



Side Elevation



Milestone NW Mercer Island Lot 2

7619 SE 22nd ST. Mercer Island, WA 98040

DRAWING INDEX

- A1. CODE NOTES
- ALL. SITE PLAN
- C1. WATER, SEWER, AND DRAINAGE PLAN
- C2. DRIVEWAY AND GRADING PLAN
- C3. BOUNDARY AND TOPOGRAPHY MAP
- C4. WATER DETAILS
- A2.0. FOUNDATION PLAN
- A2.1. LOWER FLOOR PLAN
- A2.2. MAIN FLOOR FRAMING
- A3. MAIN FLOOR PLAN
- A4. LOWER ROOF & UPPER FLOOR FRAMING
- A5. UPPER FLOOR PLAN
- A6. UPPER ROOF FRAMING
- A7. ELEVATIONS
- A8. ELEVATIONS
- A9. BUILDING SECTIONS
- DI. STANDARD DETAILS
- EI. ENERGY FORMS
- S-0.0. STRUCTURAL NOTES
- SD-1. STRUCTURAL DETAILS
- SD-2. STRUCTURAL DETAILS
- SD-3. STRUCTURAL DETAILS

SQUARE FOOTAGE

MAIN FLOOR	1060 SF
UPPER FLOOR	1381 SF
LOWER	965 SF
TOTAL	3406 SF
GARAGE	424 SF
COV'D PORCH	28 SF
COV'D PATIO/DECK	51/120 SF

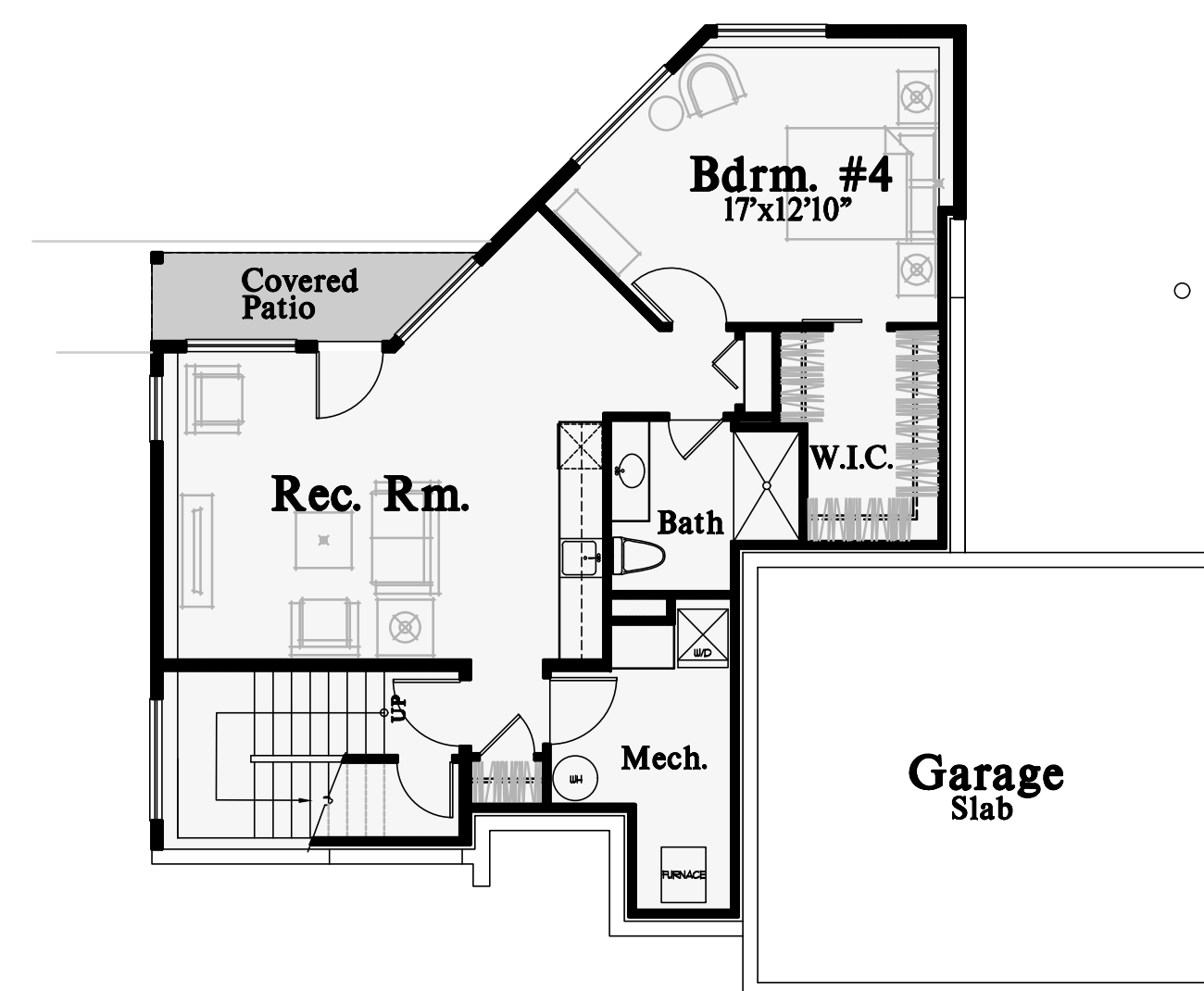


Rear Elevation

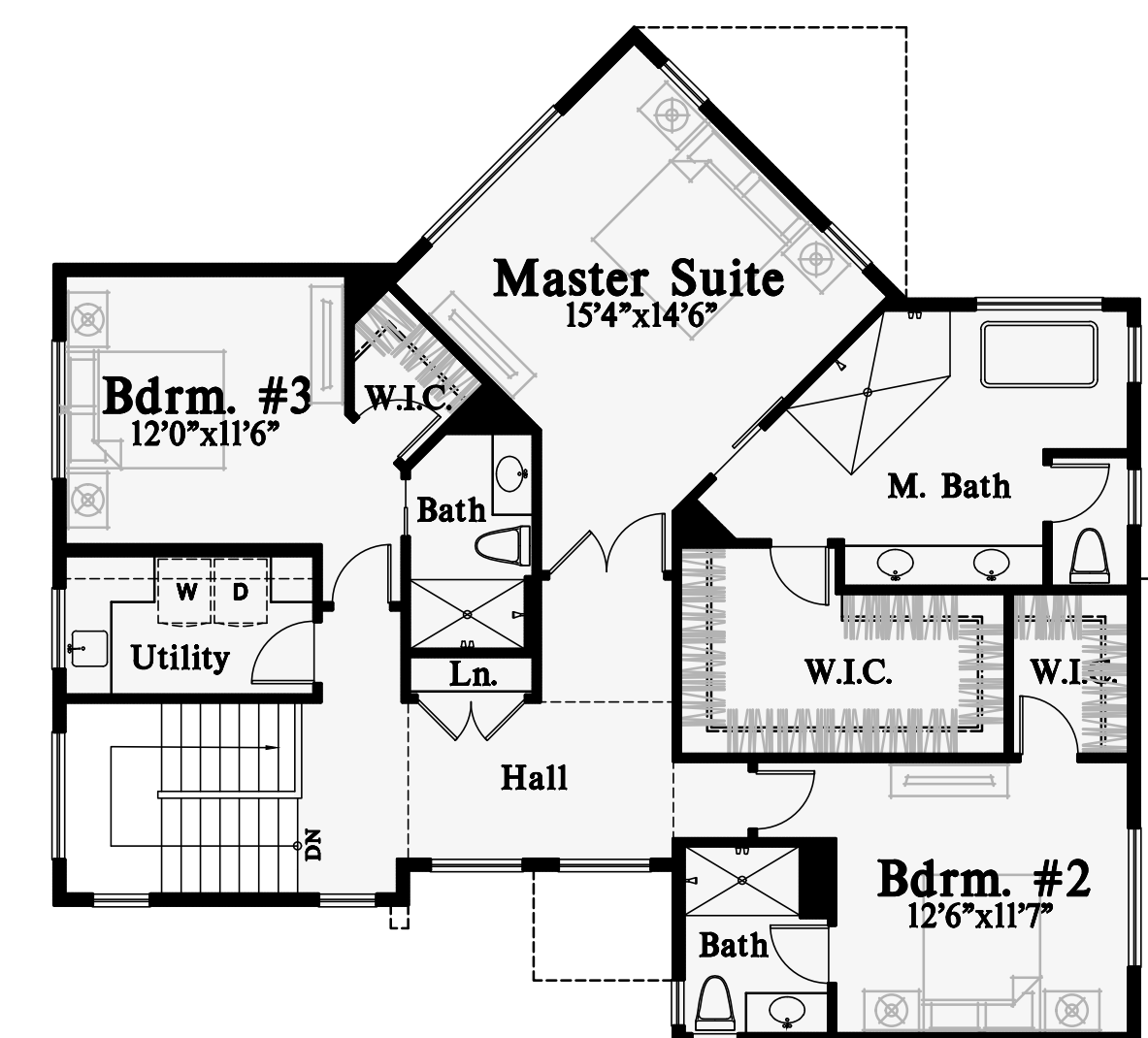
Monitored Household Fire Alarm System in compliance with NFPA 72 and CoMI standards and shall be installed throughout residence.
 A NFPA 13D Fire Sprinkler System in compliance with NFPA 13D and CoMI standards shall be installed throughout the residence. A separate FIRE permit is required. Note that this system requires a minimum of 1" water meter and 1" water supply line.



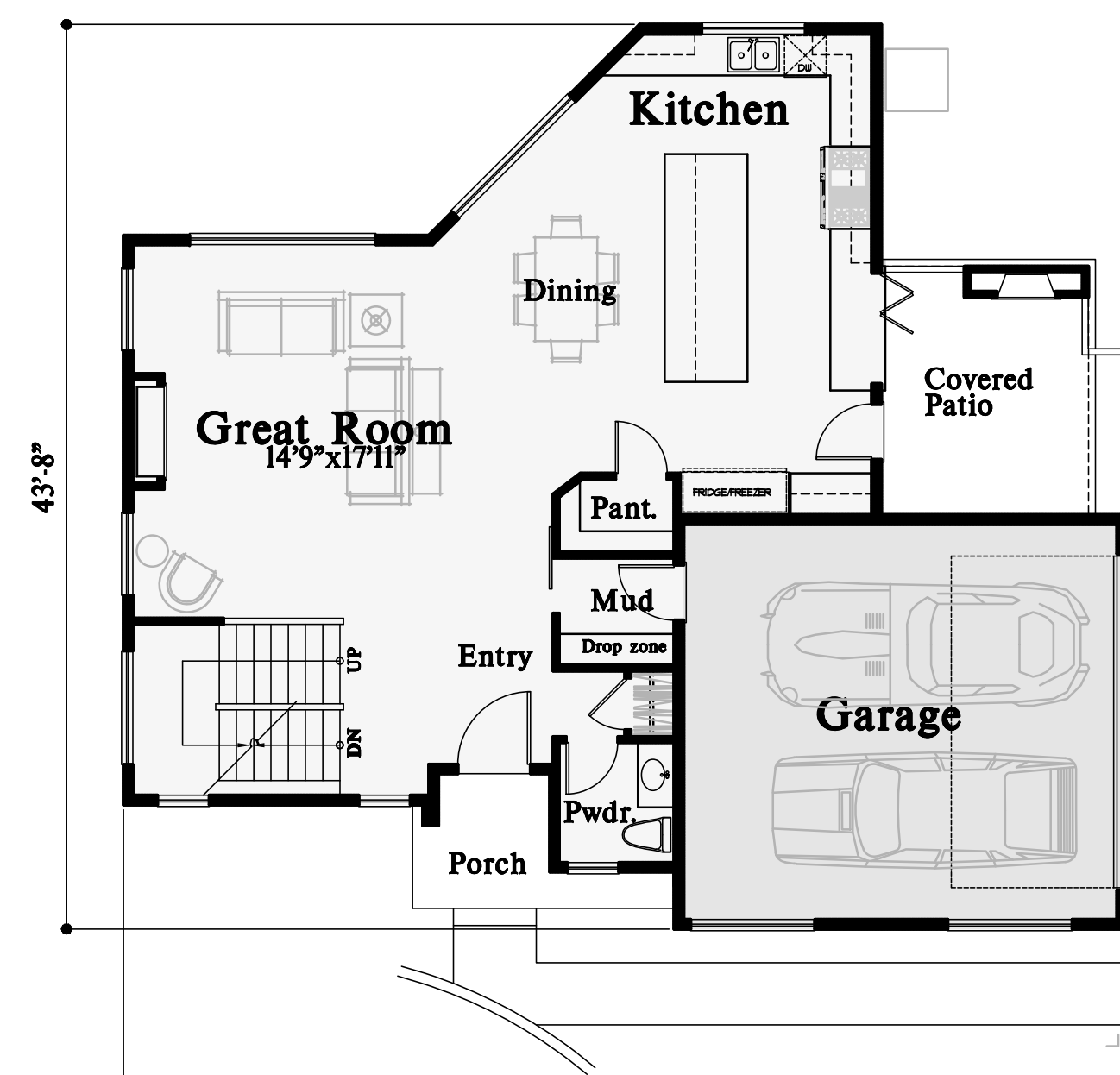
Side Elevation



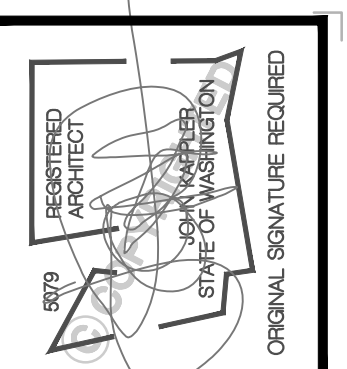
Lower Floor Plan



Upper Floor Plan



Main Floor Plan



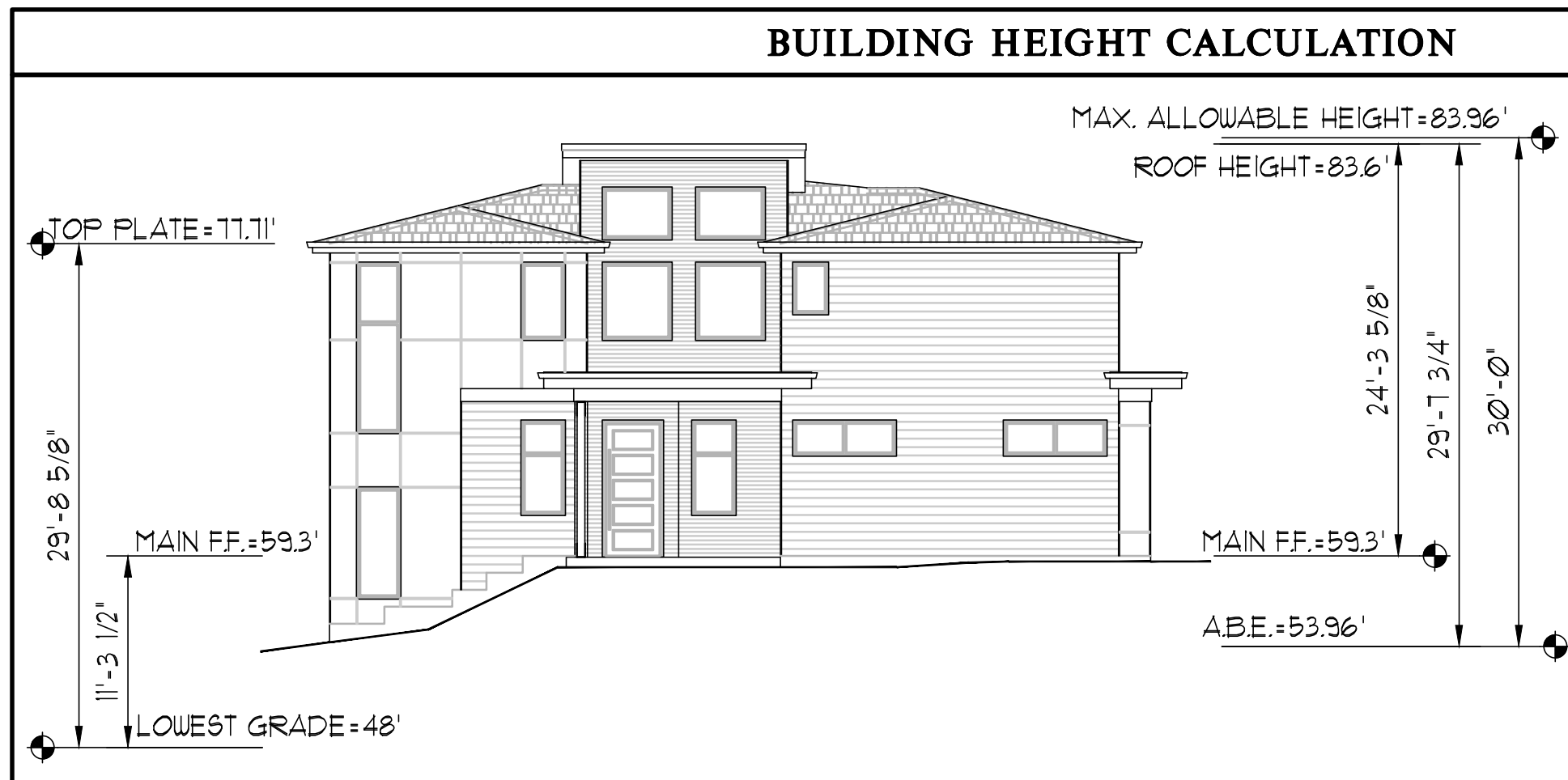
Date	By	Description
10/22/24	AG	PERMIT SET
03/17/24	SM	JURISDICTIONAL COMMENTS
04/02/24	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 16th St.
Bellevue, WA 98007
1-800-888-4517
www.kapellechanceplans.com

TITLE
JOB NO.: 21023.05
STARTING NO.: 21023.03

SHEET
COVER SHEET

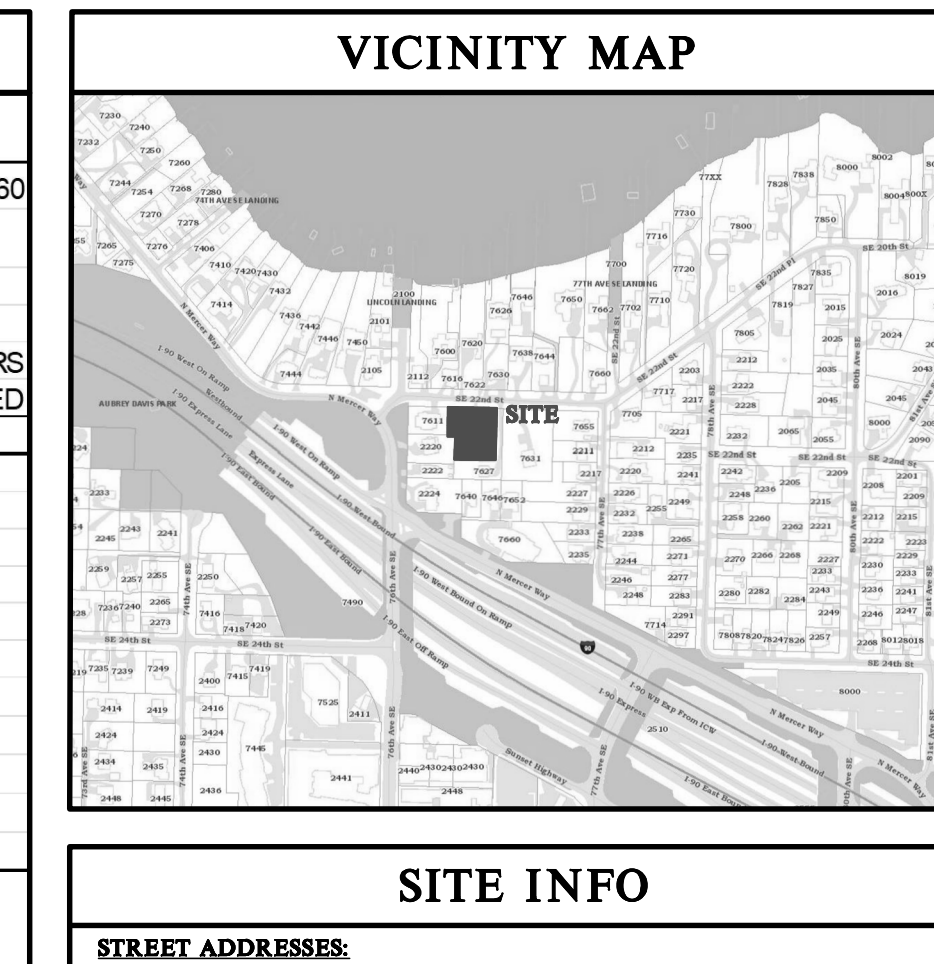


City of Mercer Island Avg. Grade Calculations

Midpoint	Datum Elevation	F or E	Wall Segment Length	A*a	B*b
A	52.70	E	a = 11.67	615.01	549.00
B	54.90	E	b = 10.00	549.00	674.40
C	56.20	E	c = 12.00	674.40	104.95
D	57.35	E	d = 1.83	104.95	1168.00
E	58.40	E	e = 20.00	1168.00	1285.79
F	58.90	E	f = 21.83	1285.79	291.00
G	58.20	E	g = 5.00	291.00	696.26
H	57.40	E	h = 12.13	696.26	56.10
I	56.10	E	i = 1.00	56.10	796.75
J	55.10	E	j = 14.46	796.75	1386.00
K	50.40	E	k = 27.50	1386.00	714.89
L	48.50	E	l = 14.74	714.89	697.92
M	48.50	E	m = 14.39	697.92	581.17
N	49.80	E	n = 11.67	581.17	762.45
				9617.23	178.22

City of Mercer Island GFA Calculations

Wall Length	Percentage	Finish or Existing	Result
A	5.33	98.5%	E 5.3
B	4.75	92.3%	E 4.4
C	6.71	86.2%	E 5.8
D	1.5	79.4%	E 1.2
E	14	68.0%	F 9.5
F	22.83	23.5%	E 5.4
G	10.75	0.0%	E 0.0
H	20	0.0%	E 0.0
I	11.87	11.0%	E 1.3
J	23.67	63.5%	E 15.0
K	9.33	100.0%	E 9.3
L	16.58	100.0%	E 16.6
			73.7
			147.32
			0.5
			985
			0.5005486
			483.0274355

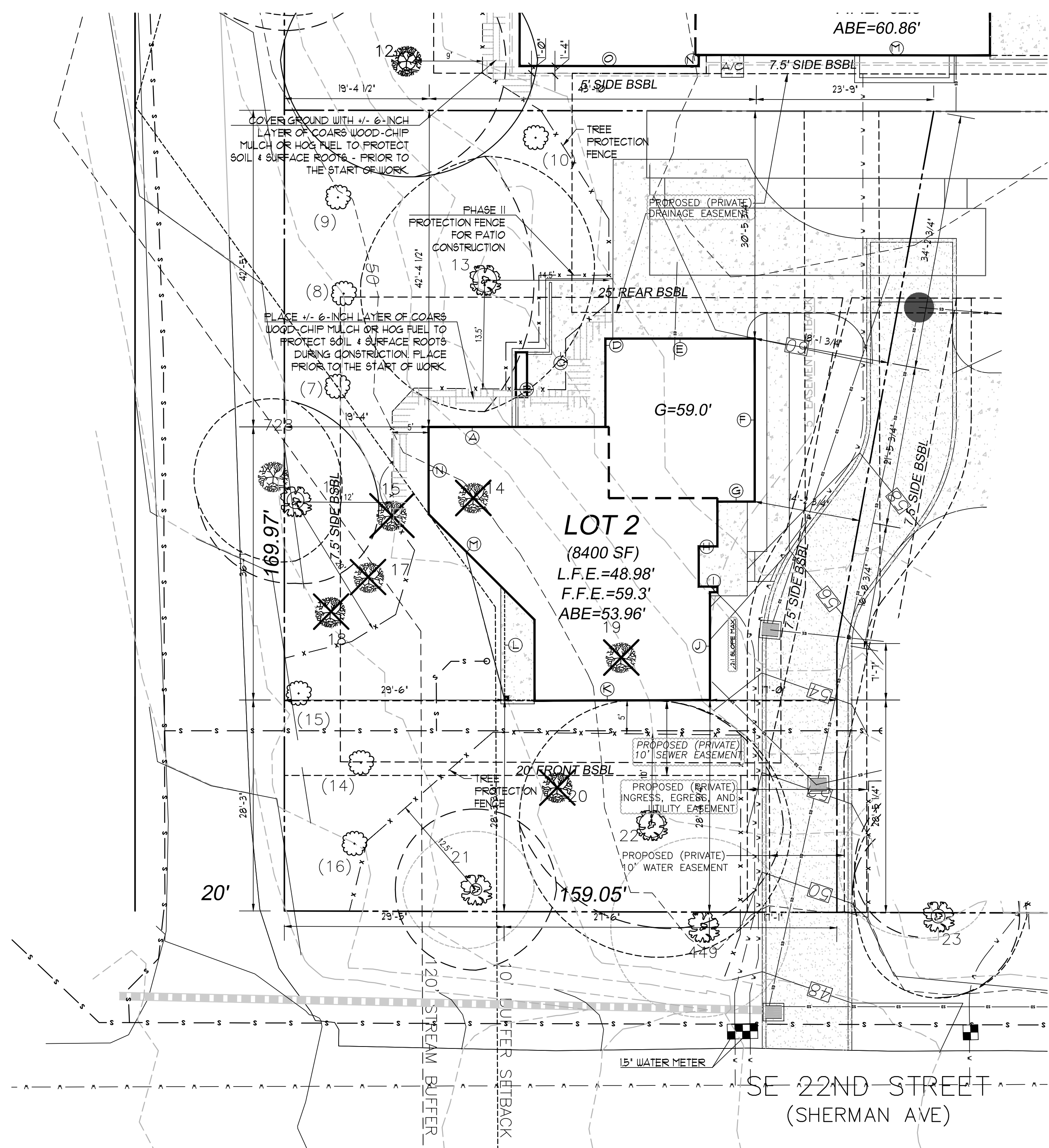
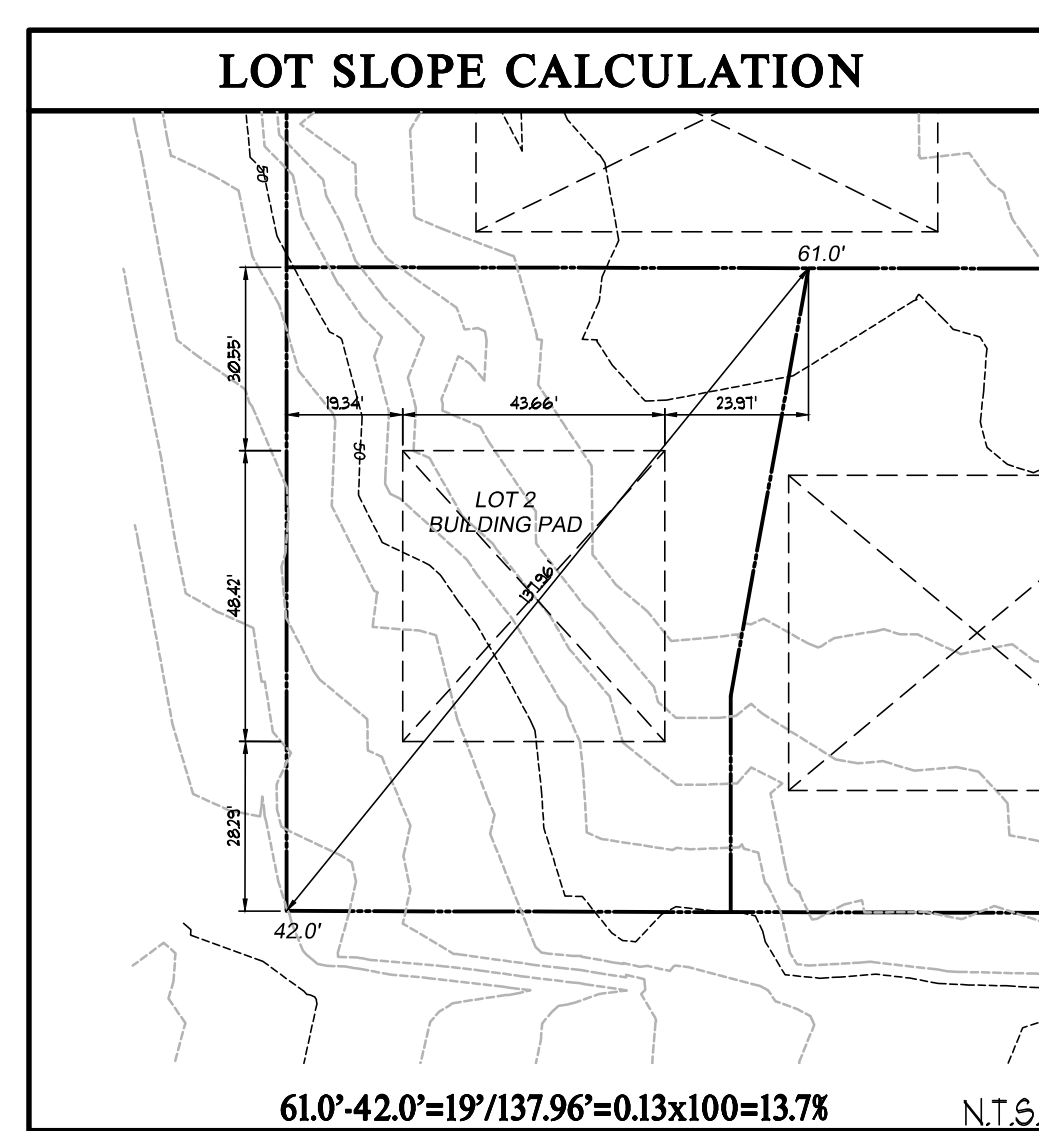


TREE RETENTION SCHEDULE

#	TREE SPECIES	SCIENTIFIC NAME	DBH	COND.	RETAIN
13.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	38	FAIR-GOOD	YES
14.	BIGLEAF MAPLE	ACER MACROPHYLLUM	18	FAIR	NO
15.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	21	FAIR	NO
16.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	27	FAIR	YES
17.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	26	FAIR	NO
18.	BIGLEAF MAPLE	ACER MACROPHYLLUM	9,7(11)	FAIR	NO
19.	HORSE CHESTNUT	AESCLUSUS HIPPOCASTAN.	14	FAIR-GOOD	NO
20.	BIGLEAF MAPLE	ACER MACROPHYLLUM	12,9,8(17)	FAIR	NO
21.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	19	FAIR	YES
22.	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	40	FAIR-GOOD	YES

REPLACEMENT TREE LEGEND

DESIGNATION	SPECIES	QUANTITY
(N)	WESTERN RED CEDAR (6' tall)	7



SITE INFO

STREET ADDRESSES:
 7619 SE 22nd Street, Mercer Island, WA 98040

PARCEL NUMBER:
 5315101847

LEGAL DESCRIPTION:
 MC GILVERAS ISLAND ADD LOT "2" OF MERCER ISLAND SP #51821-006 REC #2025101800003 SD SP BEING A POR OF LOTS 1 & 2 BLK 24 OF SD ADD

ZONING

ZONING: R 84
 SINGLE FAMILY RESIDENTIAL SETBACKS
 FRONT YARD - 20'-0"
 REAR YARD - 25'
 SIDE YARD - 7'-6" min. / 15'-0" COMBINED

HEIGHT LIMIT
 30' ABOVE AVERAGE BUILDING ELEVATION
 30' DOWNHILL HIGHEST PLATE

LOT COVERAGE
 40% MAX OF GROSS LOT AREA
HARDSCAPE COVERAGE
 9% MAX OF GROSS LOT AREA
G.F.A.
 5,000SF OR 40% MAX OF NET LOT AREA, WHICHEVER IS LESS

SITE CALCULATIONS

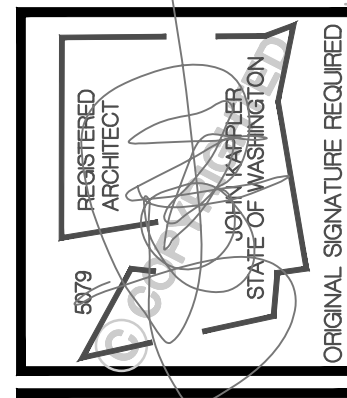
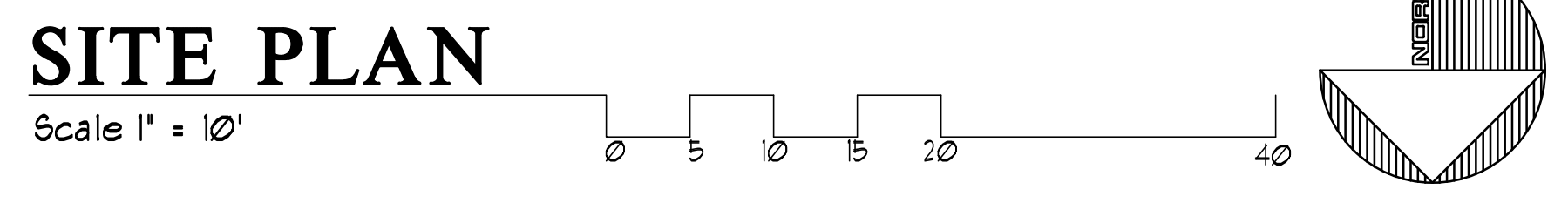
LOT AREA	GROSS LOT AREA
8,400 SF	
x 40%	
3,360 SF	
ALLOWABLE IMPERVIOUS COVERAGE	
1,810 SF	HOUSE ROOF (includes gutters)
1,395 SF	DRIVEWAY (excludes area under eaves)
3,005 SF / 35.7%	TOTAL COVERAGE
HARDSCAPE COVERAGE CALCULATION	
8,400 SF	LOT AREA
x 9%	
756 SF	ALLOWABLE HARDSCAPE COVERAGE
131 SF	FRONT WALK (excludes portion w/ eaves)
72 SF	UNCOVERED PATIO (excludes portion w/ eaves)
4 SF	A/C PAD (excludes portion w/ eaves)
207 SF / 24%	TOTAL HARDSCAPE COVERAGE

GFA CALCULATIONS

LOT AREA	GROSS LOT AREA
8,400 SF	
x 40%	
3,360 SF	
MAIN FLOOR	
1,060 SF	
1,381 SF	UPPER FLOOR (1471-90) STAIRS
482 SF	LOWER FLOOR (965-483) EXCLUDED
424 SF GARAGE	
3,347 SF / 39.8%	

LEGEND

- v --- v --- DESIGNATES WATER
- s --- s --- DESIGNATES SEWER
- " --- " --- DESIGNATES STORM
- " --- " --- DESIGNATES EXISTING GRADE
- " --- " --- DESIGNATES FINISHED GRADE
- " --- " --- DESIGNATES TREE DRIPLINE
- " --- " --- DESIGNATES TREE DRIFLINE (EXCEPTIONAL TREE)
- x --- x --- DESIGNATES LIMITS OF DISTURBANCE
- o --- o --- DESIGNATES TREE FENCING
- o --- o --- DESIGNATES EXISTING WOOD FENCE
- o --- o --- EXISTING FENCE TO BE REMOVED



Date	By	Description
10/23/25	AG	PERMIT SET
09/11/26	SM	JURISDICTIONAL COMMENTS

Milestone NW
Merced Island 3-Lot
 Lot 2
 7619 SE 22nd Street
 Mercer Island, WA
 THIS DRAWING IS COPYRIGHTED 2020 ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
 Forward Thinking Design Solutions For Your Environment
 14311 SE 164th St
 Bellevue, WA 98007
 1-800-888-4517
 www.AnnexHomePlans.com

TITLE
JOB NO.: 2001202
STARTING NO.:

SHEET

A1.1

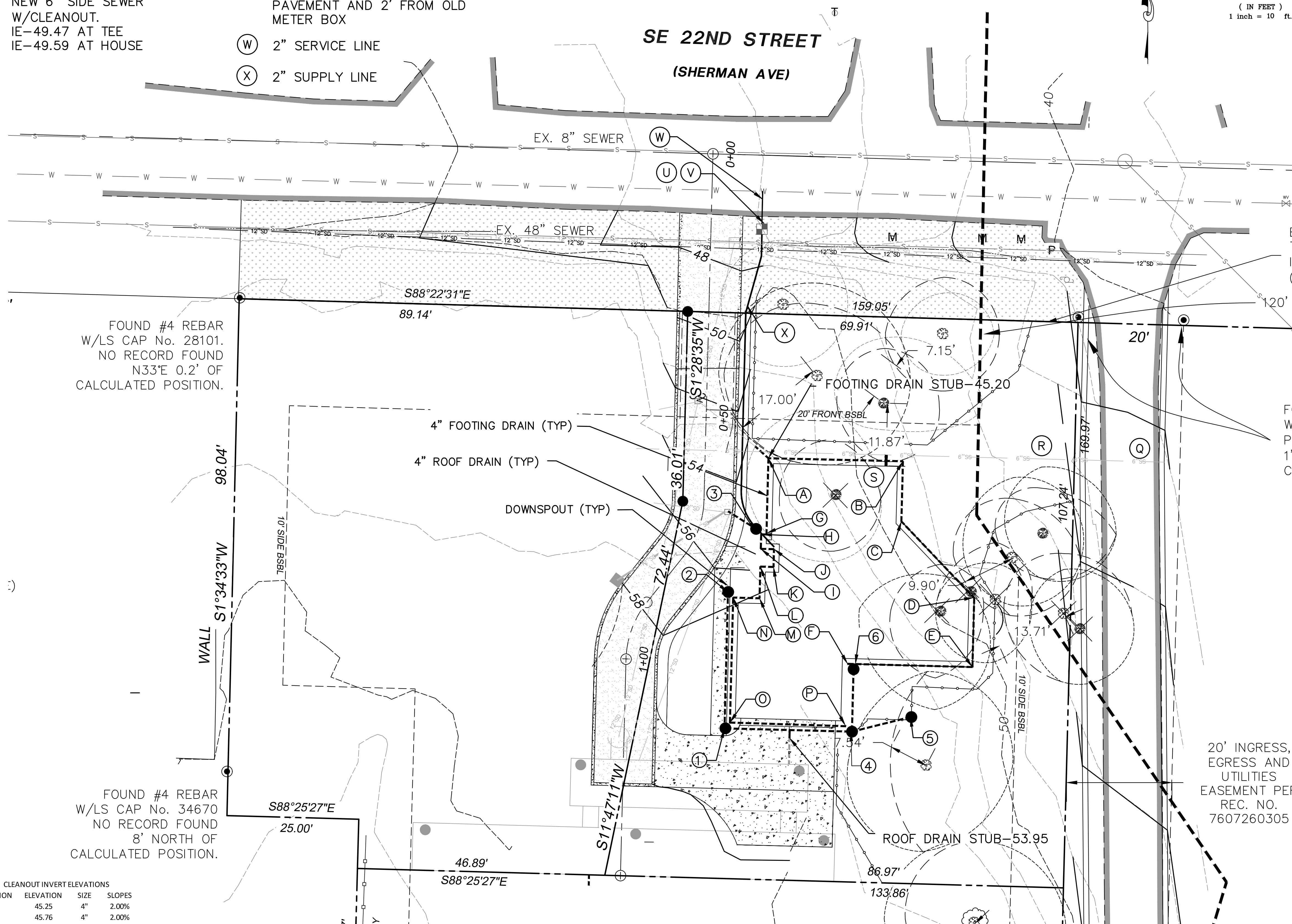
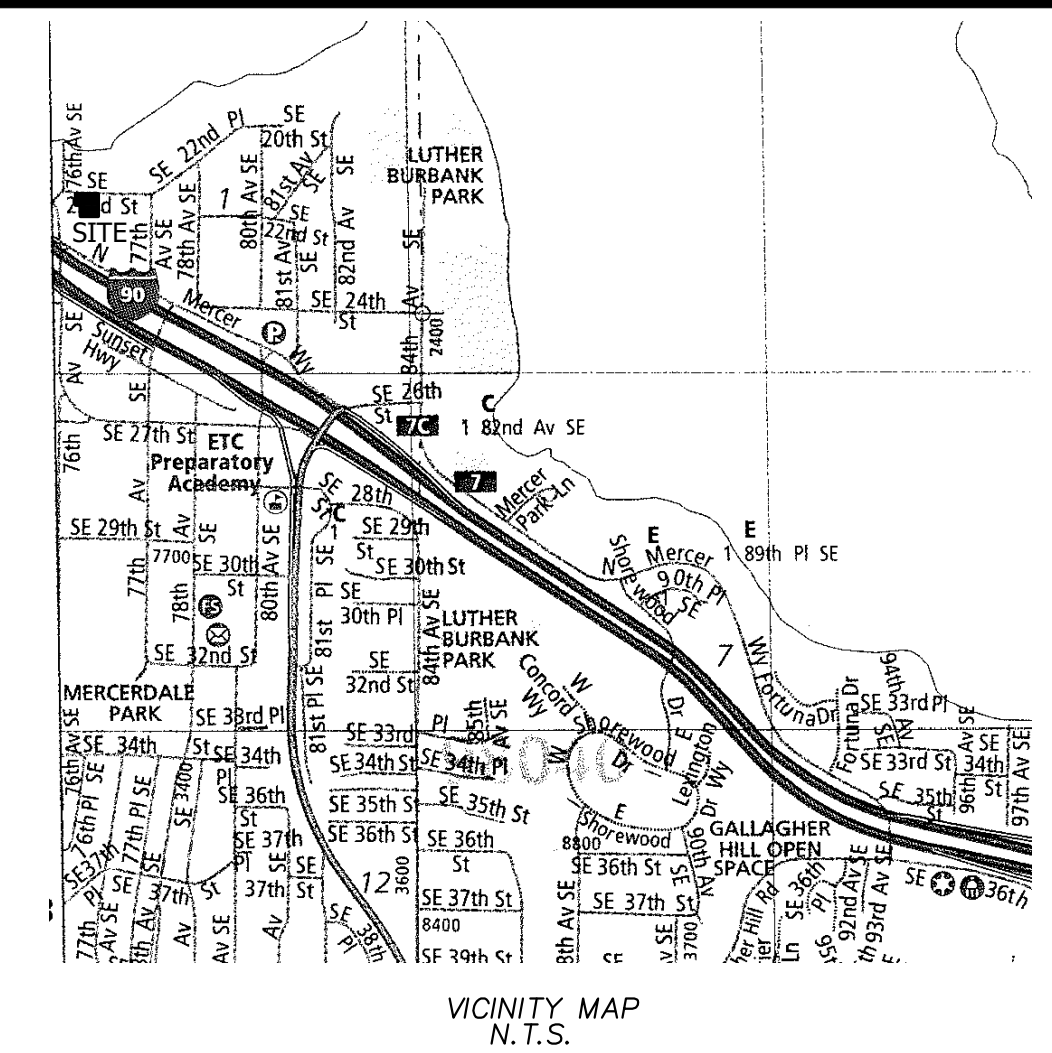
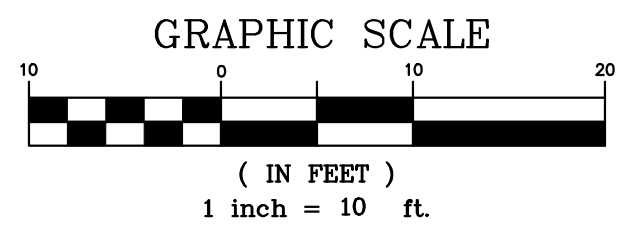
SEE PERMIT #2301-060 FOR ADD'L UTILITY INFO
 SEE PERMIT #2404-145 FOR DEMO PLANS

WATER AND SEWER CALLOUTS

- Q 6" SIDE SEWER
IE-41.43±
- R EXISTING 6" PVC SIDE SEWER @2.00%
- S NEW 6" SIDE SEWER W/CLEANOUT.
IE-49.47 AT TEE
IE-49.59 AT HOUSE
- U 1.5" WATER METER INSTALLATION
PER COMI STD NO. W-14
- V WATER METER PLACEMENT WITH
NO SIDEWALKS PER COMI STD NO.
W-16. PLACE 2' FROM EDGE OF
PAVEMENT AND 2' FROM OLD
METER BOX
- W 2" SERVICE LINE
- X 2" SUPPLY LINE

RAND-MILESTONE LOT 2 GRADING AND DRAINAGE PLAN

LOT 2 BUILDING PERMIT
SE 1/4 OF SEC.1, T.24N., R.4E., W.M.
CITY OF MERCER ISLAND, WASHINGTON



FOUND #4 REBAR
W/LS CAP No. 28101.
NO RECORD FOUND
N33°E 0.2' OF
CALCULATED POSITION.

FOUND #4 REBAR
W/LS CAP No. 34670
NO RECORD FOUND
8' NORTH OF
CALCULATED POSITION.

- TOPOGRAPHY SURVEY NOTES:
1. BASIS OF BEARINGS IS THE WASHINGTON STATE PLANE COORDINATE SYSTEM, N.A.D. 1983/2011, BASED ON GPS TIES TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN).
 2. ELEVATION DATUM IS N.A.V.D. 1988 BASED ON GPS TIES TO THE WSRN.
 3. FIELD WORK WAS DONE IN FEBRUARY OF 2020 USING A TRIMBLE R8 GNSS GPS RECEIVER, AND A SPECTRA PRECISION FOCUS 35 ROBOTIC TOTAL STATION IN ACCORDANCE WITH W.A.C. 332-130.
 4. THE PURPOSE OF THIS SURVEY IS TO PROVIDE A BASE MAP FOR CIVIL ENGINEERING DESIGN.
 5. THE CONTOURS SHOWN ARE DERIVED FROM DIRECT FIELD OBSERVATIONS. THE CONTOUR INTERVAL IS 2.0 FEET AND THE CONTOUR ACCURACY IS ONE HALF OF THE INTERVAL (±1.0 FEET).
 6. PROPERTY LINES SHOWN ARE PER UNRECORDED SHORT PLAT BY JONES, BASSI & ASSOCIATES DATED 1/16/1974.
 7. THE UNDERGROUND UTILITIES SHOWN ARE BASED ON A COMBINATION OF PAINT MARKS PROVIDED BY APPLIED PROFESSIONAL SERVICES, INC. AND THE SURVEYED LOCATION OF OBVIOUS SURFACE FEATURES. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST ON AND AROUND THIS SITE.
 8. THE LEGAL DESCRIPTION AS SHOWN HEREON IS PER STEWART TITLE INSURANCE COMPANY FILE No. 561998, COMMITMENT DATE: OCTOBER 8, 2019.
 9. ARBORIST REPORT PROVIDED BY LAYTON TREE CONSULTING LLC
 10. THE FOLLOWING SURVEYS OF RECORD WERE USED TO CALCULATE AND/OR ASCERTAIN THE BOUNDARY AS SHOWN HEREON:
THE PLAT OF McILVRA'S ISLAND ADDITION VOLUME 16, PAGE 68 UNRECORDED SHORT PLAT BY JONES, BASSI & ASSOCIATES DATED 1/16/1974 RECORD OF SURVEY VOLUME 402, PAGE 142

1. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH LOCAL SPECIFICATION.
2. ALL CUT AND FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING FOR ALL NATURAL AND PAVED AREAS AND SHALL GRADE ALL AREAS TO PRECLUDE PONDING OF WATER.
4. ALL POLLUTANTS OTHER THAN SEDIMENT ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED -TH CONSTRUCTION ACTIVITIES.
5. PROPERTIES AND WATERWAYS DOWNSTREAM OF THE SITE SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FROM PROJECT SITE.
6. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
7. CONTRACTOR TO REMOVE UNSUITABLE SOILS LOCATED WITHIN THE BUILDINGS FOOTING AREA.
8. FOR BOUNDARY AND TOPOGRAPHIC INFORMATION REFER TO SHIET 3
9. ALL GRADING, SITE PREPARATION, AND EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEERING REPORT.
10. ALL EXISTING TREES THAT CAN FEASIBLY BE RETAINED WILL BE PRESERVED. CONTRACTOR -LL WORK -TH CITY ARBORIST AND OTHER STAFF TO MAXIMIZE TREE RETENTION.
11. THE TOTAL IMPERVIOUS SURFACE ON LOT WILL NOT EXCEED THE NET MAXIMUM LOT COVERAGE AREA.

CLEANOUT INVERT ELEVATIONS

STATION	ELEVATION	SIZE	SLOPES
A	45.25	4"	2.00%
B	45.76	4"	2.00%
C	45.98	4"	2.00%
D	46.38	4"	2.00%
E	46.64	4"	2.00%
F	47.12	4"	2.00%
G	45.53	4"	2.00%
H	45.55	4"	2.00%
I	45.61	4"	2.00%
J	45.66	4"	2.00%
K	45.74	4"	2.00%
L	45.80	4"	2.00%
M	45.92	4"	2.00%
N	55.00	4"	2.00%
O	55.48	4"	2.00%
P	55.92	4"	2.00%

ROOF DRAIN INVERT ELEVATIONS

NUMBER	ELEVATION	SIZE	SLOPE
1	54.28	4"	2.00%
2	54.80	4"	2.00%
3	53.60	4"	2.00%
4	54.24	4"	2.00%
5	54.48	4"	2.00%
6	54.48	4"	2.00%

SHEET INDEX:

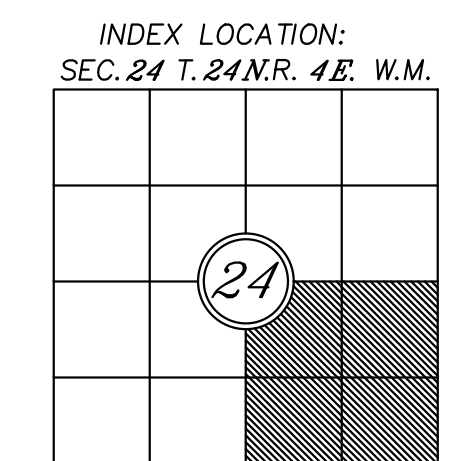
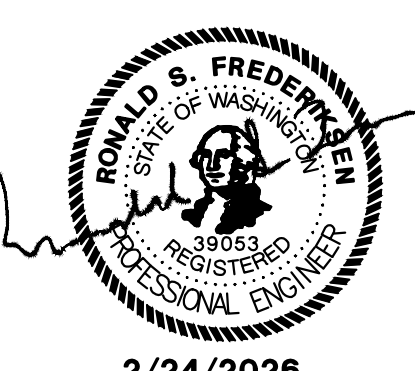
SHEET NO.	DESCRIPTION
1	WATER, SEWER, AND DRAINAGE PLAN
2	DRIVEWAY AND GRADING PLAN
3	EXISTING BOUNDARY AND TOPOGRAPHY SURVEY
4	WATER DETAILS

NOTE: THE EXISTING UTILITIES AS SHOWN ARE ONLY APPROXIMATE. OTHER EXISTING UTILITIES MAY EXIST ALONG THIS PROPOSED ALIGNMENT. IT SHALL BE THE CONTRACTOR AND OR OWNERS RESPONSIBILITY TO VERIFY THE SIZE TYPE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION

Call Before You Dig 811

LOT INFORMATION

LOT #	GROSS LOT AREA	MAX GFA	NET LOT AREA	MAX. LOT COVERAGE (40%)	MAX. HARDSCAPE (9%)
ENTIRE	8401	3360.40	8401	3360.40	756.1



REVISIONS

NO.	DATE	DESCRIPTION

MILESTONE NORTHWEST, LLC
8 CRESCENT KEY
BELLEVUE, WA 98006
CONTACT: GREG ARMS
PHONE: (206) 817-4192

ENGINEERS - SURVEYORS
EASTSIDE CONSULTANTS, INC.
1320 N.W. WALL ST., SUITE B
ISSAQUAH, WASHINGTON 98027
PH: (425) 392-5351 FAX: 392-4676

WATER, SEWER, AND DRAINAGE PLAN

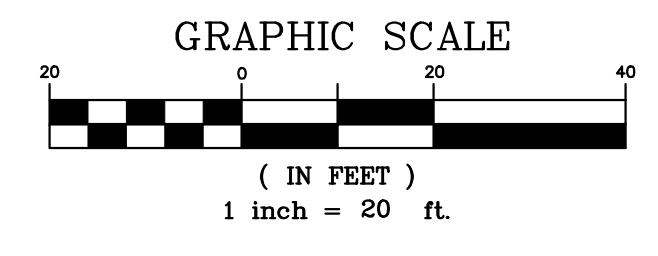
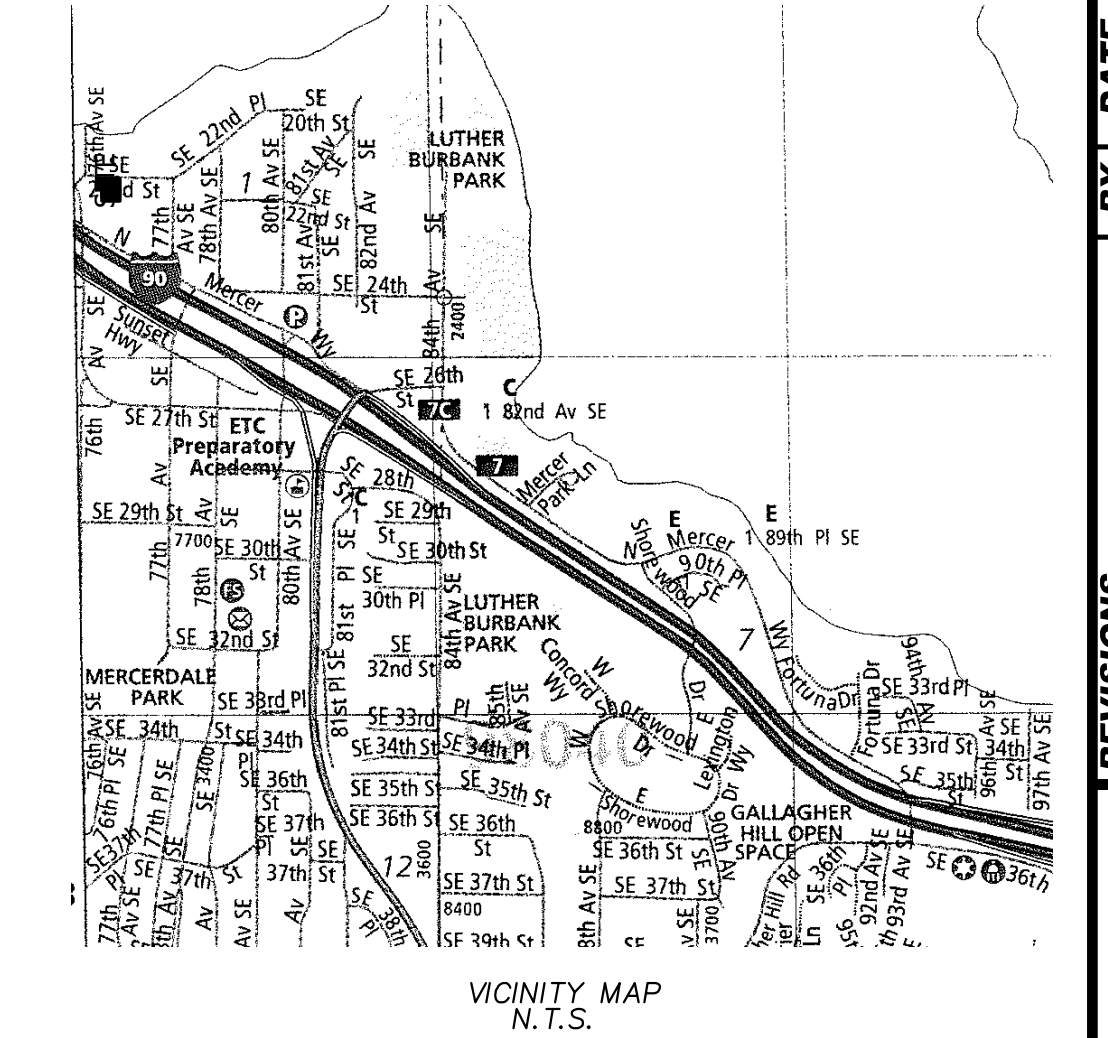
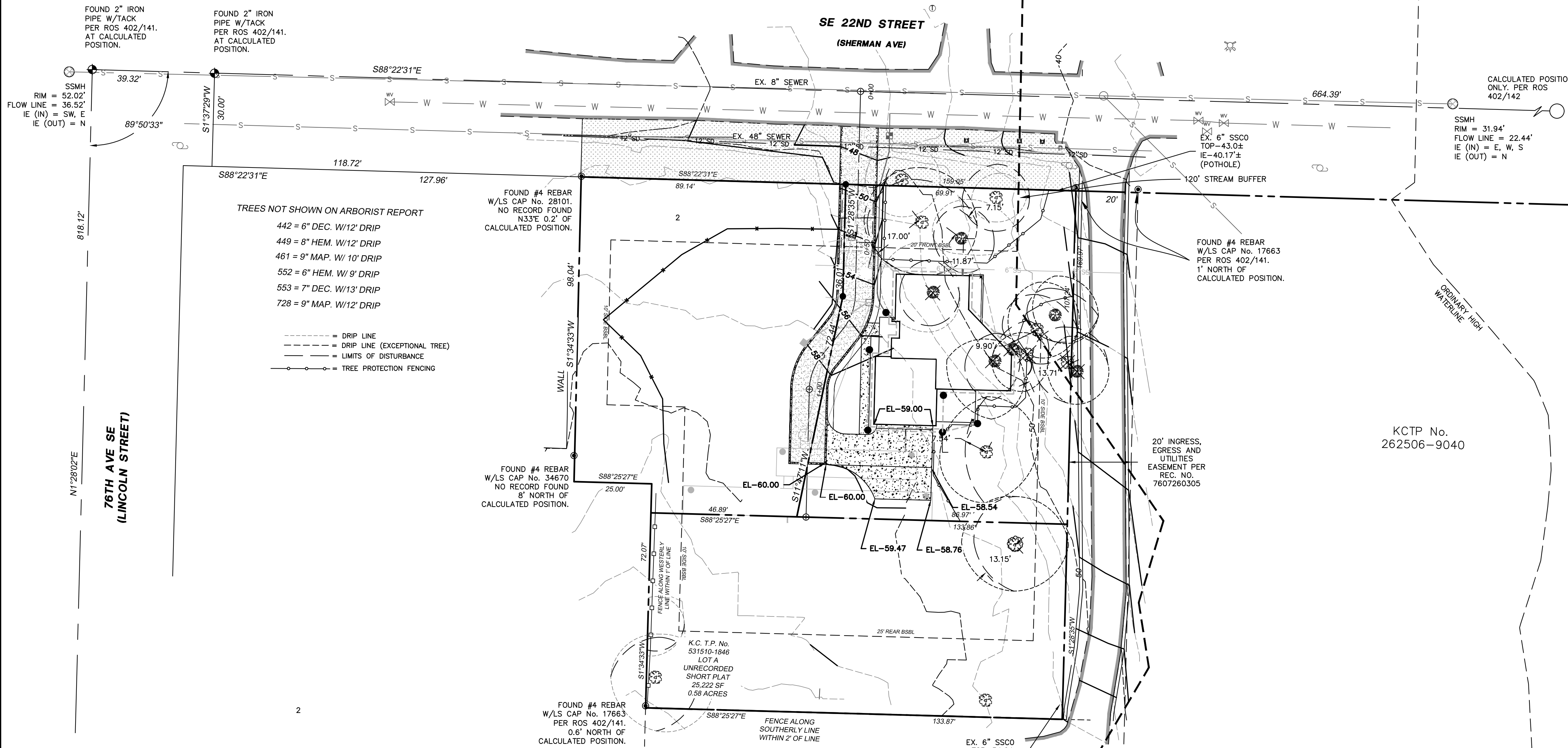
JOB NO. 20025
DATE 07/2025
SCALE 1"=10'
DESIGNED ADP
DRAWN ADP
CHECKED RSF
APPROVED RSF

2/24/2026

SHEET 1 OF 4

RAND-MILESTONE LOT 2 GRADING AND DRAINAGE PLAN

LOT 2 BUILDING PERMIT SE 1/4 OF SEC.1, T.24N., R.4E., W.M. CITY OF MERCER ISLAND, WASHINGTON



- TOPOGRAPHY SURVEY NOTES:**
- BASIS OF BEARINGS IS THE WASHINGTON STATE PLANE COORDINATE SYSTEM, N.A.D. 1983/2011, BASED ON GPS TIES TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN).
 - ELEVATION DATUM IS N.A.V.D. 1988 BASED ON GPS TIES TO THE WSRN.
 - FIELD WORK WAS DONE IN FEBRUARY OF 2020 USING A TRIMBLE R8 GNSS GPS RECEIVER, AND A SPECTRA PRECISION FOCUS 35 ROBOTIC TOTAL STATION IN ACCORDANCE WITH W.A.C. 332-130.
 - THE PURPOSE OF THIS SURVEY IS TO PROVIDE A BASE MAP FOR CIVIL ENGINEERING DESIGN.
 - THE CONTOURS SHOWN ARE DERIVED FROM DIRECT FIELD OBSERVATIONS. THE CONTOUR INTERVAL IS 2.0 FEET AND THE CONTOUR ACCURACY IS ONE HALF OF THE INTERVAL (±1.0 FEET).
 - PROPERTY LINES SHOWN ARE PER UNRECORDED SHORT PLAT BY JONES, BASSI & ASSOCIATES DATED 1/16/1974.
 - THE UNDERGROUND UTILITIES SHOWN ARE BASED ON A COMBINATION OF PAINT MARKS PROVIDED BY APPLIED PROFESSIONAL SERVICES, INC. AND THE SURVEYED LOCATION OF OBVIOUS SURFACE FEATURES. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST ON AND AROUND THIS SITE.
 - THE LEGAL DESCRIPTION AS SHOWN HEREON IS PER STEWART TITLE INSURANCE COMPANY FILE NO. 561998, COMMITMENT DATE: OCTOBER 8, 2019.
 - ARBORIST REPORT PROVIDED BY LAYTON TREE CONSULTING LLC.
 - THE FOLLOWING SURVEYS OF RECORD WERE USED TO CALCULATE AND/OR ASCERTAIN THE BOUNDARY AS SHOWN HEREON:
THE PLAT OF MCGILVRA'S ISLAND ADDITION VOLUME 16, PAGE 58 UNRECORDED SHORT PLAT BY JONES, BASSI & ASSOCIATES DATED 1/16/1974 RECORD OF SURVEY VOLUME 402, PAGE 142

- ARBORIST NOTE:**
- ARBORIST TO BE ONSITE FOR ALL EXCAVATION OF FOUNDATIONS.
 - TREE PROTECTION FENCE WILL BE 6' CHAIN LINK FENCE. THIS IS TO BE PLACED AT THE ARBORIST GIVEN LIMITS OF ALLOWABLE DISTURBANCE.
 - LIMITS OF EXCAVATION FOR FUTURE DETENTION SYSTEM WILL NOT ENCROACH INTO TREE 13'S TREE PROTECTION ZONE.
 - A QUALIFIED ARBORIST SHALL BE ON SITE FOR ALL EXCAVATION WITHIN SAVED TREES DRIFTLINES WITH AIR EXCAVATION TO LOCATE AND CLEAN-CUT ROOTS ENCOUNTERED AT LIMITS OF DISTURBANCE.
 - SEE TREE PROTECTION DETAIL ON PAGE 10 OF SDP PLANS

Tree/Tag #	Species Common	Species Scientific	DBH (inches)	Height (feet)	DripLine/Limit of Disturbance (feet)				Condition	Exceptional Yes/No	Comments	Proposal
					N	S	E	W				
1	Douglas fir	<i>Pseudotsuga menziesii</i>	30	120	12/12	12/12	15/10	12	Fair-good	Yes	topped in past	Remove
2	Douglas fir	<i>Pseudotsuga menziesii</i>	28	113	8/10	15/12	10/10	16	Fair-good	No	topped in past, crook, regenerated top, cambial rupture	Save
3	Deodar cedar	<i>Cedrus deodara</i>	23	96	10/10	17/12	20/12	6	Good	No	asymmetric crown to southeast	Remove
4	Douglas fir	<i>Pseudotsuga menziesii</i>	18	79	7/8	12/10	13/10	0	Fair	No	asymmetric crown, somewhat suppressed	Save
5	Douglas fir	<i>Pseudotsuga menziesii</i>	40	116	17/12	16/12	16/12	18	Good	Yes	topped in past	Save
6	bigleaf maple	<i>Acer macrophyllum</i>	18	30	14/10	12/10	0/10	18	Fair	No	trunk forks at 4 feet, asymmetric crown to west	Save
7	Scoulers willow	<i>Salix scouleriana</i>	9	32	2/6	11/8	6/6	4	Fair-poor	Yes	decay at root crown, suppressed	Save
8	Douglas fir	<i>Pseudotsuga menziesii</i>	26	93	13/12	16	17/12	14	Fair-good	No	large crook, large exposed surface roots, good vigor	Save
9	Deodar cedar	<i>Cedrus deodara</i>	11	44	12/8	10	10	10/8	Good	No	young, no concerns	Save
10	Deodar cedar	<i>Cedrus deodara</i>	12	45	11/8	10	10	11	Good	No	young, no concerns	Save
11	Deodar cedar	<i>Cedrus deodara</i>	12	46	10/8	10	11/8	9	Good	No	young, no concerns	Save
12	Western red cedar	<i>Thuja plicata</i>	29	70	14/14	14/14	16	16/12	Good	Yes, Grove	exposed surface roots, good vigor	Save
13	Douglas fir	<i>Pseudotsuga menziesii</i>	38	101	16/16	15/15	15	13/5	Fair-good	Yes	topped in past, large cambial rupture, 4 feet to house	Save
14	bigleaf maple	<i>Acer macrophyllum</i>	18	60	6/8	18/12	8	14/8	Fair	Yes, Grove	asymmetric crown to south	Remove
15	Douglas fir	<i>Pseudotsuga menziesii</i>	21	95	6/10	11/11	6	10/10	Fair	Yes, Grove	natural lean south, topped in past	Remove
16	Douglas fir	<i>Pseudotsuga menziesii</i>	27	62	7/10	12/12	12	5/10	Fair	Yes, Grove	broken top, small crown	Save
17	Douglas fir	<i>Pseudotsuga menziesii</i>	26	103	14/10	8/10	12	8/10	Fair	Yes, Grove	topped in past, crook, regenerated top	Save
18	bigleaf maple	<i>Acer macrophyllum</i>	9,7 (11)	51	12/8	8/8	14	6/8	Fair	Yes, Grove	poor taper, some dead cambium on 12 inch stem	Save
19	horse chestnut	<i>Aesculus hippocastanum</i>	14	47	15/10	12/10	8/8	16/10	Fair-good	No	decent form	Remove
20	bigleaf maple	<i>Acer macrophyllum</i>	12,9,8 (17)	61	12/10	4/10	18/10	8/10	Fair	No	somewhat suppressed	Save
21	Douglas fir	<i>Pseudotsuga menziesii</i>	19	86	7/10	7/10	9/10	7/10	Fair	No	narrow crown, large cambial rupture	Save
22	Douglas fir	<i>Pseudotsuga menziesii</i>	40	94	16/12	15/15	16/16	17/16	Fair-good	Yes	topped in past, crook, regenerated top	Save
24	Western red cedar	<i>Thuja plicata</i>	10	20	8/8	12/12	10/8	10/10	Fair	No	suppressed, under pine	Save
25	Douglas fir	<i>Pseudotsuga menziesii</i>	30	118	10/12	13/13	16	12/12	Fair-good	Yes	topped in past, good vigor	Save
NEIGHBORING TREES												
23	shore pine	<i>Pinus contorta</i>	22	65	10/10	16/12	10/10	11/10	Fair	Yes	forked tops	Save
101	Western red cedar	<i>Thuja plicata</i>	32	88	2/0	NA	12/8	NA	Fair-good	Yes	sparse top foliage, sound	Protect
102	Western red cedar	<i>Thuja plicata</i>	13	45	8	10	10/8	NA	Good	No	boundary line tree, good vigor	Protect

Drip-Line measurements from face of trunk
Measurements for neighboring trees from property line
Calculated DBH: The DBH in parenthesis is the square root of the sum of the dbh for each individual stem squared (example with 3 stems: dbh = square root [(stem1)² + (stem2)² + (stem3)²]).
TBD - to be determined

SE COR. S.1
FOUND 3.5" BRASS
CAP W/PUNCH &
LS No. 32429
PER ROS 402/141.
AT CALCULATED
POSITION.

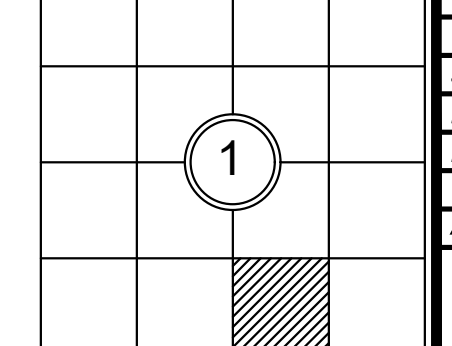
N88°29'56"W 2678.10'

S. 1/4 S. 1
FOUND 3.5" BRASS
CAP W/PUNCH &
LS No. 32429
PER ROS 402/141.
AT CALCULATED
POSITION.

PROJECT NO.: 2412-106 SUB2 MILESTONE-WCMI LLC



INDEX LOCATION:
SEC. 1 T. 24N. R. 4E. W.M.



REVISIONS	BY	DATE

DRIVEWAY AND GRADING PLAN

MILESTONE NORTHWEST, LLC
8 CRESCENT KEY
BELLEVUE, WA 98006
CONTACT: GREG ARMS
PHONE: (206) 817-4192

ENGINEERS - SURVEYORS
EASTSIDE CONSULTANTS, INC.
1320 N.W. WALL ST., SUITE B
ISSAQUAH, WASHINGTON 98027
PH: (425) 392-5351 FAX: 392-4676

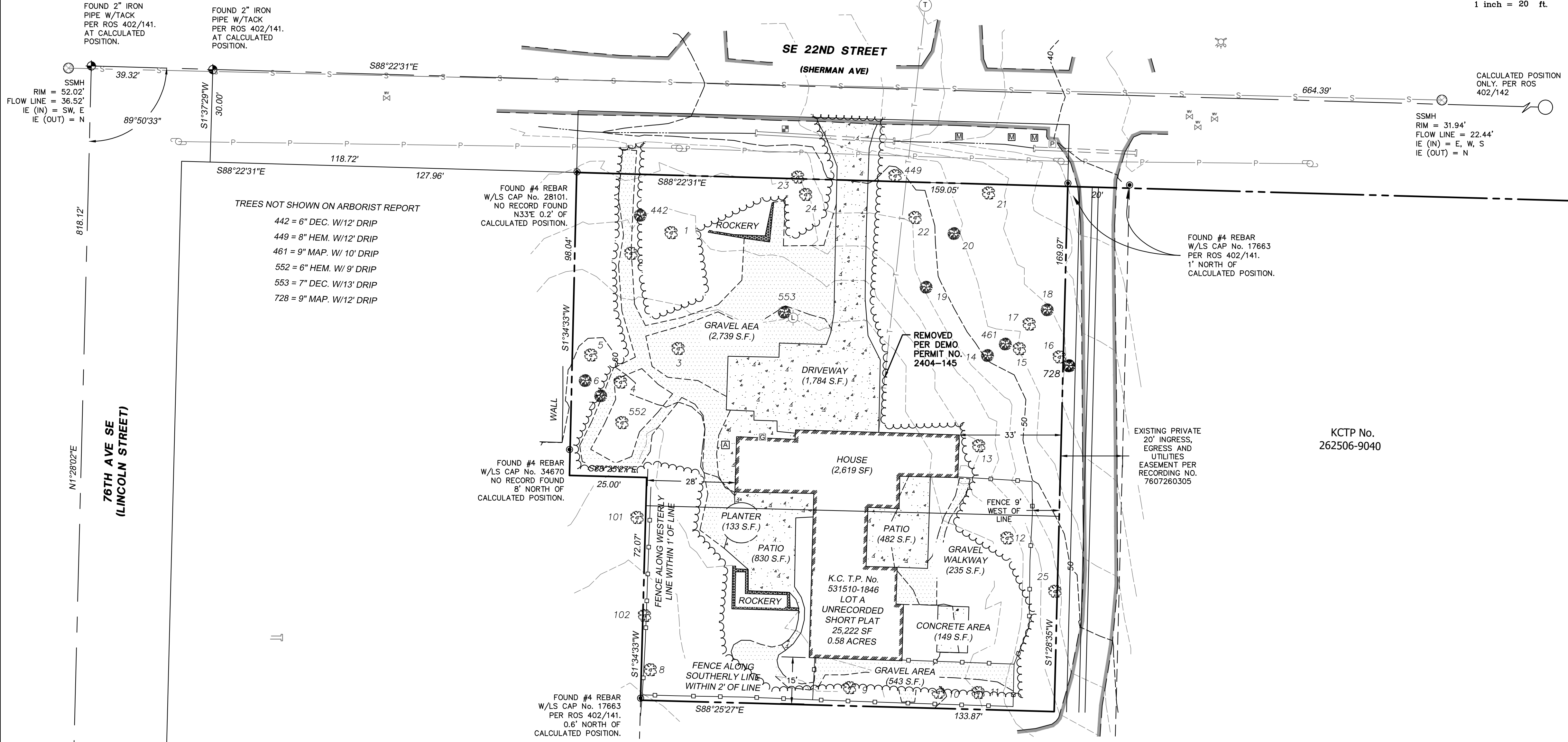
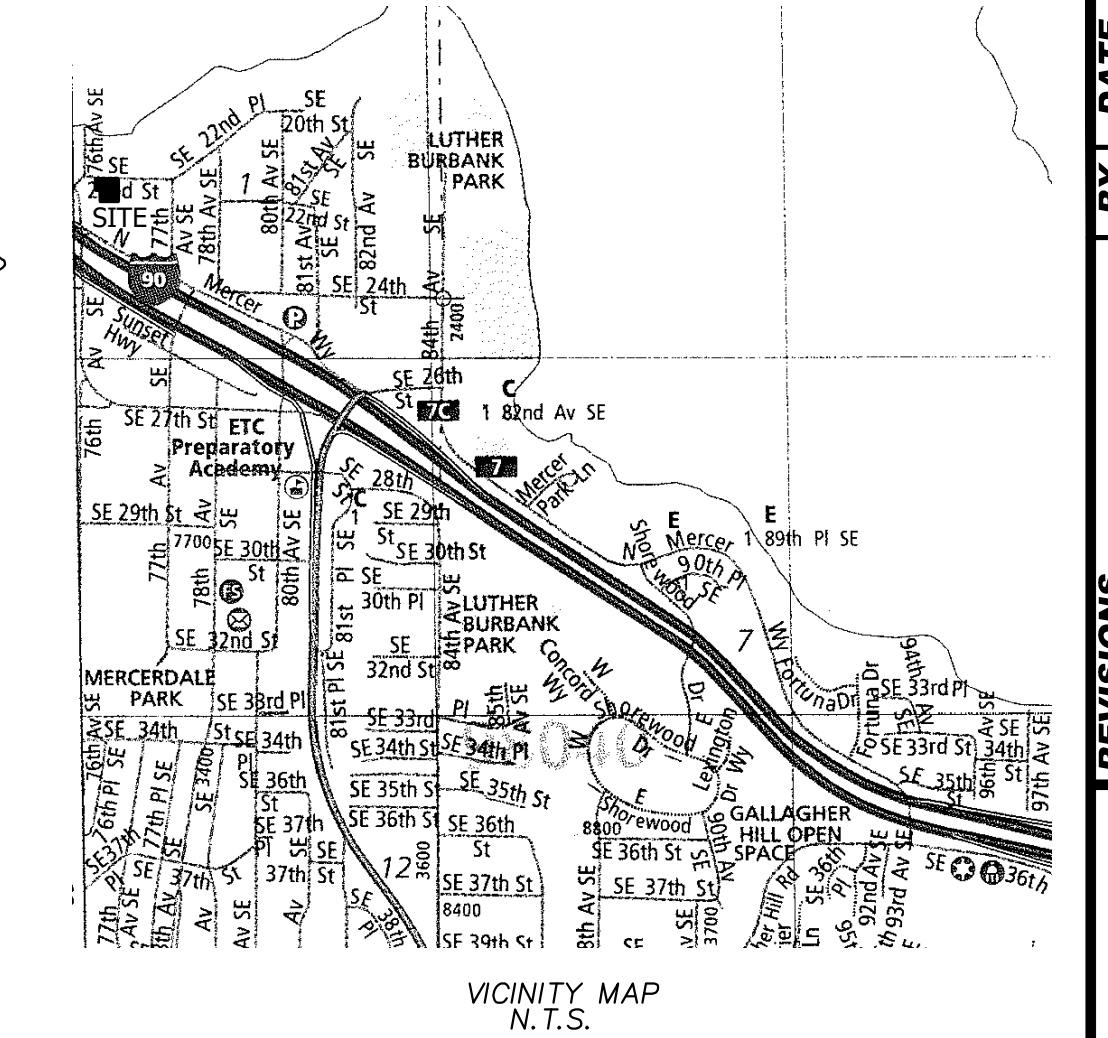
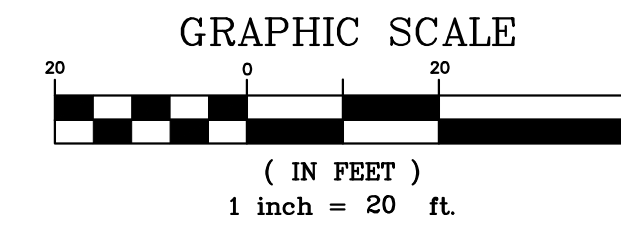
JOB NO. 20025
DATE 12/22
SCALE 1"=20'
DESIGNED RSF
DRAWN RSF
CHECKED RSF
APPROVED RSF

RAND-MILESTONE LOT 2 GRADING AND DRAINAGE PLAN

LOT 2 BUILDING PERMIT

SE 1/4 OF SEC. 1, T.24N., R.4E., W.M.

CITY OF MERCER ISLAND, WASHINGTON



DEVELOPER/AGENT:
MILESTONE-WCM, LLC
8 CRESCENT KEY
BELLEVUE, WA 98009

SURVEYOR/ENGINEER:
EASTSIDE CONSULTANTS, INC.
1320 NW MALL ST., STE B
ISSAQUAH WA 98027

ZONING:
R-8.4

PROPERTY OWNER:
MILESTONE-WCM, LLC
8 CRESCENT KEY
BELLEVUE, WA 98006

PROPERTY ADDRESS:
7621 SE 22ND STREET
MERCER ISLAND, WA 98040

TAX ACCOUNT NO.:
531510-1846

LOT SIZE:
25,221 S.F. / 0.579 ACRES

LEGAL DESCRIPTION:
THE WEST 158.97 FEET OF THE EAST 178.97 FEET OF LOT 1, AND THE WEST 133.97 FEET OF THE EAST 153.97 FEET OF LOT 2, BLOCK 24, MCGILVRA'S ISLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 16 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON.

- TOPOGRAPHY SURVEY NOTES:**
- BASIS OF BEARINGS IS THE WASHINGTON STATE PLANE COORDINATE SYSTEM, N.A.D. 1983/2011, BASED ON GPS TIES TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN).
 - ELEVATION DATUM IS N.A.V.D. 1988 BASED ON GPS TIES TO THE WSRN.
 - FIELD WORK WAS DONE IN FEBRUARY OF 2020 USING A TRIMBLE R8 GNSS GPS RECEIVER, AND A SPECTRA PRECISION FOCUS 35 ROBOTIC TOTAL STATION IN ACCORDANCE WITH W.A.C. 332-130.
 - THE PURPOSE OF THIS SURVEY IS TO PROVIDE A BASE MAP FOR CIVIL ENGINEERING DESIGN.
 - THE CONTOURS SHOWN ARE DERIVED FROM DIRECT FIELD OBSERVATIONS. THE CONTOUR INTERVAL IS 2.0 FEET AND THE CONTOUR ACCURACY IS ONE HALF OF THE INTERVAL (±1.0 FEET).
 - PROPERTY LINES SHOWN ARE PER UNRECORDED SHORT PLAT BY JONES, BASSI & ASSOCIATES DATED 1/16/1974.
 - THE UNDERGROUND UTILITIES SHOWN ARE BASED ON A COMBINATION OF PAINT MARKS PROVIDED BY APPLIED PROFESSIONAL SERVICES, INC. AND THE SURVEYED LOCATION OF OBVIOUS SURFACE FEATURES. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST ON AND AROUND THIS SITE.
 - THE LEGAL DESCRIPTION AS SHOWN HEREON IS PER STEWART TITLE INSURANCE COMPANY FILE NO. 561998, COMMITMENT DATE: OCTOBER 6, 2019.
 - ARBORIST REPORT PROVIDED BY LAYTON TREE CONSULTING LLC
 - THE FOLLOWING SURVEYS OF RECORD WERE USED TO CALCULATE AND/OR ASCERTAIN THE BOUNDARY AS SHOWN HEREON...
THE PLAT OF MCGILVRA'S ISLAND ADDITION VOLUME 16, PAGE 58
UNRECORDED SHORT PLAT BY JONES, BASSI & ASSOCIATES DATED 1/16/1974
RECORD OF SURVEY VOLUME 402, PAGE 142

"FOR REFERENCE ONLY"

Tree/Tag #	Species Common	Species Scientific	DBH (inches)	Height (feet)	DripLine/Limit of Disturbance (feet)				Condition	Exceptional Yes/No	Comments	Proposal
					N	S	E	W				
1	Douglas fir	<i>Pseudotsuga menziesii</i>	30	120	12/12	12/12	15/10	12	Fair-good	Yes	topped in past	Remove
2	Douglas fir	<i>Pseudotsuga menziesii</i>	28	113	8/10	15/12	10/10	16	Fair-good	No	topped in past, crook, regenerated top, cambial rupture	Save
3	Deodar cedar	<i>Cedrus deodara</i>	23	96	10/10	17/12	20/12	6	Good	No	asymmetric crown to southeast	Remove
4	Douglas fir	<i>Pseudotsuga menziesii</i>	18	79	7/8	12/10	13/10	0	Fair	No	asymmetric crown, somewhat suppressed	Save
5	Douglas fir	<i>Pseudotsuga menziesii</i>	40	116	17/12	16/12	16/12	18	Good	Yes	topped in past	Save
6	bigleaf maple	<i>Acer macrophyllum</i>	18	30	14/10	12/10	0/10	18	Fair	No	trunk forks at 4 feet, asymmetric crown to west	Save
7	Scoulers willow	<i>Salix scouleriana</i>	9	32	2/6	11/8	6/6	4	Fair-poor	Yes	decay at root crown, suppressed	Save
8	Douglas fir	<i>Pseudotsuga menziesii</i>	26	93	13/12	16	17/12	14	Fair-good	No	large crook, large exposed surface roots, good vigor	Save
9	Deodar cedar	<i>Cedrus deodara</i>	11	44	12/8	10	10	10/8	Good	No	young, no concerns	Save
10	Deodar cedar	<i>Cedrus deodara</i>	12	45	11/8	10	10	11	Good	No	young, no concerns	Save
11	Deodar cedar	<i>Cedrus deodara</i>	12	46	10/8	10	11/8	9	Good	No	young, no concerns	Save
12	Western red cedar	<i>Thuja plicata</i>	26	70	14/14	14/14	16	16/12	Good	Yes, Grove	exposed surface roots, good vigor	Save
13	Douglas fir	<i>Pseudotsuga menziesii</i>	38	101	16/16	15/15	15	13/5	Fair-good	Yes	topped in past, large cambial rupture, 4 feet to house	Save
14	bigleaf maple	<i>Acer macrophyllum</i>	18	60	6/8	18/12	8	14/8	Fair	Yes, Grove	asymmetric crown to south	Remove
15	Douglas fir	<i>Pseudotsuga menziesii</i>	21	95	6/10	11/11	6	10/10	Fair	Yes, Grove	natural lean south, topped in past	Remove
16	Douglas fir	<i>Pseudotsuga menziesii</i>	27	62	7/10	12/12	12	5/10	Fair	Yes, Grove	broken top, small crown	Save
17	Douglas fir	<i>Pseudotsuga menziesii</i>	26	103	14/10	8/10	12	8/10	Fair	Yes, Grove	topped in past, crook, regenerated top	Save
18	bigleaf maple	<i>Acer macrophyllum</i>	9.7 (11)	51	12/8	8/8	14	6/8	Fair	Yes, Grove	poor taper, some dead cambium on 12 inch stem	Save
19	horse chestnut	<i>Aesculus hippocastanum</i>	14	47	15/10	12/10	8/8	16/10	Fair-good	No	decent form	Remove
20	bigleaf maple	<i>Acer macrophyllum</i>	12.9.8 (17)	61	12/10	4/10	18/10	8/10	Fair	No	somewhat suppressed	Save
21	Douglas fir	<i>Pseudotsuga menziesii</i>	19	86	7/10	7/10	9/10	7/10	Fair	No	narrow crown, large cambial rupture	Save
22	Douglas fir	<i>Pseudotsuga menziesii</i>	40	94	16/12	15/15	16/16	17/16	Fair-good	Yes	topped in past, crook, regenerated top	Save
24	Western red cedar	<i>Thuja plicata</i>	10	20	8/8	12/12	10/8	10/10	Fair	No	suppressed, under pine	Save
25	Douglas fir	<i>Pseudotsuga menziesii</i>	30	118	10/12	13/13	16	12/12	Fair-good	Yes	topped in past, good vigor	Save
NEIGHBORING TREES												
23	Shore pine	<i>Pinus contorta</i>	22	65	10/10	16/12	10/10	11/10	Fair	Yes	forked tops	Save
101	Western red cedar	<i>Thuja plicata</i>	32	88	2/0	NA	12/8	NA	Fair-good	Yes	sparse top foliage, sound	Protect
102	Western red cedar	<i>Thuja plicata</i>	13	45	8	10	10/8	NA	Good	No	boundary line tree, good vigor	Protect

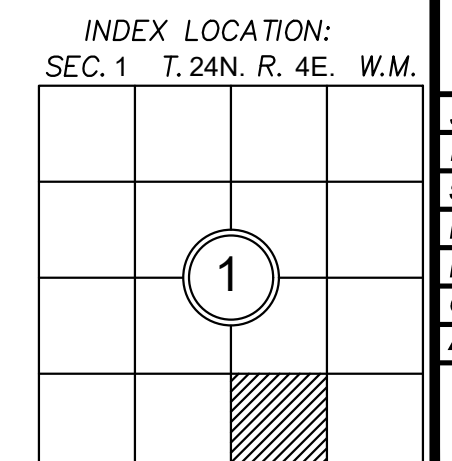
Drip-Line measurements from face of trunk
Measurements for neighboring trees from property line
Calculated DBH: the DBH in parenthesis is the square root of the sum of the dbh for each individual stem squared (example with 3 stems: dbh = square root [(stem1)² + (stem2)² + (stem3)²]).
TBD - to be determined

S. 1/4 S. 1
FOUND 3.5" BRASS
CAP W/PUNCH &
LS No. 32429
PER ROS 402/141.
AT CALCULATED
POSITION.

NOTE: THE EXISTING UTILITIES AS SHOWN ARE ONLY APPROXIMATE. OTHER EXISTING UTILITIES MAY EXIST ALONG THIS PROPOSED ALIGNMENT. IT SHALL BE THE CONTRACTOR AND OR OWNERS RESPONSIBILITY TO VERIFY THE SIZE TYPE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION

Call Before You Dig 811

PROJECT NO.: 2412-106 SUB2 MILESTONE-WCMI LLC



BY	DATE

BOUNDARY AND TOPOGRAPHY MAP

MILESTONE WCM, LLC
8 CRESCENT KEY
BELLEVUE, WA 98006
CONTACT: GREG ARMS
PHONE: (206) 817-4192

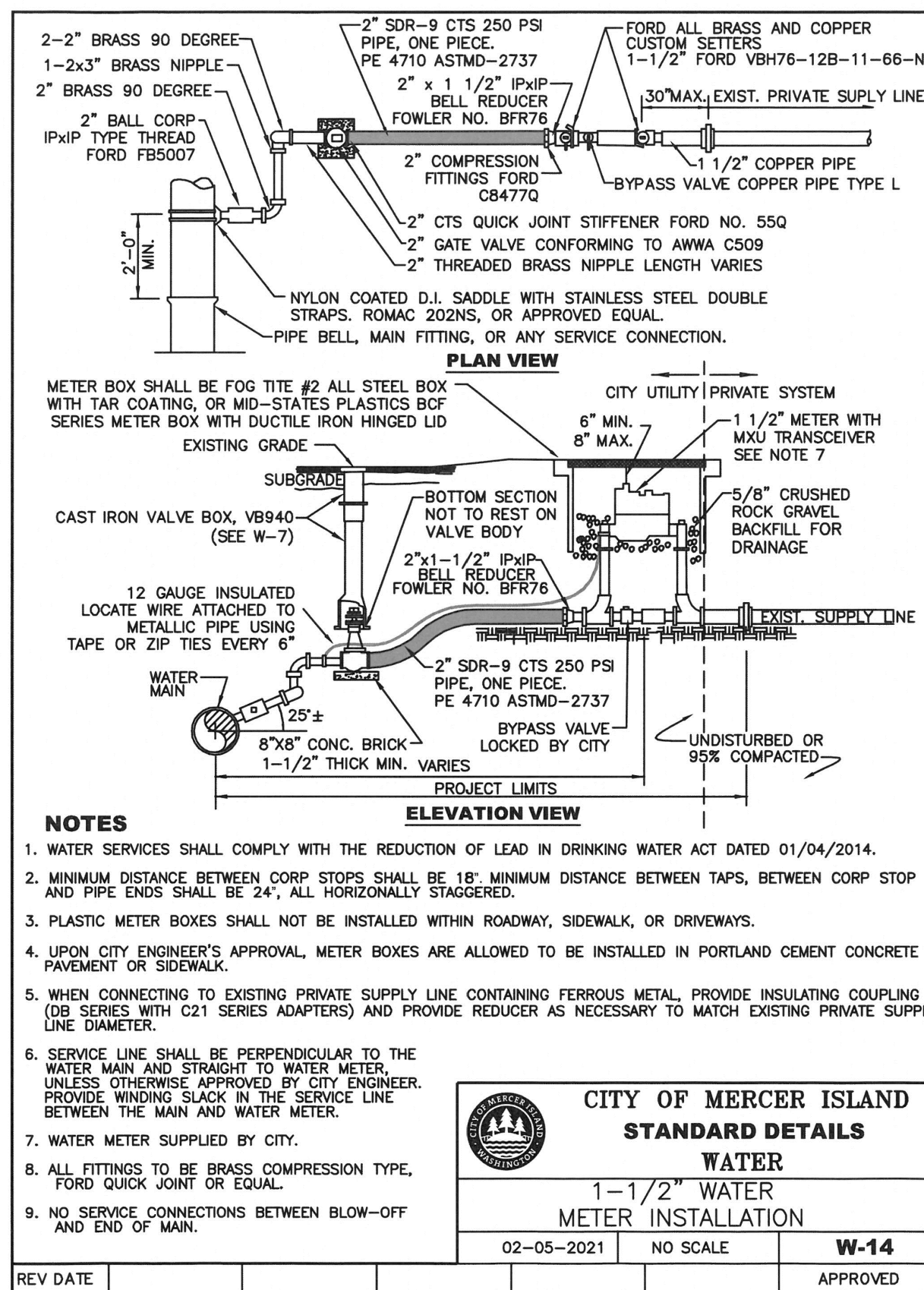
ENGINEERS - SURVEYORS
EASTSIDE CONSULTANTS, INC.
1320 NW MALL ST., SUITE B
ISSAQUAH, WASHINGTON 98027
PH: (206) 392-5351 FAX: 392-4676

JOB NO. 20025
DATE 8/21
SCALE 1"=20'
DESIGNED RSF
DRAWN RSF
CHECKED RSF
APPROVED RSF

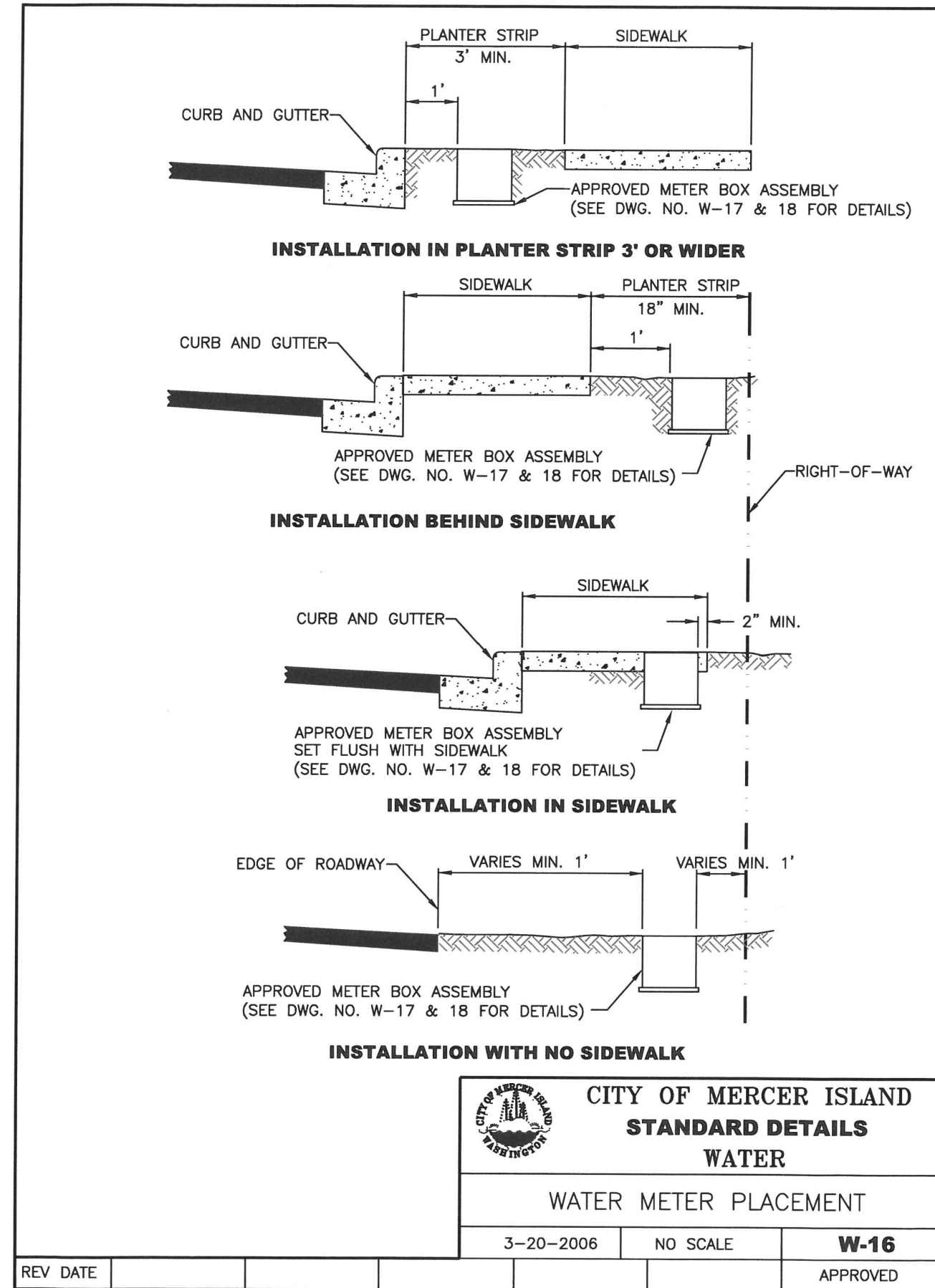
SHEET 3 OF 4

RAND-MILESTONE LOT 2 GRADING AND DRAINAGE PLAN

LOT 2 BUILDING PERMIT
SE 1/4 OF SEC.1, T.24N., R.4E., W.M.
CITY OF MERCER ISLAND, WASHINGTON



CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
1-1/2" WATER
METER INSTALLATION
02-05-2021 NO SCALE W-14



CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
WATER METER PLACEMENT
3-20-2006 NO SCALE W-16

REVISIONS	BY	DATE

WATER DETAILS

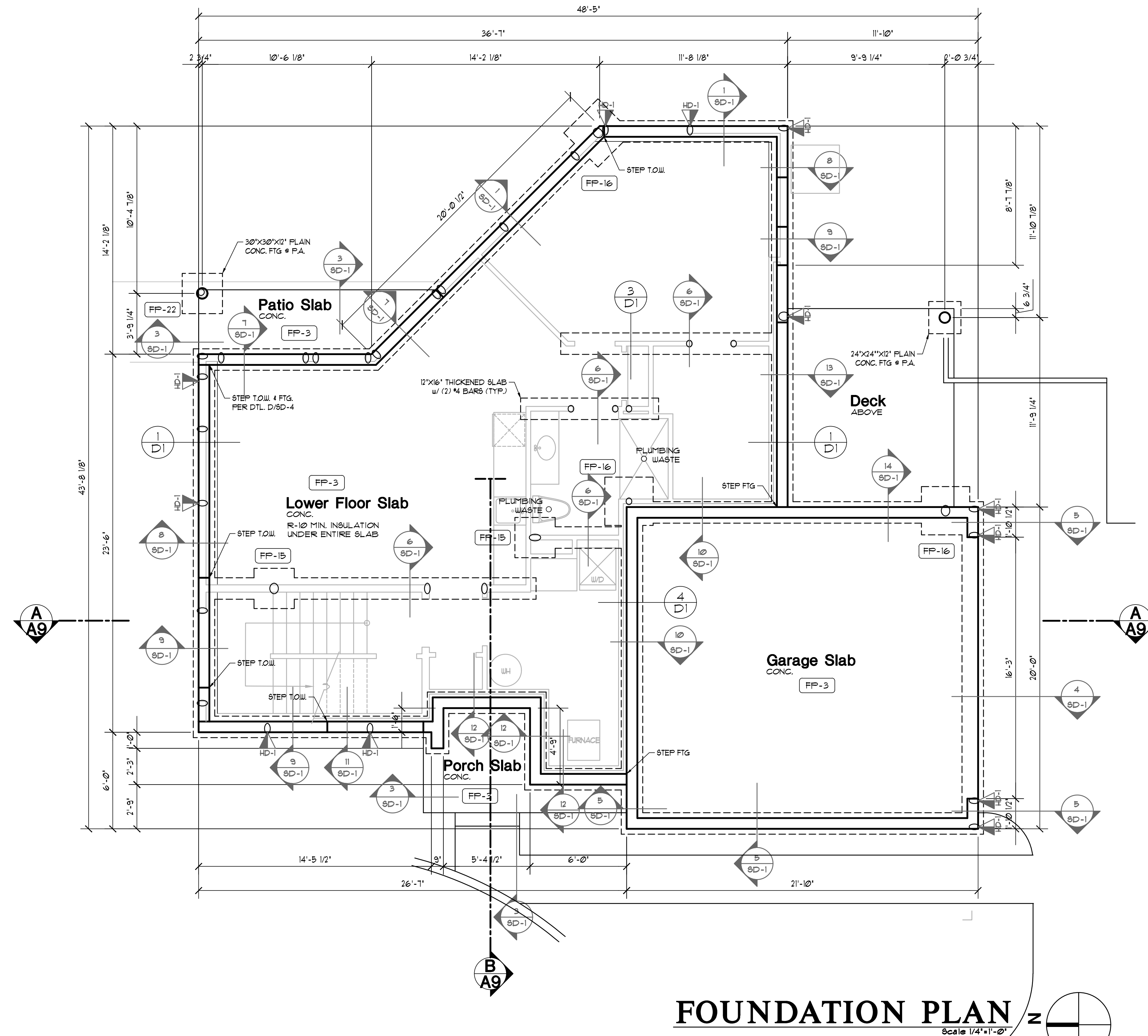
MILESTONE WCM, LLC
8 CRESCENT KEY
BELLEVUE, WA 98006
CONTACT: GREG ARMS
PHONE: (206) 817-4192

ENGINEERS - SURVEYORS
EASTSIDE CONSULTANTS, INC.
1320 N.W. WALL ST., SUITE B
ISSAQUAH, WASHINGTON 98027
PH: (425) 392-5351 FAX: 392-4676



JOB NO. 20025
DATE 12/22
SCALE 1"=20'
DESIGNED RSF
DRAWN RSF
CHECKED RSF
APPROVED RSF

2/24/2026



FOUNDATION PLAN
Scale 1/4" = 1'-0"

GENERAL FRAMING NOTES

- SEE TYPICAL MATERIALS LIST ON SECTION SHEET
- SEE SHEET A-1 FOR ALL GENERAL NOTES AND FOR ALL REQUIREMENTS CONCERNING MECHANICAL, PLUMBING, AND ELECTRICAL.
- TRUSS DESIGN BY MFG. TRUSS PLAN SHOWN IS FOR GENERAL LAYOUT ONLY. SEE DIV. 6/20 SHEET A-1
 - TRUSS LOADING. SEE DIV. 0/20/10A SHEET A-1
 - TRUSS SPAN PER FLOOR PLAN
 - TRUSS TYPE PER ROOF FRAMING PLAN
- ROOF FRAMING SPACING, 24" o.c. U.N.O.
- ROOF FITCH- EXTERIOR PER ELEVATION INTERIOR PER SECTION.
- RAFTER TAIL 2x4. VERIFY.
- ROOF TAIL AND RAKE OVERHANG PER ROOF PLAN.
- ALL HEADERS ARE 4x10 DF #2 UNO. PROVIDE (1) TRIMMER STUD UP TO 4'-0" SPAN AND (2) TRIMMER STUDS OVER 4'-0" UNO. SEE DIV. 06/100 SHEET A-1. HEADERS TO BE INSULATED W/ MIN. R-10 INSULATION
- STUD NOTCHING AND BORING PER I.R.C. SECT. R602.6
 - BEARING OR EXTERIOR WALL MAXIMUM NOTCH 25%, BORING 40%.
 - 60% MAXIMUM BORING IF DOUBLED WITH NOT MORE THAN (2) SUCCESSIVE STUDS BORED.
 - NON-BEARING MAXIMUM NOTCH 40%, BORING 60%.
 - HOLES NO CLOSER THAN 5/8" TO FACE OF STUD.

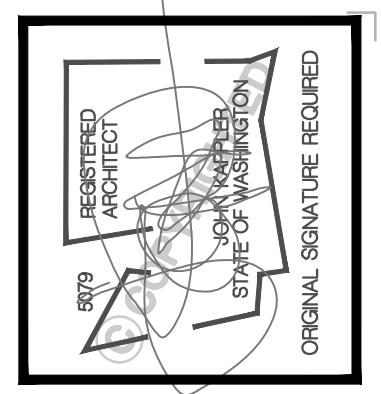
FOUNDATION KEYNOTES

- FP-1 CONCRETE STEM WALL, 8" WIDE WITH MIN. 16"x12" FOOTING. SEE DETAILS FOR ADDITIONAL INFORMATION. SEE DIV. 3 SHEET A-1
- FP-3 4" CONC. SLAB ON 10" MIL. VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 25% COMPACTED FILL/VIRGIN SOIL
- FP-5 CRAWL SPACE VENT. SEE CALCULATION.
- FP-6 ALL CRIPPLE WALLS ARE 2x4 OR 3x4 @ 16" o.c. UNO. 14" MIN STUD LENGTH PER IRC SEE DIV. 6 SHEET A-1
- FP-9 6 MIL BLACK POLYETHYLENE GROUND COVER ON GRADE. SEE DIV. 7 SHEET A-1
- FP-10 ELECTRICAL SERVICE. PROVIDE (1) 2 1/2" SCHEDULE 80 PVC CONDUIT FOR ELECTRICAL SERVICE AND (1) 5/8"x20" LONG GALVANIZED ROD FOR ELECTRICAL GROUNDING. SEE DIV. 16 AND VERIFY W/ SITE CONDITIONS
- FP-11 BLOCK OUT IN STEM WALL FOR DOORS, HVAC, ETC. AS REQUIRED
- FP-12 18"x24" CRAWL SPACE ACCESS, INSULATE AND WEATHER STRIP. SEE DIV. 0/20/11 SHEET A-1
- FP-13 PRESSURE BLOCKING OF SAME SIZE AS ADJACENT JOIST.
- FP-15 30"x30"x12" ENLARGED CONC. FTG
- FP-16 36"x36"x12" ENLARGED CONC. FTG
- FP-17 STUD STEEL 12" INTO SLAB @ 12" o.c.
- FP-18 FLOOR JOIST SEE DIV. 6 SHEET A-1
- FP-20 PROVIDE SOLID BLOCKING THRU JOIST SYSTEM TO PROVIDE SAME AREA OF BEAM SUPPORT AS ABOVE AND BELOW SEE DIV. 6 SHEET A-1
- FP-21 MIN. 1" CLEARANCE FROM CONCRETE AT END OF BEAMS
- FP-22 EXTEND PIER MIN 18" BELOW SURROUNDING GRADE
- FP-24 EDGE OF CONCRETE

SYMBOLS & LEGEND

- POINT LOADS FROM ABOVE
- POINT LOADS FROM ABOVE W/ LOADING
- POINT LOAD TRANSFERING DOWN
- POINT LOAD TRANSFERING DOWN W/ LOADING
- POINT LOAD TRANSFERED BY KICKER
- HANGERS
- HOLD DOWN WITH SIZE DESIGNATION
- VERTICAL STRAP WITH SIZE DESIGNATION TO BE USED ON FLOOR BELOW
- HORIZONTAL STRAP WITH SIZE DESIGNATION
- INDICATES BEAM CALCULATION WITH INDEXED NUMBER
- WALL ABOVE
- WALL BELOW

NOTE: UNLESS OTHERWISE NOTED, ENGINEERING AND CALCULATIONS ARE NOT PROVIDED IN THESE DRAWINGS.



Date	By	Description
10/22/20	AG	PERMIT SET
09/17/20	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 16th St.
Bellevue, WA 98007
1-800-888-4517
www.kiparchitect.com

TITLE
JOB NO.: 2102305
STARTING NO.: 2102303

SHEET
A2.0

SYMBOLS AND LEGEND

- ☐ FAN- DIRECT VENT TO OUTSIDE
- ☐ BATHROOM/LAUNDRY 50 CFM MIN.
- ☐ KITCHEN EXHAUST HOOD OVER A COMBUSTION RANGE TO BE MIN. OF 250CFM. IF EXHAUST HOOD EXCEEDS 400 CFM MAKE UP AIR MUST BE PROVIDED PER SECTION M1003.6.
- ☐ WHOLE-HOUSE FAN TO RUN CONTINUOUS & CONFORM TO IRC, M1005.4. FAN SIZE PER PLAN. FAN RATE TO BE ADJUSTED BY A FACTOR OF 1.5 FOR A NON-BALANCED NON-DISTRIBUTED SYSTEM. FRESH AIR TO BE PROVIDED BY THE FORCED AIR SYSTEM DUCTS PER SECTION M1005.4.1.
- ☐ FAN TO HAVE A SONE RATING OF 1.0 OR LESS MEASURED AT 21 INCHES WATER GAUGE
- ☐ THERMOSTAT @ 5'-0" ABOVE FLOOR
- ☉ 110V SMOKE ALARM PER IRC R314 WITH BATTERY BACKUP INTERCONNECTED PER R314.4 & R315.5. USE A COMBINATION SMOKE/CARBON MONOXIDE ALARM WHEN NOTED
- ☉ HEAT DETECTOR OR HEAT ALARM RATED FOR THE AMBIENT OUTDOOR TEMPERATURES & HUMIDITY PER IRC, R314.
- MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEM FOR UNITS; PER DIV. 15.16 SEE SHEET A1
- FURN
- WH
- A. PROVIDE 6" DIAMETER FRESH AIR INTAKE FROM OUTSIDE TO RETURN AIR PLENUM AT FURNACE WITH MOTORIZED FLOW DAMPERS.
- B. PROVIDE THERMAL EXPANSION TANK AT WATER HEATER.
- C. STRAP WATER HEATER TO FRAMING TOP AND BOTTOM.
- D. PROVIDE PRESSURE RELIEF LINE PLUMBED TO OUTSIDE.

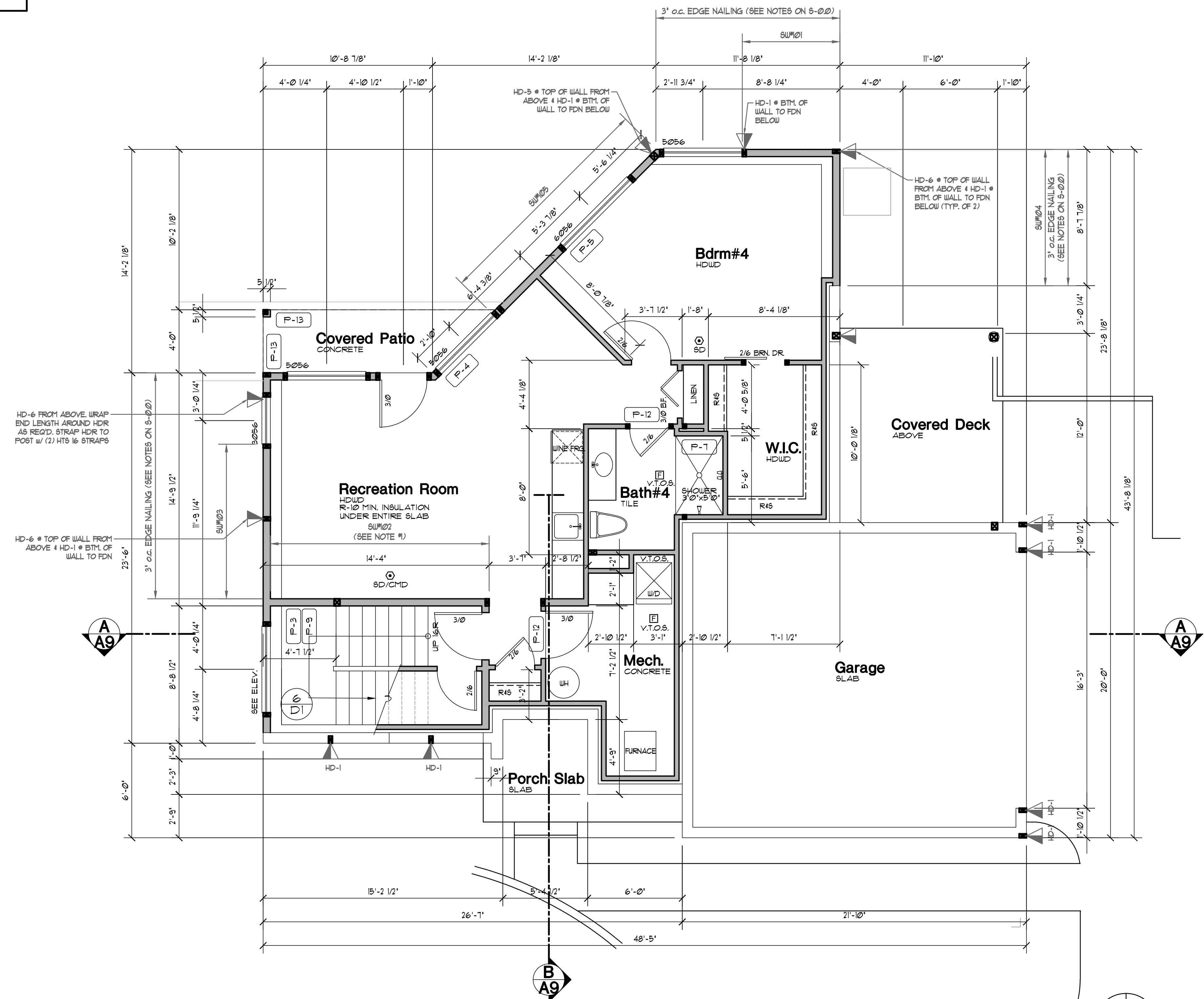
NOTE 1:
PROVIDE 1/4" OSB OR 1/2" PLYWOOD FASTENED PER TYP. EXT. WALL SHEATHING SPEC. (SEE NOTES ON 5-00).

GENERAL PLAN NOTES

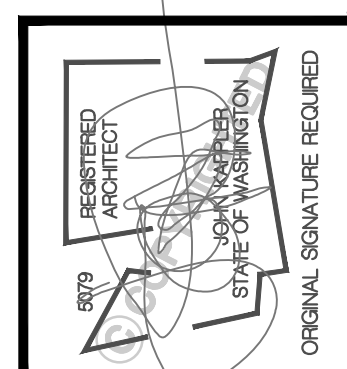
1. SEE SHEET A-1 FOR ALL GENERAL NOTES AND REQUIREMENTS.
2. ENERGY AND AIR QUALITY INFORMATION SEE DIV. 11 SHEET A-1
3. SEE BUILDING ELEVATION FOR WINDOW OPERATION SEE DIV. 8 SHEET A-1
4. SEE TYP. MATERIALS LIST ON SECTION SHEET
5. SEE SHEET A-1 FOR ALL NOTES AND REQUIREMENTS CONCERNING MECHANICAL, PLUMBING AND ELECTRICAL.

FLOOR PLAN KEY NOTES

- P-1 OCCUPANCY SEPARATION: APPLY (1) LAYER OF 1/2" G.I.B. TO GARAGE SIDE OF RESIDENCE, ATTIC SPACES, AND TO ALL BEAMS AND POSTS SUPPORTING A FLOOR-CEILING ASSEMBLY. APPLY (1) LAYER OF 3/4" TYPE 'X' G.I.B. TO GARAGE CEILING WHEN UNDER HABITABLE ROOMS. DUCTS THROUGH WALL OR CEILING COMMON TO HOUSE SHALL HAVE MINIMUM 26 GAUGE STEEL SEE DIV. 01002.6.A. SHEET A-1.
- P-2 1/4" MIN. SELF-CLOSING SOLID WOOD CORE HONEY-COMB CORE STEEL OR 20-MINUTE FIRE RATED DOOR SEE DIV. 01002.6.B. SHEET A-1
- P-3 STAIR ASSEMBLY NOTES: PER IRC, SECTION R311.1 A. HEADROOM MIN. 6'-8" WIDTH MIN. 3'-0". B. TREADS 10" MIN. DEPTH AND MIN. WIDTH OF 36" ABOVE HANDRAIL HEIGHT. RISERS 7 1/4" MAX. HT. TREAD NOSING TO BE MINIMUM 3/4" AND A MAXIMUM OF 1 1/4" ON STAIRS WITH SOLID RISERS. C. HANDRAIL MIN. 34" TO MAX. 38" ABOVE TREAD NOSING. HANDRAIL TYPE 1 CIRCULAR TO HAVE 1 1/2" MIN. TO 2" MAX. CROSS SECTION DIMENSION AND 1 1/2" MIN. CLEAR FROM WALL, RETURN RAIL ENDS. HANDRAILS SHALL BE STRONG ENOUGH TO RESIST A 200 POUND POINT LOAD IN ANY DIRECTION PER IRC, TABLE R301.5 D. INSTALL FIRE BLOCKING BETWEEN STRINGERS AT THE TOP AND BOTTOM OF EACH RUN PER IRC, SECTION R302.11. E. COVER USABLE SPACE UNDER STAIR W/ 1/2" G.I.B. PER IRC, SECTION R302.1. F. INTERMEDIATE BALUSTERS SHALL BE SPACED W/ LESS THAN 4" BETWEEN BALUSTERS. G. PROVIDE STAIRWAY ILLUMINATION PER IRC, SECTION R302.1. SEE DIV. 01002.1 SHEET A-1.
- P-4 SAFETY GLAZING PER IRC, SECTION R308 A. WINDOWS WITHIN 18" OF FLOOR B. WINDOWS WITHIN A 24" ARC OF DOORS C. WINDOWS AT TUBS AND SHOWERS D. GLAZING IN DOORS E. LESS THAN 60" HORIZ. FROM THE BOT. STAIR TREAD NOSING, 4 BOT. EDGE OF GLAZING IS LESS THAN 36" ABOVE LANDING/WALKING SURFACE SEE DIV. 02000 SHEET A-1
- P-5 EGRESS WINDOW PER IRC, SECTION R310 SEE DIV. 02000 SHEET A-1
- P-6 IGNITERS FOR GAS FIRED APPLIANCES IN GARAGE TO BE 18" MIN. ABOVE TOP OF SLAB. SEE DIV. 15 SHEET A-1
- P-7 COVER WALLS ADJACENT TO TUBS AND SHOWERS WITH NON-ABSORBENT MATERIAL TO 12" ABOVE DRAIN INLETS PER IRC, SECTION 501.2. SEE DIV. 02000 SHEET A-1
- P-8 (2) LAYERS OF FLOOR SHEATHING OVER FRAMING.
- P-9 3/4" MAX. RISER WITH 10" MIN. RUN. IF MORE THAN (2) RISERS, HANDRAIL REQUIRED PER IRC, SECTION R311.8. SEE DIV. 01002.1 SHEET A-1
- P-10 18"x24" CRAWL SPACE ACCESS. INSULATE AND WEATHER STRIP. SEE DIV. 01002.1 SHEET A-1
- P-11 22"x30" ATTIC SPACE ACCESS W/ 30" HEAD CLEARANCE. INSULATE AND WEATHER STRIP. SEE DIV. 01002.2 SHEET A-1
- P-12 FLOOR MATERIAL BREAK LINE
- P-13 WALL LINE ABOVE
- P-14 WALL LINE BELOW
- P-15 FIREPLACE ASSEMBLY NOTES: A. DIRECT VENT GAS FIREPLACES, MUST BE LISTED, LABELED & INSTALLED PER MFG. SPECIFICATIONS. SHALL CONFORM TO IRC REQUIREMENTS. SEE DIV. 01002.12 SHEET A-1 B. ZERO CLEARANCE FIREPLACES SHALL CONFORM TO IRC REQUIREMENTS. SEE DIV. 01002.12 SHEET A-1 C. HEARTH SHALL CONFORM TO IRC REQUIREMENT SEE DIV. 01002.12 D. FIREBLOCK OPENINGS AROUND PENETRATIONS * EACH FLOOR PER IRC, SECTION R1003.19. E. FIREPLACE MUST COMPLY WITH UL 121 TESTING SEE DIV. 01002.12
- P-16 SEE SITE PLAN FOR EXTENT OF WALKS & DRIVEWAYS
- P-17 3" DIAMETER STEEL POST
- P-18 36" GUARDRAIL PER IRC, SECTION R312 & TABLE R301.5 CONTRACTOR TO VERIFY TO INSPECTOR THAT ALL GUARDS & RAILINGS ARE CAPABLE OF RESISTING 200LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION.
- P-19 1" VENT FOR MECHANICAL. 1" CLEARANCE ALL SIDES PER IRC, SECTION R302.11. SEE DIV. 15 SHEET A-1
- P-20 PLANT SHELF
- P-21 UPPER AND LOWER LINEN CABINETS
- P-22 SOFFIT AREA
- P-23 INTEGRATED MAKE UP AIR
- P-24 2x6 STUDS W/ R-21 INSULATION MIN.



LOWER FLOOR PLAN
Scale 1/4"=1'-0"



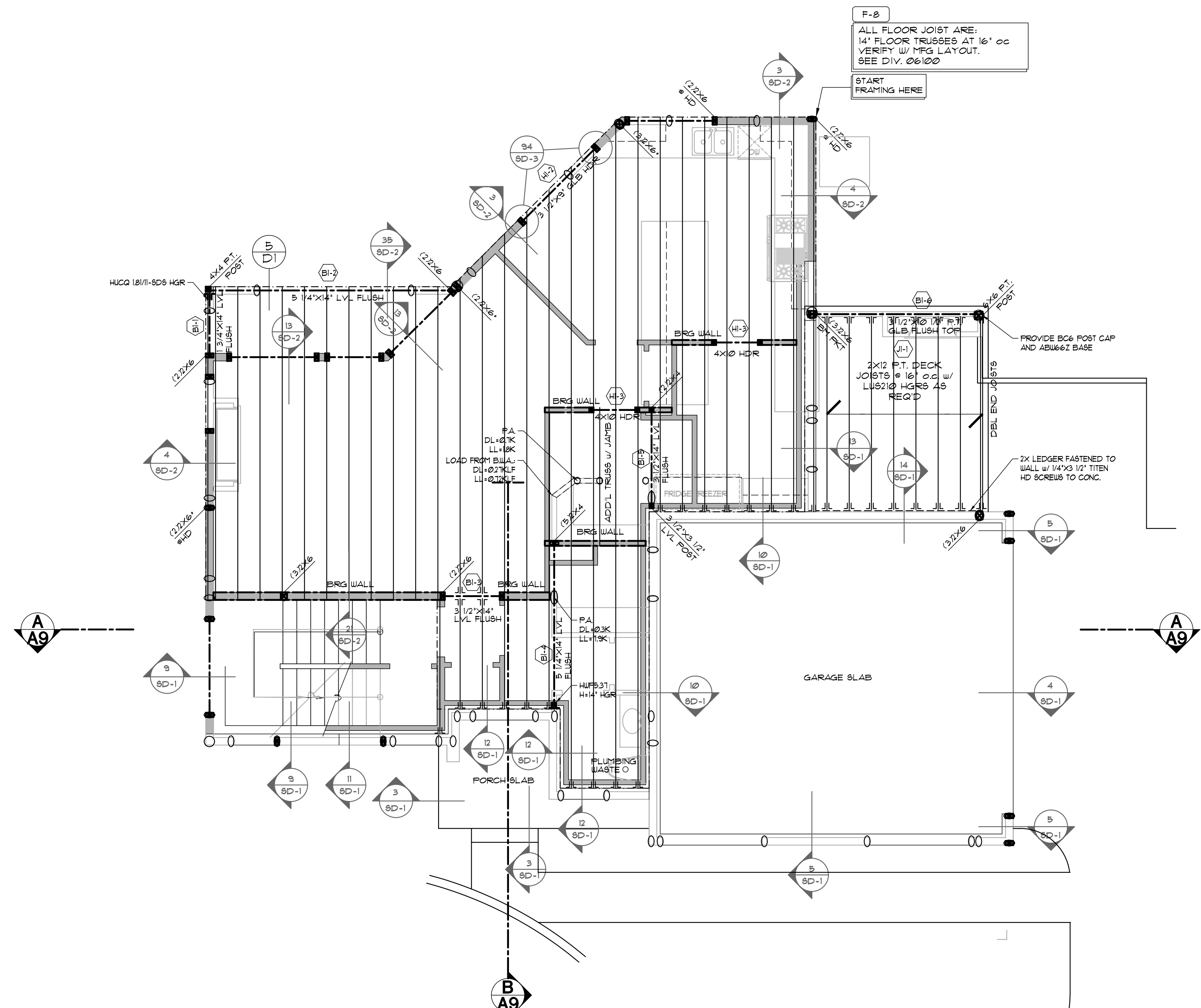
Date	By	Description
10/22/20	AG	PERMIT SET
03/17/20	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 16th St.
Bellevue, WA 98007
1-800-888-4517
www.kiparchitect.com

TITLE
JOB NO. : 2102305
STARTING NO. : 2102303

SHEET
A2.1



MAIN FLOOR FRAMING PLAN
Scale 1/4"=1'-0"

GENERAL FRAMING NOTES

- SEE TYPICAL MATERIALS LIST ON SECTION SHEET
- SEE SHEET A-1 FOR ALL GENERAL NOTES AND FOR ALL REQUIREMENTS CONCERNING MECHANICAL, PLUMBING, AND ELECTRICAL.
- TRUSS DESIGN BY MFG. TRUSS PLAN SHOWN IS FOR GENERAL LAYOUT ONLY. SEE DIV. 6/200 SHEET A-1
 - TRUSS LOADING. SEE DIV. 6/200/10A SHEET A-1
 - TRUSS SPAN PER FLOOR PLAN
 - TRUSS TYPE PER ROOF FRAMING PLAN
- ROOF FRAMING SPACING, 24" o.c. U.N.O.
- ROOF PITCH- EXTERIOR PER ELEVATION
INTERIOR PER SECTION.
- RAFTER TAIL 2x4. VERIFY.
- ROOF TAIL AND RAKE OVERHANG PER ROOF PLAN.
- ALL HEADERS ARE 4x10 DF #2 UNO. PROVIDE (1) TRIMMER STUD UP TO 4'-0" SPAN AND (2) TRIMMER STUDS OVER 4'-0" UNO. SEE DIV. 6/100 SHEET A-1. HEADERS TO BE INSULATED W/ MIN. R-10 INSULATION
- STUD NOTCHING AND BORING PER I.R.C. SECT. R602.6
 - BEARING OR EXTERIOR WALL MAXIMUM NOTCH 25%, BORING 40%.
 - 60% MAXIMUM BORING IF DOUBLED WITH NOT MORE THAN (2) SUCCESSIVE STUDS BORED.
 - NON-BEARING MAXIMUM NOTCH 40%, BORING 60%.
 - HOLES NO CLOSER THAN 5/8" TO FACE OF STUD.

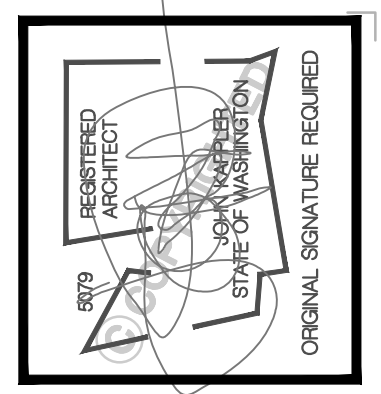
FRAMING PLAN KEYNOTES

- F-1 BACK FRAMING AND SOFFIT AREA AS REQUIRED TO ALLOW FOR HVAC DUCTING. SEE DIV/5 SHEET A-1
- F-2 RAKED PONY WALL ON TOP OF LOWER ROOF FRAMING MEMBERS SUPPORTING UPPER ROOF FRAMING MEMBERS.
- F-3 ALIGN EDGE OF JOIST WITH FACE OF WALL
- F-4 ALIGN INSIDE FACE OF BEAM WITH OUTSIDE FACE OF WALL
- F-6 TOP OF BEAM IS FLUSH WITH BOTTOM OF JOIST WITH NO TOP PLATE. CUT ADJACENT FRAMING MEMBERS INTO BEAM FOR ADEQUATE SUPPORT.
- F-7 ATTIC SPACE VENT SEE CALCULATION SEE DIV. 6/200/3 B SHEET A-1
- F-8 FLOOR JOIST - SEE SCHEDULE DWG. SEE DIV. 6/100 SHEET A-1
- F-9 SEE ELEVATIONS AND SECTIONS FOR PLATE HEIGHT
- F-10 PRESSURE BLOCKING SEE DIV. 6/100 SHEET A-1
- F-11 FLUSH - BOTTOM OF BEAM EVEN W/ BOTTOM OF JOISTS
- F-12 TOP OF BEAM FLUSH W/ TOP OF JOIST AND BEAM EXTENDS DOWN BELOW JOISTS
- F-14 2x OVERFRAMING @ 24" O.C. PROVIDE 2x6 STRONGBACK FURLINS AND 2x KICKERS AT 6'-0" O.C TO TRUSSES BELOW.
- F-15 2x6 CEILING JOISTS @ 24" O.C

SYMBOLS & LEGEND

- POINT LOADS FROM ABOVE
- POINT LOADS FROM ABOVE W/ LOADING
- POINT LOAD TRANSFERING DOWN
- POINT LOAD TRANSFERING DOWN W/ LOADING
- HANGER
- POINT LOAD TRANSFERED BY KICKER
- HOLD DOWN WITH SIZE DESIGNATION
- VERTICAL STRAP WITH SIZE DESIGNATION TO BE USED ON FLOOR BELOW
- HORIZONTAL STRAP WITH SIZE DESIGNATION
- INDICATES BEAM CALCULATION WITH INDEXED NUMBER
- WALL ABOVE — WALL BELOW

NOTE: UNLESS OTHERWISE NOTED, ENGINEERING AND CALCULATIONS ARE NOT PROVIDED IN THESE DRAWINGS.



Date	By	Description
10/22/20	AG	PERMIT SET
09/17/20	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 16th St.
Bellevue, WA 98007
1-800-888-4517
www.kiparchitect.com

TITLE
JOB NO.: 2102305
STARTING NO.: 2102303

SHEET
A2.2

SYMBOLS AND LEGEND

- FAN-DIRECT VENT TO OUTSIDE
 - BATHROOM/LAUNDRY 50 CFM MIN.
 - KITCHEN EXHAUST HOOD OVER A COMBUSTION RANGE TO BE MIN. OF 250CFM. IF EXHAUST HOOD EXCEEDS 400 CFM MAKE UP AIR MUST BE PROVIDED PER SECTION M1503.6.
 - WHOLE-HOUSE FAN TO RUN CONTINUOUS & CONFORM TO IRC, M1505.4. FAN SIZE PER PLAN. FAN RATE TO BE ADJUSTED BY A FACTOR OF 1.5 FOR A NON-BALANCED NON-DISTRIBUTED SYSTEM. FRESH AIR TO BE PROVIDED BY THE FORCED AIR SYSTEM DUCTS PER SECTION M1505.4.1.
 - FAN TO HAVE A BONE RATING OF 1.0 OR LESS MEASURED AT 0.1 INCHES WATER GAUGE
 - THERMOSTAT @ 5'-0" ABOVE FLOOR
 - 110V SMOKE ALARM PER IRC, R314 WITH BATTERY BACKUP INTERCONNECTED PER R314.4 & R315.5. USE A COMBINATION SMOKE/CARBON MONOXIDE ALARM WHEN NOTED
 - HEAT DETECTOR OR HEAT ALARM RATED FOR THE AMBIENT OUTDOOR TEMPERATURES & HUMIDITY PER IRC, R314.
- MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEM FOR UNITS; PER DIV. 15.16 SEE SHEET A1
- FURN
- WH
- A. PROVIDE 6" DIAMETER FRESH AIR INTAKE FROM OUTSIDE TO RETURN AIR FLENUM AT FURNACE WITH MOTORIZED FLOW DAMPERS.
- B. PROVIDE THERMAL EXPANSION TANK AT WATER HEATER.
- C. STRAP WATER HEATER TO FRAMING TOP AND BOTTOM.
- D. PROVIDE PRESSURE RELIEF LINE PLUMBED TO OUTSIDE.

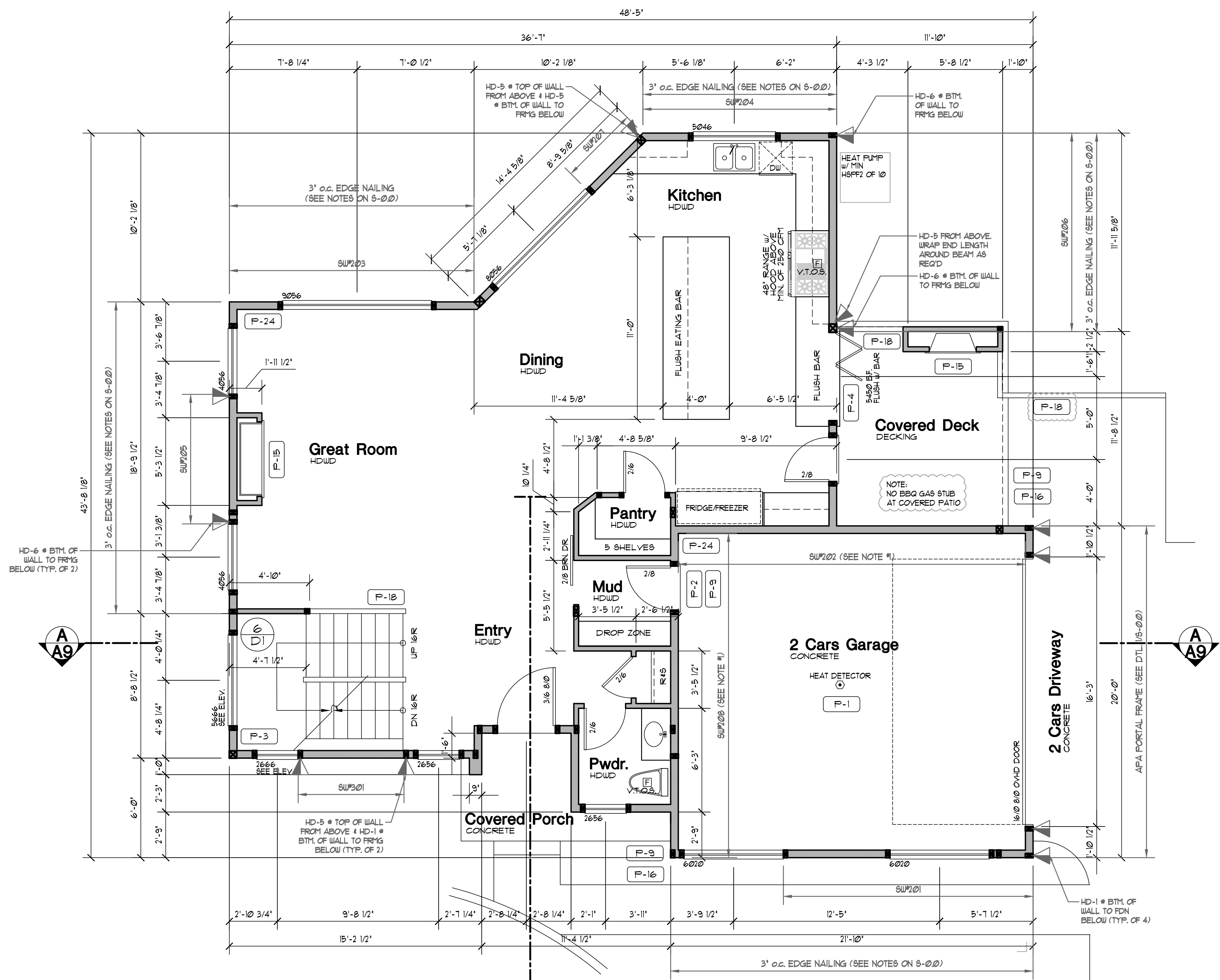
NOTE 1:
PROVIDE 1/4" OSB OR 1/2" PLYWOOD FASTENED PER TYP. EXT. WALL SHEATHING SPEC. (SEE NOTES ON 5-0-0).

GENERAL PLAN NOTES

1. SEE SHEET A-1 FOR ALL GENERAL NOTES AND REQUIREMENTS.
2. ENERGY AND AIR QUALITY INFORMATION SEE DIV. 11 SHEET A-1
3. SEE BUILDING ELEVATION FOR WINDOW OPERATION SEE DIV. 8 SHEET A-1
4. SEE TYP. MATERIALS LIST ON SECTION SHEET
5. SEE SHEET A-1 FOR ALL NOTES AND REQUIREMENTS CONCERNING MECHANICAL, PLUMBING AND ELECTRICAL.

FLOOR PLAN KEY NOTES

- P-1 OCCUPANCY SEPARATION: APPLY (1) LAYER OF 1/2" G.I.B. TO GARAGE SIDE OF RESIDENCE, ATTIC SPACES, AND TO ALL BEAMS AND POSTS SUPPORTING A FLOOR-CEILING ASSEMBLY. APPLY (1) LAYER OF 3/4" TYP. 3" G.I.B. TO GARAGE CEILING WHEN UNDER HABITABLE ROOMS. DUCTS THROUGH WALL OR CEILING COMMON TO HOUSE SHALL HAVE MINIMUM 26 GAUGE STEEL SEE DIV. 01002.6.A. SHEET A-1.
- P-2 1/4" MIN. SELF-CLOSING SOLID WOOD CORE HONEY-COMB CORE STEEL OR 20-MINUTE FIRE RATED DOOR SEE DIV. 01002.6.B. SHEET A-1
- P-3 STAIR ASSEMBLY NOTES: PER IRC, SECTION R311.1
 - A. HEADROOM MIN. 6'-8" WIDTH MIN. 3'-0"
 - B. TREADS 10" MIN. DEPTH AND MIN. WIDTH OF 36" ABOVE HANDRAIL HEIGHT. RISERS 7 1/4" MAX. HT. TREAD NOSING TO BE MINIMUM 3/4" AND A MAXIMUM OF 1 1/4" ON STAIRS WITH SOLID RISERS.
 - C. HANDRAIL MIN. 34" TO MAX. 38" ABOVE TREAD NOSING. HANDRAIL TYPE I CIRCULAR TO HAVE 1 1/2" MIN. TO 2" MAX. CROSS SECTION DIMENSION AND 1 1/2" MIN. CLEAR FROM WALL, RETURN RAIL ENDS. HANDRAILS SHALL BE STRONG ENOUGH TO RESIST A 200 POUND POINT LOAD IN ANY DIRECTION PER IRC, TABLE R301.5
 - D. INSTALL FIRE BLOCKING BETWEEN STRINGERS AT THE TOP AND BOTTOM OF EACH RUN PER IRC, SECTION R302.11.
 - E. COVER USABLE SPACE UNDER STAIR W/ 1" G.I.B. PER IRC, SECTION R302.1.
 - F. INTERMEDIATE BALUSTERS SHALL BE SPACED W/ LESS THAN 4" BETWEEN BALUSTERS.
 - G. PROVIDE STAIRWAY ILLUMINATION PER IRC, SECTION R302.1.
- P-4 SAFETY GLAZING PER IRC, SECTION R308
 - A. WINDOWS WITHIN 18" OF FLOOR
 - B. WINDOWS WITHIN A 24" ARC OF DOORS
 - C. WINDOWS AT TUBS AND SHOWERS
 - D. GLAZING IN DOORS
 - E. LESS THAN 60" HORIZ. FROM THE BOT. STAIR TREAD NOSING, 4 BOT. EDGE OF GLAZING IS LESS THAN 36" ABV. LANDING/WALKING SURFACE SEE DIV. 02002 SHEET A-1
- P-5 EGRESS WINDOW PER IRC, SECTION R310 SEE DIV. 02002 SHEET A-1
- P-6 IGNITERS FOR GAS FIRED APPLIANCES IN GARAGE TO BE 18" MIN. ABOVE TOP OF SLAB. SEE DIV. 15 SHEET A-1
- P-7 COVER WALLS ADJACENT TO TUBS AND SHOWERS WITH NON-ABSORBENT MATERIAL TO 1/2" ABOVE DRAIN INLETS PER IRC, SECTION 5012. SEE DIV. 02002 SHEET A-1
- P-8 (2) LAYERS OF FLOOR SHEATHING OVER FRAMING.
- P-9 3/4" MAX. RISER WITH 10" MIN. RUN, IF MORE THAN (2) RISERS, HANDRAIL REQUIRED PER IRC, SECTION R311.1.8. SEE DIV. 01002.1 SHEET A-1
- P-10 18"x24" CRAWL SPACE ACCESS, INSULATE AND WEATHER STRIP. SEE DIV. 01002.1 SHEET A-1
- P-11 22"x30" ATTIC SPACE ACCESS W/ 30" HEAD CLEARANCE. INSULATE AND WEATHER STRIP. SEE DIV. 01002.2 SHEET A-1
- P-12 FLOOR MATERIAL BREAK LINE
- P-13 WALL LINE ABOVE
- P-14 WALL LINE BELOW
- P-15 FIREPLACE ASSEMBLY NOTES:
 - A. DIRECT VENT GAS FIREPLACES, MUST BE LISTED, LABELED & INSTALLED PER MFG. SPECIFICATIONS. SHALL CONFORM TO IRC REQUIREMENTS. SEE DIV. 01002.12 SHEET A-1
 - B. ZERO CLEARANCE FIREPLACES SHALL CONFORM TO IRC REQUIREMENTS. SEE DIV. 01002.12 SHEET A-1
 - C. HEARTH SHALL CONFORM TO IRC REQUIREMENT SEE DIV. 01002.12
 - D. FIREBLOCK OPENINGS AROUND PENETRATIONS @ EACH FLOOR PER IRC, SECTION R1003.13.
 - E. FIREPLACE MUST COMPLY WITH UL 121 TESTING
- P-16 SEE SITE PLAN FOR EXTENT OF WALKS & DRIVEWAYS
- P-17 3" DIAMETER STEEL POST
- P-18 36" GUARDRAIL PER IRC, SECTION R302 & TABLE R301.5 CONTRACTOR TO VERIFY TO INSPECTOR THAT ALL GUARDS & RAILINGS ARE CAPABLE OF RESISTING 200 LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION.
- P-19 1" VENT FOR MECHANICAL. 1" CLEARANCE ALL SIDES PER IRC, SECTION R302.11. SEE DIV. 15 SHEET A-1
- P-20 PLANT SHELF
- P-21 UPPER AND LOWER LINEN CABINETS
- P-22 SOFFIT AREA
- P-23 INTEGRATED MAKE UP AIR
- P-24 2x6 STUDS W/ R-21 INSULATION MIN.



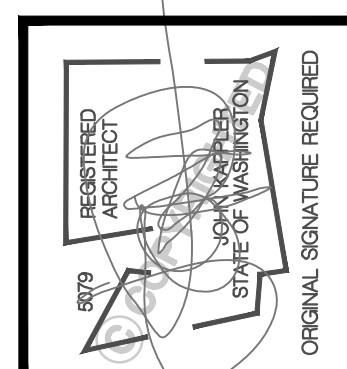
MAIN FLOOR PLAN

Scale 1/4"=1'-0"

SQUARE FOOTAGE

MAIN FLOOR	1060 SF
UPPER FLOOR	1381 SF
LOWER	965 SF
TOTAL	3406 SF
GARAGE	424 SF
COV'D PORCH	28 SF
COV'D PATIO/DECK	51/120 SF

SQUARE FOOTAGE IS MEASURED TO THE OUTSIDE FACE OF WALLS, STAIRS ARE COUNTED ONCE IN CALCULATIONS, OPEN TO BELOW SPACES AND GARAGES ARE NOT INCLUDED IN CALCULATIONS.



Date	By	Description
10/22/23	AG	PERMIT SET
03/17/24	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 16th St
Bellevue, WA 98007
1-800-888-4517
www.kiparchitectural.com

TITLE	
JOB NO.:	2102305
STARTING NO.:	2102303

SHEET
A3

SYMBOLS AND LEGEND

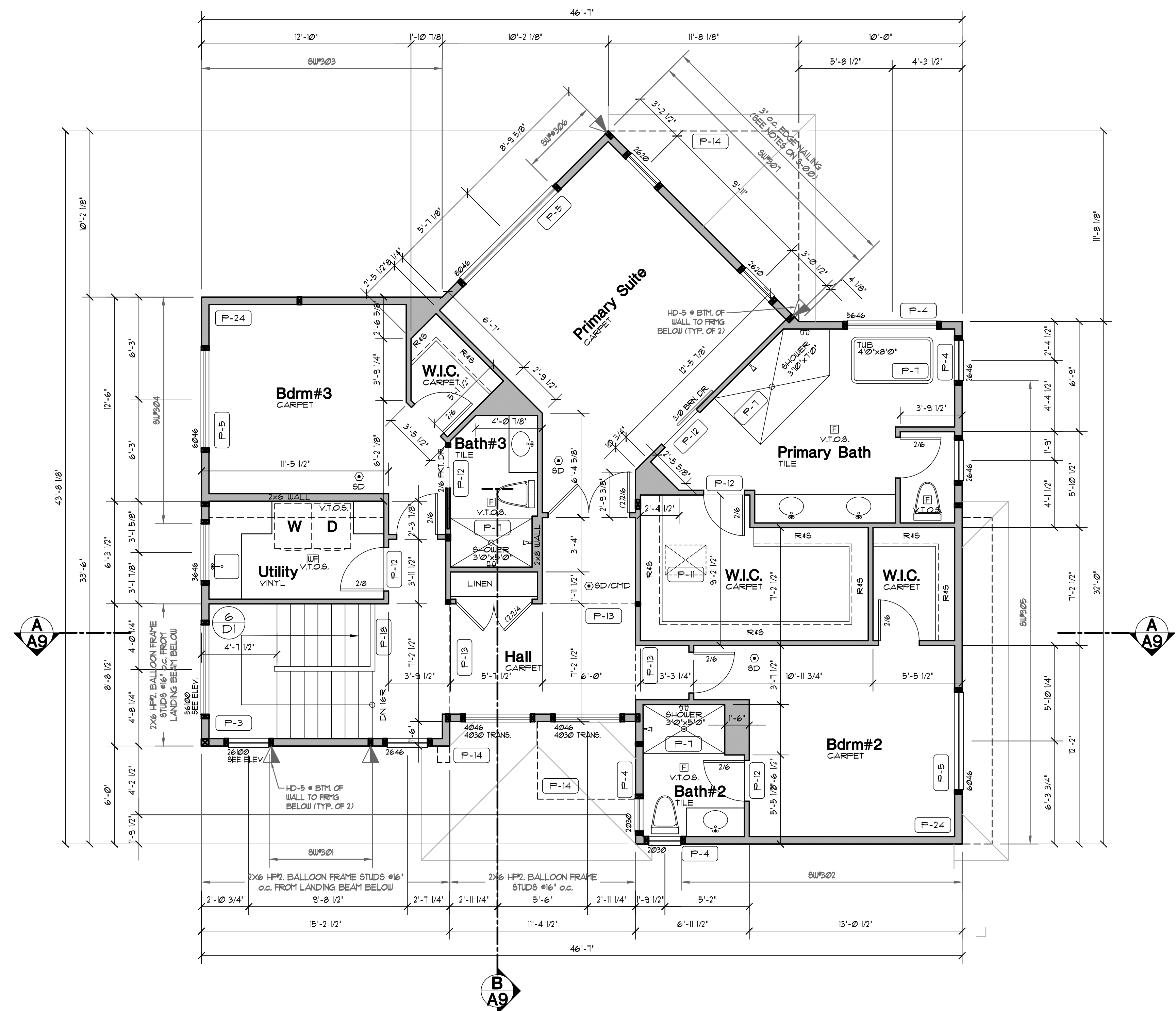
- FAN-DIRECT VENT TO OUTSIDE
 - BATHROOM/LAUNDRY 50 CFM MIN.
 - KITCHEN EXHAUST HOOD OVER A COMBUSTION RANGE TO BE MIN. OF 250CFM. IF EXHAUST HOOD EXCEEDS 400 CFM MAKE UP AIR MUST BE PROVIDED PER SECTION M1003.6.
- WHOLE-HOUSE FAN TO RUN CONTINUOUS & CONFORM TO IRC, M1005.4. FAN SIZE PER PLAN. FAN RATE TO BE ADJUSTED BY A FACTOR OF 1.5 FOR A NON-BALANCED NON-DISTRIBUTED SYSTEM. FRESH AIR TO BE PROVIDED BY THE FORCED AIR SYSTEM DUCTS PER SECTION M1005.4.1.
- FAN TO HAVE A SONE RATING OF 1.0 OR LESS MEASURED AT 21 INCHES WATER GAUGE
- THERMOSTAT @ 5'-0" ABOVE FLOOR
- 110V SMOKE ALARM PER IRC, R314 WITH BATTERY BACKUP INTERCONNECTED PER R314.4 & R315.5. USE A COMBINATION SMOKE/CARBON MONOXIDE ALARM WHEN NOTED
- HEAT DETECTOR OR HEAT ALARM RATED FOR THE AMBIENT OUTDOOR TEMPERATURES & HUMIDITY PER IRC, R314.
- MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEM FOR UNITS; PER DIV. 15.16 SEE SHEET A1
- FURN
- WH
- A. PROVIDE 6" DIAMETER FRESH AIR INTAKE FROM OUTSIDE TO RETURN AIR FLENUM AT FURNACE WITH MOTORIZED FLOW DAMPERS.
- B. PROVIDE THERMAL EXPANSION TANK AT WATER HEATER.
- C. STRAP WATER HEATER TO FRAMING TOP AND BOTTOM.
- D. PROVIDE PRESSURE RELIEF LINE PLUMBED TO OUTSIDE.

GENERAL PLAN NOTES

1. SEE SHEET A-1 FOR ALL GENERAL NOTES AND REQUIREMENTS.
2. ENERGY AND AIR QUALITY INFORMATION SEE DIV. 11 SHEET A-1
3. SEE BUILDING ELEVATION FOR WINDOW OPERATION SEE DIV. 8 SHEET A-1
4. SEE TYP. MATERIALS LIST ON SECTION SHEET
5. SEE SHEET A-1 FOR ALL NOTES AND REQUIREMENTS CONCERNING MECHANICAL, PLUMBING AND ELECTRICAL.

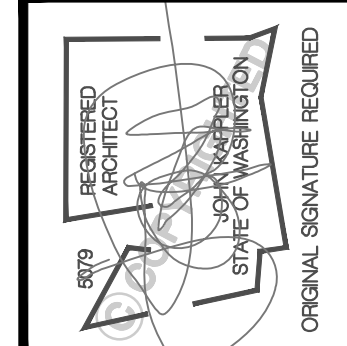
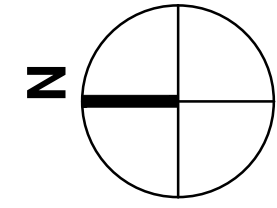
FLOOR PLAN KEY NOTES

- P-1 OCCUPANCY SEPARATION: APPLY (1) LAYER OF 1/2" G.I.B. TO GARAGE SIDE OF RESIDENCE, ATTIC SPACES, AND TO ALL BEAMS AND POSTS SUPPORTING A FLOOR-CEILING ASSEMBLY. APPLY (1) LAYER OF 3/4" TYPE 'X' G.I.B. TO GARAGE CEILING WHEN UNDER HABITABLE ROOMS. DUCTS THROUGH WALL OR CEILING COMMON TO HOUSE SHALL HAVE MINIMUM 26 GAUGE STEEL SEE DIV. 01002.6.A. SHEET A-1.
- P-2 1/4" MIN. SELF-CLOSING SOLID WOOD CORE HONEY-COMB CORE STEEL OR 20-MINUTE FIRE RATED DOOR SEE DIV. 01002.6.B. SHEET A-1
- P-3 STAIR ASSEMBLY NOTES: PER IRC, SECTION R301.1. A. HEADROOM MIN. 6'-8" WIDTH MIN. 3'-0". B. TREADS 10" MIN. DEPTH AND MIN. WIDTH OF 36" ABOVE HANDRAIL HEIGHT. RISERS 7 1/4" MAX. HT. TREAD NOSING TO BE MINIMUM 3/4" AND A MAXIMUM OF 1 1/4" ON STAIRS WITH SOLID RISERS. C. HANDRAIL MIN. 34" TO MAX 38" ABOVE TREAD NOSING. HANDRAIL TYPE I CIRCULAR TO HAVE 1 1/2" MIN. TO 2" MAX. CROSS SECTION DIMENSION AND 1 1/2" MIN. CLEAR FROM WALL, RETURN RAIL ENDS. HANDRAILS SHALL BE STRONG ENOUGH TO RESIST A 200 POUND POINT LOAD IN ANY DIRECTION PER IRC, TABLE R301.5. D. INSTALL FIRE BLOCKING BETWEEN STRINGERS AT THE TOP AND BOTTOM OF EACH RUN PER IRC, SECTION R302.11. E. COVER USABLE SPACE UNDER STAIR W/ 1" G.I.B. PER IRC, SECTION R302.1. F. INTERMEDIATE BALUSTERS SHALL BE SPACED W/ LESS THAN 4" BETWEEN BALUSTERS. G. PROVIDE STAIRWAY ILLUMINATION PER IRC, SECTION R302.1. SEE DIV. 01002.1 SHEET A-1.
- P-4 SAFETY GLAZING PER IRC, SECTION R308. A. WINDOWS WITHIN 18" OF FLOOR. B. WINDOWS WITHIN A 24" ARC OF DOORS. C. WINDOWS AT TUBS AND SHOWERS. D. GLAZING IN DOORS. E. LESS THAN 60" HORIZ. FROM THE BOT. STAIR TREAD NOSING, 4 BOT. EDGE OF GLAZING IS LESS THAN 36" ABV. LANDING/WALKING SURFACE SEE DIV. 02002 SHEET A-1.
- P-5 EGRESS WINDOW PER IRC, SECTION R310 SEE DIV. 02002 SHEET A-1
- P-6 IGNITERS FOR GAS FIRED APPLIANCES IN GARAGE TO BE 18" MIN. ABOVE TOP OF SLAB. SEE DIV. 15 SHEET A-1
- P-7 COVER WALLS ADJACENT TO TUBS AND SHOWERS WITH NON-ABSORBENT MATERIAL TO 12" ABOVE DRAIN INLETS PER IRC, SECTION 501.2. SEE DIV. 02002 SHEET A-1
- P-8 (2) LAYERS OF FLOOR SHEATHING OVER FRAMING.
- P-9 3/4" MAX. RISER WITH 10" MIN. RUN. IF MORE THAN (2) RISERS, HANDRAIL REQUIRED PER IRC, SECTION R311.8. SEE DIV. 01002.1 SHEET A-1
- P-10 18"x24" CRAWL SPACE ACCESS, INSULATE AND WEATHER STRIP. SEE DIV. 01002.1 SHEET A-1
- P-11 22"x30" ATTIC SPACE ACCESS W/ 30" HEAD CLEARANCE. INSULATE AND WEATHER STRIP. SEE DIV. 01002.2 SHEET A-1
- P-12 FLOOR MATERIAL BREAK LINE
- P-13 WALL LINE ABOVE
- P-14 WALL LINE BELOW
- P-15 FIREPLACE ASSEMBLY NOTES: A. DIRECT VENT GAS FIREPLACES, MUST BE LISTED, LABELED & INSTALLED PER MFG. SPECIFICATIONS, SHALL CONFORM TO IRC REQUIREMENTS. SEE DIV. 01002.12 SHEET A-1. B. ZERO CLEARANCE FIREPLACES SHALL CONFORM TO IRC REQUIREMENTS. SEE DIV. 01002.12 SHEET A-1. C. HEARTH SHALL CONFORM TO IRC REQUIREMENT SEE DIV. 01002.12. D. FIREBLOCK OPENINGS AROUND PENETRATIONS @ EACH FLOOR PER IRC, SECTION R1003.13. E. FIREPLACE MUST COMPLY WITH UL 121 TESTING. SEE SITE PLAN FOR EXTENT OF WALKS & DRIVEWAYS
- P-16 3" DIAMETER STEEL POST
- P-18 36" GUARDRAIL PER IRC, SECTION R302.4 TABLE R302.5 CONTRACTOR TO VERIFY TO INSPECTOR THAT ALL GUARDS & RAILINGS ARE CAPABLE OF RESISTING 200LB LOAD ON TOP RAIL ACTING IN ANY DIRECTION.
- P-19 1" VENT FOR MECHANICAL. 1" CLEARANCE ALL SIDES PER IRC, SECTION R302.11. SEE DIV. 15 SHEET A-1
- P-20 PLANT SHELF
- P-21 UPPER AND LOWER LINEN CABINETS
- P-22 SOFFIT AREA
- P-23 INTEGRATED MAKE UP AIR
- P-24 2x6 STUDS W/ R-21 INSULATION MIN.



UPPER FLOOR PLAN

Scale 1/4"=1'-0"



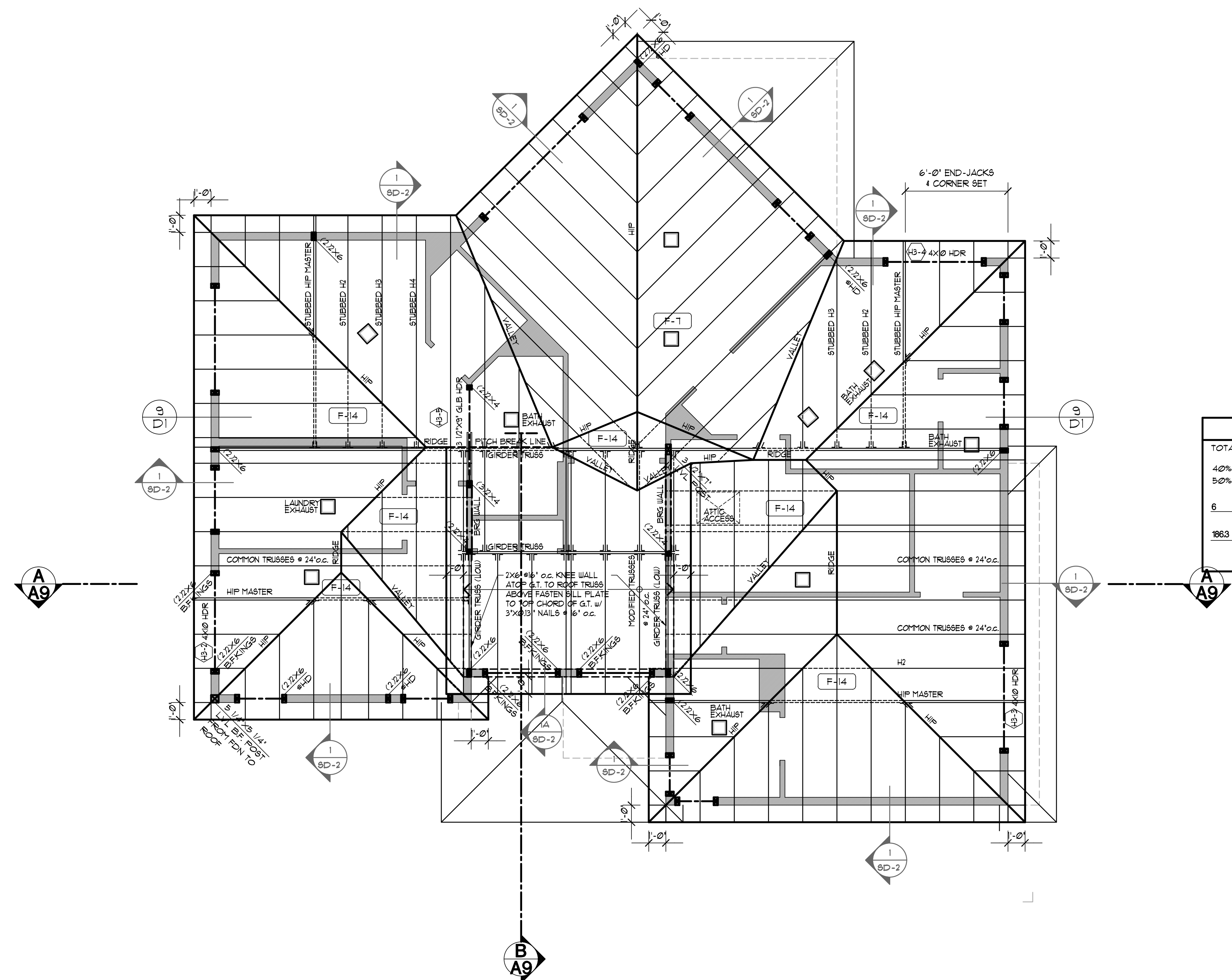
Date	By	Description
10/22/20	AG	PERMIT SET
03/17/20	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
 7619 SE 22nd ST. Mercer Island, WA 98040
 THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
 Forward Thinking Design Solutions For Your Environment
 14311 SE 16th St.
 Bellevue, WA 98007
 1-800-888-4517
 www.kiparchitect.com

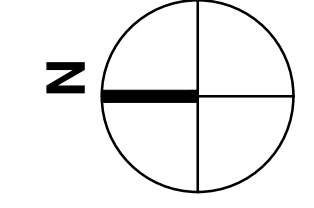
TITLE	
JOB NO.	2102305
STARTING NO.	2102303

SHEET
A5



UPPER ROOF FRAMING PLAN

SCALE 1/4"=1'-0"



GENERAL FRAMING NOTES

- SEE TYPICAL MATERIALS LIST ON SECTION SHEET
- SEE SHEET A-1 FOR ALL GENERAL NOTES AND FOR ALL REQUIREMENTS CONCERNING MECHANICAL, PLUMBING, AND ELECTRICAL.
- TRUSS DESIGN BY MFG. TRUSS PLAN SHOWN IS FOR GENERAL LAYOUT ONLY. SEE DIV. 6/20 SHEET A-1
 - TRUSS LOADING. SEE DIV. 6/20/10A SHEET A-1
 - TRUSS SPAN PER FLOOR PLAN
 - TRUSS TYPE PER ROOF FRAMING PLAN
- ROOF FRAMING SPACING, 24' o.c. UNO.
- ROOF PITCH- EXTERIOR PER ELEVATION
INTERIOR PER SECTION.
- RAFTER TAIL 2x4. VERIFY.
- ROOF TAIL AND RAKE OVERHANG PER ROOF PLAN.
- ALL HEADERS ARE 4x10 DF #2 UNO.
PROVIDE (1) TRIMMER STUD UP TO 4'-0" SPAN (45) AND (2) TRIMMER STUDS OVER 4'-0" UNO.
SEE DIV. 6/100 SHEET A-1
HEADERS TO BE INSULATED W/ MIN. R-10 INSULATION
- STUD NOTCHING AND BORING PER I.R.C. SECT. R602.6
 - BEARING OR EXTERIOR WALL MAXIMUM NOTCH 25%, BORING 40%.
 - 60% MAXIMUM BORING IF DOUBLED WITH NOT MORE THAN (2) SUCCESSIVE STUDS BORED.
 - NON-BEARING MAXIMUM NOTCH 40%, BORING 60%.
 - HOLES NO CLOSER THAN 5/8" TO FACE OF STUD.

FRAMING PLAN KEYNOTES

- F-1 BACK FRAMING AND SOFFIT AREA AS REQUIRED TO ALLOW FOR HVAC DUCTING. SEE DIV/5 SHEET A-1
- F-2 RAKED PONY WALL ON TOP OF LOWER ROOF FRAMING MEMBERS SUPPORTING UPPER ROOF FRAMING MEMBERS.
- F-3 ALIGN EDGE OF JOIST WITH FACE OF WALL
- F-4 ALIGN INSIDE FACE OF BEAM WITH OUTSIDE FACE OF WALL
- F-6 TOP OF BEAM IS FLUSH WITH BOTTOM OF JOIST WITH NO TOP PLATE. CUT ADJACENT FRAMING MEMBERS INTO BEAM FOR ADEQUATE SUPPORT.
- F-7 ATTIC SPACE VENT
SEE CALCULATION
SEE DIV. 6/20/3.5 SHEET A-1
- F-8 FLOOR JOIST - SEE SCHEDULE DWG.
SEE DIV. 6/100 SHEET A-1
- F-9 SEE ELEVATIONS AND SECTIONS FOR PLATE HEIGHT
- F-10 PRESSURE BLOCKING
SEE DIV. 6/100 SHEET A-1
- F-11 FLUSH - BOTTOM OF BEAM EVEN W/ BOTTOM OF JOISTS
- F-12 TOP OF BEAM FLUSH W/ TOP OF JOIST AND BEAM EXTENDS DOWN BELOW JOISTS
- F-14 2x OVERFRAMING @ 24' O.C. PROVIDE 2x6 STRONGBACK FURLINS AND 2x KICKERS AT 6'-0" O.C. TO TRUSSES BELOW.
- F-15 2x6 CEILING JOISTS @ 24' O.C.

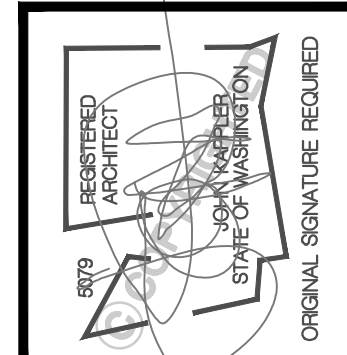
ROOF VENT CALCULATION

TOTAL ROOF AREA, 1471	SF/300	= 49	SF OF VENT AREA REQ.
40% MIN. AT 36" MAX BELOW RIDGE	= 196	SF MIN.	
50% MAX. AT 36" MAX BELOW RIDGE	= 245	SF MAX.	
6 ROOF JACKS AT 50 SQ. IN. EACH	= 300	SQ. IN. = 208	SF
(36" MAX. BELOW RIDGE)			
1863 L.F. OF EAVE VENTS AT 3.3 SQ. IN./L.F.	= 6147	SQ. IN. = 426	SF
TOTAL SF OF VENTILATION PROVIDED			= 634 SF

SYMBOLS & LEGEND

- POINT LOADS FROM ABOVE
- POINT LOADS FROM ABOVE W/ LOADING
- POINT LOAD TRANSFERING DOWN
- POINT LOAD TRANSFERING DOWN W/ LOADING
- HANGER
- POINT LOAD TRANSFERRED BY KICKER
- HOLD DOWN WITH SIZE DESIGNATION
- VERTICAL STRAP WITH SIZE DESIGNATION TO BE USED ON FLOOR BELOW
- HORIZONTAL STRAP WITH SIZE DESIGNATION
- INDICATES BEAM CALCULATION WITH INDEXED NUMBER
- WALL ABOVE
- WALL BELOW

NOTE: UNLESS OTHERWISE NOTED, ENGINEERING AND CALCULATIONS ARE NOT PROVIDED IN THESE DRAWINGS.



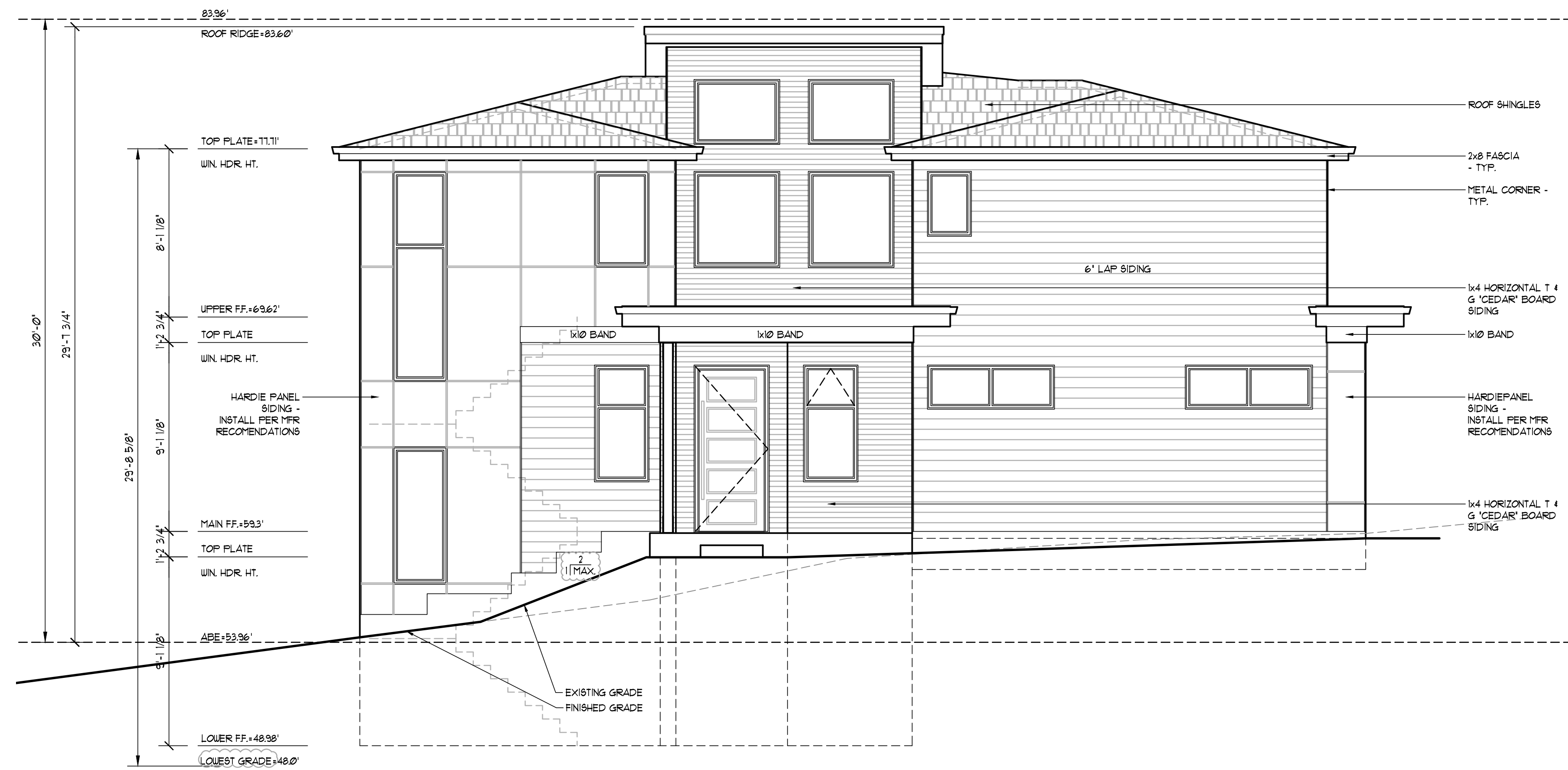
Date	By	Description
10/22/25	AG	PERMIT SET
09/17/25	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 16th St.
Bellevue, WA 98007
1-800-888-4517
www.kkarchitect.com

TITLE
JOB NO. : 2102305
STARTING NO. : 2102303

SHEET
A6



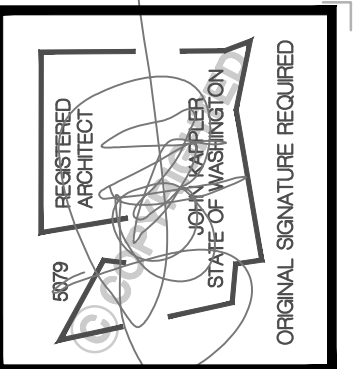
WEST ELEVATION

Scale 1/4"=1'-0"



NORTH ELEVATION

Scale 1/8"=1'-0"



Date	By	Description
07/23/25	AG	PERMIT SET
03/17/25	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
 7619 SE 22nd ST. Mercer Island, WA 98040
 THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
 Forward Thinking Design Solutions For Your Environment
 14311 SE 94th St.
 Bellevue, WA 98007
 1-800-888-4517
 www.kapplerhomeplans.com

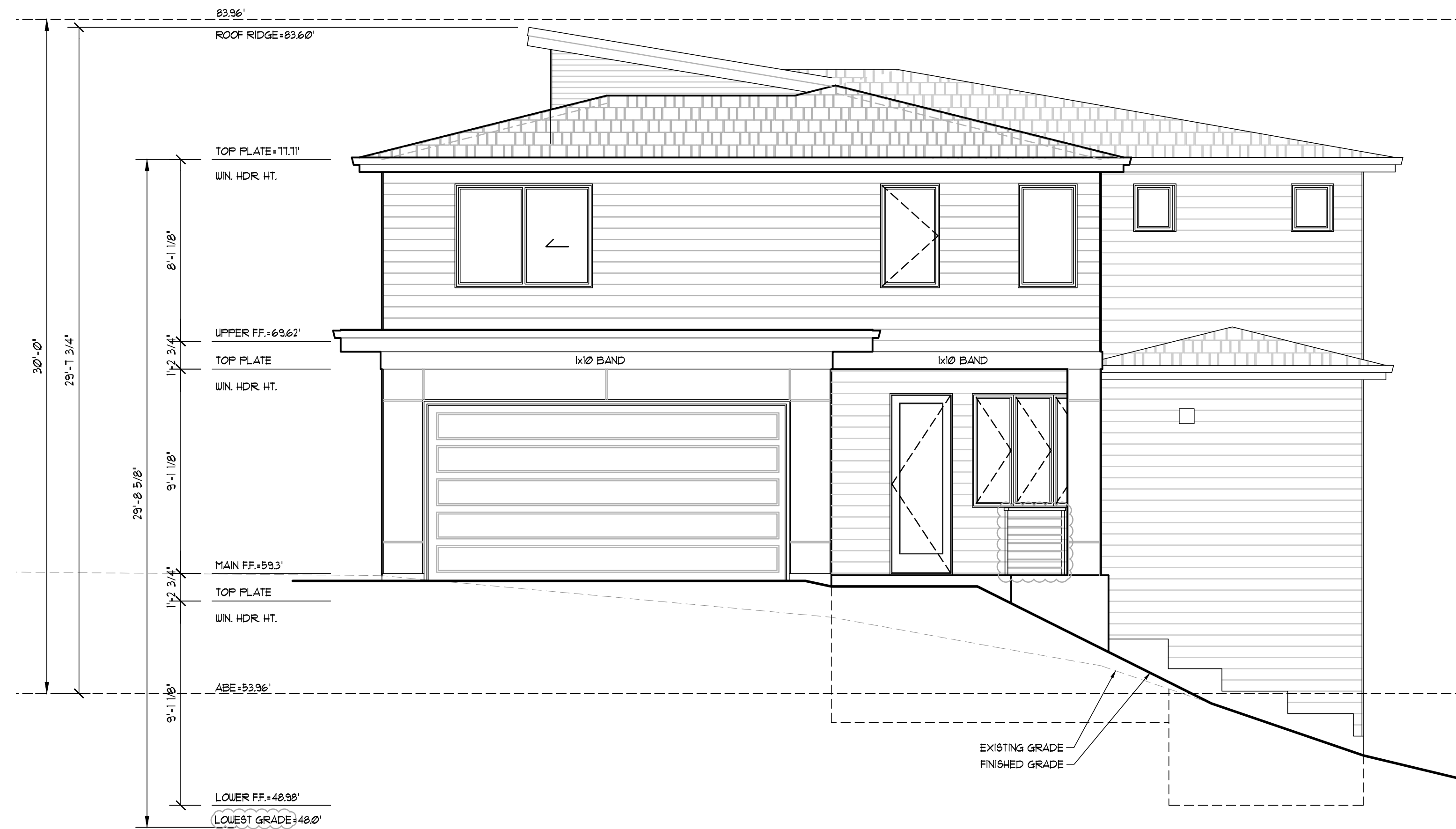
TITLE
JOB NO. : 21023.05
STARTING NO. : 21023.03

SHEET
A7



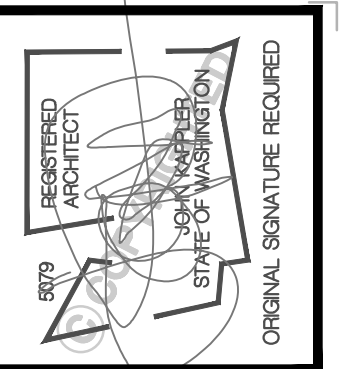
EAST ELEVATION

Scale 1/4"=1'-0"



SOUTH ELEVATION

Scale 1/4"=1'-0"



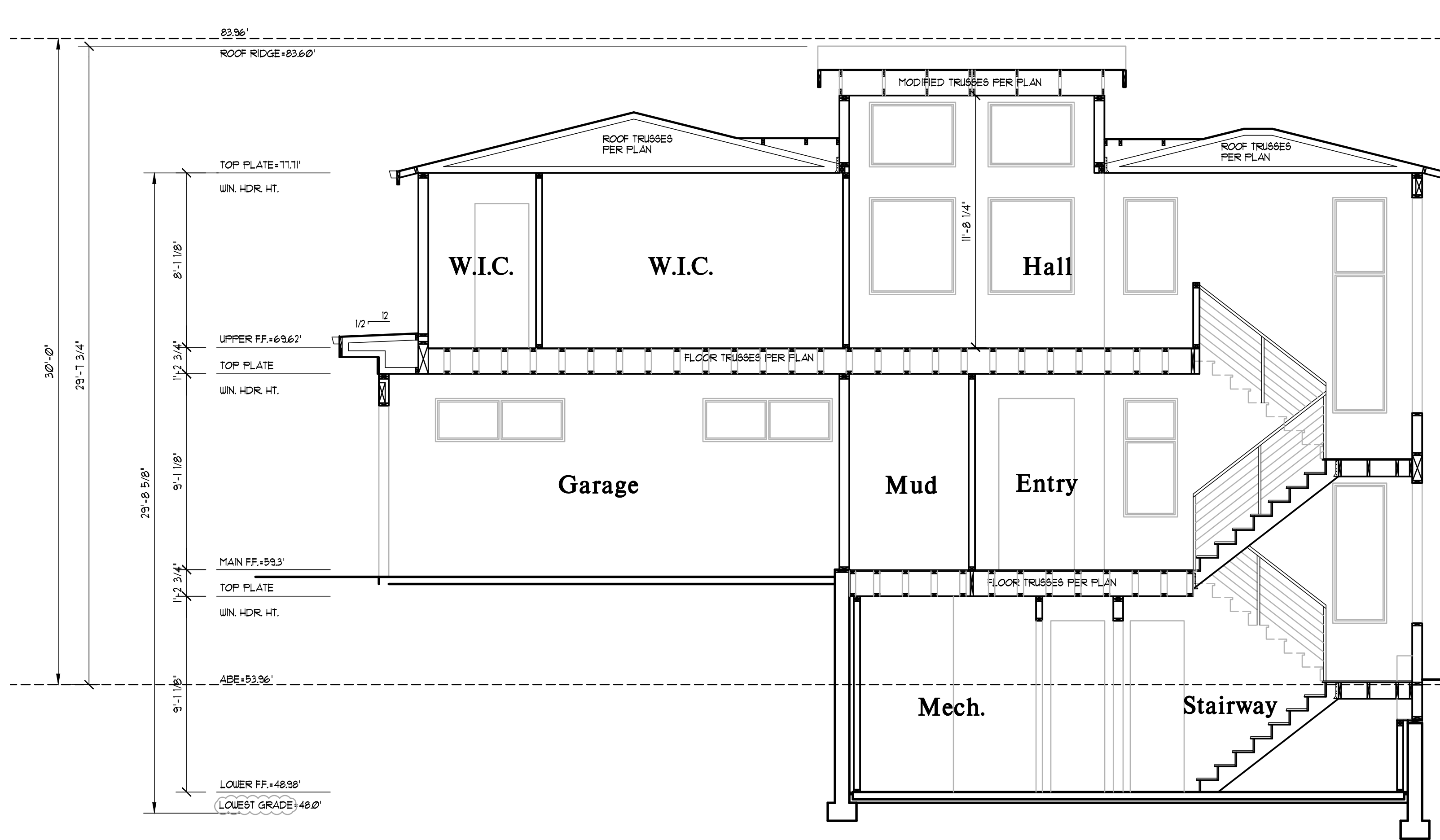
Date	By	Description
07/23/25	AG	PERMIT SET
07/17/25	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
 7619 SE 22nd ST. Mercer Island, WA 98040
 THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

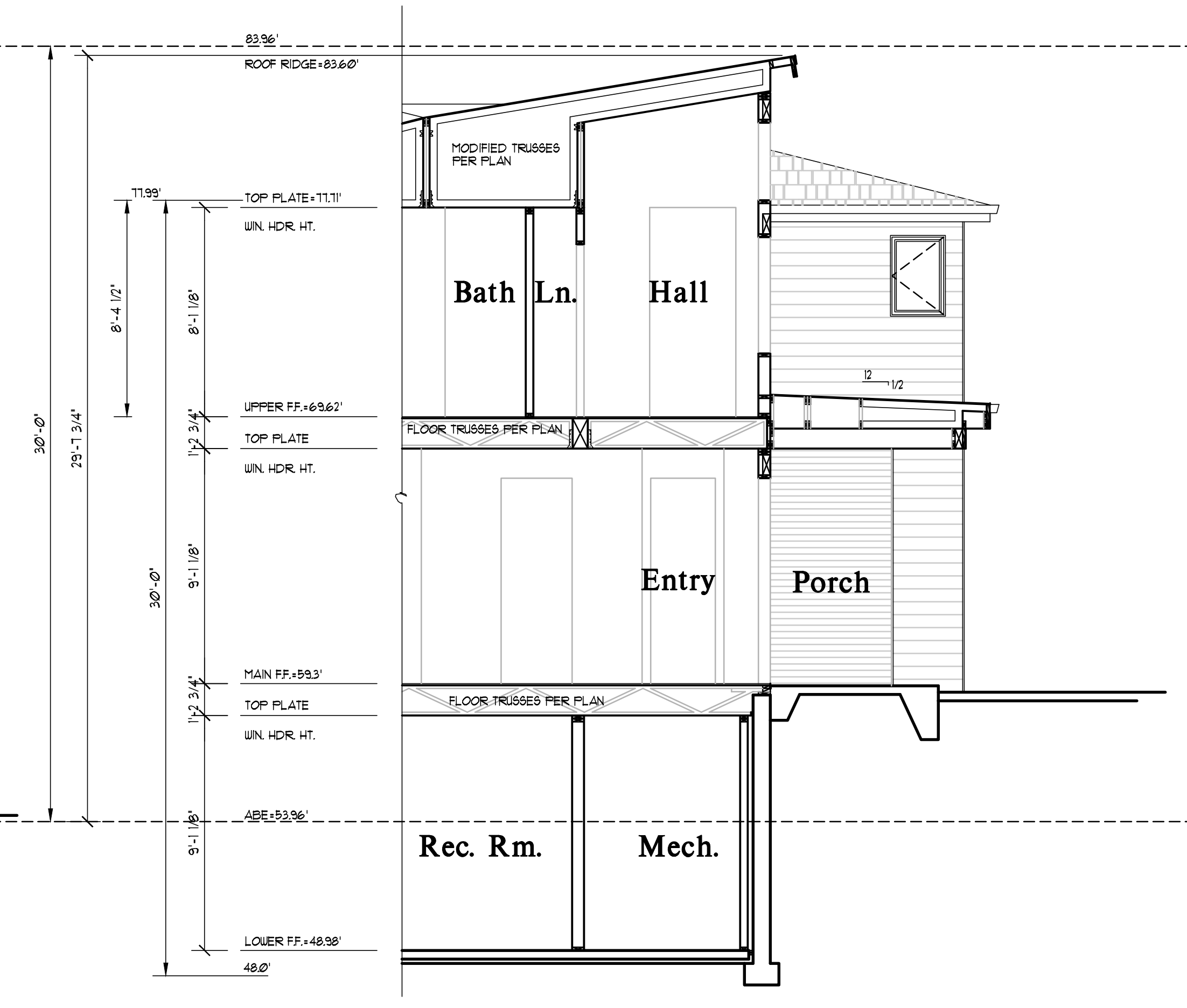
ARCHITECTURAL INNOVATIONS, P.S.
 Forward Thinking Design Solutions For Your Environment
 14311 SE 14th St.
 Bellevue, WA 98007
 1-800-888-4517
 www.kapplerhomeplans.com

TITLE	
JOB NO. :	21023.05
STARTING NO. :	21023.03

SHEET
A8



BUILDING SECTION A-A
Scale 1/4"=1'-0"



BUILDING SECTION B-B
Scale 1/4"=1'-0"

TYPICAL BUILDING MATERIALS

ROOF CONSTRUCTION

- | | |
|--------------------------|-------------------------|
| ROOFING: (DIV. 7) | SHINGLES (DIV. 01000.5) |
| BUILDING PAPER: (DIV. 7) | 30# BUILDING PAPER |
| SHEATHING: (DIV. 6) | 7/16" OSB OR EQUAL |
| FRAMING: (DIV. 6) | PER PLAN |
| INSULATION: (DIV. 7) | R-49 BATTLED |
| SOFFIT: (DIV. 7) | PER SPEC. |
| GWB: (DIV. 9) | 5/8" GWB |

EXTERIOR WALL CONSTRUCTION

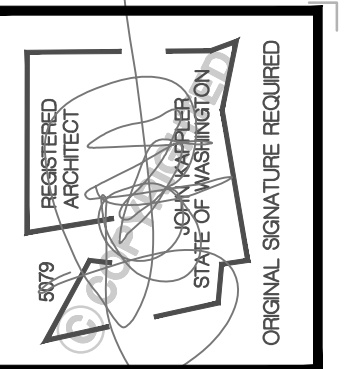
- | | |
|---------------------------|--|
| SIDING MATERIAL: (DIV. 7) | WOOD SIDING (DIV. 0100.5) |
| BUILDING WRAP: (DIV. 7) | 15# BUILDING PAPER |
| SHEATHING: (DIV. 6) | 1/2" CDX PLYWOOD OR EQUAL |
| FRAMING: (DIV. 6) | 2 X 6 STUDS AT 16" OC |
| INSULATION: (DIV. 7) | R-21 CAVITY-R-0 FOAM INT 2X6W LAP
PROVIDE CLASS II VAPOR RETARDER
IN MARINE ZONE 4 |
| GWB: (DIV. 9) | 1/2" GWB |

FLOOR CONSTRUCTION

- | | |
|----------------------|---------------------------------|
| FLOORING: (DIV. 9) | FINISH PER PLANS (DIV. 0100.5) |
| SUBFLOOR: (DIV. 6) | 3/4" T&G (PLYWD, COMPLY, OR EQ) |
| FRAMING: (DIV. 6) | PER PLANS |
| INSULATION: (DIV. 7) | R-38 BATT |
| SOFFIT: (DIV. 7) | PER SPEC. |

TRIM: (DIV. 6)

- | | |
|---------------------------------|----------------|
| WINDOW:
(WITH NO BRICK MOLD) | HEAD: METAL |
| CORNER BOARDS: | JAMB: METAL |
| FASCIA: | SILL: METAL |
| | INSIDE: METAL |
| | OUTSIDE: METAL |
| | 2x8 UNO |



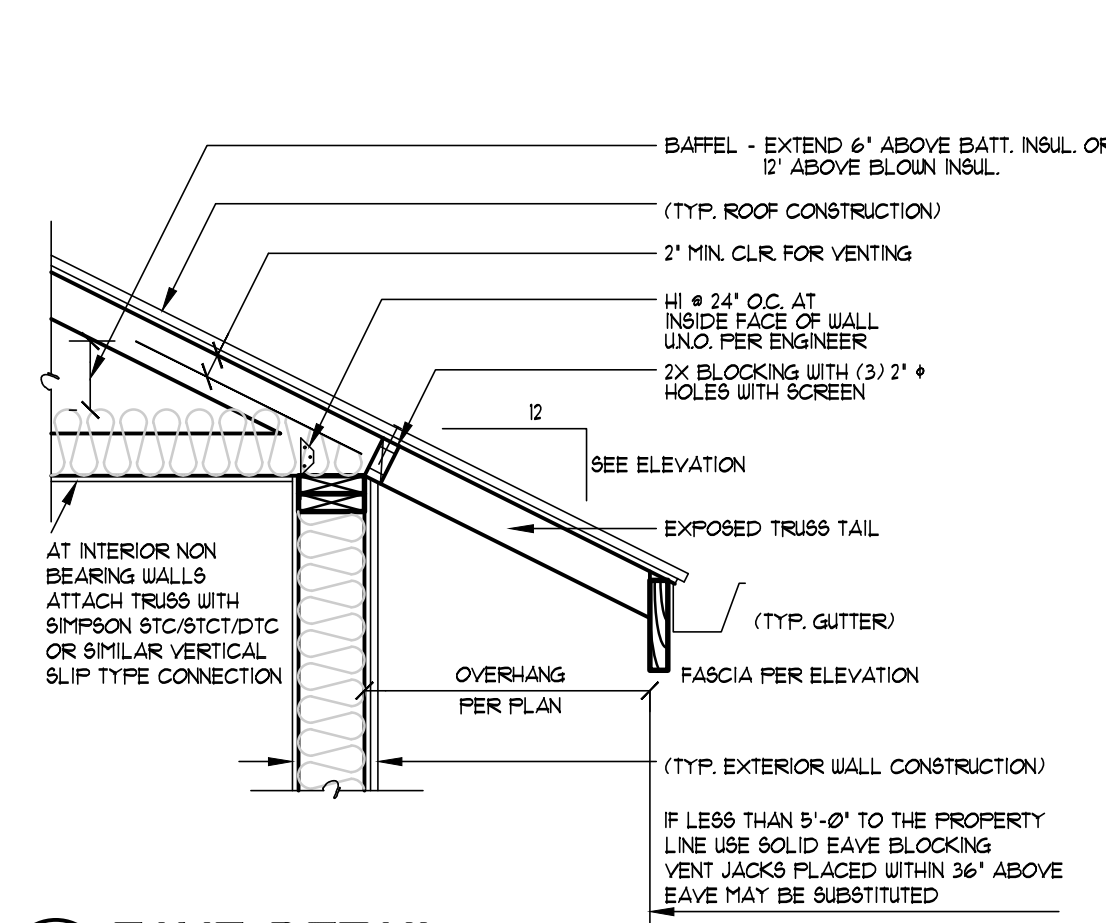
Date	By	Description
02/23/25	AG	PERMIT SET
03/17/25	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

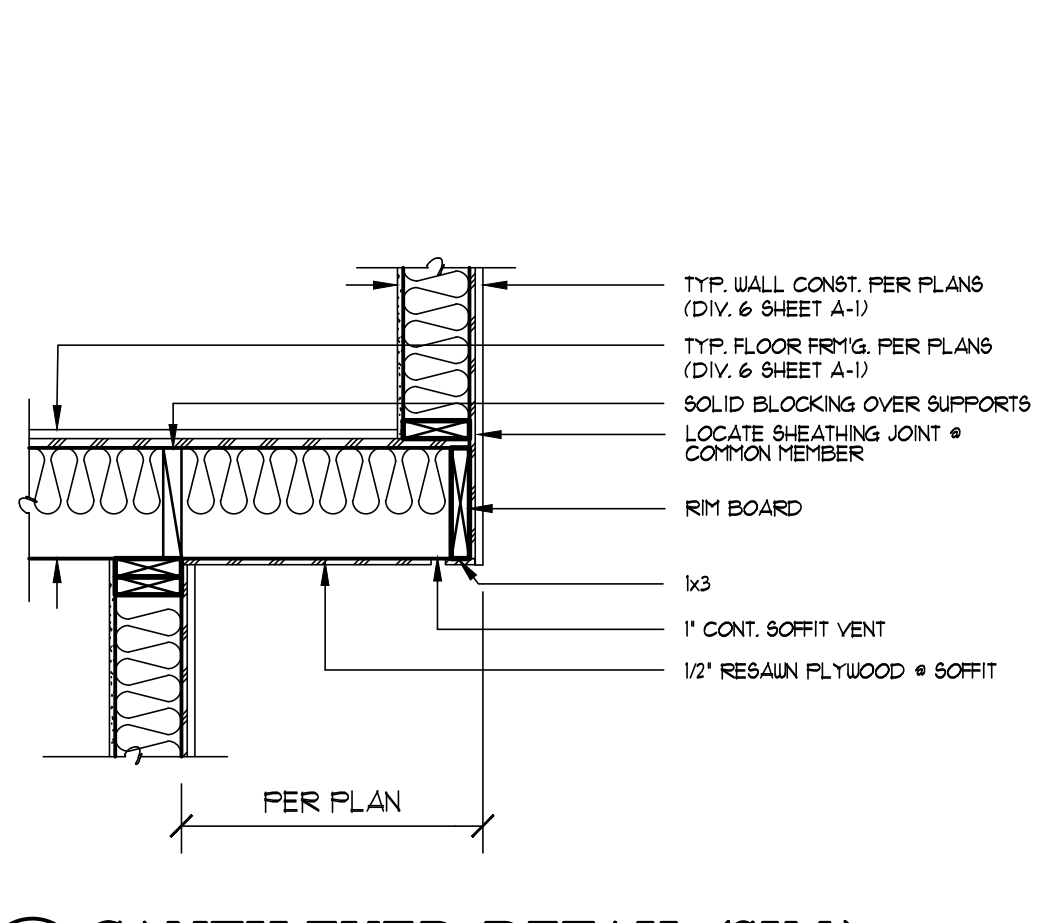
ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 14th St.
Bellevue, WA 98007
1-800-888-4517
www.kapplerhomeplans.com

TITLE	
JOB NO.:	21023.05
STARTING NO.:	21023.03

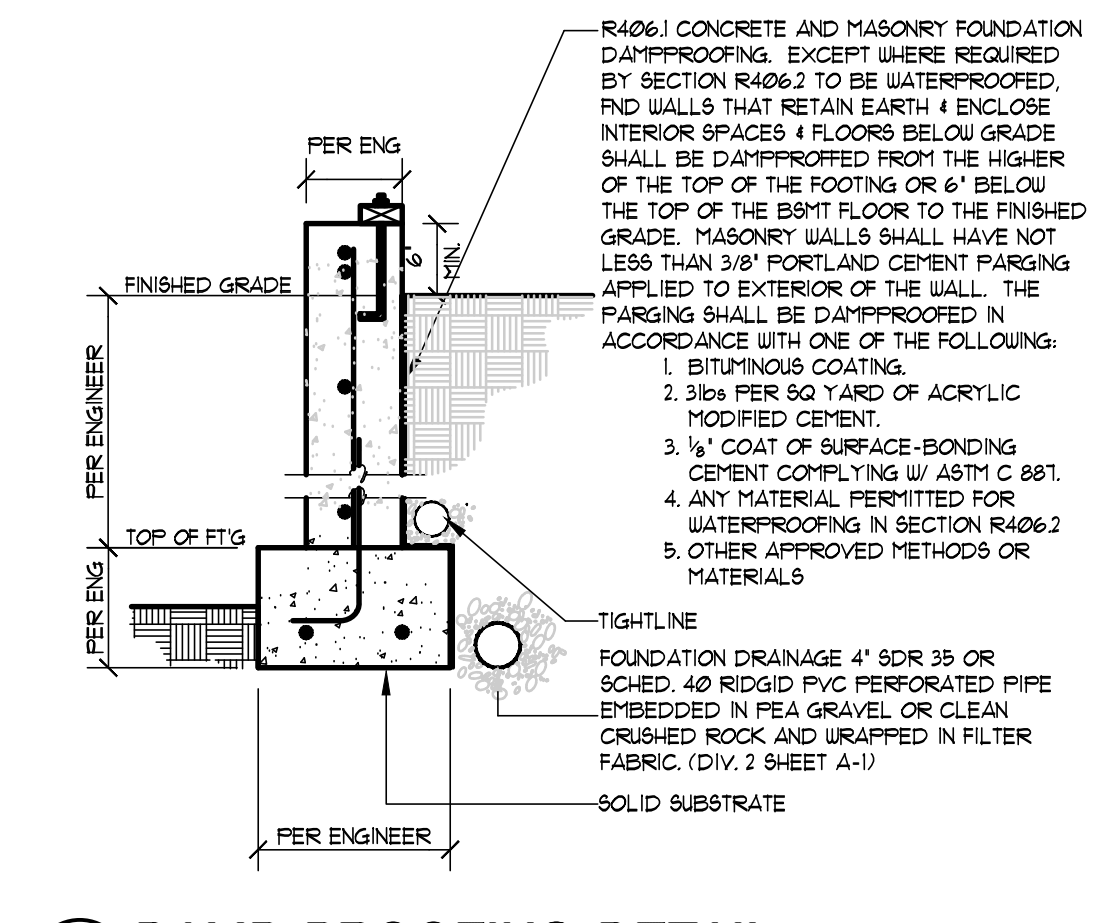
SHEET
A9



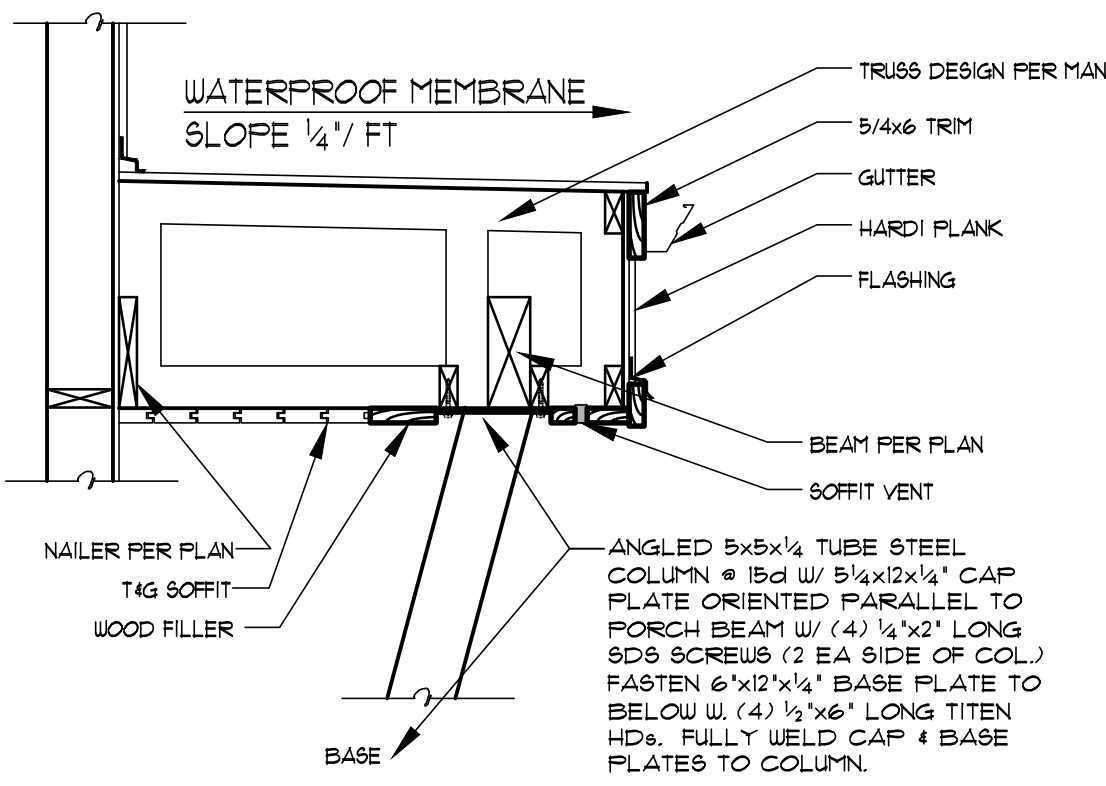
9 EAVE DETAIL
3/4"=1'-0" 08100-07300-01



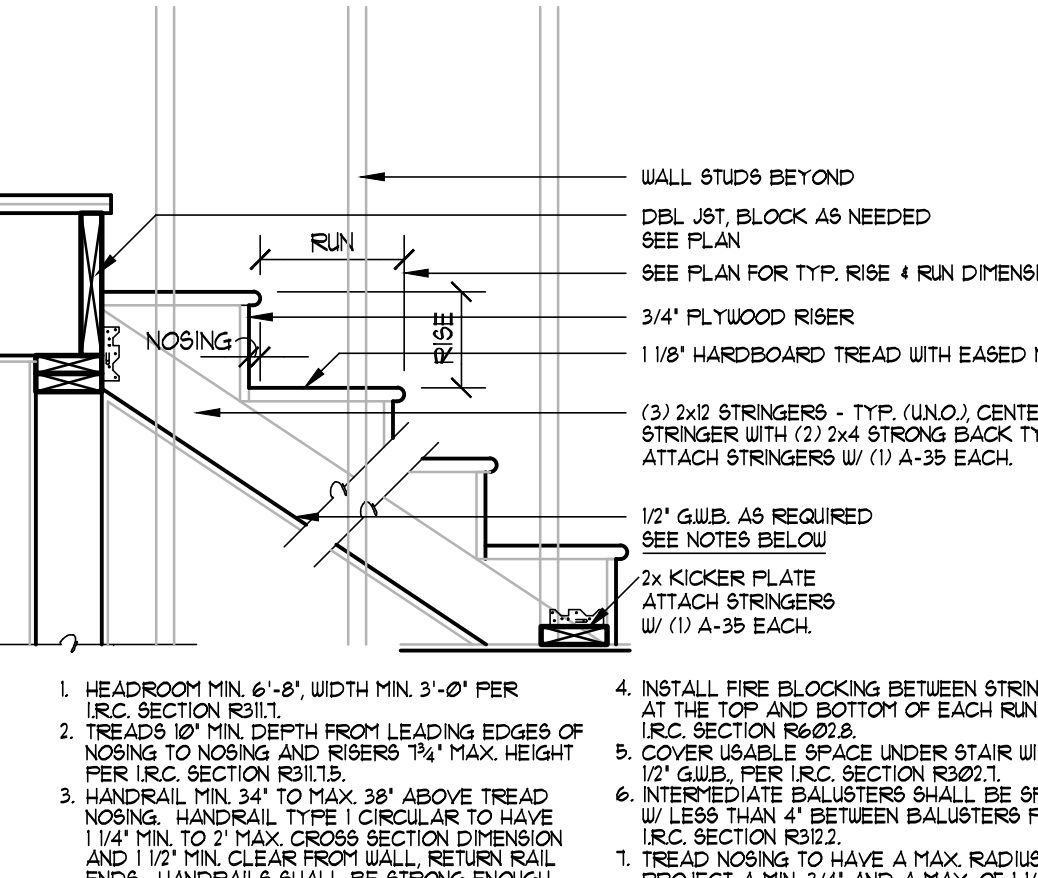
5 CANTILEVER DETAIL (SIM.)
3/4"=1'-0" 08100-07300-01



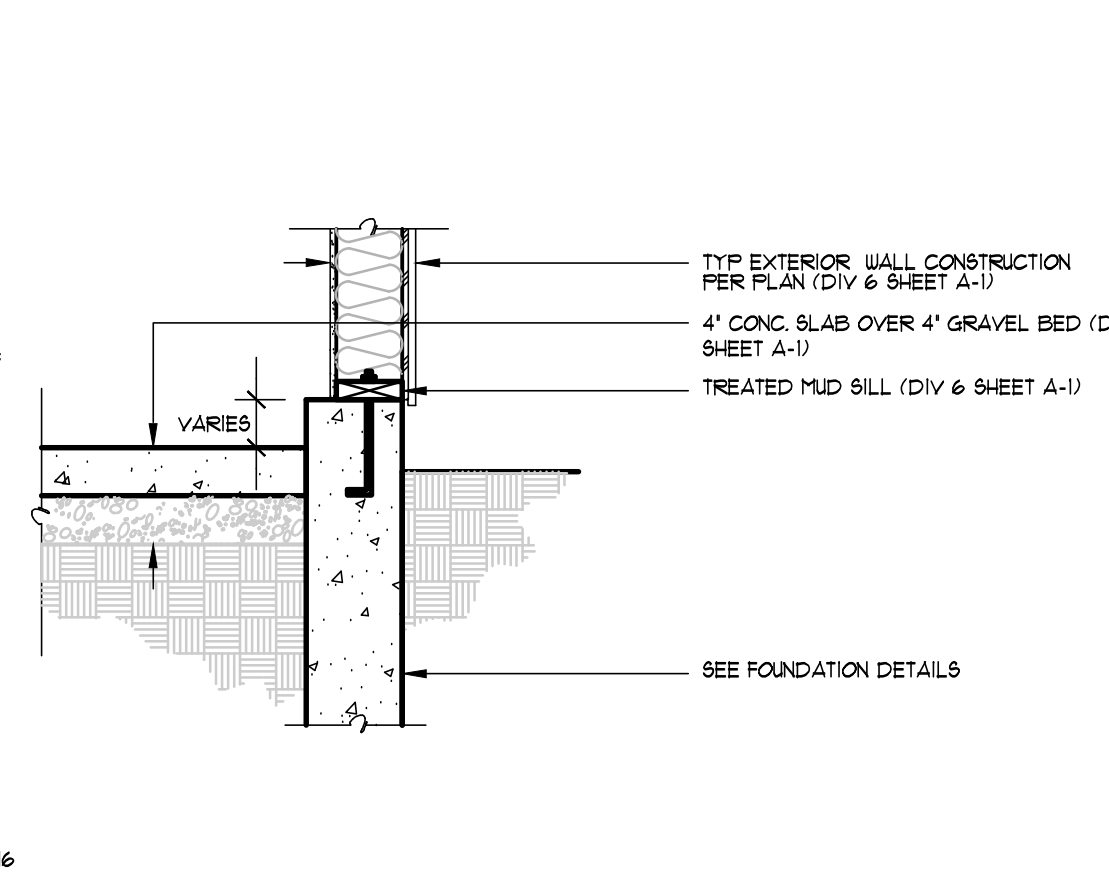
1 DAMP PROOFING DETAIL
3/4"=1'-0" 08300-0710



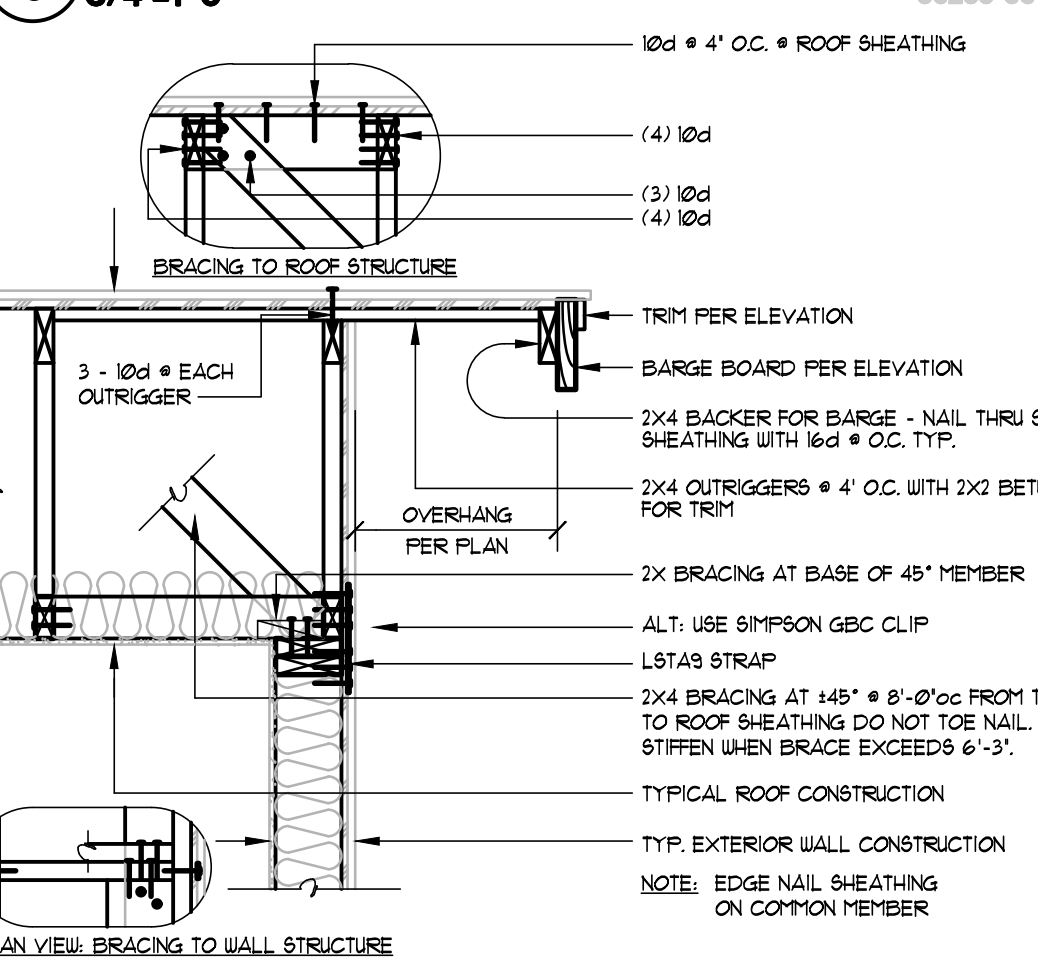
10 ENTRY COLUMN DETAIL (SIM.)
3/4"=1'-0"



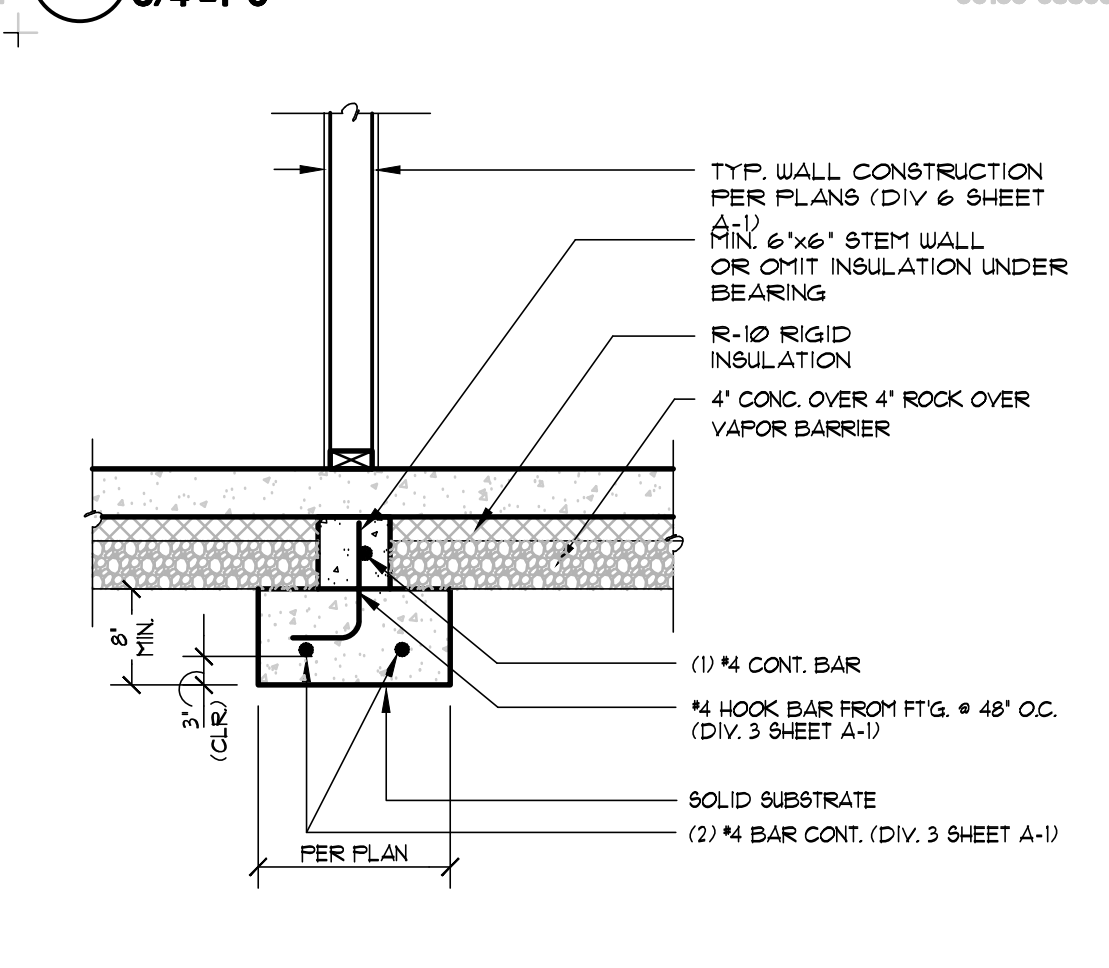
6 STAIR SECTION DETAIL
3/4"=1'-0" 08200-08100-01



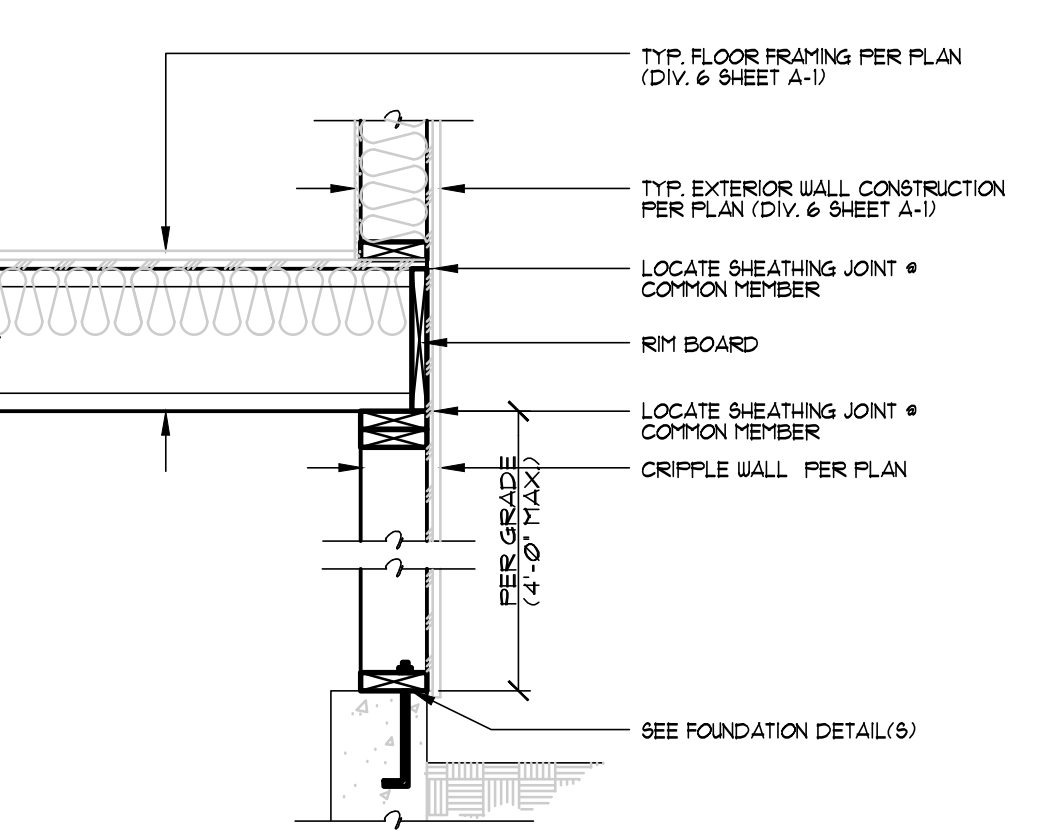
2 SLAB & STEM WALL
3/4"=1'-0" 08100-08300



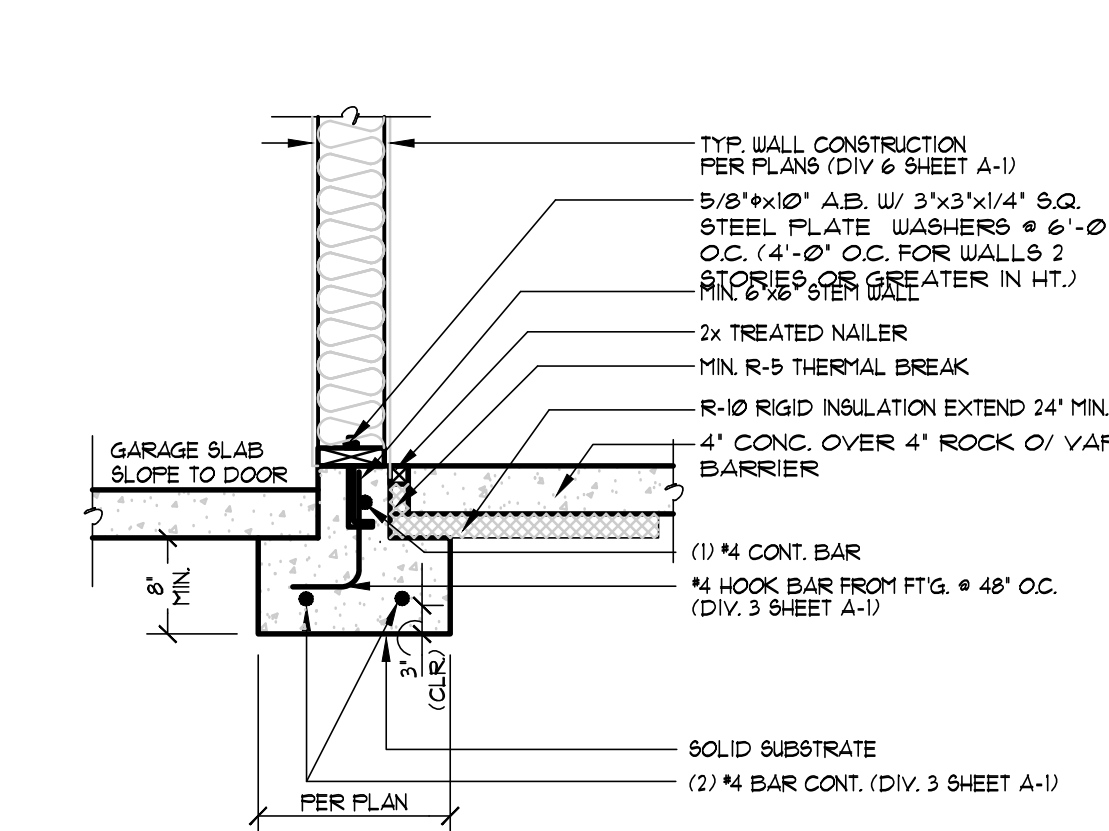
7 GABLE END DETAIL
3/4"=1'-0" 08100-07500-12



3 FOUNDATION DETAIL
3/4"=1'-0" 08300-00001



8 CRIPPLE WALL & FOUNDATION
3/4"=1'-0" 08100-03300-06_T11



4 FOUNDATION DETAIL
3/4"=1'-0" 08300-00001

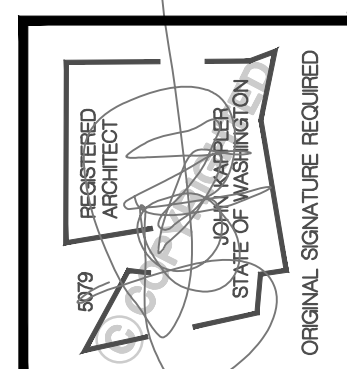
DATE	BY	DESCRIPTION
10/22/20	AG	PERMIT SET
03/17/20	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
Forward Thinking Design Solutions For Your Environment
14311 SE 16th St.
Bellevue, WA 98007
1-800-888-4517
www.knaptechonline.com

TITLE
JOB NO.: 2102305
STARTING NO.: 2102303

SHEET
D1



Date	By	Description
10/22/24	AG	PERMIT SET
03/17/24	SM	JURISDICTIONAL COMMENTS

Milestone NW
Mercer Island Lot 2
7619 SE 22nd ST. Mercer Island, WA 98040
 THIS DRAWING IS © COPYRIGHTED ARCHITECTURAL INNOVATIONS, P.S. ALL RIGHTS RESERVED

ARCHITECTURAL INNOVATIONS, P.S.
 Forward Thinking Design Solutions For Your Environment
 14311 SE 16th St.
 Bellevue, WA 98007
 1-800-888-4517
 www.kkarchitect.com

TITLE

JOB NO.: 2102305

STARTING NO.: 2102305

SHEET

E1

Project Information Milestone NW LLS Mercer Island - Lot 2 7619 SE 22nd St., Mercer Island, WA 98040	Messages / Comments * RESULT: PASS UA Reduction = 4.95, Proposed UA is better than baseline by 1%. Vertical glazing area of proposed design exceeds 15% of floor area. Baseline window area set to 15% of floor area Whole House Mechanical Ventilation Airflow Rate: 112.5 CFM with Run Time Percent of 100%, Unbalanced, Not Distributed Maximum allowable total measured duct leakage: 272 CFM25 *Results assume your inputs are complete and correct. Results do not constitute an approval. Analysis should be reviewed by your AHJ.
--	--

ANALYSIS SET UP What code compliance pathway are you using? Table UA Alternative - Whole Building Trade Off Analysis Project Building Type? New Construction Occupancy Type? 03 Single family dwellings and townhouses Code Version? WSEC 2021 Classification: Medium Dwelling Unit - 3490 sq. ft. Baseline Description: Code Baseline - Maximum baseline window area is 15% of floor area. About Your Selection: No exempt window or door areas	Total UA Alternative - Whole Building Trade Off Analysis Medium Dwelling Unit - 3490 sq. ft. Code Baseline - Maximum baseline window area is 15% of floor area. No exempt window or door areas
---	--

Component Performance, R-Occurrences		Baseline Design		Proposed Design		
U	Area	UA	U	Area	UA	
Doors U =	0.300	49	14.8	0.300	49	14.8
Overhead Glazing U =	0.300	0	0.0	0.250	770	192.4
Vertical Glazing U =	0.300	511	153.3	0.027	1,567	42.3
Flat/Vaulted Ceilings U =	0.024	1,567	37.6	0.054	2,361	128.6
Wall (above grade) U =	0.056	2,640	147.8	0.025	584	14.6
Floors over Crawlspace U =	0.029	584	16.9	0.360	86	31.7
Slab on Grade F =	0.540	86	47.5	0.064	912	58.4
Below Grade Wall U =	0.040	912	36.5	0.324	141	45.7
Below Grade Slab F =	0.560	141	79.0			

*Values from Table R402.1.2 (Oct 2022)

Baseline UA Total	533.4	Proposed UA Total	528.5
Required Credits	8.0	Proposed Credits	8.0
		UA Percent Reduction	1%
		UA Reduction	0.5

from Tables 406.2 and 406.3

System No.	Full Description	Select System Type	Fuel Normalization Credits (406.3)	Energy Credits (406.3)	Total Credits (406.2 & 406.3)
4	For heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) or Table C403.3.2(9) OR Air to Water heat pump units that are configured to provide both heating and cooling and are rated in accordance with AHRI 550/590	Variable Refrigerant Heat Pump or Air-to-Water Heat Pump	3.0	5.0	8.0

Option No.	Category	Select Options	Energy Credits	Brief Description of Selected Options*
1	Efficient Building Envelope	Not Selected	0.0	
2	Air Leakage Control and Efficient Ventilation	Option 2.2	1.5	Per Section R402.4.1.2 (1) 5 ACH50 For R-2, 0.20 cfm per ft ² at 50 Pa HRV with min SHR eff of 0.75 per IRC Section M1505.3 or IMC Section 403.8
3.1-3.10	High Efficiency HVAC	Option 3.6	1.0	Air source ducted Heat Pump with Min HSPFF of 10 (HSPFF of 11) if no design temp is 23F or below cold climate variable capacity heat pump is required.
3.11	High Efficiency HVAC - Smart Thermostat	Not Selected	NA	
4	High Efficiency HVAC Distribution System	Option 4.1	0.5	Duct/distribution system in conditioned space per R403.3.2 Electric resistance, hydronic, ductless and gas fired systems < 60% AFUE systems not permitted.

Option No.	Category	Select Options	Energy Credits	Brief Description of Selected Options*
5.1	Efficient Water Heating - Drain Heat Recovery	Not Selected	0.0	
5.2	Efficient Water Heating - Compact Hot Water Distribution	Not Selected	0.0	
5.3-5.8	Efficient Water Heating	Option 5.6	2.0	Electric heat pump water heater meeting NEEA Tier 3.
6	Renewable Electric Energy	3,000 kWh	Not Selected	0.0
7	Appliance Package	Not Selected	0.0	

Energy Credits 5.0

*Refer to WSEC 2021 Table R406.3 for complete option descriptions and requirements <https://lic.wa.gov/tables/codes/regulations/buildingcode/energycode>

*Refer to WSEC 2021 Table R406.3 for complete option descriptions and requirements

THERMAL ENVELOPE DETAILS - Proposed Design Conditioned Floor Area, Proposed Design: 3,406 sq. ft. Classification: Medium Dwelling Unit Notes
--

Plan ID	Component Description	Ref.	U	Qt	Width Feet	Height Feet	Area	UA
Mud	Code Baseline, U=0.30		0.30	1	2	8	21	6.4
Entry	Code Baseline, U=0.30		0.30	1	3	8	24	7.2

Sum of Area and UA: 49, 0.00
Exterior Doors Area Weighted U: 0.300

Plan ID	Component Description	Ref.	Glazing U	Qt	Width Feet	Height Feet	Area	UA

Sum of Area and UA: 0.0, 0
Overhead Glazing Area Weighted U: 0

Plan ID	Component Description	Ref.	Glazing U	Qt	Width Feet	Height Feet	Area	UA
1	Sec Rm	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	4	5	18.5	4.63
2	Sec Rm	U=0.25 (2021 1.2, 2018 1.4)	0.25	2	4	5	55.0	13.75
3	Sec Rm	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	8	24.0	6.00
4	Bedroom	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	8	5	33.0	8.25
5	Bedroom	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	4	5	20.0	5.00
6	Entry	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	2	5	10.0	2.50
7	Stairway	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	2	6	12.0	3.00
8	Stairway	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	6	18.0	4.50
9	Garage	U=0.25 (2021 1.2, 2018 1.4)	0.25	2	4	5	44.0	11.00
10	Garage	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	5	15.0	3.75
11	Dining	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	5	15.0	3.75
12	Kitchen	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	5	4	20.0	5.00
13	Kitchen	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	5	15.0	3.75
14	Kitchen	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	2	8	16.0	4.00
15	Porch	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	2	5	10.0	2.50
16	Hall	U=0.25 (2021 1.2, 2018 1.4)	0.25	2	4	4	16.0	4.00
17	Hall	U=0.25 (2021 1.2, 2018 1.4)	0.25	2	3	4	12.0	3.00
18	Hall	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	2	4	8.0	2.00
19	Stairway	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	2	10	20.0	5.00
20	Stairway	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	4	10	40.0	10.00
21	W/B	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	4	12.0	3.00
22	Bedroom	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	8	4	32.0	8.00
23	P-Slab	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	4	12.0	3.00
24	P-Slab	U=0.25 (2021 1.2, 2018 1.4)	0.25	2	2	2	4.0	1.00
25	P-Bath	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	3	4	12.0	3.00
26	P-Bath	U=0.25 (2021 1.2, 2018 1.4)	0.25	2	2	4	8.0	2.00
27	Bedroom	U=0.25 (2021 1.2, 2018 1.4)	0.25	1	4	4	16.0	4.00
28	Bath#2	U=0.25 (2021 1.2, 2018 1.4)	0.25	2	2	3	6.0	1.50

Sum of Area and UA: 769.9, 192.4
Vertical Glazing Area Weighted U: 0.262

Plan ID	Component Description	Ref.	Attic U	Area	UA

Plan ID	Component Description	Ref.	U	Area	UA
	R40 blown Attic STD baffled (2019 Code Baseline, 1.1.4)	10.7	0.027	1,567	42.3

Sum of Area and UA: 1,567, 42.3
Area Weighted U-Value: 0.027

Plan ID	Component Description	Ref.	Wall U	Area	UA
	R51 cavity R0 foam INT 2X6W Lap (Code Baseline)	10.5	0.054	2,361	129

Sum of Net Area and UA: 2,361, 129
Gross Wall Area: 3,200
Area Weighted U-Value: 0.054

Plan ID	Component Description	Ref.	Floor U	Area	UA
	R38 vented Joist (2021 1.2, 1.3, 2018 1.3-1.5)	10.3	0.025	584	15

Sum of Area and UA: 584, 15
Area Weighted U-Value: 0.025

Plan ID	Component Description	Ref.	Slab F	Slab Perim	FP
	R10 Fully Insulated (2018 1.3-1.5)	10.2	0.360	88	32

Sum of Perimeter and FP: 88, 32
Area Weighted U-Value: 0.360

Plan ID	Component Description	Slab Depth	Ref.	Wall U	Wall Area	Wall UA	Slab F	Slab Perim	Slab UA
	R10 Foam Ext w/TB, R10 Full Underlab	3.5'-depth	Baylon & Ke	0.064	912	58.4	0.324	141	46

Sum of Area, Length and UA: 912, 66
Weighted U- and F-values: 0.064

Links to Download Forms, Checklists and Other Resources

Compliance Certificate: [Compliance Certificate](#) | [Instructions](#)
 Insulation Certificate for Residential New Construction: [Insulation Certificate](#)
 Duct Testing Affidavit: [Duct Testing Affidavit](#)
 Existing Construction: [Attic/Bldg](#)
 New Construction: [Attic/Bldg](#)
 Prescriptive Checklist for 2018 WSEC: [Prescriptive Checklist](#)
 Alterations (Remodel) Worksheet: [Worksheet](#)
 EER SEER COP HSPF2 Converter: <https://www.aiaa.com/engineering-computer-software/hsp2-cop-hsp2f-hsp2-converter>

Ventilation Requirements

Conditioned Floor Area: 3,406 sq. ft.
 Number of Bedrooms: 4
 Run-Time Percent in Each 4-Hour Segment: 100%
 Is the system Balanced? Unbalanced
 Is the system Distributed? Not Distributed
 Ventilation Code Section: IRC Chapter 15
 Whole House Mechanical Ventilation Airflow Rate: 113 CFM

HVAC Thermal Distribution System

Is this a hydronic heating system? No
 Location of Ducts: Conditioned Space
 Location of Air Handler: Conditioned Space
 Is Duct Testing Required? Yes
 Maximum Duct Leakage: Maximum total measured duct leakage per square foot: 0.08 CFM25 per sq. ft.
 Maximum allowable total measured duct leakage: 272 CFM25
 A maximum of 10 feet of return ducts are allowed to be located outside of the building thermal envelope. If installed and sealed per R403.3.7.

Heating System Sizing - Proposed Design

Nearest Weather Station: Mercer Island
 Indoor Design Temperature: 70 F
 Outdoor Design Temperature: 25 F
 Design Temperature Difference (ΔT): 45 F
 Conditioned Floor Area, Proposed Design: 3,406 ft²

Conditioned Volume: 33,036 ft³ Average ceiling height = 9.7 ft, Volume = 33036 ft³
 Leave blank to use default of 8.5 ft ceiling height
 Average ceiling height: 9.7 ft
 HVAC System Type: Heat Pump
 Location of HVAC Distribution System: Conditioned Space
 Sum of UA: 528
 Envelope Heat Load: 23,780 Btu / Hour
 Sum of UA x ΔT
 Air Leakage Heat Load: 16,056 Btu / Hour
 (Volume x 0.019 x ΔT x 0.03)
 Building Design Heat Load: 39,837 Btu / Hour
 Air Leakage + Envelope Heat Loss
 Building and Duct Heat Load: 39,837 Btu / Hour
 For ducts located in unconditioned space. Sum of Building Heat Load + TL
 For ducts located in conditioned space or ductless. Sum of Building Heat Loss x 1
 Maximum Heat Equipment Output: 49,796 Btu / Hour
 Building and Duct Heat Loss x 1.25 for heat pumps
 Building and Duct Heat Loss x 1.40 for all other systems

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

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

PORCH SLAB
4" CONC. SLAB ON GRADE ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- DESIGN LOADS: 2500 PSF ALLOWABLE BEARING PRESSURE PER RILEY GROUP GEOTECH REPORT DATED 4/9/2020
- CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS IN 28 DAYS, UNO.
 - $f_c = 5000$ psi - FOUNDATION WALLS
 - 5000 psi - FOOTINGS
 - 2500 psi - INTERIOR SLABS ON GRADE
 - 3500 psi - GARAGE & EXT. SLABS ON GRADE
 - $f_y = 60000$ psi
- ALL CONCRETE HAS BEEN DESIGNED FOR 2500 PSI, ANYTHING GREATER THAN THIS SPECIFICATION IS FOR WEATHERING ONLY.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- FOUNDATION WALL DESIGN IS BASED ON BACKFILL SOIL PRESSURE OF 55 PCF AT REST, 35 PCF ACTIVE & 7H SEISMIC SURCHARGE.
- TYPICAL REINFORCEMENT DETAILS: LAP ALL REBAR 24" MIN. END BARS AND LAP AT CORNERS; PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT; PROVIDE 3" MINIMUM COVER AT THE BOTTOM BARS AND 1 1/2" COVER AT THE SIDES.
- FOUNDATION WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY EITHER ADEQUATE TEMPORARY BRACING OR INSTALLATION OF FIRST FLOOR DECK.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE. CONSULT SOILS REPORT/ LOCAL MUNICIPALITY FOR MINIMUM DEPTH BELOW GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP (15'-0" O.C.)
- FASTEN SILL PLATES TO FOUNDATION WALLS WITH 3/8" DIA. ANCHOR BOLTS W/ MIN. 3"x3"x 1/4" PLATE WASHERS (EDGE OF WASHER TO BE LOCATED WITHIN 1/2" OF EXTERIOR EDGE OF SILL PLATE) PROVIDE A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAXIMUM FROM PLATE ENDS, UNO. (SEE FND. DETAILS).
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE OR MASONRY FOUNDATION SHALL BE PRESERVATIVE TREATED HEM FIR #2.
- ARCH/BUILDER TO VERIFY ALL DIMENSIONS

LOADING AND DESIGN PARAMETERS

GRAVITY DESIGN LOADS:

DEAD LOAD (PSF):	10
ROOF TRUSSES TOP CHORD:	7
ROOF TRUSSES BOTTOM CHORD:	15
FLOOR TRUSSES:	10
FLOOR (2x):	

LIVE LOAD (PSF):

ROOF:	20
RESIDENTIAL LIVING AREAS:	40
RESIDENTIAL SLEEPING AREAS:	30
GARAGE:	50

SNOW LOAD:

GROUND SNOW LOAD (P _s) (PSF):	25
FLAT ROOF SNOW LOAD (P _f) (PSF):	25
SNOW EXPOSURE FACTOR (C _e):	0.8
SNOW LOAD IMPORTANCE FACTOR (I):	1.0
THERMAL FACTOR (C _t):	1.2

LATERAL DESIGN LOADS:

WIND LOAD: (IBC 1609)	100
SPEED (V _W) (MPH):	110
WIND RISK CATEGORY:	II
IMPORTANCE FACTOR (I _w):	1.0
EXPOSURE CATEGORY:	C
INTERNAL PRESSURE COEFF. (GC _p):	±0.18
TOPOGRAPHIC FACTOR (K _z):	1.00

SEISMIC LOAD: (IBC 1603)

SEISMIC RISK CATEGORY: II
 SEISMIC ANALYSIS: EACH 10% IN MAPPED SPECTRAL RESPONSE: S_s = 1.265 S₁ = 0.526
 SITE CLASS: D
 SPECTRAL RESPONSE COEFF.: S_s = 0.11 S₁ = 0.526

SEISMIC DESIGN CATEGORY: BASIC SEISMIC-FORCE-RESISTING SYS.: LIGHT FRAMED WALLS WOOD STRUCTURAL PANELS
 ULTIMATE BASE SHEAR: TRANS: 15 k LONG: 15 k
 SEISMIC RESPONSE COEFF. (C_w): TRANS: 0.11 LONG: 0.11
 RESPONSE MODIFICATION FACTOR (R): TRANS: 6.5 LONG: 6.5
 ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE

LATERAL BRACING NOTES

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

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

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

- 3/8" OSB OR 1/2" PLYWOOD.
- FASTEN SHEATHING W/ 2 1/2"x0.131" NAILS @ 6" O.C. AT ALL SUPPORTED PANEL EDGES AND 12" O.C. IN THE PANEL FIELD. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED PER THIS SPECIFICATION UNO. ON PLANS.

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

- 3/8" OSB OR 1/2" PLYWOOD.
- ONLY AT LOCATIONS INDICATED ON PLANS - SHEATHING WALL SHOWN WITH 3/8" OSB. FASTEN SHEATHING W/ 2 1/2"x0.131" NAILS @ 3" O.C. AT EDGES AND 12" O.C. AT CENTER. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE AND 3" O.C. FASTENING.

NOTES:

- LATERAL ANALYSIS ASSUMES STUD SPACING @ 16" O.C.
- ALL SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES FASTENED TOGETHER W/ 3"x0.131" NAILS @ 8" O.C. USE (12) 3/8"x0.131" NAILS AT EACH LAP SPlice, (6) EACH SIDE OF JOINT (TYP. UNO.)
- ALL EXTERIOR WALLS ARE CONTINUOUSLY SHEATHED.
- ALL INTERIOR SHEAR WALLS AND EXTERIOR WALLS ARE SHEATHED ABOVE AND BELOW OPENINGS.

GENERAL STRUCTURAL NOTES

DESIGN PARAMETERS

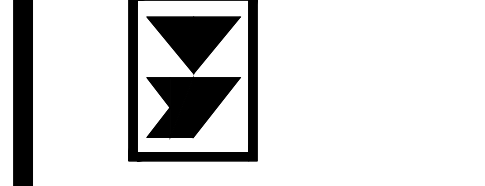
- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- WOOD FRAME ENGINEERING IS BASED ON NDS "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

GENERAL FRAMING

- EXTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- INTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (W/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO.
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x4 "STUD" GRADE MEMBERS SPACED @ 24" O.C. (MAX).
- ALL WALLS TALLER THAN TYP. PLATE HEIGHT SHALL BE CONSIDERED BALLOON FRAMED & SHALL BE CONSTRUCTED FROM FLOOR TO UNDERSIDE OF FRAMING AT NEXT LEVEL. B.F. WALLS SHALL BE 2x6 HEM FIR (HF) #2 GRADE LUMBER, OR BETTER, UNO.
- ALL SHEATHING AND LEDGERS ARE TO BE DIRECTLY APPLIED AND FASTENED TO FRAMING. DO NOT PROVIDE CONTINUOUS INSULATION BETWEEN FRAMING AND SHEATHING/LEDGERS.
- ALL HEADERS SHALL BE SUPPORTED BY (1) 2x JACK STUD & (1) 2x KING STUD, MINIMUM.
 - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, UNO.
- BUILT-UP POSTS SHALL BE 2x4 OR 2x6 HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, UNO. & SOLID WOOD COLUMNS SHALL BE SPRUCE PINE FIR (SPF) #2 GRADE LUMBER, OR BETTER, UNO.
- ALL 2x6 AND LARGER SOLID SAWN BEAMS/HEADERS SHALL BE HEM FIR #2 (HF #2) OR BETTER. ALL 4x6 AND LARGER SOLID SAWN LUMBER SHALL BE DOUG FIR #2 (DF #2) OR BETTER.
- ALL FRAMING LUMBER SHALL BE KILN DRIED TO 19% MC (KD-15).
- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN GENERAL NOTES, IN DETAILS, OR ON PLANS. ALL NAILS SPECIFIED ARE MIN. DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- FASTEN ALL BEAMS TO COLUMNS, OR FLUSH BEAMS TO SUPPORTING BEAMS, W/ (4) 3"x0.131" TOENAILS (MIN), TYP. UNO.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS & HOLD-DOWNS CONTINUOUS TO FOUNDATION/EXTERIOR. BLOCKING TO MATCH POST ABOVE.
- ENGINEERED LUMBER TO MEET OR EXCEED THE FOLLOWING:
 - S/L MEMBERS - F_b=2325 PSI; F_v=910 PSI; E=1,550,000 PSI
 - LVL MEMBERS - F_b=2600 PSI; F_v=285 PSI; E=2,040,000 PSI
 - SLB MEMBERS - F_b=2400 PSI; F_v=11850 PSI; F_v=265 PSI; E=1,8x10⁶ PSI; DF/DF; 24F-V4 (UNO.)
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
 - LVL MEMBERS - F_b=2400 PSI; F_v=11850 PSI; E=1,8x10⁶ PSI
- FACE NAIL MULTI-PLY 2x BEAMS & HEADERS W/ 3-ROWS OF 3"x0.131" NAILS (MIN) @ 12" O.C. STAGGERED. APPLY NAILING FROM BOTH FACES @ 3-PLY OR MORE CONDITIONS. UTILIZE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.
- TRUSS SHOP DWGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PROPOSED CONSTRUCTION SHALL BE SUBMITTED TO BUILDING DESIGNER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY IN ACCORDANCE WITH TPI-1 2.3.2.3 & 2.3.4.3.
- REFER TO IRC FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. UNO.
- BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653 & ASTM A153, TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.



MULHERN + KULP
RESIDENTIAL STRUCTURAL ENGINEERING
7320 Trade Street, Suite 255, San Diego, CA 92121
p 619-699-0010 - mulhern@mkp.com



M&K project number: 203-24022
project mgr: NJM
drawn by: RSC
issue date: 11-20-24

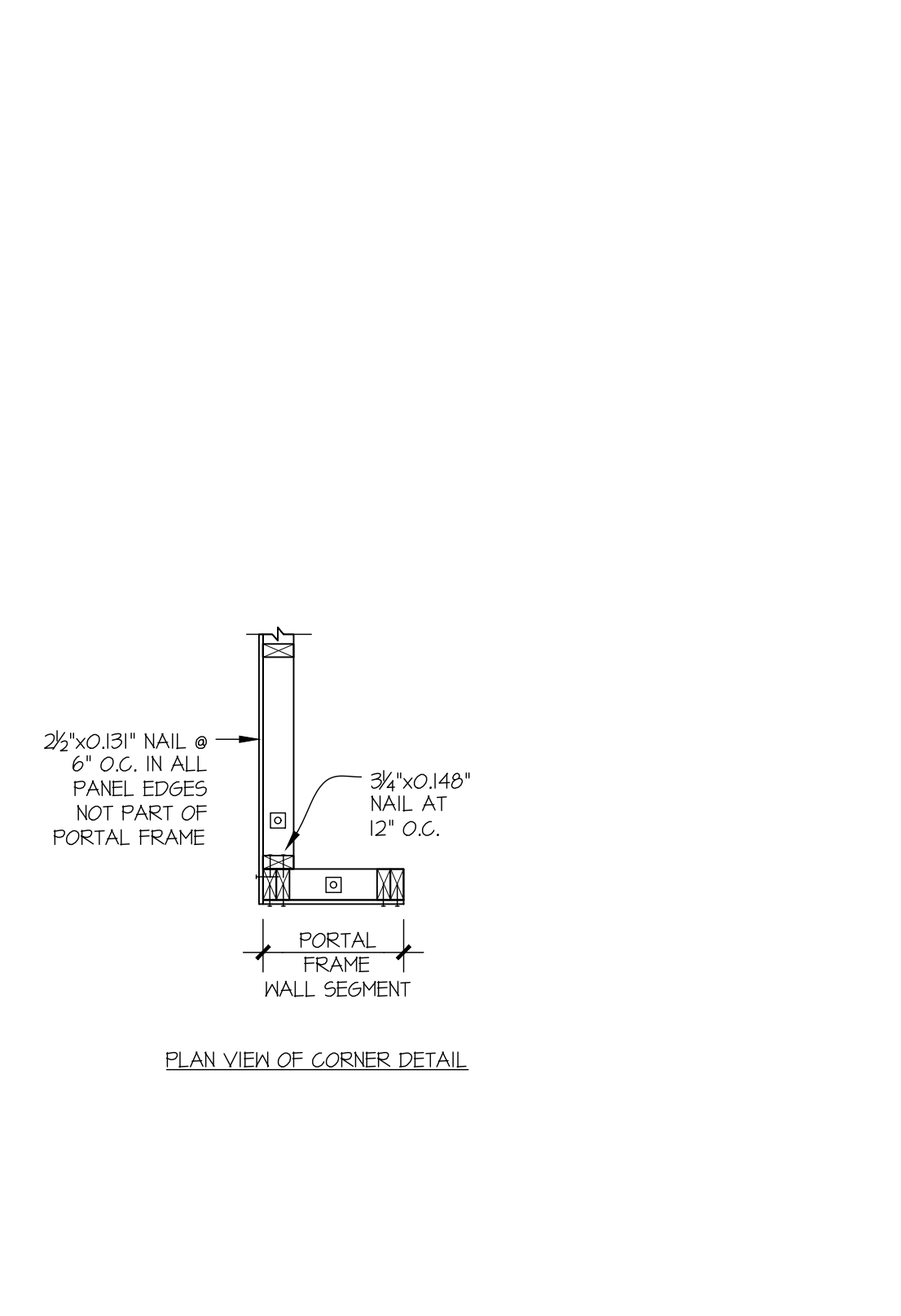
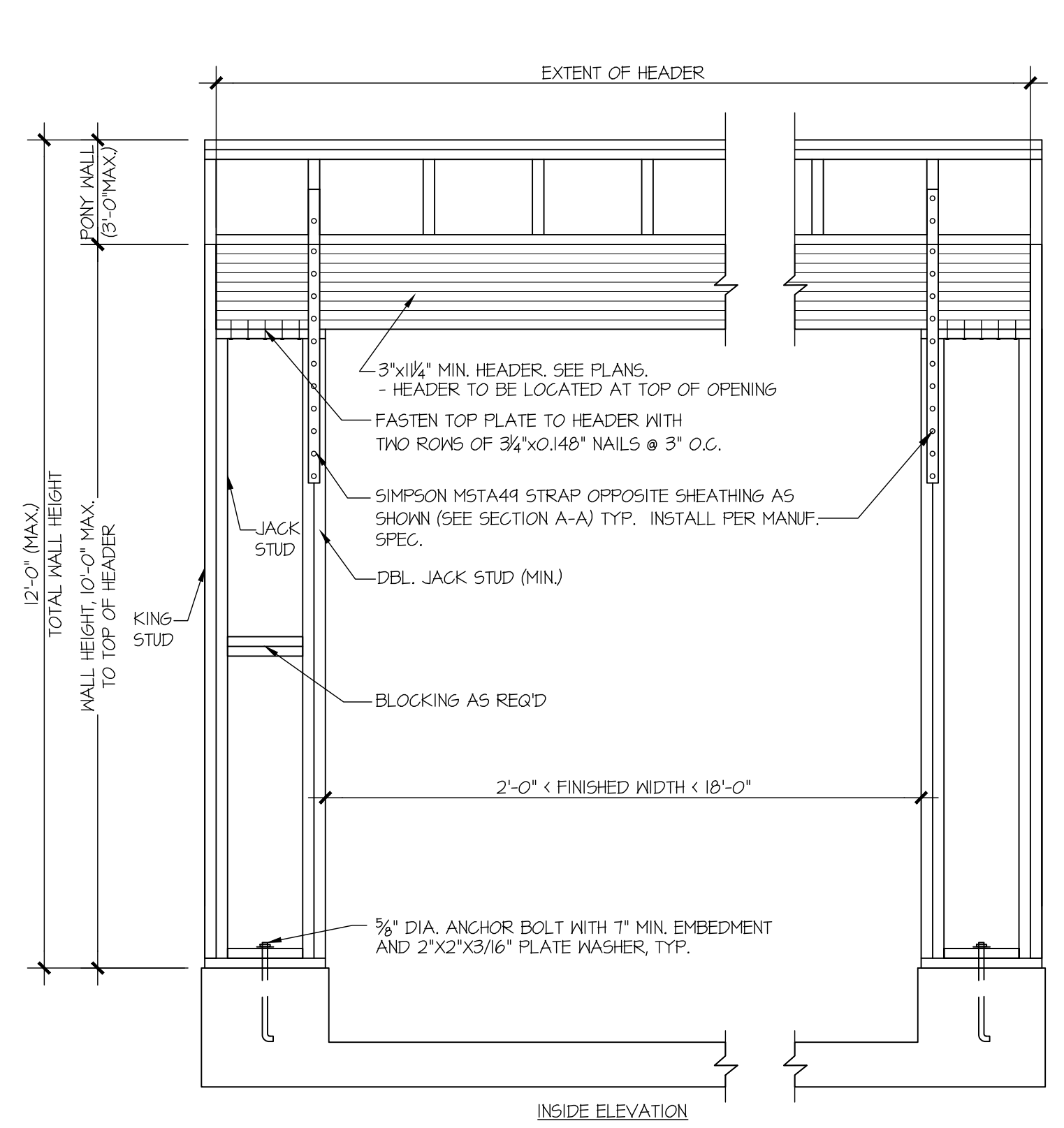
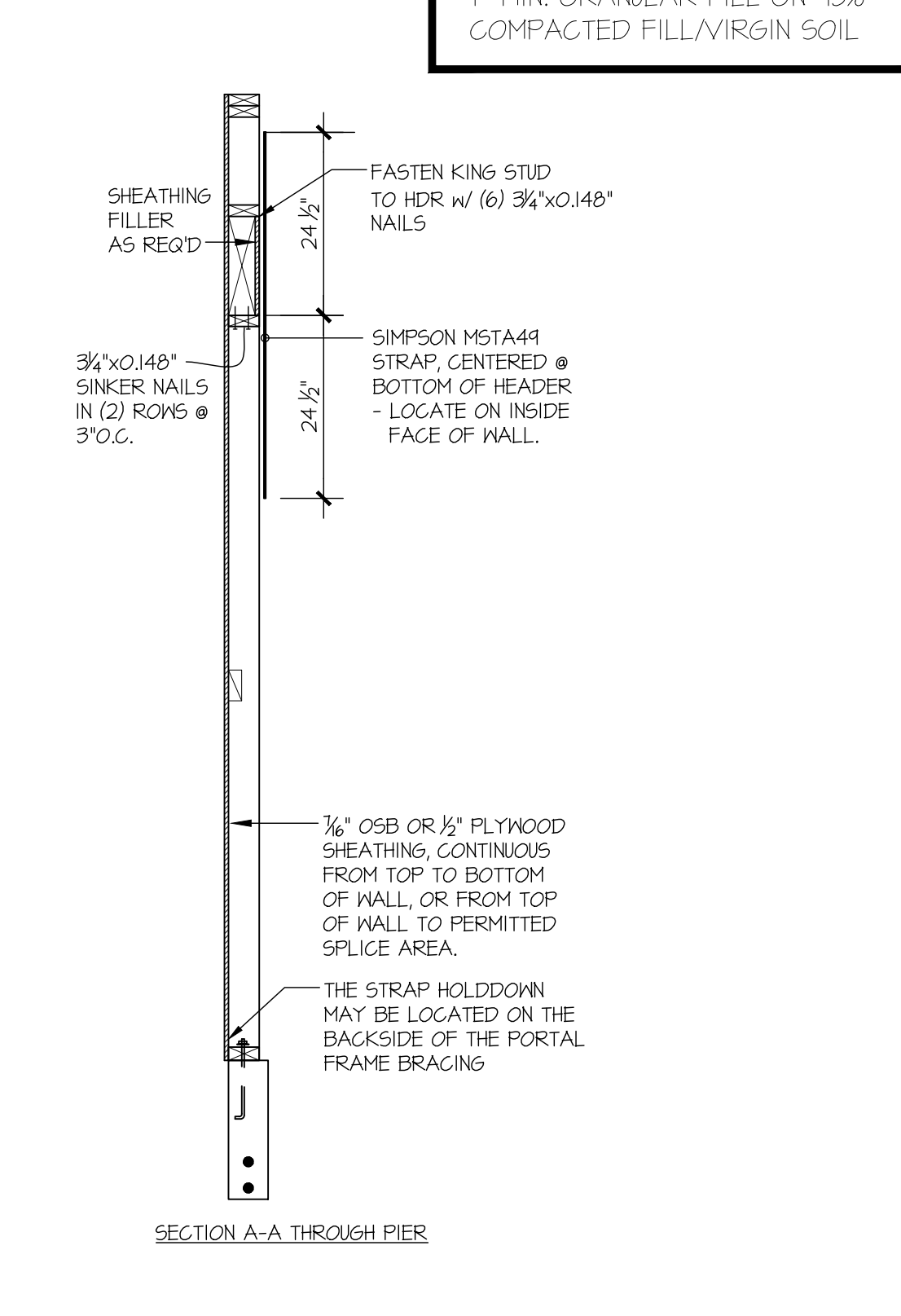
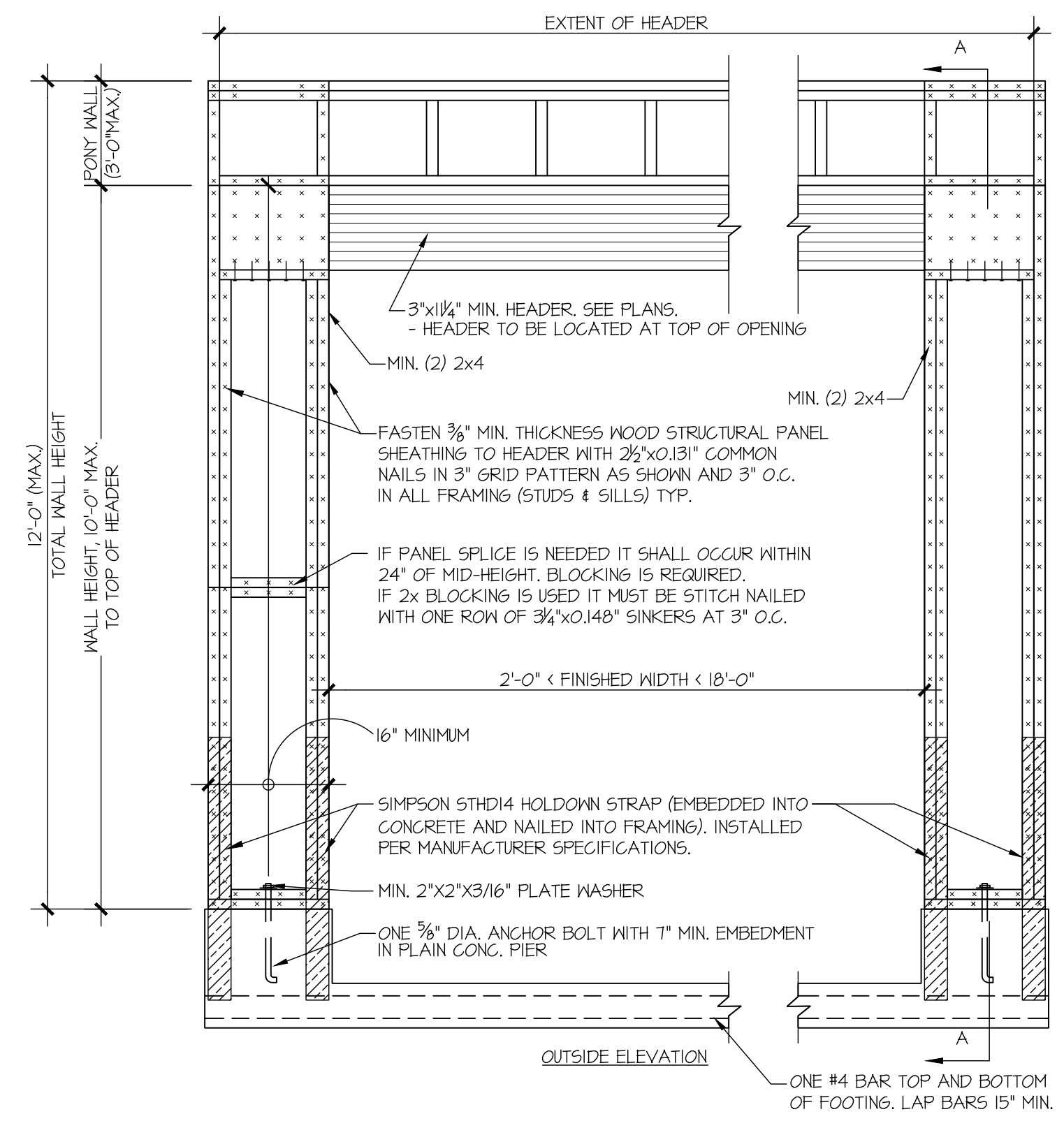
REVISIONS:
date: 03/11/2026 initial: RSC
GEOTECH REPORT

ARCHITECTURAL INNOVATIONS

STRUCTURAL NOTES

MERCER ISLAND - LOT 2
SE 22ND ST
MERCER ISLAND, WA

sheat: S-O.O



HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON 5THD14 (R/L) HOLD-DOWN
HD-5	SIMPSON C516 STRAP TIE (14" END LENGTH)
HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)
HD-7	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.)

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

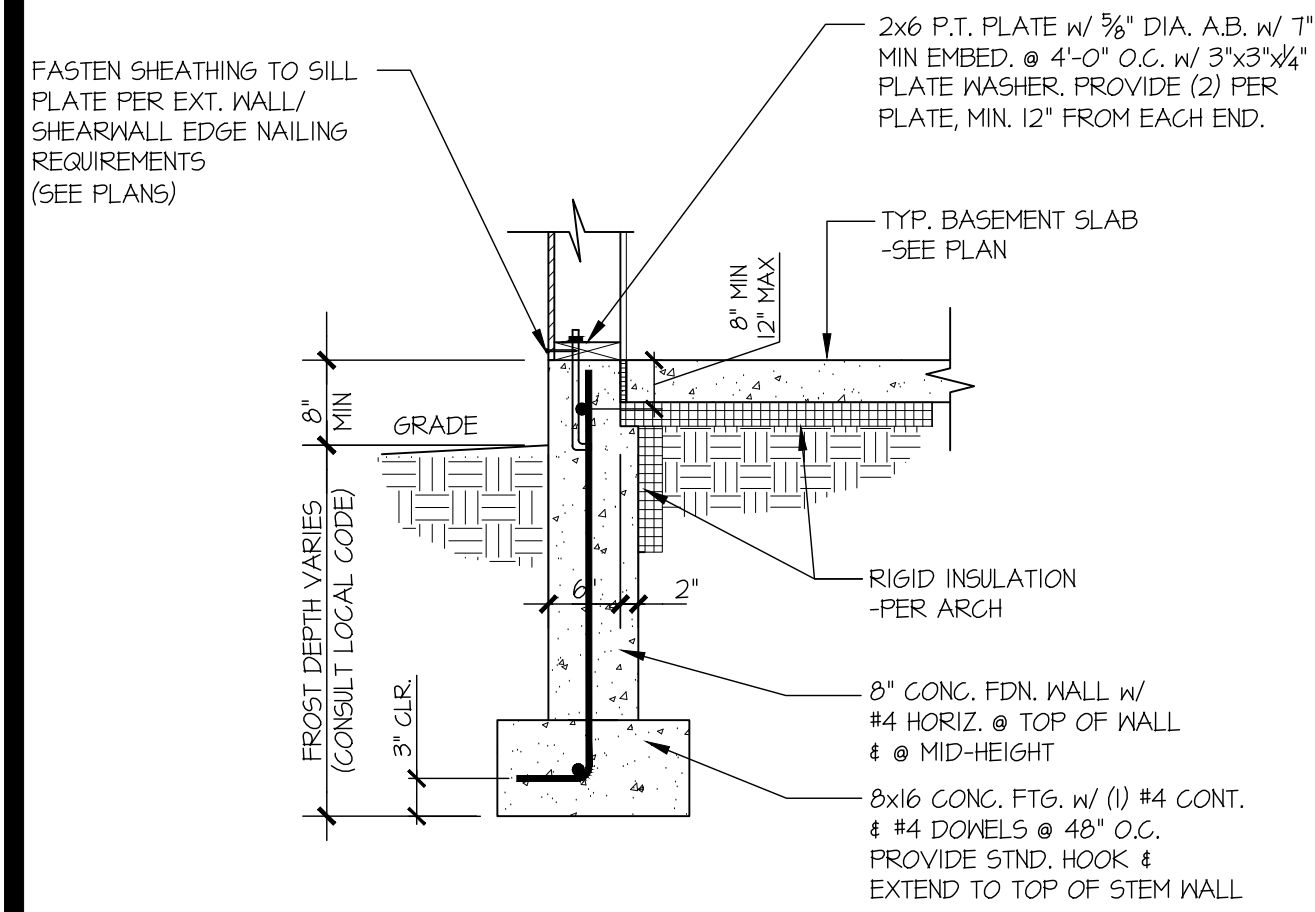
STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

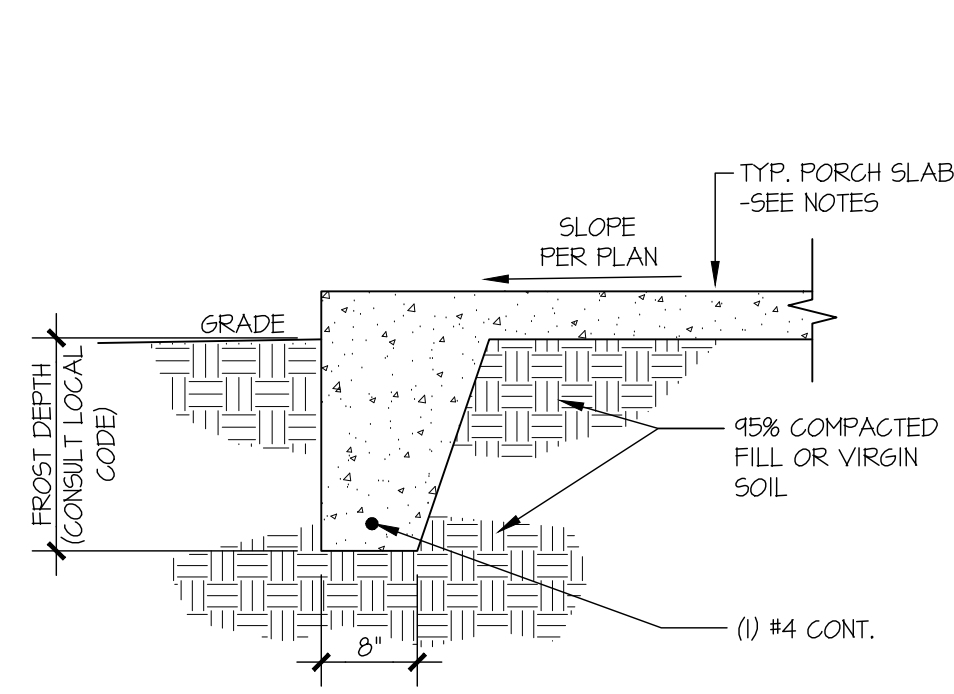
ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MKP FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

TRUSSES SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES OR GIRDER TRUSSES DOES NOT EXCEED THE FOLLOWING:

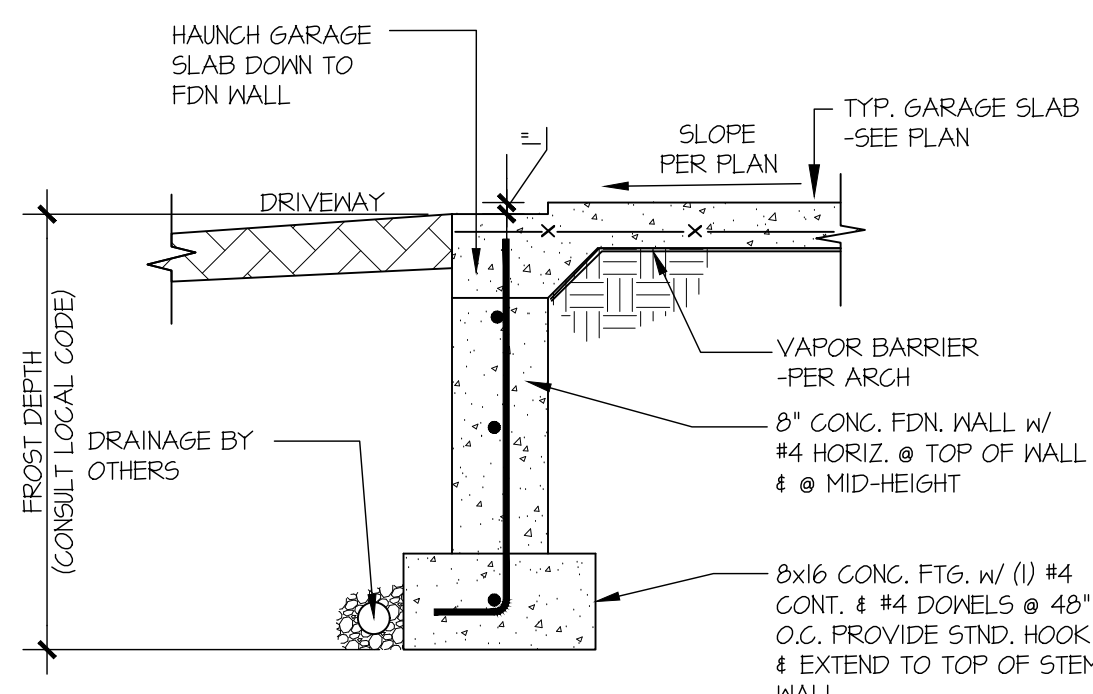
- ROOF TRUSSES: 1/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS: 160" DEAD LOAD
- FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS: LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)



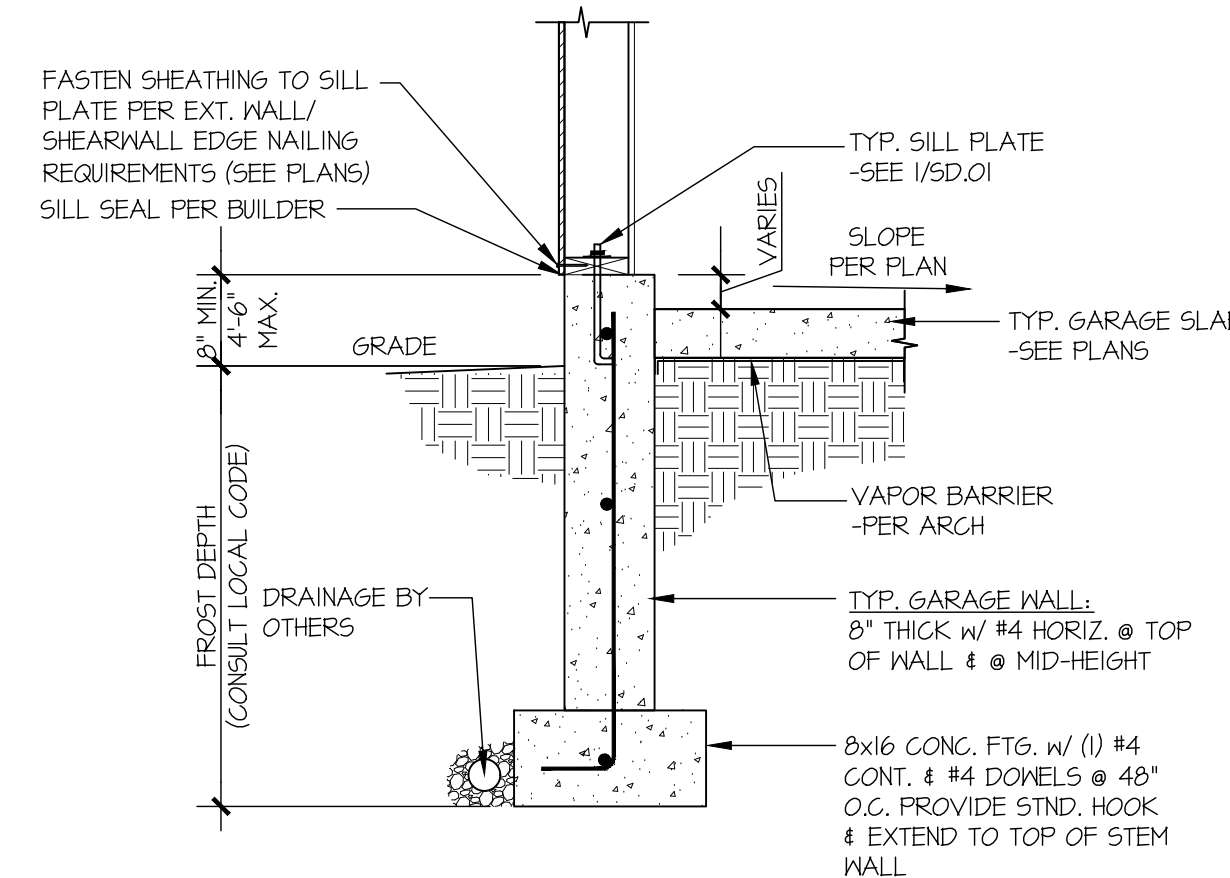
1 TYPICAL FOOTING @ WALKOUT BASEMENT
SCALE: 3/4"=1'-0"



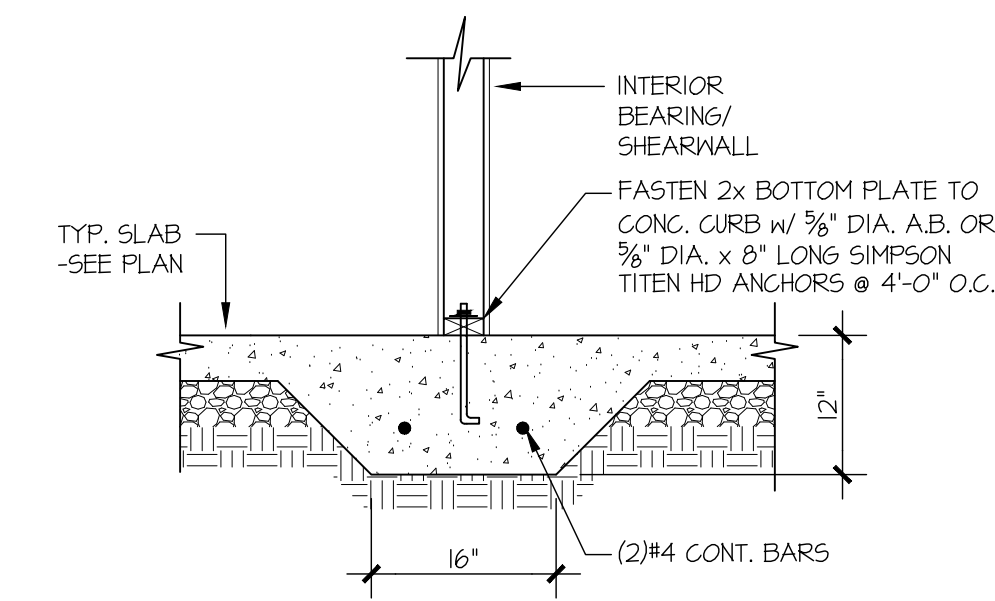
3 TYPICAL FOOTING @ PORCH SLAB
SCALE: 3/4"=1'-0"



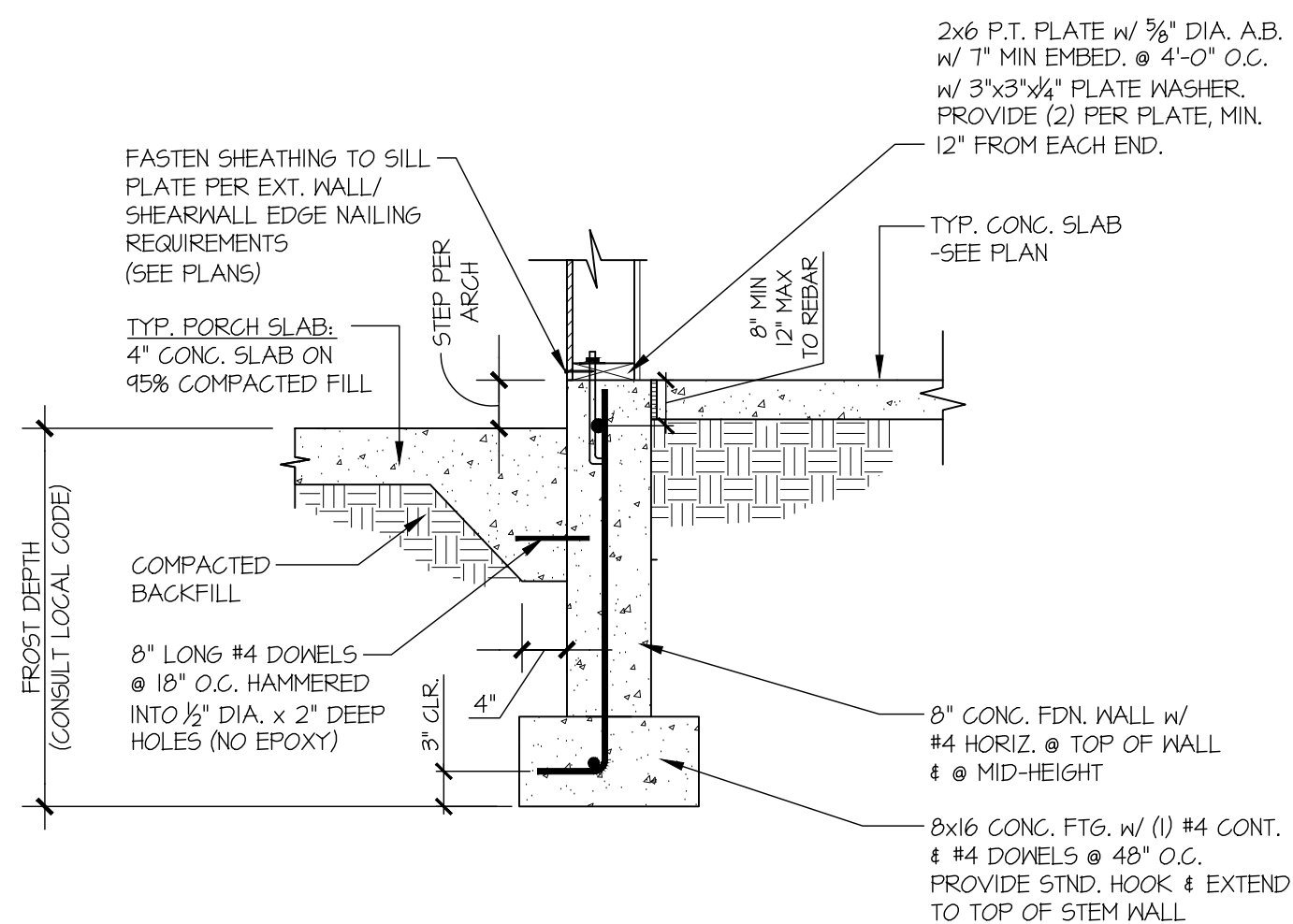
4 TYPICAL CONCRETE FOOTINGS @ GARAGE DOOR OPENING
SCALE: 3/4"=1'-0"



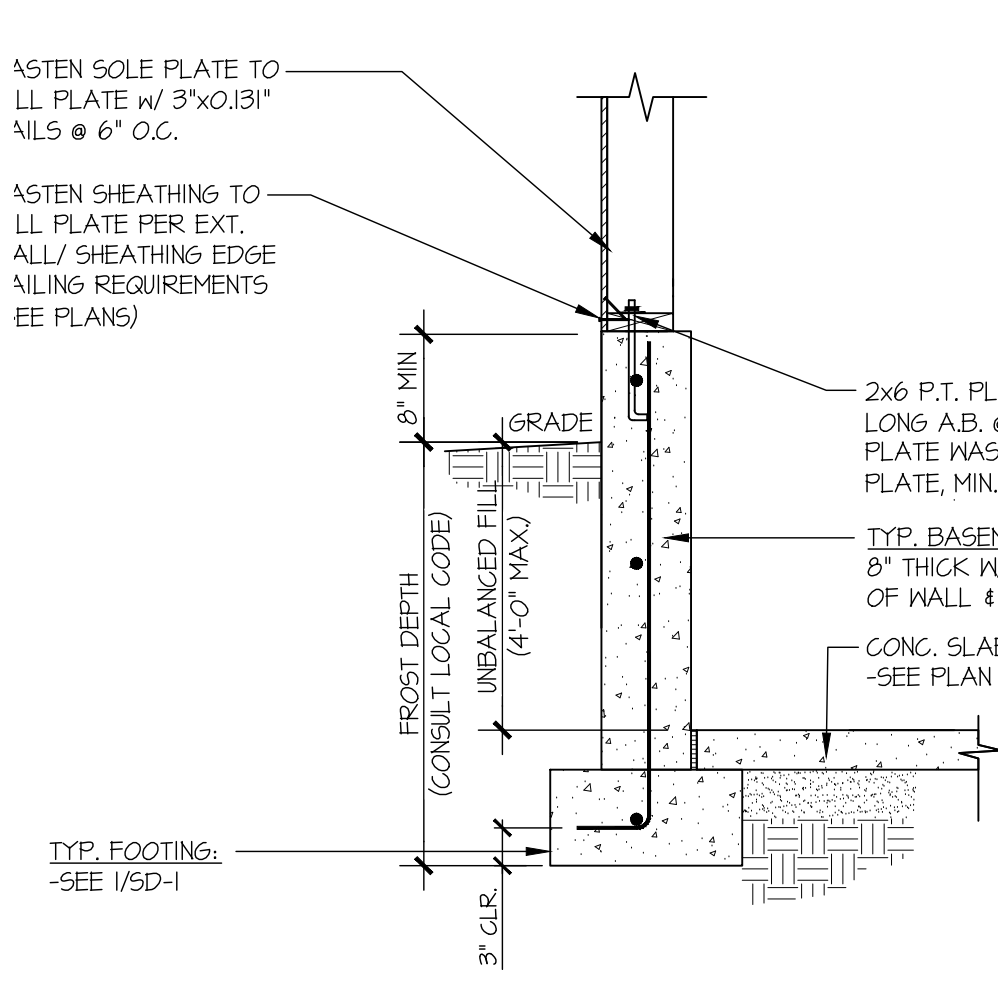
5 TYPICAL EXT. GARAGE FOUNDATION
SCALE: 3/4"=1'-0"



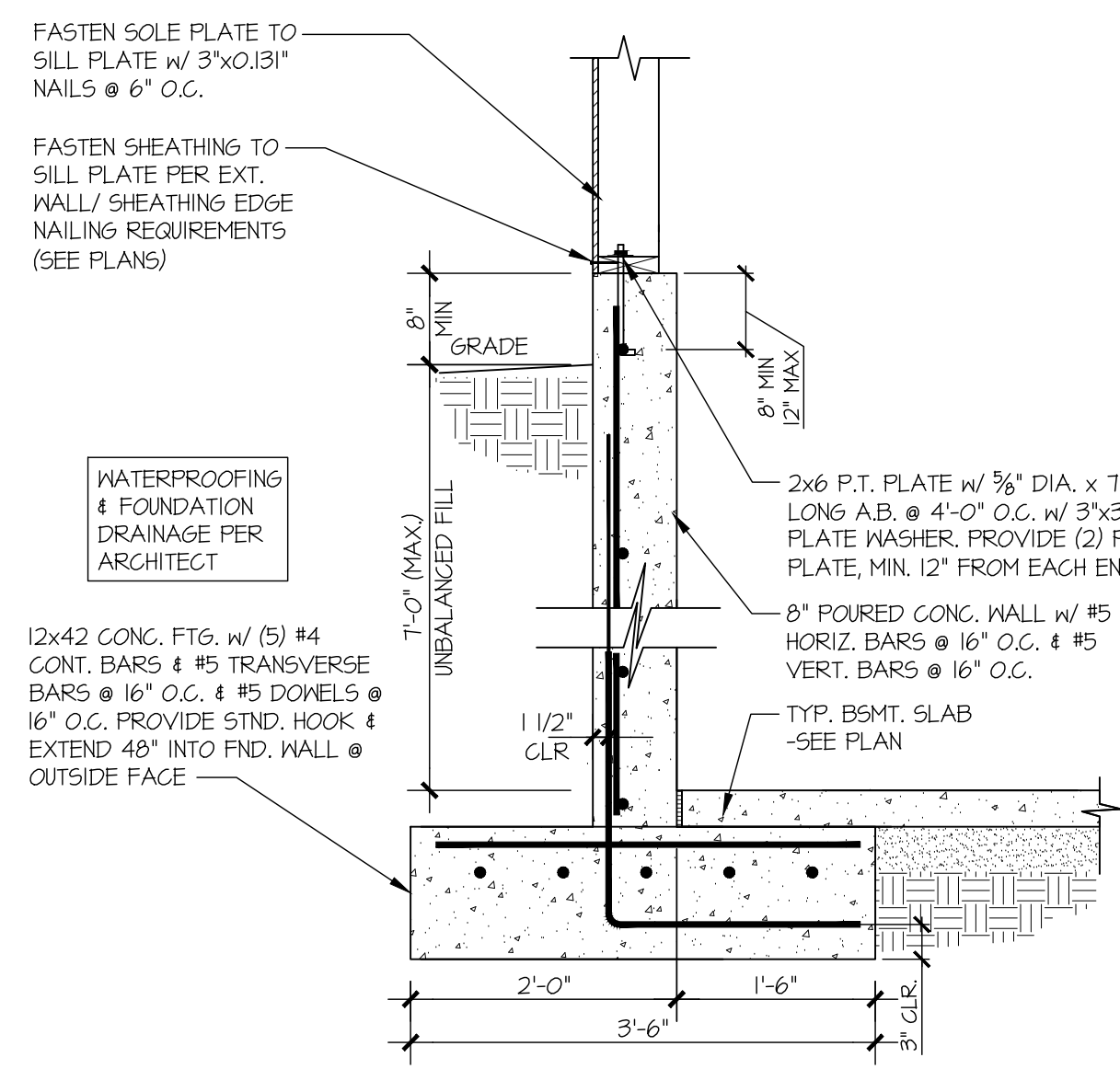
6 TYPICAL CRAWL SPACE FOOTING DETAIL
SCALE: 3/4"=1'-0"



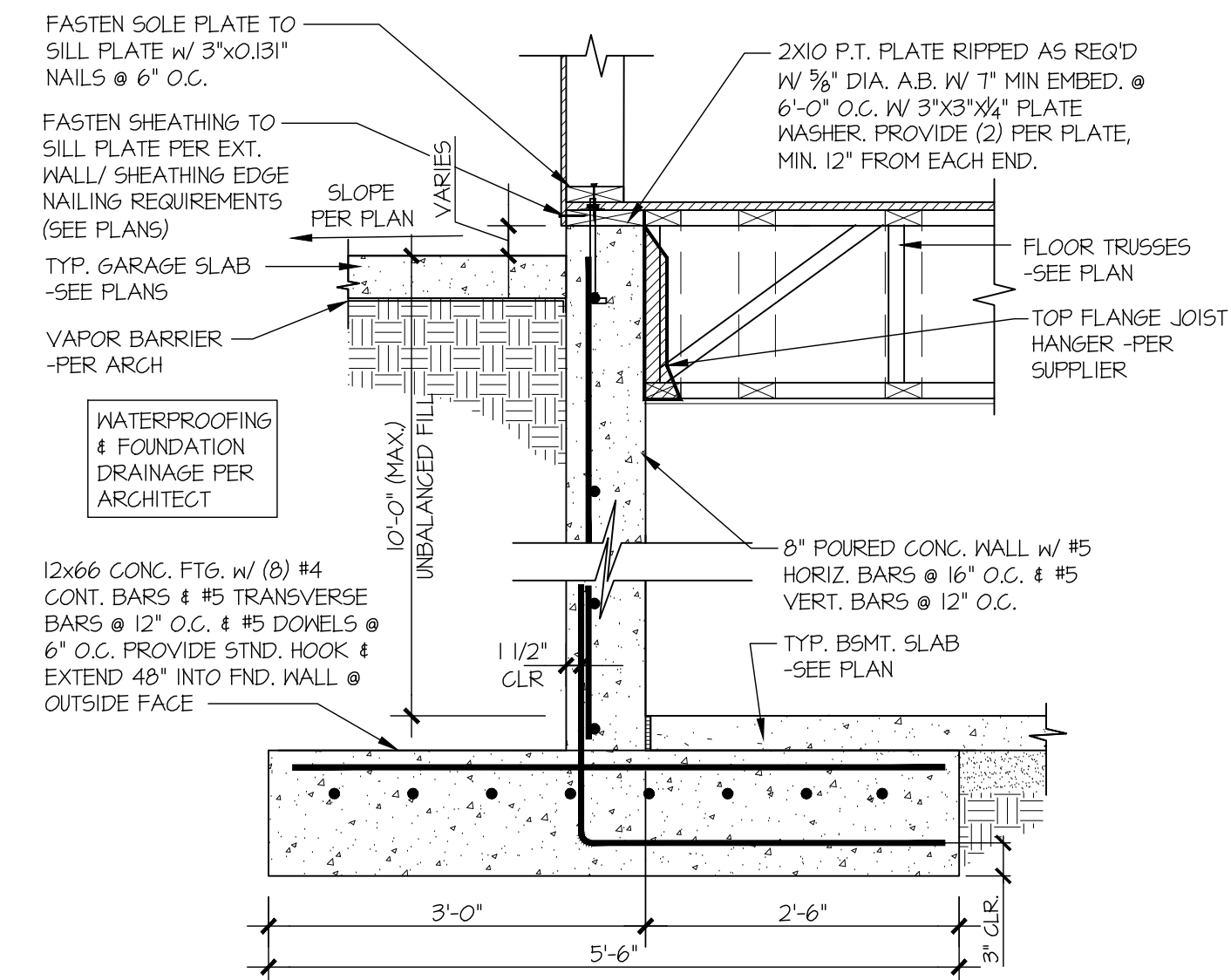
7 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/4"=1'-0"



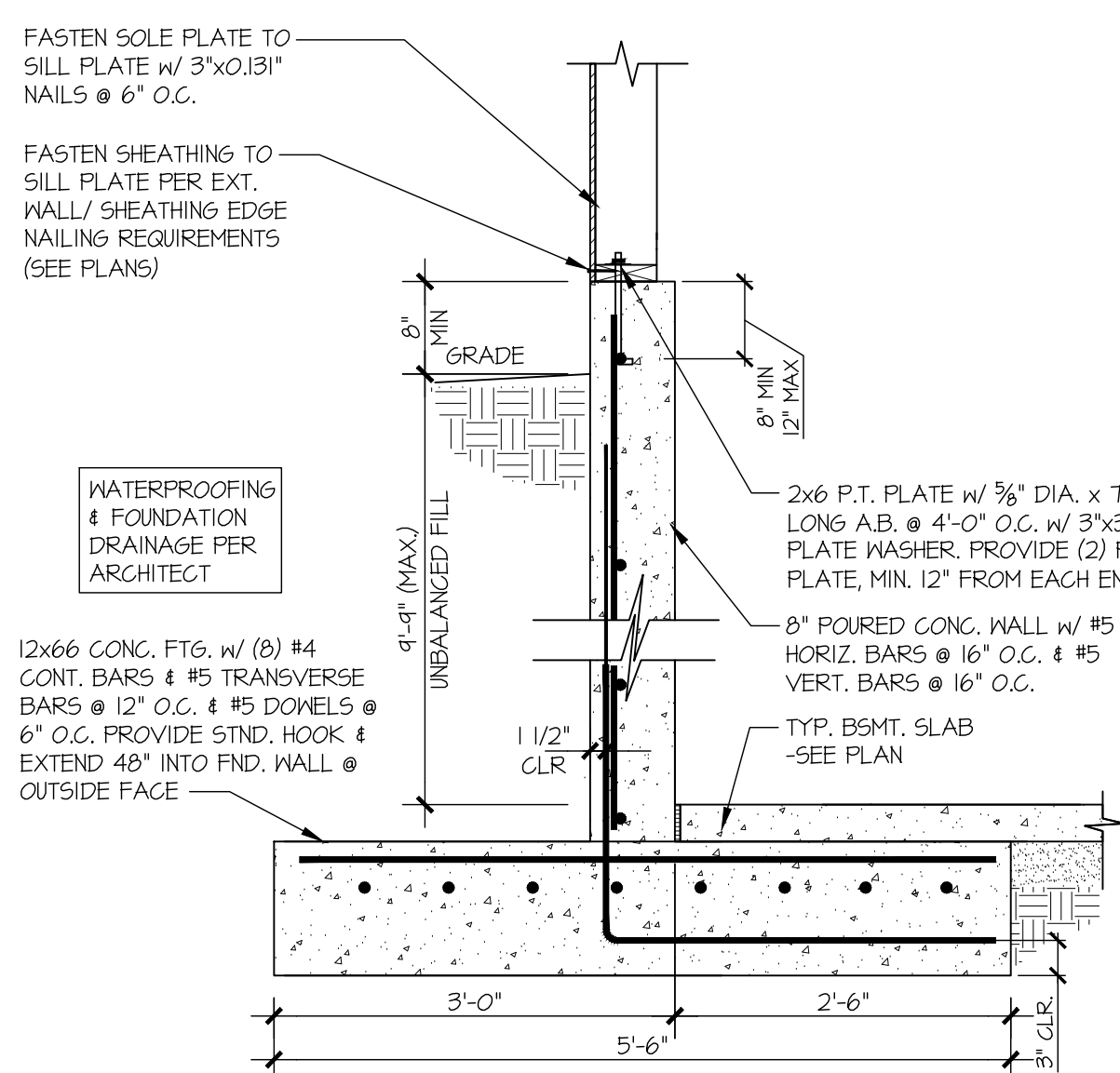
8 TYPICAL BASEMENT FOUNDATION
SCALE: 3/4"=1'-0"



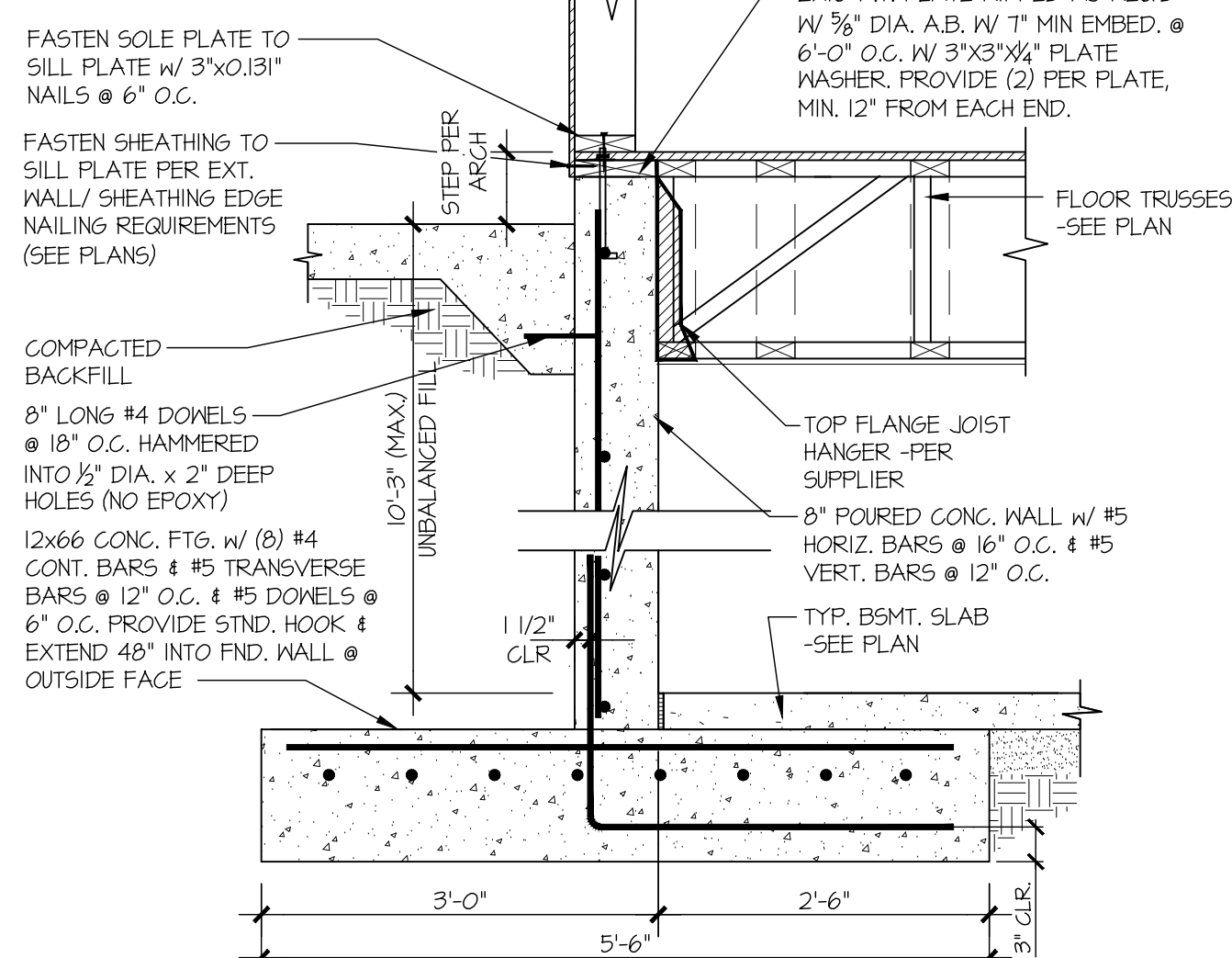
9 TYPICAL BASEMENT FOUNDATION WALL
SCALE: 3/4"=1'-0"



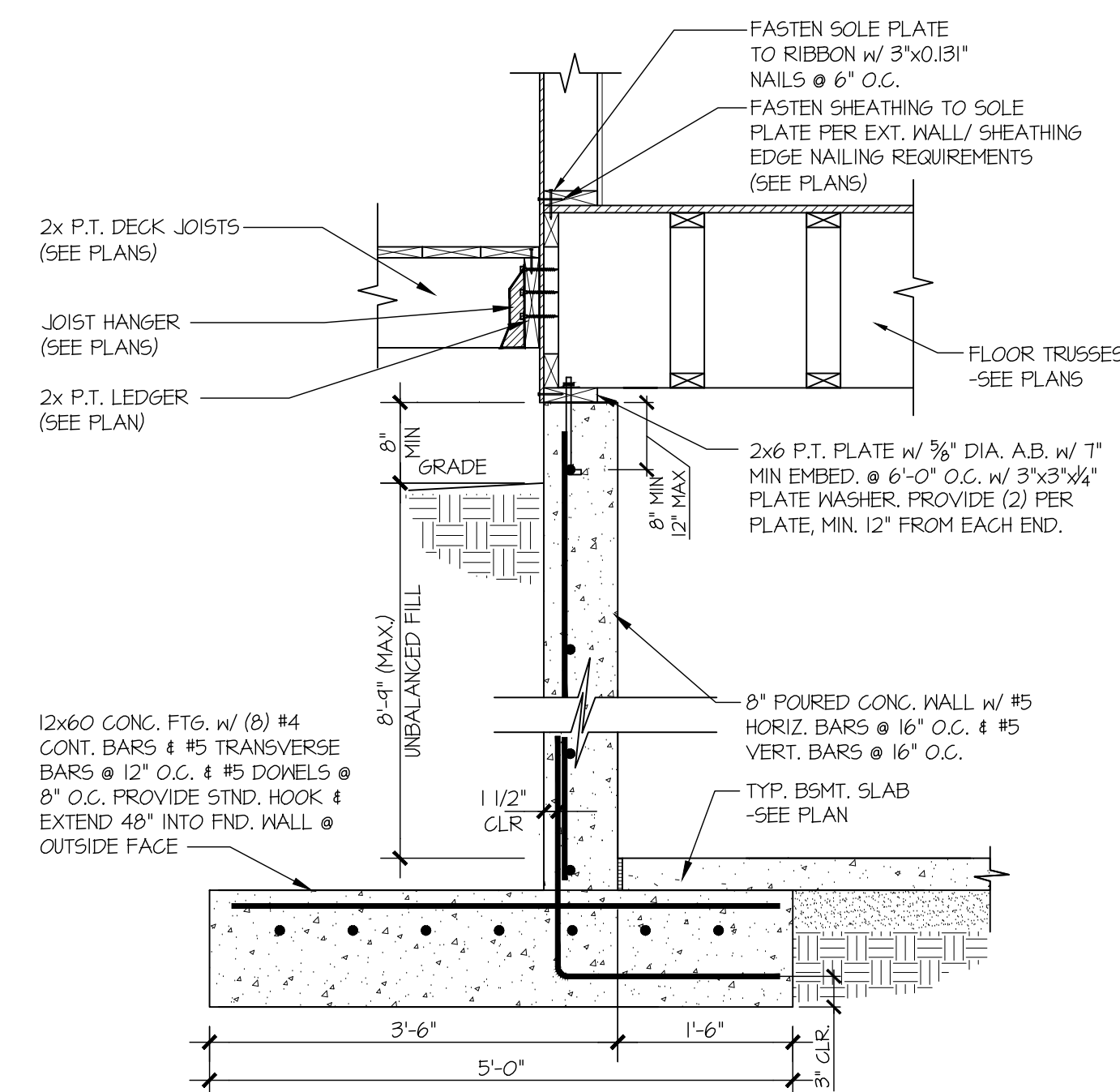
10 TYPICAL BASEMENT FDN WALL
SCALE: 3/4"=1'-0"



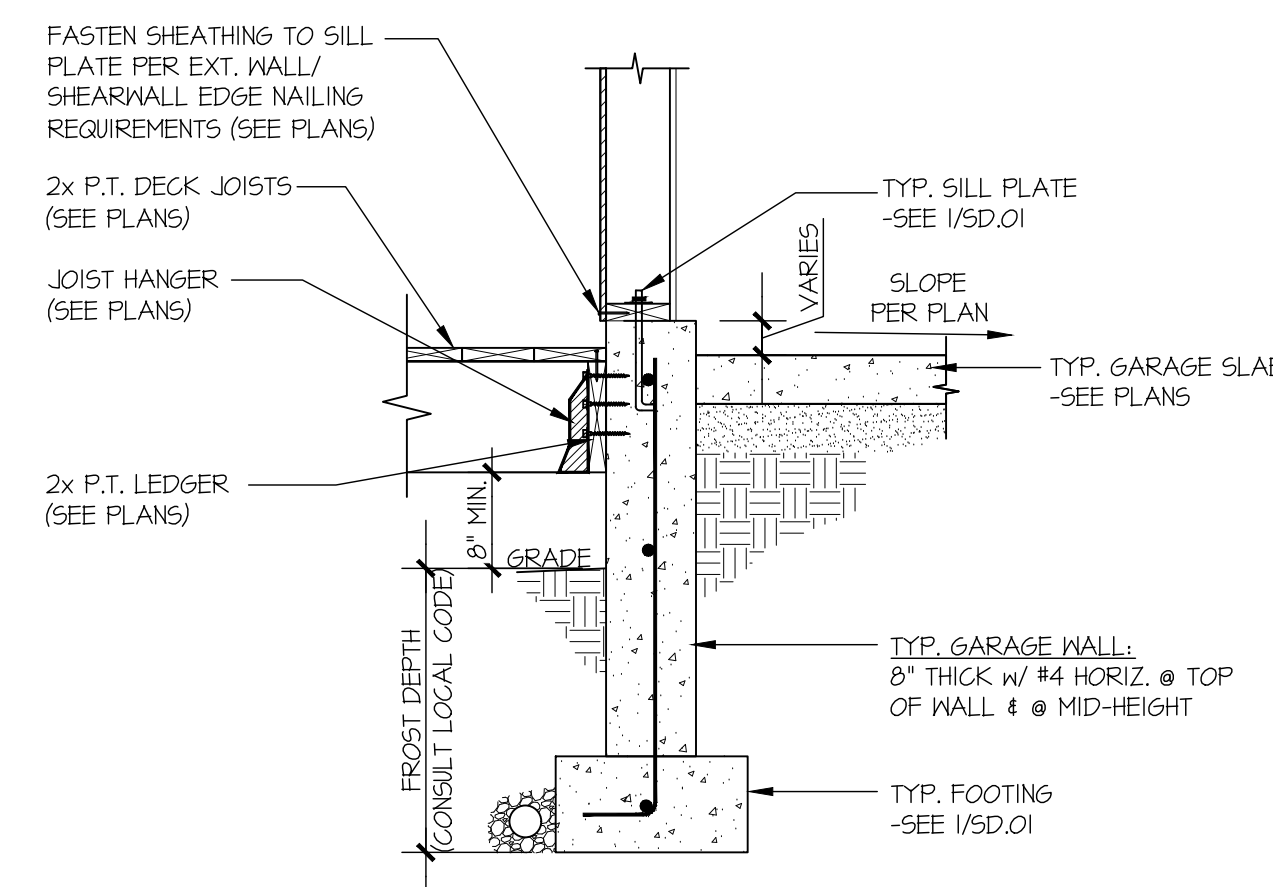
11 TYPICAL BASEMENT FOUNDATION WALL
SCALE: 3/4"=1'-0"



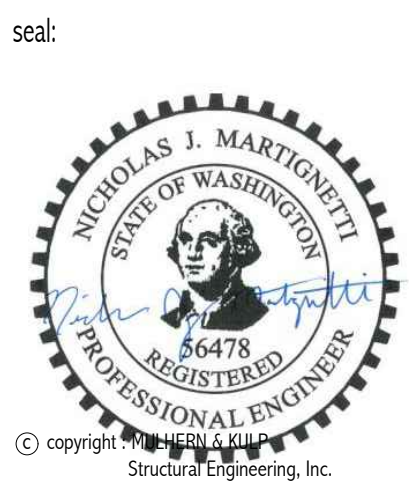
12 TYPICAL BASEMENT FOUNDATION WALL
SCALE: 3/4"=1'-0"



13 TYPICAL BASEMENT FOUNDATION WALL
SCALE: 3/4"=1'-0"



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



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
7220 Trade Street, Suite 205, San Diego, CA 92121
p 619-593-0010 • mulhernkulp.com

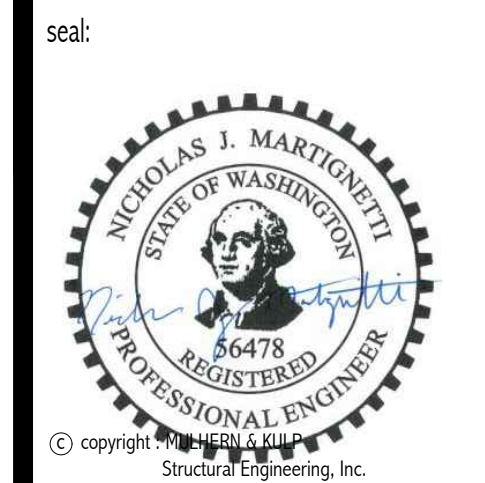
M&K project number:
203-24022
project mgr: **NJM**
drawn by: **RSC**
issue date: **11-20-24**

REVISIONS:
date: initial:

ARCHITECTURAL INNOVATIONS

STRUCTURAL DETAILS
MERCER ISLAND - LOT 2
SE 22ND ST
MERCER ISLAND, WA

sheet:
SD-1



MULHERN+KULP
 RESIDENTIAL STRUCTURAL ENGINEERING
 7220 Trade Street, Suite 205, San Diego, CA 92121
 p 619-593-0010 • mkmhmkp.com

M&K project number:
 203-24022

project mgr: NJM
 drawn by: RSC
 issue date: 11-20-24

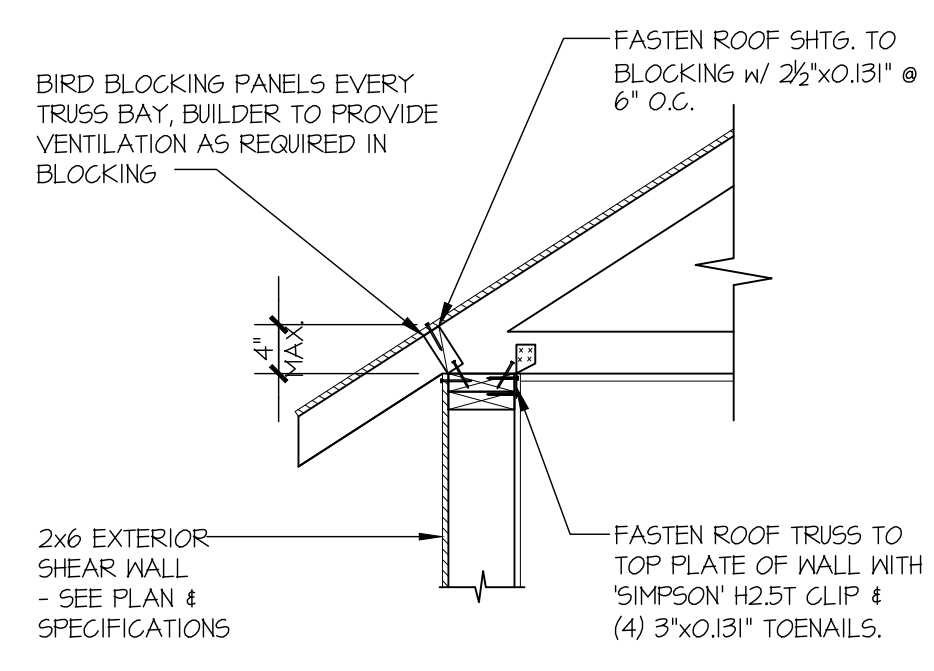
REVISIONS:

date:	initial:

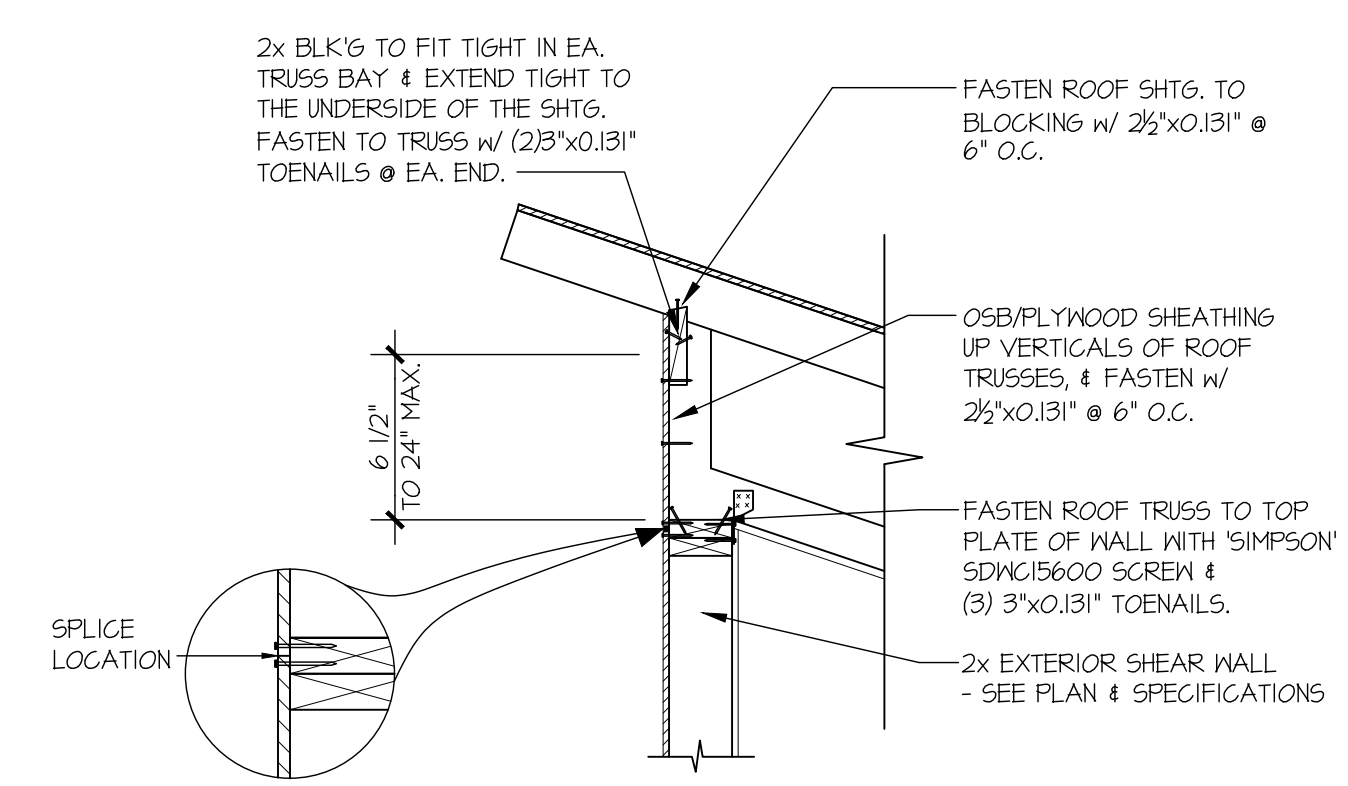
ARCHITECTURAL
 INNOVATIONS

STRUCTURAL DETAILS
 MERCER ISLAND - LOT 2
 SE 22ND ST
 MERCER ISLAND, WA

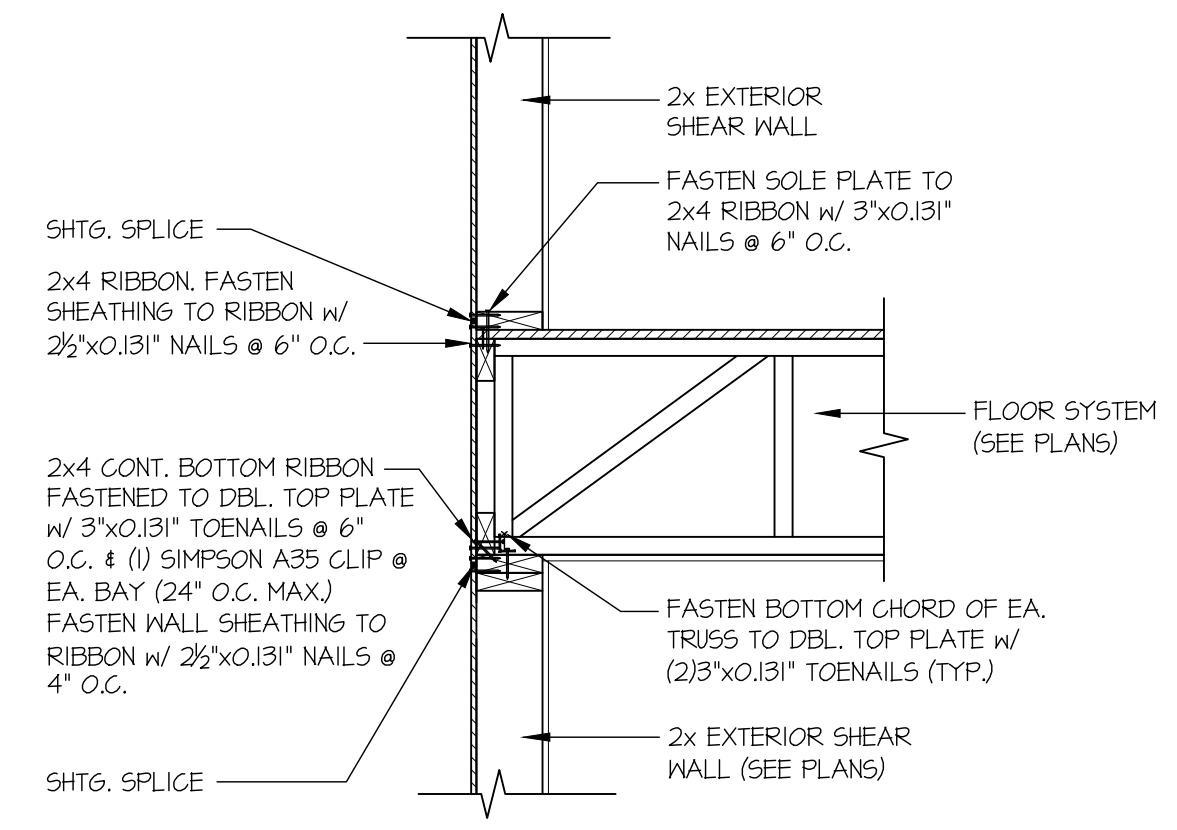
sheet:
SD-2



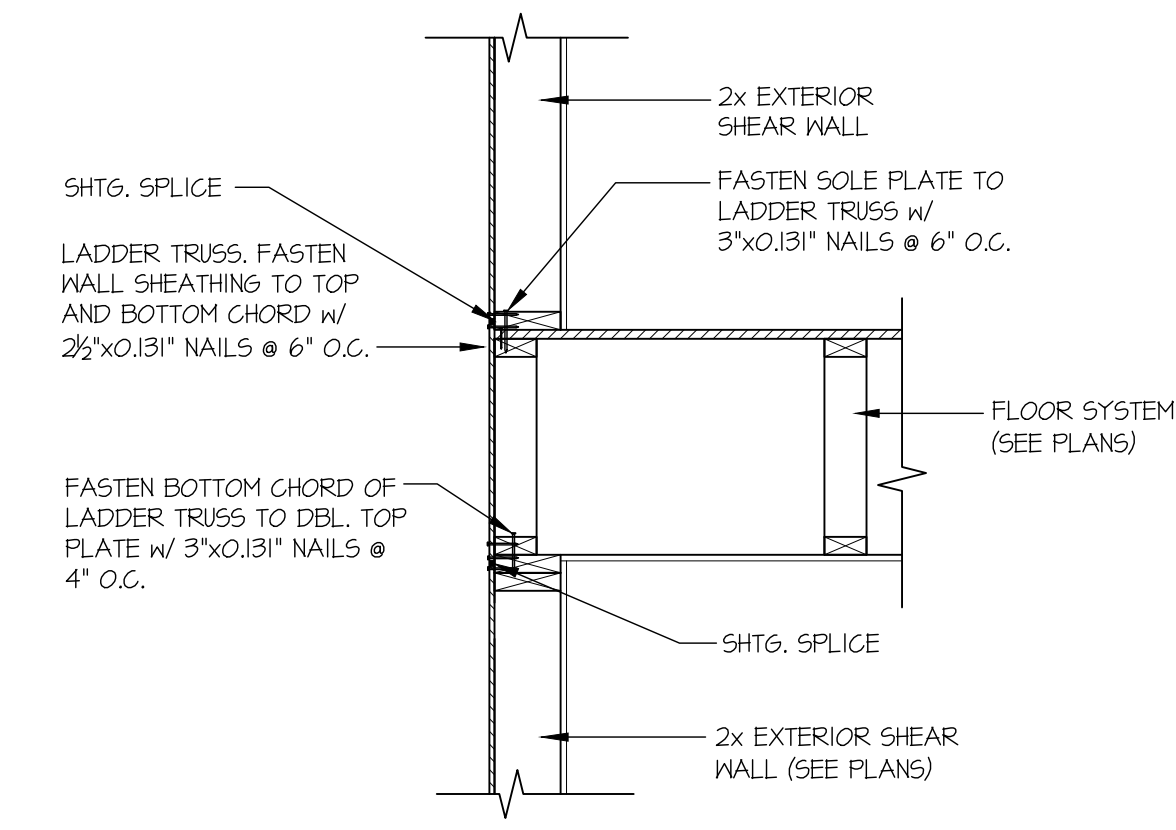
I TYPICAL SHEAR
 TRANSFER DETAIL @ ROOF
 SCALE: 3/4"=1'-0" HEEL HEIGHT LESS THAN 6 1/2"



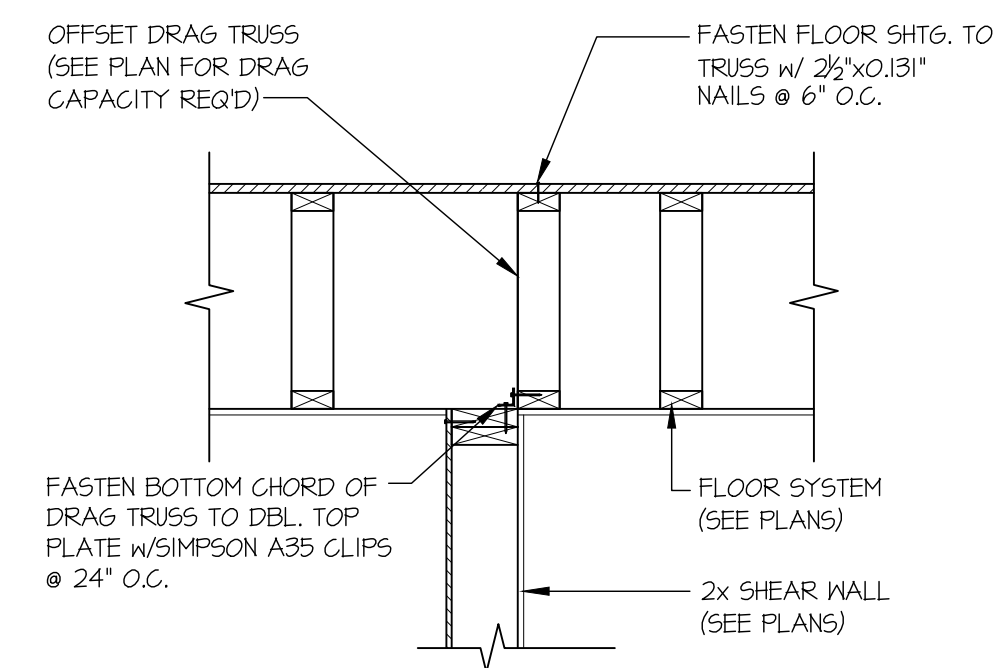
IA TYPICAL SHEAR
 TRANSFER DETAIL @ ROOF
 SCALE: 3/4"=1'-0"



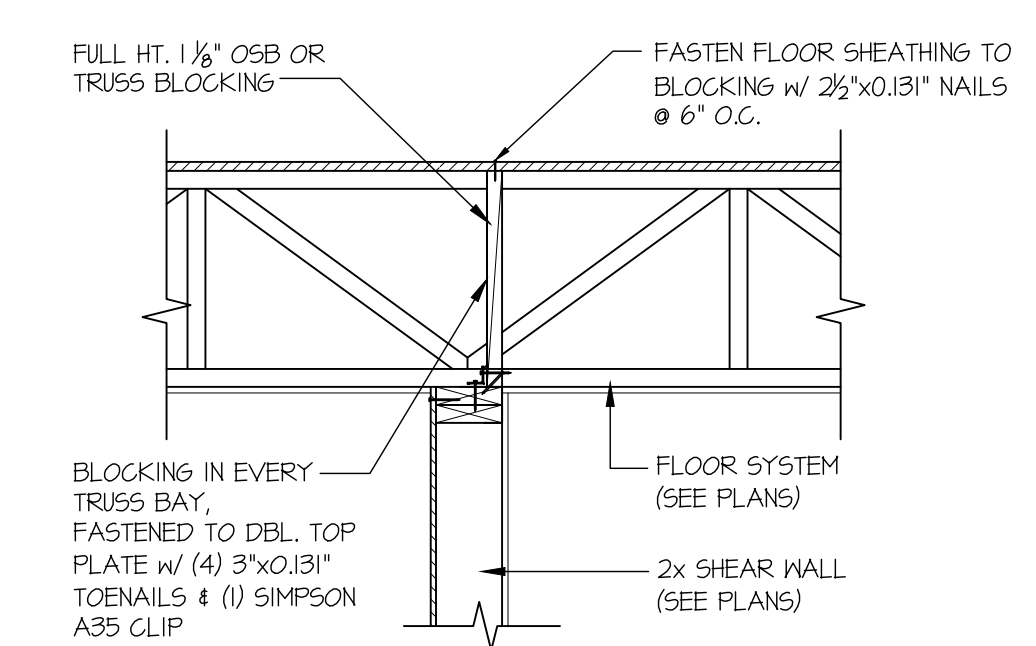
3 TYPICAL SHEAR TRANSFER DETAIL
 BETWEEN FLOORS @ EXTERIOR WALL
 SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



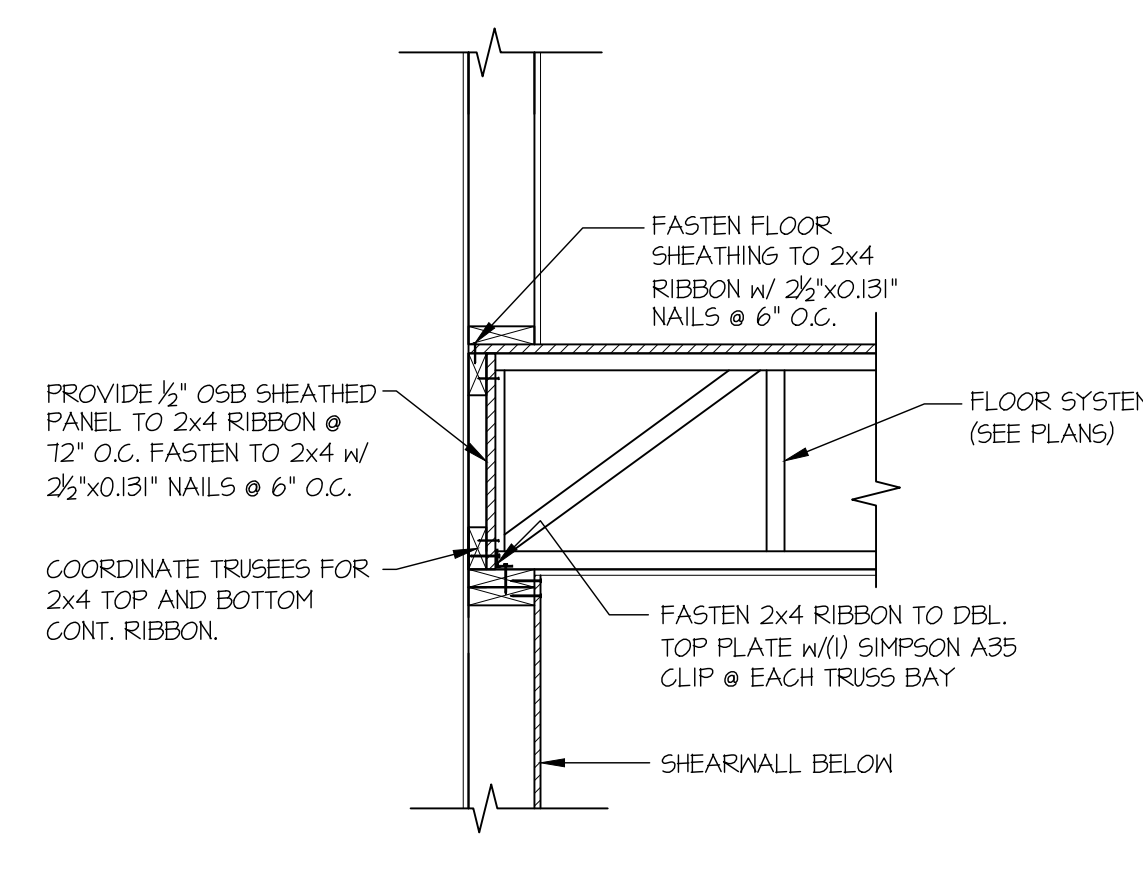
4 TYPICAL SHEAR TRANSFER DETAIL
 BETWEEN FLOORS @ EXTERIOR WALL
 SCALE: 3/4"=1'-0" PARALLEL FRAMING



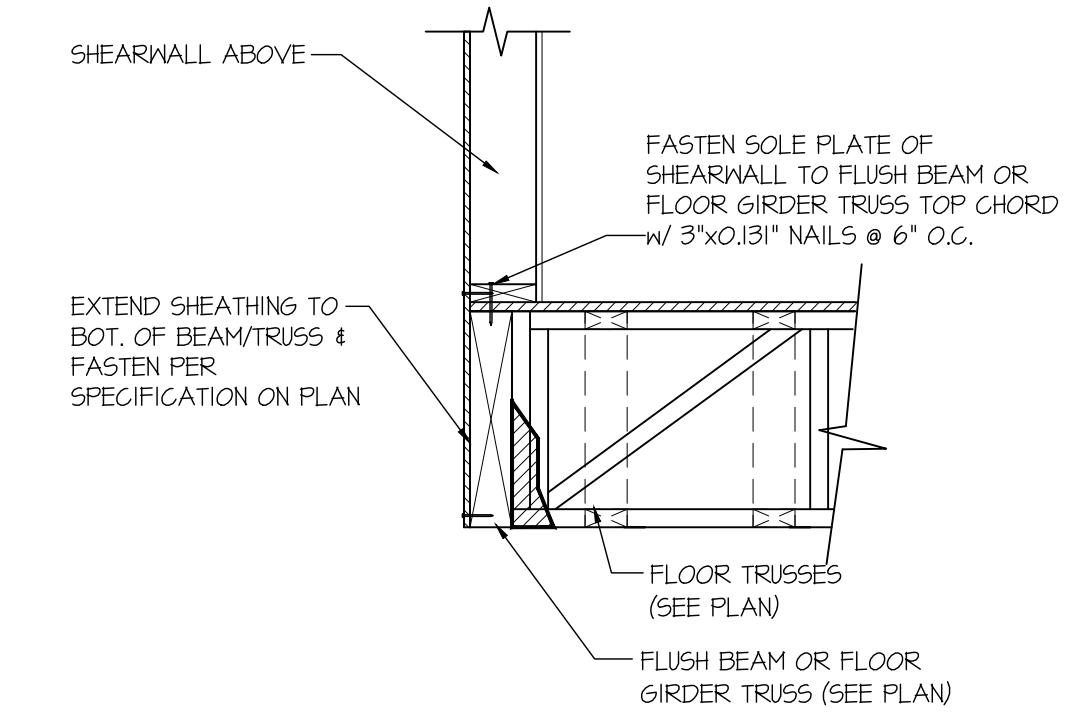
II SHEAR TRANSFER DETAIL
 @ SHEAR WALL BELOW
 SCALE: 3/4"=1'-0"



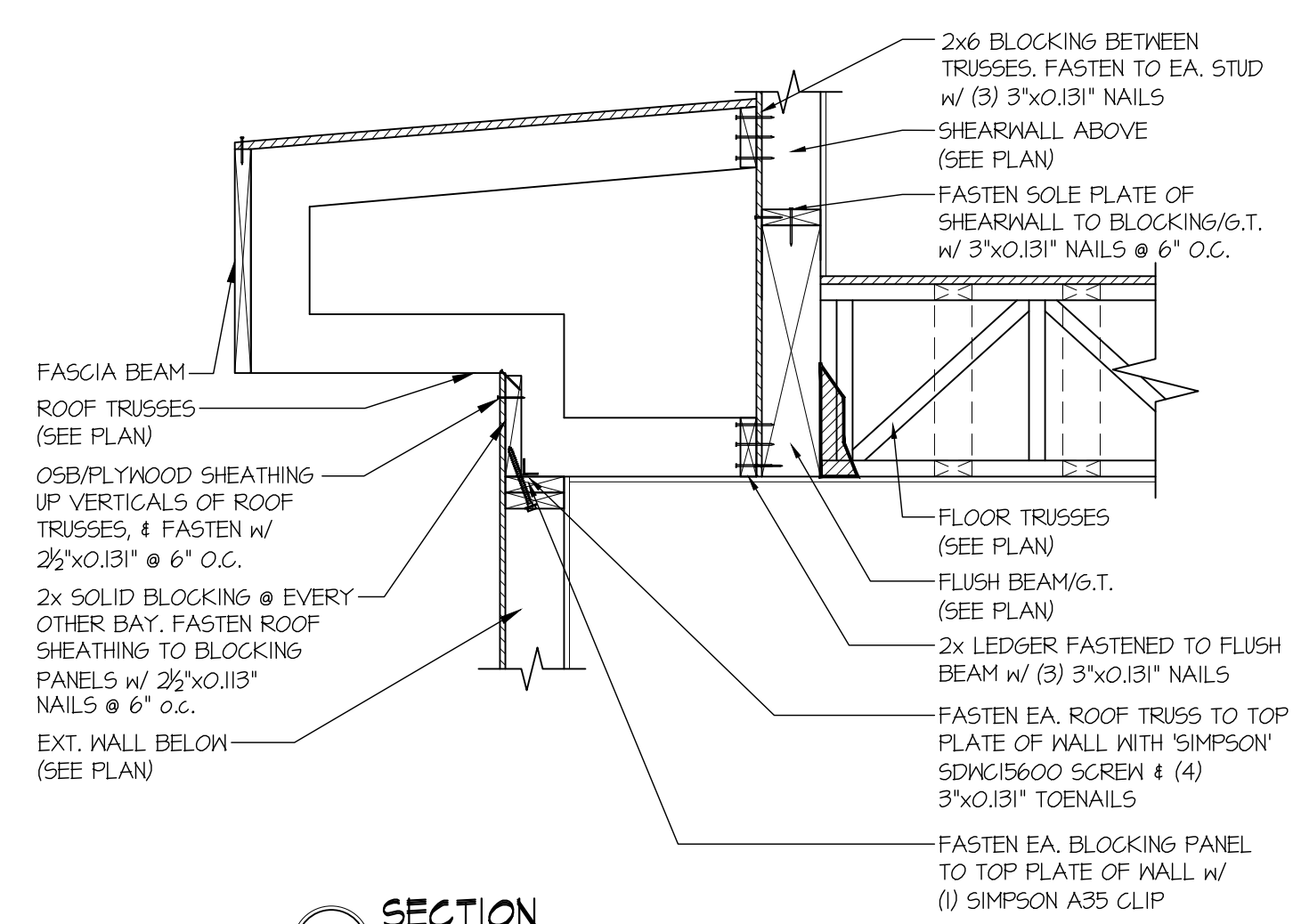
IB SHEAR TRANSFER DETAIL
 @ SHEAR WALL BELOW
 SCALE: 3/4"=1'-0"



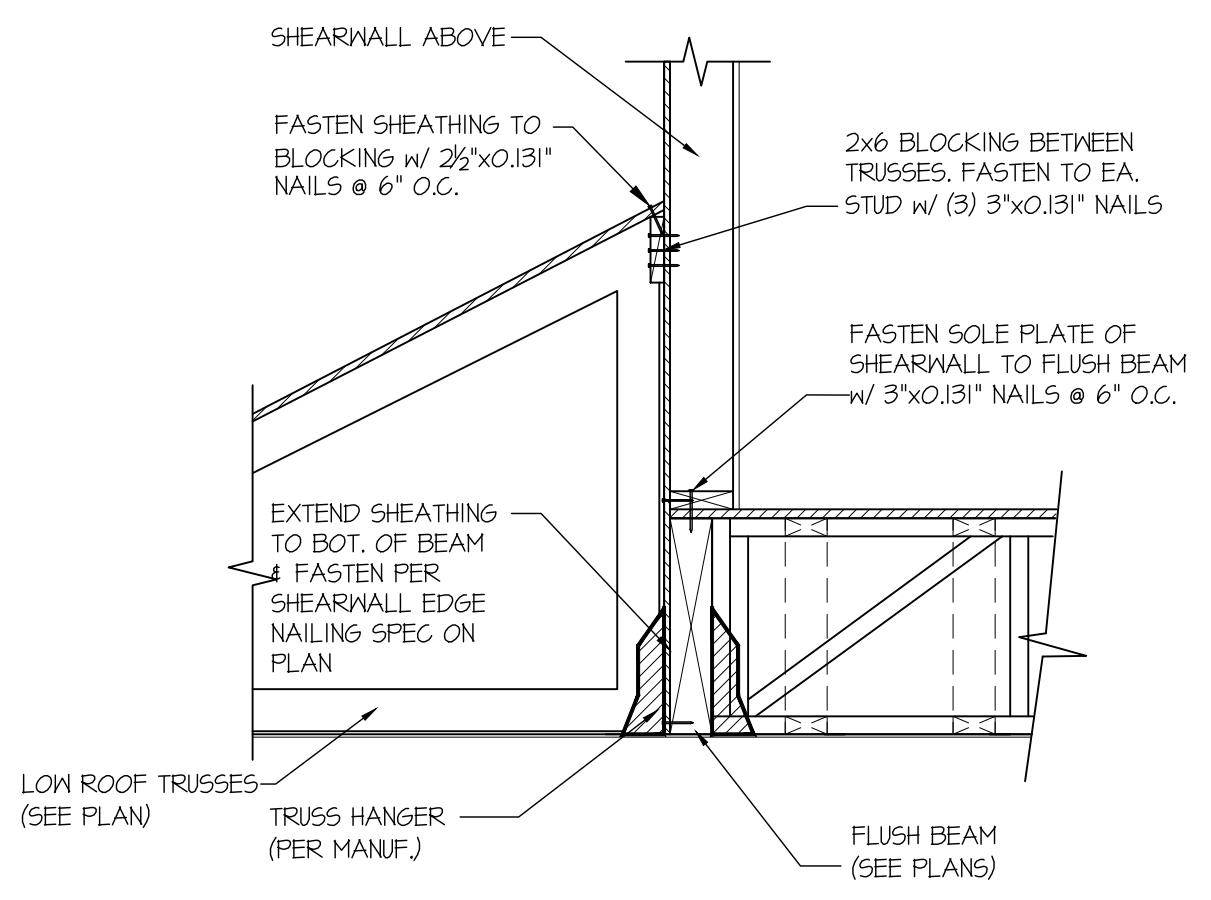
2I SHEAR TRANSFER DETAIL
 @ INTERIOR SHEAR WALL
 SCALE: 3/4"=1'-0"



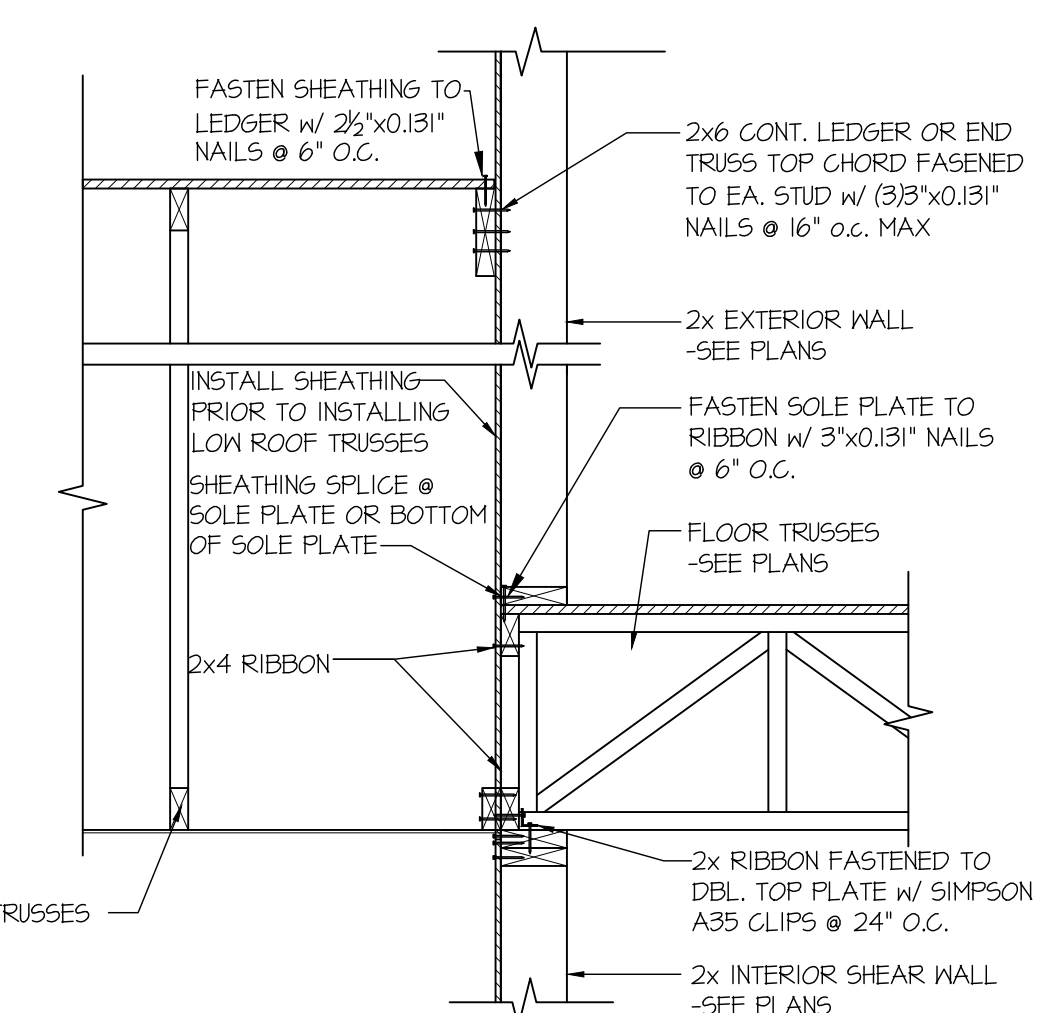
35 SHEAR TRANSFER DETAIL @
 EXTERIOR SHEARWALL ABOVE
 SCALE: 3/4"=1'-0"



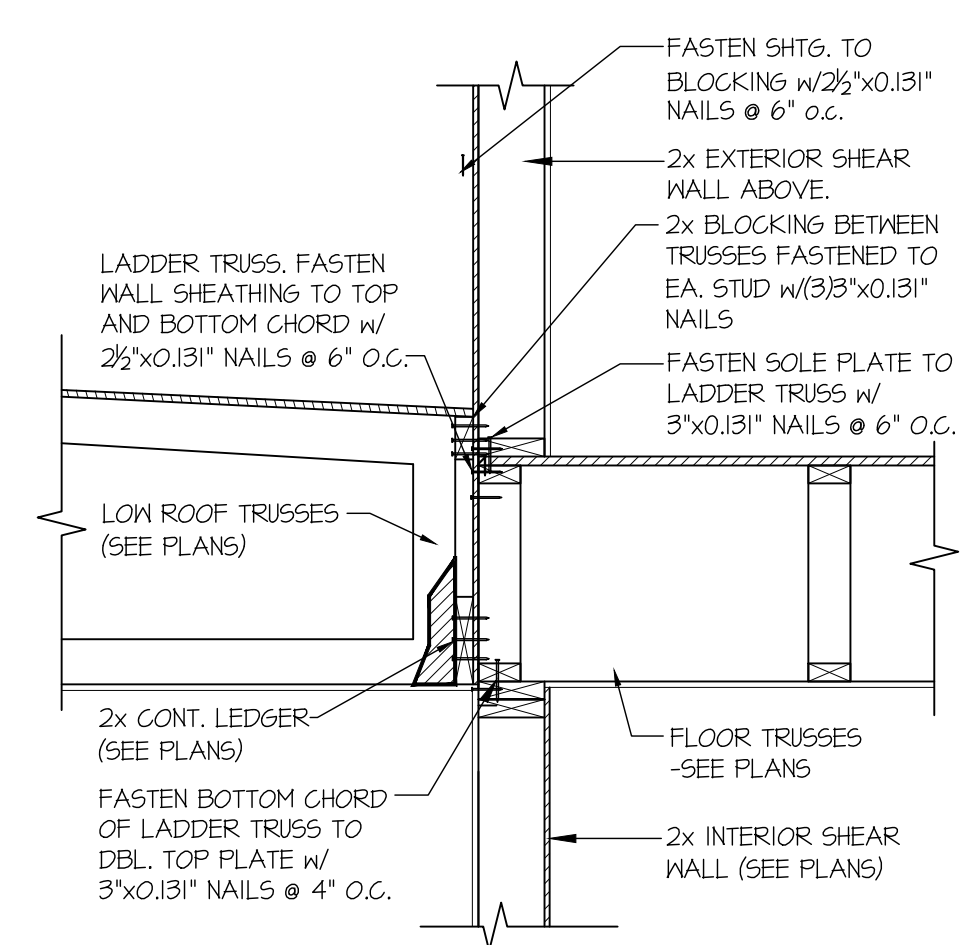
50 SECTION
 SCALE: 3/4"=1'-0"



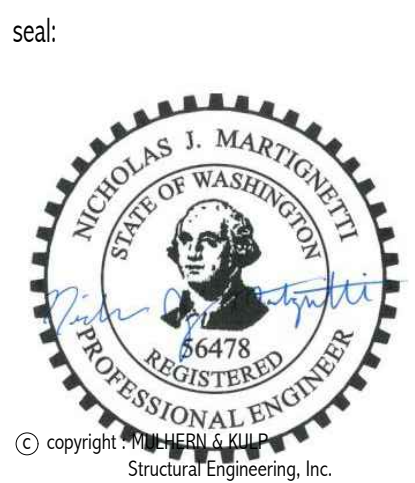
52 SHEAR TRANSFER DETAIL @
 EXTERIOR SHEARWALL ABOVE
 SCALE: 3/4"=1'-0"



6I TYPICAL SHEAR TRANSFER DETAIL
 BETWEEN FLOORS @ INTERIOR WALL
 SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



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



MULHERN + KULP
 RESIDENTIAL STRUCTURAL ENGINEERING
 7720 Trade Street, Suite 205, San Diego, CA 92121
 p 619-593-0010 • m+k@mulhernkulp.com

M&K project number:
 203-24022

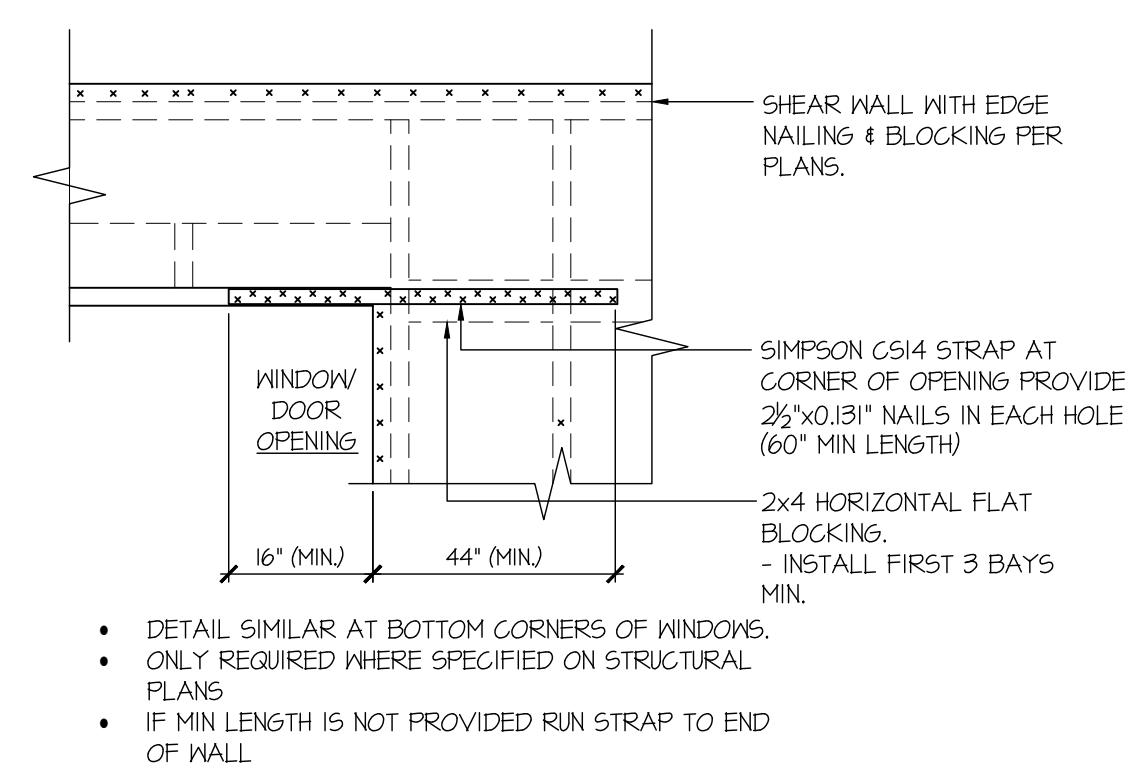
project mgr: NJM
 drawn by: RSC
 issue date: 11-20-24

REVISIONS:
 date: initial:

ARCHITECTURAL
 INNOVATIONS

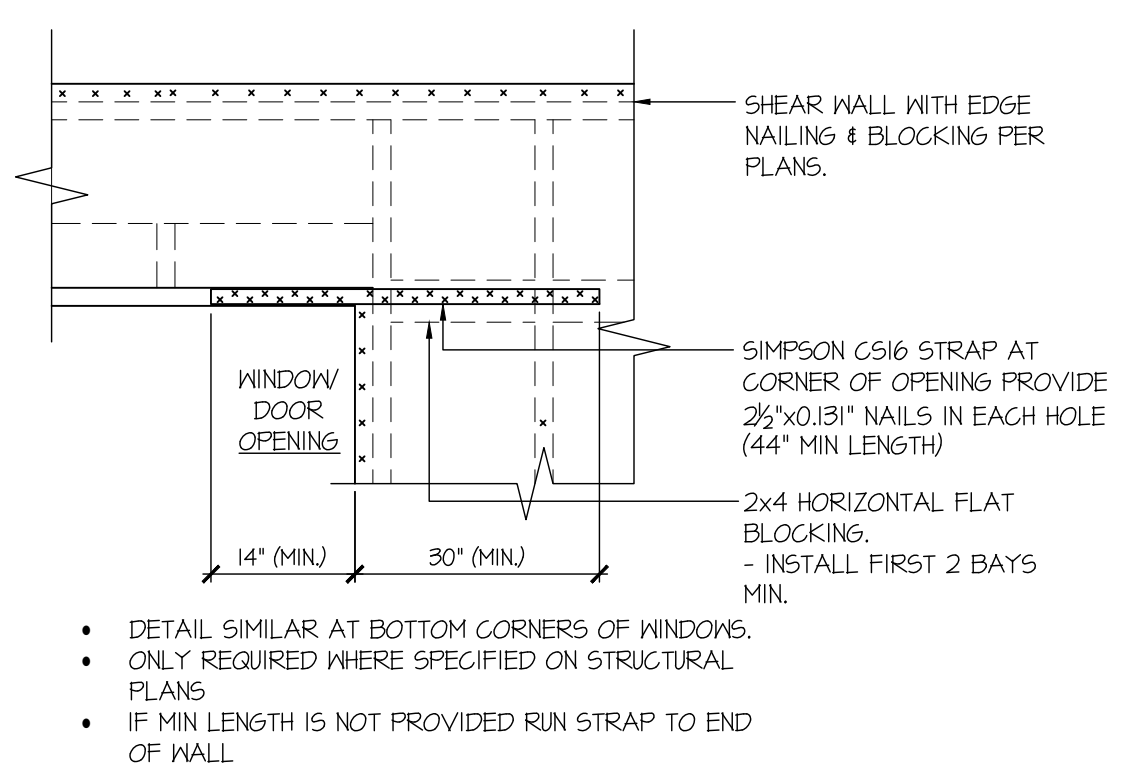
STRUCTURAL DETAILS
 MERCER ISLAND - LOT 2
 SE 22ND ST
 MERCER ISLAND, WA

sheet:
SD-3



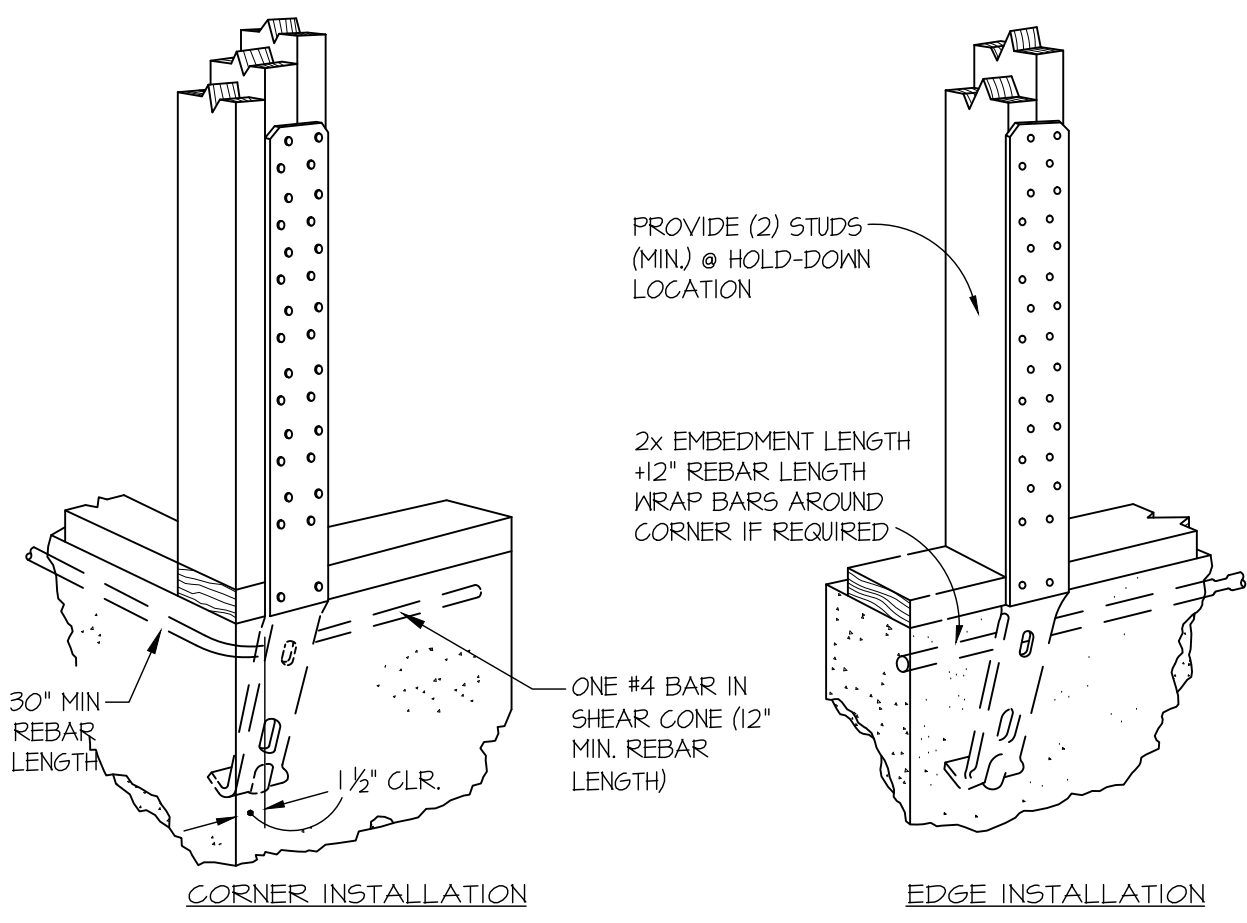
93 EXT. WALL & INT. SHEARWALL
 OPENING ELEVATION
 SCALE: NTS

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

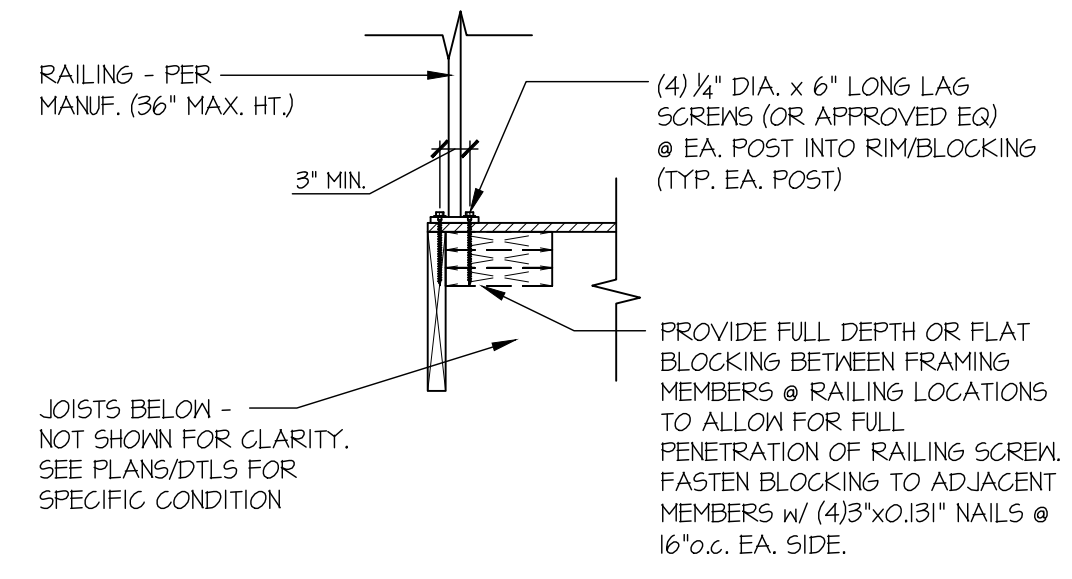


94 EXT. WALL & INT. SHEARWALL
 OPENING ELEVATION
 SCALE: NTS

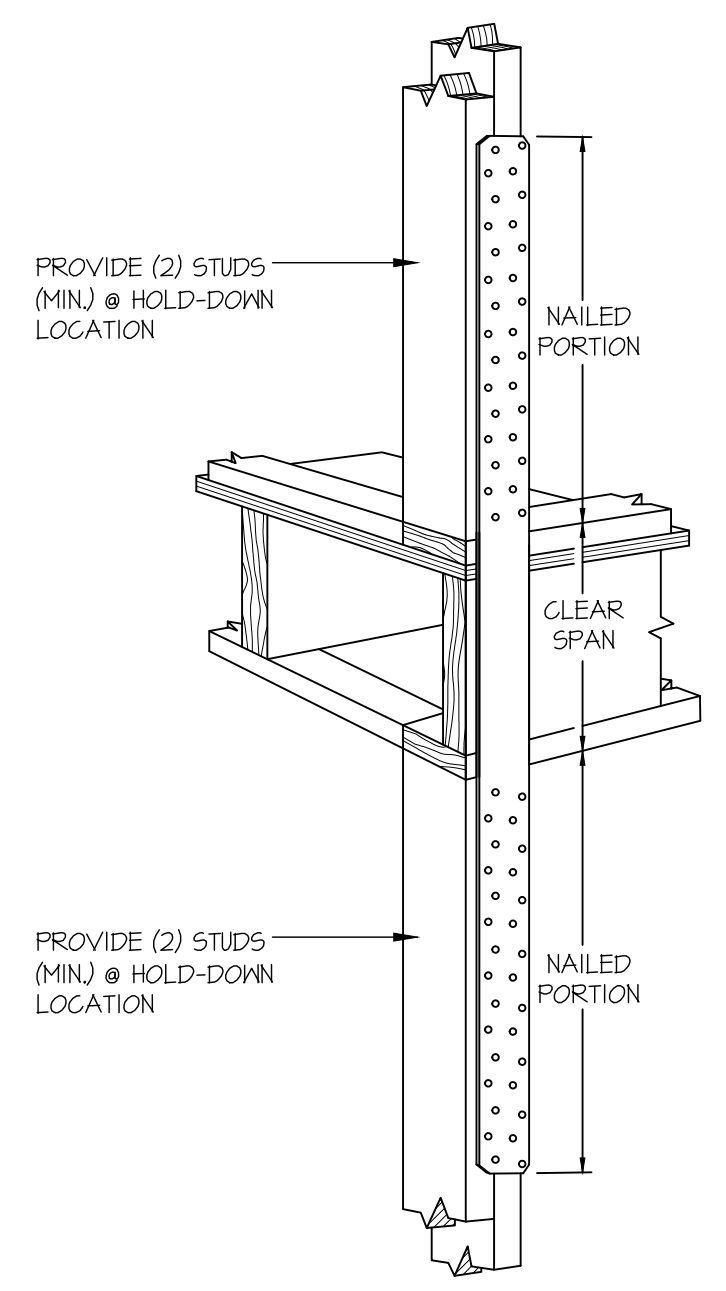
- DETAIL SIMILAR AT BOTTOM CORNERS OF WINDOWS.
- ONLY REQUIRED WHERE SPECIFIED ON STRUCTURAL PLANS
- IF MIN LENGTH IS NOT PROVIDED RUN STRAP TO END OF WALL



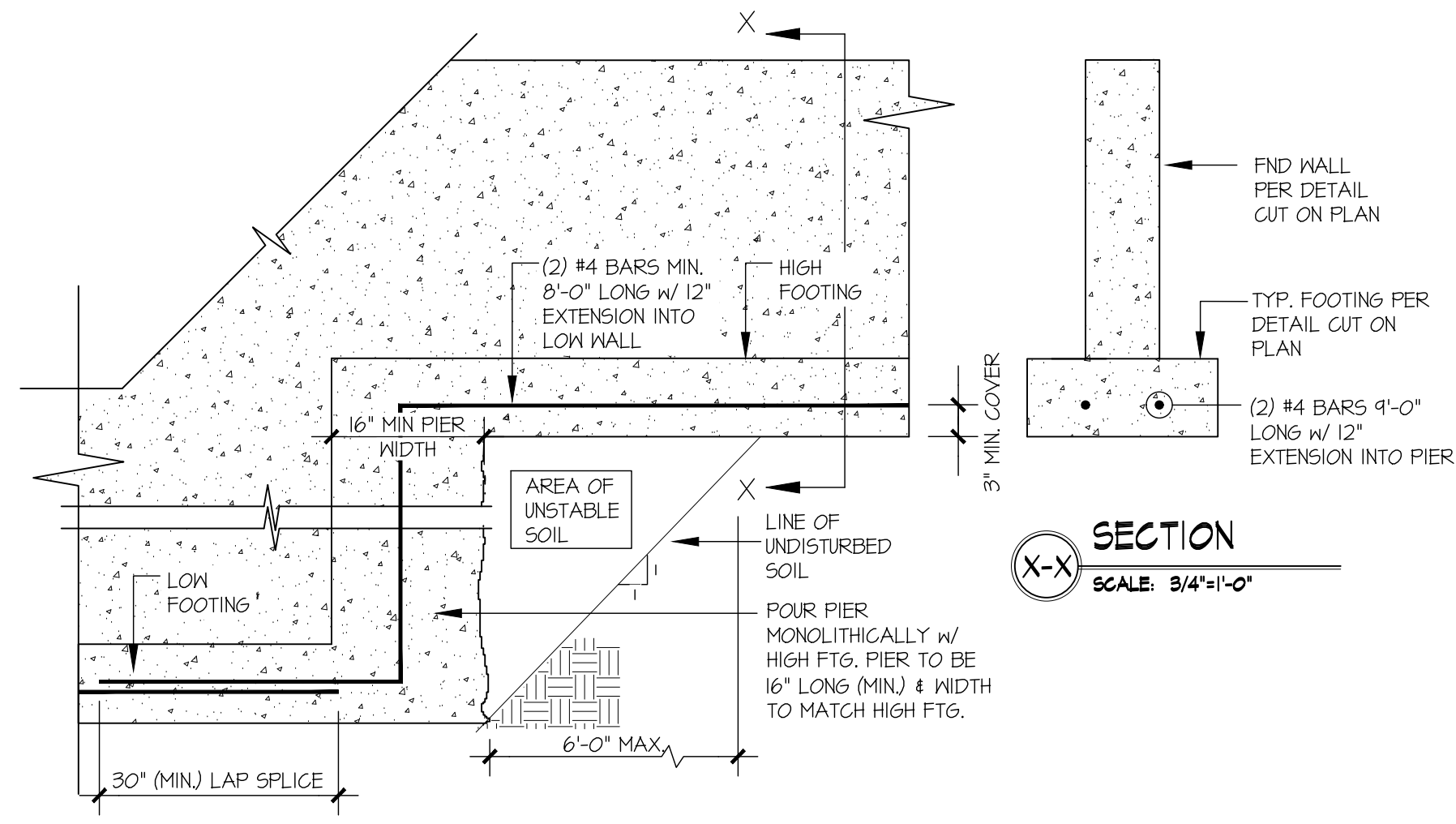
A TYPICAL HOLD-DOWN INSTALLATION
 NOT TO SCALE
 SIMPSON STD HD @ FOUNDATION



B TYP. RAILING CONNECTION
 SCALE: 3/4"=1'-0" WOOD FRMG BELOW



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



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