

ABBREVIATIONS

AT	CENTERLINE	FBOIC	FURNISHED BY OWNER	PASS.	PASSENGER
PC	PROPERTY LINE	FBOIO	INSTALLED BY CONTRACTOR	P.B.	PANIC BAR
D	PENNY	FCB	FURNISHED BY OWNER	P.B.D.	PARTICLE BOARD
L	PERPENDICULAR	FCD	INSTALLED BY OWNER	P.C.	PRECAST CONCRETE
#	POUND OR NUMBER	F.D.	FIBER CEMENT BOARD	PERF.	PERFORATE(D)
Ø	DIAMETER	F.DN	FLOOR DRAIN	PERI.	PERIMETER
sq	SQUARE FEET	F.FN	FOUNDATION	PL	PLATE
		F.F.E.	FIRE EXTINGUISHER	P.L.	PROPERTY LINE
A.B.	ANCHOR BOLT	F.F.C.	FIRE EXTINGUISHER CABINET	P.LAM	PLASTIC LAMINATE
A/C	AIR CONDITIONING	F.F.	FACTORY FINISH	PLAS.	PLASTER
ACC.	ACCESSIBLE	FIN	FINISHED	PLYWD	PLYWOOD
ACOUS.	ACOUSTICAL	FLR(G)	FLOORING	PNL	PANEL
ACT	ACOUSTIC TILE	FLSHS	FLASHING	P.O.	PURCHASE ORDER
A.D.	AREA DRAIN	FLUOR.	FLOUORESCENT	PR.	PAIR
ADD.	ADDENDUM	F.O.S.	FACE OF STUDS	P.S.F.	POUNDS PER SQ. FOOT
ADJ.	ADJACENT	F.O.C.	FACE OF CONCRETE	P.S.I.	POUNDS PER SQ. INCH
ADJUS	ADJUSTABLE	F.O.F.	FACE OF FINISH	PT	POINT
AF	ABOVE FINISH FLOOR	F.O.B.	FACE OF BRICK	P.T.	PRESSURE TREATED
AGGR.	AGGREGATE	F.O.M.	FACE OF MASONRY	PD.	PLASTER DRAIN
ALT	ALTERNATE	FP.	FIREPROOF	PTN.	PARTITION
AL., ALUM	ALUMINUM	FT	FOOT, FEET	PVMT	PAVEMENT
ANOD.	ANODIZED	FTG	FOOTING	P.T.D.	PAPER TOWEL DISPENSER
APPROX.	APPROXIMATE	F.T.V.	FIXED SECURITY TELEVISION	Q.T.	QUARRY TILE
ARCH	ARCHITECT	FURR	FURRED, FURRING	R.	REUSED, RELOCATED
ARCHL	ARCHITECTURAL	FUTR	FUTURE	R.	RISER
ASPH	ASPHALT	F.R.G.	FIBERGLASS REINF. GYPSUM	(R)	REUSED, RELOCATED
AV	AUDIO/VISUAL	FV	FIELD VERIFY	R.A.	RETURN AIR
		F.W.C.	FABRIC WALLCOVERING	RAD.	RADIUS
BRD, BD	BOARD	GA	GAGE	R.A.T.	RESILIENT TILE
BTWN	BETWEEN	GALV.	GALVANIZED	R.D.	ROOF DRAIN
BLDG	BUILDING	G.B.	GRAB BAR	REF.	REFERENCE
BLK.	BLOCK	GEN.	GENERAL	REFL.	REFLECTED
BLKG	BLOCKING	GL.	GLASS, GLAZING	REFL.	REFRIGERATOR
BM	BENCH MARK	GND.	GROUND	REG.	REGISTER
B.M.	BENCH MARK	GR.	GRADE, GRADING	REINFC	REINFORCING
BOT	BOTTOM	GWB	GYPSUM WALL BOARD	REQD.	REQUIRED
BRG	BEARING	GYP.	GYPSUM	REV	REVISION
BRZ	BRONZE	GFR.	GLASS FIBER REINF. CONC.	R.H.	RIGHT HAND
BSMT	BASEMENT	H.B.	HOSE BIBB	RM	ROOM
B.U.R.	BUILT UP ROOF	H.C.	HOLLOW CORE	RO	ROUGH OPENING
		HD.	HEAD	R.O.W.	RIGHT OF WAY
CAB.	CABINET	HDBD.	HARDBOARD	RCP	REFLECTED CLNG PLAN
C.B.	CATCH BASIN	HDR	HEADER	SAM	SELF ADHERED MEMBRANE
CHMT	CEMENT	HDWD	HARDWOOD	S	SOUTH
CER.	CERAMIC	HDWR	HARDWARE	S.C.	SOLID CORE
C.G.	CORNER GUARD	HM	HOLLOW METAL	S.C.D	SEE CIVIL DRAWINGS
CHAMF.	CHAMFER	HORIZ	HORIZONTAL	SCHDL	SCHEDULE
C.I.	CAST IRON	HR	HOUR	S.D.	STORM DRAIN
C.I.P.	CAST-IN-PLACE(CONCRETE)	HT	HEIGHT	SLNT	SEALANT
CHRC.	CIRCLE	HTG	HEATING	SECT.	SECTION
C.J.T.	CORNER JOINT	HVAC	HEATING/VENTILATING/	SF	SQUARE FEET
CLG, CLNG	CEILING	HW	HOT WATER HEATER	SH.	SHelf
CLR	CLEAR(ANCE)	ID.	INSIDE DIAMETER	SHT.	SHEET
CMU	CONCRETE MASONRY UNIT	INCL.	INCLUDING	SHTG	SHEATHING
CNTR	COUNTER	INCLM	INCLUDING	SIM	SIMILAR
C.O.	CLEAR OUT	INSUL	INSULATION	SL	SLOPE
COL	COLUMN	INT	INTERIOR	S.L.D	SEE LANDSCAPE DRAWINGS
CONC	CONCRETE	INV.	INVERT	SP	STAND PIPE
CONN.	CONNECTION	JAN.	JANITOR	SPEC	SPECIFICATION
CONST.	CONSTRUCTION	JST	JOIST	SQ	SQUARE
CONT	CONTINUOUS	JT	JOINT	S.S.	SERVICE SINK
CONTR	CONTRACTOR	KIT.	KITCHEN	S.S.D	SEE STRUCTURAL DRAWINGS
CORR.	CORRIDOR	KO.	KNOCKOUT	S.S.TL	SEE STRUCTURAL DRAWINGS
CPT	CARPET	KPL.	KICKPLATE	STD.	STAINLESS STEEL
CRS.	COURSING	LAM.	LAMINATE(D)	STD.	STANDARD
CSMT	CASEMENT	LAV.	LAVATORY	STL	STEEL
C.T.	CERAMIC TILE	L.H.	LEFT HAND	STR.	STORAGE
CTR	CENTER	L.L.	LENGTH, LONG	STRCTL	STRUCTURAL
CSK.	COUNTER SINK	L.L.	LIGHT LOAD	SUSP.	SUSPENDED
CU FT	CUBIC FOOT	L.T.	LIGHT	T.	TREAD
CU YD	CUBIC YARD	LTL	LINTEL	T.B.	TOWEL BAR
		LVR.	LOUVER	TEL.	TELEPHONE
DB	DESIGN BUILD	MARB.	MARBLE	TEMP	TEMPERED
DEMO	DEMOLITION	MAS.	MASONRY	TERR.	TERRAZZO
DBL	DOUBLE	MAX	MAXIMUM	TEX.	TEXTURE(D)
D.L.	DEAD LOAD	M.C.	MEDICINE CABINET	T&G	TONGUE AND GROOVE
DETL	DETAIL	MCH(TL)	MECHANIC(AL)	THK	THICK(NESS)
D.F.	DRINKING FOUNTAIN	MED.	MEDIUM	THRESH.	THRESHOLD
D.H.	DOUBLE HUNG	MEMB.	MEMBRANE	T.J.T.	TOOLED JOINT
DIAG	DIAGONAL	MEZZ	MEZZANINE	TKBD.	TACKBOARD
DIAM.	DIAMETER	MFR.	MANUFACTURE(R)	T.O.B.	TOP OF BRICK
DIM	DIMENSION	M.F.B.	MINERAL FIBER BD.	TV	TELEVISION
DIV.	DIVISION	MH.	MANHOLE	TYP	TYPICAL
DN	DOWN	MIN	MINIMUM	T.O.C	TOP OF CONCRETE
DP	DAMP PROOFING	MISC	MISCELLANEOUS	T.O.S	TOP OF STL.
DPR.	DISPENSER	MTD	MOUNTED	UNFIN.	UNFINISHED
DR	DOOR	MTL	METAL	UNON	UNLESS OTHERWISE NOTED
DS	DOWNSPOUT	MULL	MULLION	VAR.	VARNISH
D.T.	DRAIN TILE	(N)	NEW	VCT	VINYL COMPOSITION TILE
DWG	DRAWING	N.	NORTH	VIF	VERIFY IN FIELD
DWR.	DRAWER	N.I.C.	NOT IN CONTRACT	VNR.	VENEER
		NO.	NUMBER	VRFY	VERIFY
E	EAST	N.O.	NOT TO SCALE	VERT.	VERTICAL
EA	EACH	NOM.	NOMINAL	VEST.	VESTIBULE
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM	N.T.S.	NOT TO SCALE	V.G.	VISION GRILLE
		O.A.	OVERALL	V.W.C.	VINYL WALL COVERING
E.J.T.	EXPANSION JOINT	OC	ON CENTER	W.	WEST, WIDE
ELEV	ELEVATION	OD	OUTSIDE DIAMETER	w/	WITH
ELEC(TL)	ELECTRIC(AL)	O.F.R.D.	OVERFLOW ROOF DRAIN	WAB	WATER/AIR BARRIER
ELEV.	ELEVATOR	OH.	OVERHEAD	W.C.	WATER CLOSET
ENCL.	ENCLOSURE	OPNG	OPENING	WD	WOOD
ENG	ENGINEER	OPP	OPPOSITE	W.H.	WATER HEATER
EQ	EQUAL	O.P.S.	OPEN TO STRUCTURE	w/O	WITHOUT
EQUIP	EQUIPMENT			WP(G)	WATERPROOF(ING)
ESC.	ESCALATOR			WRB	WATER RESISTANT BARRIER
EST	ESTIMATE			WSCT.	WAINSCOT
EXCAV.	EXCAVATE			WT.	WEIGHT
EXH.	EXHAUST			W.W.F.	WELDED WIRE FABRIC
(E), EXIST	EXISTING				
EXP.	EXPANSION				
EXT	EXTERIOR				

# ZHENG'S GARAGE

4620 88TH AVE SE  
MERCER ISLAND, WA 98040

## PERMIT SET

### BUILDING CODE INFORMATION

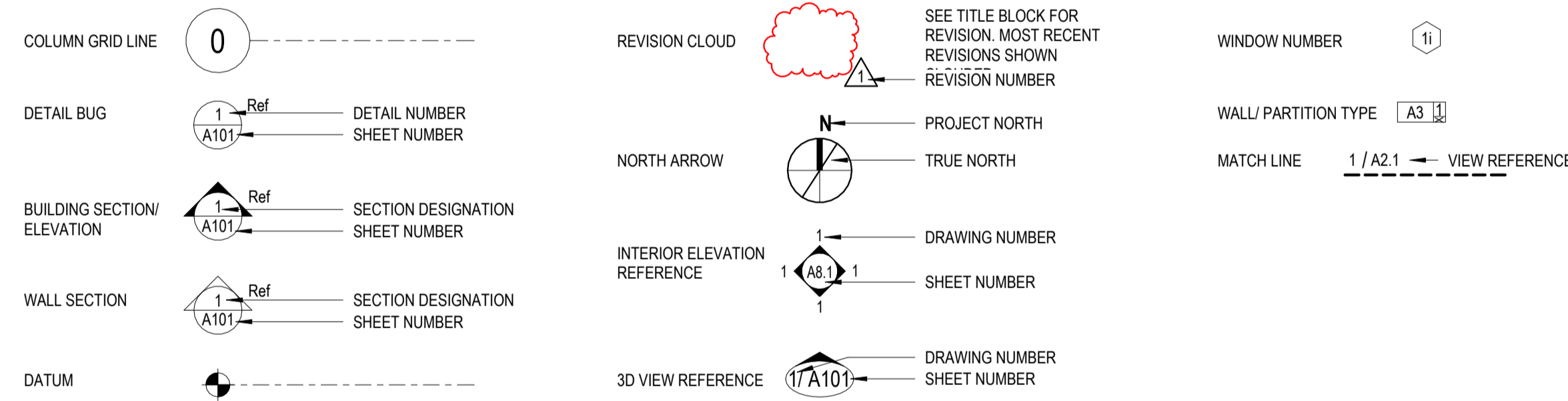
1. THIS INTERIOR REMODEL IS DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES AND REGULATIONS:

- 2021 INTERNATIONAL BUILDING CODE (IBC)
- 2021 INTERNATIONAL RESIDENTIAL CODE (IRC)
- 2021 WASHINGTON STATE RESIDENTIAL ENERGY CODE - (WSEC-R)
- 2021 INTERNATIONAL FIRE CODE (IFC)
- 2021 INTERNATIONAL MECHANICAL CODE (IMC)
- 2020 NATIONAL ELECTRICAL CODE
- 2021 WASHINGTON STATE PLUMBING CODE
- 2017 ACCESSIBLE & USABLE BUILDINGS & FACILITIES (ICC/ANSI A117.1)
- WA STATE AMENDMENTS (IBC)
- WA STATE REGULATIONS FOR BARRIER-FREE FACILITIES
- WA STATE AMENDMENTS (IRC)
- WA STATE AMENDMENTS (IMC)
- WA STATE AMENDMENTS (IFC)
- WA STATE PLUMBING CODE & STANDARDS
- WA STATE ENERGY CODE (WSEC)
- WA STATE VENTILATION & INDOOR AIR QUALITY CODE
- ELECTRICAL SAFETY STANDARDS, ADMINISTRATION AND INSTALLATION

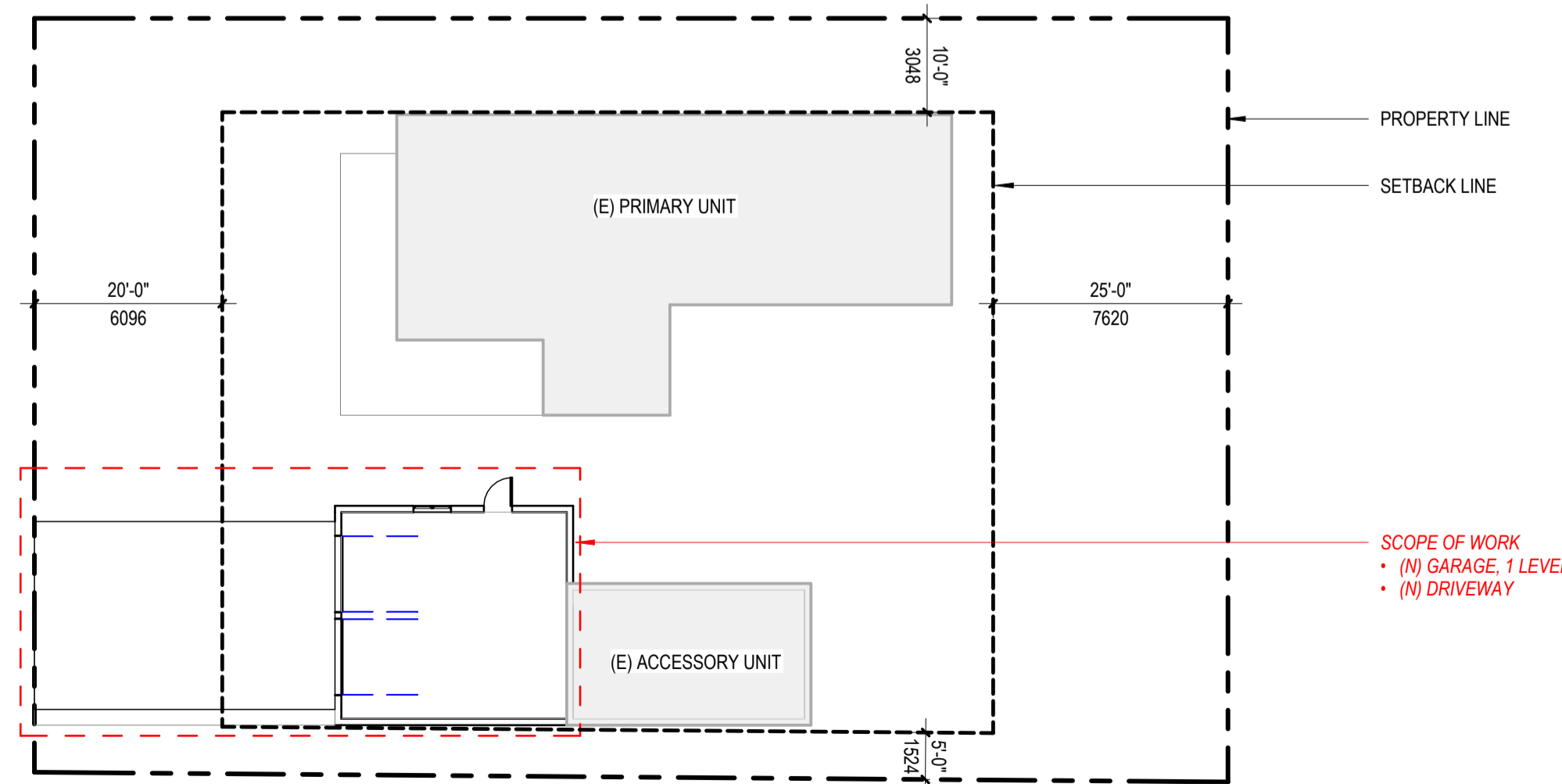
### 2. GENERAL BUILDING DESCRIPTION:

- A. CONSTRUCTION TYPE: VB
- B. OCCUPANCY TYPE: R DWELLING, U GARAGE
- C. FIRE PROTECTION: NON-SPRINKLER
- D. EXISTING BUILDING CONSTRUCTION TYPE: VB-NON-SPRINKLER
- E. SEISMIC ZONE: D
- F. EXISTING BUILDING HEIGHT: REMAIN

### SYMBOL LEGEND



### SITE PLAN AND SCOPE OF WORK



REFER TO SHEET A1.1 FOR DETAIL INFORMATION

### DRAWING INDEX

- ARCHITECTURAL
- A0.1 COVER, PROJECT INFORMATION
  - A1.1 SITE PLAN
  - A2.1 FLOOR PLANS
  - A4.1 BUILDING ELEVATIONS
  - A4.2 SECTIONS
  - A7.1 DOOR/WINDOW SCHEDULES & LEGENDS
  - A9.1 WALL TYPES & TYPICAL DETAILS

Issue Date

### PROJECT INFORMATION

NEW GARAGE AREA: 528 SF  
NEW GARAGE HEIGHT: 14'-5"

DESCRIPTION:

- ADD 2 CAR GARAGE ATTACHED TO EXISTING ACCESSORY UNIT
- NEW DRIVEWAY TO ACCESS NEW GARAGE

### LEGAL DESCRIPTION

PARCEL NUMBER: 019110-0705

LEGAL DESCRIPTION:  
ALL VIEW HEIGHTS ADD PARCEL B MERCER ISLAND SHORT PLAT NO 79-08-29 REC NO 7910040812

PLAT BLOCK: 9  
PLAT LOT: 13-14

ZONING: R-9.6  
LOT AREA: 10,239 SF

### GENERAL NOTES

- DO NOT SCALE DRAWINGS.
- IT IS THE INTENT OF THE CONTRACT DOCUMENTS THAT ALL WORK COMPLY W/ THE STATE OF LOCAL BUILDING CODE, THE LOCAL ENERGY CODE & OTHER APPLICABLE CODES, RULES & REGULATIONS OF JURISDICTIONS HAVING AUTHORITY.
- PRIOR TO COMMENCEMENT OF ANY PORTION OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES NOTED AMONG OR BETWEEN THE CONTRACT DOCUMENTS, OWNER PROVIDED INFORMATION, SITE CONDITIONS, MANUFACTURER RECOMMENDATIONS, OR CODE REGULATIONS, OR RULES OF JURISDICTIONS HAVING AUTHORITY
- PRIOR TO COMMENCEMENT OF ANY PORTION OF THE WORK, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CONTRACT DOCUMENTS, OWNER PROVIDED INFORMATION AND SITE CONDITIONS, INCLUDING TAKING FIELD MEASUREMENTS AS NECESSARY.
- THE CONTRACTOR SHALL PAY AND SECURE & ALL GOVERNMENTAL PERMITS, FEES, LICENSES, AND INSPECTION NECESSARY FOR PROPER EXECUTION AND COMPLETION OF THE WORK EXCEPT FOR THE GENERAL BUILDING PERMIT.
- ALL DIMENSIONS ARE TO FACE OF FINISH, UNLESS OTHERWISE NOTED. CONTACT ARCHITECT FOR CLARIFICATIONS IF NEEDED.

### PROJECT DIRECTORY

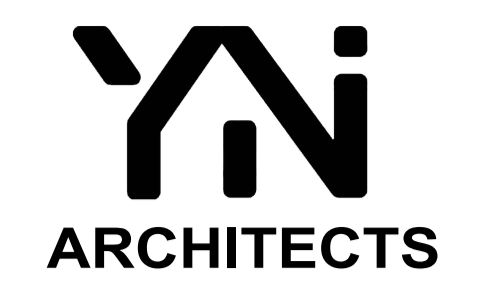
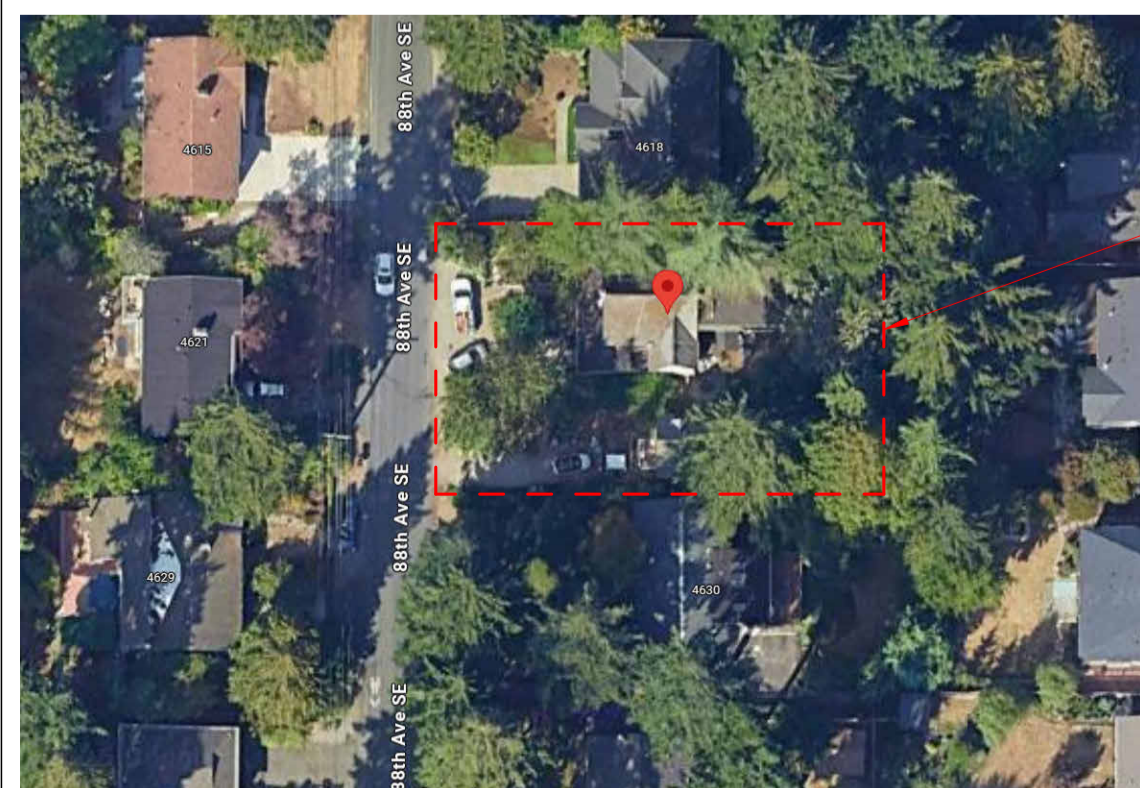
Owner: Owner

Design Architect: YINING ARCHITECTS  
13434 110TH PL NE  
KIRKLAND, WA 98034  
P 401.837.9330

Contact: Yin Lu

General Contractor: TBD

### VICINITY MAP



Architects: YINING ARCHITECTS  
13434 110TH PL NE  
KIRKLAND, WA 98034  
P 401.837.9330  
Contact: Yin Lu

General Contractor:

Owner:

Owner:

Date:

Revision:

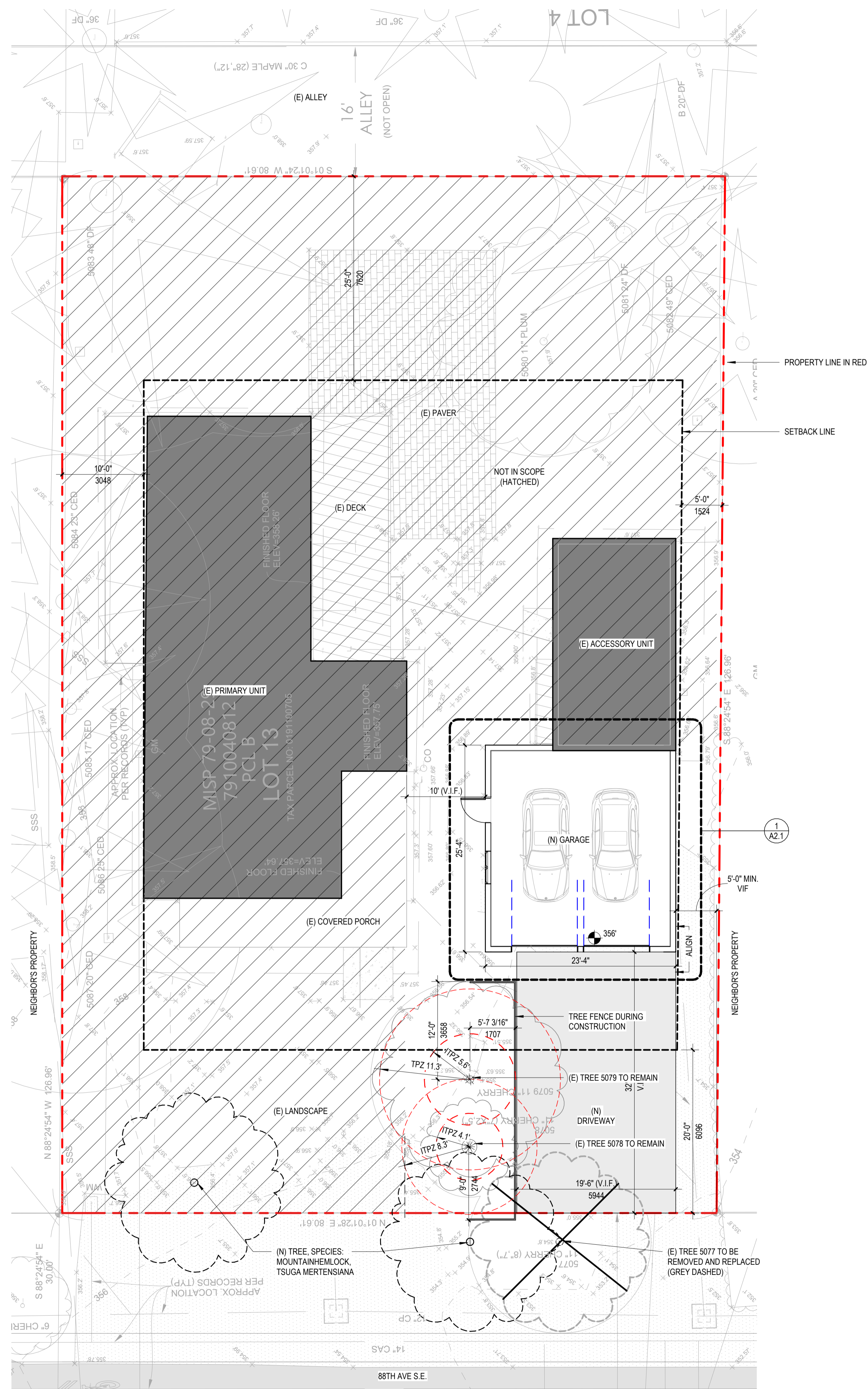
Number:

Project: ZHENG'S GARAGE  
4620 88TH AVE SE  
MERCER ISLAND, WA 98040

Project no. Project Number  
Date: Issue Date  
PERMIT SET

COVER, PROJECT INFORMATION

# A0.1



**LOT COVERAGE CALCULATIONS**

A. Gross Lot Area	10234	Square Feet
B. Net Lot Area	10234	Square Feet
C. Allowed Lot Coverage Area	4094	Square Feet
D. Allowed Lot Coverage	40	% of Lot
E. Existing Lot Coverage:		
1. Main Structure Roof Area	1759	Square Feet
2. Accessory Building Roof Area	545	Square Feet
3. Vehicular Use (driveway, paved access easements [portion used by the lot for access], parking)	867	Square Feet
4. Covered Patios and Covered Decks	484	Square Feet
5. Total Existing Lot Coverage Area (E1+E2+E3+E4)	3655	Square Feet
F. (Total Lot Coverage Area Removed)	3657	Square Feet
G. Proposed Adjustment for Single Story (Area)	0	Square Feet
H. Proposed Adjustment for Flag Lot	0	Square Feet
I. Total New Lot Coverage Area:		
1. Main Structure Roof Area	0	Square Feet
2. Accessory Structure Roof Area	610	Square Feet
3. Vehicular Use (driveway, paved access easement [portion used by the lot for access], parking)	619	Square Feet
4. Covered Patios and Covered Decks	0	Square Feet
5. Total New Lot Coverage Area (I1 + I2 + I3 + I4)	1229	Square Feet
J. Total Project Lot Coverage Area = (E5 - F) + I5	4017	Square Feet
K. Proposed Lot Coverage Area = (J/8) x 100	39.3%	% of Lot
Lot coverage calculations shown on Plan Sheet #	A1.1	

**HARDSCAPE CALCULATIONS**

A. Gross Lot Area	10234	Square Feet
B. Net Lot Area	10234	Square Feet
C. Area Borrowed from Lot Coverage	77	Square Feet
D. Allowed Hardscape Area = 9% of lot area + C	9.8	% of Lot
E. Allowed Hardscape Area	998	Square Feet
F. Total Existing Hardscape Area:		
1. Uncovered Decks	208	Square Feet
2. Uncovered Patios	82	Square Feet
3. Walkways	532	Square Feet
4. Stairs	58	Square Feet
5. Rockeries and Retaining Walls	112	Square Feet
6. Other	674	Square Feet
7. Total Existing Hardscape Area (F1+F2+F3+F4+F5+F6)	1566	Square Feet
G. (Total Hardscape Area Removed)	694	Square Feet
H. Total New Hardscape Area:		
1. Uncovered Decks	0	Square Feet
2. Uncovered Patios	0	Square Feet
3. Walkways	0	Square Feet
4. Stairs	0	Square Feet
5. Rockeries and Retaining Walls	0	Square Feet
6. Other	0	Square Feet
7. Total New Hardscape Area (H1+H2+H3+H4+H5+H6)	0	Square Feet
I. Total Project Hardscape Area = (F7 - G) + H7	972	Square Feet
J. Total Project Hardscape Area = (I/8)x100	9.5	% of Lot
Hardscape calculations shown on Plan Sheet #	A1.0	

**GROSS FLOOR AREA CALCULATIONS**

Building Area	Existing Area	Removed Area	New/Addition Area	Total
Upper Floor	1537	0	0	1537
Main Floor	1679	0	0	1679
Gross Basement Area	0	0	0	0
Garage/ Carport	0	0	371	371
<b>Total Floor Area</b>	<b>3216</b>	<b>0</b>	<b>371</b>	<b>3782</b>
Accessory Buildings	344	0	0	344
Accessory Dwelling Unit	344	0	0	344
2nd & 3rd Story Roofed Decks	0	0	0	0
Basement Area	0	0	0	0
Excluded	0	0	0	0
150% GFA Modifier* (main and upper floor x2)	0	0	0	0
200% GFA Modifier* (main and upper floor x2)	0	0	0	0
Staircase GFA Modifier* (x2 for a three story staircase, x3 for a four story staircase)	110	0	0	110
<b>TOTAL Building Area</b>	<b>3924</b>	<b>0</b>	<b>371</b>	<b>4295</b>

**Gross floor area calculations found on Plan Sheet #**

A. Lot Area	10234	Square Feet
B. Zone R-8.4 <input type="checkbox"/> R-9.6 <input checked="" type="checkbox"/> R-12 <input type="checkbox"/> R-15 <input type="checkbox"/>		
C. Allowed Gross Floor Area (refer to "allowed GFA")	4500	Square Feet
D. Allowed Gross Floor Area	44.0	% of Lot
E. Proposed Gross Floor Area	4465	Square Feet
F. Proposed Gross Floor Area	43.9	% of Lot
Gross floor area calculations found on Plan Sheet #	A1.0	
Basement exclusion calculations found on Plan Sheet #	N/A	

**AVERAGE BUILDING ELEVATION (ABE) CALCULATIONS:**

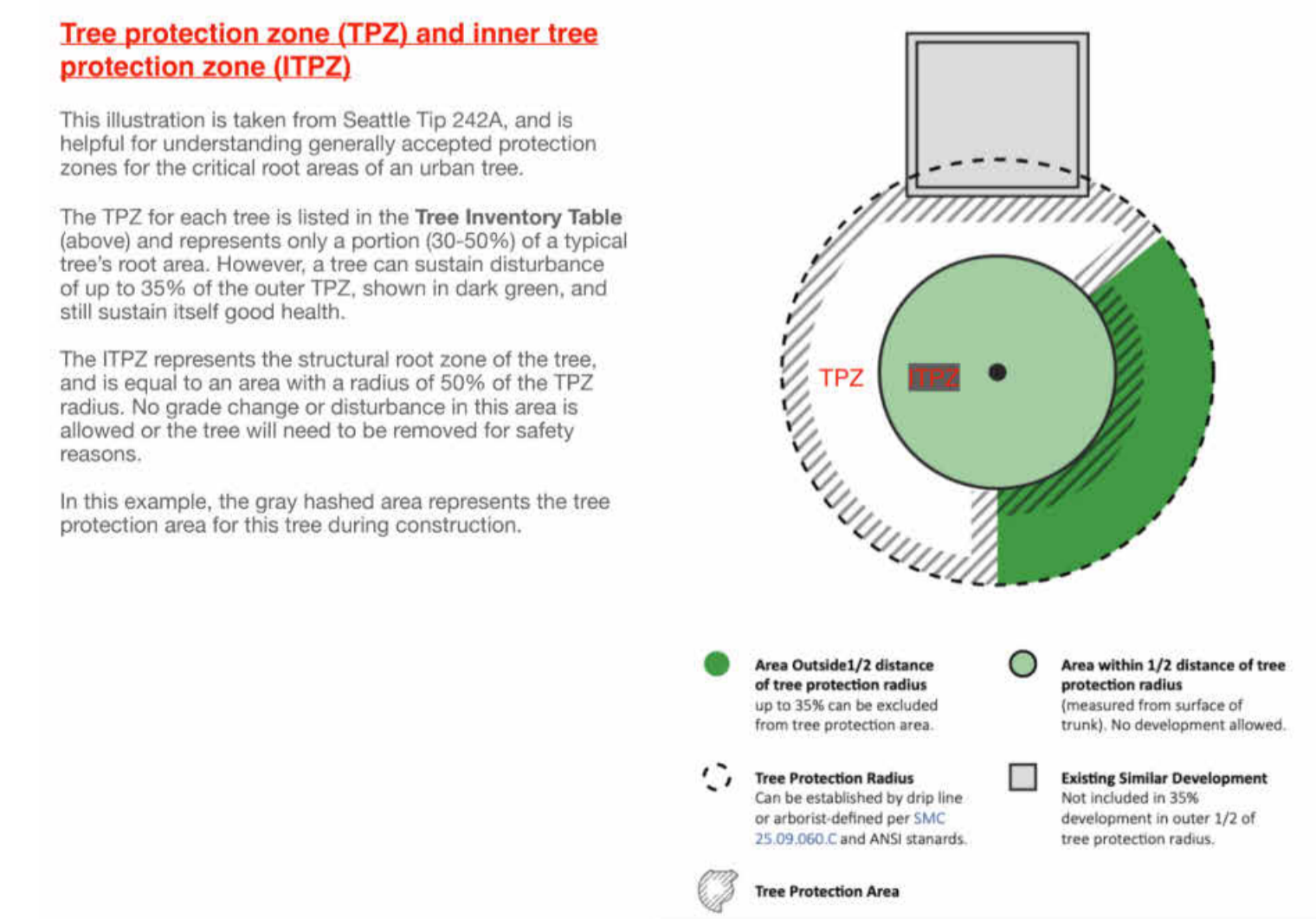
$(356'25 + 355'6'23 + 356'5'25 + 356'6'23) / (25+23+25+23) = 356.2$

F. Sloping lot (Downhill side)- maximum height of top of exterior wall façade above lowest existing grade (30-ft max)	N/A	Feet
G. ABE and Allowable Building Height Shown on elevations plan sheet #	A1.1	
H. Topo-survey Accuracy Attested on Plan Sheet #	A1.1	

**Tree Inventory Table**

Tree table for Zheng 4620 88th Ave SE Mercer Island 8/28/2025

Tree #	Common name	Species	DSH	DLR	Clas	Cond	TPZ	ITPZ	Retain	NOTES
ROW-5077	Cherry	Prunus sp	11.2	11	ROW	4	11.1	5.6	No	Multistem 8.5.7.3
5078	Cherry	Prunus sp	10.5	6	Regulated	3	8.3	4.1	yes	Topped, Multistem 8.5.6.5.5
5079	Cherry	Prunus sp	10.5	12	Regulated	4	11.3	5.6	yes	

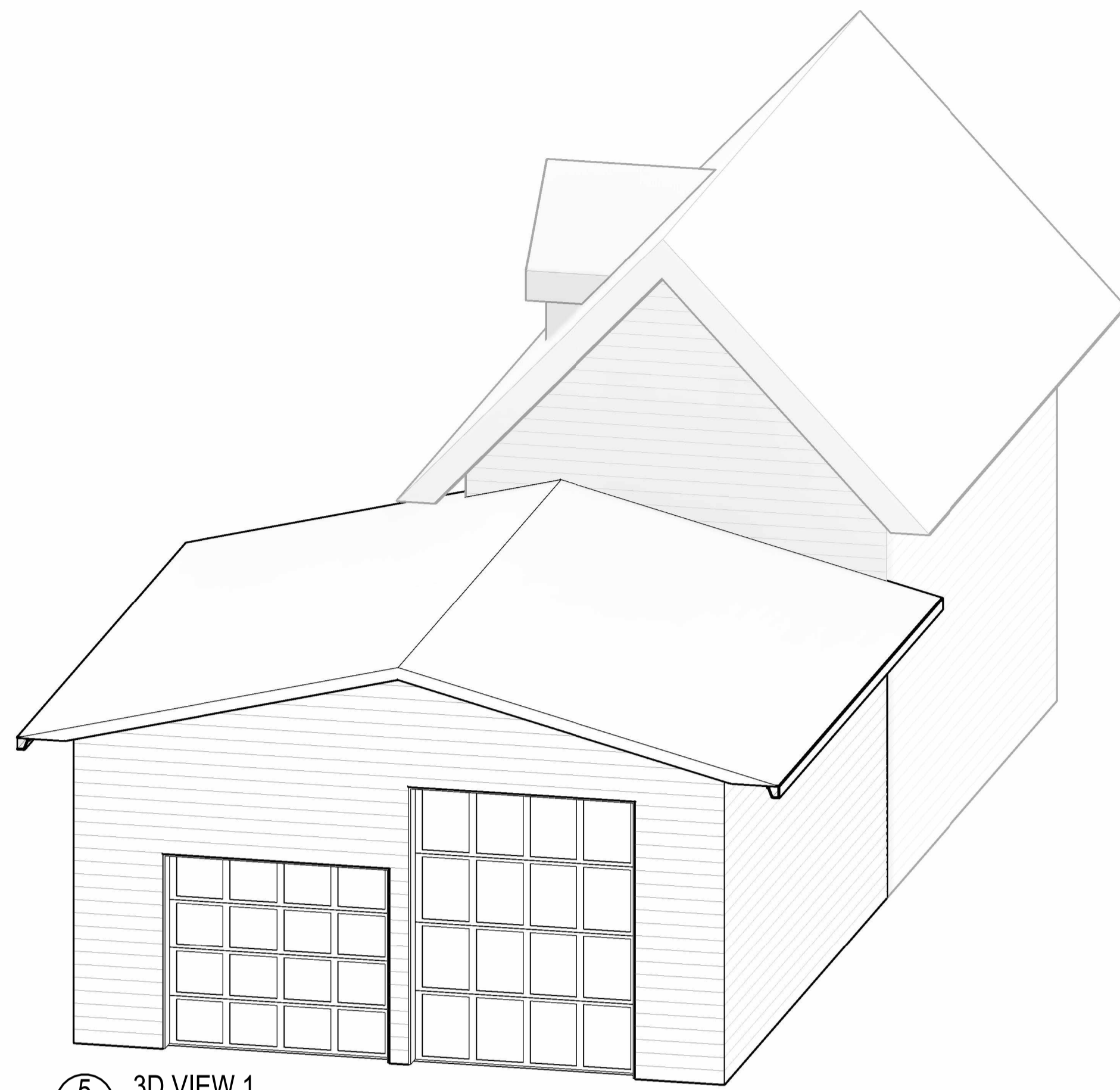


**1 SITE PLAN**  
 A1.1 1/8" = 1'-0"

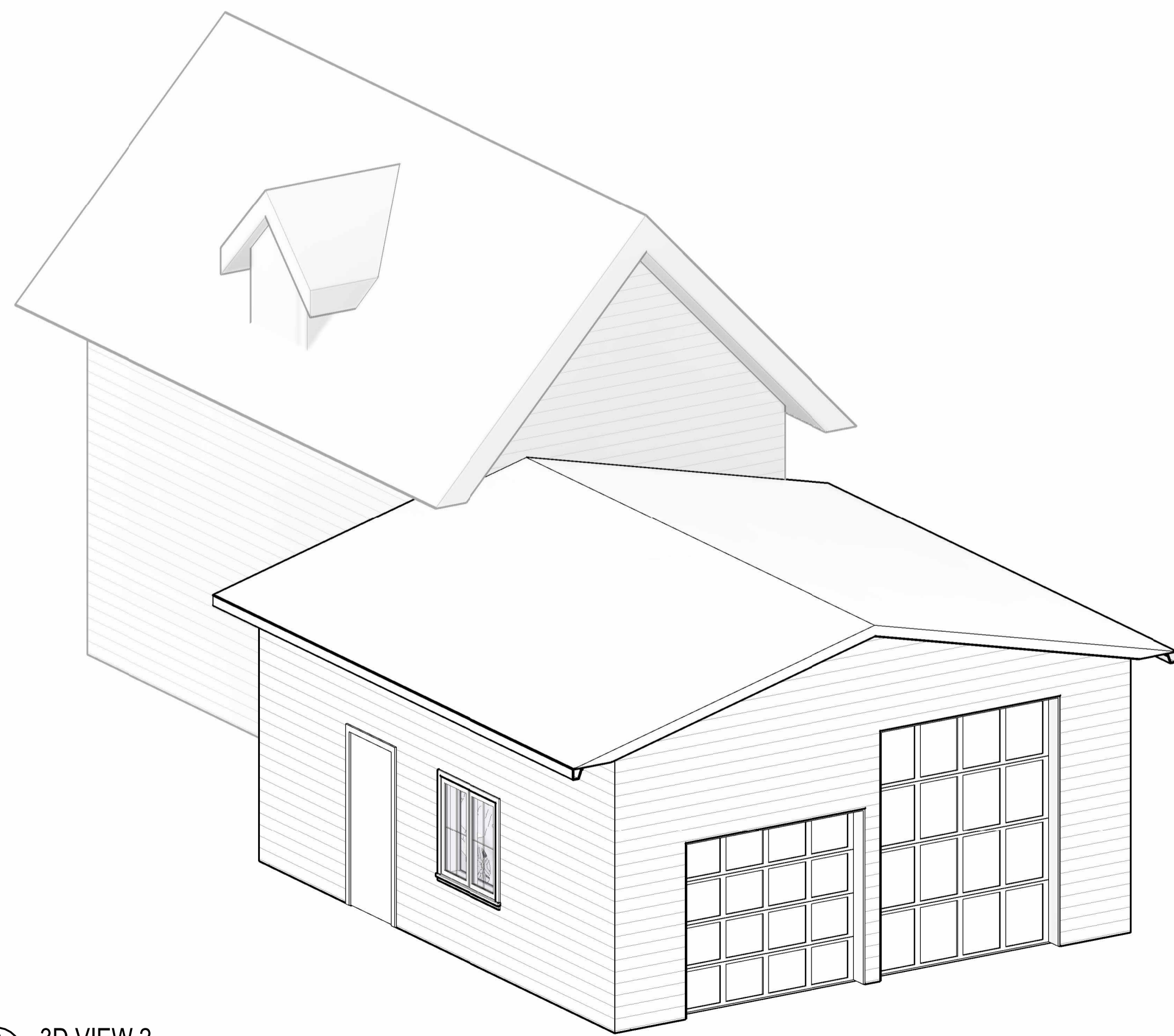
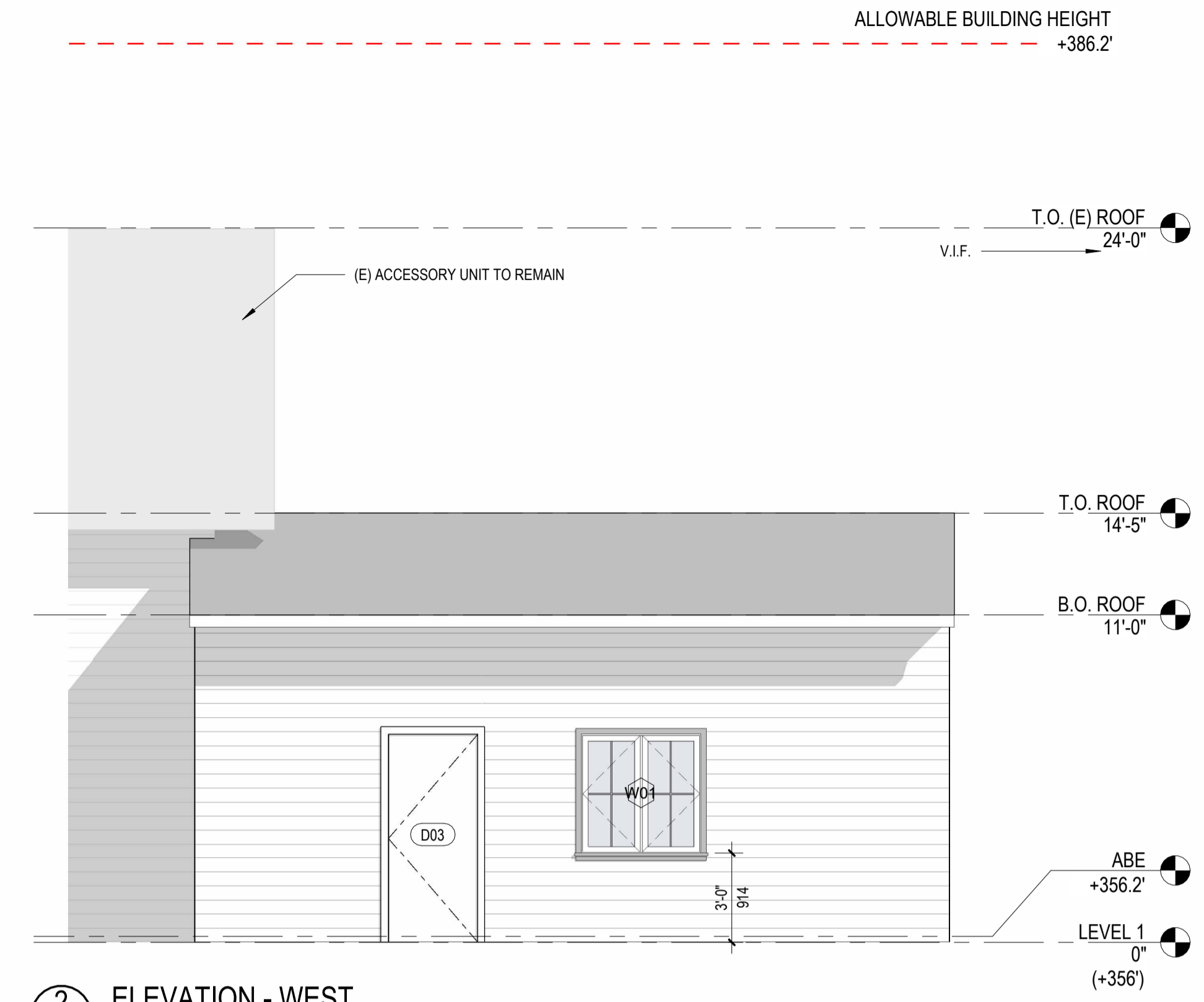
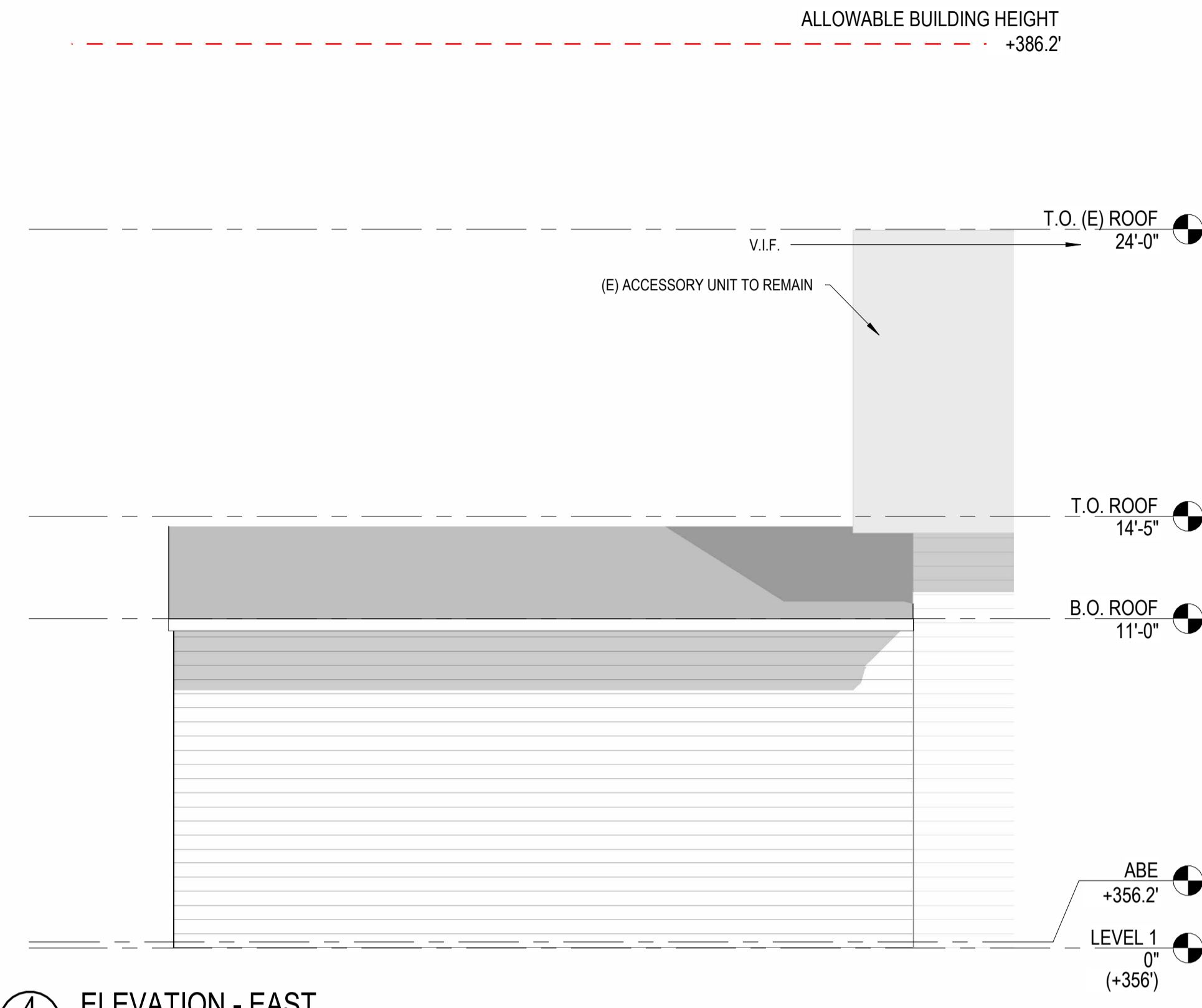
**2 SITE DEVELOPMENT WORKSHEET**  
 A1.1 N.T.S.

**3 TREE PROTECTION FENCE DURING CONSTRUCTION**  
 A1.1 N.T.S.

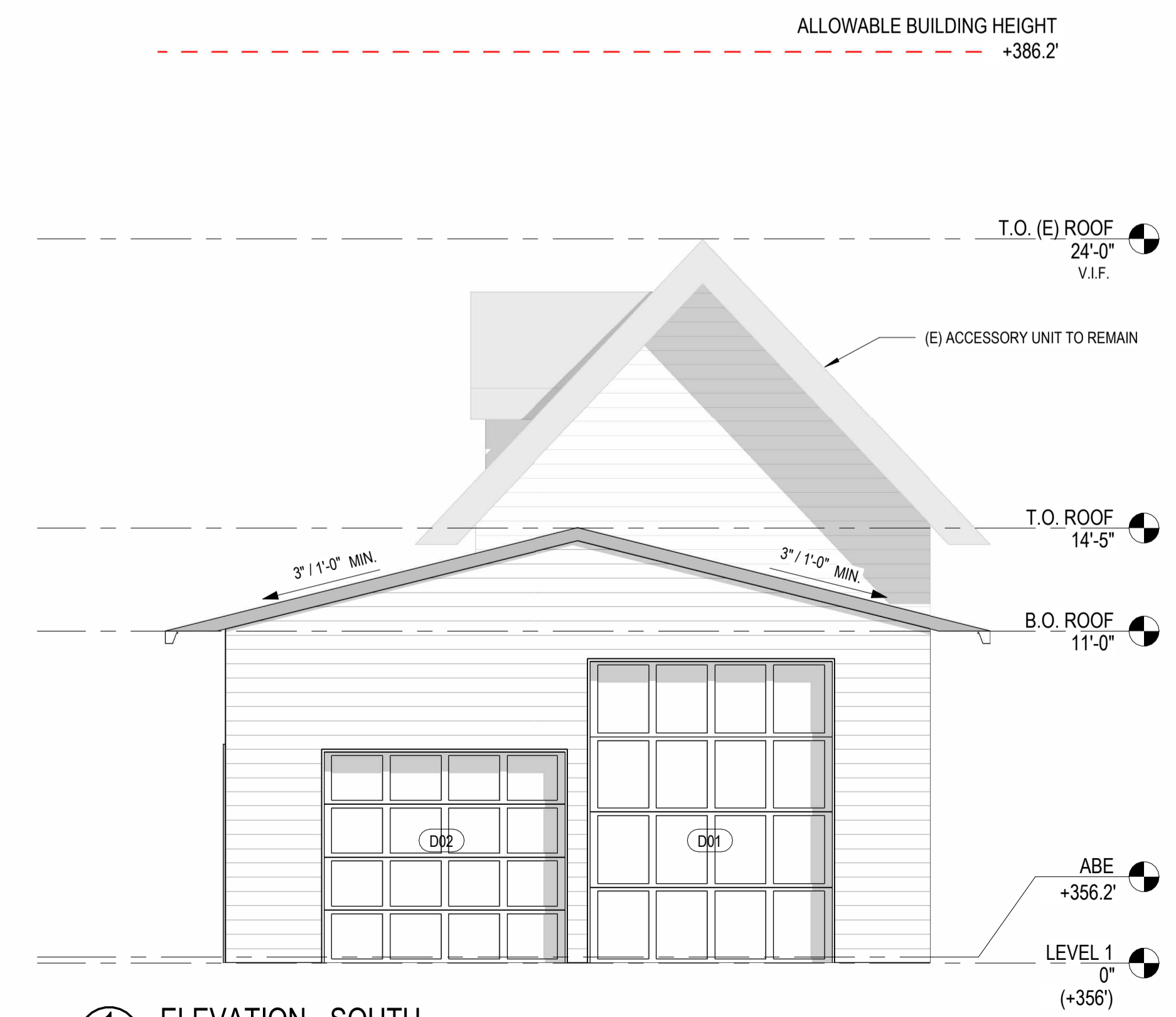
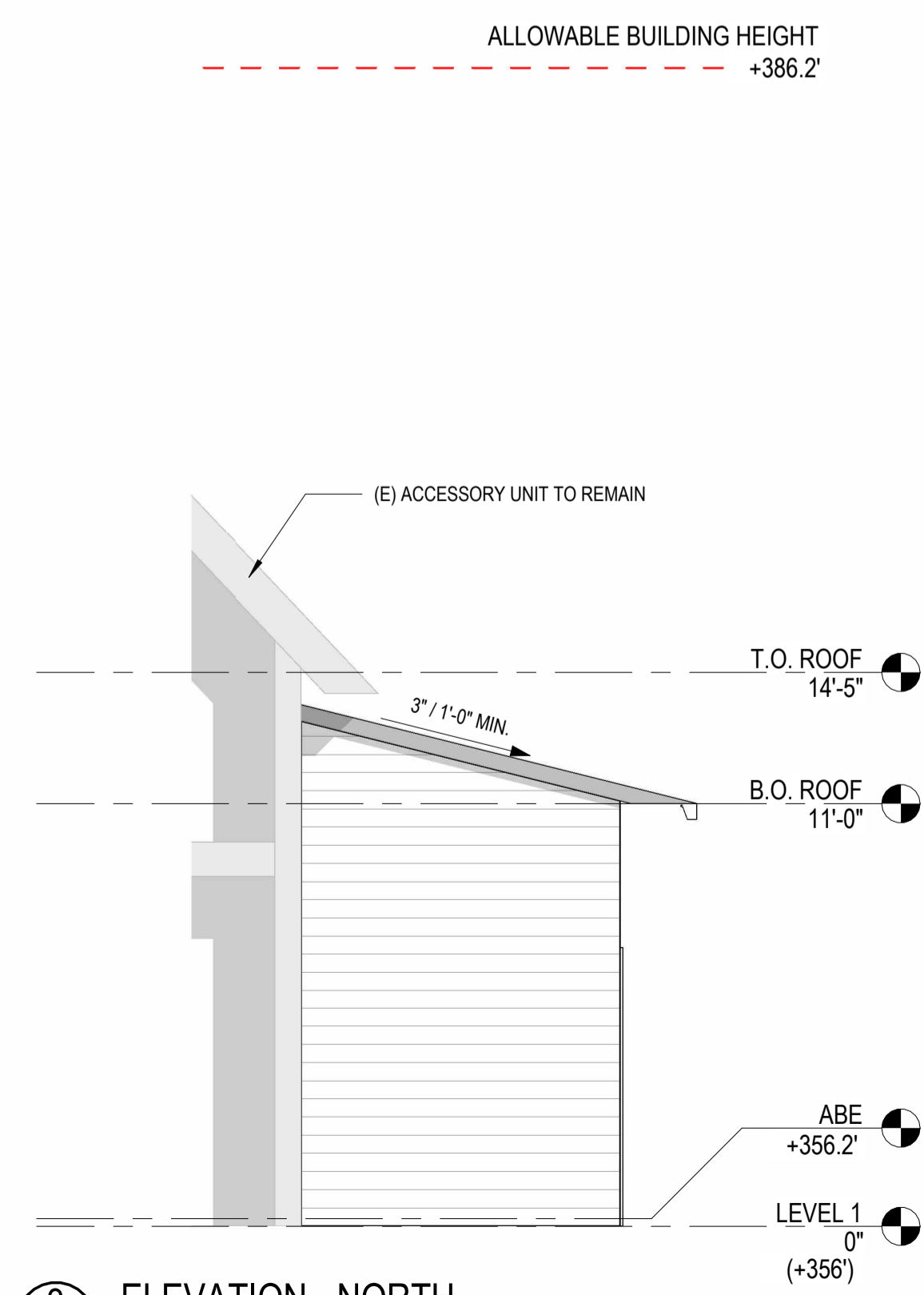


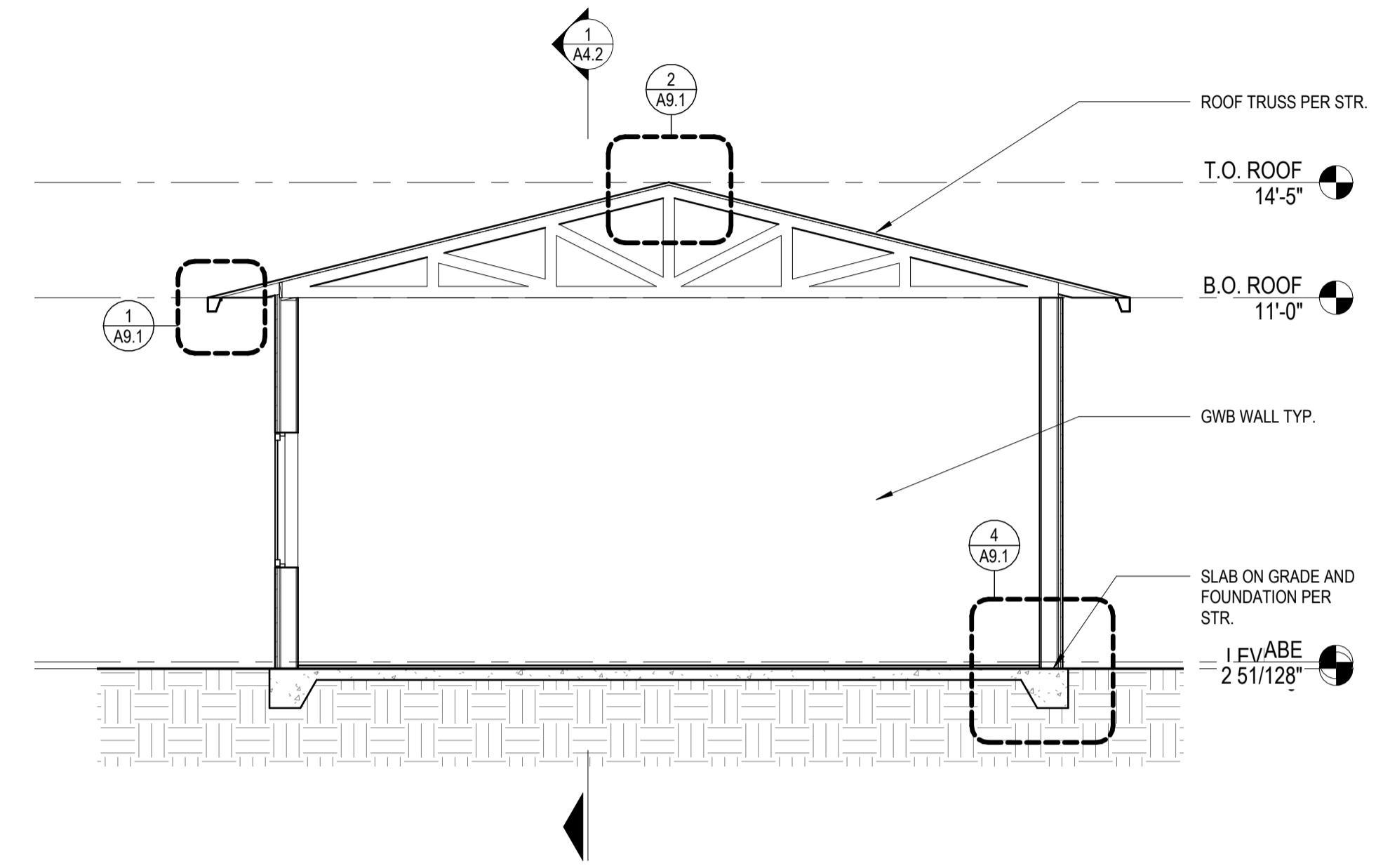


**5** 3D VIEW 1  
A4.1

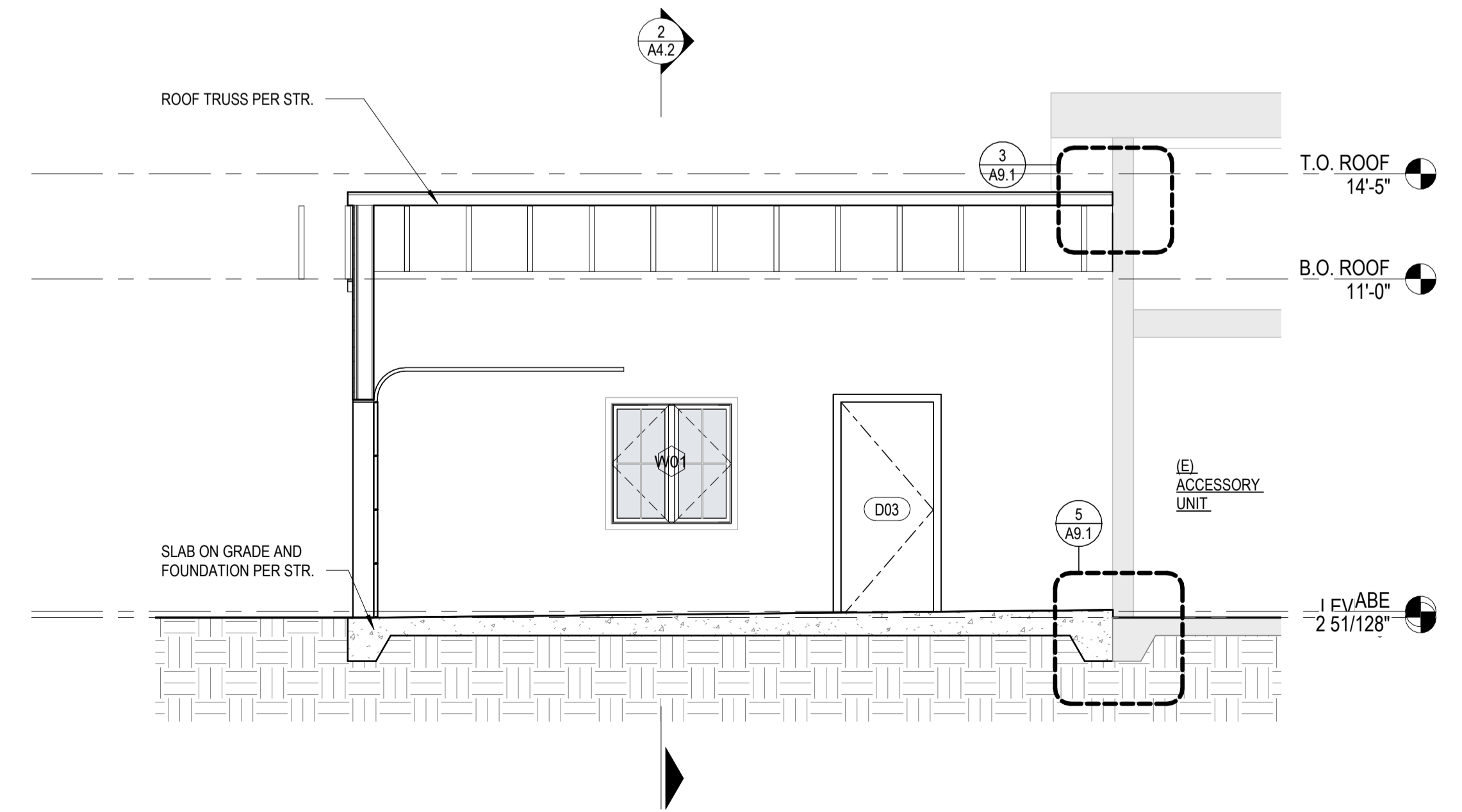


**6** 3D VIEW 2  
A4.1





**2** SECTION - E-W  
A4.2 1/4" = 1'-0"



**1** SECTION - N-S  
A4.2 1/4" = 1'-0"

Owner: **Owner**

Date: \_\_\_\_\_

Revision: \_\_\_\_\_

Number: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

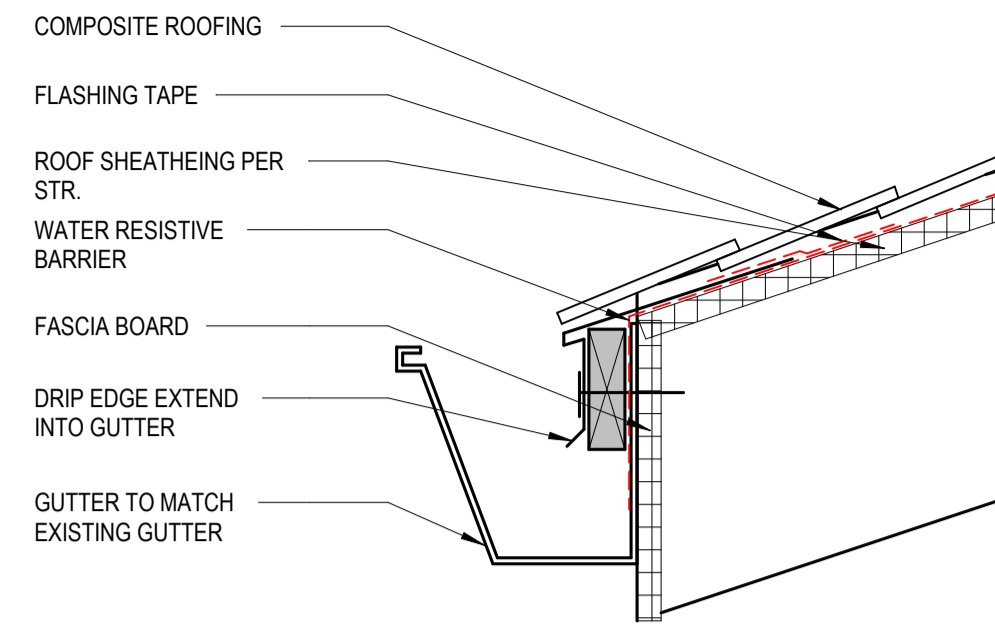
Project: **ZHENG'S GARAGE**

4620 88TH AVE SE  
MERCER ISLAND, WA 98040

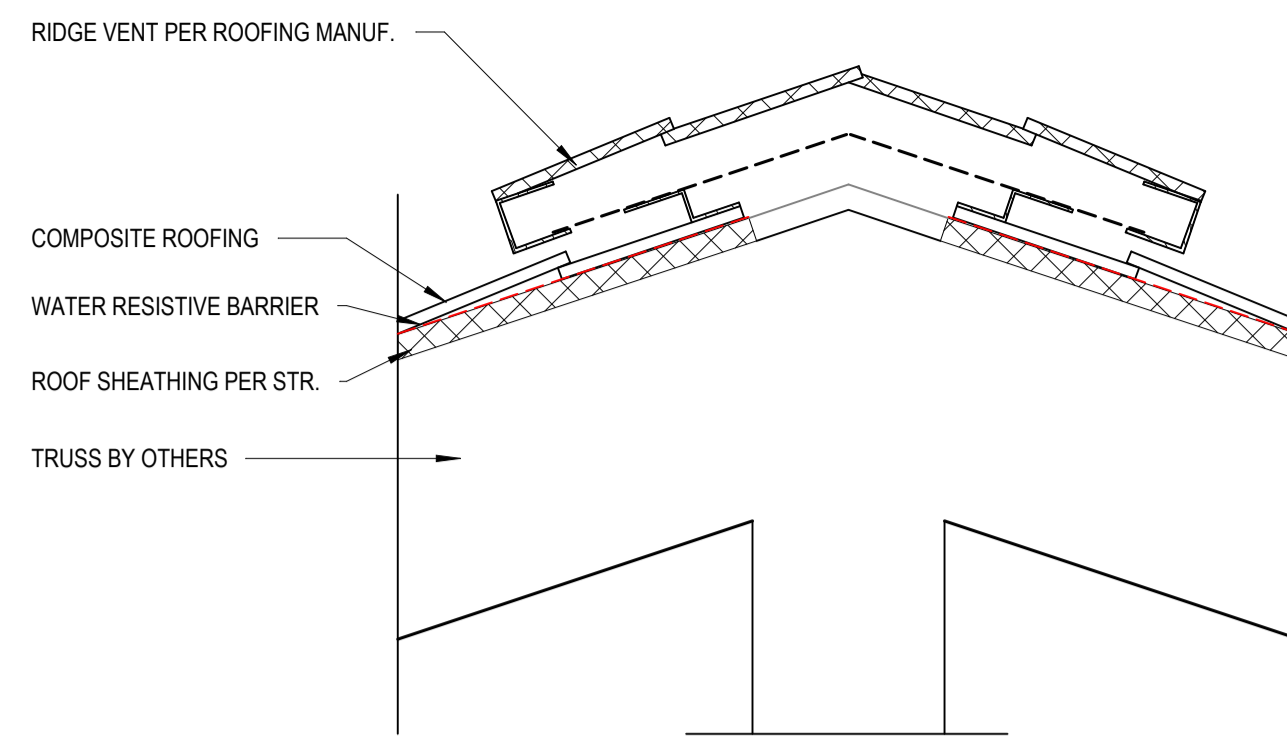
Project no. \_\_\_\_\_  
Date: Issue Date

**PERMIT SET**

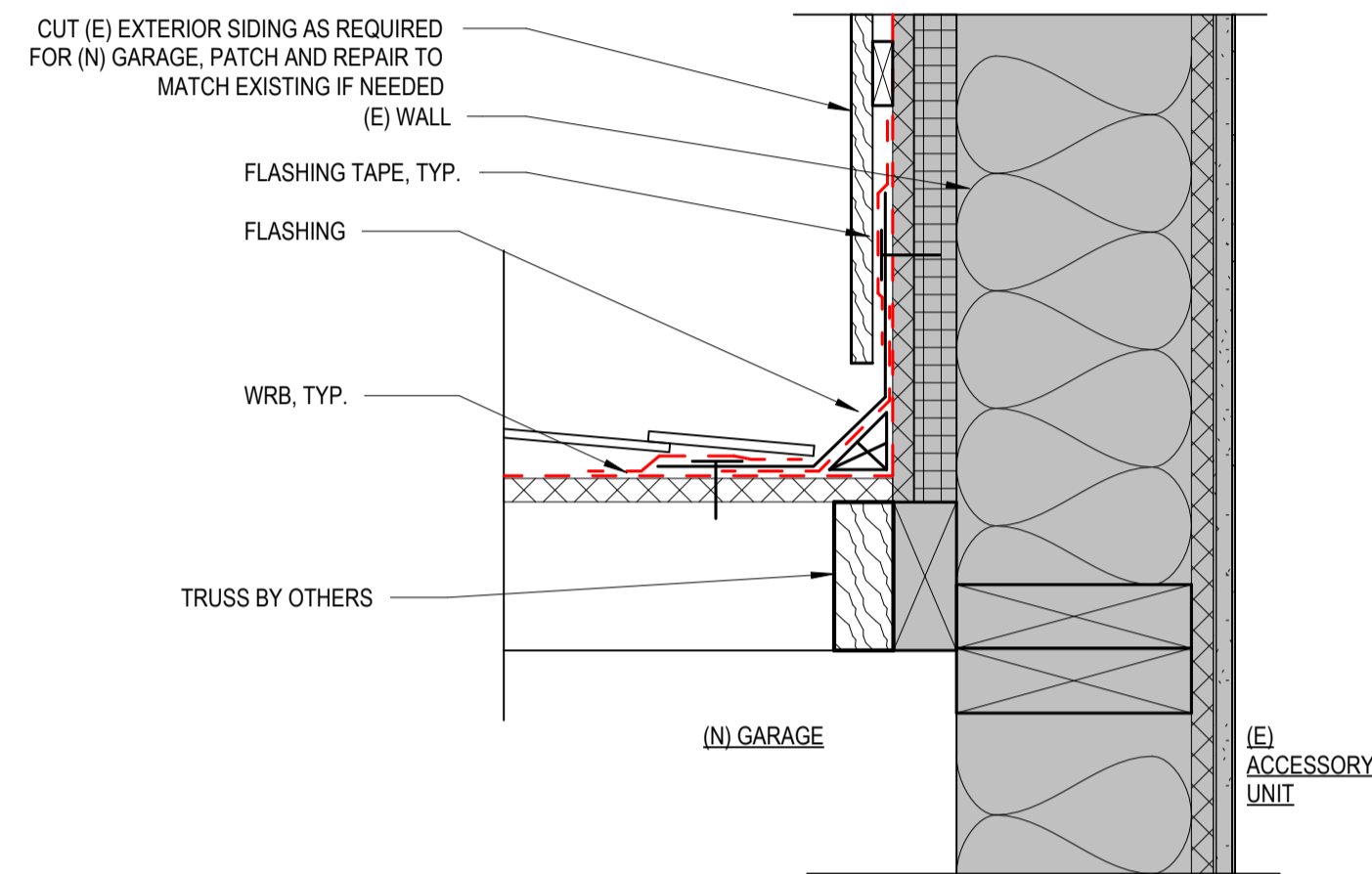
SECTIONS



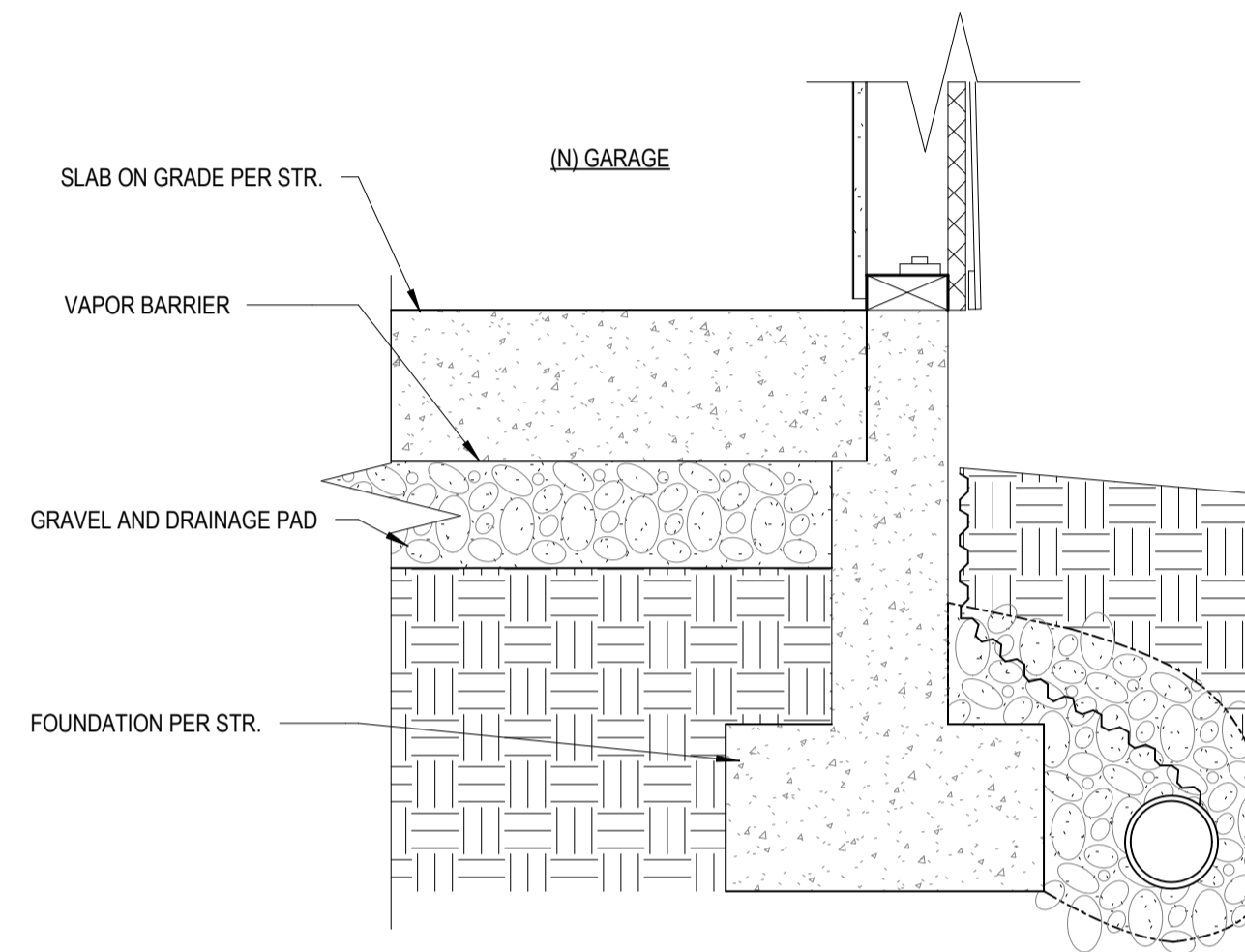
1 DTL - GUTTER  
A9.1 3/8" = 1'-0"



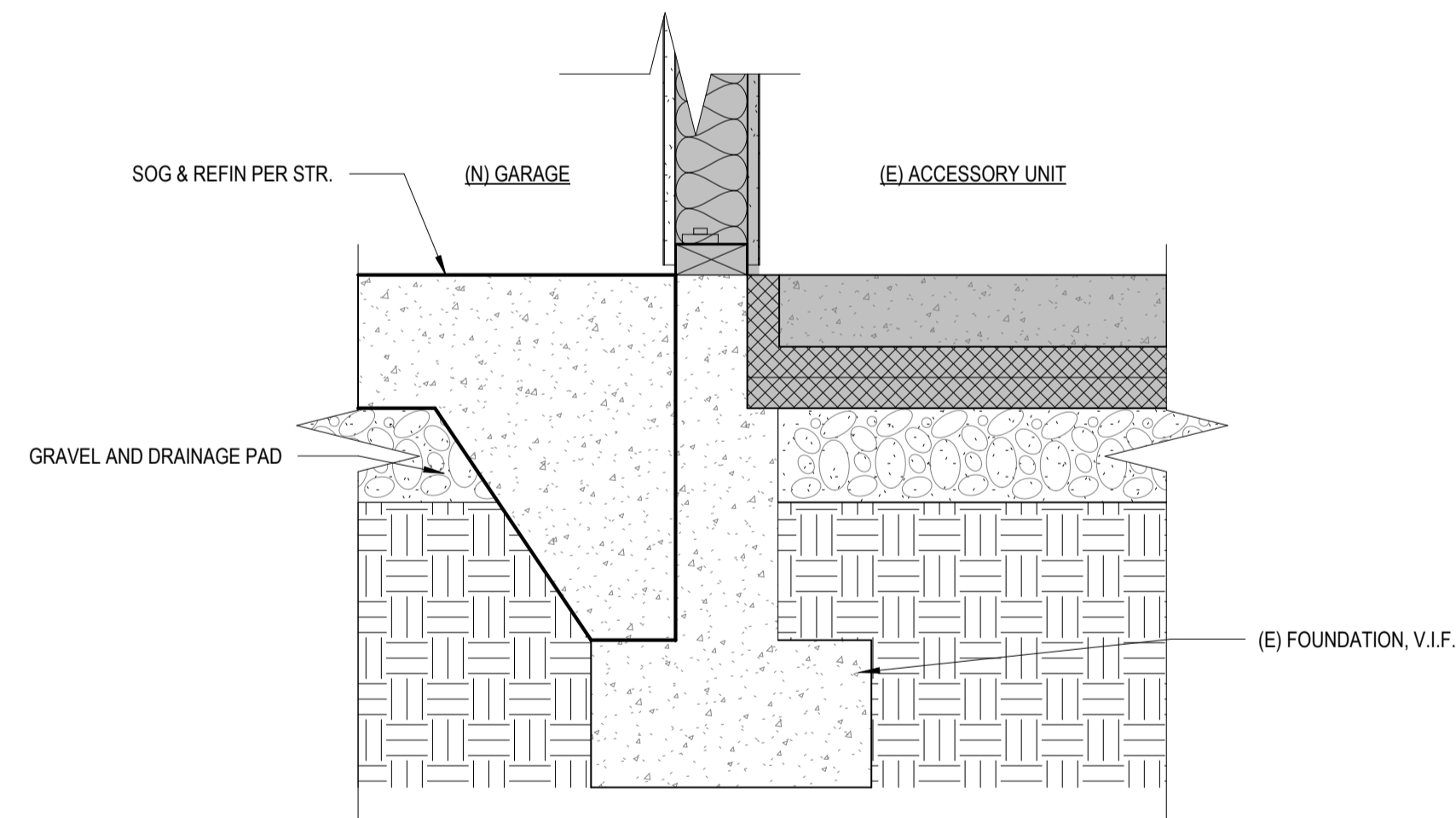
2 DTL - RIDGE VENT  
A9.1 3/8" = 1'-0"



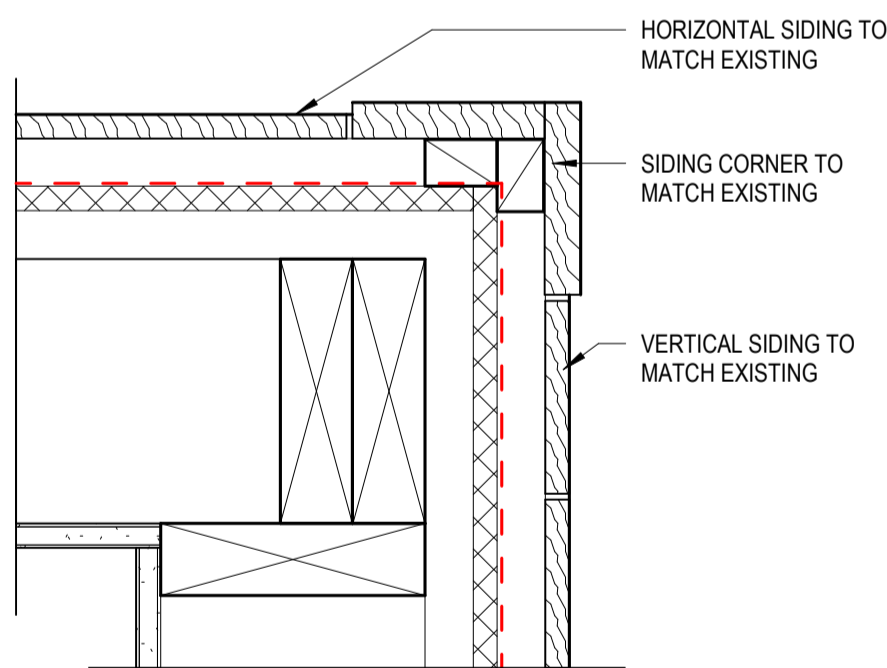
3 DTL - FLASHING  
A9.1 3/8" = 1'-0"



4 DTL - FLOOR @ (N) WALL  
A9.1 3/8" = 1'-0"



5 DTL-FLOOR ADJACENT TO (E) UNIT  
A9.1 3/8" = 1'-0"



9 DTL - EXTERIOR SIDING CORNER1  
A9.1 3/8" = 1'-0"

## EXTERIOR WALL TYPES

WALL TAG LEGEND		STUD SIZE KEY	GENERAL WALL NOTES	
		1 1 x 3 2 2 x 2 4 2 x 4 6 2 x 6 8 2 x 8 10 2 x 10	1. ALL RATED & ACOUSTICAL PARTITION TO HAVE 5/8" TYPE "X" GWB TYPICAL UON. 2. WALL TYPES ARE ASSUMED TO END AT INTERSECTING WALLS. 3. ALL FIRE RATED AND SMOKE ASSEMBLY PARTITIONS EXTEND TO STRUCTURE, UON. 4. ALL THROUGH PENETRATIONS OF FIRE-RATED ASSEMBLIES SHALL BE INSTALLED AS TESTED PER CODE. 5. INSTALL (DENS-SHIELD OR EQ) TILE BACKER BOARD AT ALL INTERIOR TILE FINISHES TYPICAL. SEE FINISH PLANS & INTERIOR ELEVATIONS FOR LOCATIONS. 6. PROVIDE 5/8" WATER RESISTANT DRYWALL AT ANY WET WALLS.	
<b>TYPE A</b>	<b>EXTERIOR MTL PANEL</b> *A2: 5/8" MOISTURE-RESISTANT GWB TO DAMP SIDE *A3: 5/8" TILE BACKER & TILE		<b>TYPE B</b>	<b>EXTERIOR HORIZ. WOOD WALL</b> *B2: 5/8" MOISTURE-RESISTANT GWB TO DAMP SIDE (BATHS) *B3: 5/8" TILE BACKER & TILE
<b>TYPE C</b>	<b>EXTERIOR VERT. WOOD WALL</b> *C2: 5/8" MOISTURE-RESISTANT GWB TO DAMP SIDE (BATHS) *C3: 5/8" TILE BACKER & TILE		<b>TYPE D</b>	<b>EXTERIOR STEEL PANEL WALL</b> *D2: 5/8" MOISTURE-RESISTANT GWB TO DAMP SIDE (BATHS) *D3: 5/8" TILE BACKER & TILE
<b>TYPE E</b>	<b>CAST-IN-PLACE CONCRETE</b>		<b>TYPE F</b>	<b>EXT. CONC. / WOOD FURRING</b> *F2: 5/8" MOISTURE-RESISTANT GWB TO DAMP SIDE (BATHS) *F3: 5/8" TILE BACKER & TILE
			<b>TYPE G</b>	<b>TYP. INTERIOR PARTITION</b> *G2: 5/8" MOISTURE-RESISTANT GWB @ DAMP LOCATIONS (BATHS) *G3: 5/8" TILE BACKER & TILE

DOOR SCHEDULE								
MARK	DOOR SIZE		DOOR TYPE	FIRE RATING	HARDWARE GROUP	FINISH		COMMENTS
	WIDTH	HEIGHT				DOOR	FRAME	
LEVEL 1								
D01	8'-0"	10'-0"						
D02	8'-0"	7'-0"						
D03	3'-0"	7'-0"						

WINDOW SCHEDULE						
MARK	WINDOW SIZE		SILL HEIGHT	MATERIAL	FRAME TYPE	COMMENTS
	WIDTH	HEIGHT				
W01	4'-0"	4'-0"	3'-0"			





REV	DESCRIPTION	DATE

Drawn By:  
Drawing Title:

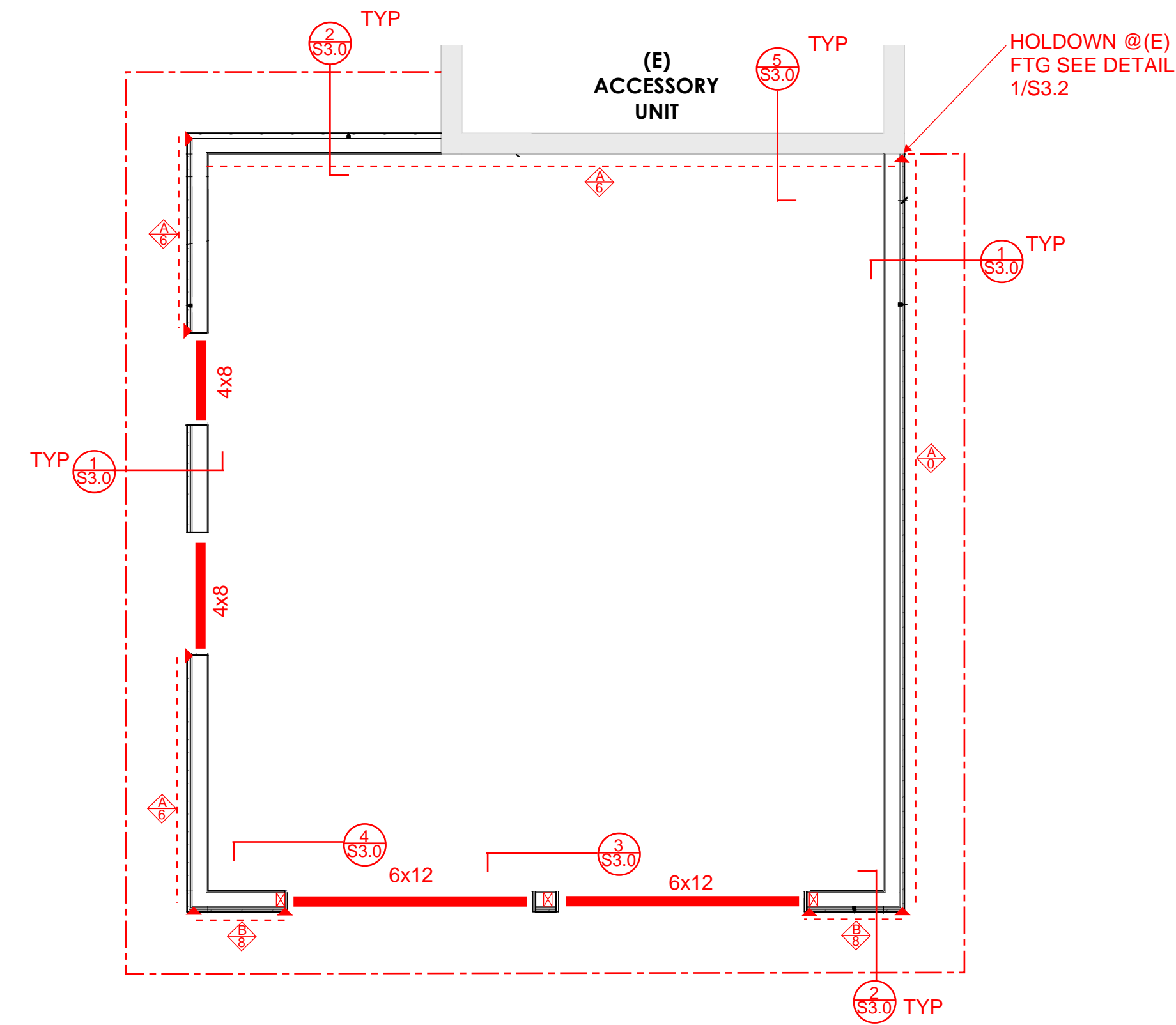
FRAMING PLAN  
Sheet **S2.0**

**FLOOR PLAN LEGEND**

	BEAM/HEADER, U.N.O.
	POST
	HOLD-DOWN LOCATION
	HANGER
	INDICATES SHEAR WALL AND HOLD-DOWN TYPE. SEE SCHEDULE ON SHEET S3.3

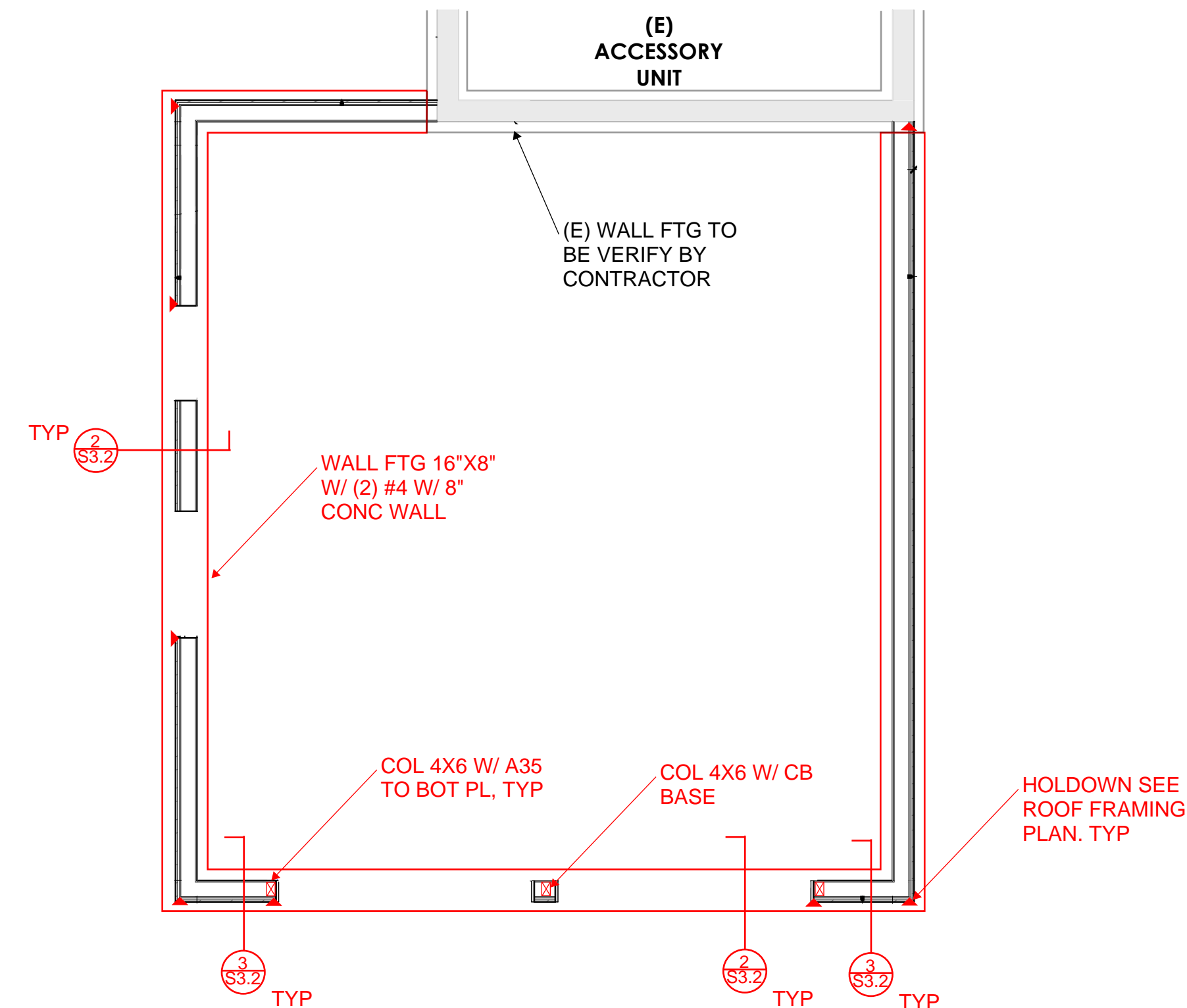
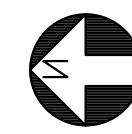
**PLAN NOTES:**

- SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. ALL DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. STRUCTURAL DRAWINGS ARE SCHEMATIC. DO NOT SCALE. CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR THE DEMOLITION.
- DIMENSIONS AND LOCATION OF EXISTING FOUNDATION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- ALL LOAD BEARING WALL WITH OUT SHEAR WALL TYPE SHOULD BE TYPE A.
- ALL 4" LOAD BEARING WALL SHOULD BE 2X4 HF#2 @ 16" O.C.
- ALL 6" LOAD BEARING WALL SHOULD BE 2X6 HF#2 @ 16" O.C.
- ALL POST SHALL BE DF#2 U.N.O.
- ALL BEAM AND HEADER SHOULD BE HF#2 U.N.O.
- ALL SHEAR WALL DOES NOT LINE UP ABOVE, HOLDOWN SHOULD BE CONTINUOUS AND CONNECTED TO BEAM OR/AND FOUNDATION.
- ALL BEAM AT TOP PLATE/WALL CONNECTION SEE DETAIL 5/S3.3.
- TYPICAL STAIR AND STAIR LANDING DETAIL SEE DWG 10/S3.1 - 15/S3.1



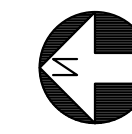
**ROOF FRAMING PLAN**

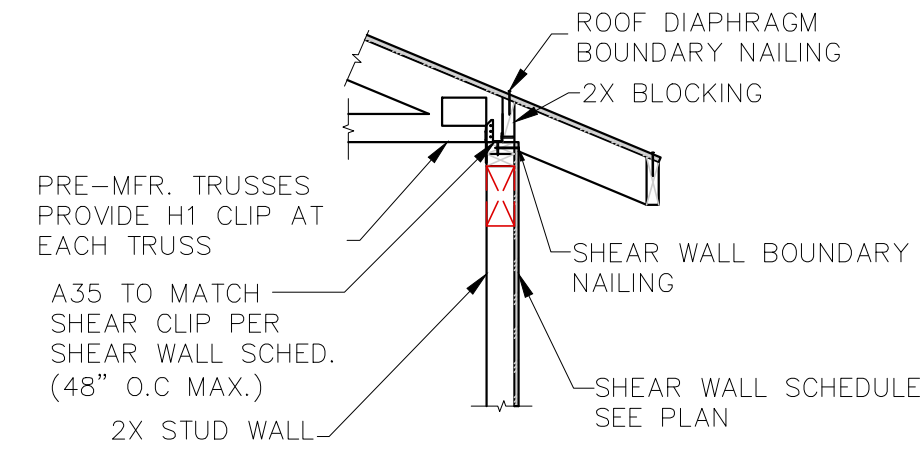
24x36 SCALE 1/4" = 1'-0"



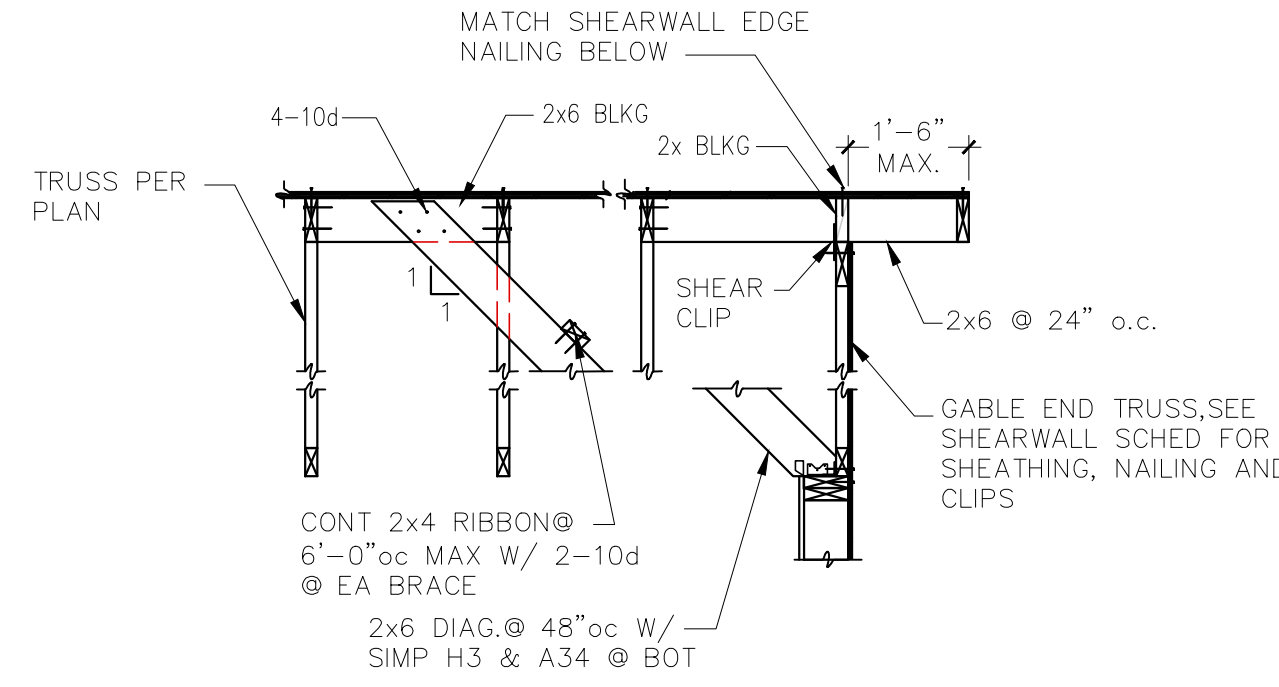
**FOUNDATION PLAN**

24x36 SCALE 1/4" = 1'-0"

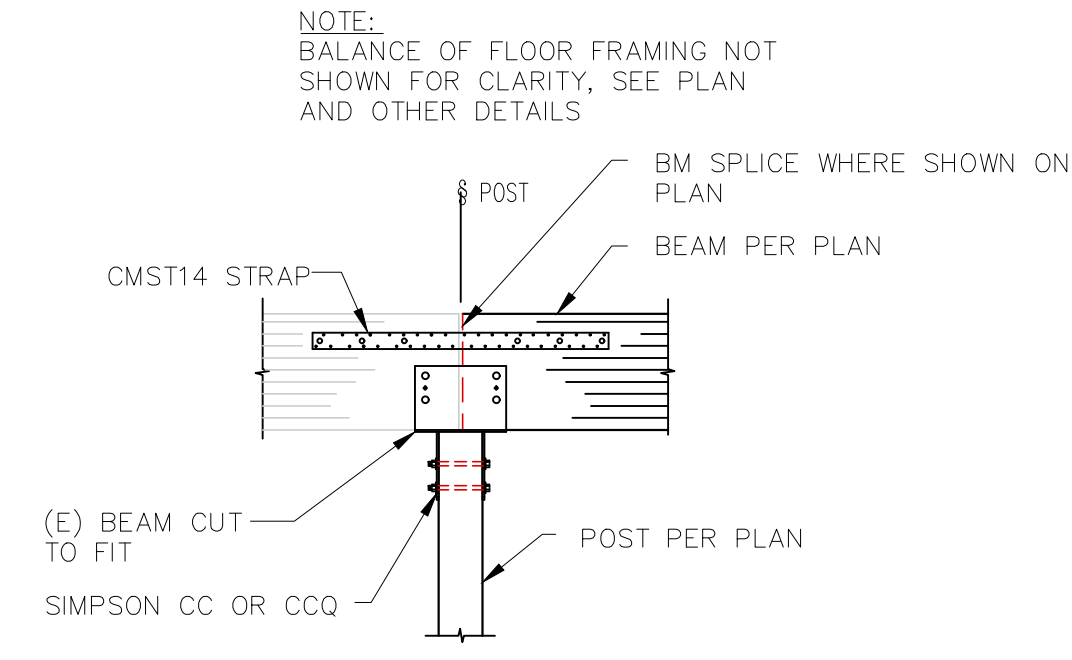




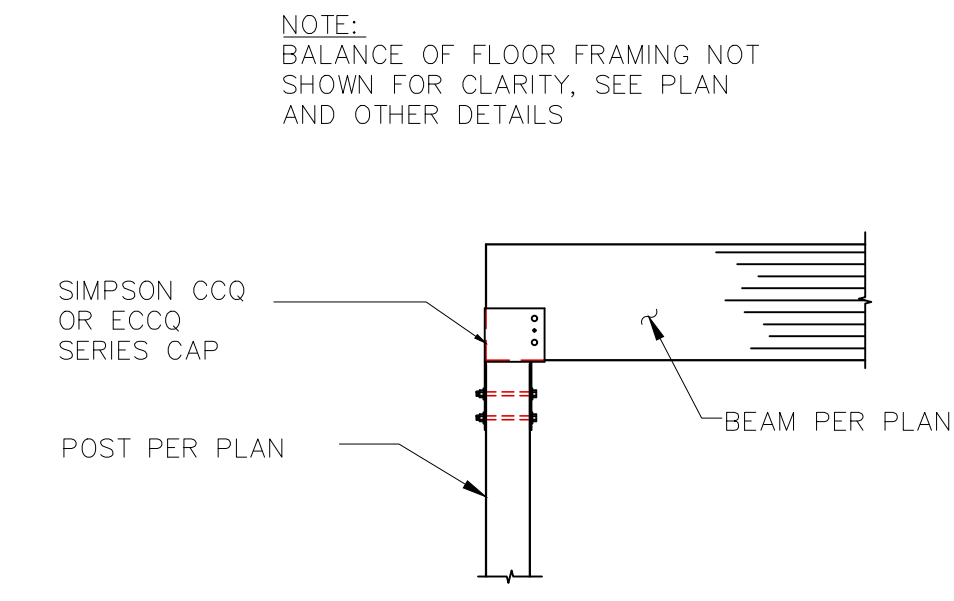
1 TYP. TRUSS PERP. TO SHEAR WALL  
SCALE:



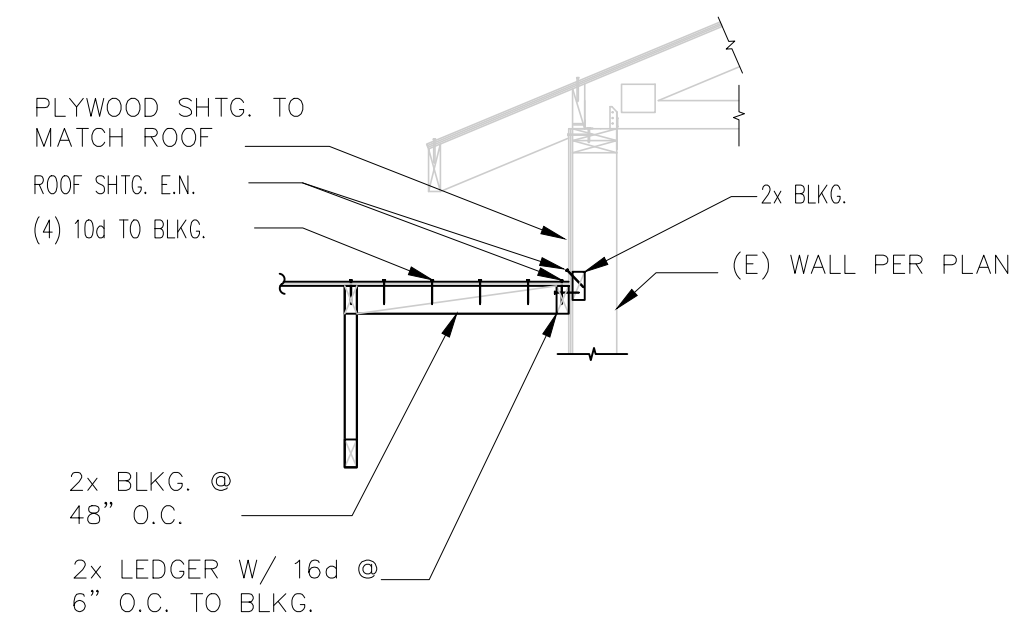
2 TYP. GABLE END ROOF CONNECTION  
SCALE:



3 TYP. COL TO BM CONN.  
SCALE: 1/2"=1'-0"



4 TYP. COL TO BM END CONN.  
SCALE: 1/2"=1'-0"



5 GIRDER TRUSS @ (E) WALL CONNECTION  
SCALE:

**F.T. ENG. & CONST. MGMT., LLC**  
PHONE: 5098220489  
EMAIL: F.T.ENG.CM@GMAIL.COM



**4620 Mercer Garage**  
4620 88th Ave SE  
Mercer Island, WA 9804

JOB # 2025029

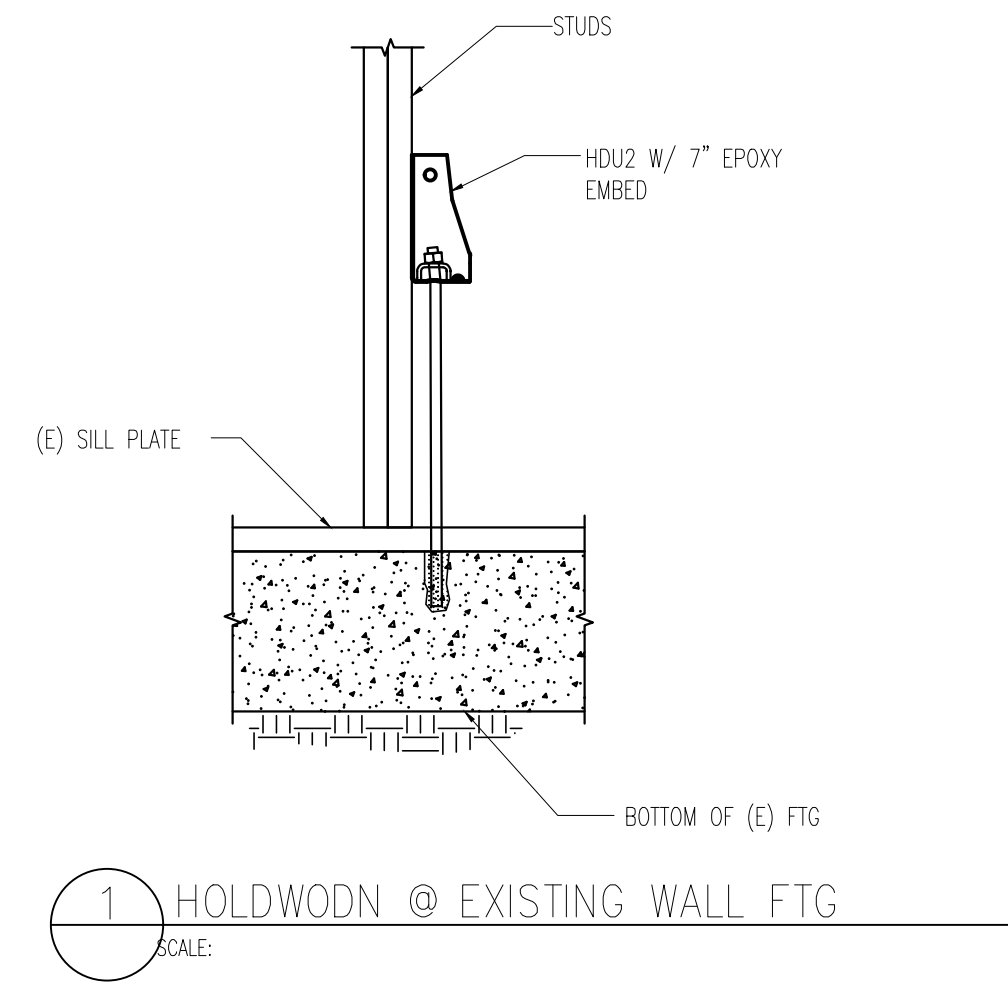
REV	DESCRIPTION	DATE

Drawn By:  
Drawing Title:

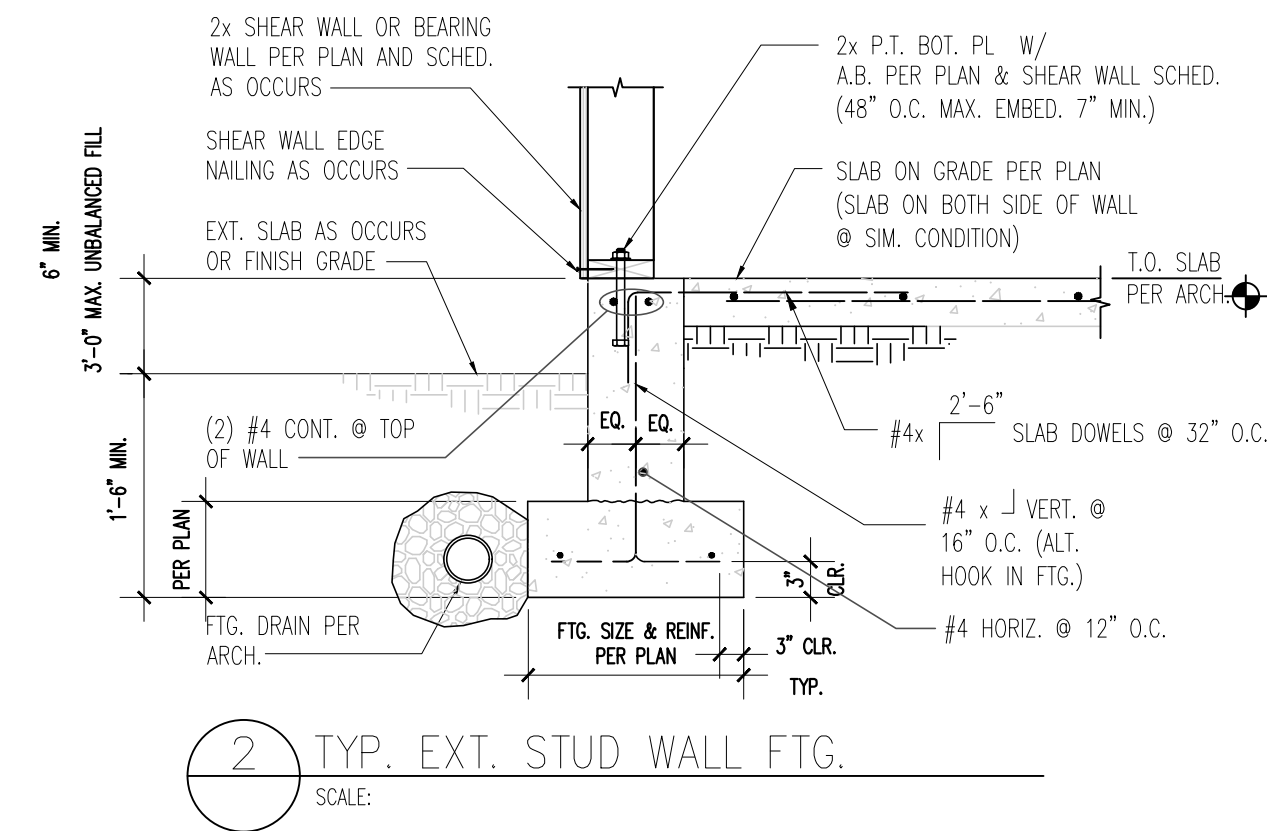
TYPICAL STRUCTURAL  
DETAILS

Sheet  
**S3.0**

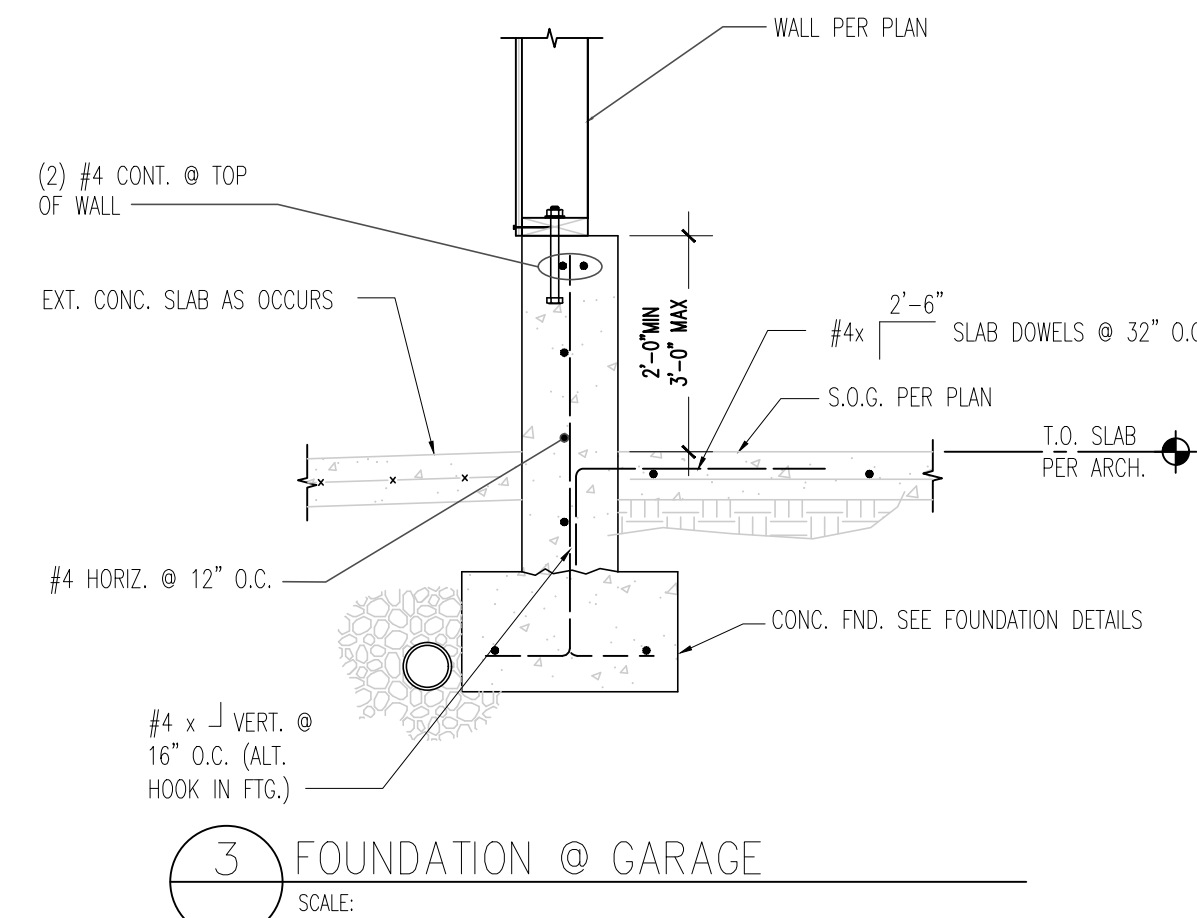




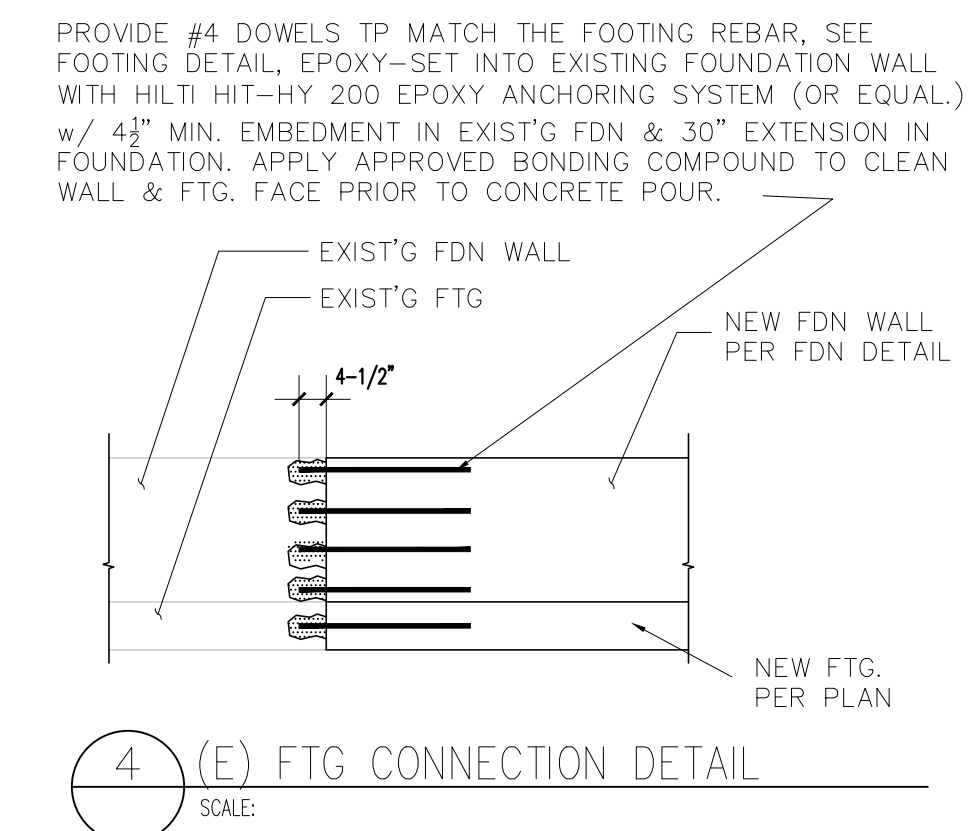
1 HOLDWODN @ EXISTING WALL FTG  
SCALE:



2 TYP. EXT. STUD WALL FTG.  
SCALE:



3 FOUNDATION @ GARAGE  
SCALE:



4 (E) FTG CONNECTION DETAIL  
SCALE:

PROVIDE #4 DOWELS TP MATCH THE FOOTING REBAR, SEE FOOTING DETAIL. EPOXY-SET INTO EXISTING FOUNDATION WALL WITH HILTI HIT-HY 200 EPOXY ANCHORING SYSTEM (OR EQUAL.) w/ 4 3/4\"/>



**F.T. ENG. & CONST. MGMT., LLC**  
PHONE: 5098220489  
EMAIL: F.T.ENG.CM@GMAIL.COM

**4620 Mercer Garage**  
4620 88th Ave SE  
Mercer Island, WA 9804

JOB # 2025029

REV	DESCRIPTION	DATE

Drawn By:  
Drawing Title:  
TYPICAL STRUCTURAL  
DETAILS

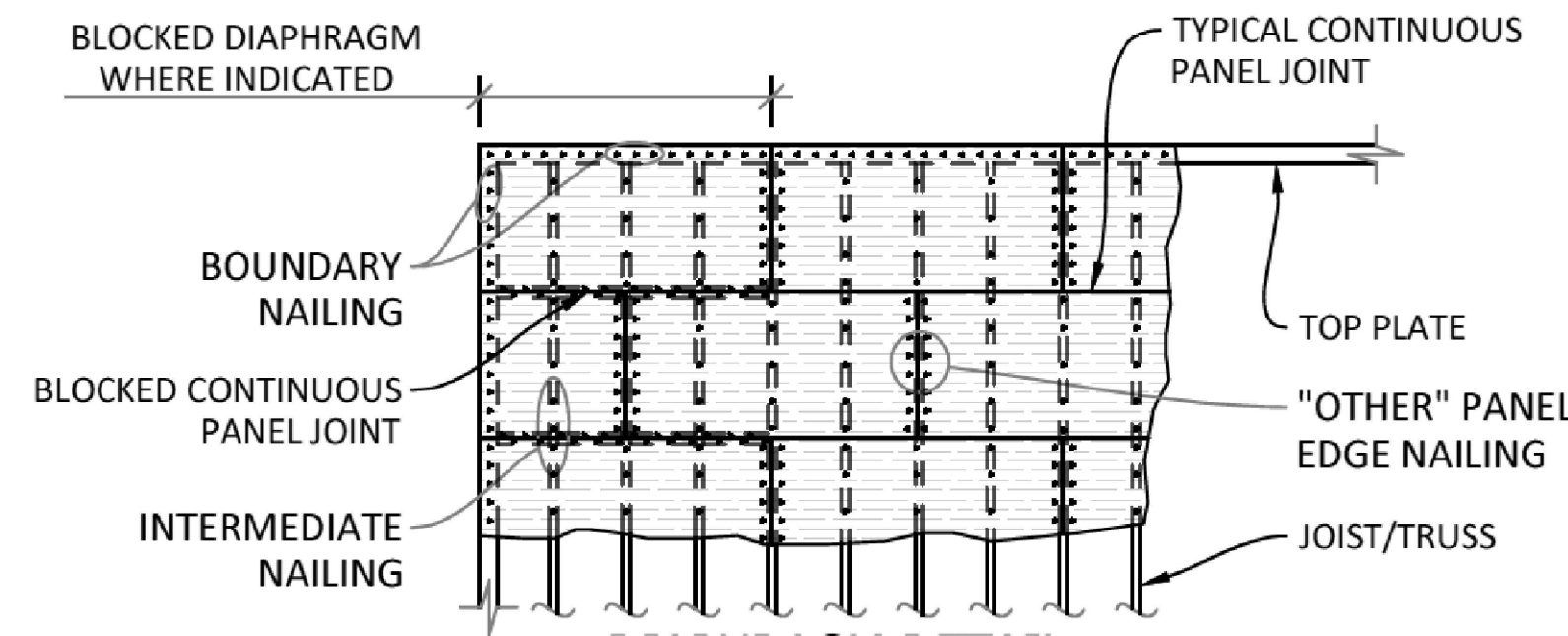
Sheet  
S3.2



DATE	DESCRIPTION	REV

Drawn By:  
 Drawing Title:

SHEAR WALL DETAILS

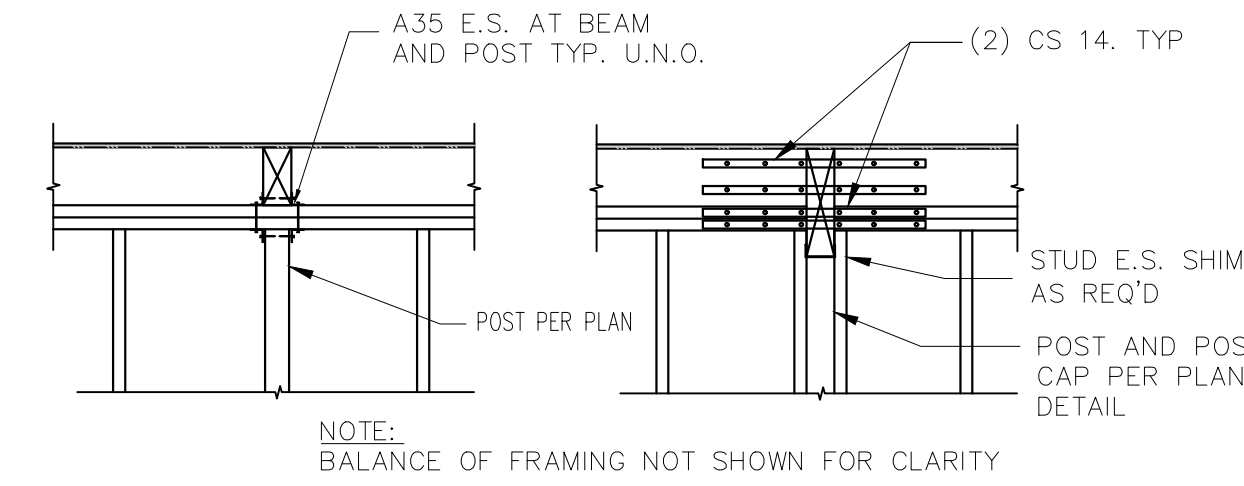


LOCATION	SHEATHING	BLKG REQD	SIZE OF NAIL	NAIL SPACING AT BOUNDARIES AND "OTHER" PANEL EDGES	NAIL SPACING AT INTERMEDIATE FRAMING MEMBERS	NAIL SPACING AT BLOCKED PANEL JOINTS
ROOF	SEE STRUCT	NO	10d	6" OC	12" OC	6" OC
SUB-FLR	NOTES	NO	10d & GLUE	4" OC	12" OC	4" OC

NOTE:  
 \*PROVIDE 1/8" GAP @ TYP. PANEL JOINT

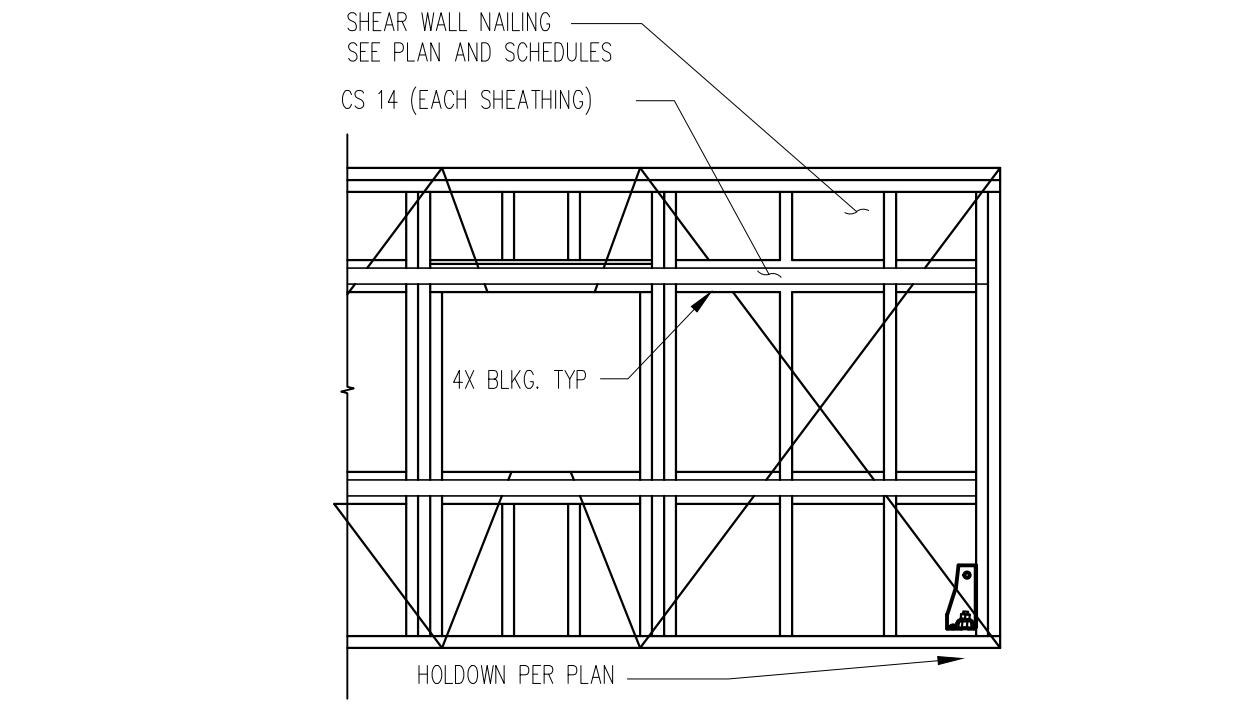
- DIAPHRAGM NOTES
- ALL DIAPHRAGM SHEATHING IS TO BE STAGGERED IN THE DIRECTION OF THE PLYWOOD SPAN PER DIAPHRAGM DETAIL.
  - PROVIDE BOUNDARY NAILING CONTINUOUS AROUND THE ENTIRE PERIMETER OF THE DIAPHRAGM
  - NAILS SHALL BE COMMON OR GALVANIZED BOX
  - ALL FRAMING MEMBERS SHALL BE 2x MINIMUM NOMINAL WIDTH

1 TYP. PLY. DIAPHRAGM NAILING  
 SCALE 1/4" = 1'-0"

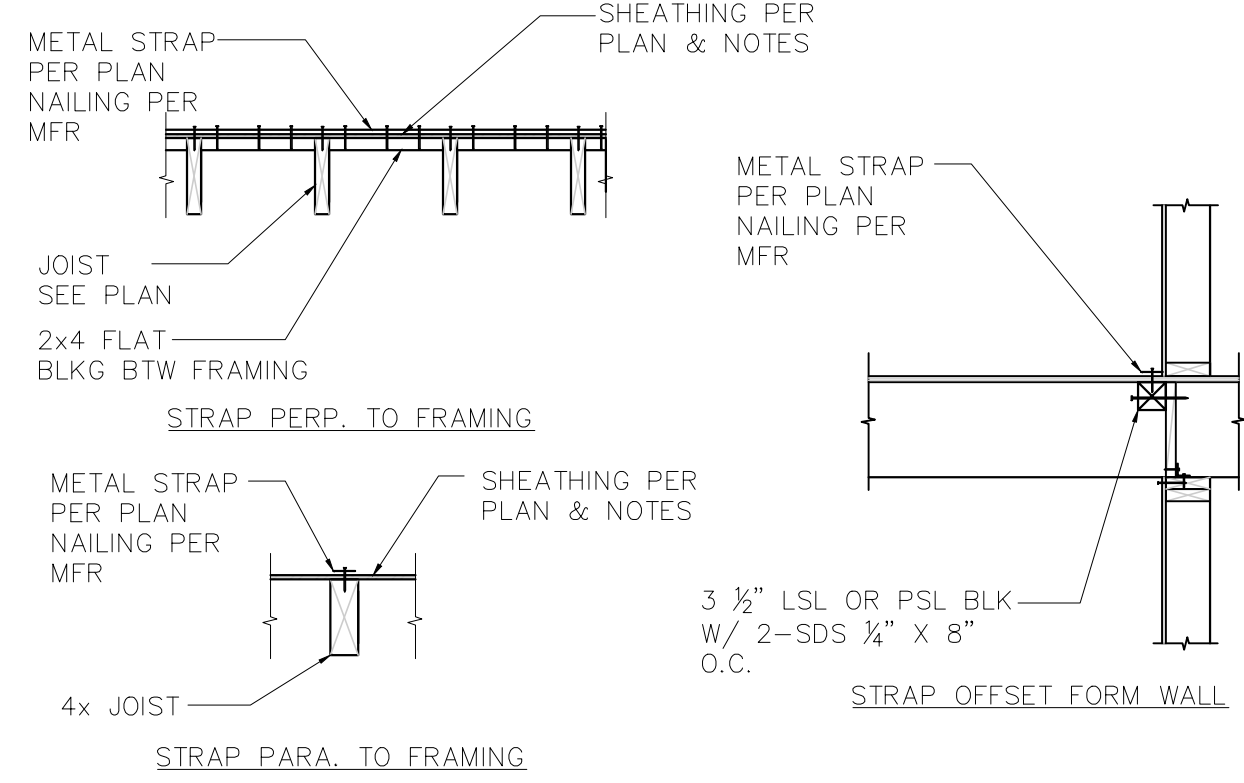


NOTE:  
 BALANCE OF FRAMING NOT SHOWN FOR CLARITY

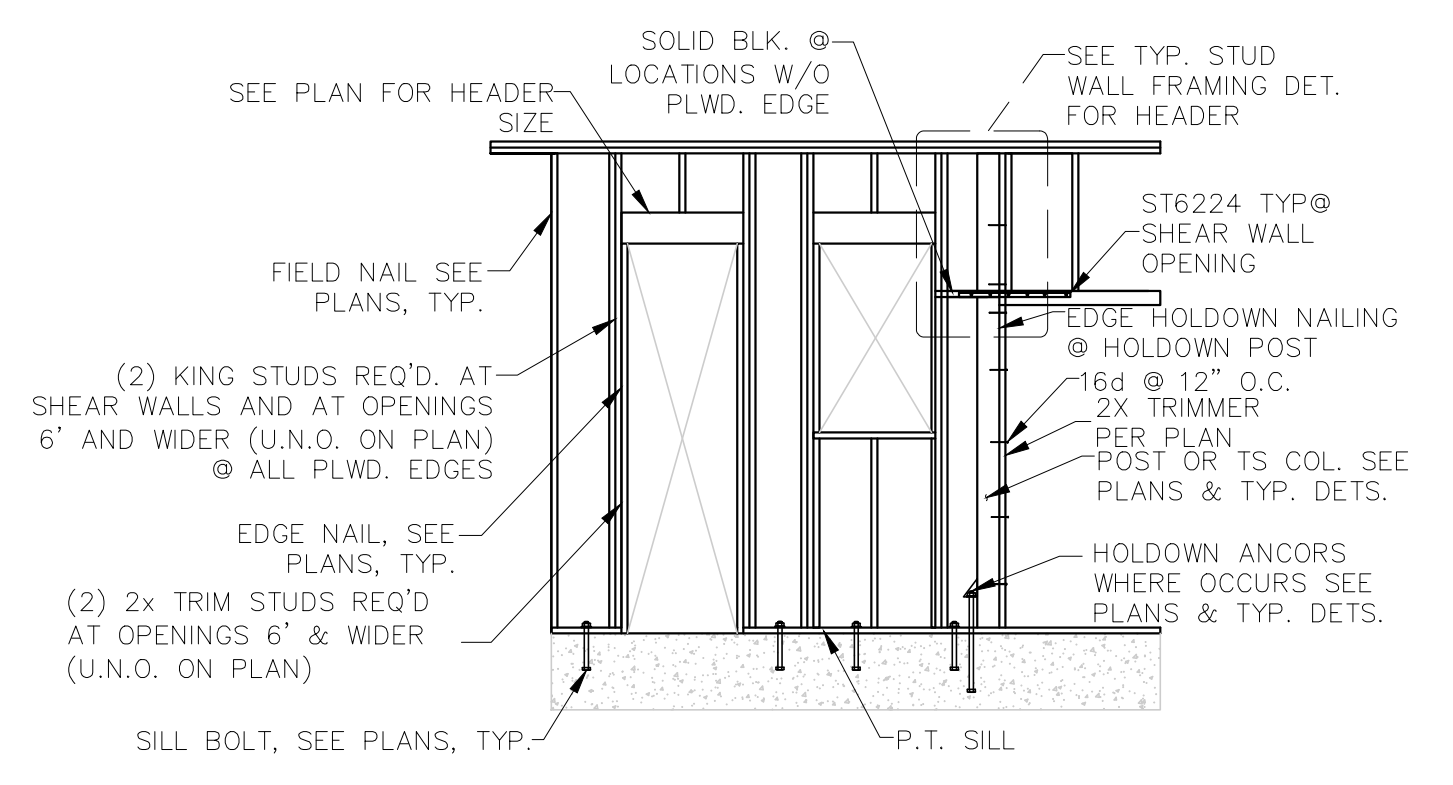
5 TYP. BEAM @ WALL CONNECTION  
 SCALE NTS



6 TYP. PERFORATED SHEAR WALL  
 SCALE NTS



7 TYP. COIL STRAP AT FRAMING  
 SCALE NTS



WIDTH OF OPENING	8'-0"	6'-0"	4'-0"
NUMBER OF TRIMMERS	3	2	1
NUMBER OF KING STUD	4	3	2

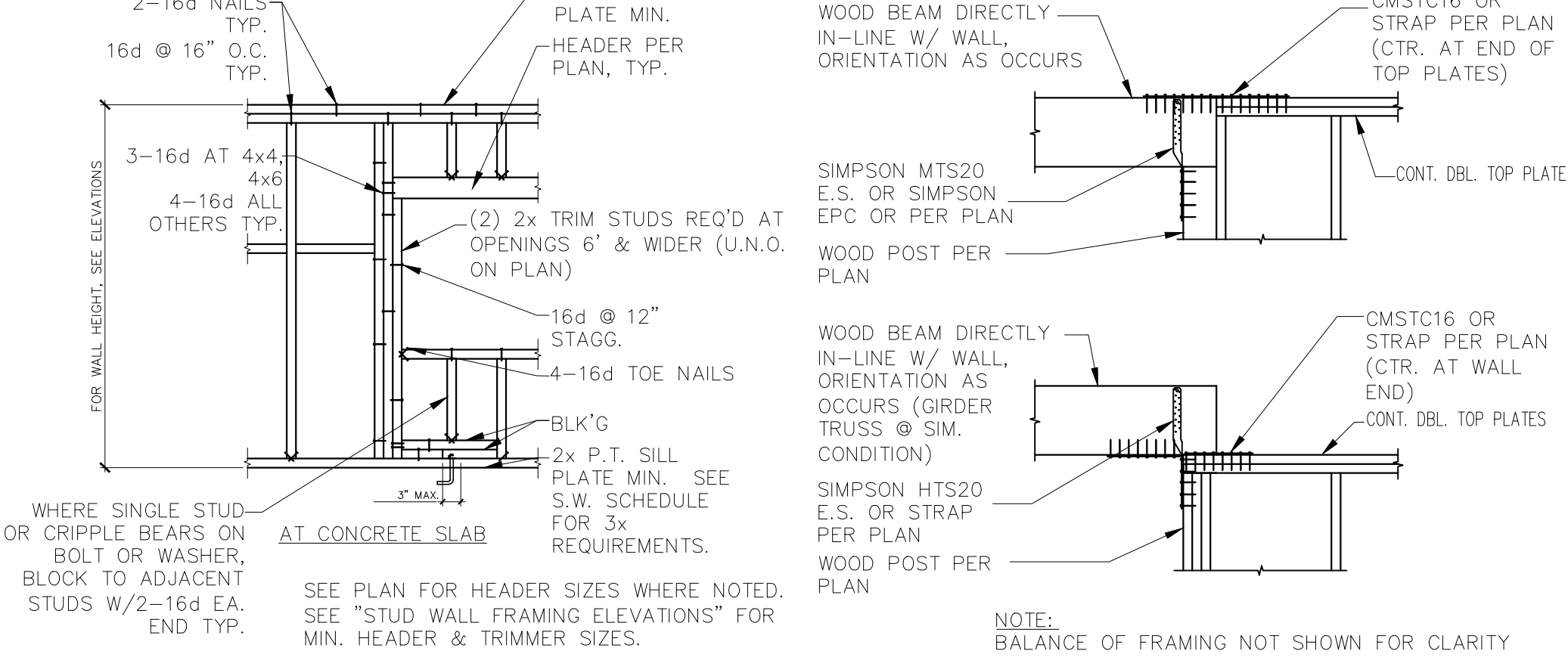
- NOTES:
- USE 2x6 AT 16" O.C. AT ALL EXTERIOR WALLS.
  - SEE PLANS FOR SPECIAL FRAMING REQUIREMENTS.
  - HEADER SIZES SHOWN IN SCHEDULES ABOVE ARE MINIMUM HEADER SIZES, SEE PLANS FOR WHERE LARGER HEADER SIZES ARE REQUIRED.
  - IF CALLED OUT STUD HEIGHTS AT ANY GIVEN FLOOR LEVEL EXCEED LIMITATIONS, CONTACT STRUCTURAL ENGINEER FOR CLARIFICATION.
  - TRIMMERS AT 4x4 USE 1-4x4 AND 1-2x4 AND AT 3x4 USE 1-3x4 AND 1-2x4.
  - NAIL TRIMMERS TOGETHER W/ 16d NAILS @ 12" O.C. STAGGERED EACH FACE.
  - SEE PLANS FOR SHEAR WALL FRAMING REQUIREMENTS.

2 TYP. SHEAR WALL FRAMING  
 SCALE NTS

MARK	SHEATHING	SIDE	PANEL NAILING			PANEL BLOCKING	BOT PLATE FASTENING	SILL PLATE	ANCHOR BOLTS (MIN. 7" EMBED)	SHEAR CLIP	VALUE (PLF)
			SIZE	EDGE	FIELD						
A	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	ONE	8d	6" O.C.	12" O.C.	2x	16d @ 6"OC	2x	5/8" x 10" @ 48" O.C. OR UFP10-SDS3 @ 48" O.C.	SIMPSON LTP4/A35 @ 18" O.C.	230
B	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	ONE	8d	4" O.C.	12" O.C.	3x	16d @ 4"OC	3x (2) 2x	5/8" x 12" @ 42" O.C. OR UFP10-SDS3 @ 42" O.C.	SIMPSON LTP4/A35 @ 18" O.C.	380
C	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	ONE	8d	3" O.C.	12" O.C.	3x	16d @ 3"OC	3x (2) 2x	5/8" x 12" @ 36" O.C. OR UFP10-SDS3 @ 36" O.C.	SIMPSON LTP4/A35 @ 16" O.C.	420
D	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	ONE	10d	3" O.C.	12" O.C.	3x	16d @ 3"OC	3x (2) 2x	5/8" x 12" @ 24" O.C. OR UFP10-SDS3 @ 24" O.C.	SIMPSON LTP4/A35 @ 12" O.C.	560
E	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	TWO	8d	6" O.C.	12" O.C.	3x	(2) ROW 16d @ 6"OC	3x (2) 2x	5/8" x 12" @ 32" O.C.	SIMPSON LTP4 & A35. @ 24" O.C.	520
F	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	TWO	8d	4" O.C.	12" O.C.	3x	(2) ROW 16d @ 4"OC	3x (2) 2x	5/8" x 12" @ 24" O.C.	SIMPSON LTP4 & A35. @ 16" O.C.	760
G	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	TWO	8d	3" O.C.	12" O.C.	3x	(2) ROW 16d @ 3"OC	3x (2) 2x	5/8" x 12" @ 16" O.C.	SIMPSON LTP4 & A35. @ 12" O.C.	980
H	15/32" APA RATED SHEATHING WITH STUDS @ 16" O.C.	TWO	10d	3" O.C.	12" O.C.	3x	(2) ROW 16d @ 3"OC	3x (2) 2x	5/8" x 12" @ 12" O.C.	SIMPSON LTP4 & A35. @ 9" O.C.	1,200

- NOTES:
- SOME SHEAR WALLS LISTED MAY NOT BE USED IN THIS PROJECT. REFER TO PLAN FOR TYPES USED.
  - 8d NAIL = 2 1/2" x 0.131" COMMON OR 2 1/2" x 0.113" GALVANIZED BOX. 10d NAIL = 3" x 0.148" COMMON OR 3" x 0.128" GALVANIZED BOX.
  - IF ANCHOR BOLT SPACING IS GREATER THAN SHEAR WALL LENGTH INSTALL (1) ANCHOR BOLT WITHIN 12" OF EACH END.
  - NAIL SIZES SHOWN ARE FOR COMMON NAILS OR GALVANIZED BOX. POWER DRIVEN NAILS SHALL COMPLY WITH ESR 1539 FOR RECOMMENDED SPACING AND INSTALLATION TO COMPLY WITH THE ABOVE SHEAR WALL SCHEDULE.
  - SILL PLATE ANCHORS SHALL INCLUDE A STEEL PLATE WASHER NOT LESS THAN 0.229"x3"x3" IN SIZE PER AF&PA SDPWS SECTION 4.3.6.4.3. THE HOLE IN THE PLATE WASHER SHALL BE PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1-3/4". PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. THE PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE(S) WITH SHEATHING.
  - IN SEISMIC DESIGN CATEGORY D, E, OR F, WHERE SHEAR DESIGN VALUES EXCEED 700 POUNDS PER LINEAR FOOT (350 PLF ASD), ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A SINGLE 3-INCH NOMINAL MEMBER, OR TWO 2-INCH NOMINAL MEMBERS FASTENED TOGETHER IN ACCORDANCE WITH SECTION 2306.1 TO TRANSFER THE DESIGN SHEAR VALUES BETWEEN FRAMING MEMBERS. WOOD STRUCTURAL PANEL JOINT AND SILL PLATE NAILING SHALL BE STAGGERED IN ALL CASES.
  - WHERE PANELS ARE APPLIED TO BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. ALTERNATIVELY, THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS SHALL BE 3" NOMINAL OR GREATER AT ADJOINING PANEL EDGES AND NAILS AT ALL PANEL EDGES SHALL BE STAGGERED.
  - SHEAR WALL NAILING MUST BE INSTALLED SUCH THAT THE NAIL HEAD OR CROWN IS FLUSH WITH THE SURFACE OF SHEATHING. OVERDRIVEN OR OVER PENETRATED NAILS WILL NOT BE ALLOWED OR COUNTED AS APPROPRIATE NAILING.

SHEAR WALL SCHEDULE  
 SCALE NTS



3 TYP. STUD WALL OPENING FRAMING  
 SCALE NTS

4 TYP. TIE STRAP CONN. DETAILS  
 SCALE NTS

MARK	HOLDOWN	WOOD MEMBER	WOOD FASTENER	ANCHOR BOLT	ANCHOR BOLT EMBEDMENT (IN)	COMMENTS SEE NOTES BELOW	VALUE (LBS)
0	NONE REQUIRED						
1	SIMPSON MST37	(2) 2x	(22) 16d NAILS 1/2 TOP & BOT.	N/A	N/A	WRAP & NAIL STRAP TO BEAM/HEADER BELOW AS REQUIRED	2,135
2	SIMPSON MST48	(2) 2x	(32) 16d NAILS 1/2 TOP & BOT.	N/A	N/A	WRAP & NAIL STRAP TO BEAM/HEADER BELOW AS REQUIRED	3,425
3	SIMPSON MST60	(2) 2x	(48) 16d NAILS 1/2 TOP & BOT.	N/A	N/A	WRAP & NAIL STRAP TO BEAM/HEADER BELOW AS REQUIRED	4,830
4	SIMPSON CMST12	(1) 4x	(86) 16d NAILS 1/2 TOP & BOT.	N/A	N/A	WRAP & NAIL STRAP TO BEAM/HEADER BELOW AS REQUIRED 39" END LENGTH	9,215
5	SIMPSON LSTHDB OR LSTHDBRJ	(2) 2x SEE NOTES	(24) 16d SINKERS	N/A	8"	SEE NOTES 1, 2, 3, AND 4 USE (3) 2x AT CORNERS	1,220
6	SIMPSON HDU2-SDS2.5	(2) 2x	(6) SIMPSON SDS SCREWS	5/8" DIA. SIMP. SSB16	12-5/8"	SEE NOTES 1, 2, 3, AND 4	2,215
7	SIMPSON HDU4-SDS2.5	(2) 2x	(14) SIMPSON SDS SCREWS	5/8" DIA. SIMP. SSB20	16-5/8"	SEE NOTES 1, 2, 3, AND 4	3,285
8	SIMPSON HDU5-SDS2.5	(2) 2x	(14) SIMPSON SDS SCREWS	5/8" DIA. SIMP. SSB24	20-5/8"	SEE NOTES 1, 2, 3, AND 4	4,340
9	SIMPSON HDU8-SDS2.5	(1) 4x	(20) SIMPSON SDS SCREWS	7/8" DIA. SIMP. SB7/8x24	18"	SEE NOTES 1, 2, 3, AND 4	5,820
10	SIMPSON HHD011-SDS2.5	(1) 6x	(24) SIMPSON SDS SCREWS	1" DIA. A307 THREADED ROD	de = 16" W = 48"	SEE NOTES 1, 2, 3, 4 AND 5	8,030
11	SIMPSON HHD014-SDS2.5	(1) 6x	(30) SIMPSON SDS SCREWS	1" DIA. A307 THREADED ROD	de = 16" W = 48"	SEE NOTES 1, 2, 3, 4 AND 5	12,375
12	SIMPSON HDU14-SDS2.5	(1) 6x	(36) SIMPSON SDS SCREWS	1" DIA. A307 THREADED ROD	de = 16" W = 48"	SEE NOTES 1, 2, 3, 4 AND 5	12,425

- NOTES:
- DOUBLE STUDS ARE REQUIRED AT HOLDOWNS UNLESS NOTED OTHERWISE. DOUBLE STUDS SHALL BE LAMINATED TOGETHER WITH 16d NAILS AT 6" O.C. FULL HEIGHT (TYPICAL).
  - PROVIDE HOLDOWN NOTED WITHIN 6" FROM EACH END OF EACH SHEAR WALL SHOWN ON PLANS.
  - ADD (2) EXTRA VERTICAL DOWEL WITH STANDARD HOOK IN FOOTING AT EACH ANCHOR BOLT LOCATION.
  - ADJUST FOOTING AND STEM WALL HEIGHT TO ACCOMMODATE ANCHOR BOLT EMBEDMENT REQUIREMENTS.
  - ADJUST FOOTING AND STEM WALL HEIGHT TO ACCOMMODATE ANCHOR BOLT EMBEDMENT REQUIREMENTS.
  - SEE THREADED ROD ANCHOR DETAIL.
  - FOR EXISTING STEM WALL, DRILL AND EPOXY ANCHOR. USE A307 THREADED ROD WITH SIMPSON SET-XP EPOXY. SEE PLANS AND DETAILS FOR REQUIRED EMBEDMENT.
  - ALL HOLDOWN ANCHORS AND BOLTS SHALL BE INSTALLED IN THE CORRECT LOCATION IN THE TOP OF THE CONCRETE WALL AND SECURED TO THE FORMS PRIOR TO CONCRETE INSTALLATION. THERE IS NO PRACTICAL SOLUTION TO POST-INSTALLED HOLDOWN ANCHORS IN THE TOP OF THE 8" CONCRETE STEM WALL. NO EPOXY OR MECHANICAL ANCHOR BOLT ALTERNATIVES WILL BE OFFERED FOR MISSING OR MISPLACED EMBEDDED ANCHORS. CONCRETE FOOTINGS AND STEM WALLS MAY HAVE TO BE REMOVED AT CONTRACTOR'S EXPENSE TO MITIGATE MISPLACED, MISALIGNED, OR MISSING HOLDOWN ANCHORS OR BOLTS.

HOLDOWN SCHEDULE  
 SCALE NTS

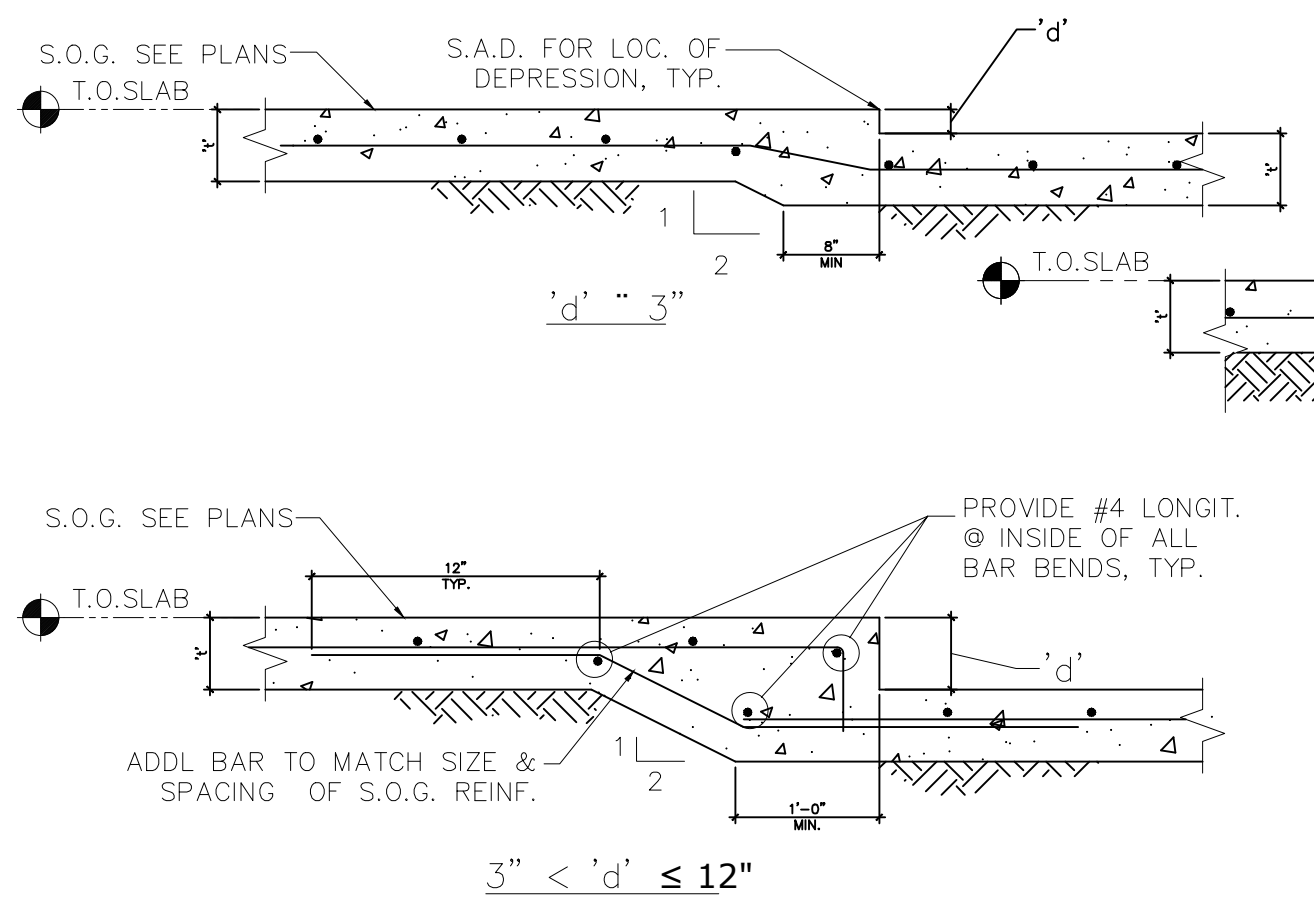


DATE	DESCRIPTION

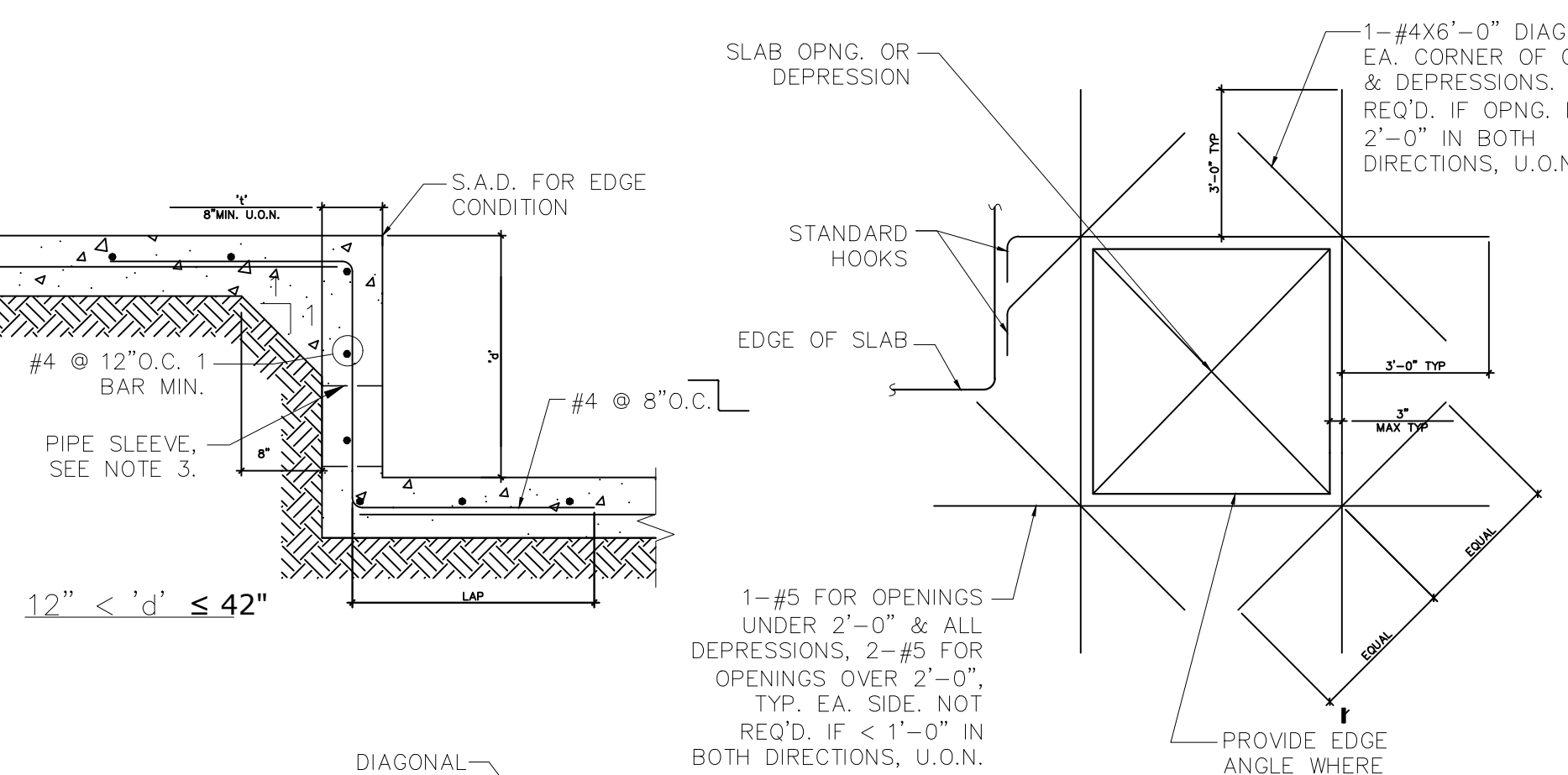
Drawn By:  
Drawing Title:

TYPICAL STRUCTURAL DETAILS

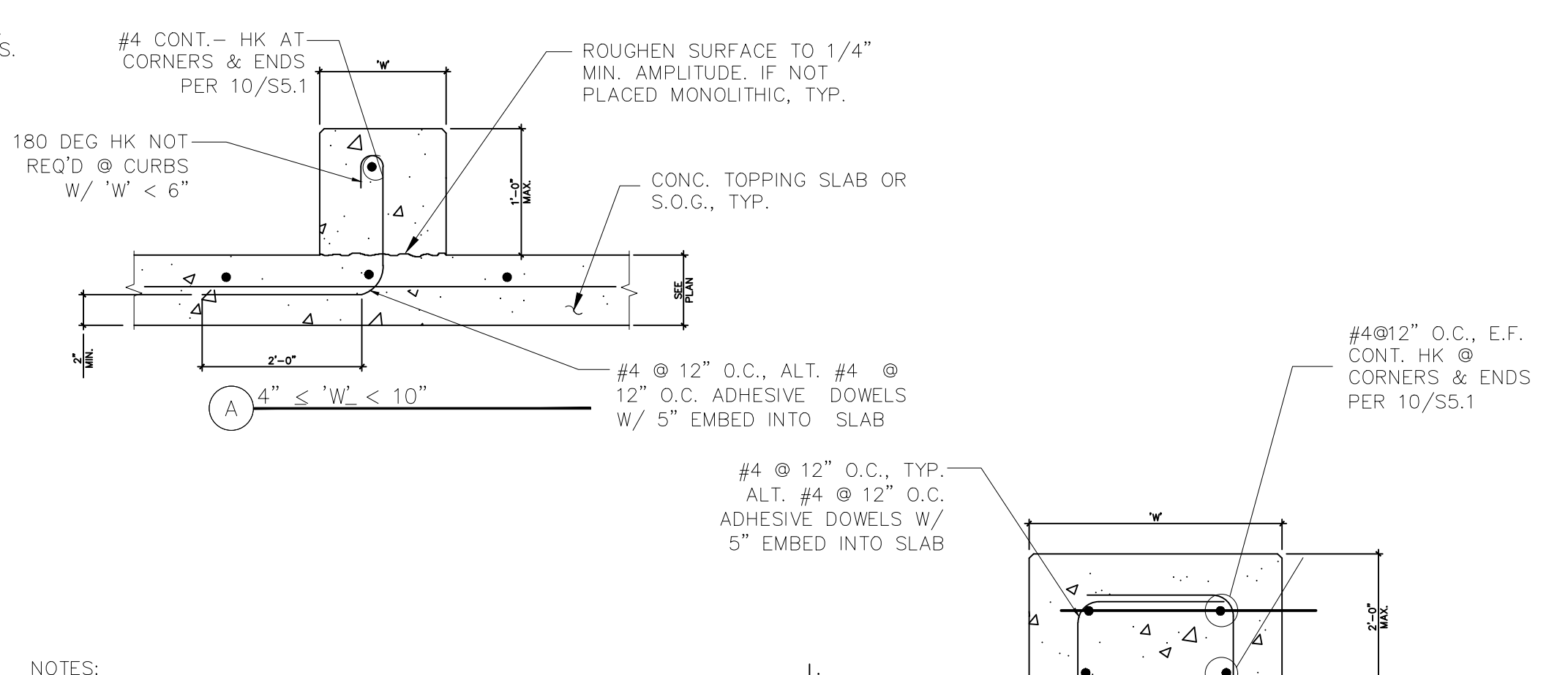
Sheet S3.4



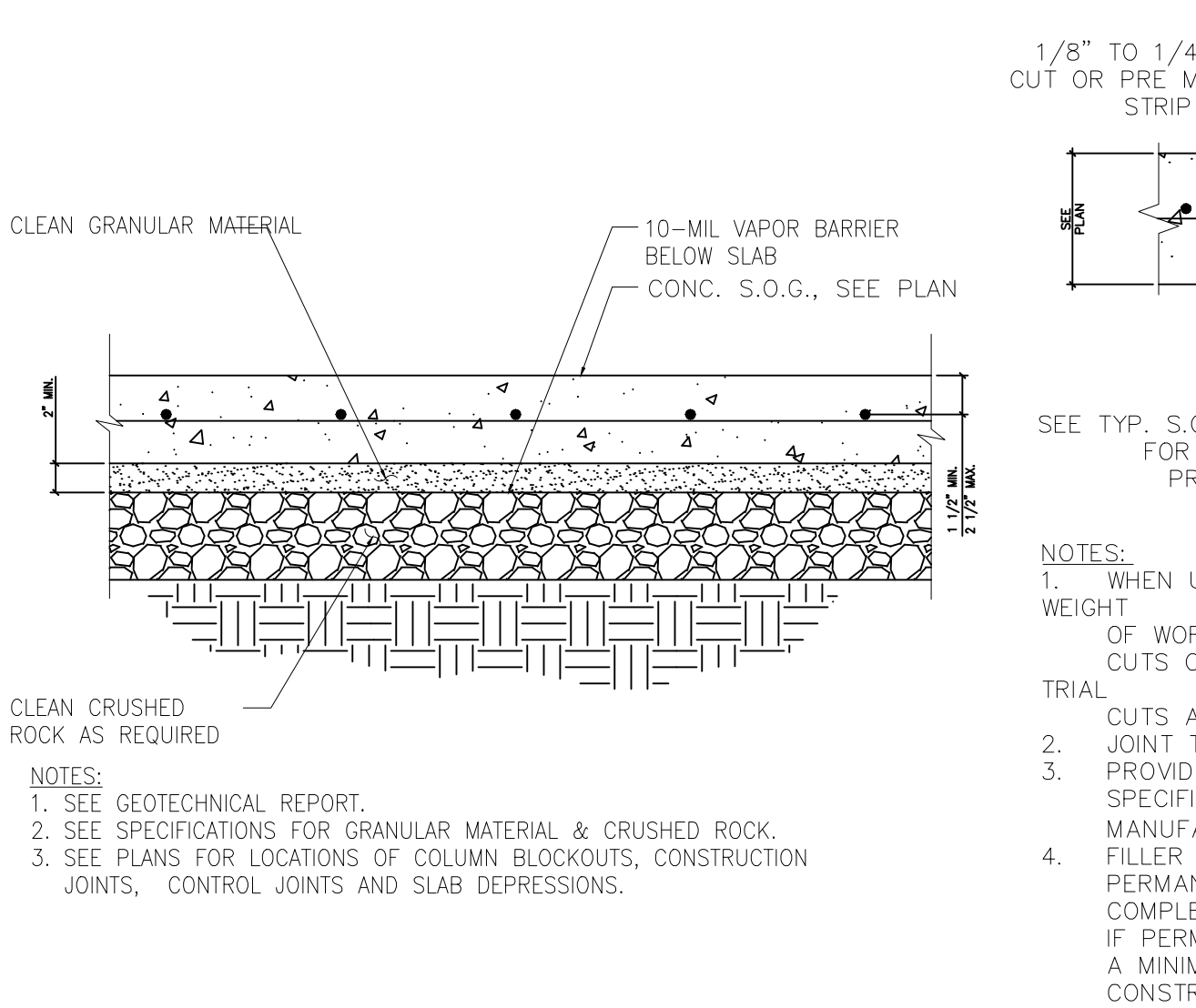
**1 SLAB ON GRADE DEPRESSION**  
SCALE: 1/2"=1'-0"



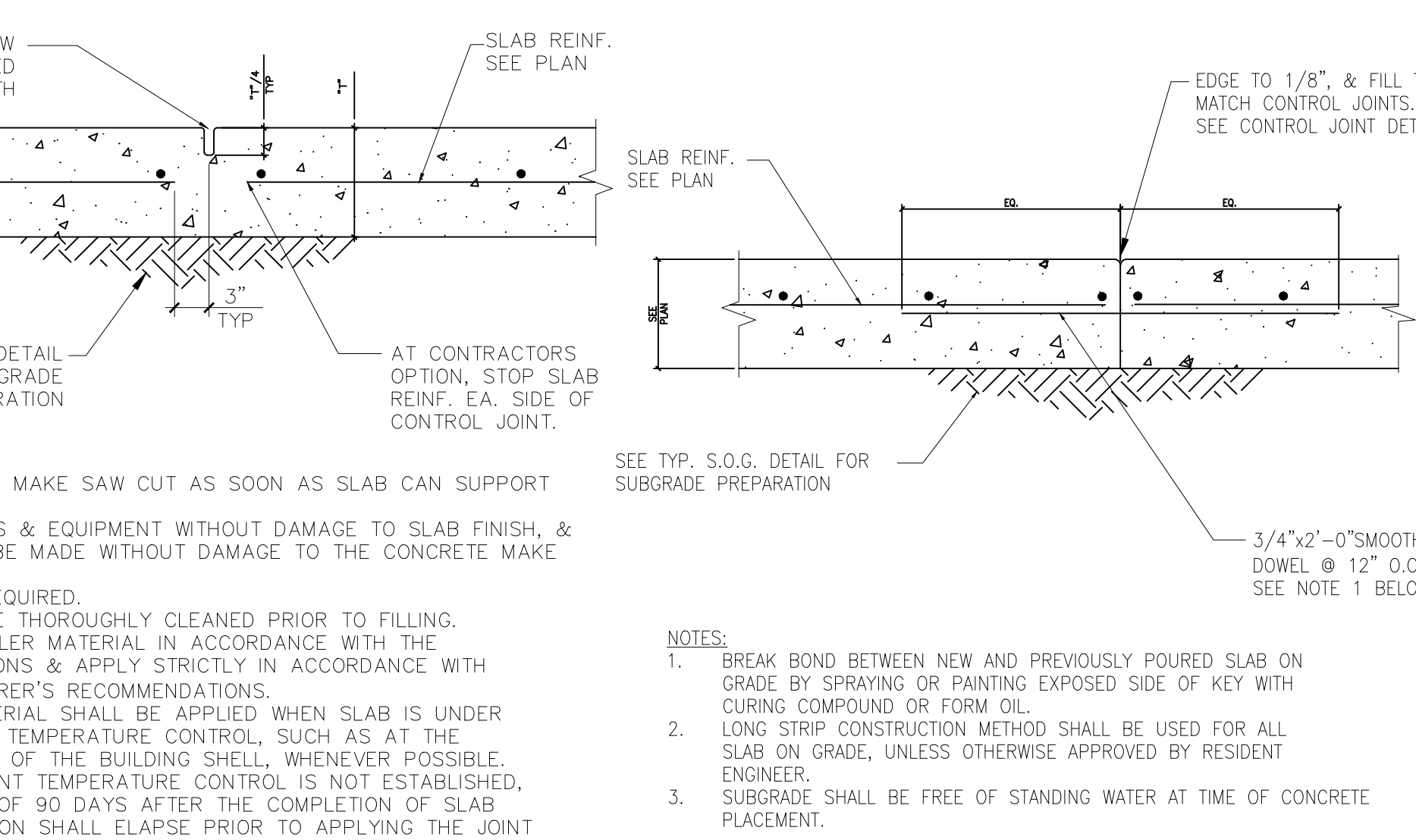
**2 SLAB PENETRATION REINFORCING**  
SCALE: 1/2"=1'-0"



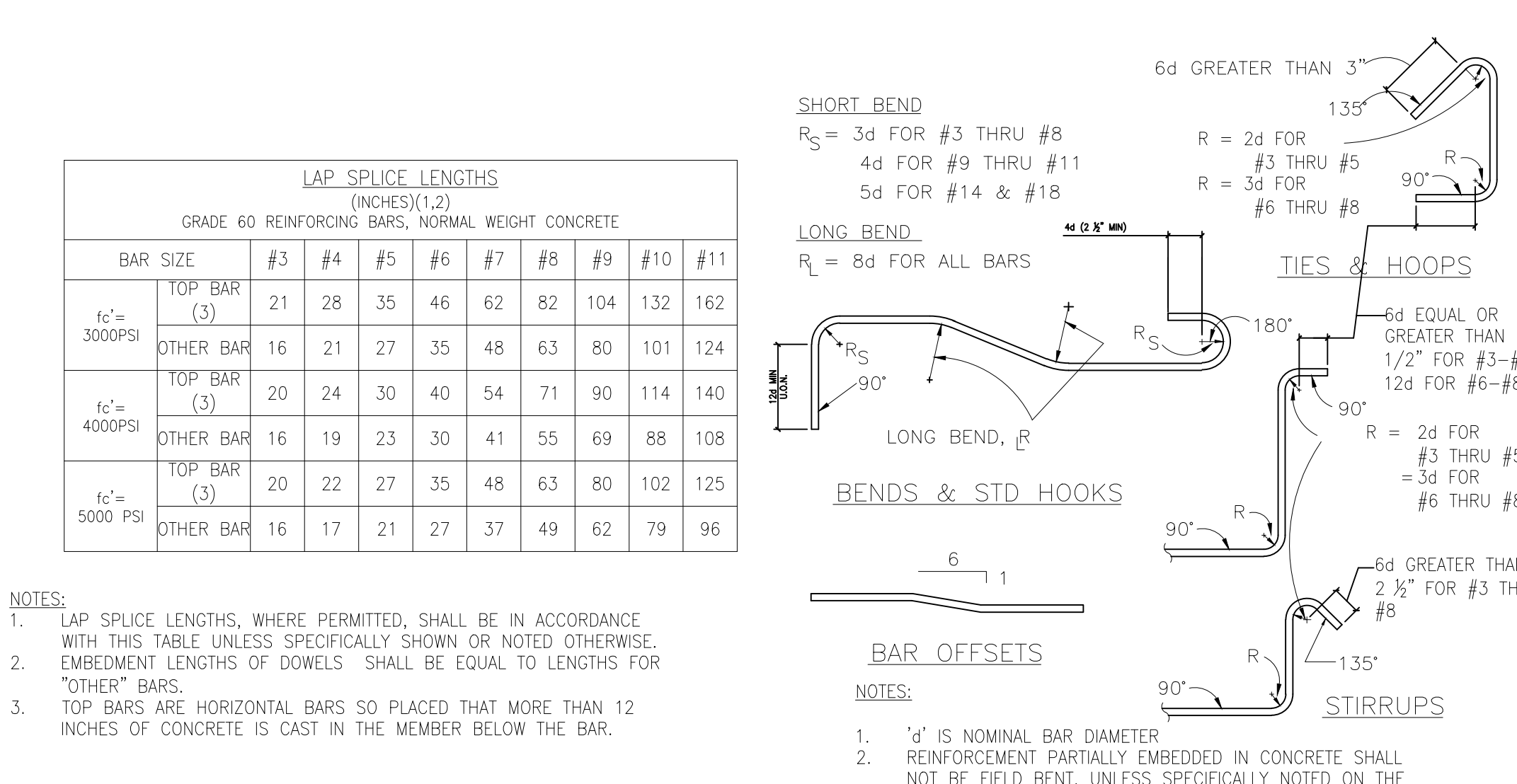
**3 TYPICAL RAISED CURBS & PADS**  
SCALE: 1/2"=1'-0"



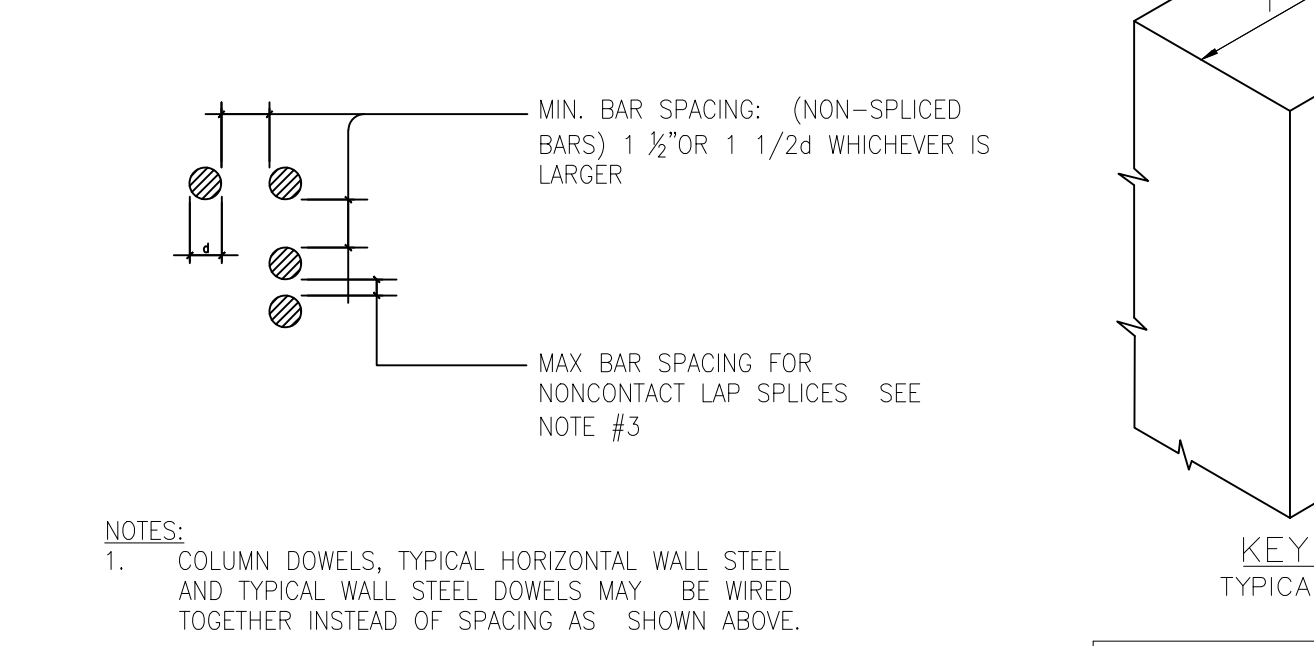
**4 TYP. SUBGRADE PREP. & SLAB ON GRADE DETAIL**  
SCALE: 1/2"=1'-0"



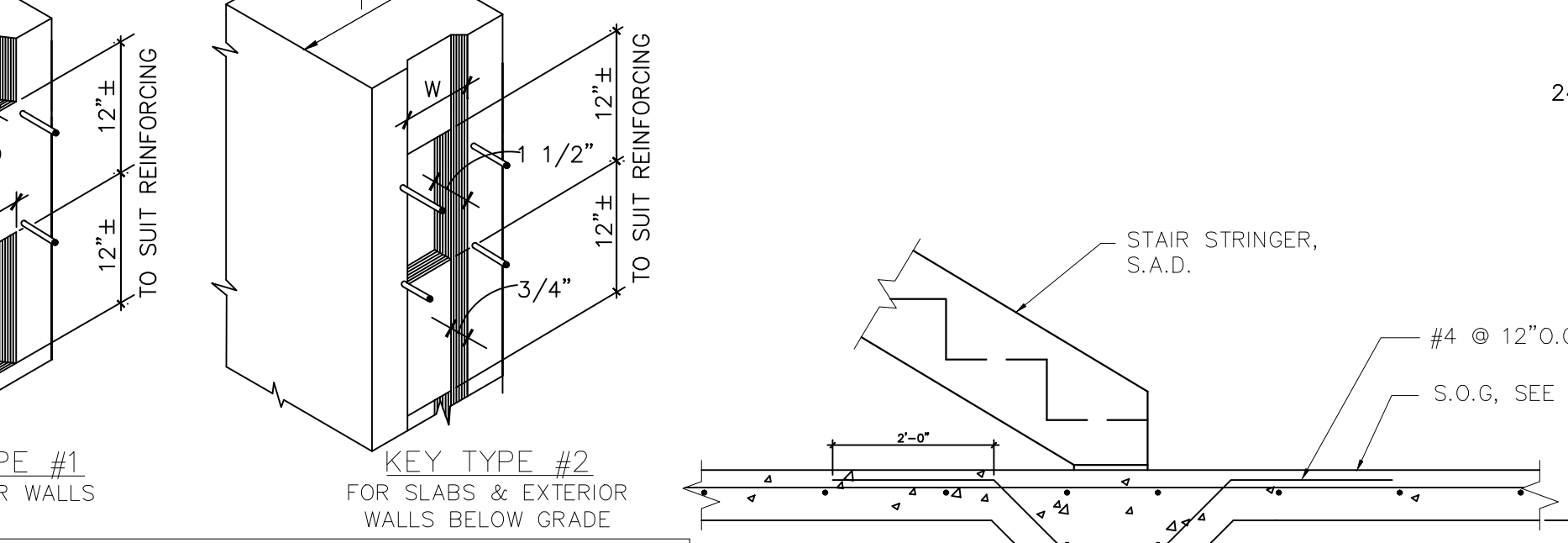
**5 CONTROL JOINTS AT SLAB ON GRADE**  
SCALE: 1/2"=1'-0"



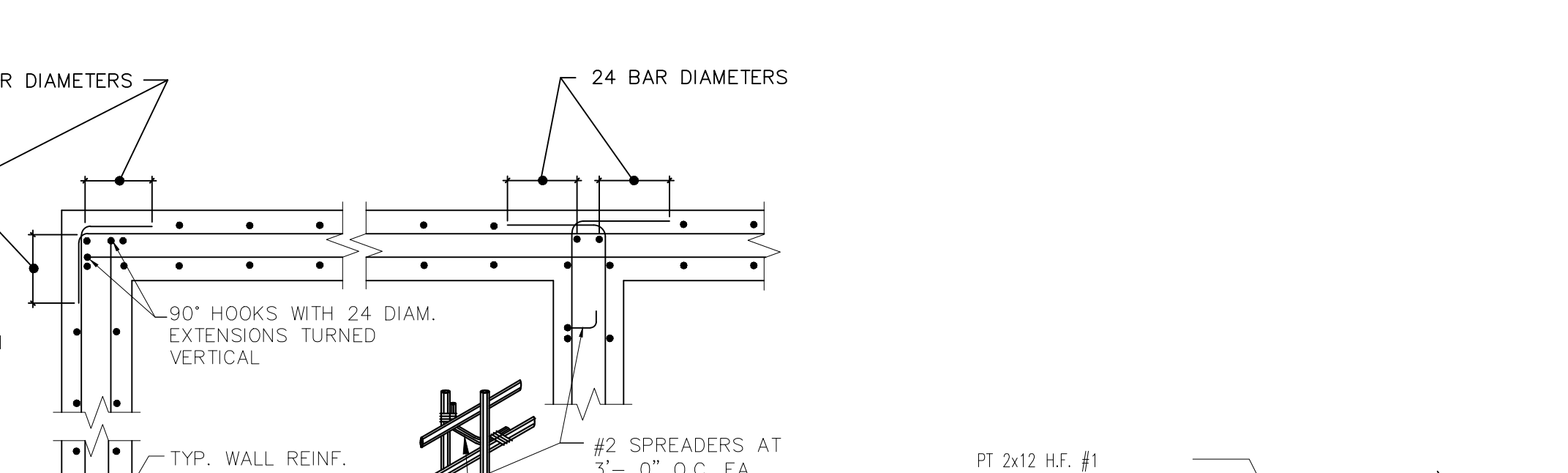
**6 CONSTRUCTION JOINTS AT SLAB ON GRADE**  
SCALE: 1/2"=1'-0"



**7 REINFORCING LAP SPICE TABLE**  
SCALE: NTS



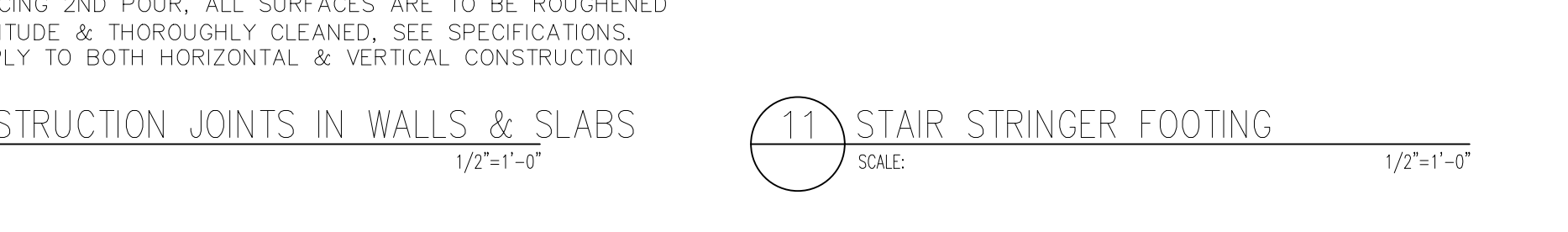
**8 HOOKS AND BENDS**  
SCALE: NTS



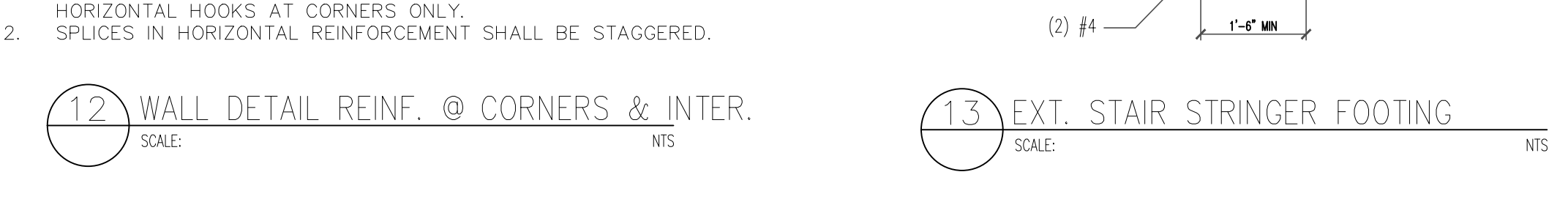
**9 BAR SPACING & SLAB ON GRADE DETAIL**  
SCALE: NTS



**10 CONSTRUCTION JOINTS IN WALLS & SLABS**  
SCALE: 1/2"=1'-0"



**11 STAIR STRINGER FOOTING**  
SCALE: 1/2"=1'-0"



**12 WALL DETAIL REINF. @ CORNERS & INTER.**  
SCALE: NTS



**13 EXT. STAIR STRINGER FOOTING**  
SCALE: NTS

		LAP SPICE LENGTHS (INCHES)(1,2)										
		GRADE 60 REINFORCING BARS, NORMAL WEIGHT CONCRETE										
BAR SIZE		#3	#4	#5	#6	#7	#8	#9	#10	#11		
f <sub>c</sub> ' = 3000PSI	TOP BAR (3)	21	28	35	46	62	82	104	132	162		
	OTHER BAR	16	21	27	35	48	63	80	101	124		
f <sub>c</sub> ' = 4000PSI	TOP BAR (3)	20	24	30	40	54	71	90	114	140		
	OTHER BAR	16	19	23	30	41	55	69	88	108		
f <sub>c</sub> ' = 5000 PSI	TOP BAR (3)	20	22	27	35	48	63	80	102	125		
	OTHER BAR	16	17	21	27	37	49	62	79	96		

KEY SCHEDULE					
T	W	D	T	W	D
EQUAL LESS THAN 6" WALL OR SLAB	1"	1 1/2"	13"	7 1/2"	1 1/2"
7"	7"	1 1/2"	14" TO 16"	9 1/2"	2 1/2"
8" TO 12"	5 1/2"	1 1/2"	18" & OVER	11 1/4"	2 1/2"