

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 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GENERAL STRUCTURAL NOTES	
FOUNDATION	
<ul style="list-style-type: none"> DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE DESIGN LOADS: <ul style="list-style-type: none"> SOIL: 2500 PSF ALLOWABLE BEARING PRESSURE PER EARTH SOLUTIONS N4 LLC GEOTECH REPORT DATED 02/01/2022 CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS IN 28 DAYS, UNO. <ul style="list-style-type: none"> $f_c = 5000 \text{ psi}^*$ — FOUNDATION WALLS 5000 psi^* — FOOTINGS 2500 psi^* — INTERIOR SLABS ON GRADE 3500 psi^* — GARAGE & EXT. SLABS ON GRADE $f_y = 60000 \text{ psi}$ * ALL CONCRETE HAS BEEN DESIGNED FOR 2500 PSI, ANYTHING GREATER THAN THIS SPECIFICATION IS FOR WEATHERING ONLY. ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 1% AIR ENTRAINMENT. FOUNDATION WALL DESIGN IS BASED ON BACKFILL SOIL PRESSURE OF 55 PCF AT-REST, 35 PCF ACTIVE & B1 SEISMIC SURCHARGE. 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. FOUNDATION WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY EITHER ADEQUATE TEMPORARY BRACING OR INSTALLATION OF FIRST FLOOR DECK. ALL FOOTINGS SHALL BEAR BELOW FROST LINE. CONSULT SOILS REPORT/LOCAL MUNICIPALITY FOR MINIMUM DEPTH BELOW GRADE. FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL. PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP (8'-0" O.C.) FASTEN SILL PLATES TO FOUNDATION WALLS WITH 3/8" DIA. ANCHOR BOLTS W/ MIN. 3"x3"x 1/4" 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). ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE OR MASONRY FOUNDATION SHALL BE PRESERVATIVE TREATED HEM FIR #2. ARCH/BUILDER TO VERIFY ALL DIMENSIONS. 	

HOLD-DOWN SCHEDULE	
SYMBOL	SPECIFICATION
▶ HD-1	SIMPSON 5THD14 (RJ) HOLD-DOWN
▶ 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 & 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:</p> <p>1/4" DEAD LOAD</p> <p>B. FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:</p> <p>1/8" DEAD LOAD</p> <p>C. FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS:</p> <p>LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)</p>	

LOADING AND DESIGN PARAMETERS	
GRAVITY DESIGN LOADS:	
DEAD LOAD (PSF):	
ROOF TRUSSES TOP CHORD:	10
ROOF TRUSSES BOTTOM CHORD:	15
FLOOR TRUSSES:	10
FLOOR (2x):	
LIVE LOAD (PSF):	
ROOF:	20
RESIDENTIAL LIVING AREAS:	40
RESIDENTIAL SLEEPING AREAS:	30
GARAGE:	50
SNOW LOAD:	
GROUND SNOW LOAD (P _s) (PSF):	25
FLAT ROOF SNOW LOAD (P _f) (PSF):	25
SNOW EXPOSURE FACTOR (C _e):	0.8
SNOW LOAD IMPORTANCE FACTOR (I):	1.0
THERMAL FACTOR (C _t):	1.2
LATERAL DESIGN LOADS:	
WIND LOAD: (IBC 1609)	
SPEED (V _w) (MPH):	100
WIND RISK CATEGORY:	II
IMPORTANCE FACTOR (I _w):	1.0
EXPOSURE CATEGORY:	B
INTERNAL PRESSURE COEFF. (C _{ei}):	0.18
TOPOGRAPHIC FACTOR (K _z):	1.00
SEISMIC LOAD: (IBC 1613)	
SEISMIC RISK CATEGORY:	II
SEISMIC IMPORTANCE FACTOR (I _s):	1.0
HAPPED SPECTRAL RESPONSE:	
S _e : 1.405	S _e : 0.481
SITE CLASS:	D
SPECTRAL RESPONSE COEFF.:	
S _m : 1.124	S _m : 0.540
SEISMIC DESIGN CATEGORY:	D
BASIC SEISMIC-FORCE-RESISTING SYS:	
LIGHT FRAMED WALLS	
WOOD STRUCTURAL PANELS	
ULTIMATE BASE SHEAR:	LONG: 27 k
TRANS: 21 k	
SEISMIC RESPONSE COEFF. (C _w):	
TRANS: 0.175	LONG: 0.175
RESPONSE MODIFICATION FACTOR (R):	
TRANS: 6.5	LONG: 6.5
ANALYSIS PROCEDURE USED:	
EQUIVALENT LATERAL FORCE	

LATERAL BRACING NOTES

THIS HOME HAS BEEN ENGINEERED TO RESIST LATERAL FORCES RESULTING FROM: 100 MPH WIND SPEED, EXP. B (ASCE 7-16 WIND MAP, PER IRC R301.2.1.1) RISK CAT. 2 & SEISMIC CAT. D2.

100 MPH WIND IN 2021 IRC MAP

ENGINEERED DESIGN WAS COMPLETED PER 2021 IBC (SECTION 1604 & 1613) & ASCE 7-16, AS PERMITTED BY R301.3 OF THE 2021 IRC. ACCORDINGLY, THIS HOME, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES, AND DOES NOT NEED TO CONFORM TO THE PRESCRIPTIVE PROVISIONS OF R602.10.

STANDARD EXTERIOR WALL SHEATHING SPECIFICATIONS
(INTERIOR WALL SPECIFICATION WHERE NOTED ON PLANS)

- 3/8" 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.

3" O.C. EDGE NAILING
(WHERE NOTED ON PLANS)

- 3/8" OSB OR 1/2" PLYWOOD:

ONLY AT LOCATIONS INDICATED ON PLANS - SHEATH WALL SHOWN WITH 3/8" 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.

- NOTES:**
- LATERAL ANALYSIS ASSUMES STUD SPACING @ 16" O.C.
 - ALL SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES FASTENED TOGETHER W/ 3"x0.131" NAILS @ 8" O.C. USE (2) 3/8"x0.131" NAILS AT EACH LAP SPlice, (6) EACH SIDE OF JOINT (TYP. UNO.)
 - ALL EXTERIOR WALLS ARE CONTINUOUSLY SHEATHED.
 - ALL INTERIOR SHEAR WALLS AND EXTERIOR WALLS ARE SHEATHED ABOVE AND BELOW OPENINGS.

LEGEND	
•	INTERIOR BEARING WALL
□	BEARING WALL ABOVE (B.W.A.), OR SHEARWALL ABOVE (S.W.A.)
—	BEAM / HEADER
■	INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL W/ 3" O.C. EDGE NAILING ABOVE (S.W.A.)
•••••	AREA OF OVERFRAMING
JL	METAL HANGER
*	INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
▶	INDICATES HOLD-DOWN.

GENERAL STRUCTURAL NOTES	
DESIGN PARAMETERS	
<ul style="list-style-type: none"> DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE WOOD FRAME ENGINEERING IS BASED ON NDS "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION. 	
GENERAL FRAMING	
<ul style="list-style-type: none"> EXTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO. INTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO. ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x "STUD" GRADE MEMBERS SPACED @ 24" O.C. (MAX). ALL WALLS TALLER THEN TYP. PLATE HEIGHT SHALL BE CONSIDERED BALLOON FRAMED & SHALL BE CONSTRUCTED FROM FLOOR TO UNDERSIDE OF FRAMING AT NEXT LEVEL. B.F. WALLS SHALL BE 2x6 HEM FIR (HF) #2 GRADE LUMBER, OR BETTER, UNO. ALL SHEATHING AND LEDGERS ARE TO BE DIRECTLY APPLIED AND FASTENED TO FRAMING. DO NOT PROVIDE CONTINUOUS INSULATION BETWEEN FRAMING AND SHEATHING/LEDGERS. ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STUD, MINIMUM. <ul style="list-style-type: none"> THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, UNO. BUILT-UP POSTS SHALL BE 2x4 OR 2x6 HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO. & SOLID WOOD COLUMNS SHALL BE SPRUCE PINE FIR (SPF) #2 GRADE LUMBER, OR BETTER, UNO. ALL 2x6 AND LARGER SOLID SAWN BEAMS/HEADERS SHALL BE HEM FIR #2 (HF #2) OR BETTER. ALL 4x6 AND LARGER SOLID SAWN LUMBER SHALL BE DOUG FIR #2 (DF #2) OR BETTER. ALL FRAMING LUMBER SHALL BE KILN DRIED TO 15% MC (KD-15). 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 NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS. FASTEN ALL BEAMS TO COLUMNS, OR FLUSH BEAMS TO SUPPORTING BEAMS, W/ (4) 3"x0.131" TOENAILS (MN), TYP. UNO. PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS & HOLD-DOWNS CONTINUOUS TO FOUNDATION/BEARING. BLOCKING TO MATCH POST ABOVE. ENGINEERED LUMBER TO MEET OR EXCEED THE FOLLOWING: <ul style="list-style-type: none"> LSL MEMBERS - Fb=2325 PSI; Fv=910 PSI; E=155x10⁹ PSI LVL MEMBERS - Fb=2600 PSI; Fv=285 PSI; E=2.0x10¹⁰ PSI SLB MEMBERS - Fb=2400 PSI; Fv=1850 PSI; Fv=265 PSI; E=1.8x10⁹ PSI; DF/DF; 24F-V4 (UNO) ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING: <ul style="list-style-type: none"> LVL MEMBERS - Fb=2400 PSI; Fv=12500 PSI; E=1.8x10⁹ PSI LVL MEMBERS - Fb=2400 PSI; Fv=12500 PSI; E=1.8x10⁹ PSI FACE NAIL MULTI-PLY 2x BEAMS & HEADERS W/ 3-ROWS OF 3"x0.131" NAILS (MN) @ 12" O.C. STAGGERED. APPLY NAILING FROM BOTH FACES @ 3-PLY OR MORE CONDITIONS. UTILIZE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS. 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 & 2.3.4.3. REFER TO IRC FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. UNO. 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 & HARDWARE SUPPLIERS TO COORD. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653, TYPE G95 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED. 	
ROOF FRAMING	
<ul style="list-style-type: none"> I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 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 MK FOR EXCLUDED DESIGNS). ALL METAL I-JOIST/TRUSS HANGERS SHALL BE SPECIFIED BY I-JOIST/TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED. 2x FLOOR JOISTS HAVE BEEN DESIGNED TO MEET OR EXCEED L/360 LIVE LOAD DEFLECTION CRITERIA. TYPICAL 2x JOIST HANGERS (UNO. ON PLANS): <ul style="list-style-type: none"> SINGLE PLY: SIMPSON LUS210 DOUBLES: SIMPSON LUS210-2 FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 5/16" FLOOR 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND 2 1/2" x 0.131" NAILS @ 6" O.C. AT PANEL EDGES & @ 12" O.C. FIELD. ALL FLUSH CONNECTIONS SHALL BE CONNECTED WITH HANGER APPROPRIATE FOR MEMBER SIZE, UNO. FASTEN HANGERS TO SINGLE PLY FLUSH BEAMS W/ 1/2" LONG NAILS. 	
ROOF FRAMING	
<ul style="list-style-type: none"> FASTEN EACH ROOF TRUSS TO TOP PLATE W/ (4) 3"x0.131" TOENAILS (MN) & (1) SIMPSON SDW2500 SCREW @ ALL BEARING POINTS. PROVIDE (2) SIMPSON H25T CLIPS AT 3-PLY GIRDER TRUSSES, (2) SIMPSON H25T CLIPS AT 3-PLY GIRDER TRUSSES AT ALL BEARING POINTS. FASTEN EACH ROOF RAFTER TO TOP PLATE WITH (1) SIMPSON H25T CLIPS. PROVIDE (2) SIMPSON H25T CLIPS AT FLUSH BEAMS IN THE ROOF - AT ALL BEARING POINTS. ROOF SHEATHING SHALL BE 7/16" 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. ALL METAL HANGERS SHALL BE SPECIFIED BY THE TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED. ROOF TRUSS SHOP DRAWINGS & CALCULATIONS SHALL BE DESIGNED FOR UNBALANCED SNOW LOADING PER ASCE 7-16, SECTION 7.6. ERECT AND INSTALL ROOF TRUSSES PER FIG. 4 & FIGS. B251-1-08 (GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES). FASTEN OVER-FRAMED TRUSS SETS TO TRUSSES BELOW W/ (2) 3"x0.131" TOENAILS AT EA. TRUSS. FASTEN ALL INTERIOR NON-BEARING PARTITION WALLS TO TRUSS BOTTOM CHORD ABOVE WITH SIMPSON 5TC CLIPS AT 24" O.C. MAX. PROVIDE BLOCKING BETWEEN THE TRUSS BOTTOM CHORDS AS REQUIRED FOR THE PARALLEL CONDITIONS. 	



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project mgr: NJM
drawn by: RSC
issue date: 11-04-24

REVISIONS:

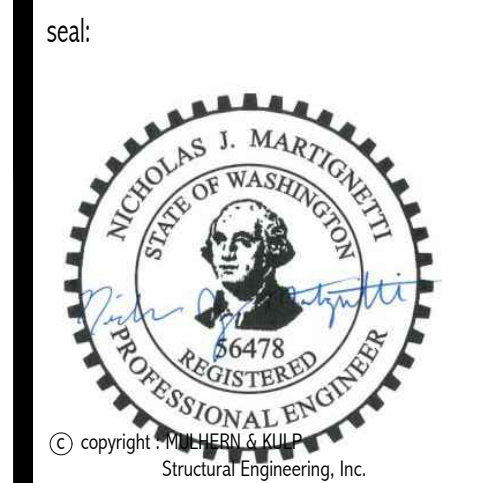
date:	initial:
12-31-2024	RJD
04-08-2025	RSC

DESIGN BUILT HOMES

STRUCTURAL NOTES

86TH AVE SE
LOT 2
MERCER ISLAND, WA

sheet: S-O.O



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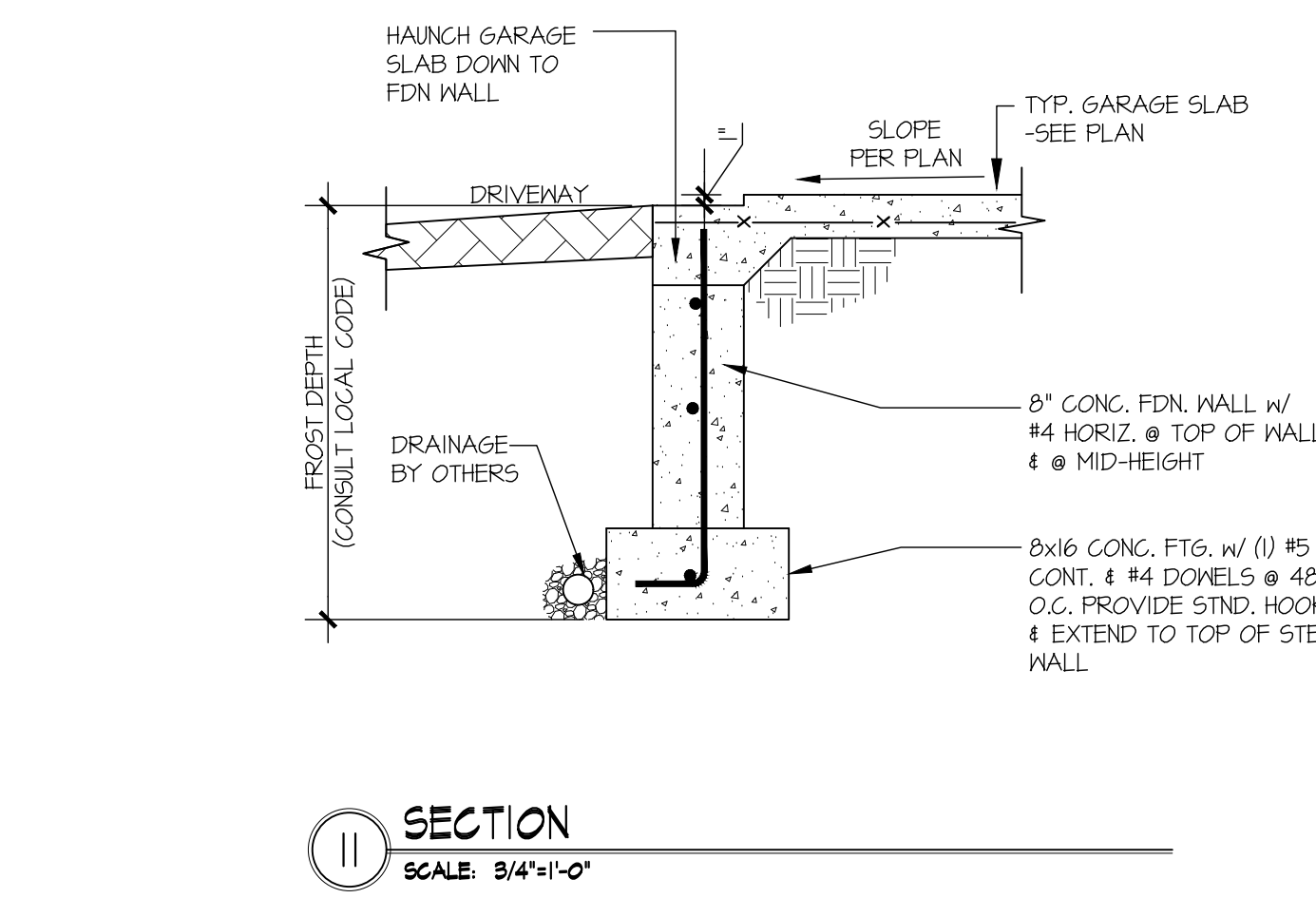
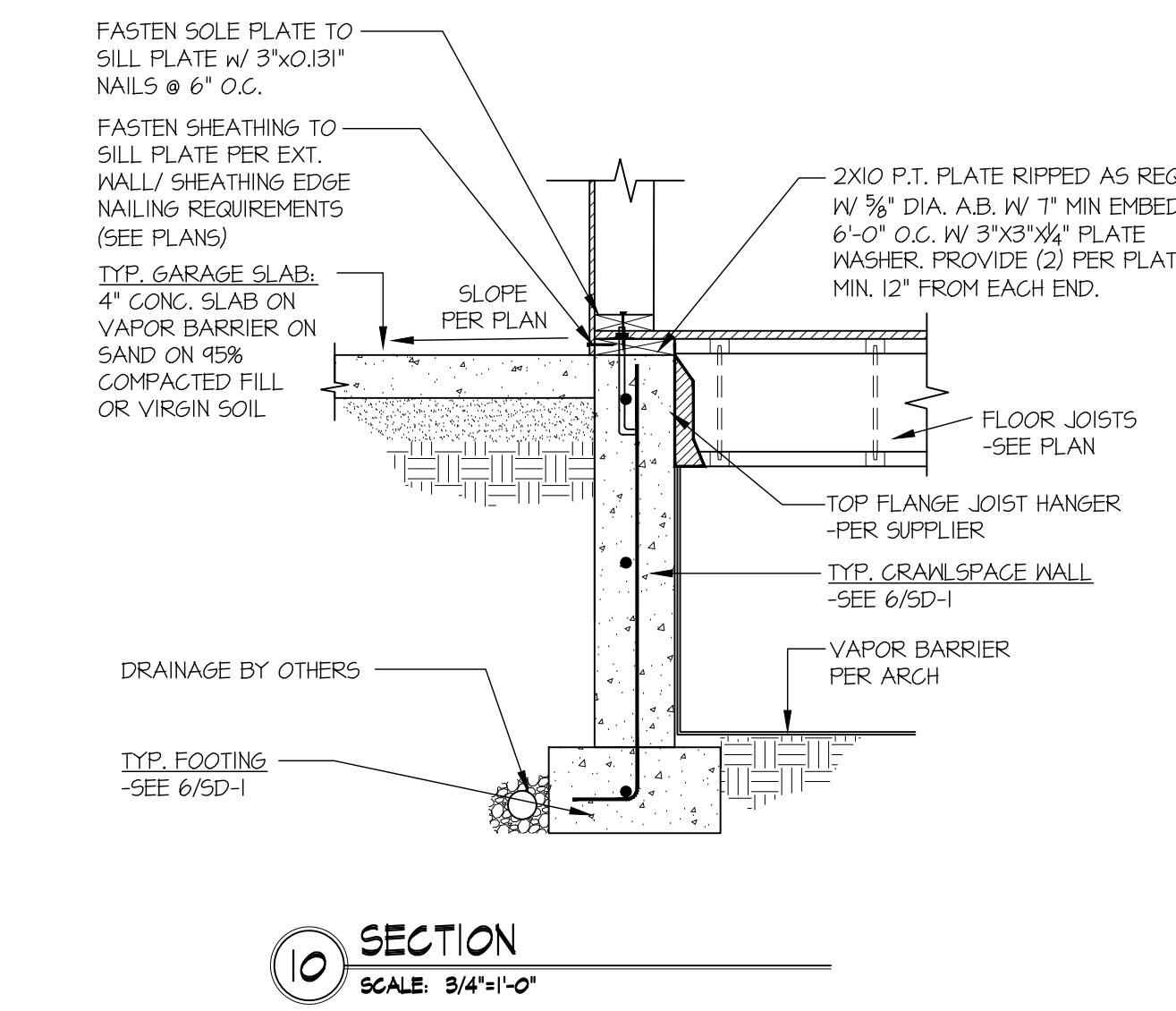
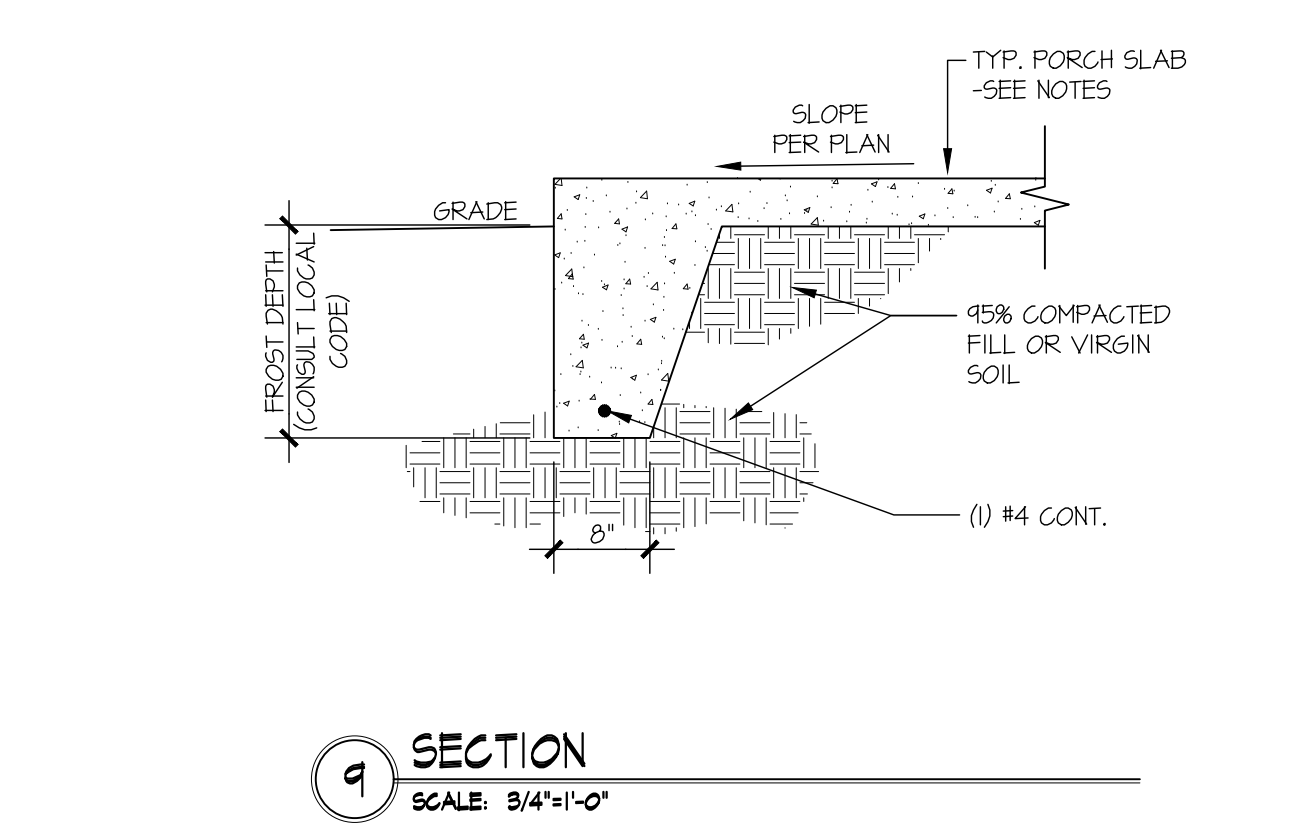
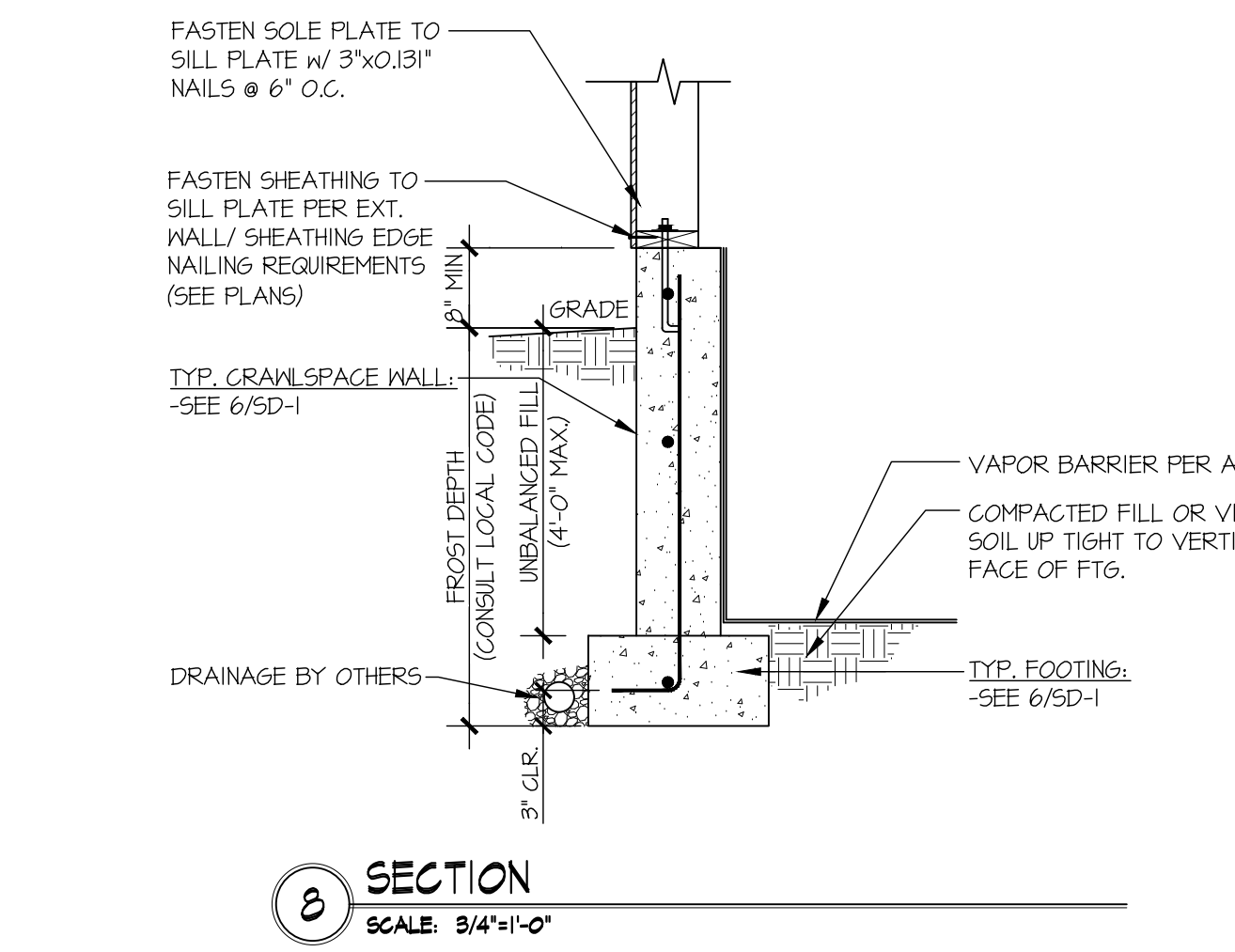
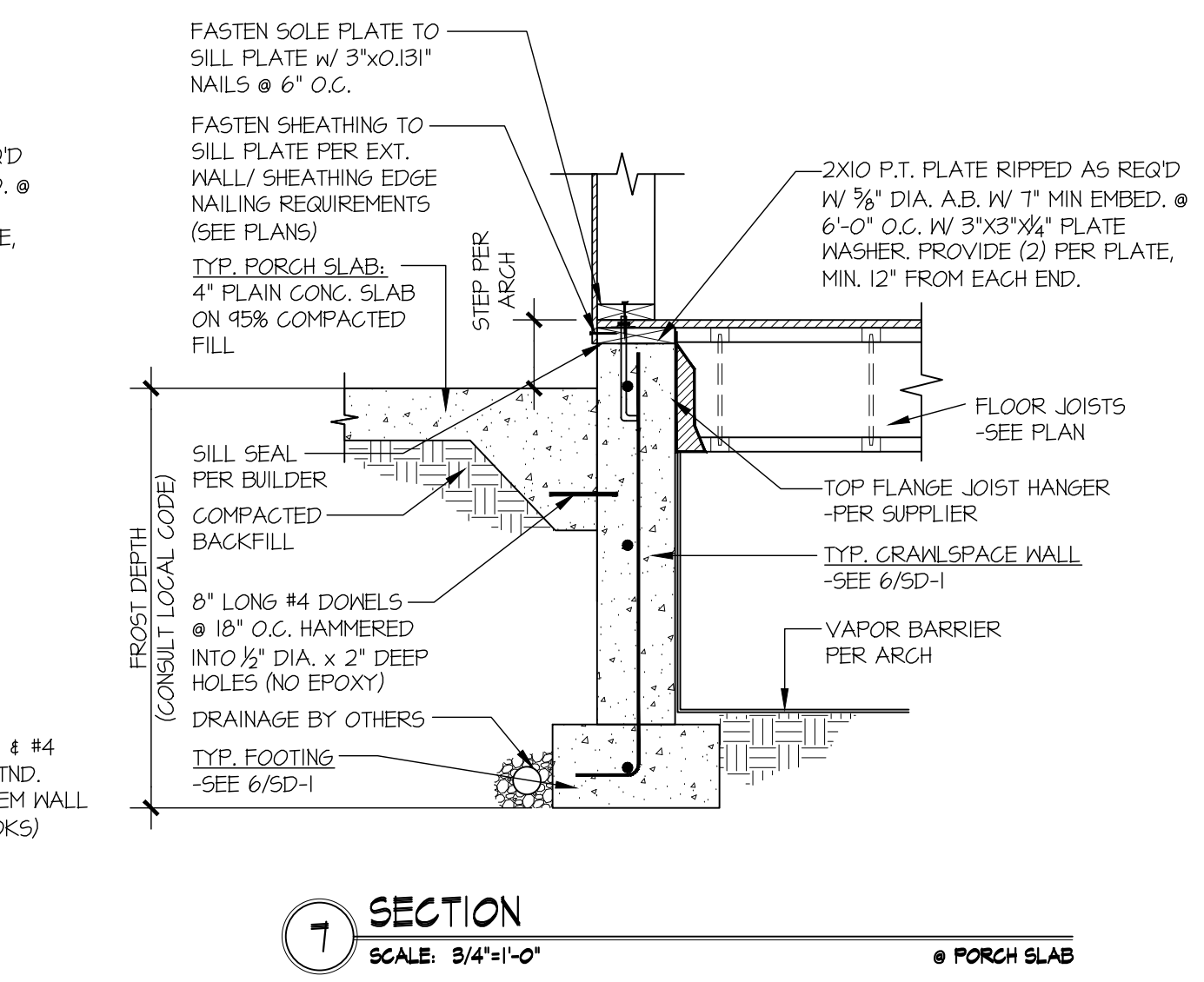
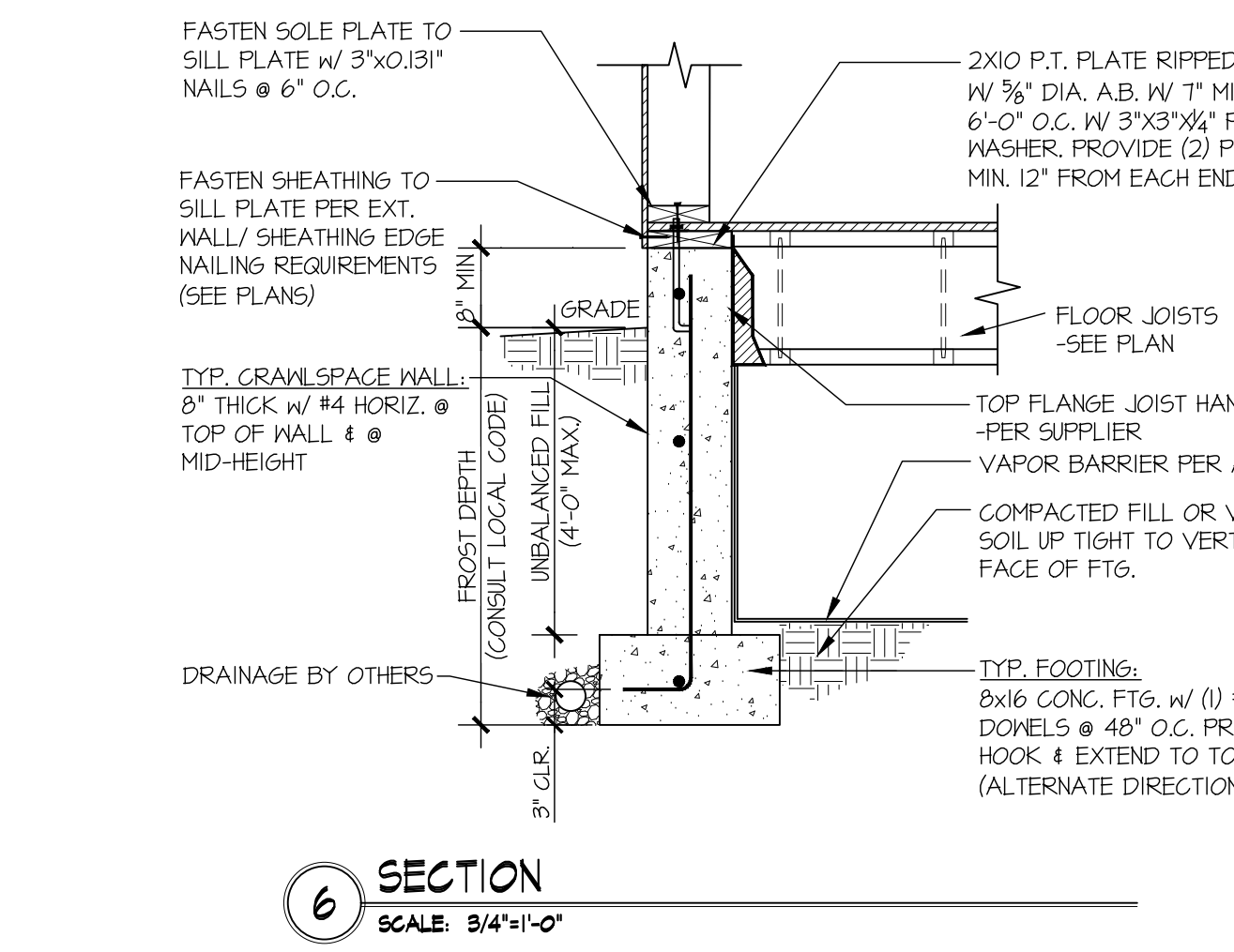
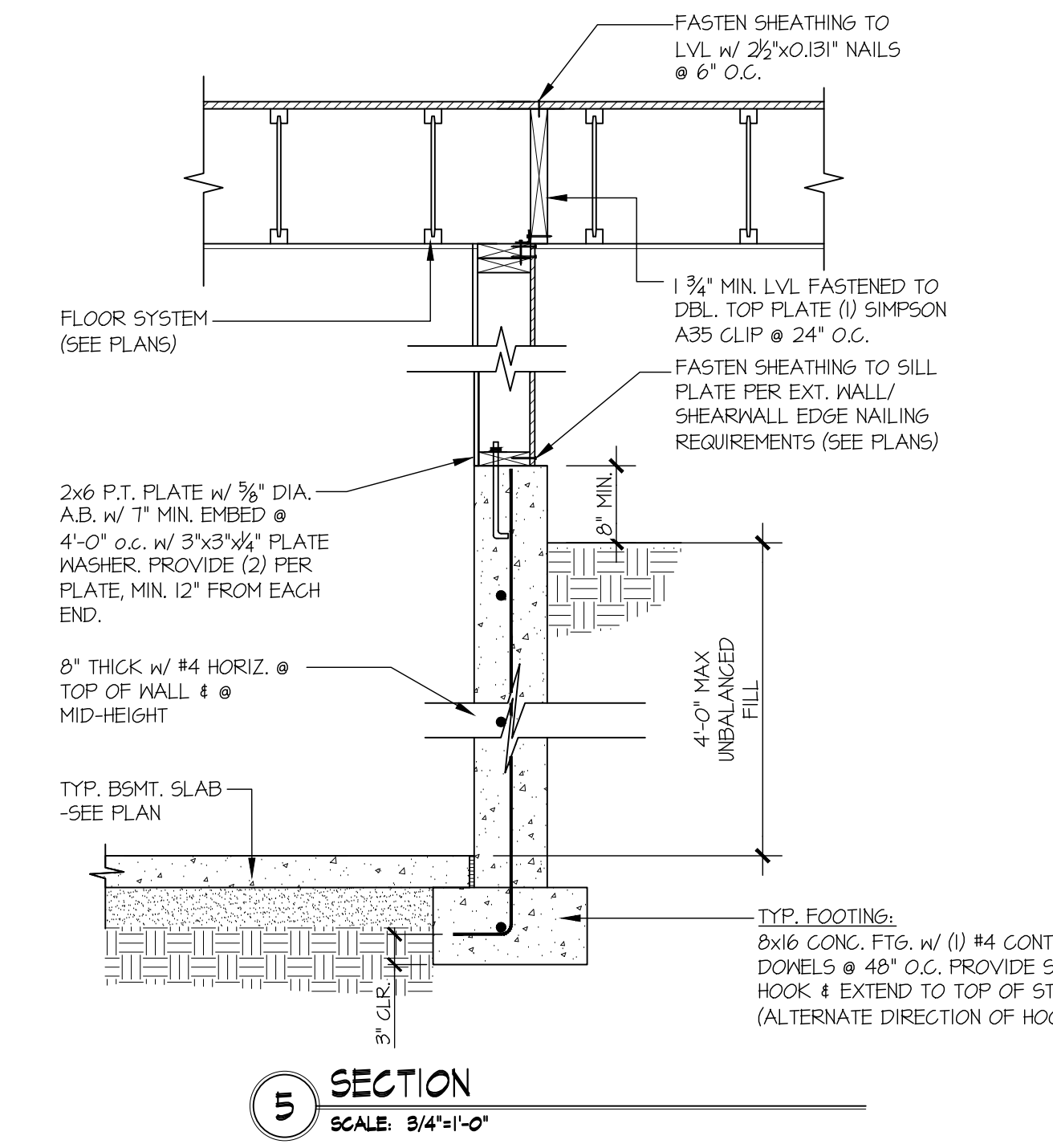
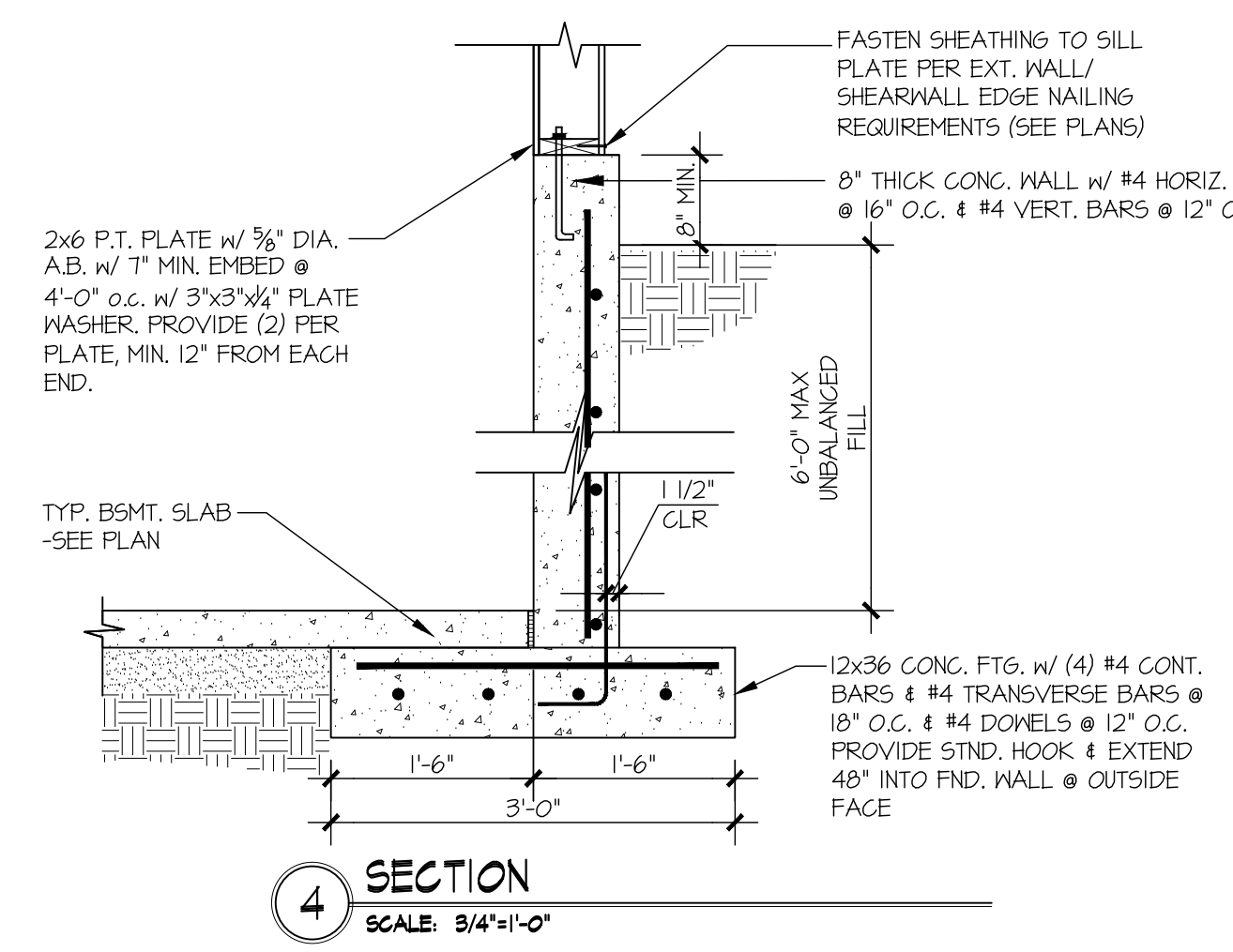
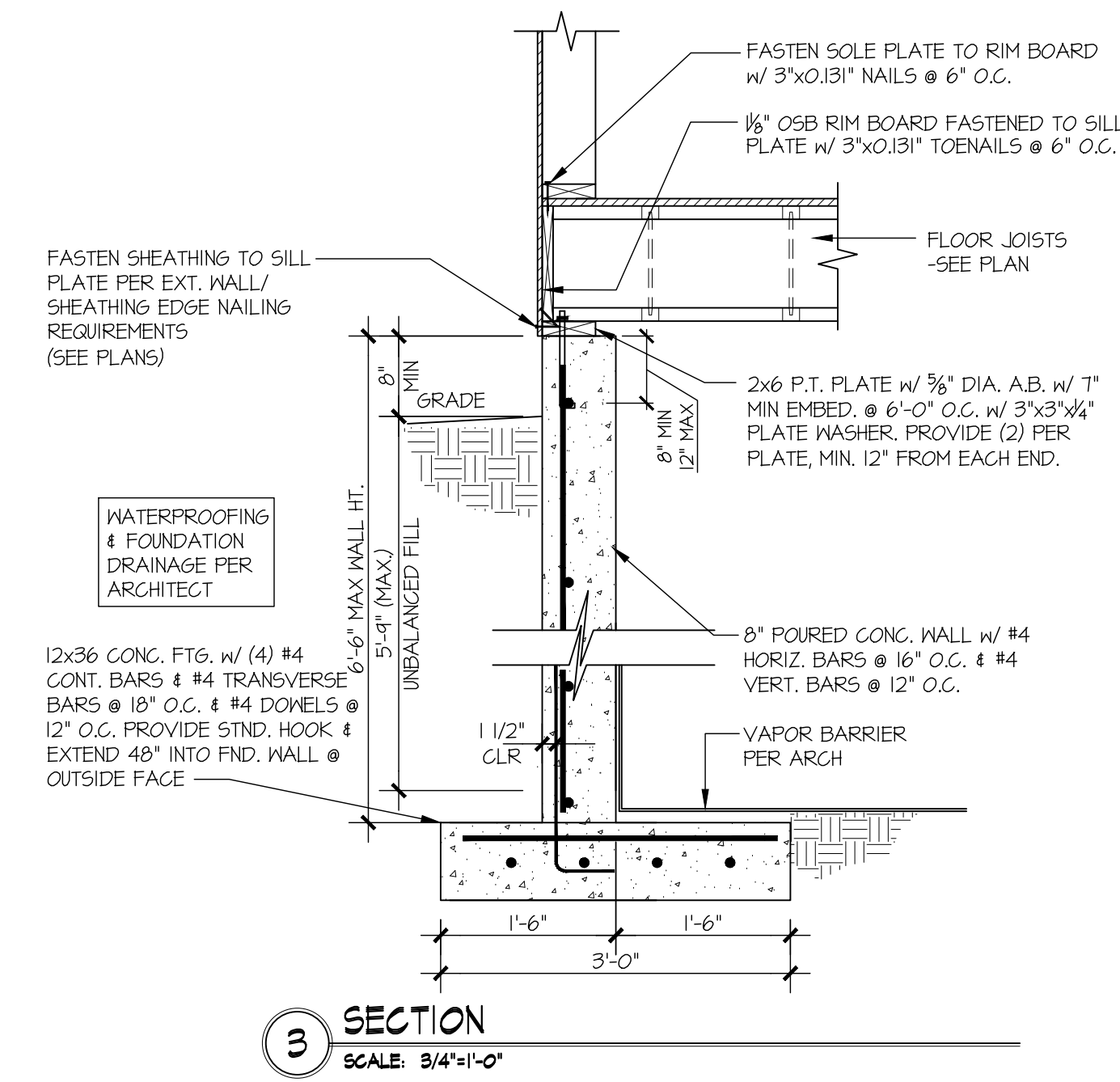
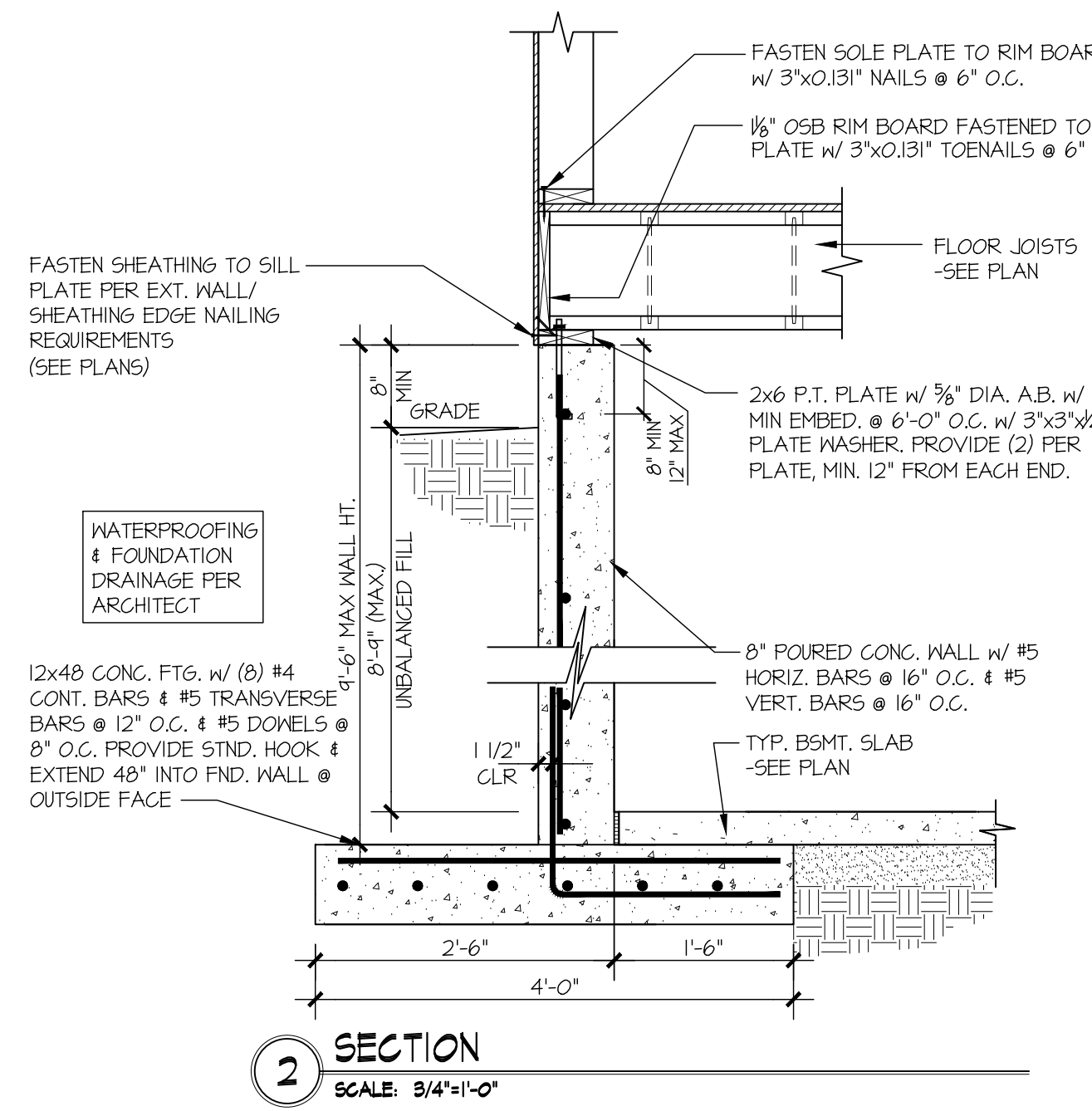
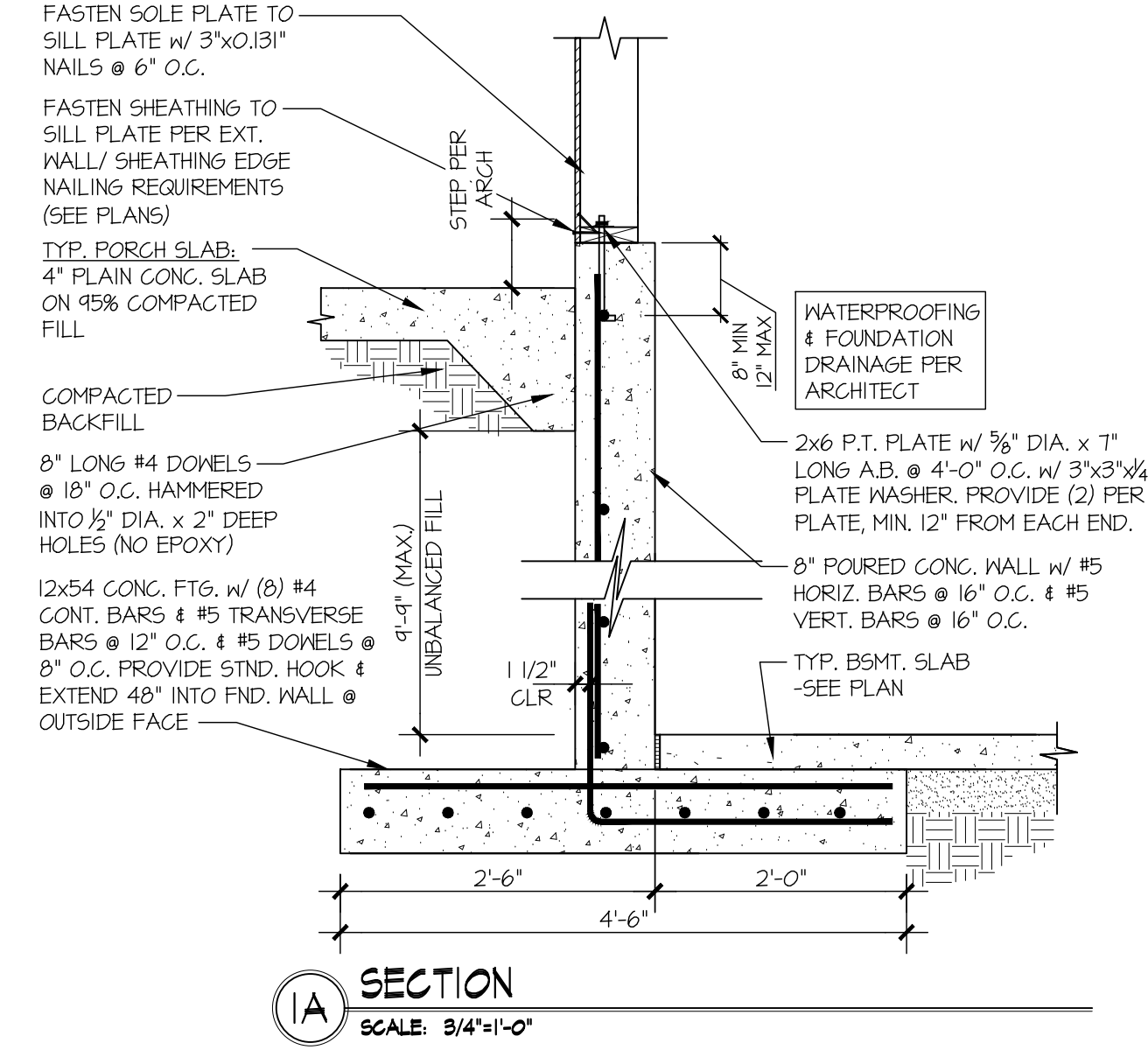
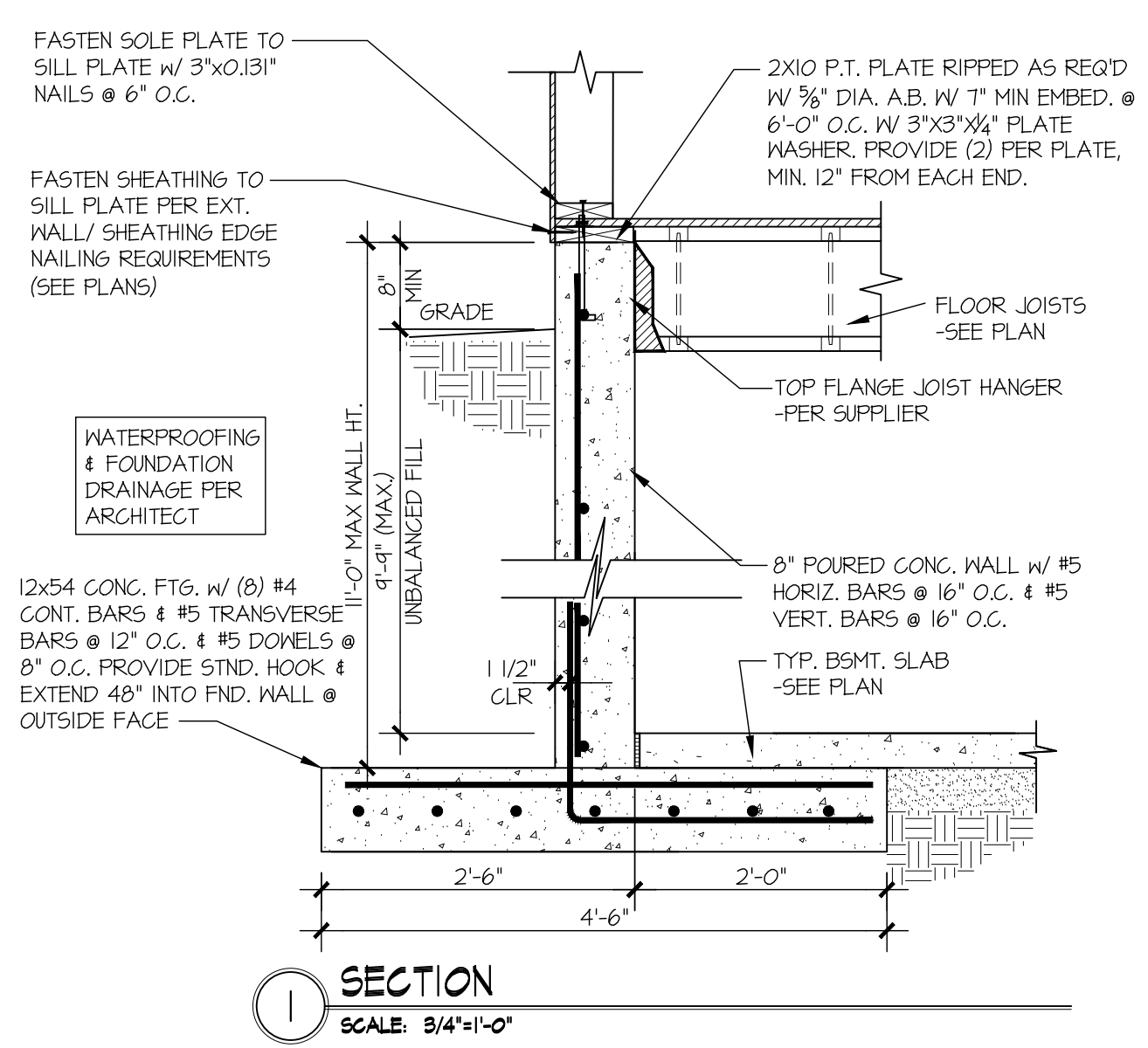
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GEOTECH REPORT	

DESIGN BUILT
HOMES

STRUCTURAL DETAILS
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LOT 2
MERCER ISLAND, WA

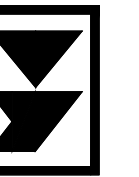
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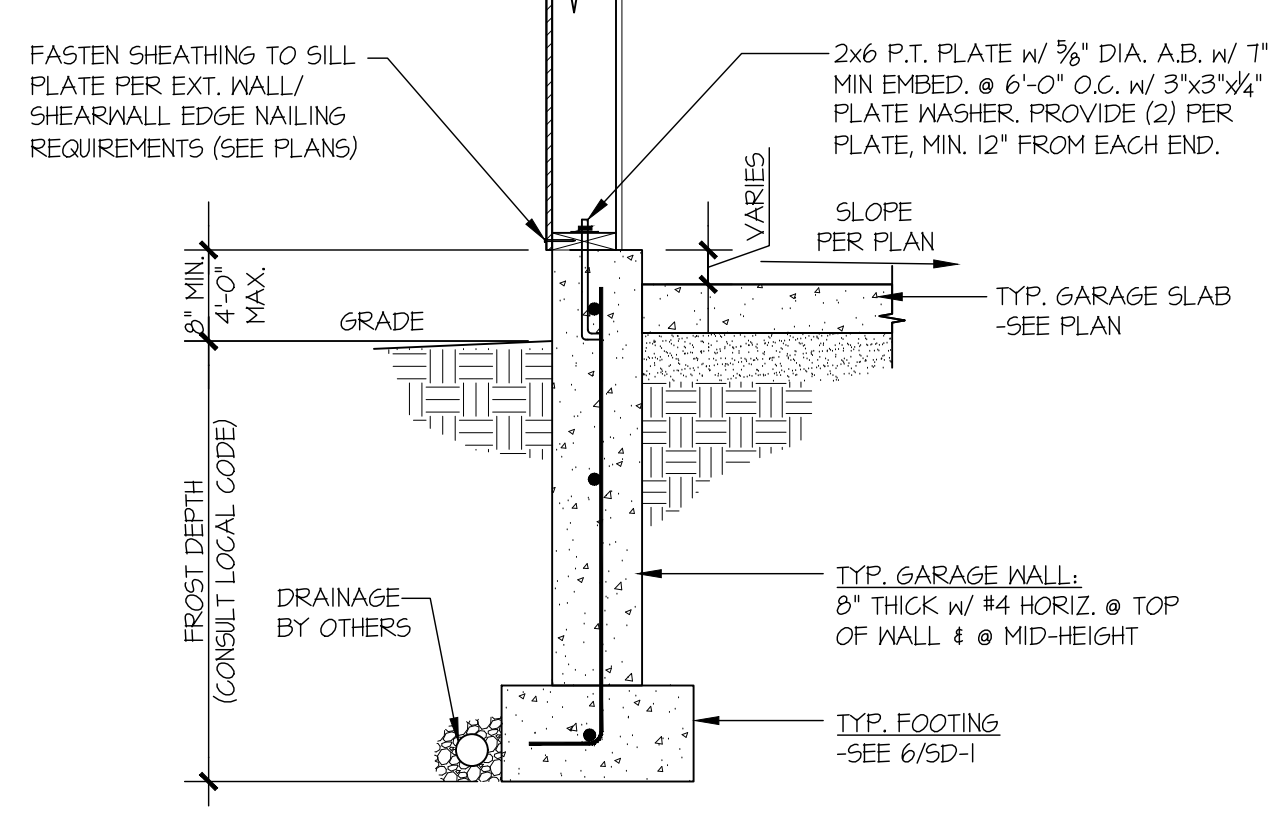
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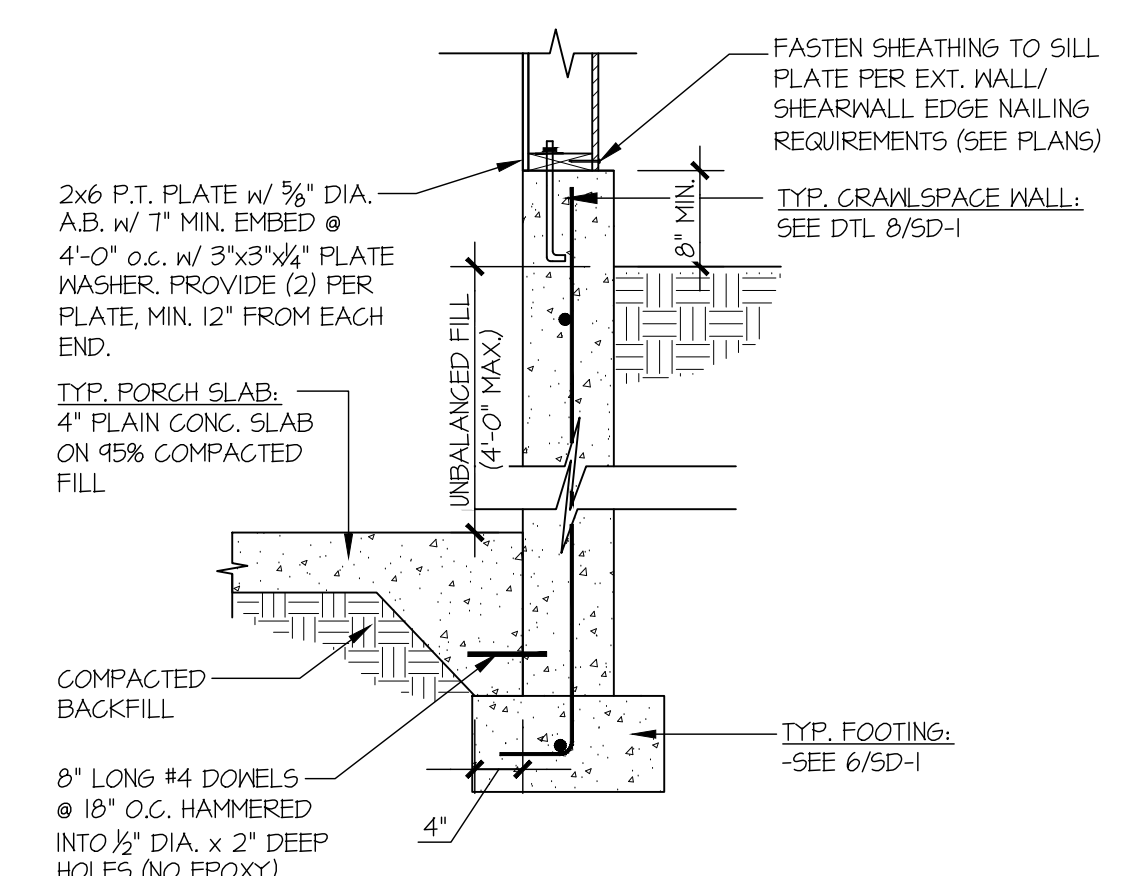
DESIGN BUILT
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STRUCTURAL DETAILS
86TH AVE SE
LOT 2
MERCER ISLAND, WA

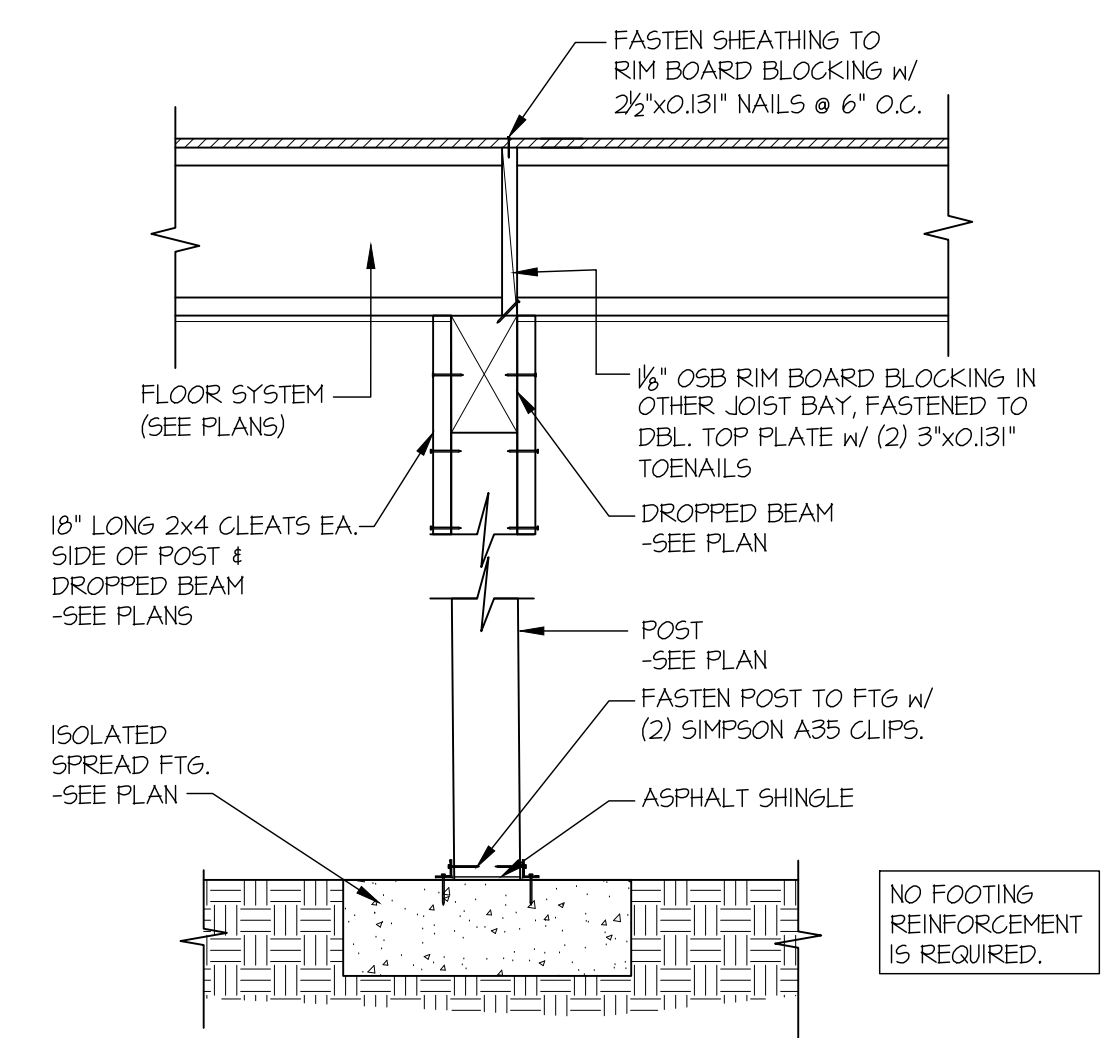
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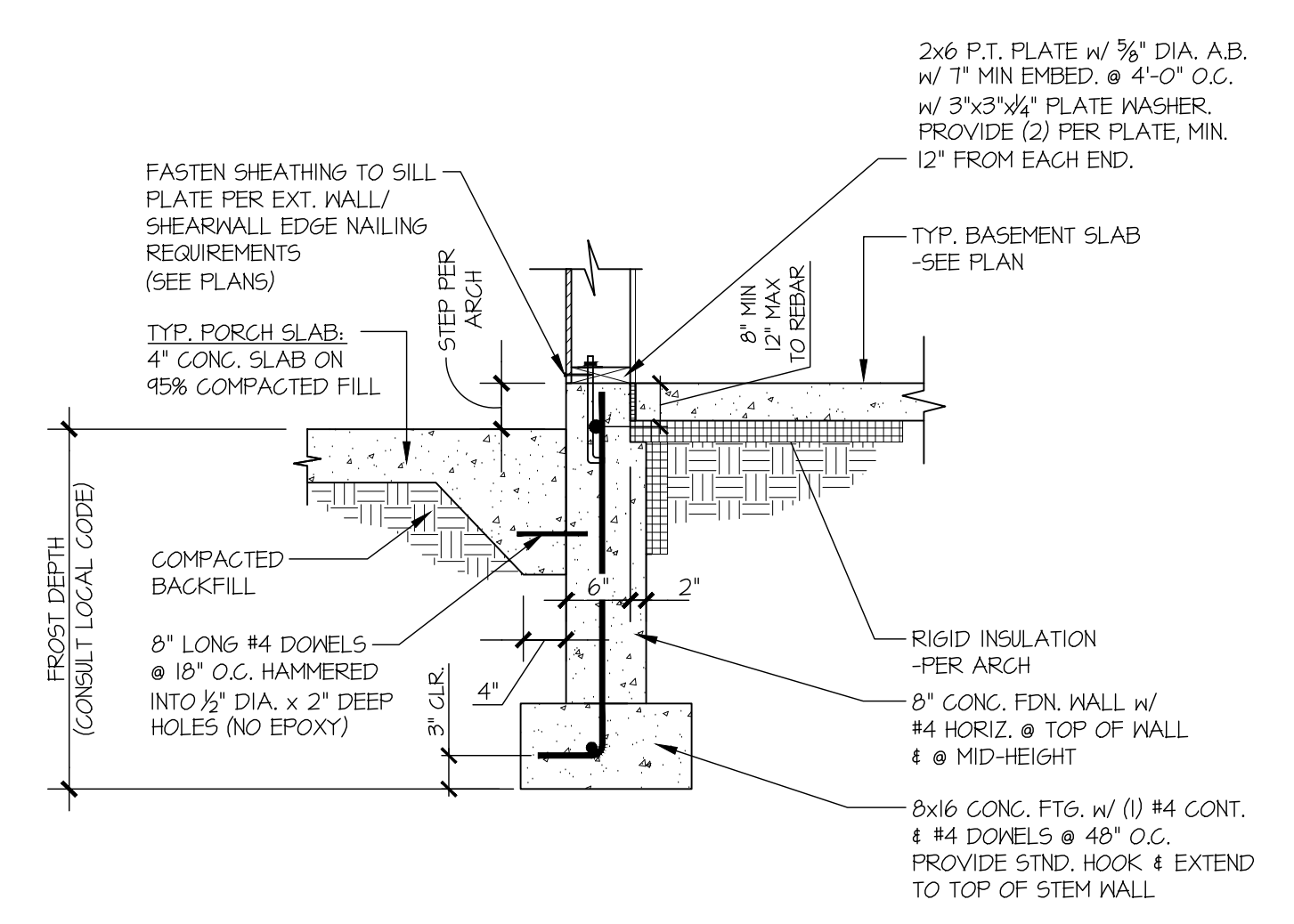
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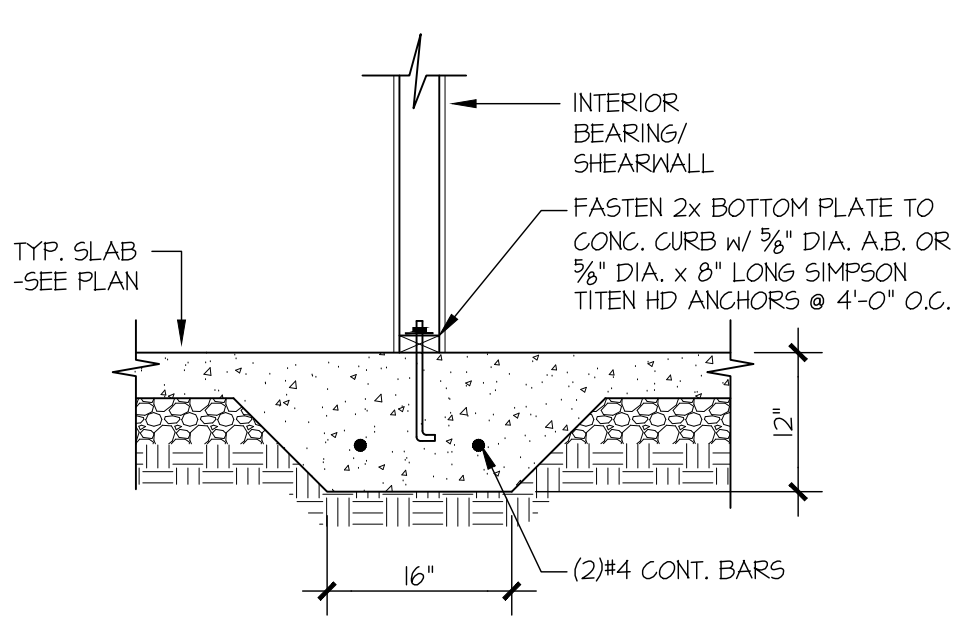
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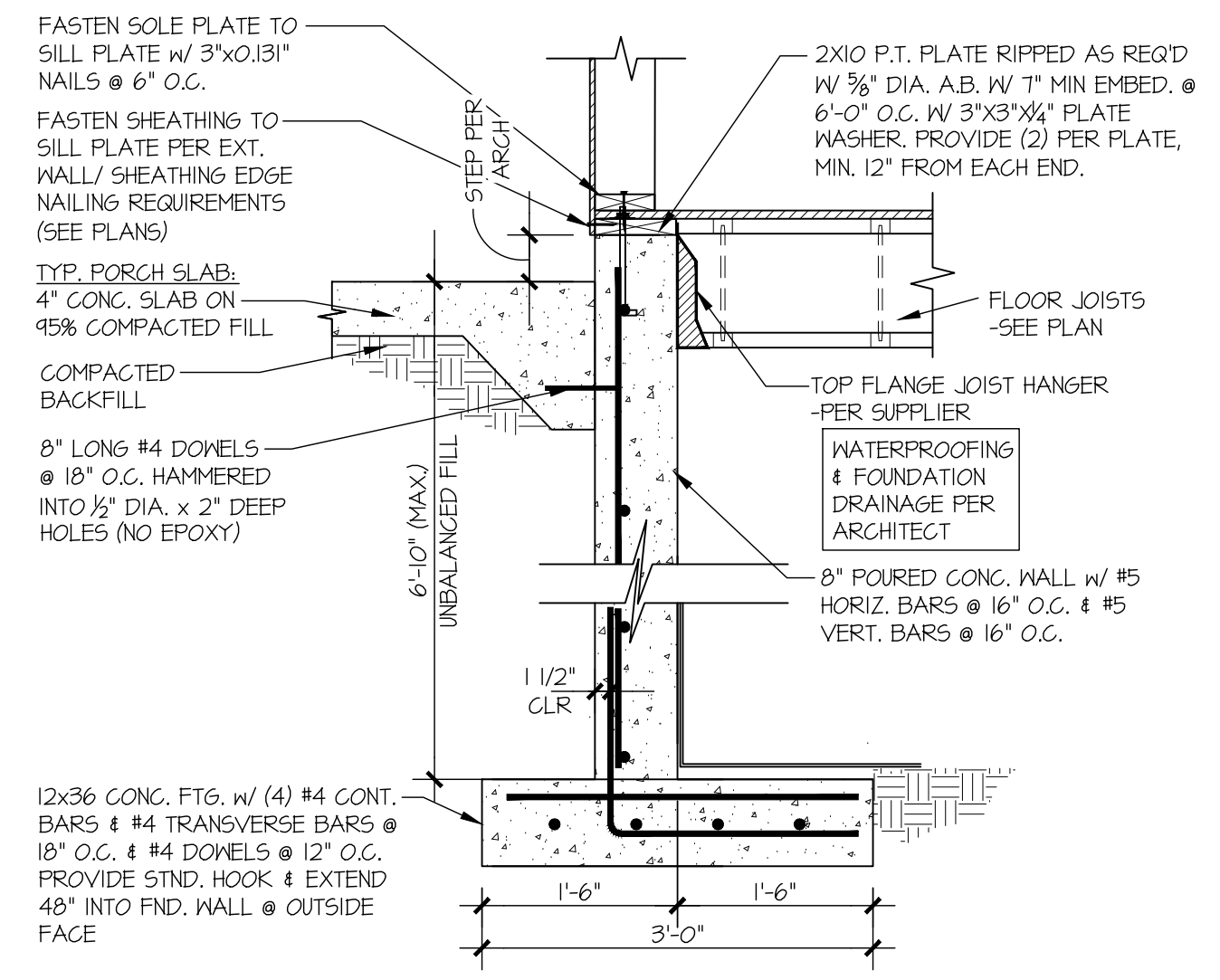
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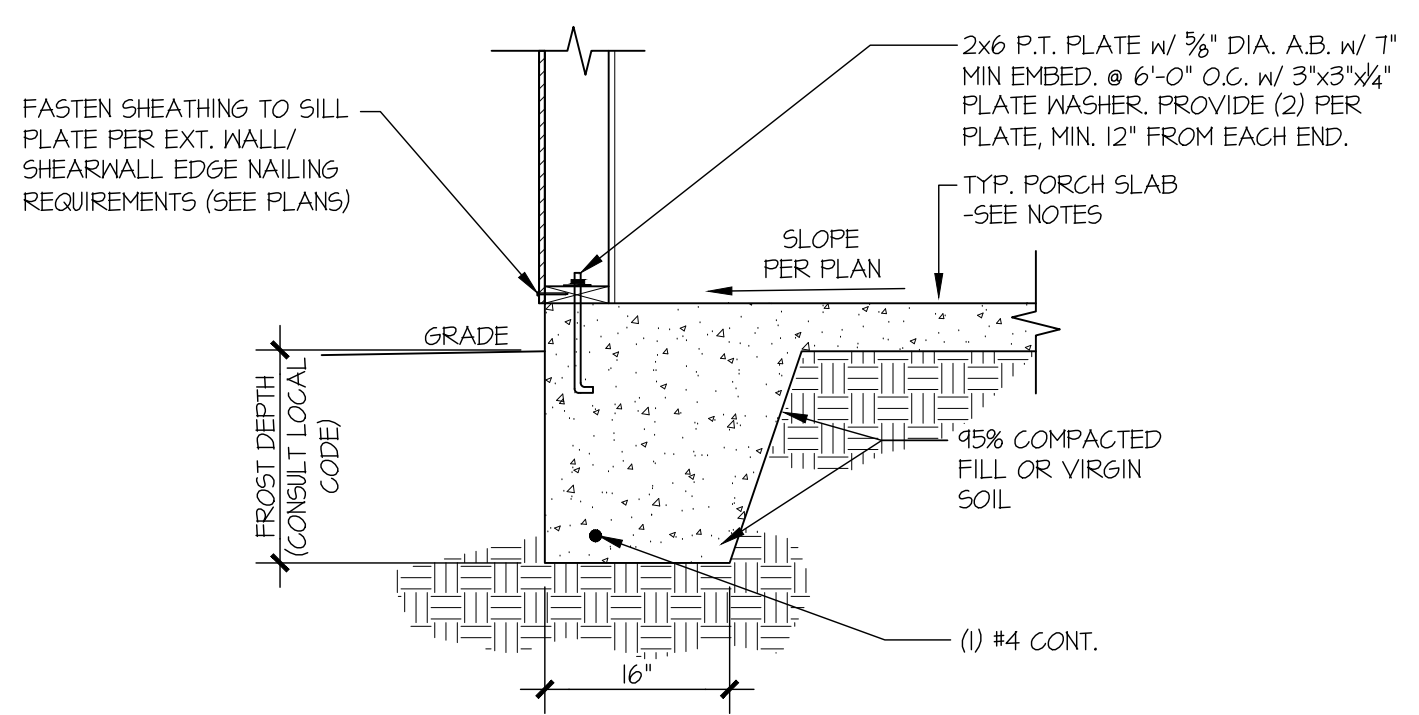
15 SECTION
SCALE: 3/4"=1'-0"



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



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

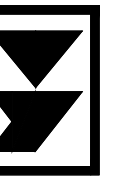


18 SECTION
SCALE: 3/4"=1'-0"

seal:



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M&K project number:
244-24010
project mgr: **NJM**
drawn by: **RSC**
issue date: **11-04-24**

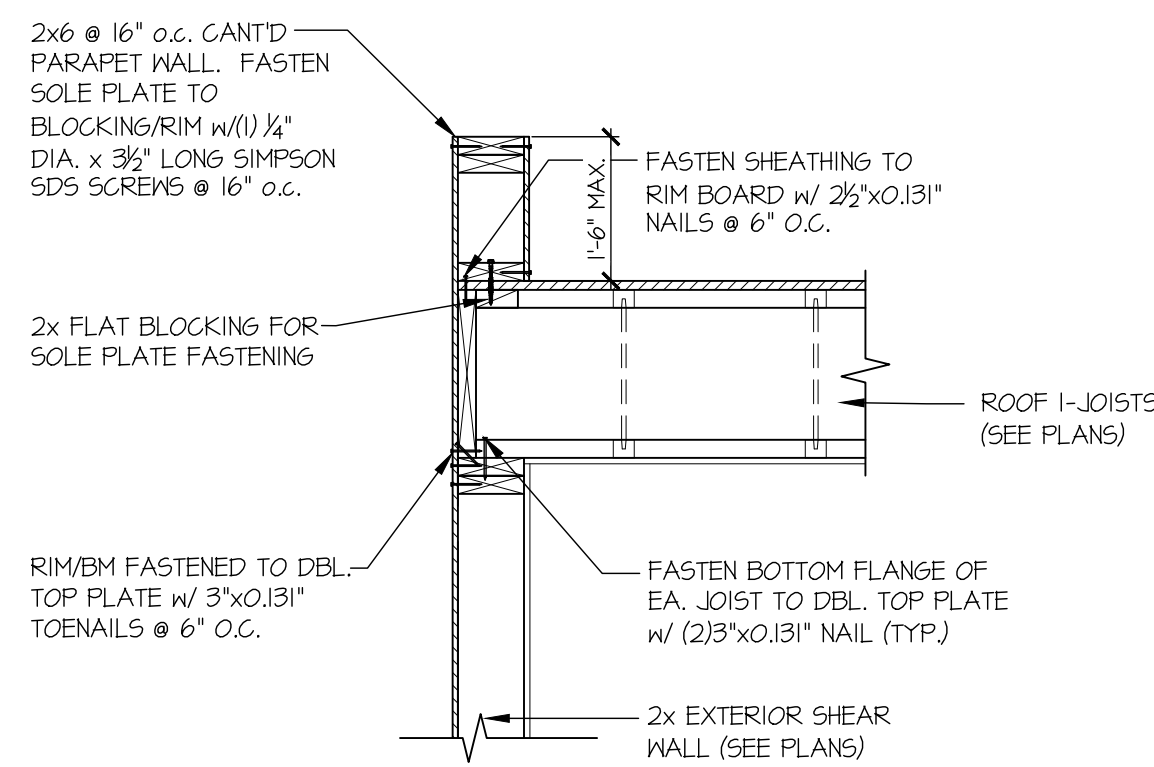
REVISIONS:
date: initial:
12-31-2024 RJD
ARCH REVISIONS
04-08-2025 RSC
GEOTECH REPORT

DESIGN BUILT
HOMES

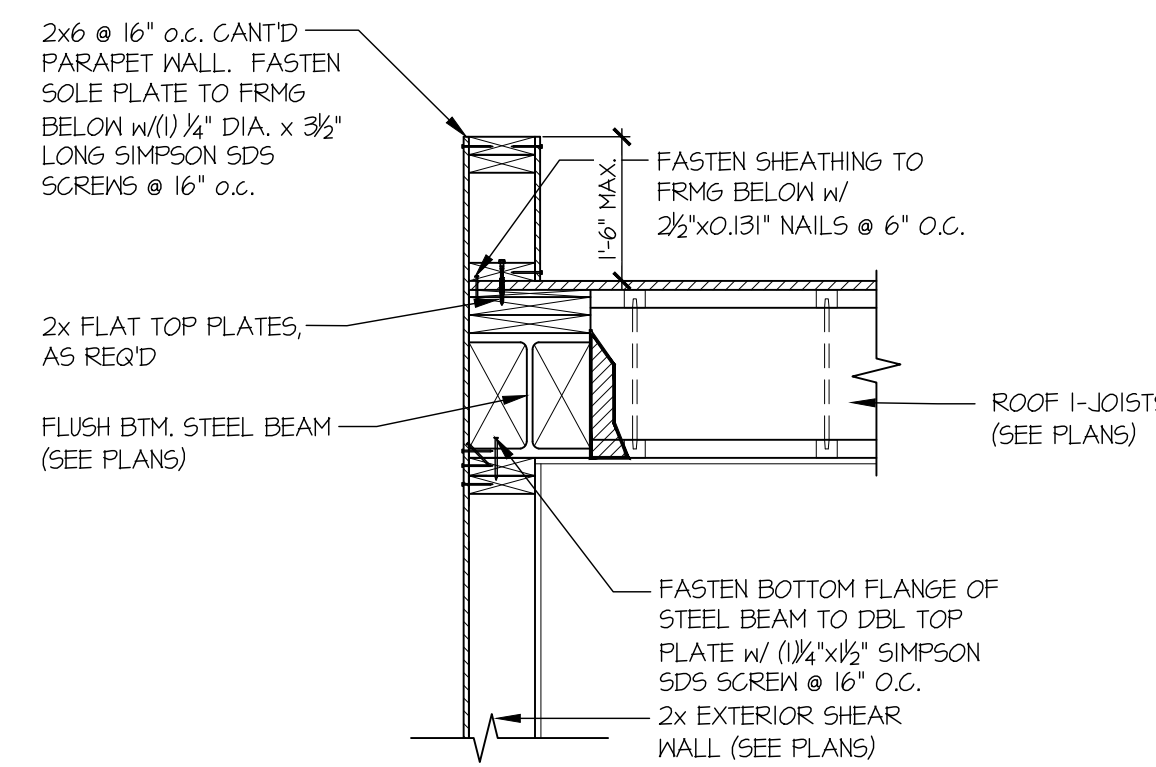
STRUCTURAL DETAILS
86TH AVE SE
LOT 2
MERCER ISLAND, WA

sheet:

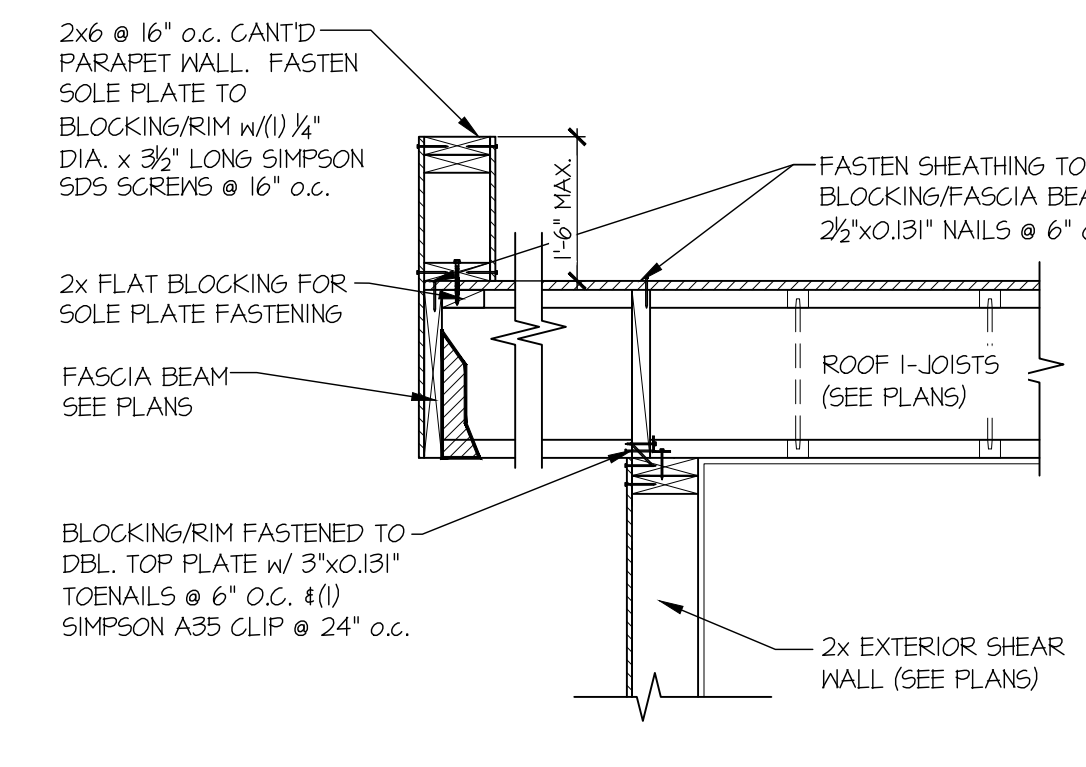
SD-3



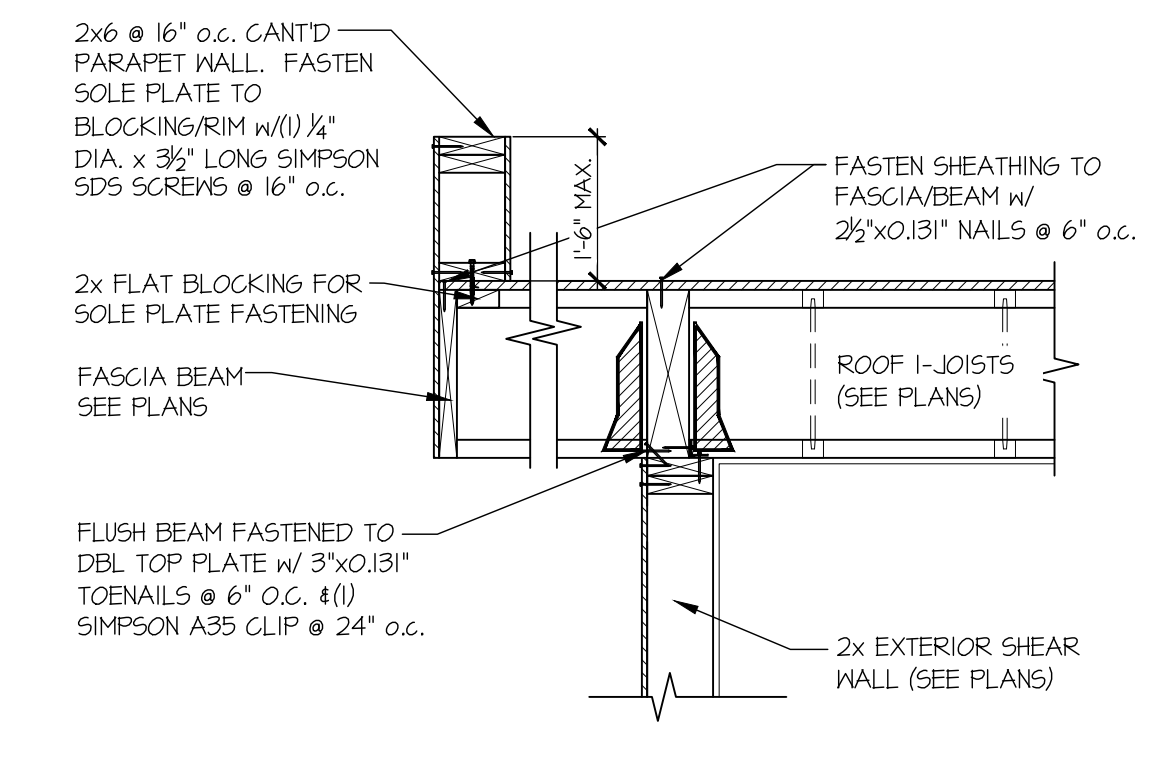
1 SECTION
SCALE: 3/4"=1'-0"



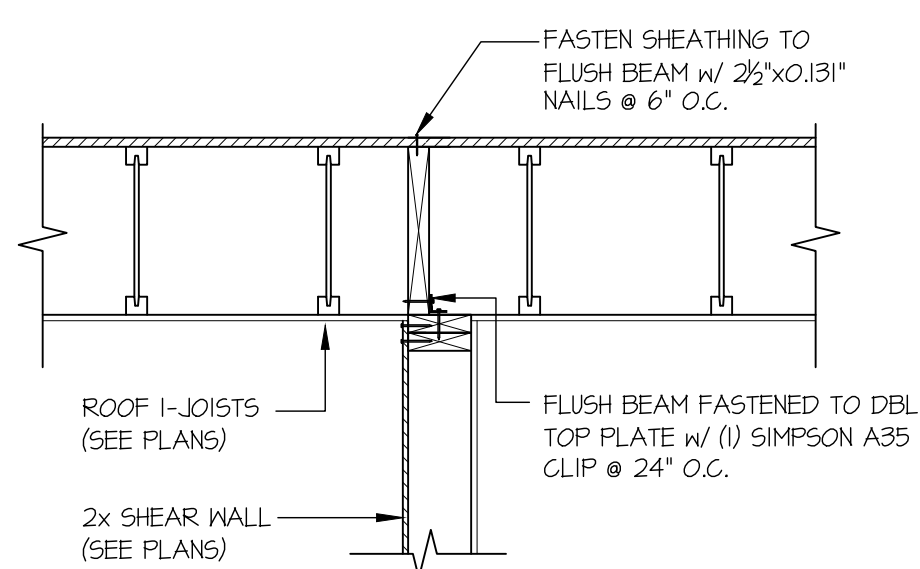
1A SECTION
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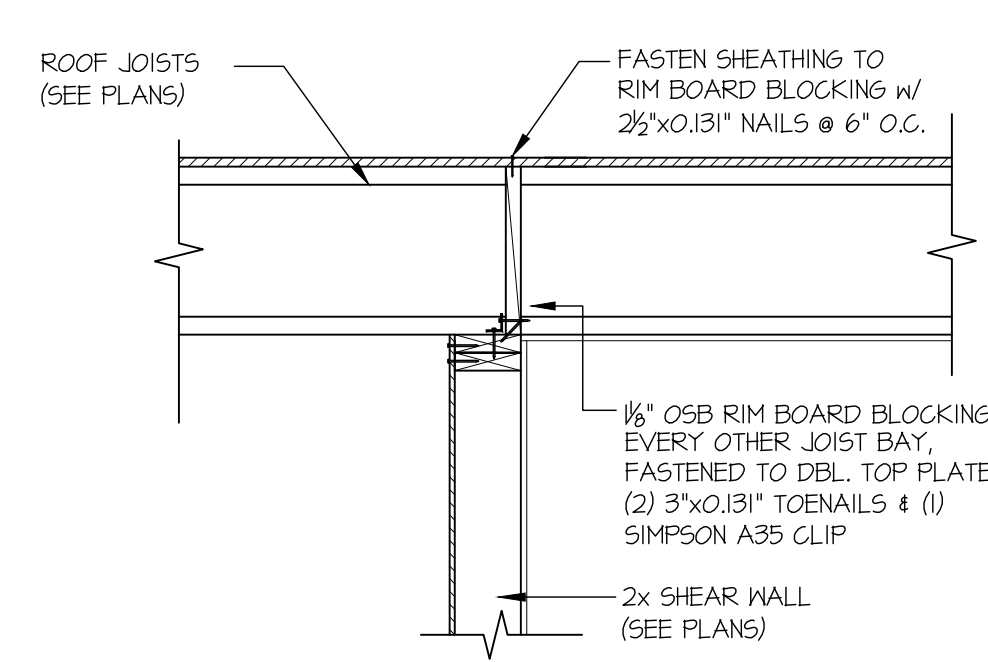
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SCALE: 3/4"=1'-0"



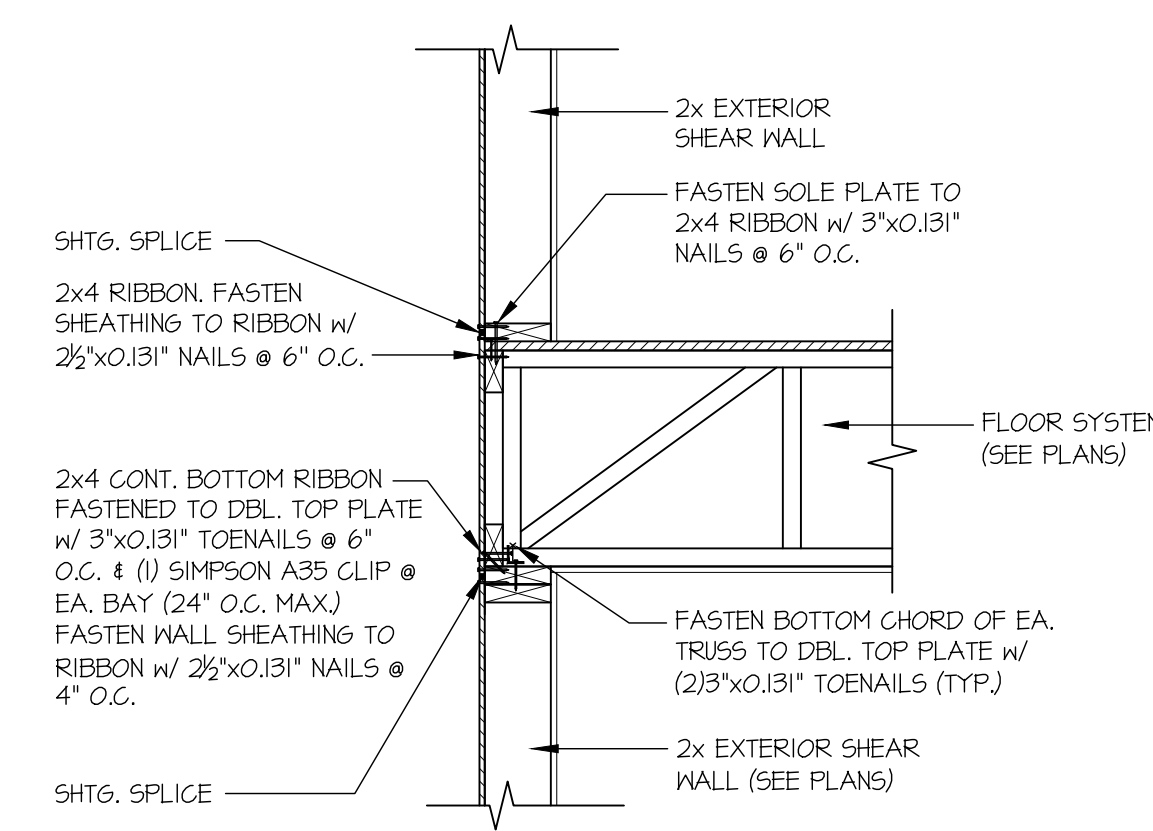
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SCALE: 3/4"=1'-0"



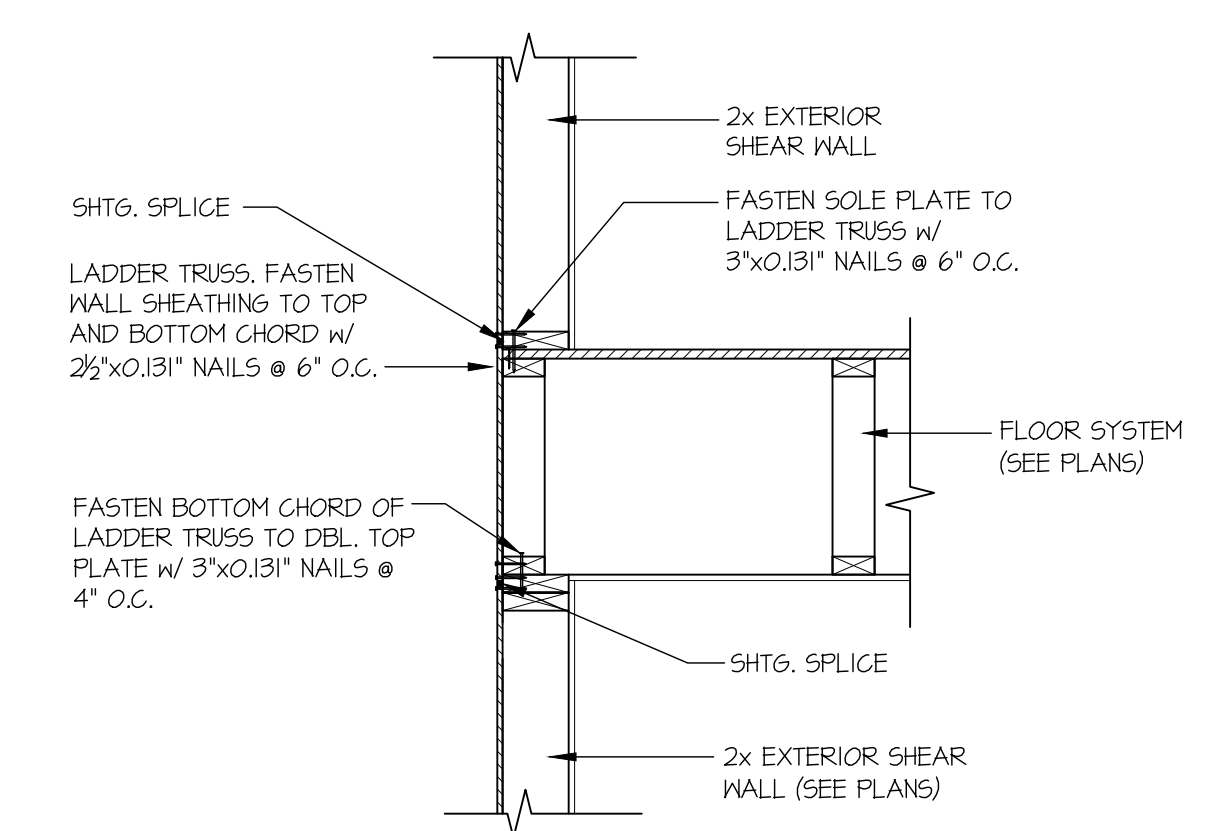
4 SECTION
SCALE: 3/4"=1'-0"



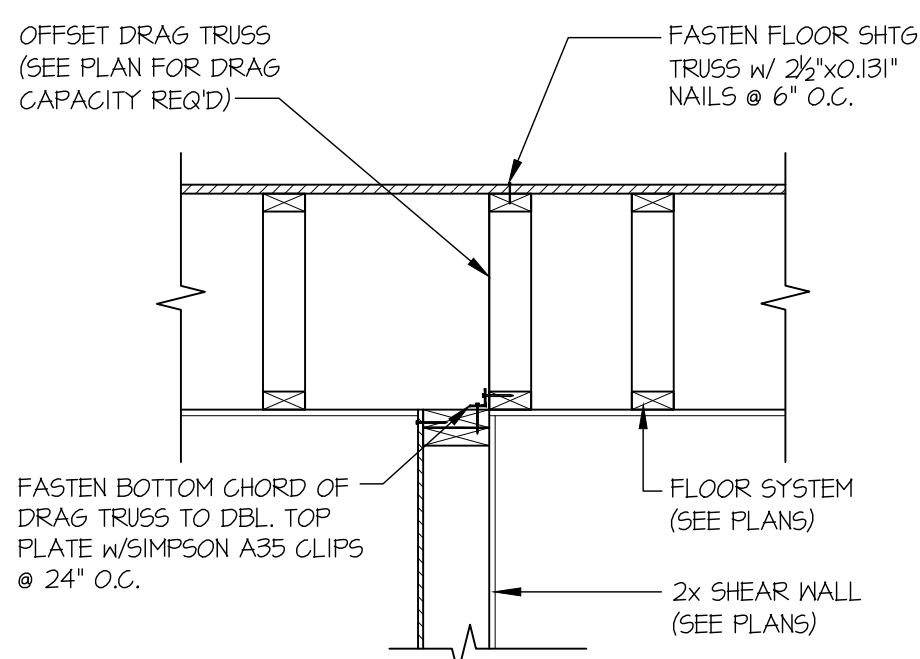
5 SECTION
SCALE: 3/4"=1'-0"



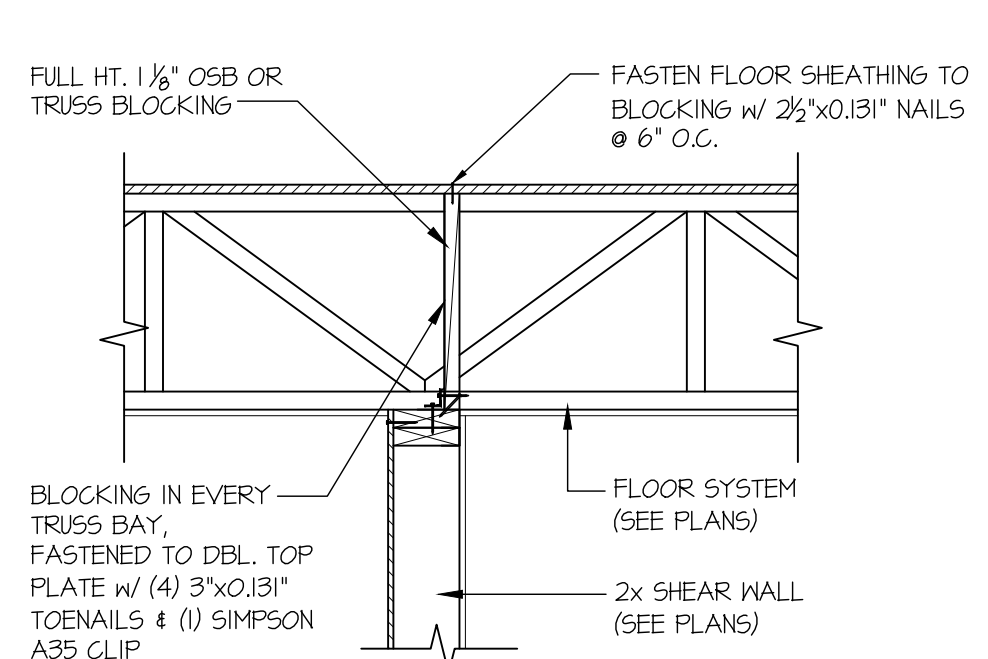
6 SECTION
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



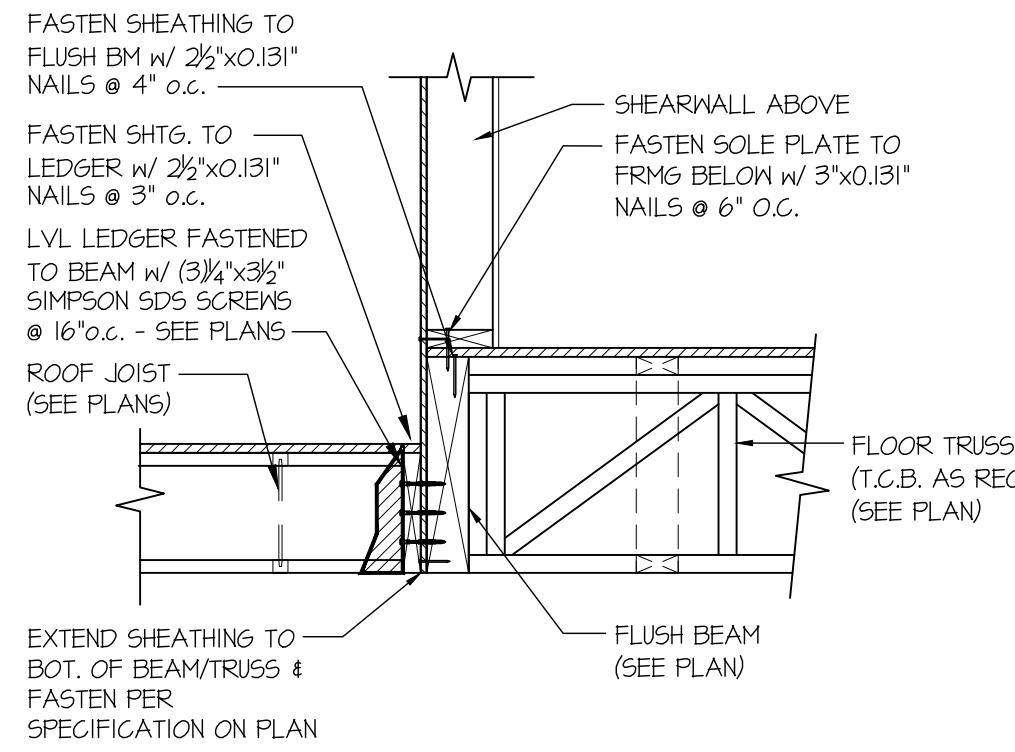
7 SECTION
SCALE: 3/4"=1'-0" PARALLEL FRAMING



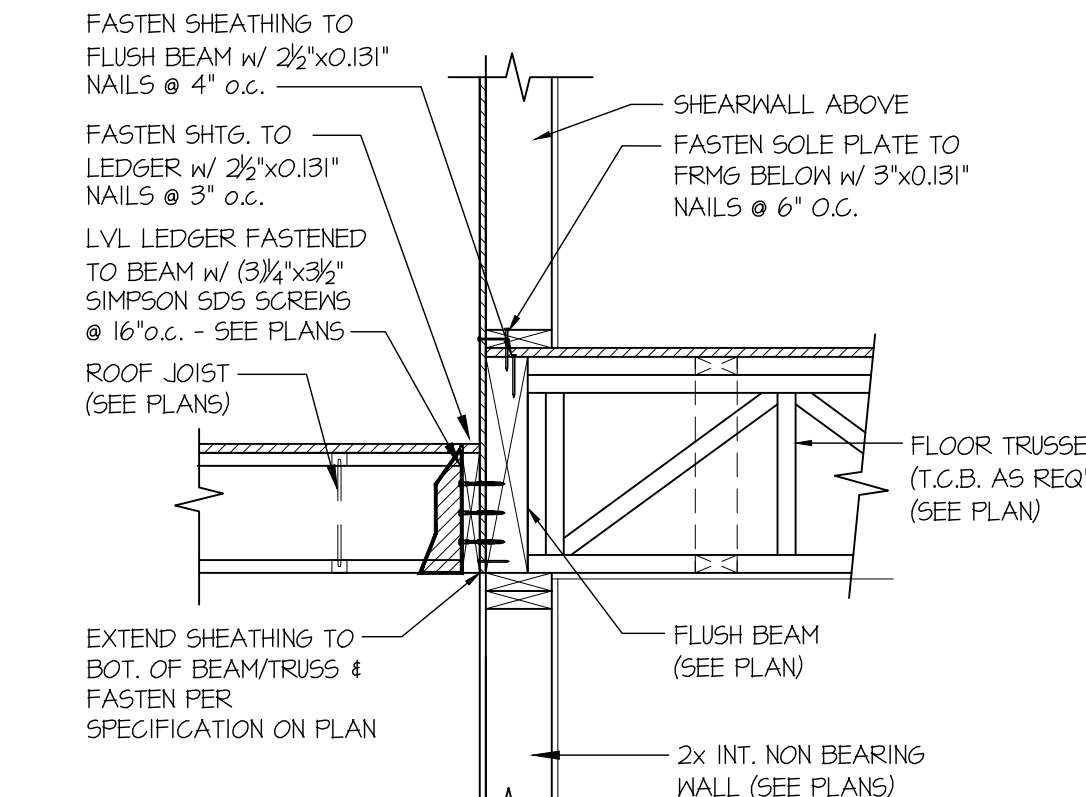
11 SECTION
SCALE: 3/4"=1'-0"



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



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



14A SECTION
SCALE: 3/4"=1'-0"



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M&K project number:
244-24010

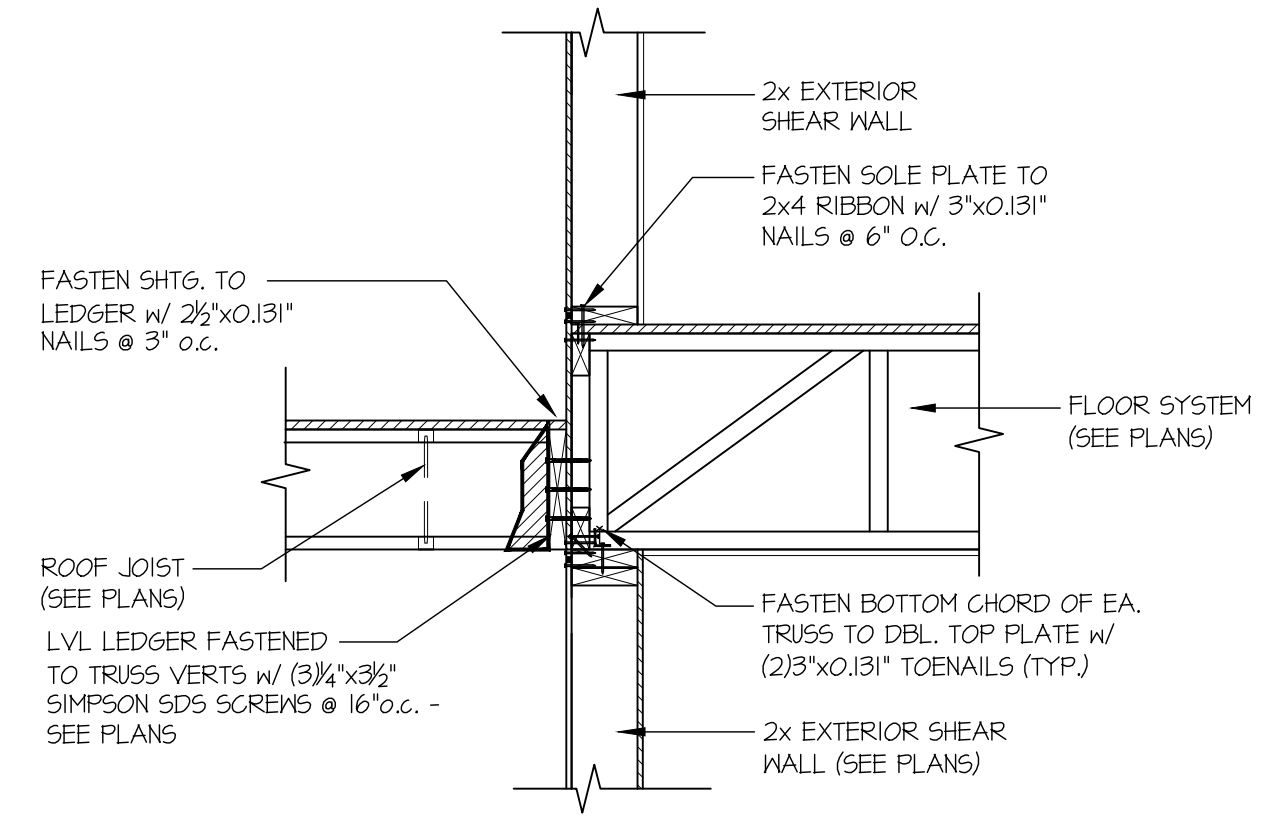
project mgr: **NJM**
drawn by: **RSC**
issue date: **11-04-24**

REVISIONS:	
date:	initial:
12-31-2024	RJD
04-08-2025	RSC
GEOTECH REPORT	

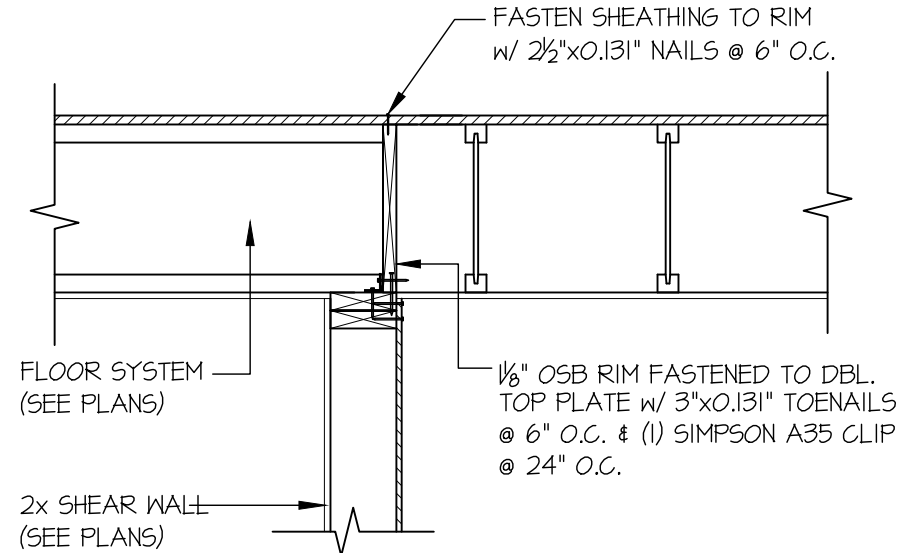
DESIGN BUILT
HOMES

STRUCTURAL DETAILS
86TH AVE SE
LOT 2
MERCER ISLAND, WA

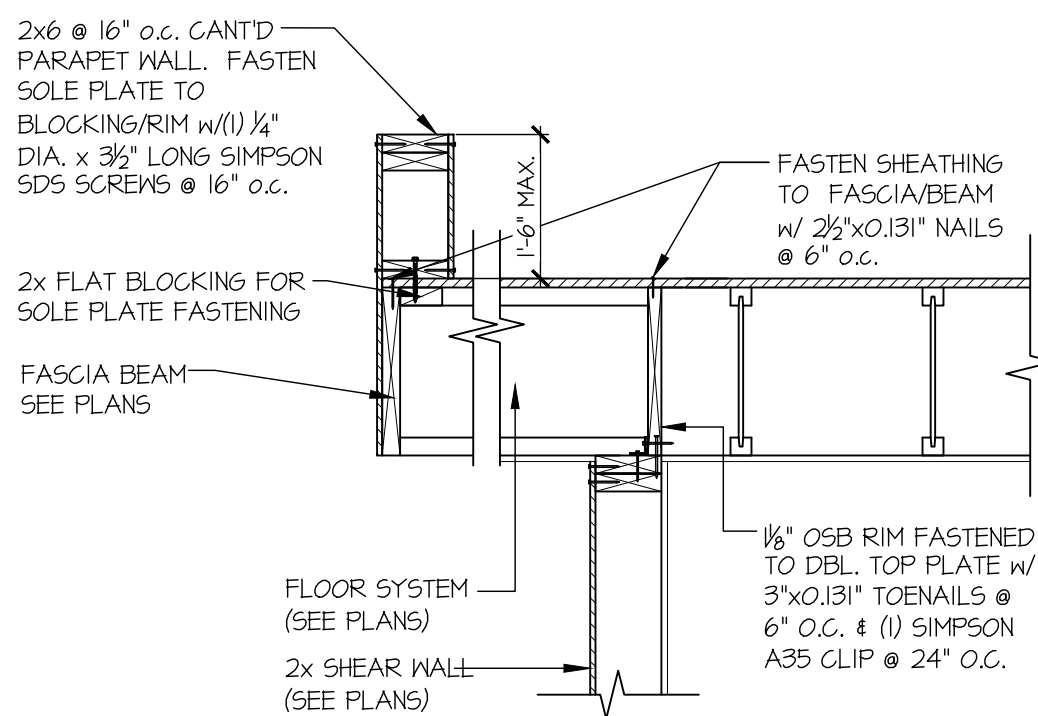
sheet:
SD-4



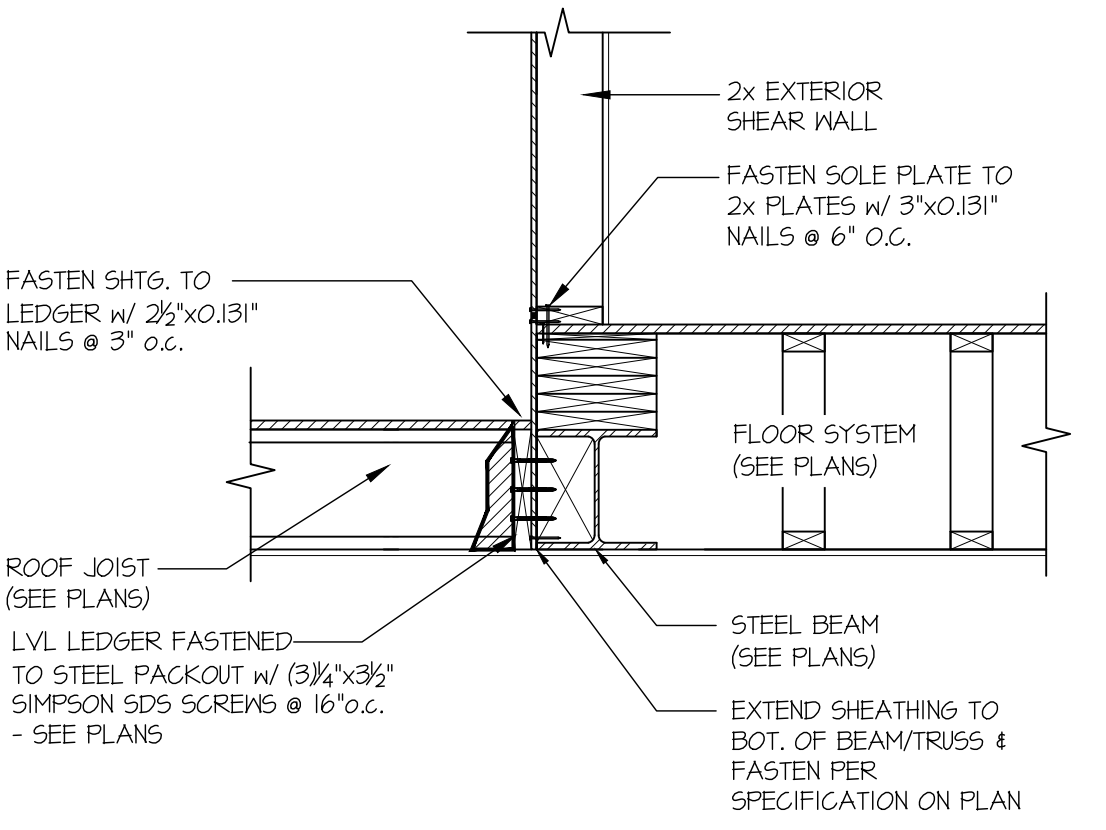
15 SECTION
SCALE: 3/4"=1'-0"
PERPENDICULAR FRAMING



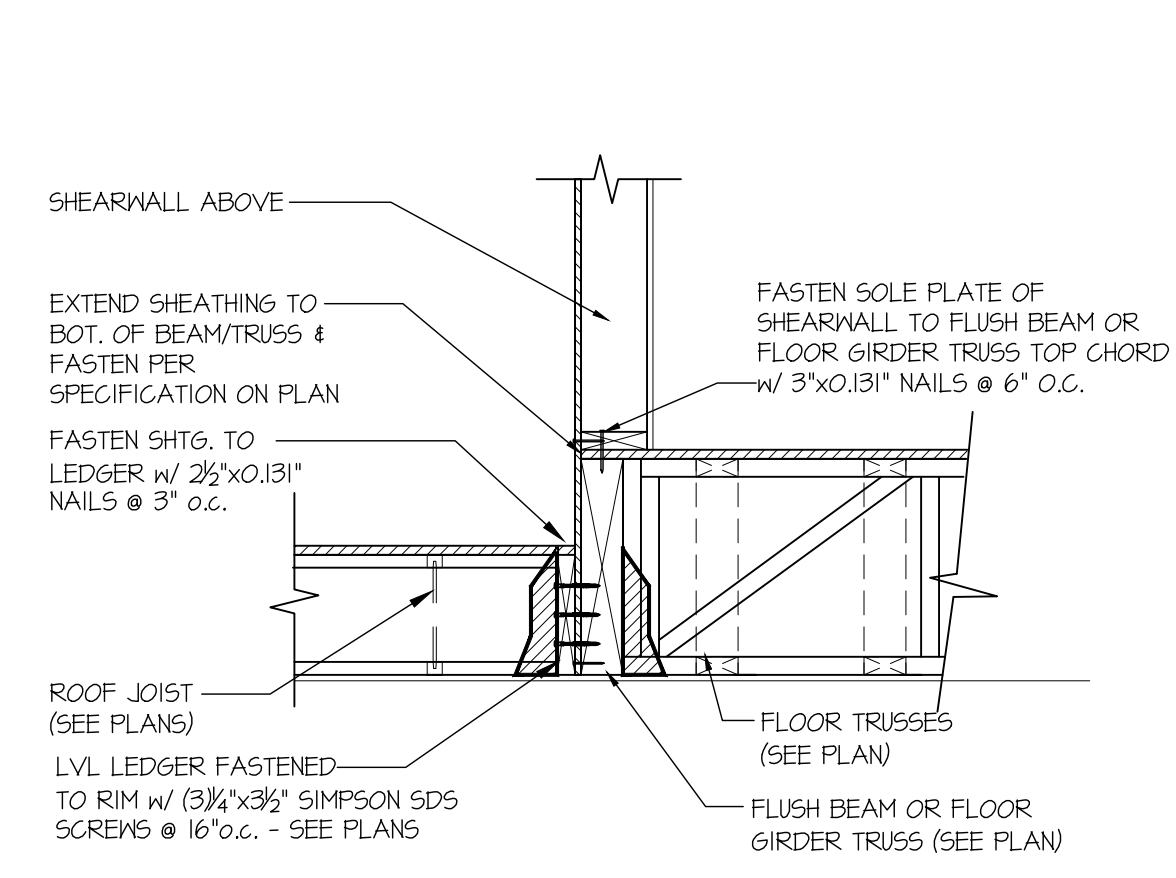
17 SECTION
SCALE: 3/4"=1'-0"



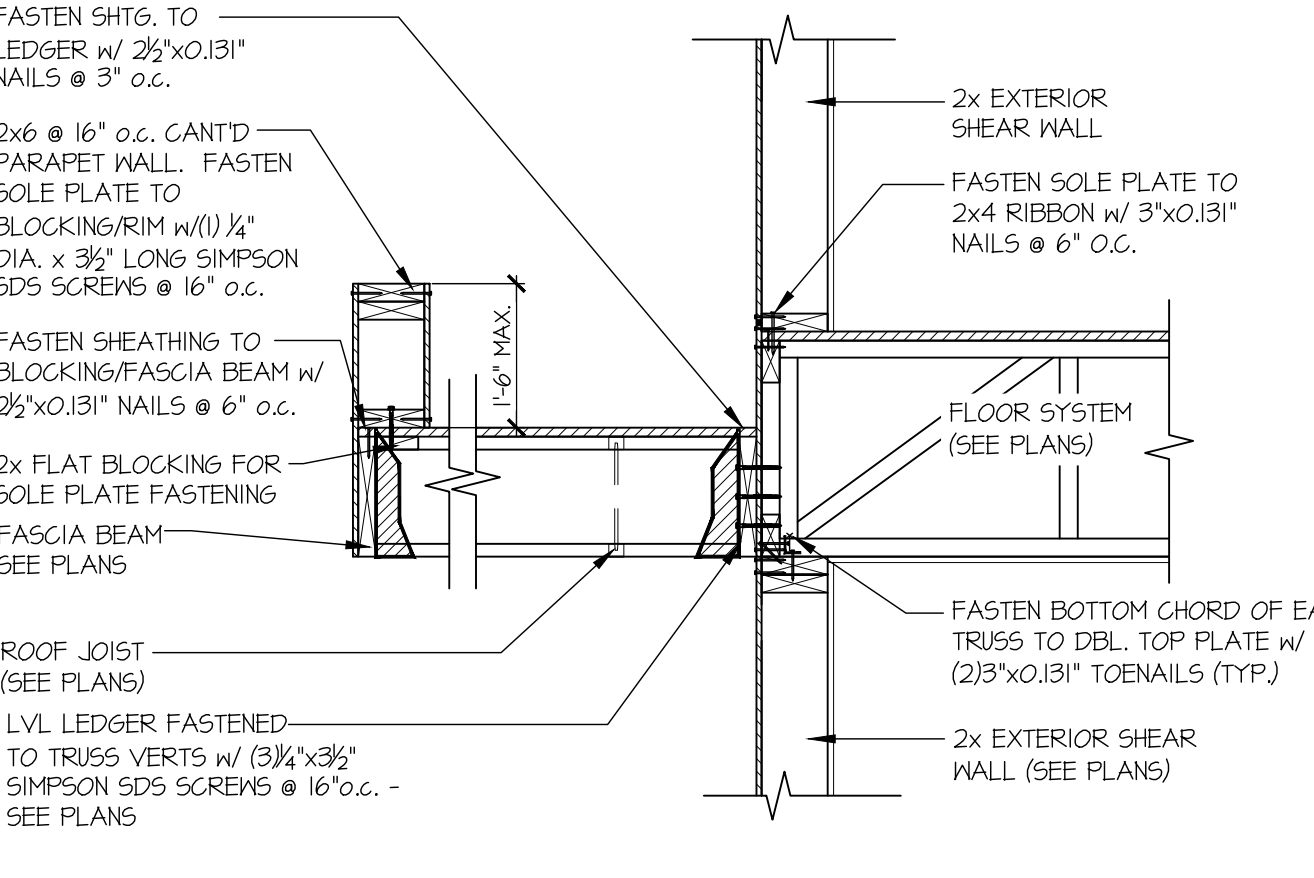
17A SECTION
SCALE: 3/4"=1'-0"



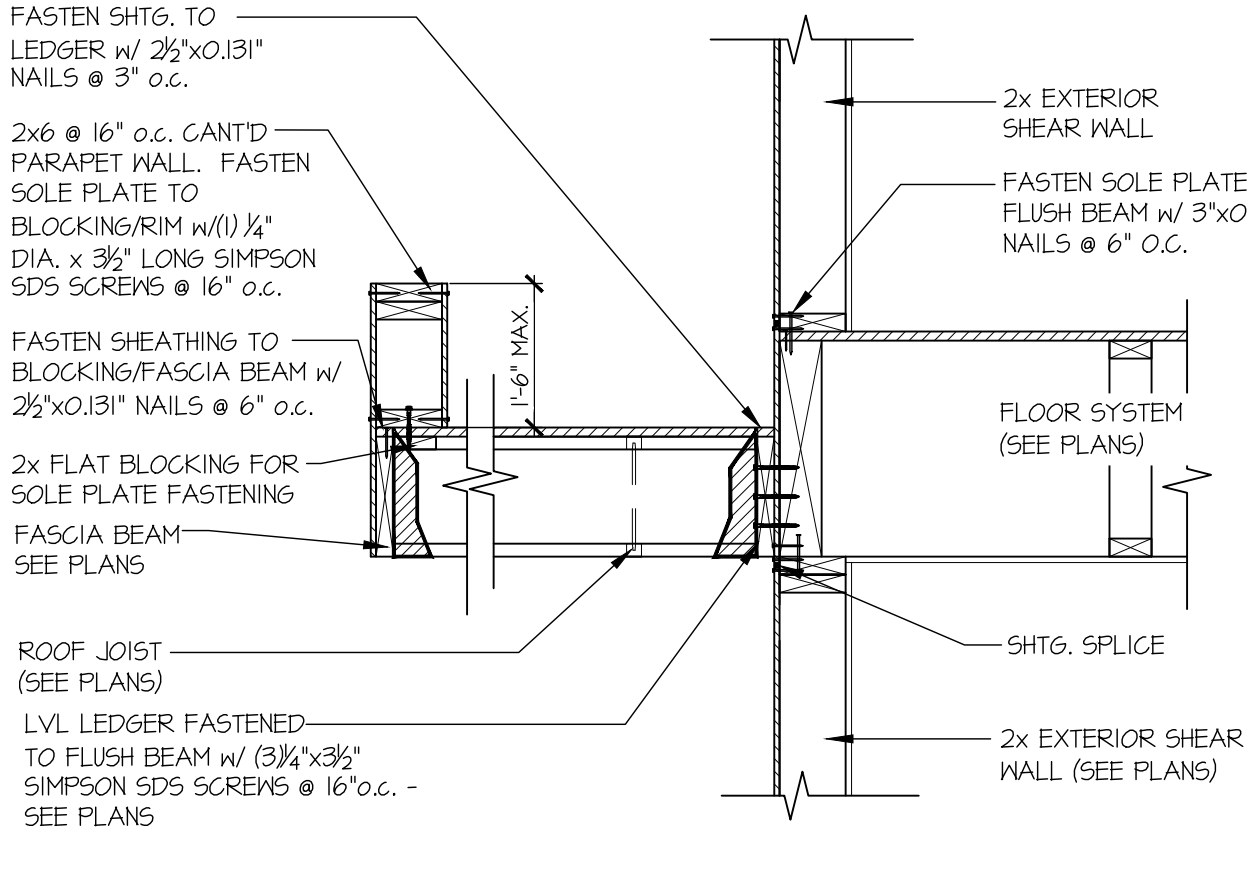
18 SECTION
SCALE: 3/4"=1'-0"
PERPENDICULAR FRAMING



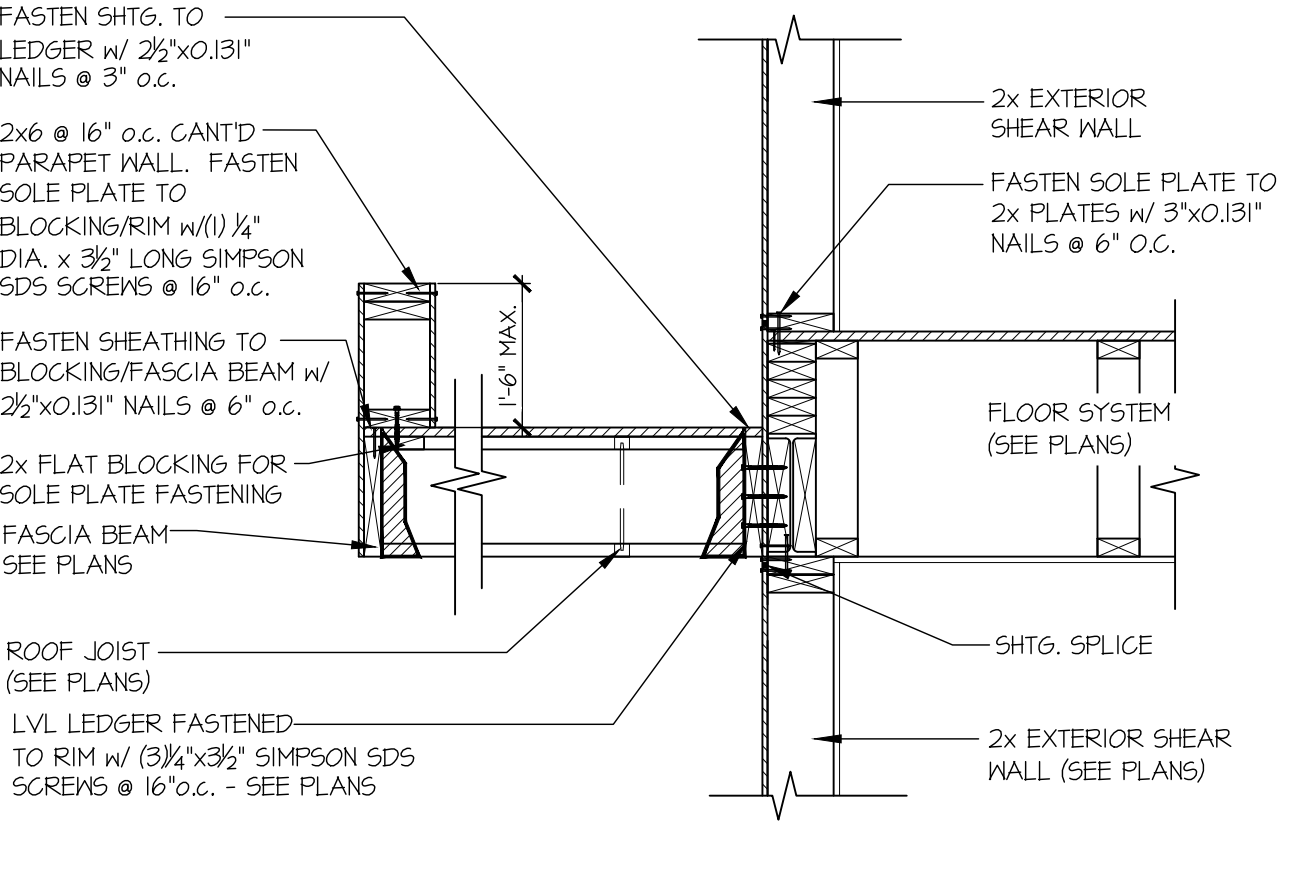
19 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



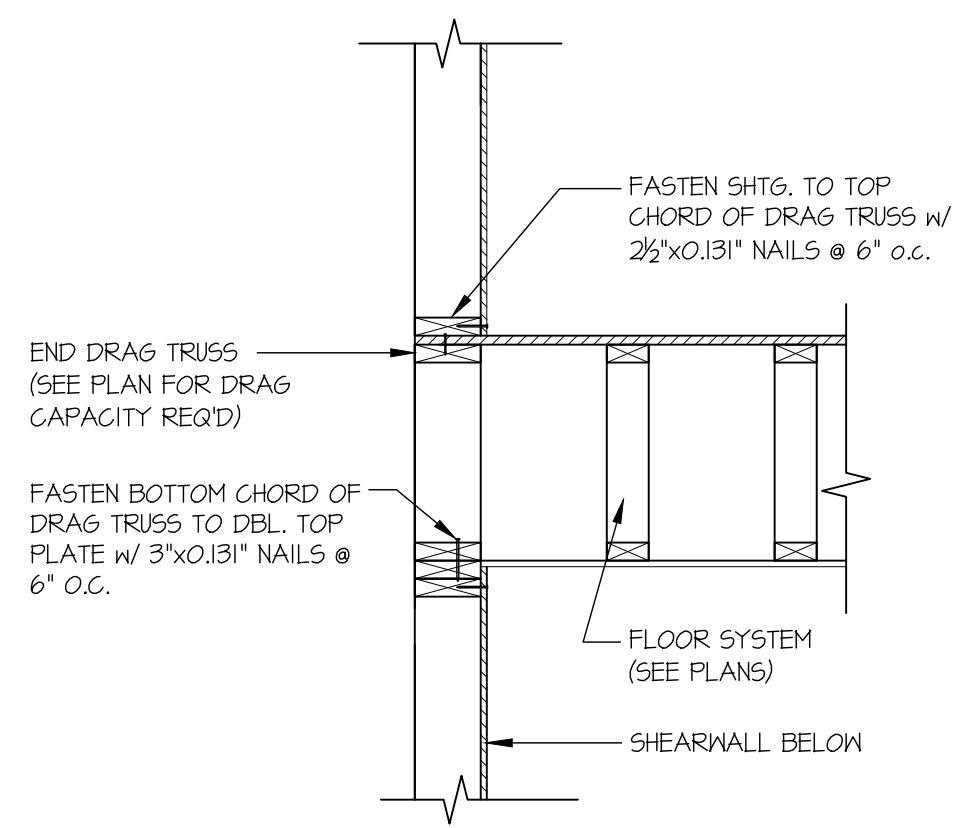
20 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0"
PERPENDICULAR FRAMING



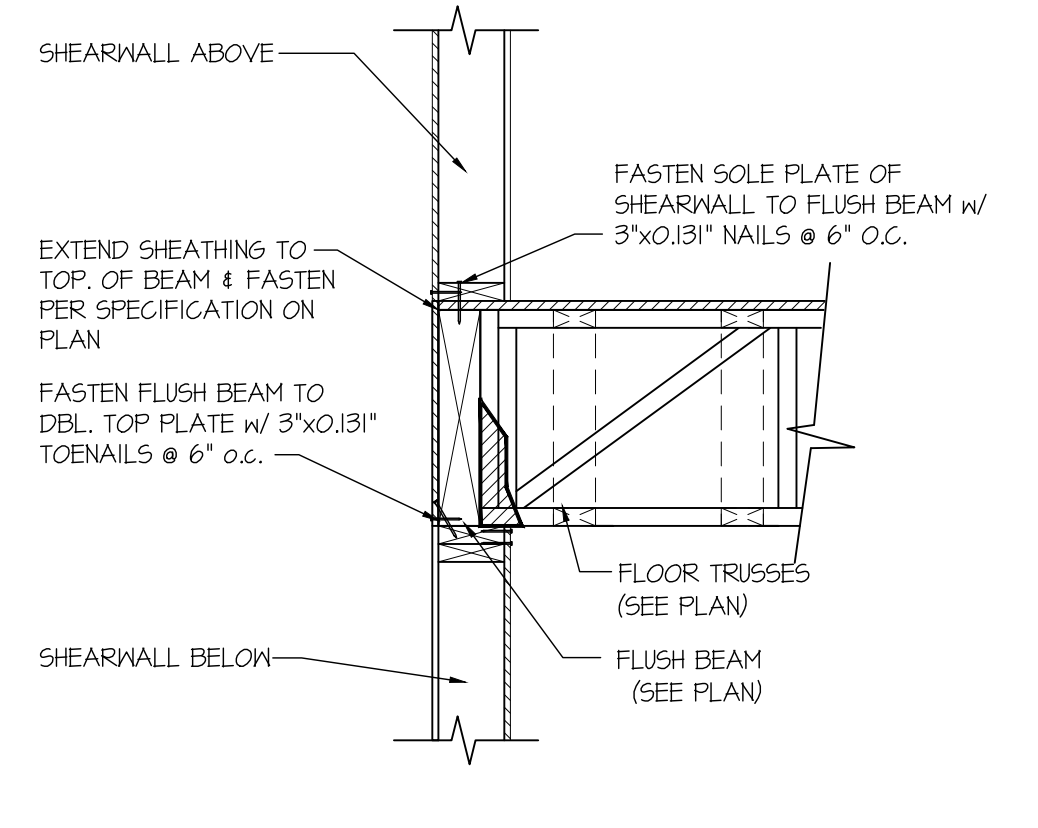
21 SECTION
SCALE: 3/4"=1'-0"
PARALLEL FRAMING



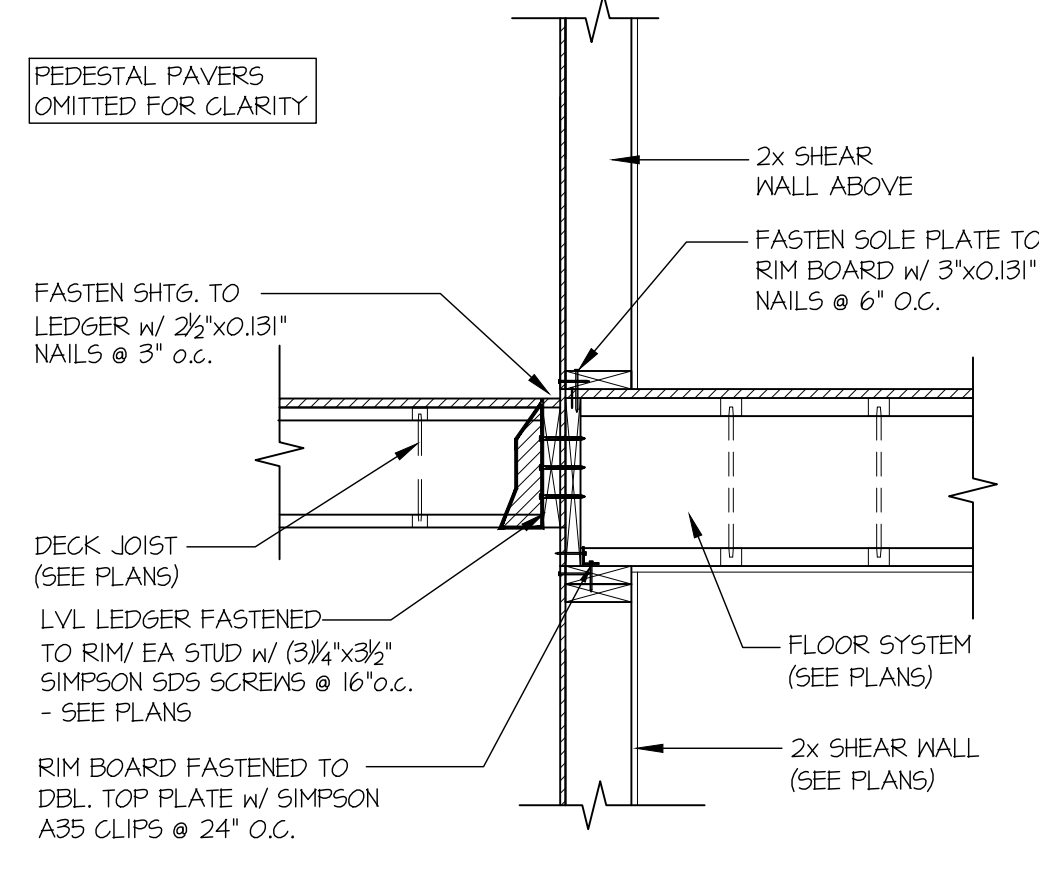
21A SECTION
SCALE: 3/4"=1'-0"
PARALLEL FRAMING



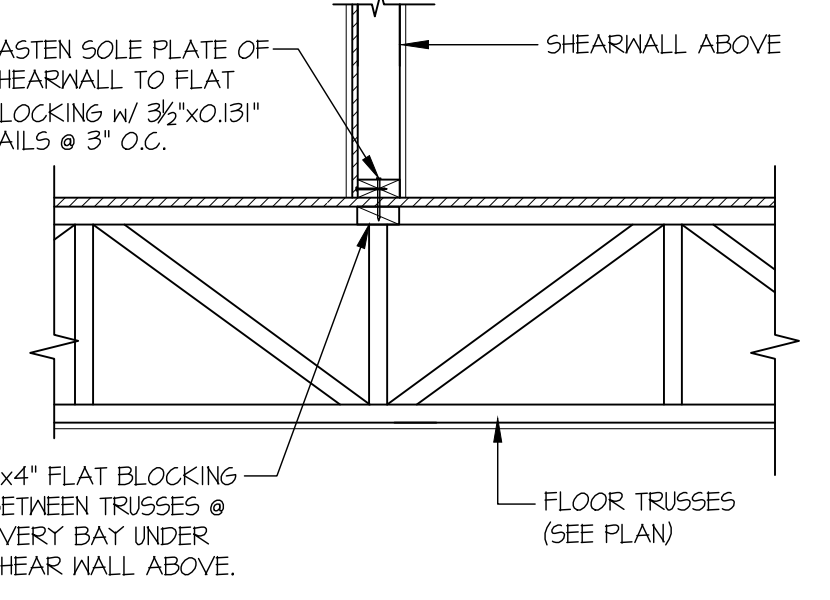
22 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/4"=1'-0"



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



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



25 SHEAR TRANSFER DETAIL @ INTERIOR SHEAR WALL
SCALE: 3/4"=1'-0"
PERPENDICULAR FRAMING



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M&K project number: 244-24010

project mgr: NJM
drawn by: RSC
issue date: 11-04-24

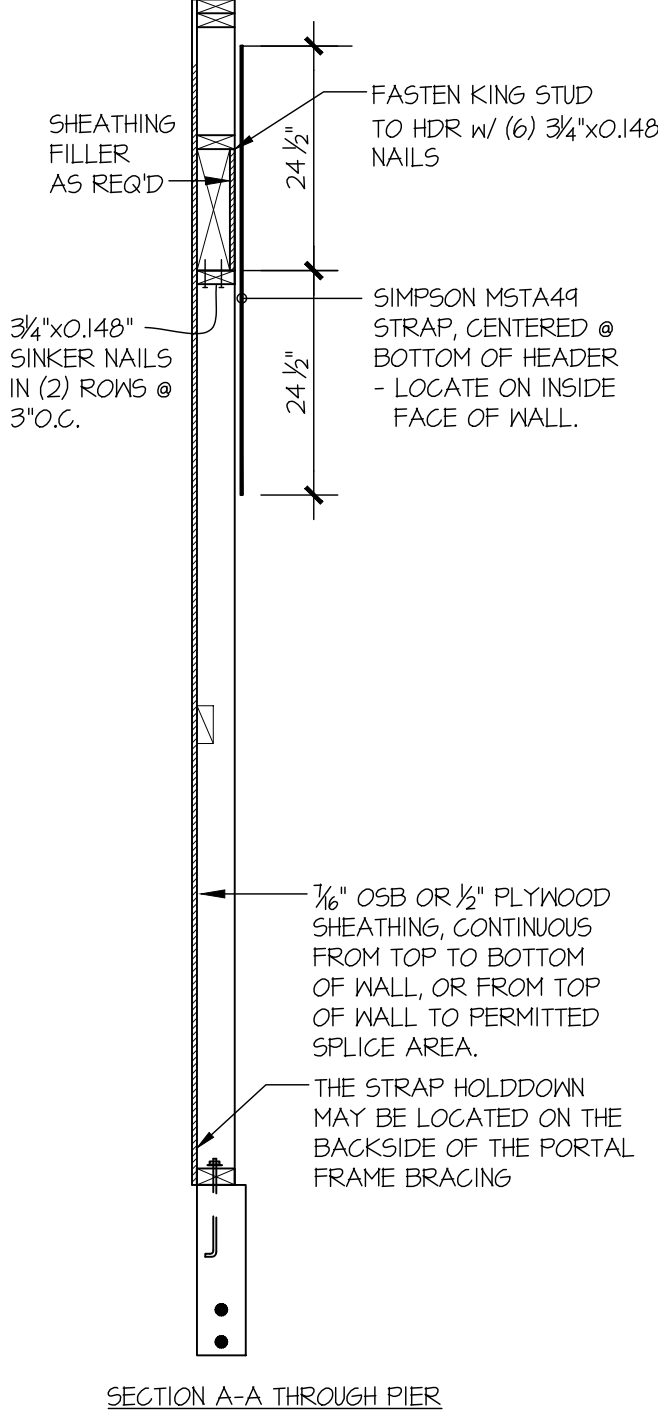
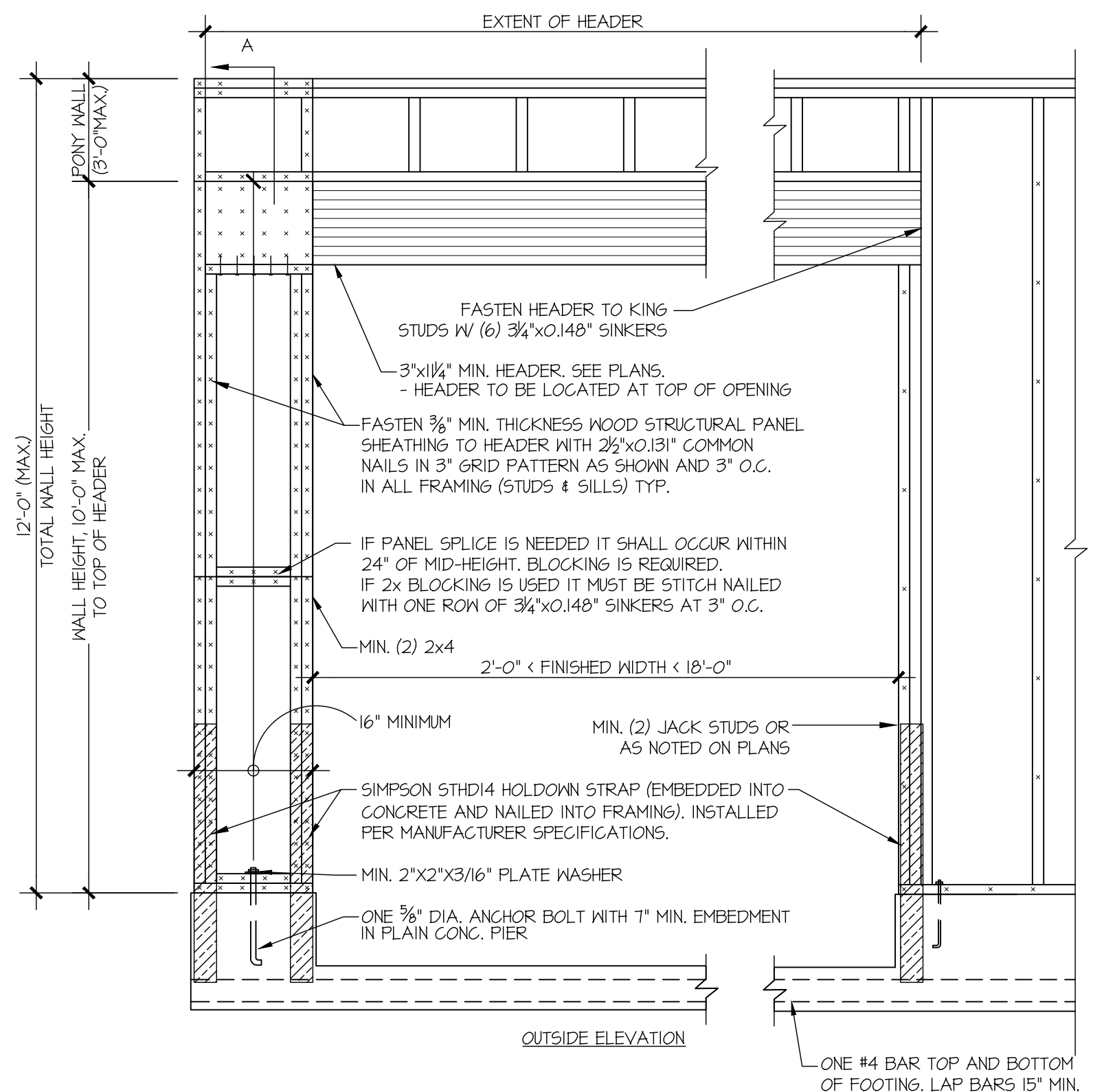
REVISIONS:

date:	initial:
12-31-2024	RJD
04-08-2025	RSC
GEOTECH REPORT	

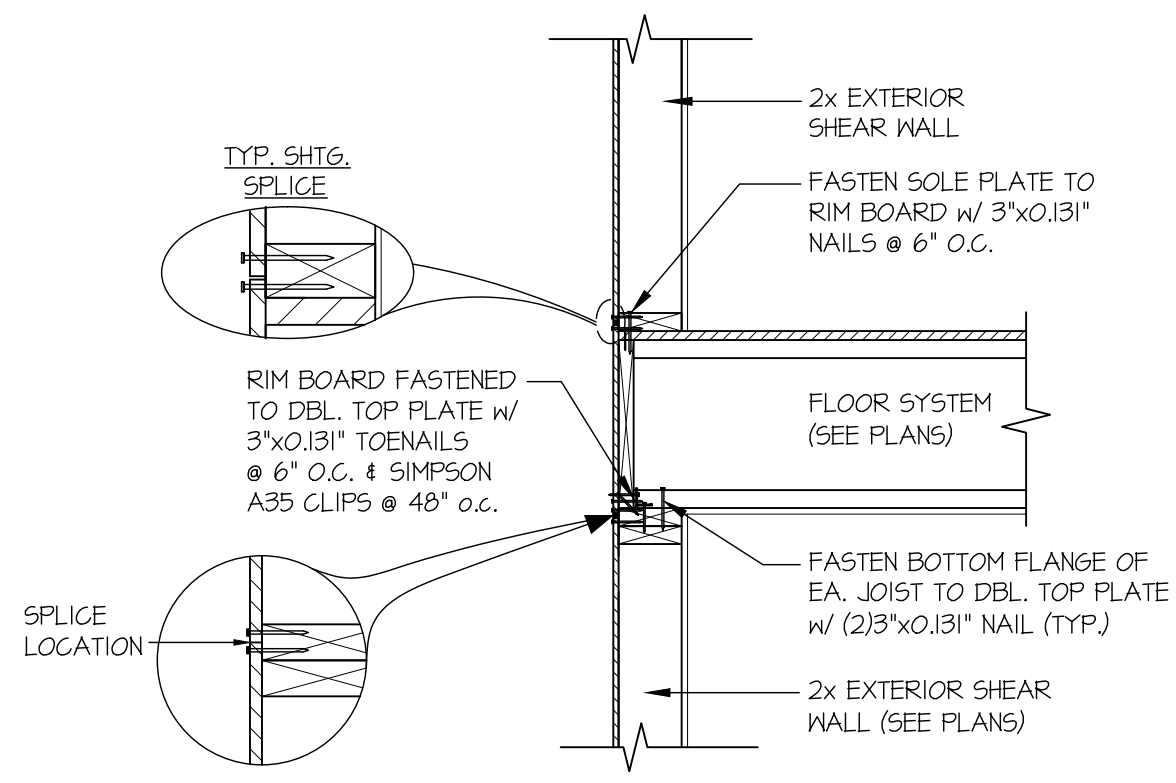
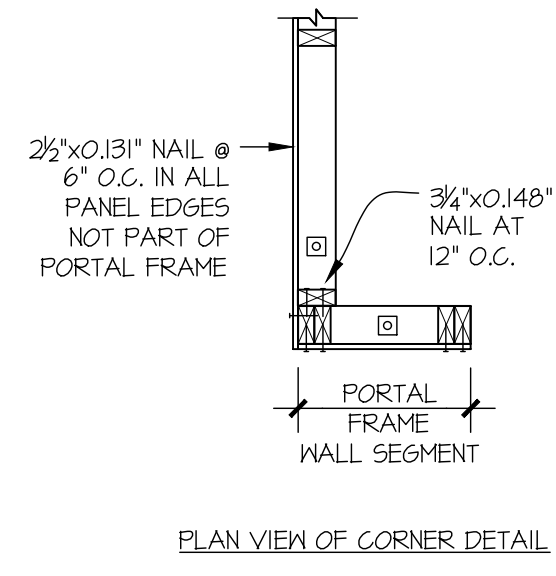
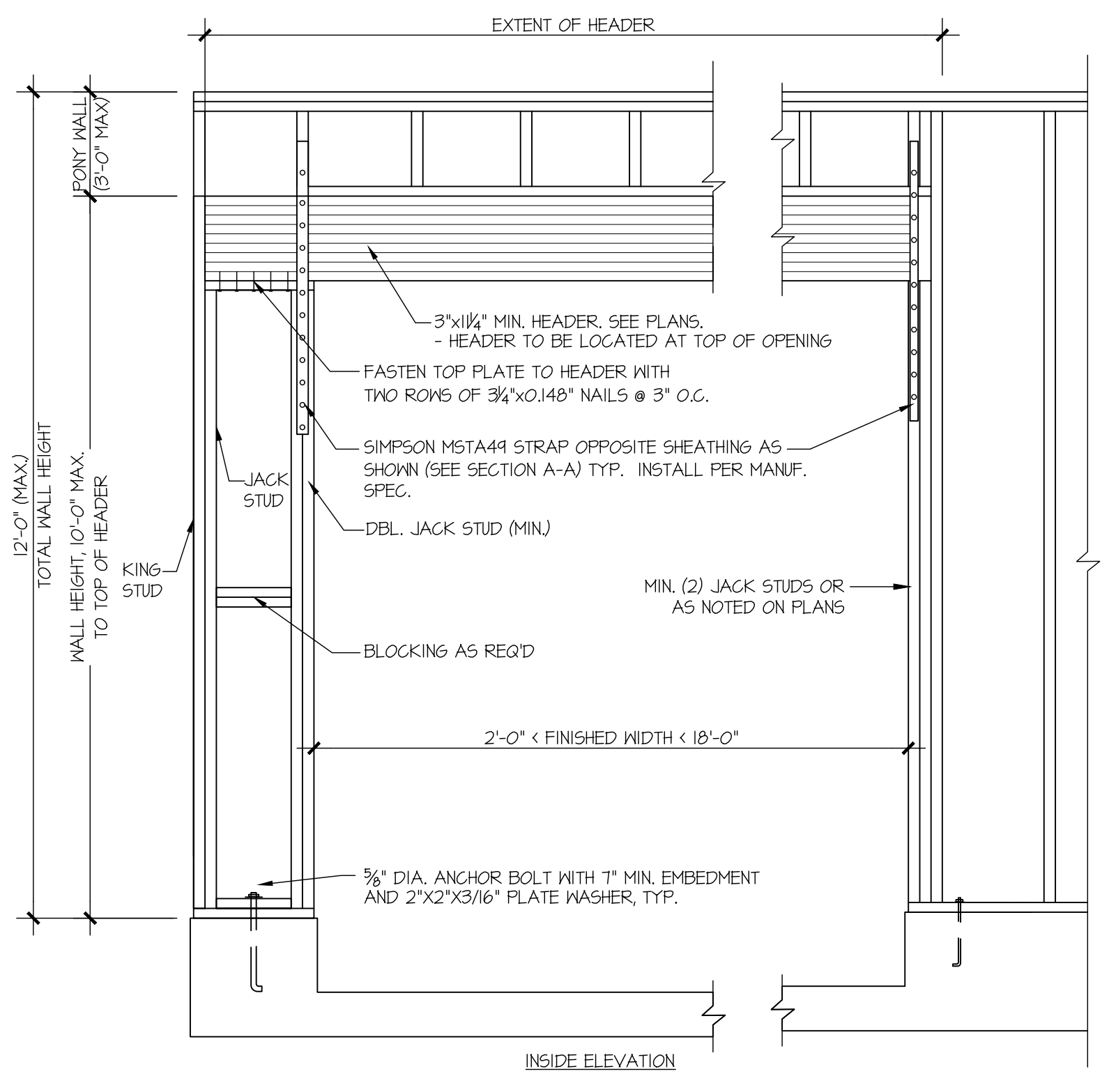
DESIGN BUILT HOMES

STRUCTURAL DETAILS
86TH AVE SE
LOT 2
MERCER ISLAND, WA

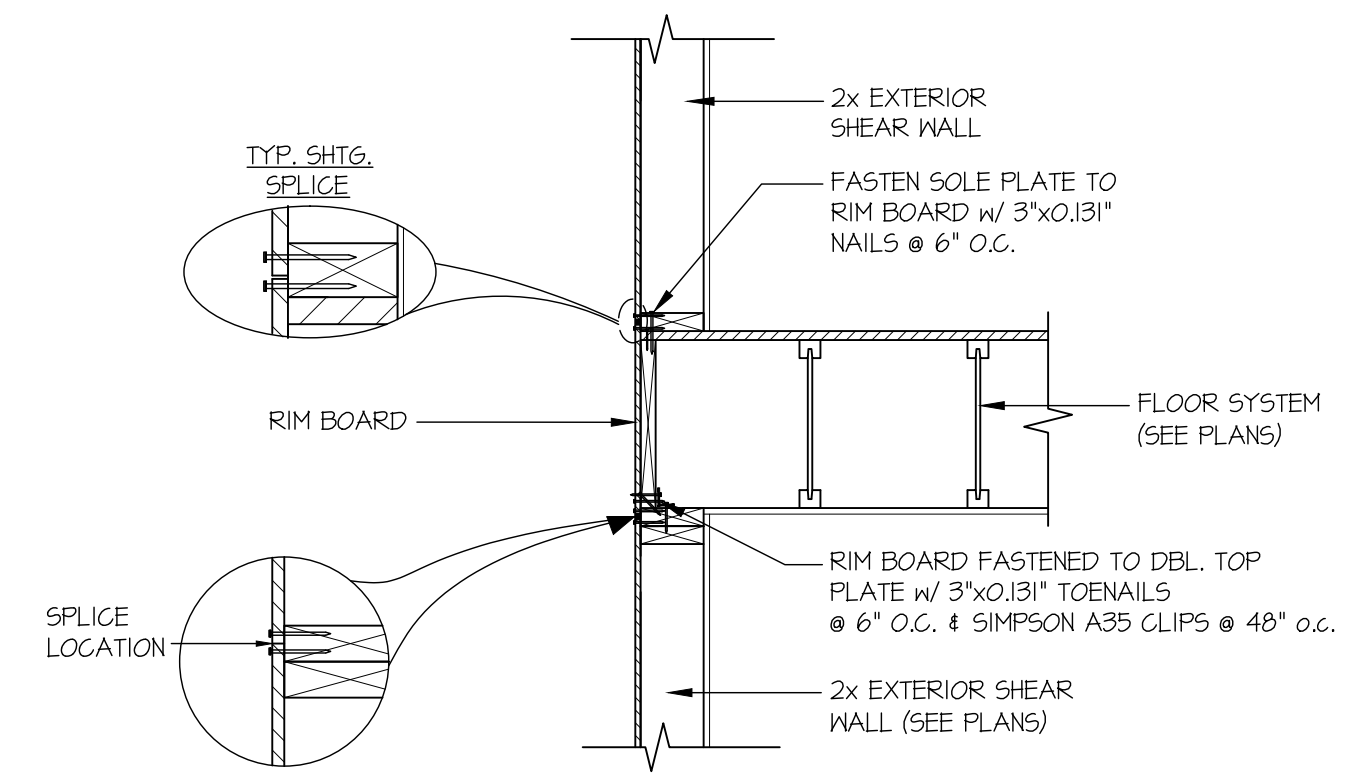
sheet:
SD-5



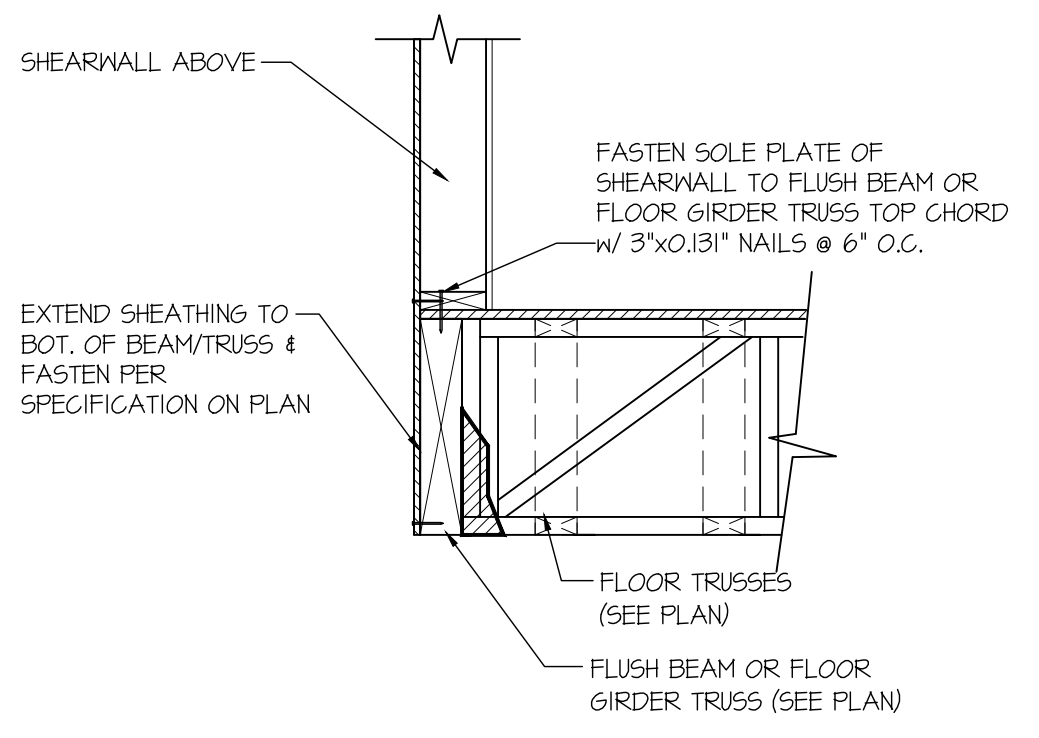
NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 3/4" OSB



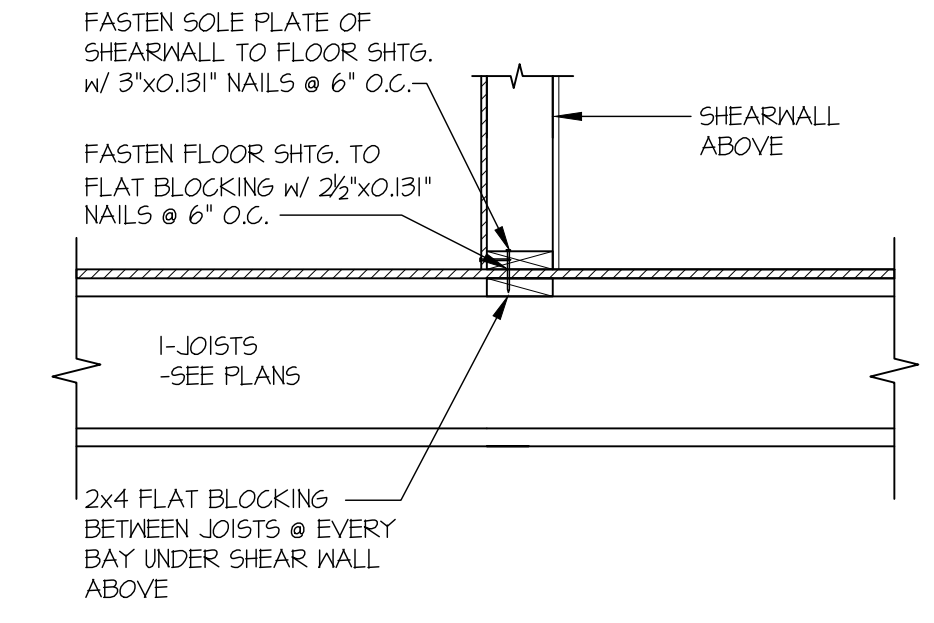
31 SECTION
SCALE: 3/4"=1'-0"



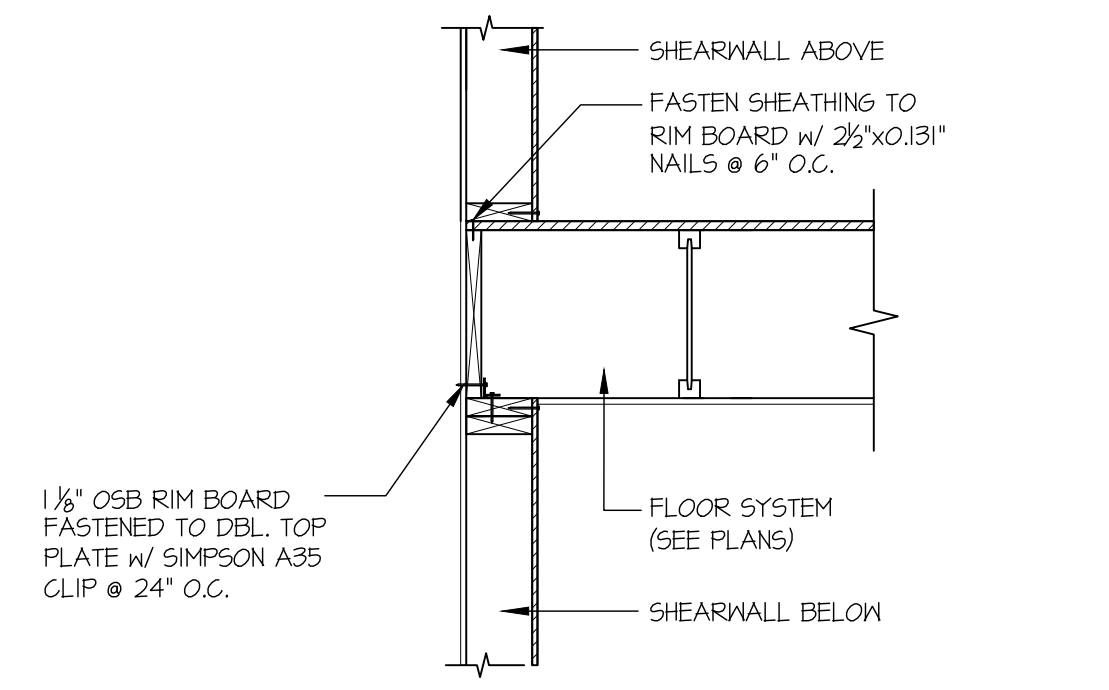
31 SECTION
SCALE: 3/4"=1'-0"



35 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



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

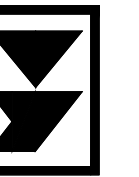


42 SHEAR TRANSFER DETAIL @ INTERIOR SHEAR WALL
SCALE: 3/4"=1'-0"

2 APA PORTAL FRAME DETAIL WITH HOLDOWNS
SCALE: N.T.S.



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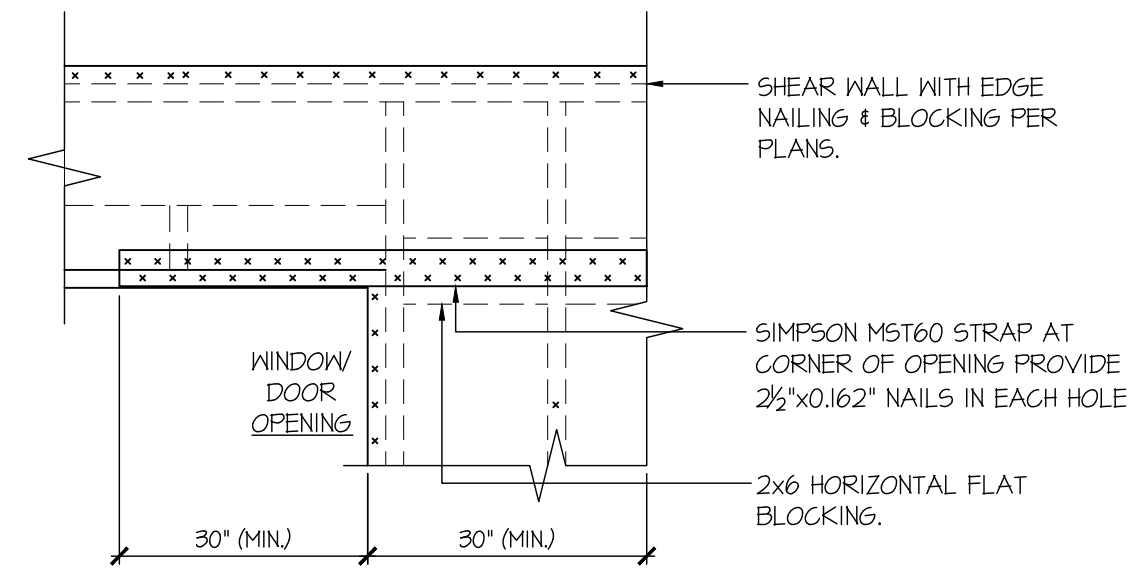
M&K project number:
244-24010
project mgr: **NJM**
drawn by: **RSC**
issue date: **11-04-24**

REVISIONS:
date: 12-31-2024 initial: RJD
ARCH REVISIONS: 04-08-2025 RSC
GEOTECH REPORT

DESIGN BUILT
HOMES

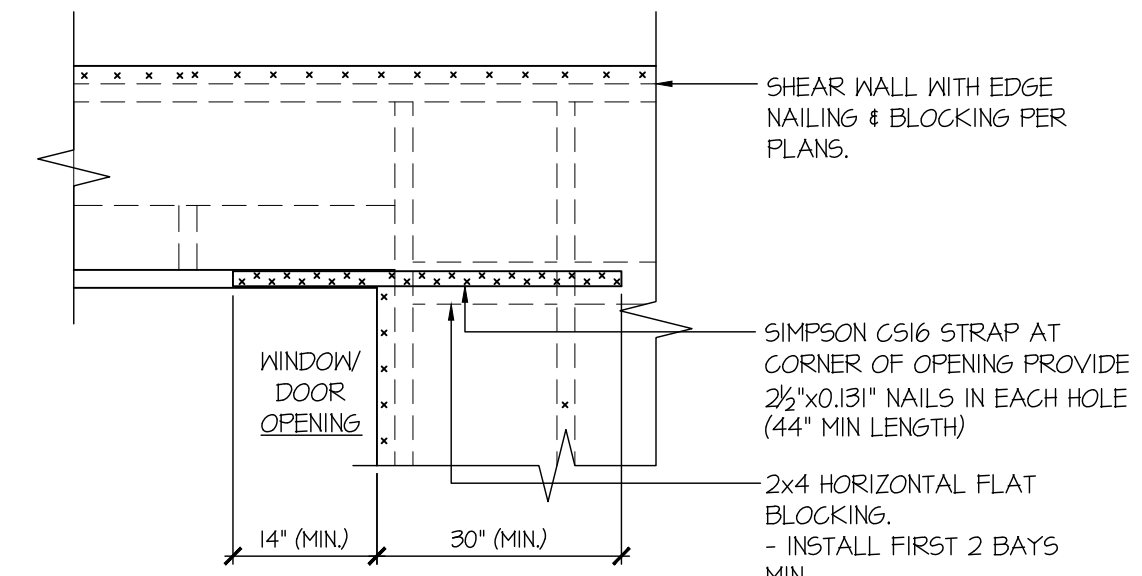
STRUCTURAL DETAILS
86TH AVE SE
LOT 2
MERCER ISLAND, WA

sheet:
SD-6



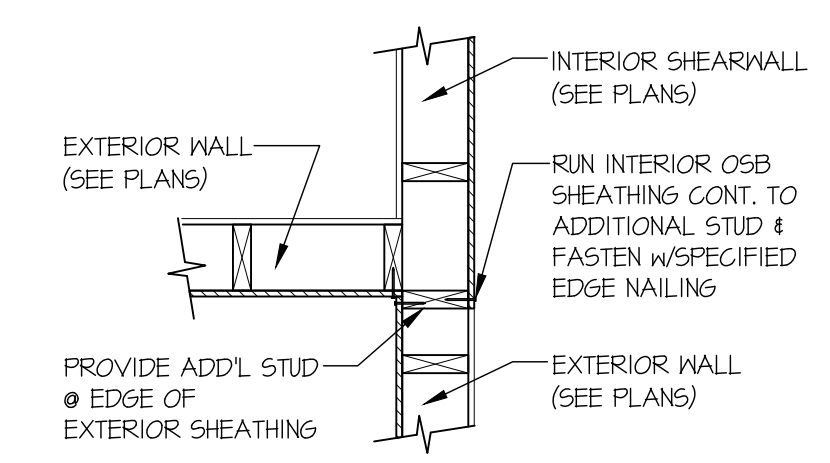
• ONLY REQUIRED WHERE SPECIFIED ON STRUCTURAL PLANS

92 EXT. WALL & INT. SHEARWALL
OPENING ELEVATION
SCALE: NTS

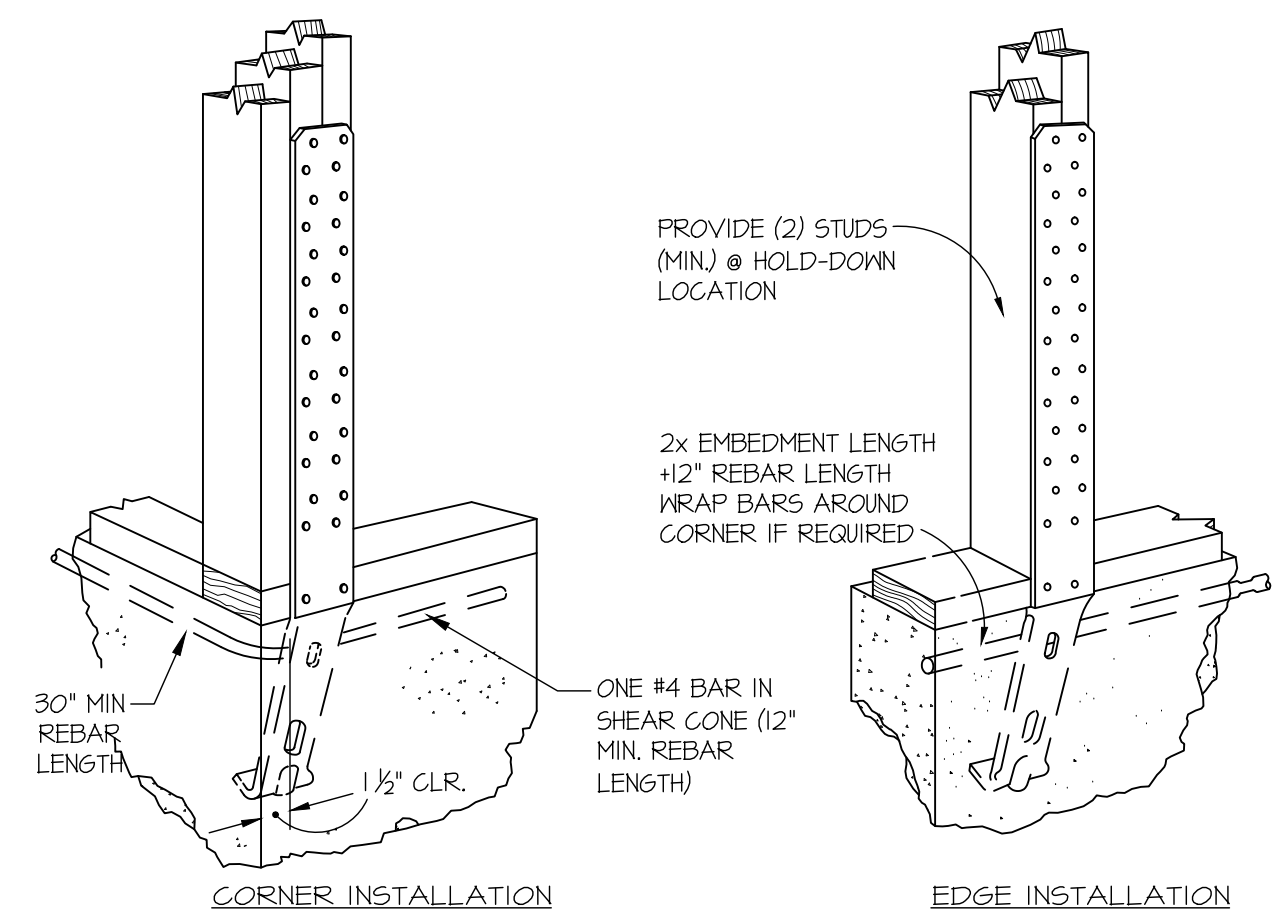


• DETAIL SIMILAR AT BOTTOM CORNERS OF WINDOWS.
• ONLY REQUIRED WHERE SPECIFIED ON STRUCTURAL PLANS
• IF MIN LENGTH IS NOT PROVIDED RUN STRAP TO END OF WALL

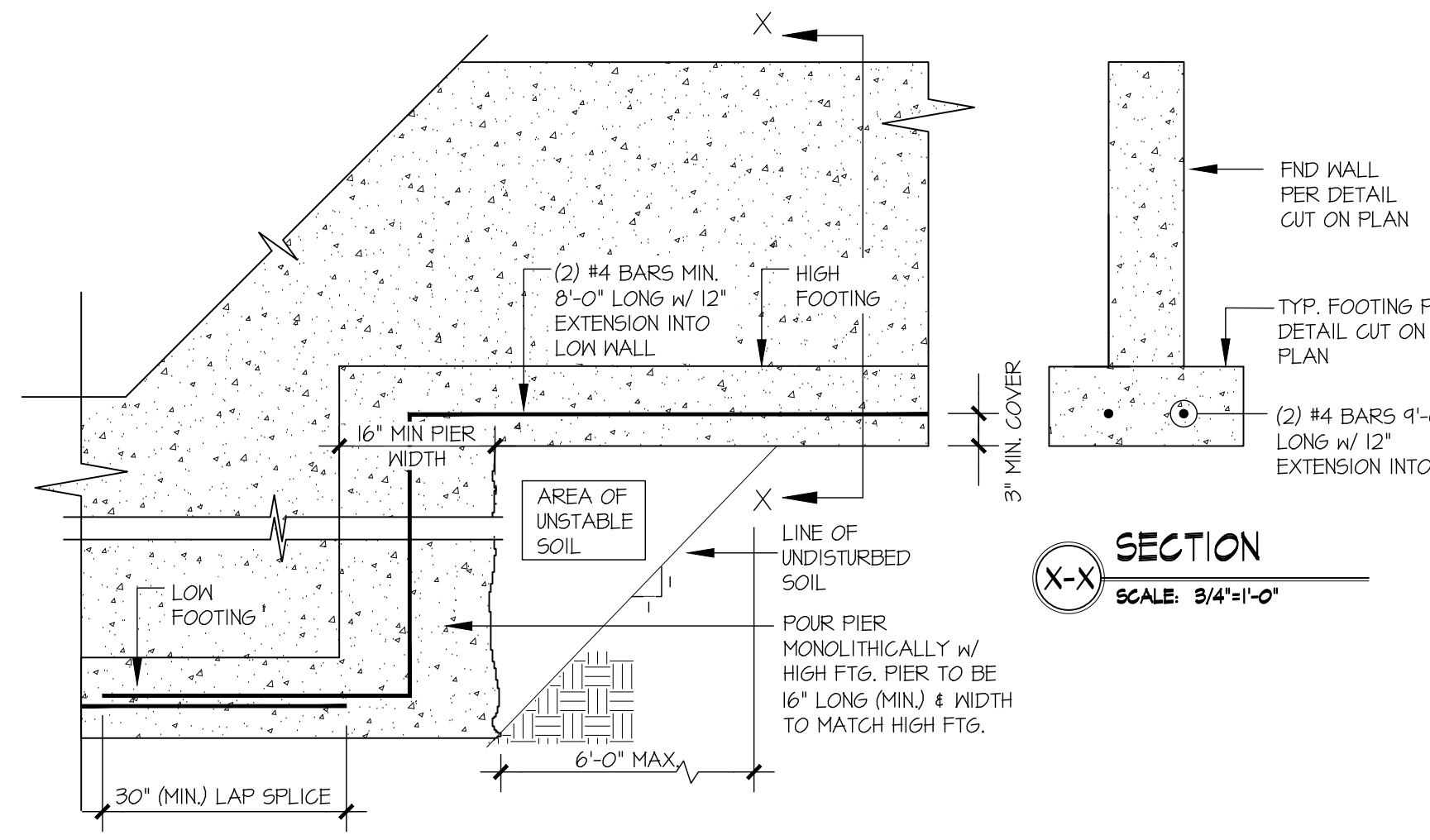
94 EXT. WALL & INT. SHEARWALL
OPENING ELEVATION
SCALE: NTS



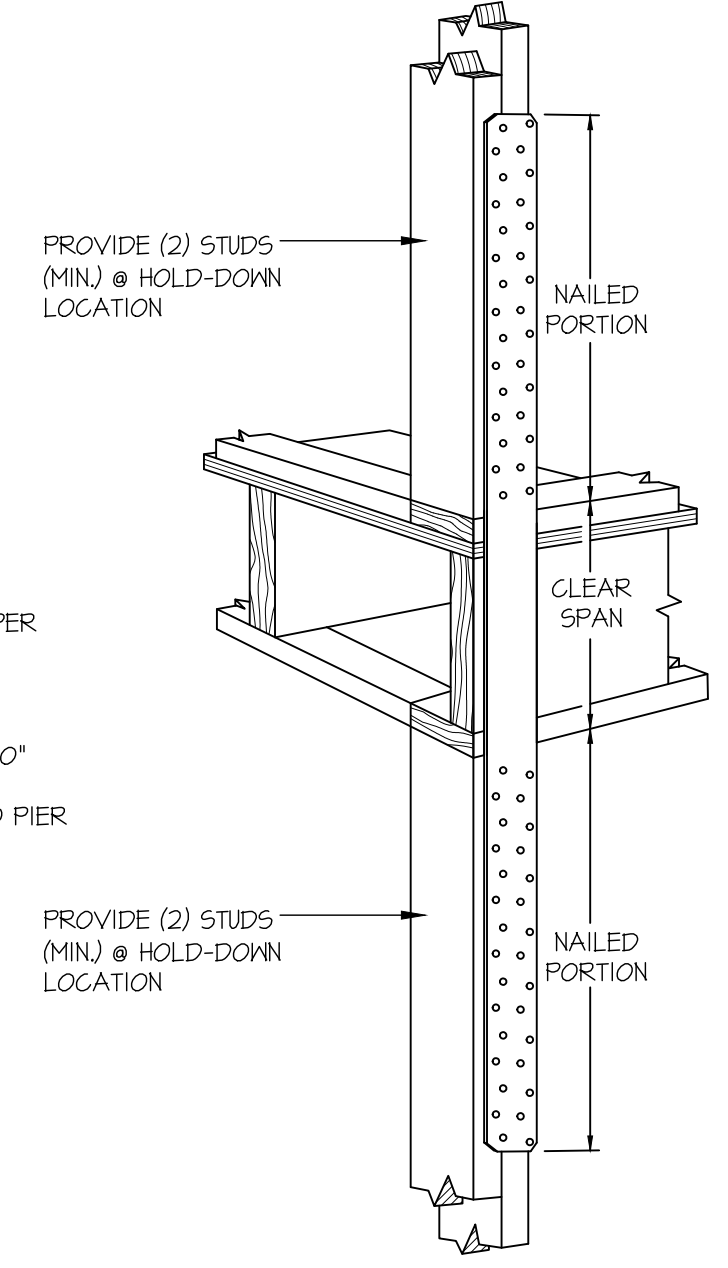
99 SHEAR TRANSFER DETAIL @
INTERSECTING INT. SHEARWALL
SCALE: 3/4"=1'-0" SHTS. OPPOSITE FACES



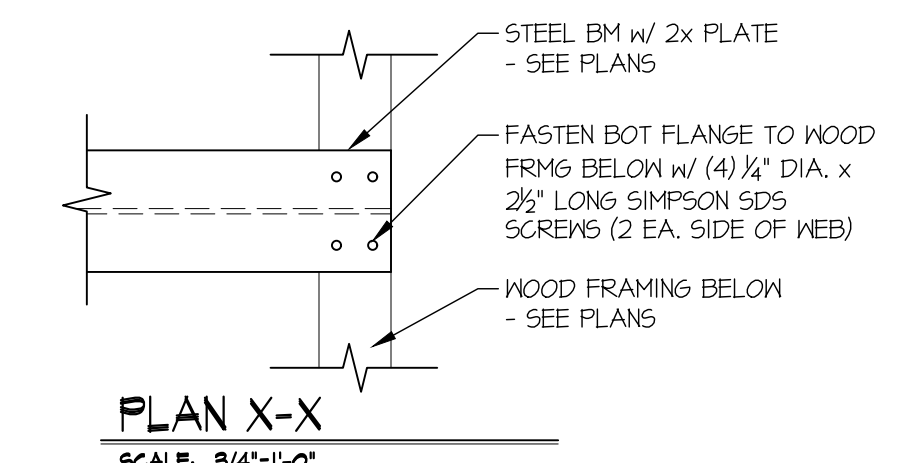
A TYPICAL HOLD-DOWN INSTALLATION
NOT TO SCALE
SIMPSON STRAP HD @ FOUNDATION



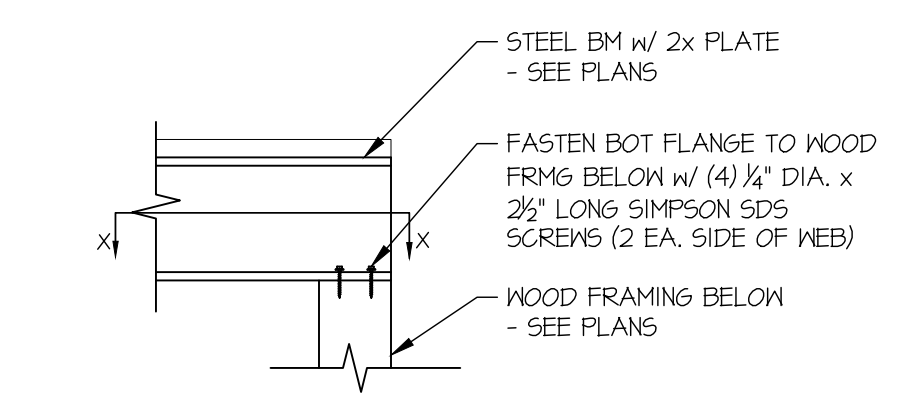
B TYPICAL STEPPED FOOTING
SCALE: 3/4"=1'-0"



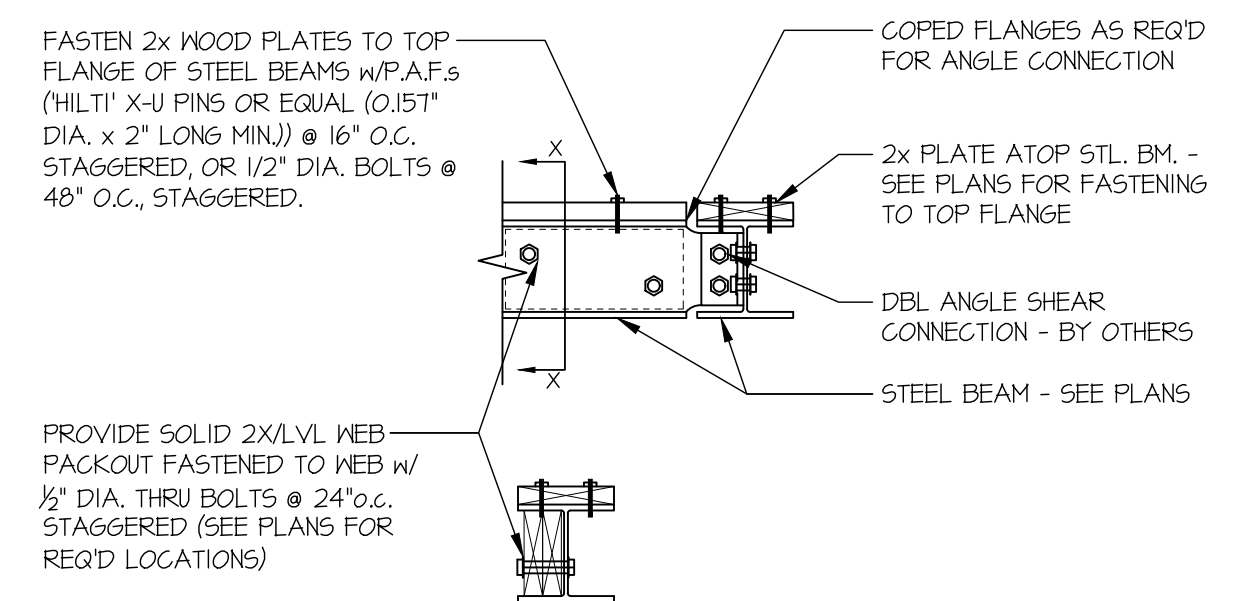
C TYPICAL HOLD-DOWN INSTALLATION
NOT TO SCALE
SIMPSON STRAP HD @ FLOOR FRAMING



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



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



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

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