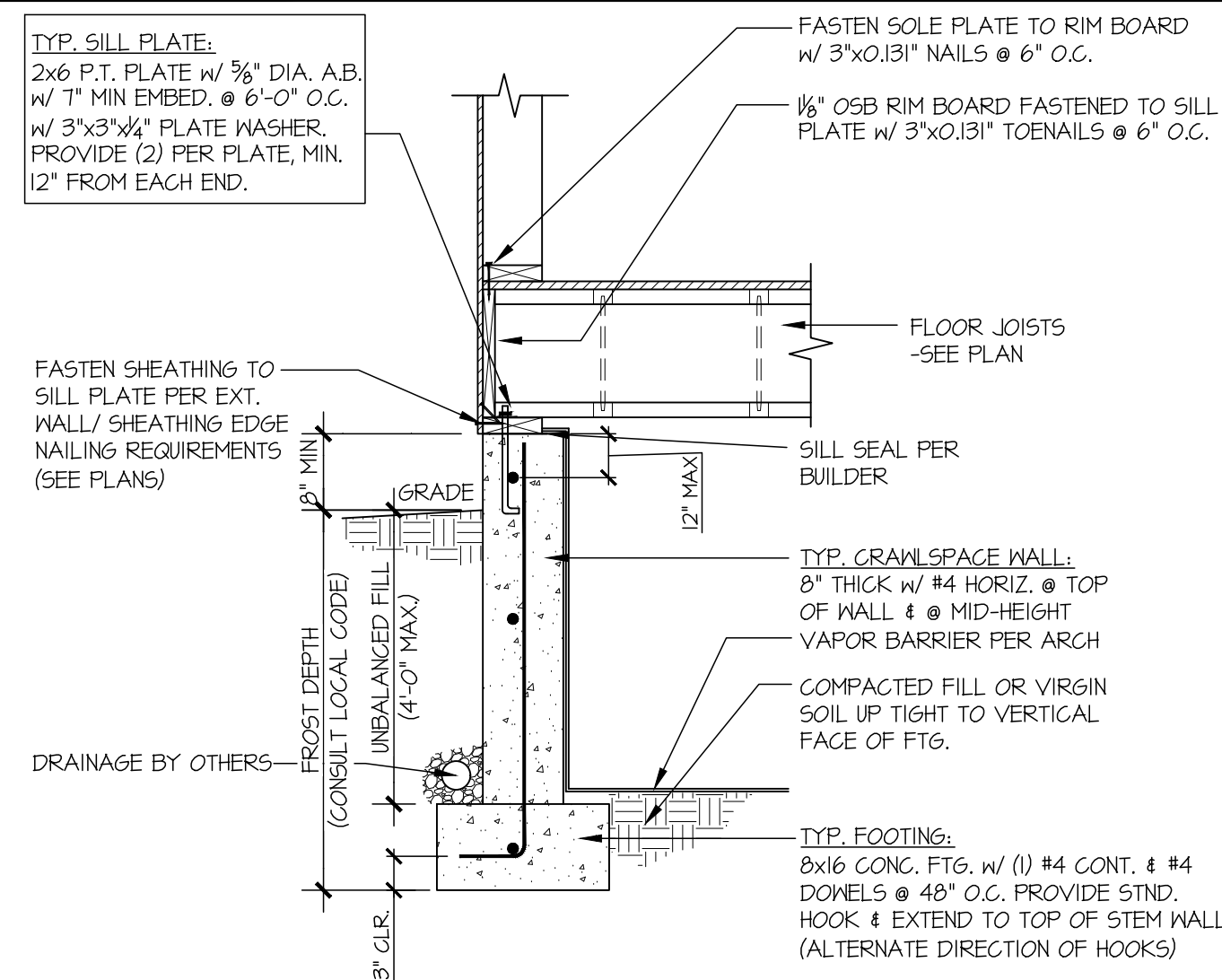
project mgr: RJJ  
drawn by: RJD  
issue date: 04-24-24

REVISIONS:

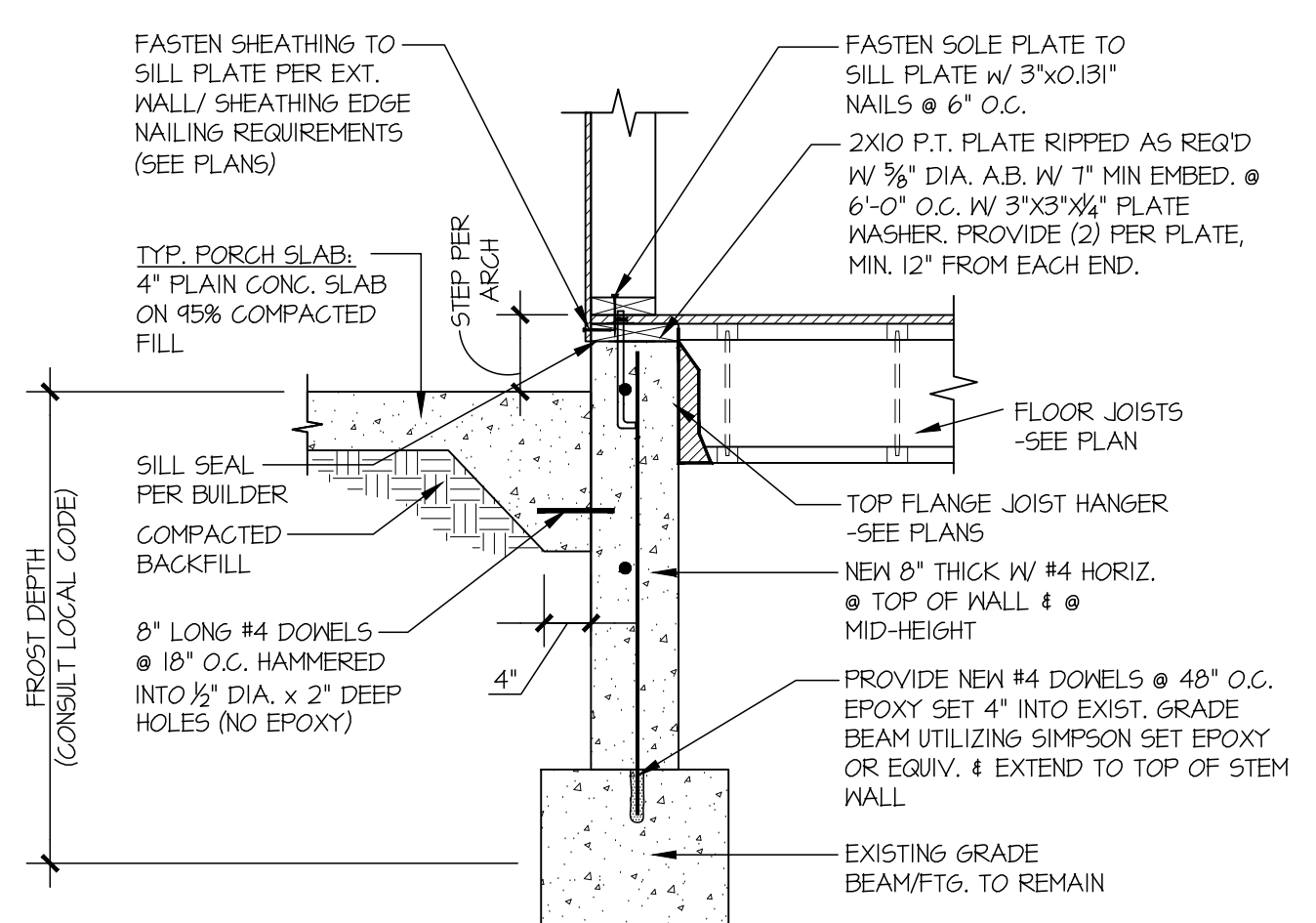
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**MACPHERSON CONSTRUCTION**

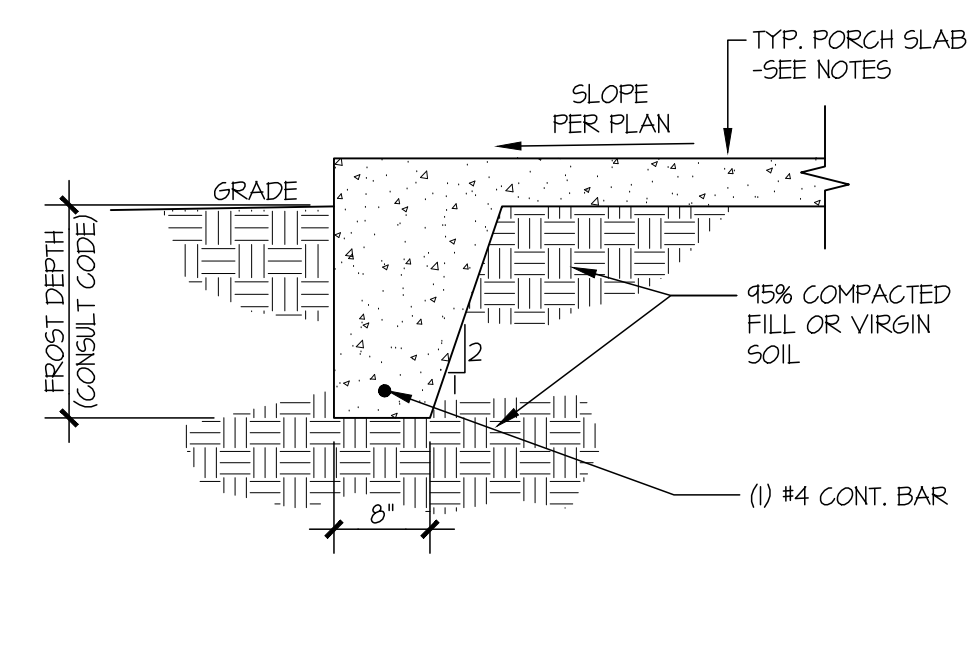
**STRUCTURAL DETAILS**  
5330 BUTTERWORTH RD  
HOUSE 1  
MERCER ISLAND, WASHINGTON



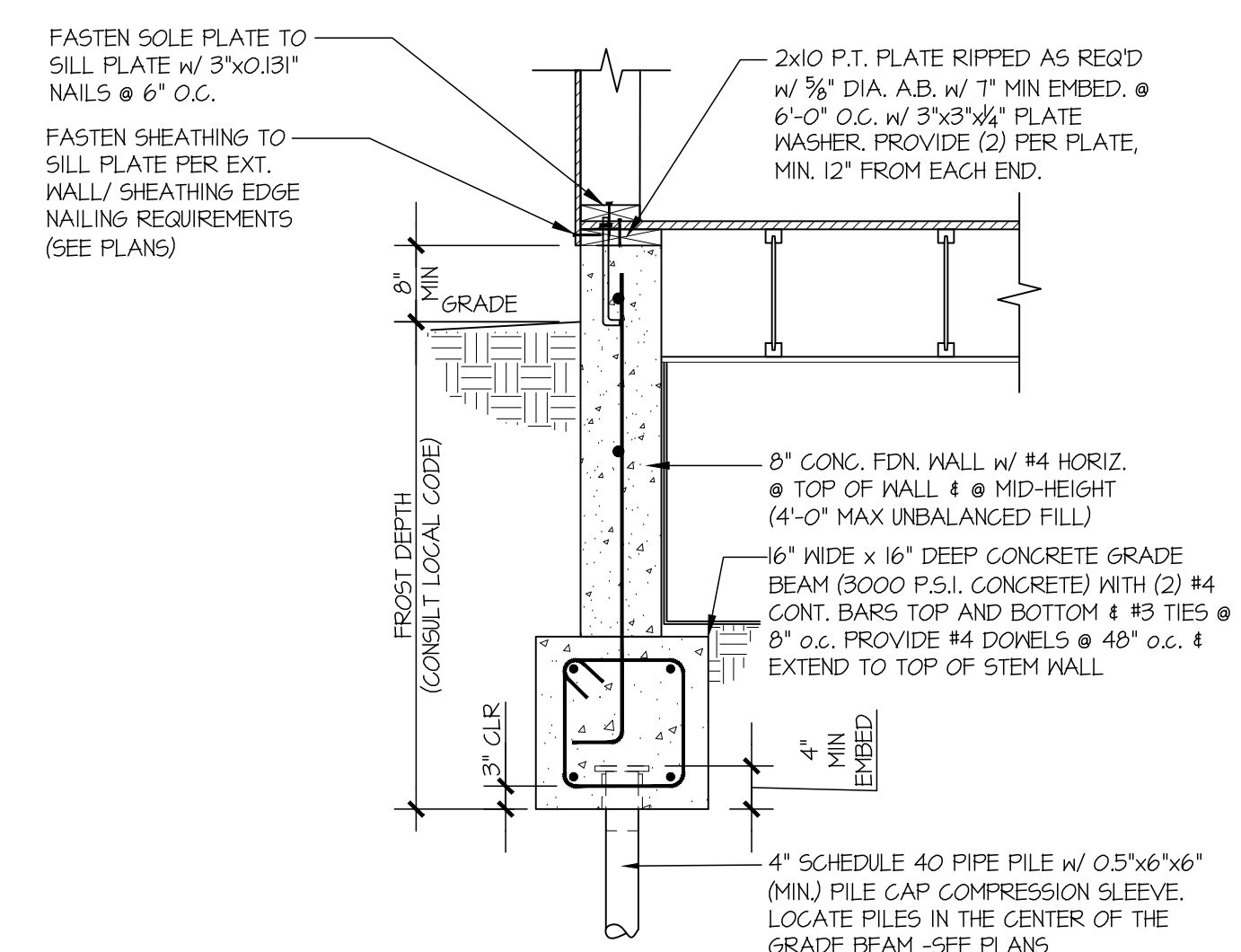
1 TYPICAL CRAWLSPACE FOUNDATION  
SCALE: 3/4"=1'-0"



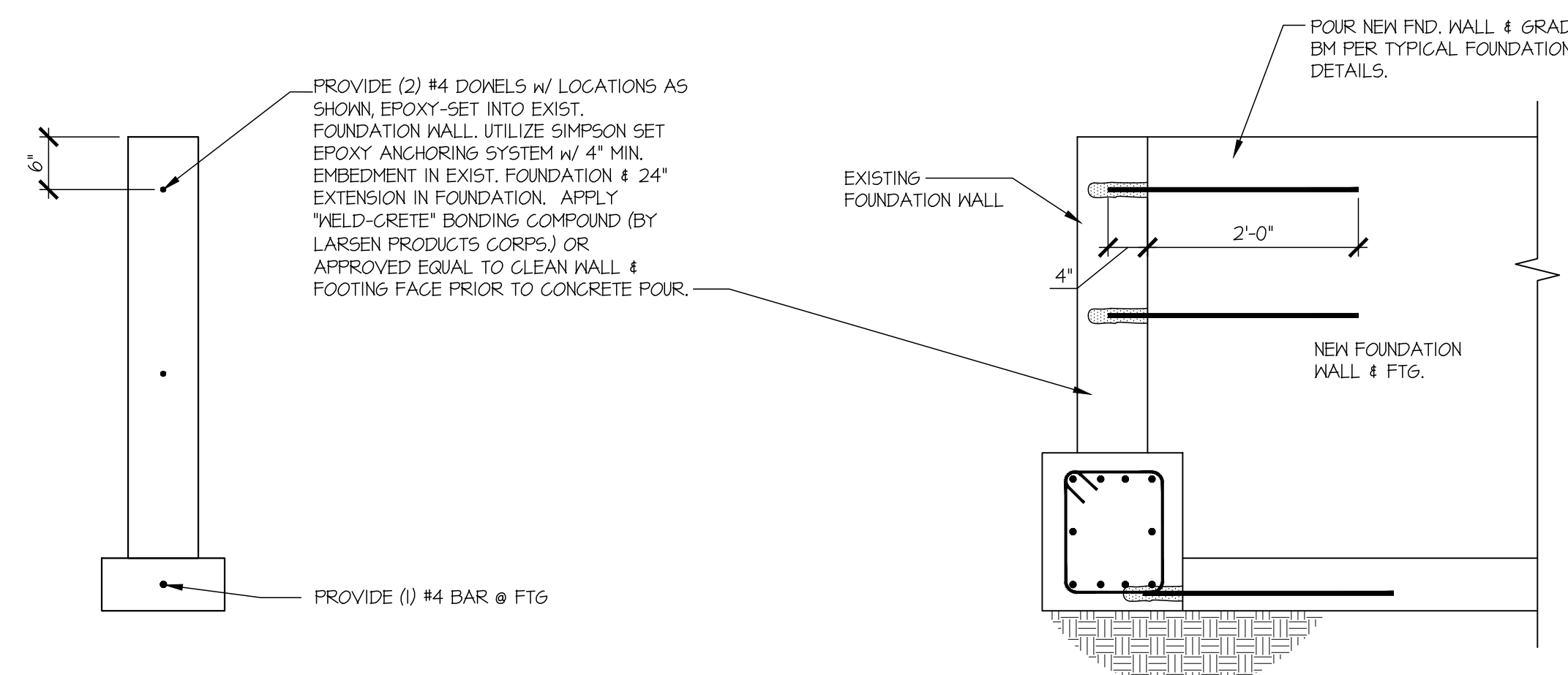
2 TYPICAL CRAWLSPACE FOUNDATION @ PORCH SLAB  
SCALE: 3/4"=1'-0"



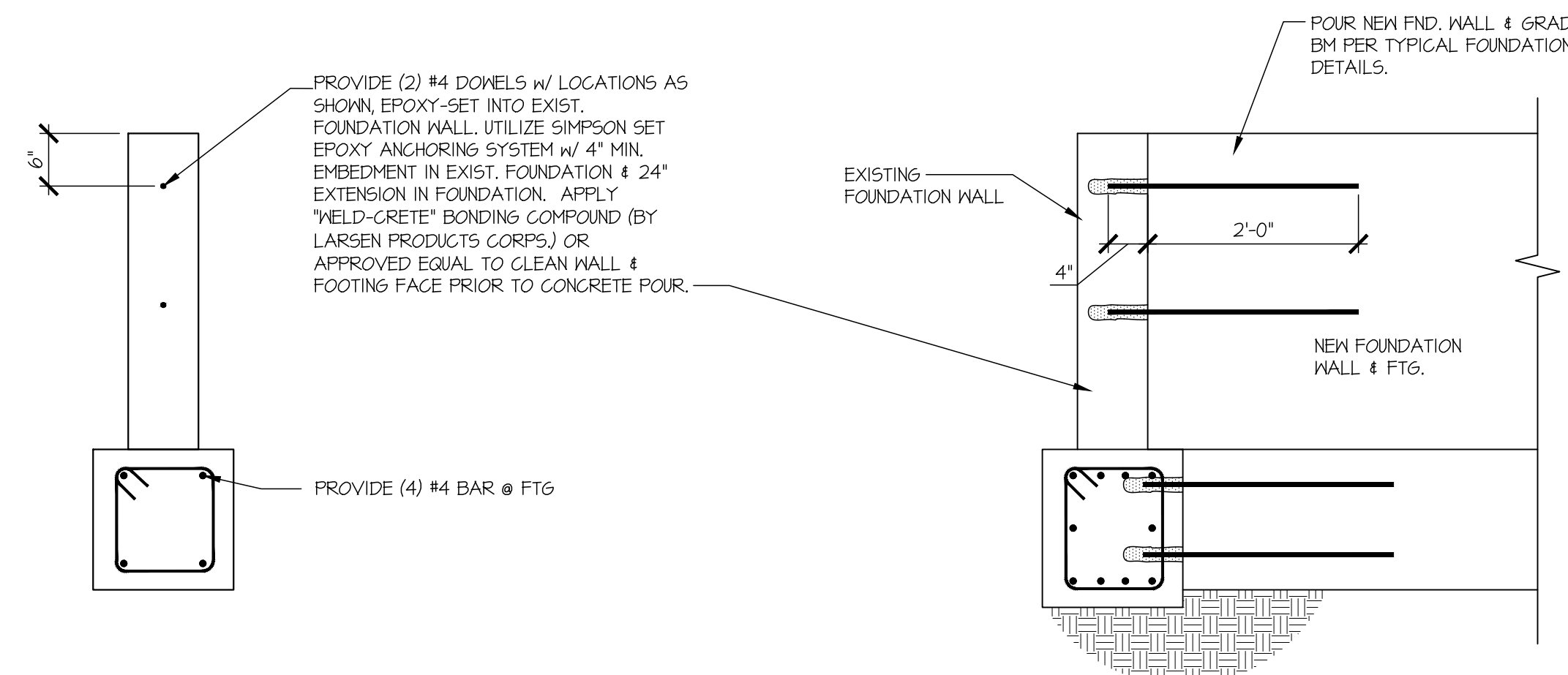
3 TYPICAL FOOTING @ PORCH SLAB  
SCALE: 3/4"=1'-0"



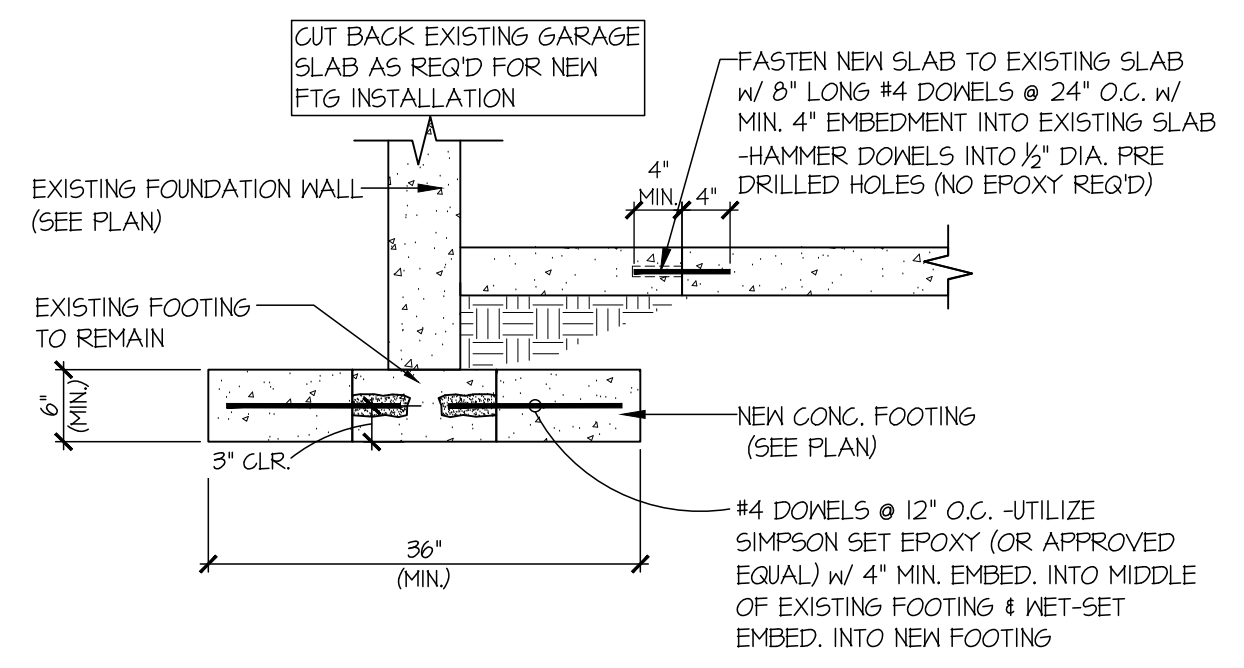
4 TYPICAL EXT. FOUNDATION  
SCALE: 3/4"=1'-0"



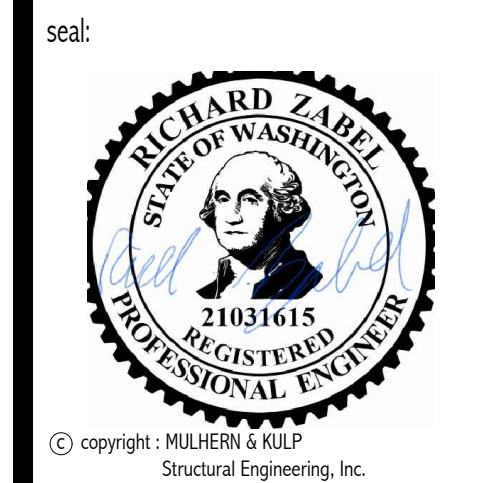
A TYPICAL FOUNDATION RETROFIT DETAIL  
SCALE: 3/4"=1'-0"



B TYPICAL FOUNDATION RETROFIT DETAIL  
SCALE: 3/4"=1'-0"



C NEW FOOTING RETROFIT  
SCALE: 3/4"=1'-0"



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306-24003  
project mgr: RJJ  
drawn by: RJD  
issue date: 04-24-24  
REVISIONS:  
date: initial:

MACPHERSON  
CONSTRUCTION

FOUNDATION DETAILS  
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sheet:  
SD.01