



# TOPOGRAPHIC & BOUNDARY SURVEY

## LEGAL DESCRIPTION

LOT 4, HILL HIGH ESTATES AS RECORDED IN VOLUME 68 OF PLATS, PAGE 28, RECORDS OF KING COUNTY, WASHINGTON.  
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

## BASIS OF BEARINGS

A BEARING OF N 74°41'28" W CALCULATED PER R1 BETWEEN MONUMENTS SHOWN HEREON

## REFERENCES

R1. HILL HIGH ESTATES, VOL. 68, PG. 28, RECORDS OF KING COUNTY, WASHINGTON.

## VERTICAL DATUM

NAVD88 PER GPS OBSERVATIONS

## SURVEYOR'S NOTES

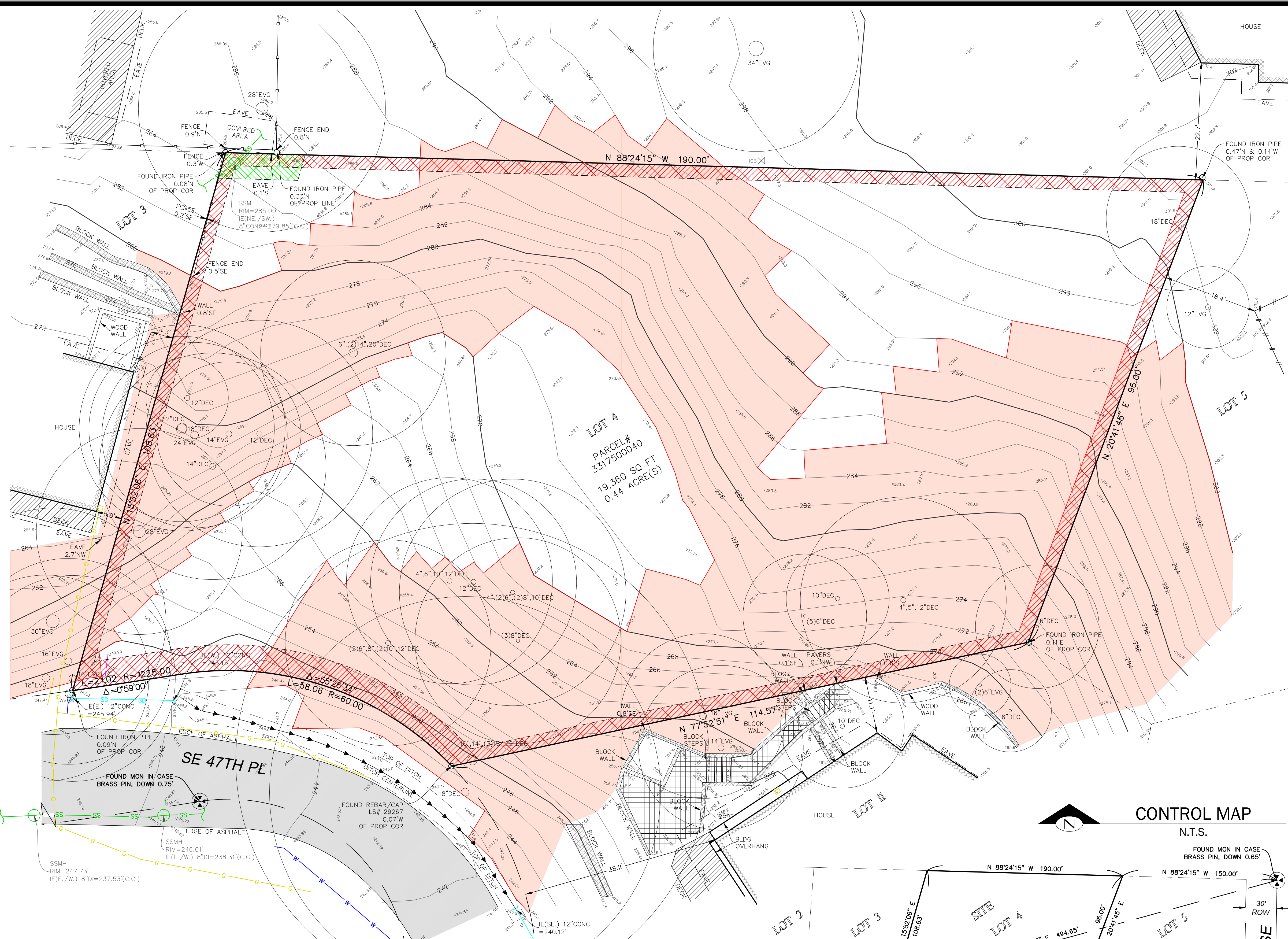
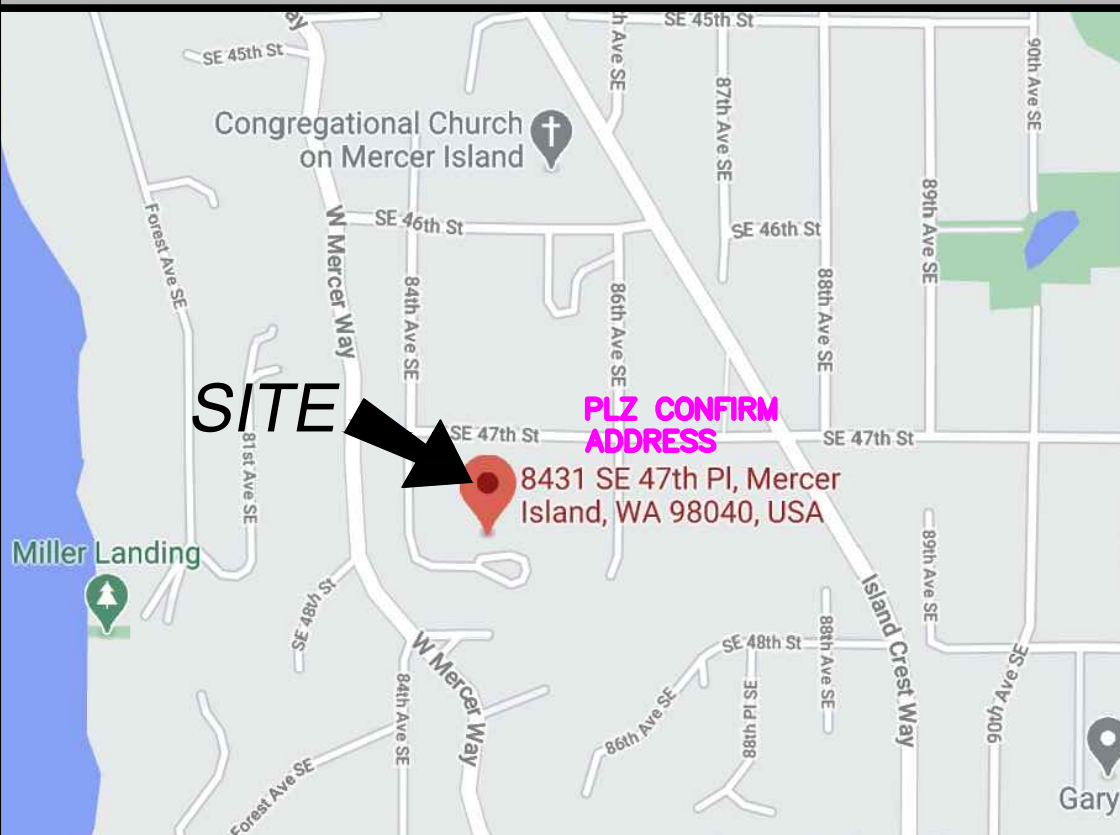
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN FEBRUARY OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 3317500040.
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 19,360± S.F. (0.44 ACRES)
6. THE PROPERTY DESCRIBED HEREON IS THE SAME AS THE PROPERTY DESCRIBED IN CHICAGO TITLE COMPANY OF WASHINGTON, COMMITMENT NO. 0164787-ETJ, WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2021 AND THAT ALL EASEMENTS, COVENANTS, AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE PROPERTY OR OTHERWISE KNOWN TO ME HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE PROPERTY.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

## LEGEND

	ASPHALT SURFACE		PAVER SURFACE
	BUILDING		REBAR AS NOTED (FOUND)
	CENTERLINE ROW		SEWER LINE
	CULVERT PIPE		SEWER MANHOLE
	CONCRETE SURFACE		STORM DRAIN LINE
	RETAINING WALL		TREE (AS NOTED)
	DECK		UTILITY LINE
	DITCH (FLOWLINE)		WATER LINE
	FENCE LINE (WIRE)		WATER METER
	FENCE LINE (IRON)		FIRE HYDRANT
	FENCE LINE (WOOD)		WATER VALVE
	GAS LINE		IRRIGATION CONTROL BOX
	IRON PIPE (FOUND)		GAS METER
	MONUMENT IN CASE (FOUND)		STEEP SLOPE AREA 40% OR GREATER

## VICINITY MAP

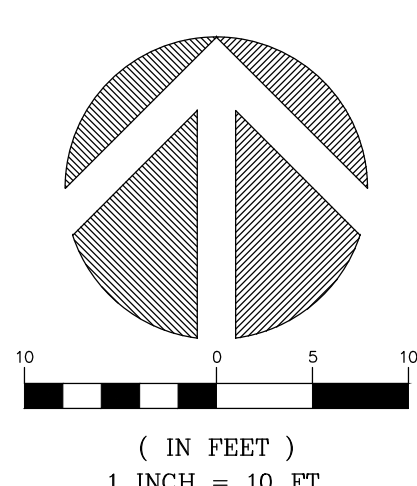
N.T.S.



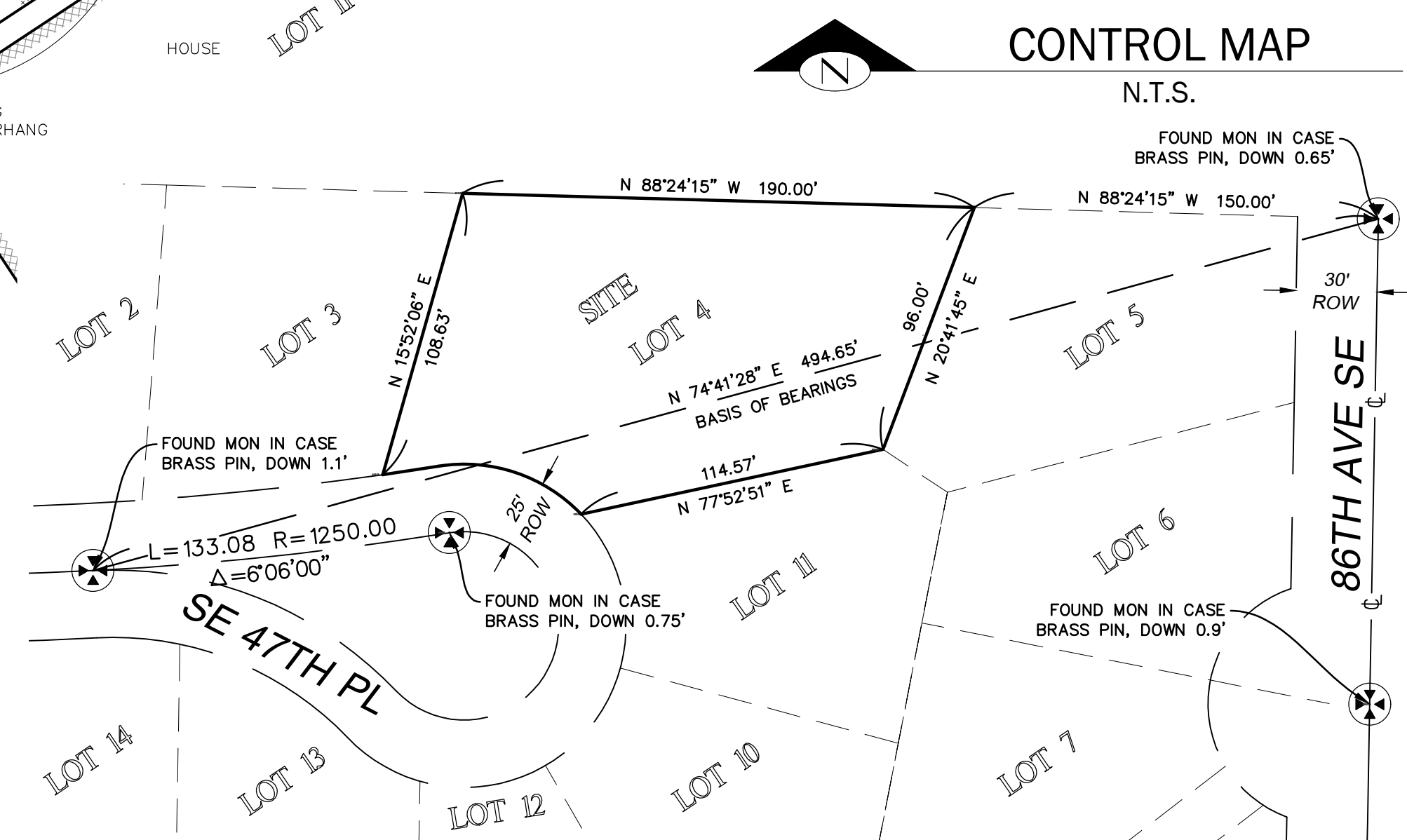
**STEEP SLOPE/BUFFER DISCLAIMER:**  
THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.

## SCHEDULE B ITEMS

	ITEM NO. 2 - SEWER EASEMENT, REC. NO. 5783155
	ITEM NO. 3 - ELECTRIC & TELEPHONE EASEMENT, REC. NO. 5918268



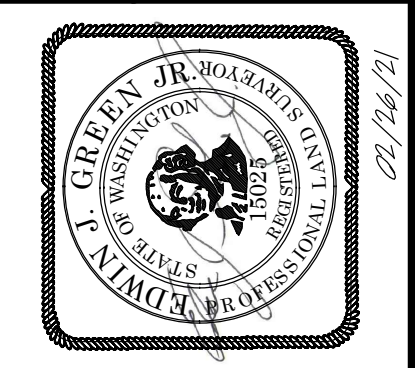
INDEXING INFORMATION			
SW	1/4	SW	1/4
SECTION: 18			
TOWNSHIP: 24N			
RANGE: 5E, W.M.			
COUNTY: KING			



measure success

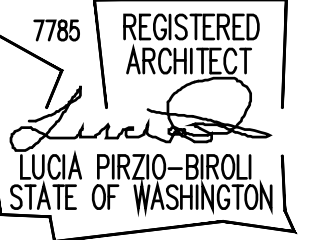
TOPOGRAPHIC & BOUNDARY SURVEY  
PARCEL NO. 3317500040  
STEINBORN PROPERTY

84XX SE 47TH PL  
MERCER ISLAND, WA 98040



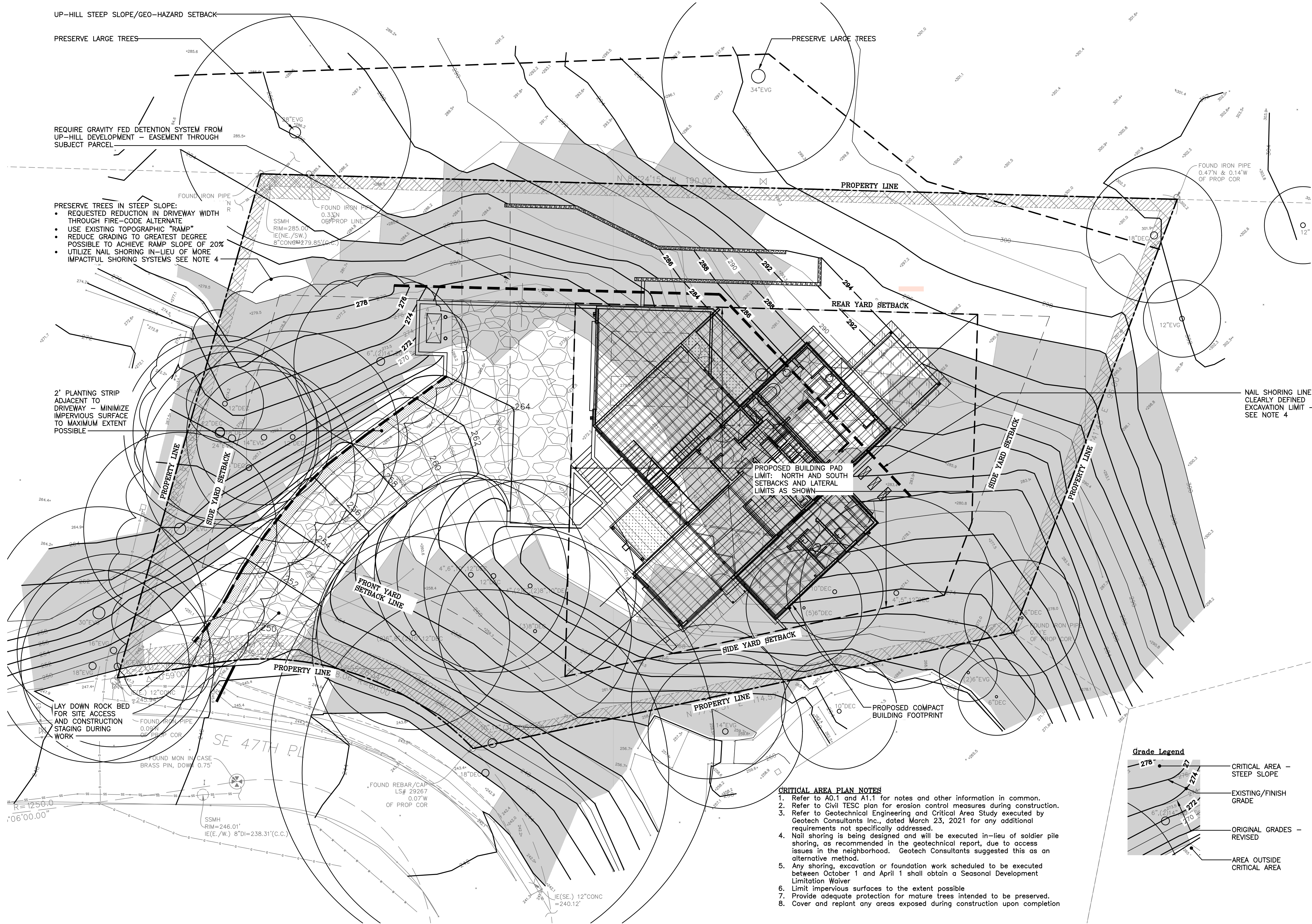
**Terrane**  
10801 Main Street, Suite 102, Bellevue, WA 98004  
phone 425.458.4488 support@terrane.net www.terrane.net

JOB NUMBER:	210291
DATE:	02/21/2021
DRAFTED BY:	RSN
CHECKED BY:	EJG/TMM
SCALE:	1" = 10'
REVISION HISTORY	
SHEET NUMBER	1 OF 1



**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040



UP-HILL STEEP SLOPE/GEO-HAZARD SETBACK

PRESERVE LARGE TREES

PRESERVE LARGE TREES

REQUIRE GRAVITY FED DETENTION SYSTEM FROM UP-HILL DEVELOPMENT - EASEMENT THROUGH SUBJECT PARCEL

PRESERVE TREES IN STEEP SLOPE:  
• REQUESTED REDUCTION IN DRIVEWAY WIDTH THROUGH FIRE-CODE ALTERNATE  
• USE EXISTING TOPOGRAPHIC "RAMP"  
• REDUCE GRADING TO GREATEST DEGREE POSSIBLE TO ACHIEVE RAMP SLOPE OF 20%  
• UTILIZE NAIL SHORING IN-LIEU OF MORE IMPACTFUL SHORING SYSTEMS SEE NOTE 4

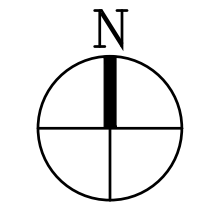
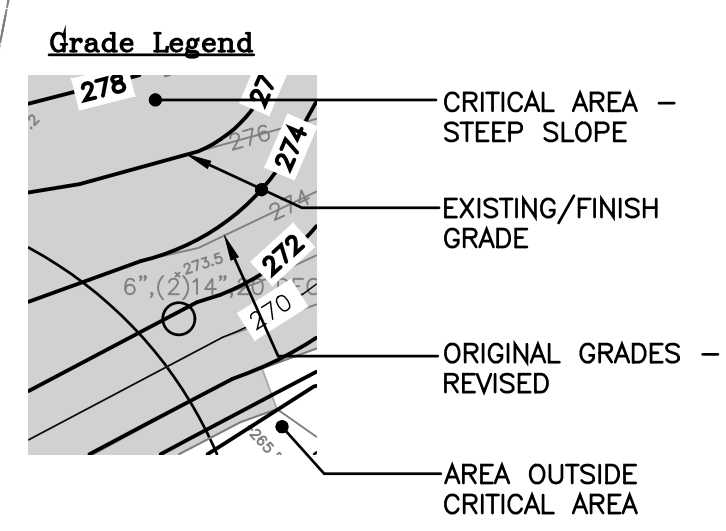
2' PLANTING STRIP ADJACENT TO DRIVEWAY - MINIMIZE IMPERVIOUS SURFACE TO MAXIMUM EXTENT POSSIBLE

NAIL SHORING LINE - CLEARLY DEFINED EXCAVATION LIMIT - SEE NOTE 4

PROPOSED BUILDING PAD LIMIT: NORTH AND SOUTH SETBACKS AND LATERAL LIMITS AS SHOWN

LAY DOWN ROCK BED FOR SITE ACCESS AND CONSTRUCTION STAGING DURING WORK

- CRITICAL AREA PLAN NOTES**
1. Refer to A0.1 and A1.1 for notes and other information in common.
  2. Refer to Civil TESC plan for erosion control measures during construction.
  3. Refer to Geotechnical Engineering and Critical Area Study executed by Geotech Consultants Inc., dated March 23, 2021 for any additional requirements not specifically addressed.
  4. Nail shoring is being designed and will be executed in-lieu of soldier pile shoring, as recommended in the geotechnical report, due to access issues in the neighborhood. Geotech Consultants suggested this as an alternative method.
  5. Any shoring, excavation or foundation work scheduled to be executed between October 1 and April 1 shall obtain a Seasonal Development Limitation Waiver
  6. Limit impervious surfaces to the extent possible
  7. Provide adequate protection for mature trees intended to be preserved.
  8. Cover and replant any areas exposed during construction upon completion

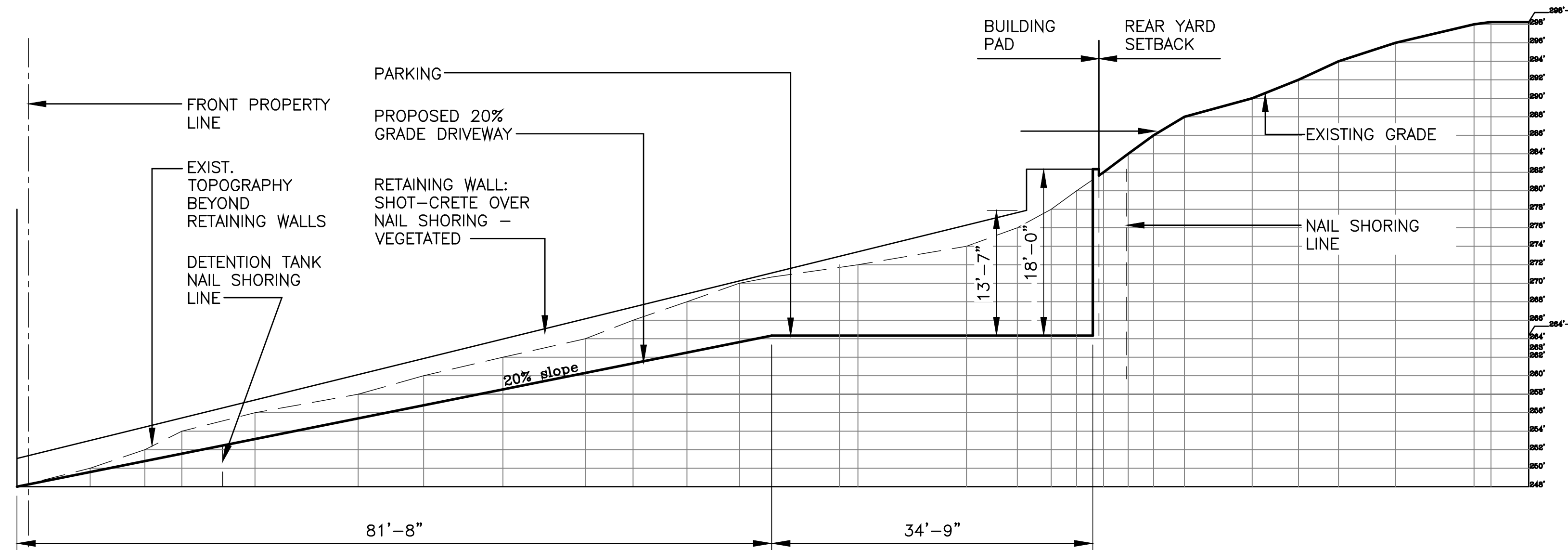
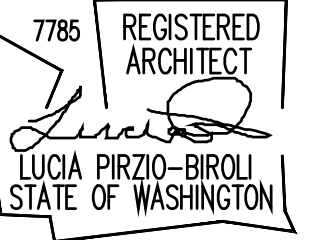


**1 Critical Area Review 2 Plan**  
scale: 1"=10'

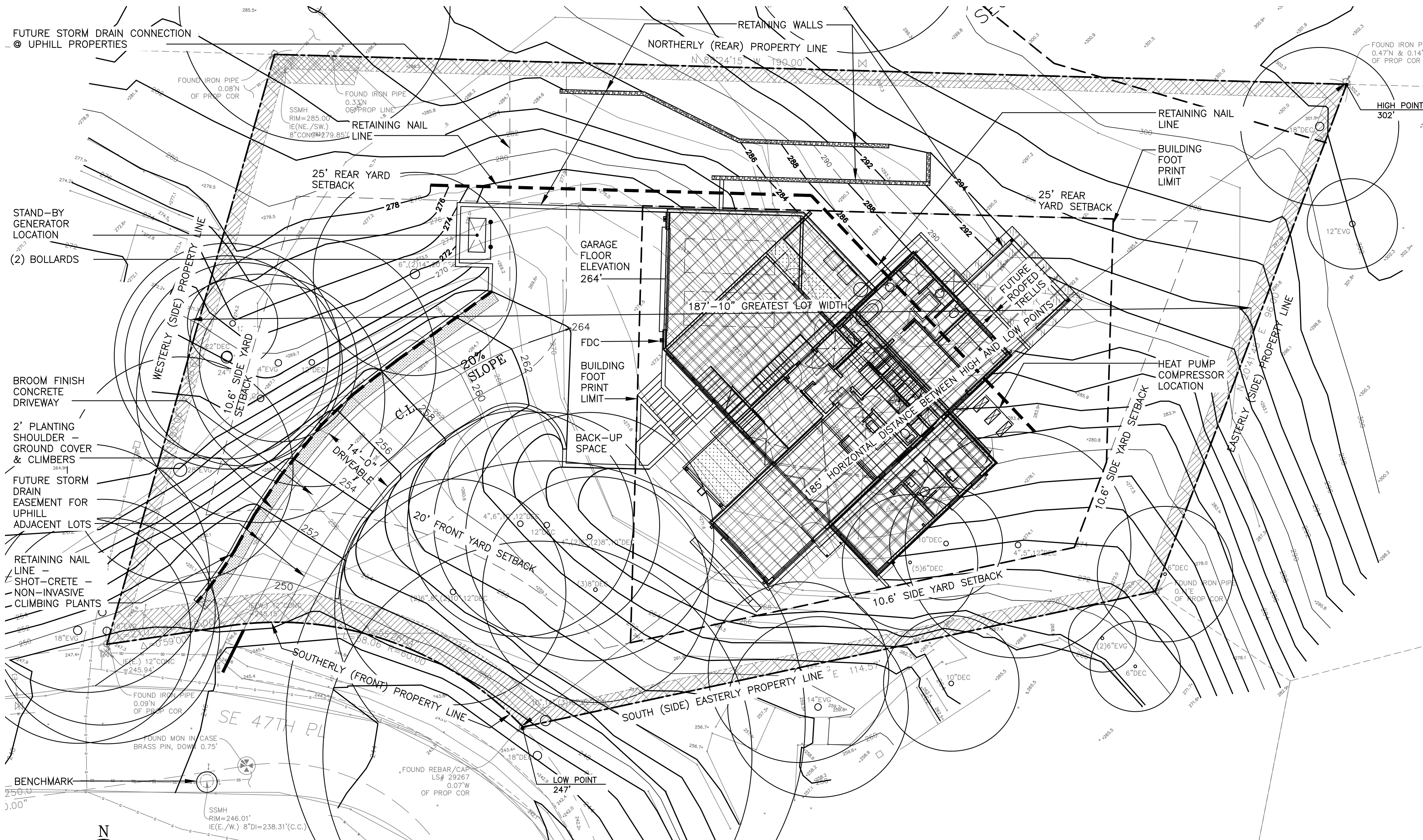
Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

Scale:

Sheet:

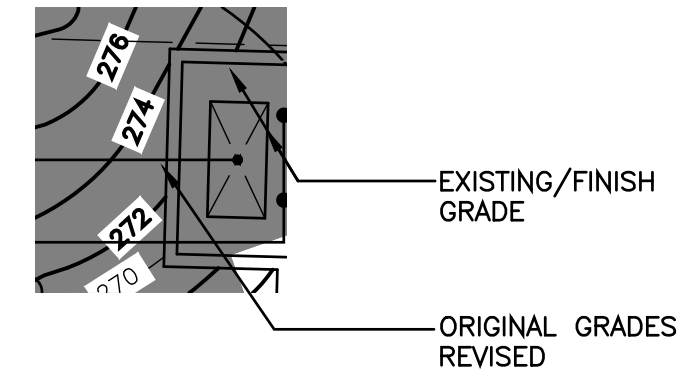


2 Section A-A - Driveway Profile w/ Northeast Retaining Walls  
Scale: 1"=10'



1 Site Plan  
Scale: 1"=10'

**Grade Legend**



**Side Yard Calculation**  
REQUIRED SIDE YARD WIDTH SUM: 17% OF LOT WIDTH  
LOT WIDTH: 187'-10"  
SIDE YARD TOTAL WIDTH: 187'-10" x 17% = 31'-11"  
(3) SIDE YARDS: 31'-11" / 3 = 10.6'

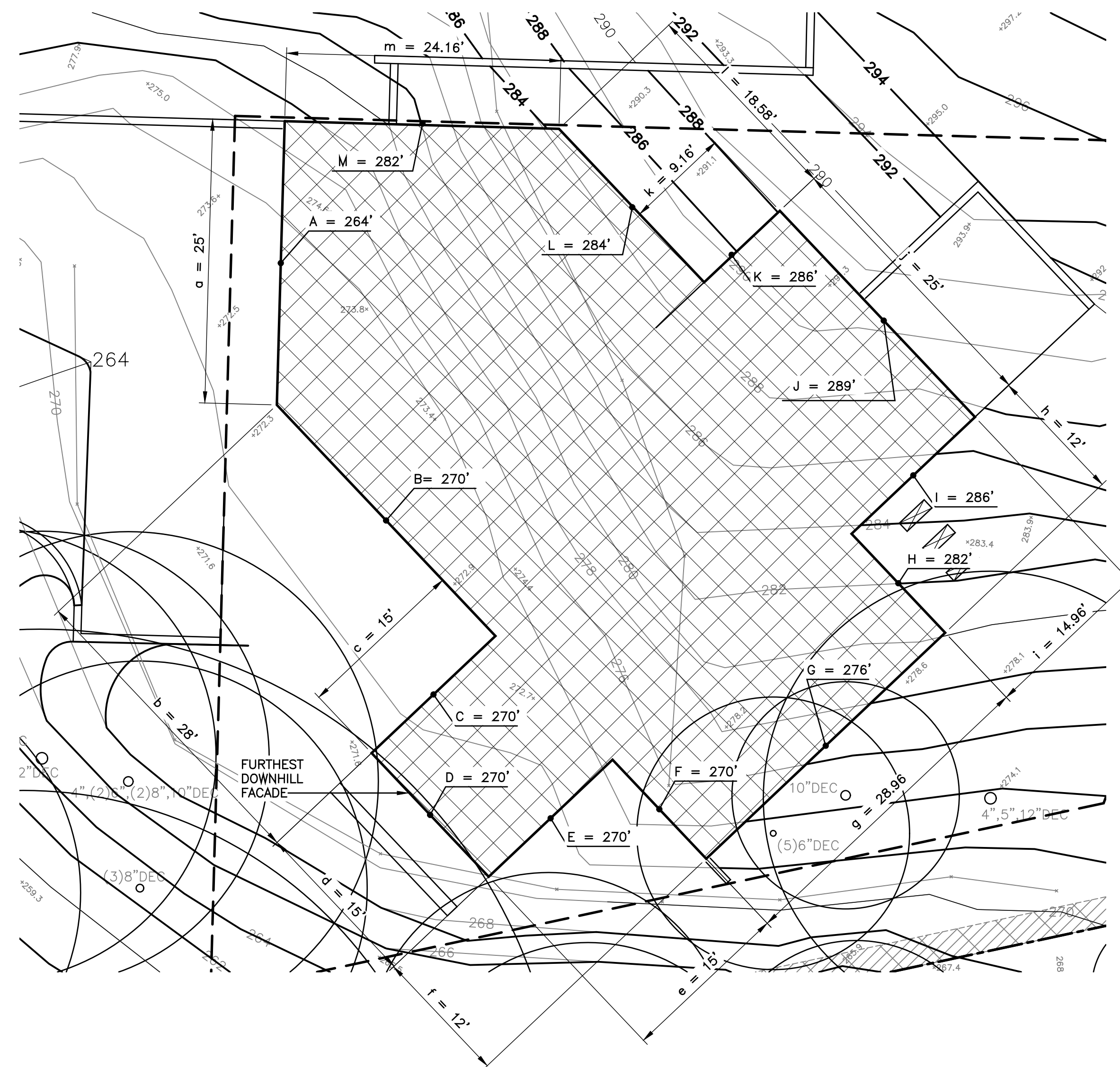
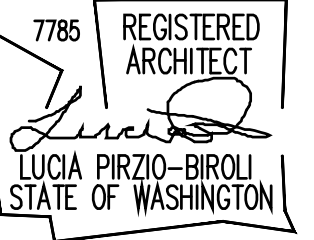
**Lot Slope**  
HIGH POINT: 302'  
LOW POINT: 247'  
DIFFERENCE: 56'  
HORIZONTAL DIFFERENCE: 185'  
LOT SLOPE: 30%  
ALLOWED LOT COVERAGE: 30%  
SEE SHEET A1.2 FOR LOT COVERAGE CALCULATIONS AND ABE CALCULATION

**STEINBORN RESIDENCE**

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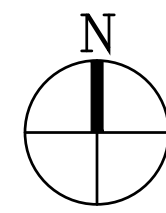
Date: 3/15/2021 Pre-App  
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Scale:  
Sheet:

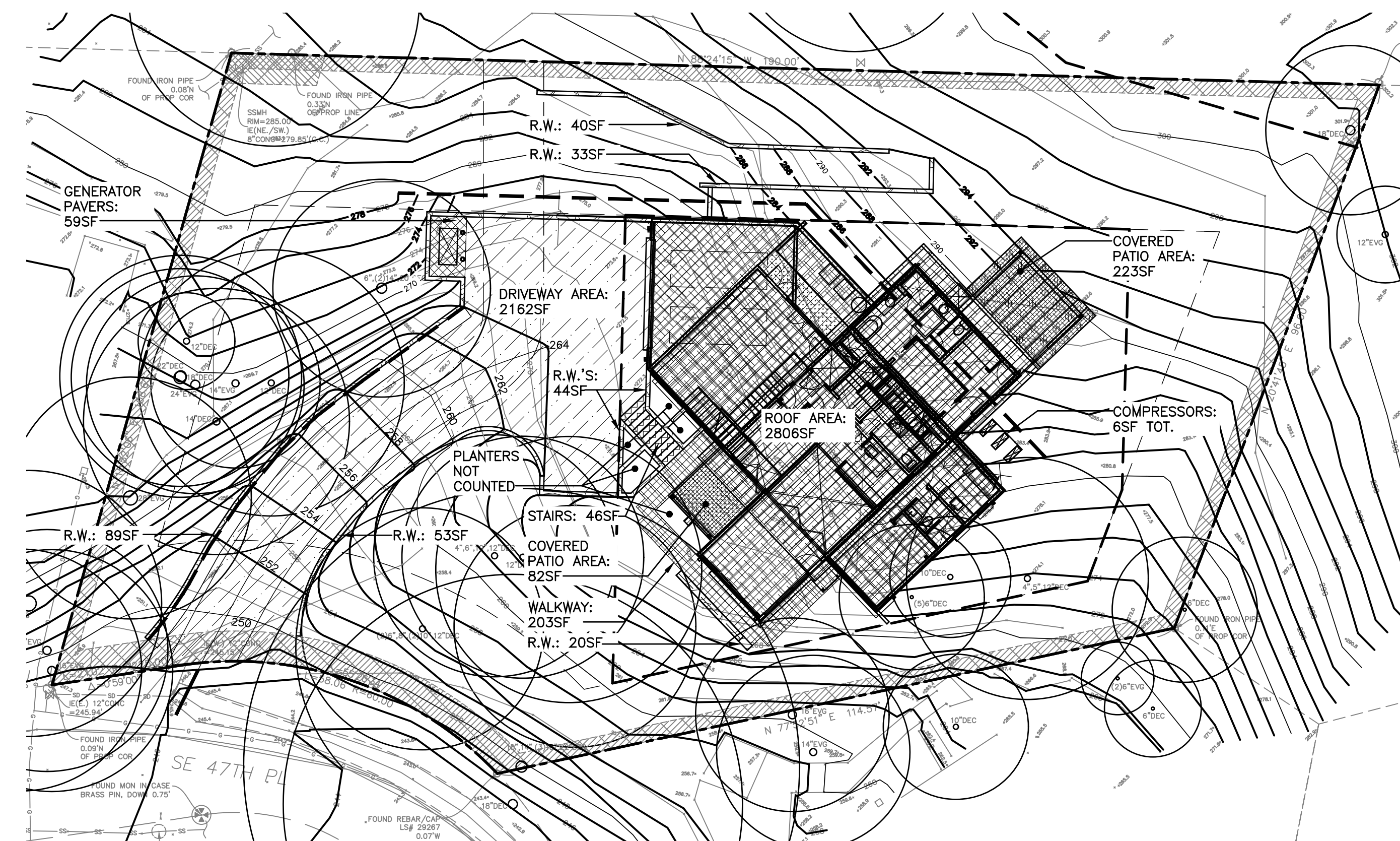


AVERAGE BUILDING ELEVATION					
Mid-point Elev.	Wall Segment Length			Elev x Length	
A= 264	ft	*	a= 25.0	ft	= 6600.0
B= 270	ft	*	b= 28.0	ft	= 7560.0
C= 270	ft	*	c= 15.0	ft	= 4050.0
D= 270	ft	*	d= 15.0	ft	= 4050.0
E= 270	ft	*	e= 15.0	ft	= 4050.0
F= 270	ft	*	f= 12.0	ft	= 3240.0
G= 276	ft	*	g= 29.0	ft	= 7993.0
H= 282	ft	*	h= 12.0	ft	= 3384.0
I= 286	ft	*	i= 15.0	ft	= 4278.6
J= 289	ft	*	j= 25.0	ft	= 7225.0
K= 286	ft	*	k= 9.2	ft	= 2619.8
L= 284	ft	*	l= 18.6	ft	= 5276.7
M= 282	ft	*	m= 24.2	ft	= 6813.1
				total=	total=
				242.8	67140.1
Avg. Building Elevation =				276.5	ft.
Allowed Building Height =				306.5	ft.

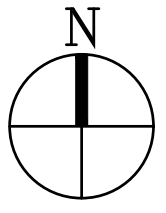
INDICATES FOOTPRINT OF FOUNDATION PERIMETER



1 Average Building Elevation Calculation  
scale: 1/8"=1'-0"



<b>Lot Coverage Calculation</b>		
GROSS/NET LOT AREA:	19360.24 SF	
ALLOWED LOT COVERAGE:	5808 SF / 30%	
EXISTING LOT COVERAGE:	0 SF	
	PROPOSED DRIVEWAY:	2162 SF
	PROPOSED MAIN STRUCTURE ROOF AREA:	2806 SF
	COVERED PATIOS AND DECKS:	305 SF
	TOTAL LOT COVERAGE:	5273 SF
	PROPOSED LOT COVERAGE AREA:	26.9%
<b>Hardscape Calculation</b>		
GROSS/NET LOT AREA:	19360.24 SF	
ALLOWED HARDSCAPE:	1742 SF / 9%	
EXISTING LOT COVERAGE:	0 SF	
	WALKWAYS:	268 SF
	STAIRS:	46 SF
	RETAINING WALLS (R.W.):	279 SF
	TOTAL HARDSCAPE:	593 SF
	PROPOSED LOT COVERAGE AREA:	3%



3 Lot Coverage & Hardscape Calculations  
scale: 1"=10'

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Scale:  
Sheet:

**GENERAL NOTES**

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MERCER ISLAND STANDARD SPECIFICATIONS, AND WSDOT/APWA STANDARD SPECIFICATIONS, LATEST EDITION. THE CITY OF MERCER ISLAND RESERVES THE RIGHT TO REJECT ANY DAMAGED AND/OR NON-COMPLIANT CONSTRUCTION MATERIAL.
- PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF MERCER ISLAND CONSTRUCTION INSPECTION PERSONNEL.
- AN APPROVED PLAN SET MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- ALL SITE WORK IMPROVEMENTS SHALL BE CONSTRUCTED TO OBTAIN STREET USE AND ANY OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND ANY OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- ANY APPROVED CUTS OF EXISTING PUBLIC ROADWAYS SHALL BE BACK FILLED AND COMPACTED IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS. ALL CUTS INTO EXISTING ASPHALT SHALL BE ALONG NEAT, CONTINUOUS, SAWED, OR WHEEL CUT LINES. A TEMPORARY COLD MIX PATCH MUST BE PLACED IMMEDIATELY AFTER BACKFILL AND COMPACTION. THIS EXISTING ROAD CUT SHALL BE REPLACED WITH AT LEAST THREE (3) INCHES OF COMPACTED CL "B" ASPHALT CONCRETE, SIX (6) INCH CRUSHED ROCK SURFACING TOP COURSE (5/8 INCH MINUS), AS REQUIRED DEPENDENT UPON A SOILS ENGINEER'S RECOMMENDATION AND TESTS. IN NO CASE SHALL THE REPLACEMENT BE LESS THAN THE EXISTING SECTION.
- PAVED SURFACES INCLUDING ROADWAYS, SIDEWALKS, AND CURBS THAT ARE DAMAGED BY NEW CONSTRUCTION SHALL BE REPAIRED AS REQUIRED BY THE CITY OF MERCER ISLAND INSPECTOR.
- ALL LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- THE CONTRACTOR SHALL LOCATE AND PROTECT ALL CASTINGS AND UTILITIES DURING CONSTRUCTION AND SHALL CONTACT THE UNDERGROUND UTILITIES LOCATOR SERVICE (1-800-424-5555) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURE LIDS, VALVE BOXES, AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS.
- UTILITY SERVICE CONNECTIONS SHOWN ON THIS PLAN ARE TO BE MAINTAINED PRIVATELY AND NOT BY THE CITY OF MERCER ISLAND.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY SEDIMENTATION COLLECTION FACILITIES TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE NATURAL OR PUBLIC DRAINAGE SYSTEM. AS CONSTRUCTION PROGRESSES AND UNEXPECTED (SEASONAL) CONDITIONS DICTATE, MORE SILTATION CONTROL FACILITIES MAY BE REQUIRED TO INSURE COMPLETE SILTATION CONTROL OF THE PROJECT. THEREFORE, DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES THAT MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES.
- THE CONTRACTOR SHALL KEEP OFF-SITE STREETS CLEAN AT ALL TIMES BY SWEEPING. WASHING OF THESE STREETS WILL NOT BE ALLOWED WITHOUT PRIOR CITY OF MERCER ISLAND APPROVAL.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL MANUAL.
- CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR EXISTING CHARGED WATER MAINS.

**SURVEY NOTE:**

UNDERGROUND UTILITIES AND EXISTING IMPROVEMENTS SHOWN ARE BASED UPON THE SURVEY "TOPOGRAPHIC AND BOUNDARY SURVEY, STEINBORN PROPERTY, BY TERRANE, DATED FEBRUARY 21, 2021 AND RECORD DRAWINGS. NO WARRANTY OR GUARANTEE OF ACCURACY OR COMPLETENESS IS EITHER IMPLIED OR EXPRESSED. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS HAVE BEEN SHOWN ON THIS DRAWING FOR THE PURPOSE OF ASSISTING THE CONTRACTOR IN LOCATING SAID UTILITIES AND IMPROVEMENTS IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING WITH APPROPRIATE AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES AND IMPROVEMENTS WITHIN THE PROJECT LIMITS AND FOR CHECKING LOCATIONS IN THE FIELD. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGE TO UNDERGROUND UTILITIES AND IMPROVEMENTS RESULTING FROM HIS OPERATION.

**VERTICAL DATUM**

NAVD88 PER GPS OBSERVATIONS

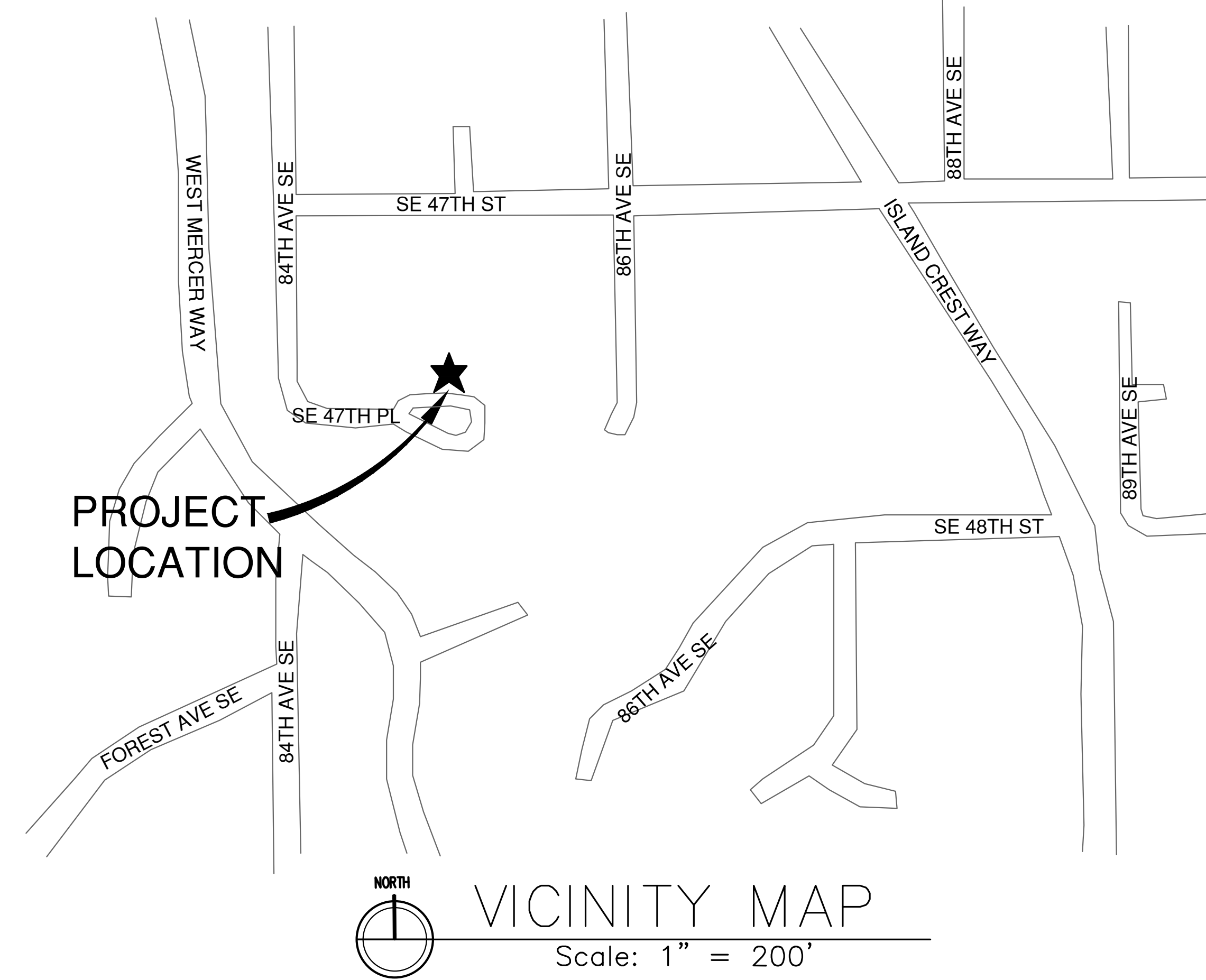
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**GENERAL DRAINAGE NOTES**

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MERCER ISLAND STANDARD SPECIFICATIONS AND WSDOT/APWA STANDARD SPECIFICATIONS, LATEST EDITION AND THE REQUIREMENTS OF THE DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON.
- PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH CITY OF MERCER ISLAND CONSTRUCTION INSPECTION PERSONNEL.
- ALL STORM DRAINAGE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE APPROVED PLANS. ANY DEVIATION FROM THESE PLANS WILL REQUIRE APPROVAL FROM THE OWNER, ENGINEER AND APPROPRIATE PUBLIC AGENCIES.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND ANY OTHER RELATED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- ALL STORM DRAIN PIPE MAY BE CONSTRUCTED OF ONE OF THE FOLLOWING MATERIALS UNLESS OTHERWISE SPECIFIED IN THE PLANS. ALL PIPE JOINTS MUST BE GASKETED WATER TIGHT AND MUST BE OF THE SAME MATERIAL AS THE PIPE. ALL PIPE SHALL HAVE A MINIMUM COVER AS SPECIFIED AND SHALL BE ADEQUATELY PROTECTED DURING CONSTRUCTION (REFER TO THE MANUFACTURE'S RECOMMENDATIONS FOR MINIMUM COVER FOR HEAVY EQUIPMENT LOADINGS). THE CITY OF MERCER ISLAND PUBLIC WORKS DEPARTMENT SHALL EXERCISE THE OPTION TO ACCEPT OR REJECT ALL DAMAGED OR NON-COMPLIANT CONSTRUCTION MATERIAL. THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REJECTED OR SUBSTITUTED CONSTRUCTION MATERIAL.
- PIPE SHALL BE AS FOLLOWS: PVC - FOUR (4) INCH THROUGH EIGHTEEN (18) INCH DIAMETER PIPE, WITH TWENTY FOUR (24) INCH TO THIRTY SIX (36) INCH OF COVER SHALL BE IN ACCORDANCE WITH ASTM D3034 SDR 21. FOUR (4) INCH THROUGH EIGHTEEN (18) INCH DIAMETER PIPE, WITH ASTM D3034 SDR 35 SHALL HAVE THIRTY SIX (36) INCHES MINIMUM COVER. ALL JOINTS SHALL BE PUSH-ON WITH RUBBER GASKETS. PVC STORM PIPE REQUIRES SAND COLLARS MEETING ASTM D-3034-78 SDR 35 SPECIFICATIONS (I.E. CATCH BASIN CONNECTION) OR KOR-N-SEAL BOOTS.
- ALL PIPE BEDDING SHALL BE APWA TYPE "F" FOR FLEXIBLE PIPE (I.E. PVC, SMP OR ADS). BEDDING MATERIAL SHALL BE 5/8 INCH MINUS CRUSHED ROCK ONLY.
- ALL TRENCH BACKFILL IN AREAS OF FUTURE PAVEMENT OR STRUCTURAL LOADING SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY PER ASTM D 1557-70 (MODIFIED PROCTOR). ALL OTHER AREAS SHALL BE COMPACTED TO 90 PERCENT MINIMUM).
- CONSTRUCTION OF DEWATERING (GROUNDWATER INTERCEPTION) SYSTEMS SHALL BE IN ACCORDANCE WITH THE APWA STANDARD SPECIFICATIONS, SECTION 61-3.02.
- THE CONTRACTOR SHALL KEEP OFF-SITE STREETS CLEAN AT ALL TIMES BY SWEEPING. WASHING THESE STREETS WILL NOT BE ALLOWED WITHOUT PRIOR CITY OF MERCER ISLAND APPROVAL.
- ALL STORMWATER FACILITIES WILL BE INSTALLED AND IN OPERATION PRIOR TO OR IN CONJUNCTION WITH ALL CONSTRUCTION ACTIVITY UNLESS THAT ACTIVITY EXCEEDS THE CAPACITY AND INTENT OF THE EROSION/SEDIMENTATION CONTROL FACILITY OR UNLESS OTHERWISE APPROVED BY THE CITY.
- RELAY EXISTING SERVICE DRAINS AND SIDE SEWERS TO CLEAR OVER OR UNDER THE NEW UTILITY AS APPROVED BY THE INSPECTOR.

**EROSION CONTROL/CONSTRUCTION SEQUENCE**

- ARRANGE AND ATTEND PRE-CONSTRUCTION MEETING WITH BETWEEN OWNER OR OWNER'S REPRESENTATIVE AND CITY OF MERCER ISLAND SITE INSPECTOR.
- CONTRACTOR'S SURVEYOR TO ESTABLISH AND STAKE OUT CONTROL POINTS FOR WORK.
- INSTALL STRAW WATTLE BARRIERS AND GRATE INLET PROTECTION.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (IF REQUIRED).
- CLEAR AND GRUB AREA.
- CONSTRUCT OR INSTALL SOIL STABILIZATION MEASURES.
- COORDINATE REMOVAL AND CAPPING OF EXISTING UTILITY LINES WITH APPROPRIATE PURVEYOR.
- GRADE SITE PER PLAN. STABILIZE GRADED AREAS WITH TEMPORARY EROSION CONTROL MEASURES AS REQUIRED.
- CONSTRUCT SITE IMPROVEMENTS.
- HYDROSEED REMAINING DISTURBED AREAS.
- RETURN SILTATION CONTROL AREAS TO ORIGINAL GROUND CONDITIONS.
- REMOVE REMAINING TEMPORARY EROSION/SEDIMENTATION CONTROL ONLY AFTER SITE HAS BEEN STABILIZED AND CITY OF MERCER ISLAND SITE INSPECTOR HAS APPROVED THE REMOVAL.



**TEMPORARY EROSION/SEDIMENTATION CONTROL (ESC) NOTES**

- APPROVAL OF THIS TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN (TESC) DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- THE IMPLEMENTATION OF THESE TESC AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE TESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE TESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
- THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED (E.G. ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS AND AS THE CITY REQUIRES.
- THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING AND OPERATION.
- ANY AREA STRIPPED OF VEGETATION, INCLUDING ROADWAY EMBANKMENTS, WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF TWO (2) DAYS, SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED TESC METHODS (E.G. SEEDING, MULCHING, NETTING, EROSION BLANKETS, ETC.) GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH OCTOBER INCLUSIVE.
- ANY AREA NEEDING TESC MEASURE, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
- THE TESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT AND AS THE CITY DEEMS NECESSARY.
- AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCES AND WASH PADS PER CITY STANDARDS, SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- DURING THE TIME PERIOD OF NOVEMBER 1ST THROUGH MARCH 31ST, ALL PROJECT DISTURBED AREAS THAT ARE TO BE LEFT UNWORKED FOR MORE THAN TWO (2) DAYS SHALL BE COVERED BY ONE OF THE FOLLOWING COVER MEASURES: MULCH, SODDING OR PLASTIC COVERING.
- WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE (E.G. ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
- WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF THREE (3) INCHES OR 3,000 LBS/ACRE.
- AS CONSTRUCTION PROGRESSES AND UNEXPECTED SEASONAL CONDITIONS DICTATE, AND AS THE CITY REQUIRES, THE PERMITTEE SHOULD ANTICIPATE THAT MORE TESC MEASURES WILL BE NECESSARY TO PROTECT ADJACENT PROPERTIES AND ENSURE MINIMUM WATER QUALITY FOR SITE RUNOFF. IT SHALL BE THE RESPONSIBILITY OF THE PERMITTEE TO ADDRESS DEFICIENT TESC CONDITIONS AND PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE MINIMUM REQUIREMENTS OUTLINED ON THE APPROVED PLANS.
- FILTER FABRIC FENCE SHALL BE USED WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE CITY.

CALL 48 HOURS BEFORE YOU DIG  
1-800-424-5555  
OR CALL 8-1-1

**ECTYPOS ARCHITECTURE**

4212 W. Mercer Way  
Mercer Island, WA 98040  
t. (206) 232-9147  
f. (206) 275-0312



Civil Engineer:  
WR Consulting, Inc.  
3611 45th Ave W.  
Seattle, WA 98199  
P: 206.285.1593



**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

**PROJECT ADDRESS:**

8435 SE 47th Place, Mercer Island, WA 98040

**LEGAL DESCRIPTION:**

LOT 4, HILL HIGH ESTATES AS RECORDED IN VOLUME 68 OF PLATS, PAGE 28, RECORDS OF KING COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**PARCEL NUMBER:**

331750-0040

**LOT AREA:**

19,361 SF

Date:  
**2/17/2022 Permit Set**

Scale: As Noted

Sheet: 1 of 4

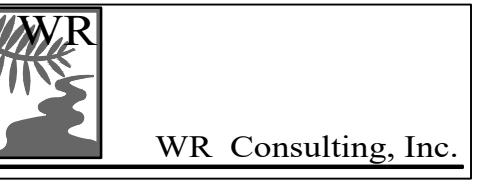
GENERAL NOTES

C1

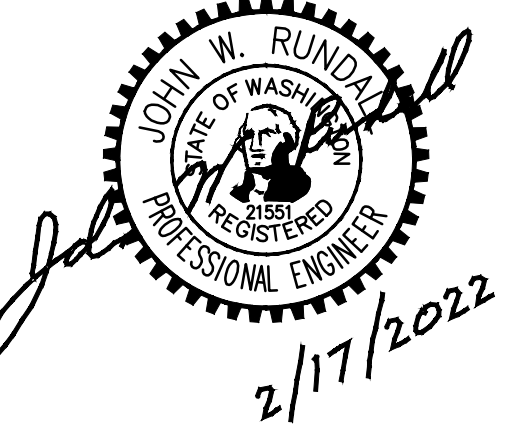
CALL 48 HOURS BEFORE YOU DIG  
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**ECTYPOS**  
ARCHITECTURE

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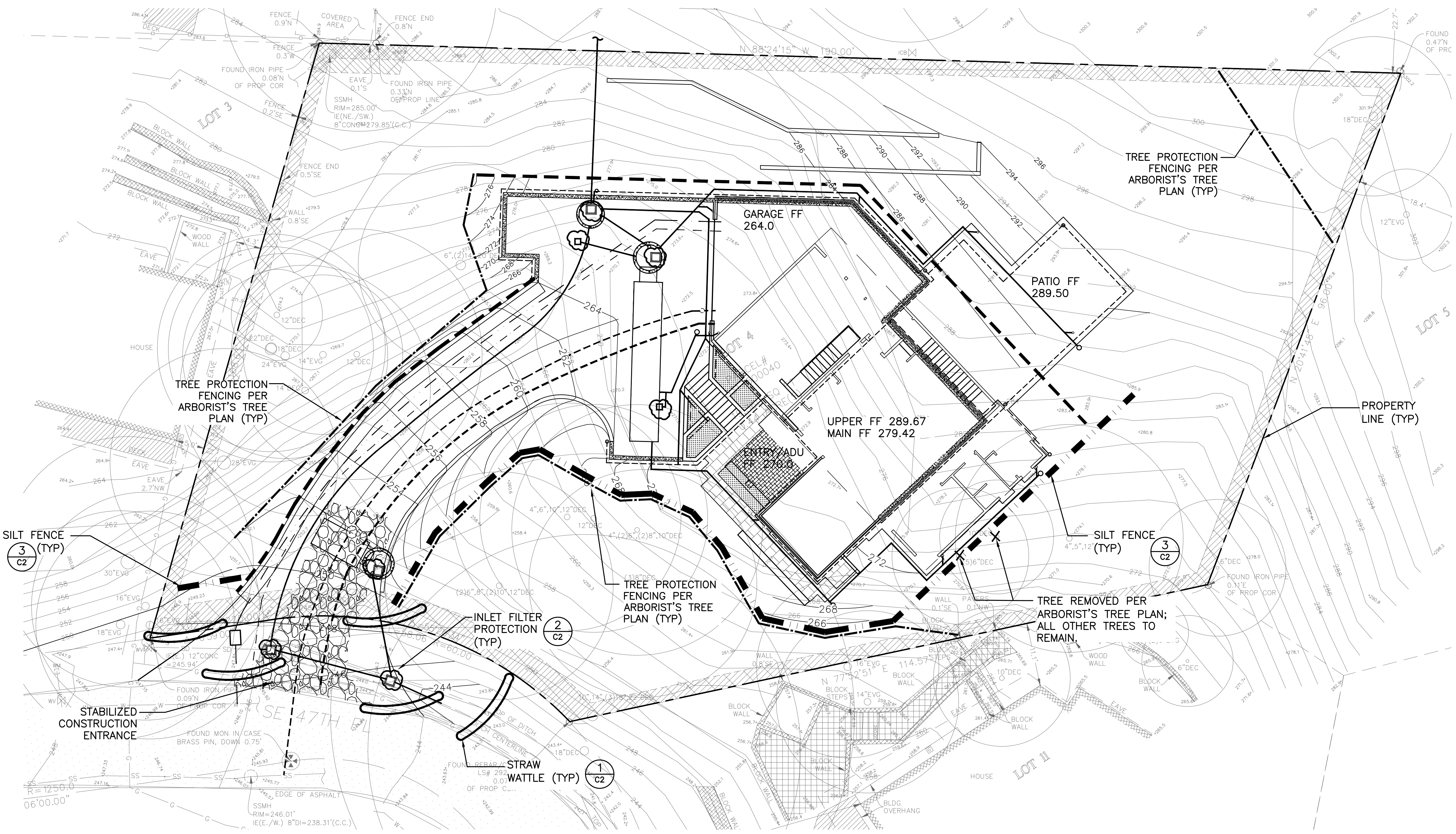


Civil Engineer:  
WR Consulting, Inc.  
3611 45th Ave W.  
Seattle, WA 98199  
P: 206.285.1593



**TREE PROTECTION NOTES:**

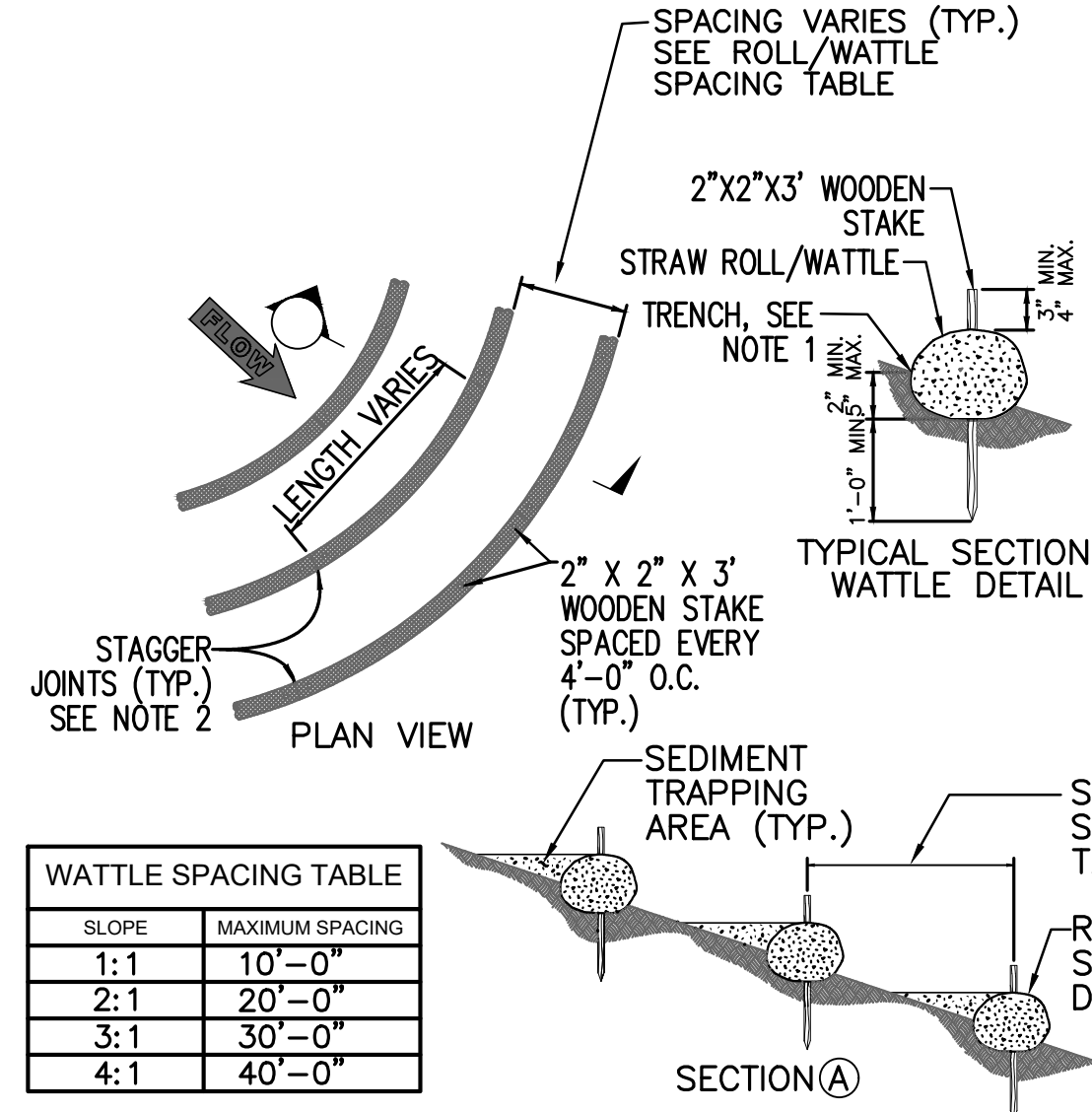
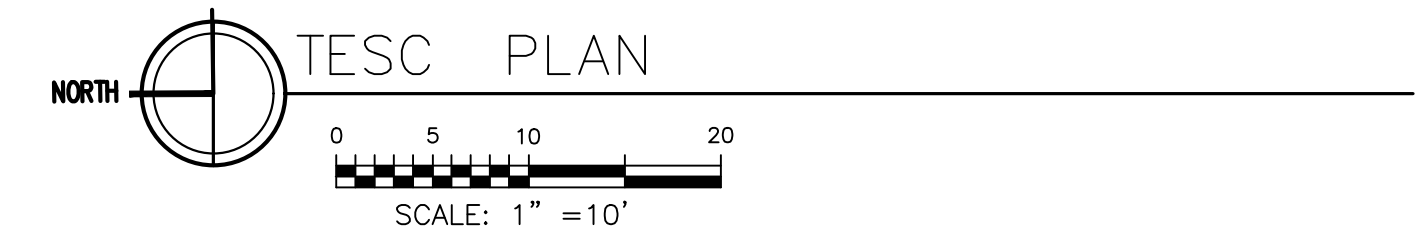
1. ALL TREES NOT INDICATED FOR REMOVAL SHALL REMAIN UNDISTURBED.
2. INSTALL ADDITIONAL TREE PROTECTION FENCING AS NEEDED TO PREVENT DAMAGE TO EXISTING TREES.
3. EXCESS EXCAVATED MATERIALS SHALL NOT BE DISPOSED OF ON-SITE OR PLACED ON ANY ROOT ZONE OF EXISTING TREES TO REMAIN.
4. SPOILS, EXCESS MATERIALS AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE HILLSIDE AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.



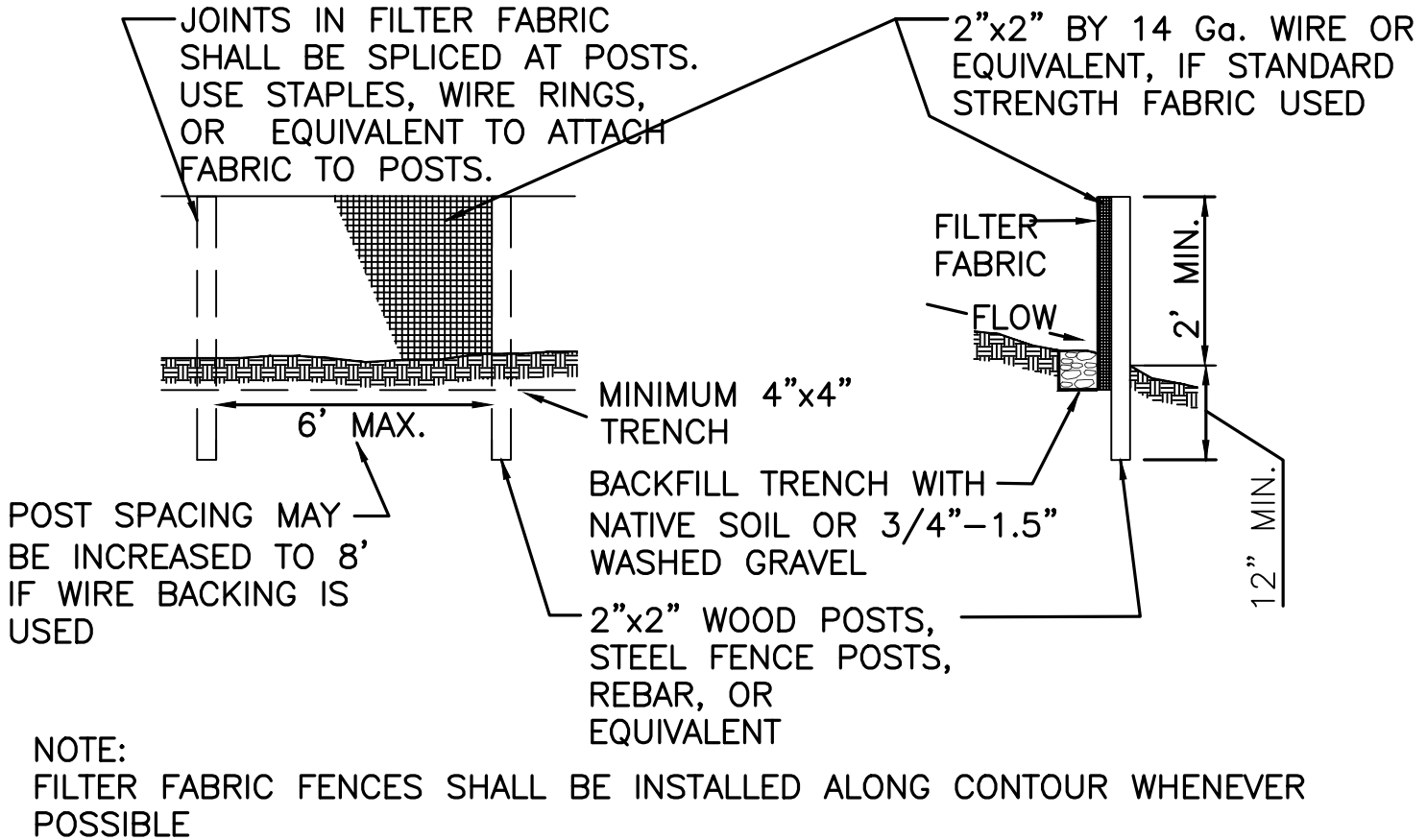
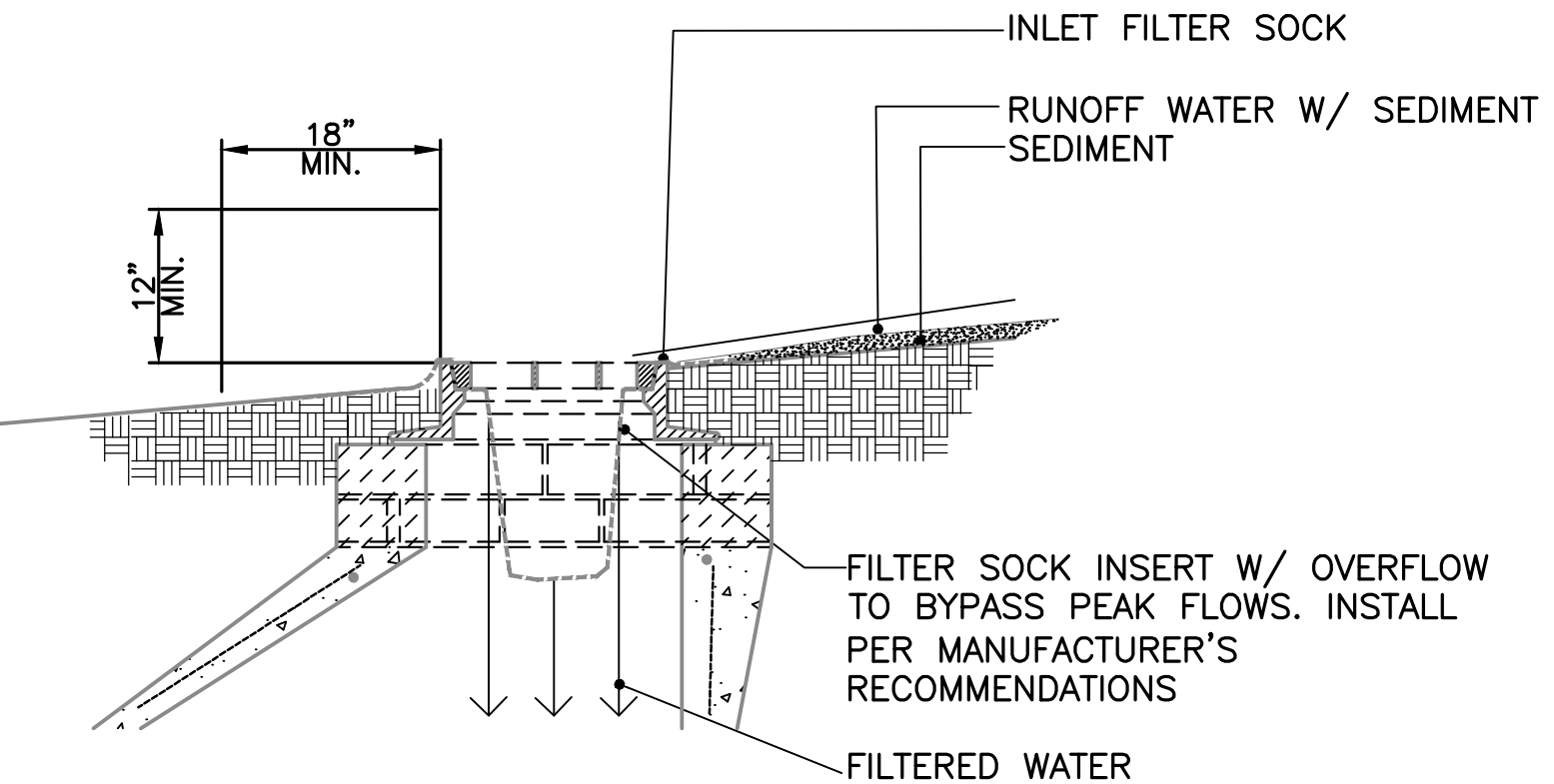
**LEGEND**

- INLET PROTECTION
- REMOVE TREE X
- SILT FENCE
- STRAW WATTLE/COIR LOG
- STABILIZED CONSTRUCTION ENTRANCE
- TREE PROTECTION FENCE

- WATTLE DETAIL NOTES**
1. Install Wattles along contours. Installation shall be in accordance with Standard Specification 8-01.3(10).
  2. Securely knot each end of Wattle. Abut adjacent Wattles tightly, end to end, without overlapping the ends.
  3. Pilot holes may be driven through the Wattles and into the soil when soil conditions require.
  4. Live stakes may be used for Permanent installation and shall be in accordance with Standard Specification 9-14.6.
  5. Wattles shall be inspected regularly, and immediately after a rainfall produces runoff, to ensure they remain thoroughly entrenched and in contact with the soil.



WATTLE SPACING TABLE	
SLOPE	MAXIMUM SPACING
1:1	10'-0"
2:1	20'-0"
3:1	30'-0"
4:1	40'-0"



1 STRAW ROLL (WATTLE) DETAIL  
SCALE: N.T.S.

2 INLET PROTECTION DETAIL  
SCALE: N.T.S.

3 SILT FENCE DETAIL  
SCALE: N.T.S.

**TESC SEASONAL WAIVER NOTES:**

1. DURING CONSTRUCTION OF DETENTION SYSTEM OR OTHER SITE WORK, A STORMWATER MANAGEMENT FACILITY INCLUDING STORAGE (EG. BAKER TANKS), PUMPS, TREATMENT COMPONENTS AND SETTLING MEASURES SHALL BE IN PLACE AS NEEDED TO CONTROL SEDIMENT WHEN DISCHARGING STORMWATER TO THE STORM DRAIN SYSTEM.
2. THE STORMWATER MANAGEMENT FACILITY SHALL BE MAINTAINED AND OPERATED AS REQUIRED TO PREVENT THE DISCHARGE OF SEDIMENT LADEN SOILS FROM THE SITE.

Date: **2/17/2022 Permit Set**

Scale: 1" = 10'

Sheet: 2 of 4

TESC PLAN AND DETAILS

**C2**

**STEINBORN RESIDENCE**  
New Residence  
8435 SE 47th Pl.  
Mercer Island, WA 98040

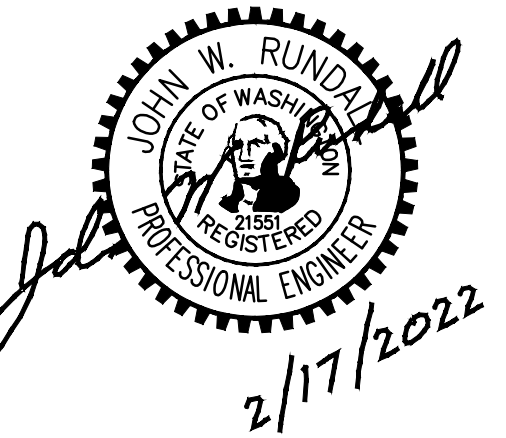
CALL 48 HOURS  
BEFORE YOU DIG  
1-800-424-5555  
OR CALL 8-1-1

**ECTYPOS**  
ARCHITECTURE

4212 W. Mercer Way  
Mercer Island, WA 98040  
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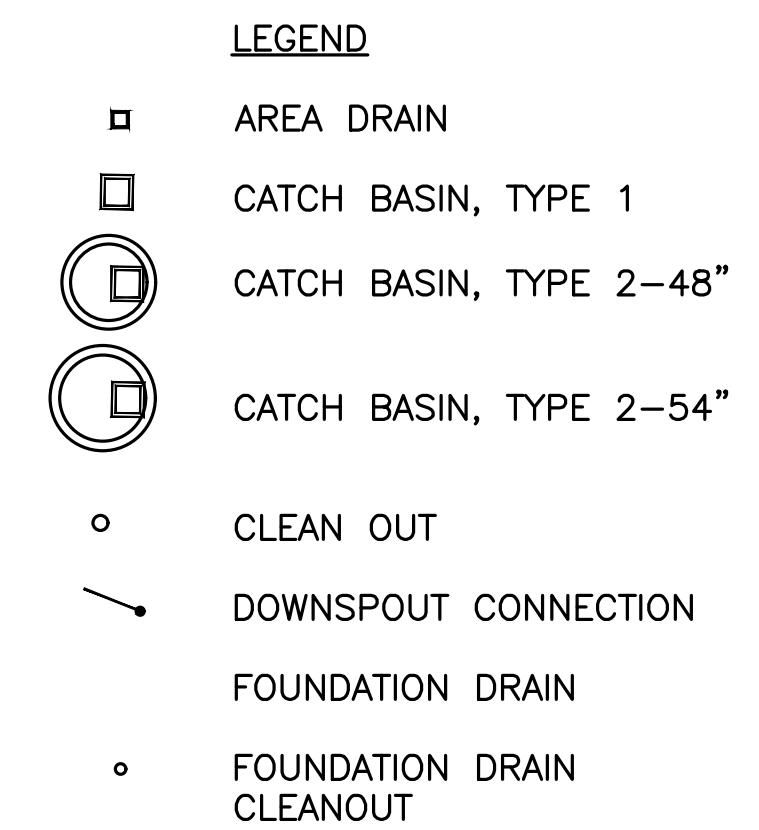
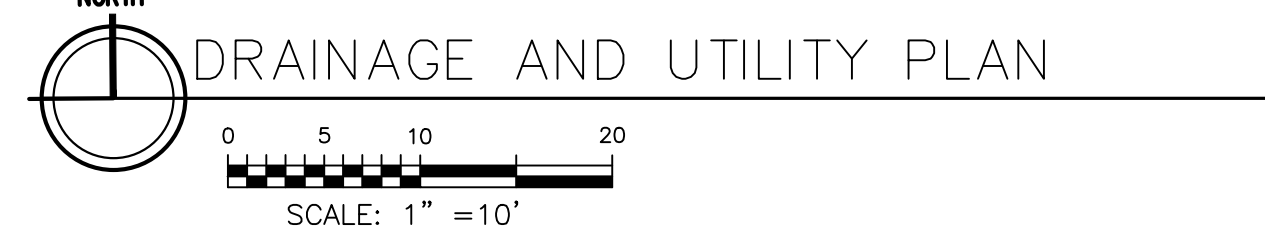
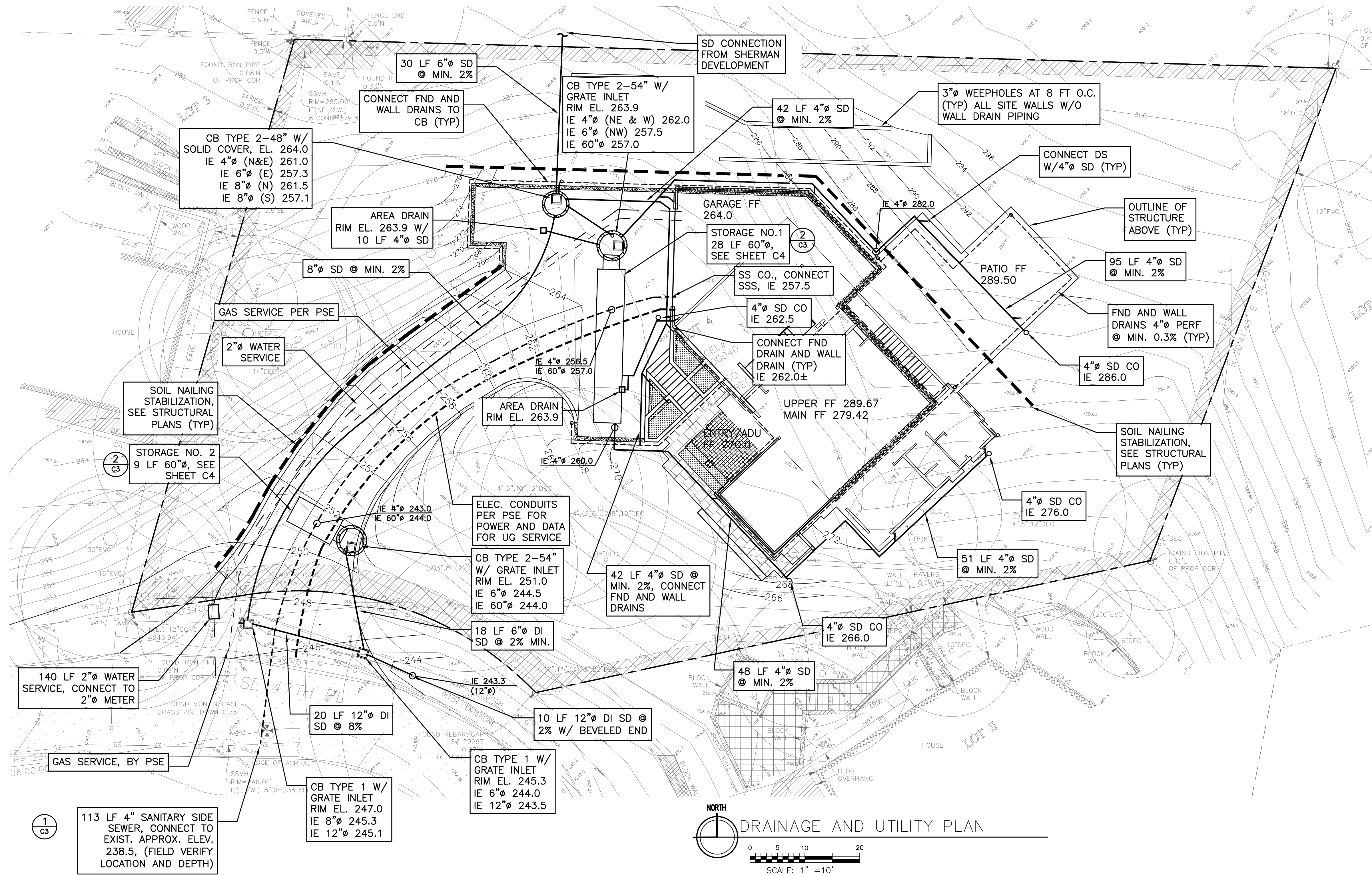


Civil Engineer:  
WR Consulting, Inc.  
3611 45th Ave W.  
Seattle, WA 98199  
P: 206.285.1593

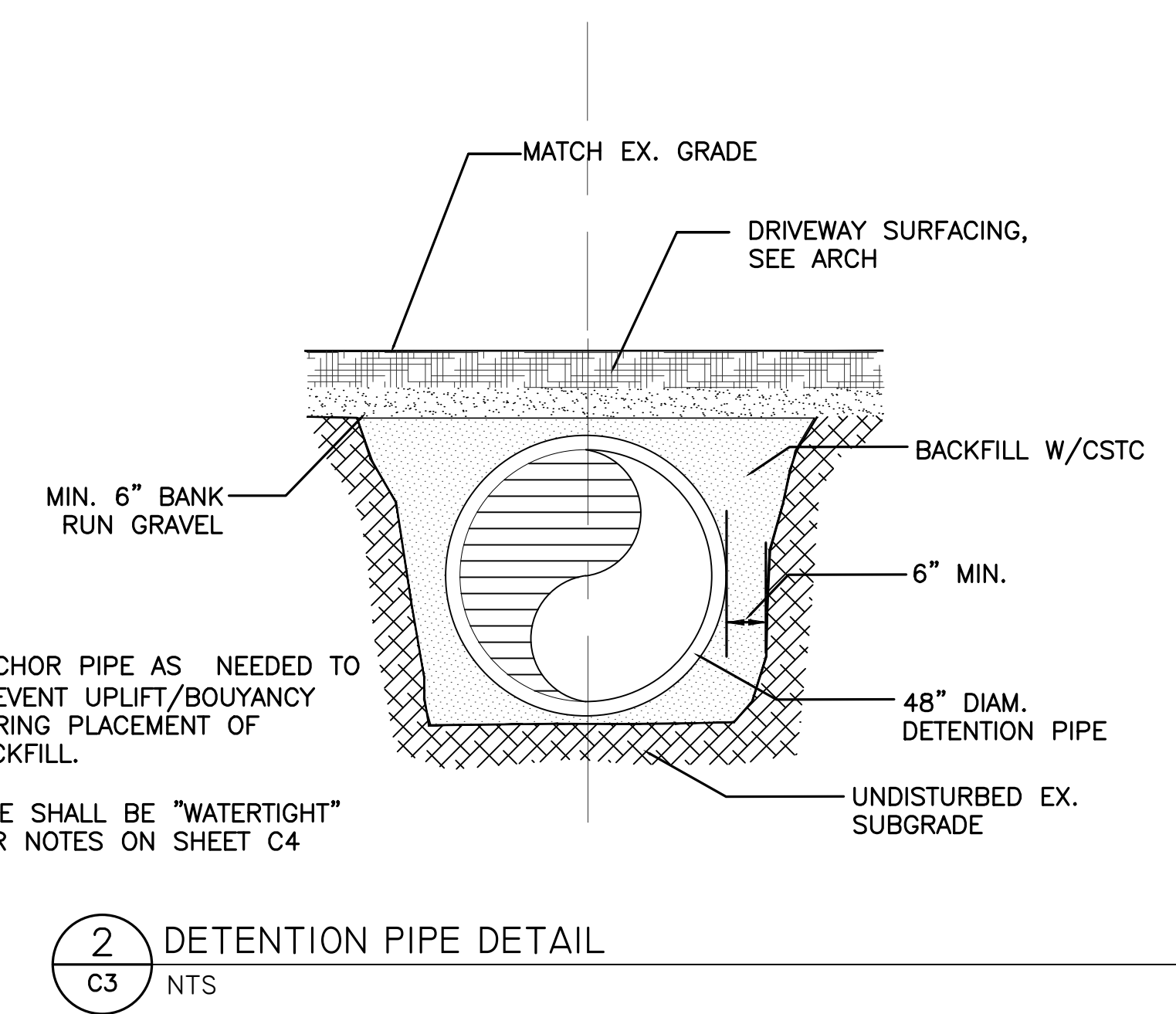
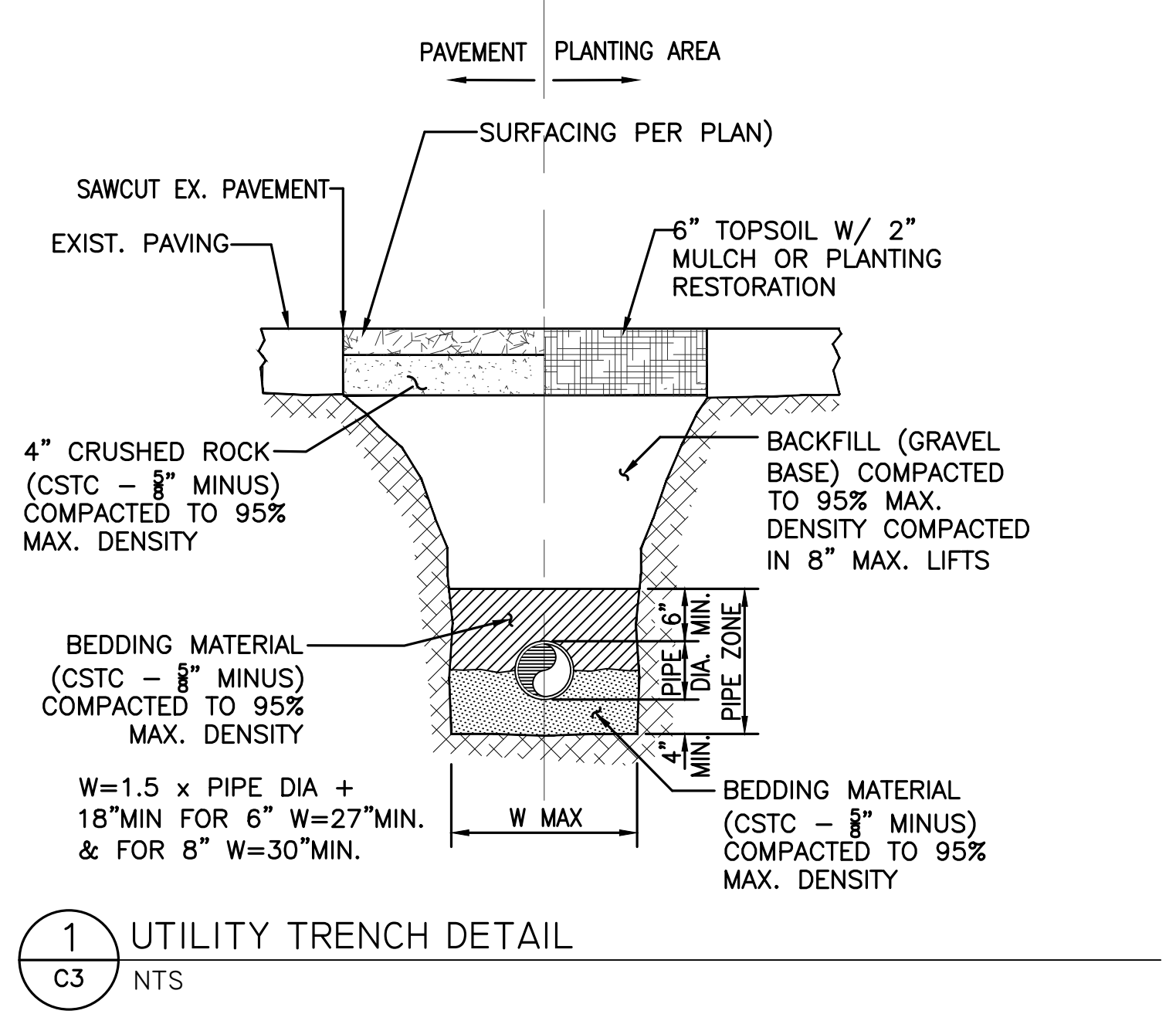


**DETENTION TANK CONSTRUCTION SEQUENCING NOTES:**

1. DETENTION TANK AND ASSOCIATED STRUCTURES SHALL BE INSTALLED ONLY AFTER SOIL NAILING STABILIZATION IMPROVEMENTS ARE COMPLETE.
2. EXCAVATION FOR DETENTION TANKS AND OTHER UTILITIES SHALL BE A SINGLE VERTICAL WALL TRENCH WITH TEMPORARY SHORING AND SAFETY SYSTEMS AS REQUIRED.
3. EXCAVATION FOR DETENTION FACILITIES SHALL BE REVIEWED AND APPROVED BY CITY OF MI INSPECTOR PRIOR TO FURTHER CONSTRUCTION.
4. THE DETENTION TANKS SHALL BE LOWERED INTO PLACE AND BACKFILLED AS INDICATED. EXCESS SPOILS SHALL BE REMOVED FROM THE SITE IMMEDIATELY.



- CONSTRUCTION NOTES:**
1. FURNISH AND INSTALL ALL TRANSITION COUPLINGS (FERNCO REDUCERS AND COUPLINGS) AS NEEDED FOR CONNECTIONS TO BLDG UTILITIES
  2. INVERT ELEVATIONS ARE APPROXIMATE. ADJUST INVERT ELEVATIONS AS NEEDED TO COORDINATE WITH BLDG UTILITIES AND EXISTING GRADES.
  3. SEE ARCHITECTURE PLANS FOR BUILDING AND SITE FURNISHINGS DETAILS.
  5. FOUNDATION DRAINS FOR THE STRUCTURES ARE SHOWN ALONG THE BUILDING PERIMETER OR WALL FOR CLARITY. ADJUST LOCATION TO DRAIN GROUNDWATER FROM RETAINED SOIL AT THE WALLS AND RELIEVE HYDROSTATIC PRESSURE AGAINST THE STRUCTURE.



NOTE: SEE ADDITIONAL DETENTION PIPE DETAILS SHEET C4

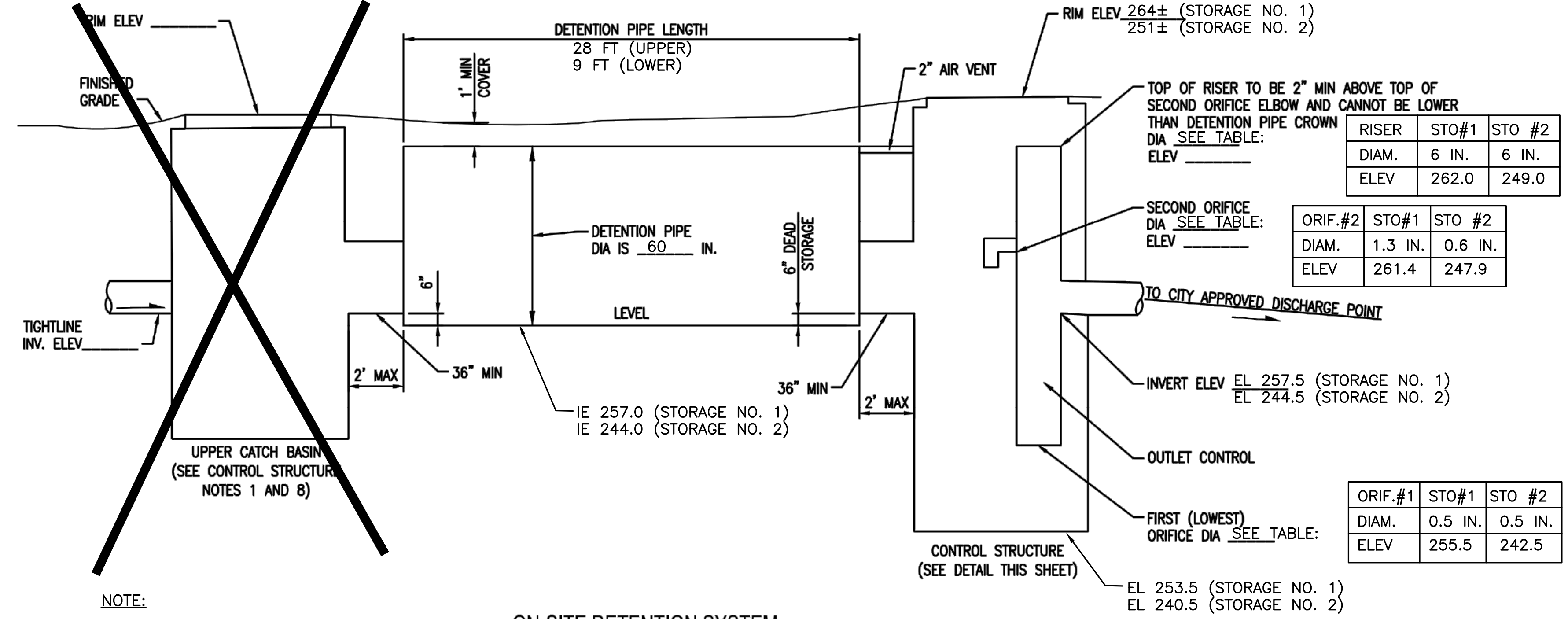
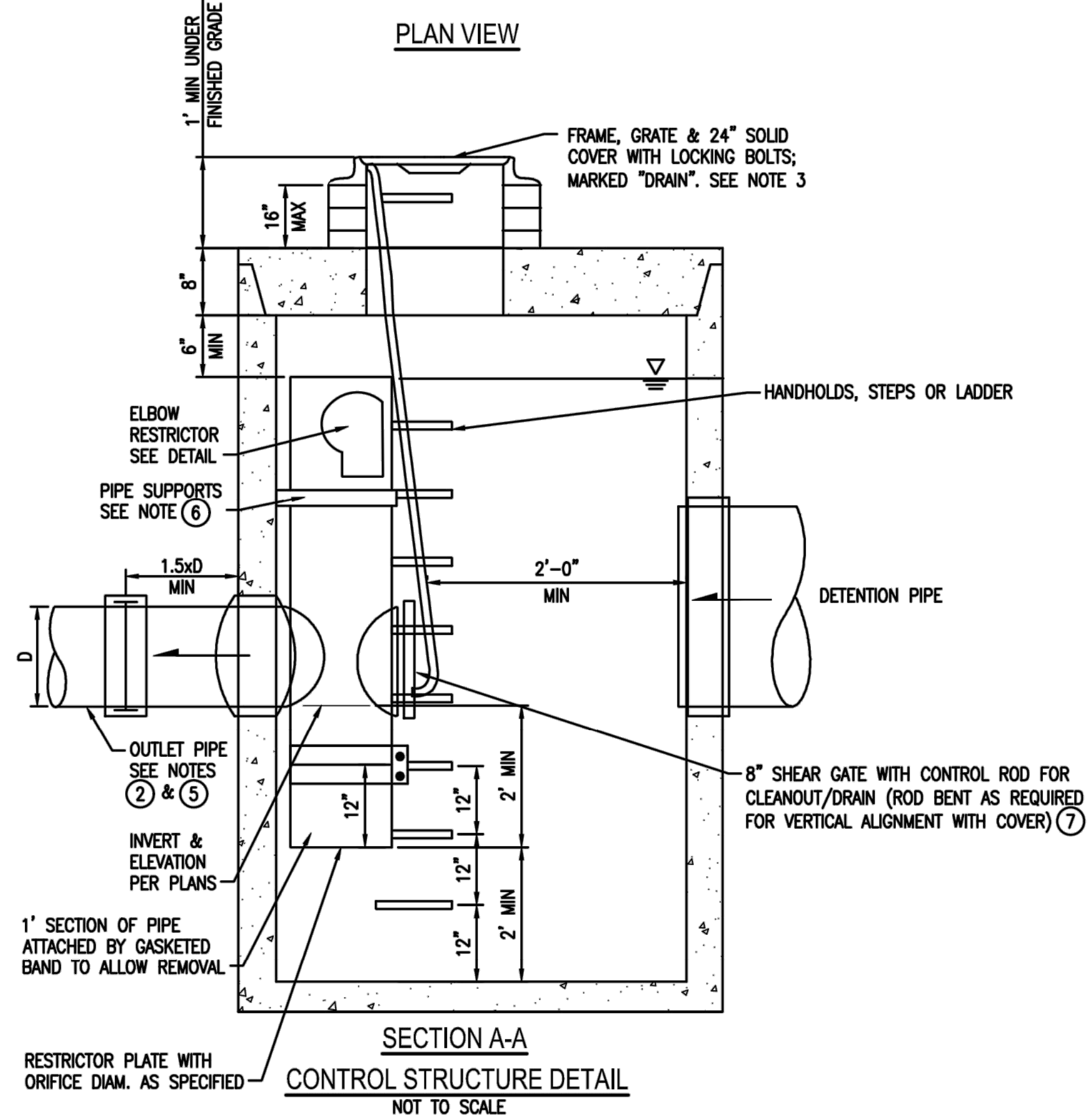
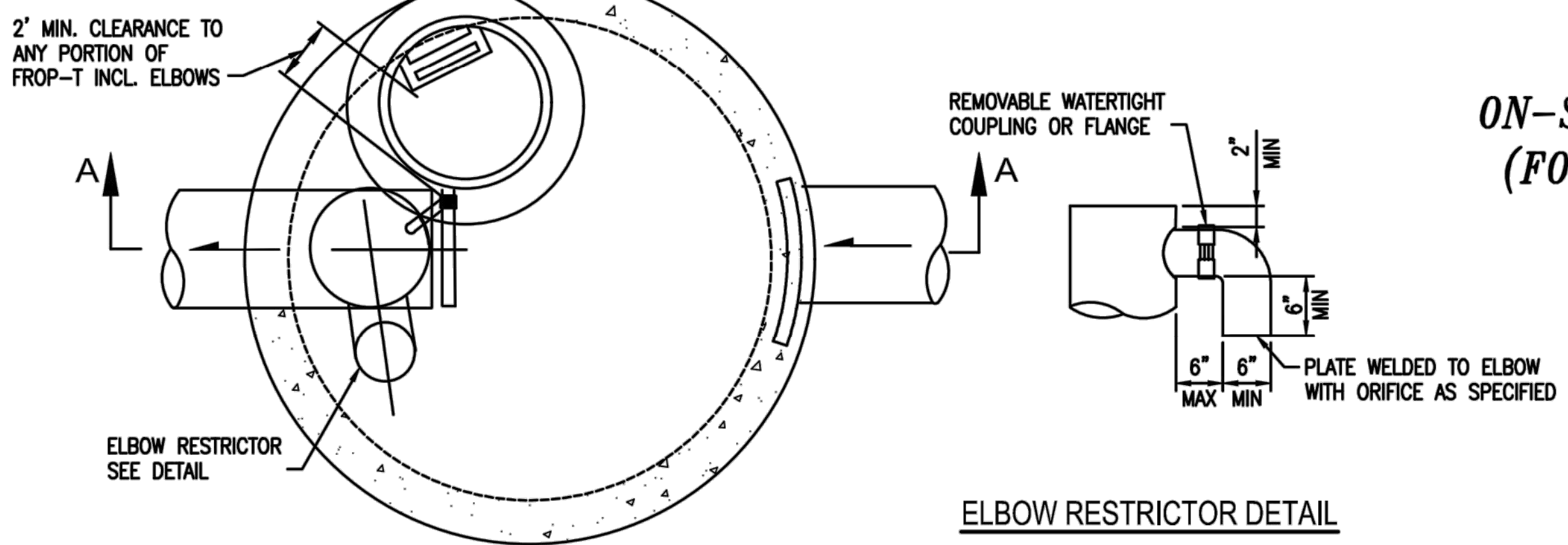


**ATTACHMENT 1**  
**CITY OF MERCER ISLAND**  
**ON-SITE DETENTION SYSTEM WORKSHEET**  
**(FOR NEW PLUS REPLACED IMPERVIOUS**  
**AREA OF 9,500 SF OR LESS)**

**DETENTION TANK NOTES:**

1. THE DETENTION PIPE MATERIAL SHALL BE WATERTIGHT AS OPPOSED TO "SOIL TIGHT".
2. THE DETENTION TANKS SHALL BE ADS N-12 WT (WATERTIGHT) IB PIPE WITH JOINTS IN ACCORDANCE WITH ASTM D3212 LAB TEST AND ASTM F1417 WATERTIGHT FIELD TEST.
3. THE PIPE MATERIAL SELECTED SHALL CONFORM TO THE TESTING REQUIREMENTS IN SECTION 7-17.3(2)F OF THE 2020 WSDOT STANDARD SPECIFICATIONS EXCEPT THE DETENTION PIPE SHALL BE TESTED IN ITS ENTIRETY RATHER THAN ONE JOINT AT A TIME.

OWNER: Dan and Susan Steinborn	ADDRESS: 8435 SE 47th PLACE	PREPARED BY: JOHN W. RUNDALL, P.E.
PERMIT #:	MERCER ISLAND, WA	PHONE: 206-850-1686
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 5,768 SF	DETENTION PIPE DIA (INCH): 60" ø	DETENTION PIPE LENGTH (FT): 37
SOIL TYPE: TYPE D	PIPE MATERIAL: ADS N-12 WT IB PIPE W/WATERTIGHT JOINTS	ORIFICE #1 DIA SEE TABLES BELOW: ORIFICE #2 DIA



- NOTE:**
1. UPPER CB NOT REQUIRED FOR EITHER STORAGE TANK PER CONTROL STRUCTURE NOTES, NOTE #8.

**ON-SITE DETENTION SYSTEM**  
NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

**CONTROL STRUCTURE NOTES:**

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
  - A. CLEANOUT GATE IS VISIBLE FROM TOP;
  - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
  - C. FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.

6. PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION ZG32A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

**ON-SITE DETENTION SYSTEM NOTES:**

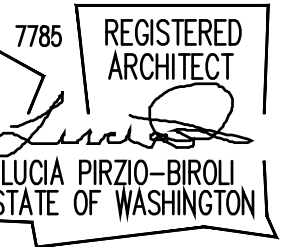
1. CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

Date: 2/17/2022 Permit Set

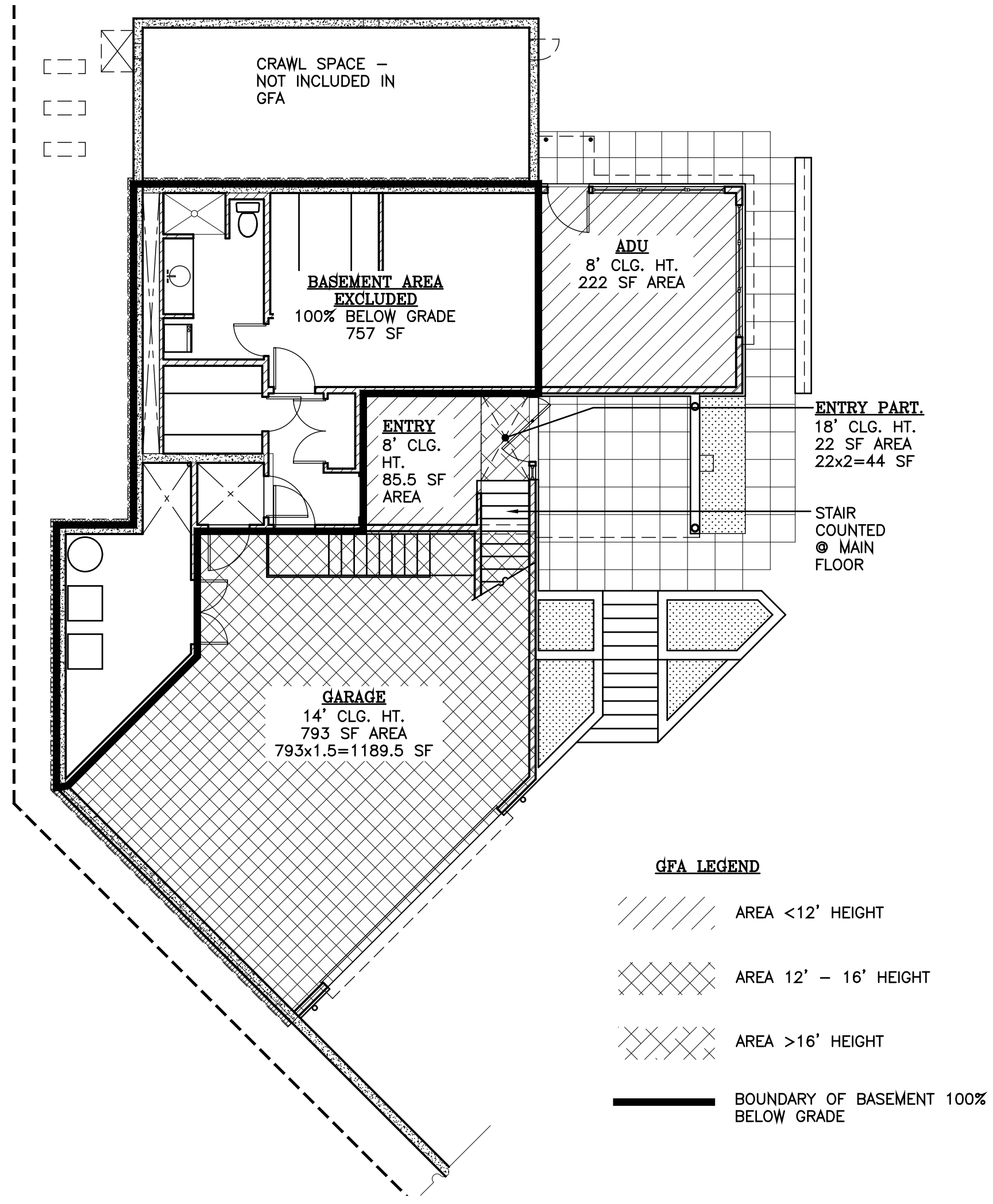
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Sheet: 4 of 4

DETENTION TANK DETAILS

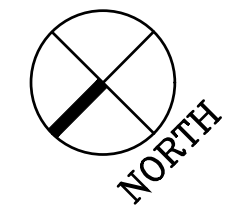


**STEINBORN RESIDENCE**  
New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040



**Garage/Entry/ADU GFA Calculation:**

<12'	307.5 SF
12'-16'	1189.5 SF
>16'	44.0 SF
<b>TOTAL</b>	<b>1541.0 SF</b>



**1 Lower Floor Plan GFA Calculation**  
scale: 1/8"=1'-0"

**Enclosed Crawl Space Ventilation Under Heated**

TOTAL AREA: 318 SF  
VENTILATION REQUIRED W/ CLASS I VAPOR BARRIER: 1 SF/300 SF  
REQUIRED VENTILATION: 1.06 SF OR 152.64 SI  
PROVIDED VENTILATION @ EXTERIOR WALLS: 186 SI  
NOTE: NFVA - NET FREE VENT AREA

**Conditioned Space Square Footage:**

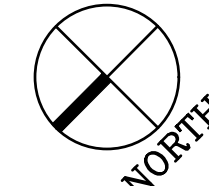
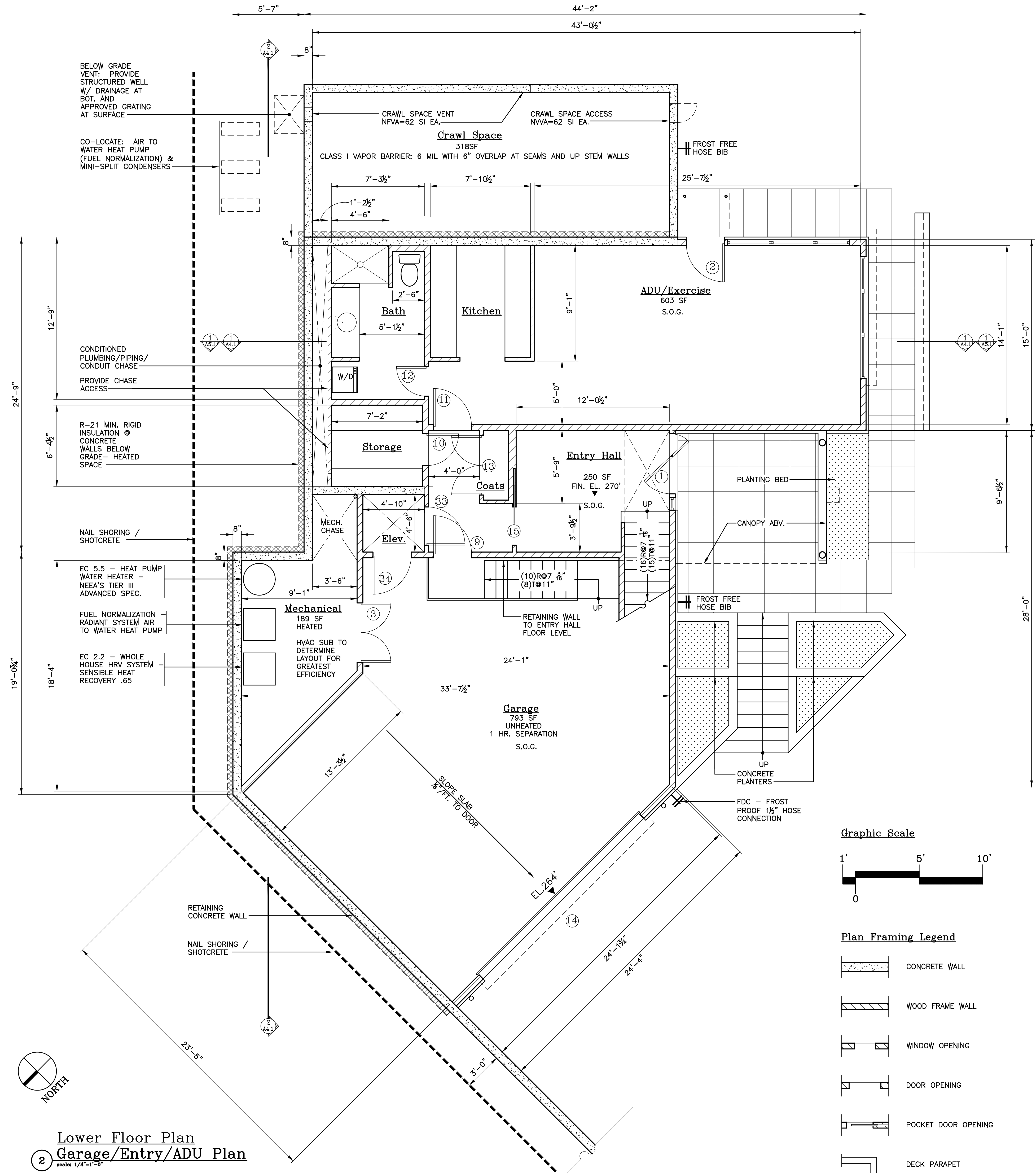
1107.6SF

**Fire Area Square Footage**

ATTACHED GARAGE/MECHANICAL ROOM/ELEVATOR: 932.7 SF  
ADU / ENTRY HALL: 800.0 SF  
ENTRY CANOPY: 117.3 SF

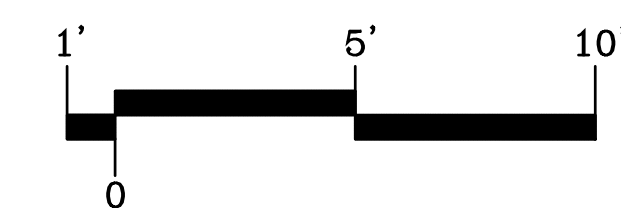
**Floor Plan Notes**

- See Sheet A0.1 for General Notes in common.
- Fire Code Alternate minimum requirements:  
13R Sprinkler System Plus - Design Build per 2016 NFPA  
1 HR 1/2" GWB throughout  
Solid core doors throughout except at closets.
- Energy Performance Requirements:  
EC 2.2 - Air Leakage Control and Efficient Ventilation: Reduce tested air leakage to 2.0 air changes per hour maximum @ 50 Pascals  
EC 4.2 - High Efficiency HVAC Distribution System: Hydronic in-floor piping throughout all conditioned spaces.
- Vapor Retarder Required - Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7



**2 Lower Floor Plan Garage/Entry/ADU Plan**  
scale: 1/4"=1'-0"

**Graphic Scale**



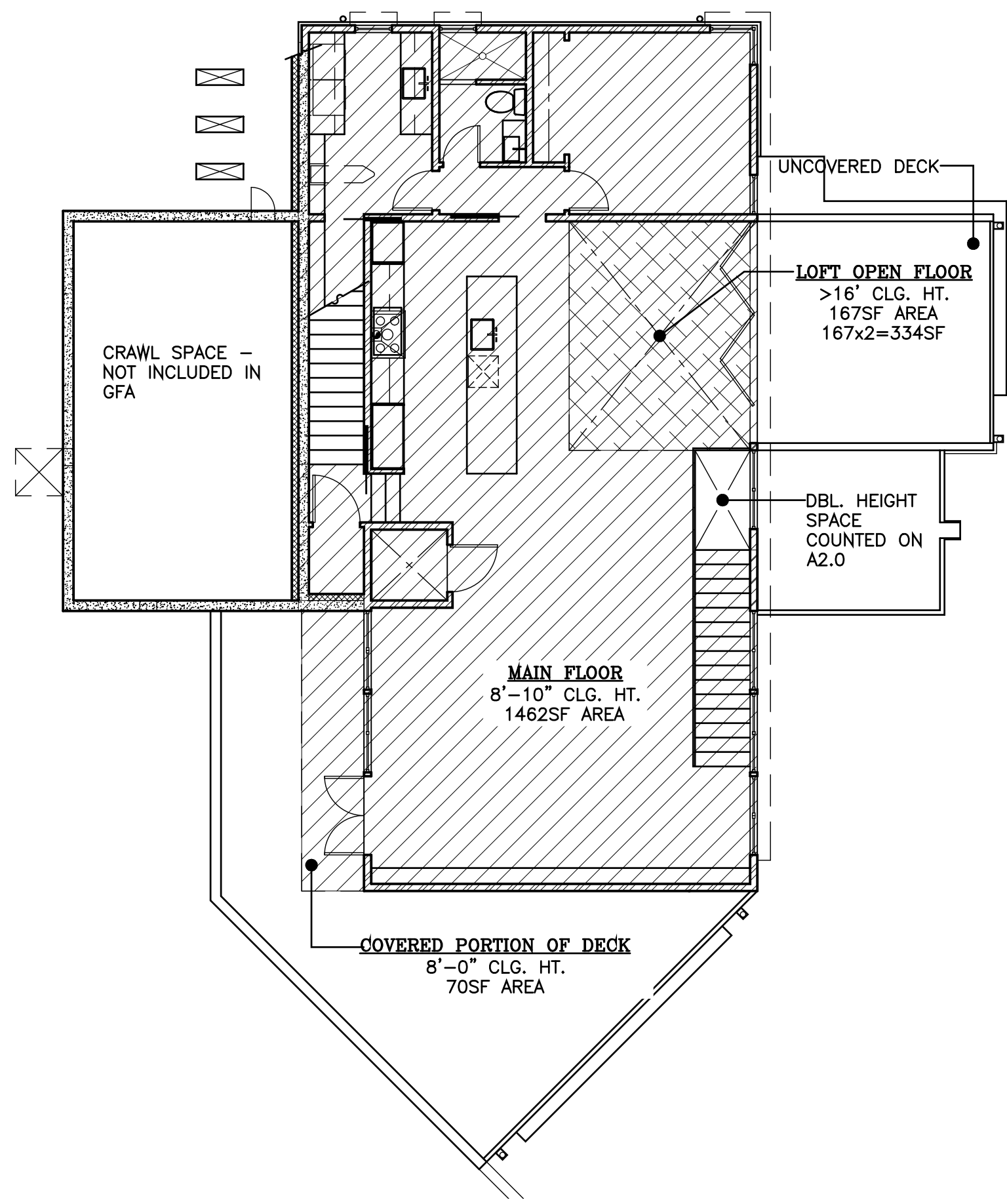
**Plan Framing Legend**

- CONCRETE WALL
- WOOD FRAME WALL
- WINDOW OPENING
- DOOR OPENING
- POCKET DOOR OPENING
- DECK PARAPET

Date: **3/15/2021 Pre-App**  
**2/14/2022 Permit Submittal**

Scale:  
Sheet:

Lower Floor Plan  
**A2.0**



**GFA LEGEND**

AREA <12' HEIGHT

AREA >16' HEIGHT

**Garage/Entry/ADU GFA Calculation:**

<12'	1532SF
>16'	334SF
	1866SF

**1 Main Floor GFA Calculation**  
Scale: 1/8"=1'-0"

**Conditioned Space Square Footage:** 1462.35F

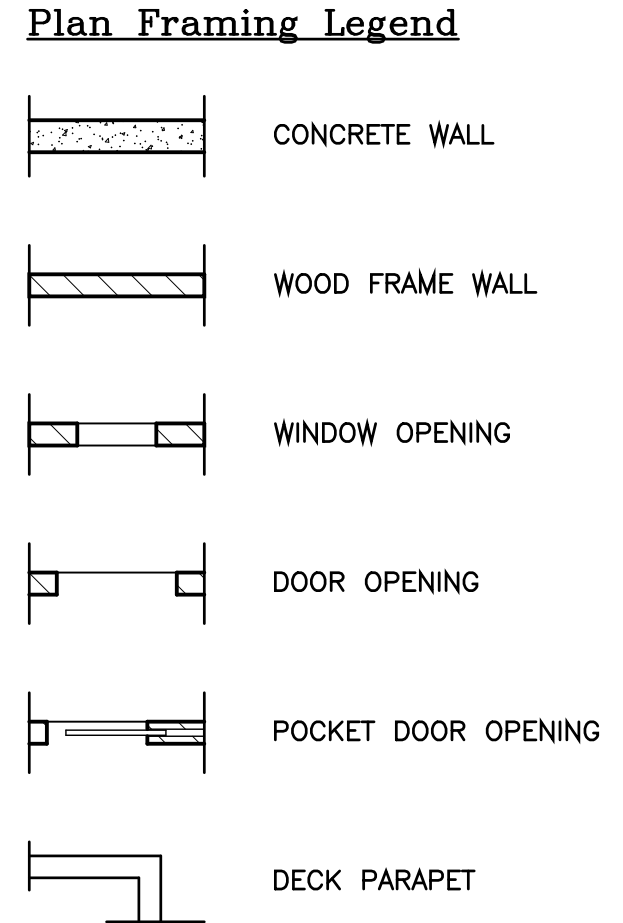
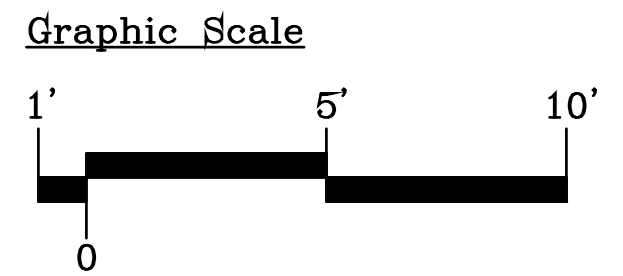
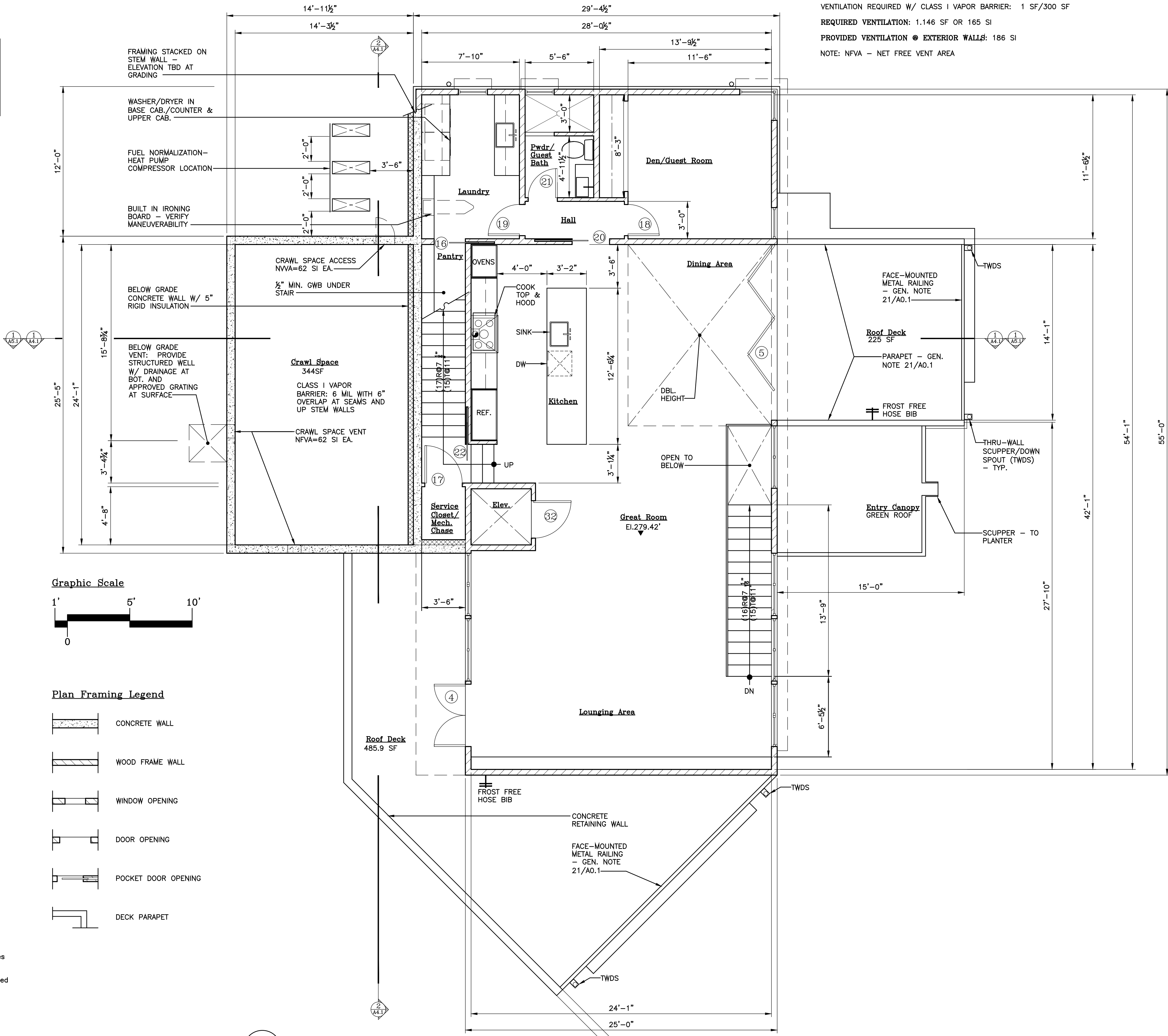
**Fire Area Square Footage**

MAIN FLOOR AREA NOT INCLUDING DOUBLE HEIGHT SPACE BELOW: 1421.5 SF  
COVERED DECK: 70.4 SF

**Roof Deck Square Footage:** 710.9 SF

**Floor Plan Notes**

- See Sheet A0.1 for General Notes in common.
- Fire Code Alternate minimum requirements:  
13R Sprinkler System Plus – Design Build per 2016 NFPA  
1 HR 5/8" GWB throughout  
Solid core doors throughout except at closets.
- Energy Performance Requirements:  
EC 2.2 – Air Leakage Control and Efficient Ventilation: Reduce tested air leakage to 2.0 air changes per hour maximum @ 50 Pascals  
EC 4.2 – High Efficiency HVAC Distribution System: Hydronic in-floor piping throughout all conditioned spaces.
- Vapor Retarder Required – Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7



**2 Main Floor Plan**  
Scale: 1/4"=1'-0"

**Enclosed Crawl Space Ventilation Under Heated**

TOTAL AREA: 344 SF

VENTILATION REQUIRED W/ CLASS I VAPOR BARRIER: 1 SF/300 SF

REQUIRED VENTILATION: 1.146 SF OR 165 SI

PROVIDED VENTILATION @ EXTERIOR WALLS: 186 SI

NOTE: NFVA – NET FREE VENT AREA

**ECTYPOS ARCHITECTURE**

4212 W. Mercer Way  
Mercer Island, WA 98040  
t. (206) 232-9147  
f. (206) 275-0312

7785 REGISTERED ARCHITECT  
LUCIA PIRZIO-BIROLI  
STATE OF WASHINGTON

**STEINBORN RESIDENCE**  
New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

Scale:

Sheet:  
Main Floor Plan  
A2.1

**ECTYPOS**  
ARCHITECTURE

4212 W. Mercer Way  
Mercer Island, WA 98040  
t. (206) 232-9147  
f. (206) 275-0312

7785 REGISTERED  
ARCHITECT  
*Lucia Pizio-Biroli*  
LUCIA PIZIO-BIROLI  
STATE OF WASHINGTON

**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

Scale:

Sheet:

Upper Floor Plan  
A2.2

**GFA LEGEND**  
AREA <12' HEIGHT  
**Upper Floor GFA Calculation:**  
<12' 1147SF

**1 Upper Floor Plan GFA Calculation**  
scale: 1/8"=1'-0"

**Conditioned Space Square Footage:** 928.3SF  
**Fire Area Square Footage**  
MASTER SUITE AREA NOT INCLUDING DOUBLE HEIGHT SPACE BELOW: 877.7 SF  
COVERED PATIO: 190 SF  
**Roof Deck Square Footage:** 797.5 SF

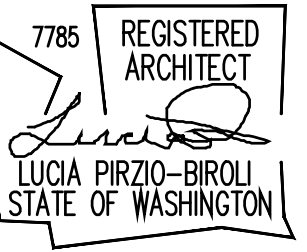
**Floor Plan Notes**  
1. See Sheet A0.1 for General Notes in common.  
2. Fire Code Alternate minimum requirements:  
13R Sprinkler System Plus - Design Build per 2016 NFPA  
1 HR 5/8" GWB throughout  
Solid core doors throughout except at closets.  
3. Energy Performance Requirements:  
EC 2.2 - Air Leakage Control and Efficient Ventilation: Reduce tested air leakage to 2.0 air changes per hour maximum @ 50 Pascals  
EC 4.2 - High Efficiency HVAC Distribution System: Hydronic in-floor piping throughout all conditioned spaces.  
4. Vapor Retarder Required - Low/no VOC vapor barrier primer on all painted surfaces per IRC 702.7

**Graphic Scale**  
1' 5' 10'  
0

**Plan Framing Legend**

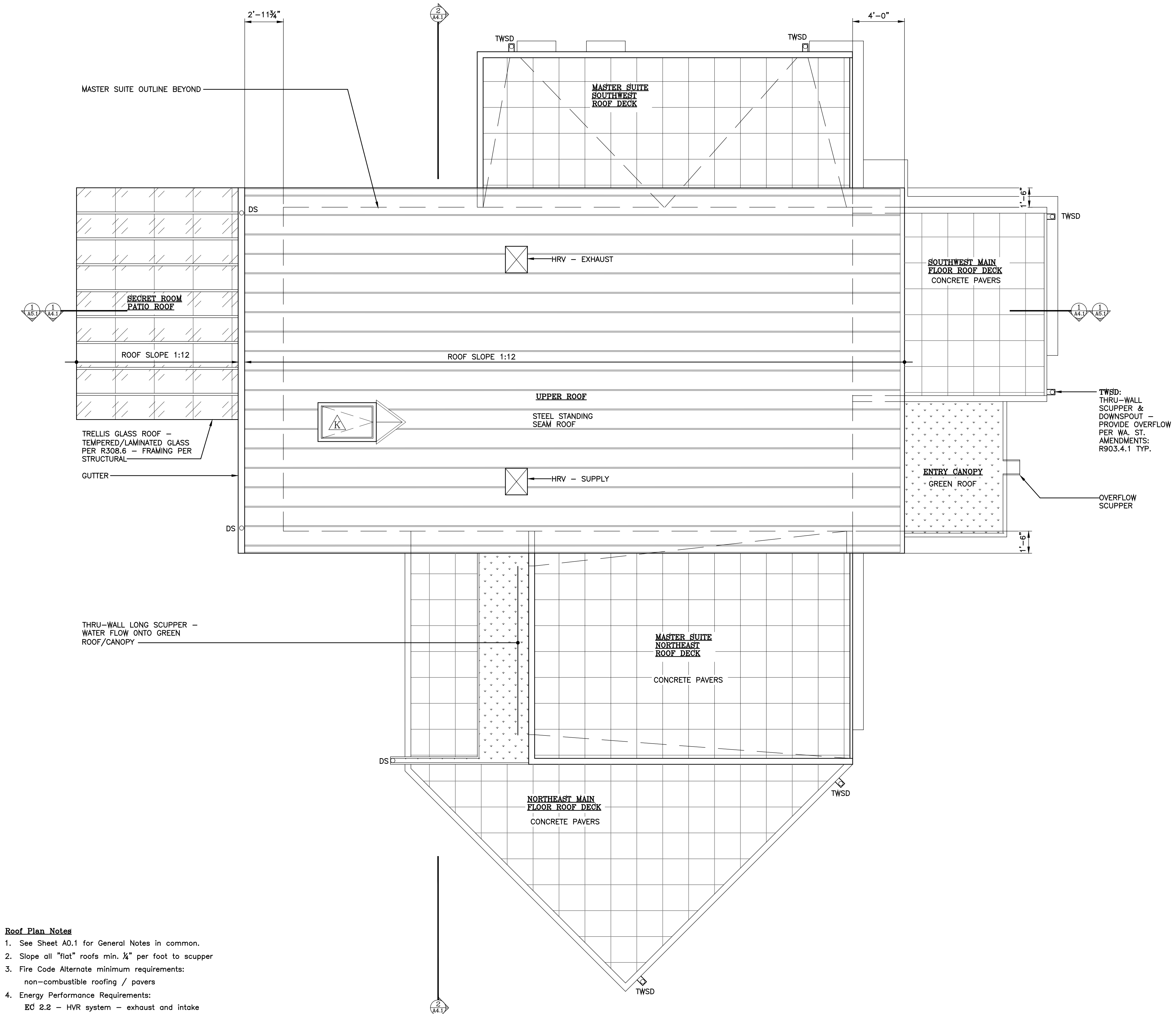
CONCRETE WALL  
WOOD FRAME WALL  
WINDOW OPENING  
DOOR OPENING  
POCKET DOOR OPENING  
DECK PARAPET

**2 Upper Floor Plan**  
scale: 1/4"=1'-0"



**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040



- Roof Plan Notes**
- See Sheet A0.1 for General Notes in common.
  - Slope all "flat" roofs min. 1/4" per foot to scupper
  - Fire Code Alternate minimum requirements:  
non-combustible roofing / pavers
  - Energy Performance Requirements:  
E0 2.2 - HVR system - exhaust and intake



**1 Roof Plan**  
scale: 1/4"=1'-0"

Date: **3/15/2021 Pre-App**  
**2/14/2022 Permit Submittal**

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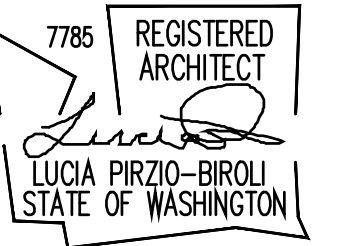
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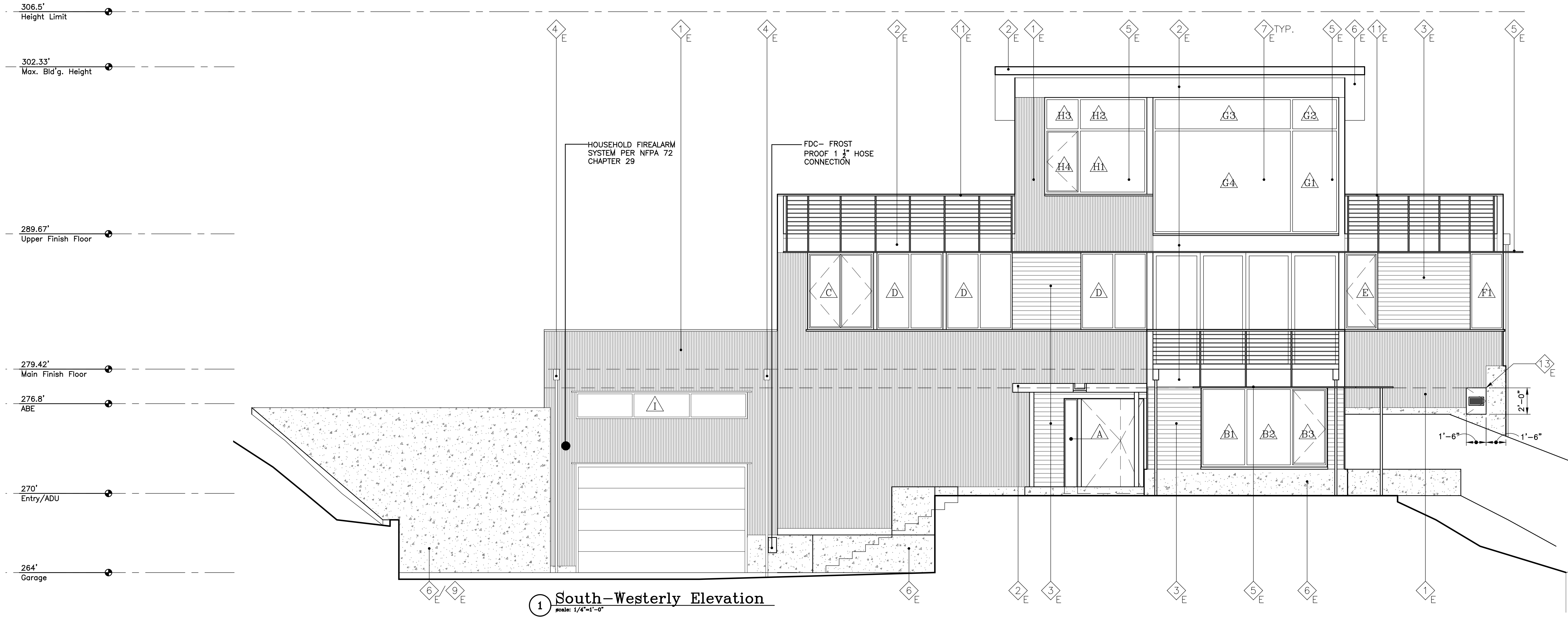
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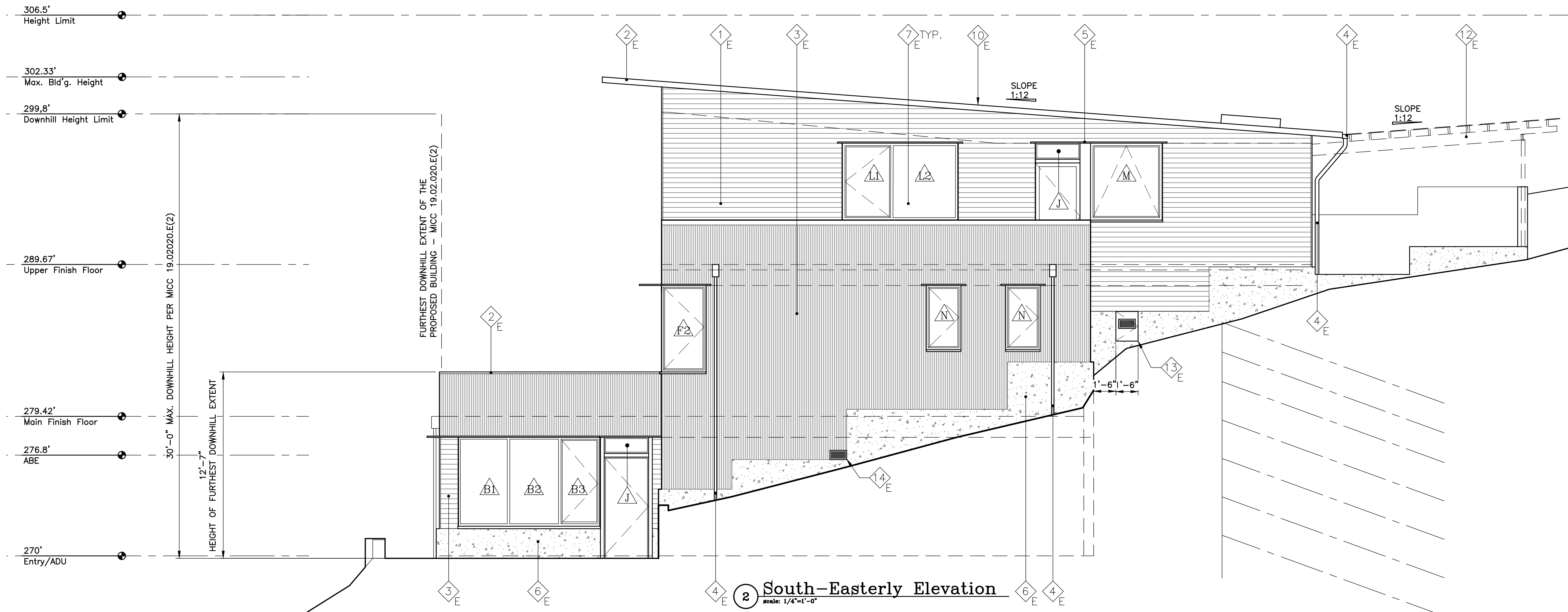


**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040



**1 South-Westerly Elevation**  
Scale: 1/4"=1'-0"

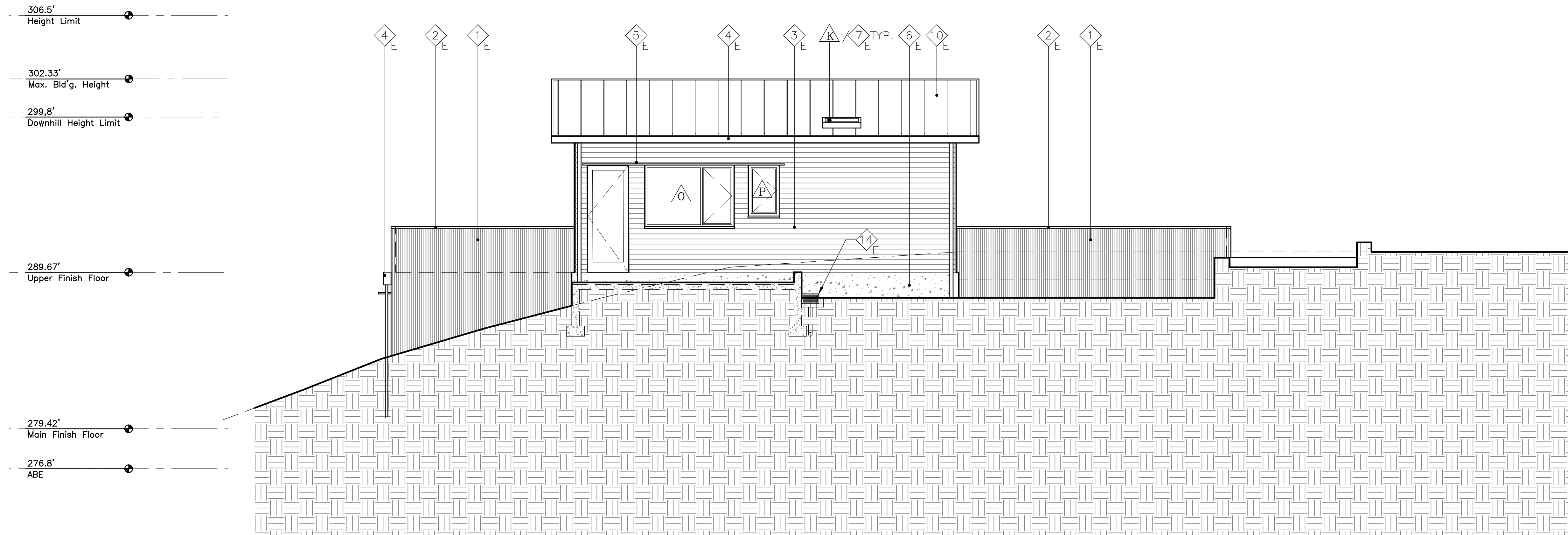
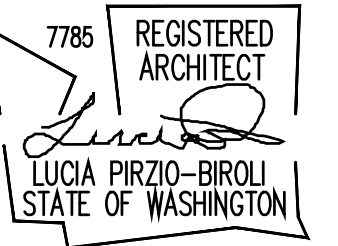


**2 South-Easterly Elevation**  
Scale: 1/4"=1'-0"

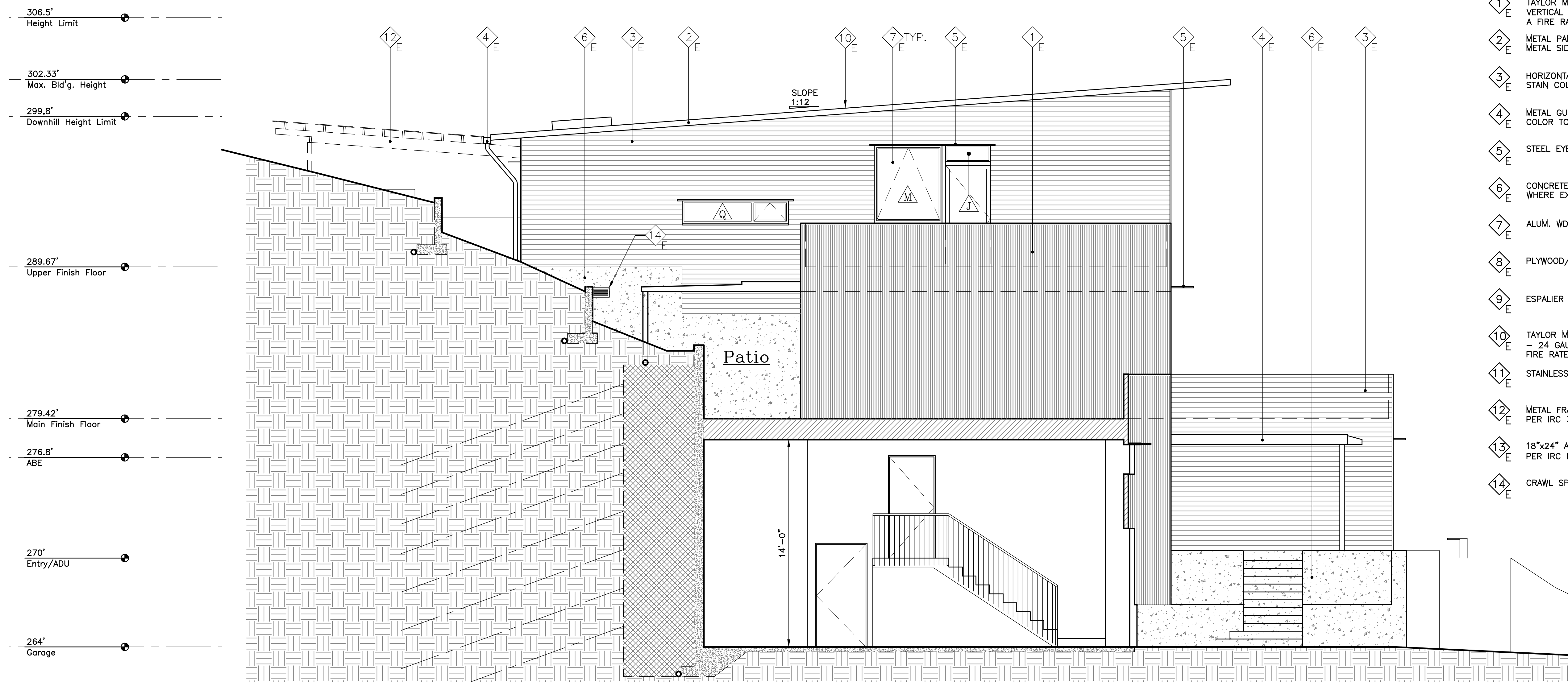
- EXTERIOR MATERIAL LEGEND:**
- 1 E TAYLOR METALS "COOL" KYNAR 500 CORRUGATED CLASSIC 1/2" VERTICAL SIDING - GRAPHITE BLACK (SRI-26) - UL 790 CLASS A FIRE RATED
  - 2 E METAL PANEL/COPING/FLASHING/SILL - COLOR TO MATCH METAL SIDING
  - 3 E HORIZONTAL CLEAR 3" EXP. CEDAR SHIPLAP SIDING - STAIN COLOR TBD
  - 4 E METAL GUTTER/OVERFLOW SCUPPER/DOWNSPOUT METAL - COLOR TO MATCH METAL WALL SIDING.
  - 5 E STEEL EYEBROW - 14 GAUGE - COLOR TO MATCH METAL SIDING
  - 6 E CONCRETE STEM WALLS - ARCHITECTURAL APPEARANCE GRADE WHERE EXPOSED
  - 7 E ALUM. WD CLAD WINDOWS/DOORS/SKYLIGHTS - COLOR TBD
  - 8 E PLYWOOD/VENEER SOFFIT - B&B - STAIN COLOR TBD
  - 9 E ESPALIER GREEN WALL - STEEL WIRE ROPE & HARDWARE
  - 10 E TAYLOR METAL ROOF "COOL" KYNAR 500 - 12" STANDING SEAM - 24 GAUGE - GRAPHITE BLACK (SRI-26) - UL 790 CLASS A FIRE RATED
  - 11 E STAINLESS STEEL GUARDRAIL WITH WOOD TOP RAIL.
  - 12 E METAL FRAME GLASS ROOFED PERGOLA - OVERHEAD GLAZING PER IRC 308.6
  - 13 E 18"x24" ACCESS OPENING W/ CRAWL SPACE VENT NFVA: 62SI - PER IRC R408.4/WAC-51 R408
  - 14 E CRAWL SPACE VENT NFVA: 62SI - SHALL MEET IRC R408

Date: **3/15/2021 Pre-App**  
**2/14/2022 Permit Submittal**

Scale:  
Sheet:



**1 North-Easterly Section/Elevation**  
scale: 1/4"=1'-0"



**2 North-Westerly Section/Elevation**  
scale: 1/4"=1'-0"

**EXTERIOR MATERIAL LEGEND:**

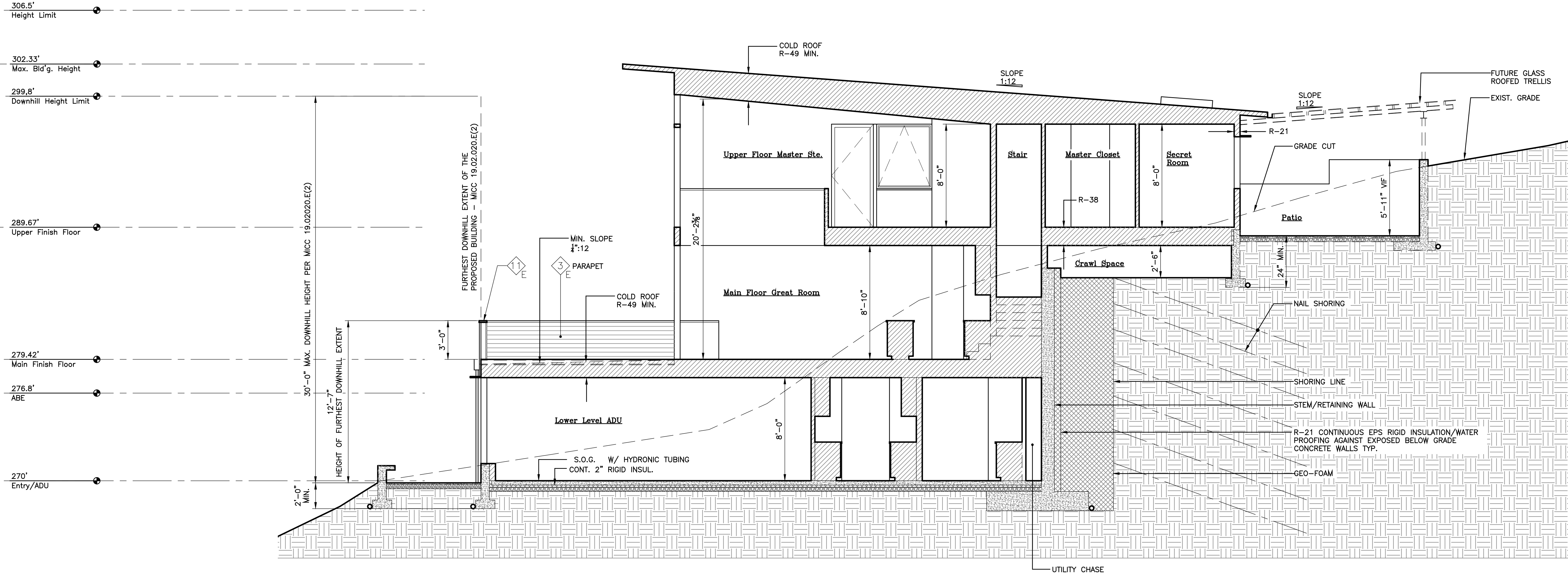
- 1 E TAYLOR METALS "COOL" KYNAR 500 CORRUGATED CLASSIC 7" VERTICAL SIDING - GRAPHITE BLACK (SRI-26) - UL 790 CLASS A FIRE RATED
- 2 E METAL PANEL/COPING/FLASHING/SILL - COLOR TO MATCH METAL SIDING
- 3 E HORIZONTAL CLEAR 3" EXP. CEDAR SHIPLAP SIDING - STAIN COLOR TBD
- 4 E METAL GUTTER/OVERFLOW SCUPPER/DOWNSPOUT METAL - COLOR TO MATCH METAL WALL SIDING.
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**STEINBORN RESIDENCE**

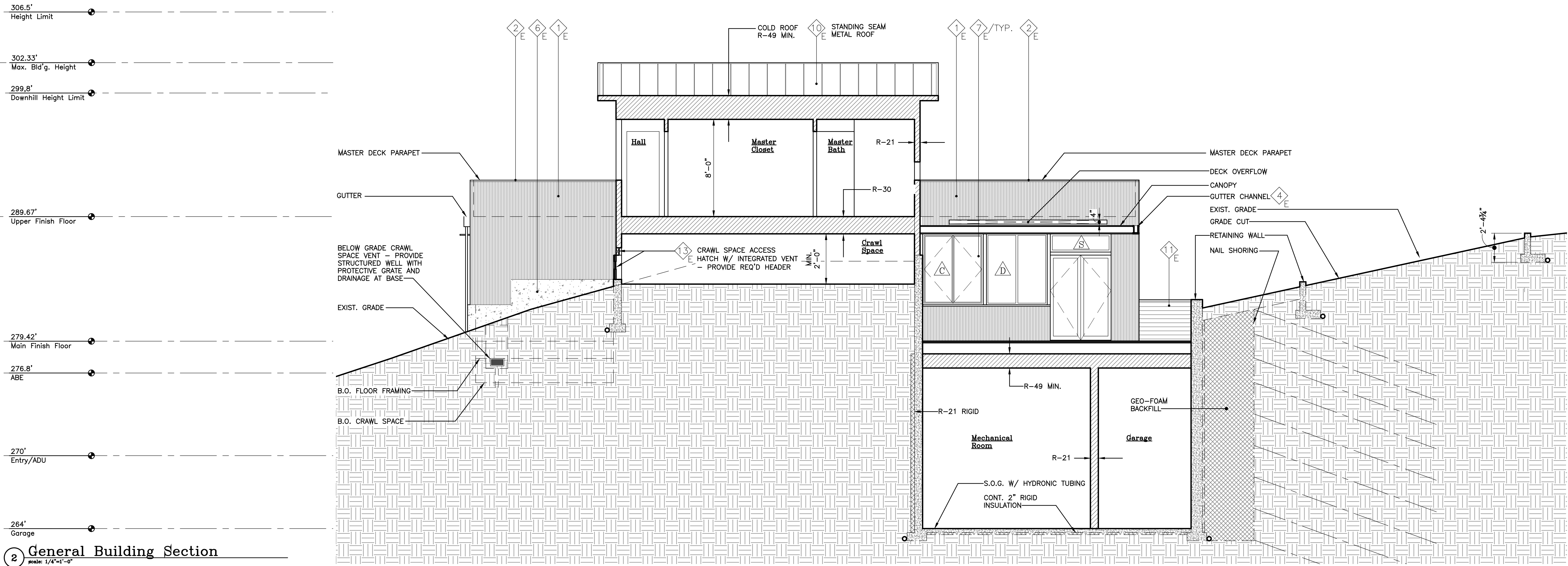
New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

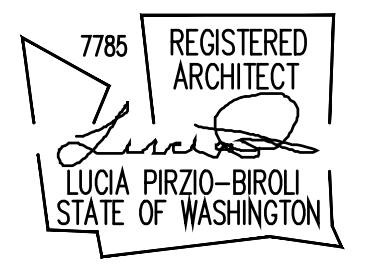
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1 General Building Section  
Scale: 1/4"=1'-0"



2 General Building Section  
Scale: 1/4"=1'-0"



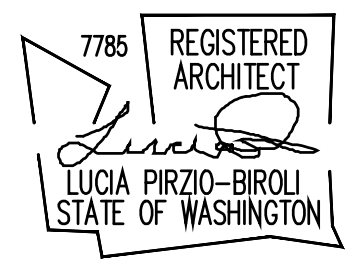
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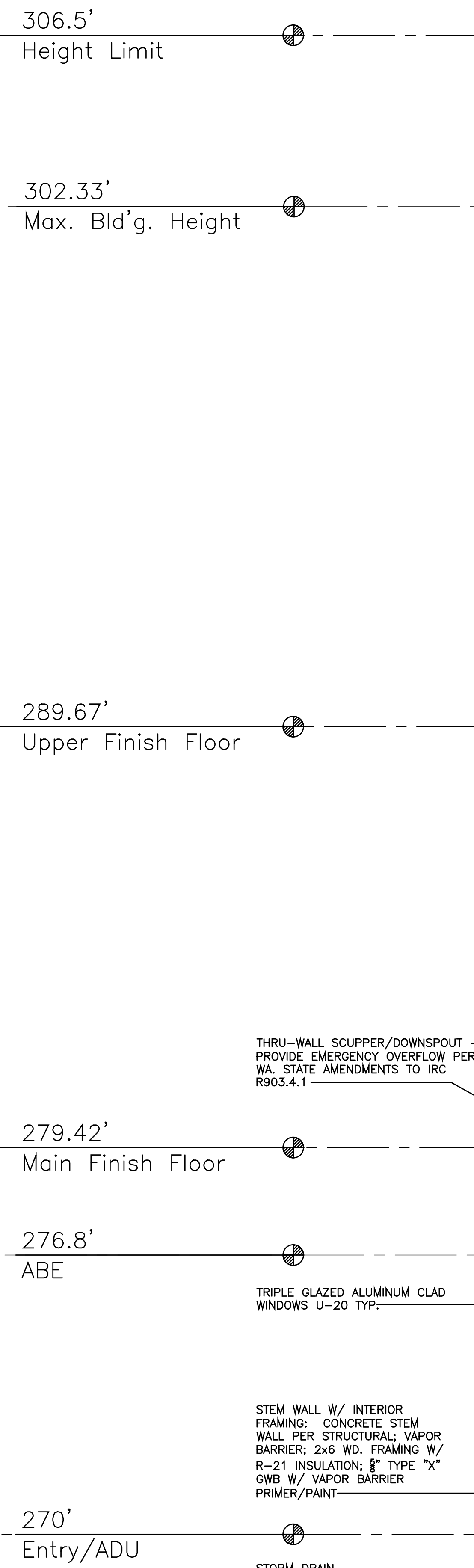
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**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040



EXTERIORLY APPLIED SPRAY FOAM AT ALL STRUCTURAL BAYS

COLD ROOF (R-49 MIN INSULATION); STANDING SEAM METAL ROOFING; UNDERLAYMENT/WATER PROOFING; PLYWD. SHEATHING PER STRUCTURAL FRAMING; 3" CLOSED CELL SPRAY FOAM (R7.2 PER INCH); R-30 BATT INSULATION; FRAMING PER STRUCTURAL; FURRING AS REQUIRED; 5/8" TYPE "X" GWB; VAPOR BARRIER PAINT

1/2" VENEER PLYWD. SOFFIT

METAL PANEL; 1/2" PLYWD.; 3/8" RAIN SCREEN; BLDG. WRAP; 1/2" PLYWD. SH'T'G; FRM'G PER STRUCTURAL; CLOSED CELL SPRAY FOAM INSULATION

CURTAIN WALL- U-20

STEEL EYE-BROW TYP. @ EXPOSED WINDOWS AND DOORS

TYP. ROOF DECK: CONCRETE PAVERS ON PEDESTALS; TPO MEMBRANE & UNDERLAYMENT; 1/2" PLYWD.; RIPPED FRAMING TO SLOPE W/ CLOSED CELL SPRAY FOAM INSULATION; SH'T'G PER STRUCTURAL; FRM'G PER STRUCTURAL W/ 3" SPRAY FOAM INSULATION & BATT. INSULATION; 5/8" TYPE "X" GWB W/ VB PAINT/PRIMER

THRU-WALL SCUPPER/DOWNSPOUT - PROVIDE EMERGENCY OVERFLOW PER WA. STATE AMENDMENTS TO IRC R903.4.1

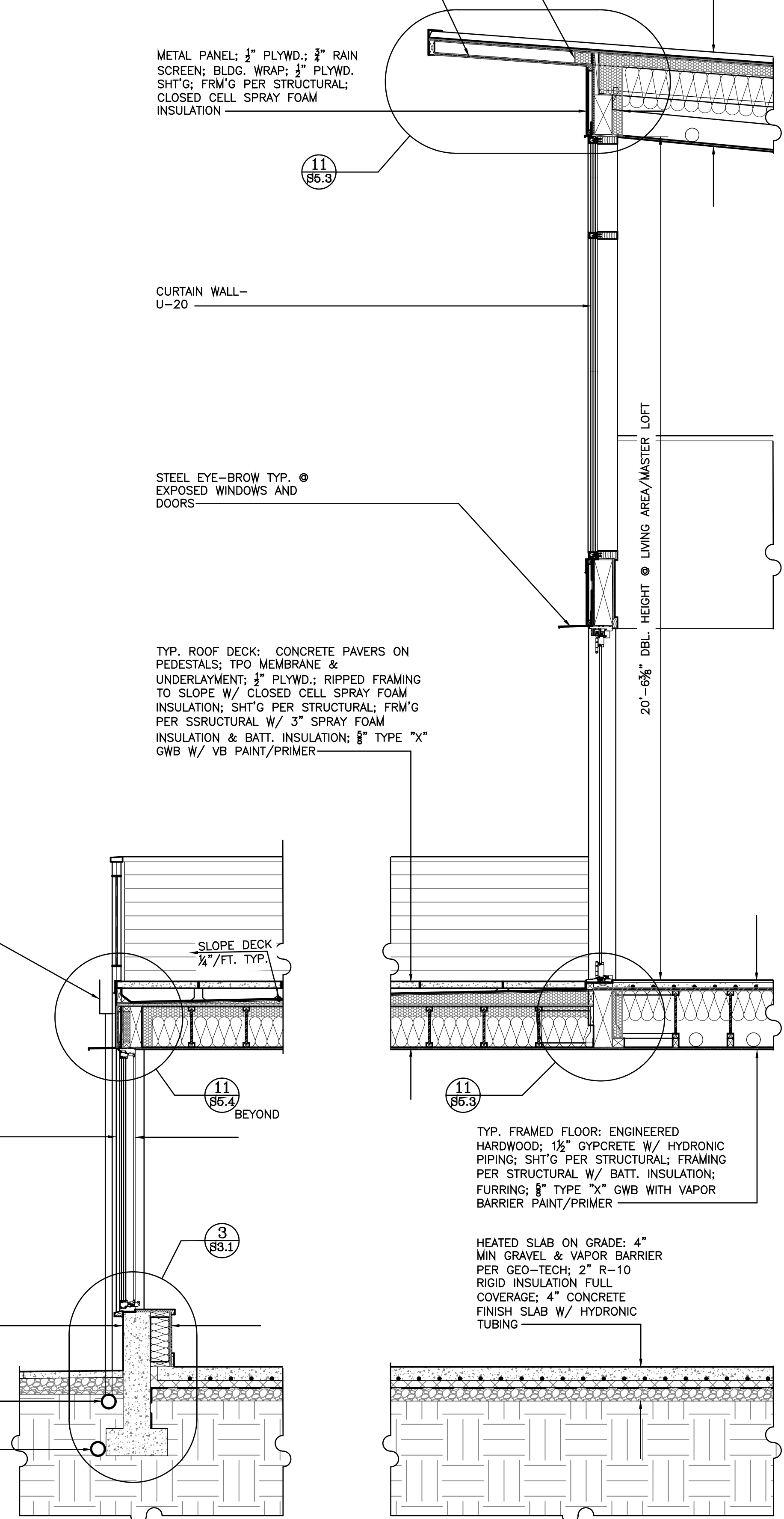
SLOPE DECK 1/4" FT. TYP.

TRIPLE GLAZED ALUMINUM CLAD WINDOWS U-20 TYP.

STEM WALL W/ INTERIOR FRAMING: CONCRETE STEM WALL PER STRUCTURAL; VAPOR BARRIER; 2x6 WD. FRAMING W/ R-21 INSULATION; 5/8" TYPE "X" GWB W/ VAPOR BARRIER PRIMER/PAINT

STORM DRAIN

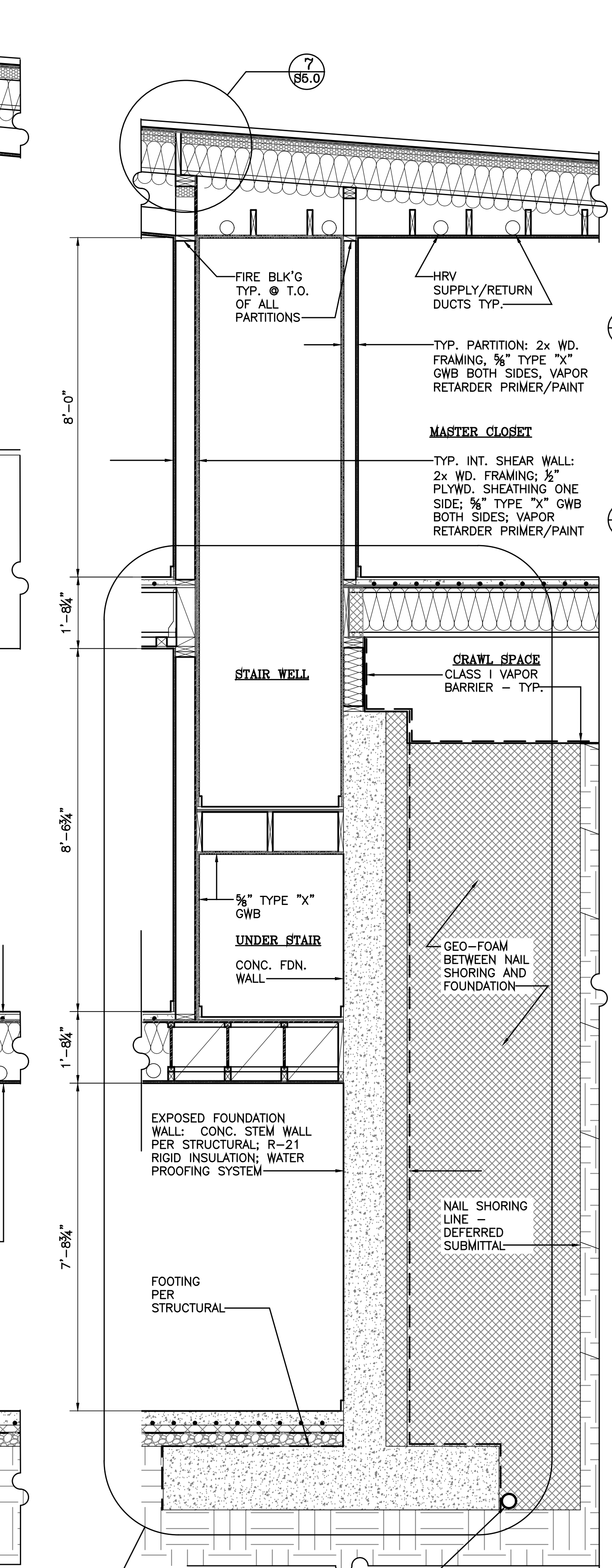
FOOTING DRAIN



20'-6 3/4" DBL. HEIGHT @ LIVING AREA/MASTER LOFT

TYP. FRAMED FLOOR: ENGINEERED HARDWOOD; 1 1/2" GYPCRETE W/ HYDRONIC PIPING; SH'T'G PER STRUCTURAL; FRAMING PER STRUCTURAL W/ BATT. INSULATION; FURRING; 5/8" TYPE "X" GWB WITH VAPOR BARRIER PAINT/PRIMER

HEATED SLAB ON GRADE: 4" MIN GRAVEL & VAPOR BARRIER PER GEO-TECH; 2" R-10 RIGID INSULATION FULL COVERAGE; 4" CONCRETE FINISH SLAB W/ HYDRONIC TUBING



FIRE BLK'G TYP. @ T.O. OF ALL PARTITIONS

HRV SUPPLY/RETURN DUCTS TYP.

TYP. PARTITION: 2x WD. FRAMING, 5/8" TYPE "X" GWB BOTH SIDES, VAPOR RETARDER PRIMER/PAINT

MASTER CLOSET

TYP. INT. SHEAR WALL: 2x WD. FRAMING; 1/2" PLYWD. SHEATHING ONE SIDE; 5/8" TYPE "X" GWB BOTH SIDES; VAPOR RETARDER PRIMER/PAINT

STAIR WELL

5/8" TYPE "X" GWB

UNDER STAIR

CONC. FDN. WALL

CRAWL SPACE

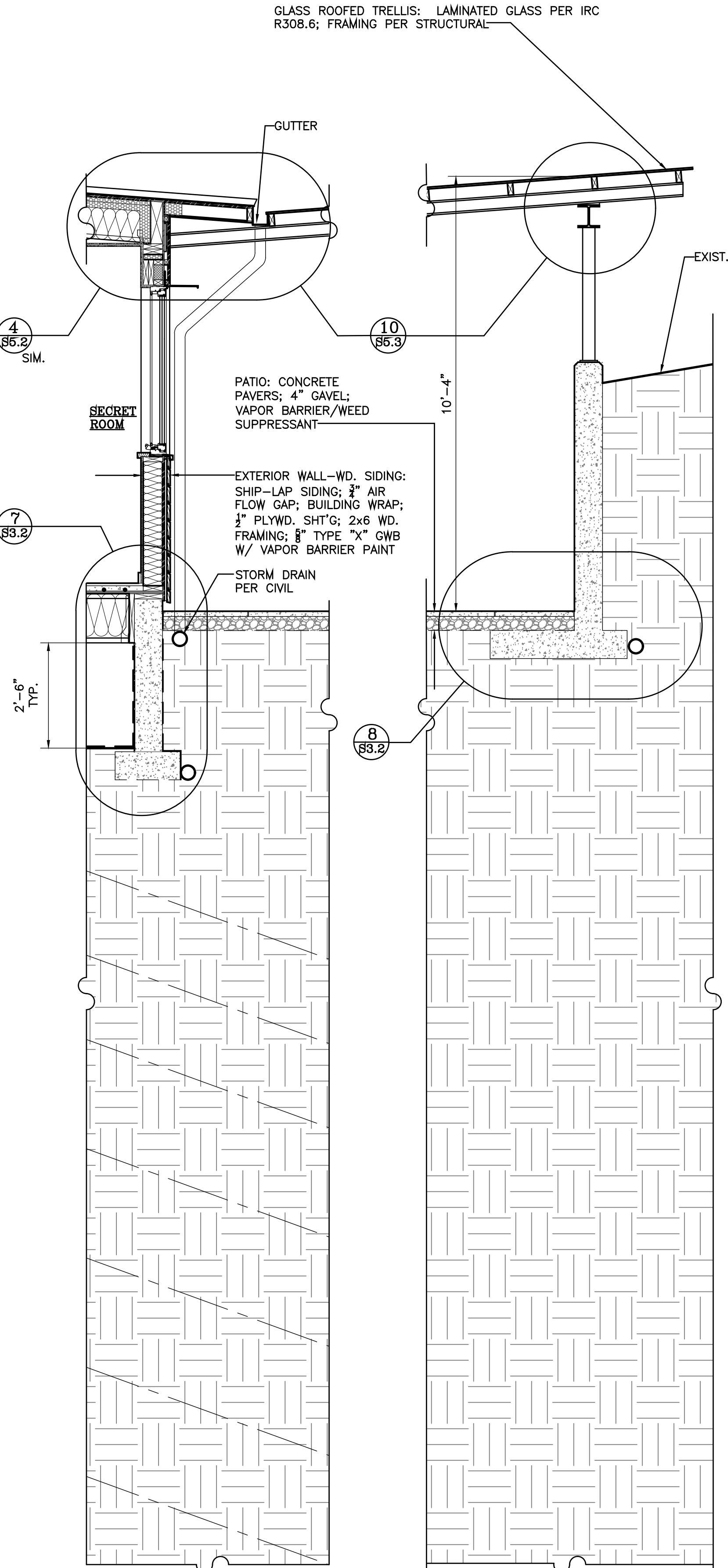
CLASS I VAPOR BARRIER - TYP.

GEO-FOAM BETWEEN NAIL SHORING AND FOUNDATION

NAIL SHORING LINE - DEFERRED SUBMITTAL

FOOTING PER STRUCTURAL

FOOTING DRAIN PER CIVIL - TYPICAL



GLASS ROOFED TRELLIS: LAMINATED GLASS PER IRC R308.6; FRAMING PER STRUCTURAL

GUTTER

PATIO: CONCRETE PAVERS; 4" GAVEL; VAPOR BARRIER/WEED SUPPRESSANT

SECRET ROOM

EXTERIOR WALL-WD. SIDING: SHIP-LAP SIDING; 3/8" AIR FLOW GAP; BUILDING WRAP; 1/2" PLYWD. SH'T'G; 2x6 WD. FRAMING; 5/8" TYPE "X" GWB W/ VAPOR BARRIER PAINT

STORM DRAIN PER CIVIL

EXIST. GRADE

1 Wall Section  
Scale: 1/8"=1'-0"

Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

Scale:  
Sheet:



# Window Schedule

TAG	UNIT BREAK DOWN	WINDOW R.O.		UNIT AREA square ft.	QTY.	TOTAL window area	MAX U-VALUE NOTE 8	UA VALUE	HEAD HEIGHT (ASF)	TYPE OPERATION	SCREEN	TYPE	FRAME / FINISH	GLASS	MANUF.	CLAD COLOR	NOTES	
		Notes 1, 2 & 9												NOTES 6&8				
		width	height															
A		1'-0"	x 7'-0"	7.0 SQ. FT.	1	7.0 SQ. FT.	0.20	1.4 SQ. FT.	7'-0"	DIRECT SET			CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON/TG	LOEWEN	STEEL MATTE BLACK	CUSTOM COORDINATE W/ ADJ. PIVOT DOOR	
B		9'-6 1/2"	x 6'-0"	69.3 SQ. FT.	2	138.5 SQ. FT.	0.20	27.7 SQ. FT.	8'-0"				CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON/TG	LOEWEN	STEEL MATTE BLACK	COORD. W/ CONCRETE STEM WALL	
	B1	3'-4 1/2"								FIX								ALIGN MULLION W/ RAILING STANCHION WHERE OCCURS
	B2	3'-5 1/2"								FIX								ALIGN MULLION W/ RAILING STANCHION WHERE OCCURS
	B3	2'-8 1/2"								CASE	X							ALIGN MULLION W/ RAILING STANCHION WHERE OCCURS
C		5'-0"	x 5'-10"	29.2 SQ. FT.	2	58.3 SQ. FT.	0.20	11.7 SQ. FT.	8'-10"	CASE	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK		
D		5'-0"	x 5'-10"	29.2 SQ. FT.	4	116.7 SQ. FT.	0.20	23.3 SQ. FT.	8'-10"	FIX			CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	TEMPERED GLASS @ ADJ. DOOR	
E		2'-6"	x 5'-10"	14.6 SQ. FT.	1	14.6 SQ. FT.	0.20	2.9 SQ. FT.	8'-10"	CASE	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORD. WIDTH AS REQ'D W/ ARCH & STRUCTURAL. / SILL HEIGHT ABV. UPPER SUB-FLOOR	
E		7'-11 1/2"	x 5'-10"	67.8 SQ. FT.	1	67.8 SQ. FT.	0.20	13.6 SQ. FT.	8'-10"	CASE	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORD. MULLIONS W/ ADJ. UNITS	
F1		2'-6"	x 5'-10"	14.6 SQ. FT.	1	14.6 SQ. FT.	0.20	2.9 SQ. FT.	8'-10"	FIX		CORNER	CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORDINATE W/ F2	
F2		3'-0"	x 5'-10"	17.5 SQ. FT.	1	17.5 SQ. FT.	0.20	3.5 SQ. FT.	8'-10"	CASE	X	CORNER	CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORDINATE W/ F1 / EGRESS	
G		14'-1"	x 10'-4"	145.5 SQ. FT.	1	145.5 SQ. FT.	0.20	29.1 SQ. FT.	10'-4"	FIX		CURTAIN WALL	CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORDINATE HORIZONTAL MULLION W/ H	
	G1	3'-7"	x 7'-10 1/2"															
	G2	3'-7"	x 2'-5 1/2"															
	G3	10'-6"	x 2'-5 1/2"															
	G4	10'-6"	x 7'-10 1/2"															
H		7'-9"	x 7'-4"	56.8 SQ. FT.	1	56.8 SQ. FT.	0.20	11.4 SQ. FT.	10'-4"			CURTAIN WALL	CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON/TG	LOEWEN	STEEL MATTE BLACK	COORDINATE HORIZONTAL MULLION W/ G	
	H1	5'-1 1/2"	x 4'-10 1/2"							FIX								
	H2	5'-1 1/2"	x 2'-5 1/2"							FIX								
	H3	2'-7 1/2"	x 2'-5 1/2"							FIX								
	H4	2'-7 1/2"	x 4'-10 1/2"							CASE	X							
I		2'-0"	x 12'-6"	25.0 SQ. FT.	1	25.0 SQ. FT.	0.20	5.0 SQ. FT.	VIF	CASE	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORDINATE W/ OVERHEAD DOOR	
J		3'-0"	x 1'-0"	3.0 SQ. FT.	3	9.0 SQ. FT.	0.20	1.8 SQ. FT.		TRANSOM/FIX			CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORDINATE W/ DOOR	
K		2'-6 1/2"	x 3'-10 1/2"	32.7 SQ. FT.	1	32.7 SQ. FT.	0.50	16.4 SQ. FT.		SOLAR POWERED				TRPL/LO-E/ARGON/TG	VELUX		SOLAR POWERED W/ SCREEN & SHADE	
L		7'-9 1/2"	x 5'-0"	54.0 SQ. FT.	1	54.0 SQ. FT.	0.20	10.8 SQ. FT.	8'-0"				CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK		
	L1	3'-4"								FIX								
	L2	4'-5 1/2"								CASE	X							
M		4'-6"	x 5'-0"	22.5 SQ. FT.	2	45.0 SQ. FT.	0.20	9.0 SQ. FT.	8'-0"	AWN	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON/TG	LOEWEN	STEEL MATTE BLACK		
N		2'-4"	x 4'-4"	10.1 SQ. FT.	2	20.2 SQ. FT.	0.20	4.0 SQ. FT.	8'-10"	CASE	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	TEMPERED GLASS @ SHOWER	
O		5'-10"	x 4'-0"	23.3 SQ. FT.	1	23.3 SQ. FT.	0.20	4.7 SQ. FT.	7'-0"				CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON/TG	LOEWEN	STEEL MATTE BLACK		
	O1	3'-8"								FIX								
	O2	2'-2"								CASE	X							
P		2'-0"	x 3'-4"	6.7 SQ. FT.	1	6.7 SQ. FT.	0.20	1.3 SQ. FT.	7'-0"	CASE	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK		
Q		7'-2"	x 1'-6"	10.8 SQ. FT.	1	10.8 SQ. FT.	0.20	2.2 SQ. FT.	4'-6" VIF				CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON/TG	LOEWEN	STEEL MATTE BLACK		
	Q1	4'-9"								FIX								
	Q2	2'-5"								AWN	X							
R		3'-11"	x 5'-0"	19.6 SQ. FT.	1	19.6 SQ. FT.	0.20	3.9 SQ. FT.	8'-0"	AWN	X		CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK		
S		5'-0"	x 1'-6"	7.5 SQ. FT.	1	7.5 SQ. FT.	0.20	1.5 SQ. FT.	8'-10"	TRANSOM			CLAD/WD/FACTORY FINISH	TRPL/LO-E/ARGON	LOEWEN	STEEL MATTE BLACK	COORD. W/ DOOR #4	
WINDOW UA:		WINDOW AREA		891.1 SQ. FT.	TOTAL UA	188.0 SQ. FT.												

### WINDOW NOTES:

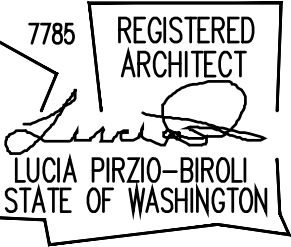
- CONTRACTOR SHALL MEASURE ACTUAL FRAMED OPENINGS PRIOR TO ORDERING UNITS. ROUGH OPENING PER MANUFACTURER'S REQUIREMENTS.
- UNIT BREAK DOWN W/ IN ROUGH OPENING
- WINDOW MANUFACTURER: LOEWEN EXCEPT AS NOTED OTHERWISE
- WINDOW MANUFACTURER TO VERIFY OPERATION AND WIDTH OPENING - COORDINATE WITH ARCHITECT WHERE DIFFERS FROM DRAWINGS
- TEMPERED GLASS: WITHIN TWO FEET OF ALL EXTERIOR DOORS, WITHIN 18" OF FLOOR, IN SHOWERS AND OTHER HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC R308.4
- GLASS - LO-E3/LOW ERS / ARGON FILLED AT ALL LOEWEN WINDOWS.
- EGRESS WINDOWS AT SLEEPING ROOMS SHALL MEET IRC R310
- EC 1.2: EFFICIENT BUILDING ENVELOPE ALL NEW EXTERIOR WINDOWS SHALL MEET MINIMUM U-20 MINIMUM COMPLIANCE.
- WHERE MULTIPLE UNITS MULLED TOGETHER - LETTERED UNIT IS OVERALL & EFFICIENCY. LETTERED/NUMBERED UNITS ARE BREAKDOWN
- OBSCURED GLASS AS NOTED.
- SCREENS ON ALL OPERABLE WINDOWS.

### ABBREVIATIONS

- |       |                  |
|-------|------------------|
| AWN   | AWNING           |
| CASE  | CASEMENT         |
| CLR   | CLEAR            |
| DBL   | DOUBLE GLAZING   |
| FIX   | FIXED            |
| HC    | HOLLOW CORE      |
| LAM   | LAMINATED        |
| LO-E  | LOW-EMISSIVITY   |
| MIN   | MINUTE           |
| OBS   | OBSCURE          |
| R.O.  | ROUGH OPENING    |
| SC    | SOLID CORE       |
| SLD   | SLIDING          |
| SK    | SKYLIGHT         |
| STORE | STOREFRONT       |
| TBD   | TO BE DETERMINED |
| TG    | TEMPERED GLASS   |
| TRPL  | TRIPLE           |
| UA    | U-VALUE AREA     |
| WD    | WOOD             |

**ECTYPOS**  
ARCHITECTURE

4212 W. Mercer Way  
Mercer Island, WA 98040  
t. (206) 232-9147  
f. (206) 275-0312



# STEINBORN RESIDENCE

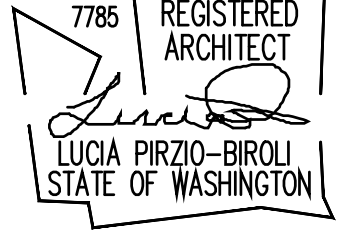
New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

Scale:

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Window  
Schedule  
A9.1



Exterior Door to Conditioned Space

Table with columns: TAG, PANEL SIZE (width, height), UNIT AREA (square ft.), PANEL QTY., TOTAL door area, MAX U-VALUE, UA VALUE, Thickness, TYPE, HARDWARE NOTE 3, MATERIAL/FINISH, FRAME/FINISH, GLASS NOTE 10, MANUF., COLOR, NOTES. Includes a vertical label 'ELEVATOR DOORS NOTE 13' on the left side.

WINDOW & EXTERIOR DOOR NOTES:

- 1. CONTRACTOR SHALL MEASURE ACTUAL FRAMED OPENINGS PRIOR TO ORDERING UNITS. ROUGH OPENING PER MANUFACTURER'S REQUIREMENTS.
2. UNIT BREAK DOWN W/ IN ROUGH OPENING
3. (3) MINIMUM HEAVY DUTY CONCEALED HINGES MIN. AT ALL EXTERIOR SWING DOORS
4. 3 POINT LOCKING SYSTEM MINIMUM AT BI-FOLD DOORS
5. MANUFACTURER: LOEWEN, EXCEPT AS NOTED OTHERWISE
6. WINDOW MANUFACTURER TO VERIFY OPERATION AND WIDTH OPENING - COORDINATE WITH ARCHITECT WHERE DIFFERS FROM DRAWINGS
7. TEMPERED GLASS: WITHIN TWO FEET OF ALL EXTERIOR DOORS, WITHIN 18" OF FLOOR, IN SHOWERS AND OTHER HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC R308.4
8. GLASS - LO-E3/LOW ERS / ARGON FILLED AT ALL LOEWEN WINDOWS AND EXTERIOR DOORS.
9. EGRESS WINDOWS AT SLEEPING ROOMS SHALL MEET IRC R310
10. EC 1.2: EFFICIENT BUILDING ENVELOPE ALL NEW EXTERIOR WINDOWS AND GLAZED DOORS SHALL MEET MINIMUM U-20 MINIMUM COMPLIANCE.
11. OBSCURED GLASS AS NOTED.
12. SCREENS ON ALL OPERABLE WINDOWS, SLIDING GLASS DOORS AND SWING DOORS AS NOTED.
13. ELEVATOR DOORS: 20 MINUTE WITH SELF-CLOSING HARDWARE

ABBREVIATIONS table listing terms like AWN, CASE, CLR, DBL, FIX, HC, LAM, LO-E, MIN, OBS, R.C., R.O., SC, SLD, SL, STORE, TBD, TG, TRPL, UA, WD and their corresponding meanings.

Interior Door Schedule

Table with columns: TAG, PANEL SIZE (width, height), PANEL QTY., UNIT AREA (square ft.), Thickness, TYPE, LOCATION, MATERIAL/ FINISH, GLASS, HARDWARE NOTE 4, MANUF., NOTES.

INTERIOR DOOR NOTES:

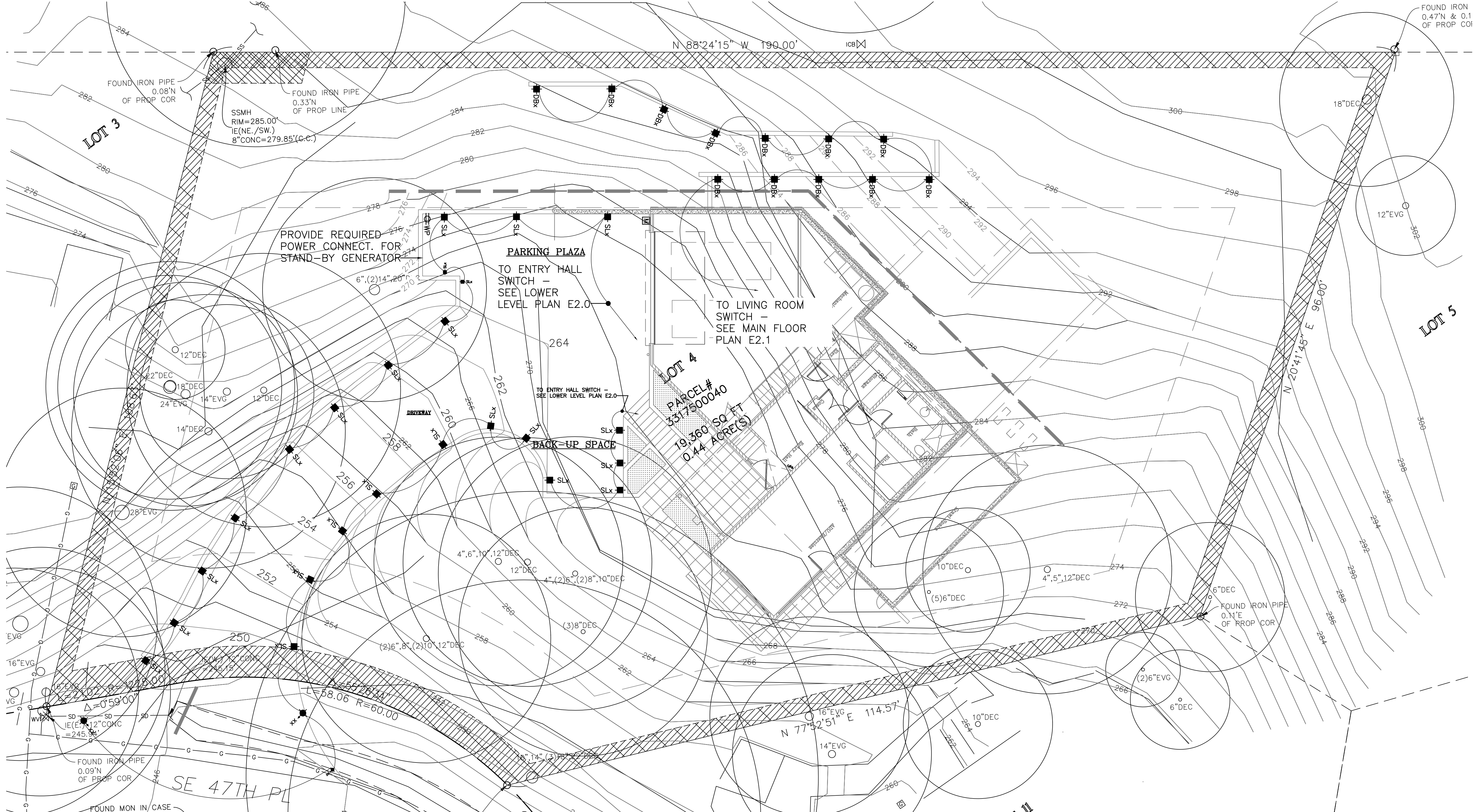
- 1. ALL NON-CLOSET FLUSH DOORS - SOLID CORE
2. (3) HINGES MINIMUM
3. HANDLE LEVER UNO
4. UNDERCUT DOORS 1/2" TO HABITABLE SPACES AS NECESSARY TO MEET WHOLE HOUSE VENTILATION REQUIREMENTS
5. MEASURE PRIOR TO ORDERING DOORS.

STEINBORN RESIDENCE

New Residence  
8435 SE 47th PL.  
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**ECTYPOS**  
ARCHITECTURE

4212 W. Mercer Way  
Mercer Island, WA 98040  
t. (206) 232-9147  
f. (206) 275-0312

7785 REGISTERED ARCHITECT  
*Lucia*  
LUCIA PIRZIO-BIROLI  
STATE OF WASHINGTON

**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

**1 Site Electrical Plan**  
Scale: 1/8"=1'-0"

**Power and Lighting Legend**

- CFM Recessed Ceiling Mounted Exhaust Fan
- ⊙ SC Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
- ⊙ HD Heat Detector / Heat Alarm
- ⊙ C Cable Connection
- ⊙ FC Floor Mounted Cable Connection
- ⊙ DDO Dedicated Data Outlet (CatV)
- ⊙ S Switch
- ⊙ SM Switch, Multi-way
- ⊙ SD Switch, Dimmer
- ⊙ SDD Switch, Dimmer/Multi-way
- ⊙ DA Dr. Act.
- ⊙ DO Duplex Outlet
- ⊙ GFI Ground Fault Circuit Interrupter
- ⊙ WPE Exterior Duplex Outlet
- ⊙ FPO Four-plex Outlet
- ⊙ FDO Floor Mounted Duplex Outlet

- ⊙ SO Strip Outlets
- ⊙ 220V 220 V Outlet
- ⊙ P Breaker Panel
- ⊙ M Meter
- ⊙ S Security Panel
- ⊙ RCD Recessed Ceiling Mounted LED Downlight
- ⊙ RCDW Recessed Ceiling Mounted LED Wallwasher
- ⊙ SCD Surface Ceiling Mounted LED Downlight
- ⊙ SSW Surface Mounted Wall LED Sconce
- ⊙ STL Surface Mounted Track LED Lighting
- ⊙ SUC Surface Mounted Undercabinet Strip LED Lighting
- ⊙ RLL Ribbon LED linear light
- ⊙ PXX Pendant Fixture
- ⊙ CXX Cluster Pendant Fixture
- ⊙ SLDL Surface Mounted Downlight

- ⊙ xx Surface Mounted LED Batten Fixture
- ⊙ xx Recessed Mounted Wall LED Washer
- ⊙ xx Recessed Wall LED Light
- ⊙ xx Exterior Recessed Ceiling Mounted LED Downlight
- ⊙ xx Exterior Ground LED Light
- ⊙ Sxx Exterior Surface Mounted Wall LED Sconce
- ⊙ SLx Exterior Recessed Wall LED Step Light
- ⊙ DBx Exterior Direct Burial Uplight
- ⊙ xx Pool Light
- ⊙ Waste Disposal
- ⊙ Level 2 240V EV Charger
- ⊙ CFCL Ceiling Fan with Light
- ⊙ SC Security Camera w/ Night Vision Capability

**NOTES:**  
1- INSTALL HOUSEHOLD FIRE ALARM  
2- INSTALL COMPREHENSIVE SECURITY

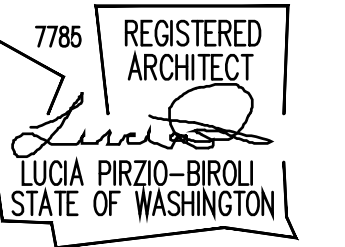
Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

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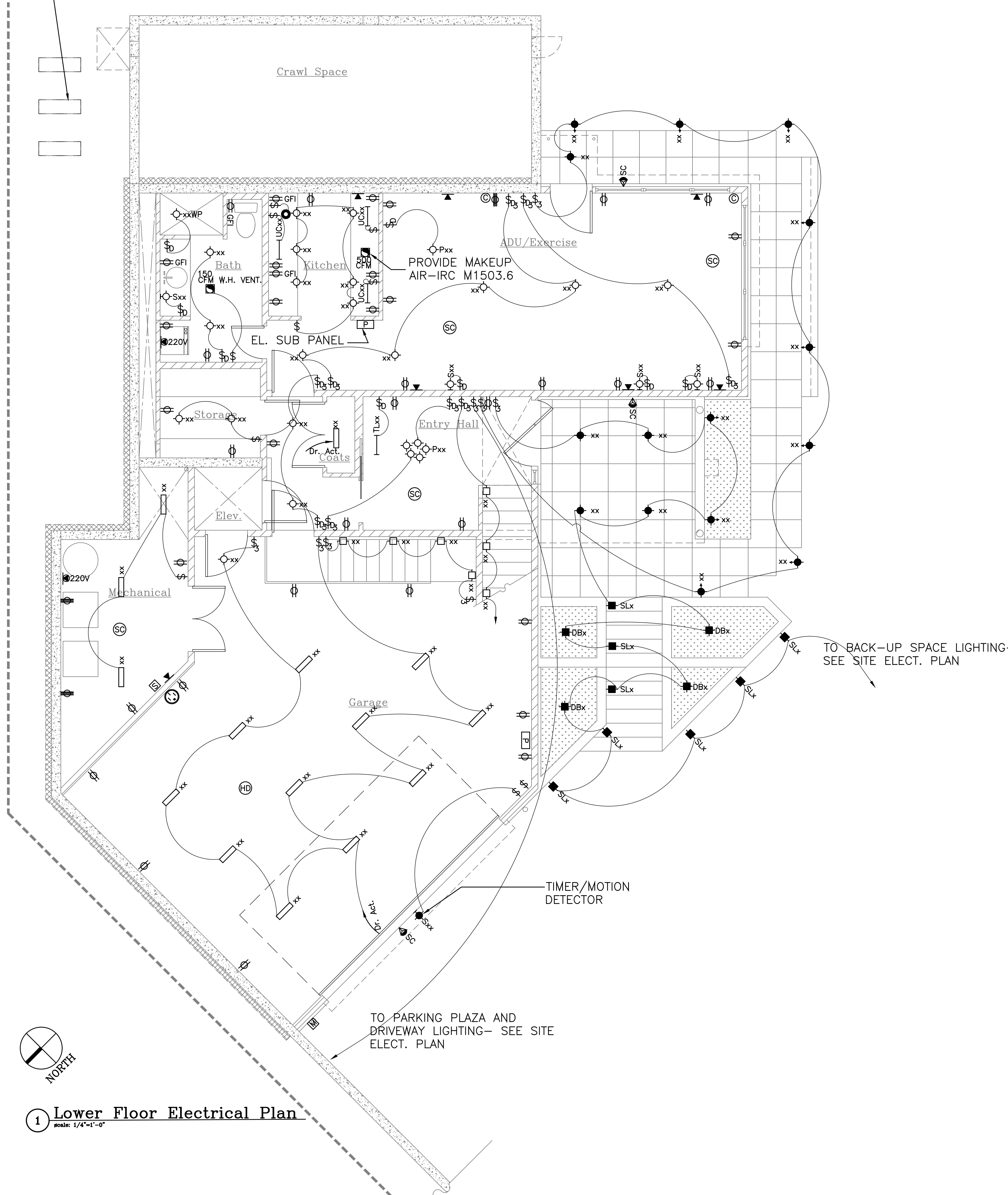
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Site Electrical Plan

E1.0



PROVIDE REQUIRED POWER:  
MINI-SPLIT & AIR TO WATER  
CONDENSER



**Power and Lighting Legend**

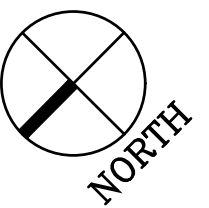
- Recessed Ceiling Mounted Exhaust Fan
- Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
- Heat Detector / Heat Alarm
- Cable Connection
- Floor Mounted Cable Connection
- Dedicated Data Outlet (CatVI)
- Switch
- Switch, Multi-way
- Switch, Dimmer
- Switch, Dimmer/Multi-way
- Switch, Door Activated
- Duplex Outlet
- Ground Fault Circuit Interrupter
- Exterior Duplex Outlet
- Four-plex Outlet
- Floor Mounted Duplex Outlet
- Strip Outlets
- 220 V Outlet
- Breaker Panel
- Meter
- Security Panel
- Recessed Ceiling Mounted LED Downlight
- Recessed Ceiling Mounted LED Wallwasher
- Surface Ceiling Mounted LED Downlight
- Surface Mounted Wall LED Sconce
- Surface Mounted Track LED Lighting
- Surface Mounted Undercabinet Strip LED Lighting
- Ribbon LED linear light
- Pendant Fixture
- Cluster Pendant Fixture
- Surface Mounted Downlight
- Surface Mounted LED Batten Fixture
- Recessed Mounted Wall LED Washer
- Recessed Wall LED Light
- Exterior Recessed Ceiling Mounted LED Downlight
- Exterior Ground LED Light
- Exterior Surface Mounted Wall LED Sconce
- Exterior Recessed Wall LED Step Light
- Exterior Direct Burial Uplight
- Pool Light
- Waste Disposal
- Level 2 240V EV Charger
- Ceiling Fan with Light
- Security Camera w/ Night Vision Capability

**NOTES:**

- 1- INSTALL HOUSEHOLD FIRE ALARM
- 2- INSTALL COMPREHENSIVE SECURITY

**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

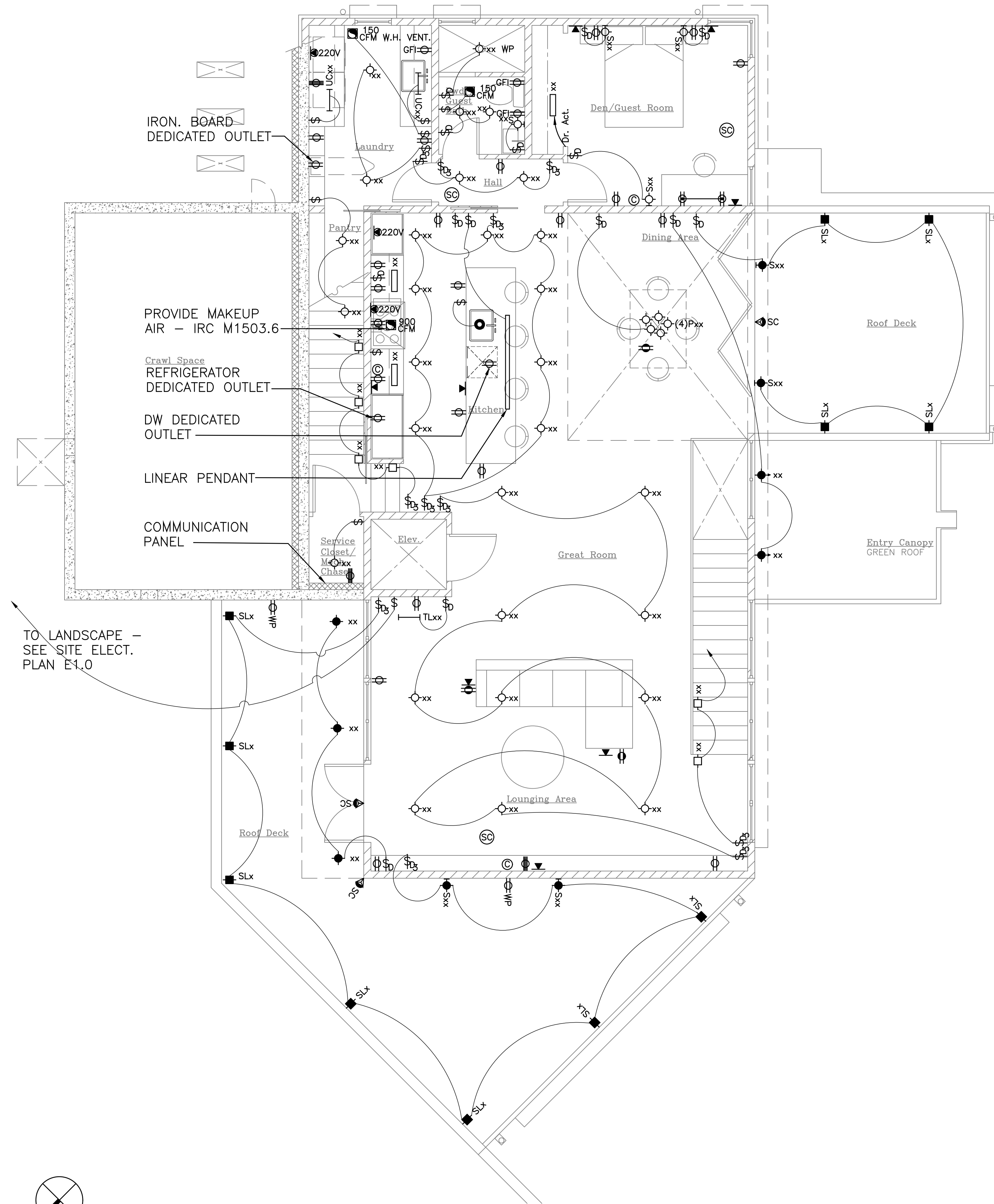
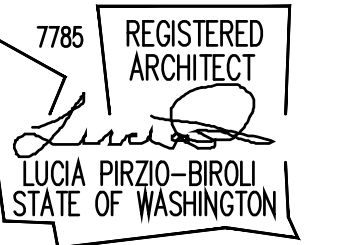


**1 Lower Floor Electrical Plan**  
Scale: 1/4"=1'-0"

Date: 3/15/2021 Pre-App  
2/14/2022 Permit Submittal

Scale:

Sheet:



IRON. BOARD  
DEDICATED OUTLET

PROVIDE MAKEUP  
AIR - IRC M1503.6

Crawl Space  
REFRIGERATOR  
DEDICATED OUTLET

DW DEDICATED  
OUTLET

LINEAR PENDANT

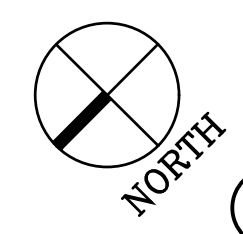
COMMUNICATION  
PANEL

TO LANDSCAPE -  
SEE SITE ELECT.  
PLAN E1.0

**Power and Lighting Legend**

- Recessed Ceiling Mounted Exhaust Fan
- Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
- Heat Detector / Heat Alarm
- Cable Connection
- Floor Mounted Cable Connection
- Dedicated Data Outlet (CatV)
- Switch
- Switch, Multi-way
- Switch, Dimmer
- Switch, Dimmer/Multi-way
- Switch, Door Activated
- Duplex Outlet
- Ground Fault Circuit Interrupter
- Exterior Duplex Outlet
- Four-plex Outlet
- Floor Mounted Duplex Outlet
- Strip Outlets
- 220 V Outlet
- Breaker Panel
- Meter
- Security Panel
- Recessed Ceiling Mounted LED Downlight
- Recessed Ceiling Mounted LED Wallwasher
- Surface Ceiling Mounted LED Downlight
- Surface Mounted Wall LED Sconce
- Surface Mounted Track LED Lighting
- Surface Mounted Undercabinet Strip LED Lighting
- Ribbon LED linear light
- Pendant Fixture
- Cluster Pendant Fixture
- Surface Mounted Downlight
- Surface Mounted LED Batten Fixture
- Recessed Mounted Wall LED Washer
- Recessed Wall LED Light
- Exterior Recessed Ceiling Mounted LED Downlight
- Exterior Ground LED Light
- Exterior Surface Mounted Wall LED Sconce
- Exterior Recessed Wall LED Step Light
- Exterior Direct Burial Uplight
- Pool Light
- Waste Disposal
- Level 2 240V EV Charger
- Ceiling Fan with Light
- Security Camera w/ Night Vision Capability

**NOTES:**  
1- INSTALL HOUSEHOLD FIRE ALARM  
2- INSTALL COMPREHENSIVE SECURITY



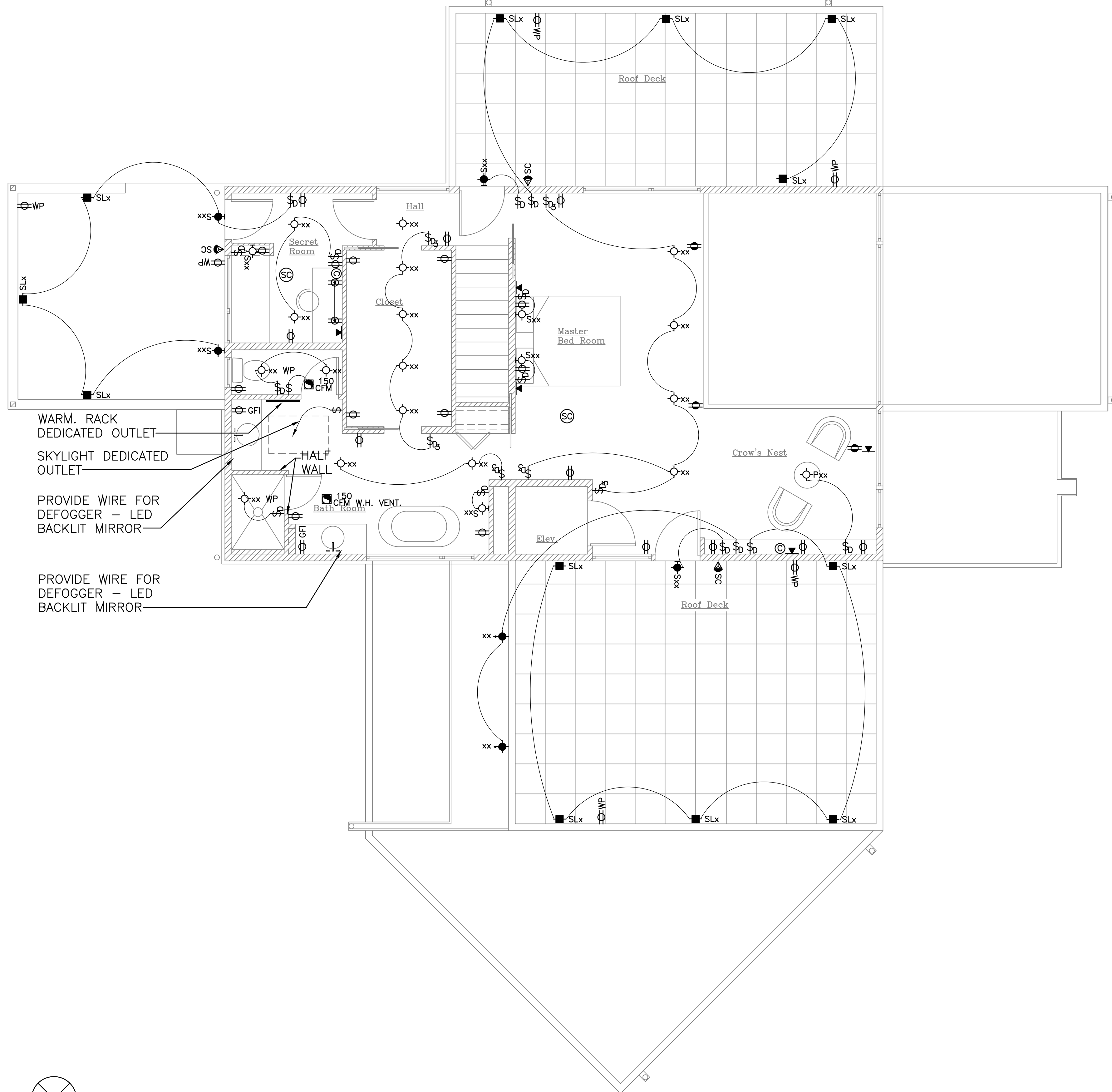
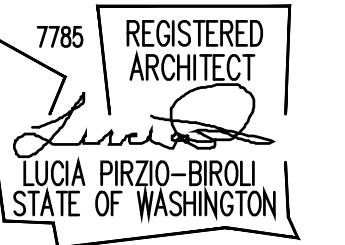
**1 Main Floor Electrical Plan**  
Scale: 1/4"=1'-0"

**STEINBORN RESIDENCE**  
New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

Date: **3/15/2021 Pre-App**  
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Scale:  
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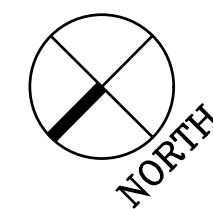
**Main Floor  
Electrical Plan  
E2.1**



**Power and Lighting Legend**

- Recessed Ceiling Mounted Exhaust Fan
- Recessed Ceiling Mounted Smoke Detector/Carbon Monoxide
- Heat Detector / Heat Alarm
- Cable Connection
- Floor Mounted Cable Connection
- Dedicated Data Outlet (CatV)
- Switch
- Switch, Multi-way
- Switch, Dimmer
- Switch, Dimmer/Multi-way
- Switch, Door Activated
- Duplex Outlet
- Ground Fault Circuit Interrupter
- Exterior Duplex Outlet
- Four-plex Outlet
- Floor Mounted Duplex Outlet
- Strip Outlets
- 220 V Outlet
- Breaker Panel
- Meter
- Security Panel
- Recessed Ceiling Mounted LED Downlight
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- Pendant Fixture
- Cluster Pendant Fixture
- Surface Mounted Downlight
- Surface Mounted LED Batten Fixture
- Recessed Mounted Wall LED Washer
- Recessed Wall LED Light
- Exterior Recessed Ceiling Mounted LED Downlight
- Exterior Ground LED Light
- Exterior Surface Mounted Wall LED Sconce
- Exterior Recessed Wall LED Step Light
- Exterior Direct Burial Uplight
- Pool Light
- Waste Disposal
- Level 2 240V EV Charger
- Ceiling Fan with Light
- Security Camera w/ Night Vision Capability

NOTES:  
1- INSTALL HOUSEHOLD FIRE ALARM  
2- INSTALL COMPREHENSIVE SECURITY



**1 Upper Floor Electrical Plan**  
Scale: 1/4"=1'-0"

**STEINBORN RESIDENCE**

New Residence  
8435 SE 47th PL.  
Mercer Island, WA 98040

Date: **3/15/2021 Pre-App**  
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Scale:

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Upper Floor  
Electrical Plan  
**E2.2**





37. LAMINATED VENEER LUMBER (LVL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F<sub>v</sub> = 2800 PSI, F<sub>v</sub> = 285 PSI, E = 2,000,000 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER, ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

38. LAMINATED STRAND LUMBER (LSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED ICC-ES EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: F<sub>v</sub> = 2325 PSI, F<sub>v</sub> = 310 PSI, E = 1,550,000 PSI,

LSL RIM JOISTS SHALL CONFORM TO ANSI/APA PRR 410 AND SHALL BE MARKED IN ACCORDANCE WITH THE STANDARD.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER, ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

39. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOIST MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

40. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1-09 OR PS 2-18 AND AMERICAN PLYWOOD ASSOCIATION PERFORMANCE STANDARD PRP-108. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATINGS AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS. EACH PANEL SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY.

41. ALL WOOD PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE, PROVIDE 2 LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC. AND CONCRETE OR MASONRY.

PRESSURE TREATED LUMBER SHALL COMPLY WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1, COMMODITY SPECIFICATION A AS INDICATED BELOW OR HAVE EQUIVALENT ICC-ES APPROVAL.

PROPOSED USE		AWPA USE CATEGORY
RESIDENTIAL DECKS	DECKING	3B
	JOISTS ABOVE GROUND	3B
	POSTS	4A
	RAILING	3B
	LEDGERS	3B
SAWN LUMBER	ABOVE GROUND	3B
	DAMP ABOVE GROUND	2
	EXTERIOR ABOVE GROUND	3B
PLYWOOD		2
		3B
SILL PLATES	IN CONTACT WITH CONCRETE OR MASONRY	2
INTERIOR LEDGERS	IN CONTACT WITH CONCRETE OR MASONRY	2

ALL TREATED LUMBER SHALL BEAR THE QUALITY MARK OF AN ACCREDITED INSPECTION AGENCY. THE QUALITY MARK SHALL INCLUDE:

- A. IDENTIFICATION OF TREATING MANUFACTURER  
 B. TYPE OF PRESERVATIVE USED  
 C. MINIMUM PRESERVATIVE RETENTION (PCF)  
 D. END USE FOR WHICH THE PRODUCT IS TREATED  
 E. IDENTITY OF THE ACCREDITED INSPECTION AGENCY  
 F. STANDARD TO WHICH THE PRODUCT IS TREATED

42. **TIMBER CONNECTORS** CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER TO ACHIEVE THE MAXIMUM PUBLISHED ALLOWABLE LOAD. ALL CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. SHIMS, WHERE REQUIRED, SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL LAG SCREWS SHALL BE INSTALLED IN PRE-DRILLED HOLES.

UNLESS NOTED OTHERWISE ALL SAWN LUMBER JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS AND ALL PREFABRICATED PLYWOOD WEB JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "IUS" SERIES JOIST HANGERS.

ALL CONNECTIONS/FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD, SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. HOT DIPPED GALVANIZED FASTENERS SHOULD CONFORM TO ASTM STANDARD 153, AND HOT DIPPED GALVANIZED CONNECTORS SHOULD CONFORM TO ASTM STANDARD A653 (CLASS G-185). STAINLESS STEEL FASTENERS AND CONNECTORS SHOULD BE TYPE 304 OR 316. NOTE: ELECTROPLATED GALVANIZED FASTENERS AND CONNECTORS ARE NOT TO BE USED WITH PRESSURE TREATED WOOD. SIMPSON PRODUCT FINISHES CORRESPONDING TO THE ABOVE REQUIREMENTS ARE ZMAX (HOT DIPPED GALVANIZED) AND SST300 (STAINLESS STEEL). STAINLESS STEEL HARDWARE AND FASTENERS SHALL NOT BE COMBINED WITH UNTREATED OR GALVANIZED MATERIAL.

43. **WOOD FASTENERS:**

- A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d	3-1/2"	0.162"

DESIGN IS BASED ON COMMON STEEL WIRE NAILS MEETING THE REQUIREMENTS OF ASTM F1667. USE OF ALTERNATE FASTENERS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

- B. NAILS — PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

44. WOOD FRAMING NOTES — THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

- A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.10.1 OF THE INTERNATIONAL BUILDING CODE. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE AS SPECIFIED ABOVE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF BOLTS AND LAG SCREWS SHALL CONFORM TO SECTIONS 12.1.3 AND 12.1.4 OF THE 2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. NATURALLY DURABLE OR PRESSURE TREATED WOOD SHALL BE PROVIDED WHERE REQUIRED BY SECTION 2304.12 OF THE INTERNATIONAL BUILDING CODE.

- B. WALL FRAMING: ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2X6 AT 16" O.C. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. TWO 2 x 8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED AND SHALL BEAR FULLY ON A MINIMUM OF TWO STUDS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE SOLID BLOCKING BETWEEN STUDS AT MID-HEIGHT OF ALL STUD WALLS OVER 10' IN HEIGHT.

STUDS MAY BE NOTCHED, CUT, OR PENETRATED WITH ROUND BORED HOLES AS FOLLOWS:

STUD SIZE	MAXIMUM NOTCH / CUT	MAXIMUM BORED HOLE
2X4	7/8"	1-3/8"
2X6	1-3/8"	2-1/8"

BORED HOLES SHALL NOT BE LOCATED WITH 5/8" FROM THE EDGE OF THE STUD OR AT THE SAME LOCATION AS A NOTCH OR CUT.

WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d AT 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS AT 4" O.C. EACH SIDE OF JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 12" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS (WITH 7H MINIMUM EMBEDMENT) @ 4' 0" O.C. UNLESS INDICATED OTHERWISE. PROVIDE 3/4x3" x1/4" HOT-DIPPED GALVANIZED PLATE WASHERS AT ALL ANCHOR BOLTS. INDIVIDUAL MEMBERS OF BUILT UP POSTS SHALL BE NAILED TO EACH OTHER WITH 16d NAILS @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES NAILED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH NAILS AT 7" O.C. USE 5d COOLER NAILS FOR 1/2" GWB AND 6d COOLER NAILS FOR 5/8" GWB. PROVIDE 15/32" APA RATED SHEATHING (SPAN RATING 24/0) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES), TOP AND BOTTOM PLATES WITH 8d NAILS @ 6" O.C. AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH NAILS @ 12" O.C. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS.

- C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS.

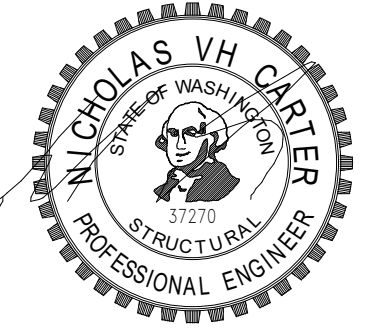
NOTCHES AT THE END OF JOISTS AND RAFTERS SHALL NOT EXCEED 1/4 THE DEPTH OF THE MEMBER. NOTCHES IN THE TOP OR BOTTOM SHALL NOT EXCEED 1/8 THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN THE MIDDLE 1/3 OF THE SPAN. THE DIAMETER OF ROUND HOLES BORED IN JOISTS AND RAFTERS SHALL NOT EXCEED 1/3 OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN 2H FROM THE TOP OR BOTTOM EDGE.

TOENAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH TWO ROWS OF 16d @ 12" O.C. ATTACH RAFTERS AND ROOF TRUSSES AT BEARING LINES WITH H2.5 @ 24" O.C. UNLESS OTHER METAL CONNECTIONS ARE INDICATED.

UNLESS OTHERWISE NOTED ON THE PLANS, APA RATED ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND ATTACHED WITH 10d NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE AND GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF ALL ROOF AND FLOOR SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d NAILS @ 12" O.C. UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND FASTEN SHEATHING TO FRAMING/BLOCKING AS SPECIFIED.

TONGUE AND GROOVE STRUCTURAL ROOF AND FLOOR DECKING SHALL BE INSTALLED AS FOLLOWS:

- A. 2X DECKING SHALL BE TOENAILED THROUGH THE TONGUE AND FACE NAILED WITH ONE 16d NAIL PER PIECE PER SUPPORT.  
 B. 3X AND 4X DECKING SHALL BE TOENAILED WITH ONE 40d NAIL AND FACE NAILED WITH ONE 60d NAIL PER SUPPORT. COURSES SHALL BE SPIKED TOGETHER WITH 8" SPIKES AT 30" O.C. (MAXIMUM) AND AT 10" (MAXIMUM) FROM EACH END OF EACH PIECE. SPIKES SHALL BE INSTALLED IN PREDRILLED EDGE HOLES



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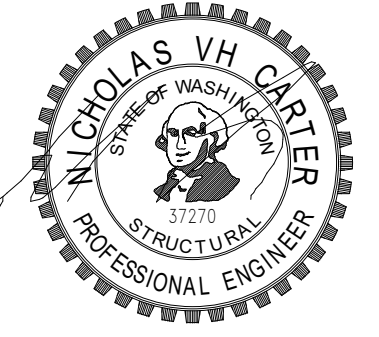
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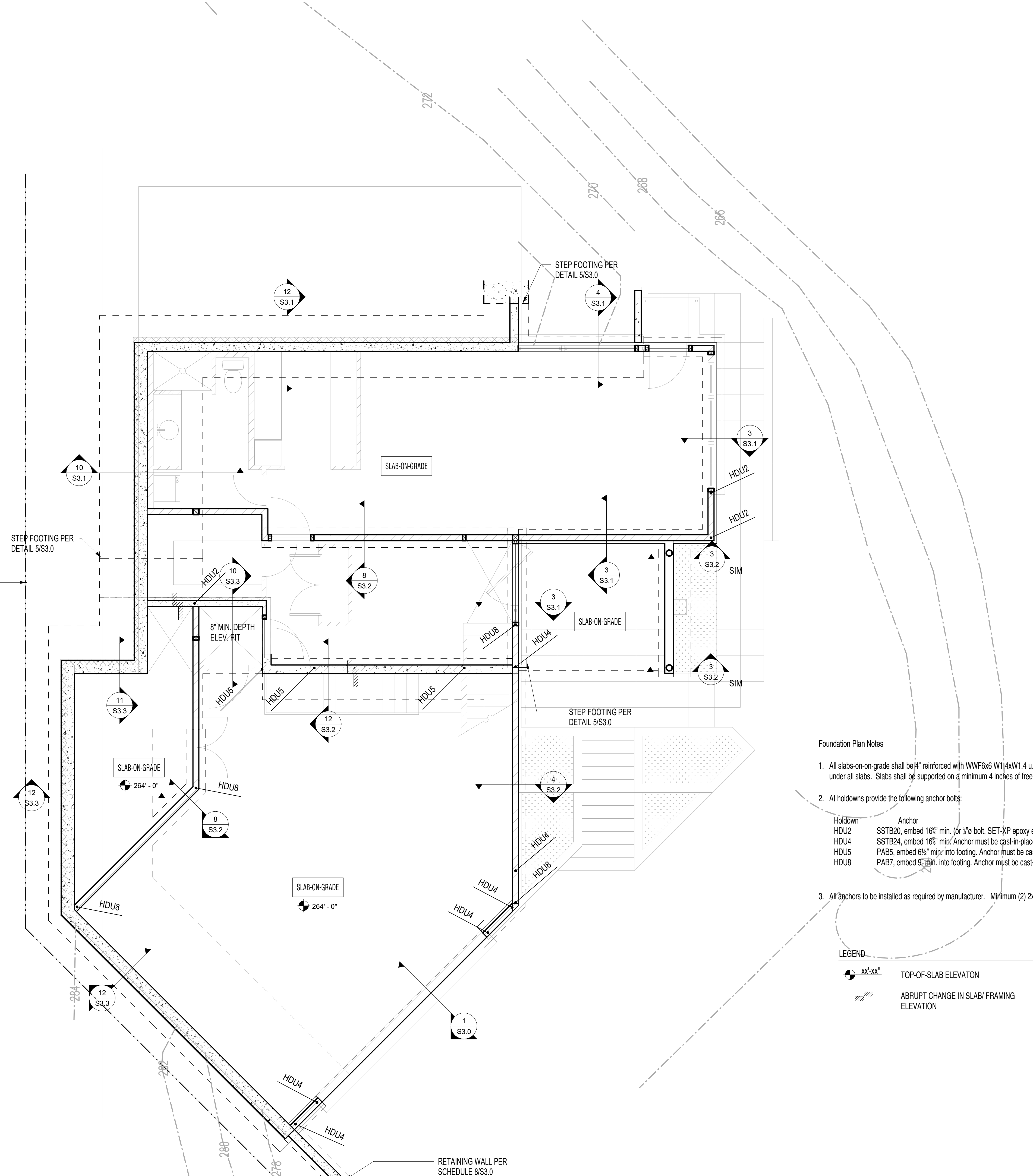
General Structural Notes

S1.1



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Foundation Plan Notes

- All slabs-on-grade shall be 4" reinforced with WWF6x6 W14XW1.4 u.n.o. Provide minimum 6-mil visqueen vapor barrier under all slabs. Slabs shall be supported on a minimum 4 inches of free draining material.
- At holddowns provide the following anchor bolts:
 

Holdown	Anchor
HDU2	SSTB20, embed 16" min. (or 1/2" bolt, SET-XP epoxy embed 10 min.)
HDU4	SSTB24, embed 16" min. Anchor must be cast-in-place.
HDU5	PAB5, embed 6 1/2" min. into footing. Anchor must be cast-in-place.
HDU8	PAB7, embed 9" min. into footing. Anchor must be cast-in-place.
- All anchors to be installed as required by manufacturer. Minimum (2) 2x studs unless otherwise noted on plans.

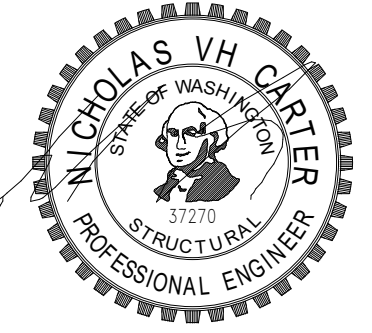
LEGEND

- "xx'-xx"
- TOP-OF-SLAB ELEVATION
- ///
- ABRUPT CHANGE IN SLAB/ FRAMING ELEVATION

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Foundation Plan



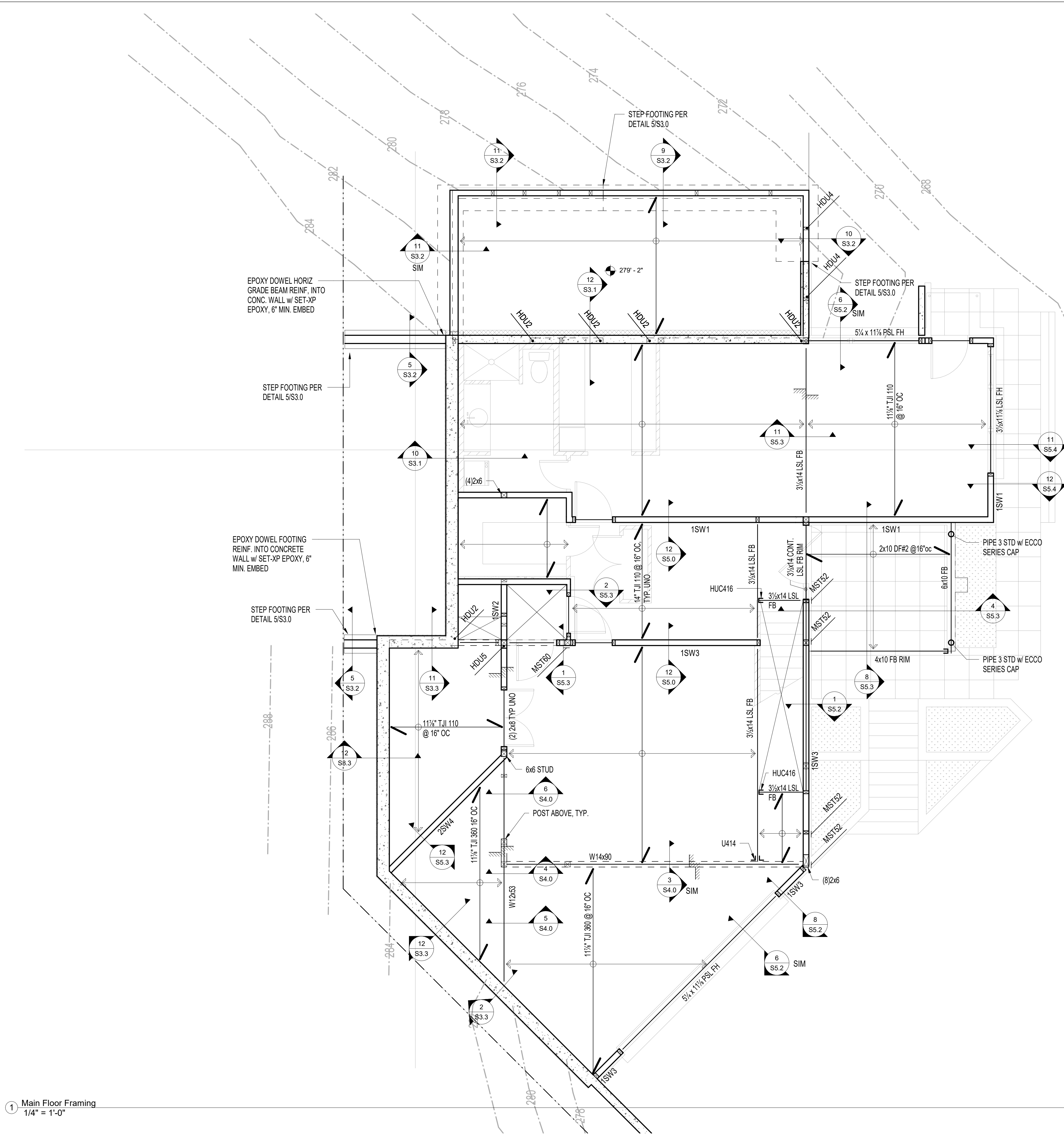
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Main Floor Framing  
Plan

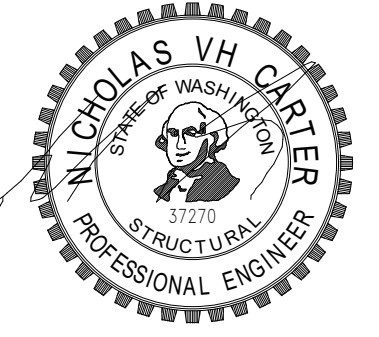


Floor Framing Plan Notes

1. Floor sheathing shall be 23/32" APA, Sturd-I-Floor with a panel index of 40/20. Nail to framing with 10d common nails at 6" oc at panel edges and 12" oc in field unless noted otherwise on plans.
2. All headers and beams shall be (2) 2x8 minimum, u.n.o. Refer to note 3 for support requirements.
3. All columns shall be double stud minimum, u.n.o., with the beam or header bearing fully on the column. Individual studs shall be nailed together per the general structural notes.
4. Exterior wall sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0 (Oriented strand board of equivalent thickness, exposure rating, and panel index may be used in lieu of plywood at contractors' option).
5. Attach LVL plies w/ (2) SDS25600 @ 16" oc.

LEGEND

- HANGER
- WALL / COLUMN BELOW
- WALL / COLUMN ABOVE
- ABRUPT CHANGE IN SLAB / FRAMING ELEVATION
- FB INDICATES FLUSH BEAM
- FH INDICATED FLUSH HEADER
- UNO UNLESS NOTED OTHERWISE
- SPAN AND EXTENTS
- SPAN AND EXTENTS THRU-OUT



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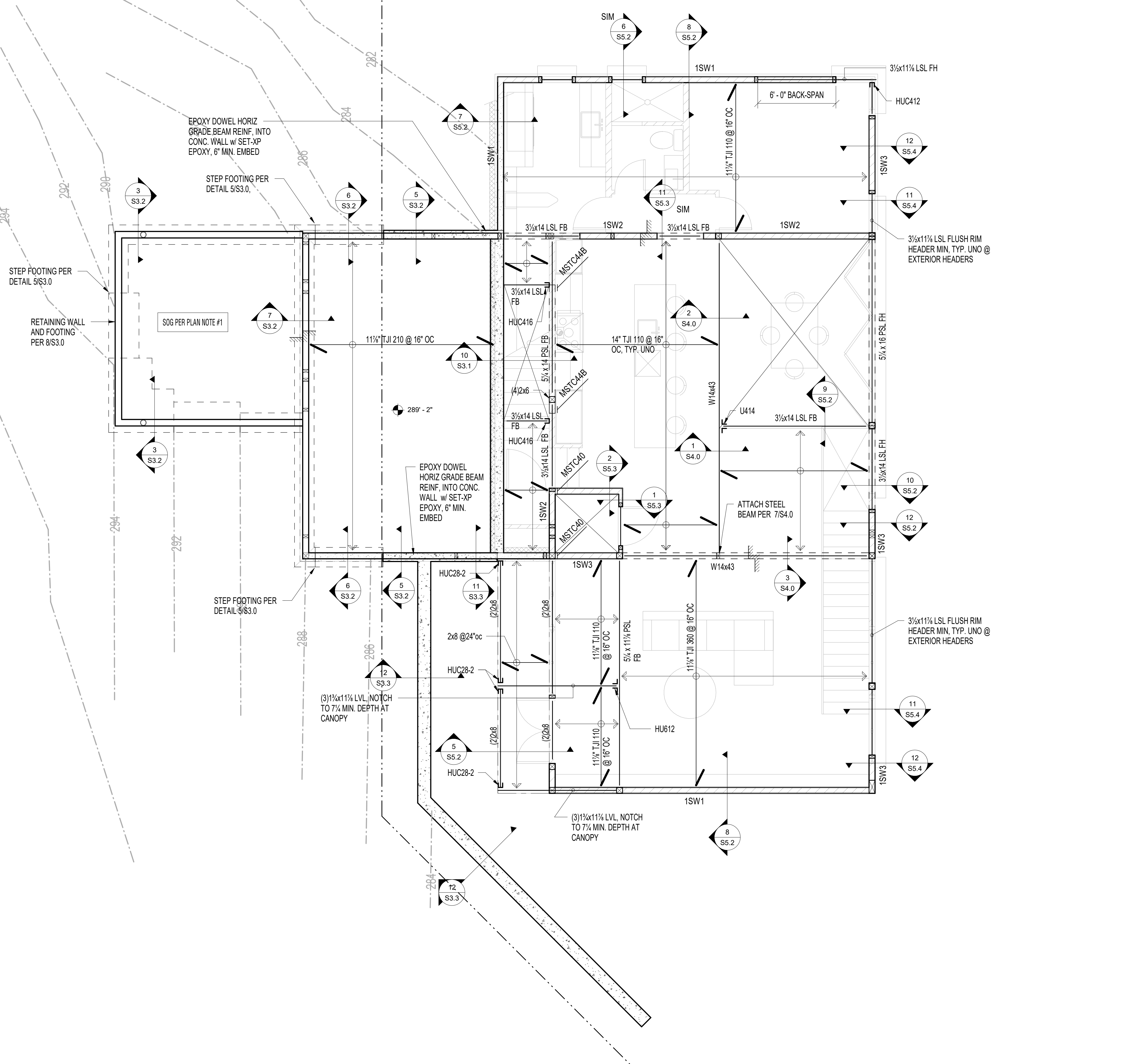
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Upper Floor Framing  
Plan

S2.2

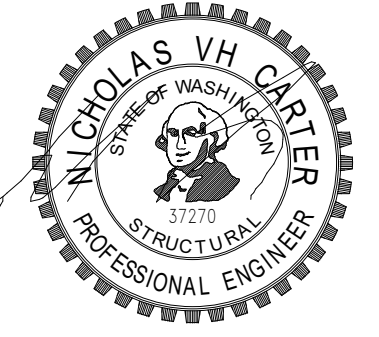


Floor Framing Plan Notes

1. Floor sheathing shall be 23/32" APA, Sturd-I-Floor with a panel index of 40/20. Nail to framing with 10d common nails at 6" oc at panel edges and 12" oc in field unless noted otherwise on plans.
2. All headers and beams shall be (2) 2x8 minimum, u.n.o. Refer to note 3 for support requirements.
3. All columns shall be double stud minimum, u.n.o., with the beam or header bearing fully on the column. Individual studs shall be nailed together per the general structural notes.
4. Exterior wall sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0 (Oriented strand board of equivalent thickness, exposure rating, and panel index may be used in lieu of plywood at contractors' option).
5. Attach LVL plies w/ (2) SDS25600 @ 16" oc.

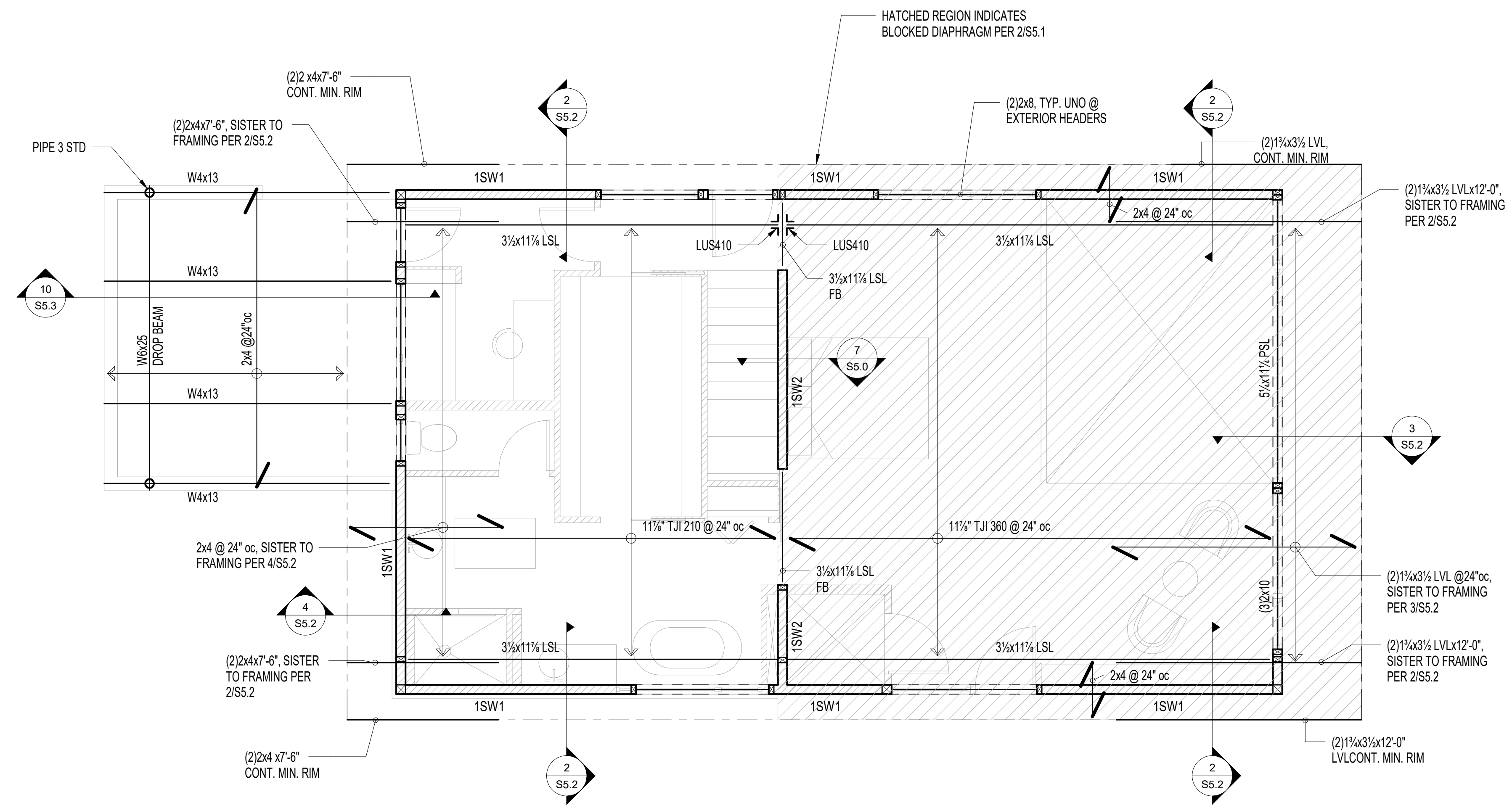
LEGEND

- HANGER
- WALL / COLUMN BELOW
- WALL / COLUMN ABOVE
- ABRUPT CHANGE IN SLAB/ FRAMING ELEVATION
- FB INDICATES FLUSH BEAM
- FH INDICATED FLUSH HEADER
- UNO UNLESS NOTED OTHERWISE
- SPAN AND EXTENTS
- SPAN AND EXTENTS THRU-OUT



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**Roof Framing Plan Notes**

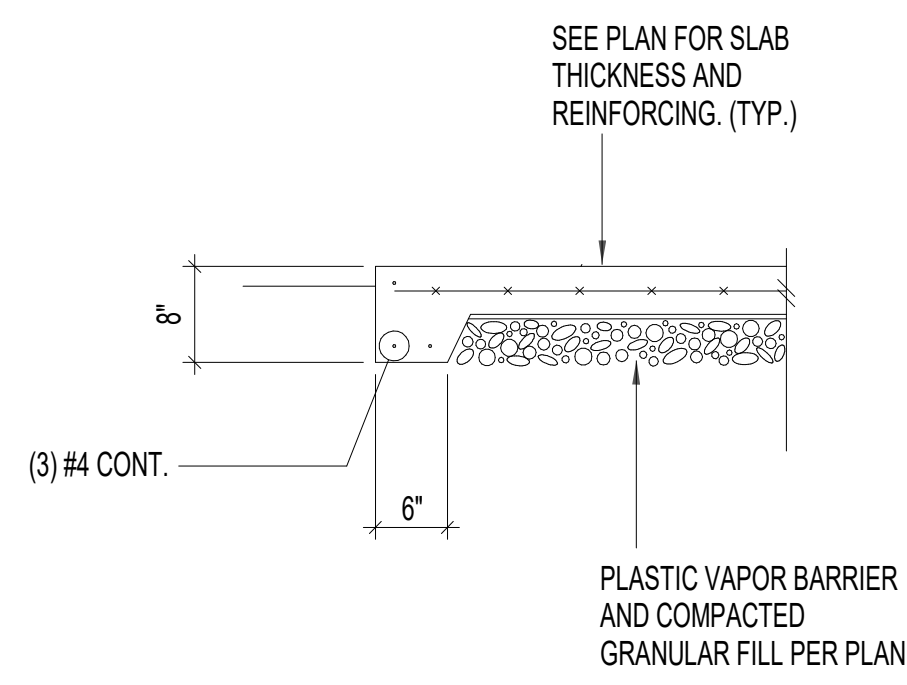
1. Roof sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0. Nail to framing with 8d common nails at 6" oc at panel edges and 12" oc in field unless noted otherwise on plans. Where noted on the plans all panel edges shall be block with minimum 2x material.
2. All headers and beams shall be (2) 2x8 minimum, u.n.o. Refer to note 3 for support requirements.
3. All columns shall be double stud minimum, u.n.o., with the beam or header bearing fully on the column. Individual studs shall be nailed together per the general structural notes.
4. Exterior wall sheathing shall be 15/32" APA Rated sheathing with a panel index of 24/0 (Oriented strand board of equivalent thickness, exposure rating, and panel index may be used in lieu of plywood at contractors' option).

**LEGEND**

	HANGER
	WALL / COLUMN BELOW
	WALL / COLUMN ABOVE
	ABRUPT CHANGE IN SLAB/ FRAMING ELEVATION
	FB INDICATES FLUSH BEAM
	FH INDICATED FLUSH HEADER
	UNO UNLESS NOTED OTHERWISE
	SPAN AND EXTENTS
	SPAN AND EXTENTS THRU-OUT

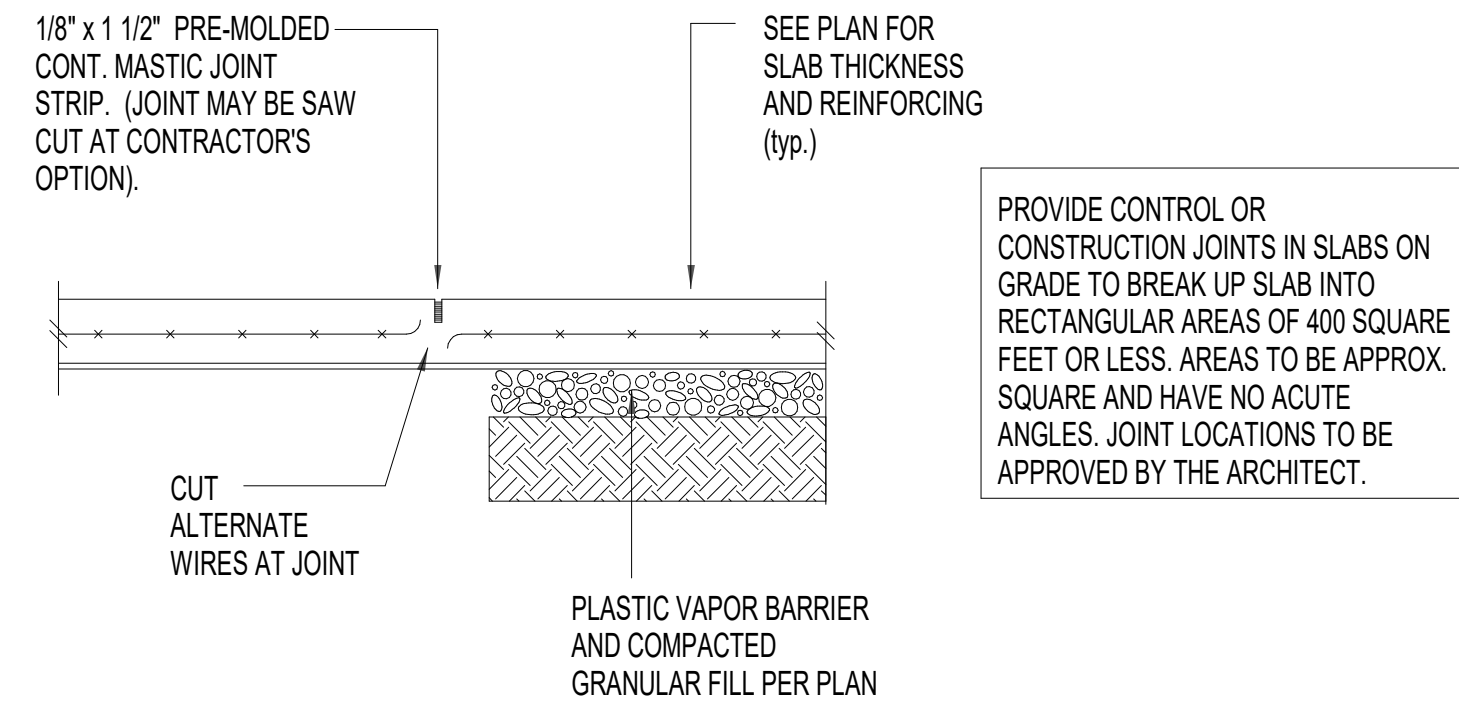
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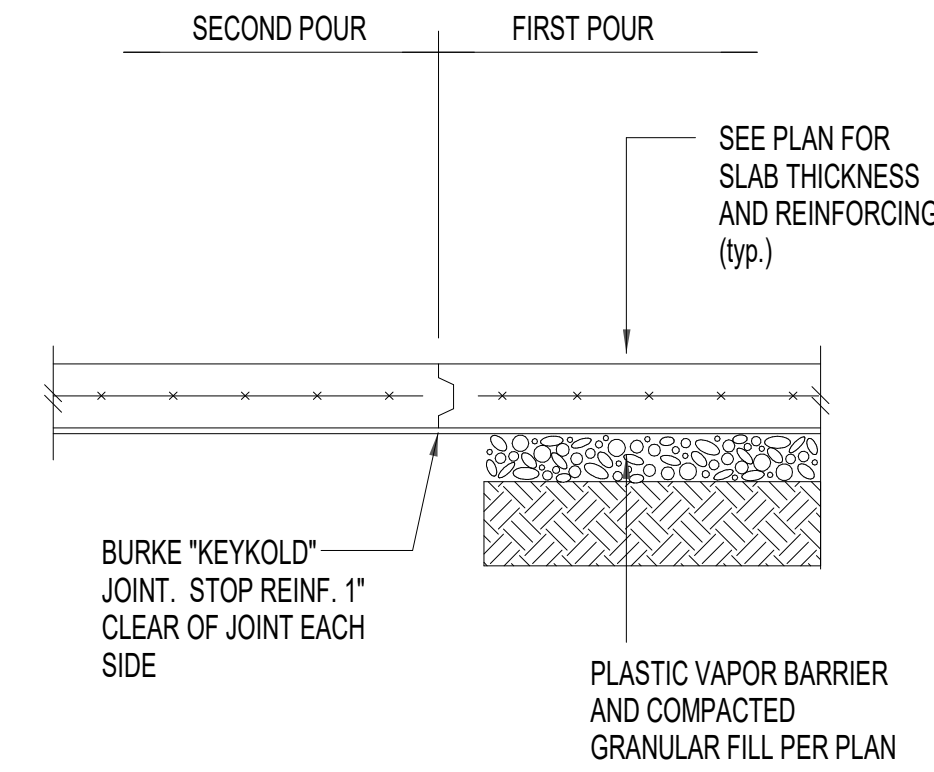


Typical Slab Edge

1



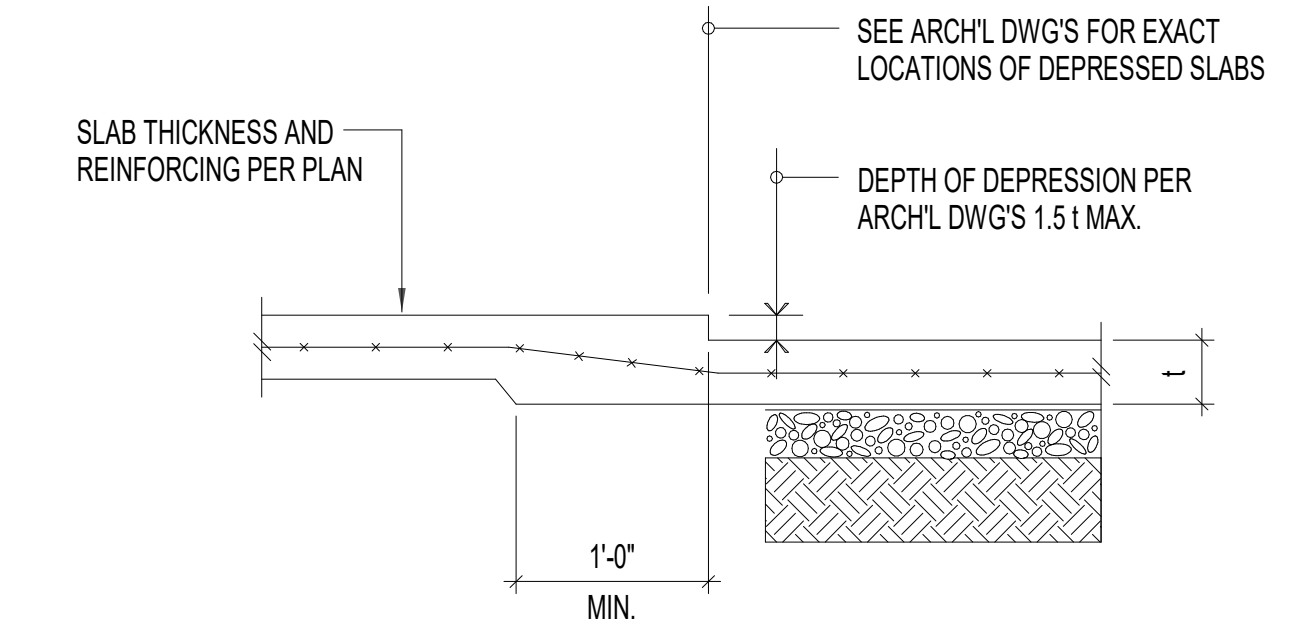
Control Joint



Construction Joint

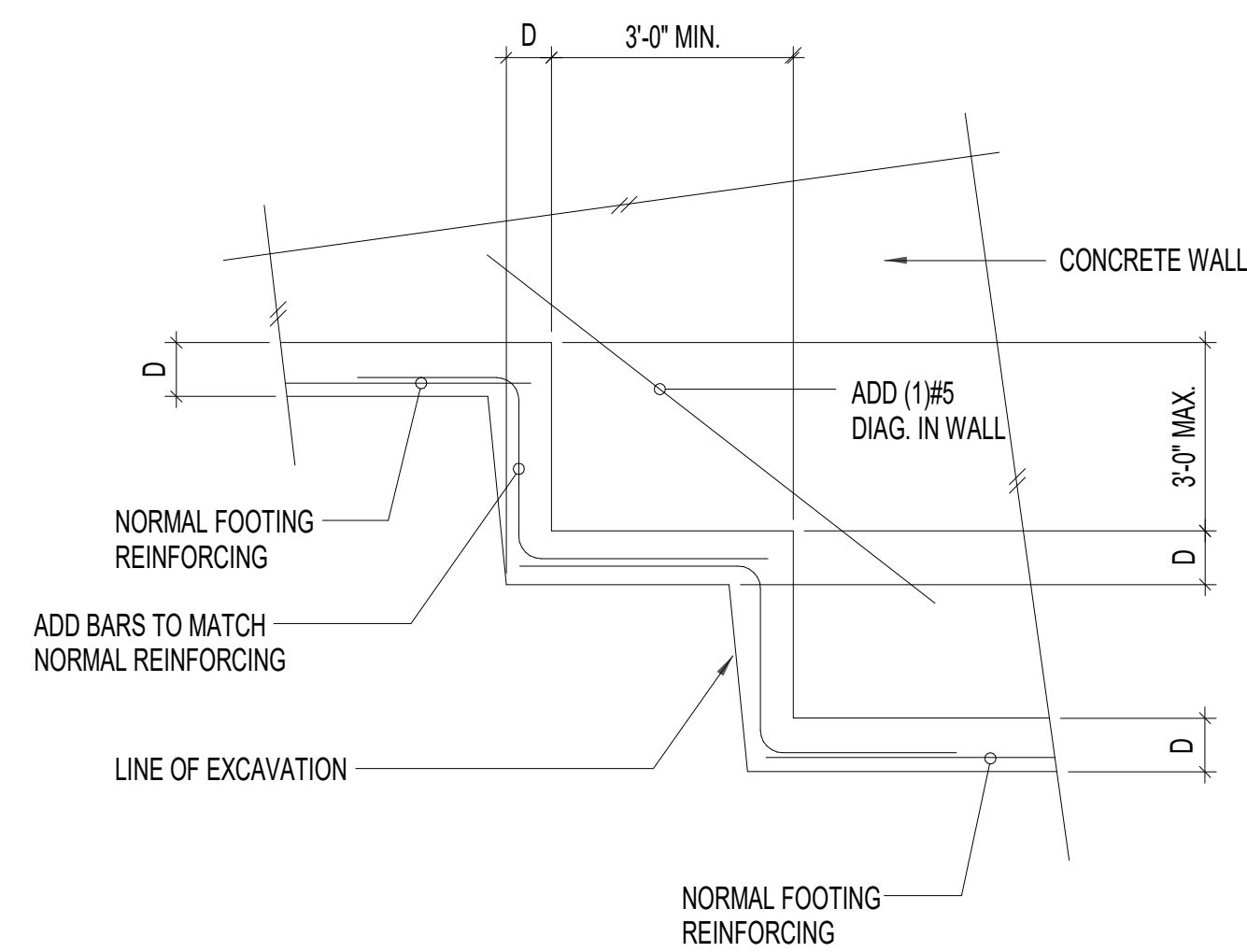
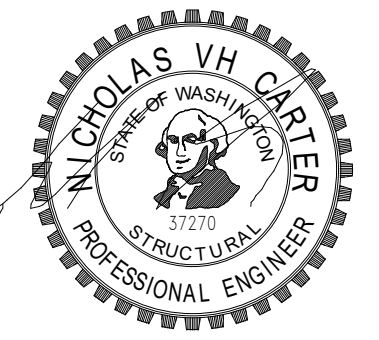
Typical Slab Joints

3



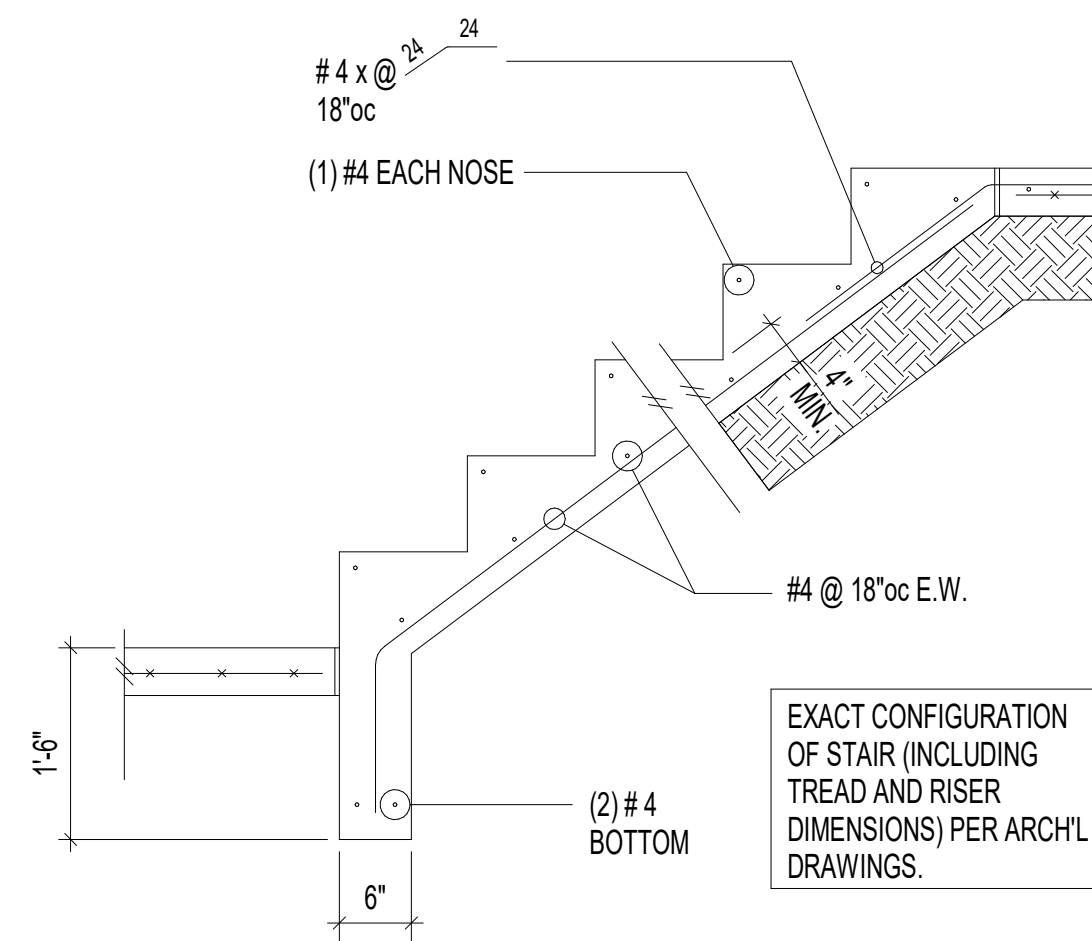
Typical Depressed Slab

4



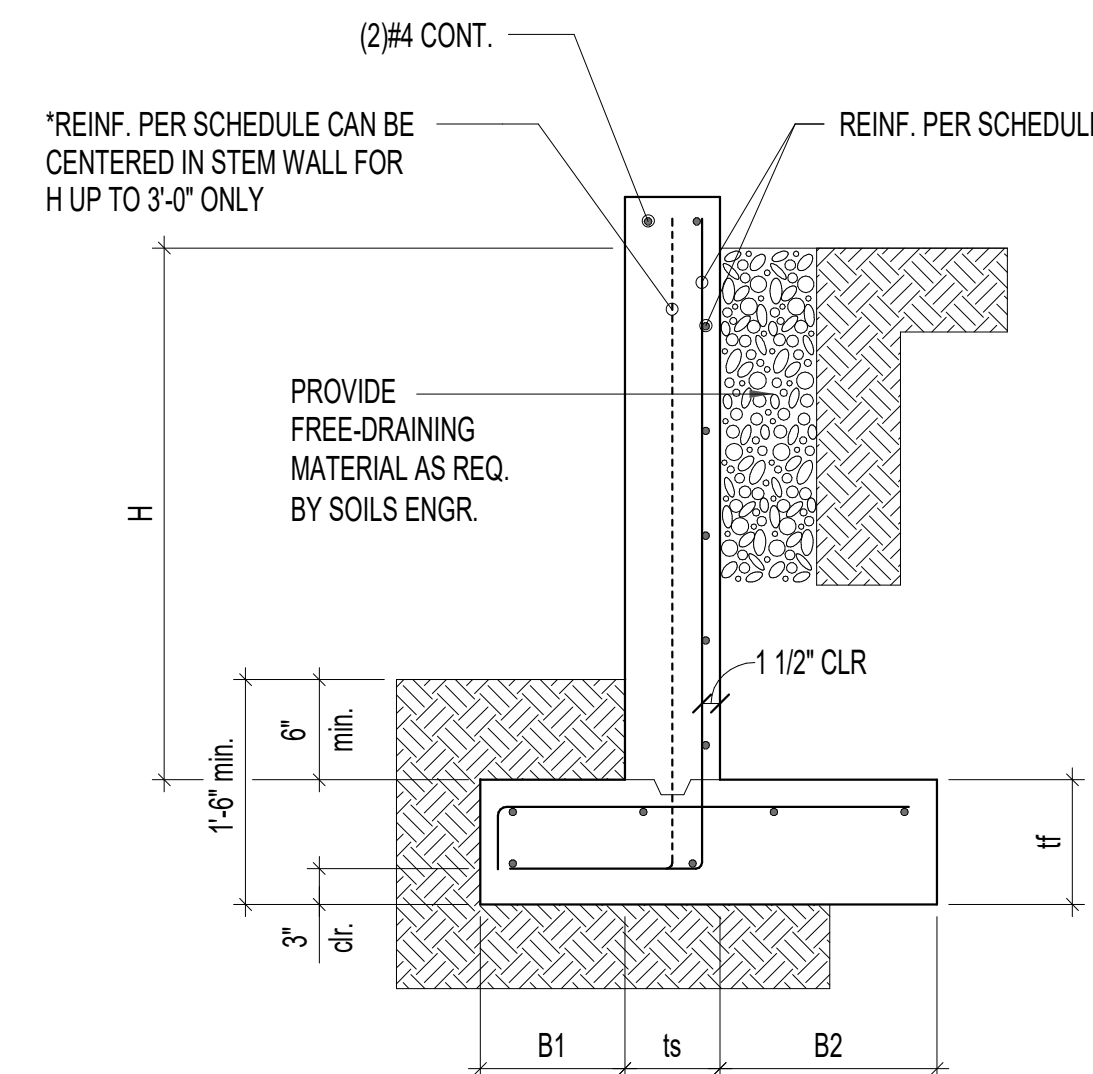
Typical Stepped Footing

5



Stair On Grade

6



H	tf	B1	ts	B2	RETAINING WALL SCHEDULE DATA			
					Stem Reinforcement		Footing Reinforcement	
					VERT.	HORIZ.	TOP	LONGIT.
*UP TO 3'-0"	10"	5"	8"	5"	#4 @12"oc	#4 @12"oc	#4 @10"oc	(2)#4
4'-0"	10"	5"	8"	16"	#4 @12"oc	#4 @12"oc	#4 @10"oc	(3)#4
5'-0"	10"	5"	8"	22"	#4 @12"oc	#4 @12"oc	#4 @10"oc	(4)#4
6'-0"	12"	9"	8"	28"	#4 @12"oc	#4 @12"oc	#5 @12"oc	(5)#4
7'-0"	12"	12"	10"	32"	#5 @12"oc	#5 @12"oc	#5 @10"oc	(6)#4

EQUIVALENT FLUID PRESSURE = 40 PCF  
 MINIMUM ALLOWABLE BEARING = 4000 PSF  
 COEFFICIENT OF FRICTION = 0.45 (ULTIMATE)  
 PASSIVE RESISTANCE = 300 PCF (ULTIMATE)  
 LATERAL SEISMIC SURCHARGE = 9H (ULTIMATE)

Retaining Wall Schedule

8

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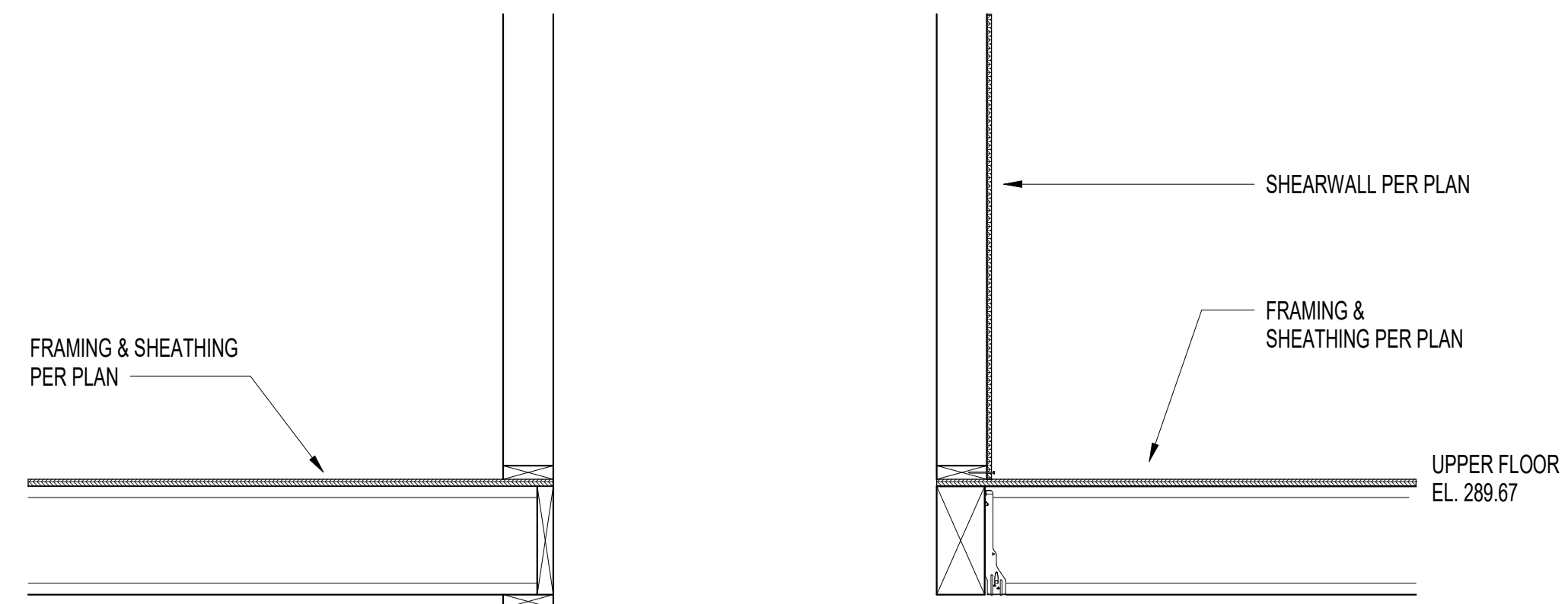
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10

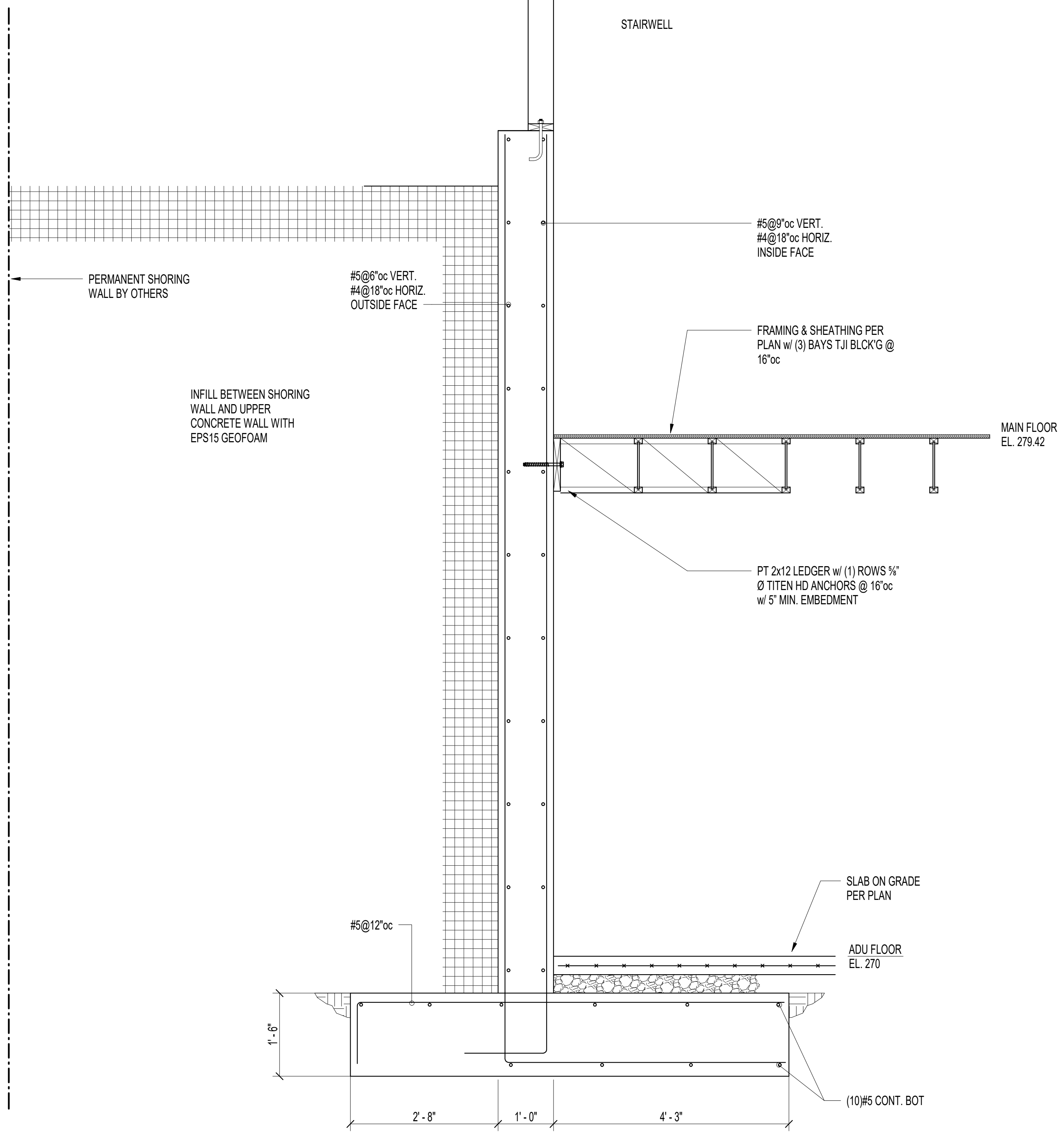
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12

S3.0

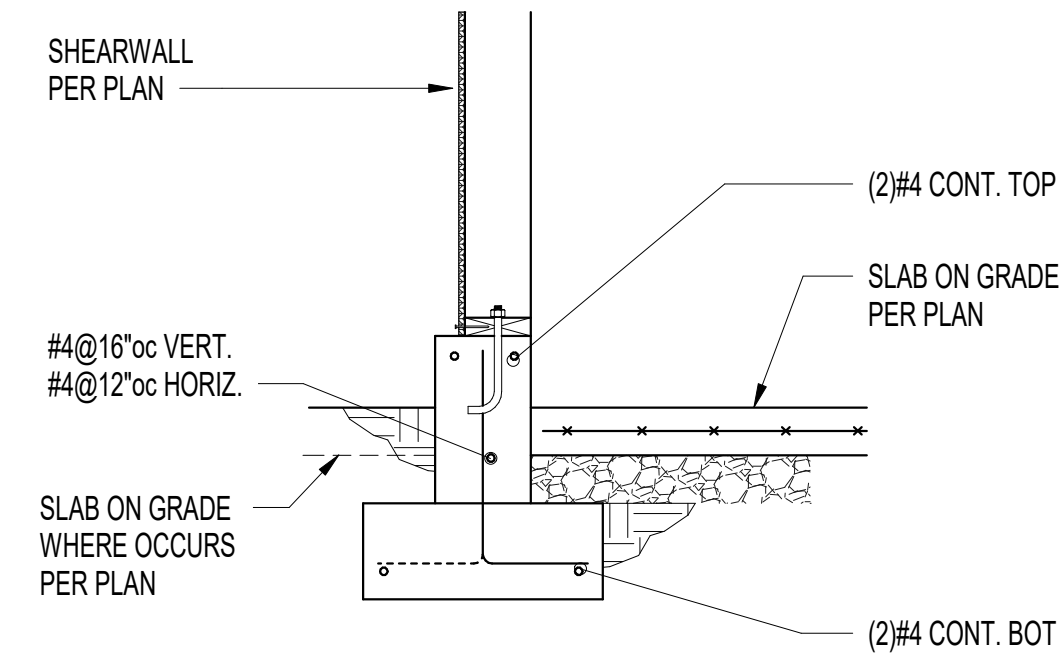


STAIRWELL

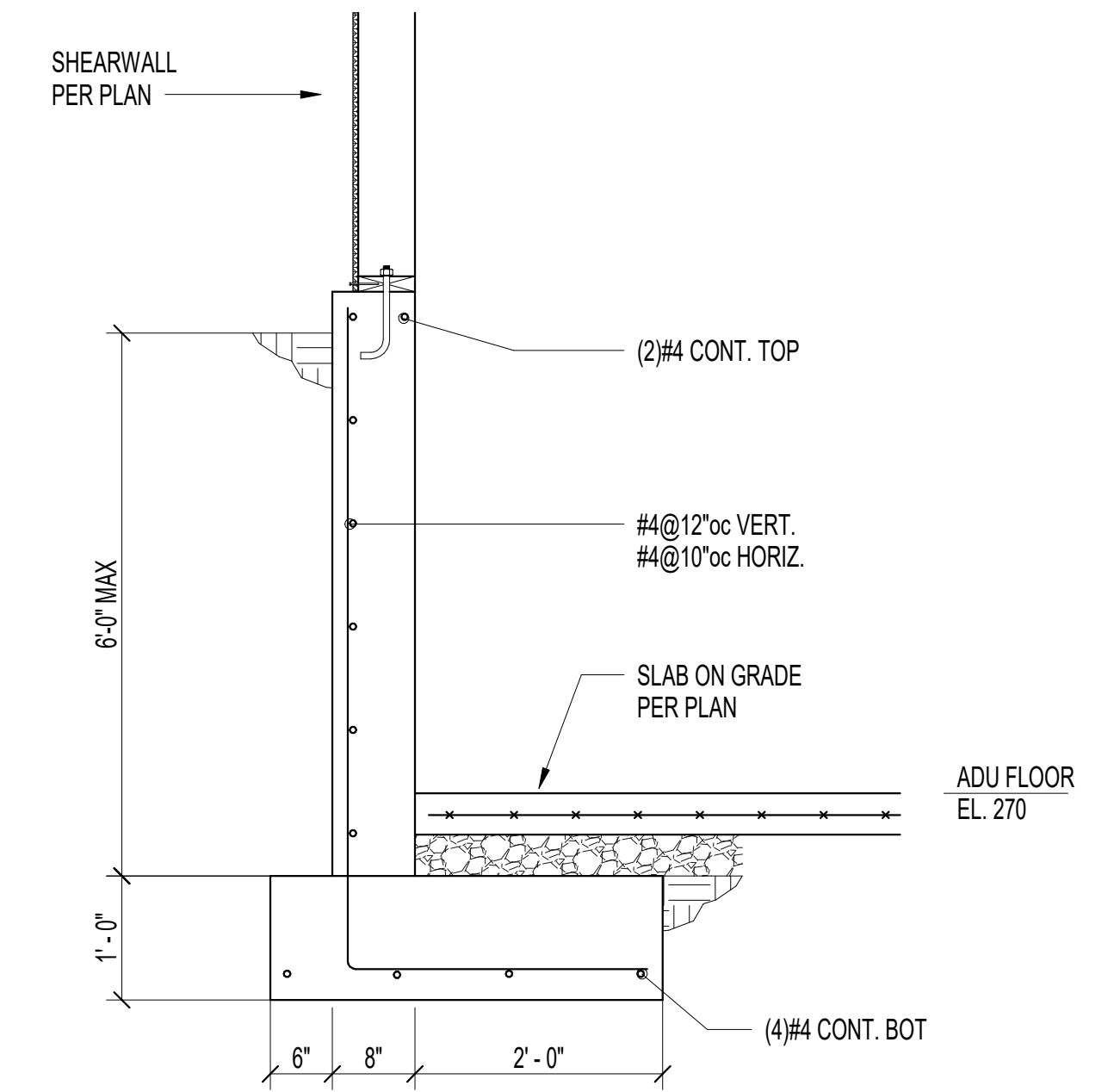


Section thru NE wall @ Stair

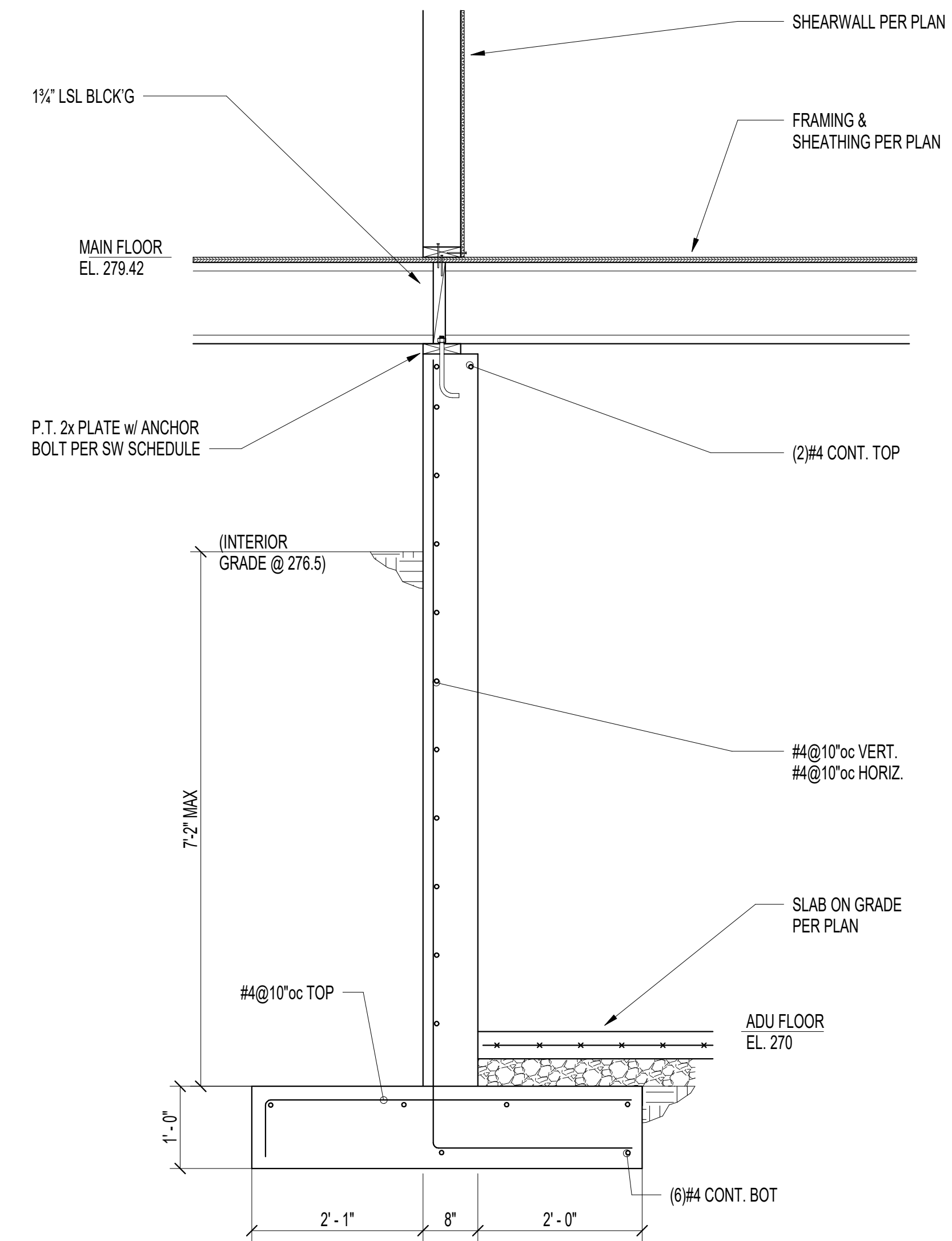
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Section SW ADU/Entry 3

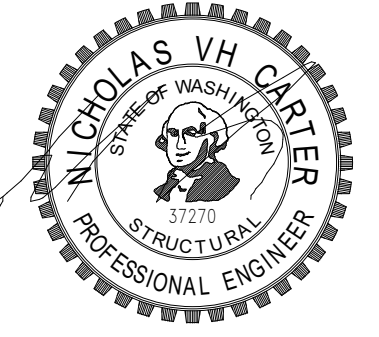


Section thru SE elevation @ ADU 4



Section thru SE elevation @ ADU/Laundry

12



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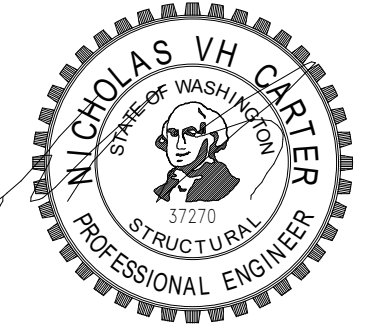
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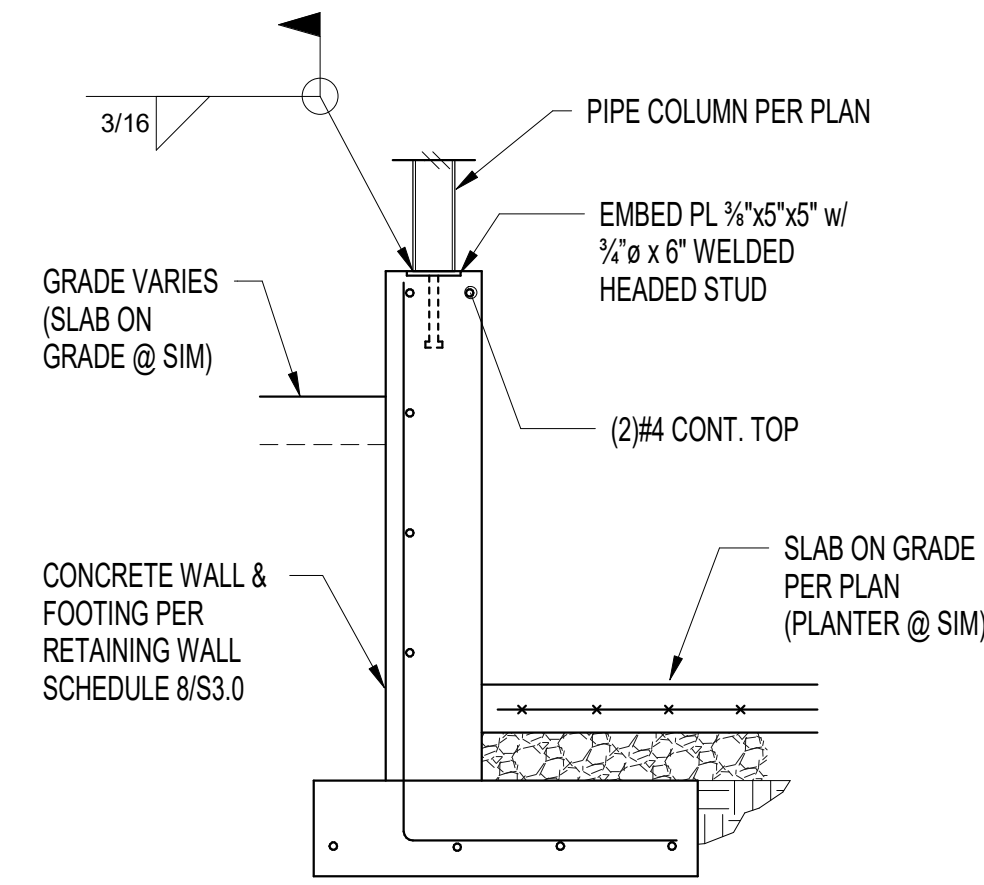
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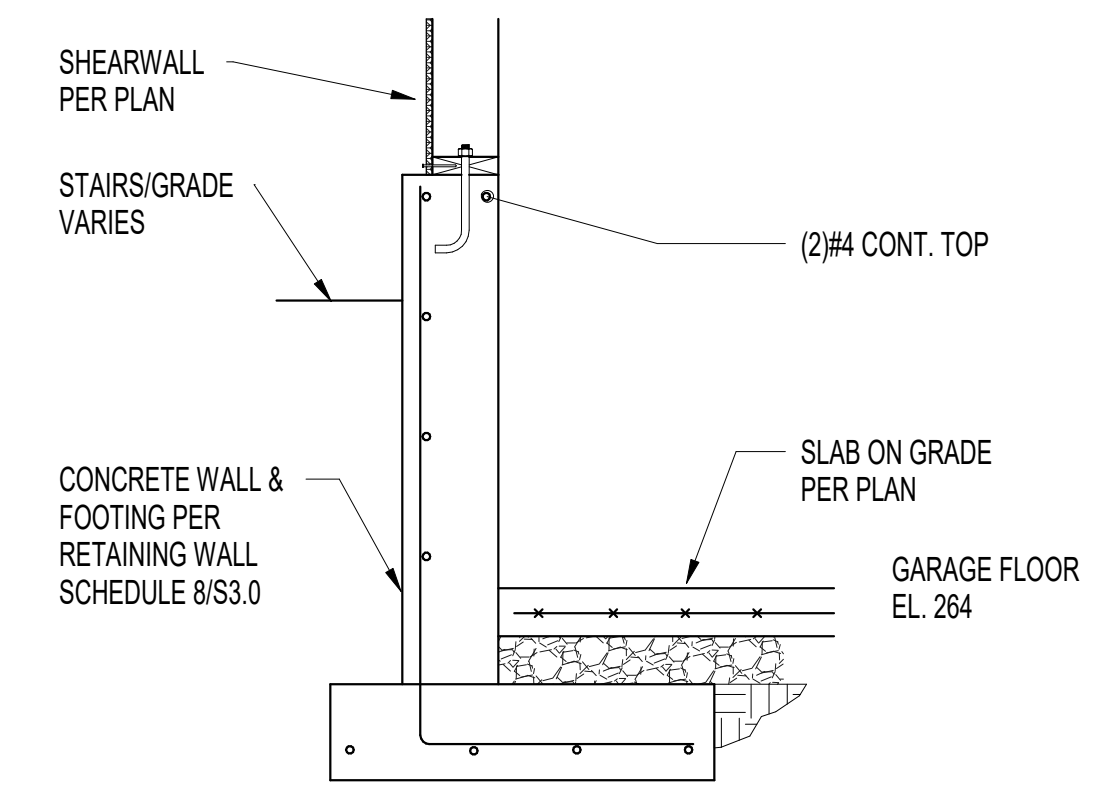
S3.1



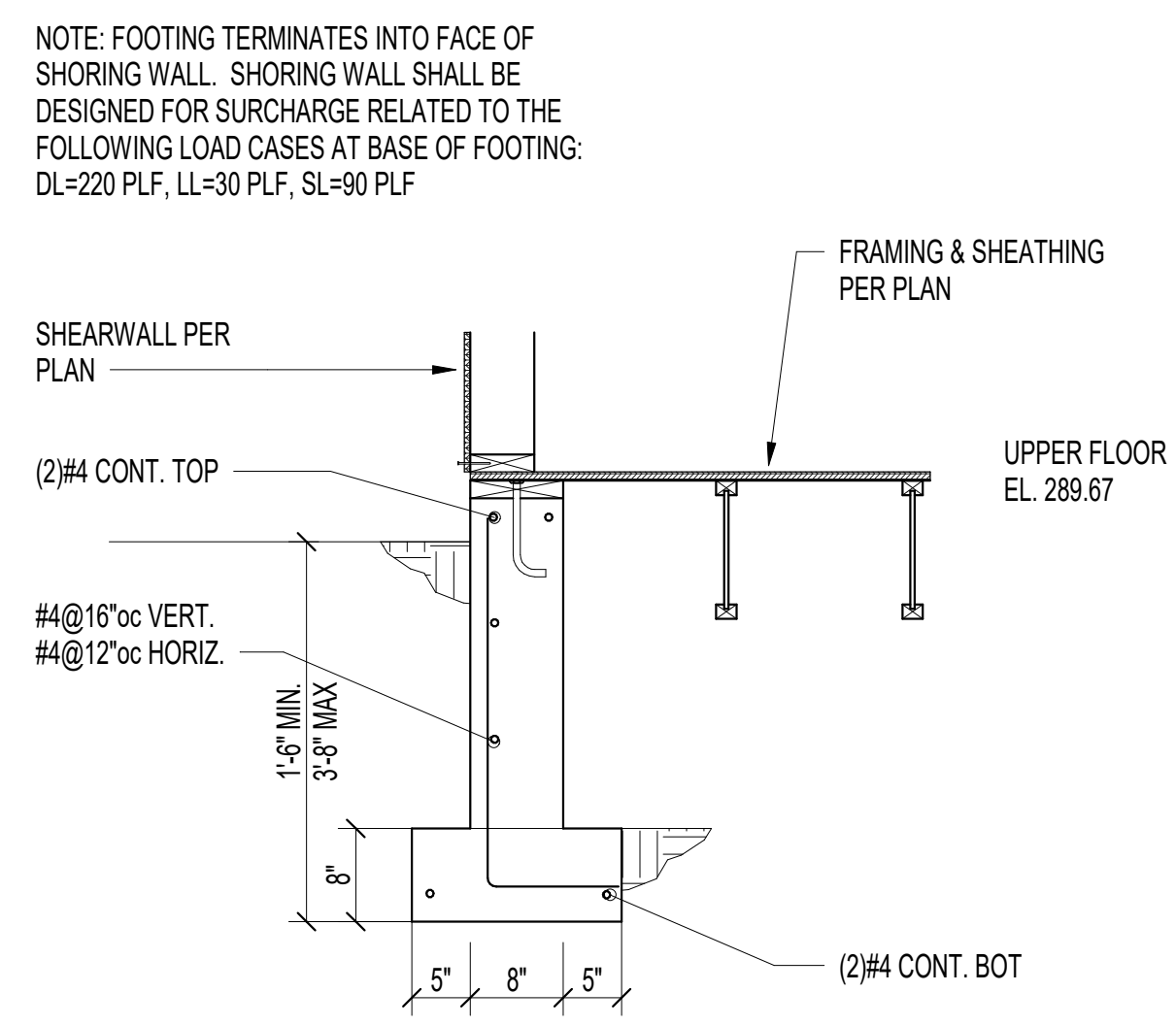
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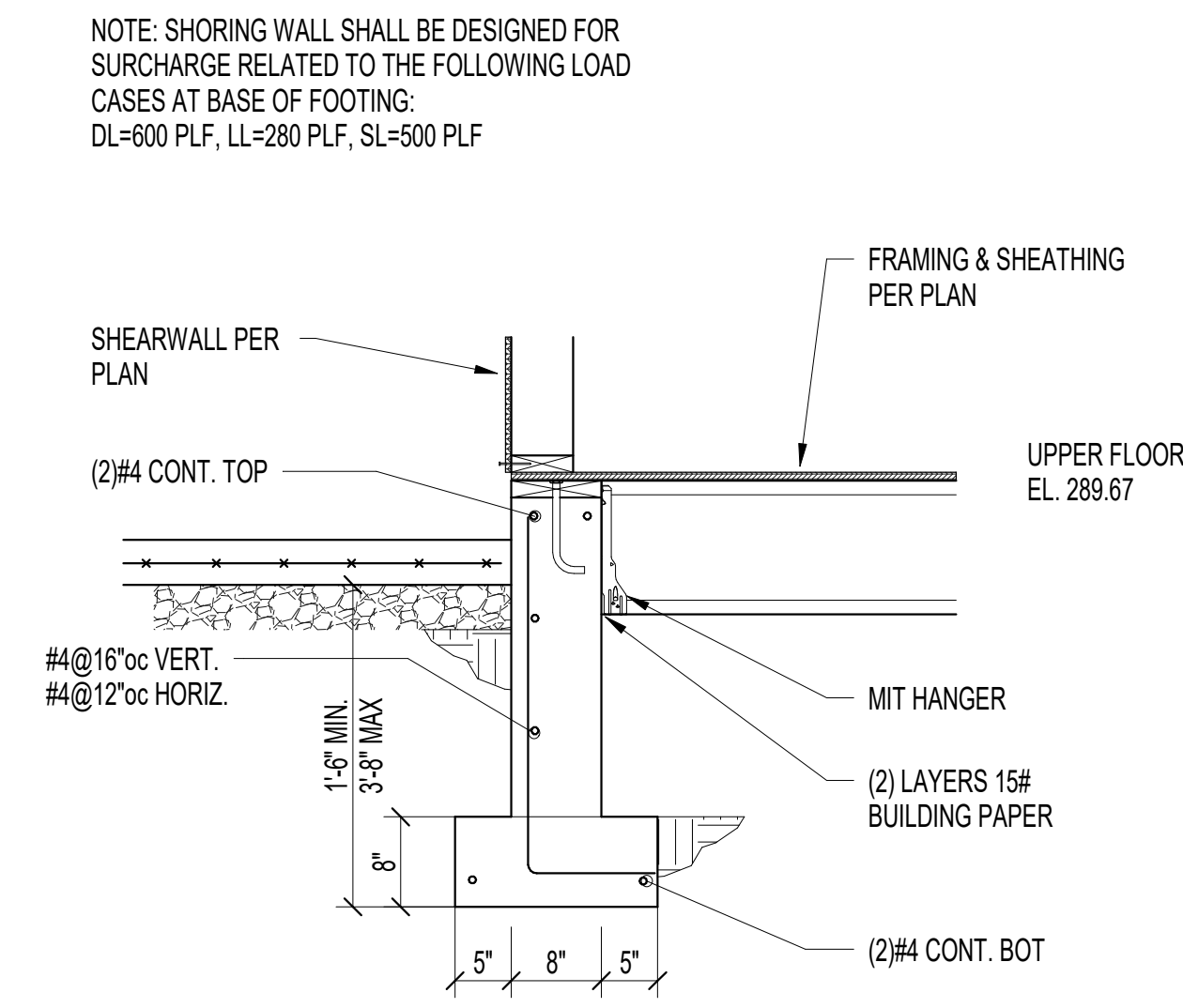
Trellis Post Base



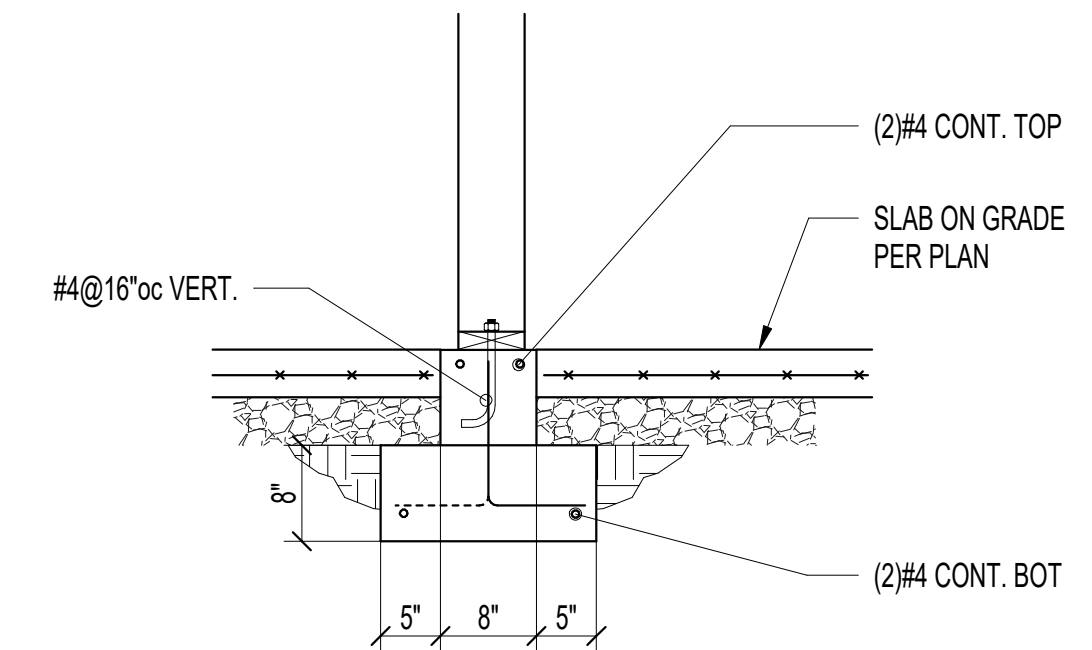
Garage SW @ Entry Planters



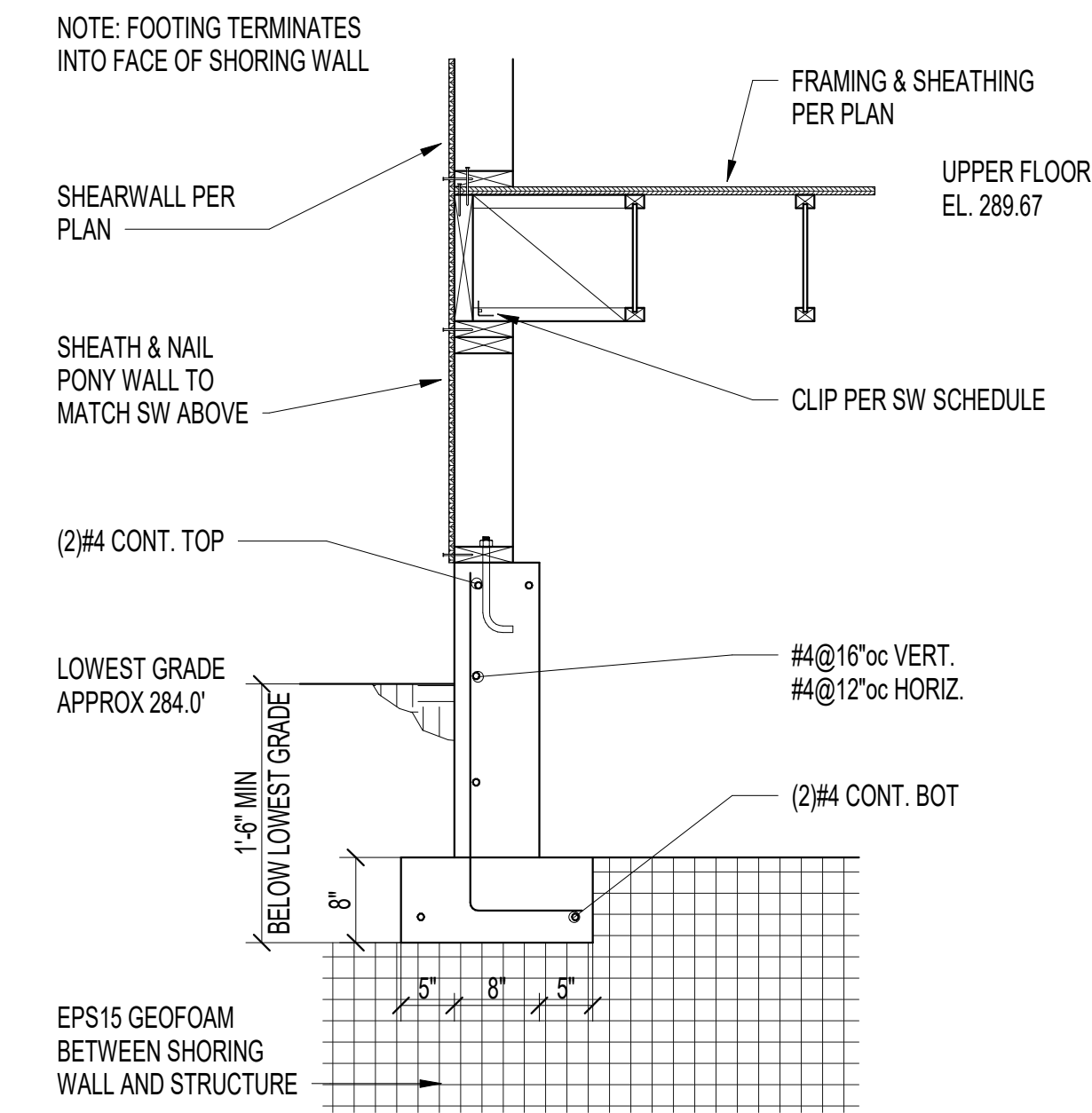
SE/NW @ Secret Room/Bath (NE of Shoring Wall)



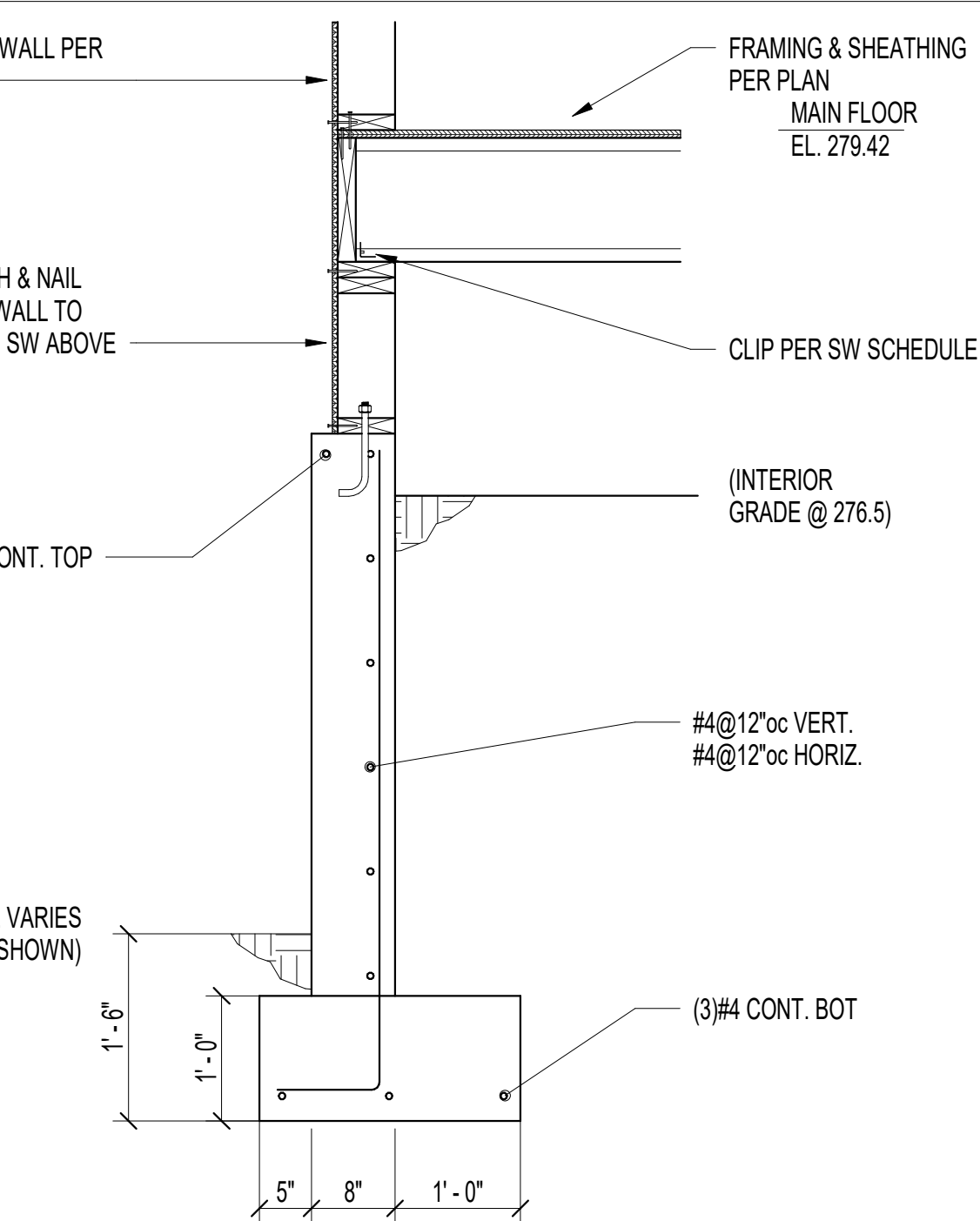
NE @ Secret Room/Bath



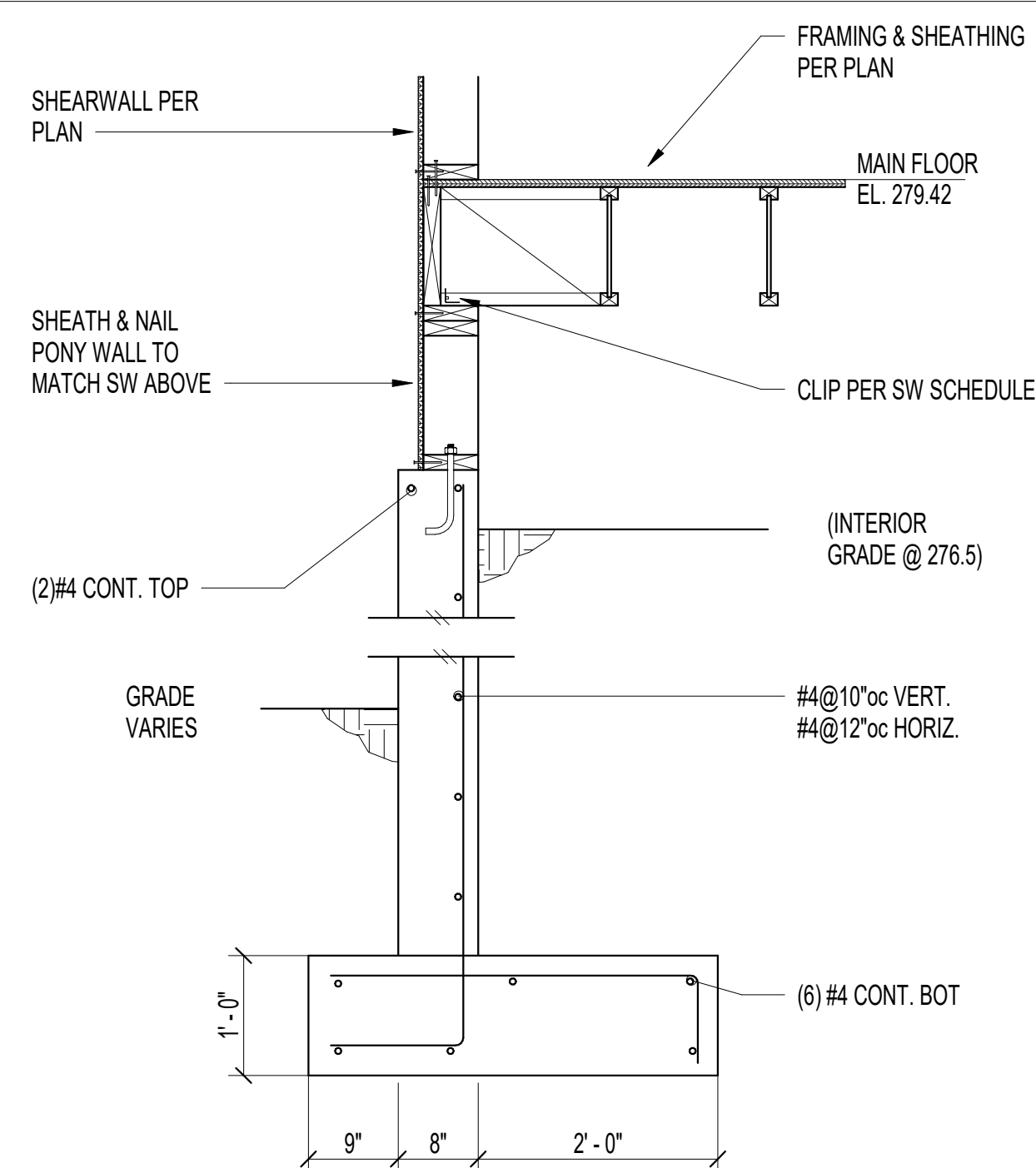
Interior Bearing Stem Wall



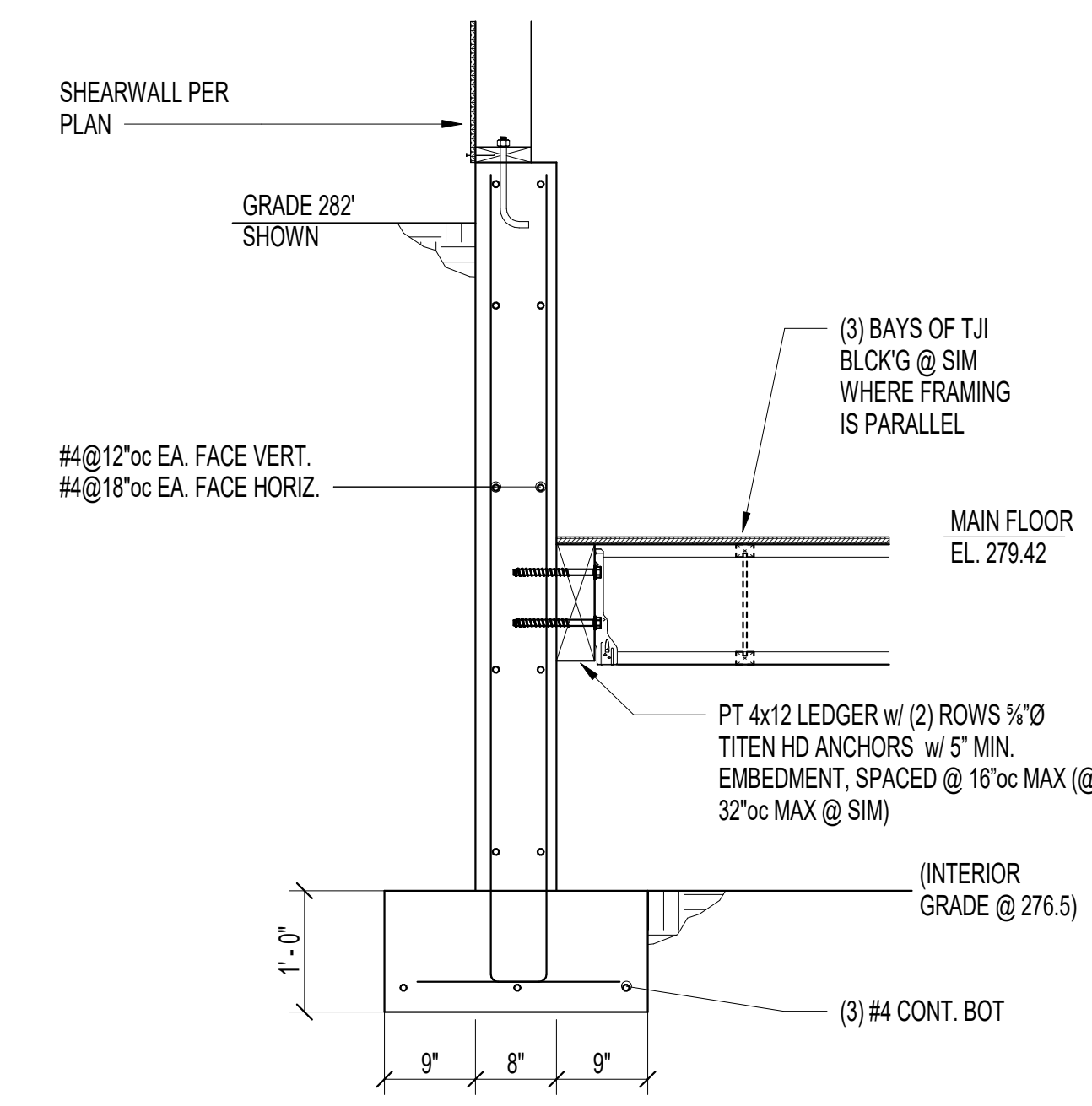
Section thru SW & NE elevations @ Secret Room/Bath



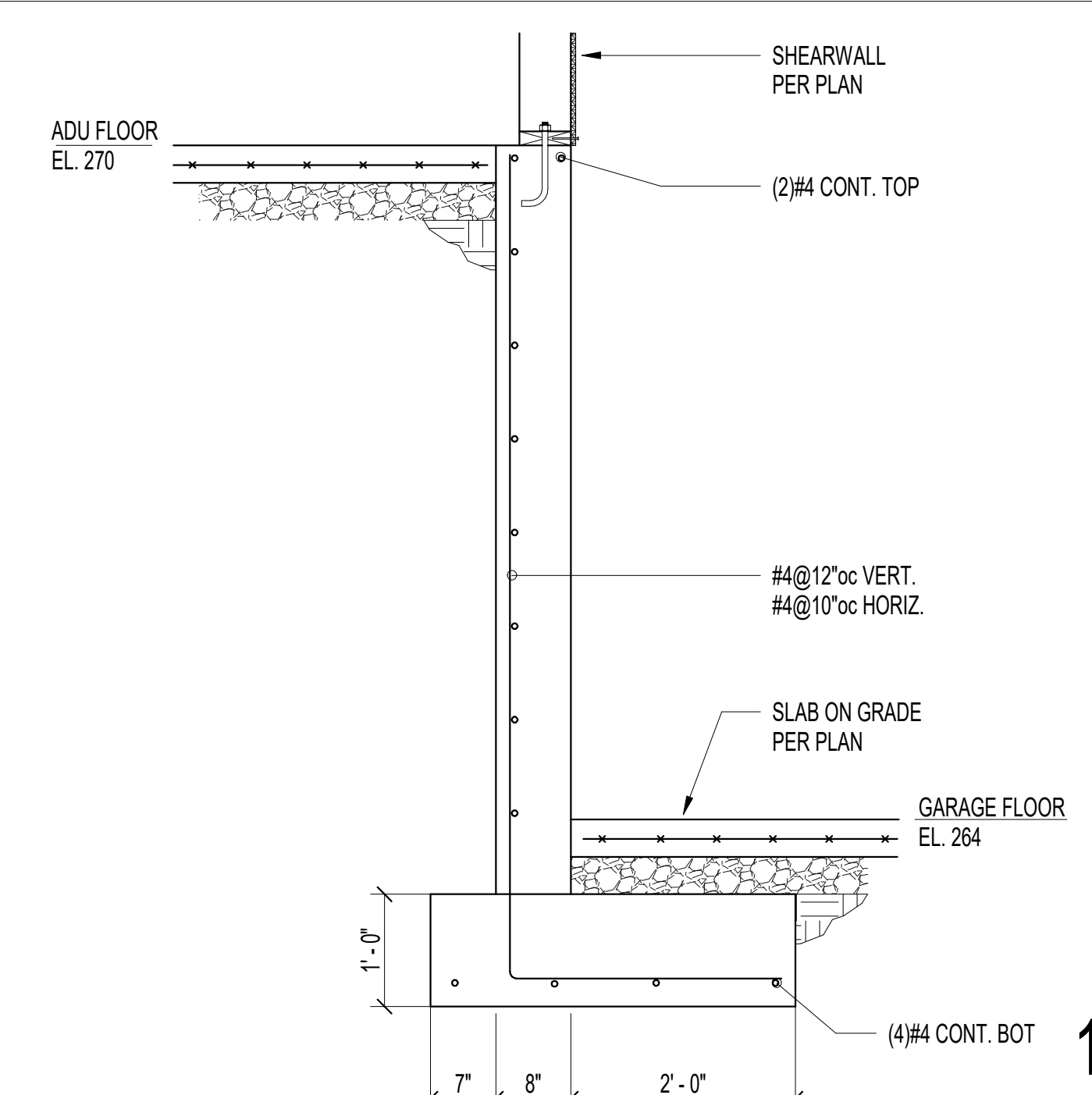
Section thru SE elevation @ Den/Laundry



Section thru SW elevation @ Den/Laundry



Section thru NE/SE elevation @ Laundry



Garage/ADU step

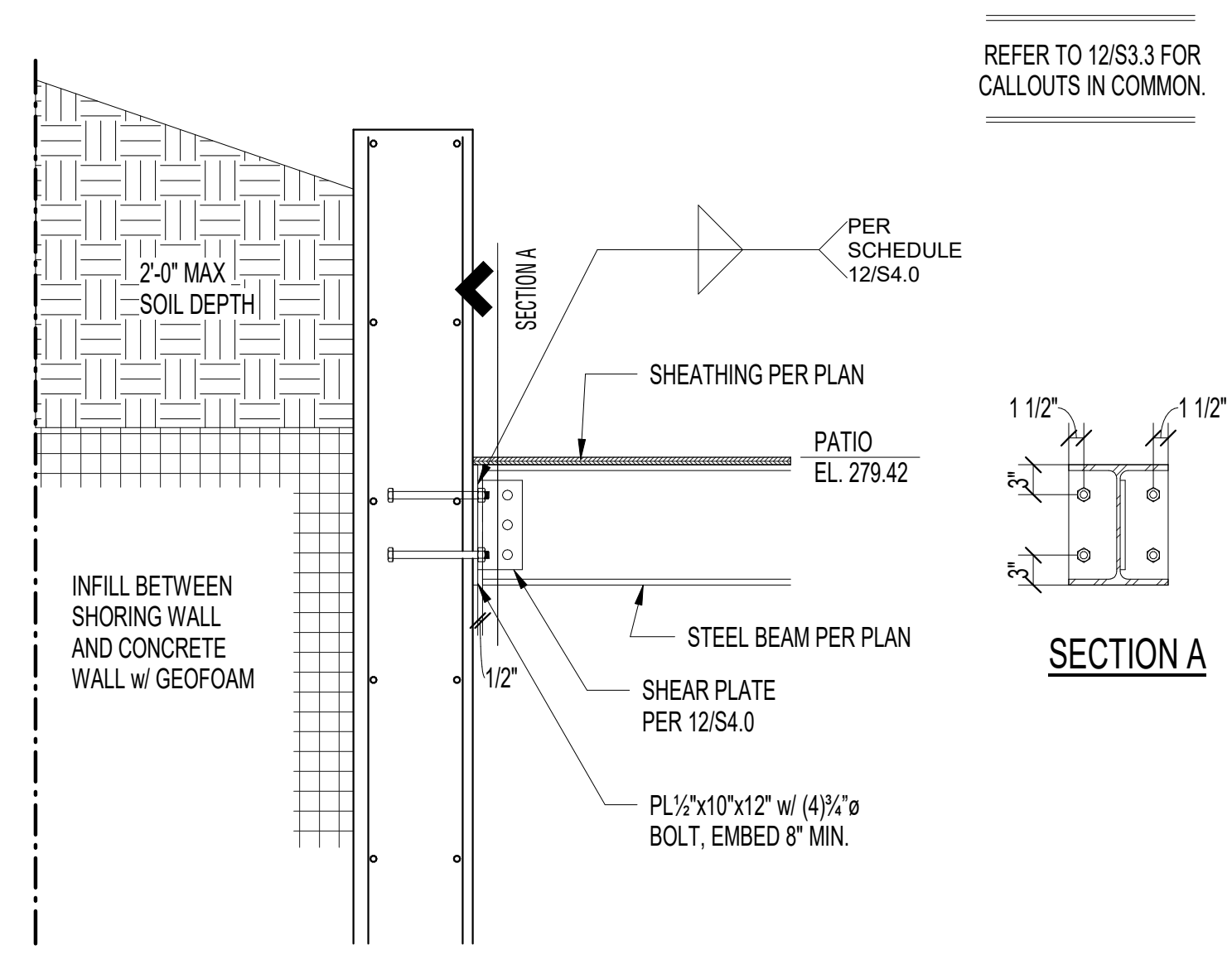
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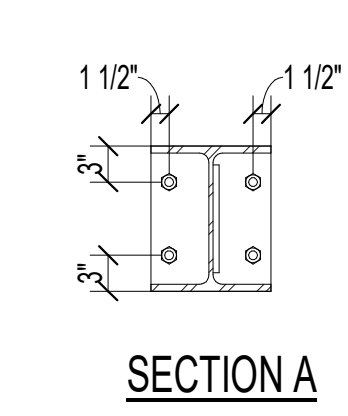
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S3.2





REFER TO 12/S3.3 FOR  
CALLOUTS IN COMMON.

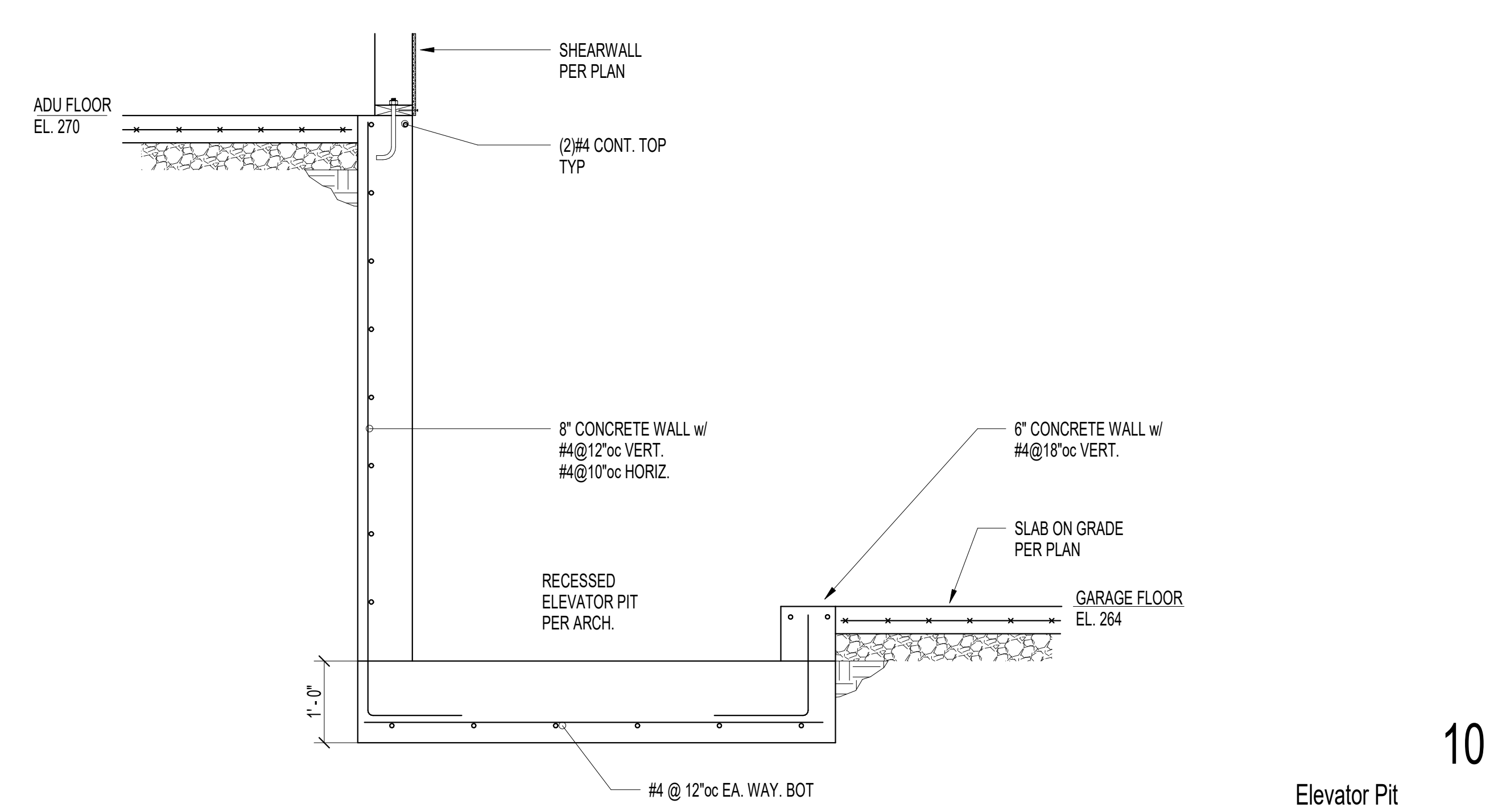


1

Section thru Garage Wall at Steel Beam 2

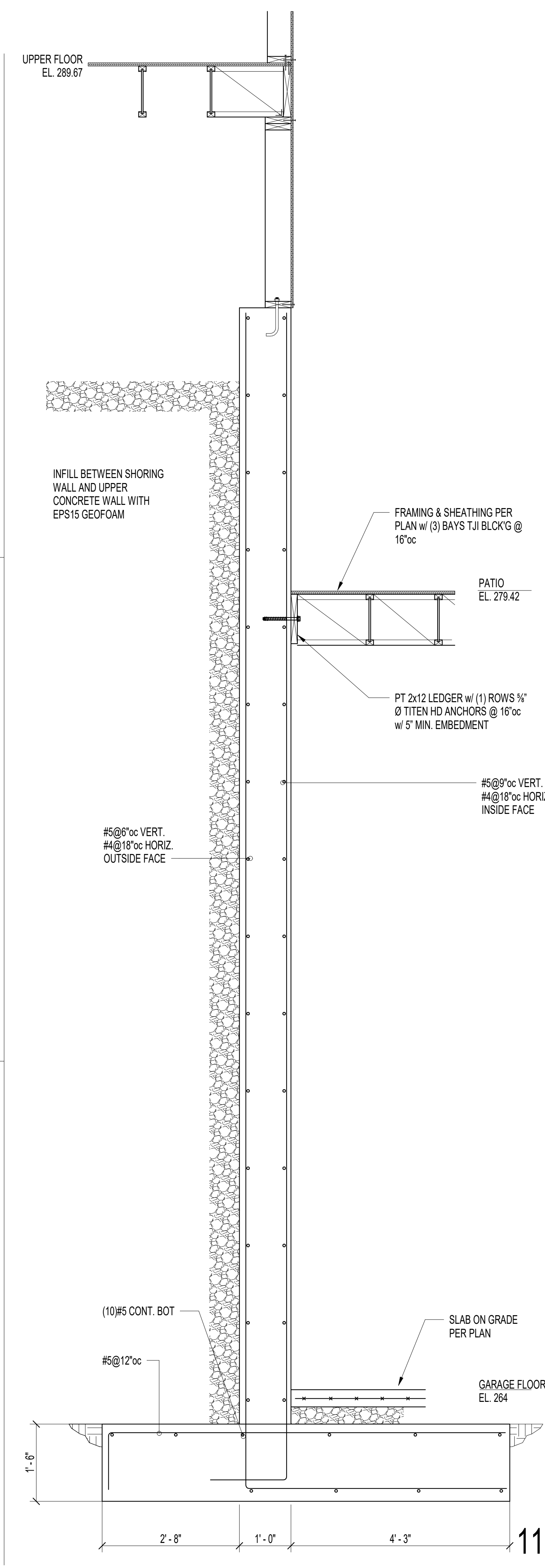
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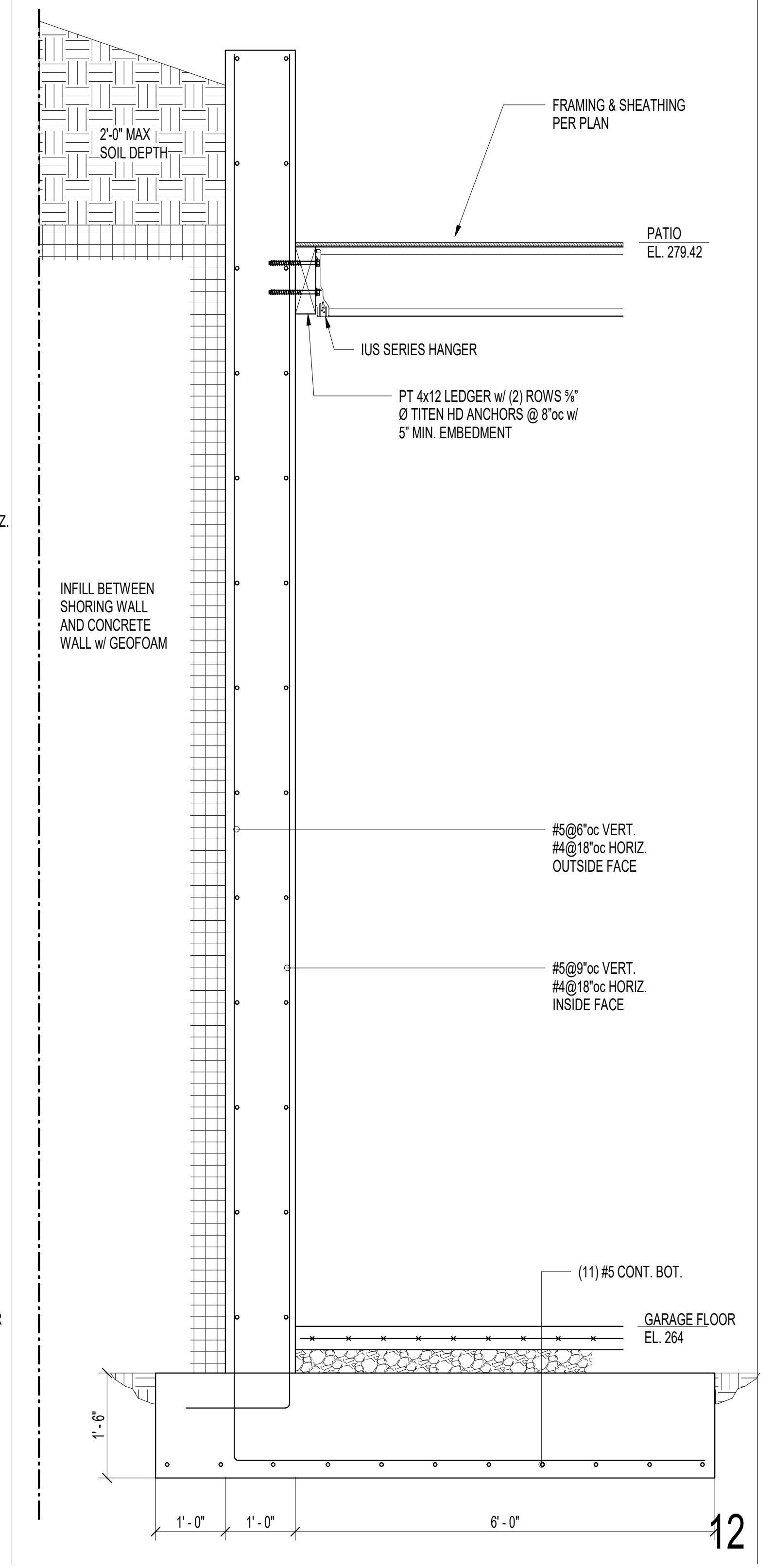


10

Elevator Pit

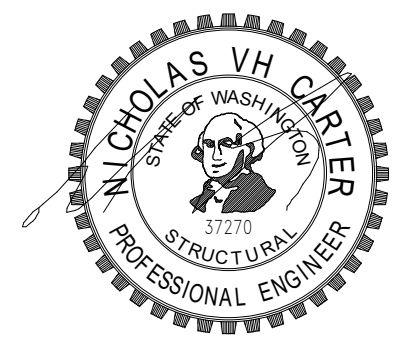


11



12

Section thru Garage Wall



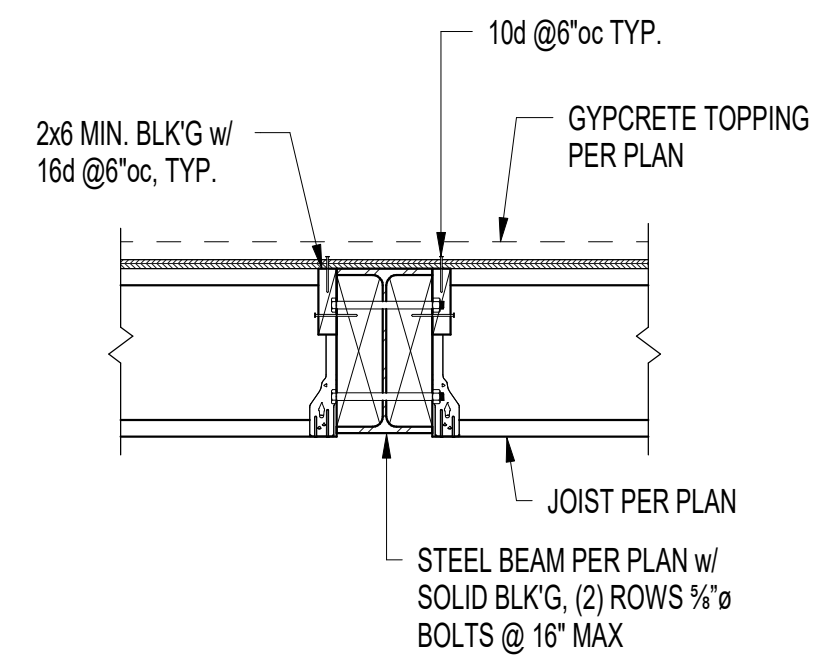
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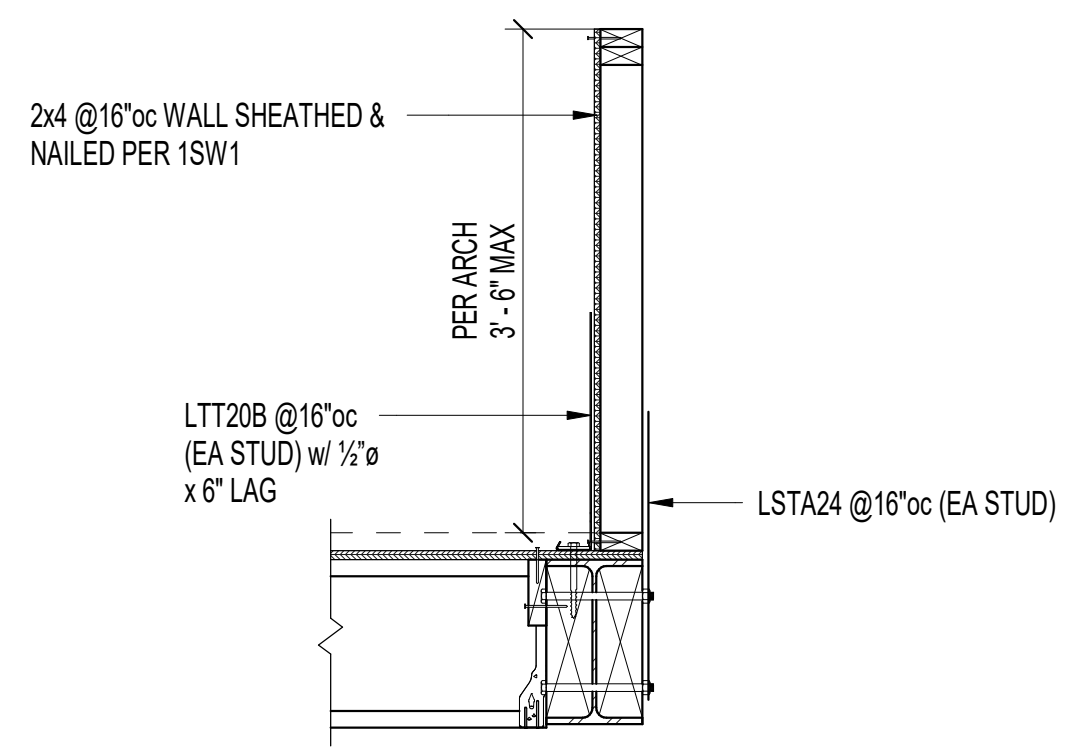
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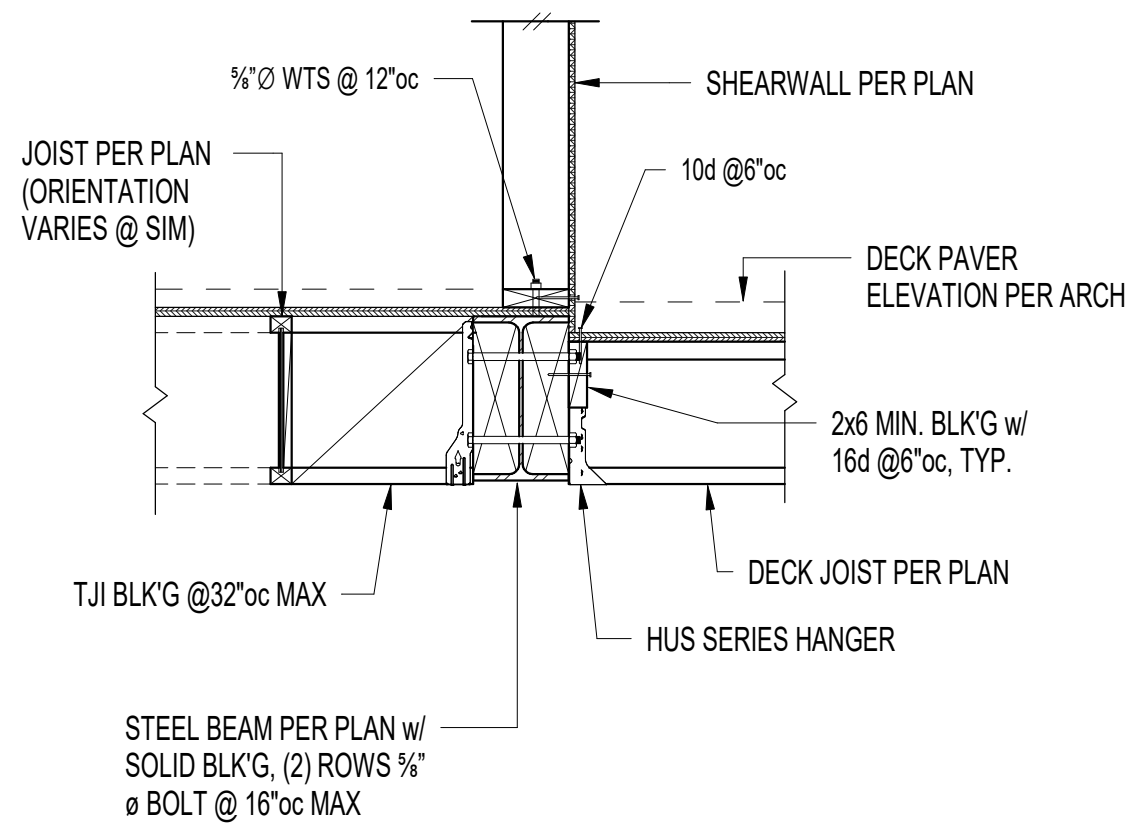
S3.3



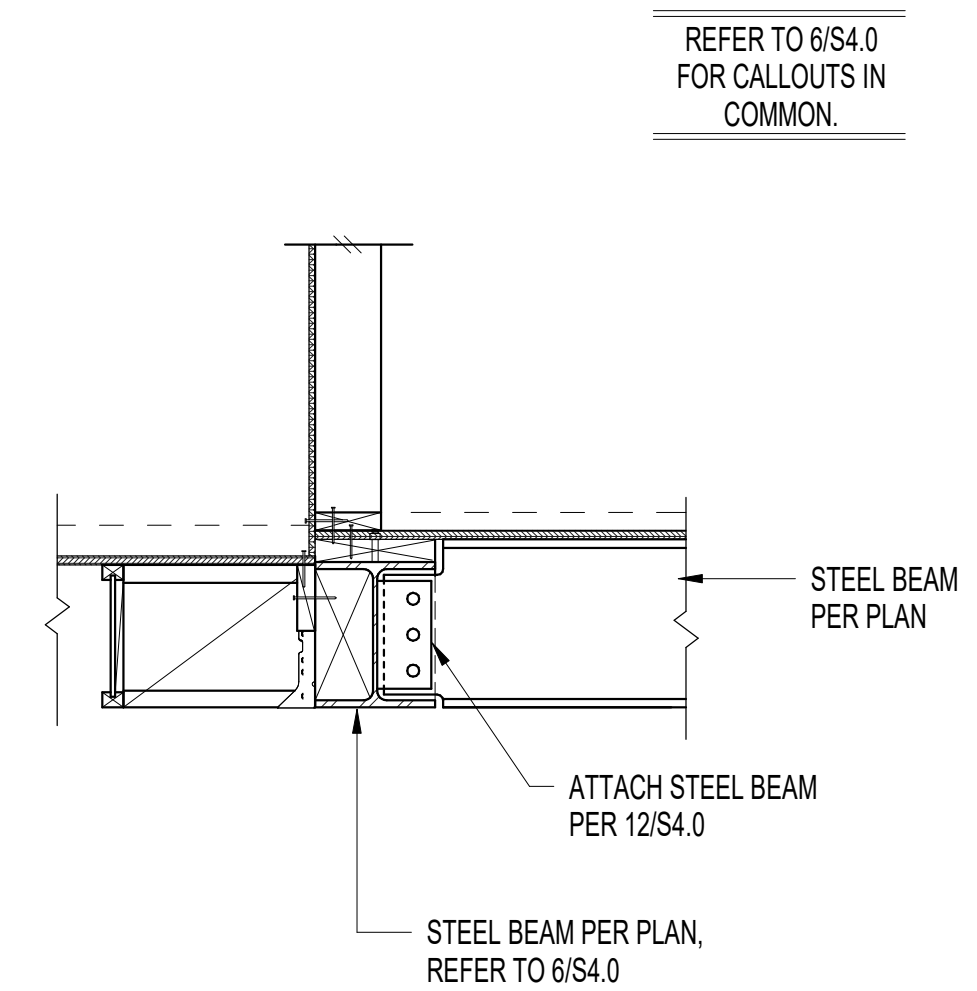
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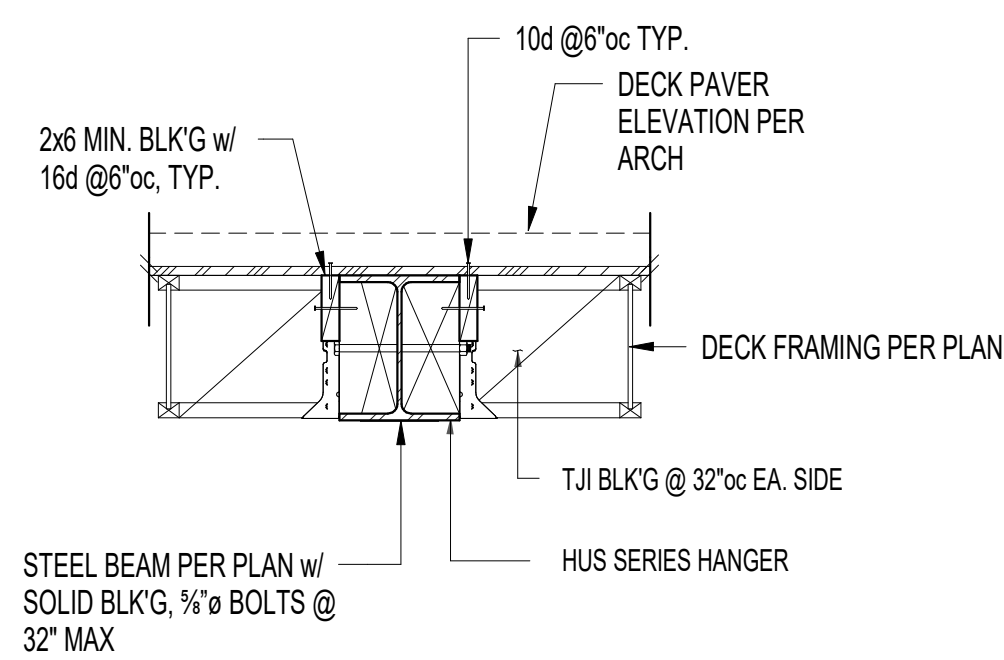
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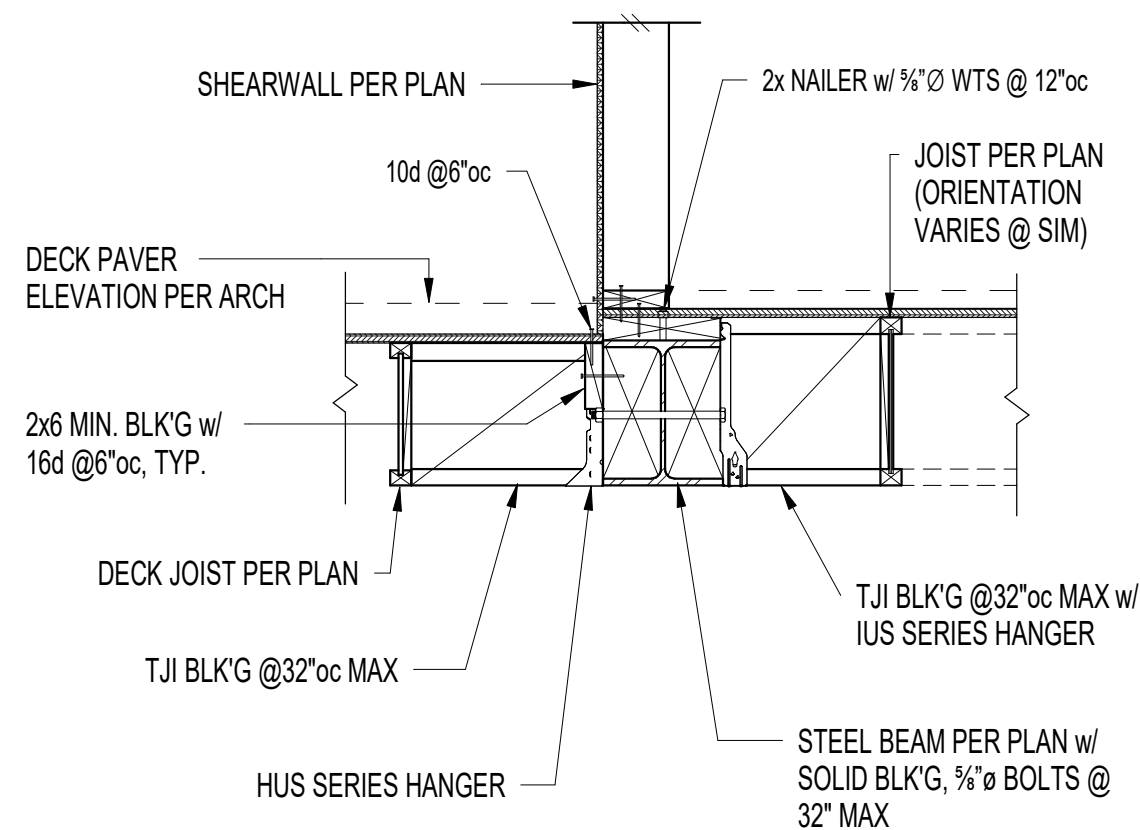
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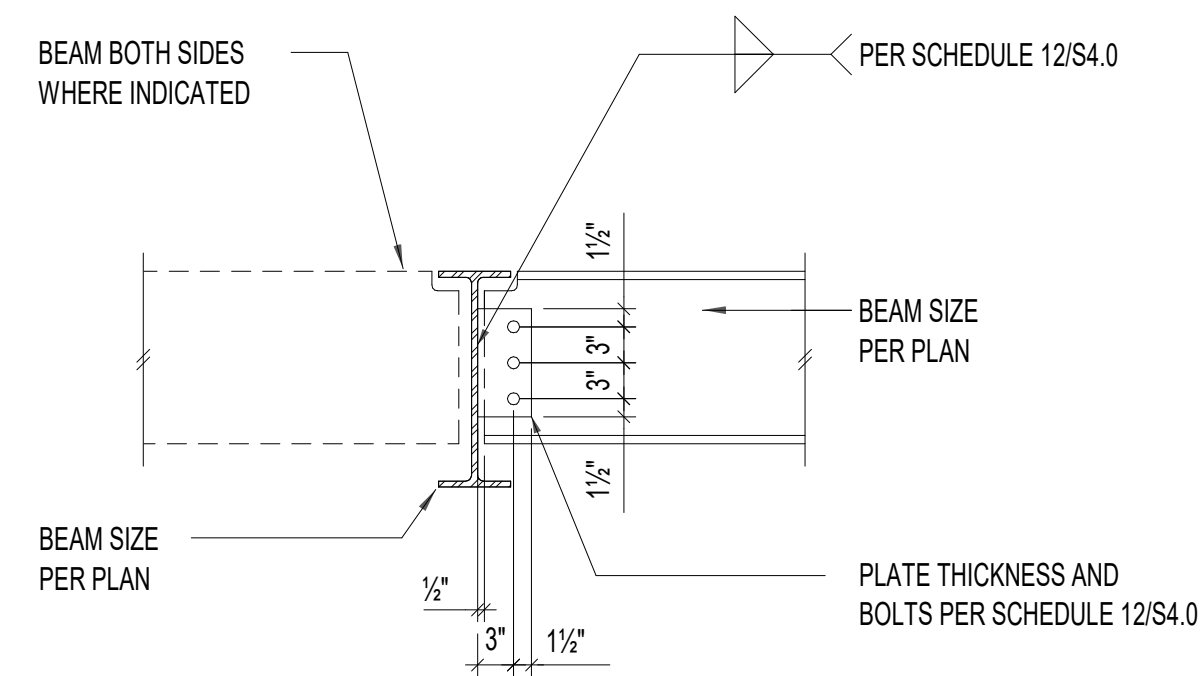
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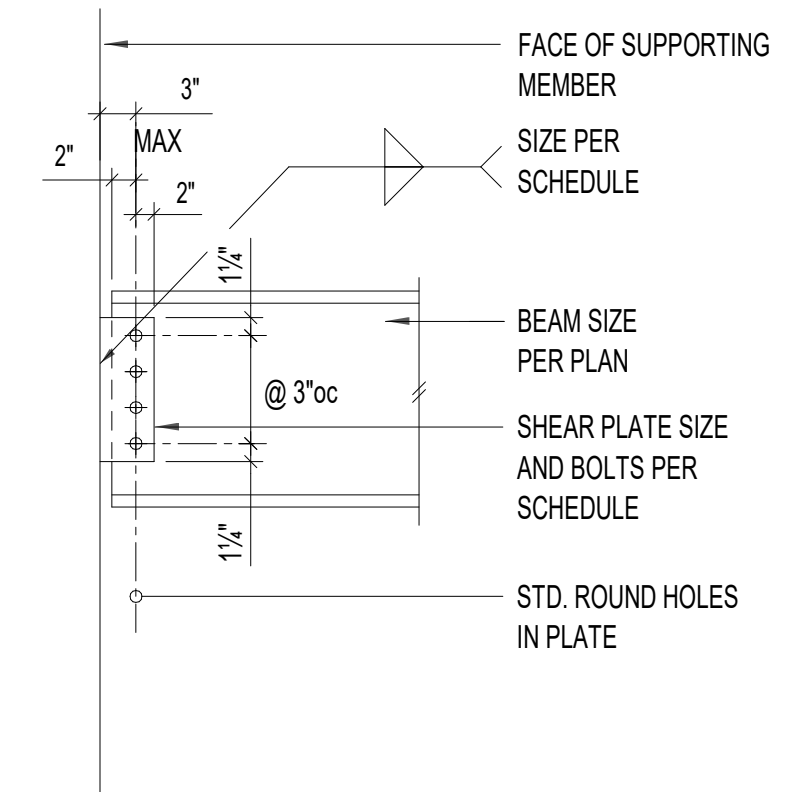


6



Typical Beam To Beam Connection

7

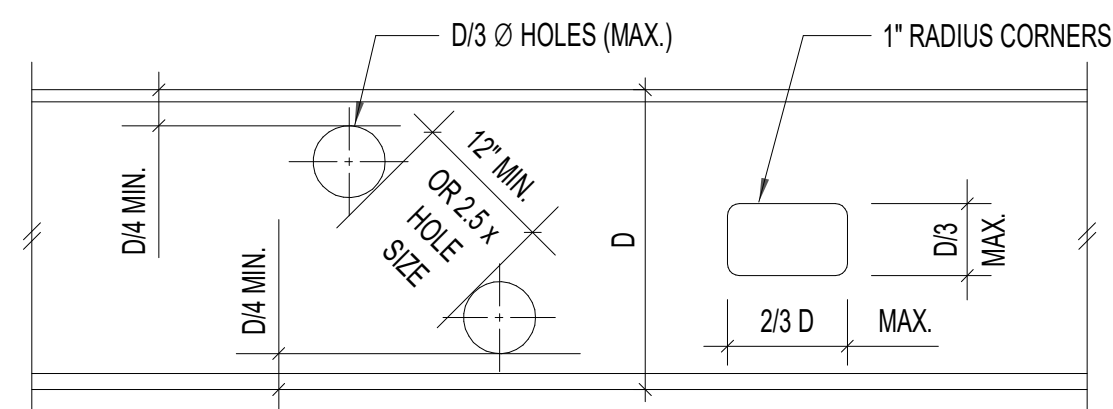


Shear Tab Connection Section

Typical Single Shear Plate Connection

SHEAR PLATE SCHEDULE					
BEAM SIZE	NO. OF BOLTS	BOLT SIZE *	PLATE THICKNESS	WELD SIZE	CAPACITY
W12, W14	3	1"Ø	1/2"	1/4"	53.3k

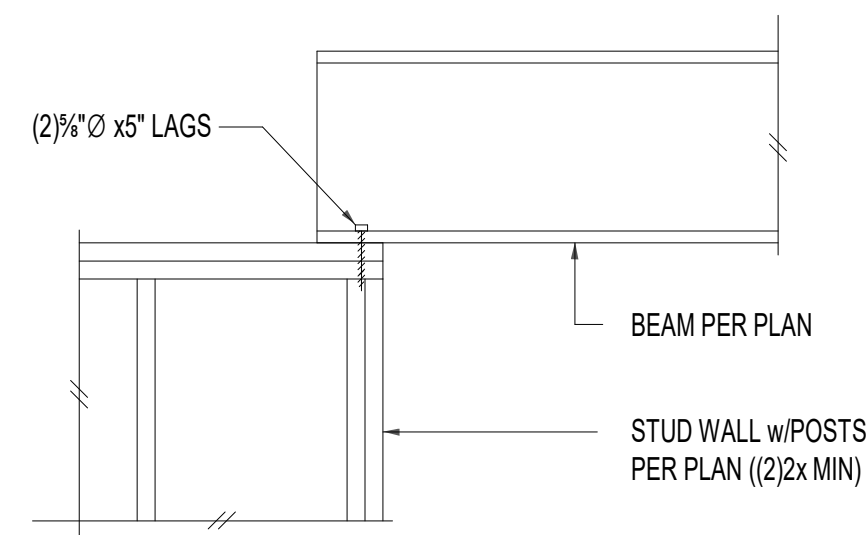
\* BOLT TYPE = A325X  
PL MATERIAL = A36



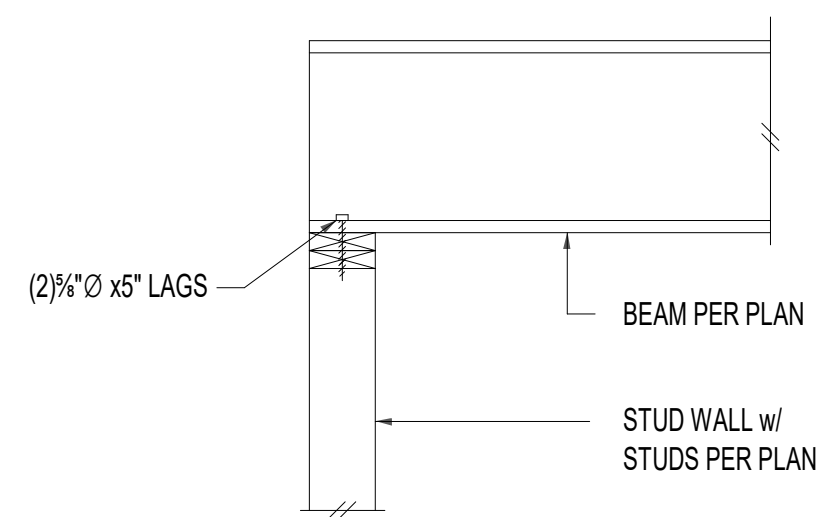
1. CONTRACTOR SHALL COORDINATE SIZES AND LOCATIONS OF ALL BEAM PENETRATIONS. ALL PENETRATIONS LARGER THAN 2"Ø SHALL BE SHOWN ON SHOP DRAWINGS OR SKETCHES AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. FIELD CUTTING NOT PERMITTED WITHOUT APPROVAL.
2. OPENINGS MAY OCCUR IN MIDDLE HALF OF BEAM LENGTH ONLY.
3. NO CUTTING MAY OCCUR IN TOP OR BOTTOM QUARTER OF BEAM DEPTH.
4. ADJACENT OPENINGS MUST BE SPACED AT THE LESSER OF, 12" OR 2.5 x LARGER OPENING SIZE, EDGE TO EDGE.
5. MAXIMUM SIZES OF OPENINGS SHALL BE D/3 Ø OR D/3 x 2D/3 AS SHOWN.
6. NO OPENINGS SHALL OCCUR WITHIN 12" OF AN ADJACENT BEAM CONNECTION.
7. REQUIRED OPENINGS NOT MEETING ABOVE CRITERIA SHALL BE SUBMITTED TO ENGINEER FOR REINFORCING DESIGN.

Steel Beam Openings

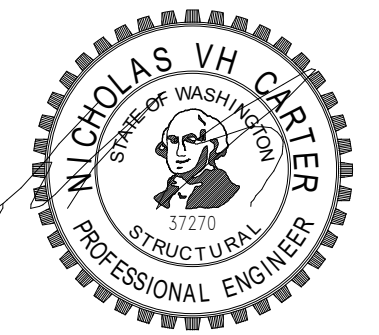
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11



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Mercer Island, WA 98040

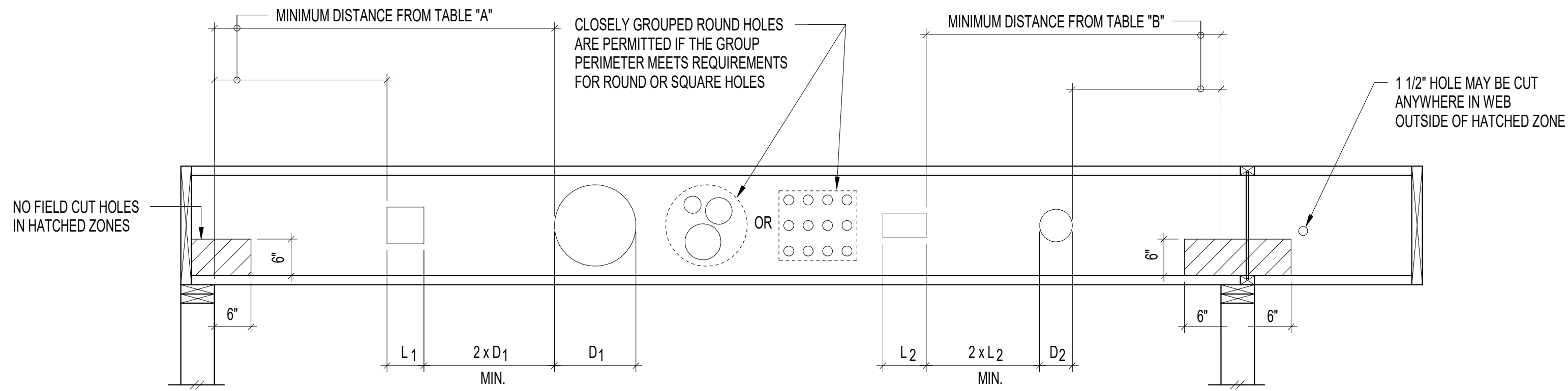
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Steel Details

12

S4.0



DO NOT CUT HOLES LARGER THAN 1 1/2" IN CANTILEVER

TABLE A - END SUPPORT  
MINIMUM DISTANCE FROM EDGE OF HOLE TO INSIDE FACE OF NEAREST END SUPPORT

DEPTH	TJI	○ ROUND HOLE SIZE									□ SQUARE OR RECTANGULAR HOLE SIZE								
		2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"	2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"
9 1/2"	110	1'-0"	1'-6"	2'-0"	3'-0"	5'-0"	-	-	-	-	1'-0"	1'-6"	2'-0"	3'-6"	4'-6"	-	-	-	-
	210	1'-0"	1'-6"	2'-6"	3'-0"	5'-6"	-	-	-	-	1'-0"	2'-0"	2'-6"	4'-0"	5'-0"	-	-	-	-
	230	1'-6"	2'-0"	2'-6"	3'-6"	5'-6"	-	-	-	-	1'-0"	2'-0"	3'-0"	4'-6"	5'-0"	-	-	-	-
11 7/8"	110	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-6"	-	-	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	5'-0"	6'-0"	-	-
	210	1'-0"	1'-6"	2'-0"	2'-0"	3'-0"	3'-6"	6'-0"	-	-	1'-0"	1'-6"	2'-6"	3'-0"	5'-0"	5'-6"	6'-6"	-	-
	230	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	6'-6"	-	-	1'-0"	2'-0"	2'-6"	3'-6"	5'-6"	5'-6"	7'-0"	-	-
	360	1'-6"	2'-0"	3'-0"	3'-6"	4'-6"	5'-0"	7'-0"	-	-	1'-6"	2'-6"	3'-6"	4'-6"	6'-6"	6'-6"	7'-6"	-	-
14"	110	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	3'-0"	5'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	4'-0"	6'-0"	8'-0"	-
	210	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-6"	6'-0"	-	1'-0"	1'-0"	2'-0"	2'-6"	4'-0"	4'-6"	6'-6"	8'-6"	-
	230	1'-0"	1'-0"	1'-0"	1'-6"	2'-6"	2'-6"	4'-0"	7'-0"	-	1'-0"	1'-0"	2'-0"	3'-0"	4'-0"	5'-0"	7'-0"	9'-0"	-
	360	1'-0"	1'-0"	1'-6"	2'-6"	3'-6"	4'-0"	5'-6"	8'-0"	-	1'-0"	1'-6"	2'-6"	4'-0"	6'-0"	6'-6"	8'-0"	9'-6"	-
14"	110	1'-0"	1'-0"	2'-0"	3'-0"	4'-6"	5'-0"	6'-6"	9'-0"	-	1'-6"	3'-0"	4'-0"	5'-0"	7'-0"	7'-6"	9'-0"	10'-0"	-

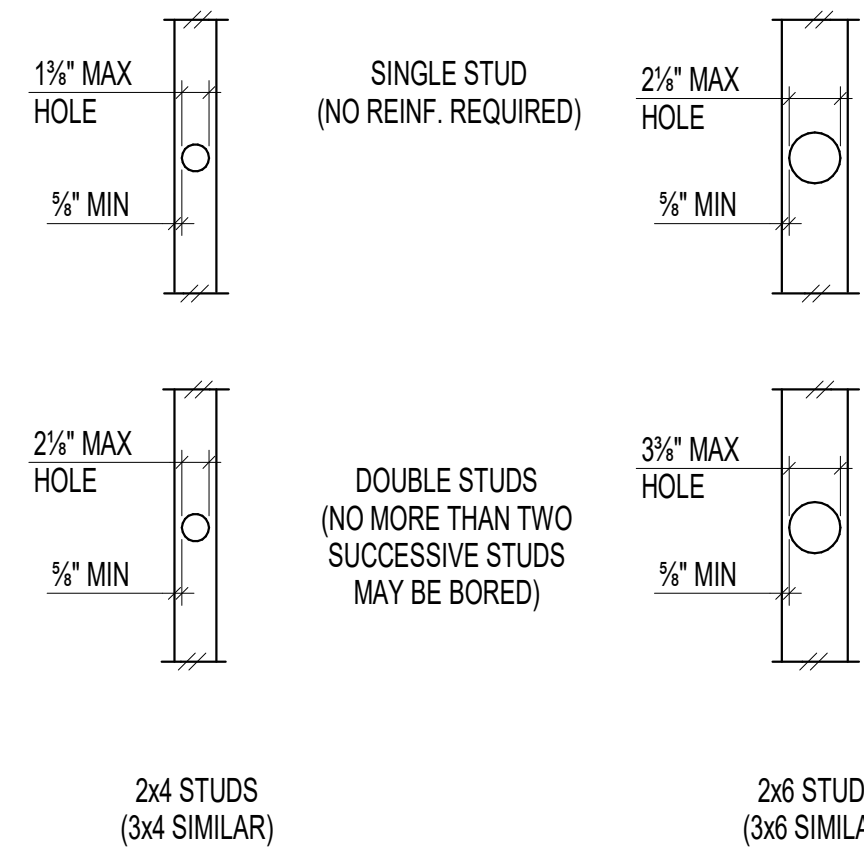
TABLE B - INTERMEDIATE OR CANTILEVER SUPPORT  
MINIMUM DISTANCE FROM EDGE OF HOLE TO INSIDE FACE OF NEAREST INTERMEDIATE OR CANTILEVER SUPPORT

DEPTH	TJI	○ ROUND HOLE SIZE									□ SQUARE OR RECTANGULAR HOLE SIZE								
		2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"	2"	3"	4"	5"	6 1/2"	7"	8 7/8"	11"	13"
9 1/2"	110	2'-0"	2'-6"	3'-6"	4'-6"	7'-6"	-	-	-	-	1'-6"	2'-6"	3'-6"	5'-6"	6'-6"	-	-	-	-
	210	2'-0"	2'-6"	3'-6"	5'-0"	8'-0"	-	-	-	-	2'-0"	3'-0"	4'-0"	6'-6"	7'-6"	-	-	-	-
	230	2'-6"	3'-0"	4'-0"	5'-6"	8'-6"	-	-	-	-	2'-0"	3'-6"	4'-6"	6'-6"	7'-6"	-	-	-	-
11 7/8"	110	1'-0"	1'-0"	1'-6"	2'-6"	4'-0"	4'-6"	8'-6"	-	-	1'-0"	1'-6"	2'-6"	4'-0"	7'-0"	7'-0"	9'-6"	-	-
	210	1'-0"	1'-0"	2'-0"	3'-0"	4'-6"	5'-0"	9'-0"	-	-	1'-0"	2'-0"	3'-0"	4'-6"	8'-0"	8'-0"	10'-0"	-	-
	230	1'-0"	2'-0"	2'-6"	3'-6"	5'-0"	5'-6"	10'-0"	-	-	1'-0"	2'-6"	3'-6"	5'-0"	8'-6"	9'-0"	10'-6"	-	-
	360	2'-0"	3'-0"	4'-0"	5'-6"	7'-0"	7'-6"	11'-0"	-	-	2'-0"	3'-6"	5'-0"	7'-0"	9'-6"	9'-6"	11'-0"	-	-
14"	110	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	2'-6"	4'-6"	8'-6"	-	1'-0"	1'-0"	1'-0"	2'-6"	5'-0"	6'-0"	9'-0"	12'-0"	-
	210	1'-0"	1'-0"	1'-0"	1'-0"	2'-6"	3'-0"	5'-6"	9'-6"	-	1'-0"	1'-0"	2'-0"	3'-6"	6'-0"	7'-0"	10'-0"	13'-0"	-
	230	1'-0"	1'-0"	1'-0"	2'-0"	3'-6"	4'-0"	6'-0"	10'-6"	-	1'-0"	1'-0"	2'-6"	4'-0"	6'-6"	7'-6"	11'-0"	13'-6"	-
	360	1'-0"	1'-0"	2'-0"	3'-6"	5'-6"	6'-0"	8'-6"	12'-6"	-	1'-0"	2'-0"	4'-0"	5'-6"	9'-0"	10'-0"	12'-0"	14'-0"	-
14"	110	1'-0"	1'-0"	1'-6"	3'-6"	5'-6"	6'-6"	9'-6"	13'-6"	-	1'-0"	3'-0"	5'-0"	7'-0"	10'-0"	11'-0"	13'-6"	15'-0"	-

- GENERAL NOTES:
- HOLES MAY BE LOCATED VERTICALLY ANYWHERE WITHIN THE WEB. LEAVE 1/8" OF WEB (MINIMUM) AT TOP AND BOTTOM OF HOLE.
  - KNOCKOUTS ARE LOCATED IN WEB AT APPROXIMATELY 12" ON-CENTER; THEY DO NOT AFFECT HOLE PLACEMENT AND MAY BE LOCATED IN THE HATCHED ZONE.
  - FOR SIMPLE SPAN (5' MINIMUM) UNIFORMLY LOADED JOISTS MEETING THE REQUIREMENTS OF THIS GUIDE, ONE MAXIMUM SIZE ROUND HOLE MAY BE LOCATED AT THE CENTER OF THE JOIST SPAN PROVIDED THAT NO OTHER HOLES OCCUR IN THE JOIST.
  - DISTANCES ARE BASED ON THE MAXIMUM UNIFORM LOADS SHOWN IN THIS GUIDE. FOR OTHER LOAD CONDITIONS OR HOLE CONFIGURATIONS, USE FORTE SOFTWARE OR CONTACT YOUR WEYERHAEUSER REPRESENTATIVE.
  - DO NOT CUT OR NOTCH FLANGE.

Allowable TJI Joist Penetrations

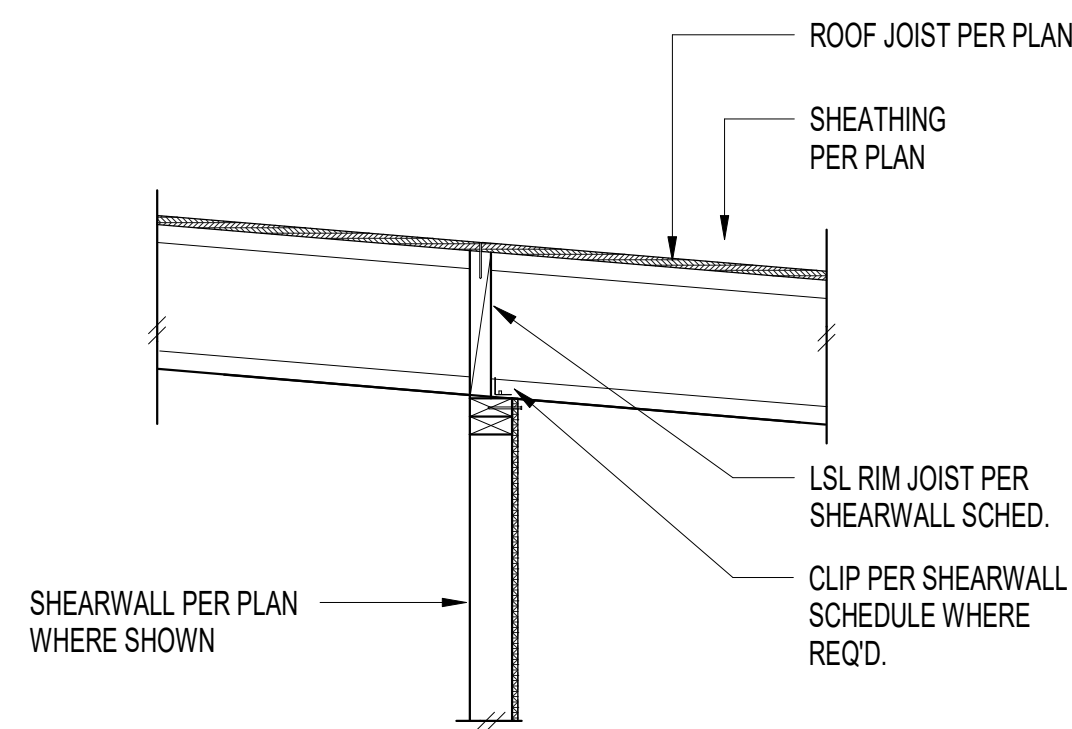
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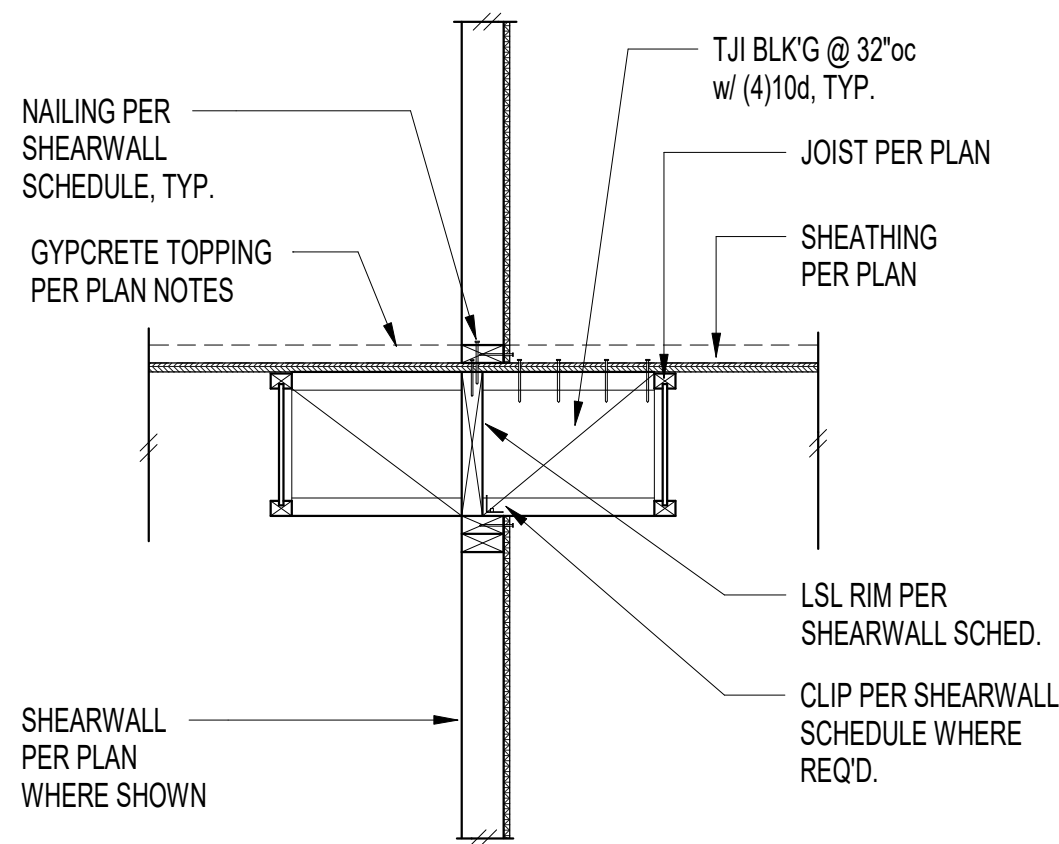
NOTE: BORED HOLES SHALL NOT BE LOCATED @ THE SAME SECTION OF STUD AS A NOTCH.

Holes Allowed Through Studs

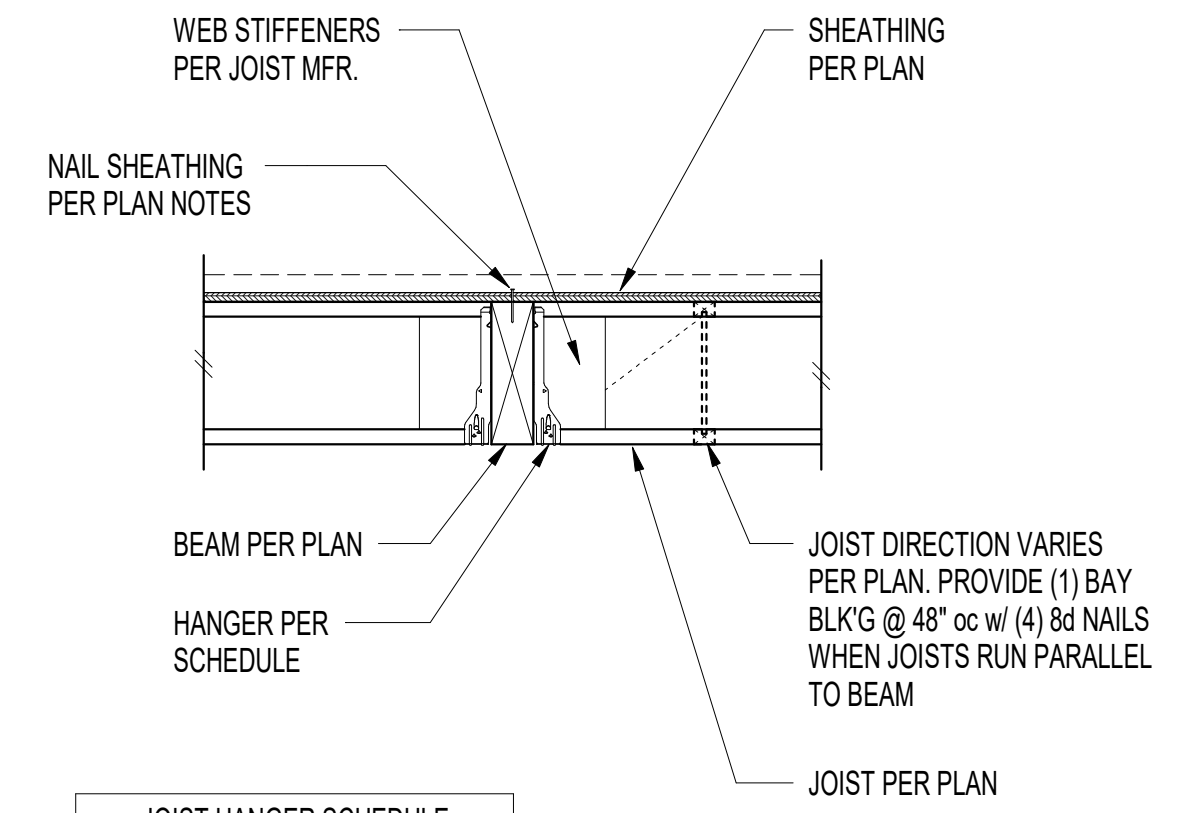
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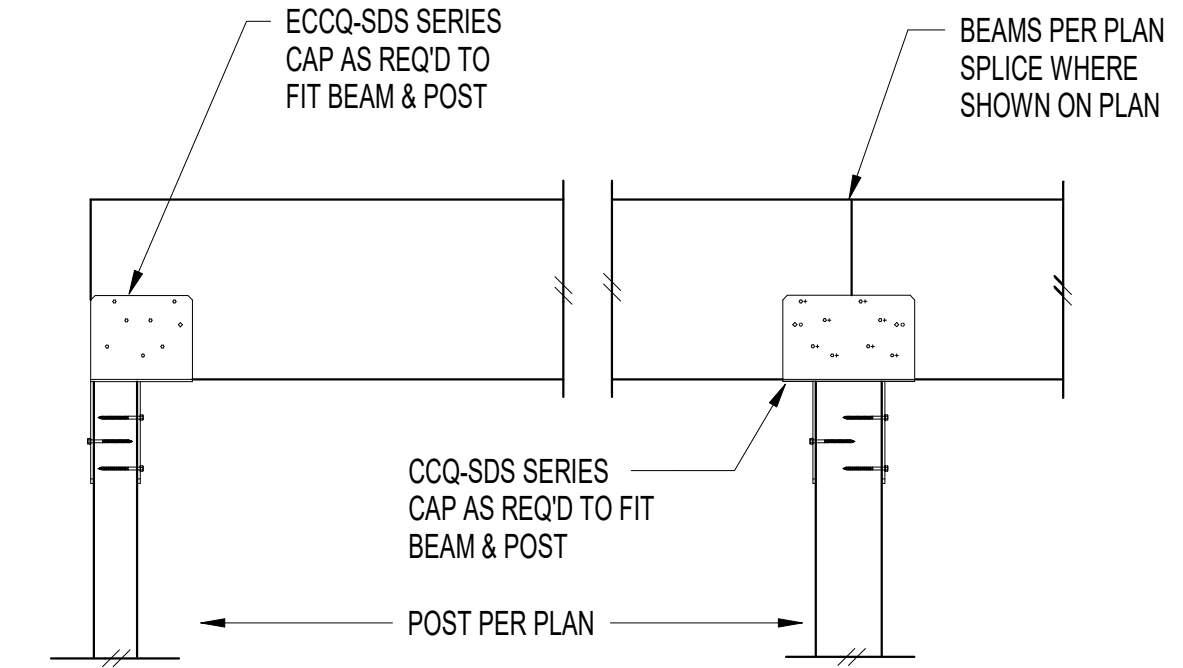
11



JOIST HANGER SCHEDULE	
JOIST	HANGER
11 1/2" TJI 110	HUS1.81/11
11 1/2" TJI 360	HU3511
14" TJI 110	IUS1.81/14

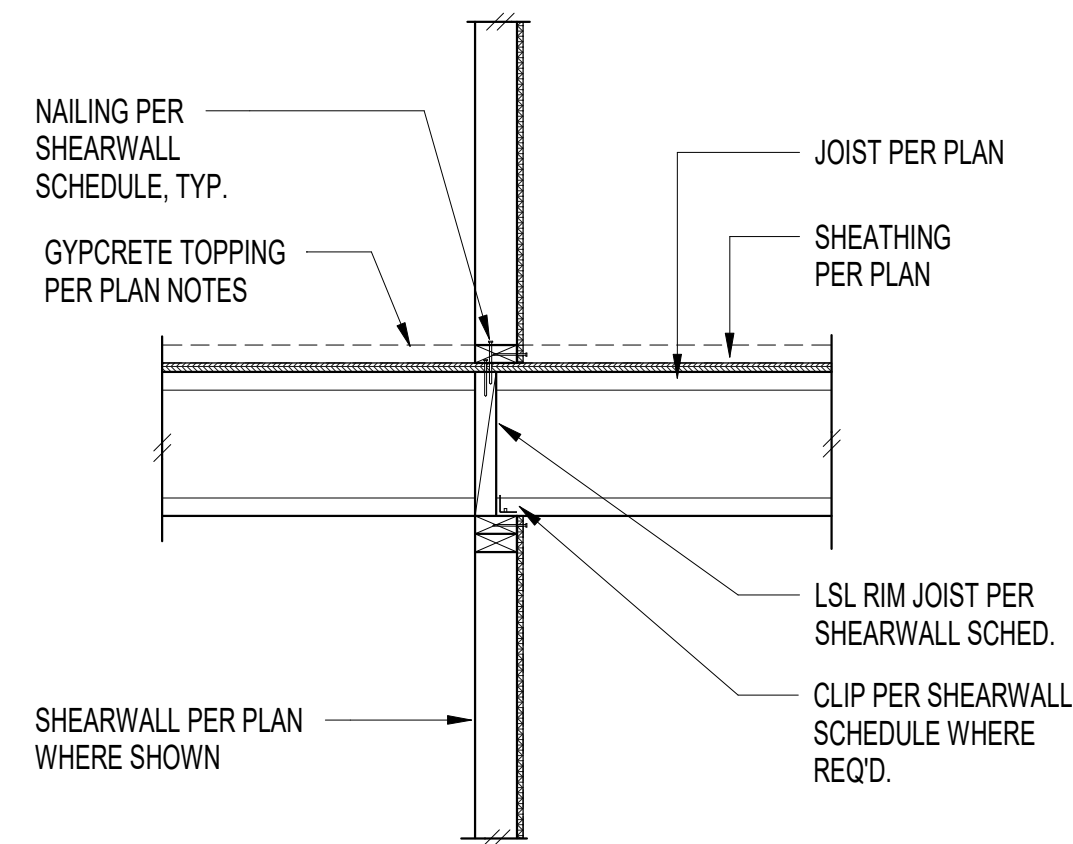
Typical Beam

4

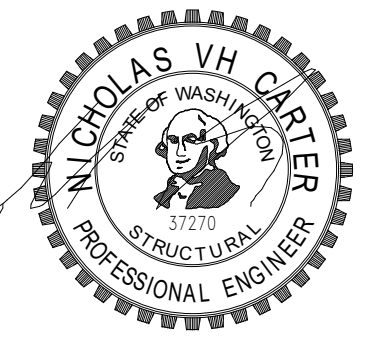


Typical Beam To Isolated Post Connection

8



12



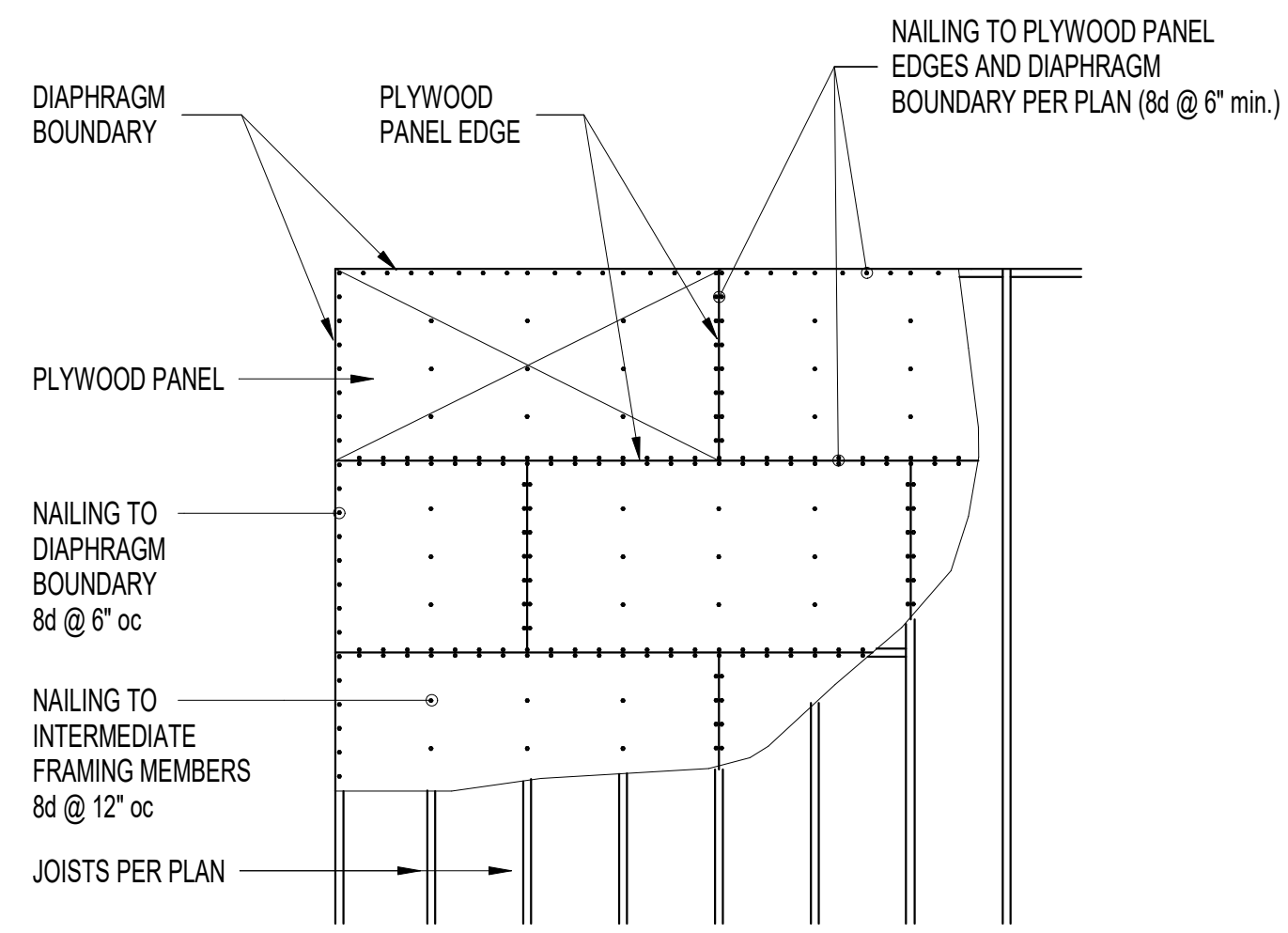
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Typical Wood Details

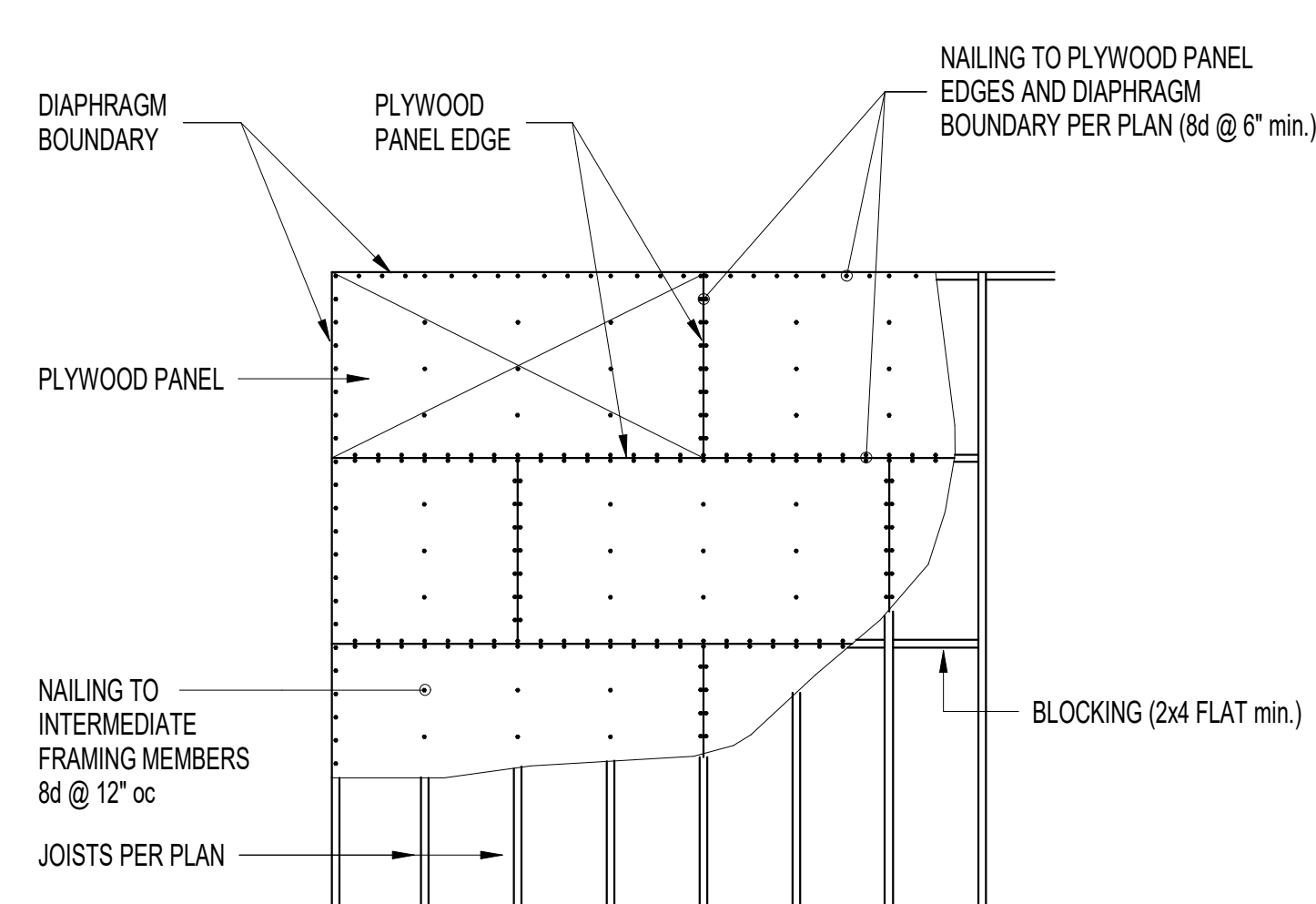
S5.0



NOTE:  
BEARING AND SHEAR WALL INTERSECTIONS SHALL BE CONSIDERED DIAPHRAGM BOUNDARIES, TYP

Typical Un-Blocked Plywood Roof/Floor Sheathing Layout

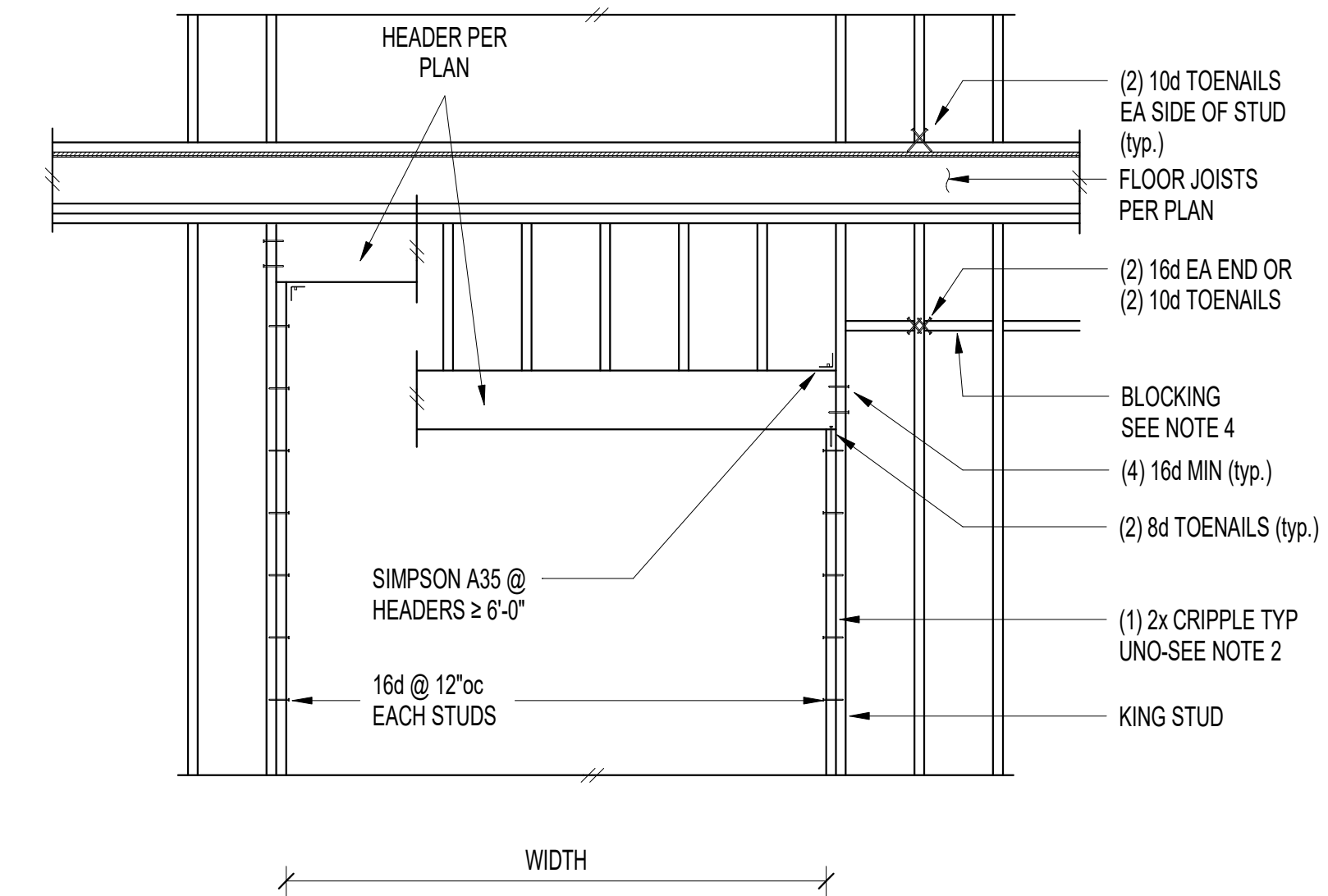
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NOTE:  
BEARING AND SHEAR WALL INTERSECTIONS SHALL BE CONSIDERED DIAPHRAGM BOUNDARIES, TYP

Typical Blocked Sheathing Layout

2

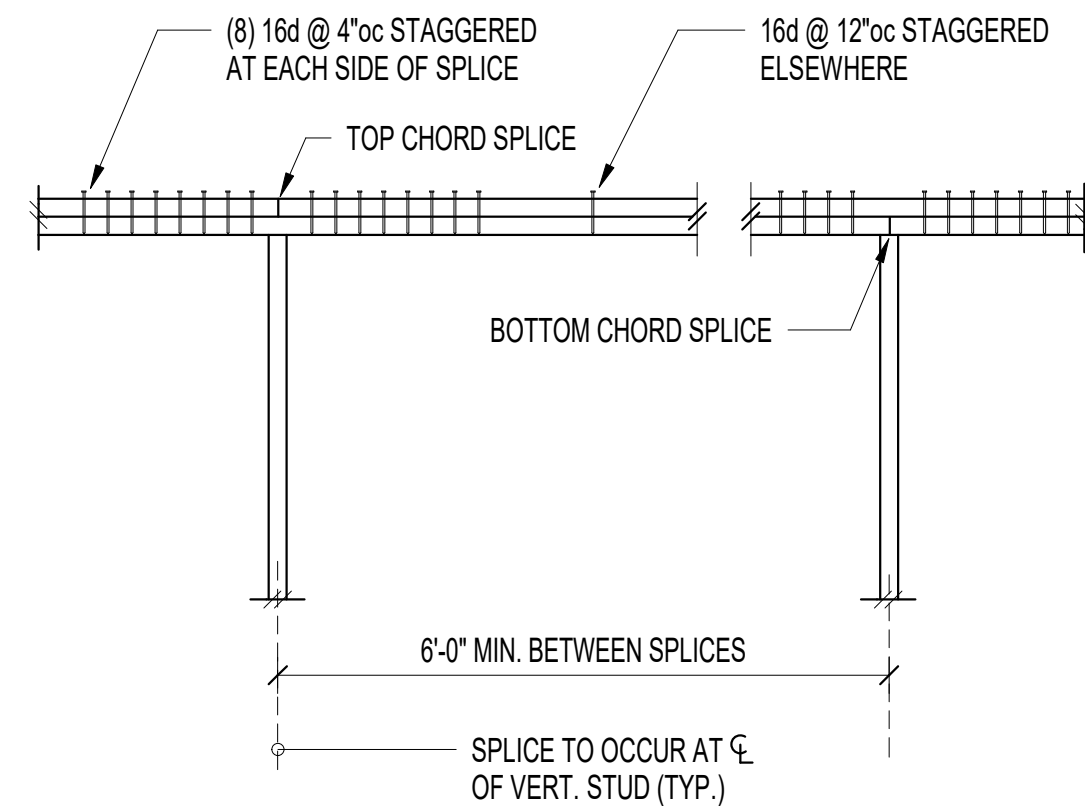


Scale : N.T.S.

- NOTES:
- HEADERS PER PLAN
  - PROVIDE (1) 2x CRIPPLE STUDS MINIMUM TYPICAL, U.O.N.
  - SEE ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS
  - 2x SOLID BLOCKING REQUIRED AT CEILING LINE, ALL PANEL EDGES, AND @ 8'-0"oc MAX.

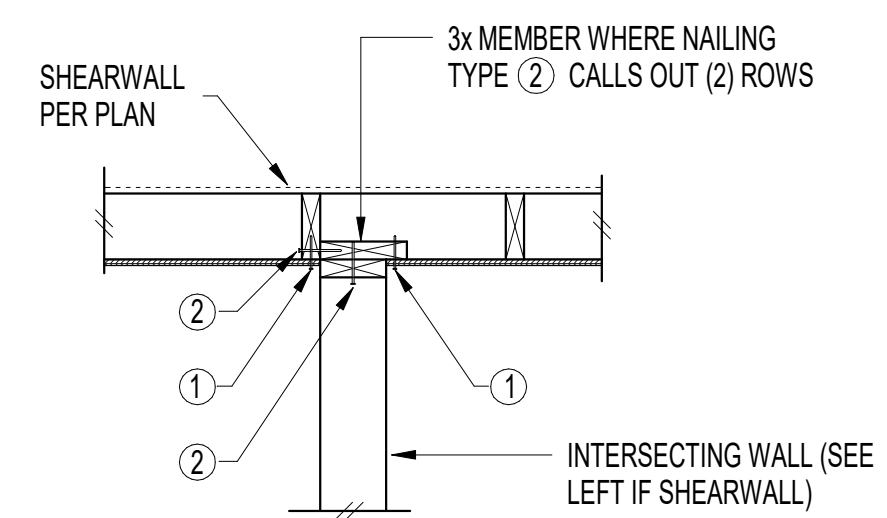
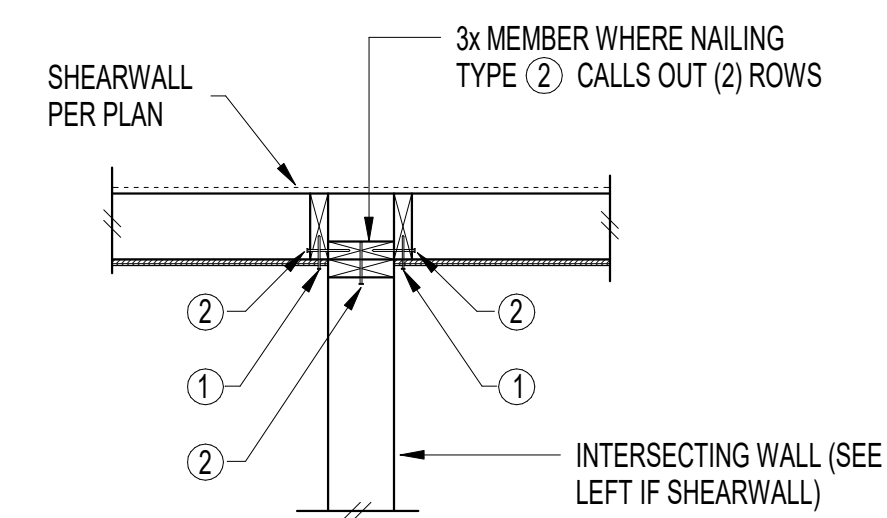
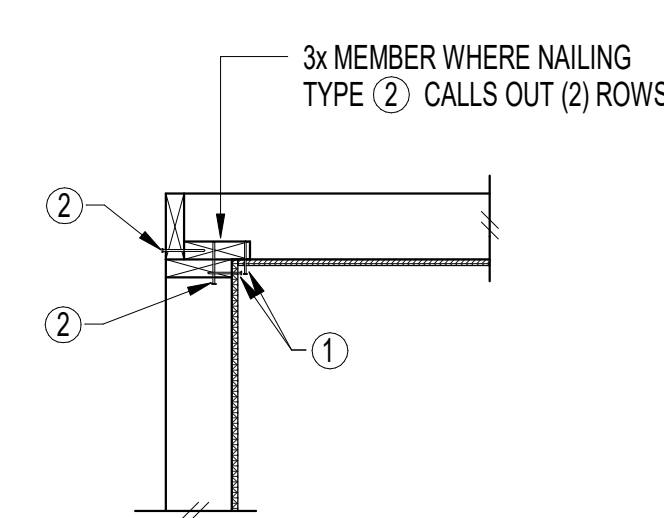
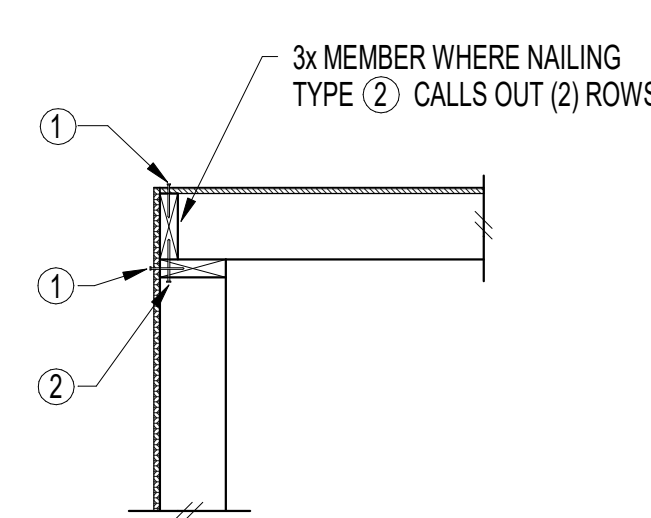
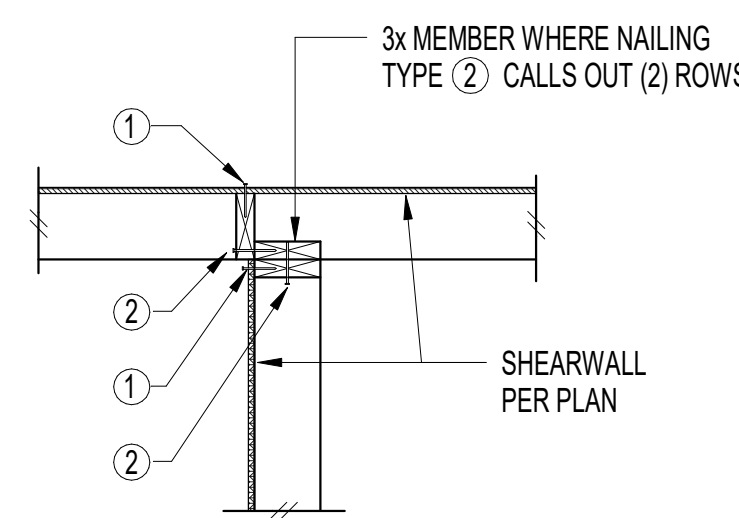
Typical Wall Opening Framing Elevation

4



Typical Top Plate Splice - Side View

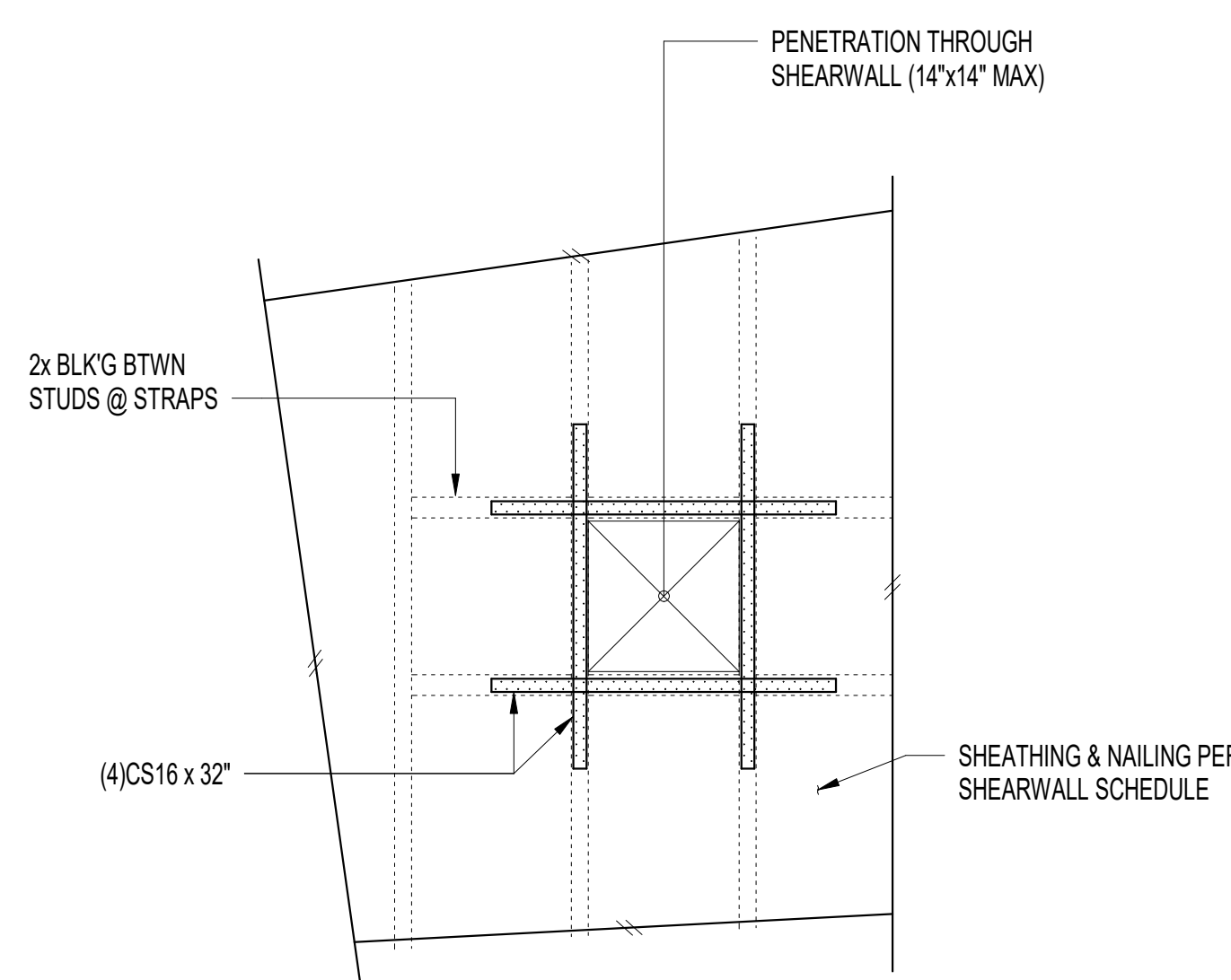
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- PLYWOOD PANEL EDGE NAILING PER SHEARWALL SCHEDULE TO MATCH BOTTOM PLATE
- NAILING PER SHEARWALL SCHEDULE

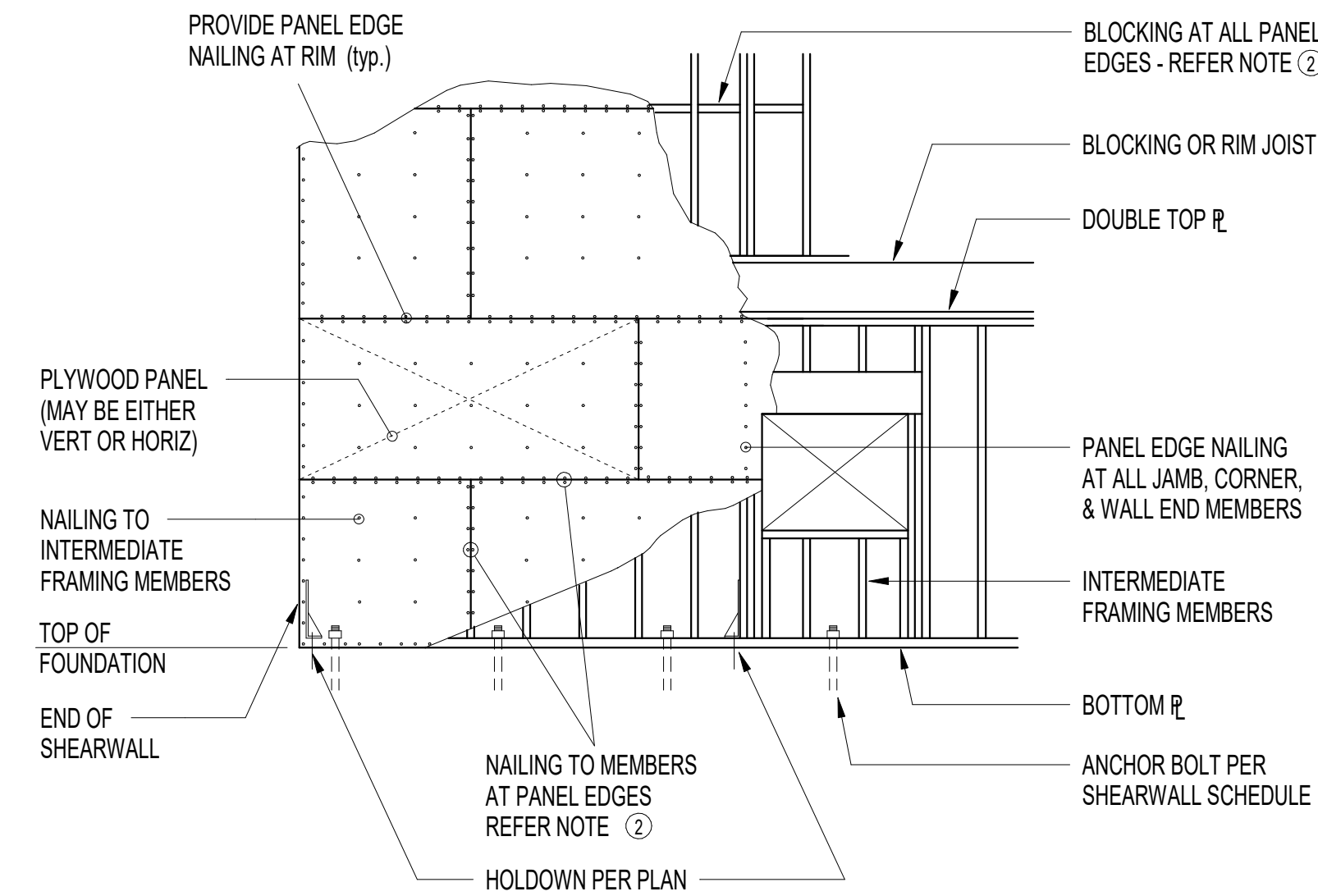
Shearwall Intersection

8



Penetration Through Shearwall

9



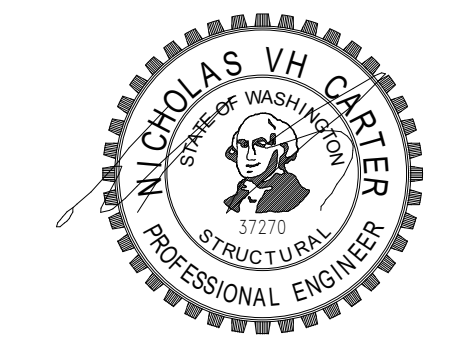
Typical Shearwall Panel Elevation

SHEAR WALL SCHEDULE

#SW#	SHEATHING	BLOCKING	PANEL EDGE NAILING	ATTACHMENT TO TOP PLATE	BOTTOM PLATE ATTACHMENT			CAPACITY (plf) SEISMIC
					LSL RIM JOIST REQ'D.	FACENAILING TO WOOD BELOW	ANCHOR BOLTING TO CONC. BELOW	
1SW1	15/32" APA RATED SHEATHING	YES	10d @ 6"oc	CLIP @ 16"oc	1 1/4" LSL	NAILS @ 6"oc	5/8" @ 48"oc	280 PLF
1SW2	15/32" APA RATED SHEATHING	YES	10d @ 4"oc	CLIP @ 16"oc	1 1/4" LSL	NAILS @ 4 1/2"oc	5/8" @ 48"oc	380 PLF
1SW3	15/32" APA RATED SHEATHING	YES	10d @ 2"oc	CLIP @ 12"oc	3/4" LSL	(2) ROWS NAILS @ 5 1/2"oc	5/8" @ 24"oc	640 PLF
2SW4	15/32" APA RATED SHEATHING EA SIDE	YES	10d @ 4"oc	CLIP @ 10"oc	3/4" LSL	(2) ROWS NAILS @ 4 1/2"oc	5/8" @ 24"oc	760 PLF

- NAILS SHALL BE 10d COMMON. NAILING APPLIES TO ALL PANEL EDGES (BLOCK ALL UNSUPPORTED PANEL EDGES). TOP & BOTTOM PLATES AND BLOCKING NAIL TO INTERMEDIATE FRAMING MEMBERS w/ 10d @ 12"oc. (NOTE: WHERE STUD SPACING IS 24" oc, NAIL TO INTERMEDIATE FRAMING MEMBERS w/ 10d @ 6" oc)
- FRAMING AT ADJOINING PANEL EDGES SHALL BE 3 INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED.
- CLIP SHALL BE EITHER A35 OR LTP4, CLIP MAY BE OMITTED WHEN ADJOINING PANEL EDGES OCCUR @ RIM JOIST AS SHOWN IN ELEVATION.
- ROWS MUST BE OFFSET AT LEAST 1/2" AND STAGGERED.
- NAILS SHALL BE 10d COMMON (0.1480 x 3 1/2") SCREWS SHALL BE SIMPSON SDS25500 (1/2"Ø x 5" MIN.)

- PROVIDE 3"x3"x0.229" PLATE WASHER AT ALL ANCHOR BOLTS. ANCHOR BOLTS SHALL BE POSITIONED SUCH THAT PLATE EDGE OF PLATE WASHER IS WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE (PLATE WASHER MAY BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 13/16" AND A LENGTH NOT TO EXCEED 1 1/2")
- ALTERNATE PLATE WASHERS TO PROVIDE 1/2" DIMENSION ON EACH SIDE OF THE SHEARWALL



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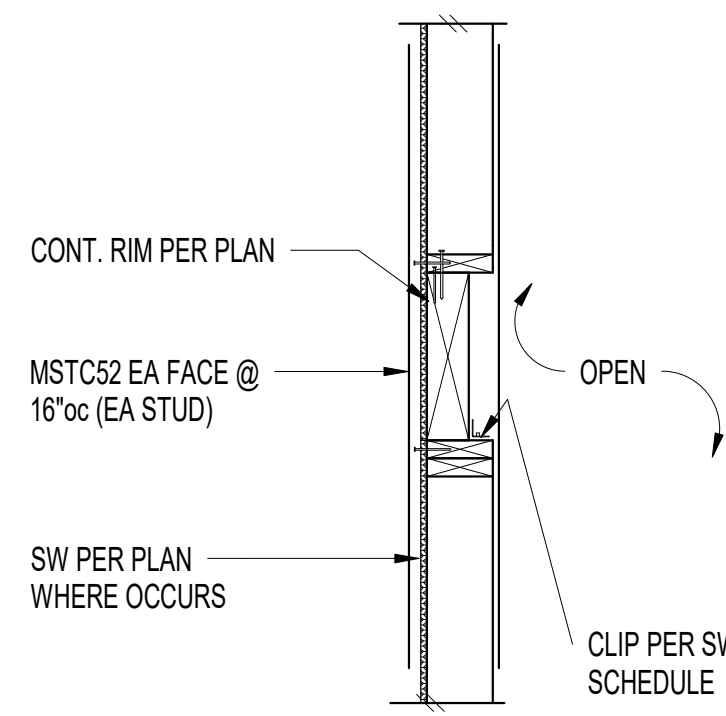
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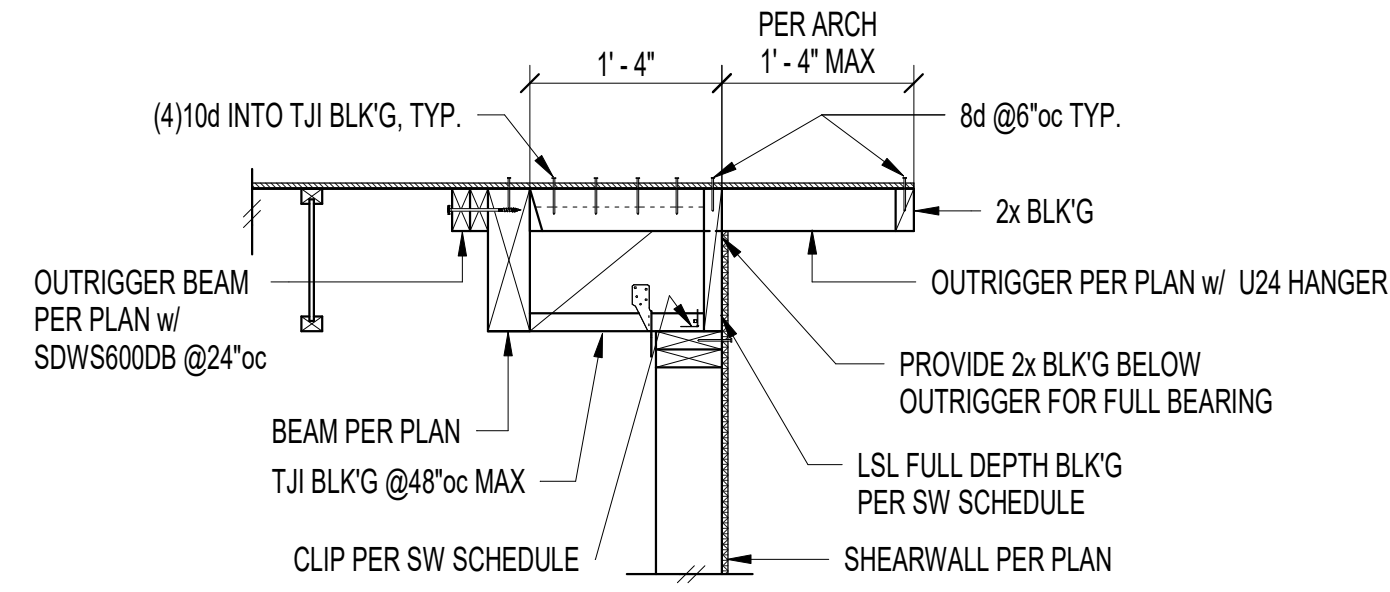
Typical Wood Lateral Details

12

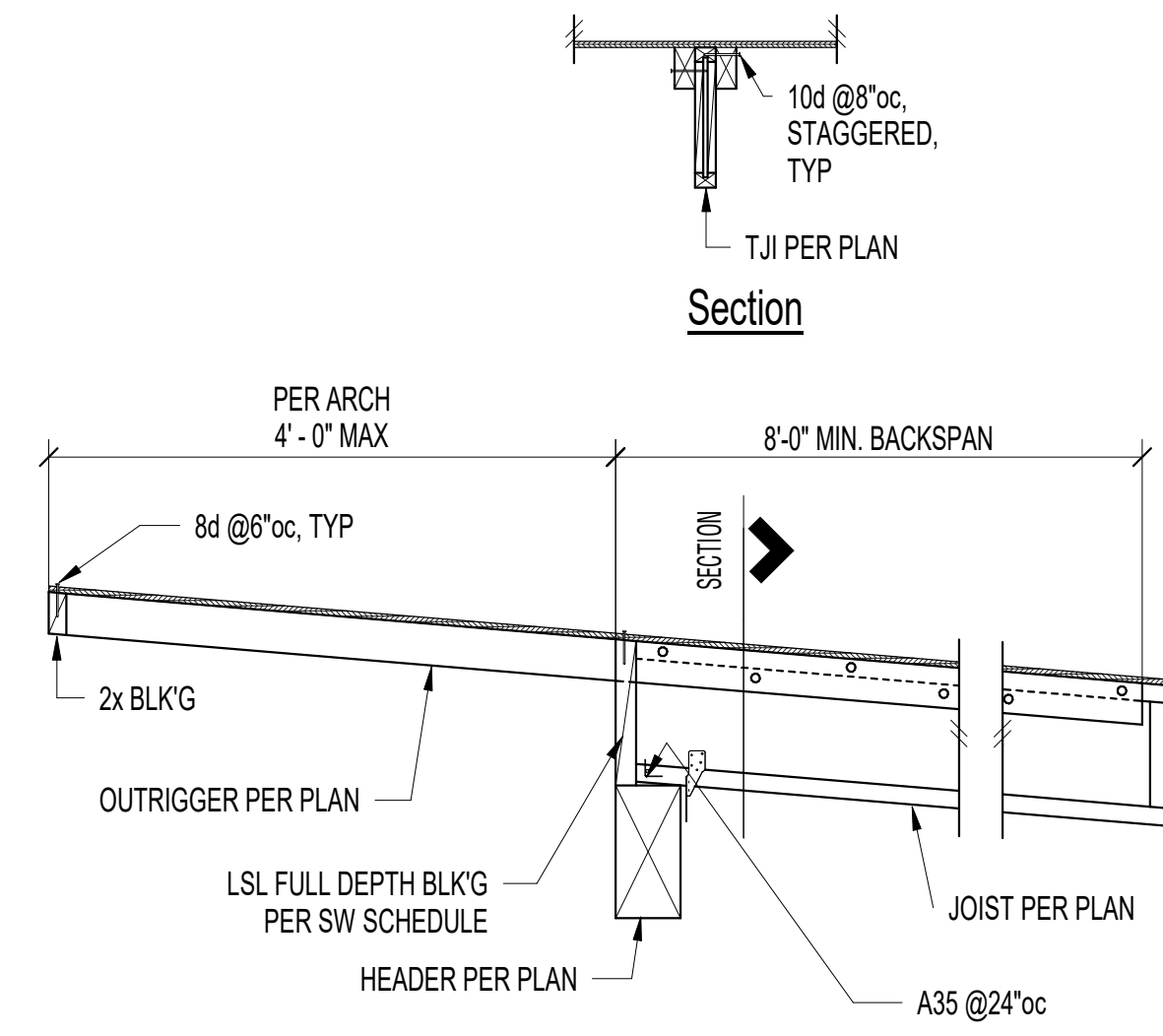
S5.1



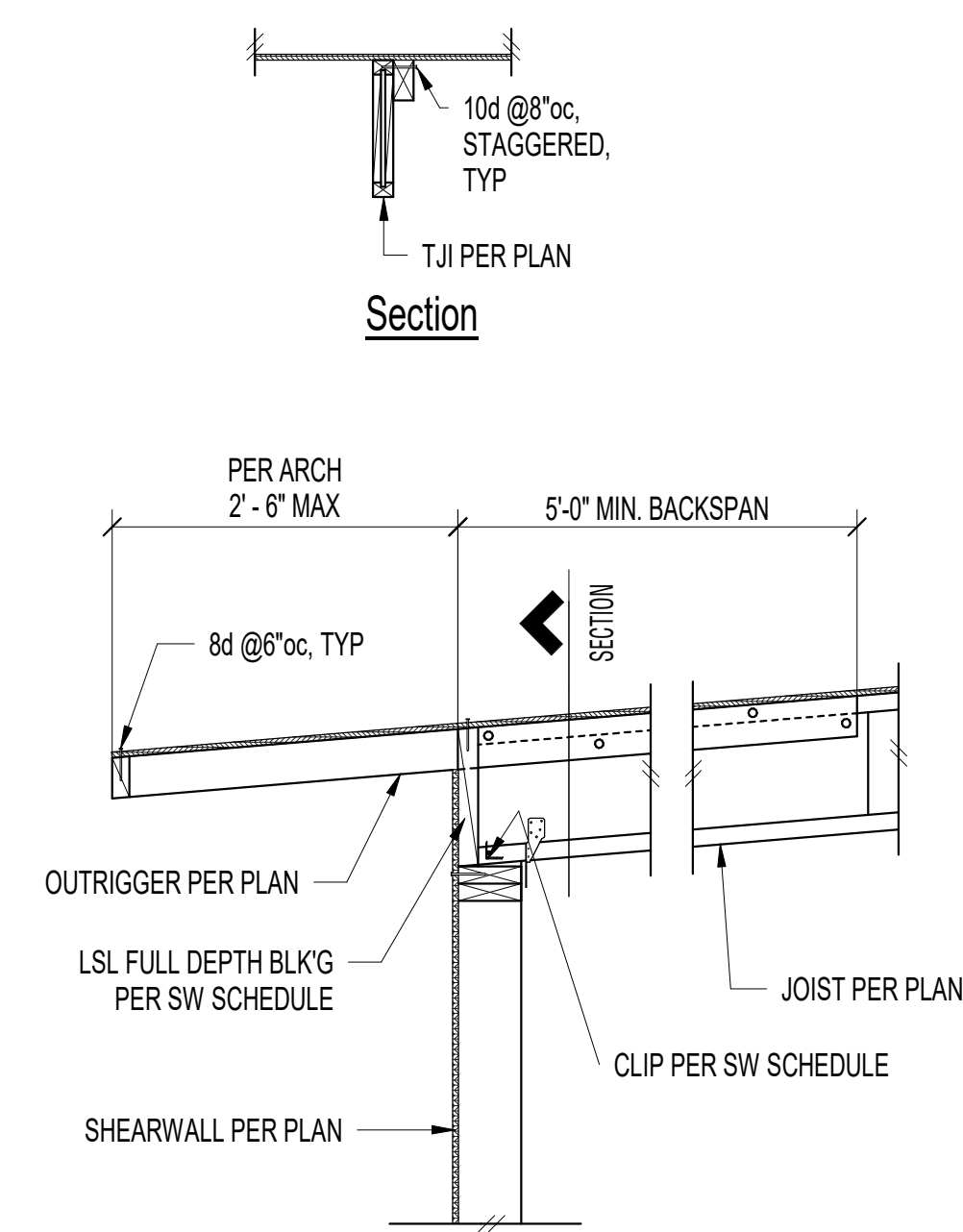
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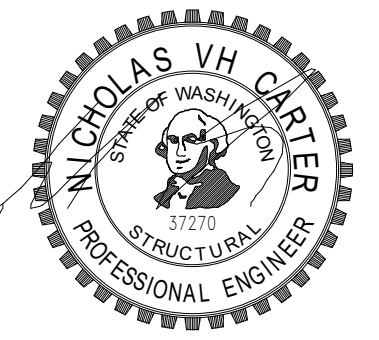
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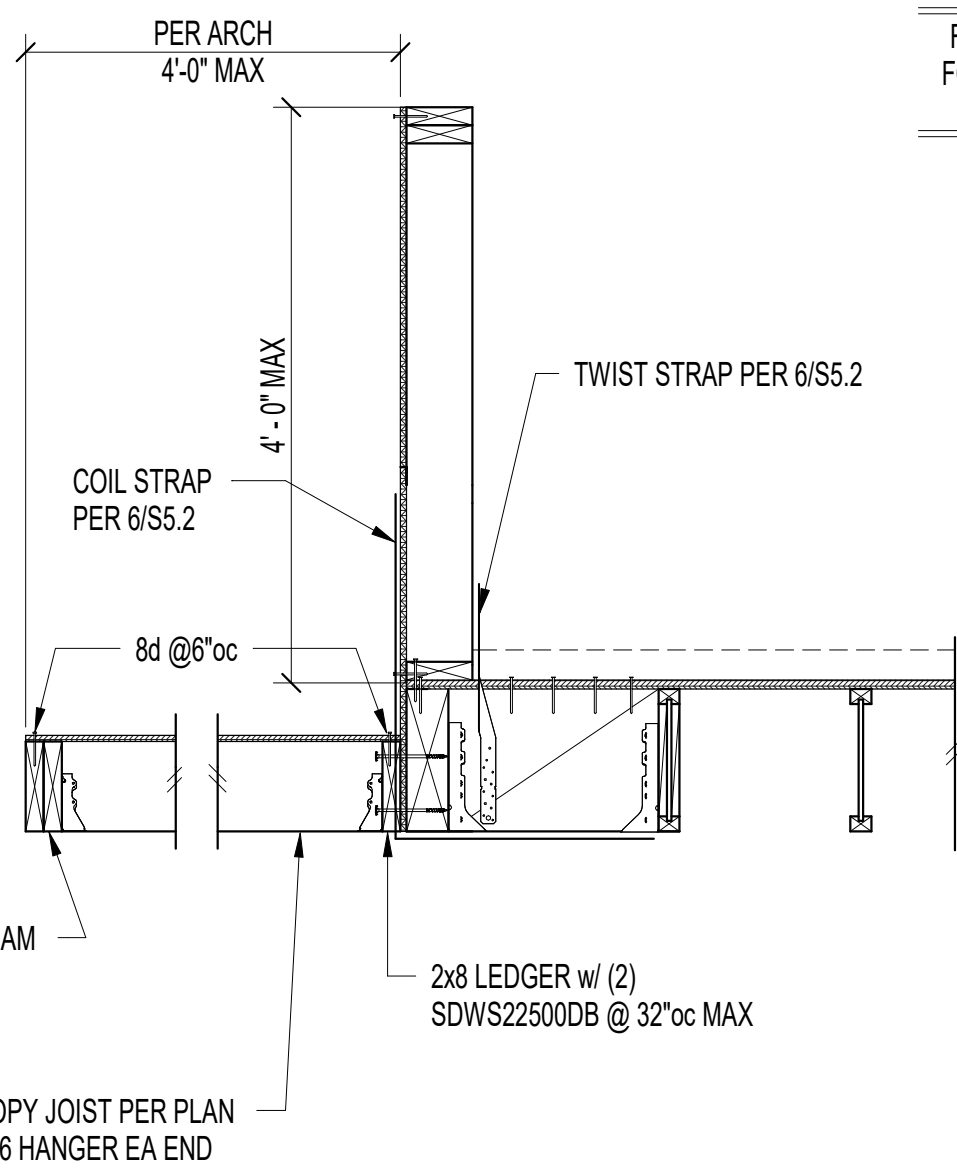
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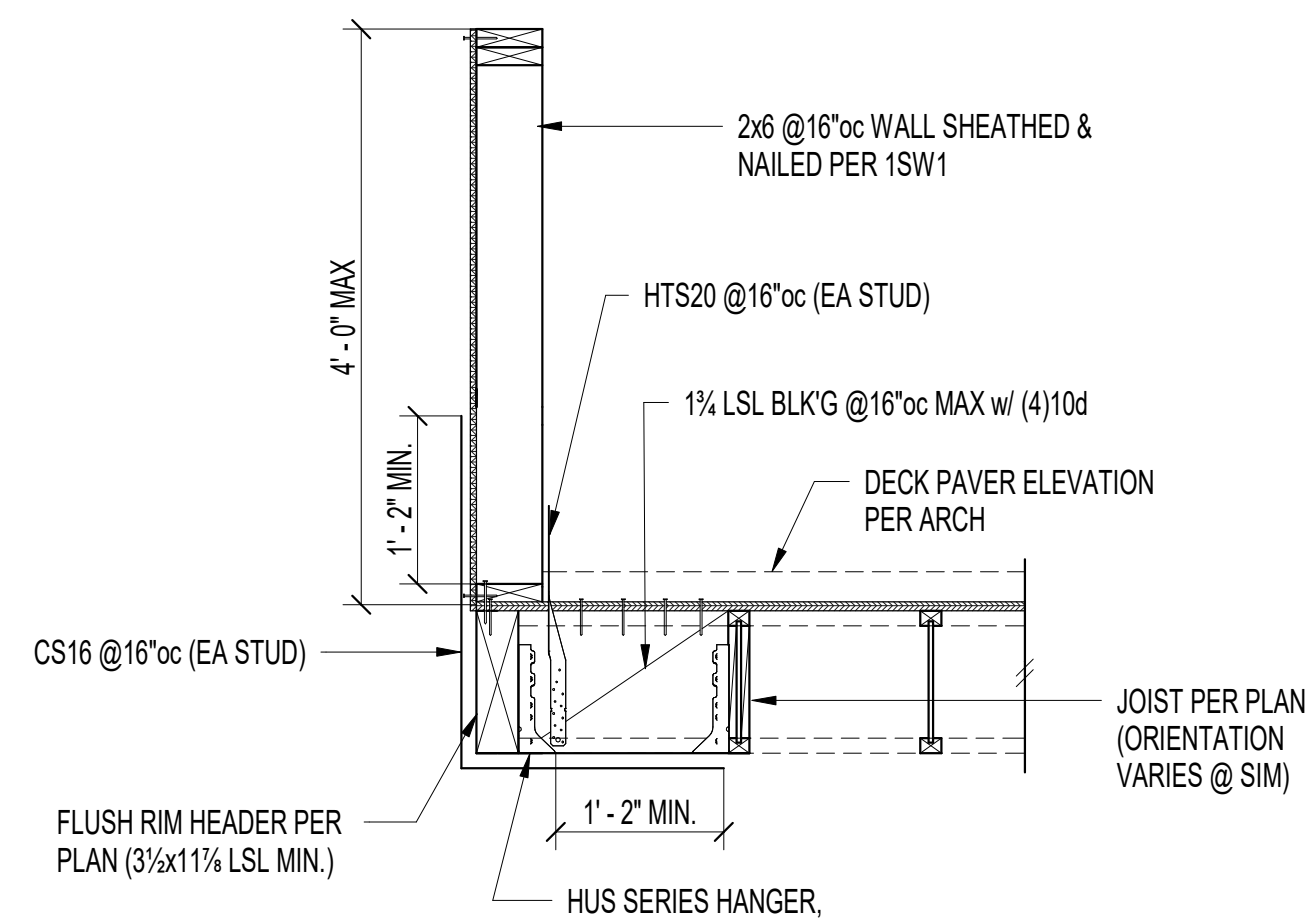
BYKONEN  
CARTER  
QUINN  
STRUCTURAL  
ENGINEERING



REFER TO 6/5.2  
FOR CALLOUTS IN  
COMMON.

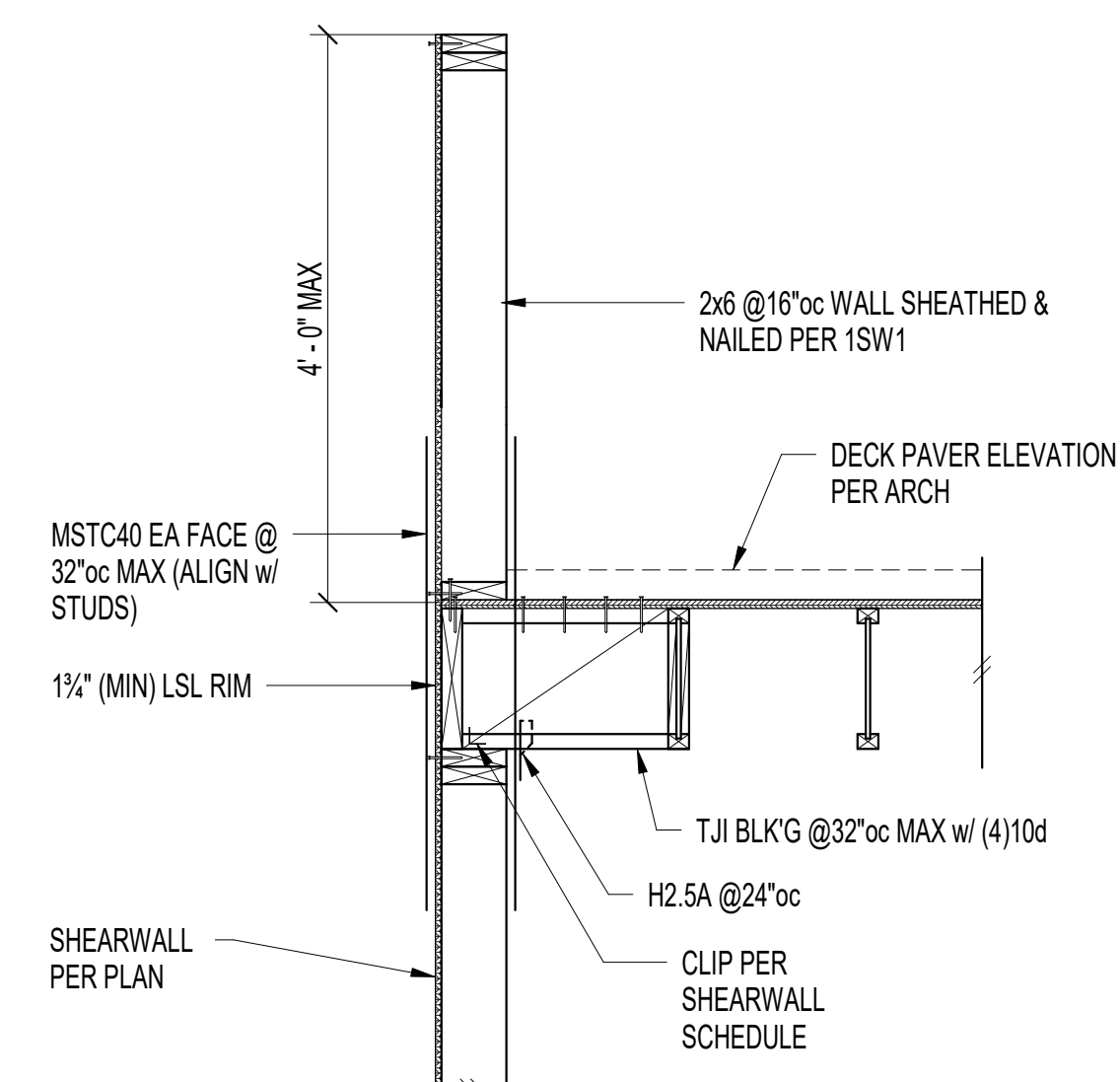
Canopy/ Deck Parapet - Flush Rim Header

5



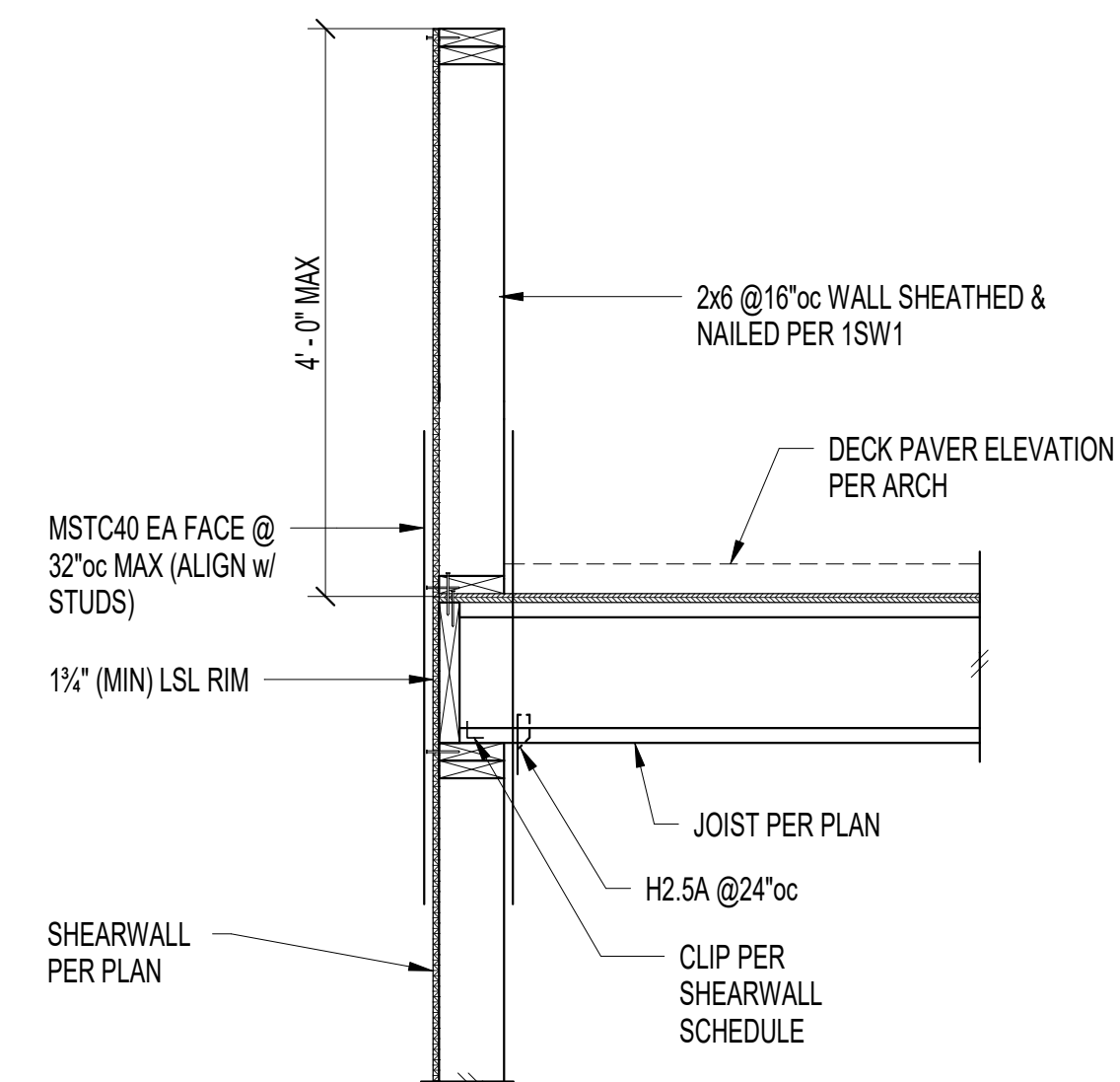
Deck Parapet - Flush Rim Header

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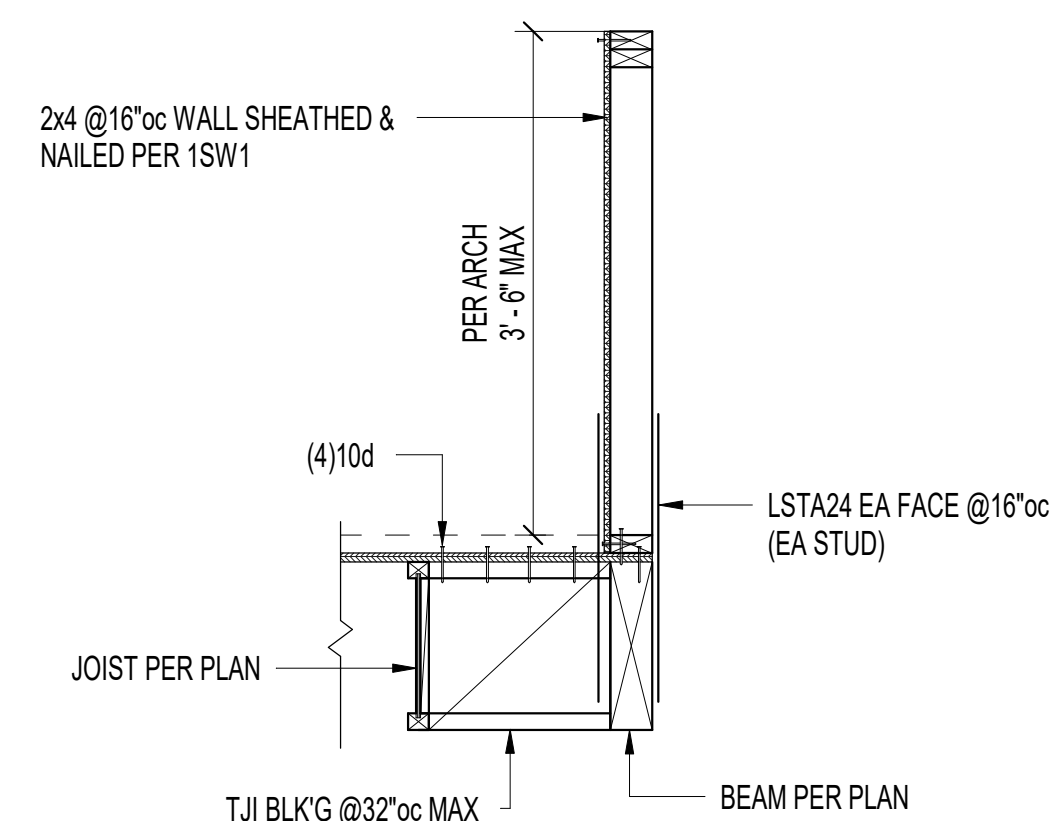
Deck Parapet - Parallel framing

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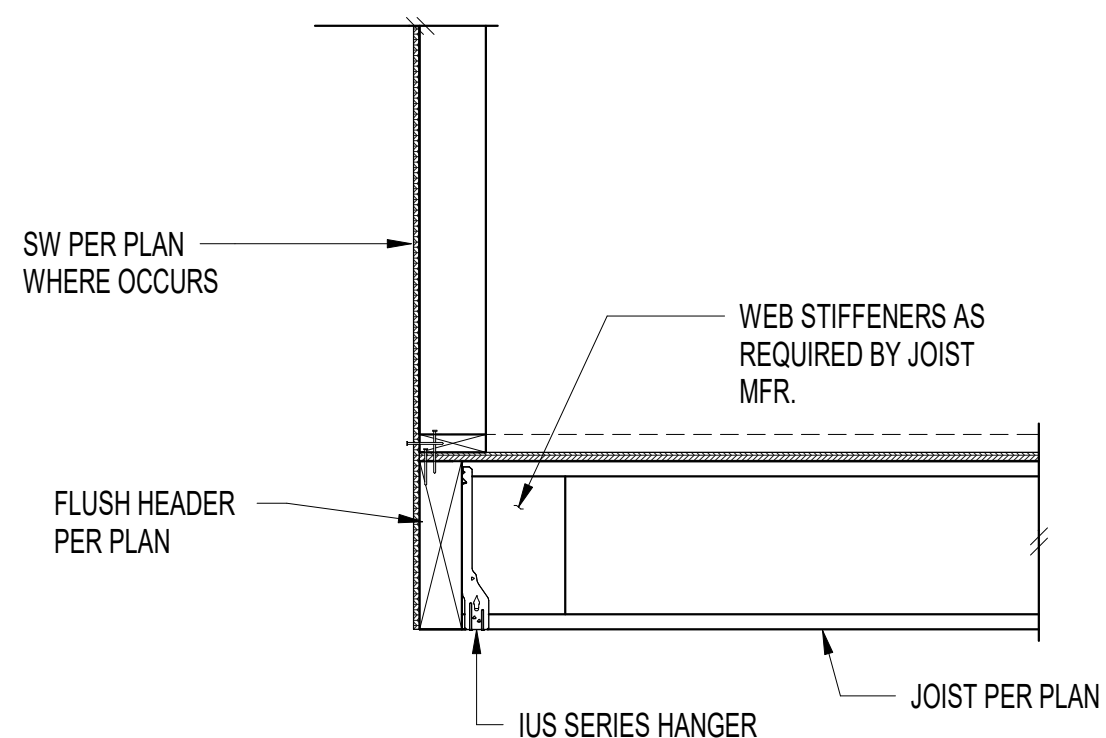
Deck Parapet - Perpendicular Framing

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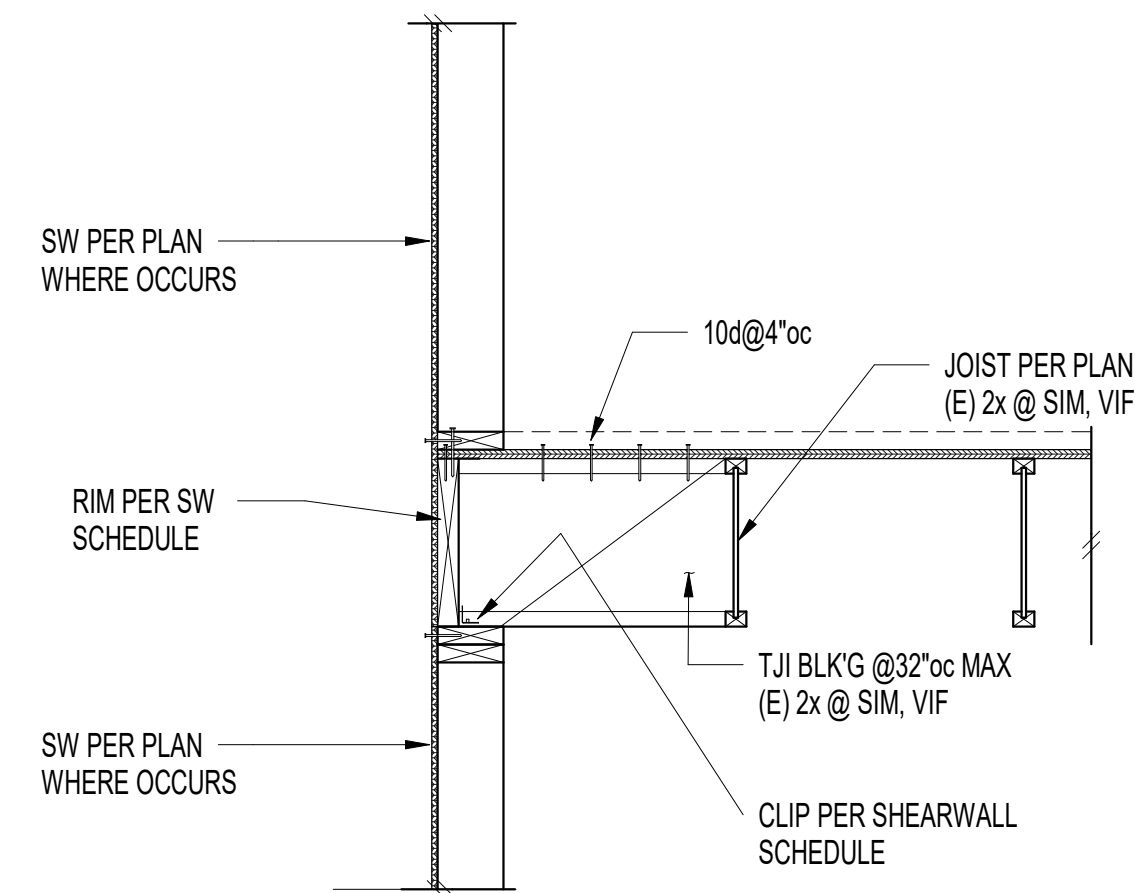


Knee-wall - Flush Beam

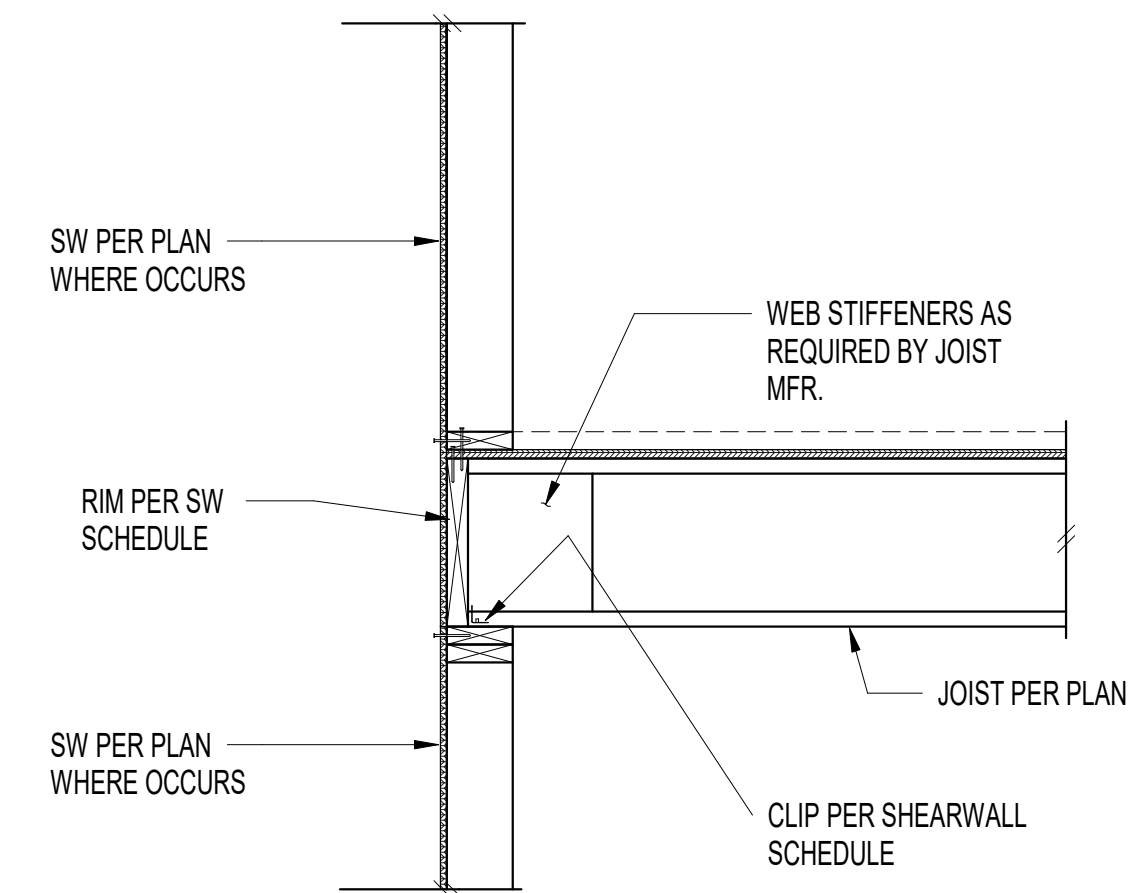
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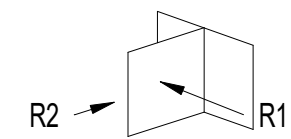
12

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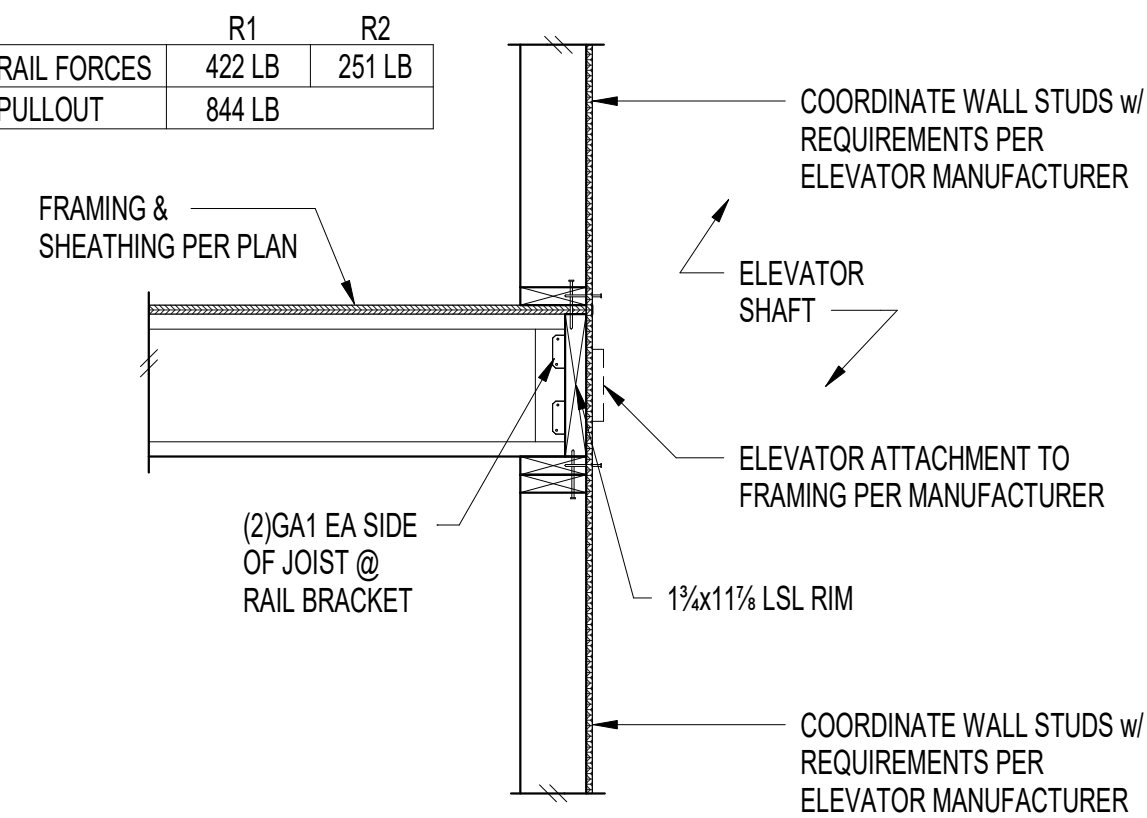
Wood Details

S5.2

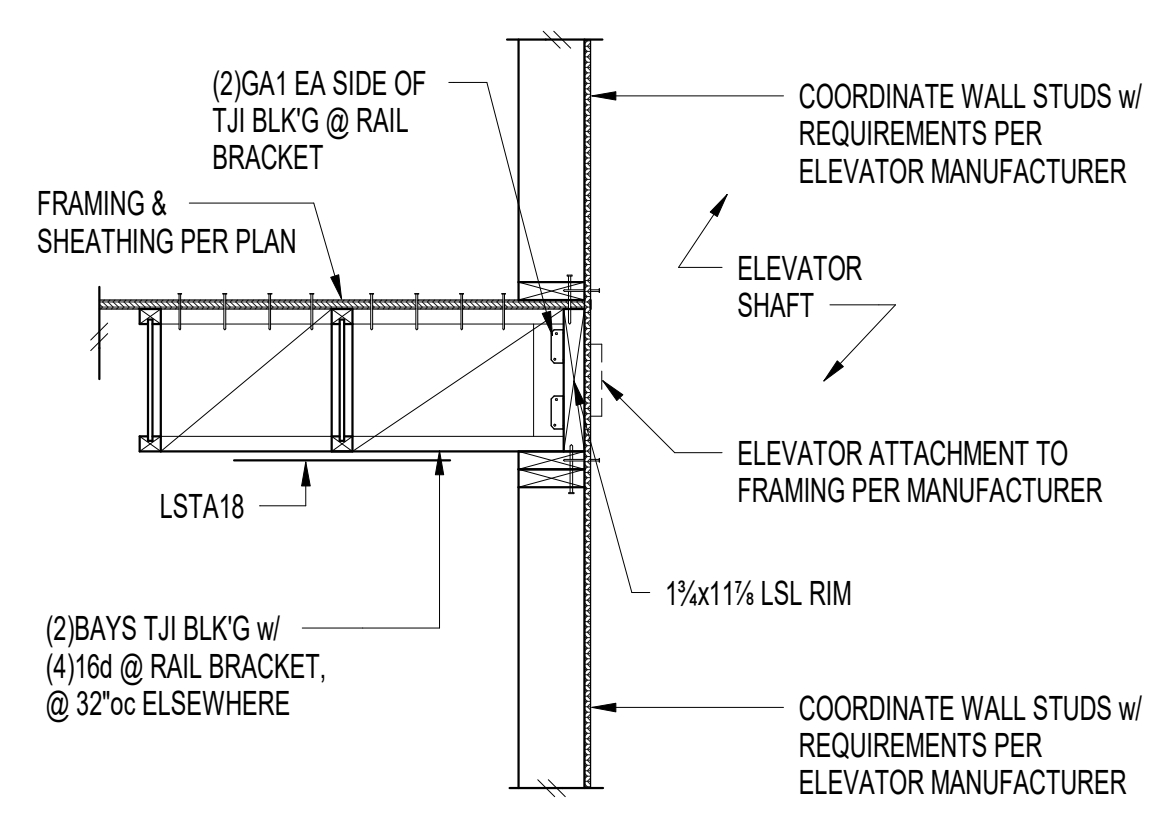


CONN. DESIGNED FOR SAVARIA ECLIPSE HD RESIDENTIAL ELEVATOR w/ MAX ELEVATOR RAIL FORCES AS FOLLOWS: (NOTIFY ENG. IF FORCES EXCEED THOSE SHOWN)

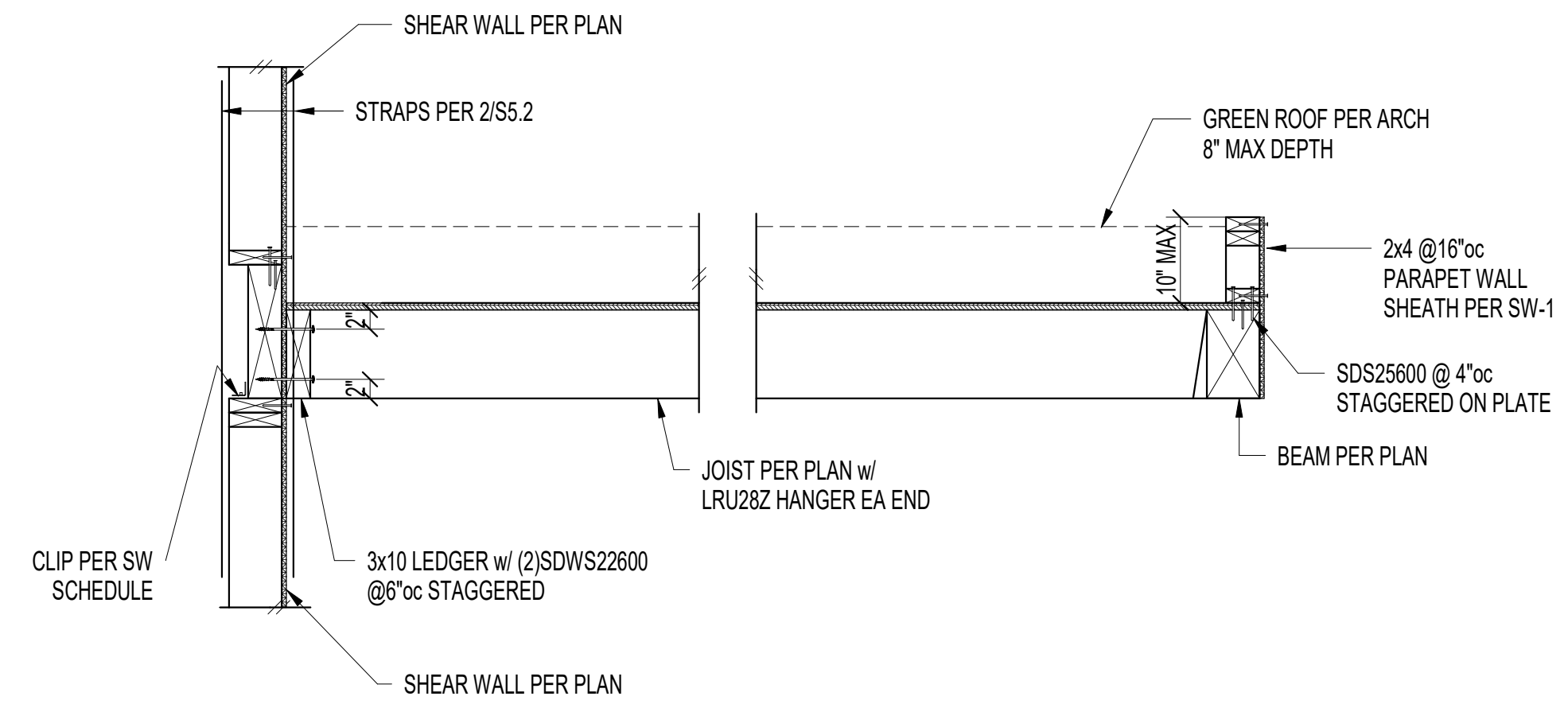
	R1	R2
RAIL FORCES	422 LB	251 LB
PULLOUT	844 LB	



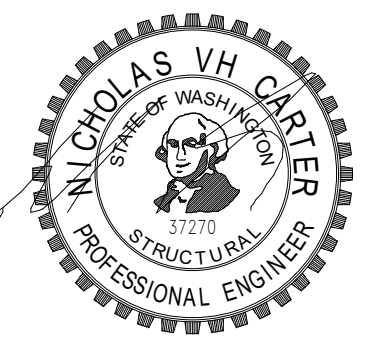
Elevator Bracket w/ Perpendicular Framing 1



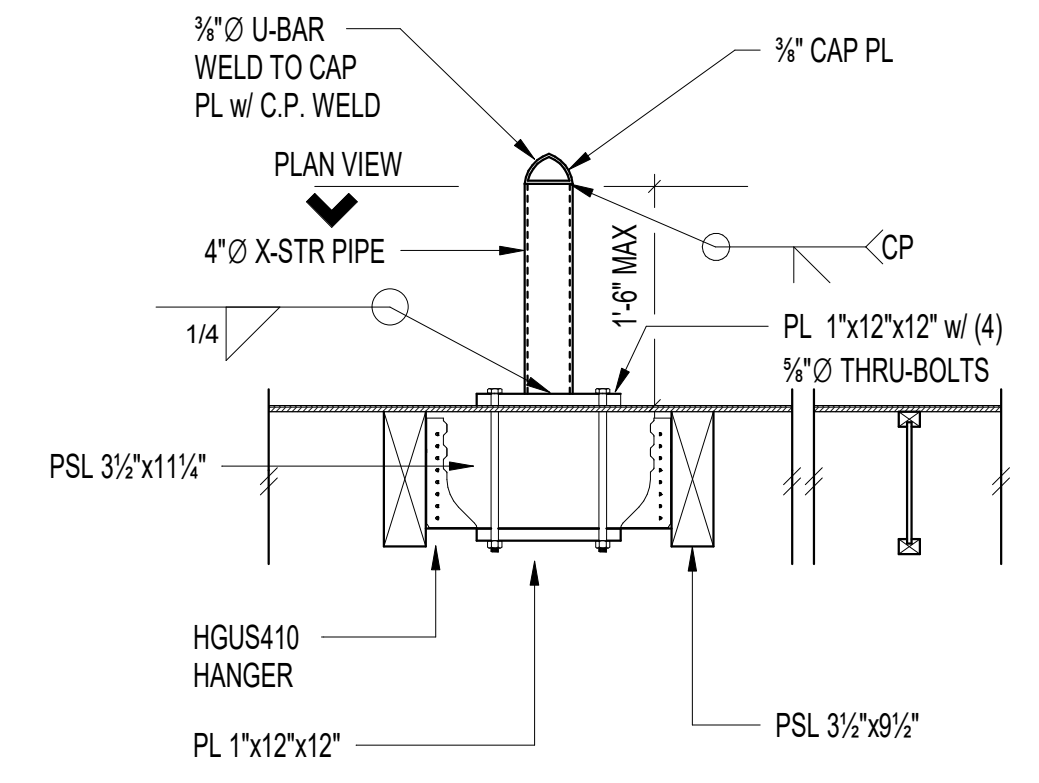
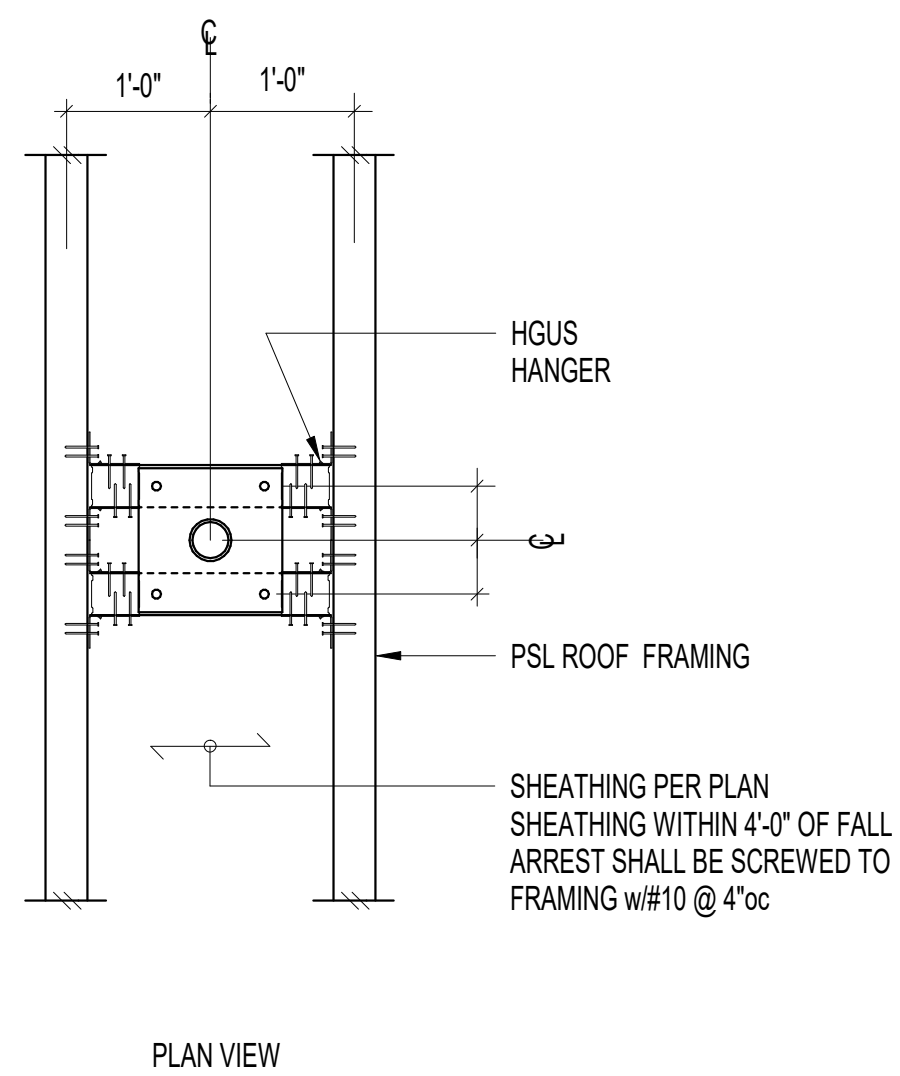
Typ. Elevator Bracket w/ Parallel Framing 2



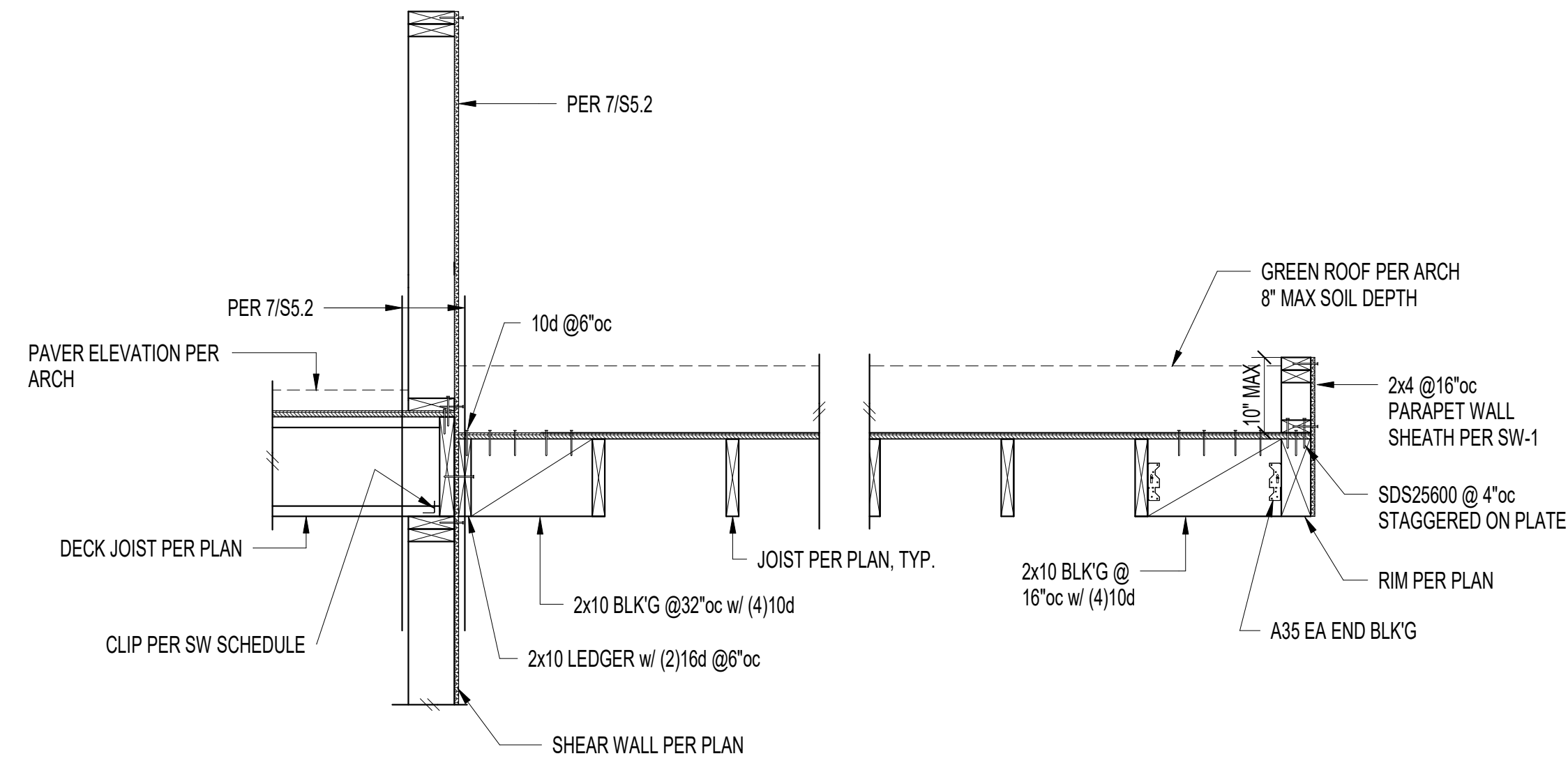
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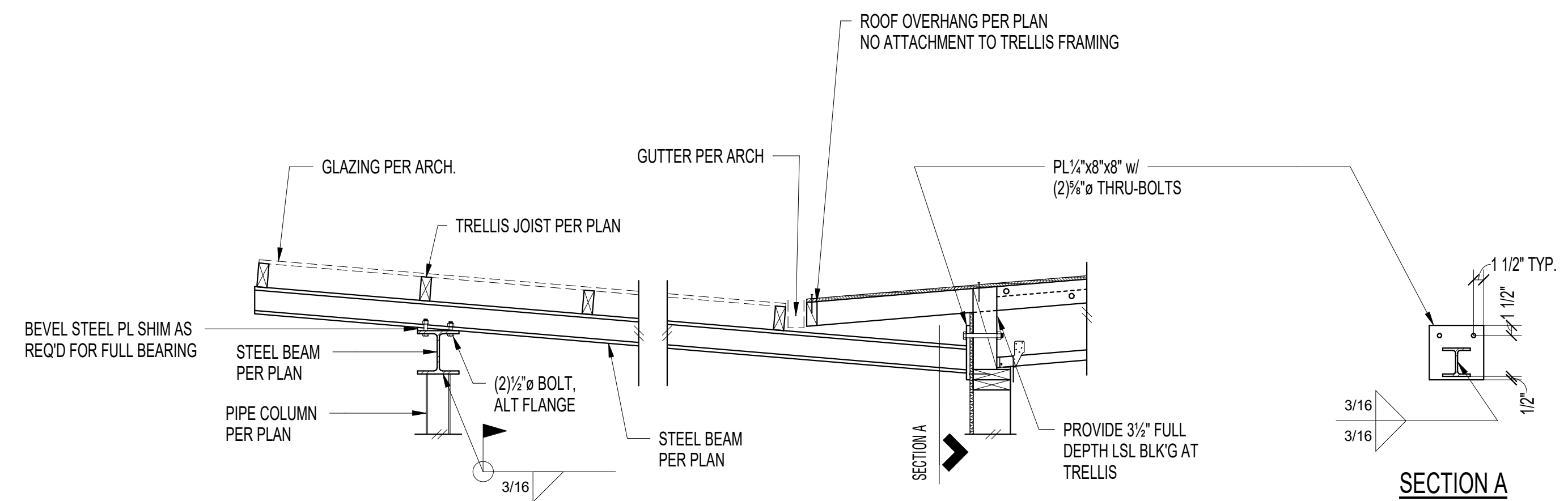
BYKONEN CARTER QUINN  
STRUCTURAL ENGINEERING



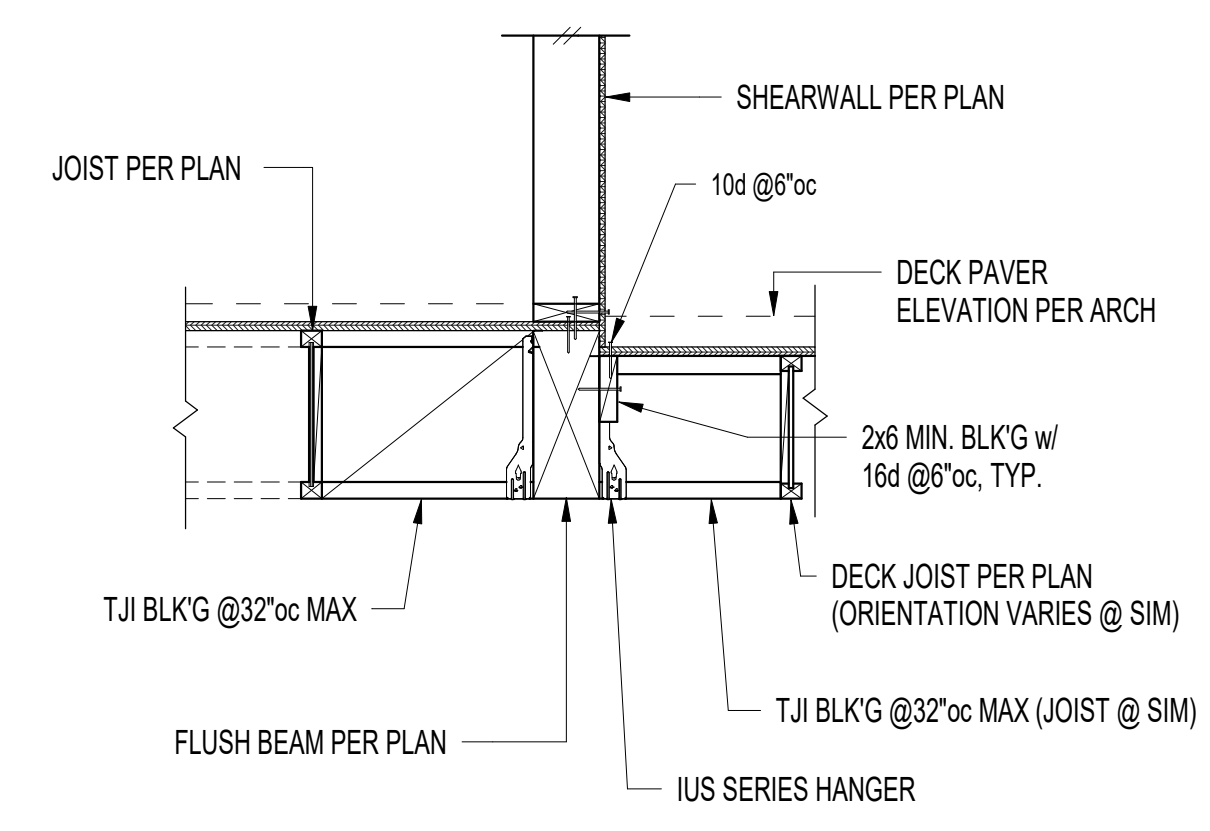
Fall Arrest Anchor 6



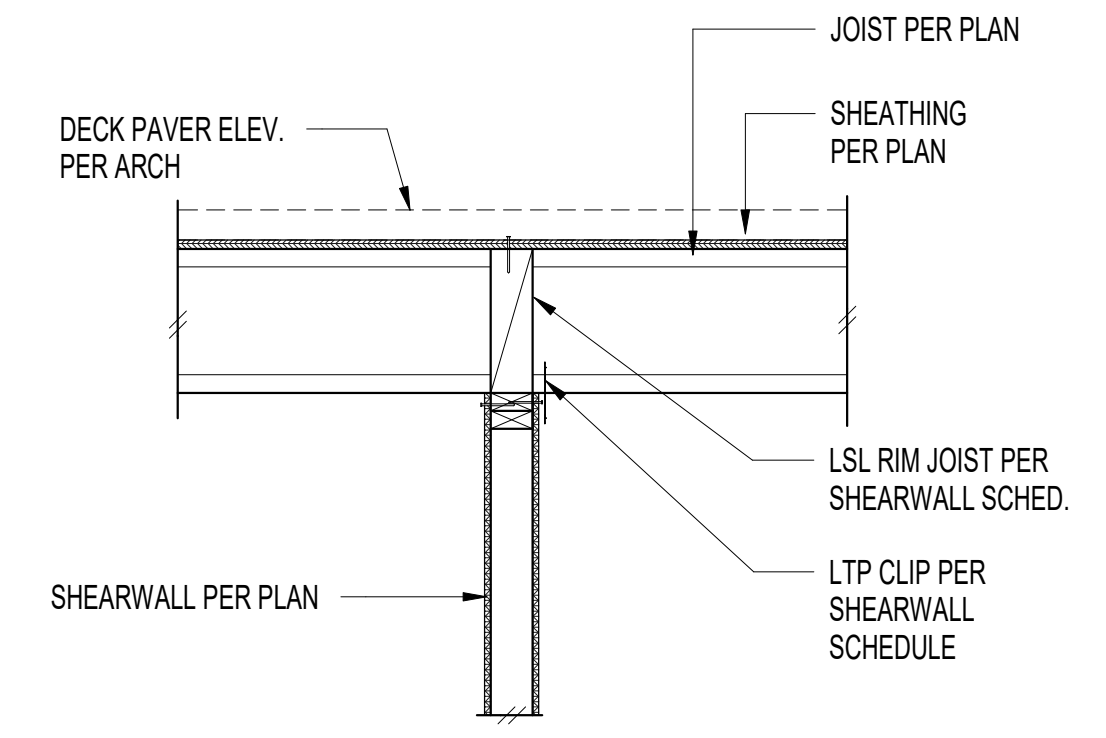
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10



11



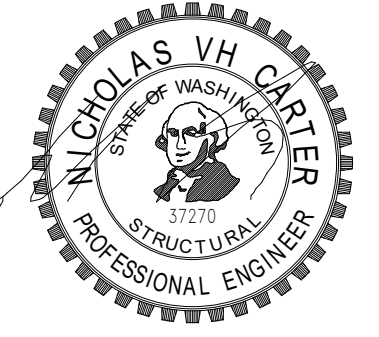
12

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Wood Details

S5.3



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Wood Details

S5.4

1

2

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6

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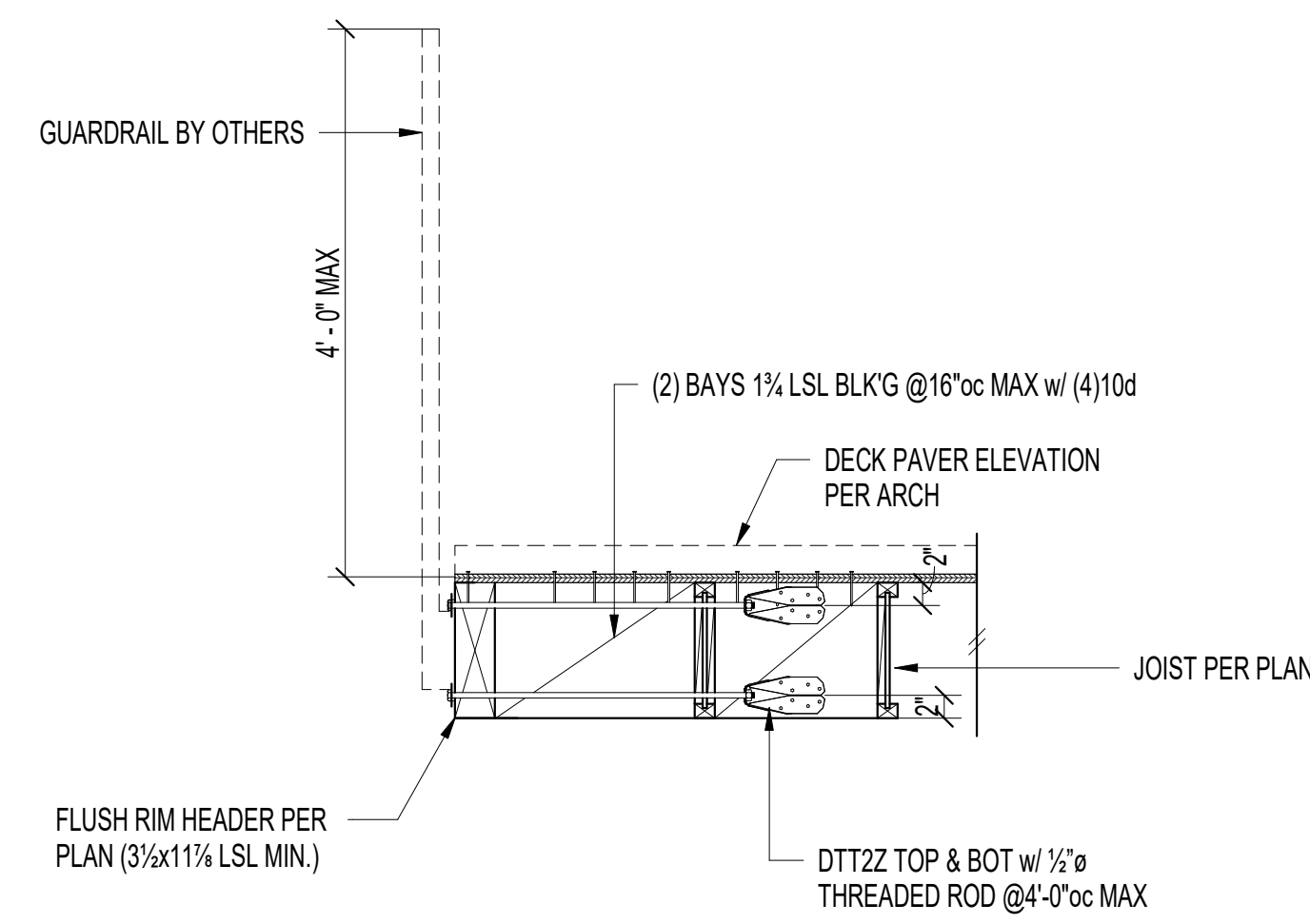
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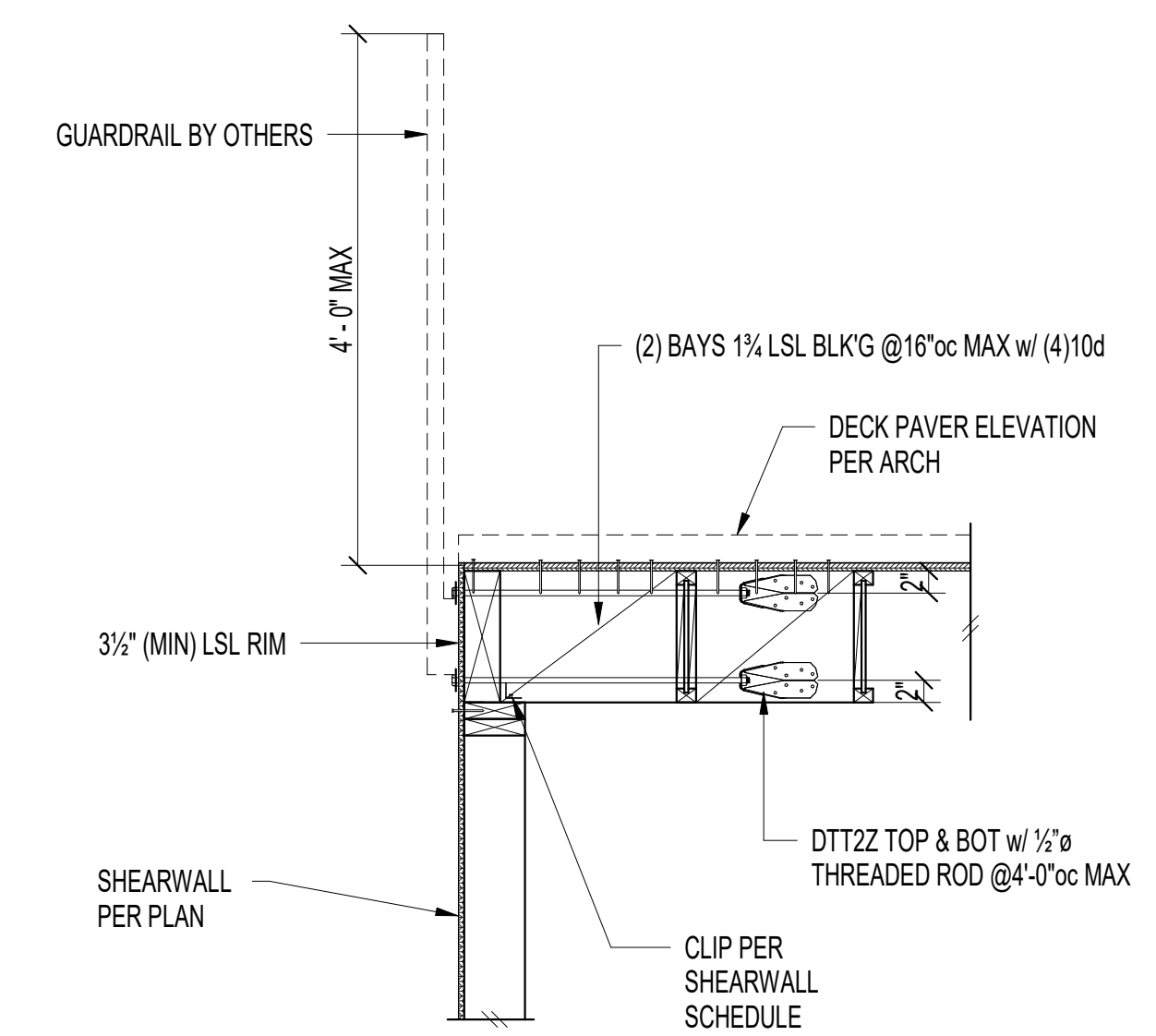
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11

12



Deck Rail - Flush Rim Header



Deck Rail - Parallel framing