



**8 VICINITY MAP**  
SCALE: NTS

**CITY OF MERCER ISLAND**  
Chapter 19.02 RESIDENTIAL DEVELOPMENT REGULATIONS SUMMARY

<b>ZONE:</b>	R-15
<b>MIN. LOT SIZE:</b>	15,000 Square Feet (SF)
<b>MIN. LOT WIDTH:</b>	90 Feet (FT)
<b>MIN. LOT DEPTH:</b>	80 FT
<b>MIN. FRONT YARD:</b>	20 FT (10 FT for accessory structures per MICC 19.02.040)
<b>MIN. REAR YARD:</b>	25 FT
<b>MIN. SIDE YARD:</b>	Lot width is 100'; 17% or 17' is cumulative required side yards; min. 5 FT.
<b>MAX. LOT COVERAGE:</b>	Maximum Impervious Surface Limits for Lots: Sites with slopes between 15% to less than 30% maximum coverage = 35% <b>18,616 x .35% = 6,515 sf</b>
<b>GROSS FLOOR AREA:</b>	MICC 19.02.020: 12,000 – or 40%: 18,616X.40 = 7,446 (max gross floor area allowed) <b>5433 Proposed</b>
<b>MAX. NO. OF STORIES:</b>	3
<b>BUILDING HEIGHT:</b>	30' from base elevation, 30' max downhill facade
<b>MAX. PROJECTIONS INTO YARDS:</b>	18 Inches

Land clearing, grading, filling, and foundation work are not permitted between October 1st and April 1st on lots such as this one due to the geologic hazards (erosion, potential slide) per MICC 19.07.020. Any work that is proposed during the wet season must submit a Seasonal Development Limitation Waiver for approval by the Building Official.

**6 ZONING INFO**

**PROPERTY ADDRESS**

8243 W. Mercer Way  
Mercer Island, WA 98040

**OWNER**

HU WEN + LI CHINAN  
c/o Mei Young  
11900 NE 1st Street, Suite 3083  
Bellevue, WA 98005

**CITY OF MERCER ISLAND PROJECT NUMBER:**

Project Number: PRE-010 (Pre-application meeting project number).

**TAX PARCEL NUMBERS:**

3358500454

**LEGAL DESCRIPTION:**

TRACTS 498, 499, 500, 501 AND 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON; EXCEPT THAT PORTION OF SAID TRACT 574 LYING NORTHEASTERLY OF A LINE PARALLEL WITH AND DISTANT 270 FEET FROM (AS MEASURED AT RIGHT ANGLES TO) THE SOUTHWESTERLY LINE OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET); TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING; AND TOGETHER WITH ANY UNPLATTED UPLANDS, LYING BETWEEN SAID TRACTS AND THE SHORELANDS ADJOINING; ALSO TOGETHER WITH THE NORTHEASTERLY 270 FEET OF THAT PORTION OF TRACT 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON, LYING SOUTHWESTERLY OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET), EXCEPT THE NORTHEASTERLY 150 FEET OF THE SOUTHEASTERLY 80 FEET THEREOF.

**DESCRIPTION:**

NEW SINGLE FAMILY HOME ON EXISTING VACANT LOT. EXISTING LOT IS APPROXIMATELY 18,616 SQUARE FEET AND THE PROPOSED SINGLE FAMILY HOME IS 3 LEVELS WITH APPROXIMATELY 5433 GROSS SQUARE FEET.

**4 GENERAL PROJECT INFO**  
SCALE: NA

**OWNER**

HU WEN + LI CHINAN  
c/o Mei Young  
11900 NE 1st Street, Suite 3083  
Bellevue, WA 98005  
tel: 425.214.7348  
email: mei@myrealestate.com

**ARCHITECT**

Peter Bocek (Principal)  
Michael Shreve (Project Manager)  
PB Architects Inc., P.S.  
617 8th Ave S  
Seattle, WA 98104  
tel: 206.443.9790  
e-mail: pbocek@pbarch.com  
e-mail: mshreve@pbarch.com

**GENERAL CONTRACTOR**

TBD  
X  
Street Address  
City, WA 98XXX

**CIVIL ENGINEER**

John E. Anderson  
Pace  
11255 Kirkland Way Suite 300  
Kirkland, WA 98033  
tel: 425.827.2014  
e-mail: johna@paceengrs.com

**STRUCTURAL ENGINEER**

Todd Phillips  
Phillips Structural Engineering  
P.O.Box 108  
Milton, WA 98354  
tel: 425.233.6088  
e-mail: todd@phillipsse.com

**SURVEYOR**

Danny Slager  
Terrane  
10801 Main Street, Suite 102  
Bellevue, WA 98004  
tel: 000.000.0000  
e-mail: danny@terrane.net

**ARBORIST**

Jennifer Wells  
Washington Tree Experts  
16732 Broadway Ave.  
Snohomish, WA 98296  
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e-mail: wletree@yahoo.com

**2 DIRECTORY OF CONTACTS**  
SCALE: NA

INDEX	ARCHITECTURAL	DATE OF LAST ISSUANCE
T-1.01	PROJECT OVERVIEW	07/12/19
T-1.02	PROJECT NOTES	07/12/19
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A-1.01	STEEP SLOPE PLAN	07/12/19
A-1.02	TREE PLAN	07/12/19
A-1.03	HARDSCAPE & COVERAGE	07/12/19
A-2.00	FOUNDATION PLAN	07/12/19
A-2.01	FLOOR PLAN - BASEMENT	07/12/19
A-2.02	FLOOR PLAN - MAIN	07/12/19
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A-2.04	ROOF PLAN	07/12/19
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INDEX	STRUCTURAL	DATE OF LAST ISSUANCE
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S-2	BASEMENT FLOOR FRAMING	10/30/18
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S-4	MAIN FLOOR FRAMING	10/30/18
S-5	MAIN FLOOR SHEAR WALLS, HOLDOWNS, AND STRUCTURE	10/30/18
S-6	SECOND FLOOR FRAMING	10/30/18
S-7	SECOND FLOOR SHEAR WALLS, HOLDOWNS, AND STRUCTURE	10/30/18
S-8	ROOF FRAMING	10/30/18
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C-1	T.E.S.C. PLAN	06/19/19
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C-3	DRAINAGE PLAN	06/19/19
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C-5	DETAILS	06/19/19

**1 DRAWING INDEX**  
SCALE: NA



**7 CONCEPTUAL VIEW**  
SCALE: NA



**HU WEN + LI CHINAN RESIDENCE**  
8243 WEST MERCER WAY  
MERCER ISLAND | WA | 98040

PROJECT REVISIONS	DATE	DESCRIPTION
1	12/JUL/2019	SUBMITTAL SET REV. 5
2		
3		
4		

PROJECT RELEASE	DATE	DESCRIPTION
1	12/JUL/2019	PRELIM
2	12/JUL/2019	PRE-APP REVIEW
3	30/MAR/2018	90% REVIEW
4	12/JUL/2019	SUBMITTAL REVISIONS

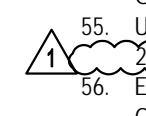
PROJECT PERMIT INFO	DATE	DESCRIPTION
1		
2		
3		

**T-1.01**  
PROJECT OVERVIEW

GENERAL NOTES

- 1. BUILDING CODE: INTERNATIONAL RESIDENTIAL CODE (IRC) 2015. ALL WORK SHALL COMPLY WITH THE APPLICABLE CODES FOR CITY, COUNTY, AND STATE.
2. UNDER SEPARATE PERMIT: MECHANICAL, PLUMBING, ELECTRICAL.
3. SPECIAL INSPECTIONS: PER CITY REQUIREMENTS, PER GEOTECHNICAL REPORT REQUIREMENTS, PER STRUCTURAL REQUIREMENTS.
4. THE CONSTRUCTION DOCUMENTS, OF WHICH THESE DRAWINGS ARE A PART OF, ARE CONCEPTUAL IN NATURE. THEY SCHEMATICALLY INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION...
5. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR ACCURACY OF THE ENGINEERING DATA SUPPLIED BY OTHERS.
6. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AMONG ALL DRAWINGS PRIOR TO CONSTRUCTION...
7. IN THE EVENT OF DISCREPANCIES OR CONTRADICTORY INFORMATION ON THE DRAWINGS OR IN THE NOTES OR IN THE SPECIFICATIONS OR ANY OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS, IT IS THE OBLIGATION OF THE CONTRACTOR TO NOTIFY THE ARCHITECT OF THE DISCREPANCIES AND TO OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK...
8. ALL CONTRACT DOCUMENTS ARE TO BE CONSIDERED AND INTERPRETED FOR BIDDING AND CONSTRUCTION PURPOSES AS A COMPLETE WHOLE. NO PART OF THE CONTRACT DOCUMENTS SHALL BE DISTRIBUTED, CONSIDERED OR USED IN ANY WAY INDEPENDENT OF THE COMPLETE SET OF DOCUMENTS.
9. THE ARCHITECT SHALL HAVE FINAL AUTHORITY WITH REGARDS TO INTERPRETATION OF THE INTENT AND SPIRIT OF THE CONTRACT DOCUMENTS.
10. WHEN USED IN THESE DOCUMENTS, THE TERM 'ALIGN' MEANS TO ACCURATELY CONSTRUCT SO THAT THE FINISHED SURFACES ARE IN THE SAME PLANE...
11. THE CONTRACTOR SHALL CONSIDER THE GEOTECHNICAL REPORT (WHERE APPLICABLE) AS A PART OF THE CONTRACT DOCUMENTS AND SHALL REVIEW AND FOLLOW ALL RECOMMENDATIONS AND REQUIREMENTS SET FORTH IN THE REPORT...
12. THE CONTRACTOR SHALL ASSUME THAT THE SAME FINISH MATERIAL SHALL BE USED FOR ALL SURROUNDING ABUTTING, AND ADJOINING SURFACES FOR AREAS AND ITEMS NOTED ON THE DRAWINGS...
13. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES REQUIRED TO PERFORM THE WORK.
14. CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION...
15. THE CONTRACTOR IS RESPONSIBLE FOR ALL BRACING AND SHORING DURING CONSTRUCTION, AS WELL AS ALL SAFETY PRECAUTIONS.
16. THE CONTRACTOR SHALL MAKE AVAILABLE THE JOB SITE, THE BUILDING UNDER CONSTRUCTION, AND ALL RELATED STRUCTURES AND AREAS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD...
17. THE CONTRACTOR SHALL COORDINATE ALL SUB-CONTRACTORS AND WORK FOR THE PROJECT IN SUCH A MANNER AS TO ALLOW CONSISTENT AND REASONABLE PROGRESS TOWARDS COMPLETION OF THE PROJECT IN A TIMELY MANNER...
18. ALL DIMENSIONS ARE TO FACE OF STUDS OR CONCRETE UNLESS INDICATED OTHERWISE ON THE PLANS. WINDOWS AND DOORS ARE DIMENSIONED TO THE CENTER OF THE OPENING UNLESS NOTED OTHERWISE.
19. SITE DRAINAGE SHALL CONFORM TO ALL LOCAL REGULATIONS, CODES AND ORDINANCES AND TO APPLICABLE IBC/IRC CODES.
20. PROVIDE CONTINUOUS 6" ROUND RIGID PERFORATED PERIMETER FOOTING DRAIN IN GRAVEL FILL WITH FILTER FABRIC WRAP AT THE EXTERIOR FACE OF ALL FOUNDATION WALL FOOTINGS.
21. CONNECT ALL DOWNSPOUTS AND ROOF DRAINAGE LINES TO A 6" ROUND RIGID ROOF DRAIN TIGHT-LINE.
22. PROVIDE A 4" THICK LAYER OF COMPACTED GRAVEL FILL, SUCH AS CRUSHED ROCK, UNDER ALL INTERIOR CONCRETE SLAB-ON-GRADE FLOORS.

- 23. APPROVED GRAVEL FILL CONSISTS OF WASHED, CLEAN, FREE DRAINING GRAVEL RANGING FROM 1/4" TO 3/4" IN SIZE. UNLESS NOTED OTHERWISE IN GEOTECHNICAL REPORT.
24. APPLY WATERPROOFING TO THE EXTERIOR OF ALL CONCRETE FOUNDATION WALLS FROM TOP OF FOOTING TO FINISH GRADE. UNLESS NOTED OTHERWISE, WATERPROOFING SHALL BE 'GREYWALL', MANUFACTURED BY RUBBER POLYMER CONDUCTOR HEADS PRIOR TO INSTALLATION.
25. ALL EXTERIOR FRAME WALLS TO BE 2x6 STUDS AT 16" O.C. PER THE STRUCTURAL NOTES OF THESE DOCUMENTS. UNLESS NOTED OTHERWISE.
26. WOOD FRAMED FLOOR SYSTEMS THAT SPAN OVER RAWM, SPACES, UNEXCAVATED AREAS, OR OTHER AREAS OF EXPOSED GROUND WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION SHALL MAINTAIN THE FOLLOWING MINIMUM CLEARANCES FROM THE BOTTOM OF THE WOOD MEMBER TO THE GROUND: JOISTS- 18" CLEAR; BEAMS OR GIRDERS- 12" CLEAR.
27. EXTERIOR WOOD FRAMED TRELLISES AND OTHER WOOD FRAMED STRUCTURES EXPOSED TO WEATHER SHALL BE CONSTRUCTED OF CEDAR, REDWOOD, OR PRESSURE TREATED (P.T.) LUMBER.
28. WOOD IN DIRECT CONTACT WITH CONCRETE TO BE PRESSURE TREATED (P.T.).
29. PROVIDE FIREBLOCKING IN CONCEALED SPACES OF WALLS INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS VERTICALLY AT THE CEILING AND FLOOR LEVEL.
30. PROVIDE A MINIMUM OF 1-HOUR OCCUPANCY SEPARATION BETWEEN THE HABITABLE SPACES OF THE HOUSE AND THE GARAGE.
31. PROVIDE A MINIMUM 1-HOUR OCCUPANCY SEPARATION ON ALL WALLS AND CEILING IN SPACES UNDERNEATH STAIRWAYS.
32. PROVIDE A 20-MINUTE RATED DOOR WITH WEATHER STRIPPING AND SMOKE SEALED THRESHOLD BETWEEN THE HABITABLE SPACES OF THE HOUSE AND THE GARAGE.
33. IN BASEMENTS, GARAGES, MECHANICAL ROOMS OR OTHER AREAS SUSCEPTIBLE TO MOISTURE INTRUSION, HOLD G.W.B. A MINIMUM OF 3/4" OFF OF CONCRETE SLABS ON GRADE OR FINISHED FLOORS.
34. ALL UNDER FLOOR AREAS WITHIN THE PERIPHERY OF THE FOUNDATION SHALL BE ACCESSIBLE BY AN UNOBSTRUCTED MINIMUM CLEAR OPENING OF 18" X 24".
35. PROVIDE A MINIMUM OF 2' X 3' UNOBSTRUCTED ACCESS TO ALL ATTICS OF ROOF AREAS WITH A NET CLEAR HEIGHT OF 30" OR GREATER FROM THE TOP OF THE CEILING JOIST TO THE BOTTOM OF THE RAFTERS.
36. UN-CONDITIONED UNDER-FLOOR AREAS TO BE VENTILATED BY AN APPROVED MECHANICAL MEANS OR BY OPENINGS IN THE EXTERIOR FOUNDATION WALLS.
37. PROVIDE ATTIC VENTILATION OF 1/50 OF ATTIC AREA IF ALL VENTILATION IS LOCATED AT THE SOFFIT.
38. APPLICATION AND INSTALLATION OF INSULATION AND VAPOR BARRIERS SHALL COMPLY WITH STATE OF WASHINGTON THERMAL INSULATION STANDARDS.
39. ALL LOW SLOPE ROOF AND WATERPROOF DECK AREAS TO HAVE A MINIMUM ROOF SLOPE OF 1/4" PER FOOT.
40. THE ROOFING INSTALLER MUST BE APPROVED BY THE ROOFING PRODUCT MANUFACTURER AND THE ARCHITECT.
41. PLUMBING RISERS AND VENTS ARE NOT SHOWN IN THE CONSTRUCTION DOCUMENTS FOR CLARITY.
42. PROVIDE ROOF DRAINS (R.D.) WITH DOWN SPOUTS (D.S.) WHERE INDICATED ON THE PLAN.
43. EACH THRU-WALL ROOF DRAIN SCUPPER ARE INDICATED ON THE DRAWINGS.
44. PROVIDE DOWN SPOUTS (D.S.) WHERE INDICATED ON THE PLANS AND DRAWINGS.



EGRESS SHALL BE PROVIDED FROM EACH SLEEPING ROOM. EGRESS WINDOWS SHALL BE PROVIDED WHERE DOORS WHICH OPEN DIRECTLY TO THE EXTERIOR FROM THE SLEEPING ROOM ARE NOT PROVIDED.

- 45. DISPERSE DOWN SPOUTS (D.S.) WHERE INDICATED ON THE PLANS AND DRAWINGS.
46. PROVIDE SHEET METAL FLASHING AT ALL VALLEYS AND CHANGES IN ROOF PITCH.
47. PROVIDE A MINIMUM OF 24 GAUGE FLASHING AND COUNTER FLASHING AT ALL ROOF PENETRATIONS AND INTERSECTIONS OF ROOF PLANES TO VERTICAL SURFACES AND PARAPET CAPS.
48. PROVIDE DRIP CAPS AND FLASHING AT ALL HORIZONTAL INTERRUPTIONS OF SIDING AND CHANGES FROM ONE SIDING MATERIAL TO ANOTHER.
49. ALL FLASHING AND SHEET METAL WORK SHALL CONFORM TO THE MOST CURRENT EDITION OF THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) ARCHITECTURAL SHEET METAL MANUAL.
50. INSTALL SILL, JAMB AND HEAD FLASHING PAPER AROUND ALL WALL PENETRATIONS.
51. ALL HINGED SHOWER DOORS SHALL OPEN OUTWARD AND SHALL NOT REQUIRE ANY SPECIAL KNOWLEDGE TO OPEN.
52. ALL DOORS SHALL CONFORM TO THE MOST CURRENT EDITION OF THE ARCHITECTURAL WOODWORK INSTITUTE (AWI) QUALITY STANDARDS.
53. ALL NEW GLAZING SHALL COMPLY WITH APPLICABLE IBC/IRC CODES AND WASHINGTON STATE SAFETY GLASS LAW.
54. GLAZING IN LOCATIONS SUBJECT TO HUMAN IMPACT SHALL BE WIRE REINFORCED.
55. EGRESS SHALL BE PROVIDED FROM EACH SLEEPING ROOM.
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57. SITE BUILT SHOWER COMPARTMENTS SHALL BE PER PLANS AND DRAWINGS.
58. INSTALL ALL PREFABRICATED FIREPLACES, STOVES AND RELATED ASSEMBLIES IN ACCORDANCE WITH U.L. APPROVED MANUFACTURER'S SPECIFICATIONS.
59. PROVIDE A MINIMUM OF 2" CLEAR FROM FIREPLACES, SMOKE CHAMBERS AND CHIMNEYS TO ALL COMBUSTIBLES.
60. ALL HABITABLE ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA.

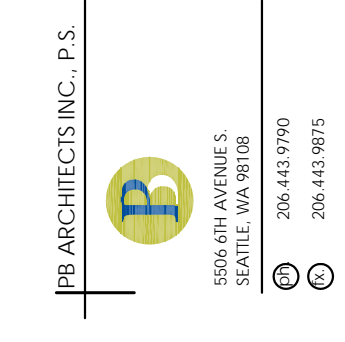
AREA, EXCEPT WHERE MECHANICAL VENTILATION AND ARTIFICIAL LIGHT IS PROVIDED. NATURAL VENTILATION SHALL BE THROUGH WINDOWS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOORS. THE MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE FLOOR AREA. EXCEPT IN ROOMS SUPPLIED WITH MECHANICAL VENTILATION PRODUCING .35 AIR CHANGES PER HOUR OR SERVED BY A WHOLE HOUSE VENTILATION SYSTEM SUPPLYING 1.5 CFM OF FRESH AIR PER OCCUPANT.
61. VENT ALL CLOTHES DRYERS, EXHAUST FANS, AND COOKTOP/RANGE HOODS TO THE OUTSIDE.
62. PROVIDE SMOKE ALARMS AND DETECTORS AS REQUIRED BY IRC SECTION R313.
63. PROVIDE GUARDRAILS PER THE PLANS AND DRAWINGS.
64. ALL HANDRAIL SHALL BE PROVIDED AT EVERY STAIRWAY WHETHER FOUR OR MORE RISERS.

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Table with 4 columns: A/C, ADJ, APPR, ASTM, AWG, BLDG, BLK, B/S, CLG, CLR, CONC, CONST, CO, DBL, DIA, DIM, DN, DS, DTL, DWG, E, EA, EA, EL, ELEV, ELEC, EQP, EQUIP, E/W, EX, EXT, FIN, FLR, FLR, FT, GA, GALV, GRND, G/WB, HWOD, HORIZ, HR, HT, HVAC, I.D., IN, INFC, INSO, INSUL, INT, LB(S), MAX, MECH, MET, MANUF, MGR, MIN, MIS, N, NA, NIC, NOT, O.C., ON, OP, OPP, PLYWD, PLY, PRJ, PROP, PT, RECD, RM, R.O., S, SCHED, SD, SHIT, SKMLR, SKYLK, SOG, SPEC, SQ, SS, STL, STRUC, SUSP, S.V., S.W., THRU, TRND, T.O.C., T.O.M, TS, TYP, UL, UNO, UNO, U.S., VERT, VIF, VT, W, W/W, W/P, W01, D01, REQUIRED, ROUGH OPENING, SCHEDULE, SMOKE DETECTOR, SHEET, SMALLER, SKYLIGHT, SLAB-ON-GRADE SPECIFICATION, SQUARE, STAINLESS STEEL, STEEL, STRUCTURAL SUSPENDED, SHEET VINYL, SIDEWALK, THROUGH TRND, TOP OF CONCRETE, TOP OF MASONRY, TUBE STEEL, TYPICAL, UNDERWRITERS LAB UNLESS NOTED OTHERWISE, UNO UNLESS NOTED OTHERWISE, VERTICAL VERIFY IN FIELD, VINYL TILE, WEST WITH WINDOW WITHOUT WORKING POINT, WEST WITH WINDOW WITHOUT WORKING POINT, WEST WITH WINDOW WITHOUT WORKING POINT.

Table with 3 columns: SYMBOL, DESCRIPTION, REFERENCE. Symbols include ANGLE, AND, AT, CENTER LINE, NUMBER, PROPERTY LINE, SMOKE DETECTOR, SMOKE/CARBON MONO DETECTOR, REVISION, KEY NOTE, ASSEMBLY TYPE, ROOM NUMBER, EXHAUST FAN, WHOLE HOUSE FAN, DETAIL REFERENCE, SECTION REFERENCE, GRID LABEL, EXT. OPENING TAG, DOOR TAG.

ABBREVIATIONS & SYMBOLS



WENHUI RESIDENCE 8243 WEST MERCER WAY MERCER ISLAND | WA | 98040

PROJECT REVISIONS table with columns: DATE, DESCRIPTION, SUBMITAL SET REV. Includes revision 1 on 12/10/19.

PROJECT RELEASE table with columns: DATE, DESCRIPTION, PRELIM, PRE-APP REVIEW, APP REVIEW, SUBMITAL REVISIONS. Includes dates from 12/10/19 to 12/10/19.

PROJECT PERMIT INFO table with columns: DATE, DESCRIPTION, PRELIM, PRE-APP REVIEW, APP REVIEW, SUBMITAL REVISIONS. Includes dates from 12/10/19 to 12/10/19.

T-1.02 PROJECT NOTES

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED UNDER RECORDING NUMBER 20170224001412)  
TAX PARCEL NUMBER 3358500450:

TRACTS 498, 499, 500, 501 AND 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON:

EXCEPT THAT PORTION OF SAID TRACT 574 LYING NORTHEASTERLY OF A LINE PARALLEL WITH AND DISTANT 270 FEET FROM (AS MEASURED AT RIGHT ANGLES TO) THE SOUTHWESTERLY LINE OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET);

TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING; AND

TOGETHER WITH ANY UNPLATTED UPLANDS, LYING BETWEEN SAID TRACTS AND THE SHORELANDS ADJOINING;

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

(PER STATUTORY WARRANTY DEED UNDER RECORDING NUMBER 20170227001016)  
TAX PARCEL NUMBER 3358500454:

TRACTS 498, 499, 500, 501 AND 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON;  
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TOPOGRAPHIC & BOUNDARY SURVEY

SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN MAY OF 2017. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED JULY 30, 2016 UNLESS OTHERWISE NOTED.
3. BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. TERRANE ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1-800-424-5555 BEFORE CONSTRUCTION.
4. SUBJECT PROPERTY TAX PARCEL NO'S. 3358500450 & 3358500454.
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS: TAX PARCEL NO. 3358500450 UPLAND AREA IS 19,004± S.F. (0.44± ACRES) UPLAND AREA DETERMINED TO THE TOP OF ROCK BULKHEAD. TAX PARCEL NO. 3358500454 AREA IS 18,616± S.F. (0.43± ACRES)
6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

BASIS OF BEARINGS

NAD83/2011, WASHINGTON NORTH COORDINATE SYSTEM, PER GPS OBSERVATIONS THE CENTERLINE OF W. MERCER WAY BEARS N48°10'07"W BETWEEN FOUND MONUMENTS

REFERENCES

1. PLAT OF SEA SHORE-LAKE EDEN FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, AS RECORDED IN VOLUME 12 OF PLATS, PAGE 44, RECORDS OF KING COUNTY, WASHINGTON.
2. RECORD OF SURVEY IN BOOK 12 OF SURVEYS, PAGE 118, RECORDS OF KING COUNTY, WASHINGTON.

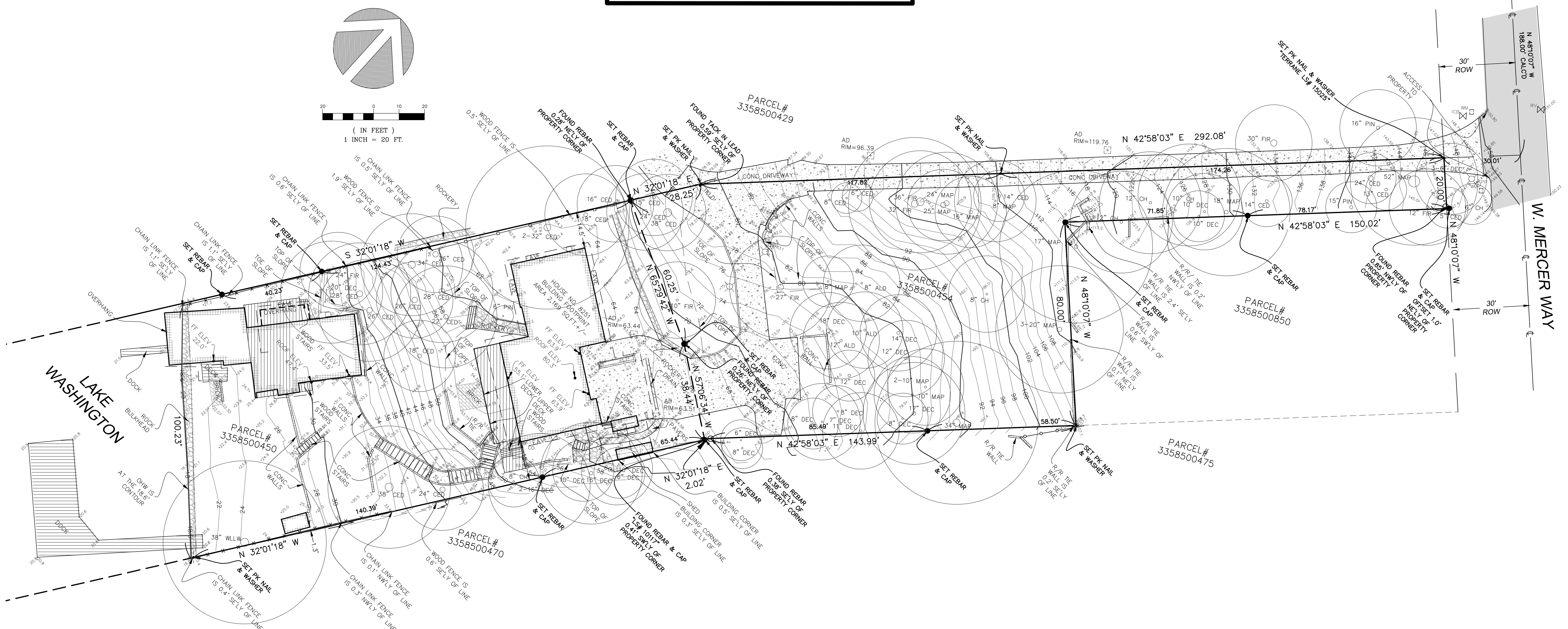
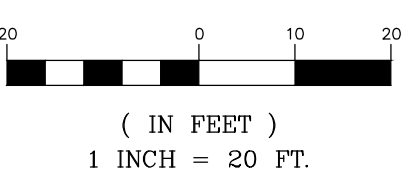
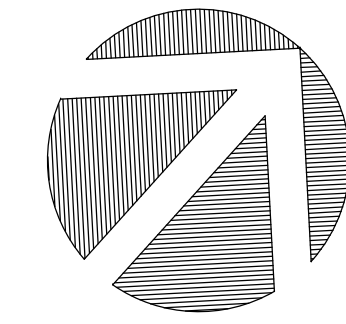
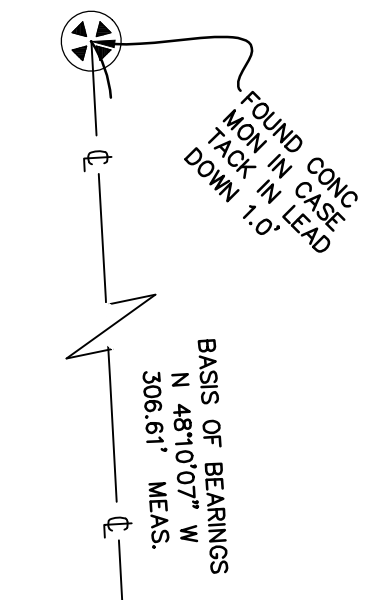
VERTICAL DATUM

CITY OF MERCER ISLAND BENCH MARK NO. 4332  
NAVD88  
FOUND "1"X1" LEAD W/ TACK IN CONC (DN 1.1") INTX. W MERCER WAY & 81ST AVE SE.  
ELEVATION = 140.59'

LEGEND

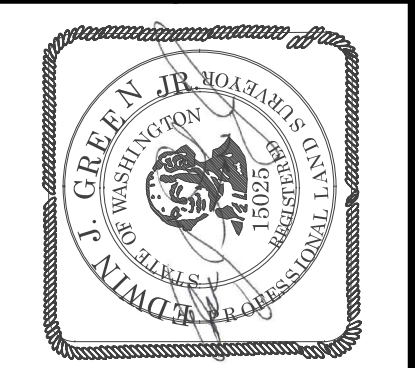
	AREA DRAIN		POWER (OVERHEAD)
	ASPHALT SURFACE		POWER POLE
	BRICK SURFACE		REBAR AS NOTED (FOUND)
	BUILDING CENTERLINE ROW CLEANOUT		REBAR & CAP (SET)
	CONCRETE SURFACE		ROCKERY
	WALL AS NOTED		TREE (AS NOTED)
	CONTOUR (MAJOR)		WATER METER
	CONTOUR (MINOR)		WATER VALVE
	DECK/DOCK AS NOTED		YARD LIGHT
	FENCE LINE (CHAIN LINK)		CALC'D CEDAR TREE
	FENCE LINE (WOOD)		CALC'D CHERRY TREE
	FIRE HYDRANT		CALC'D CONCRETE
	GAS METER		CALC'D DECIDUOUS TREE
	GUY ANCHOR		CALC'D ELEVATION
	GUY POLE		CALC'D FINISH FLOOR
	IRRIGATION CONTROL BOX		CALC'D FIR TREE
	NAIL AS NOTED		CALC'D MAPLE TREE
	MONUMENT IN CASE (FOUND)		CALC'D MEASURED
	POWER METER		CALC'D MONUMENT
			CALC'D PINE TREE
			CALC'D WILLOW TREE

VICINITY MAP



TOPOGRAPHIC & BOUNDARY SURVEY  
NE 1/4 & SE 1/4 & SW 1/4 OF NE 1/4 SEC 36, TWP. 24N., RGE. 40E., W.M.  
TAX PARCEL NOS. 3358500450 & 3358500454

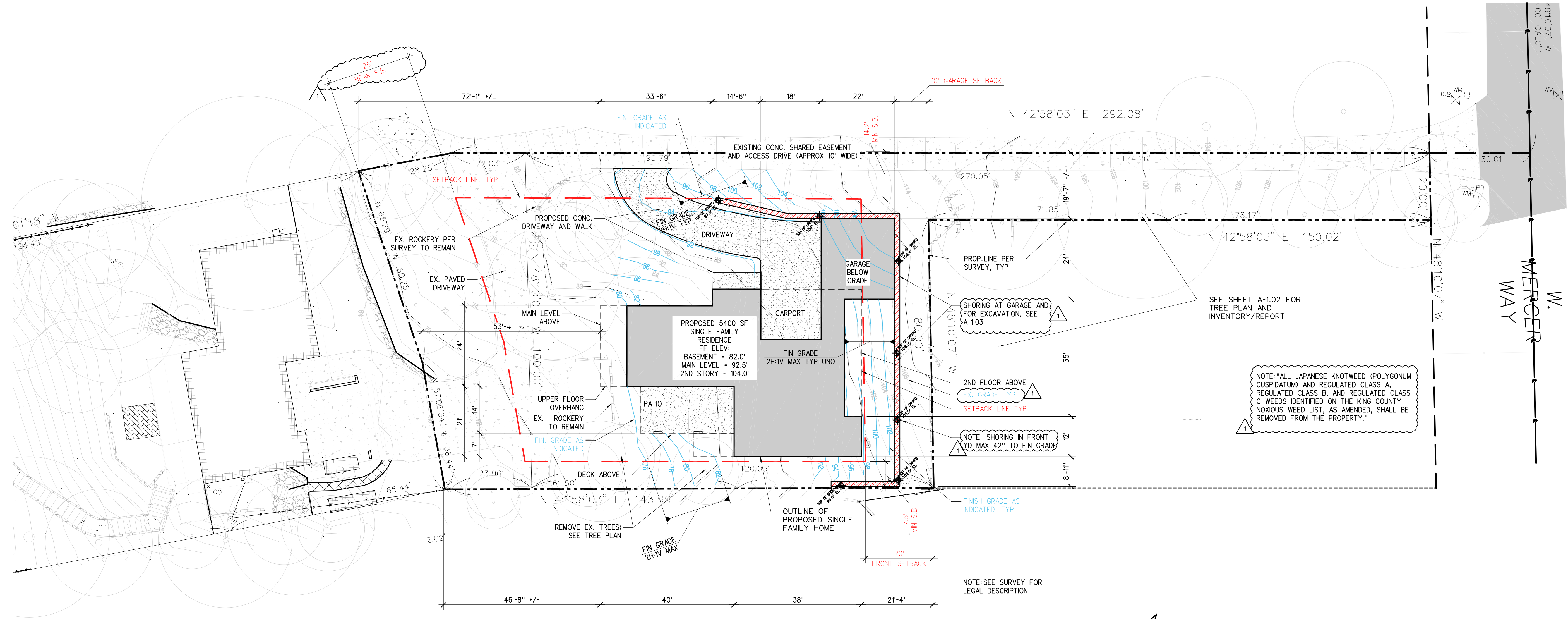
HU RESIDENCE  
8251 W. MERCER WAY  
MERCER ISLAND, WA. 98040



**Terrane**  
10801 Main Street, Suite 102, Bellevue, WA 98004  
phone 425.458.4498 support@terrane.net  
www.terrane.net

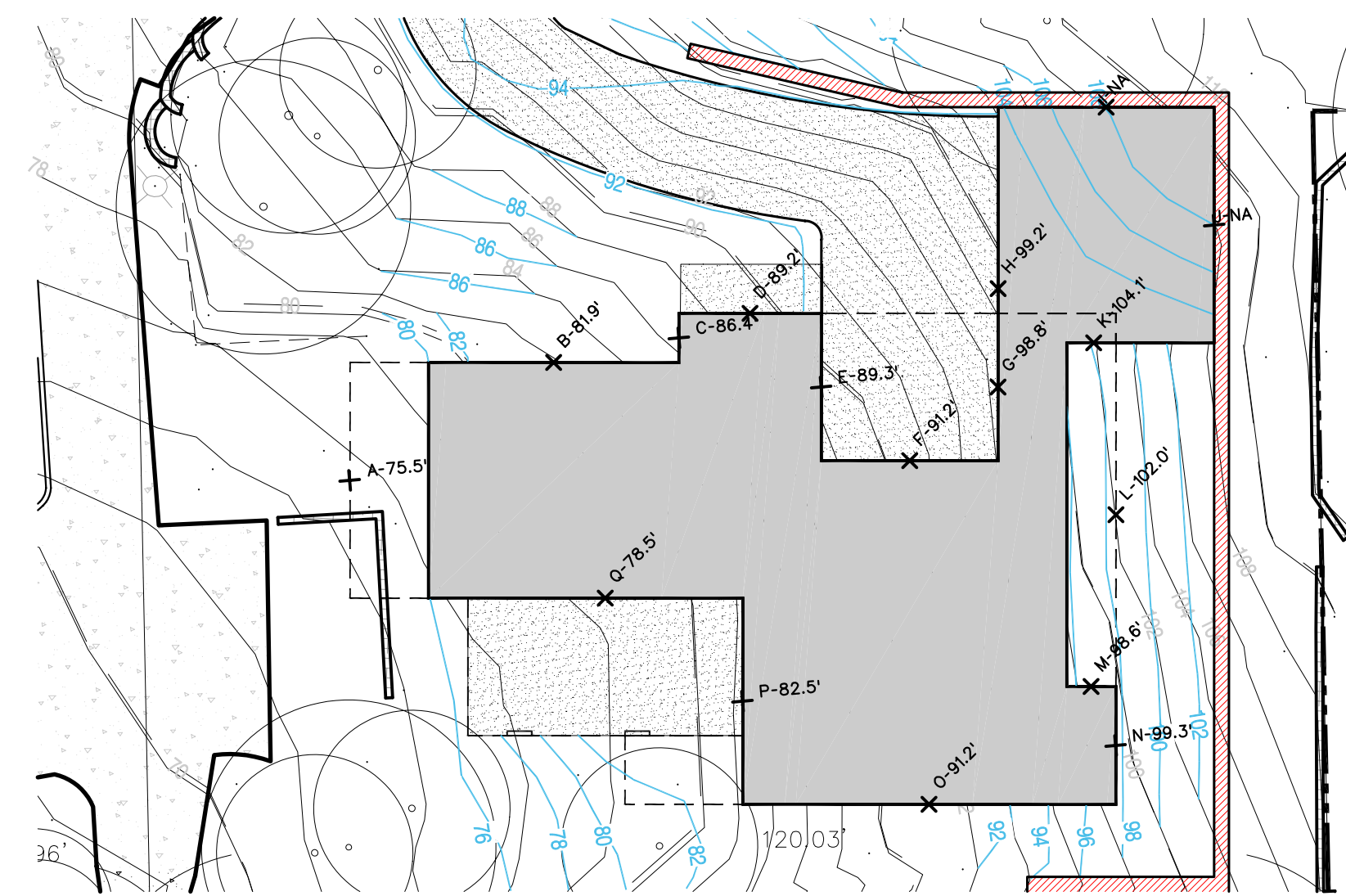
JOB NUMBER:	160477
DATE:	06/01/17
DRAFTED BY:	VLJ
CHECKED BY:	EJG/JGM
SCALE:	1"=20'
REVISION HISTORY	
SHEET NUMBER	
1 OF 1	

measure success



1 SITE PLAN

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



MIDPOINT ELEVATION	wall segment length	TOTALS	COMMENTS
A 75.5	a 24.0	1,812.0	
B 81.9	b 25.5	2,088.5	
C 86.4	c 5.0	432.0	
D 88.2	d 14.5	1,278.9	
E 89.3	e 15.0	1,339.5	
F 91.2	f 18.0	1,641.6	
G 96.0	g 15.0	1,440.0	
H 99.2	h 5.0	496.0	
I 0.0	i 0.0	0.0	NA-wall segment below grade
J 0.0	j 0.0	0.0	NA-wall segment below grade
K 101.0	k 5.0	505.0	
L 102.0	l 35.0	3,570.0	
M 98.6	m 5.0	493.0	
N 99.3	n 12.0	1,191.6	
O 91.2	o 38.0	3,465.6	
P 82.5	p 21.0	1,732.5	
Q 78.5	q 32.0	2,512.0	
		<b>270.0</b>	<b>23,998.2</b>
Average building Elevation (ABE) =		88.9	(23998.2/270.0)

2 AVERAGE BUILDING ELEVATION - SEE ALSO ELEVATIONS SHEETS A-4.01, A-4.02

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

LEGAL DESCRIPTION (SEE SURVEY)

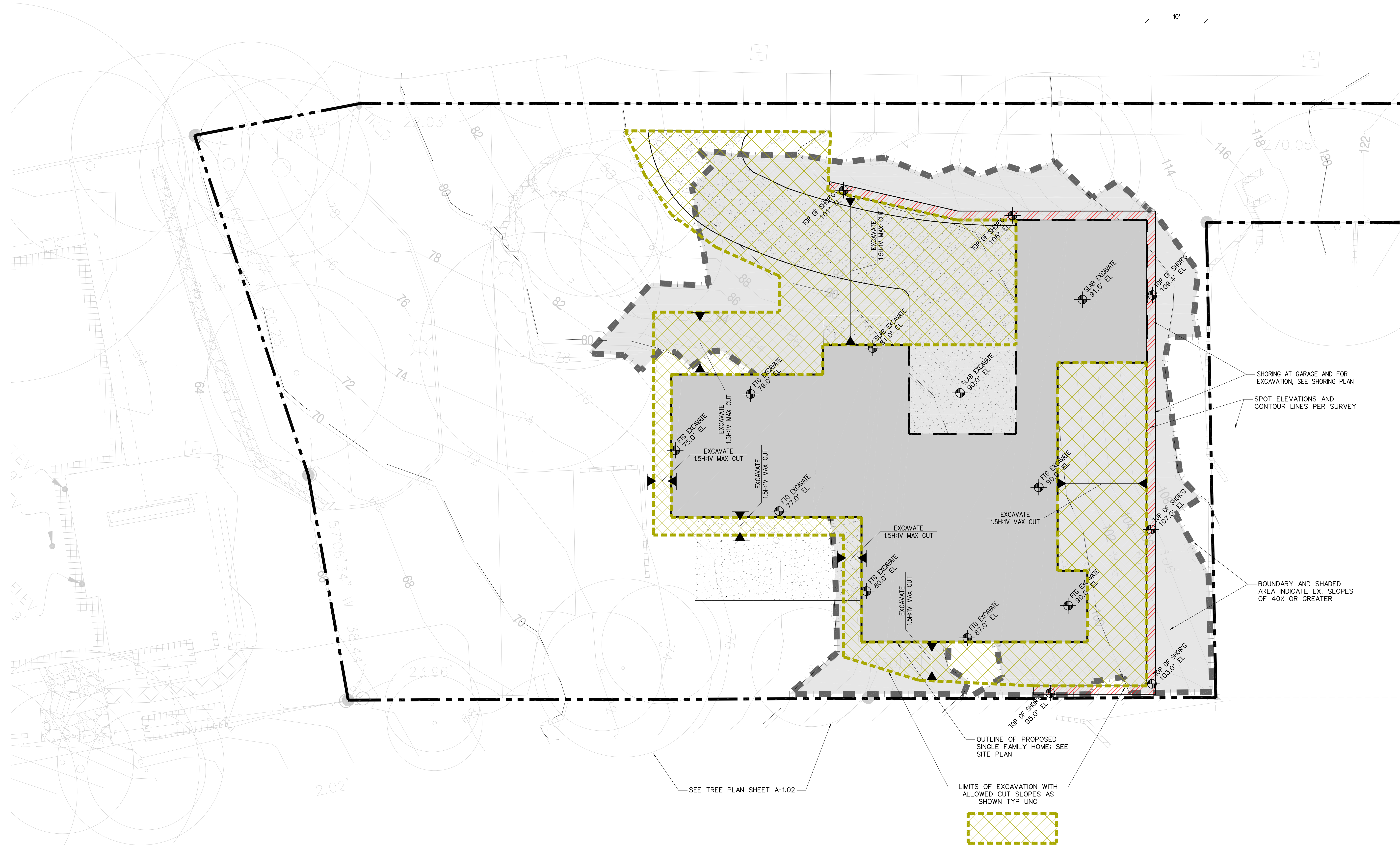
(PER STATUTORY WARRANTY DEED UNDER RECORDING NUMBER 20170227001016)  
TAX PARCEL NUMBER 3358500454:

TRACTS 498, 499, 500, 501 AND 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON; EXCEPT THAT PORTION OF SAID TRACT 574 LYING NORTHEASTERLY OF A LINE PARALLEL WITH AND DISTANT 270 FEET FROM (AS MEASURED AT RIGHT ANGLES TO) THE SOUTHWESTERLY LINE OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET); TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING; AND TOGETHER WITH ANY UNPLATTED UPLANDS, LYING BETWEEN SAID TRACTS AND THE SHORELANDS ADJOINING; ALSO TOGETHER WITH THE NORTHEASTERLY 270 FEET OF THAT PORTION OF TRACT 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON, LYING SOUTHWESTERLY OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET), EXCEPT THE NORTHEASTERLY 150 FEET OF THE SOUTHEASTERLY 80 FEET THEREOF.

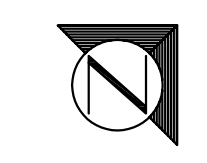
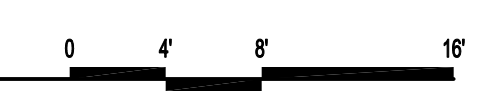
PROJECT REVISIONS	DATE	DESCRIPTION
1	12/01/2019	SUBMITTAL SET REV 5
2		
3		
4		

PROJECT RELEASE	DATE	DESCRIPTION
1	11/26/2017	PRELIM
2	12/04/2018	PRE-APP REVIEW
3	3/04/2018	90% REVIEW
4	12/01/2019	SUBMITTAL REVISIONS

PROJECT PERMIT INFO	DATE	DESCRIPTION



**1** STEEP SLOPE AND EXCAVATION PLAN  
SCALE 1/8" = 1'-0"



PROJECT REVISIONS	
DATE	DESCRIPTION
12/JUL/2019	SUBMITTAL SET REV. 5
▲	
▲	
▲	
▲	

PROJECT RELEASE	
DATE	DESCRIPTION
15/SEP/17	PRELIM
12/MAR/2018	PRE-APP REVIEW
30/MAY/2018	90% REVIEW
12/JUL/2019	SUBMITTAL REVISIONS

PROJECT PERMIT INFO	
DATE	DESCRIPTION

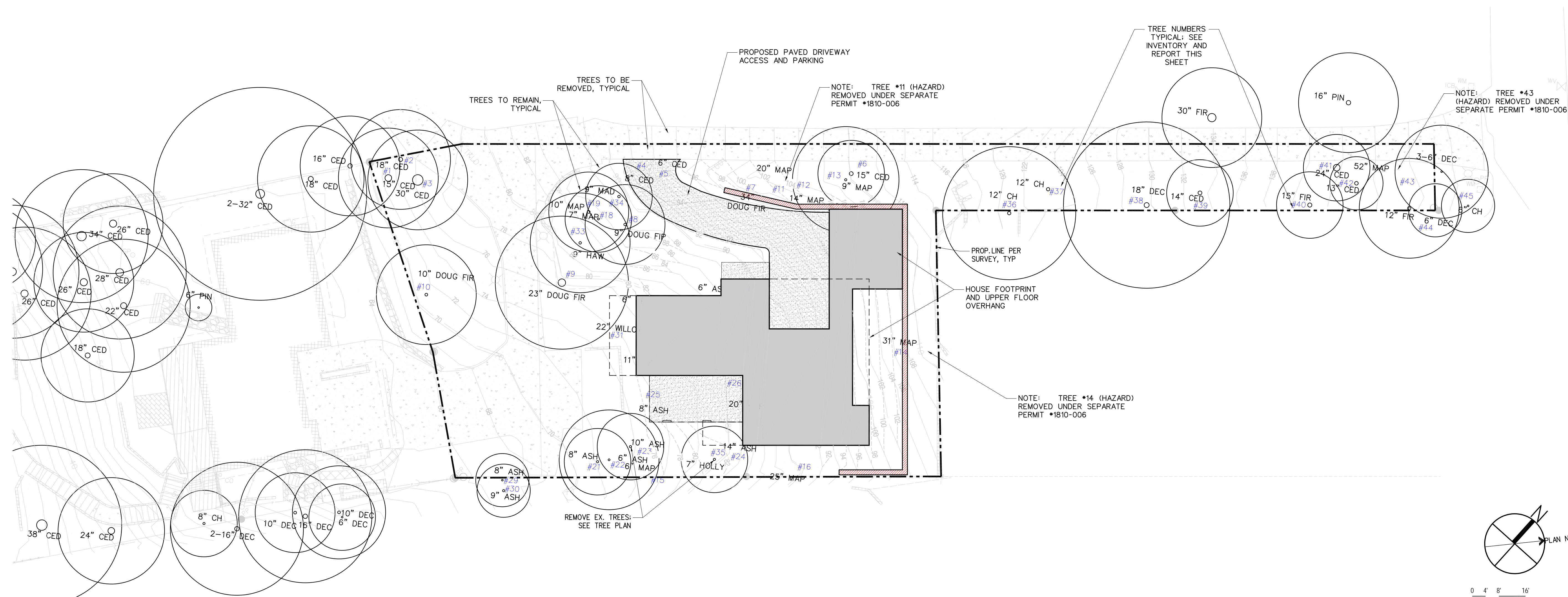
SHORING AT GARAGE AND FOR EXCAVATION, SEE SHORING PLAN  
 SPOT ELEVATIONS AND CONTOUR LINES PER SURVEY

BOUNDARY AND SHADED AREA INDICATE EX. SLOPES OF 40% OR GREATER

OUTLINE OF PROPOSED SINGLE FAMILY HOME; SEE SITE PLAN

LIMITS OF EXCAVATION WITH ALLOWED CUT SLOPES AS SHOWN TYP UNO

SEE TREE PLAN SHEET A-1.02



1 SITE PLAN - TREES  
SCALE: 1/16" = 1'-0"

Vacant Lot (Mercer Island)  
September 25, 2018  
Page 1 of 4

**Washington Tree Experts**  
9792 Edmonds Way #123  
Edmonds, WA 98020  
206-362-3380  
wtetree@yahoo.com

Client name: Mei Young  
Street: 8251 W. Mercer Way  
City, Zip: Mercer Island, WA 98040

RE: Tree inventory and report as required by the City of Mercer Island

MAP #	SPECIES	TREE TAG#	DIAMETER	EXCEPTIONAL	GENERAL HEALTH	REMOVE/RETAIN
1	Western Red Cedar ( <i>Thuja plicata</i> )	THUIA1	15"	NO	GOOD	RETAIN
2	Cedar	THUIA2	18"	NO	GOOD	RETAIN
3	Cedar	THUIA3	30"	YES*	GOOD	RETAIN
4	Cedar	THUIA4	8"	NO	GOOD	REMOVE
5	Cedar	THUIA5	6"	NO	GOOD	REMOVE
6	Cedar	THUIA6	15"	NO	GOOD	RETAIN
7	Doug Fir ( <i>Pseudotsuga menziesii</i> )	DF1	34"	YES*	GOOD	REMOVE
8	Doug Fir	DF2	9"	NO	GOOD	RETAIN
9	Doug Fir	DF3	23"	NO	GOOD	RETAIN
10	Doug Fir	DF4	10"	NO	GOOD	RETAIN
11	Bigleaf Maple ( <i>Acer macrophyllum</i> )	BLM1	20"	NO	POOR/HAZARD	REMOVE
12	Maple	BLM2	14"	NO	FAIR	REMOVE
13	Maple	BLM3	9"	NO	FAIR	RETAIN
14	Maple	BLM4	31"	YES*	POOR/HAZARD	REMOVE
15	Maple	BLM5	6"	NO	FAIR	REMOVE
16	Maple	BLM6	25"	NO	FAIR	REMOVE
17	Maple	BLM7	20"	NO	FAIR	REMOVE
18	Maple	BLM8	7"	NO	FAIR	RETAIN

Washington Tree Experts Certified Arborist

Vacant Lot (Mercer Island)  
September 25, 2018  
Page 2 of 4

19	Maple	BLM9	10"	NO	FAIR	RETAIN
20	Oregon Ash ( <i>Fraxinus latifolia</i> )	ASH1	11"	NO	FAIR	REMOVE
21	Ash	ASH2	8"	NO	FAIR	RETAIN
22	Ash	ASH3	6"	NO	FAIR	RETAIN
23	Ash	ASH4	10"	NO	FAIR	RETAIN
24	Ash	ASH5	14"	NO	FAIR	REMOVE
25	Ash	ASH6	8"	NO	FAIR	REMOVE
26	Ash	ASH7	9"	NO	FAIR	REMOVE
27	Ash	ASH8	14"	NO	FAIR	REMOVE
28	Ash	ASH9	6"	NO	FAIR	REMOVE
29	Ash	ASH11	8"	NO	FAIR	RETAIN
30	Ash	ASH12	9"	NO	FAIR	RETAIN
31	Willow ( <i>Salix scouleriana</i> )	SALX1	22"	YES*	FAIR	REMOVE
32	Indian Plum ( <i>Oemleria cerasiformis</i> )	PLUM1	6"	NO	FAIR	REMOVE
33	Hawthorn ( <i>Crataegus</i> sp.)	HAW1	9"	NO	GOOD	RETAIN
34	Madrone ( <i>Arbutus menziesii</i> )	MAD1	9"	YES*	GOOD	RETAIN
35	Holly ( <i>Ilex aquifolium</i> )	HOLLY1	7"	NO	GOOD	RETAIN
36	Cherry ( <i>Prunus serrulata</i> )	CH1	12"	NO	FAIR	RETAIN
37	Purple Plum ( <i>Prunus cerasifera</i> )	PLUM1	12"	NO	FAIR	RETAIN
38	Purple Plum	PLUM2	18"	NO	FAIR	RETAIN
39	Port Orford Cedar ( <i>Chamaecyparis lawsoniana</i> )	CHAM1	14"	NO	GOOD	RETAIN
40	Doug Fir	DF5	15"	NO	GOOD	RETAIN
41	Cedar	THUIA7	24"	NO	GOOD	RETAIN
42	Cedar	THUIA8	13"	NO	GOOD	RETAIN
43	Maple	BLM10	52"	YES*	POOR/HAZARD	REMOVE
44	Doug Fir	DF6	12"	NO	GOOD	RETAIN
45	Juniper	JP1	6"	NO	GOOD	RETAIN

\*exceptional greater than 24" ^exceptional less than 24"

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Vacant Lot (Mercer Island)  
September 25, 2018  
Page 3 of 4

**Protection recommendations:**  
The best way to protect trees during construction is to limit the amount of disturbance in the critical root zone (CRZ). A common rule to establish the CRZ is protect all tree roots within the dripline.

To protect the trees for retention during construction restrict the following within the critical root zone (CRZ) which is equal to the drip line:

- erect barriers or sturdy fencing around to tree to define the tree protection area to remain in place for the life of the development project to ensure protection
- no grade changes.
- no heavy equipment driven in the protection zone.
- no piling of soil or debris in protection zone.
- no digging or excavating in the CRZ.
- if roots are found outside the CRZ no cutting of roots more than 4" diameter and clean straight cuts on 1-3' roots with a handsaw to promote wound closure and prevent the spread of decay in the root crown.
- for all digging operations, insist that exposed roots be cut cleanly to promote quick wound closure and regeneration. Minimize damage by keeping the plants well-watered before and after digging; and covering exposed roots with soil, mulch, or damp burlap as soon as possible.

Tree #8 Doug Fir (DF2) can be retained and preserved despite the driveway construction in the dripline. It is healthy and young Doug Fir that can tolerate the minimum disturbance intrusion into the CRZ. NO disturbance to the structural root plate which is approximately 6' radius. No more than 10% of the CRZ should be interrupted which is equal to approximately 12' radius.

Tree #9 Doug Fir (DF3) can be retained and preserved despite the building construction in the dripline. The amount of disturbance represents a very small percentage of the CRZ and the tree can tolerate some intrusion as it is of normal vigor and health. Fencing should be constructed to protect as much of the dripline as possible. There should only be an allowance on the southwest side of the dripline. NO disturbance to the structural root plate which is approximately 10' radius and no more than 10% of the CRZ should be interrupted which is equal to approximately 30' radius.

**Retention trees:**  
If the protection measures are taken, the necessary removals will not negatively impact the trees for retention. Most of the trees for retention are young and viable and have a higher tolerance for disturbance than their more mature counterparts. Neighboring trees will not be adversely affected.

**Replacement trees:**  
As per the City of Mercer Island replacement trees should be mostly native. I would recommend a variety as to avoid a monoculture. The following is a list of species that would be suitable:

Washington Tree Experts Certified Arborist

Vacant Lot (Mercer Island)  
September 25, 2018  
Page 4 of 4

- Vine Maple (*Acer circinatum*)
- Serviceberry (*Amelanchier* sp.)
- Shore Pine (*Pinus contorta* v. *contorta*)
- Lumber Pine (*Pinus flexilis*)
- Pacific Yew (*Taxus brevifolia*)
- Pacific Dogwood (*Cornus nuttallii*)
- Cascara (*Rhamnus purshiana*)

Prepared by  
*Jennifer Wells*  
Jennifer Wells  
ISA Certified Consulting Arborist #PN6209A  
ISA Qualified Tree Risk Assessor

Waiver of liability  
This information represents the tree health assessment at this point in time. My findings do not guarantee future safety nor are they predictions of future events. Information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection. The inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. All data has been verified to the best of my knowledge. The report represents the opinion of the arborist and the fees are in no way contingent upon retesting. Any alterations made to this report automatically invalidate this report.

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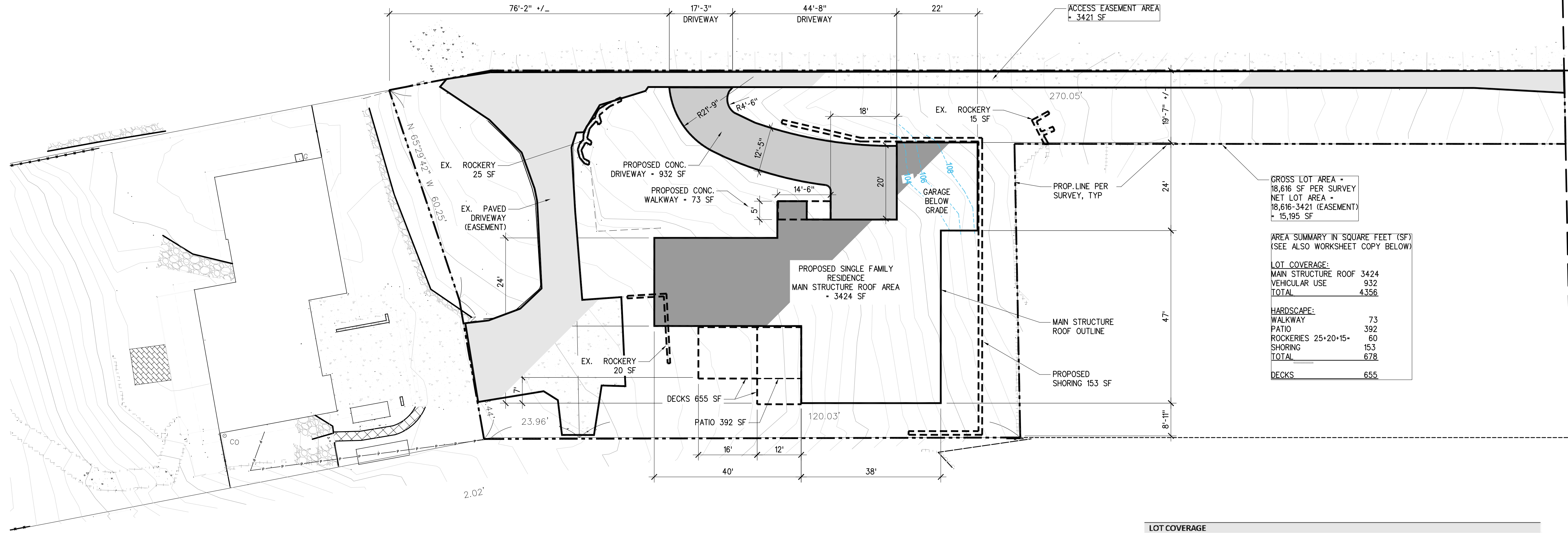
**WEN HUI**  
**RESIDENCE**  
8243 WEST MERCER WAY  
MERCER ISLAND | WA | 98040

DATE	DESCRIPTION
12/01/2019	SUBMITTAL SET REV. 5
12/01/2019	SUBMITTAL SET REV. 6
12/01/2019	SUBMITTAL SET REV. 7
12/01/2019	SUBMITTAL SET REV. 8

DATE	DESCRIPTION
11/25/2017	ISSUE #17
12/04/2018	PRELIM
3/04/2018	PRE-APP REVIEW
3/04/2018	90% REVIEW
12/01/2019	SUBMITTAL REVISIONS

DATE	DESCRIPTION

**A-1.02**  
TREE PLAN



GROSS LOT AREA -		18,616 SF PER SURVEY
NET LOT AREA -		18,616-3421 (EASEMENT)
TOTAL		15,195 SF
AREA SUMMARY IN SQUARE FEET (SF) (SEE ALSO WORKSHEET COPY BELOW)		
LOT COVERAGE:		
MAIN STRUCTURE ROOF	3424	
VEHICULAR USE	932	
TOTAL	4356	
HARDSCAPE:		
WALKWAY	73	
PATIO	392	
ROCKERIES 25+20+15+	60	
SHORING	153	
TOTAL	678	
DECKS	655	

**LOT COVERAGE**

For single family residential development, "lot coverage" is the area of a lot that may be covered by a combination of the buildings and vehicular driving surfaces. The maximum lot coverage for a specific lot is based upon the lot's slope (see above). The area of the lot that cannot be used for lot coverage is "required landscaping area"; the landscaping area is typically improved with either hardscape (see below) or softscape. *Please note: Lot coverage is not the same as impervious surface calculations used for drainage review.*

Lot Slope	Maximum Lot Coverage (House, driving surfaces, and accessory buildings)	Required Landscaping Area
Less than 15%	40%	60%
15% to less than 30%	35%	65%
30% to 50%	30%	70%
Greater than 50% slope	20%	80%

**LOT COVERAGE CALCULATIONS**

A. Allowed Lot Coverage	35	% of Lot
B. Allowed Lot Coverage Area	6516	Square Feet
C. Gross Lot Area	18616	Square Feet
D. Net Lot Area	15195	Square Feet
E. Main Structure Roof Area	3424	Square Feet
F. Accessory Building Roof Area	0	Square Feet
G. Vehicular Use (driveway, access easements, parking)	932	Square Feet
H. Total Existing Lot Coverage Area	0	Square Feet
I. (Total Lot Coverage Area Removed)	0	Square Feet
J. Total New Lot Coverage Area	4356	Square Feet
K. Total Project Lot Coverage Area = (H-I) + J	4356	Square Feet
L. Proposed adjustment for single story		Square Feet
M. Proposed adjustment for flag lot		Square Feet
N. Proposed Lot Coverage = (K/D)x100	29	% of Lot

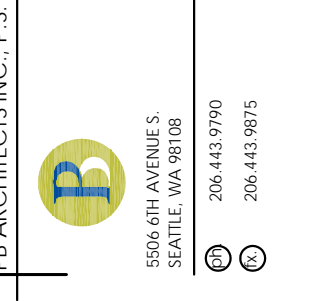
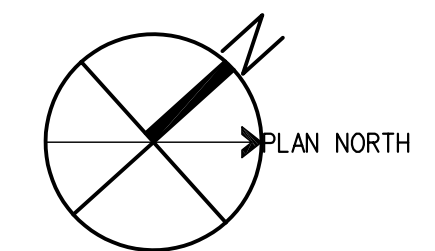
**HARDSCAPE**

For single family residential development, hardscape is the solid, hard, elements or structures that are incorporated into landscaping. The hardscape includes, but is not limited to, structures, paved areas, stairs, walkways, decks, patios, and similar constructed elements. The hardscape within the landscaping area consists of materials such as wood, stone, concrete, gravel, permeable pavements or pavers, and similar materials. Hardscape does not include solid, hard elements or structures that are covered by a minimum of two feet of soil intended for softscape (for example, a septic tank covered with at least two feet of soil and planted shrubs is not hardscape). The hardscape does not include driving surfaces or buildings.

Up to 9% of the net lot area may consist of hardscape areas. In addition, unused lot coverage may also be improved with hardscape.

What is the total square footage of all hardscape on property? 678 Square Feet

What is the total square footage of all decks on property? 655 Square Feet



**WEN HU RESIDENCE**  
8243 WEST MERCER WAY  
MERCER ISLAND | WA | 98040

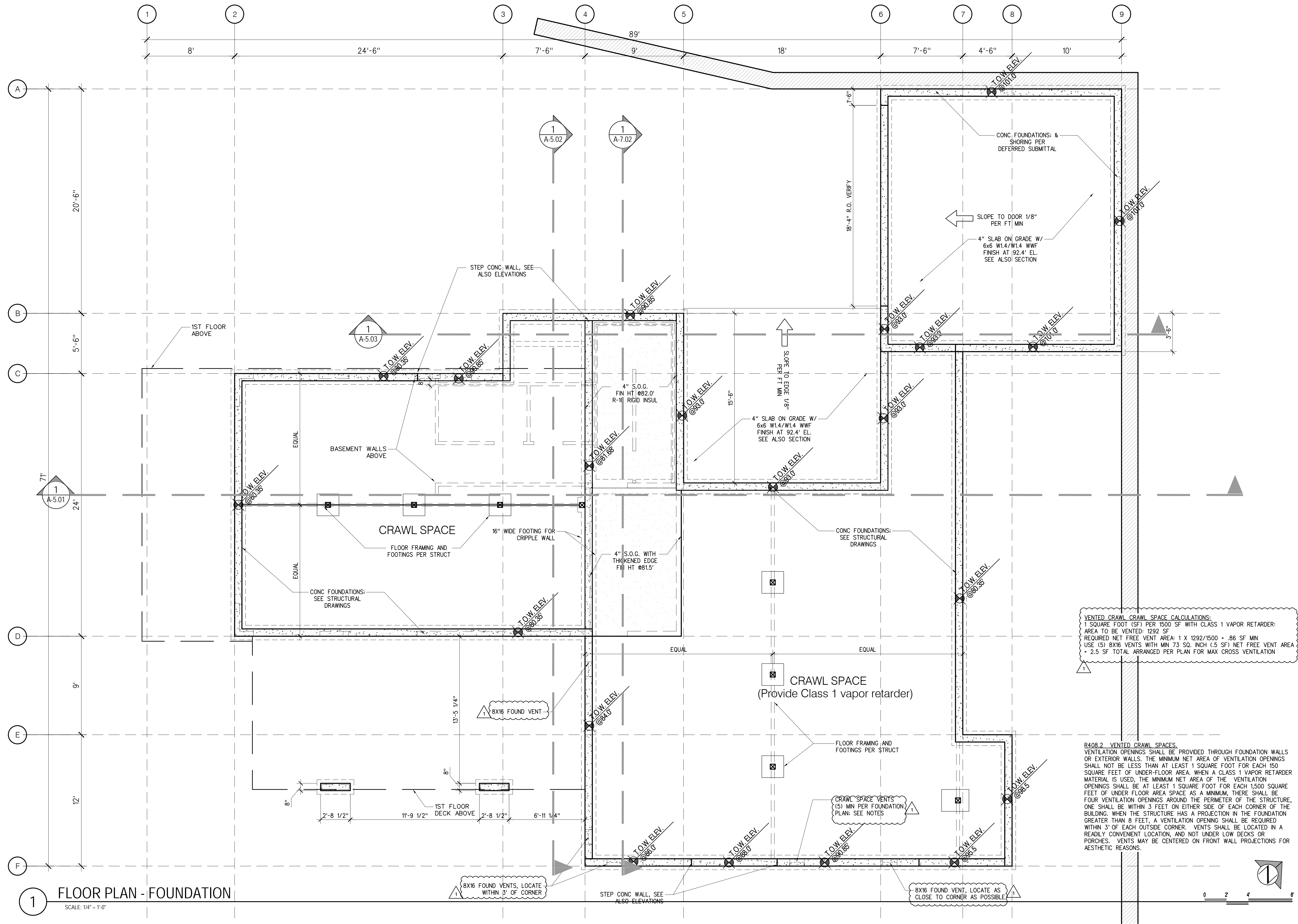
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DATE	DESCRIPTION
12/JUL/2019	SUBMITTAL SET REV'S
▲	
▲	
▲	

PROJECT RELEASE		
DATE	DESCRIPTION	DATE
11/SEP/17	PRELIM	
12/MAR/2018	PRE-APP REVIEW	
30/MAY/2018	90% REVIEW	
12/JUL/2019	SUBMITTAL REVISIONS	

PROJECT PERMIT INFO	

**1 SITE COVERAGE AND HARDSCAPE**  
SCALE: 1/16" = 1'-0"

**A-1.03**  
HARDSCAPE COVERAGE

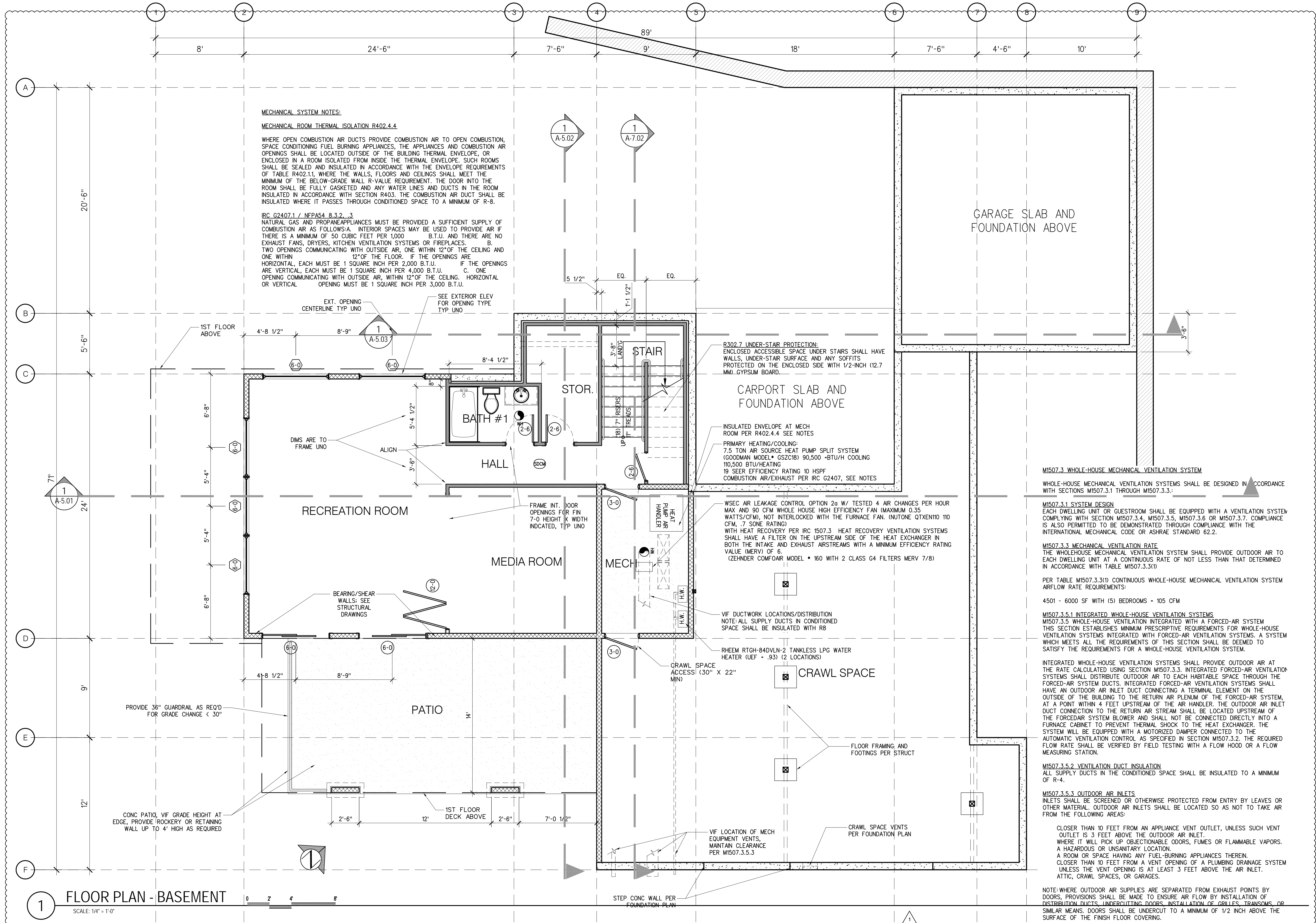


PROJECT REVISIONS	
DATE	DESCRIPTION
12/JUL/2019	SUBMITTAL SET REV. 5
12/JUL/2019	SUBMITTAL SET REV. 4
12/JUL/2019	SUBMITTAL SET REV. 3
12/JUL/2019	SUBMITTAL SET REV. 2
12/JUL/2019	SUBMITTAL SET REV. 1

PROJECT RELEASE	
DATE	DESCRIPTION
12/JUL/2019	PRELIM
30/MAR/2018	PRE-APP REVIEW
30/MAR/2018	90% REVIEW
12/JUL/2019	SUBMITTAL REVISIONS

PROJECT PERMIT INFO	
DATE	DESCRIPTION
12/JUL/2019	PERMIT

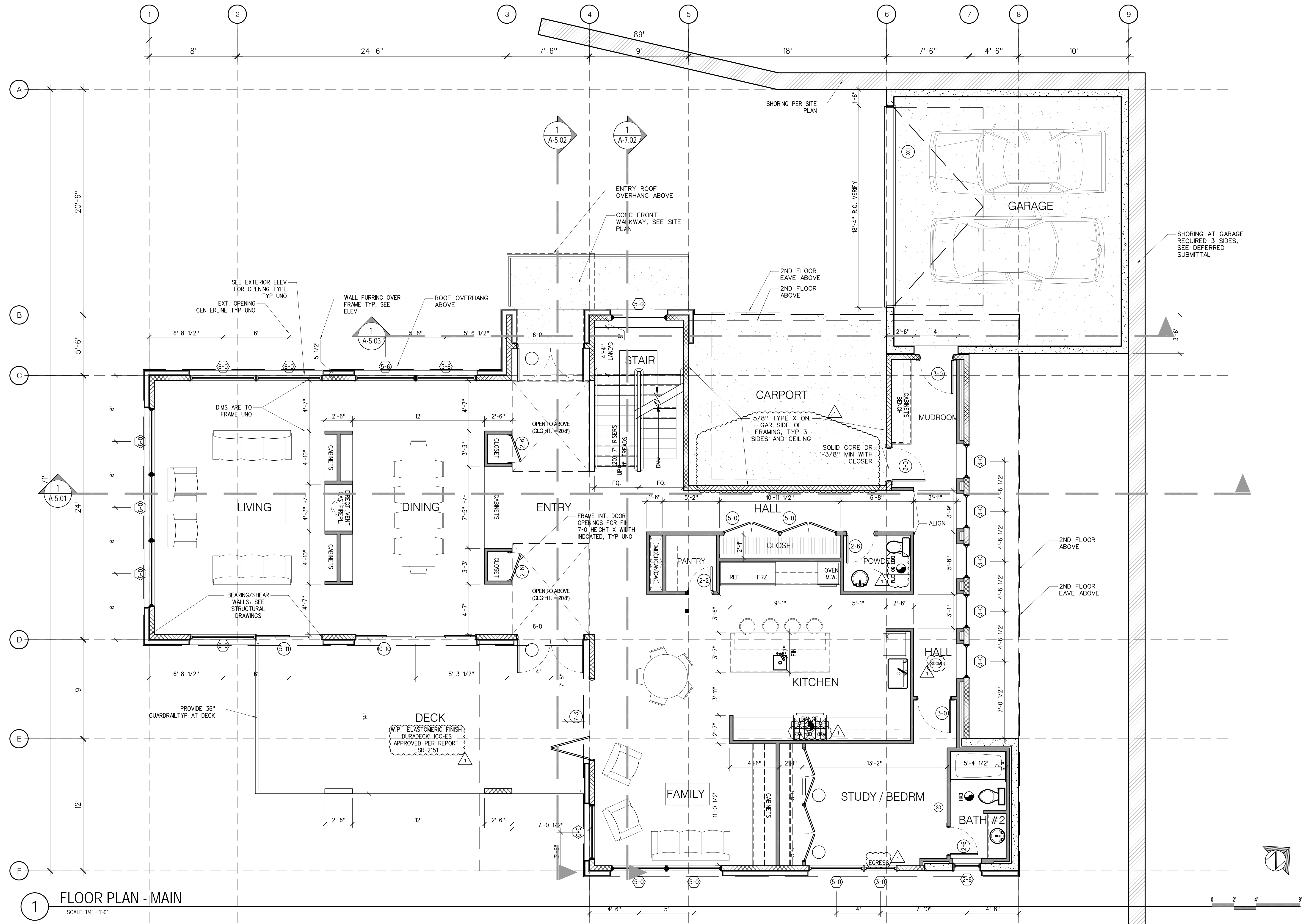




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DATE	DESCRIPTION
12/10/2019	SUBMITTAL SET REV. 5
12/10/2019	SUBMITTAL SET REV. 4
12/10/2019	SUBMITTAL SET REV. 3
12/10/2019	SUBMITTAL SET REV. 2
12/10/2019	SUBMITTAL SET REV. 1

PROJECT RELEASE	
DATE	DESCRIPTION
12/10/2019	PRELIM
12/10/2019	PRE-APP REVIEW
12/10/2019	90% REVIEW
12/10/2019	SUBMITTAL REVISIONS

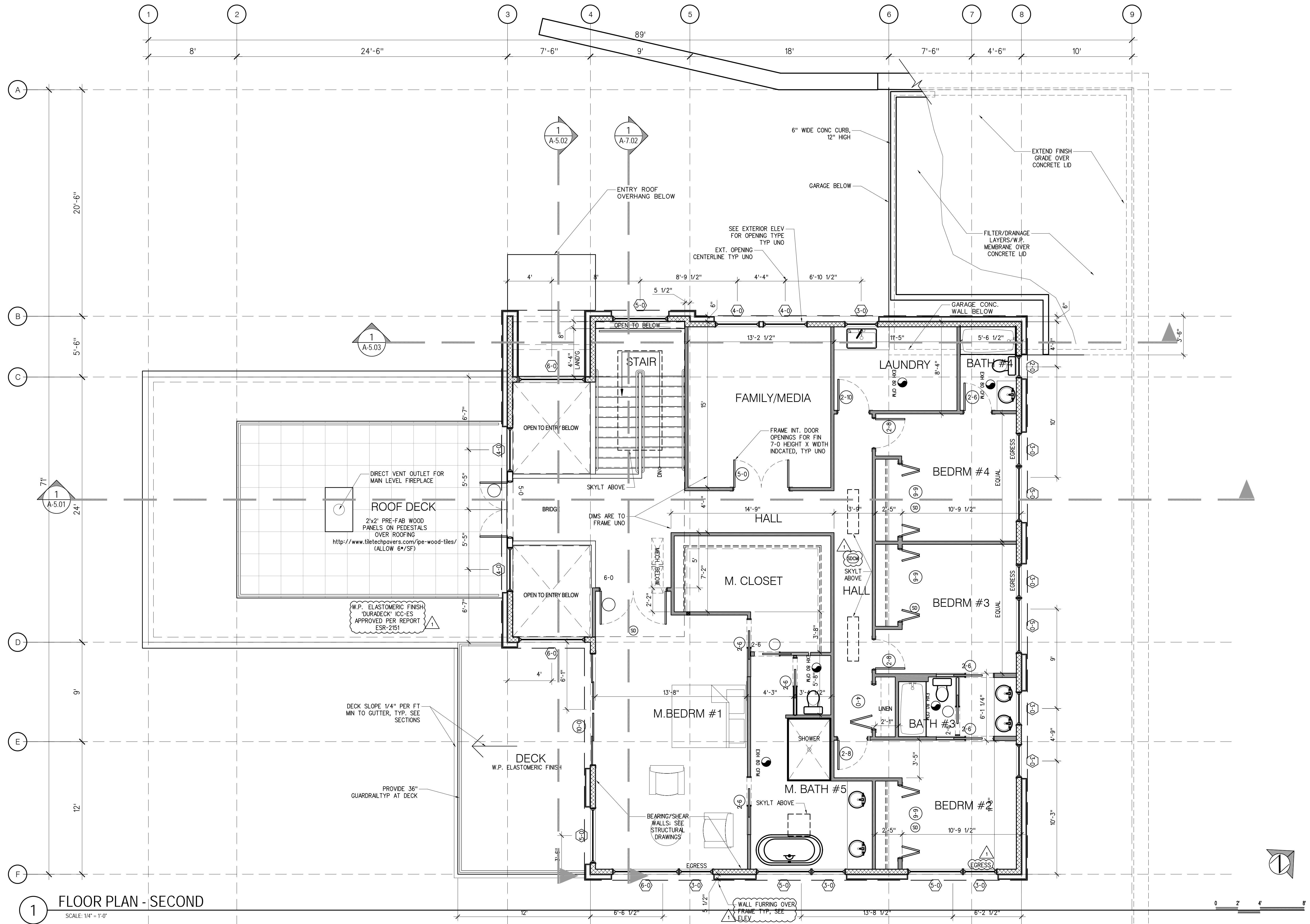
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DATE	DESCRIPTION
12/10/2019	PRELIM
12/10/2019	PRE-APP REVIEW
12/10/2019	90% REVIEW
12/10/2019	SUBMITTAL REVISIONS



PROJECT REVISIONS	
DATE	DESCRIPTION
12/JUL/2019	SUBMITTAL SET REV. 5
▲	▲
▲	▲
▲	▲
▲	▲

PROJECT RELEASE	
DATE	DESCRIPTION
11/SEP/17	PRELIM
12/MAR/2018	PRE-APP REVIEW
30/MAR/2018	90% REVIEW
12/JUL/2019	SUBMITTAL REVISIONS

PROJECT PERMIT INFO	
DATE	DESCRIPTION

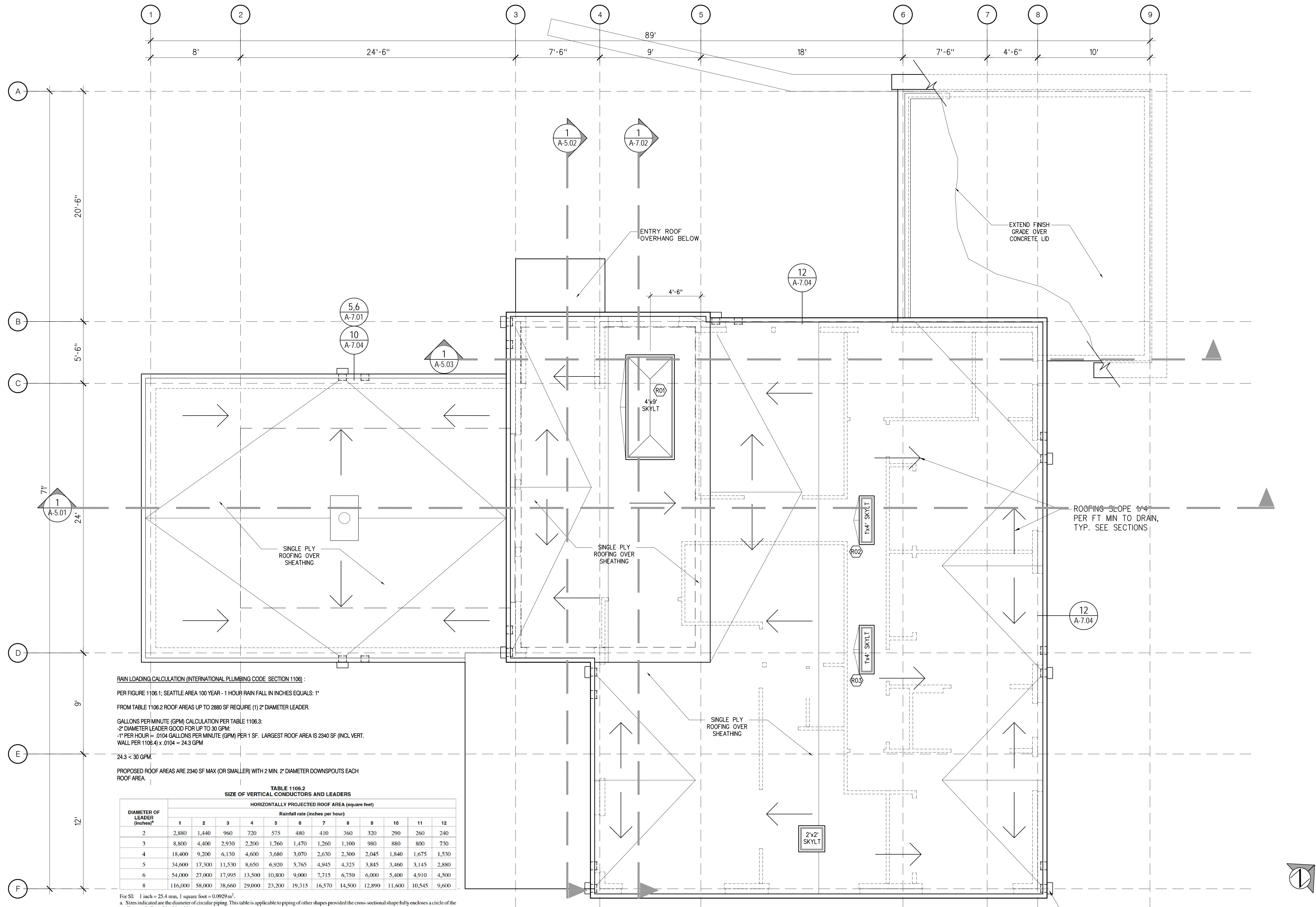


**1 FLOOR PLAN - SECOND**  
SCALE: 1/4" = 1'-0"

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DATE	DESCRIPTION



**RAIN LOADING CALCULATION (INTERNATIONAL PLUMBING CODE SECTION 1106):**  
 PER FIGURE 1106.1: SEATTLE AREA 100 YEAR - 1 HOUR RAIN FALL IN INCHES EQUALS: 1"  
 FROM TABLE 1106.2 ROOF AREAS UP TO 2880 SF REQUIRE (1) 2" DIAMETER LEADER.

**GALLONS PER MINUTE (GPM) CALCULATION PER TABLE 1106.3:**  
 2" DIAMETER LEADER GOOD FOR UP TO 30 GPM.  
 1" PER HOUR = .0104 GALLONS PER MINUTE (GPM) PER 1 SF. LARGEST ROOF AREA IS 2340 SF (INCL. VERT. WALL PER 1106.4) x .0104 = 24.3 GPM  
 24.3 < 30 GPM.

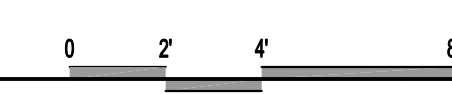
PROPOSED ROOF AREAS ARE 2340 SF MAX (OR SMALLER) WITH 2 MIN. 2" DIAMETER DOWNSPOUTS EACH ROOF AREA.

**TABLE 1106.2 SIZE OF VERTICAL CONDUCTORS AND LEADERS**

DIAMETER OF LEADER (inches) <sup>a</sup>	HORIZONTALLY PROJECTED ROOF AREA (square feet)											
	Rainfall rate (inches per hour)											
	1	2	3	4	5	6	7	8	9	10	11	12
2	2,880	1,440	960	720	575	480	410	360	320	290	260	240
3	8,800	4,400	2,930	2,200	1,760	1,470	1,260	1,100	980	880	800	730
4	18,400	9,200	6,130	4,600	3,680	3,070	2,630	2,300	2,045	1,840	1,675	1,530
5	34,600	17,300	11,530	8,650	6,920	5,765	4,945	4,325	3,845	3,460	3,145	2,880
6	54,000	27,000	17,995	13,500	10,800	9,000	7,715	6,750	6,000	5,400	4,910	4,500
8	116,000	58,000	38,660	29,000	23,200	19,315	16,570	14,500	12,890	11,600	10,545	9,600

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m<sup>2</sup>.  
 a. Sizes indicated are the diameter of circular piping. This table is applicable to piping of other shapes provided the cross-sectional shape fully encloses a circle of the diameter indicated in this table.

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



**PROJECT REVISIONS**

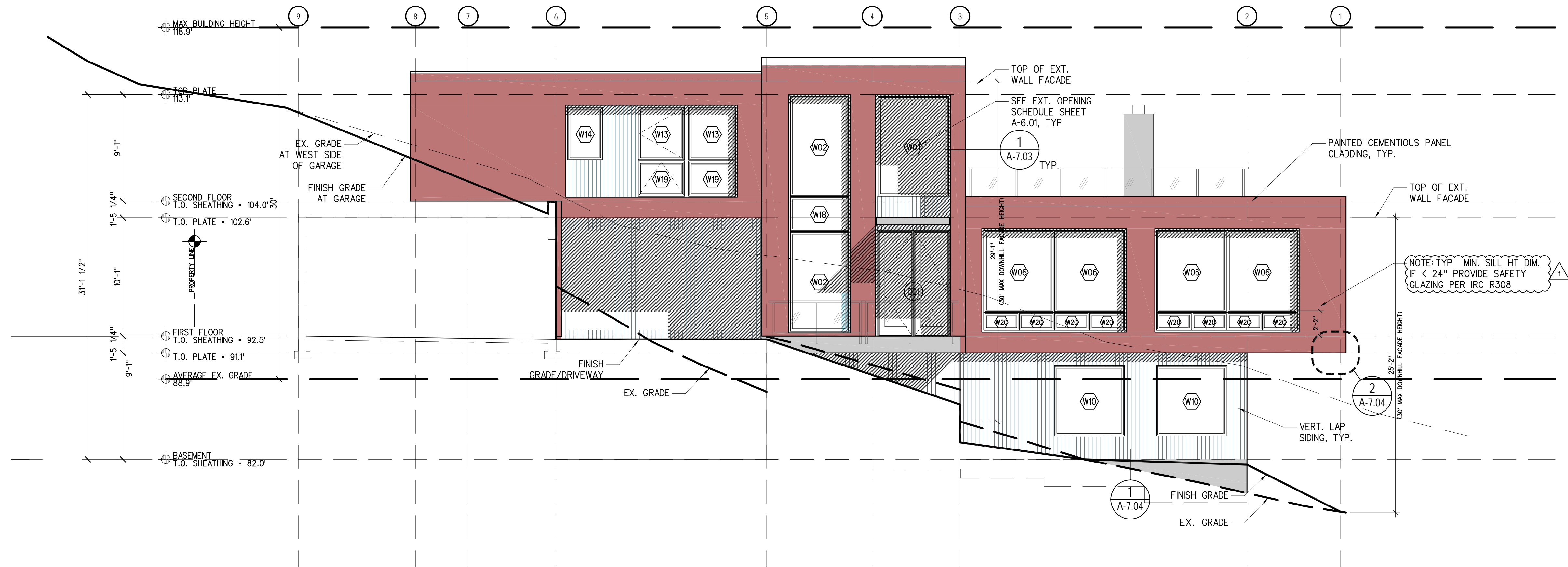
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12/JUL/2019	SUBMITTAL SET REV 2
12/JUL/2019	SUBMITTAL SET REV 1

**PROJECT RELEASE**

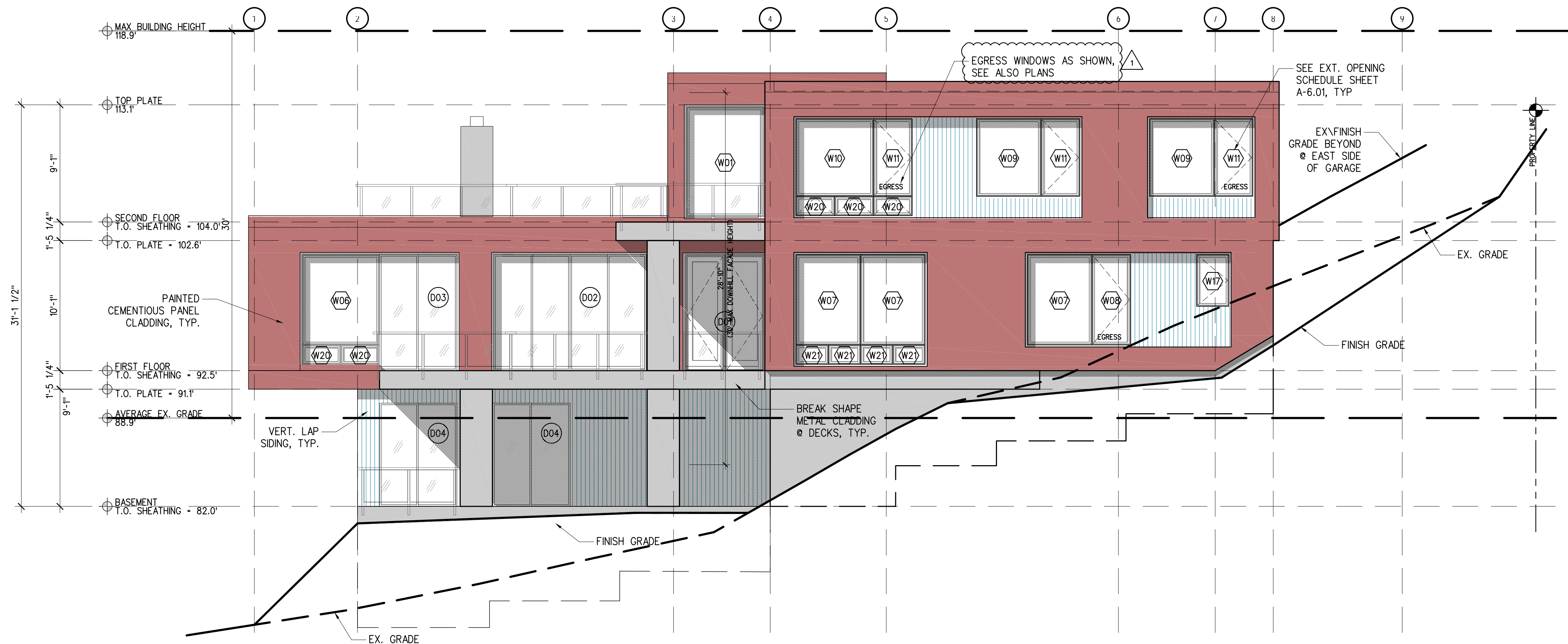
DATE	DESCRIPTION	DATE	DESCRIPTION
15/SEP/17	PRELIM		
12/MAR/2018	PRE-APP REVIEW		
30/MAY/2018	90% REVIEW		
12/JUL/2019	SUBMITTAL REVISIONS		

**PROJECT PERMIT INFO**

DATE	DESCRIPTION



2 WEST ELEV  
SCALE: 3/16" = 1'-0"

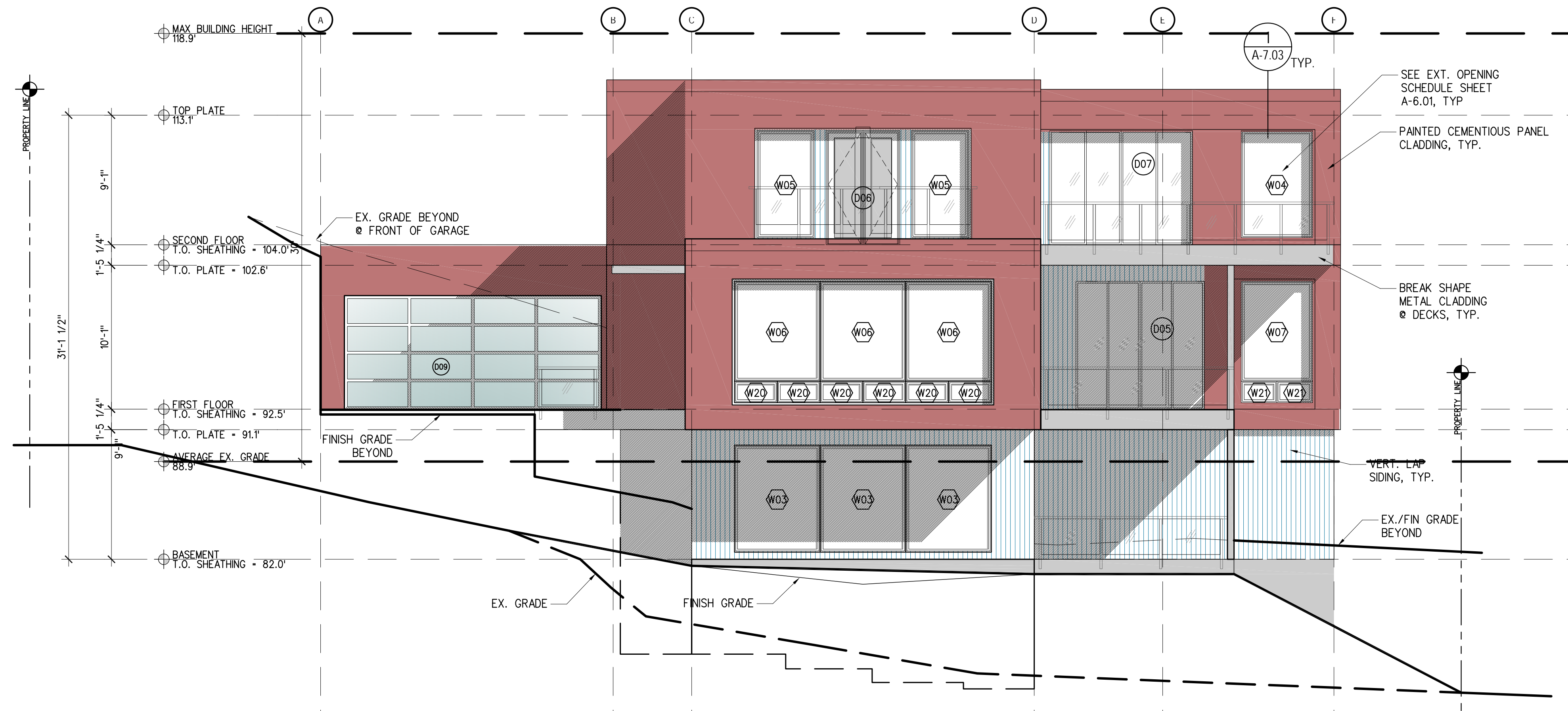


1 EAST ELEV  
SCALE: 3/16" = 1'-0"

PROJECT REVISIONS	
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12/JUL/2019	SUBMITTAL SET REV. 5
12/JUL/2019	SUBMITTAL SET REV. 4
12/JUL/2019	SUBMITTAL SET REV. 3
12/JUL/2019	SUBMITTAL SET REV. 2
12/JUL/2019	SUBMITTAL SET REV. 1

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12/JUL/2019	SUBMITTAL SET REV. 3
12/JUL/2019	SUBMITTAL SET REV. 2
12/JUL/2019	SUBMITTAL SET REV. 1
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2 SOUTH ELEV  
SCALE: 3/16" = 1'-0"

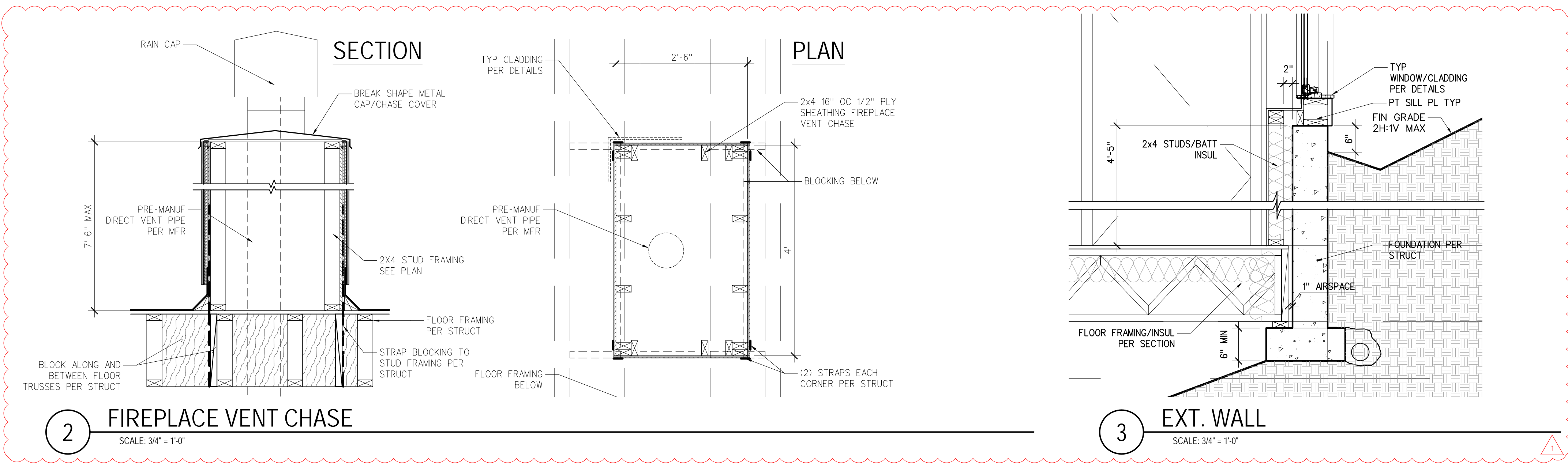


1 NORTH ELEV  
SCALE: 3/16" = 1'-0"

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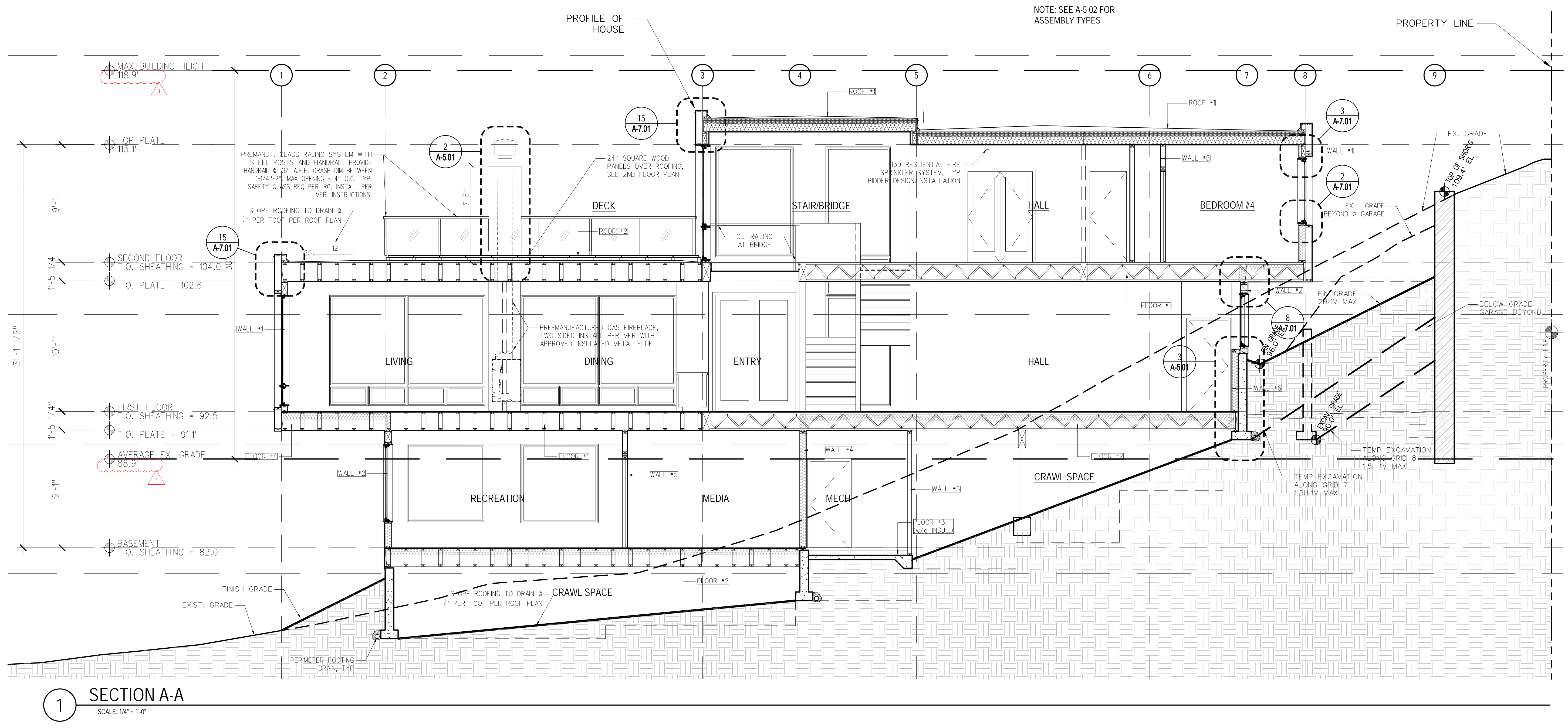
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**2 FIREPLACE VENT CHASE**  
SCALE: 3/4" = 1'-0"

**3 EXT. WALL**  
SCALE: 3/4" = 1'-0"



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

NOTE: SEE A-5.02 FOR ASSEMBLY TYPES

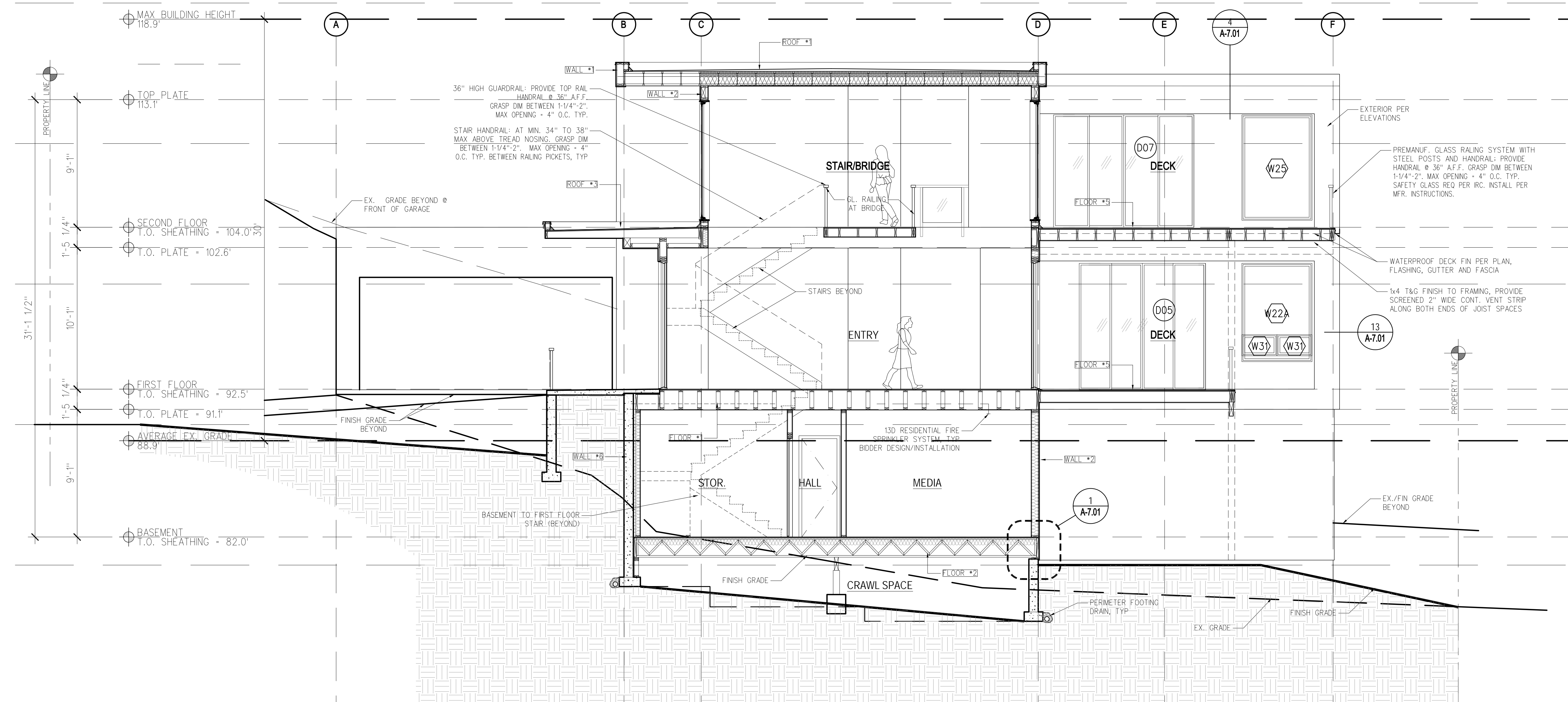
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12/JUL/2019	SUBMITTAL SET REV. 3
12/JUL/2019	SUBMITTAL SET REV. 2
12/JUL/2019	SUBMITTAL SET REV. 1

PROJECT RELEASE	
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12/MAR/2018	PRE-APP REVIEW
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ASSEMBLY TYPES		
WALL-1 CEMENTITIOUS PANEL SIDING BUILDING PAPER 1/2" PLYWOOD SHEATHING 2 X 6 STUDS @ 16" O.C. R-21 BATT INSULATION + R4 5/8" TYPE X G.W.B.	FLOOR-1 FINISH FLOOR PER PLANS 3/4" T&G PLYWOOD FLOOR FRAMING PER STRUCT. 1/2" G.W.B.	ROOF-1 SINGLE PLY WATERPROOF MEMBRANE OVER 1/2" PLYWD UNDERLAYMENT, TAPERED FURRING TO DRAIN PER ROOF PLAN/SECTIONS SHEATHING PER STRUCTURAL RAFTERS PER STRUCTURAL R-19 MIN CLOSED CELL SPRAY FOAM W/ R-19 MIN BATT INSULATION (R-38 TOTAL MIN) 5/8" TYPE X G.W.B.
WALL-2 VERTICAL LAP SIDING BUILDING PAPER 1/2" PLYWOOD SHEATHING 2 X 6 STUDS @ 16" O.C. R-21 BATT INSULATION + R4 5/8" TYPE X G.W.B.	FLOOR-2 FINISH FLOOR PER PLANS 3/4" T&G PLYWOOD FLOOR FRAMING PER STRUCT. R-38 BATT INSULATION 2" MIN CRAWLSPACE >>>PROVIDE SPRAY FIRE RETARDANT ON FRAMING FOR FIRE CODE ALTERNATE 6 MIL POLY VAPOR BAR	ROOF-2 2" SQUARE PRE-FAB IPE PANELS/PEDESTALS OVER 1/2" PLYWD UNDERLAYMENT, TAPERED FURRING TO DRAIN PER ROOF PLAN/SECTIONS SHEATHING PER STRUCTURAL RAFTERS PER STRUCTURAL R-19 MIN CLOSED CELL SPRAY FOAM W/ R-19 MIN BATT INSULATION (R-38 TOTAL MIN) 5/8" TYPE X G.W.B.
WALL-3 METAL BREAK SHAPE PANELS BUILDING PAPER 1/2" PLYWOOD SHEATHING 2 X 6 STUDS @ 16" O.C. R-21 BATT INSULATION + R4 5/8" TYPE X G.W.B.	FLOOR-3 FINISH FLOOR PER PLANS 4" CONCRETE S.O.G. 6 MIL VAPOR BARRIER R-10 RIGID INSULATION CONTINUOUS FULL SLAB INSULATION FOR 1b EFFICIENT ENVELOPE CREDIT (RIGID INSUL NOT REQ'D AT GARAGE OR WHERE NOTED)	ROOF-3 SINGLE PLY WATERPROOF MEMBRANE SHEATHING PER STRUCTURAL TAPERED FRAMING PER STRUCTURAL 3/8" T&G OR TEXTURED PLY. FIN NOTE: SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND WALL LOCATIONS
WALL-4 5/8" TYPE X G.W.B. 2 X 6 STUDS @ 16" O.C. R-21 BATT INSULATION + R4 6 MIL VAPOR BARRIER 1/2" G.W.B.	FLOOR-4 FINISH FLOOR PER PLANS 3/4" T&G PLYWOOD FLOOR FRAMING PER STRUCT. R-38 BATT INSULATION 3/8" T&G OR TEXTURED PLY.	
WALL-5 5/8" TYPE X G.W.B. 2 X 4 STUDS @ 16" O.C. 5/8" TYPE X G.W.B.	FLOOR-5 WATER PROOF FINISH 3/4" T&G PLYWOOD TAPERED DECK JOISTS PER STRUCTURAL 3/8" T&G OR TEXTURED PLY.	
WALL-3 W.P. OVER CONC WALL 2" AIRSPACE 2 X 4 STUDS @ 16" O.C. R-21 BATT INSULATION + R5 d 5/8" TYPE X G.W.B.		

4 ASSEMBLY TYPES

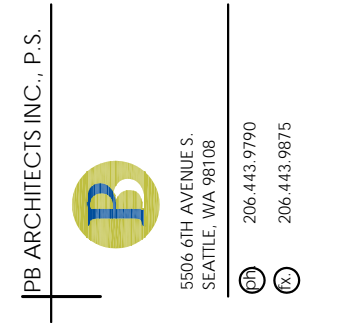


1 SECTION B-B  
SCALE: 1/4" = 1'-0"

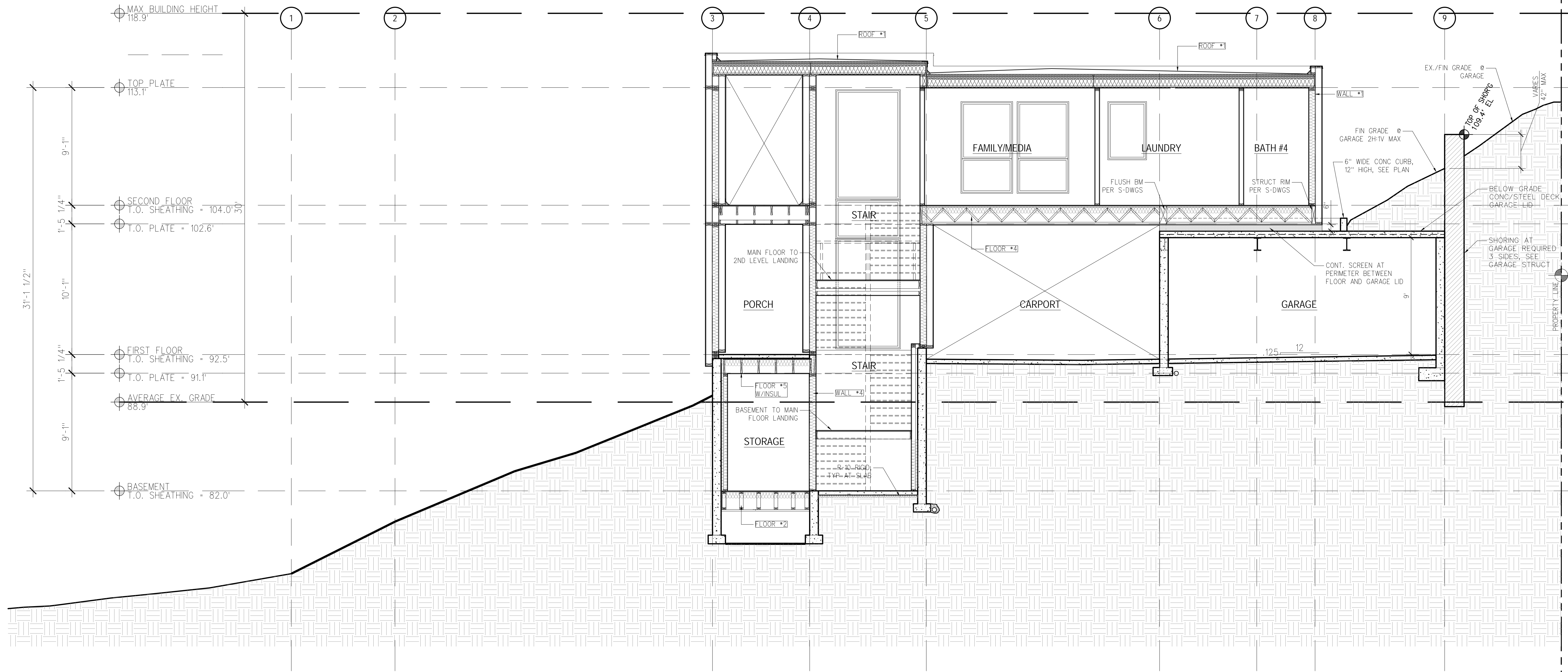
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12/JUL/2019	SUBMITTAL SET REV. 2
12/JUL/2019	SUBMITTAL SET REV. 1

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12/JUL/2019	PRE-APP REVIEW
12/JUL/2019	PRELIM

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DATE	DESCRIPTION
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12/JUL/2019	90% REVIEW
12/JUL/2019	PRE-APP REVIEW
12/JUL/2019	PRELIM







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

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PROJECT RELEASE	
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EXTERIOR SKY LIGHT SCHEDULE				
TYPE	STYLE	LENGTH	WIDTH	AREA
R01	SKYLIGHT	9'-0"	4'-0"	36 SQ. FT.
2	SKYLIGHT	4'-0"	1'-0"	4 SQ. FT.
3	SKYLIGHT	4'-0"	1'-0"	4 SQ. FT.
				<b>44 SQ. FT.</b>

3 EXTERIOR SKYLIGHT SCHEDULE

INT DOOR SCHEDULE			
Style	TYPE	Width	Count
BI-FOLD	4-0	4'-0"	1
BI-FOLD	6-6	6'-6"	3
BI-FOLD	12-0	12'-0"	1
DOOR	2-2	2'-2"	1
DOOR	2-6	2'-6"	8
DOOR	2-8	2'-8"	3
DOOR	2-10	2'-10"	1
DOOR	3-0	3'-0"	3
DOUBLE DOOR	5-0	5'-0"	5
DOUBLE DOOR	6-0	6'-0"	1
POCKET DOOR	2-6	2'-6"	7

2 INTERIOR DOOR SCHEDULE

1) "EGRESS" WINDOWS NOTED ON PLANELEV PER IRC R310.2, MINIMUM NET CLEAR OPENABLE AREA OF 5.7 SQ. FT. ELSEWHERE, AND MINIMUM NET CLEAR OPENABLE WIDTH OF 20", AND MINIMUM NET CLEAR OPENABLE HEIGHT OF 24", AND BOTTOM OF THE CLEAR OPENING NOT GREATER THAN 44"  
 2) SAFETY GLAZING, PROVIDE SAFETY GLAZING PER IRC R308 AND SPECIFICALLY IN WINDOWS PER BELOW:  
 R308.4.3 GLAZING IN WINDOWS: GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION:  
 THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQUARE FEET (0.836 M2),  
 THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES (457 MM) ABOVE THE FLOOR,  
 THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES (914 MM) ABOVE THE FLOOR AND  
 ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES (914 MM), MEASURED HORIZONTALLY AND IN A STRAIGHT LINE OF THE GLAZING.

EXT OPENINGS SCHEDULE						
OPENING TYPE	TYPE	STYLE	HEIGHT	WIDTH	Count	Area
Door	D01	Double	9'-0"	6'-0"	2	108.00
Door	D02	Double Sliding	9'-0"	11'-10"	1	106.50
Door	D03	Single Sliding	9'-0"	6'-0"	1	54.00
Door	D04	Single Sliding	8'-0"	6'-0"	2	96.00
Door	D05	Double Sliding	9'-0"	9'-0"	1	81.00
Door	D06	Double	8'-0"	5'-0"	1	40.00
Door	D07	Double Sliding	8'-0"	10'-0"	1	80.00
Door	D08	Single	8'-0"	3'-0"	1	24.00
Door	D09	Garage Door	8'-0"	18'-0"	1	144.00
Window	W01	FIXED	8'-6"	6'-0"	2	102.00
Window	W02	FIXED	8'-6"	5'-0"	2	85.00
Window	W03	FIXED	7'-6"	6'-0"	3	135.00
Window	W04	FIXED	7'-6"	5'-0"	1	37.50
Window	W05	FIXED	7'-6"	4'-0"	2	60.00
Window	W06	FIXED	7'-0"	6'-0"	8	336.00
Window	W07	FIXED	7'-0"	5'-0"	4	140.00
Window	W08	CASEMENT	7'-0"	3'-0"	1	21.00
Window	W09	FIXED	6'-0"	5'-0"	4	120.00
Window	W10	FIXED	6'-0"	6'-0"	3	108.00
Window	W11	CASEMENT	6'-0"	3'-0"	5	90.00
Window	W13	CASEMENT	4'-6"	4'-0"	1	18.00
Window	W13	FIXED	4'-6"	4'-0"	1	18.00
Window	W14	FIXED	4'-6"	3'-0"	3	40.50
Window	W15	FIXED	4'-6"	2'-0"	1	9.00
Window	W16	FIXED	4'-0"	3'-0"	5	60.00
Window	W17	CASEMENT	4'-0"	2'-6"	1	10.00
Window	W18	FIXED	3'-0"	5'-0"	1	15.00
Window	W19	AWNING	3'-0"	4'-0"	1	12.00
Window	W19	FIXED	3'-0"	4'-0"	1	12.00
Window	W20	AWNING	1'-6"	3'-0"	3	13.50
Window	W20	FIXED	1'-6"	3'-0"	16	72.00
Window	W21	FIXED	1'-6"	2'-6"	6	22.50
						<b>2,270.50</b>

1 EXTERIOR OPENINGS SCHEDULE



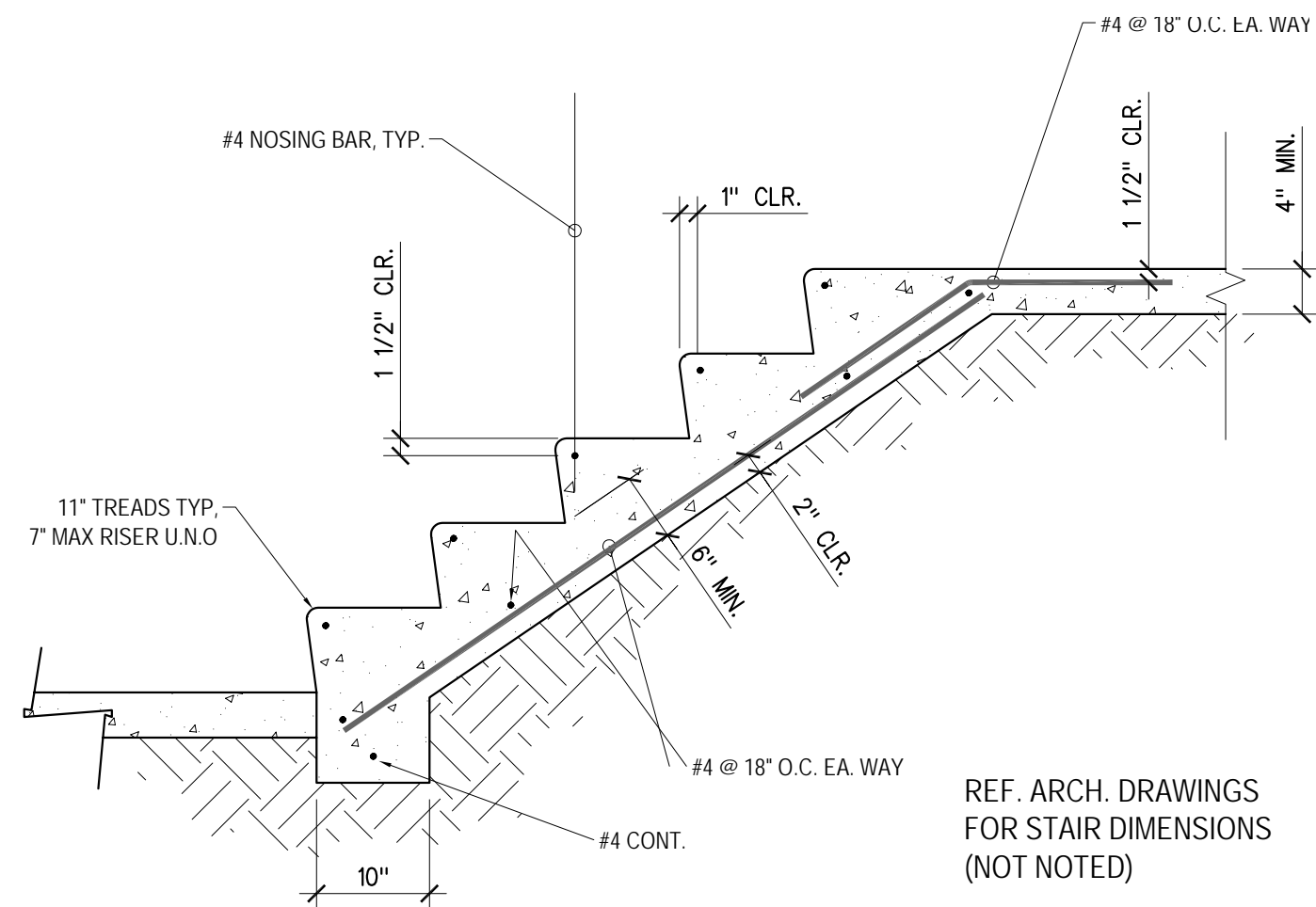
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DATE	DESCRIPTION
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DATE	DESCRIPTION
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17/MAR/2018	PRE-APP REVIEW
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12/JUL/2019	SUBMITTAL REVISIONS

PROJECT PERMIT INFO	
DATE	DESCRIPTION

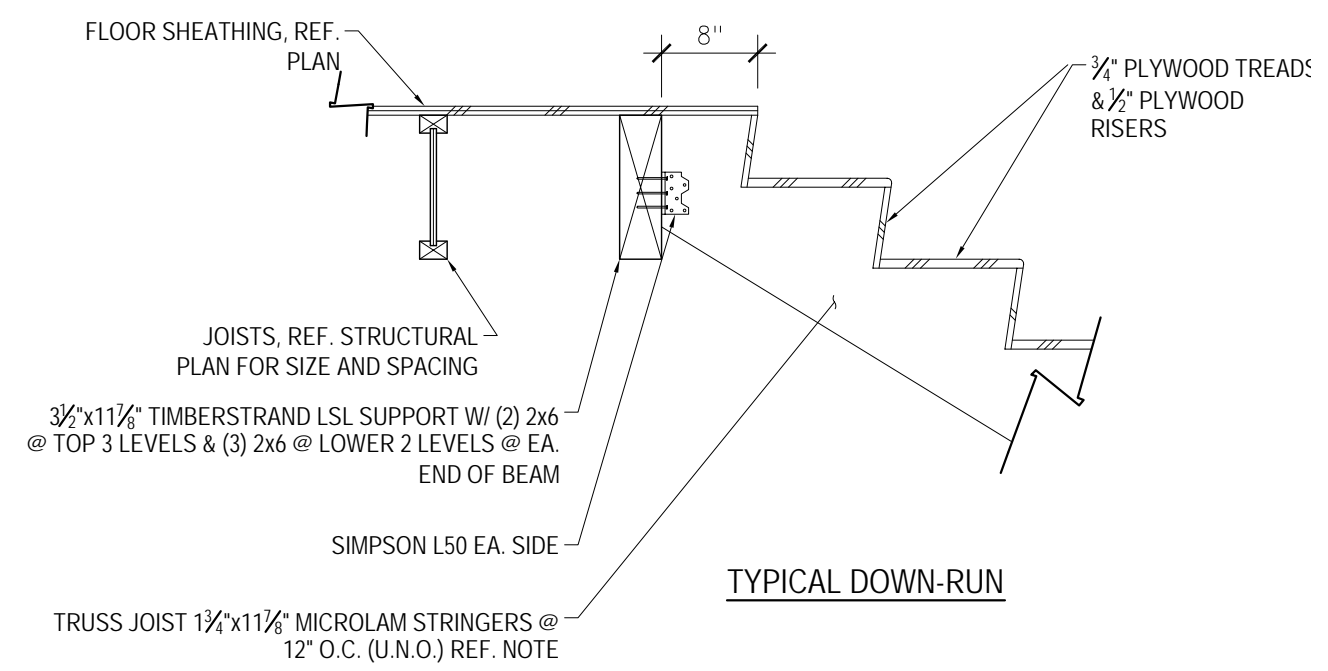




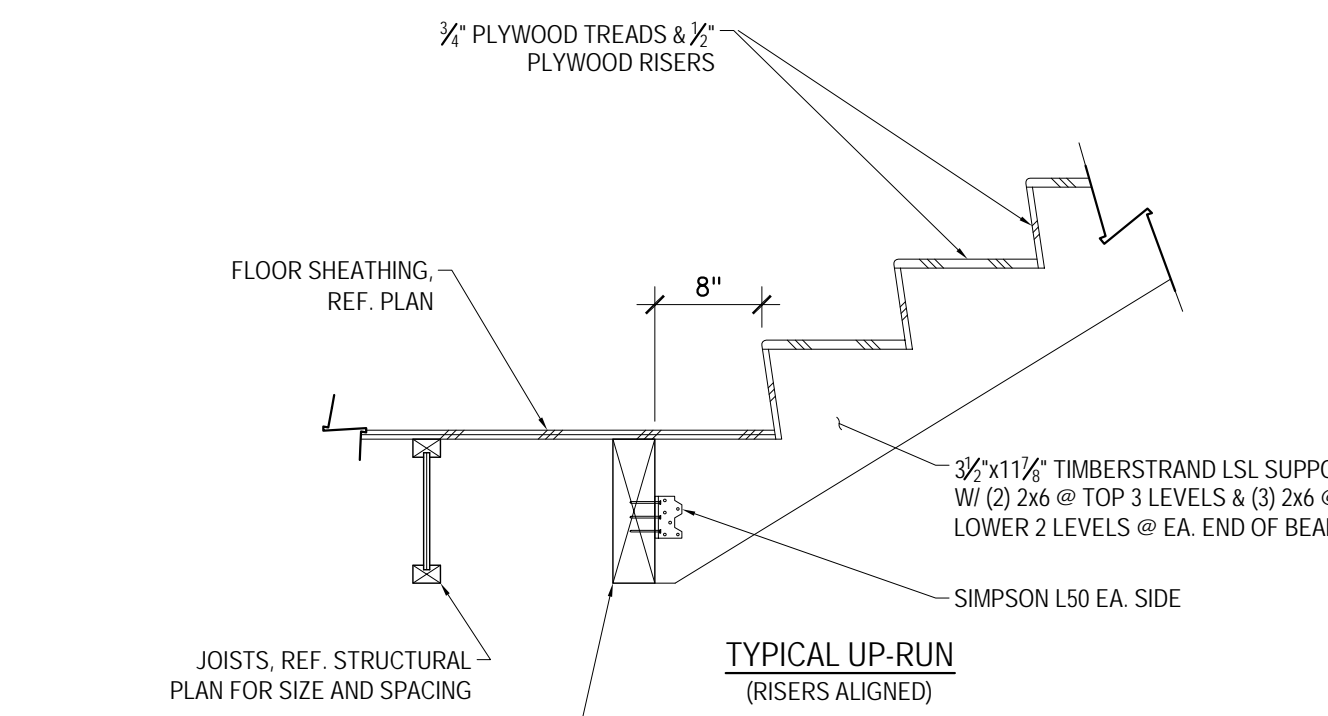


**16** TYPICAL STAIR ON GRADE  
SCALE: 3/4" = 1'-0"

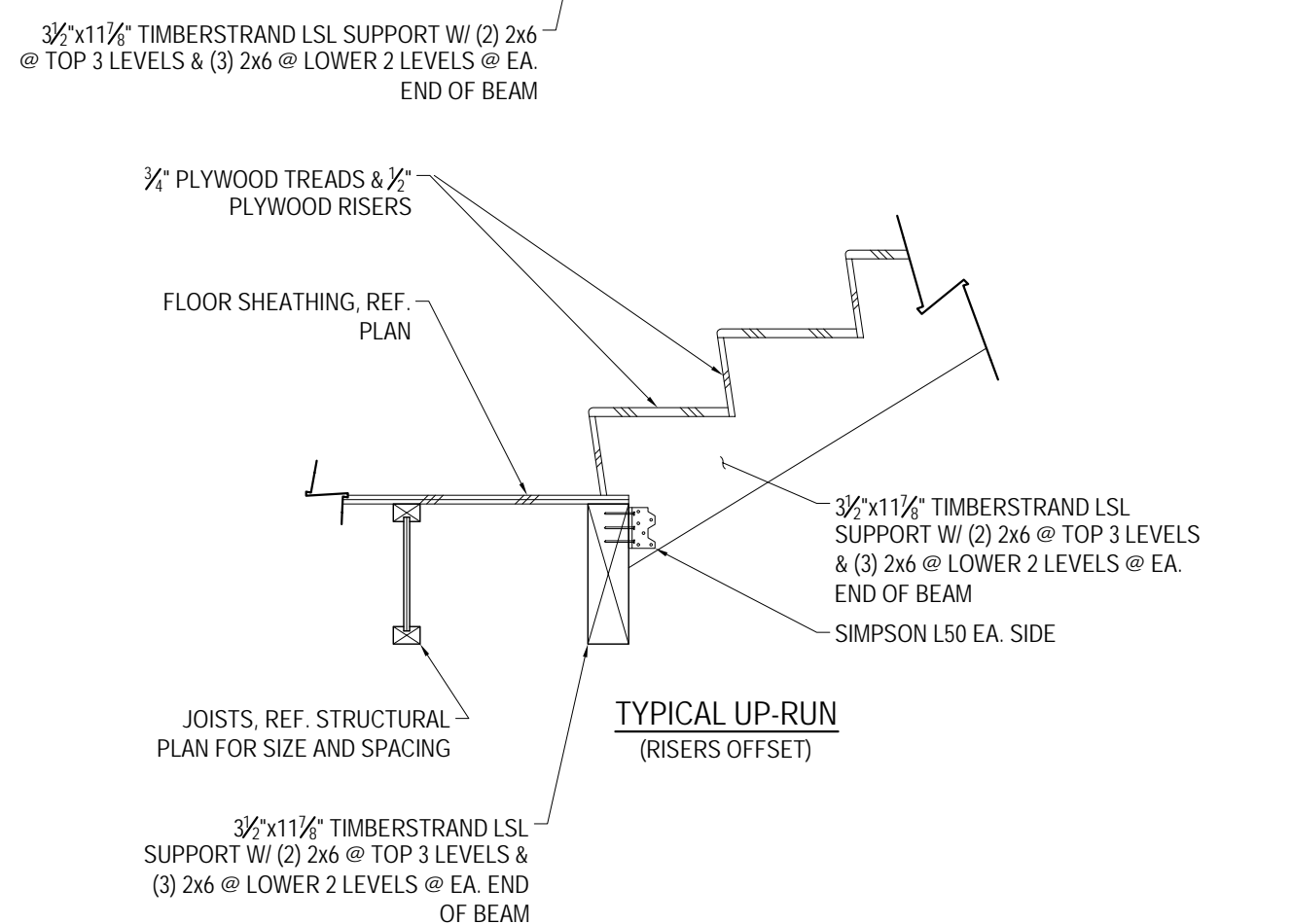
- NOTE:
1. USE TRUSS JOIST 3 1/2" X 11 1/2" MICROLAM STRINGERS @ 6" O.C. FOR STAIR RUNS WITH 11 OR MORE RISERS
  2. REF. ARCH. FOR STAIR DIMENSIONS (NOT NOTED)



TYPICAL DOWN-RUN

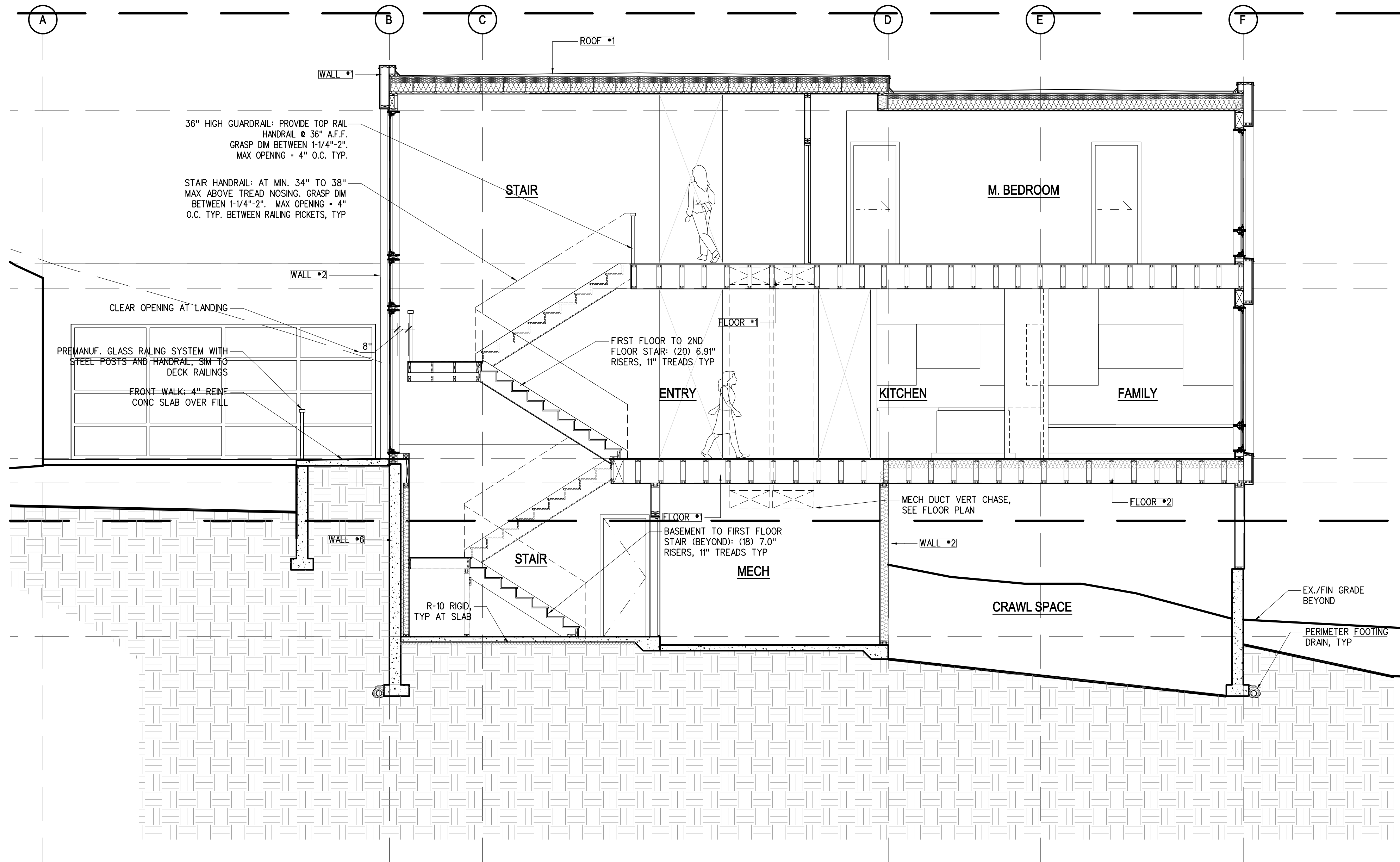


TYPICAL UP-RUN (RISERS ALIGNED)



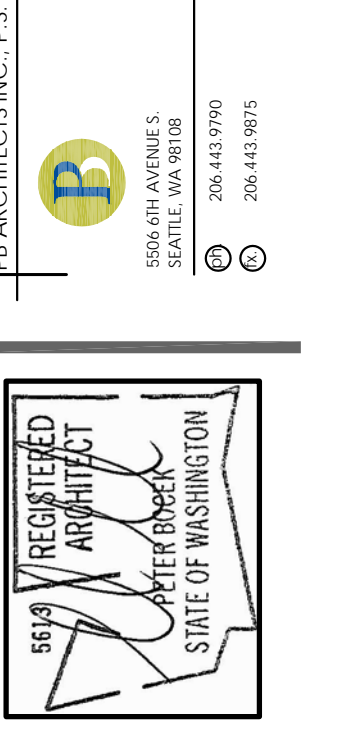
TYPICAL UP-RUN (RISERS OFFSET)

**13** STAIRS - TYPICAL STRINGER  
SCALE: 3/4" = 1'-0"



**1** WALL SECTION  
SCALE: 1/2" = 1'-0"

NOTE: SEE A-5.02 FOR ASSEMBLY TYPES



**WEN HUI**  
**RESIDENCE**  
8243 WEST MERCER WAY  
MERCER ISLAND | WA | 98040

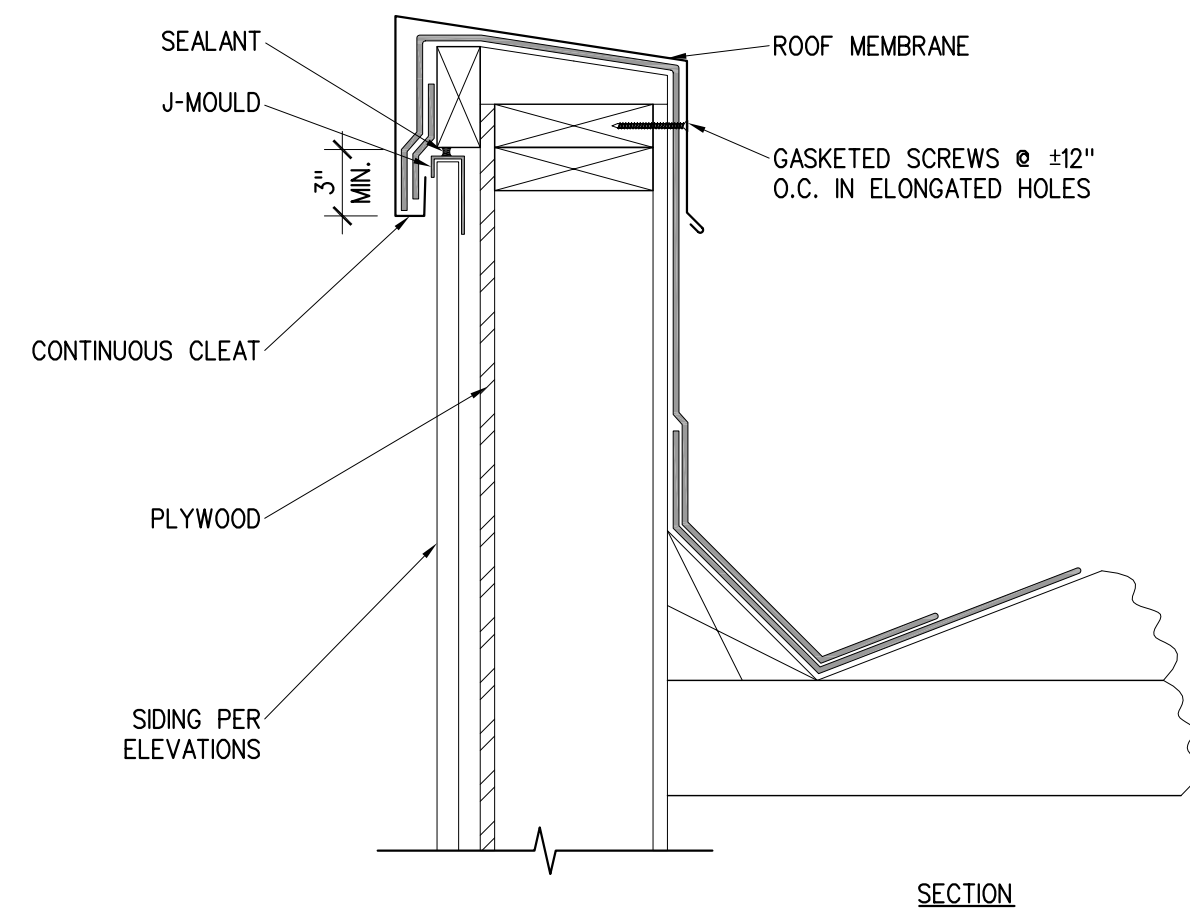
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30/MAR/2018	90% REVIEW
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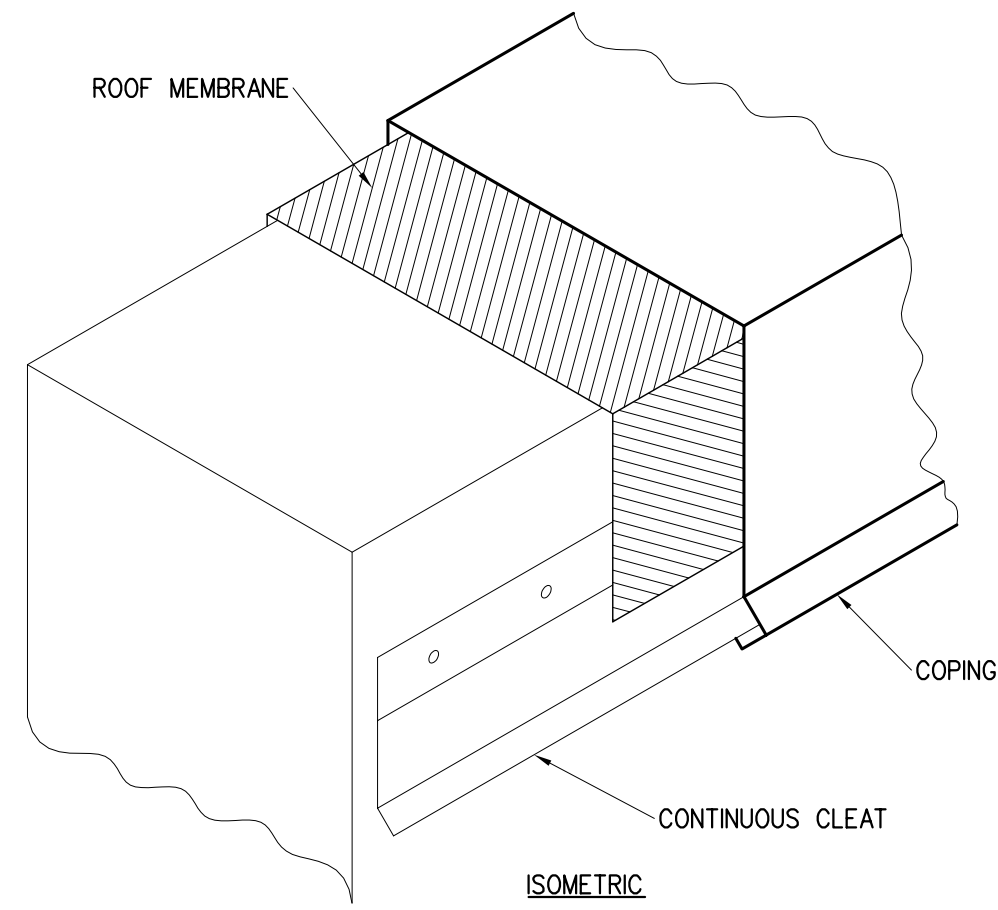
PROJECT PERMIT INFO	
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**A-7.02**  
DETAILS - STAIRS

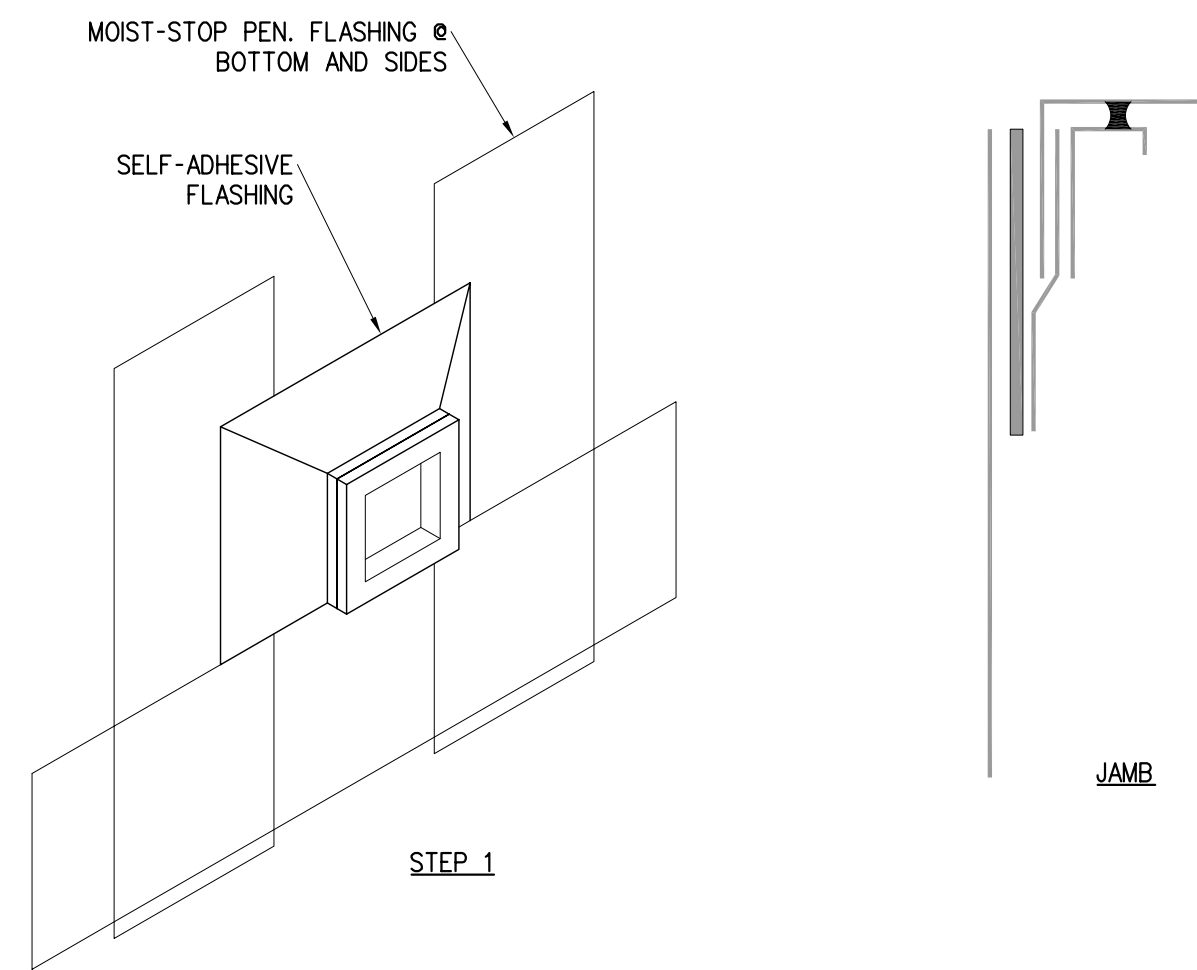




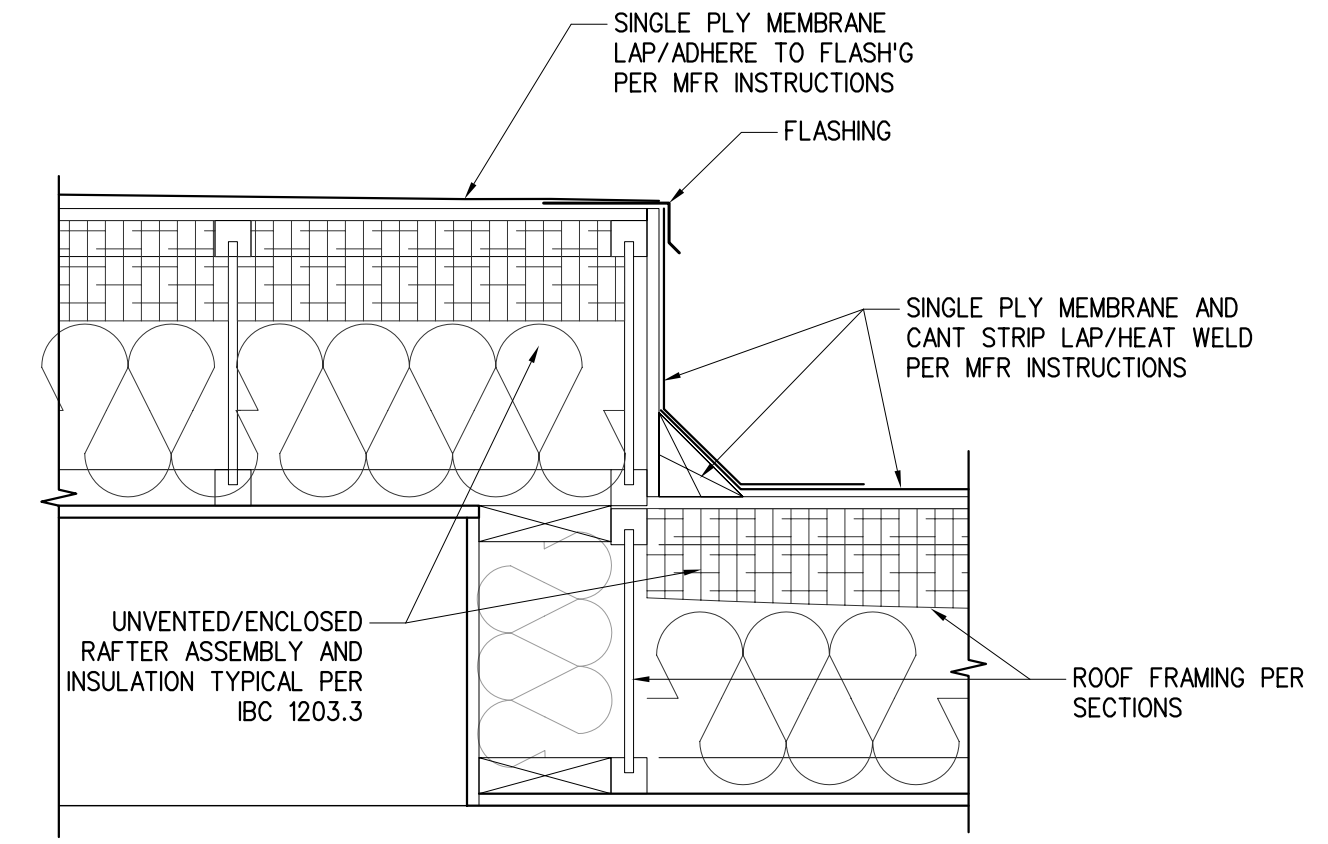
SECTION



ISOMETRIC



STEP 1

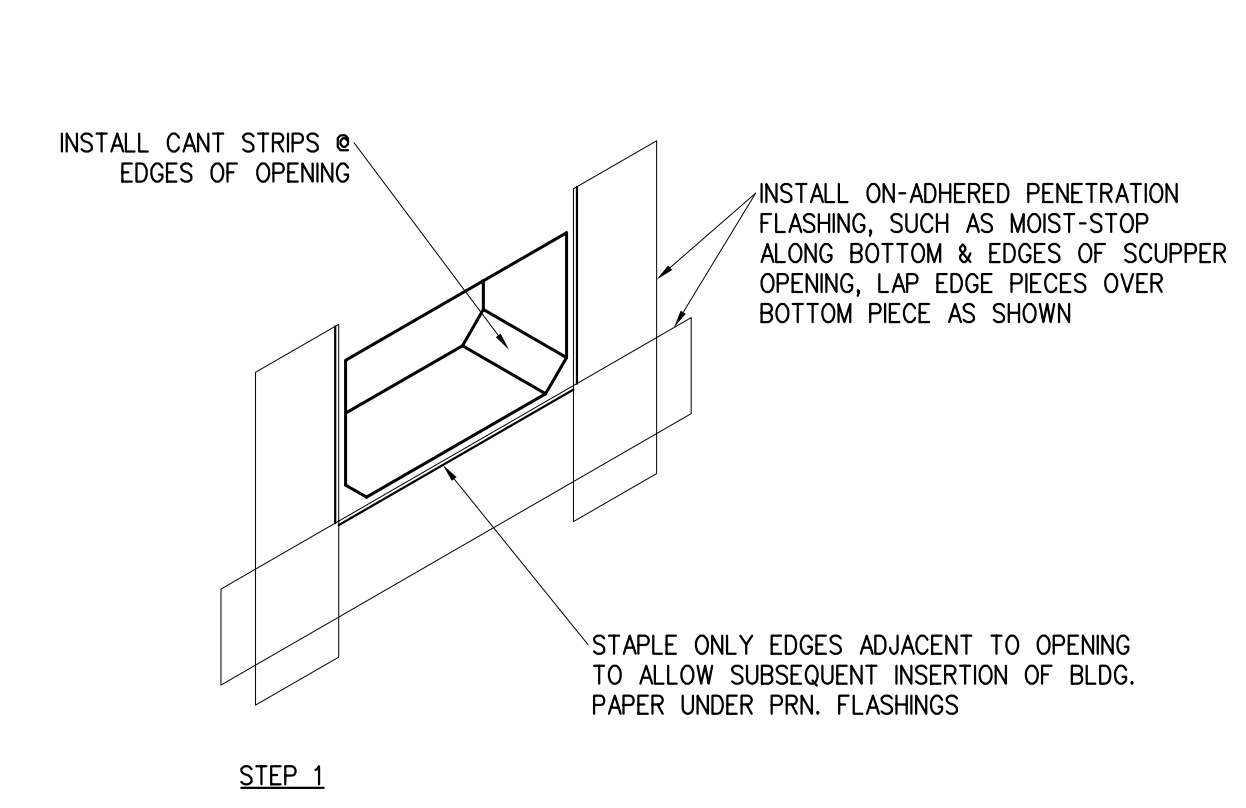


3 ROOF STEP

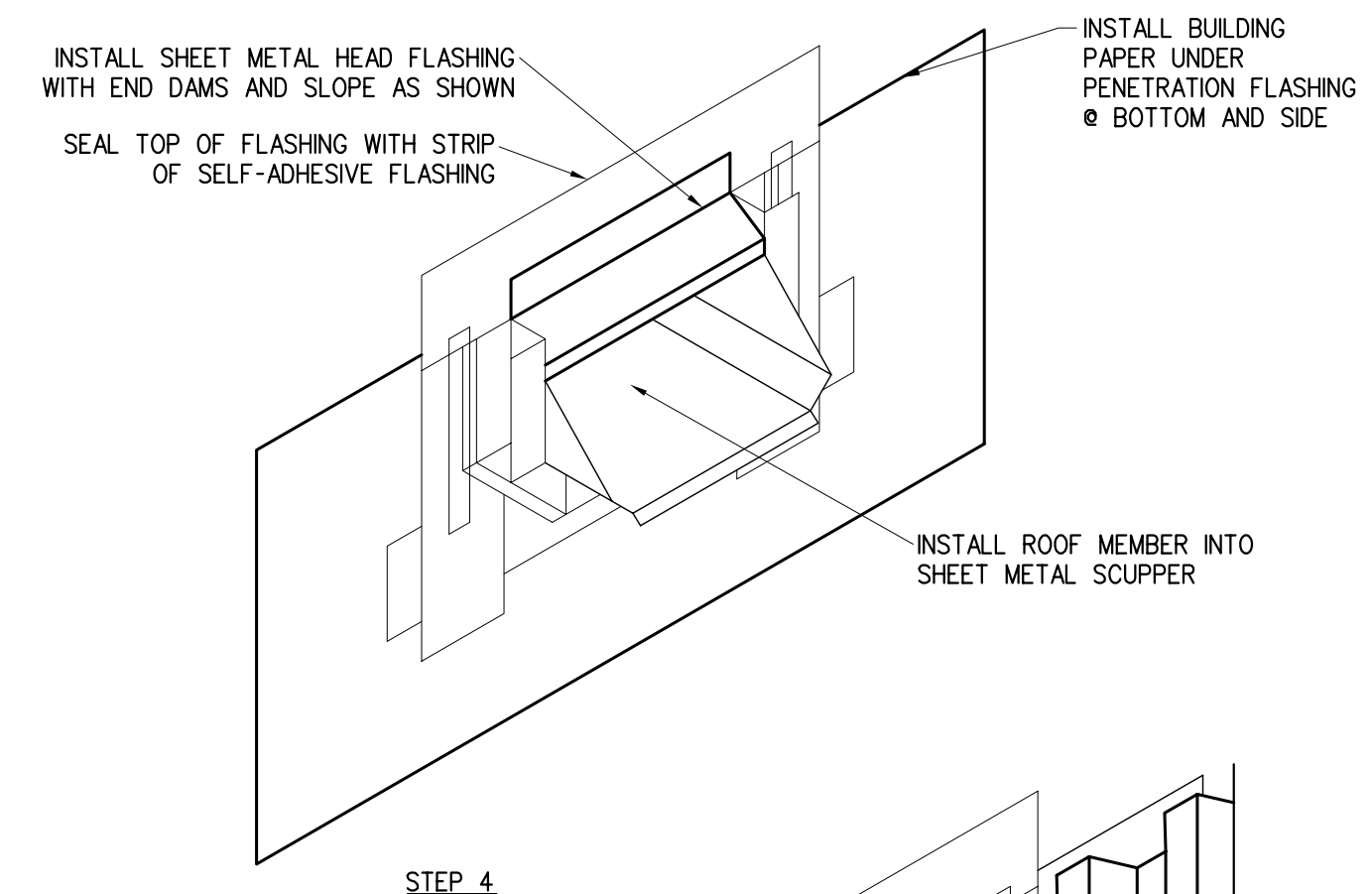
SCALE: 1-1/2" = 1'-0"

12 PARAPET

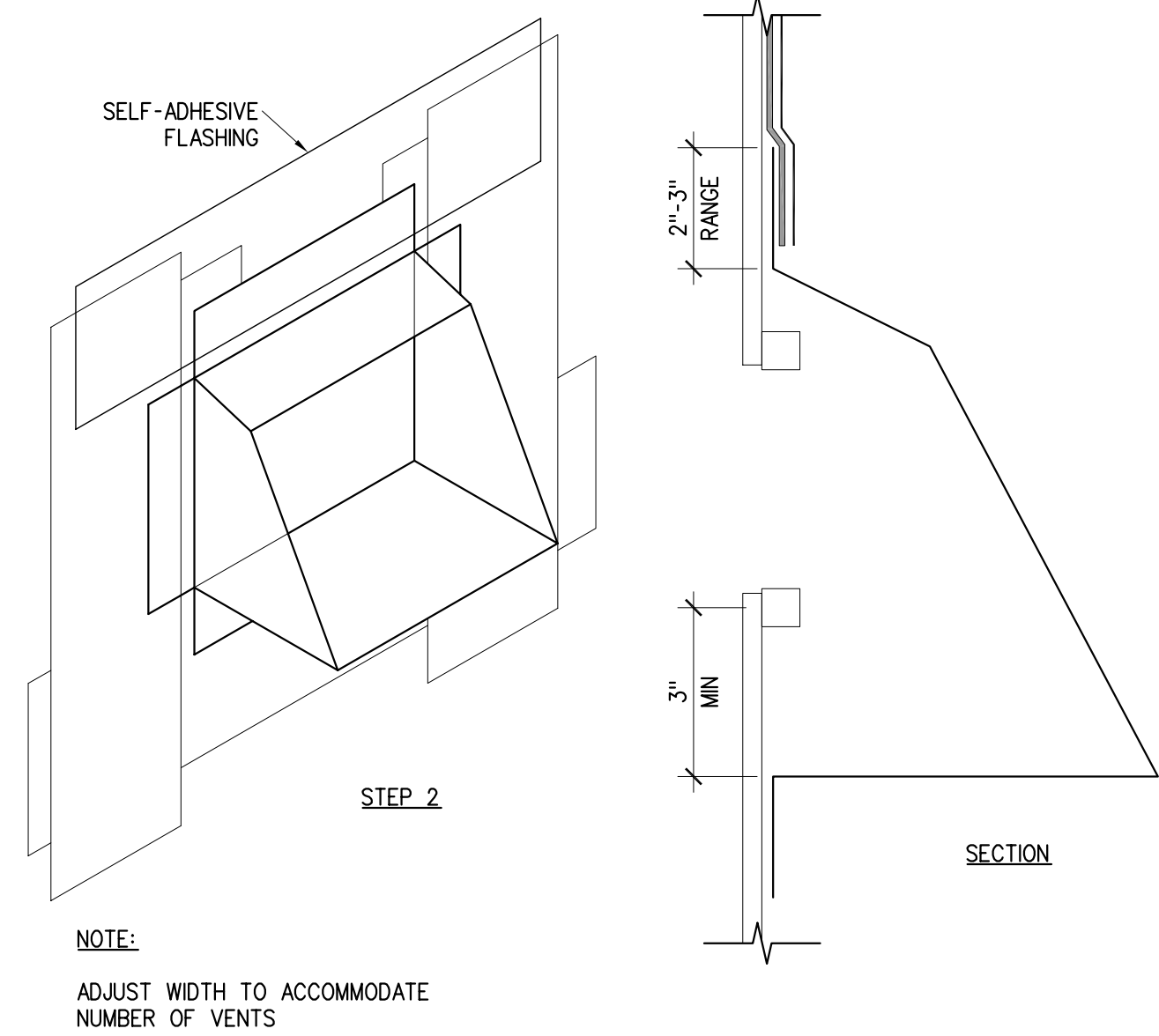
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STEP 1



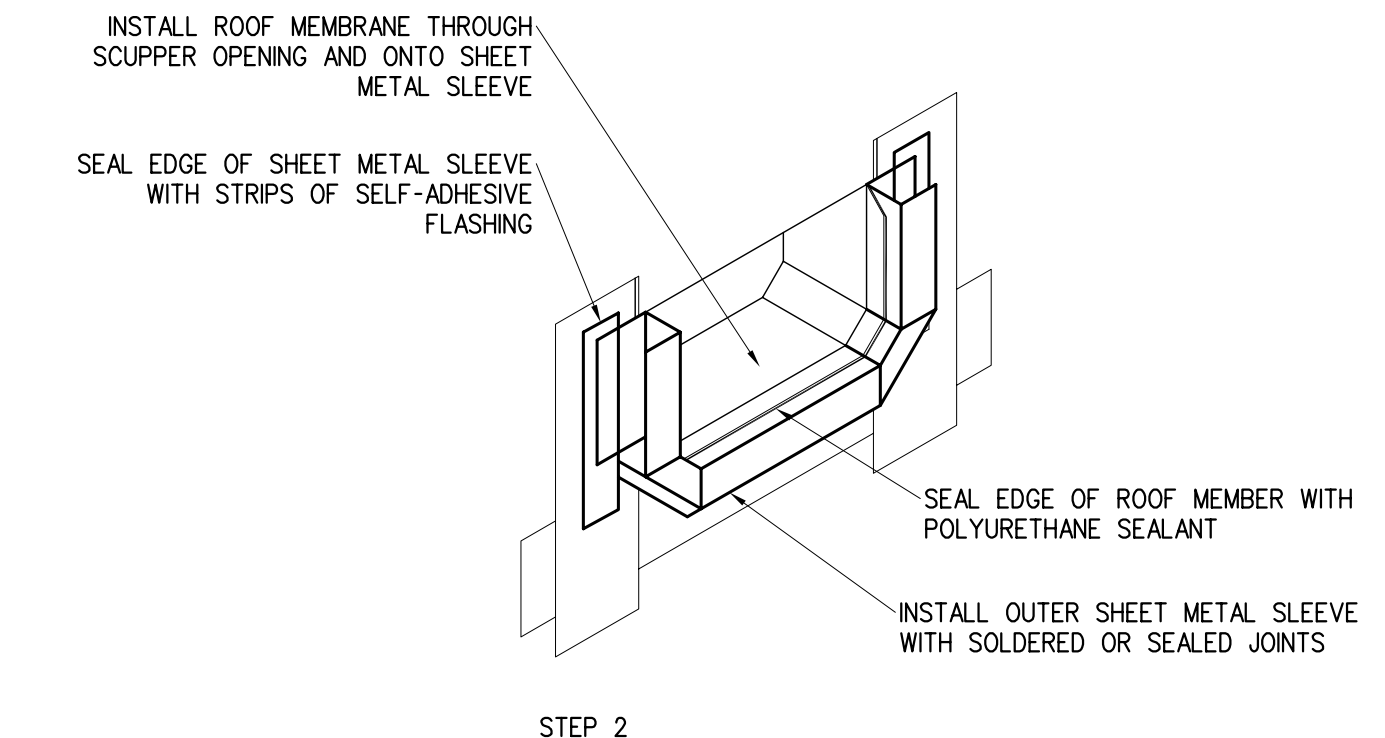
STEP 4



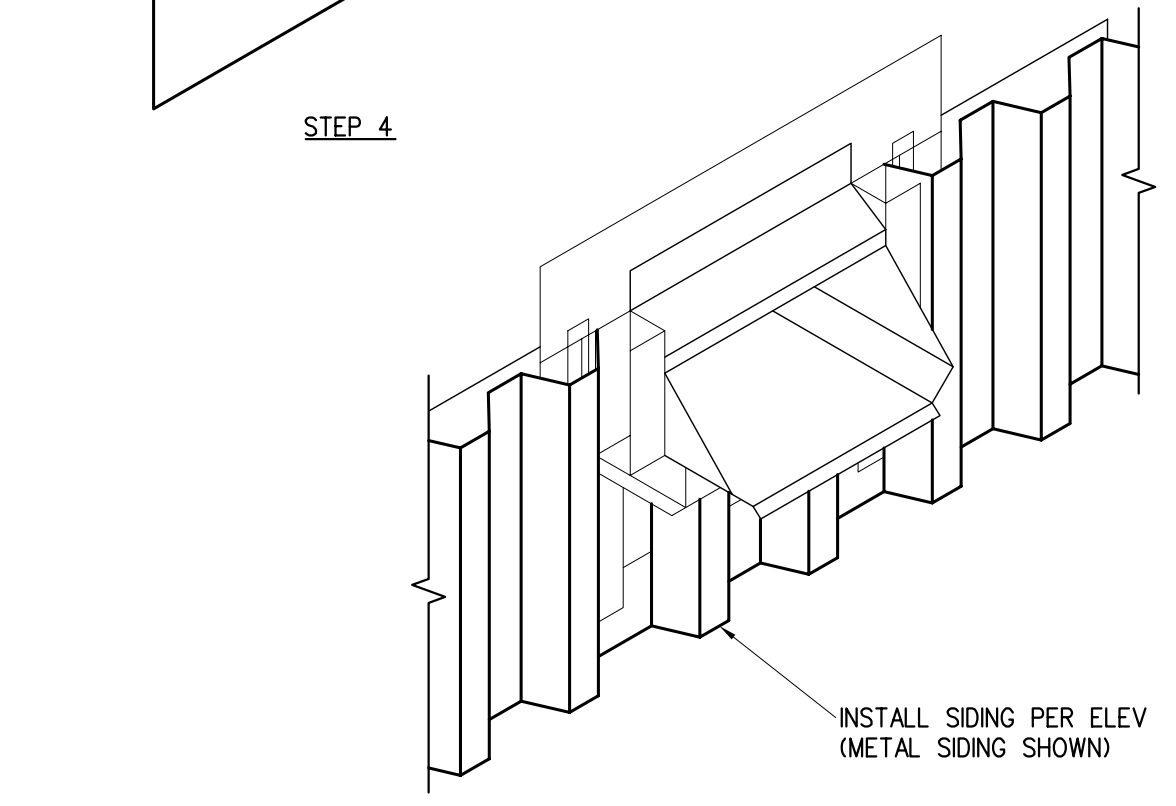
STEP 2

NOTE:

ADJUST WIDTH TO ACCOMMODATE NUMBER OF VENTS



STEP 2



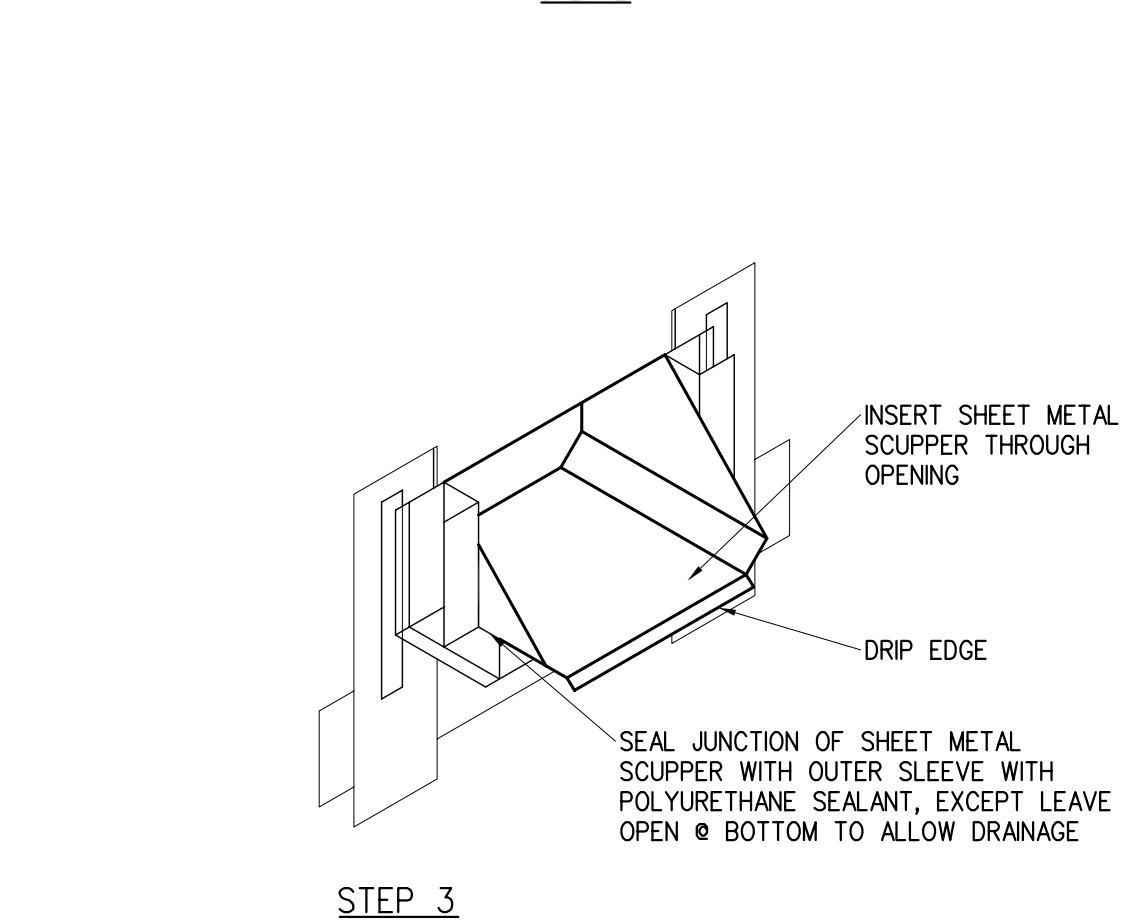
STEP 5

5 VENT COVER

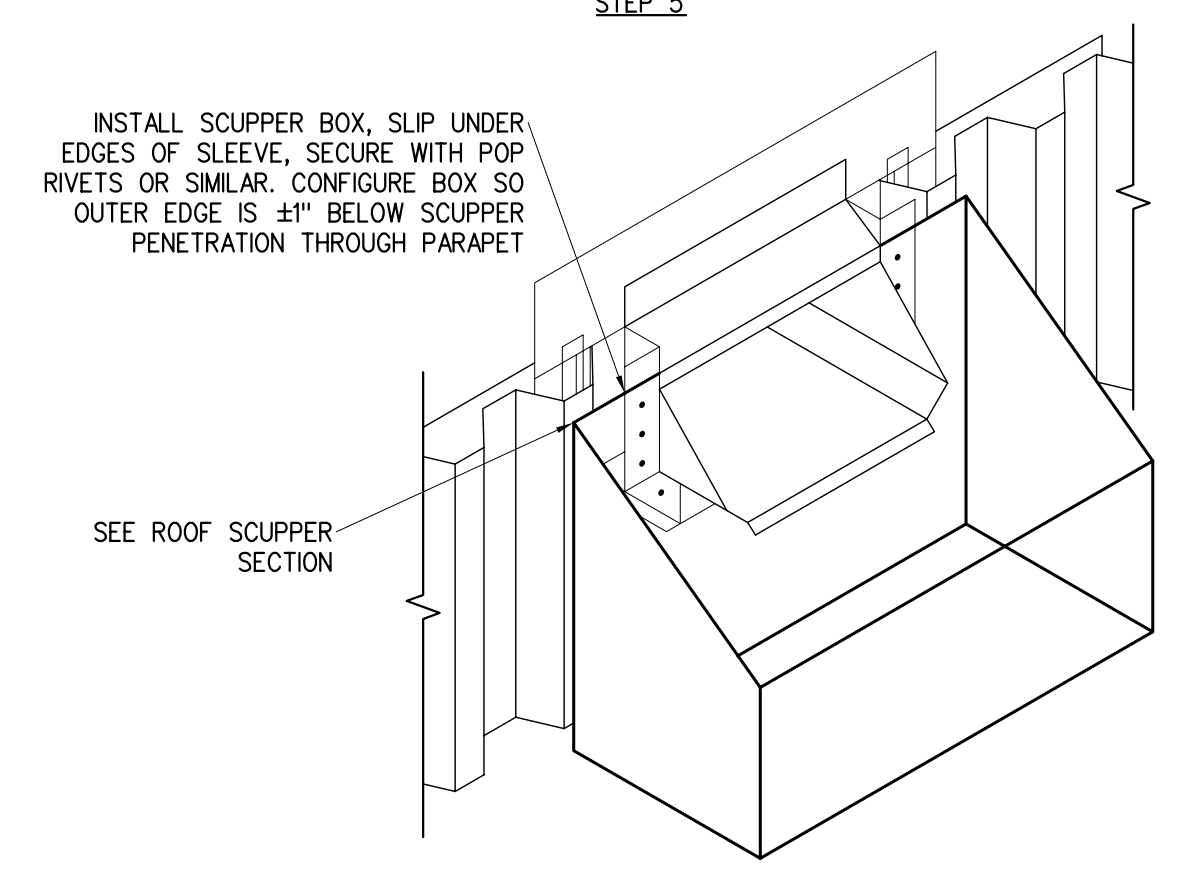
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2 CANTILEVER SOFFIT

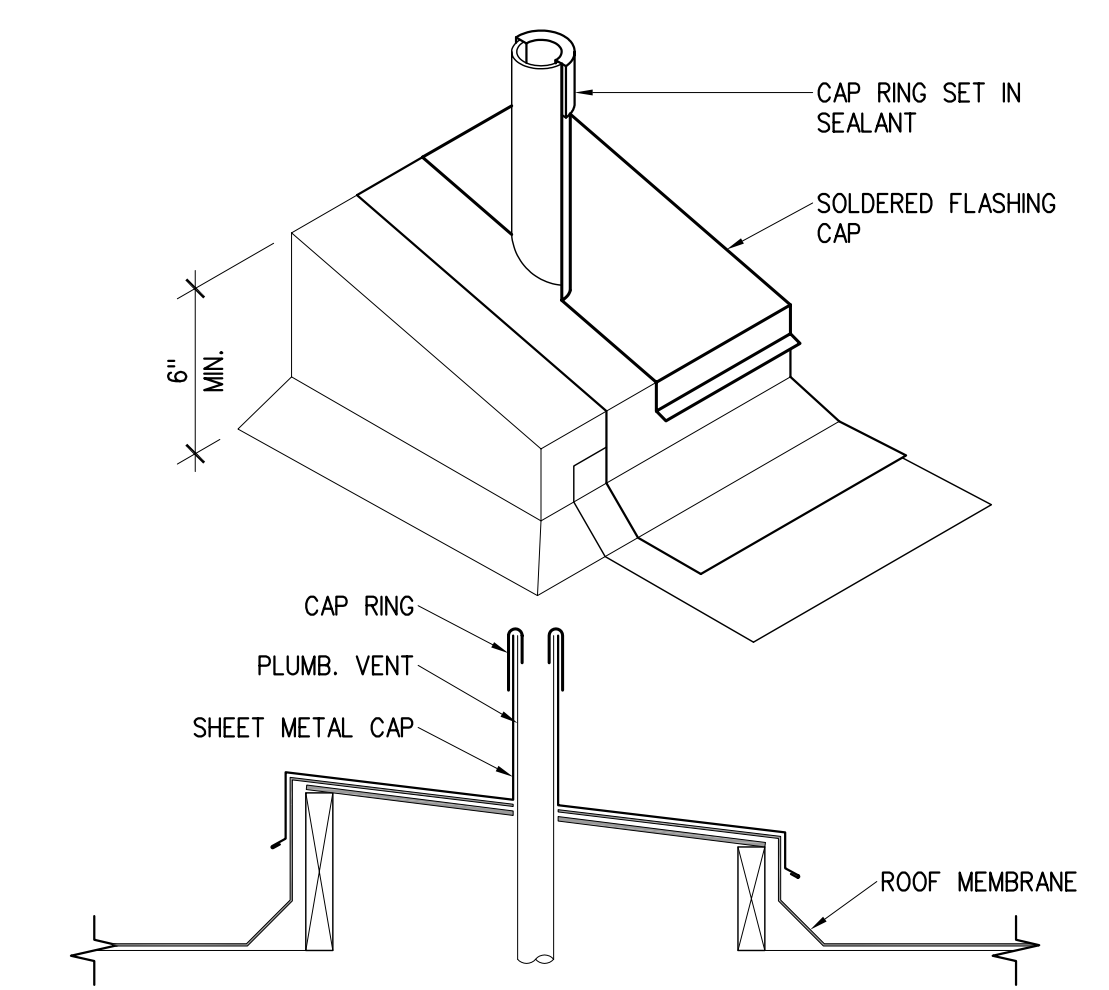
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STEP 3

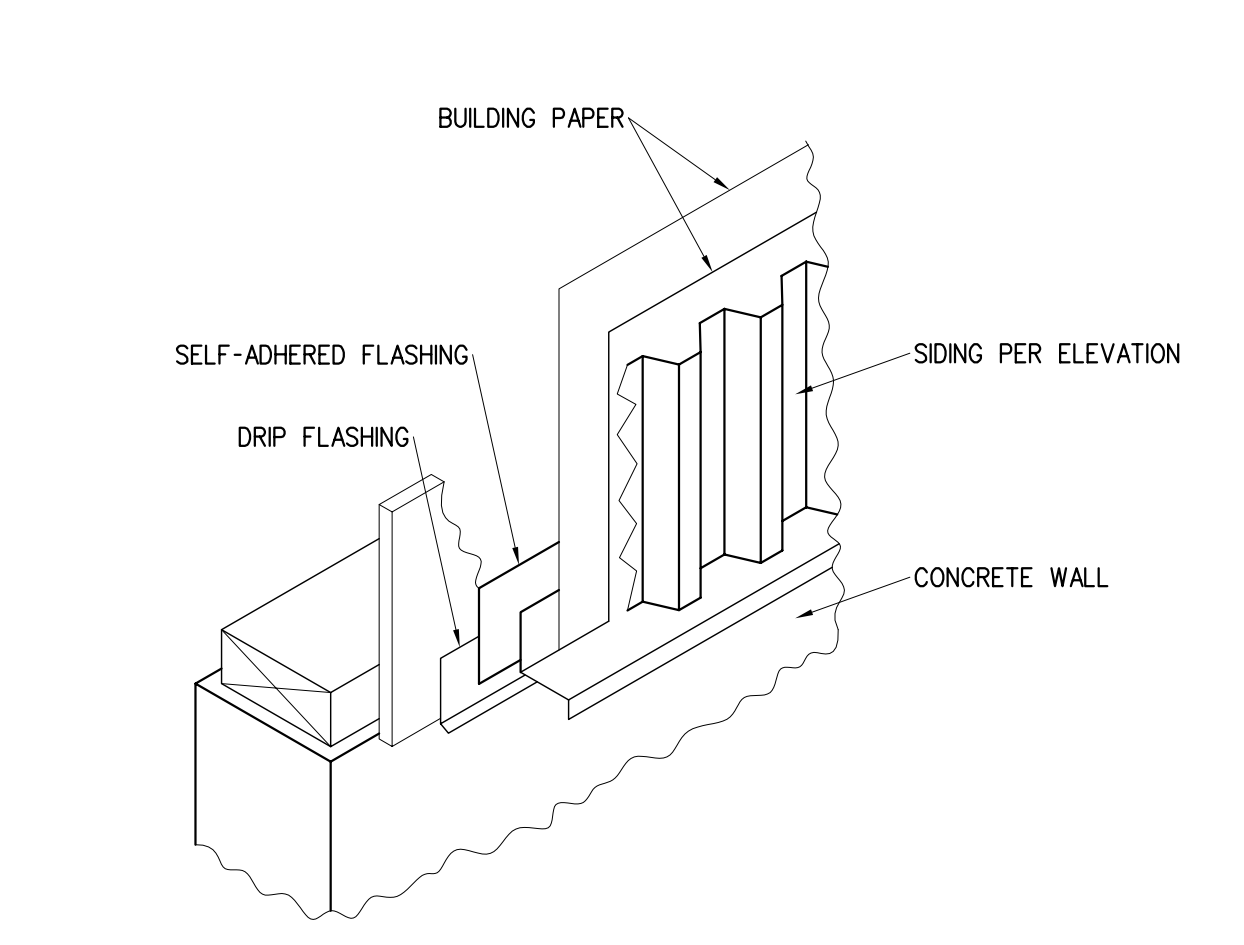


STEP 6



4 ROOF SCUPPER VENT

SCALE: NA



1 WALL BASE

SCALE: NA

10 ROOF SCUPPER INSTALL

SCALE: NA

PROJECT REVISIONS	
DATE	DESCRIPTION
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DATE	DESCRIPTION
15/SEP/17	PRELIM
12/MAR/2018	PRE-APP REVIEW
30/MAR/2018	90% REVIEW
12/JUL/2019	SUBMITTAL REVISIONS

PROJECT PERMIT INFO	
DATE	DESCRIPTION

**GENERAL NOTES:**

The Structure has been designed to resist code-required vertical and lateral forces after the construction of all structural elements have been completed. Stability of the structural elements prior to completion is the sole responsibility of the General Contractor. Builder is to verify all dimensions prior to starting work. All changes to structure must be reviewed and approved by Phillips Structural Engineering. All materials, methods, and workmanship shall be in accordance with the International Building Code (IBC) 2015 Edition. The Builder is responsible for using safe work practices and conforming to all safety ordinances.

Construction observation by the Structural Engineer is for conformance with design aspects only and is not intended in any way to review the General Contractor's construction procedures.

**STANDARDS:**

All methods, materials and workmanship shall conform to the 2015 International Building Code (IBC) as amended and adopted by the local Building Official or applicable jurisdiction.

**DESIGN LOADS**

ROOF LOAD: SNOW 25 PSF, DEAD 20 PSF  
 FLOOR LOADS: LIVE 40 PSF, DECK LIVE 60 PSF, DEAD 15 PSF  
 WIND SPEED: Vs 3-Sec= 110 MPH, Iw=1.0, EXPOSURE "C"  
 SEISMIC: DESIGN CATEGORY "D", Ss=1.47, S1=0.56, Ie=1.0, Site Class "D", R=6.5

**SOILS:**

Allowable soil bearing pressure of 1500 PSF is assumed. It is the contractor's responsibility to verify that all footings bear on firm, undisturbed earth or compacted "Structural Backfill" that meet or exceed allowable soil bearing pressure.

**FOUNDATIONS:**

Bottom of exterior footings shall be a minimum of 18" below finished grade bearing on undisturbed native soils. Back fill with dry soils. Backfill next to retaining walls with a minimum of 12" gravel or free draining soil. Soils under footings and slabs to be 95% compacted to a Modified Proctor Density (ASTM D1557). All construction on fill soil shall be reviewed by a licensed Geotechnical engineer.

**CONCRETE:**

All concrete materials and placement shall conform to the current ACI code. Concrete shall be made with Portland Cement ASTM C-150 Type II or Type I and shall be Ready-Mixed per ASTM C-94. Min. compressive strength shall be 3000 PSI\* at 28 days with a min. water/cement ratio of .45. All concrete shall be air entrained 5 ±1%. Max aggregate size = 7/8". \*Special Inspection not required. 3000 PSI compressive strength has been specified for weathering protection. *Structural design of concrete based on 2500 PSI compressive strength.*

**REINFORCING STEEL:**

All reinforcing steel to be GRADE 60 PER ASTM A-615. Lap all splices shall be the greater of 32 bar diameters or 18". Lap horizontal steel at corners and intersections in footings and walls with continuous corner bars.

Minimum concrete cover over reinforcing steel:

- INTERIOR FACES OF SLAB AND WALL BARS = 1 1/2"
- EXPOSED TO WEATHER OR EARTH = 1 1/2" AT #5 AND SMALLER AND 2" AT #6 AND LARGER.
- CONCRETE CAST AGAINST SOIL = 3"

**WOOD FRAMING AND CARPENTRY:**

General Requirements: Provide minimum nailing per 2015 IBC table 2304.10.1 or as indicated on the drawings. Do not notch or drill structural members, except as permitted by the engineer.

Framing Connectors: Only ICC approved connectors shall be used in framing applications as manufactured by Simpson Strong-Tie or equivalent. Provide maximum size and quantity of fasteners shown in the manufacturer's catalog U.N.O.

**Fasteners:**

Bolts shall be per ASTM A-307 with standard cut washers or malleable iron washers. Post-installed anchors require engineering confirmation prior to installation. Contact Phillips Structural Engineering for possible alternatives. Nails shall be common wire nails or equivalent pneumatically drive nails (P-nails), American or Canadian manufacturer only as indicated below. P-nails shall be installed per the manufacturer's guidelines.

COMMON WIRE NAIL	DIAMETER (INCHES)	MINIMUM LENGTH (INCHES)	NAIL APPLICATION
8d COMMON	0.131	2 1/2"	SHEATHING
10d COMMON	0.148	2 3/4"	SHEATHING
N/A	0.131	3"	FRAMING
12d COMMON	0.148	3 1/4"	FRAMING
16d COMMON	0.162	3 3/4"	FRAMING

**Wood Sheathing (Structural):**

Roof sheathing shall be 1/2" CDX or 7/16" OSB nailed w/ 8d @ 6" o.c. along panel edges, and 12" o.c. in field. Span index shall be 24/0. Plywood Sub Flooring shall be 3/4" T&G CDX or OSB (glued & nailed). Nailing shall be 10d @ 6" o.c. along panel edges, and 12" o.c. in field (U.N.O.) Span index shall be 48/24. Stagger all end laps. All sheathing shall bear the grade trademark of the American Plywood Association (APA).

**Studs:**

All studs shall be kiln dried (KD) or surface dried (SD). Each stud shall bear the stamp of the West Coast Lumber Inspection Bureau (WCLIB) or Western Wood Products Association (WWPA) showing grade mark or approved equal. All studs shall 2x minimum material and Doug-Fir meeting the following minimum strength properties: Fb= 900psi, Fv=180psi, E=1,600,000psi.

**Headers:**

All headers not specified or otherwise noted on the plan with spans <5'-0" are to be 4x8 DF#2 or (2)2x10 HF#2 with at least one cripple and one king stud at each end. Spans greater than 5'-0" shall have at least two cripples and one king stud U.N.O.

**Heavy Timbers:**

All timbers above sizes listed above including posts and beams shall be Doug-Fir #2 or better.

**Glue-Laminated Beams (GLB):**

All GLB shall be in conformance with ANSI A190.1, American National Standards for Structural Glue-Laminated Timber. Grade 24F-V4 shall meet or exceed the following: Fb=2400psi, Fv=240psi, E=1,800,000psi and shall be used at simple spans. Grade 24F-V8 shall be used at continuous spans.

**Laminated Veneer Lumber (LVL):**

All LVL shall be in conformance with ASTM D2559. LVL shall be made of Doug-Fir (DF) and meet or exceed the following: Fb= 2,600psi, Fv=285psi, E=1,900,000psi.

**Parallel Strand Lumber (PSL):**

All PSL shall be in conformance with ASTM D2559 and NER-292. PSL strength requirements shall meet or exceed the following: Fb=2,900psi, Fv=290psi, E=2,000,000psi.

**Preservative Treatment (P.T.):**

All exposed framing including lumber, plywood and deck materials shall be pressure treated with 0.25%cf pentachlorophenol per AWWA specification P-5 or other approved treatment. All cutting and boring after pressure treatment shall be cared for in accordance with AWWA specification M-4. Exposed framing includes, but is not limited to:

1. Joists, girders and subfloor that is closer than 18" to exposed ground in crawl spaces.
  2. Wood framing (including sheathing) that rest on exterior foundation stem walls and is 8" or less from exposed earth.
  3. Any other wood product in direct contact with concrete or masonry.
- Wood Connectors at P.T. Conditions:  
 Metal connectors which are in contact with pressure treated wood shall be protected with on of the following: Simpson "ZMAX" G185 Galvanization, Triple Zinc Coated, hot Dipped Galvanized or other approved method.

**Pre-Engineered Floor Trusses:**

All prefabricated floor trusses shall be designed by or under the direct supervision of a licensed professional engineer registered in the state where the structure is located. The truss shop drawings shall bear the stamp of that engineer and shall be fabricated and installed per the latest Truss Plate Institute standards. All necessary temporary and permanent bridging, blocking, pre-notched plates, hangers, etc. for the stability of the truss elements under gravity and lateral loads shall be designed and detailed/specified and furnished by the manufacturer. The truss manufacturer shall verify all setbacks, dimensions and bearing points prior to fabrication. Maximum allowable deflections shall be as follows:

- ~Floor Total Load = L/480 or 5/8" (whichever is less)
- ~Floor Live Load = L/600 or 1/2" (whichever is less)

Trusses shall be designed for the spans and conditions shown and be constructed from Doug-Fir timber and be furnished and installed in conformance with the manufacturer's published specifications. Additional concentrated loads from mechanical units and misc. equipment shall be accounted for/coordinated with sub-contractors, the designer of record and truss engineer. Framing has been designed assuming Hem-Fir plates w/ 405psi crushing capacity, truss engineer to confirm compatibility.

Where trusses align with shear walls, truss engineer to design and provide a truss that has been designed to transfer lateral wind and seismic forces as shown on the plans. Loading indicated (100plf minimum) shall be designed by the truss engineer to transfer from floor sheathing to shearwall below. Shop drawings including truss engineering shall be submitted to the Engineer of Record for approval prior to submittal to the jurisdiction and fabrication.

Alteration of the truss layout indicated on the plans may require supporting structural and foundation changes, therefore prior approval by the designer and structural engineer is required. Trusses shall not be field altered in any way without written approval from the licensed truss engineer of record.

Holdown Label (D)	Simpson Strong-Tie Label (SHU) (A) (B) (C) (F) (G)	Strap/Holdown Attachment and Required Fasteners		
		Required NAILING and Boundary Studs	Required SCREWS and Boundary Studs	Anchorage to Foundation (O) (E)
[1]	STD14/STD14RJ	(2) 2X STUDS W/ (30) 16d Sinker	N/A	EMBEDDED STRAP
[1]M1	HDU5-SDS2.5	N/A	(2) 2X STUDS W/ (14) SDS SCREWS	SIMPSON SB#24
[2]	HD08-SDS3	N/A	(3) 2X STUDS W/ (20) SDS SCREWS	SIMPSON SB#24 (SEE NOTE E)
[3]	HD01T-SDS2.5	N/A	N/A	N/A
[4]	MST4B STRAP	(2) 2X STUDS W/ (34) 16d	N/A	N/A
[5]	MST60 STRAP	(2) 2X STUDS W/ (34) 16d	N/A	N/A
[6]	MSTC48B3 STRAP	(2) 2x STUDS W/ (38) 10d	N/A	N/A
[7]	MSTC66B3 STRAP	(2) 2x STUDS W/ (38) 10d	N/A	N/A

Label	ASD S.W. Capacity (PLF) (Semi-Min)	Minimum Required APA Rated Plywood (F) (G) (H) (I) (J) (K) (L) (M) (N)	Panel Edge Nailing (C) (E)	Stud & Blocking Size (F) (L)	Rim Joist Or Block Connection To Top Plate (H) (J) (Does not apply to crawlspace)	2x Bottom Plate Attachment (I)	Sill Plate Attachment	
							(4)Anchor Bolt To Concrete Below (J) (K) (M)	Sill Plate (L) or Fdn.
SW6	260/365	3/4" OSB (1) Side	0.131x2 1/2" @ 6" O.C.	2x...	LTP4 @ 36" OC	16d @ 6" O.C. OR 12d @ 4" O.C.	3/8" @ 48" O.C.	2x
SW4	380/532	3/4" OSB (1) Side	0.131x2 1/2" @ 4" O.C.	2x...	LTP4 @ 20" OC	16d @ 4" O.C. OR 12d @ 2 1/2" O.C.	3/8" @ 32" O.C.	2x
SW3	490/685	3/4" OSB (1) Side	0.131x2 1/2" @ 3" O.C.	3x...	LTP4 @ 12" OC	16d @ 3 1/2" O.C.	3/8" @ 18" O.C.	3x
SW2	640/895	3/4" OSB (1) Side	0.131x2 1/2" @ 2" O.C.	3x...	LTP4 @ 10" OC	16d @ 3" O.C.	3/8" @ 12" O.C.	3x
DW4	760/1065	3/4" OSB Each Side	0.131x2 1/2" @ 4" O.C.	3x...	LTP4 @ 8" OC	(2) ROWS 16d @ 6" O.C. & LTP4 @ 16" OC AT BACK TO PLATE	3/8" @ 12" O.C.	3x
DW3	980/1370	3/4" OSB Each Side	0.131x2 1/2" @ 3" O.C.	3x...	LTP4 @ 6" OC	(2) ROWS 16d @ 6" O.C. & LTP4 @ 16" OC AT BACK TO PLATE	3/8" @ 9" O.C.	3x
DW2	1280/1790	3/4" OSB Each Side	0.131x2 1/2" @ 2" O.C.	3x...	LTP4 @ 6" OC	(2) ROWS 16d @ 6" O.C. & LTP4 @ 16" OC AT BACK TO PLATE	3/8" @ 9" O.C.	3x

**IMPORTANT FRAMING NOTE:** GENERAL CONTRACTOR/FRAMER SHALL VERIFY ALL CONCENTRATED LOADS FROM ABOVE TO HAVE SOLID BEARING CONTINUOUS TO THE FOUNDATION (INCLUDING SQUASH BLOCKING IN CRAWLSPACE/FLOOR FRAMING). ANY CHANGES TO FOUNDATION AND STRUCTURE FROM ARCHITECTURAL PLANS SHALL BE NOTED AND ALL AFFECTED PARTIES SHALL BE NOTIFIED.

**SYMBOL & ABBREVIATIONS LEGEND:**

(X) BEAM # CALLOUT (REF. CALCULATIONS)

[x] HOLD DOWN CALLOUT (REF. HOLDOWN TABLE)

SW#, DW# SHEARWALL CALLOUT (REF. SHEARWALL TABLE)

(X) SECTION REFERENCE

A.B. ANCHOR BOLT  
 AFF. ABOVE FINISHED FLOOR  
 C.I.P. CONCRETE  
 CONC. IN PLACE  
 (E) EXISTING  
 E.N. SHEARWALL EDGE NAIL  
 E.W. EACH WAY  
 FDN. FOUNDATION  
 G.T. GIRDER TRUSS  
 G.W.B. GYPSUM WALL BOARD  
 HDR. HEADER (SEE STRUCTURAL NOTES FOR SIZE)  
 MFR. MANUFACTURER  
 (N) NEW  
 O.C. ON CENTER  
 P.E. PRE-ENGINEERED  
 S.W. SHEARWALL  
 T.O.F. TOP OF FRAMING  
 T.O.W. TOP OF WALL  
 U.N.O. UNLESS NOTED OTHERWISE  
 V.I.F. VERIFY IN FIELD

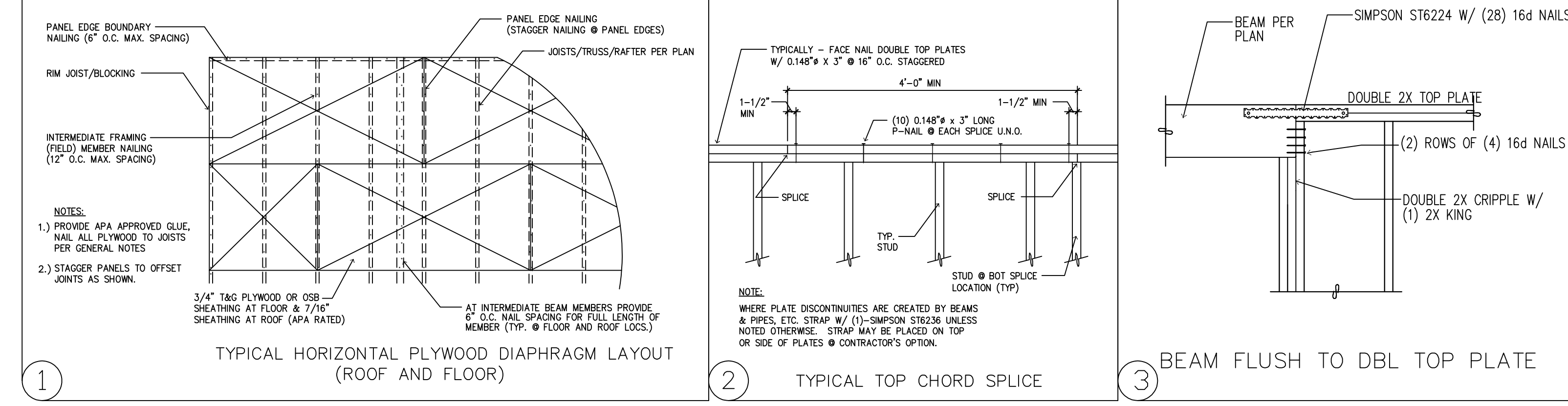
**TYPICAL FRAMING NOTES:**

1. Roof and floor diaphragm nailing per Wood Sheathing Notes.
2. Solid blocking shall be provided between the bearings of every rafter or truss and attach to framing with Simpson H2.5T or clip indicated in typical detailing.
3. Provide solid built-up studs or posts under all girder trusses, roof beams and floor beams. Solid blocking (squash blocking) is required in all floor cavities under built-up studs/posts. Built-ups or posts shall run continuous to the foundation.
4. Exterior walls shall be nailed per SW6 U.N.O. All panel edges shall be blocked per shearwall table.
5. Where (2) shearwalls meet at a corner/intersection, the sheathing of each wall shall be edge nailed to the studs/post which the holdown is attached to.
6. Provide solid rim where floor joist bear on exterior walls per typical details.
7. Where floor framing runs parallel to exterior walls, install 2x blocking panels between rim joist and first joist @ 48" o.c. ~ nail sheathing to blocking w/ 8d @ 3" o.c. (crawl space framing where rim joist bears on concrete stem/walls are omitted from this requirement).
8. Roof and floor joists/trusses are shown schematically on the plan and are not intended to show every location of every joist/truss.
9. Provide double joists under interior partition walls when running parallel to each other.
10. Top plates are assumed to be continuous and may be spliced per typical detailing on this sheet.
11. All columns not specified or shown on the plans are to be a minimum of (2) 2x studs spike laminated together with 16d nails @ 6" o.c. (stagger).
12. All post-beam intersections shall contain positive connections to resist against uplift and/or lateral displacement. Anchorage of walls to the foundation shall be provided in accordance with the shearwall schedule.
13. Typical Walls shall be framed with Hem-Fir U.N.O. Walls shall be anchored to the foundation per the minimum requirements of SW6 (3/8"Ø A.B. @ 48" o.c. embedded 7" and no more than 12" from ends of each sill and 2 bolts minimum) with 3"x3"x1/4" square washers firmly attached between plate and nut. All walls over 10' tall shall have bracing/blocking at 48" o.c. (flat or on edge).

**PLAN VERACITY:** Every attempt has been made to insure the accuracy of these engineered documents, site conditions, product availability, etc. All information listed above must be verified prior to construction and fabrication. Any changes or deficiencies on or to the plan must be transmitted to Phillips Structural Engineering for written approval.

**LICENSE OF ENGINEERING DOCUMENTS:**

1. Grant of License: Phillips Structural Engineering grants the Licensee a nonexclusive Right of Use for the purpose of constructing a single structure (use) from this engineering package. Future uses of this drawing set are permitted when accompanied by an originally stamped "Site Specific Re-Use Letter" for each additional site and payment has been made to Phillips Structural Engineering.
2. Ownership of Engineering Calculations and Drawings: Phillips Structural Engineering shall retain "Title 17 USC Rights and Ownership" of the Copyright Law of the United States of America of these Engineering Documents and all subsequent copies of the engineering. The Licensee is not permitted unlimited reuse of these documents without prior consent.
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REVISION DESCRIPTION	DATE	BY	CHKD
1	4/2/2019		

PHILLIPS STRUCTURAL ENGINEERING  
 PO Box 108, Milton, WA 98354  
 Phone: (253) 344-1666

PHILLIPS STRUCTURAL ENGINEERING  
 4/4/2019  
 ORIGINAL STAMP MUST BE RED FOR VALIDITY

ALL VARIATIONS FOR DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE DESIGNER FOR RESOLUTION WITH THE ENGINEER PRIOR TO PROCEEDING WITH WORK. FAILURE TO COMPLY BY THE CONTRACTOR SHALL BE THEIR SOLE RESPONSIBILITY FOR ANY COSTS NECESSARY FOR REMEDIAL WORK.

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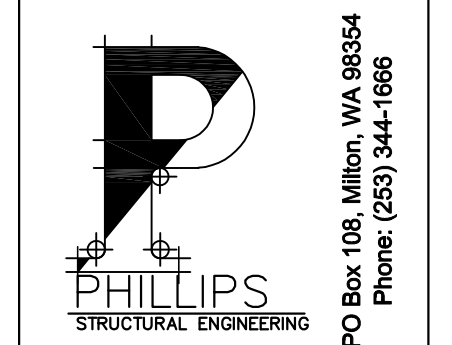
**WEN HU RESIDENCE**  
 8251 WEST MERCER WAY  
 MERCER ISLAND, WA 98040

WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOWLOAD:	25 PSF

GENERAL NOTES	
DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 18.094
SHEET NO: <b>S-0</b>	



REVISIONS	REVISION DESCRIPTION
DATE	JURISDICTIONAL REVIEW
REV. DELTA	
1	



ALL VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE DESIGNER FOR RESOLUTION WITH THE ENGINEER PRIOR TO PROCEEDING WITH WORK. FAILURE TO COMPLY BY THE CONTRACTOR SHALL BE THEIR SOLE RESPONSIBILITY FOR ANY COSTS NECESSARY FOR REMEDIAL WORK.

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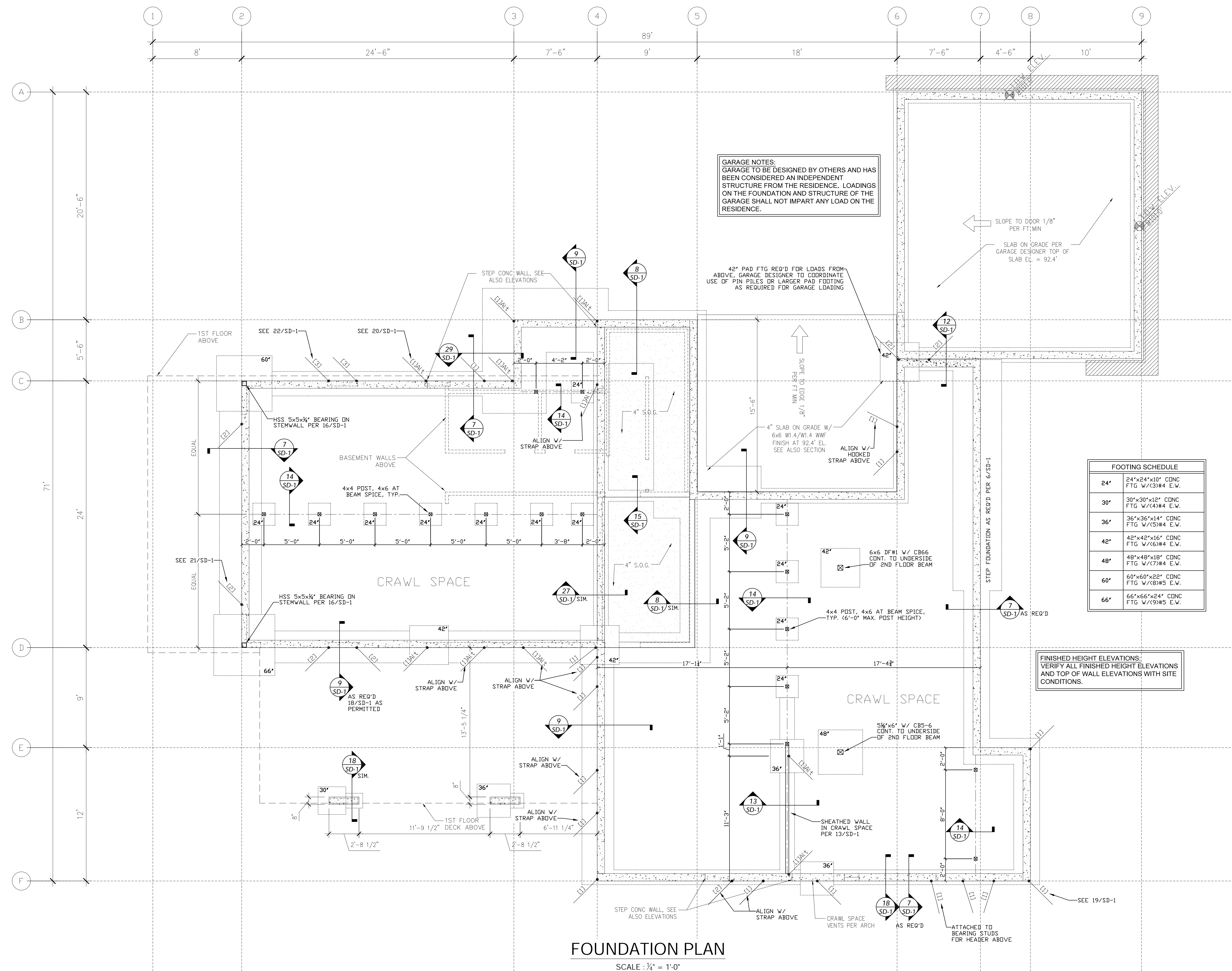
**WEN HU RESIDENCE**  
8251 WEST MERCER WAY  
MERCER ISLAND, WA 98040

WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

FOUNDATION PLAN

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 18.094

SHEET NO:  
**S-1**



**GARAGE NOTES:**  
GARAGE TO BE DESIGNED BY OTHERS AND HAS BEEN CONSIDERED AN INDEPENDENT STRUCTURE FROM THE RESIDENCE. LOADINGS ON THE FOUNDATION AND STRUCTURE OF THE GARAGE SHALL NOT IMPART ANY LOAD ON THE RESIDENCE.

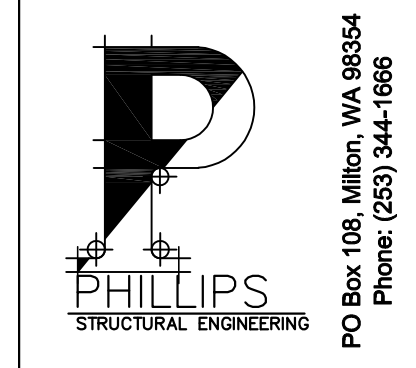
42" PAD FTG REQ'D FOR LOADS FROM ABOVE. GARAGE DESIGNER TO COORDINATE USE OF PIN PILES OR LARGER PAD FOOTING AS REQUIRED FOR GARAGE LOADING

24"	24"x24"x10" CONC FTG W/(3)#4 E.W.
30"	30"x30"x12" CONC FTG W/(3)#4 E.W.
36"	36"x36"x14" CONC FTG W/(4)#4 E.W.
42"	42"x42"x16" CONC FTG W/(6)#4 E.W.
48"	48"x48"x18" CONC FTG W/(7)#4 E.W.
60"	60"x60"x22" CONC FTG W/(8)#5 E.W.
66"	66"x66"x24" CONC FTG W/(9)#5 E.W.

FINISHED HEIGHT ELEVATIONS: VERIFY ALL FINISHED HEIGHT ELEVATIONS AND TOP OF WALL ELEVATIONS WITH SITE CONDITIONS.

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

REVISION DESCRIPTION	
JURISDICTIONAL REVIEW	
DATE	4/20/19
REV. DELTA	1



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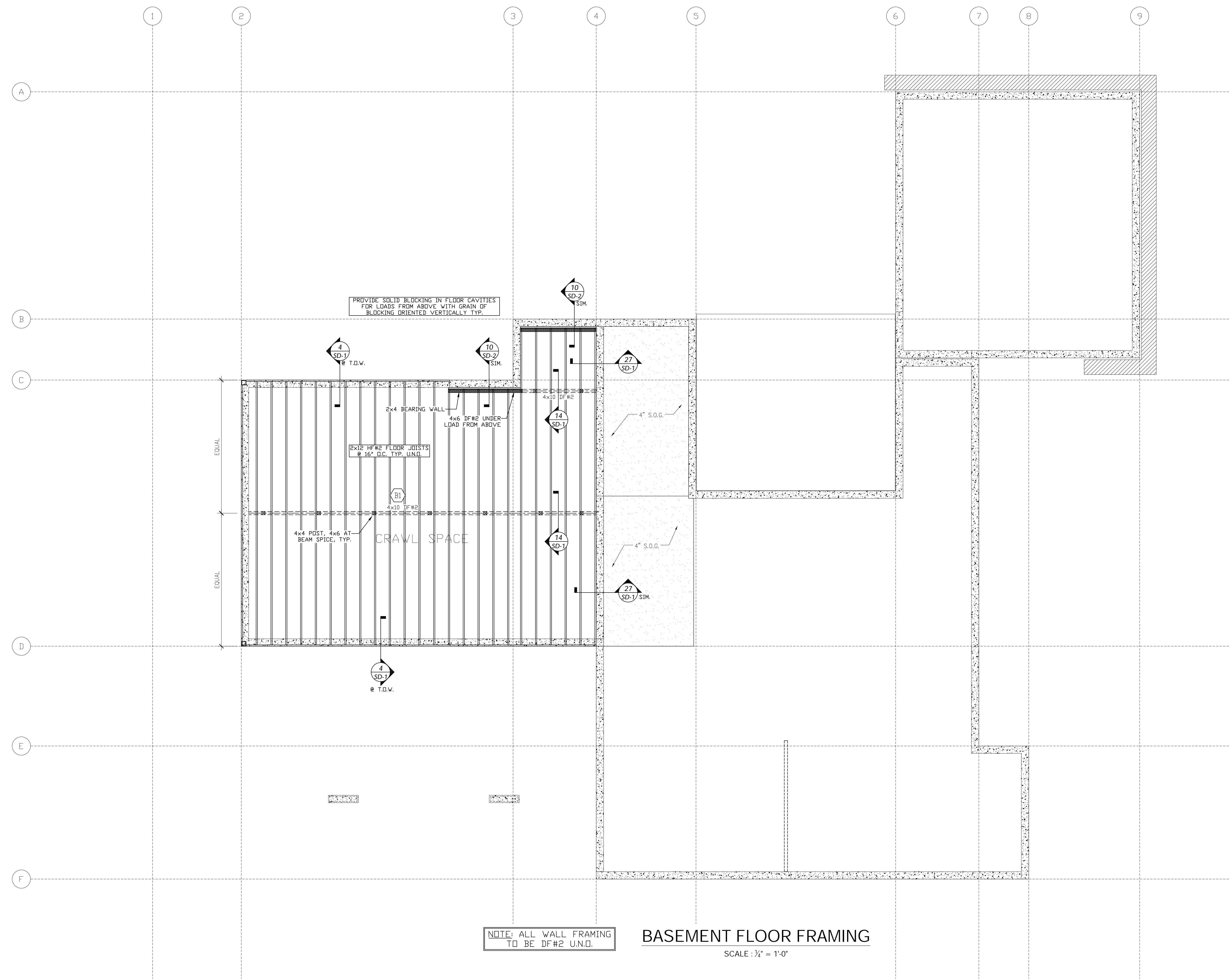
**WEN HU RESIDENCE**  
8251 WEST MERCER WAY  
MERCER ISLAND, WA 98040

WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

**BASEMENT FLOOR FRAMING**

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 16.094

SHEET NO:  
**S-2**



NOTE: ALL WALL FRAMING TO BE DF#2 U.N.O.

**BASEMENT FLOOR FRAMING**  
SCALE : 3/4" = 1'-0"

PHILLIPS STRUCTURAL ENGINEERING

REVISIONS	REVISION DESCRIPTION
DATE	JURISDICTIONAL REVIEW
REV. DATE	
1	

**PHILLIPS**  
STRUCTURAL ENGINEERING

PO Box 108, Milton, WA 98354  
Phone: (253) 344-1666

**TODD PHILLIPS**  
STATE OF WASHINGTON  
REGISTERED PROFESSIONAL ENGINEER  
No. 3594

4/4/2019  
ORIGINAL STAMP MUST BE RED FOR VALIDITY

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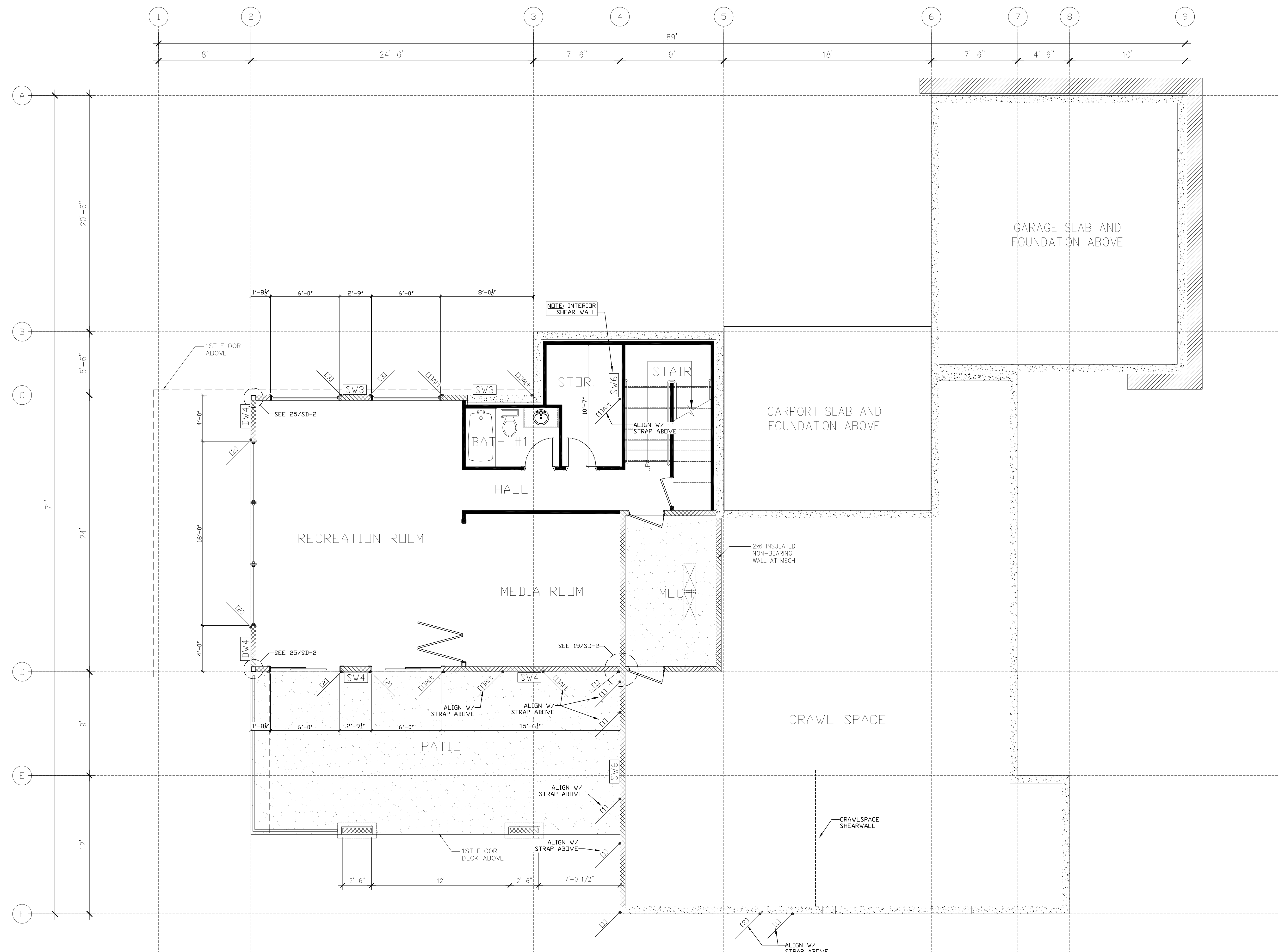
**WEN HU RESIDENCE**  
8251 WEST MERCER WAY  
MERCER ISLAND, WA 98040

WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

**BASEMENT SHEAR WALLS, HOLDOWNS, AND STRUCTURE**

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 18.094

SHEET NO:  
**S-3**

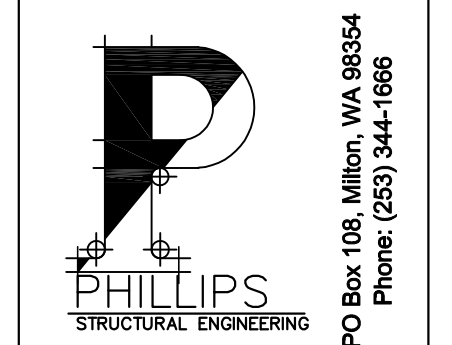


NOTE: ALL WALL FRAMING TO BE DF#2 U.N.D.

**BASEMENT FLOOR SHEAR WALLS, HOLDOWNS, AND STRUCTURE**

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

REVISIONS	REVISION DESCRIPTION	DATE
1	JURISDICTIONAL REVIEW	4/4/2019



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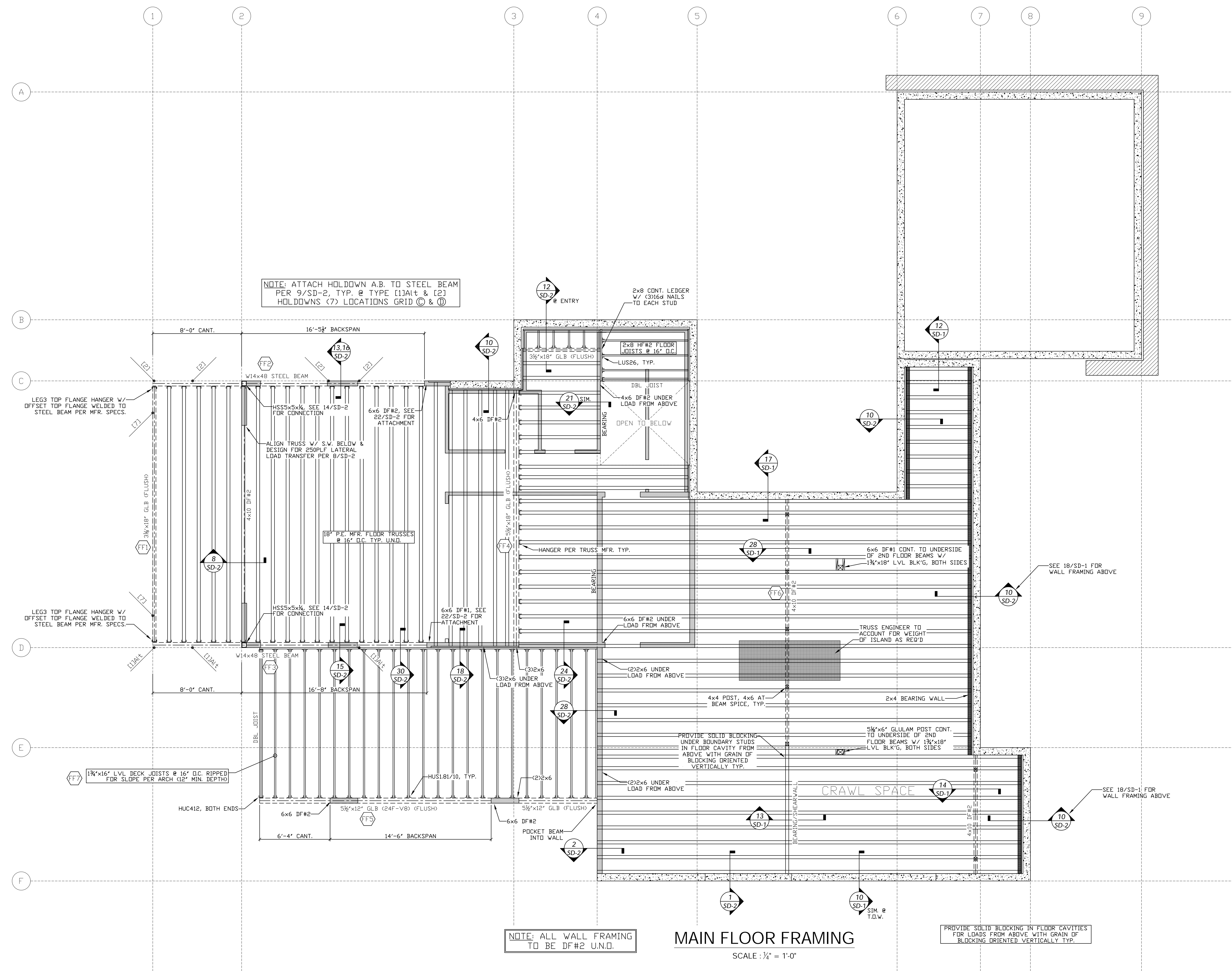
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WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

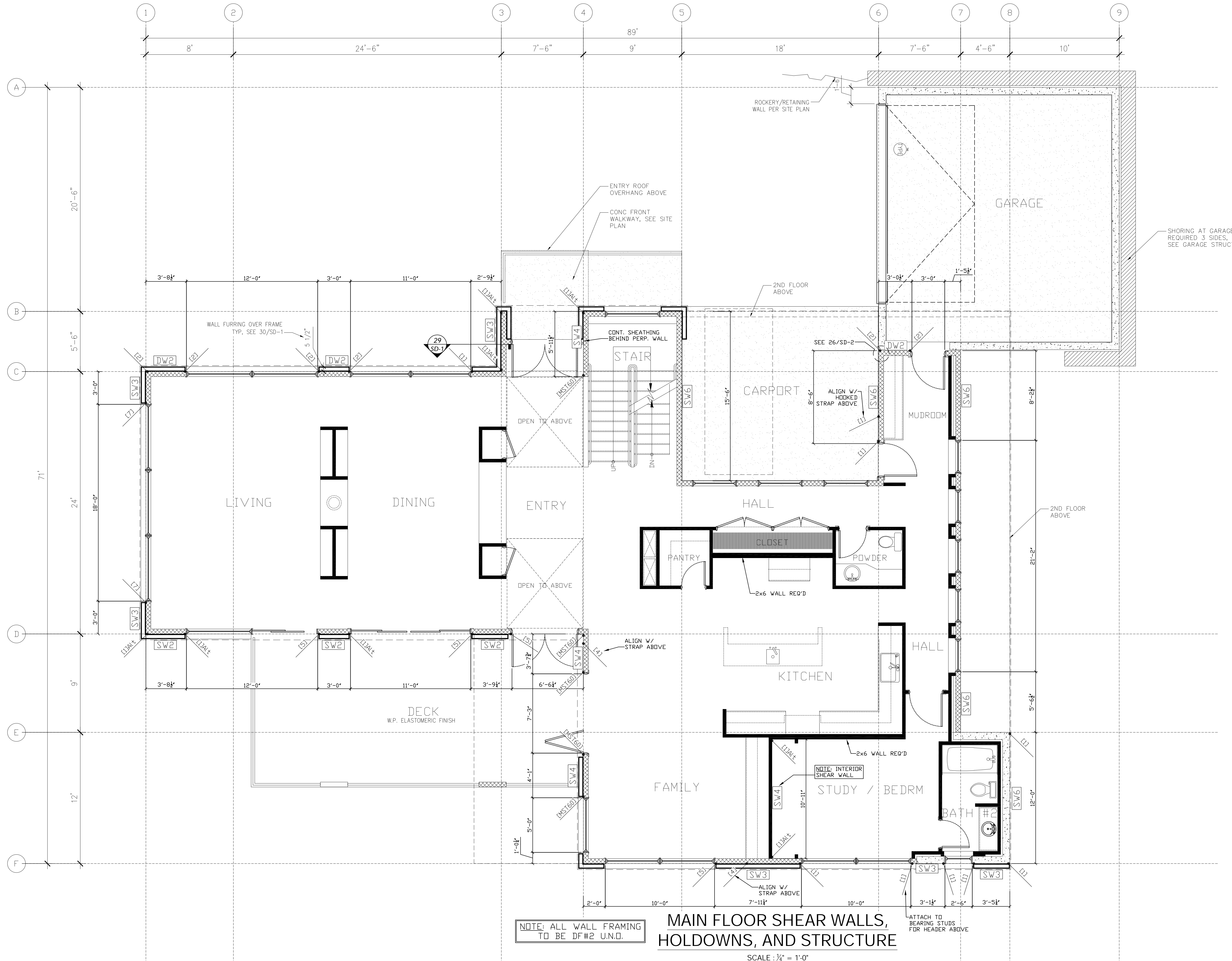
MAIN FLOOR FRAMING

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 16.094

SHEET NO:  
**S-4**



PHILLIPS STRUCTURAL ENGINEERING

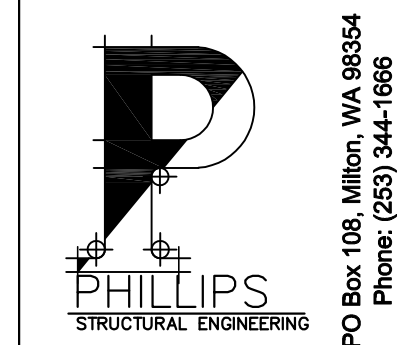


NOTE: ALL WALL FRAMING TO BE DF#2 U.N.D.

MAIN FLOOR SHEAR WALLS, HOLDOWNS, AND STRUCTURE

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

REVISIONS	REVISION DESCRIPTION
DATE	JURISDICTIONAL REVIEW
REV. DELTA	
1	



ALL VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE DESIGNER FOR RESOLUTION WITH THE ENGINEER PRIOR TO PROCEEDING WITH WORK. FAILURE TO COMPLY BY THE CONTRACTOR SHALL BE THEIR SOLE RESPONSIBILITY FOR ANY COSTS NECESSARY FOR REMEDIAL WORK.

REUSE OF DOCUMENTS  
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**WEN HU RESIDENCE**  
8251 WEST MERCER WAY  
MERCER ISLAND, WA 98040

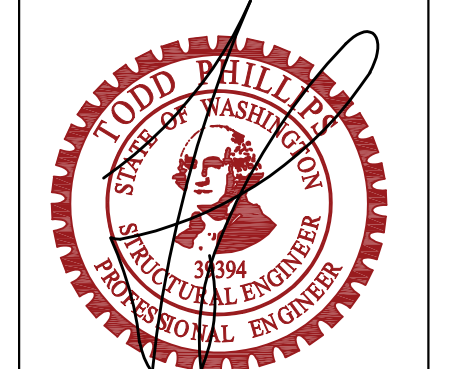
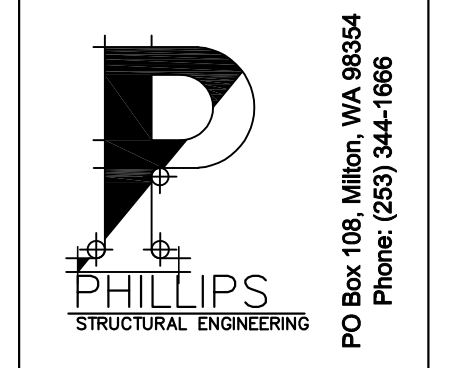
WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

MAIN FLOOR SHEAR WALLS, HOLDOWNS, AND STRUCTURE

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.D.)
PSE NUMBER:	PSE 18.094

SHEET NO:  
**S-5**

REVISIONS	REVISION DESCRIPTION	DATE
1	JURISDICTIONAL REVIEW	4/6/2019



4/4/2019  
ORIGINAL STAMP MUST BE RED FOR VALIDITY

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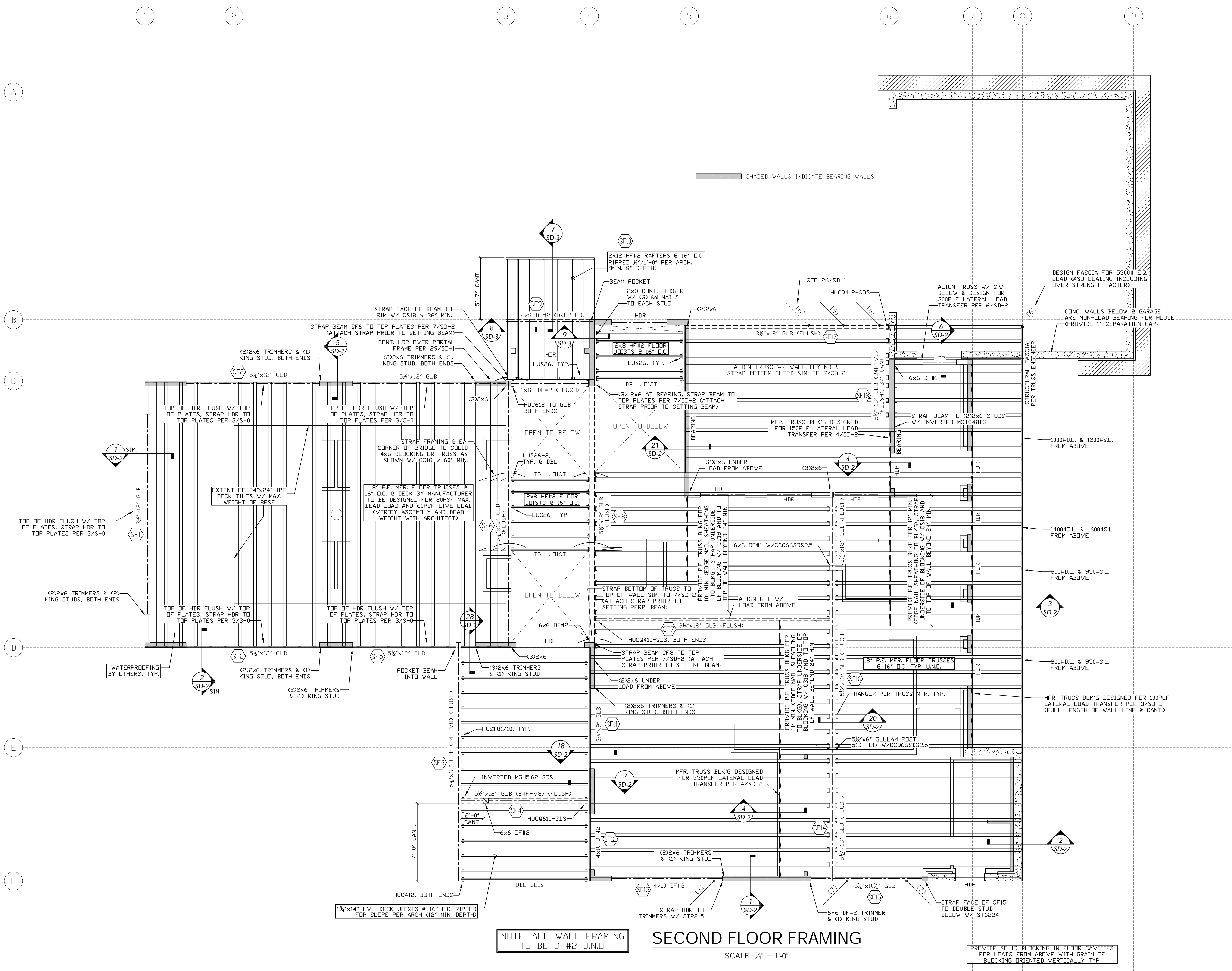
**WEN HU RESIDENCE**  
8251 WEST MERCER WAY  
MERCER ISLAND, WA 98040

WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

SECOND FLOOR FRAMING

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (UNO.)
PSE NUMBER:	PSE 16.094

SHEET NO:  
**S-6**

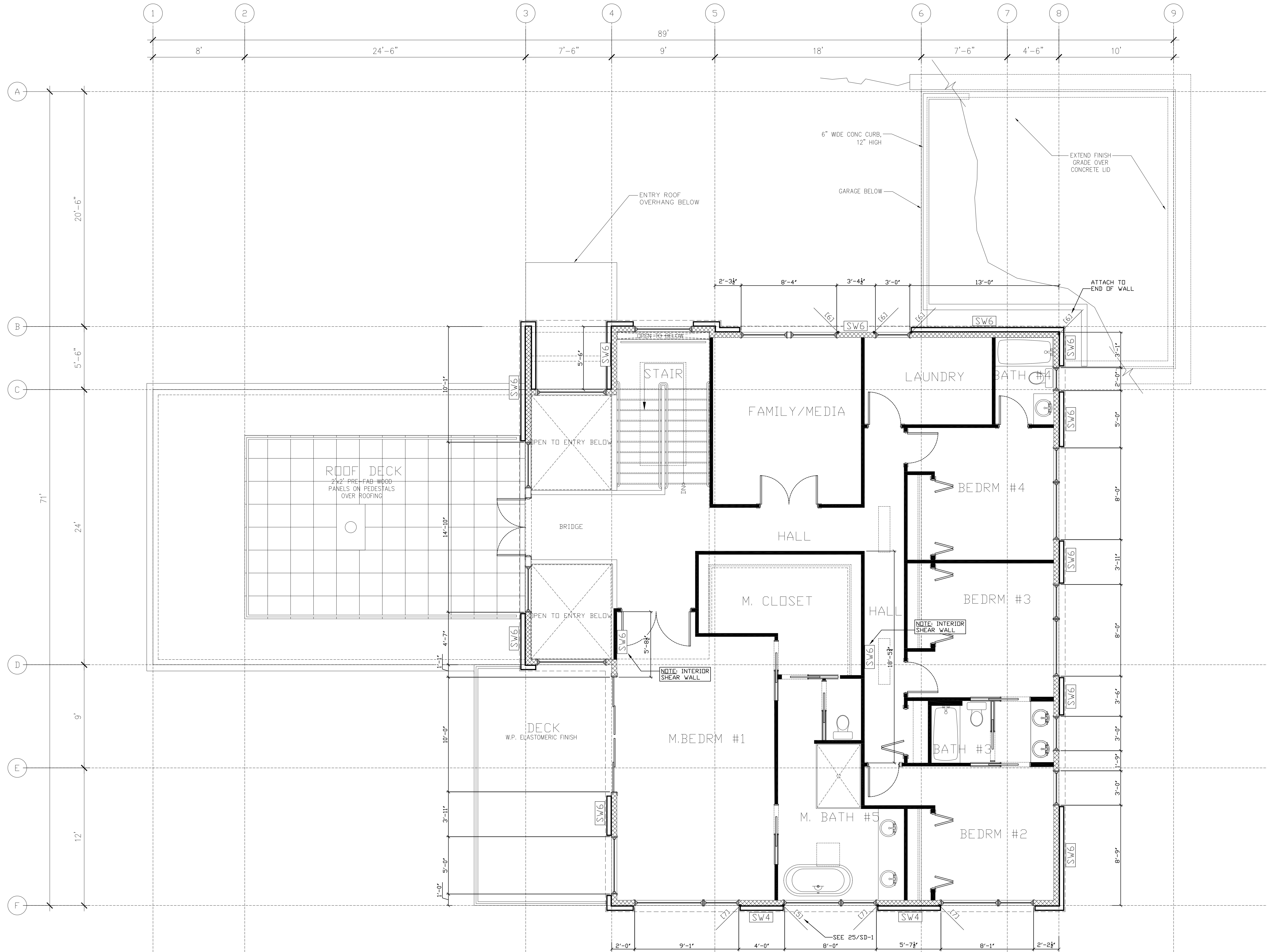


NOTE: ALL WALL FRAMING TO BE DF#2 U.N.O.

SECOND FLOOR FRAMING

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

PROVIDE SOLID BLOCKING IN FLOOR CAVITIES FOR LOADS FROM ABOVE WITH GRAIN OF BLOCKING ORIENTED VERTICALLY TYP.

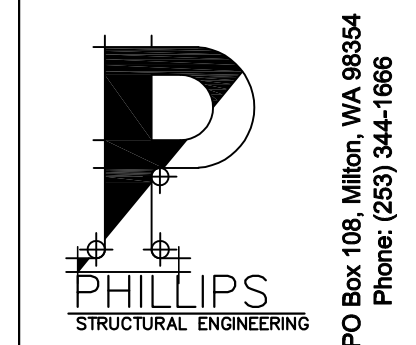


SECOND FLOOR SHEAR WALLS, HOLDOWNS, AND STRUCTURE

NOTE: ALL WALL FRAMING TO BE DF#2 U.N.O.

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

REVISIONS	REVISION DESCRIPTION
DATE	JURISDICTIONAL REVIEW
REV. DELTA	
1	



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**WEN HU RESIDENCE**  
8251 WEST MERCER WAY  
MERCER ISLAND, WA 98040

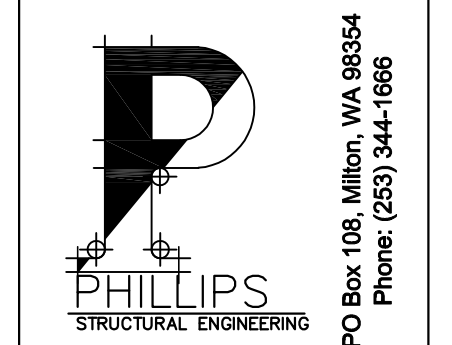
WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

SECOND FLOOR SHEAR WALLS, HOLDOWNS, AND STRUCTURE

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 18.094

SHEET NO:  
**S-7**

REVISIONS	REVISION DESCRIPTION	DATE
1	JURISDICTIONAL REVIEW	4/20/19
REV. DELTA	1	



4/4/2019  
ORIGINAL STAMP MUST BE RED FOR VALIDITY

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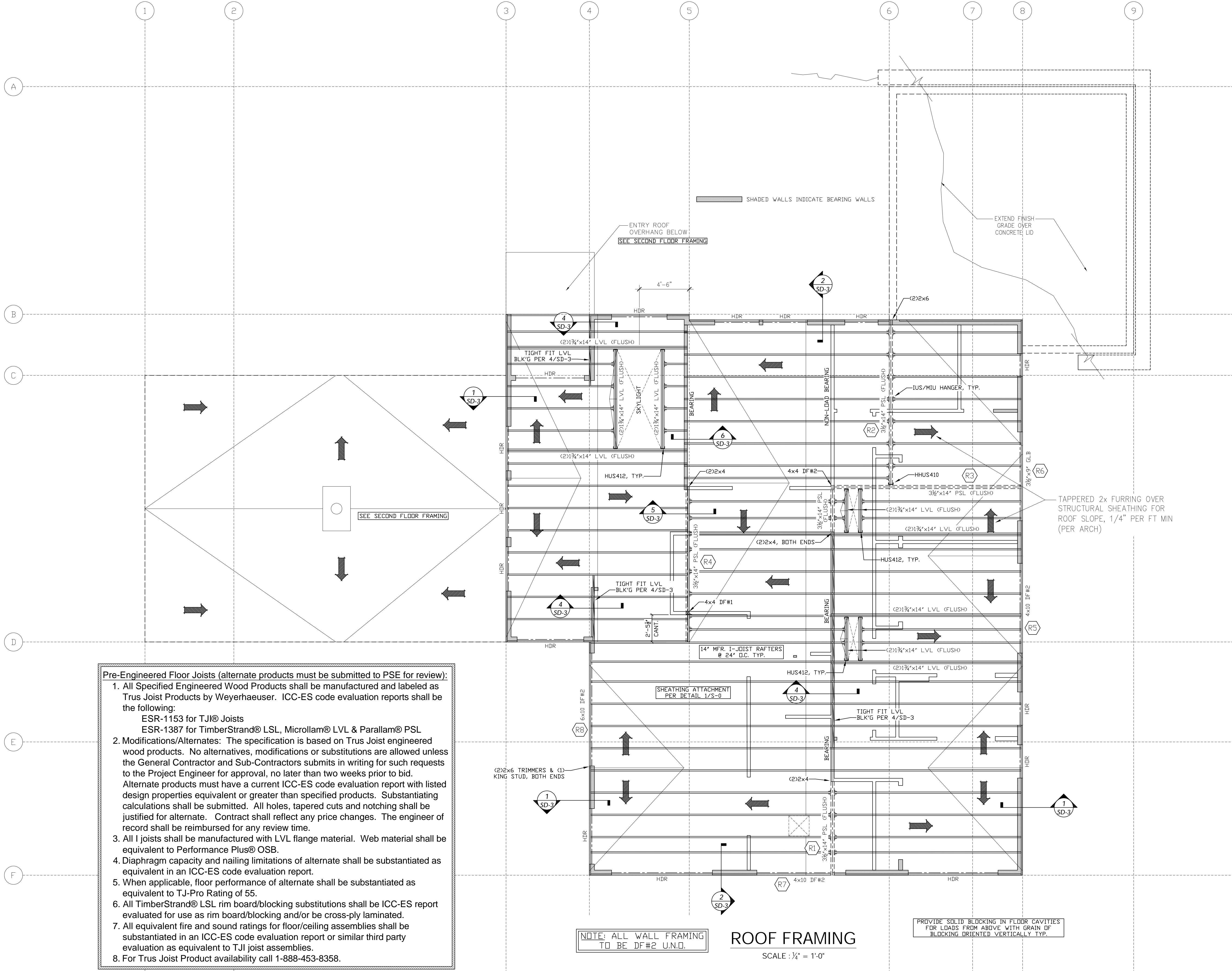
**WEN HU RESIDENCE**  
8251 WEST MERCER WAY  
MERCER ISLAND, WA 98040

WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF

**ROOF FRAMING**

DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 16.094

SHEET NO:  
**S-8**



**Pre-Engineered Floor Joists (alternate products must be submitted to PSE for review):**

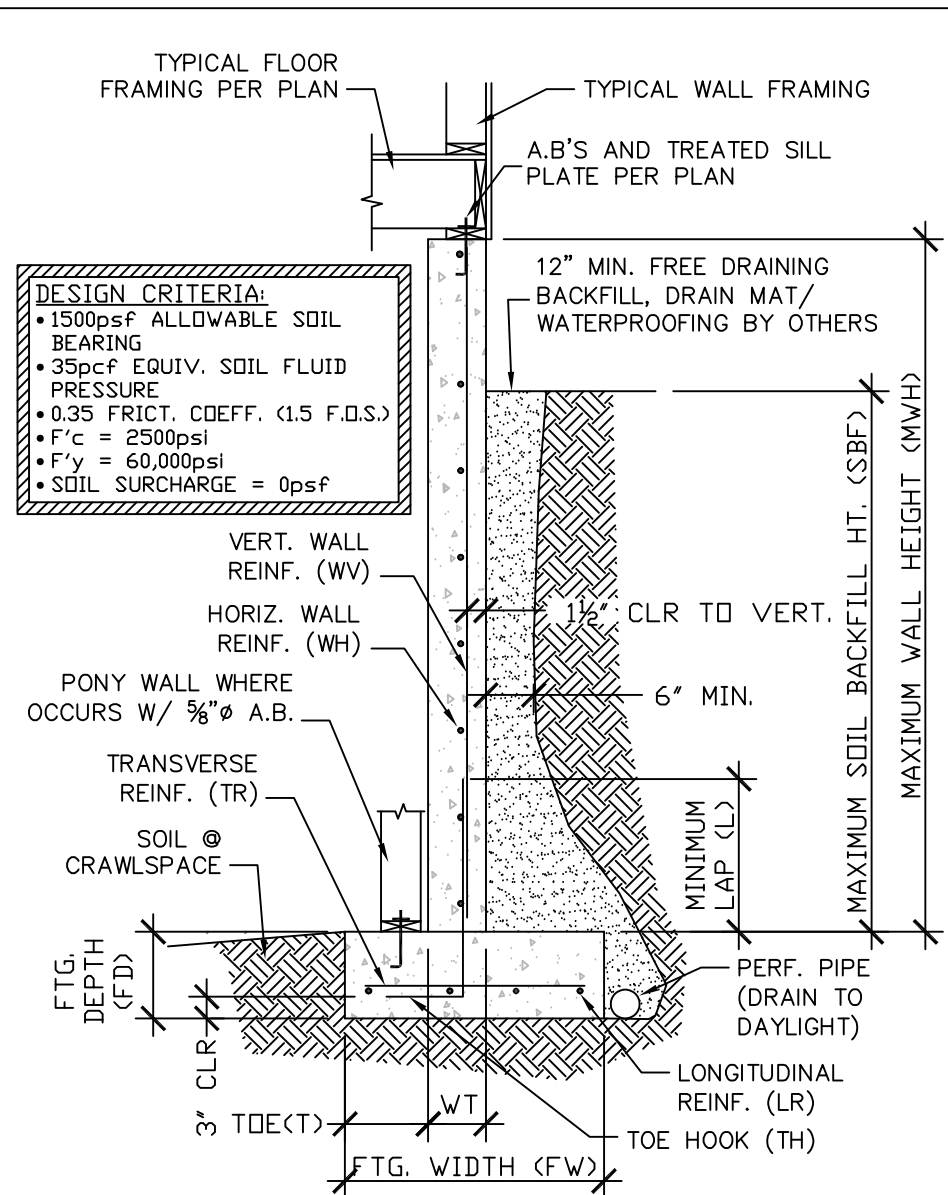
- All Specified Engineered Wood Products shall be manufactured and labeled as Trus Joist Products by Weyerhaeuser. ICC-ES code evaluation reports shall be the following:  
ESR-1153 for TJI® Joists  
ESR-1387 for TimberStrand® LSL, Microllam® LVL & Parallam® PSL
- Modifications/Alternates: The specification is based on Trus Joist engineered wood products. No alternatives, modifications or substitutions are allowed unless the General Contractor and Sub-Contractors submits in writing for such requests to the Project Engineer for approval, no later than two weeks prior to bid. Alternate products must have a current ICC-ES code evaluation report with listed design properties equivalent or greater than specified products. Substantiating calculations shall be submitted. All holes, tapered cuts and notching shall be justified for alternate. Contract shall reflect any price changes. The engineer of record shall be reimbursed for any review time.
- All I joists shall be manufactured with LVL flange material. Web material shall be equivalent to Performance Plus® OSB.
- Diaphragm capacity and nailing limitations of alternate shall be substantiated as equivalent in an ICC-ES code evaluation report.
- When applicable, floor performance of alternate shall be substantiated as equivalent to TJ-Pro Rating of 55.
- All TimberStrand® LSL rim board/blocking substitutions shall be ICC-ES report evaluated for use as rim board/blocking and/or be cross-ply laminated.
- All equivalent fire and sound ratings for floor/ceiling assemblies shall be substantiated in an ICC-ES code evaluation report or similar third party evaluation as equivalent to TJ joist assemblies.
- For Trus Joist Product availability call 1-888-453-8358.

NOTE: ALL WALL FRAMING TO BE DF#2 U.N.O.

**ROOF FRAMING**

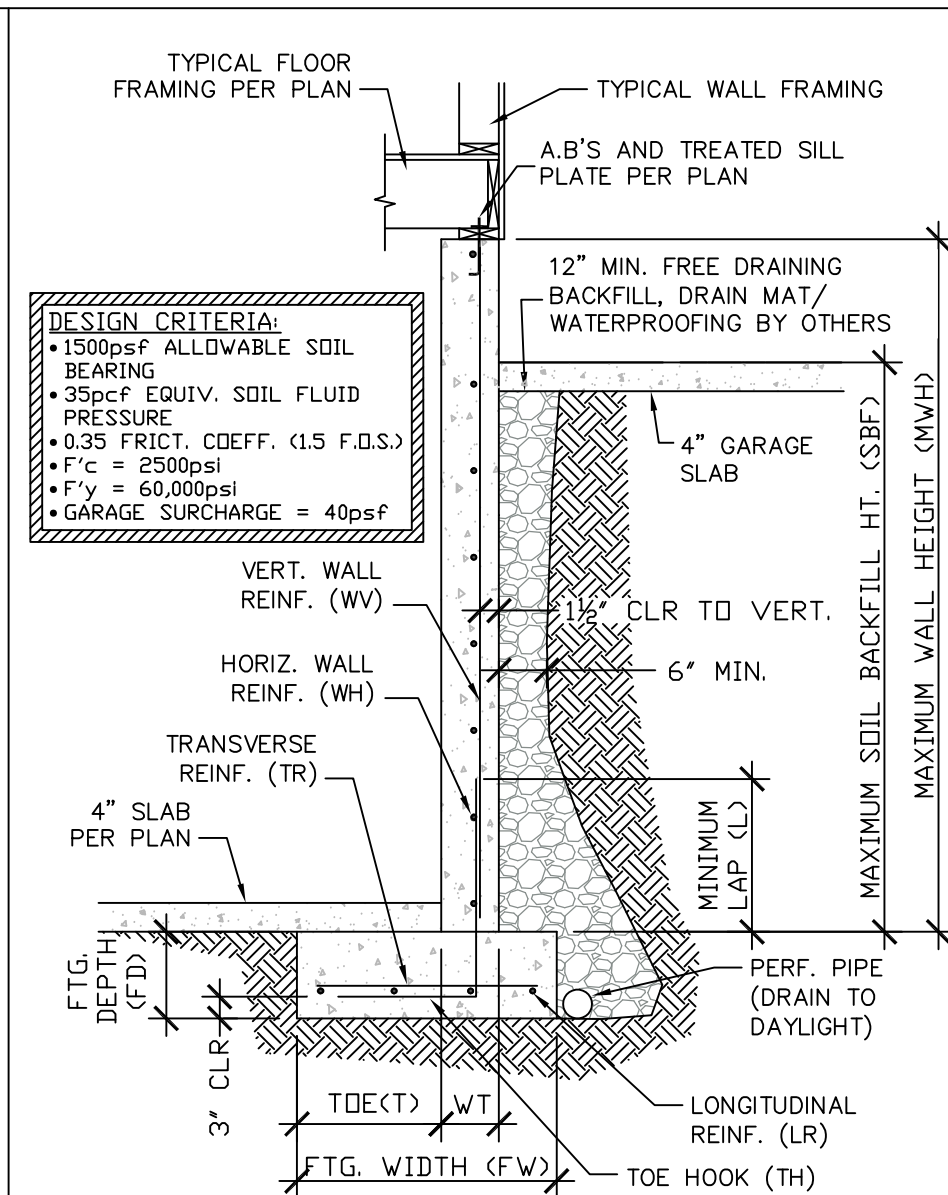
SCALE: 1/4" = 1'-0"





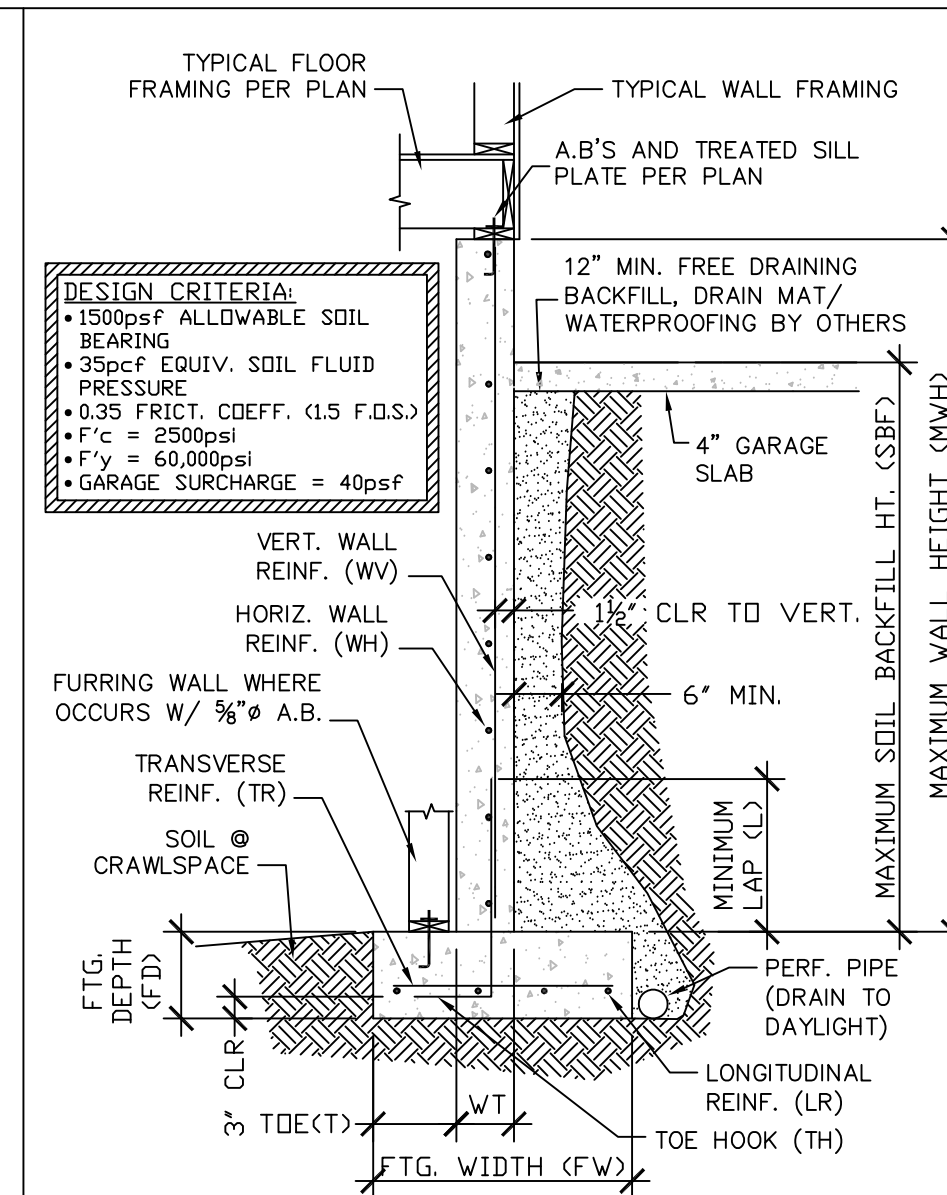
CANTILEVERED RETAINING WALL SCHEDULE table with columns for Max. Wall Height, Max. Soil Backfill Height, etc.

CANTILEVERED RETAINING WALL (SOIL HIGH/SOIL LOW) 7



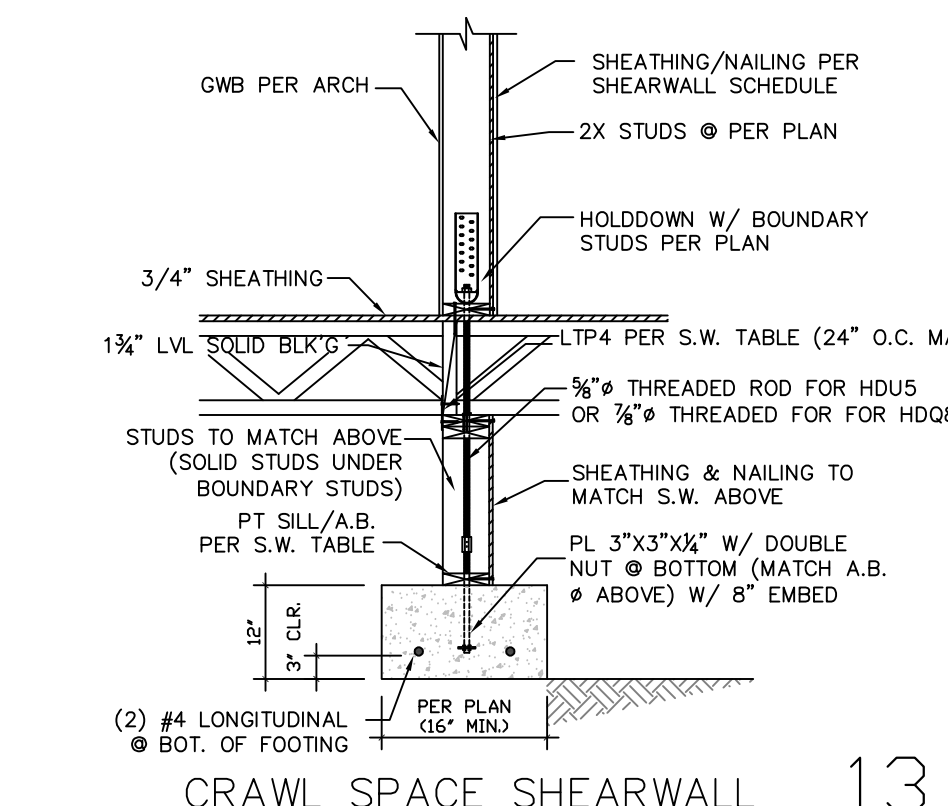
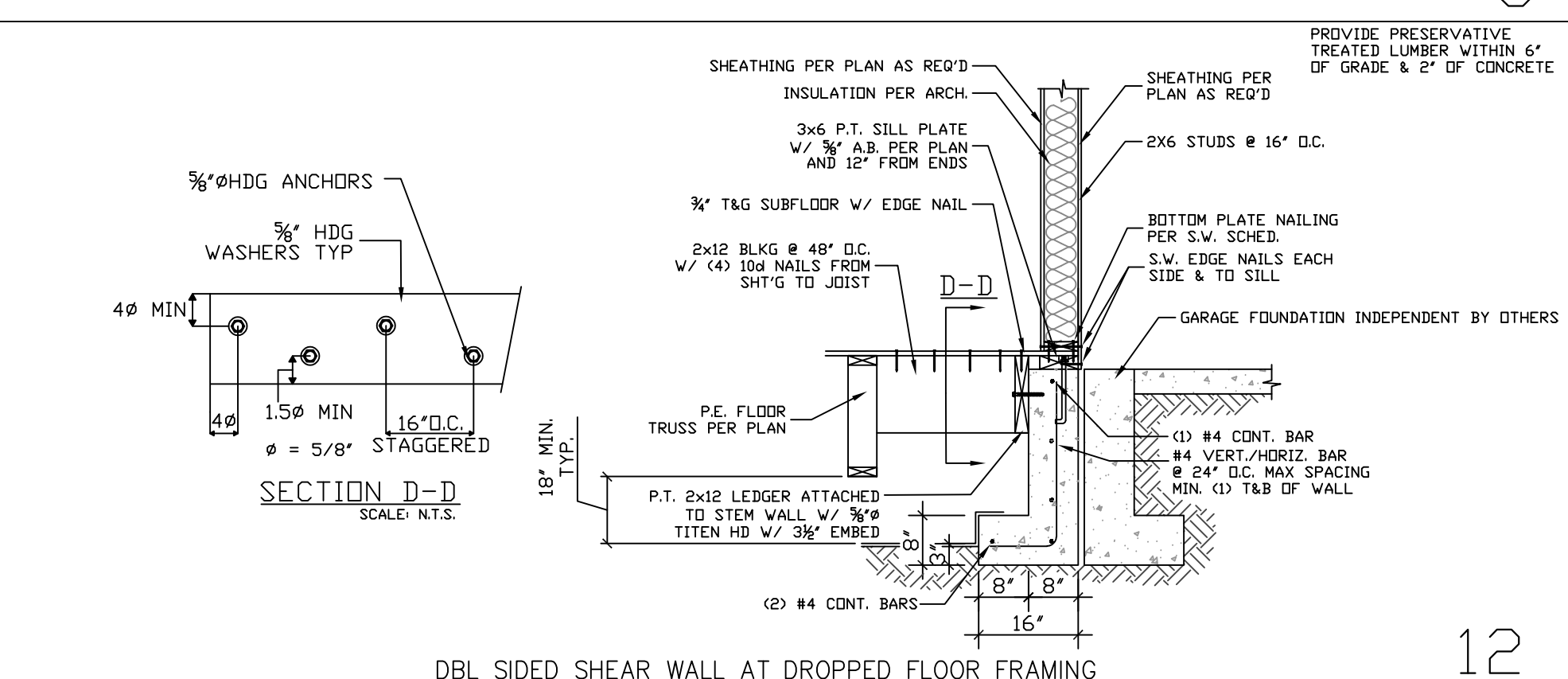
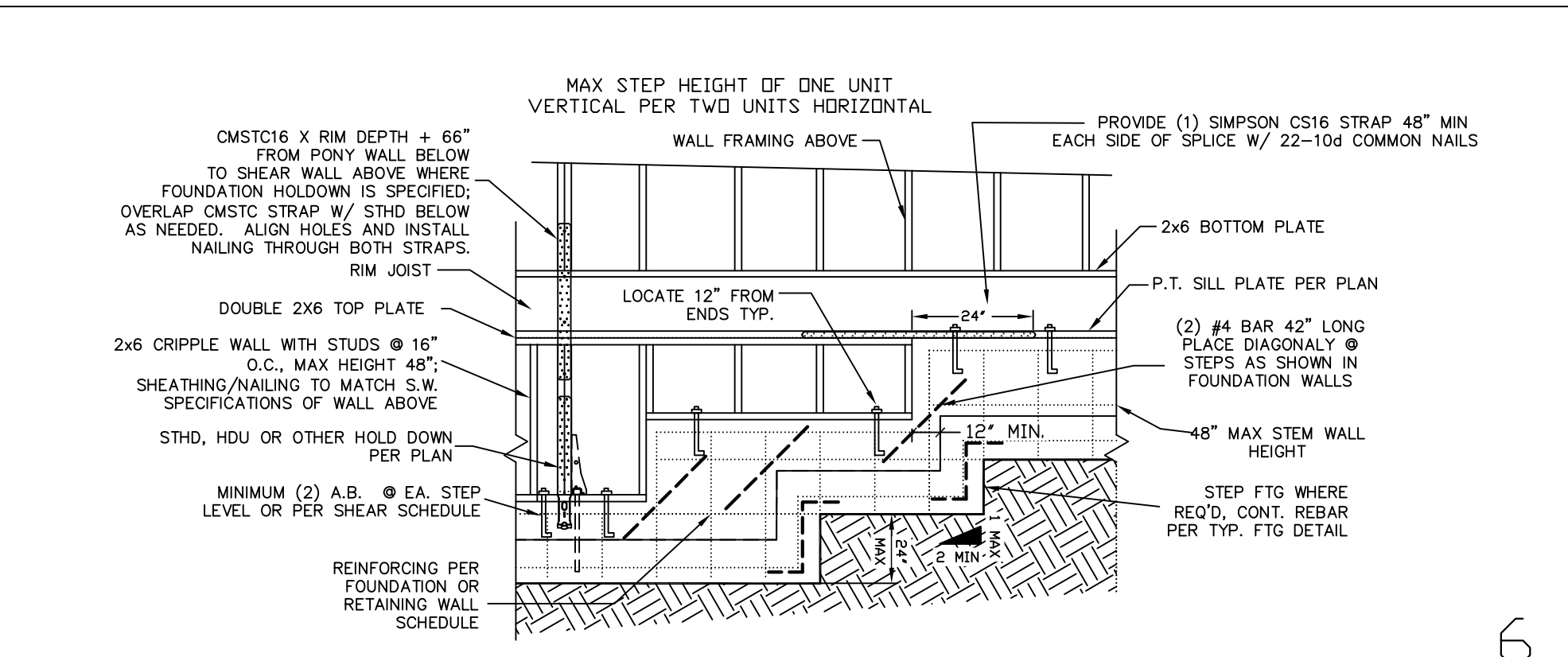
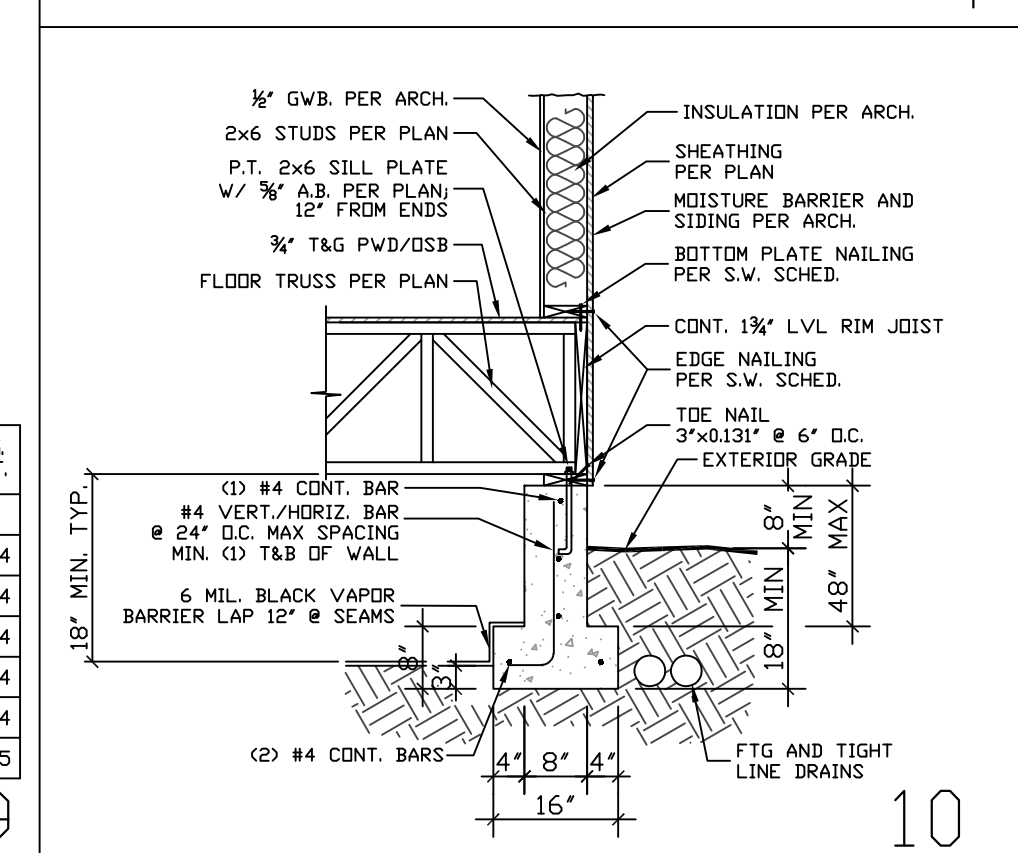
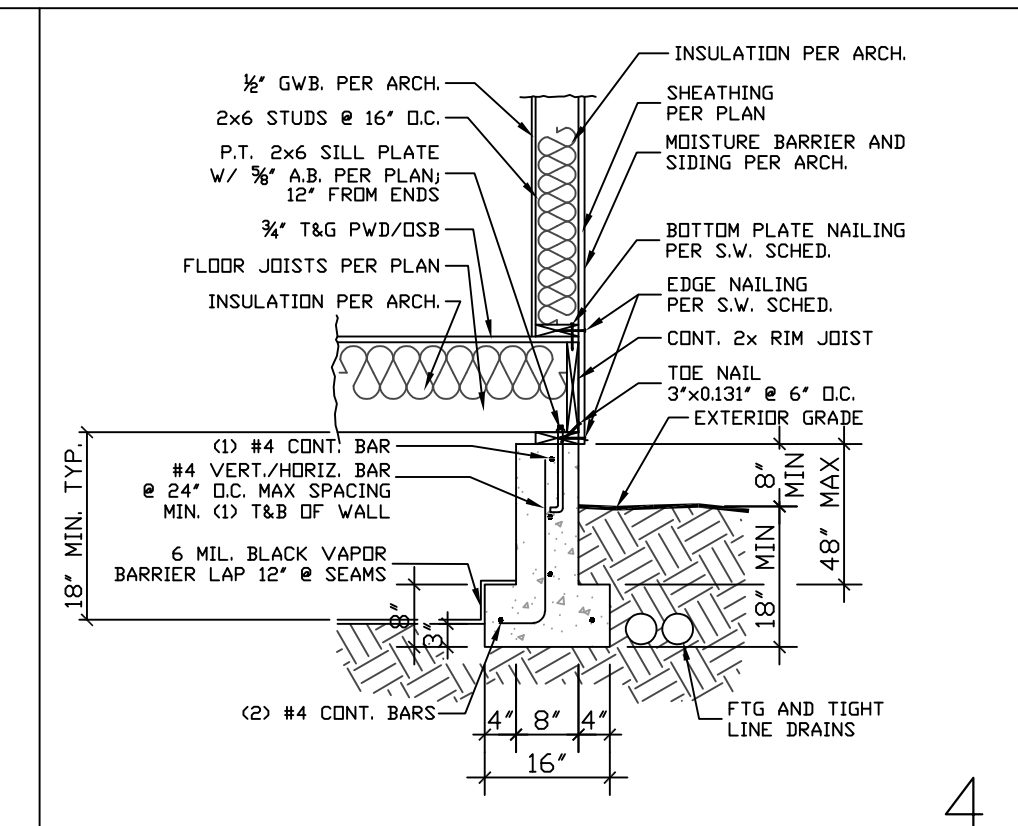
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CANTILEVERED RETAINING WALL (SLAB LOW/HIGH) 8

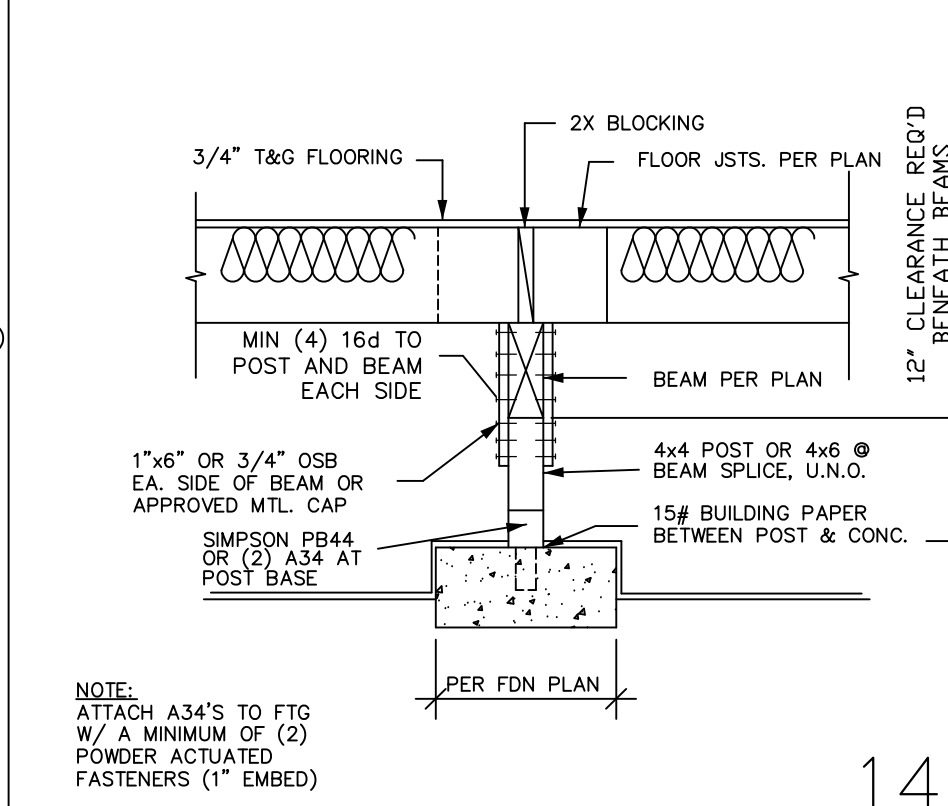


CANTILEVERED RETAINING WALL SCHEDULE table with columns for Max. Wall Height, Max. Soil Backfill Height, etc.

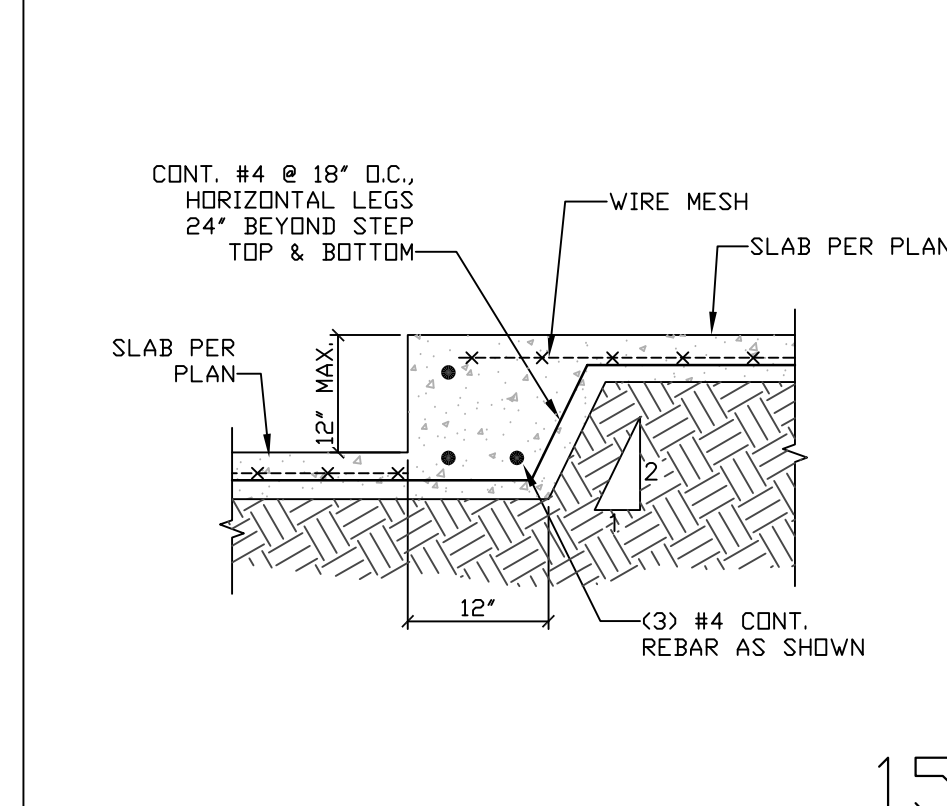
CANTILEVERED RETAINING WALL (SLAB HIGH/SOIL LOW) 9



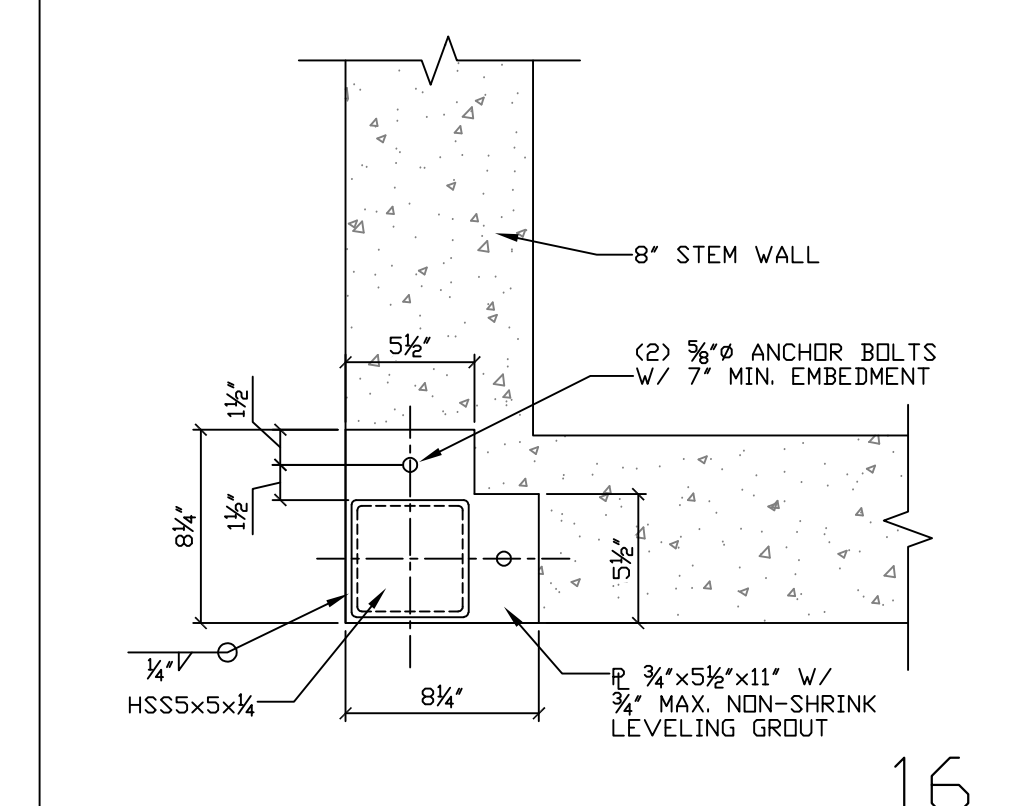
CRAWL SPACE SHEARWALL 13



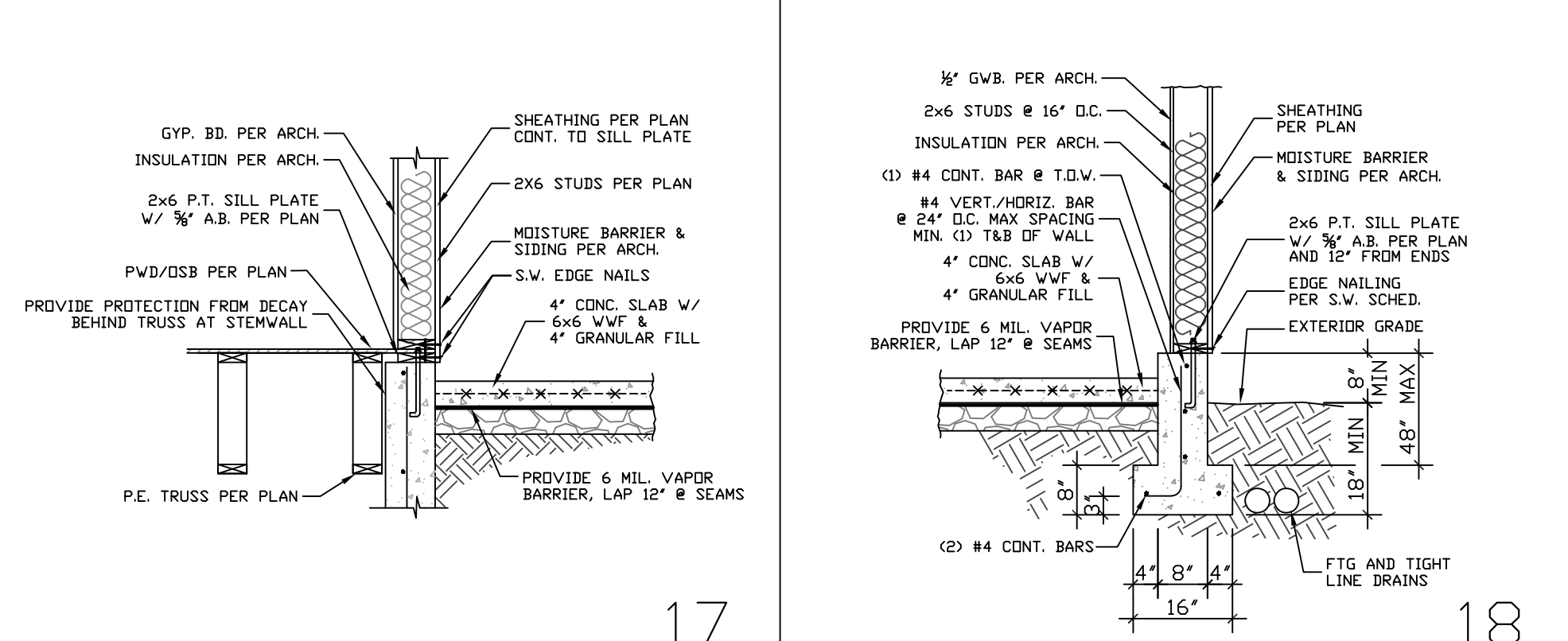
CRAWL SPACE SHEARWALL 14



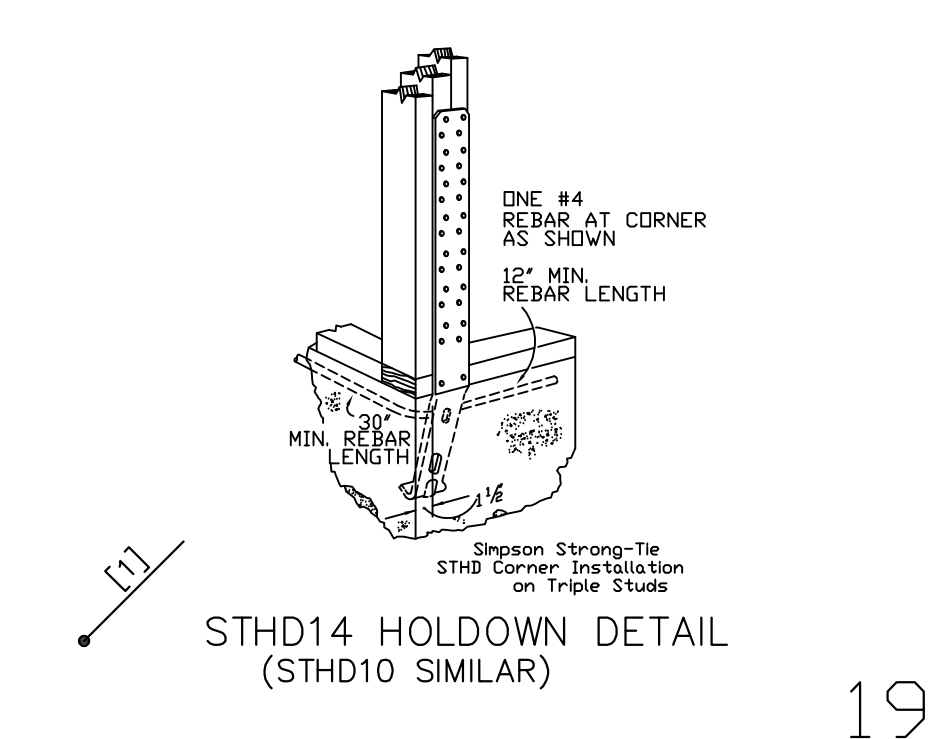
CRAWL SPACE SHEARWALL 15



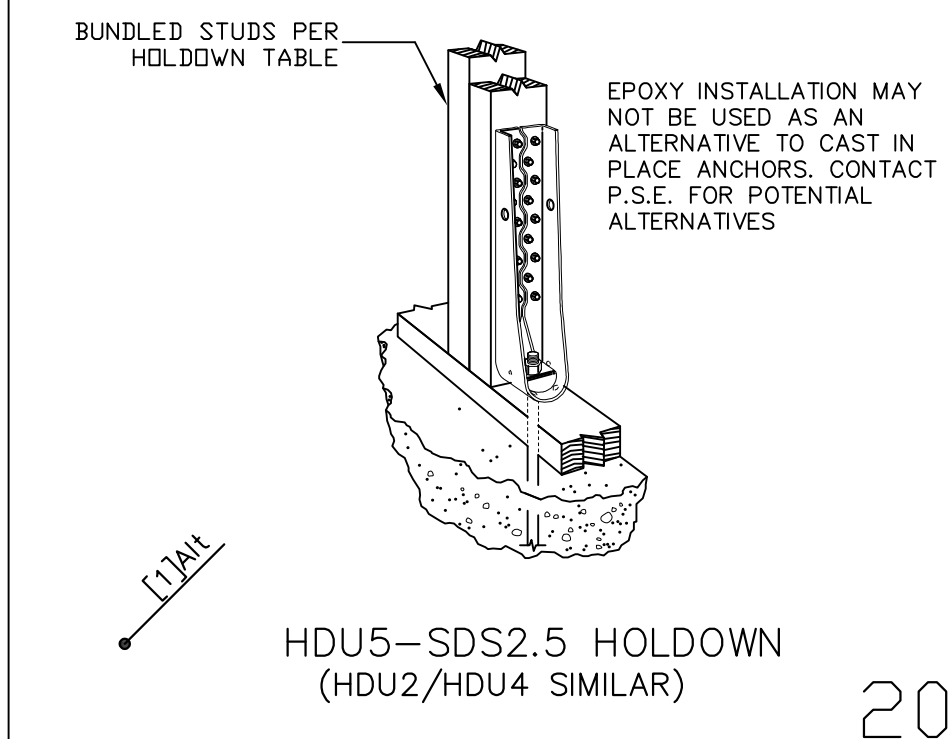
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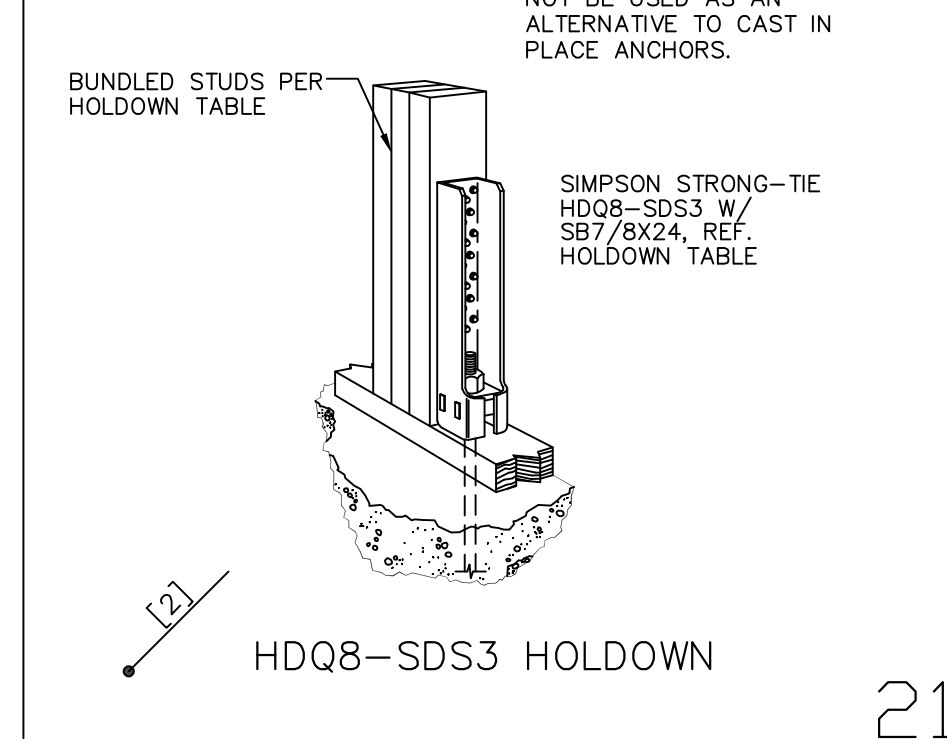
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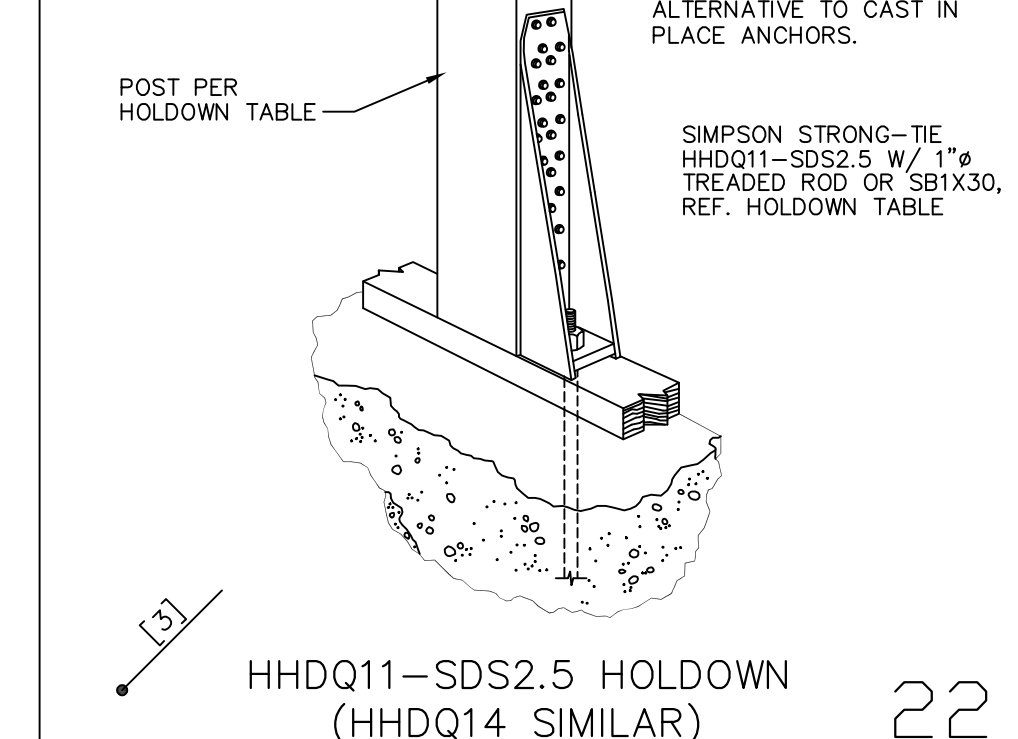
STHD14 HOLDOWN DETAIL (STHD10 SIMILAR) 19



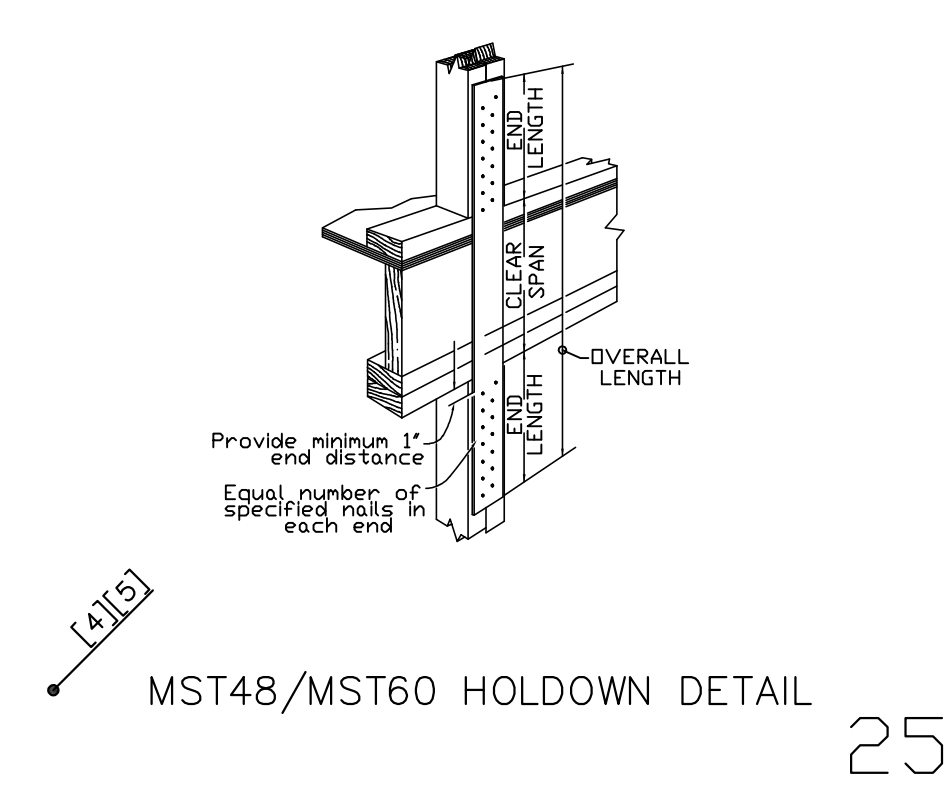
HDU5-SDS2.5 HOLDOWN (HDU2/HDU4 SIMILAR) 20



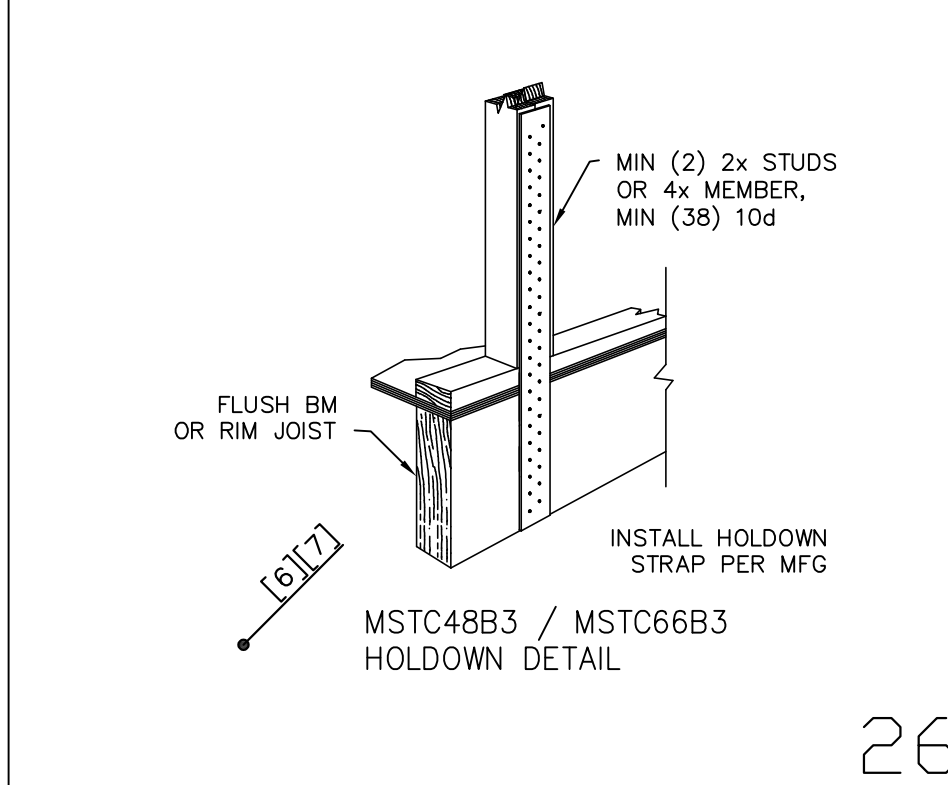
HDQ8-SDS3 HOLDOWN 21



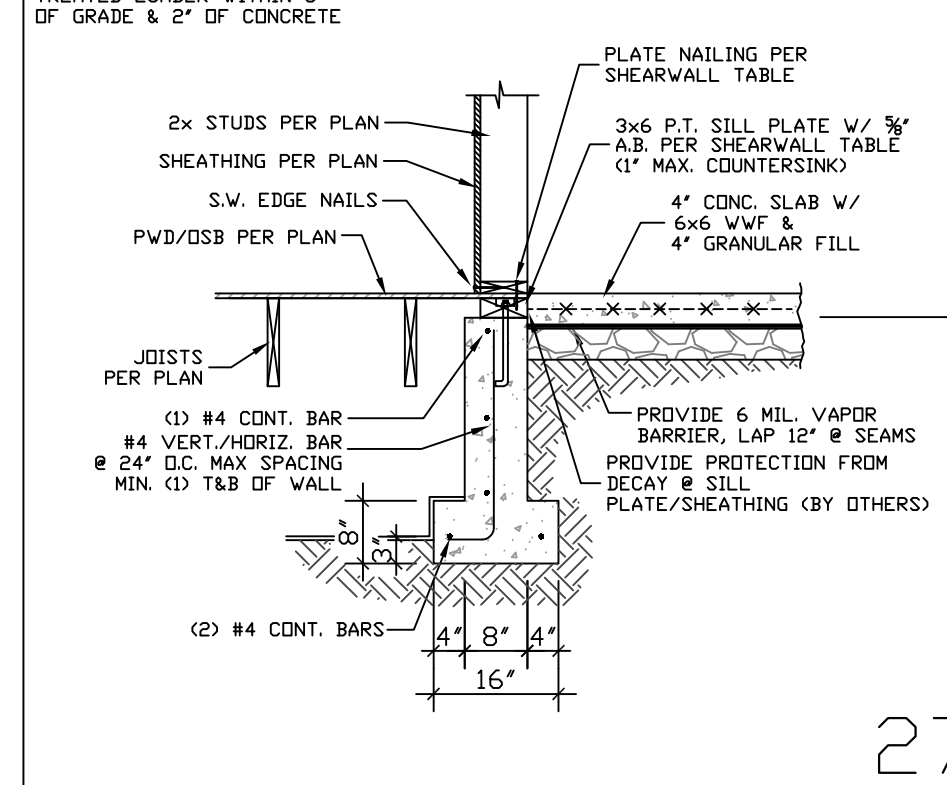
HDDQ11-SDS2.5 HOLDOWN (HDDQ14 SIMILAR) 22



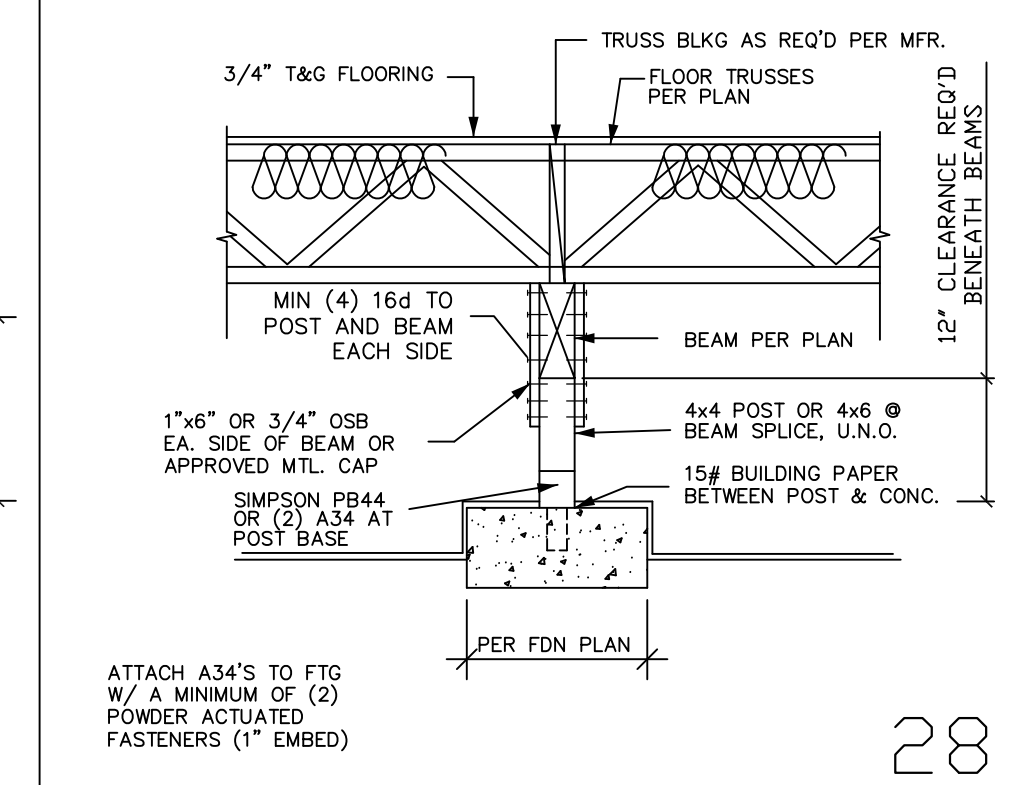
MST48/MST60 HOLDOWN DETAIL 25



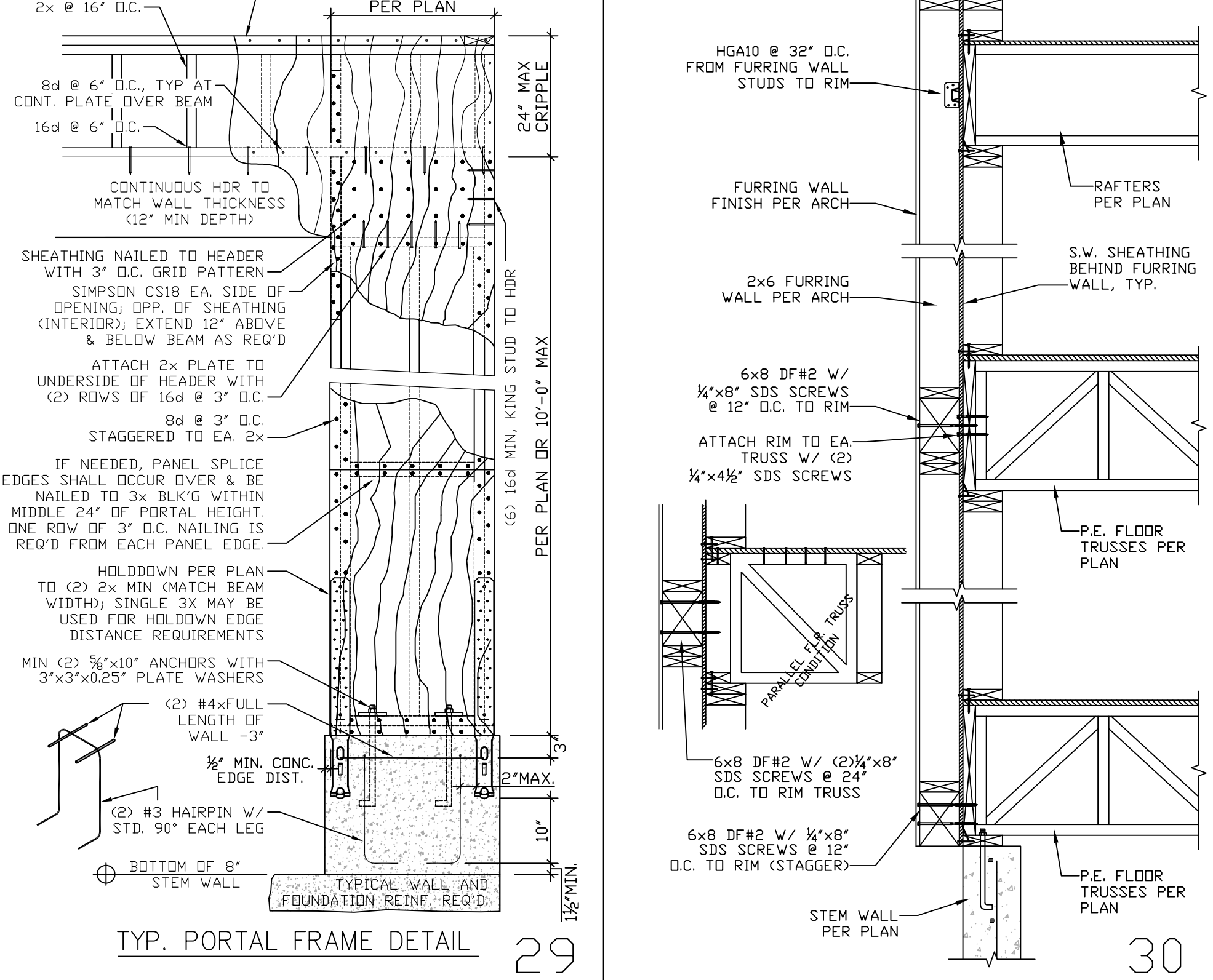
MSTC48B3 / MSTC66B3 HOLDOWN DETAIL 26



WALL FRAMING DETAIL 27

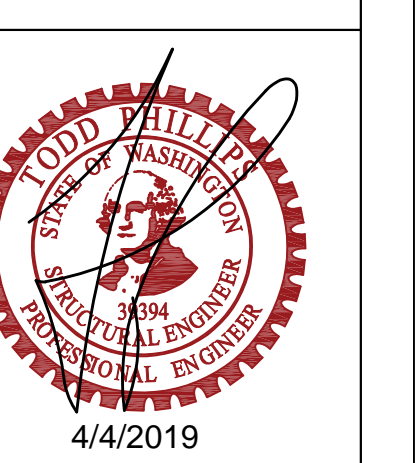
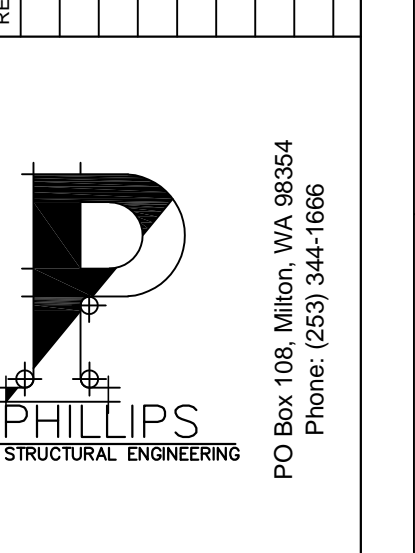


WALL FRAMING DETAIL 28



TYP. PORTAL FRAME DETAIL 29

Revisions table with columns for Date, Revision, Description, and Reviewer.

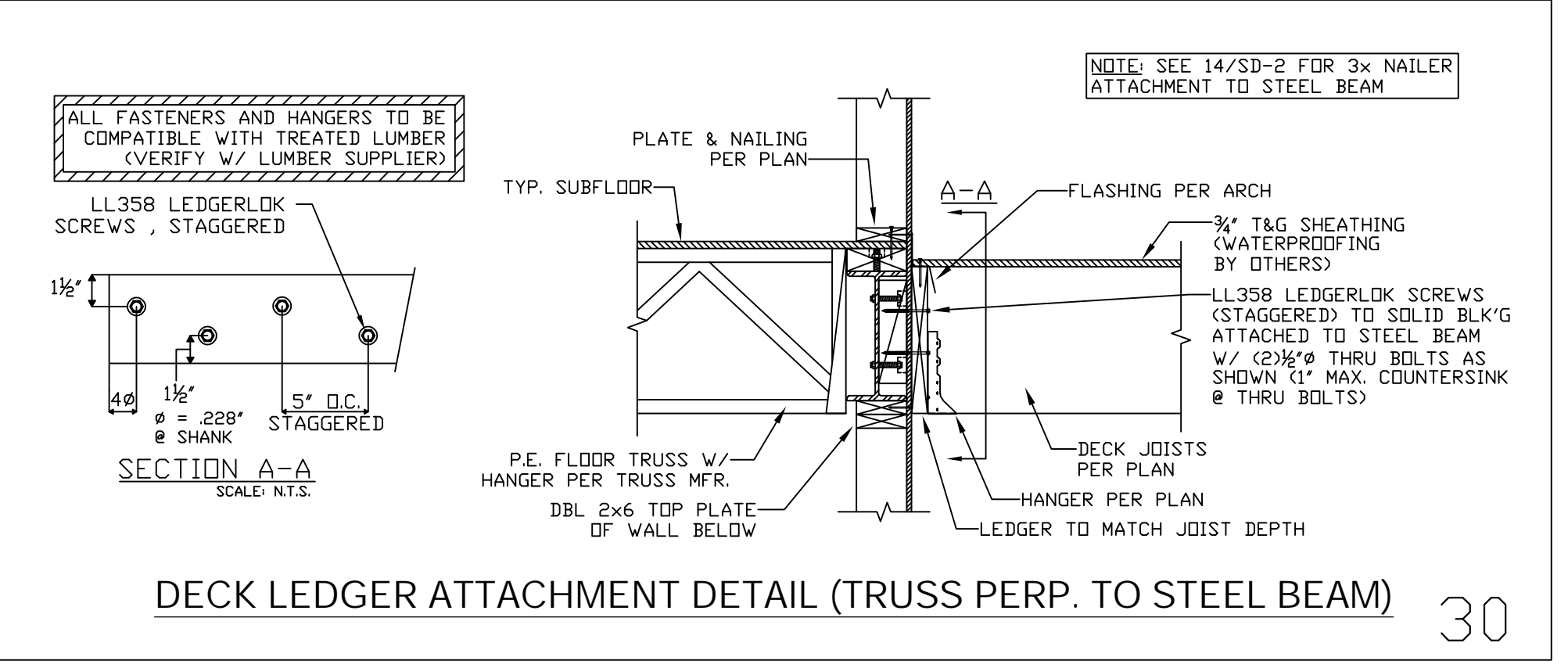
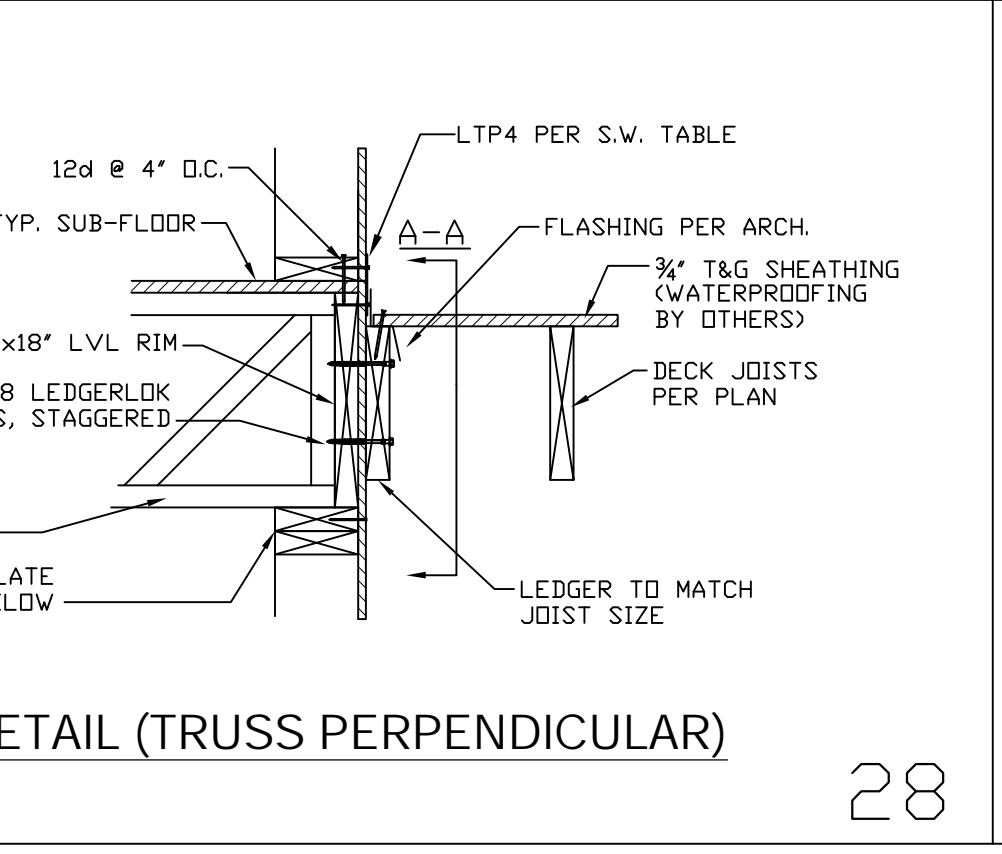
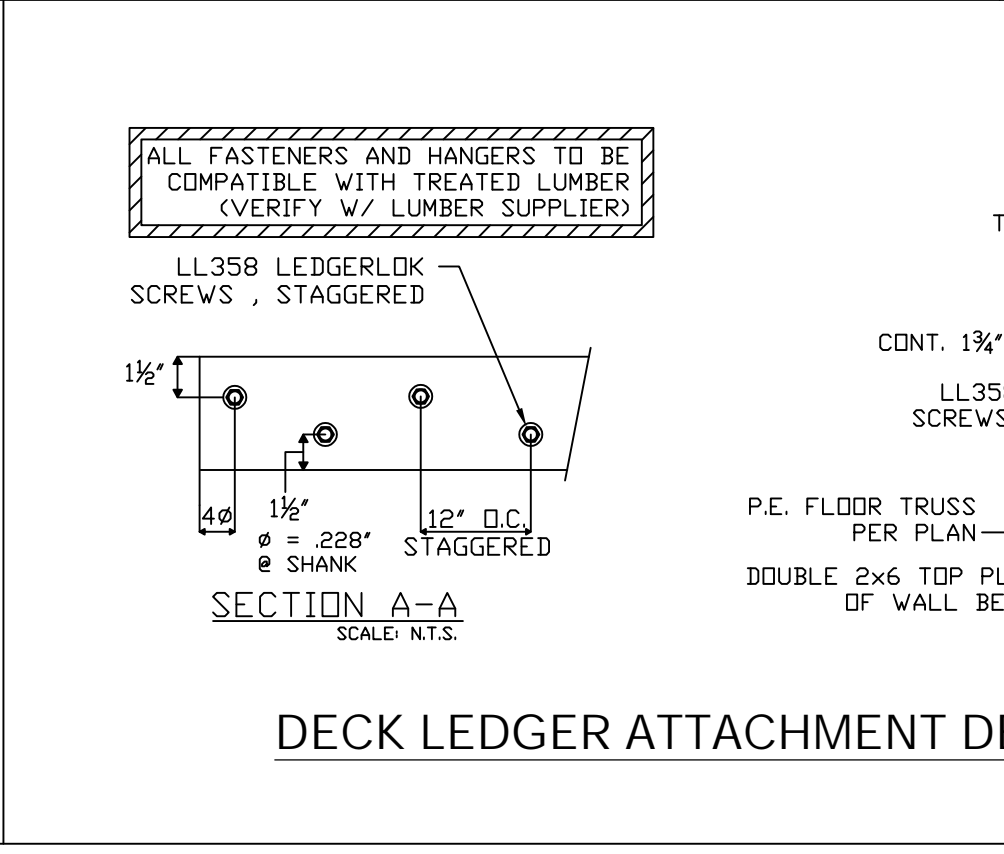
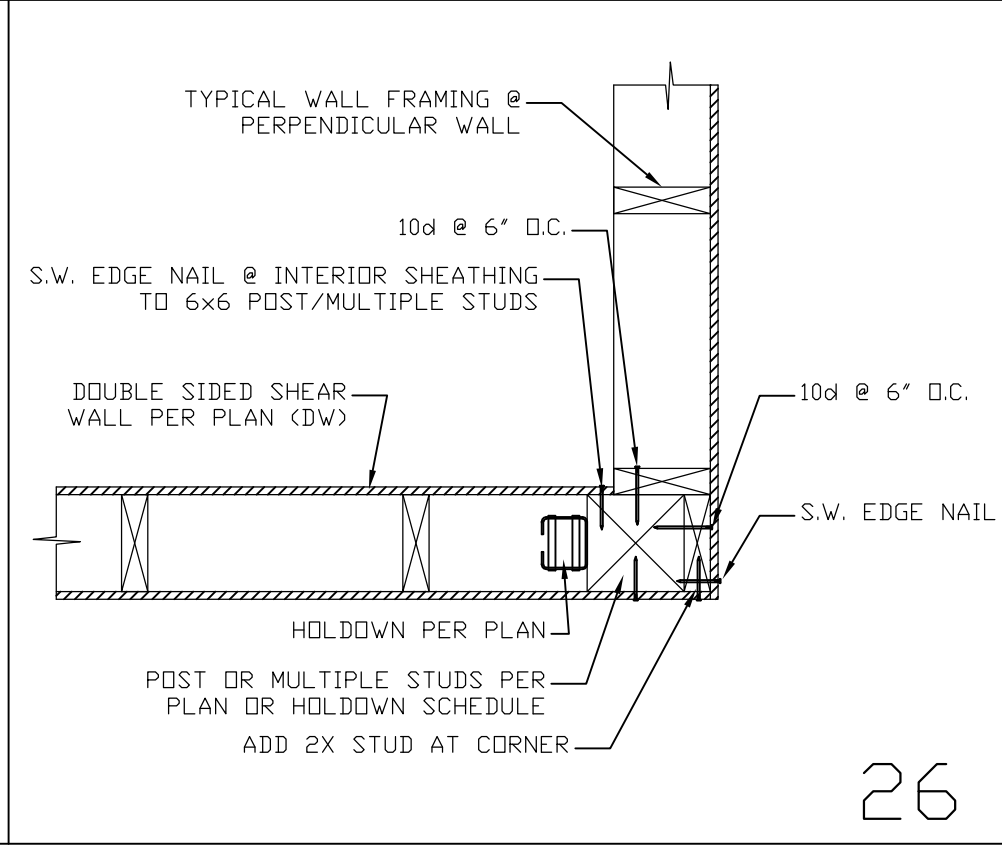
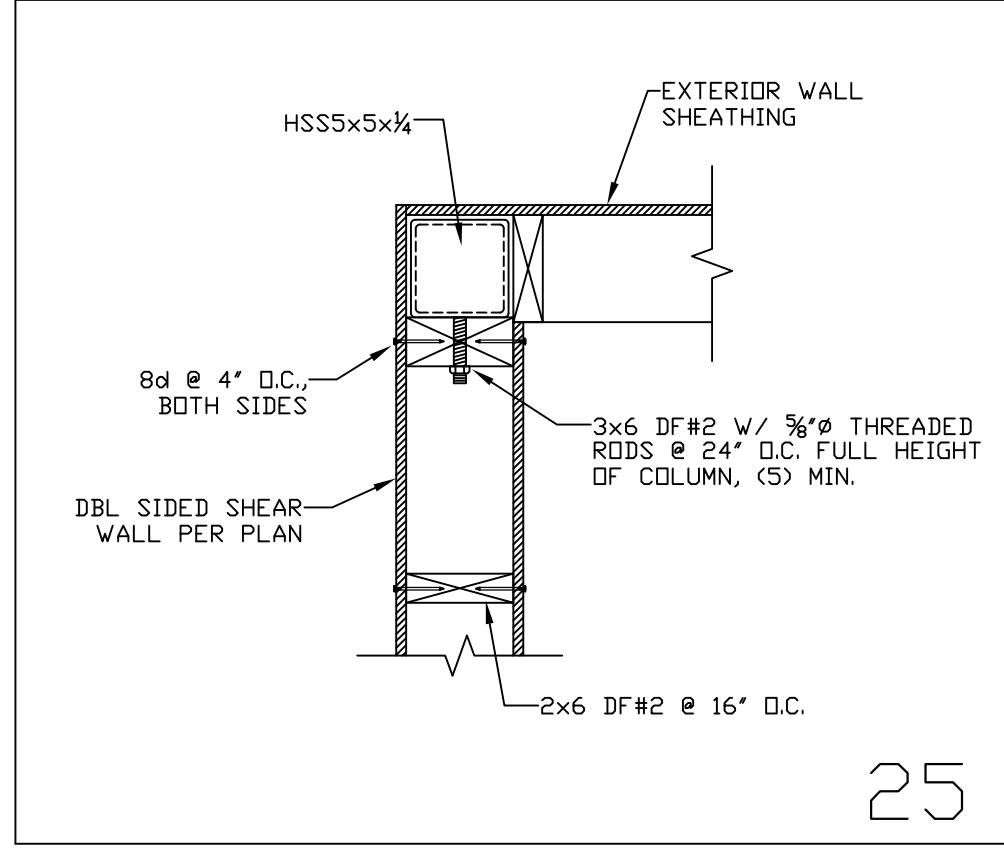
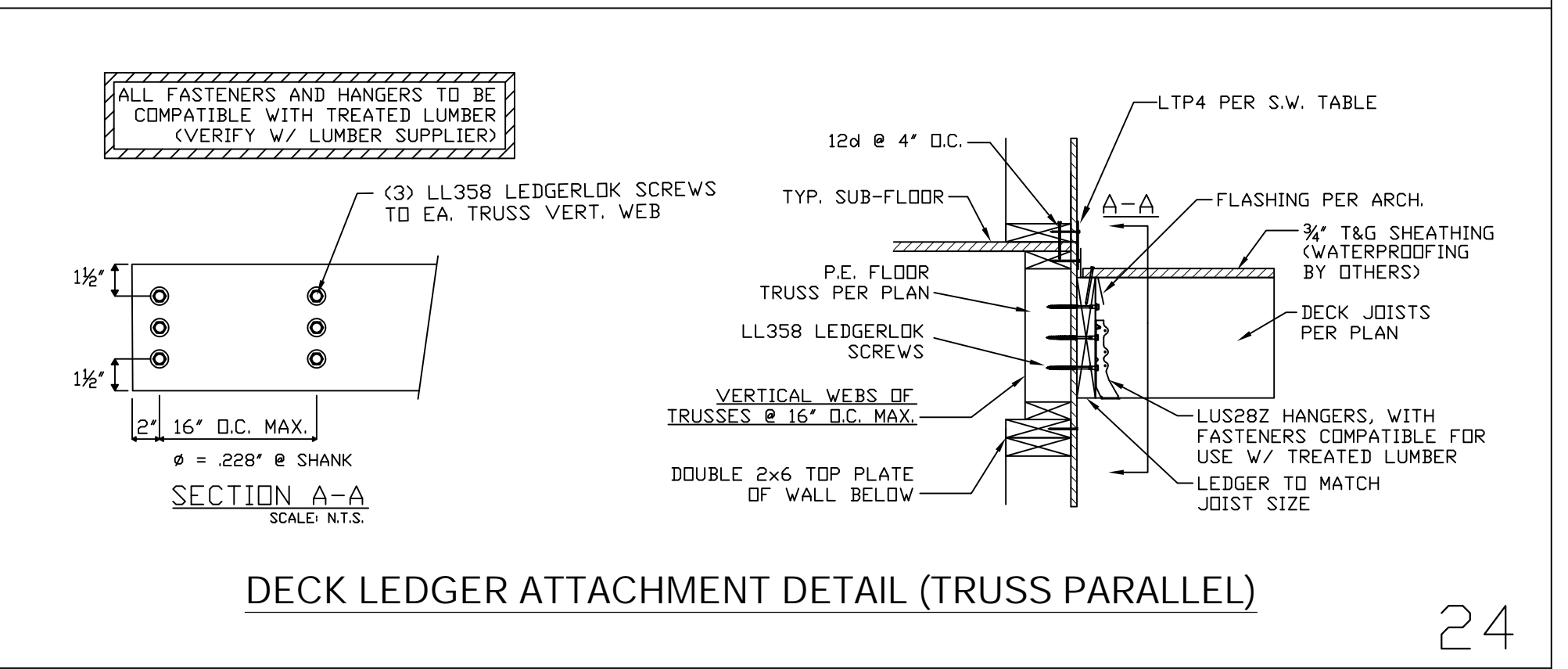
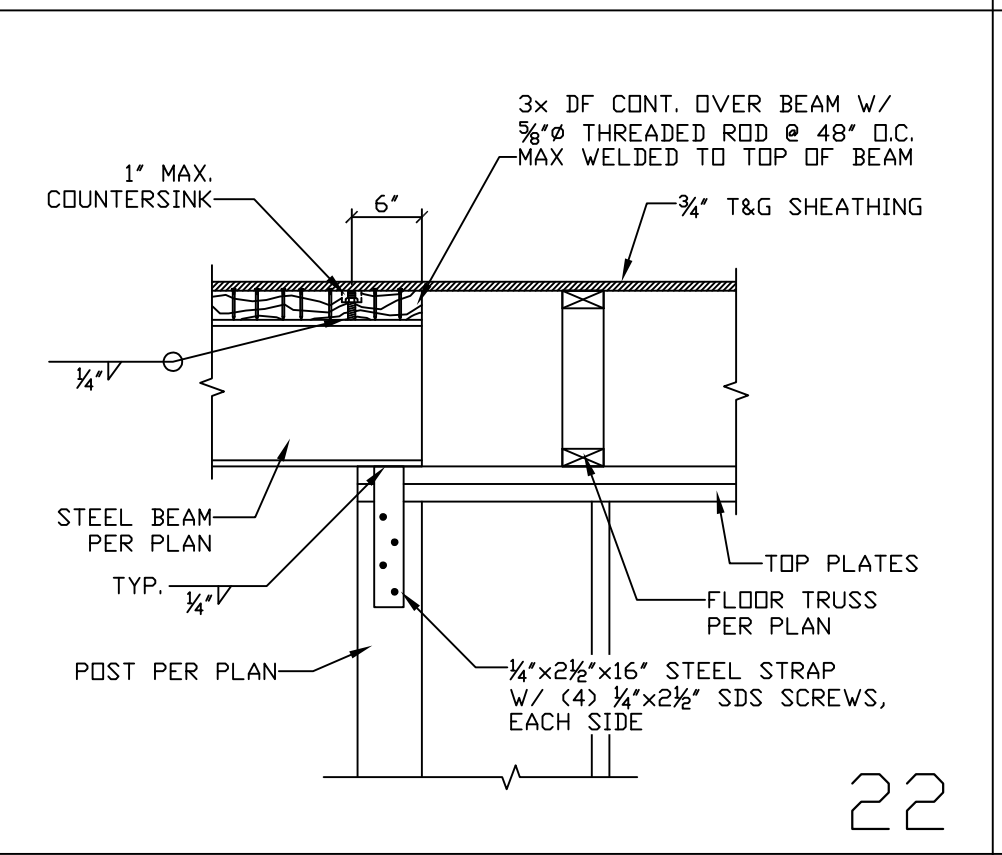
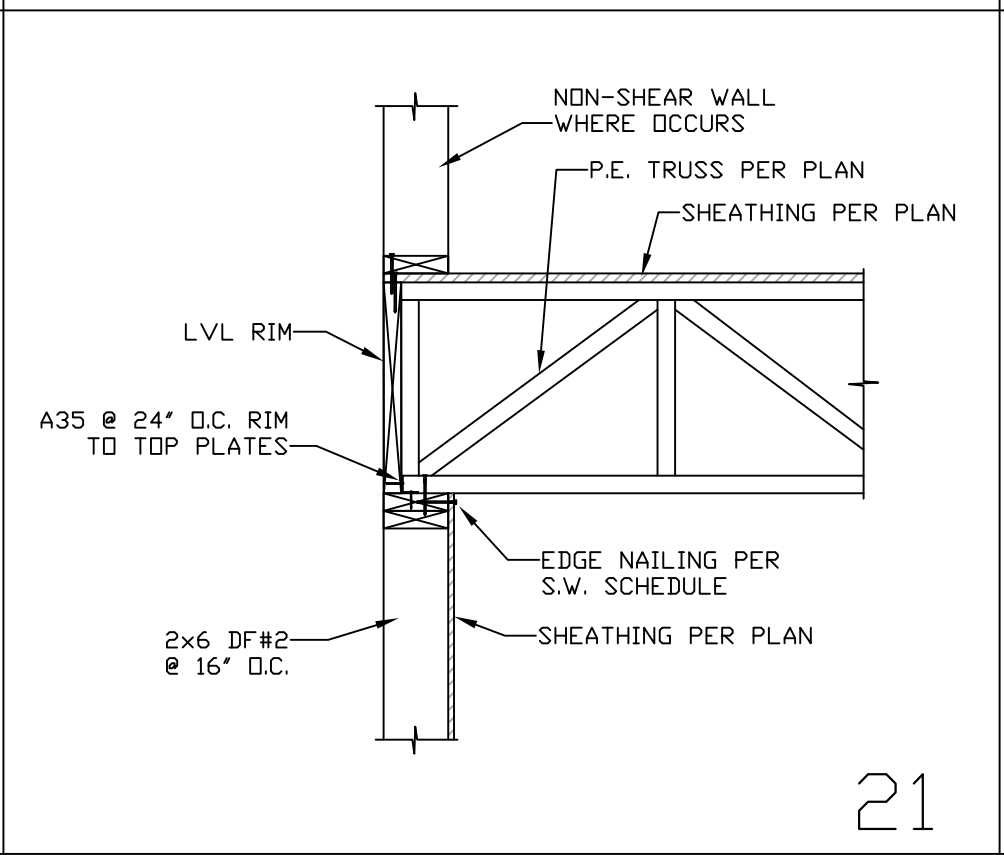
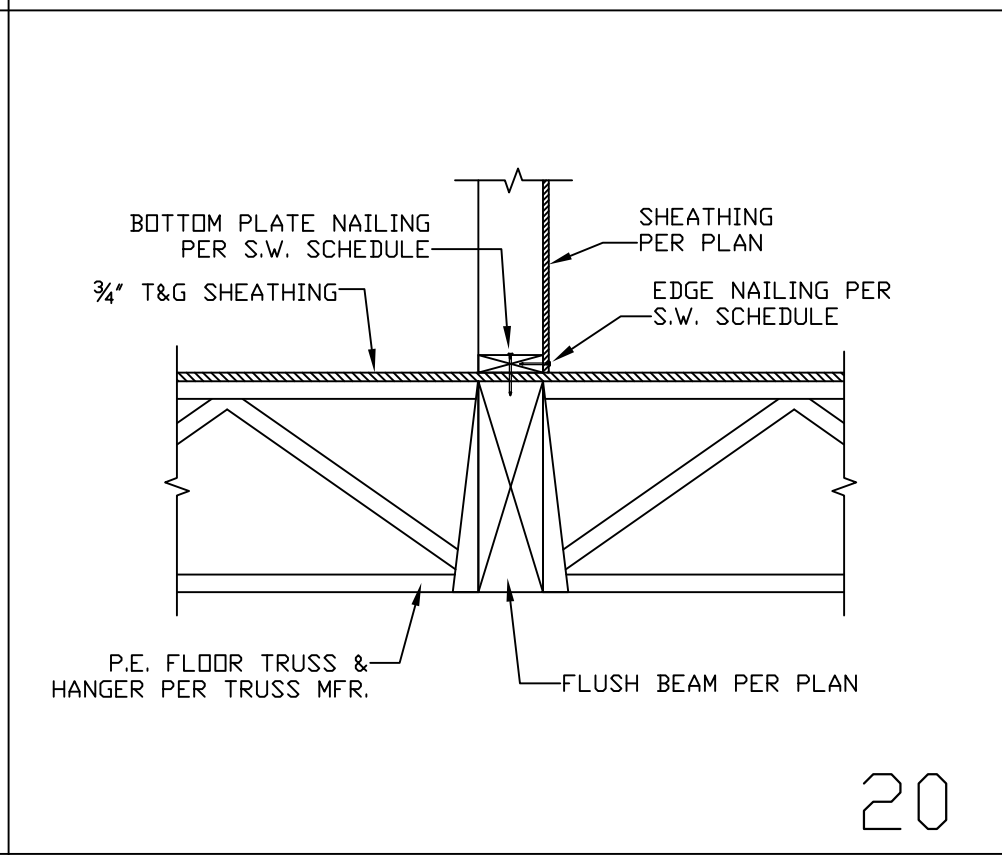
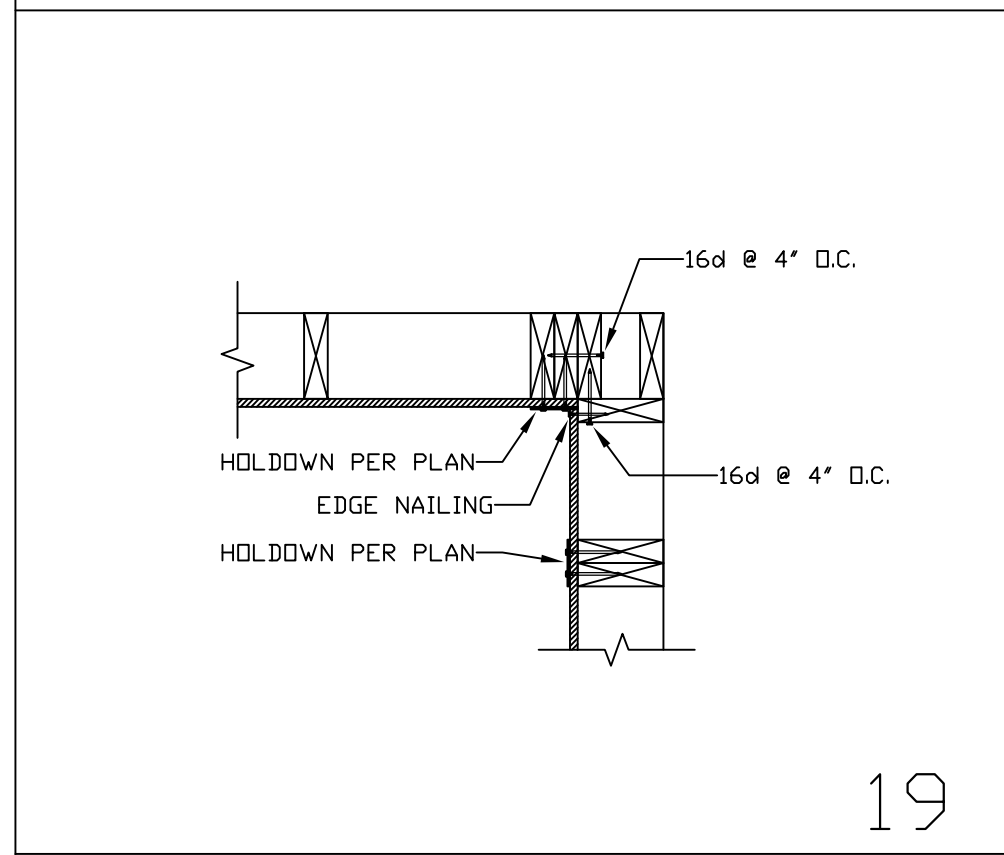
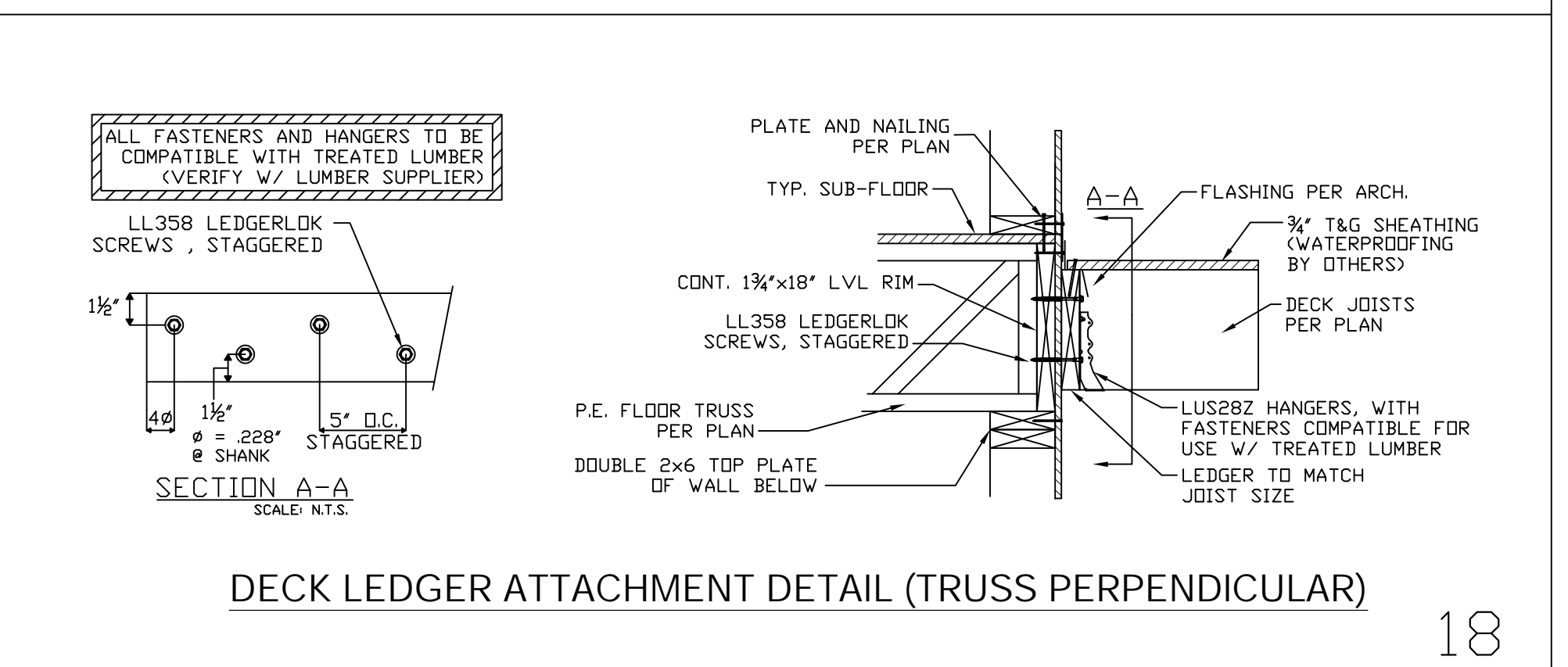
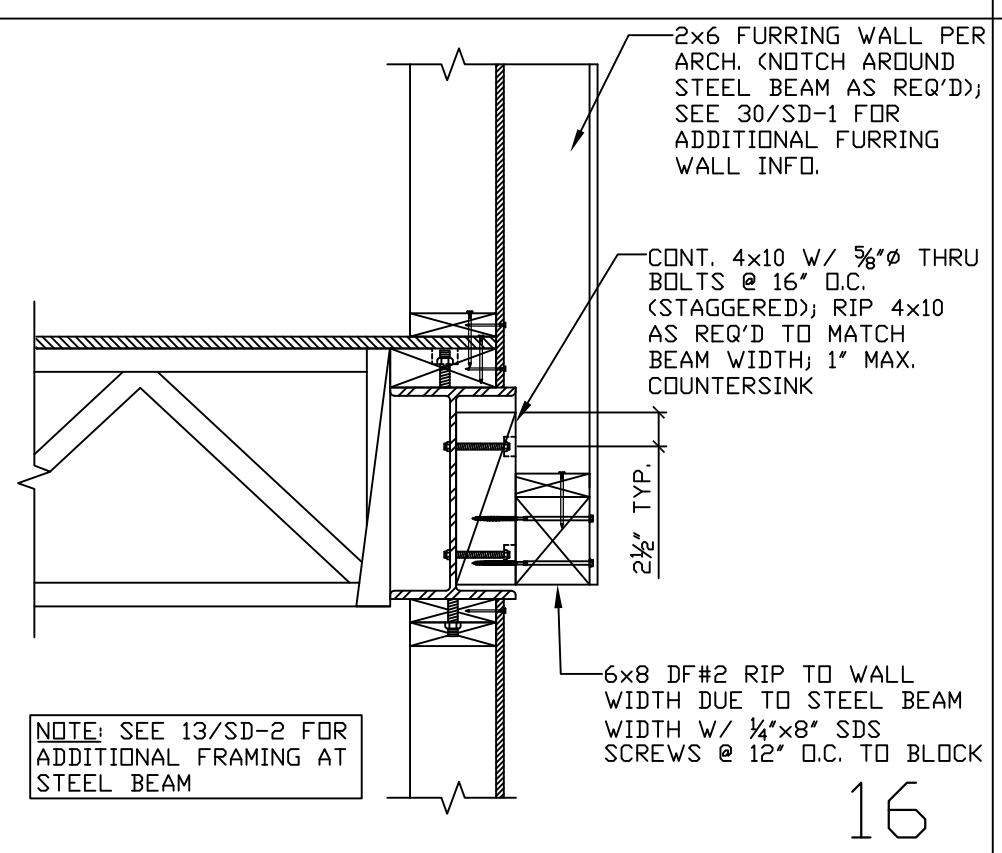
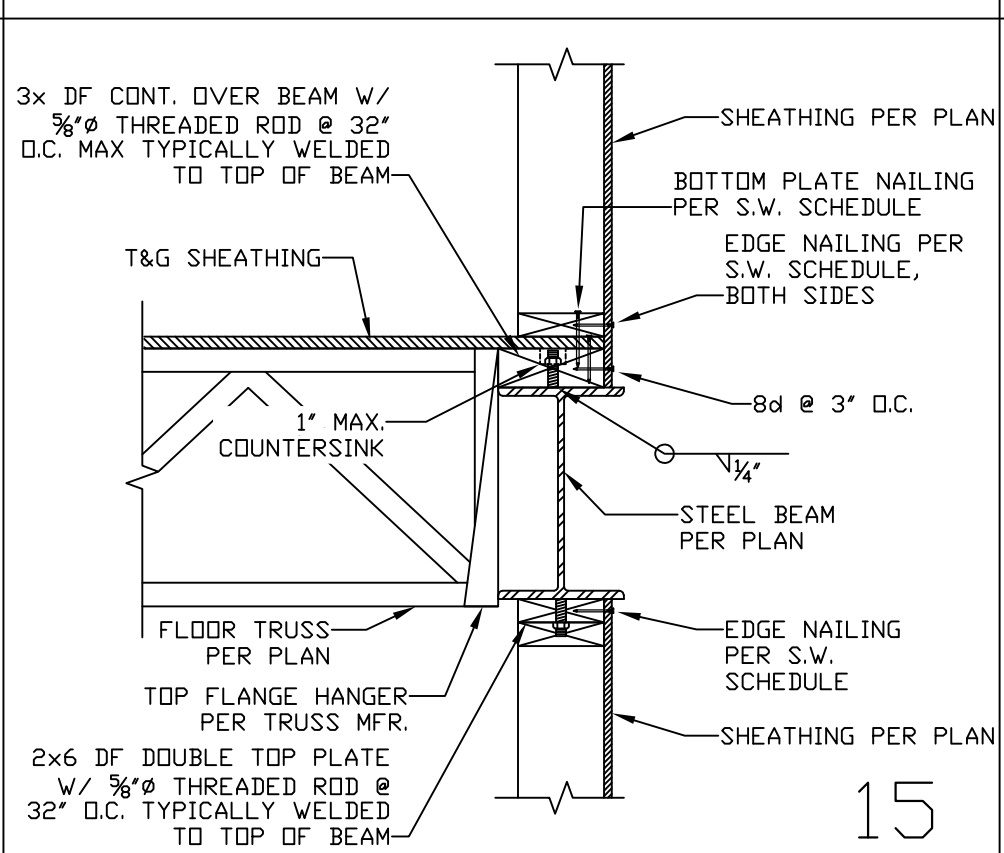
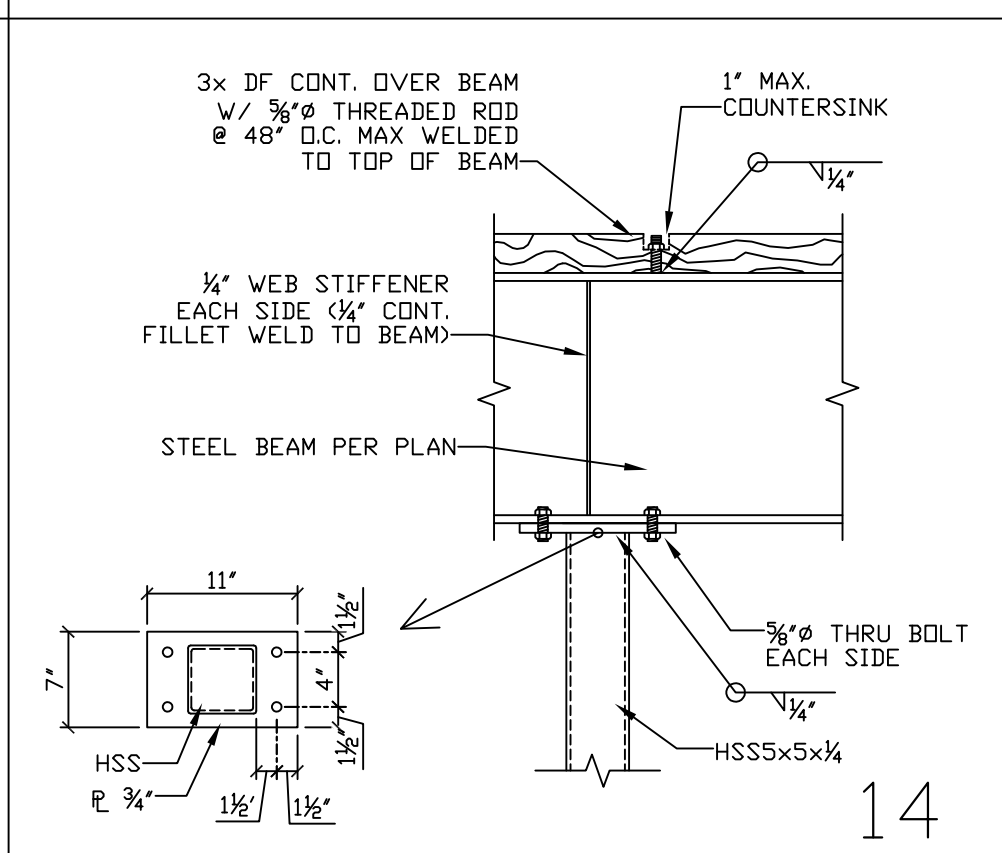
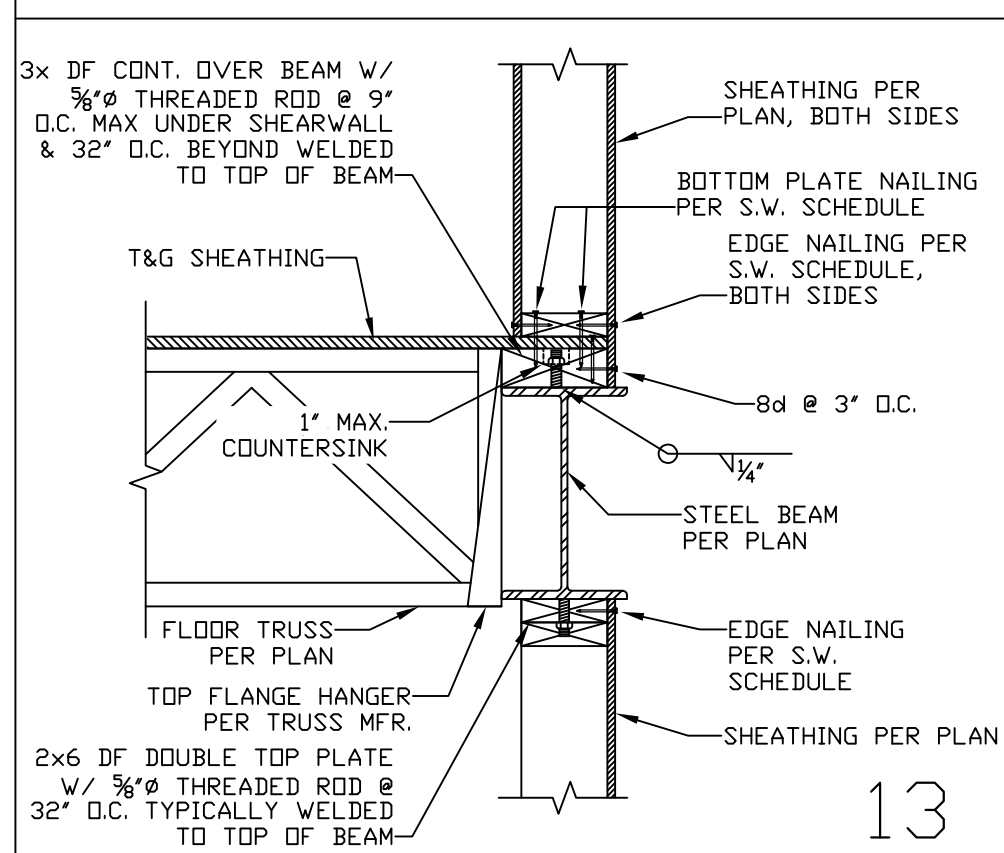
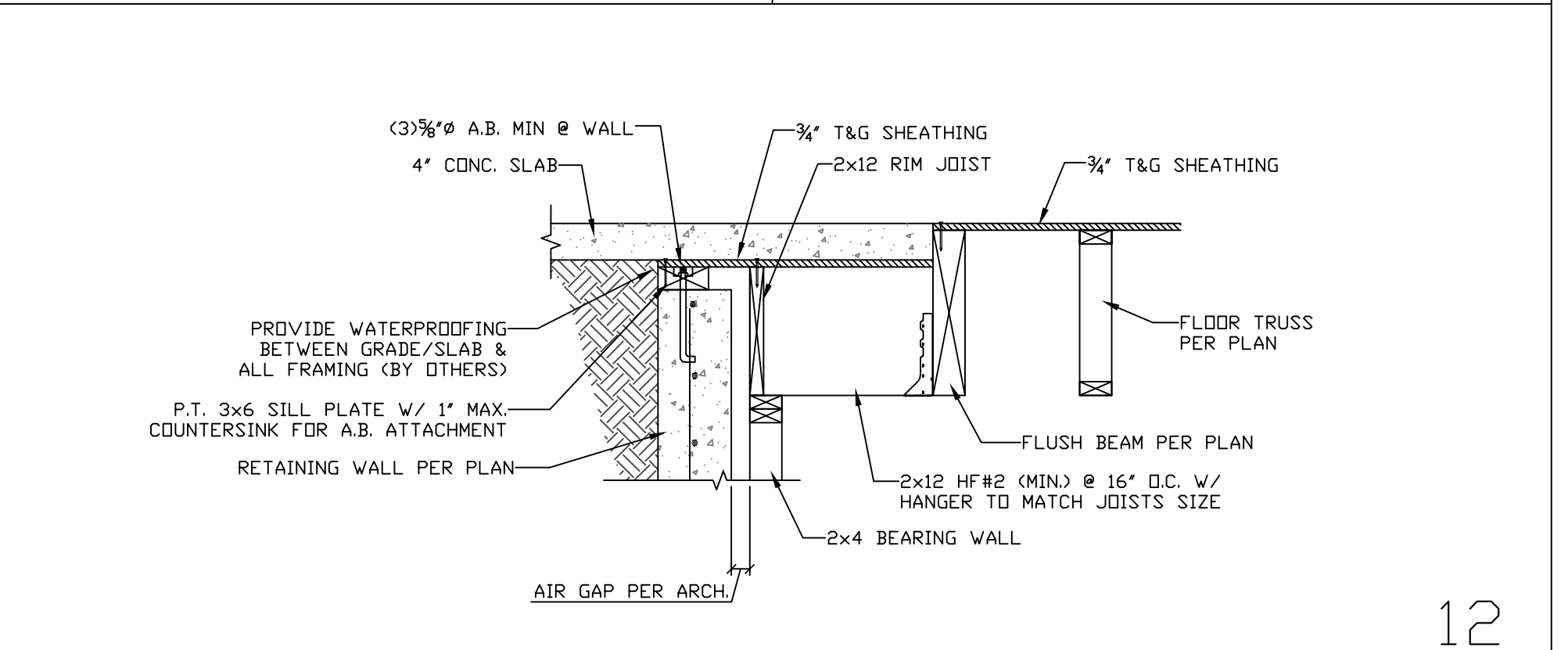
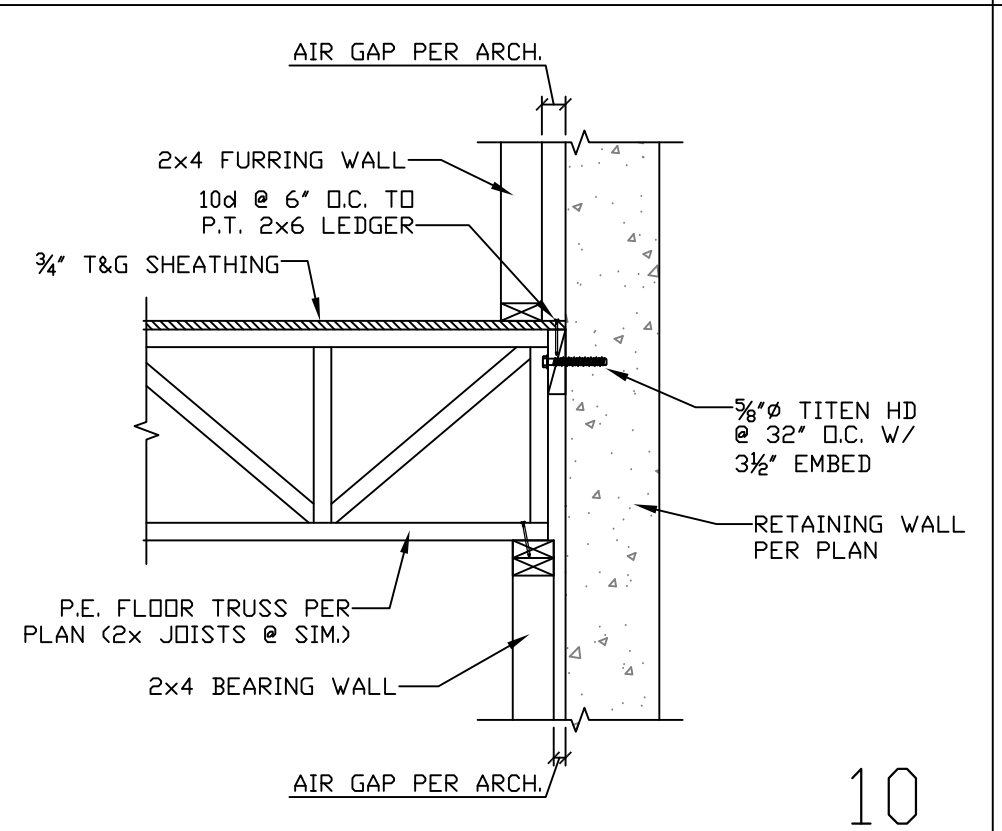
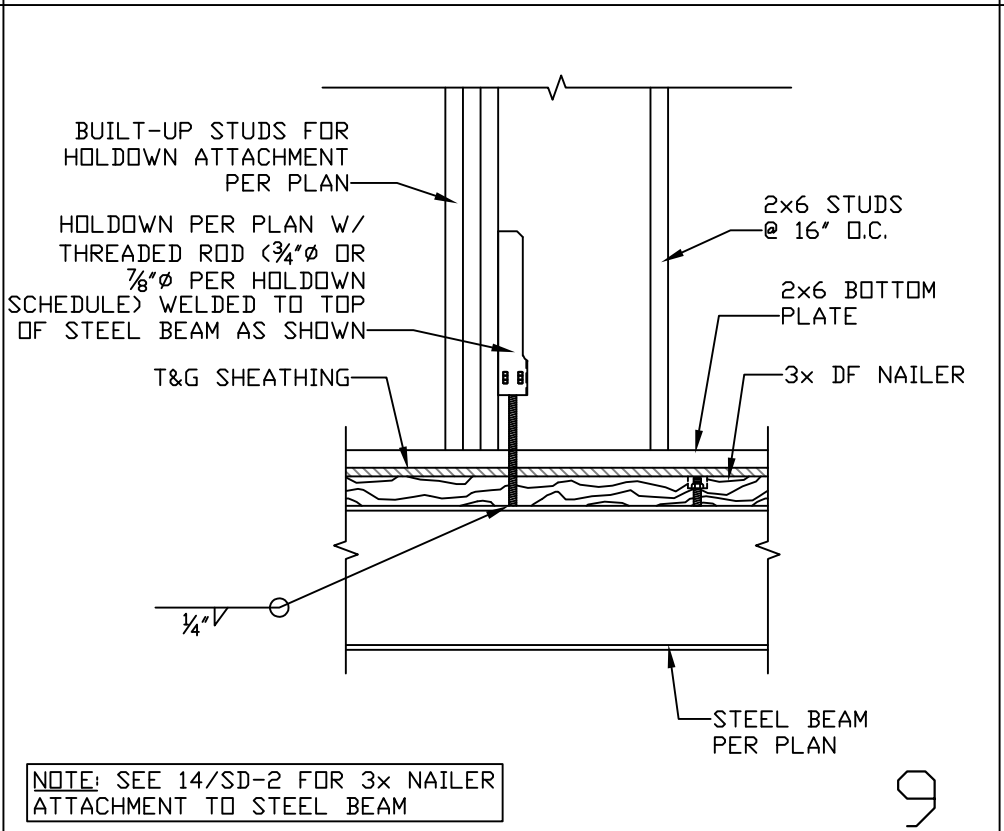
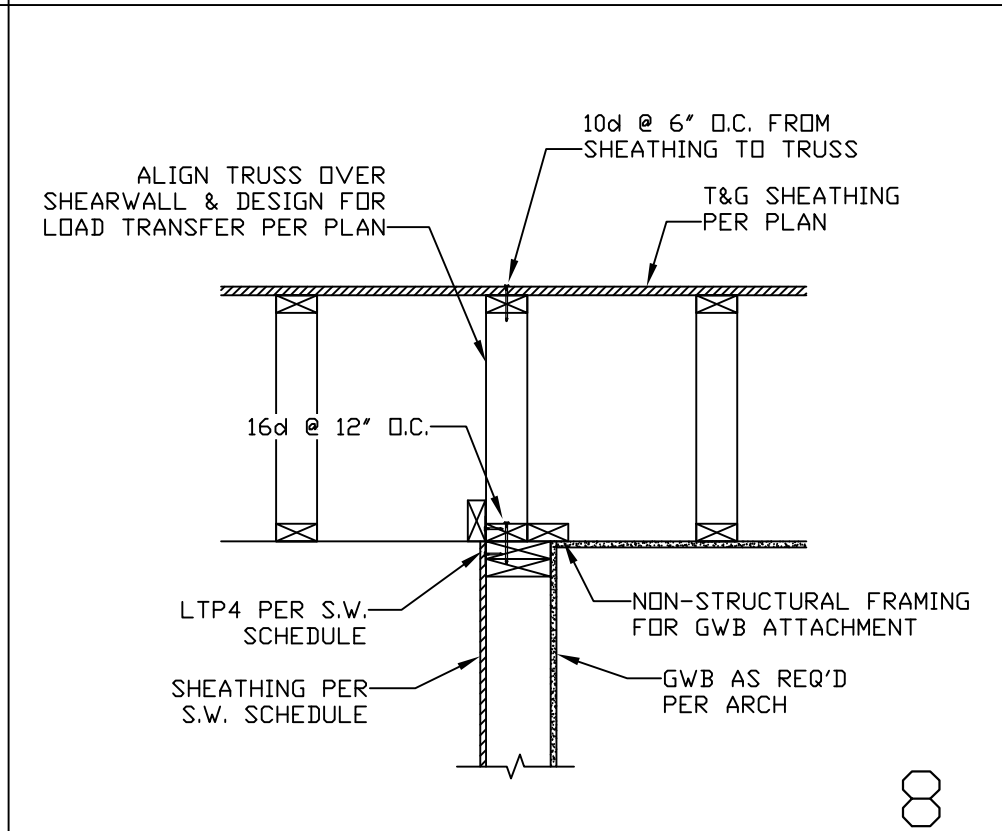
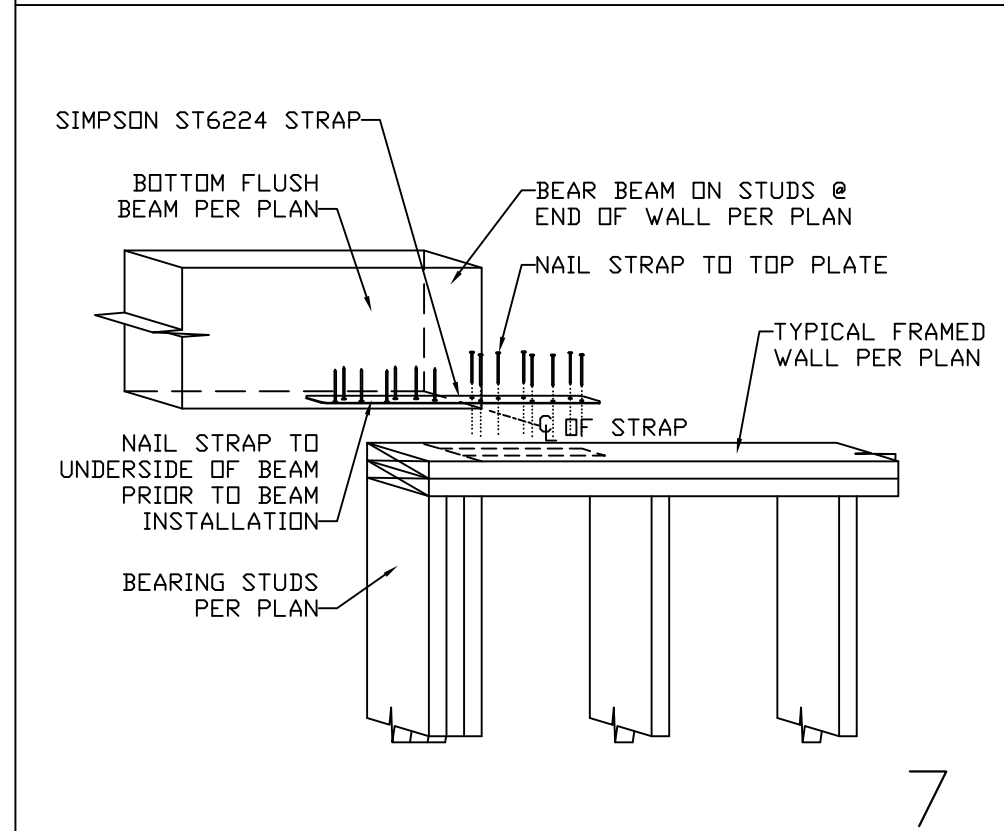
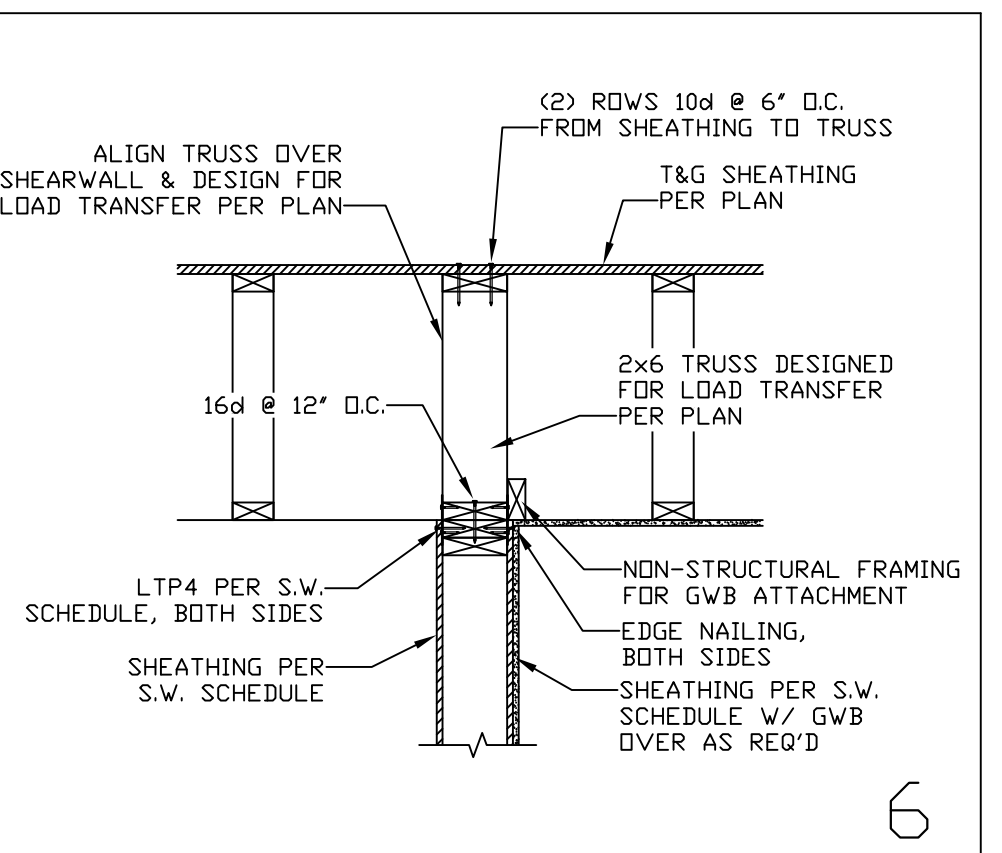
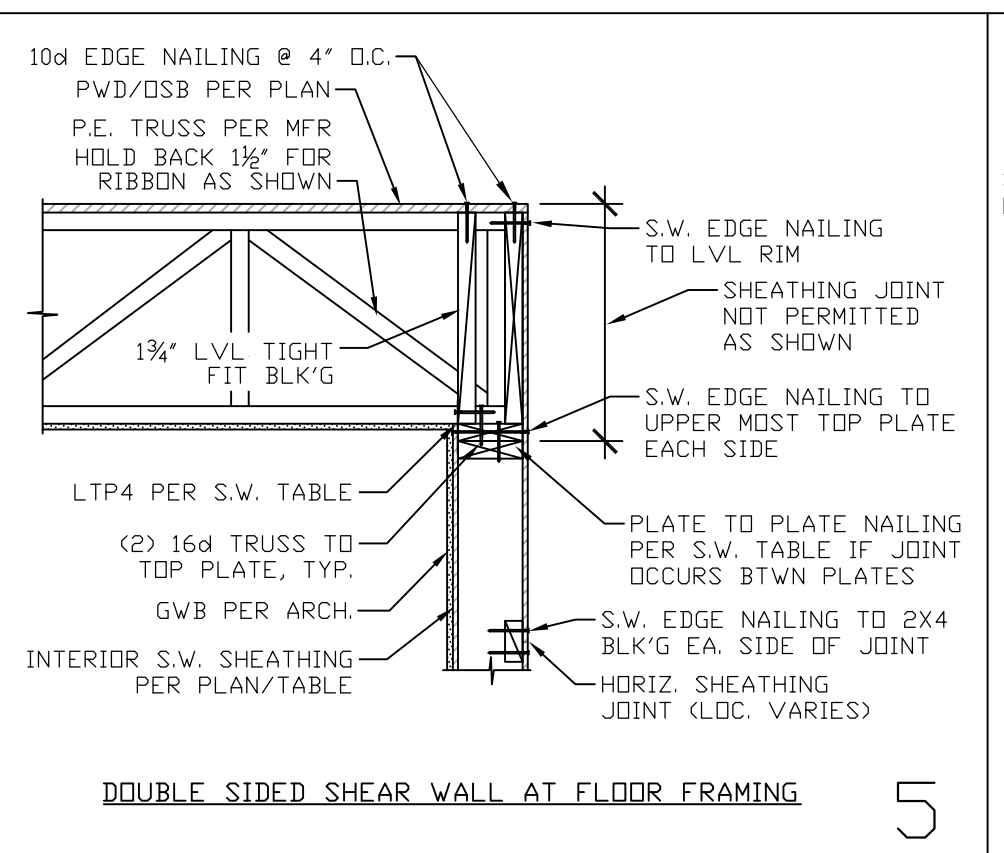
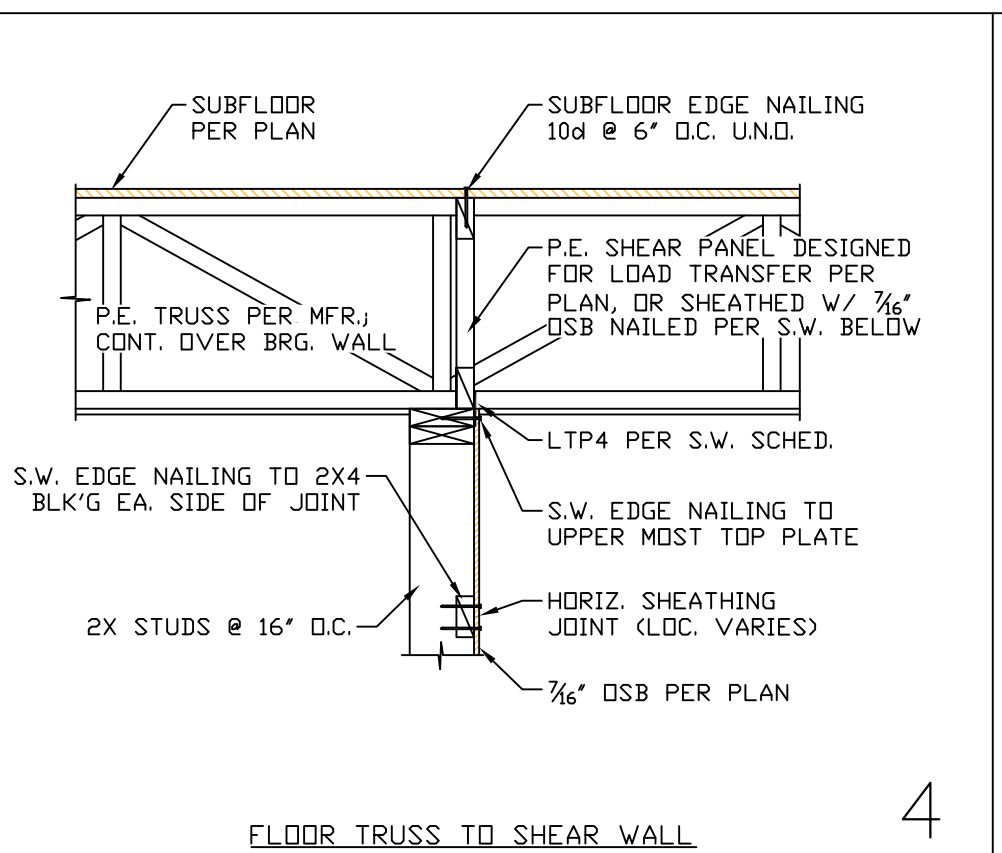
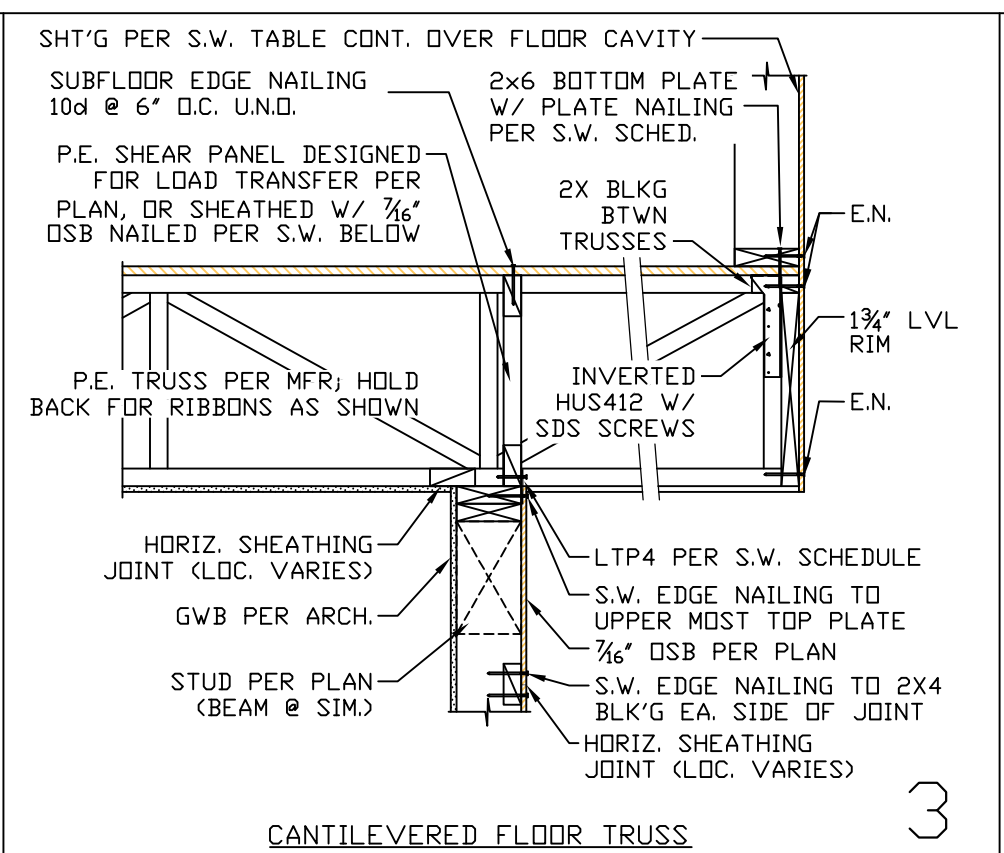
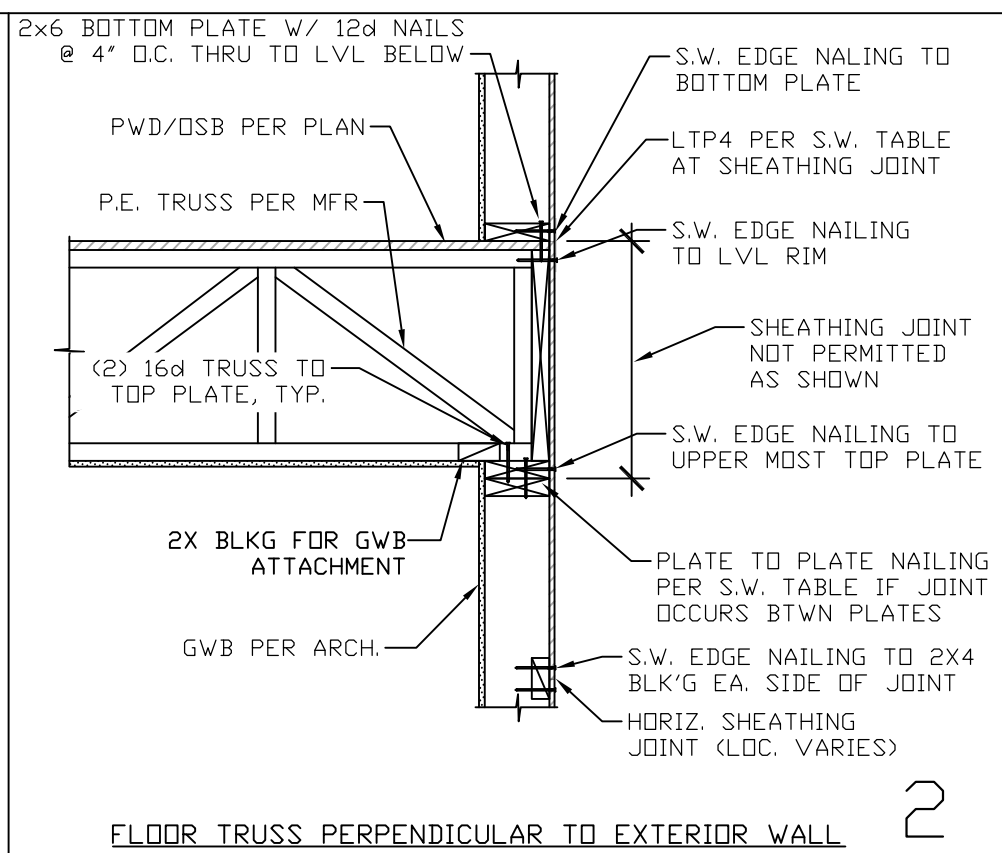
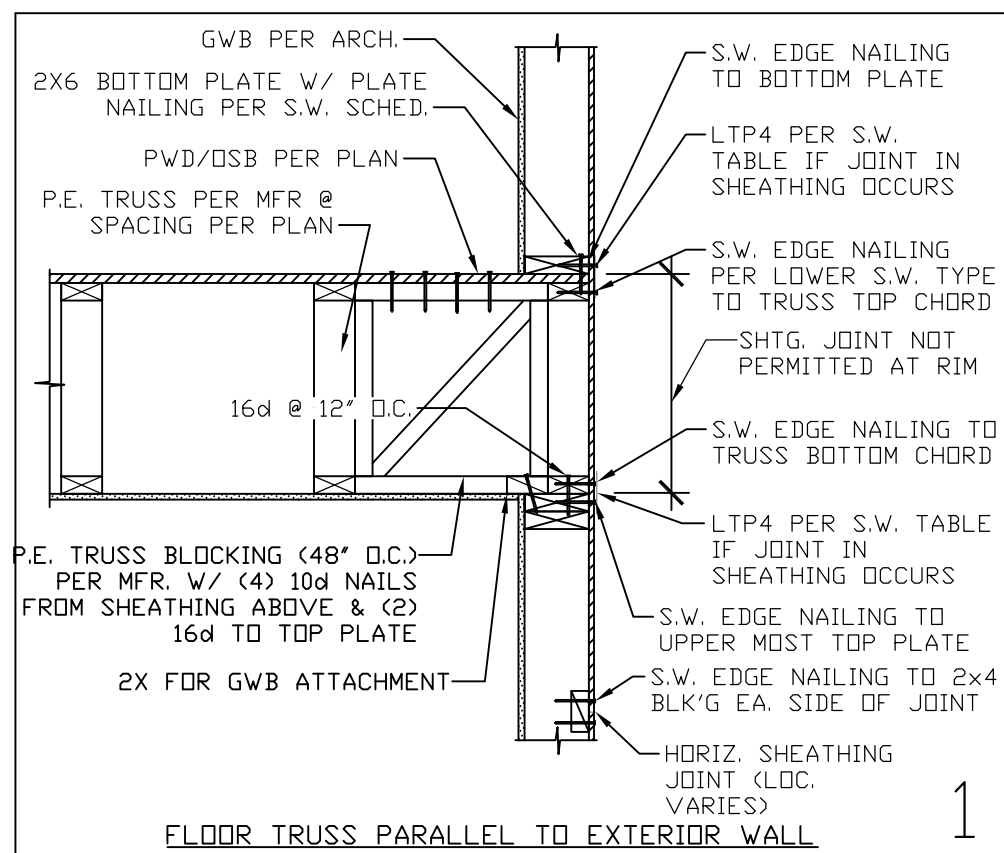


4/4/2019 ORIGINAL STAMP MUST BE RED FOR VALIDITY. ALL VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE DESIGNER...

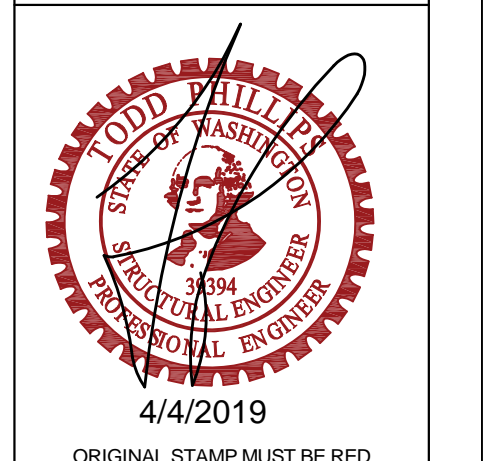
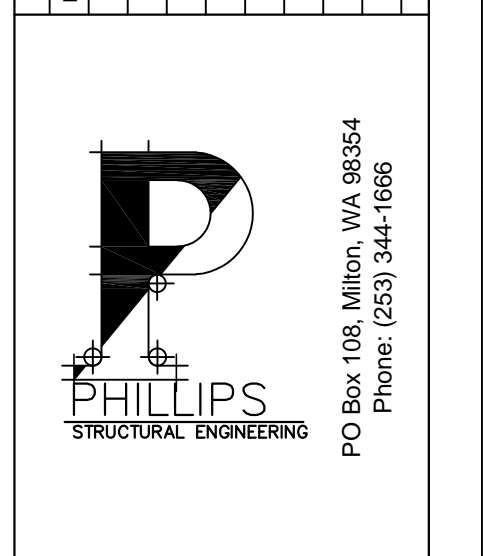
WEN HU RESIDENCE project information table including address and location.

Structural Details table with columns for Wind Speed, Exposure, Snow Load, etc.

SHEET NO: SD-1



REVISIONS TABLE



ALL VARIATIONS FOR DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE DESIGNER FOR RESOLUTION WITH THE ENGINEER PRIOR TO PROCEEDING WITH WORK...

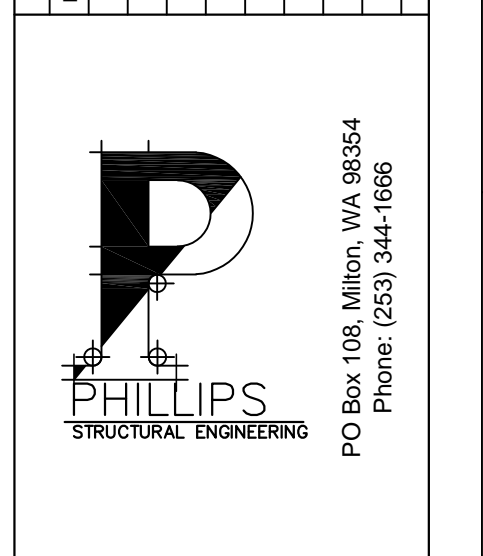
WEN HU RESIDENCE 8251 WEST MERCER WAY MERCER ISLAND, WA 98040

WIND SPEED: 110 MPH, WIND EXPOSURE: C, ROOF SNOW LOAD: 25 PSF

STRUCTURAL DETAILS, DRAWN BY: AMS, DRAWING DATE: OCT. 30, 2018, SCALE: N.T.S. (U.N.O.), SHEET NO: SD-2

<p>SEE 3/SD-3 FOR VENTING</p> <p>8d @ 6" O.C.</p> <p>1/2" CDX OR 3/8" OSB EDGE &amp; 12" FIELD NAILING U.N.D.</p> <p>PARAPET, 2x FURRING &amp; WATERPROOFING PER ARCH (8" MAX. HEIGHT)</p> <p>MFR. I-JOIST RAFTERS PER PLAN</p> <p>1 3/4" LVL RIM JST (48" O.C. TYP. MAX SPACING)</p> <p>8d TOENAIL @ 6" O.C.</p> <p>HORIZ. SHEATHING JOINT</p> <p>WEB STIFFENER</p> <p>H2.5T @ EACH RAFTER</p> <p>GWB PER ARCH.</p> <p>2x6 STUDS PER PLAN</p> <p>LTP4 @ JOINT PER S.W. TABLE (48" O.C. TYP. MAX SPACING)</p> <p>EDGE NAILING PER S.W. SCHEDULE</p> <p>DBL TOP PLATE</p> <p>SHEATHING W/ NAILING PER S.W. SCHEDULE</p> <p>NO HORIZ. SHEATHING JOINT</p>	<p>SEE 3/SD-3 FOR VENTING</p> <p>8d @ 6" O.C.</p> <p>1/2" CDX OR 3/8" OSB 6" EDGE &amp; 12" FIELD NAILING U.N.D.</p> <p>PARAPET, 2x FURRING &amp; WATERPROOFING PER ARCH (8" MAX. HEIGHT)</p> <p>I-JOIST BLKG @ 48" O.C. W/ (4) 8d NAILS FROM SHT'G TO JOIST</p> <p>1 3/4" LVL RIM JST</p> <p>8d TOENAIL @ 6" O.C.</p> <p>HORIZ. SHEATHING JOINT</p> <p>LTP4 @ JOINT PER S.W. TABLE (48" O.C. TYP. MAX SPACING)</p> <p>EDGE NAILING PER S.W. SCHEDULE</p> <p>DBL TOP PLATE</p> <p>SHEATHING W/ NAILING PER S.W. SCHEDULE</p> <p>8d NAIL EA. SIDE (DRIVEN @ ANGLE)</p> <p>GWB PER ARCH.</p> <p>2x6 STUDS PER PLAN</p> <p>NO HORIZ. SHEATHING JOINT</p>	<p>1/2" MAX.</p> <p>1/2" MAX.</p> <p>1/2" MAX.</p> <p>MAXIMUM ALLOWABLE V-CUT</p>	<p>8d @ 4" O.C. TO LVL BLK'G</p> <p>1 3/4" LVL BLK'G (TIGHT FIT)</p> <p>I-JOIST RAFTERS PER PLAN</p> <p>16d TOENAIL @ 6" O.C.</p> <p>GWB PER ARCH.</p> <p>ROOF SHEATHING PER PLAN</p> <p>LTP4 PER SW SCHED. LVL BLK'G TO TOP PLATE (A35 ON OPP. SIDE PERMITTED)</p> <p>EDGE NAILING PER S.W. TABLE</p> <p>GWB PER ARCH OVER SHEATHING PER S.W. TABLE</p> <p>BLOCKING OVER SHEARWALL</p>	<p>WEB STIFFENER</p> <p>ROOF SHEATHING PER PLAN</p> <p>EDGE NAILING TO 1 3/4"x14" LVL RIM</p> <p>EDGE NAILING</p> <p>10d TOENAIL @ 8" O.C.</p> <p>ROOF SHEATHING PER PLAN</p> <p>H2.5T @ EACH RAFTER</p> <p>A35 @ 32" O.C. MAX.</p> <p>FLUSH BEAM PER PLAN</p> <p>IUS/MIU HANGER, TYP.</p> <p>RAFTERS PER PLAN</p>	<p>WEB STIFFENER</p> <p>ROOF SHEATHING PER PLAN</p> <p>EDGE NAILING TO 1 3/4"x14" LVL RIM</p> <p>EDGE NAILING TO 1 3/4"x14" LVL RIM</p> <p>ROOF SHEATHING PER PLAN</p> <p>H2.5T @ EACH RAFTER</p> <p>A35 @ 32" O.C. MAX. TO 2x6 FLAT BLKG</p> <p>8d TOENAIL @ 6" O.C.</p> <p>2x4 BEARING WALL</p> <p>H2.5T @ EACH RAFTER</p> <p>RAFTERS PER PLAN</p>
<p>8d @ 6" O.C. TO 2x BLK'G</p> <p>ROOF SHEATHING PER PLAN</p> <p>H2.5T @ EACH RAFTER</p> <p>DROPPED BEAM PER PLAN</p> <p>A35 @ 32" O.C. BLK'G TO BEAM</p> <p>RAFTER PER PLAN</p>	<p>8d @ 6" O.C.</p> <p>SHEATHING W/ NAILING PER S.W. SCHEDULE</p> <p>BOTTOM PLATE NAILING PER S.W. SCHEDULE</p> <p>ROOF SHEATHING PER PLAN</p> <p>2x BLKG @ 48" O.C. W/ (4) 8d NAILS FROM SHT'G TO BLKG.</p> <p>EDGE NAILING PER S.W. SCHEDULE</p> <p>RAFTER PER PLAN</p> <p>8d TOENAIL @ 6" O.C.</p> <p>HORIZ. SHEATHING JOINT</p> <p>LTP4 @ JOINT PER S.W. TABLE (48" O.C. TYP. MAX SPACING)</p> <p>EDGE NAILING PER S.W. SCHEDULE</p> <p>DBL TOP PLATE</p> <p>2x6 STUDS PER PLAN</p> <p>8d TOENAIL EA. SIDE</p> <p>GWB PER ARCH.</p> <p>NO HORIZ. SHEATHING JOINT</p>	<p>SHEATHING W/ NAILING PER S.W. SCHEDULE</p> <p>EDGE NAILING PER S.W. SCHEDULE</p> <p>8d TOENAIL EA. SIDE</p> <p>ROOF SHEATHING PER PLAN</p> <p>BOTTOM PLATE NAILING PER S.W. SCHEDULE</p> <p>8d @ 6" O.C.</p> <p>RAFTER PER PLAN</p> <p>8d TOENAIL @ 6" O.C.</p> <p>2x BLKG @ 48" O.C. W/ (4) 8d NAILS FROM SHT'G TO BLKG.</p> <p>EDGE NAILING PER S.W. SCHEDULE</p> <p>DBL TOP PLATE</p> <p>2x6 STUDS PER PLAN</p> <p>A35 @ 24" O.C.</p> <p>SHEATHING W/ NAILING PER S.W. SCHEDULE</p>			

REV.	DATE	DESCRIPTION
1	4/4/2019	JURISDICTIONAL REVIEW



ALL VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE DESIGNER FOR RESOLUTION WITH THE ENGINEER PRIOR TO PROCEEDING WITH WORK. FAILURE TO COMPLY BY THE CONTRACTOR SHALL BE THEIR SOLE RESPONSIBILITY FOR ANY COSTS NECESSARY FOR REMEDIAL WORK.

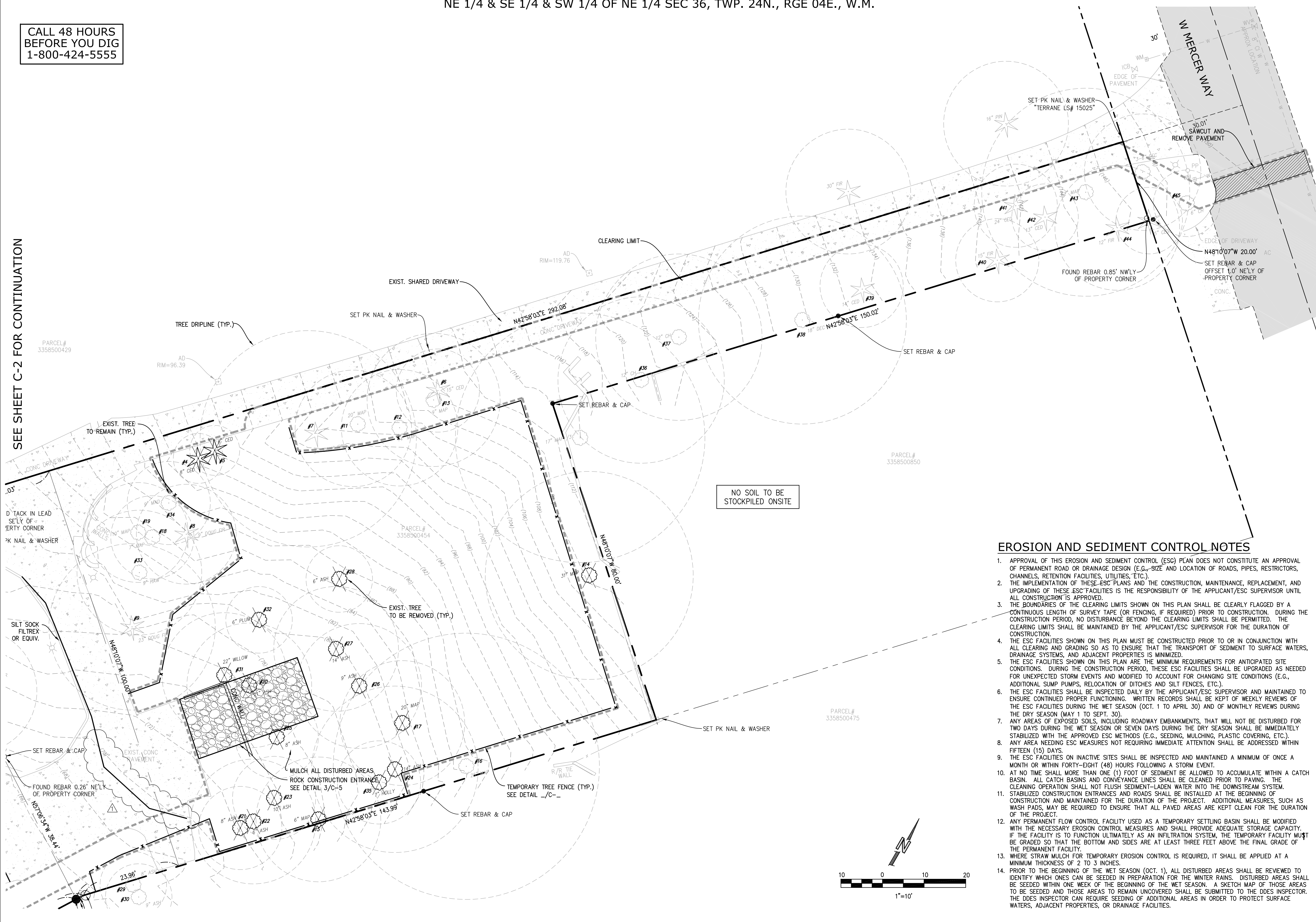
REUSE OF DOCUMENTS  
UNAUTHORIZED ALTERATION OF ANY OF THE INFORMATION ON THIS DOCUMENT WILL INVALIDATE THE DOCUMENT, ENGINEER'S SEAL AND SIGNATURE.  
THE DESIGNS AND IDEAS INCORPORATED HEREIN, AS A TOOL OF PROFESSIONAL SERVICE, IS THE PROPERTY OF PHILLIPS STRUCTURAL ENGINEERING AND IS NOT TO BE USED IN PART OR IN WHOLE BY ANY PARTY FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION FROM PHILLIPS STRUCTURAL ENGINEERING.

<b>WEN HU RESIDENCE</b>	
8251 WEST MERCER WAY MERCER ISLAND, WA 98040	
WIND SPEED:	110 MPH
WIND EXPOSURE:	C
ROOF SNOW LOAD:	25 PSF
STRUCTURAL DETAILS	
DRAWN BY:	AMS
DRAWING DATE:	OCT. 30, 2018
SCALE:	N.T.S. (U.N.O.)
PSE NUMBER:	PSE 18.094
SHEET NO. <b>SD-3</b>	

PHILLIPS STRUCTURAL ENGINEERING

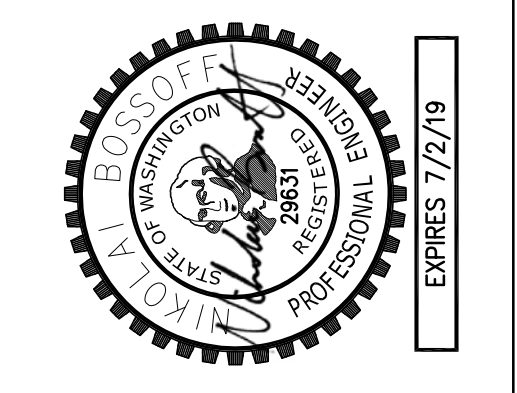
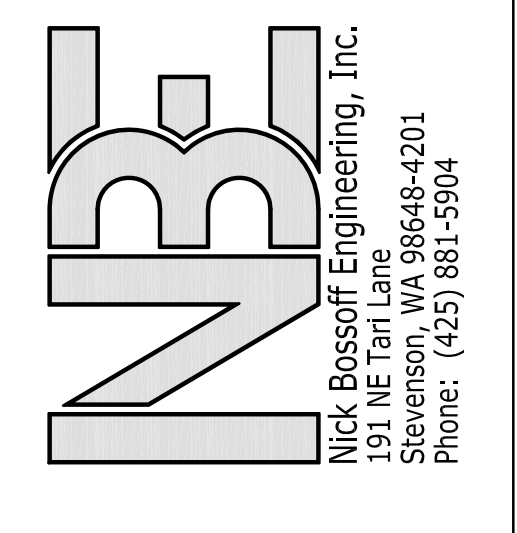
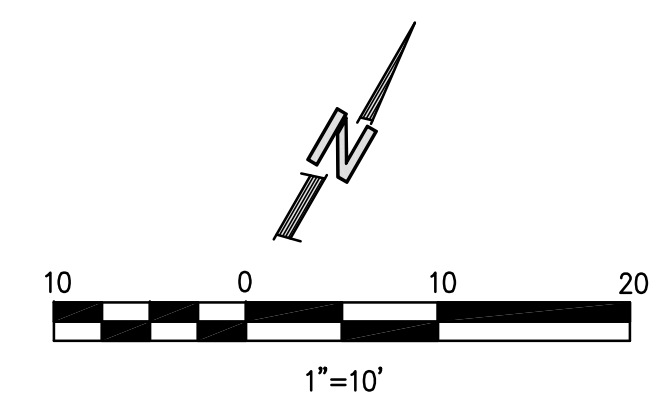
CALL 48 HOURS BEFORE YOU DIG  
1-800-424-5555

SEE SHEET C-2 FOR CONTINUATION



**EROSION AND SEDIMENT CONTROL NOTES**

1. APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY TAPE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
7. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
8. ANY AREA NEEDING ESC MEASURES NOT REQUIRING IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.
10. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
11. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
12. ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
13. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DDES INSPECTOR. THE DDES INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.



NO.	DATE	REVISION
1	08/21/18	PERMIT SUBMITTAL
2	08/19/19	CITY COMMENTS

N. BOSSOFF, P.E.  
PROJECT MANAGER:  
NB  
DESIGNED:  
TKB  
DRAWN:  
PBAR-1801  
JOB NUMBER:  
PBAR-1801plin.dwg  
FILE NAME:

WASHINGTON

**WEN HU RESIDENCE**  
**8251 W MERCER WAY**

MERCER ISLAND

TITLE:  
06/19/19 CITY COMMENTS  
T.E.S.C.  
PLAN

SHEET:  
**C-1**

**BASIS OF BEARINGS**

NAD83/2011, WASHINGTON NORTH COORDINATE SYSTEM, PER GPS OBSERVATIONS THE CENTERLINE OF W. MERCER WAY BEARS N48°10'07"W BETWEEN FOUND MONUMENTS

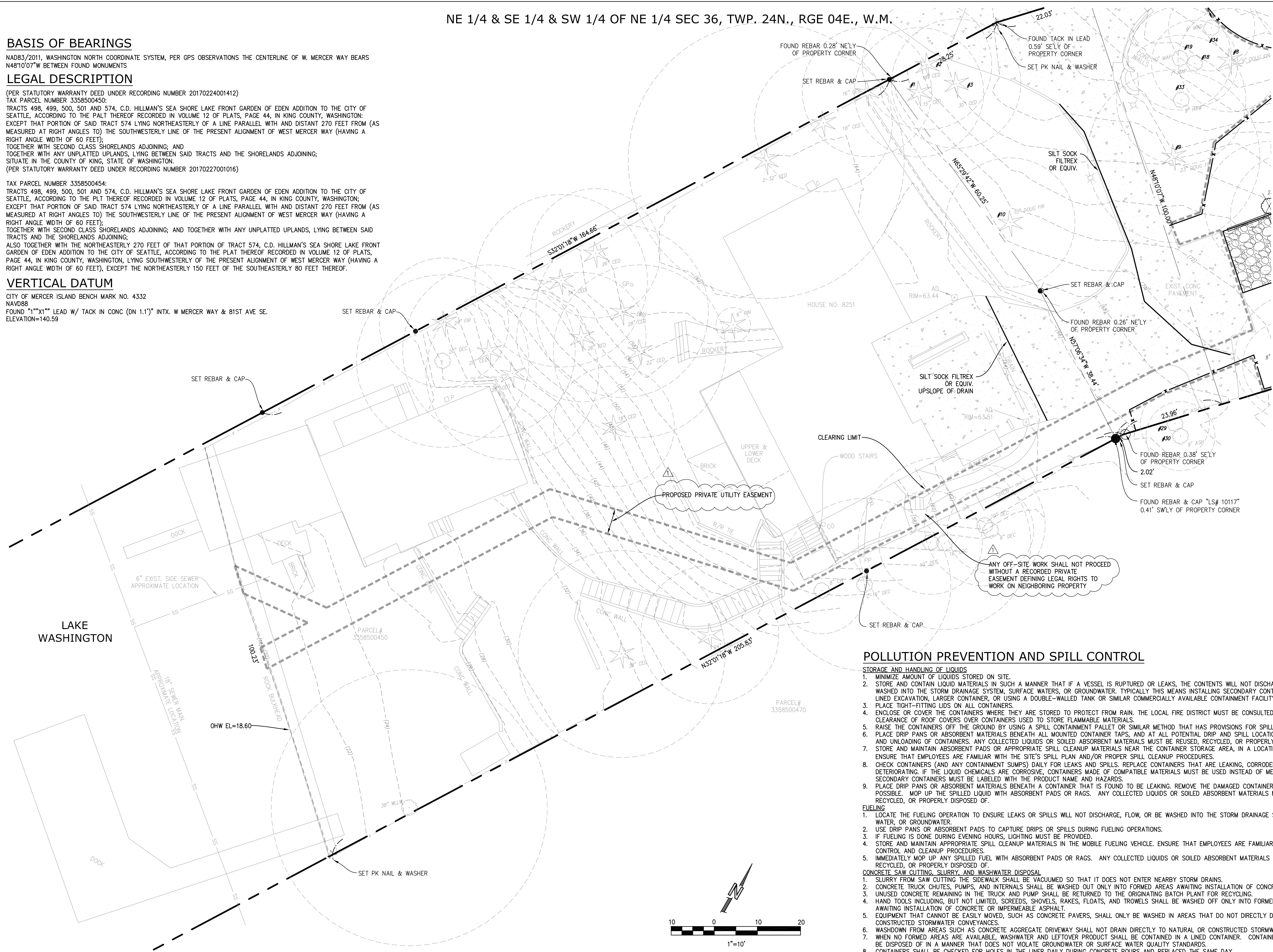
**LEGAL DESCRIPTION**

(PER STATUTORY WARRANTY DEED UNDER RECORDING NUMBER 20170224001412)  
 TAX PARCEL NUMBER 3358500450:  
 TRACTS 498, 499, 500, 501 AND 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON; EXCEPT THAT PORTION OF SAID TRACT 574 LYING NORTHEASTERLY OF A LINE PARALLEL WITH AND DISTANT 270 FEET FROM (AS MEASURED AT RIGHT ANGLES TO) THE SOUTHWESTERLY LINE OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET);  
 TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING; AND  
 TOGETHER WITH ANY UNPLATTED UPLANDS, LYING BETWEEN SAID TRACTS AND THE SHORELANDS ADJOINING;  
 SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.  
 (PER STATUTORY WARRANTY DEED UNDER RECORDING NUMBER 20170227001016)

TAX PARCEL NUMBER 3358500454:  
 TRACTS 498, 499, 500, 501 AND 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON; EXCEPT THAT PORTION OF SAID TRACT 574 LYING NORTHEASTERLY OF A LINE PARALLEL WITH AND DISTANT 270 FEET FROM (AS MEASURED AT RIGHT ANGLES TO) THE SOUTHWESTERLY LINE OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET);  
 TOGETHER WITH SECOND CLASS SHORELANDS ADJOINING; AND TOGETHER WITH ANY UNPLATTED UPLANDS, LYING BETWEEN SAID TRACTS AND THE SHORELANDS ADJOINING;  
 ALSO TOGETHER WITH THE NORTHEASTERLY 270 FEET OF THAT PORTION OF TRACT 574, C.D. HILLMAN'S SEA SHORE LAKE FRONT GARDEN OF EDEN ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 44, IN KING COUNTY, WASHINGTON, LYING SOUTHWESTERLY OF THE PRESENT ALIGNMENT OF WEST MERCER WAY (HAVING A RIGHT ANGLE WIDTH OF 60 FEET), EXCEPT THE NORTHEASTERLY 150 FEET OF THE SOUTHEASTERLY 80 FEET THEREOF.

**VERTICAL DATUM**

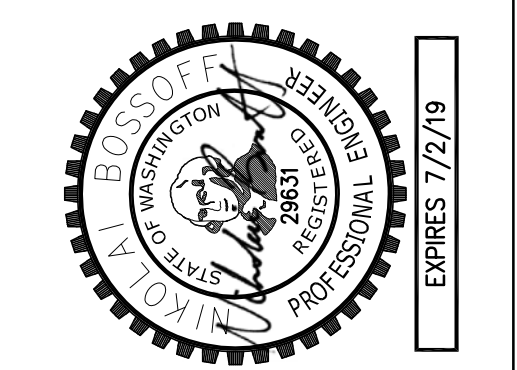
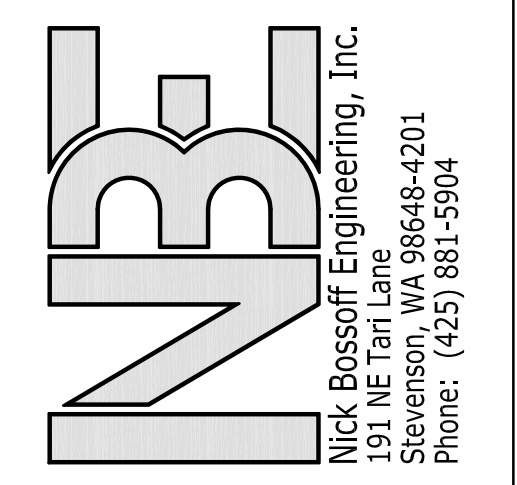
CITY OF MERCER ISLAND BENCH MARK NO. 4332  
 NAVD88  
 FOUND "1"x1" LEAD W/ TACK IN CONC (DN 1.1") INTX. W MERCER WAY & 81ST AVE SE.  
 ELEVATION=140.59



SEE SHEET C-1 FOR CONTINUATION

**POLLUTION PREVENTION AND SPILL CONTROL**

- STORAGE AND HANDLING OF LIQUIDS**
- MINIMIZE AMOUNT OF LIQUIDS STORED ON SITE.
  - STORE AND CONTAIN LIQUID MATERIALS IN SUCH A MANNER THAT IF A VESSEL IS RUPTURED OR LEAKS, THE CONTENTS WILL NOT DISCHARGE, FLOW, OR BE WASHED INTO THE STORM DRAINAGE SYSTEM, SURFACE WATERS, OR GROUNDWATER. TYPICALLY THIS MEANS INSTALLING SECONDARY CONTAINMENT, SUCH AS A LINED EXCAVATION, LARGER CONTAINER, OR USING A DOUBLE-WALLED TANK OR SIMILAR COMMERCIALLY AVAILABLE CONTAINMENT FACILITY.
  - PLACE TIGHT-FITTING LIDS ON ALL CONTAINERS.
  - ENCLOSE OR COVER THE CONTAINERS WHERE THEY ARE STORED TO PROTECT FROM RAIN. THE LOCAL FIRE DISTRICT MUST BE CONSULTED FOR LIMITATIONS ON CLEARANCE OF ROOF COVERS OVER CONTAINERS USED TO STORE FLAMMABLE MATERIALS.
  - RAISE THE CONTAINERS OFF THE GROUND BY USING A SPILL CONTAINMENT PALLET OR SIMILAR METHOD THAT HAS PROVISIONS FOR SPILL CONTROL.
  - PLACE DRIP PANS OR ABSORBENT MATERIALS BENEATH ALL MOUNTED CONTAINER TAPS, AND AT ALL POTENTIAL DRIP AND SPILL LOCATIONS DURING FILLING AND UNLOADING OF CONTAINERS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.
  - STORE AND MAINTAIN ABSORBENT PADS OR APPROPRIATE SPILL CLEANUP MATERIALS NEAR THE CONTAINER STORAGE AREA, IN A LOCATION KNOWN TO ALL. ENSURE THAT EMPLOYEES ARE FAMILIAR WITH THE SITE'S SPILL PLAN AND/OR PROPER SPILL CLEANUP PROCEDURES.
  - CHECK CONTAINERS (AND ANY CONTAINMENT SUMPS) DAILY FOR LEAKS AND SPILLS. REPLACE CONTAINERS THAT ARE LEAKING, CORRODED, OR OTHERWISE DETERIORATING. IF THE LIQUID CHEMICALS ARE CORROSIVE, CONTAINERS MADE OF COMPATIBLE MATERIALS MUST BE USED INSTEAD OF METAL DRUMS. NEW OR SECONDARY CONTAINERS MUST BE LABELED WITH THE PRODUCT NAME AND HAZARDS.
  - PLACE DRIP PANS OR ABSORBENT MATERIALS BENEATH A CONTAINER THAT IS FOUND TO BE LEAKING. REMOVE THE DAMAGED CONTAINER AS SOON AS POSSIBLE. MOP UP THE SPILLED LIQUID WITH ABSORBENT PADS OR RAGS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.
- FUELING**
- LOCATE THE FUELING OPERATION TO ENSURE LEAKS OR SPILLS WILL NOT DISCHARGE, FLOW, OR BE WASHED INTO THE STORM DRAINAGE SYSTEM, SURFACE WATER, OR GROUNDWATER.
  - USE DRIP PANS OR ABSORBENT PADS TO CAPTURE DRIPS OR SPILLS DURING FUELING OPERATIONS.
  - IF FUELING IS DONE DURING EVENING HOURS, LIGHTING MUST BE PROVIDED.
  - STORE AND MAINTAIN APPROPRIATE SPILL CLEANUP MATERIALS IN THE MOBILE FUELING VEHICLE. ENSURE THAT EMPLOYEES ARE FAMILIAR WITH PROPER SPILL CONTROL AND CLEANUP PROCEDURES.
  - IMMEDIATELY MOP UP ANY SPILLED FUEL WITH ABSORBENT PADS OR RAGS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.
- CONCRETE SAW CUTTING, SLURRY, AND WASHWATER DISPOSAL**
- SLURRY FROM SAW CUTTING THE SIDEWALK SHALL BE VACUUMED SO THAT IT DOES NOT ENTER NEARBY STORM DRAINS.
  - CONCRETE TRUCK CHUTES, PUMPS, AND INTERNALS SHALL BE WASHED OUT ONLY INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE.
  - UNUSED CONCRETE REMAINING IN THE TRUCK AND PUMP SHALL BE RETURNED TO THE ORIGINATING BATCH PLANT FOR RECYCLING.
  - HAND TOOLS INCLUDING, BUT NOT LIMITED, SCREDS, SHOVELS, RAKES, FLOATS, AND TROWELS SHALL BE WASHED OFF ONLY INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE OR IMPERMEABLE ASPHALT.
  - EQUIPMENT THAT CANNOT BE EASILY MOVED, SUCH AS CONCRETE PAVERS, SHALL ONLY BE WASHED IN AREAS THAT DO NOT DIRECTLY DRAIN TO NATURAL OR CONSTRUCTED STORMWATER CONVEYANCES.
  - WASHDOWN FROM AREAS SUCH AS CONCRETE AGGREGATE DRIVEWAY SHALL NOT DRAIN DIRECTLY TO NATURAL OR CONSTRUCTED STORMWATER CONVEYANCES.
  - WHEN NO FORMED AREAS ARE AVAILABLE, WASHWATER AND LEFTOVER PRODUCT SHALL BE CONTAINED IN A LINED CONTAINER. CONTAINED CONCRETE SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.
  - CONTAINERS SHALL BE CHECKED FOR HOLES IN THE LINER DAILY DURING CONCRETE POURS AND REPLACED THE SAME DAY.



NO.	DATE	REVISION
1	06/19/19	PERMIT SUBMITTAL
2	06/19/19	CITY COMMENTS

N. BOSSOFF, P.E.	PROJECT MANAGER:
NO. 10000	DESIGNED:
TKB	DRAWN:
PBAR-1801	JOB NUMBER:
PBAR-1801.pln.dwg	FILE NAME:

**WEN HU RESIDENCE**  
**8251 W MERCER WAY**

WASHINGTON  
 MERCER ISLAND

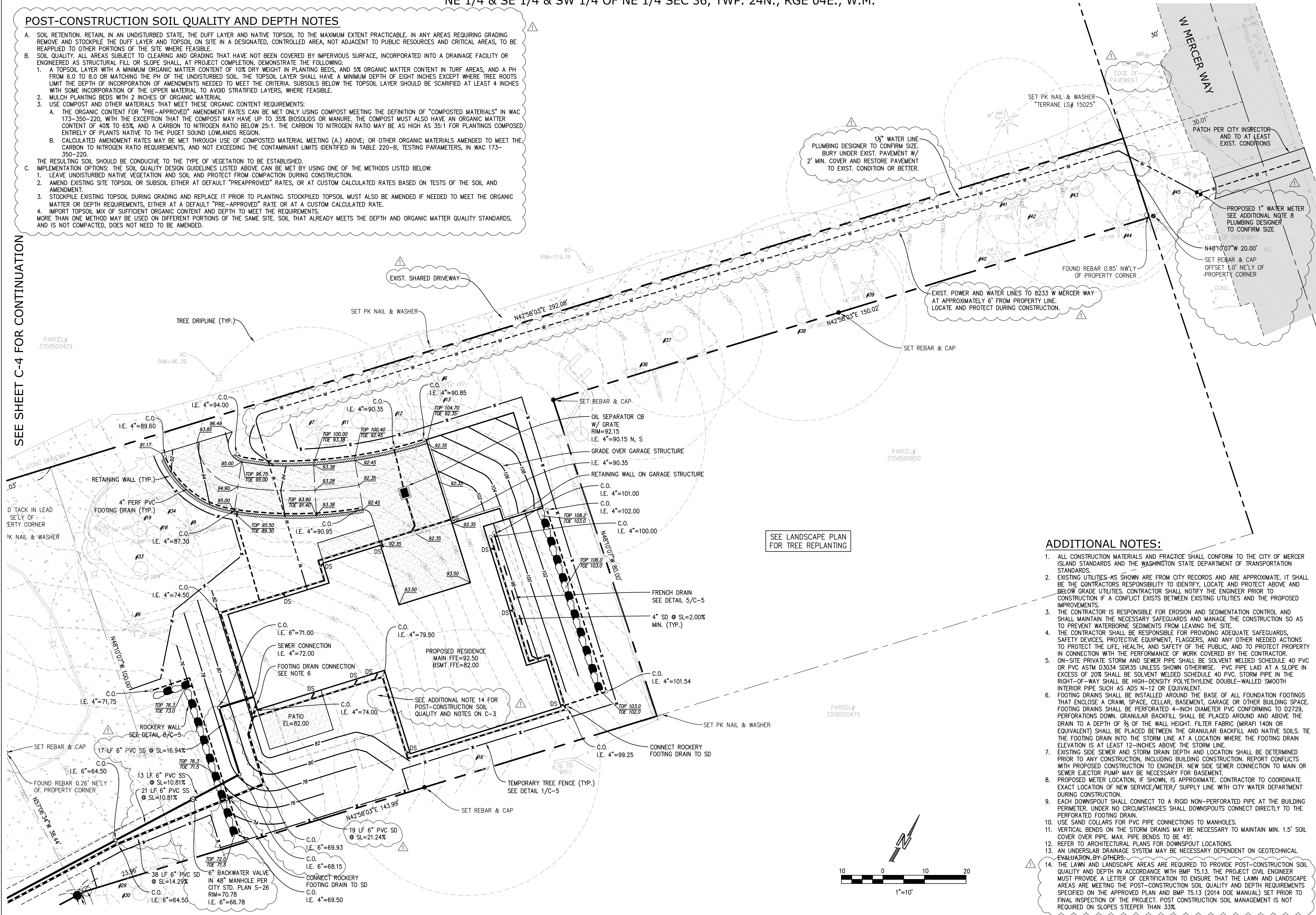
TITLE:  
**T.E.S.C. PLAN**

SHEET:  
**C-2**

**POST-CONSTRUCTION SOIL QUALITY AND DEPTH NOTES**

- A. SOIL RETENTION. RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.
- B. SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
  - 1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
  - 2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
  - 3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
    - A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE DEFINITION OF "COMPOSTED MATERIALS" IN WAC 173-350-220, WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
    - B. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A.) ABOVE, OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.
- C. THE RESULTING SOIL SHOULD BE CONDUCTIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED. IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:
  - 1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
  - 2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PREAPPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
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  - 4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

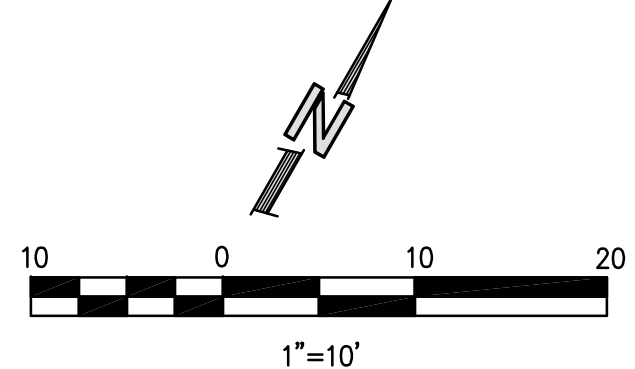
SEE SHEET C-4 FOR CONTINUATION



SEE LANDSCAPE PLAN FOR TREE REPLANTING

**ADDITIONAL NOTES:**

1. ALL CONSTRUCTION MATERIALS AND PRACTICE SHALL CONFORM TO THE CITY OF MERCER ISLAND STANDARDS AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARDS.
2. EXISTING UTILITIES AS SHOWN ARE FROM CITY RECORDS AND ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY, LOCATE AND PROTECT ABOVE AND BELOW GRADE UTILITIES. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND THE PROPOSED IMPROVEMENTS.
3. THE CONTRACTOR IS RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL AND SHALL MAINTAIN THE NECESSARY SAFEGUARDS AND MANAGE THE CONSTRUCTION SO AS TO PREVENT WATERBORNE SEDIMENTS FROM LEAVING THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR.
5. ON-SITE PRIVATE STORM AND SEWER PIPE SHALL BE SOLVENT WELDED SCHEDULE 40 PVC OR PVC ASTM D3034 SDR35 UNLESS SHOWN OTHERWISE. PVC PIPE LAID AT A SLOPE IN EXCESS OF 20% SHALL BE SOLVENT WELDED SCHEDULE 40 PVC. STORM PIPE IN THE RIGHT-OF-WAY SHALL BE HIGH-DENSITY POLYETHYLENE DOUBLE-WALLED SMOOTH INTERIOR PIPE SUCH AS ADS N-12 OR EQUIVALENT.
6. FOOTING DRAINS SHALL BE INSTALLED AROUND THE BASE OF ALL FOUNDATION FOOTINGS THAT ENCLOSE A CRAWL SPACE, CELLAR, BASEMENT, GARAGE OR OTHER BUILDING SPACE. FOOTING DRAINS SHALL BE PERFORATED 4-INCH DIAMETER PVC CONFORMING TO D2729, PERFORATIONS DOWN. GRANULAR BACKFILL SHALL BE PLACED AROUND AND ABOVE THE DRAIN TO A DEPTH OF 2/3 OF THE WALL HEIGHT. FILTER FABRIC (MIRAFIX 140N OR EQUIVALENT) SHALL BE PLACED BETWEEN THE GRANULAR BACKFILL AND NATIVE SOILS. TIE THE FOOTING DRAIN INTO THE STORM LINE AT A LOCATION WHERE THE FOOTING DRAIN ELEVATION IS AT LEAST 12-INCHES ABOVE THE STORM LINE.
7. EXISTING SIDE SEWER AND STORM DRAIN DEPTH AND LOCATION SHALL BE DETERMINED PRIOR TO ANY CONSTRUCTION, INCLUDING BUILDING CONSTRUCTION. REPORT CONFLICTS WITH PROPOSED CONSTRUCTION TO ENGINEER. NEW SIDE SEWER CONNECTION TO MAIN OR SEWER EJECTOR PUMP MAY BE NECESSARY FOR BASEMENT.
8. PROPOSED METER LOCATION, IF SHOWN, IS APPROXIMATE. CONTRACTOR TO COORDINATE EXACT LOCATION OF NEW SERVICE/METER/ SUPPLY LINE WITH CITY WATER DEPARTMENT DURING CONSTRUCTION.
9. EACH DOWNSPOUT SHALL CONNECT TO A RIGID NON-PERFORATED PIPE AT THE BUILDING PERIMETER. UNDER NO CIRCUMSTANCES SHALL DOWNSPOUTS CONNECT DIRECTLY TO THE PERFORATED FOOTING DRAIN.
10. USE SAND COLLARS FOR PVC PIPE CONNECTIONS TO MANHOLES.
11. VERTICAL BENDS ON THE STORM DRAINS MAY BE NECESSARY TO MAINTAIN MIN. 1.5' SOIL COVER OVER PIPE. MAX. PIPE BENDS TO BE 45'.
12. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS.
13. AN UNDERSLAB DRAINAGE SYSTEM MAY BE NECESSARY DEPENDENT ON GEOTECHNICAL EVALUATION BY OTHERS.
14. THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP 15.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN AND BMP 15.13 (2014 DOE MANUAL) SET PRIOR TO FINAL INSPECTION OF THE PROJECT. POST CONSTRUCTION SOIL MANAGEMENT IS NOT REQUIRED ON SLOPES STEEPER THAN 33%.



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Professional Engineer Seal for Nick Bossoff, State of Washington, License No. 147279. The seal includes the text 'NICK BOSSOFF', 'STATE OF WASHINGTON', 'LICENSED PROFESSIONAL ENGINEER', and 'EXPIRES 7/27/19'.

NO.	REVISION	DATE	PERMIT SUBMITTAL	CITY COMMENTS
1		09/21/18		
2		08/09/19		

N. BOSSOFF, P.E.  
 PROJECT MANAGER: NB  
 DESIGNED: TKB  
 DRAWN: PBAR-1801  
 JOB NUMBER: PBAR-1801.pln.dwg  
 FILE NAME:

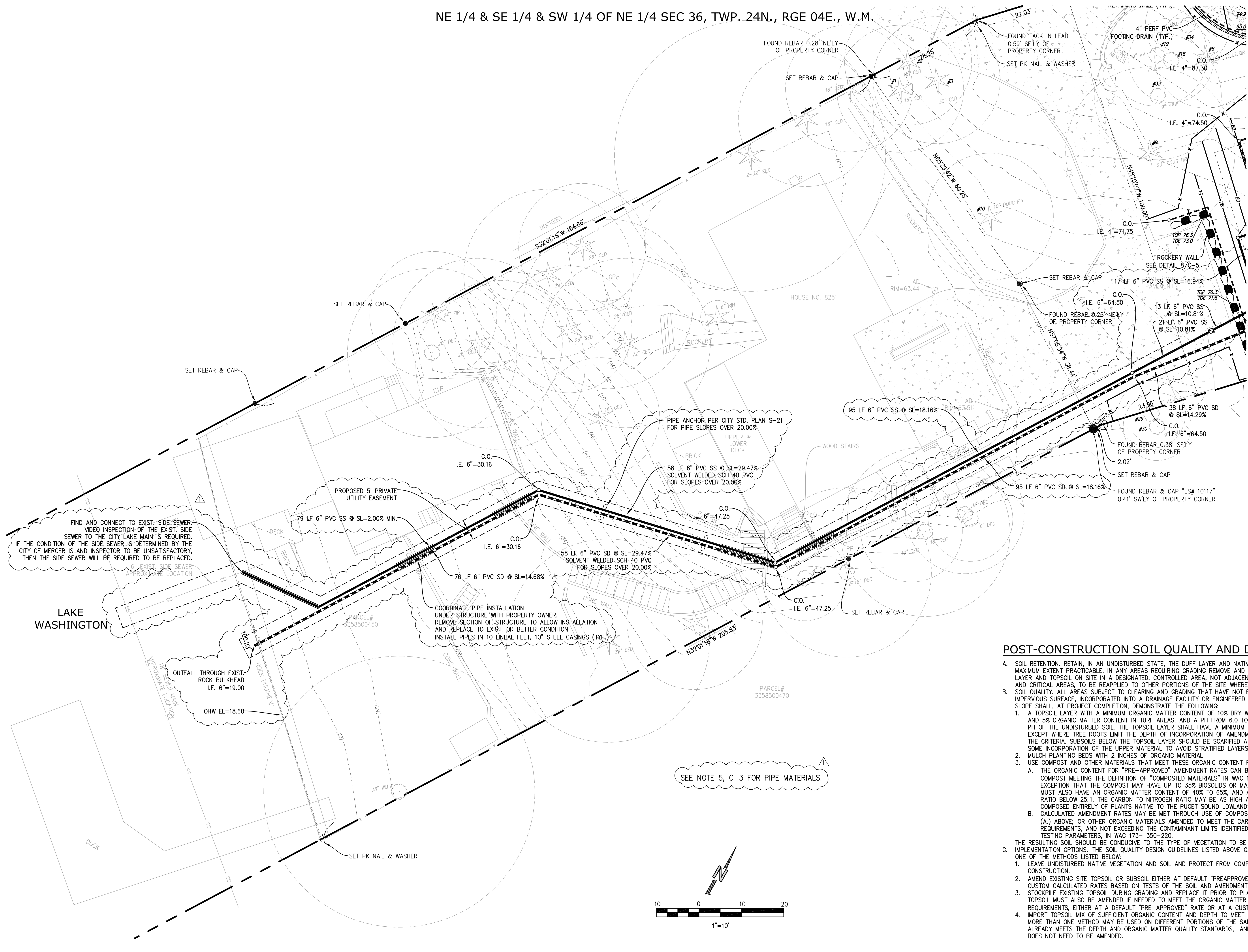
**WEN HU RESIDENCE**  
**8251 W MERCER WAY**

WASHINGTON  
 MERCER ISLAND

TITLE: **DRAINAGE PLAN**

SHEET: **C-3**

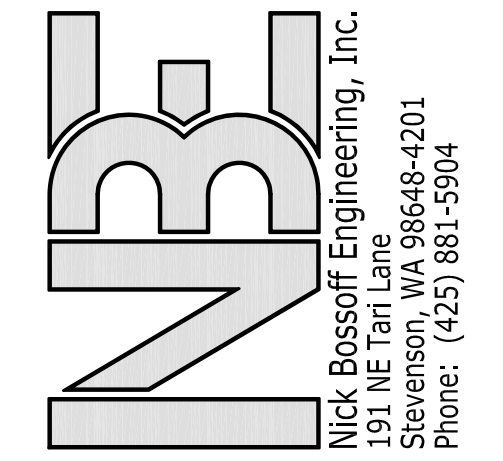
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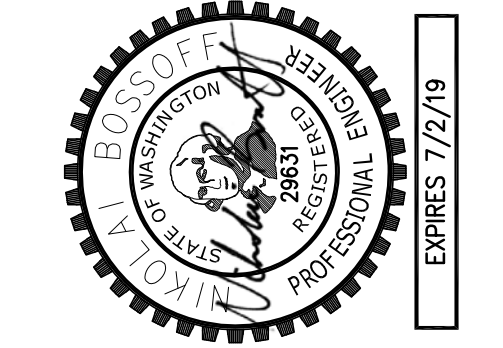
SEE SHEET C-3 FOR CONTINUATION

**POST-CONSTRUCTION SOIL QUALITY AND DEPTH NOTES**

- A. SOIL RETENTION. RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.
- B. SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
  - 1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
  - 2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
  - 3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
    - A. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE DEFINITION OF "COMPOSTED MATERIALS" IN WAC 173-350-220, WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
    - B. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A.) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.
- C. THE RESULTING SOIL SHOULD BE CONDUCTIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED. IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:
  - 1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
  - 2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PREAPPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
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NB	DESIGNED
TKB	DRAWN
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PBAR-1801.pln.dwg	FILE NAME

**WASHINGTON**

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**8251 W MERCER WAY**

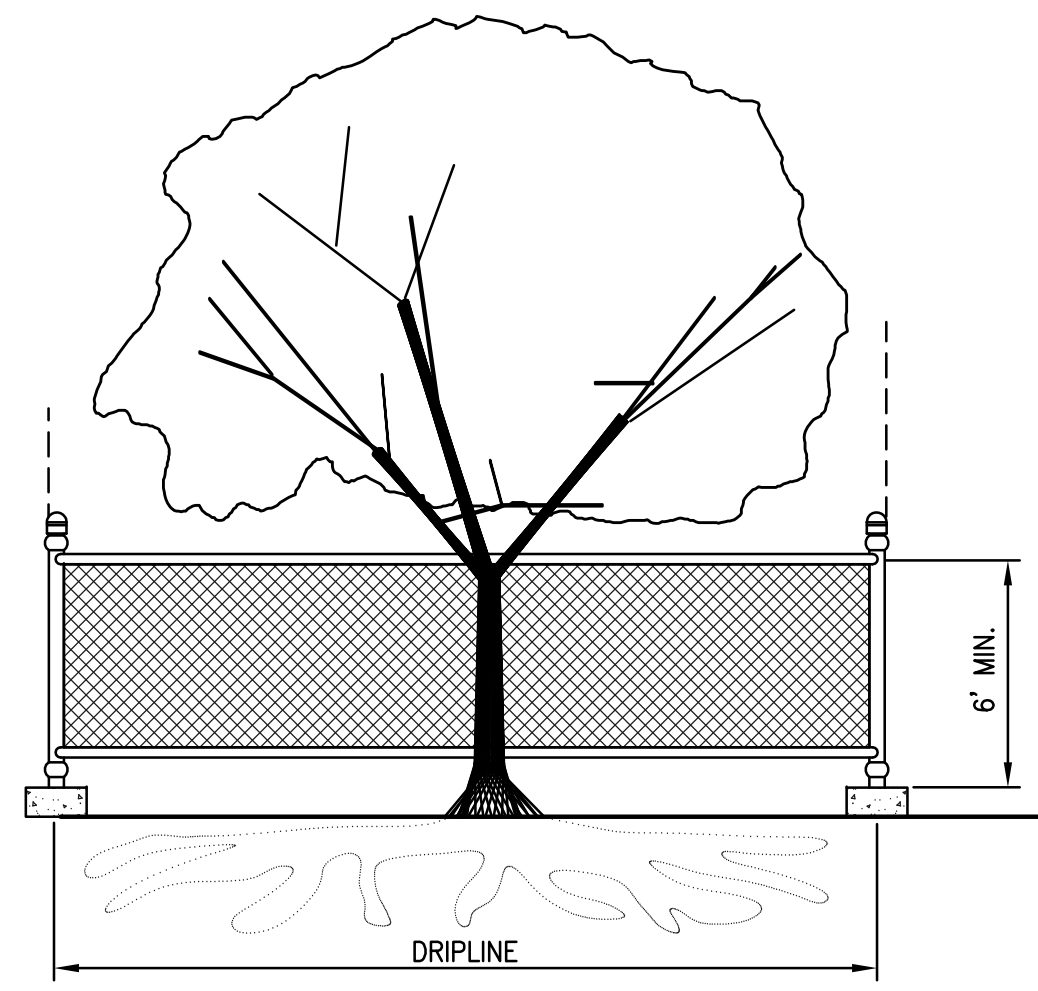
**MERCER ISLAND**

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TITLE: **DRAINAGE PLAN**

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SHEET: **C-4**



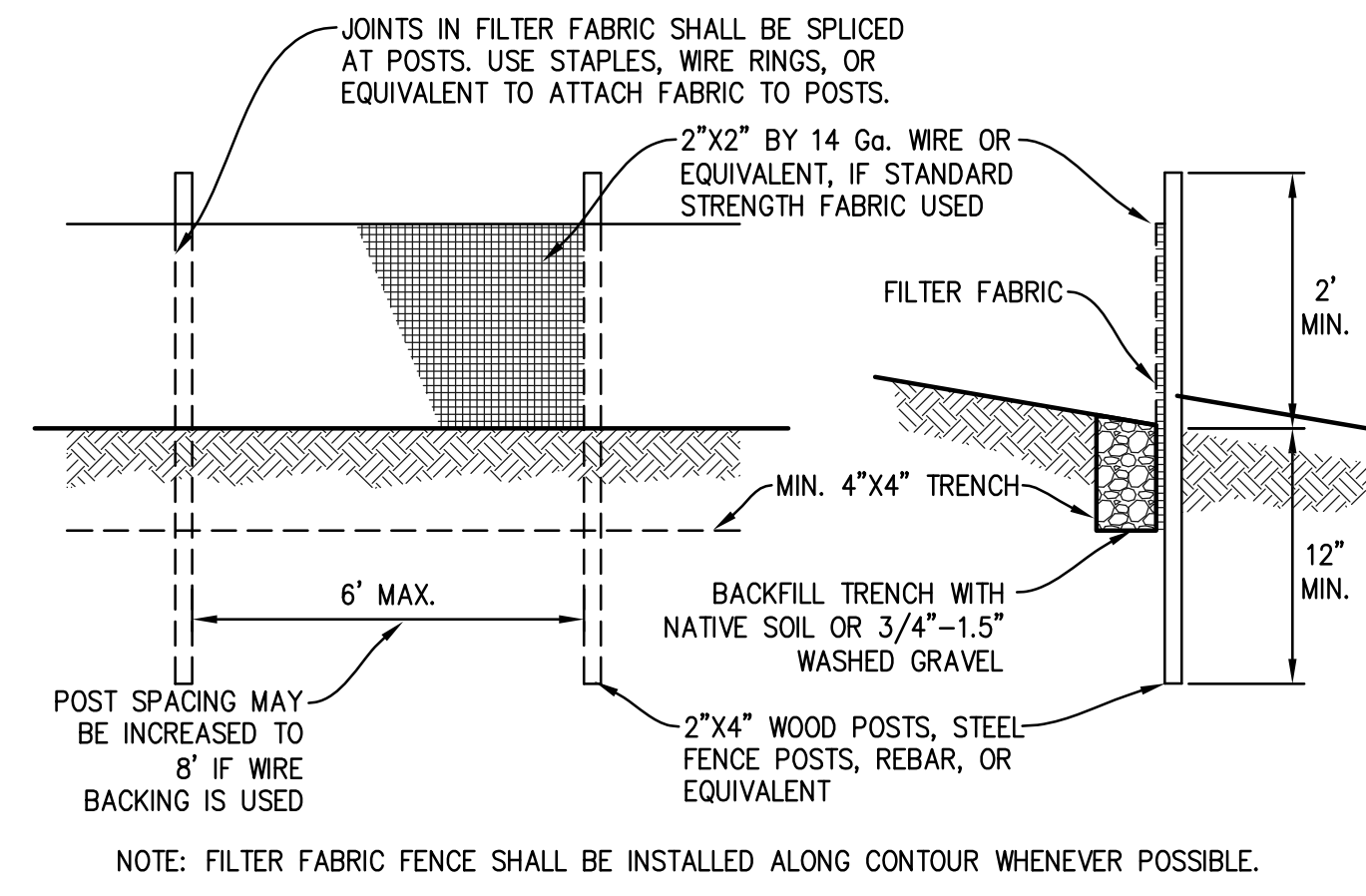
**TREE PROTECTION DURING CONSTRUCTION**

- 6-FT. HIGH TEMPORARY CHAIN LINK FENCE SHALL BE PLACED AT THE DRIPLINE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCLOSE THE TREE(S). INSTALL FENCE POSTS USING PIER BLOCKS ONLY. AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS.
- FOR ROOTS OVER 1-IN DIA. THAT ARE DAMAGED DURING CONSTRUCTION, MAKE A CLEAN, STRAIGHT CUT TO REMOVE THE DAMAGED PORTION. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING, AND SHALL BE COVERED WITH SOIL AS SOON AS POSSIBLE.
- WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING.

**TREE PROTECTION**

SCALE: NTS

1



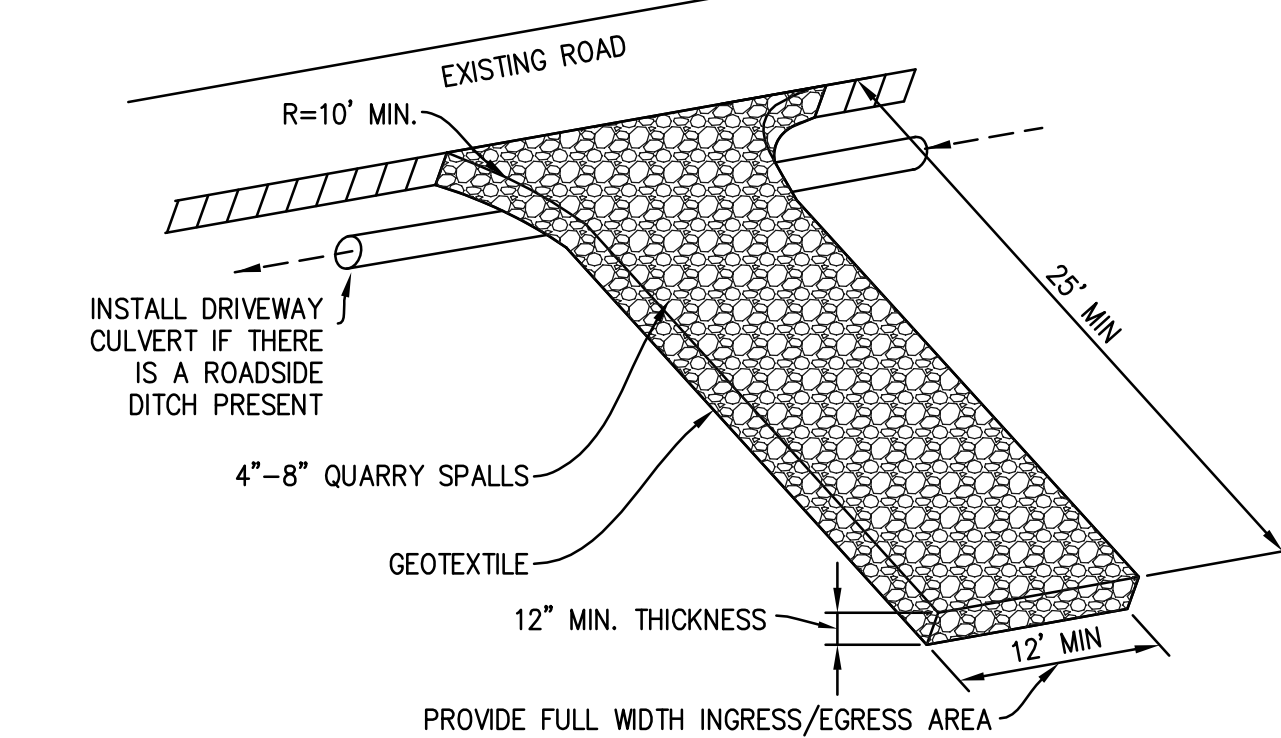
**MAINTENANCE STANDARDS**

- ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
- IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
- IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGN OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE AND/OR REMOVE THE TRAPPED SEDIMENT.
- SEDIMENT MUST BE REMOVED WHEN THE SEDIMENT IS 6" HIGH.
- IF THE FILTER FABRIC HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

**SILT FENCE**

SCALE: NTS

2



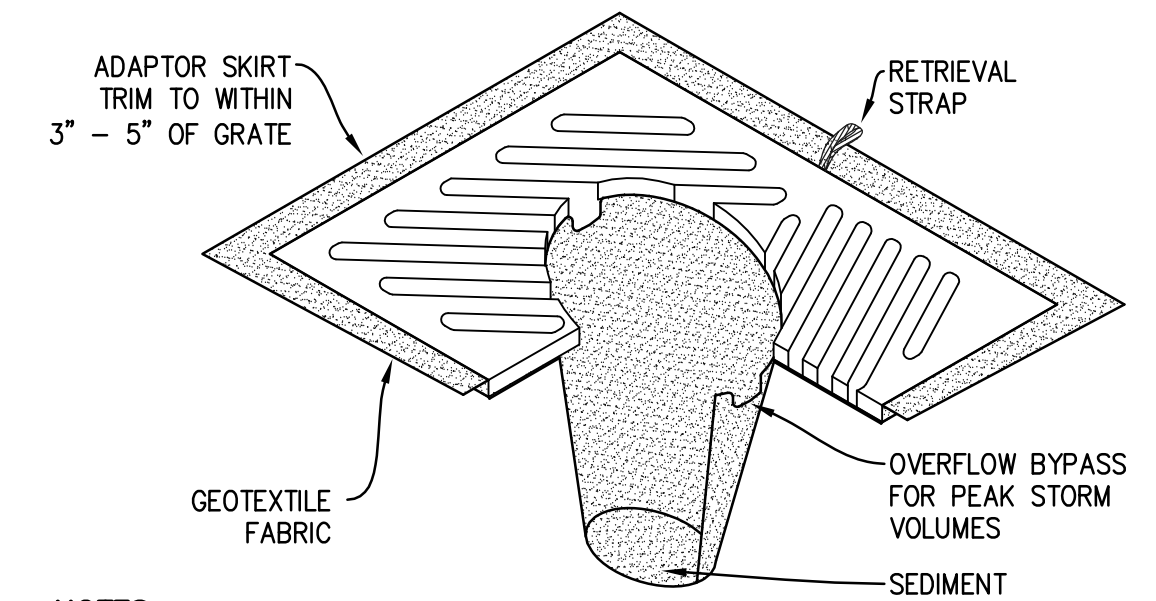
**MAINTENANCE STANDARDS**

- QUARRY SPALLS (OR HOG FUEL) SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
- IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
- ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREET, THE CONSTRUCTION OF A SMALL SLUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP.
- ANY ROCK SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
- IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING (SECTION 5.4.1) SHALL BE INSTALLED TO CONTROL TRAFFIC.

**ROCK CONSTRUCTION ENTRANCE**

SCALE: NTS

3



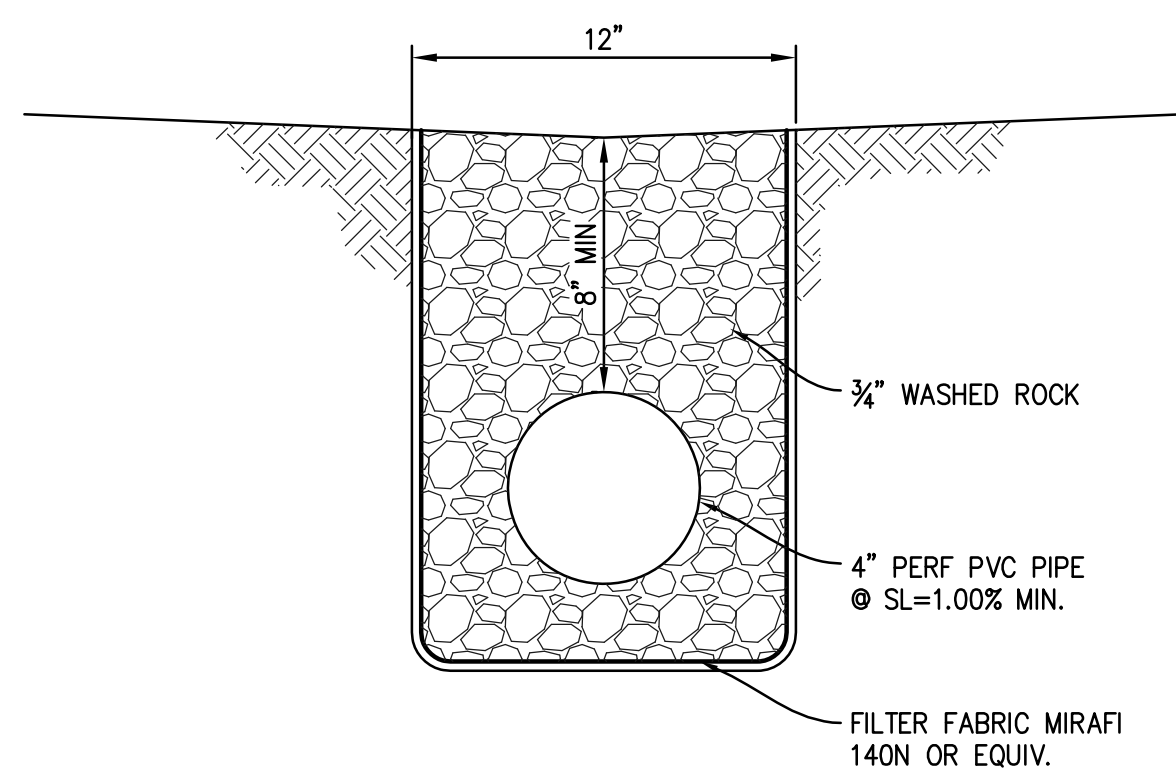
**NOTES**

- INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
- SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FULL.
- SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.

**CB INSERT**

SCALE: NTS

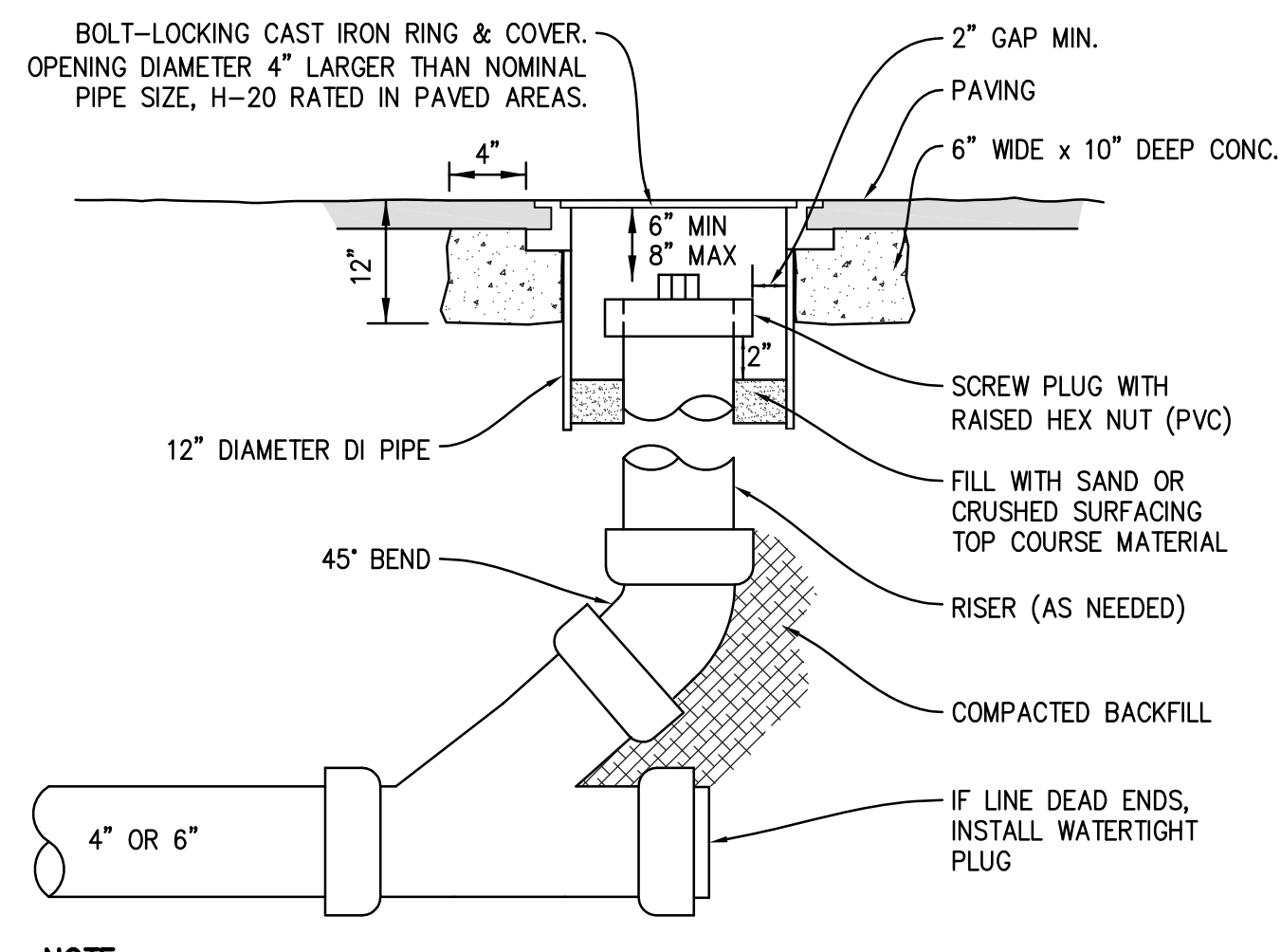
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**FRENCH DRAIN**

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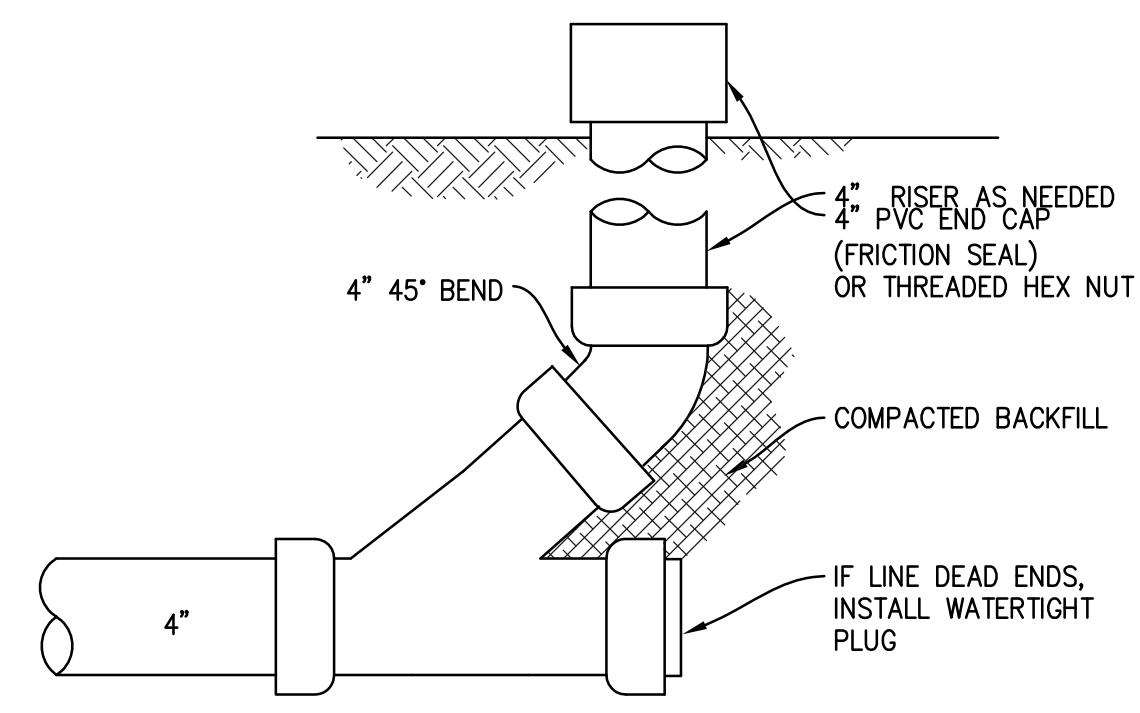
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**CLEANOUT (PAVED AREAS)**

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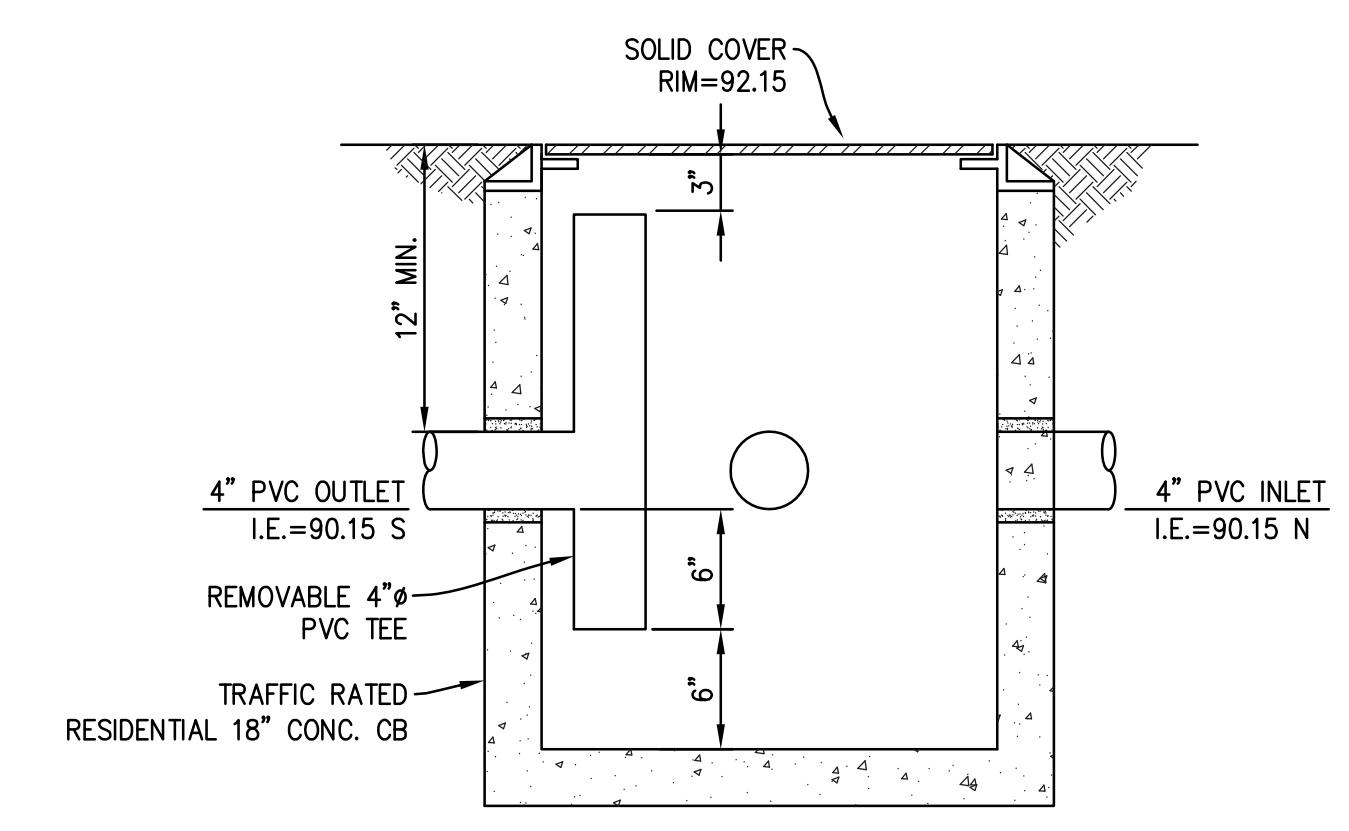
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**CLEANOUT (UNPAVED AREAS)**

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7



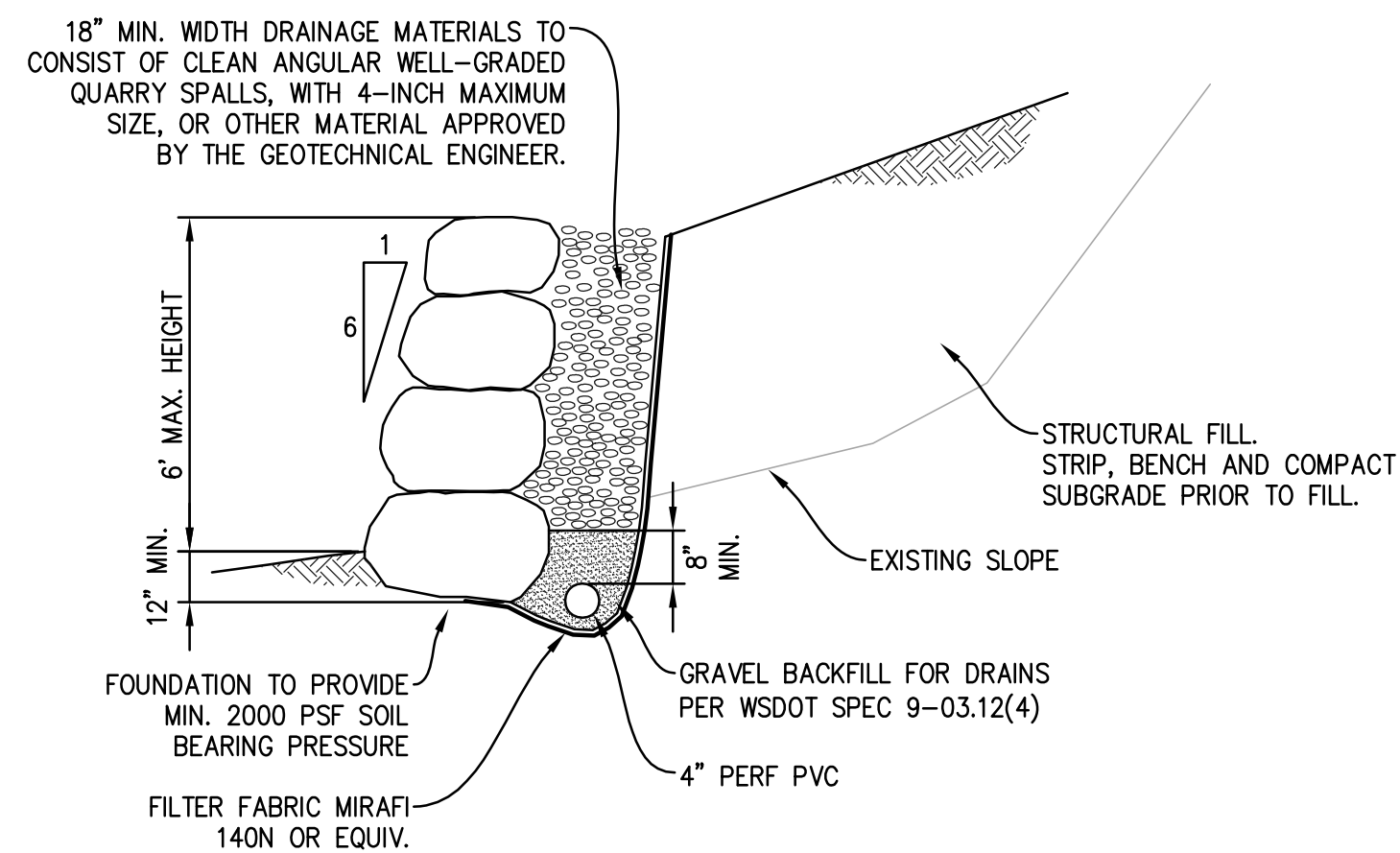
**OIL SEPARATOR CB**

SCALE: NTS

8

**ROCKERY NOTES:**

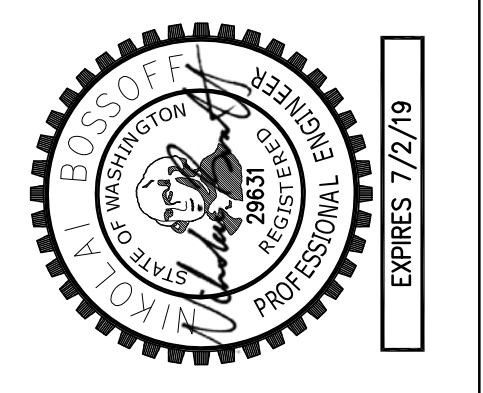
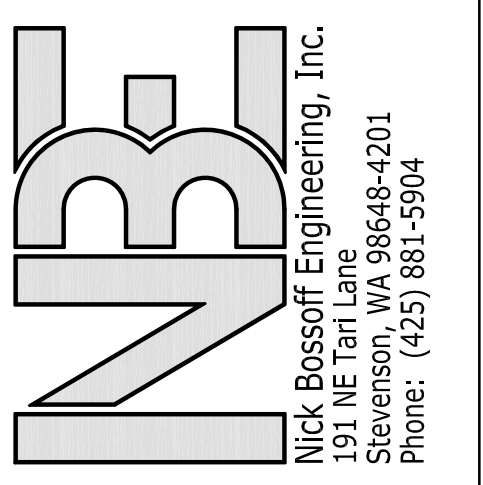
- ROCKERY SHALL BE INSTALLED BY A LICENSED ROCKERY CONTRACTOR AND IN ACCORDANCE WITH THE CITY OF MERCER ISLAND STANDARDS AND GUIDELINES.
- BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED 6 INCHES WHERE HAND COMPACTION IS USED, OR 8 TO 10 INCHES WHERE HEAVY COMPACTION EQUIPMENT IS USED. LIFT THICKNESS SHALL BE DECREASED TO ACHIEVE THE REQUIRED COMPACTION DENSITY AS REQUIRED.
- BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557. THE MOISTURE CONTENT OF THE BACKFILL MATERIAL PRIOR TO AND DURING COMPACTION SHALL BE AT OR NEAR THE OPTIMUM MOISTURE CONTENT.
- ONLY LIGHTWEIGHT HAND-OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET OF THE BACK OF THE ROCKERY.
- THE ROCKERY CONSTRUCTION SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER ON A PERIODIC OR FULL-TIME BASIS AS APPROPRIATE. TESTING OF THE COMPACTED BACKFILL SHALL BE PERFORMED BY THE GEOTECHNICAL ENGINEER.
- GEOTECH ENGINEER TO MODIFY DESIGN AS NECESSARY FOR SPECIFIC SITE CONDITIONS.



**ROCKERY**

SCALE: NTS

9



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TITLE:  
**DETAILS**  
 SHEET:  
**C-5**