

**GENERAL NOTES**

- CODE COMPLIANCE**  
ALL WORK SHALL COMPLY WITH THE 2018 IRC, 2018 IRC, 2018 IMC, 2018 IFGC, 2018 NATIONAL FUEL GAS CODE, NFPA 54, 2018 LIQUEFIED PETROLEUM GAS CODE, NFPA 58, 2018 IFG, 2018 UPC, 2018 WSEC, WAC 51-11, 2018 WAC, WAC 51-13, 2018 NEC, AND WITH ALL LOCAL CODES AND ORDINANCES.
- DIMENSIONS**  
A. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ARCHITECT OF DISCREPANCIES. IF WORK IS STARTED PRIOR TO NOTIFICATION, THE GENERAL AND SUBCONTRACTOR PROCEED AT THEIR OWN RISK.  
B. UNLESS OTHERWISE NOTED, PLAN DIMENSIONS ARE TO FACE OF STUDS OR FACE OF CONCRETE WALLS. FACE OF STONE VENEER LIES 6" +/- OUTSIDE THE FACE OF FRAMING. INTERIOR PLAN DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE NOTED.  
C. VERIFY ALL ROUGH-IN DIMENSIONS FOR WINDOWS, DOORS, PLUMBING, ELECTRICAL FIXTURES AND APPLIANCES PRIOR TO COMMITMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES OF DIMENSIONAL TOLERANCES REQUIRED.
- DOCUMENT REVIEW/VERIFICATION**: CONSULT WITH ARCHITECT REGARDING ANY SUSPECTED ERRORS, OMISSIONS, OR CHANGES ON PLANS BEFORE PROCEEDING WITH THE WORK.
- ROUGH OPENINGS/BACKING**: VERIFY SIZE AND LOCATION, AS WELL AS PROVIDE ALL OPENINGS THROUGH FLOORS AND WALLS, FURRING, CURBS, ANCHORS, INSERTS, EQUIPMENT BASES AND ROUGH BUCKS/BACKING FOR SURFACE-MOUNTED ITEMS.
- FURRING**: PROVIDE FURRING AS REQUIRED TO CONCEAL MECHANICAL AND/OR ELECTRICAL EQUIPMENT IN FINISHED AREAS. FURRING NOT SHOWN ON PLANS SHALL BE APPROVED BY ARCHITECT PRIOR TO CONSTRUCTION.
- GRADES**: VERIFY ALL GRADES AND THEIR RELATIONSHIP TO THE BUILDING(S).
- FLOOR LINES**: "FLOOR LINE" REFERS TO TOP OF CONCRETE SLAB OR TOP OF WOOD SUBFLOOR.
- REPETITIVE FEATURES**: OFTEN DRAWN ONLY ONCE AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.
- DOORS**: DOORS NOT DIMENSIONALLY LOCATED SHALL BE 6" FROM STUD FACE TO EDGE OF DOOR; ROUGH OPENING OR CENTERED BETWEEN WALLS AS SHOWN.
- WOOD ON CONCRETE**: WOOD MEMBERS IN CONTACT WITH CONCRETE AND/OR EXPOSED TO WEATHER, PROVIDE PRESSURE TREATED SILL PLATES.
- FRAMING**: INTERIOR FURRING & PARTITION WALLS TO BE 2x4 @ 16" O.C.
- VENTILATION**: VENT ALL BATHROOM FANS, LAUNDRY FANS, RANGE HOODS AND DRYERS TO OUTSIDE ATMOSPHERE. BATHROOM/UTILITY ROOM FANS SHALL BE VENTED DIRECTLY TO THE OUTSIDE THROUGH SMOOTH, RIGID, NON-CORROSIVE METAL, 24 GA. DUCTWORK. FLEX DUCTING IS NOT ALLOWED.
- FLUES**: FLUES TO BE LOCATED MINIMUM 2" FROM ALL COMBUSTIBLE MATERIALS.
- BASEMENT**: NO LPG PROPANE GAS APPLIANCES ARE ALLOWED IN THE BASEMENT.
- OTHER DOCUMENTATION**: REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL AND/OR LANDSCAPE DRAWINGS FOR ADDITIONAL DRAWINGS, NOTES, SCHEDULES AND SYMBOLS.
- PROTECTION**: PROTECT ALL EXISTING FINISHES & SURFACES. ANY DAMAGE TO BE REPAIRED @ NO ADDITIONAL EXPENSE TO OWNER.

**ENERGY NOTES**

**CODE(S)**: 2018 INTERNATIONAL BUILDING CODE (IBC) (2018 INTERNATIONAL RESIDENTIAL CODE (IRC) 2018 WASHINGTON ENERGY CODE (WEC)

**CLIMATIC ZONE**: 4C - MARINE  
**SPACE HEAT TYPE**: NATURAL GAS, FORCED AIR  
**INSULATION VALUES: PRESCRIPTIVE METHOD (ALL NEW AREA)**  
WALLS: R-21  
FLAT ATTICS/CEILINGS: R-49/R-38  
FLOORS (OVER UNHEATED SPACES): R-38  
VAULTED CEILINGS: R-38  
SLAB-ON-GRADE: R-10

**THERMAL STANDARDS FOR OPENINGS UNLIMITED OPTION**  
**AIR INFILTRATION**: MANUFACTURED DOORS/WINDOWS: CONFORM TO SECTION 502.1.5 OF THE WASHINGTON STATE ENERGY CODE  
**EXTERIOR JOINTS/OPENINGS**: SEAL, CAULK, GASKET OR WEATHERSTRIP TO LIMIT AIR LEAKAGE AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF; OPENINGS AT PENETRATIONS OF UTILITY SERVICES AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE.  
**MOISTURE CONTROL**: VAPOR RETARDER BONDED TO BATT INSULATION; INSTALL WITH STAPLES NOT MORE THAN 8 INCHES ON CENTER AND WITH A GAP BETWEEN AND OVER FRAMING NOT GREATER THAN 1/16 OF AN INCH; OR VAPOR RETARDER OF ONE PERM PERM CUP RATING (4 MIL POLYETHYLENE)

**ATTICS/CEILINGS**: VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE). INSTALL CONTINUOUSLY.  
**CRAWL SPACE**: CONTINUOUS 6 MIL. POLYETHYLENE  
**VENTILATION**: ATTICS WITH BATTS: BAFFLE VENT OPENINGS TO DEFLECT AIR ABOVE INSULATION SURFACE  
ENCLOSED JOIST OR RAFTER SPACES: PROVIDE MINIMUM OF ONE INCH CLEAR VENTED AIR SPACE ABOVE INSULATION. TAPER OR COMPRESS INSULATION AT PERIMETER TO INSURE PROPER VENTILATION  
**HEATING & COOLING**: FORCED AIR NATURAL GAS HEATING SYSTEM.  
**TEMP. CONTROL**: FOR HEATING AND COOLING, THERMOSTAT SHALL BE CAPABLE OF BEING SET FROM 55-85 DEGREES FAHRENHEIT AND OF OPERATING THE HEATING/COOLING SYSTEM IN SEQUENCE. THERMOSTAT TO BE AUTOMATIC DAY/NIGHT SETBACK TYPE.  
**DUCT INSULATION**: THERMALLY INSULATE ALL PLENUMS, DUCTS AND ENCLOSURES IN ACCORDANCE WITH TABLE 406.2 OF THE 2018 WASHINGTON STATE ENERGY CODE.

**PIPE INSULATION**: RECESSED LIGHTING FIXTURES INSTALLED IN BUILDING ENVELOPE SHALL COMPLY WITH WSEC PROVISIONS AND SHALL BE 1/2" MIN. INSULATED TO R-3 MIN.  
NON RECIRCULATING HOT AND COLD WATER PIPES LOCATED IN UNCONDITIONED SPACE SHALL BE INSULATED TO R-3 MIN.

**WHOLE HOUSE VENTILATION**:  
M1505.4 - WHOLE HOUSE MECHANICAL VENTILATION SYSTEM. EACH DWELLING UNIT SHALL BE EQUIPPED WITH A VENTILATION SYSTEM. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS: M1505.4.1 THROUGH M1505.4.4.  
M1505.4.1 - SYSTEM DESIGN. THE WHOLE HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY FANS, ONE OR MORE EXHAUST FANS, OR AN ERV/HRV WITH INTEGRAL FANS, ASSOCIATED DUCTS, AND CONTROLS. WHOLE-HOUSE MECHANICAL SYSTEM WITH SUPPLY AND EXHAUST FANS PER SECTIONS M1505.4.1.2, M1505.4.1.3, M1505.4.1.4, AND M1505.4.1.5. LOCAL EXHAUST FANS ARE PERMITTED TO SERVE AS PART OF WHOLE-HOUSE VENTILATION SYSTEM WHEN PROVIDED WITH PROPER CONTROLS PER SECTION M1505.4.2. THE SYSTEMS SHALL BE DESIGNED AND INSTALLED TO EXHAUST AND/OR SUPPLY THE MINIMUM INDOOR AIRFLOW RATES PER SECTION M1505.4.3, AS MODIFIED BY WHOLE HOUSE VENTILATION SYSTEM COEFFICIENTS IN SECTION M1505.4.3.1 WHERE APPLICABLE. THE WHOLE HOUSE VENTILATION SHALL OPERATE CONTINUOUSLY AT THE MINIMUM VENTILATION RATE DETERMINED PER SECTION M1505.4.2 UNLESS CONFIGURATION WITH INTERMITTENT OFF CONTROLS PER SECTION M1505.4.3.2.  
PROVIDE A : FV-0511VKSZ PANASONIC CONTINUOUS FAN WITH 30 CFM

**WHOLE HOUSE VENTILATION**:  
M1505.4 - WHOLE HOUSE MECHANICAL VENTILATION SYSTEM. EACH DWELLING UNIT SHALL BE EQUIPPED WITH A VENTILATION SYSTEM. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS: M1505.4.1 THROUGH M1505.4.4.  
M1505.4.1 - SYSTEM DESIGN. THE WHOLE HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY FANS, ONE OR MORE EXHAUST FANS, OR AN ERV/HRV WITH INTEGRAL FANS, ASSOCIATED DUCTS, AND CONTROLS. WHOLE-HOUSE MECHANICAL SYSTEM WITH SUPPLY AND EXHAUST FANS PER SECTIONS M1505.4.1.2, M1505.4.1.3, M1505.4.1.4, AND M1505.4.1.5. LOCAL EXHAUST FANS ARE PERMITTED TO SERVE AS PART OF WHOLE-HOUSE VENTILATION SYSTEM WHEN PROVIDED WITH PROPER CONTROLS PER SECTION M1505.4.2. THE SYSTEMS SHALL BE DESIGNED AND INSTALLED TO EXHAUST AND/OR SUPPLY THE MINIMUM INDOOR AIRFLOW RATES PER SECTION M1505.4.3, AS MODIFIED BY WHOLE HOUSE VENTILATION SYSTEM COEFFICIENTS IN SECTION M1505.4.3.1 WHERE APPLICABLE. THE WHOLE HOUSE VENTILATION SHALL OPERATE CONTINUOUSLY AT THE MINIMUM VENTILATION RATE DETERMINED PER SECTION M1505.4.2 UNLESS CONFIGURATION WITH INTERMITTENT OFF CONTROLS PER SECTION M1505.4.3.2.  
PROVIDE A : FV-0511VKSZ PANASONIC CONTINUOUS FAN WITH 30 CFM

**(A.B.E.) AVERAGE BUILDING ELEVATION**

MARK	WALL LENGTH	GRADE / ELEVATION	CALCULATION
A	12'	+298.7'	5618.5
B	2.5'	+299.0'	1157
C	6.5'	+299.0'	7271
D	2.5'	+299.0'	661
E	34'	+299.0'	7271
F	21.5'	+298.9'	330.5
G	21'	+298.9'	3305
H	21'	+295.0'	6951
I	31.5'	+291.0'	5461.5
J	33.5'	+294.5'	3144.5
TOTAL	= 177'		52,464.4

**A.B.E. = +296.4'**

**LOT INFORMATION**

ZONE: R-8.4 PARCEL No.: 1300301381  
LOT: 7,500 s.f.  
LOT SLOPE:  
HIGH ELEVATION = +300'  
LOW ELEVATION = +287.5'  
DISTANCE BETWEEN: 125' = 10.0% SLOPE

**GROSS FLOOR AREA(S) (G.F.A.)**

UPPER FLOOR: 1,509.25 S.F.  
MAIN FLOOR: 1,039 S.F.  
GARAGE: 451.5 S.F.  
TOTAL G.F.A. = 2,999.75 S.F.  
Or 3 9 . 9 %  
MAX. G.F.A. = 40% Or 3,000 s.f.

**LOT COVERAGE**

MAIN STRUCTURE ROOF AREA: 2,027.75 S.F. (Includes All Attached Porches)  
VEHICULAR USE: 336 S.F.  
TOTAL COVERAGE: 2363.75 S.F.  
Or 3 1 . 5 %  
MAX. G.F.A. = 40% Or 3,000 s.f.

**LOT HARDSCAPE**

WALKWAY: 140 S.F.  
ROCKERY: 80 S.F.  
TOTAL HARDSCAPE: 220 S.F. Or 2.9 %  
MAX. HARDSCAPE = 9% or 675 S.F.

**ENERGY CREDITS = 6.0**

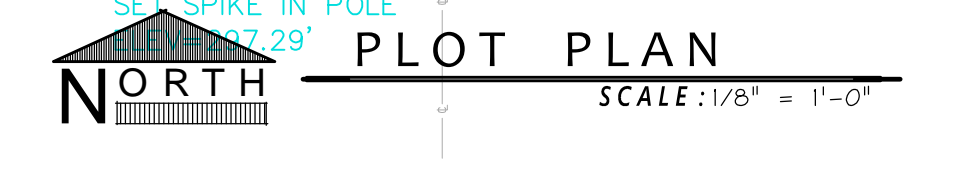
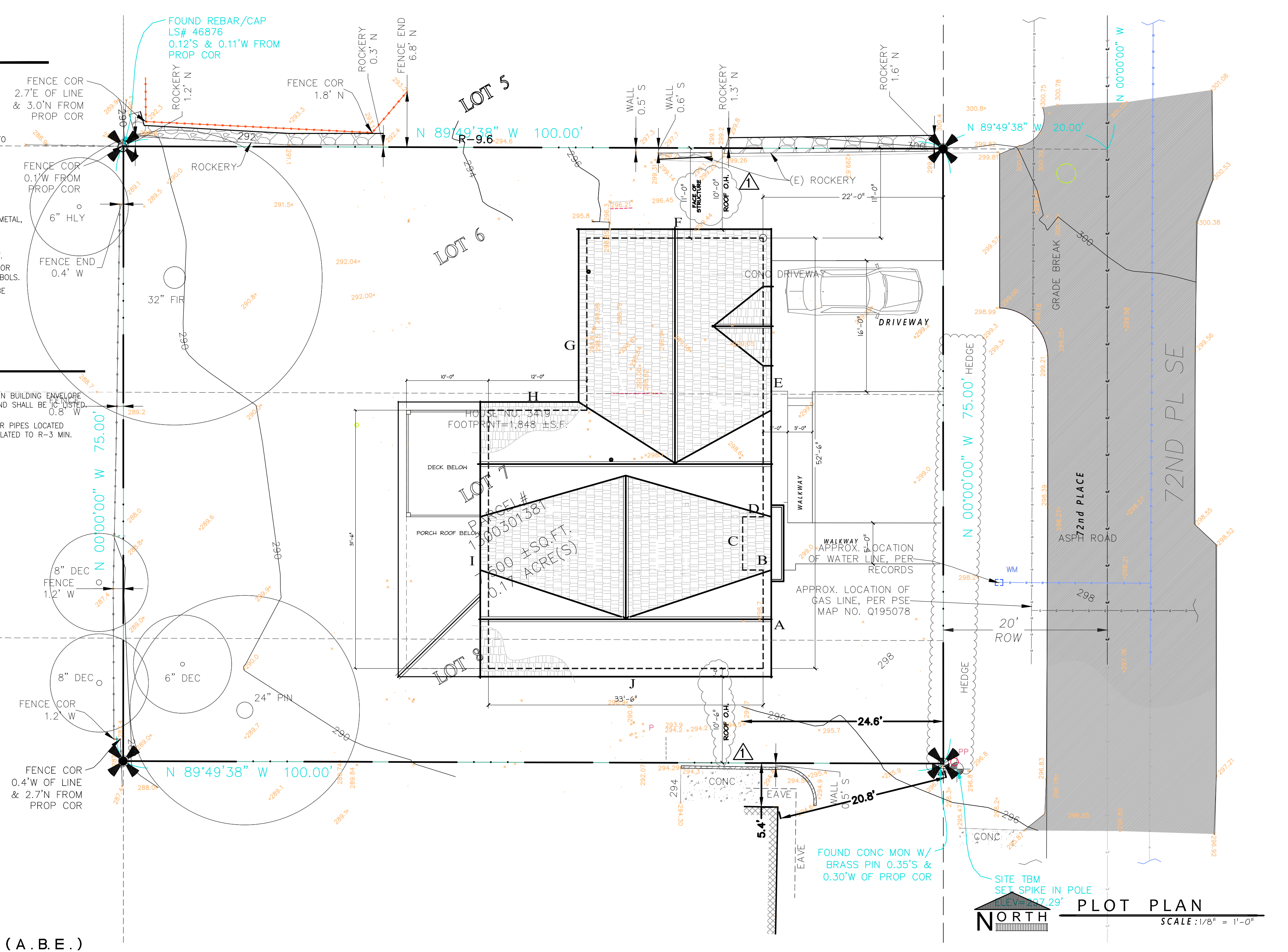
(PRESCRIPTIVE) TABLE 406.2 ENERGY CREDITS (SINGLE FAMILY)

Option	Description	Credit
HEATING OPTIONS # 2	HEAT PUMP	= 1.0
ENERGY OPTIONS 1.3	EFFICIENT BUILDING ENVELOPE	= 0.5
2.2	AIR LEAKAGE CONTROL & EFFICIENT VENTILATION (COMPLIANCE BASED ON SECT. 402.4.1.2)	= 1.0
3.5	AIR SOURCE, CENTRALLY DUCTED HEAT PUMP (MINIMUM H5PF OF 11.0)	= 1.5
5.5	EFFICIENCY WATER HEATER (MEETING STANDARDS OF Tier III OF NEEA'S SPEC.'S)	= 2.0

**6.0 TOTAL ENERGY CREDITS**

**ENERGY CODE**

-HEATING SYSTEM IS A NATURAL GAS FURNACE FORCED AIR SYSTEM.  
-CONSTRUCTION SHALL ADHERE TO:  
GLAZING RATIO  
CLIMATE ZONE: 4C - MARINE  
PRESCRIPTIVE PATH:  
MARINE IX  
WINDOWS - 0.28 U-FACTOR  
DOORS - 0.20 U-FACTOR



**PLAN KEY**

- Centerline
- PROPERTY CORNER MARK
- STRUCTURE BELOW
- SITE SETBACK AREA
- ELEVATION MARKER

**LEGAL DESCRIPTION**

PER STATUTORY WARRANTY DEED RECORDING # 7305080073  
LOT 6, 7 AND THE NORTH HALF OF LOT 3, BLOCK 5, C. C. CALKINS 1st ADDITION TO EAST SEATTLE, ACCORDING TO PLAT RECORDED IN VOLUME 4 OF PLATS, PAGE 88, IN KING COUNTY, WASHINGTON

**SITE NOTES**

- PLACE COMPOST SOCKS, COMPOST BERMS, FILTER FABRIC FENCING, STRAW BAILS, STRAW WATTLES, OR OTHER APPROVED PERIMETER CONTROLL BMP'S TO ELIMINATE CONSTRUCTION STORMWATER RUN-OFF.
- ELIMINATE UNCONTROLLED CONVEYANCE OF MUD & DIRT INTO THE RIGHT-OF-WAY (R.O.W)
- COVER BARE SOILS WITH COMPOST BLANKETS, STRAW, MULCH, MATTING, OR OTHER APPROVED EQUAL TO CONTROL CONSTRUCTION STORMWATER RUN-OFF.
- COVER STOCKPILES OF BARE SLOPES WITH COMPOST BLANKETS, TARPS, MATTING OR OTHER APPROVED EQUAL TO CONTROL CONSTRUCTION STORMWATER RUN-OFF.
- MERCER ISLAND - MICC 19.02.030(F)(3)(d) ALL JAPANESE KNOTWEED, (POLYGONUM CUSPIDATUM), & REGULATED CLASS 'A', REGULATED CLASS 'B', REGULATED CLASS 'C' WEEDS, IDENTIFIED ON KING COUNTY NOXIOUS WEED LIST SHALL BE REMOVED FROM PROPERTY PURSUANT TO SUBSECTION 19.02.020(F)(3)(a.)
- REMOVE ALL EXISTING CONCRETE WALKWAYS AND ROCKERY EXCEPT AS SHOWN AT NORTH SIDE OF PROPERTY

**RFA ARCHITECTS**  
RICHARD A FISHER ARCHITECTS  
8245 Northrup Pl. S.W. SEATTLE, WA 98136  
(206) 484-9963  
EMAIL: RAFISHER@RICHARDAFISHER.COM  
WEB: RICHARDAFISHER.COM  
WOLF CREEK RANCH WINTHROP, WASHINGTON 98862  
TEL.: (509) 996-2689

**R K CONSTRUCTION**  
RESIDENCE  
3419 72nd Place S.E.  
Mercer Island, WA 98040

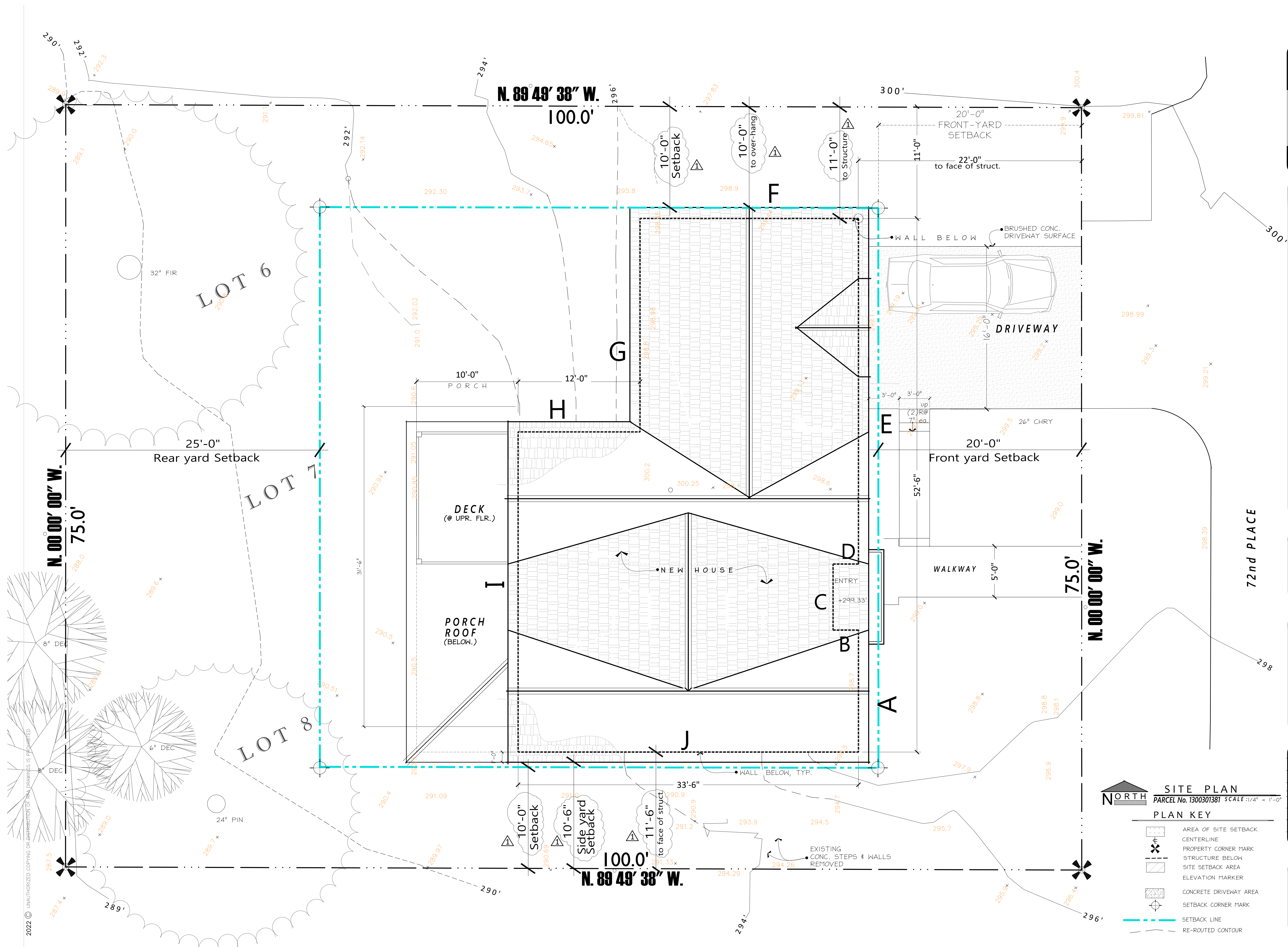
SET TITLE: PERMIT SET  
SHEET TITLE: GENERAL NOTES & PLOT PLAN

STAMP:  
4884  
RICHARD A. FISHER  
STATE OF WASHINGTON

PROJECT #: 22010  
DATE: AUGUST 5, 2022  
DRAWN BY: N.F.W.  
REVISIONS:  
1. M.I. BLDG. DEPT. REVIEW 1-15-23

SHEET No.: **A1.0**





**RFA**  
ARCHITECTS

**RICHARD A FISHER ARCHITECTS**  
8245 Northrup Pl. S.W.  
SEATTLE, WA 98136  
(206) 484-9963

EMAIL: RAFISHER@RICHARDAFISHER.COM  
WEB: RICHARDAFISHER.COM  
WOLF CREEK RANCH  
WINTHROP, WASHINGTON 98862  
TEL.: (509) 996-2689

PROJECT NAME:	PROJECT ADDRESS:
<b>R K CONSTRUCTION</b>	RESIDENCE
3419 72nd Place S.E. Mercer Island, WA 98040	

SET TITLE:	PERMIT SET
SHEET TITLE:	SITE PLAN

STAMP:

RICHARD A. FISHER  
STATE OF WASHINGTON

PROJECT #:	22010
DATE:	AUGUST 5, 2022
DRAWN BY:	N.F.W.
REVISIONS:	
1.	M.I. BLDG. DEPT. REVIEW 1-15-23

SHEET No.:

**A1.1**

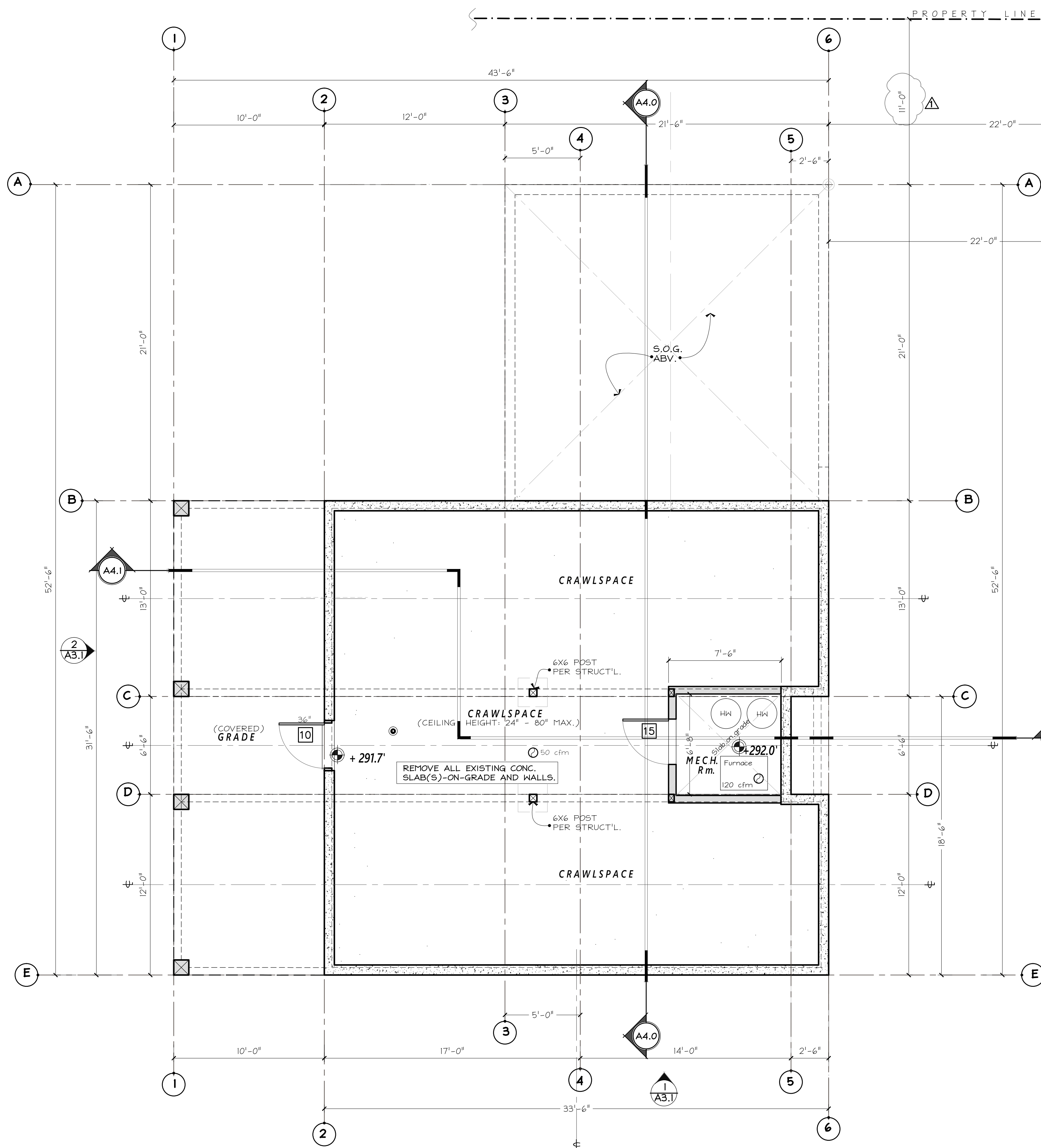
**SITE PLAN**  
PARCEL No. 1300301381 SCALE: 1/4" = 1'-0"

**PLAN KEY**

- AREA OF SITE SETBACK
- CENTERLINE
- PROPERTY CORNER MARK
- STRUCTURE BELOW
- SITE SETBACK AREA
- ELEVATION MARKER
- CONCRETE DRIVEWAY AREA
- SETBACK CORNER MARK
- SETBACK LINE
- RE-ROUTED CONTOUR

2022 © UNAUTHORIZED COPYING OR DISTRIBUTION OF THIS DRAWING IS PROHIBITED





**DOOR SCHEDULE**

TAG	DIMENSIONS (R.O. = w x h.)	TYPE	NOTES
1	3'-0" X 8'-0"	ENTRY	SOLID WD./SAFETY GLAZE / LOCKSET
2	(2) 3'-0" X 8'-0"	SLIDER	
3	(2) 3'-0" X 6'-8"	EXT. GLASS	'FRENCH-HUNG'
4	16'-0" X 8'-0"	GARAGE	'CARRIAGE STYLE'
5	3'-0" X 6'-8"	SEPARATION	1-HR. FIRE RATED w/ INTEGRAL SMOKE GASKETS 'SELF-CLOSER' REQUIRED PER I302.5.1
6	2'-6" X 8'-0"	STND. WOOD	
7	(2) 2'-6" X 6'-8"	STND. WOOD	
8	2'-6" X 6'-8"	STND. WOOD	
9	3'-0" X 6'-8"	STND. WOOD	
10	3'-0" X 6'-0"	METAL	'INSULATED ACCESS'
11	2'-6" X 6'-8"	POCKET	SLIDER HARDWARE
12	22.5" X 36"	ACCESS	REMOVABLE / INSULATED PANEL
13	22.5" X 48"	ACCESS	INSULATED PULL-DOWN LADDER
14	(2) 2'-2" X 6'-8"	STND. WOOD	CUSTOM SIZE
15	3'-0" X 6'-0"	METAL	CUSTOM SIZE - AIR VENTED DOOR

**NOTES:**  
 1. 'SG' = SAFETY GLAZING.  
 2. DOOR 'U-FACTOR' = 0.20  
 3. WINDOW 'U-FACTOR' = 0.28

**WINDOW SCHEDULE**

TAG	DIMENSIONS (R.O. = w x h.)	TYPE	NOTES
A	(2) 2'-6" X 5'-0"	CSPMNT/CSPMNT	EGRESS - SAFETY GLAZE
B	1'-0" X 5'-0"	SIDELITE	SAFETY GLAZE
C	(2) 3'-0" X 6'-0"	CSPMNT/CSPMNT	
D	3'-0" X 6'-0"	CASEMENT	
E	(2) 2'-6" X 6'-0"	CSPMNT/CSPMNT	SAFETY GLAZE
F	(2) 3'-0" X 4'-6"	CSPMNT/CSPMNT	EGRESS - SAFETY GLAZE
G	3'-0" X 4'-6"	CASEMENT	
H	(2) 2'-6" X 4'-6"	CSPMNT/CSPMNT	
I	3'-0" X 3'-0"	CASEMENT	
J	(2) 3'-0" X 5'-0"	CSPMNT/CSPMNT	
K	3'-0" X 5'-0"	CASEMENT	
L	(2) 2'-6" X 4'-6"	CSPMNT/CSPMNT	
M	2'-6" X 3'-6"	CASEMENT	
N	3'-0" X 2'-6"	TRANSOM	
O	2'-6" X 4'-0"	CASEMENT	

**NOTES:**  
 1. 'SG' = SAFETY GLAZING.  
 2. DOOR 'U-FACTOR' = 0.20  
 3. WINDOW 'U-FACTOR' = 0.28

**PLAN NOTES**

- WHOLE HOUSE VENTILATION TO BE PROVIDED BY FORCED AIR FURNACE WITH DIRECT OUTSIDE AIR.
- SMOKE DETECTORS SHALL BE HARD-WIRED & PROVIDED IN EXISTING SPACES WITH BATTERY BACK-UP PER IRC 313 & INSTALLED PER IRC 314.2.2
- ALL OUTLETS @ COUNTER HEIGHT, (@BATHS, KITCHEN, LAUNDRY) SHALL BE G.F.C.I.
- DO NOT SCALE OFF DRAWINGS, NOTED DIMENSIONS SHALL @ ALL TIMES TAKE PRECEDENT. DIMS. ARE TO FACE OF FRAMING, TYP.-INDL. & DOOR DIMS. ARE TO ROUGH OPENING
- SEE SHEET A2.0 FOR WINDOW & DOOR SCHEDULE.
- 36" MECHANICAL RM. DOOR: PER IMC SECTION 303.3, ALL COMBUSTIBLE AIR MUST BE TAKEN FROM OUTDOORS IN ACCORDANCE WITH IMC CHAPTER 7. MECHANICAL RM. DOORS SHALL BE SOLID CORE WITH EXTERIOR WEATHER STRIPPING & APPROVED SELF-CLOSING DEVICE.
- INSTALL NFPA 13d FIRE SPRINKLER SYSTEM.
  - INSTALL NFPA 72 MONITORED 'Chapter 29' FIRE ALARM SYSTEM.

**PLAN KEY**

- 
- 
- 
- 
- 
- 
- 
- 
- 
- 
- 
- 

**FOUNDATION PLAN**

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

**RFA ARCHITECTS**  
 RICHARD A FISHER ARCHITECTS  
 8245 Northrup Pl. S.W.  
 SEATTLE, WA 98136  
 (206) 484-9963  
 EMAIL: RAFISHER@RICHARDAFISHER.COM  
 WEB: RICHARDAFISHER.COM  
 WOLF CREEK RANCH  
 WINTHROP, WASHINGTON 98862  
 TEL.: (509) 996-2689

**R K CONSTRUCTION**  
 RESIDENCE  
 3419 72nd Place S.E.  
 Mercer Island, WA 98040

SET TITLE: PERMIT SET  
 SHEET TITLE: FOUNDATION PLAN

STAMP:

PROJECT #: 22010  
 DATE: AUGUST 5, 2022  
 DRAWN BY: N.F.W.  
 REVISIONS:

Tag	Description
A	M.I. BLDG. DEPT. REVIEW 1-15-23

SHEET No.: **A2.0**



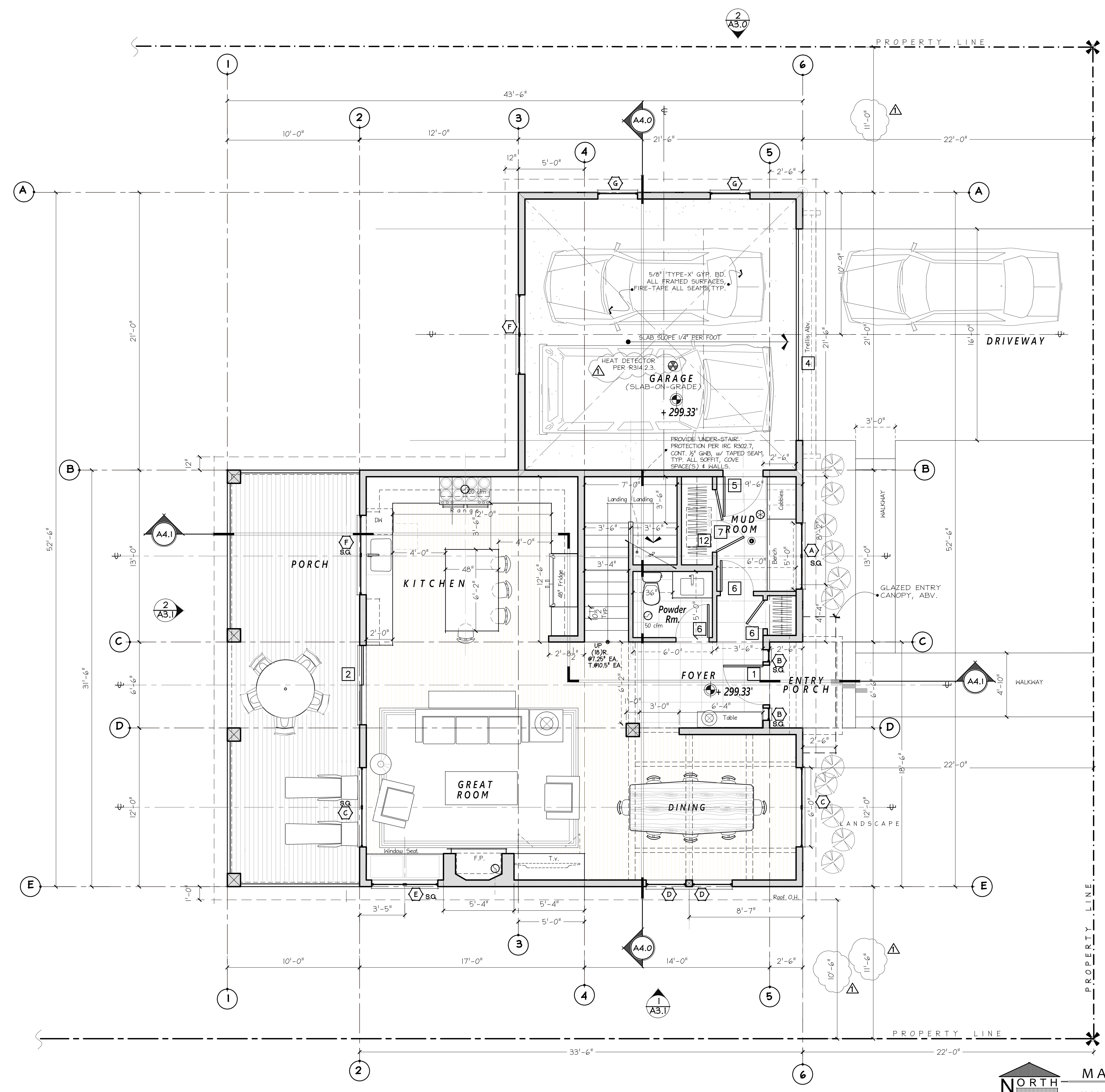
PROJECT NAME:	PROJECT ADDRESS:
<b>B K CONSTRUCTION</b>	3419 72nd Place S.E.
RESIDENCE	Mercer Island, WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	MAIN FLOOR PLAN

STAMP:

PROJECT #:	22010
DATE:	AUGUST 5, 2022
DRAWN BY:	N. F. W.
REVISIONS:	
Tag	Description
▲	M.I. BLDG. DEPT. REVIEW 1-15-23

SHEET No.:  
**A2.1**



**PLAN NOTES**

- WHOLE HOUSE VENTILATION TO BE PROVIDED BY FORCED AIR FURNACE WITH DIRECT OUTSIDE AIR.
- SMOKE DETECTORS SHALL BE HARD-WIRED & PROVIDED IN EXISTING SPACES WITH BATTERY BACK-UP PER IRC 313 & INSTALLED PER IRC 314.2.2
- STAIR HANDRAILS TO CONFORM TO I.R.C. SECT. 311.5.6. w/ 36" ht. FROM TREAD NOSING, TYP.
- ALL OUTLETS @ COUNTER HEIGHT, (@BATHS, KITCHEN, LAUNDRY) SHALL BE G.F.C.I.
- DO NOT SCALE OFF DRAWINGS. NOTED DIMENSIONS SHALL @ ALL TIMES TAKE PRECEDENT. DIMS. ARE TO FACE OF FRAMING, TYP.-WDW. & DOOR DIMS. ARE TO ROUGH OPENING
- SEE SHEET A2.0 FOR WINDOW & DOOR SCHEDULE. SCHEDULE.
- CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS & RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB. LOAD ON TOP RAIL, ACTING IN ANY DIRECTION AS REQUIRED BY IRC TABLE R301.5.
- 36" MECHANICAL RM. DOOR: PER IMC SECTION 305.3, ALL COMBUSTIBLE AIR MUST BE TAKEN FROM OUTDOORS IN ACCORDANCE WITH IMC CHAPTER 7. MECHANICAL RM. DOORS SHALL BE SOLID CORE WITH EXTERIOR WEATHER STRIPPING & APPROVED SELF-CLOSING DEVICE.
- SEE SHEET A2.0 FOR WINDOW & DOOR SCHEDULES.
- INSTALL NFPA 134 FIRE SPRINKLER SYSTEM
  - INSTALL NFPA 72 MONITORED Chapter 29 FIRE ALARM SYSTEM.

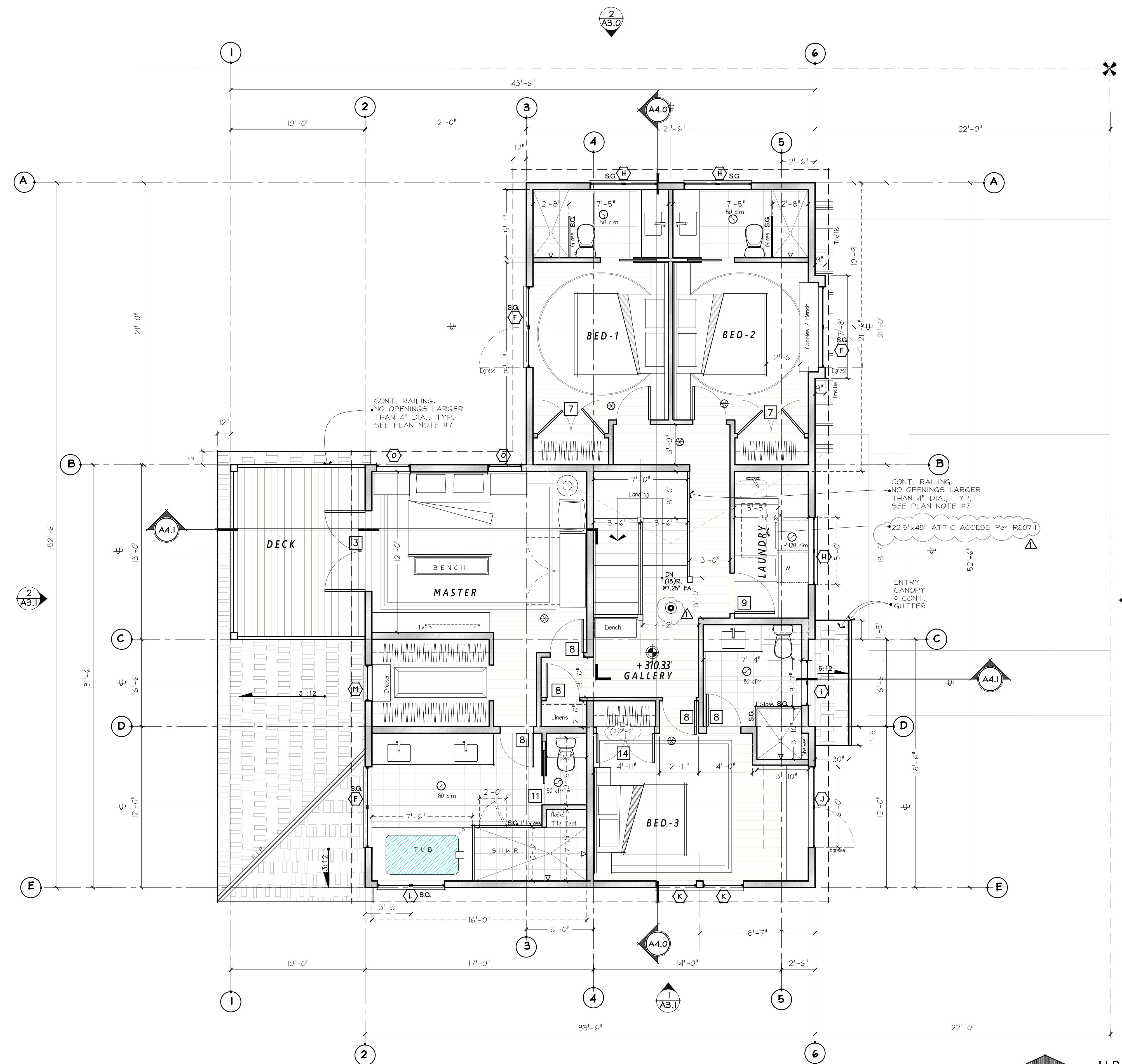
**PLAN KEY**

- PROPERTY CORNER MARK
- 6" EXTERIOR WALL
- 4" PARTITION WALL
- SMOKE DETECTOR
- MECHANICAL VENT FAN (CUBIC FEET PER MINUTE)
- ELEVATION MARKER
- SAFETY-GLAZING
- CARBON MONOXIDE DETECTOR (APPROVED PER IRC315.1)
- CENTERLINE
- SETBACK LINE
- PROPERTY LINE
- AREA OF PERVIOUS DECKING
- HEAT DETECTOR DEVICE (APPROVED PER R314.2.3)

**MAIN FLOOR PLAN**

SCALE: 1/4" = 1'-0"  
MAIN FLOOR AREA:  
GARAGE AREA:  
UPPER FLOOR AREA:  
TOTAL AREA:





**PLAN NOTES**

- WHOLE HOUSE VENTILATION TO BE PROVIDED BY FORCED AIR FURNACE WITH DIRECT OUTSIDE AIR.
- SMOKE DETECTORS SHALL BE HARD-WIRED & PROVIDED IN EXISTING SPACES WITH BATTERY BACK-UP PER IRC 313 & INSTALLED PER IRC 314.2.2
- STAIR HANDRAILS TO CONFORM TO I.R.C. SECT. 311.5.6. w/ 36" ht. FROM TREAD NOSING, TYP.
- ALL OUTLETS @ COUNTER HEIGHT, (@BATHS, KITCHEN, LAUNDRY) SHALL BE G.F.C.I.
- DO NOT SCALE OFF DRAWINGS, NOTED DIMENSIONS SHALL @ ALL TIMES TAKE PRECEDENT. DIMS. ARE TO FACE OF FRAMING, TYP.-INDA. & DOOR DIMS. ARE TO ROUGH OPENING
- SEE SHEET A2.0 FOR WINDOW & DOOR SCHEDULE SCHEDULE.
- CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS & RAILINGS SHALL BE CAPABLE OF RESISTING 200 LB. LOAD ON TOP RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC TABLE R301.5.
- 36" MECHANICAL RM. DOOR: PER IMC SECTION 303.3, ALL COMBUSTIBLE AIR MUST BE TAKEN FROM OUTDOORS IN ACCORDANCE WITH IMC CHAPTER 7. MECHANICAL RM. DOORS SHALL BE SOLID CORE WITH EXTERIOR WEATHER STRIPPING & APPROVED SELF-CLOSING DEVICE.
- SEE SHEET A2.0 FOR WINDOW & DOOR SCHEDULES.
- INSTALL NFPA 13d FIRE SPRINKLER SYSTEM.
  - INSTALL NFPA 72 MONITORED & Chapter 29 FIRE ALARM SYSTEM.

**PLAN KEY**

- ROOF PITCH & DIRECTION SYMBOL
- 6" EXTERIOR WALL
- 4" PARTITION WALL
- SMOKE DETECTOR
- MECHANICAL VENT FAN (CUBIC FEET PER MINUTE)
- ELEVATION MARKER
- SAFETY-GLAZING
- CARBON MONOXIDE DETECTOR (APPROVED PER IRC301)
- CENTERLINE
- SETBACK LINE
- PROPERTY LINE
- ROOF OVER-HANG ABOVE

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



PROJECT NAME:	PROJECT ADDRESS:
<b>B K K CONSTRUCTION</b>	RESIDENCE
	3419 72nd Place S.E.
	Mercer Island, WA 98040

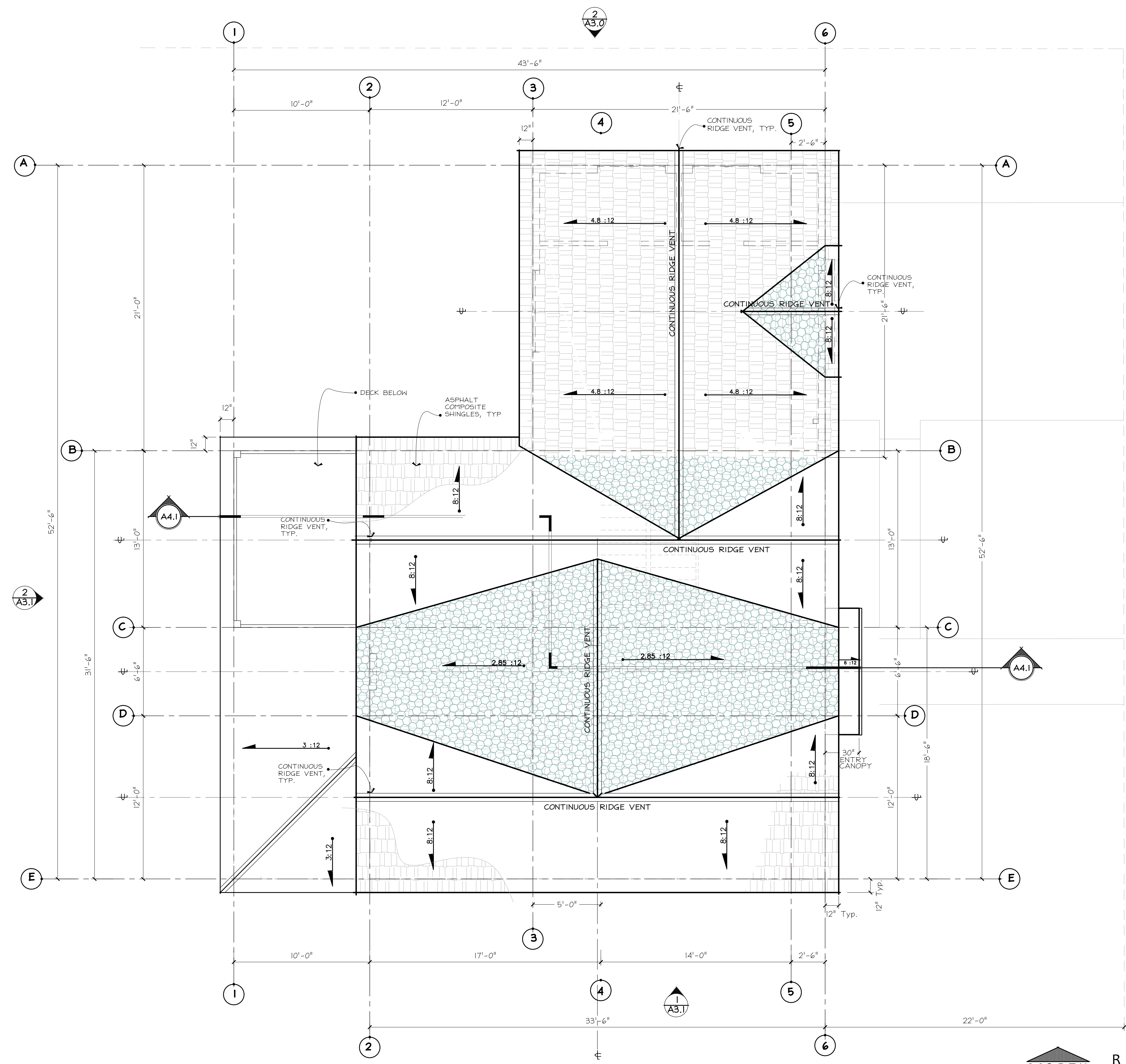
SET TITLE:	PERMIT SET
SHEET TITLE:	ROOF PLAN

STAMP:

PROJECT #:	22010
DATE:	AUGUST 5, 2022
DRAWN BY:	N.F.W.
REVISIONS:	
Tag	Description

SHEET No.:

**A2.3**

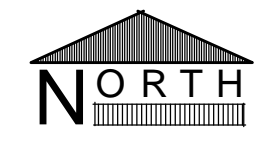


**ATTIC CALCULATIONS**

WHOLE HOUSE ATTIC AREA: 1509 S.F.  
 CALCULATION  
 $1509 / 300 = 5.03 \text{ SQ. IN.} = 724 \text{ Sq. in.}$   
 RIDGE VENT PROVIDED: 88 L.F. X 16 Sq.in. = 1,408 Sq.in. PROVIDED.  
 SOFFIT VENTS PROVIDED: 100 L.F. X 24 Sq.in. = 2,400 Sq.in. PROVIDED.

**PLAN KEY**

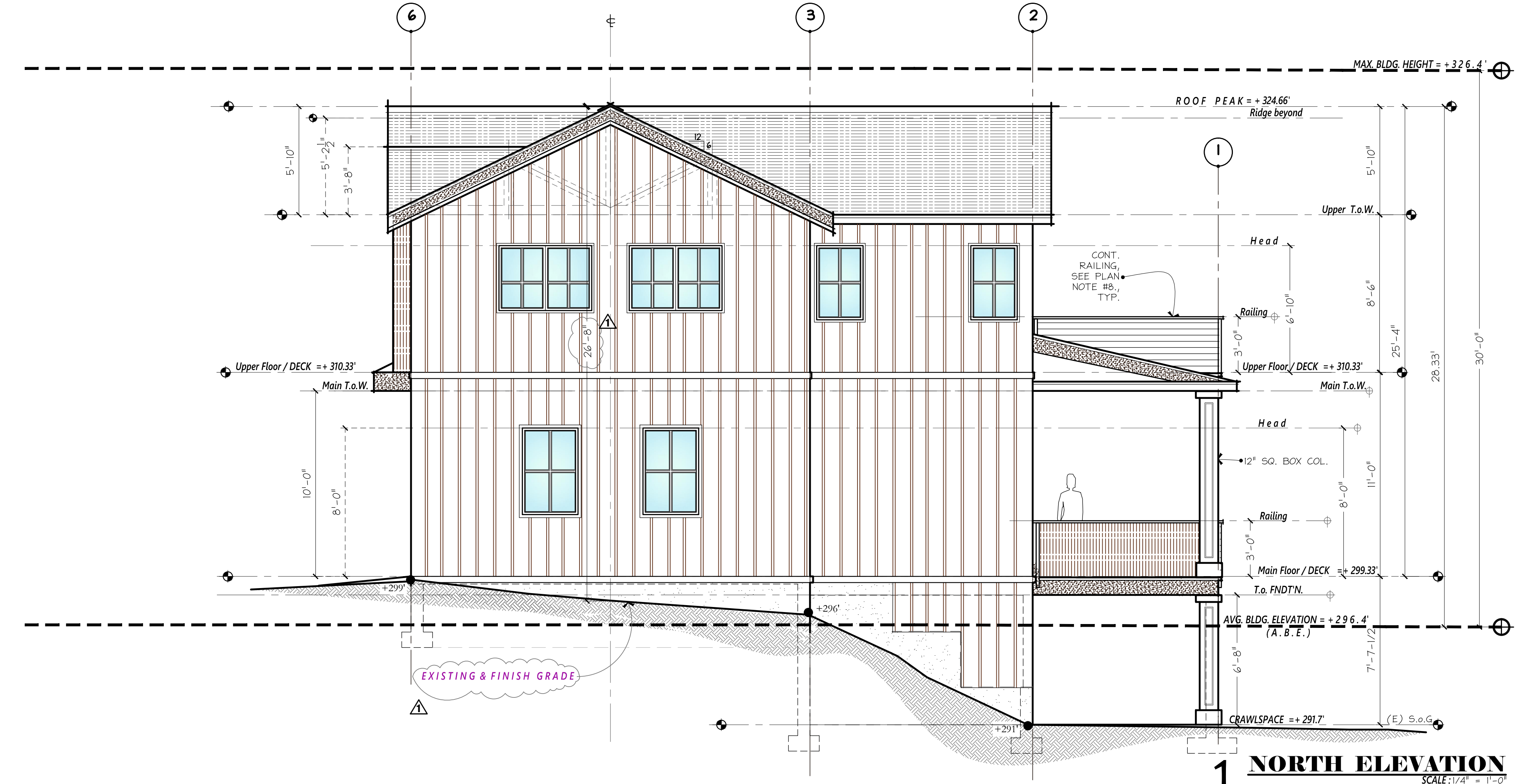
- ROOF PITCH & DIRECTION SYMBOL
- WALL BELOW
- CENTERLINE
- AREA OF ASPHALT COMP. ROOFING
- AREA OF ROOF OVER-FRAMING
- CONTINUOUS RIDGE VENT



ROOF PLAN

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





**1 NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"



**2 EAST ELEVATION**  
SCALE: 1/4" = 1'-0"

PROJECT NAME:	PROJECT ADDRESS:
<b>B K K CONSTRUCTION</b>	RESIDENCE
	3419 72nd Place S.E.
	Mercer Island, WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	EXTERIOR ELEVATIONS

STAMP:

RICHARD A. FISHER  
STATE OF WASHINGTON

PROJECT #:	22010
DATE:	AUGUST 5, 2022
DRAWN BY:	N.F.W.
REVISIONS:	
Rev.	Description
1	Mercer Is. BLDG. DEPT. REV. 1-15-23

SHEET No.:  
**A3.0**



PROJECT NAME:	PROJECT ADDRESS:
<b>R K CONSTRUCTION</b>	RESIDENCE
	3419 72nd Place S.E. Mercer Island, WA 98040

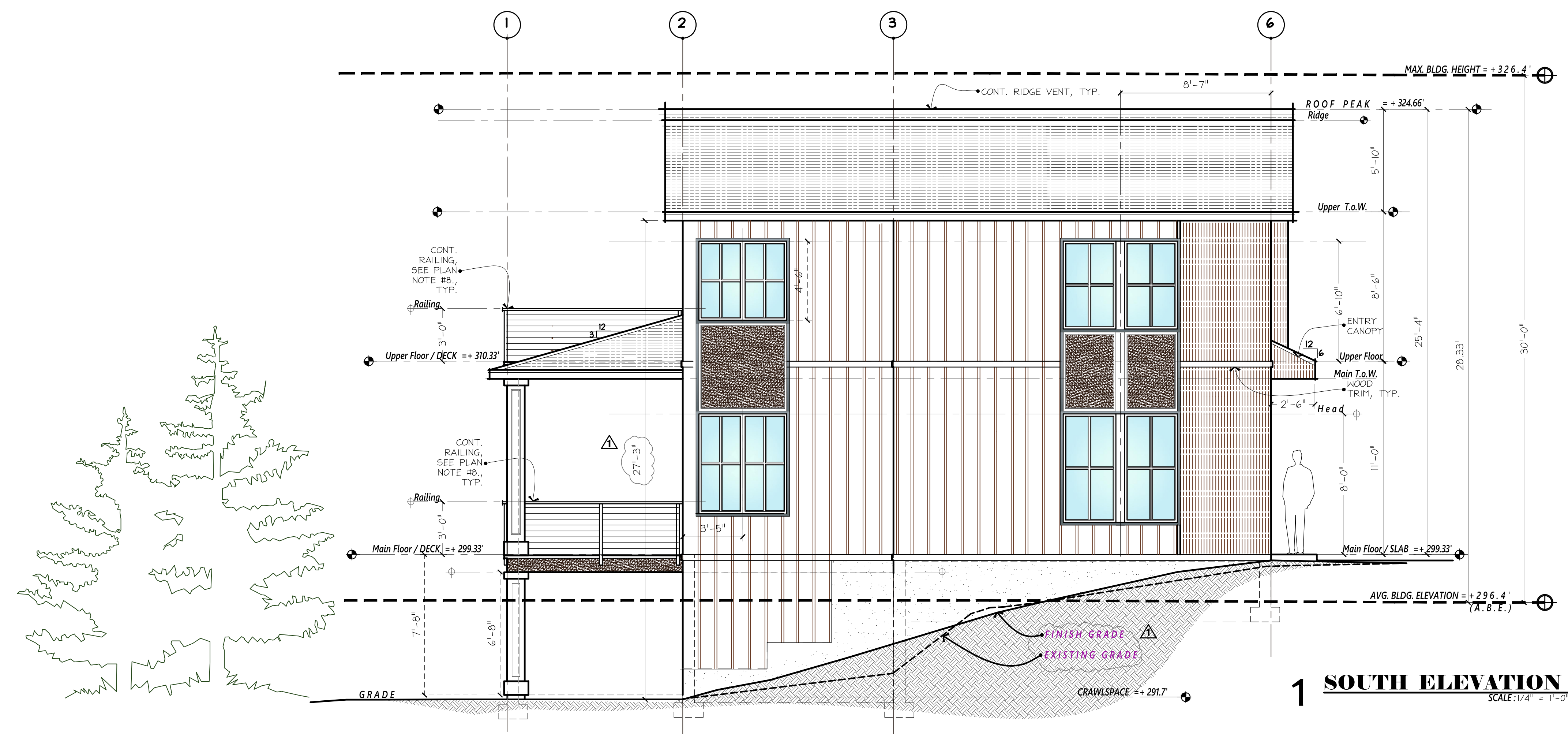
SET TITLE:	PERMIT SET
SHEET TITLE:	EXTERIOR ELEVATIONS

STAMP:

PROJECT #:	22010
DATE:	AUGUST 5, 2022
DRAWN BY:	N.F.W.
REVISIONS:	
Rev.	Description
1	Mercer Is. BLDG. DEPT. REV. 1-15-23

SHEET No.:

**A3.1**





PROJECT NAME: **RESIDENCE**  
PROJECT ADDRESS: **3419 72nd Place S.E.  
Mercer Island, WA 98040**

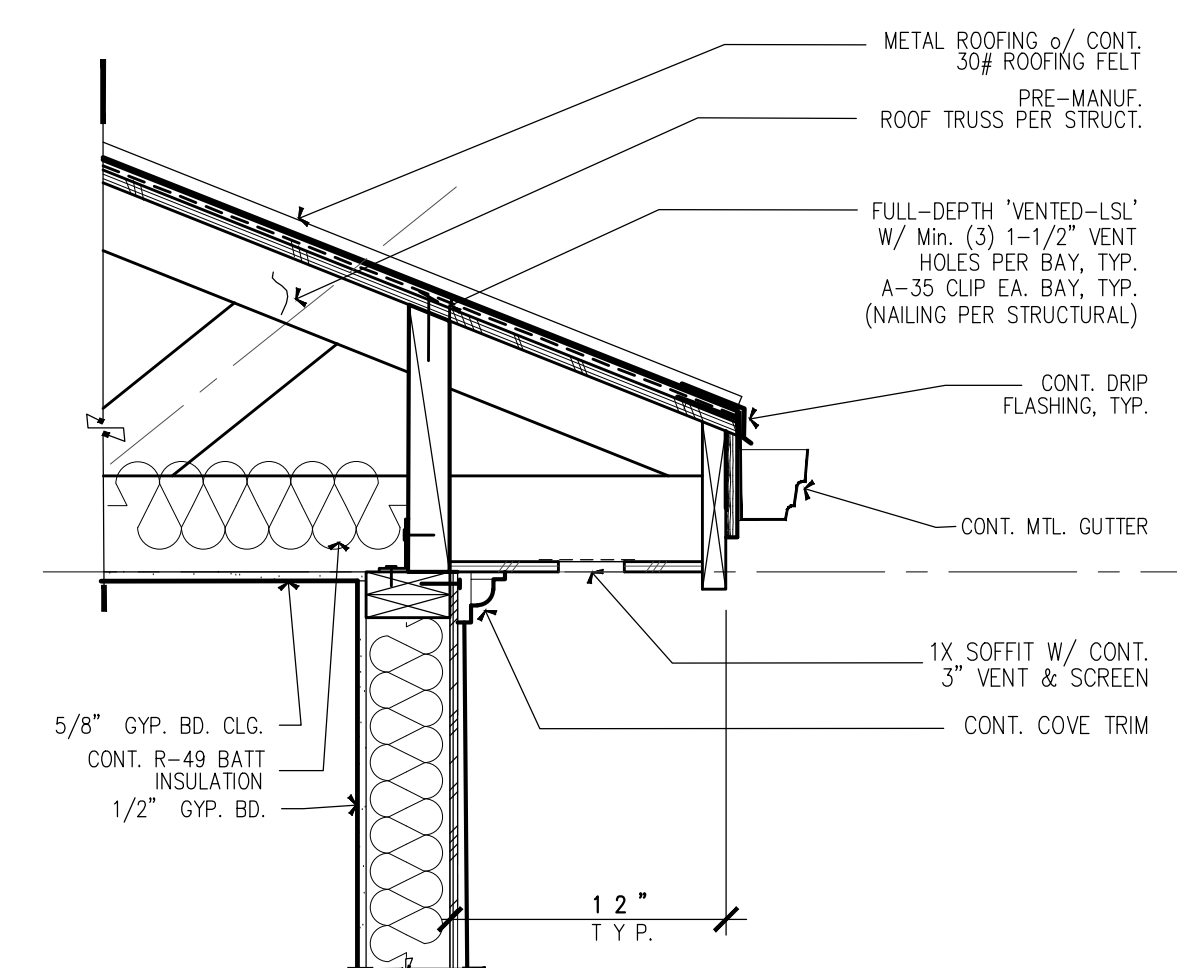
SET TITLE: **PERMIT SET**  
SHEET TITLE: **BUILDING SECTION**

STAMP:  
4884  
RICHARD A. FISHER  
STATE OF WASHINGTON

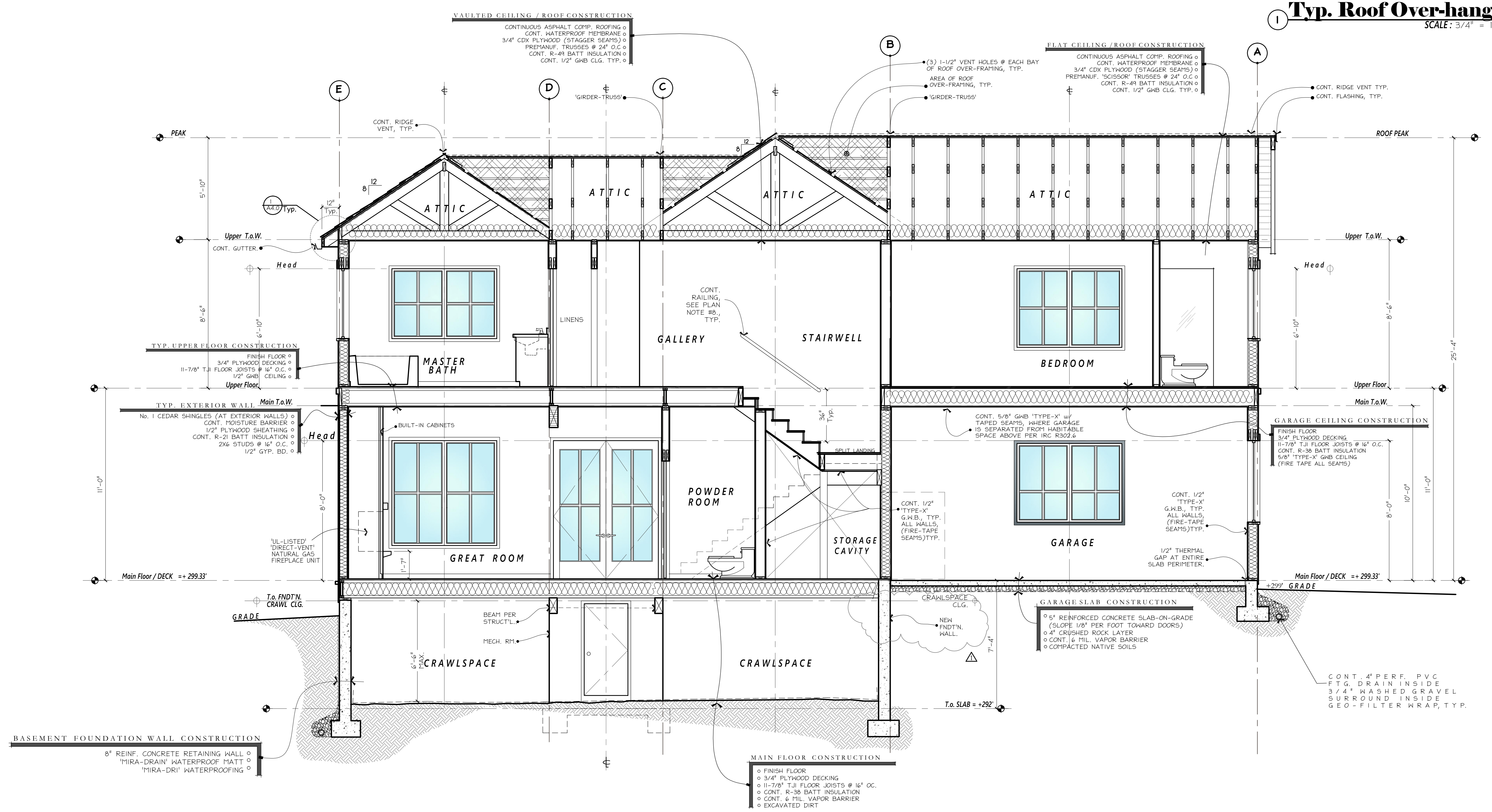
PROJECT #: **22010**  
DATE: **AUGUST 5, 2022**  
DRAWN BY: **N.F.W.**  
REVISIONS:

Tag	Description
△	M.I. BLDG. DEPT. REVIEW 1-15-23

SHEET No.: **A4.0**



**Typ. Roof Over-hang**  
SCALE: 3/4" = 1'-0"



**SECTION**  
SCALE: 3/8" = 1'-0"



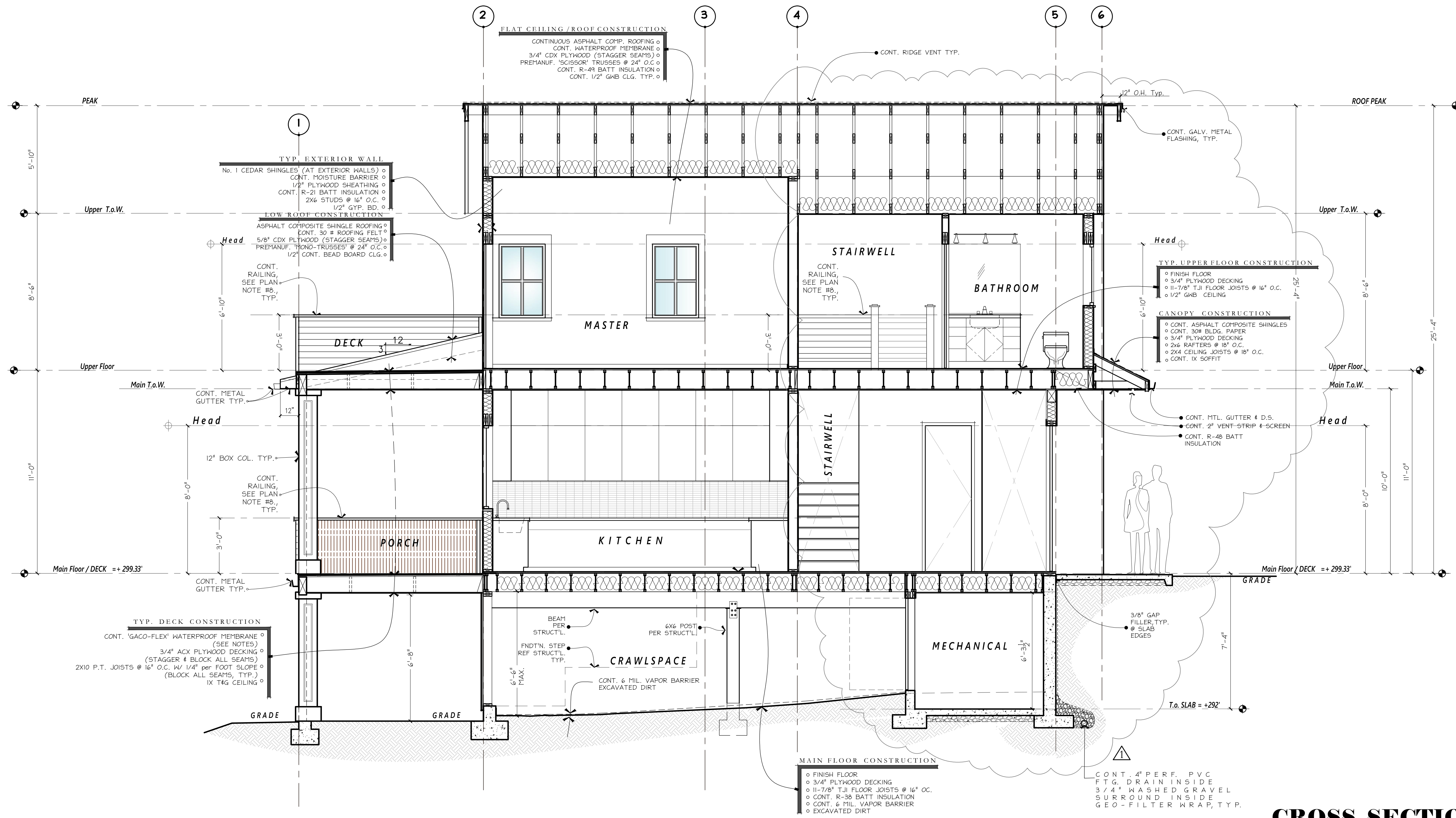
PROJECT NAME: **R K CONSTRUCTION RESIDENCE**  
PROJECT ADDRESS: **3419 72nd Place S.E. Mercer Island, WA 98040**

SET TITLE: **PERMIT SET**  
SHEET TITLE: **WALL SECTION**

STAMP:  
4884  
RICHARD A. FISHER  
STATE OF WASHINGTON

PROJECT #: **22010**  
DATE: **AUGUST 5, 2022**  
DRAWN BY: **N.F.W.**  
REVISIONS:  
Tag Description  
M.I. BLDG. DEPT. REVIEW 1-15-23

SHEET No.: **A4.1**



**CROSS SECTION**  
SCALE: 3/8" = 1'-0"

**NOTES**  
1. VERIFY MANUFACTURER OF MEMBRANE IS APPROVED FOR USE AS A WALKING DECK PER ICC-ES. WALKING DECK MEMBRANES IN ACCORDANCE WITH ICC-ES, DESIGN CRITERIA FOR WALKING DECKS (AC308).



# TOPOGRAPHIC & BOUNDARY SURVEY

## LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING# 7305080073)

LOTS 6, 7 AND THE NORTH HALF OF LOT 3, BLOCK 5, C. C. CALKINS 1ST ADDITION TO EAST SEATTLE, ACCORDING TO PLAT RECORDED IN VOLUME 4 OF PLATS, PAGE 88, IN KING COUNTY, WASHINGTON.

## BASIS OF BEARINGS

ACCEPTED THE BEARING OF N 89°54'00" E, BETWEEN MONUMENTS FOUND ALONG THE CENTERLINE OF 32ND AVE SE, PER R1.

## REFERENCES

- R1. BOUNDARY LINE ADJUSTMENT, VOL. 226, PG. 146,
- R2. RECORD OF SURVEY, VOL. 207, PG. 33
- R3. C.C. CALKINS FIRST ADDITION, VOL. 7 OF PLATS, PG. 88 RECORDS OF KING COUNTY, WASHINGTON.

## VERTICAL DATUM

NAVD 88 PER WGS SURVEY DATA WAREHOUSE 6457 DESCRIPTION: 2" BRASS CAP WITH CHISELED "X" IN CONC. MON (DN 1.0') LOCATION: 5' OFFSET MON AT INTX SE 32ND ST & 74TH AVE SE ELEVATION: 324.56'

SITE TEMP. BENCHMARK DESCRIPTION: SET SPIKE IN UTILITY POLE LOCATION: NEAR SE PROPERTY CORNER ELEVATION: 297.29'

## SURVEYOR'S NOTES

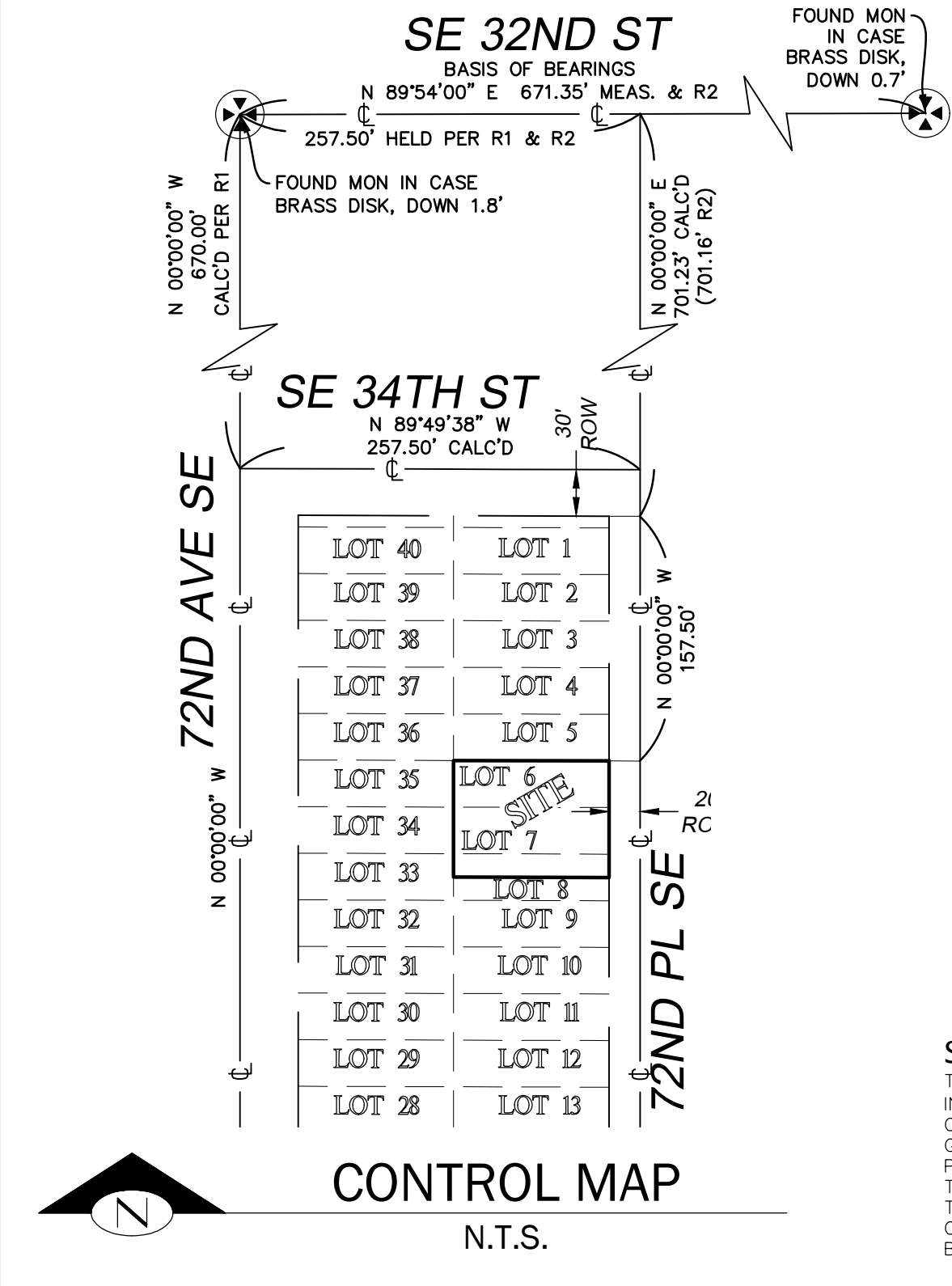
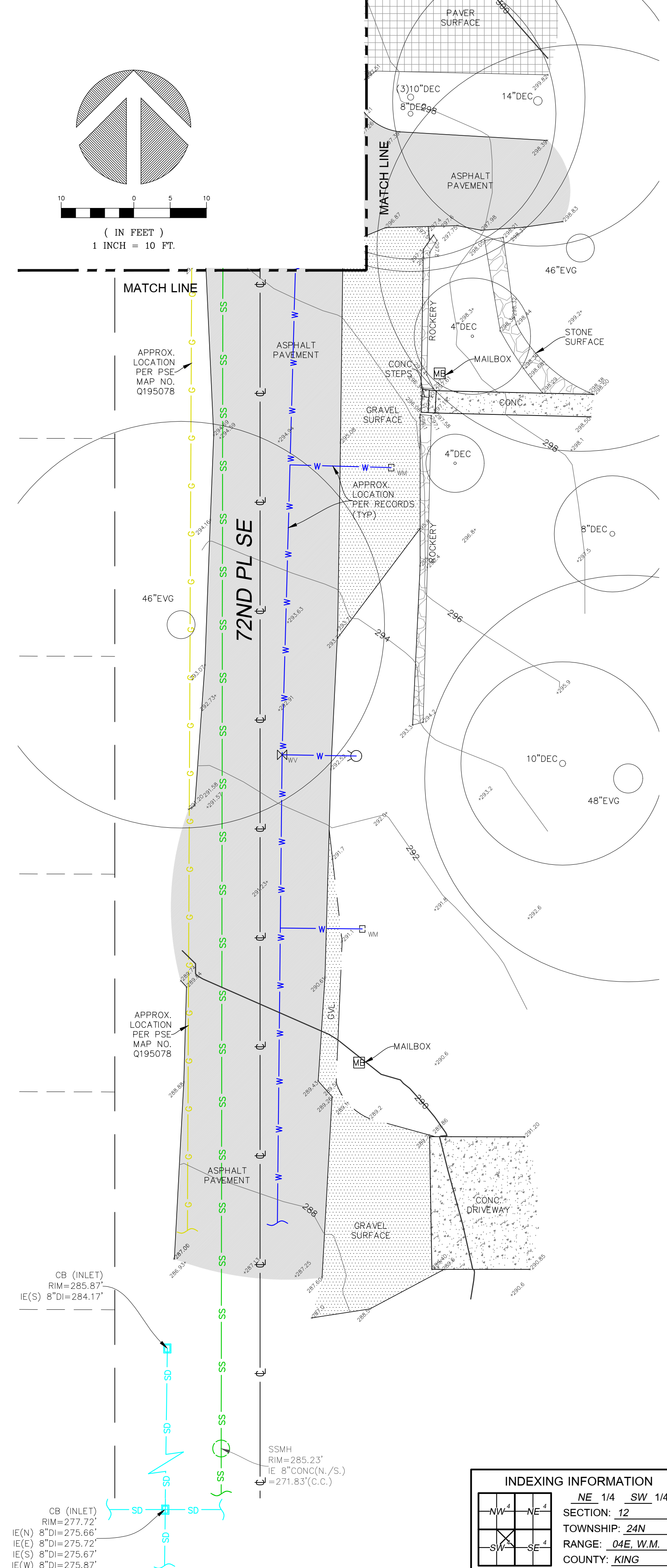
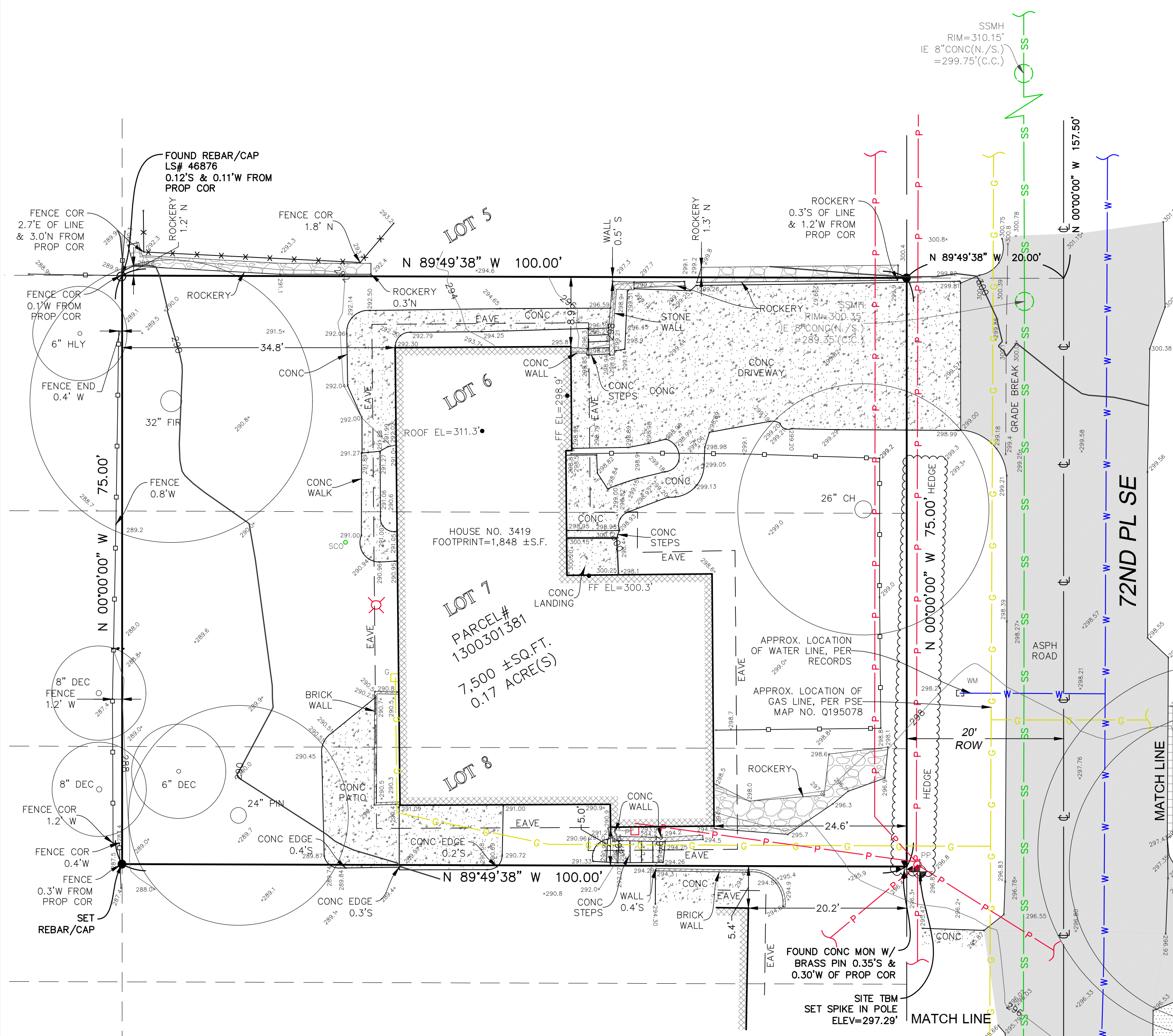
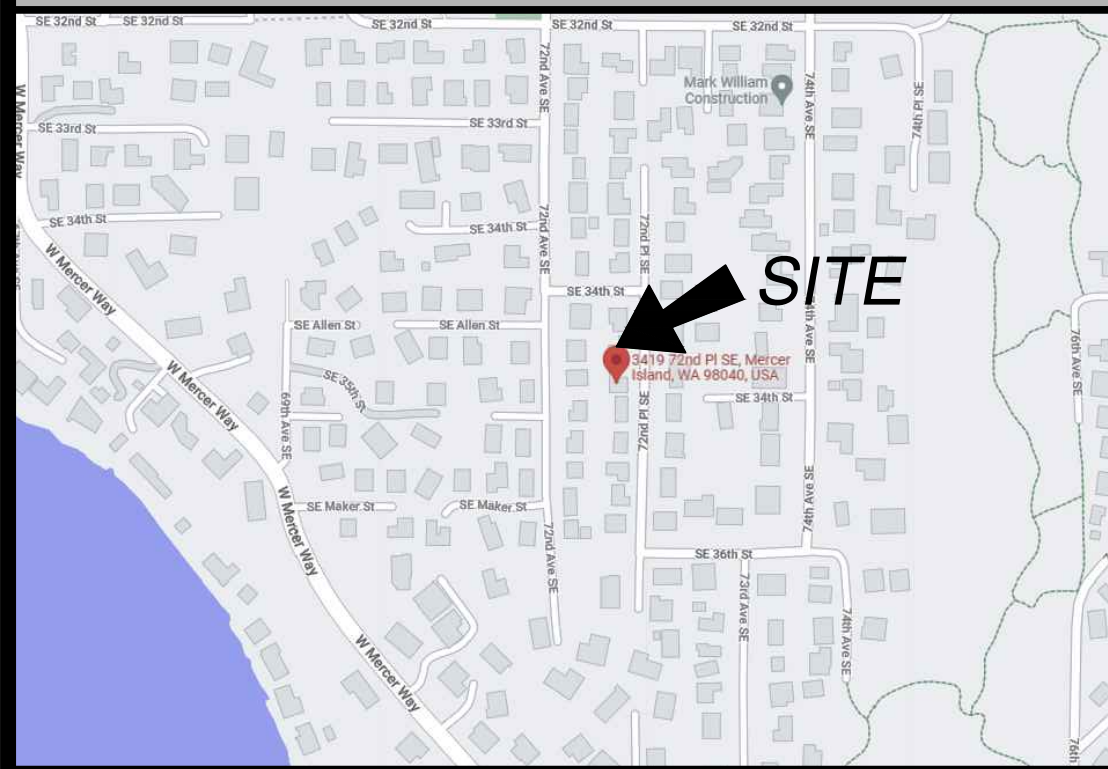
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN FEBRUARY OF 2022 & JANUARY OF 2023. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. 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. 130030-1381
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 7,500 ±S.F. (0.17 ACRES)
6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. EXISTING STRUCTURE(S) LOCATION AND DIMENSIONS ARE MEASURED FROM THE FACE OF THE SIDING UNLESS OTHERWISE NOTED.
8. 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

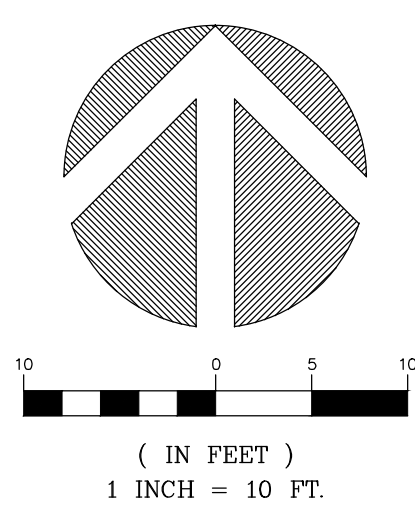
- |  |                           |  |                        |
|--|---------------------------|--|------------------------|
|  | ASPHALT SURFACE           |  | POWER METER            |
|  | BENCHMARK                 |  | POWER (OVERHEAD)       |
|  | BUILDING                  |  | POWER POLE             |
|  | CENTERLINE ROW            |  | REBAR & CAP (SET)      |
|  | SS CLEANOUT               |  | REBAR AS NOTED (FOUND) |
|  | CONCRETE SURFACE          |  | RETAINING WALL         |
|  | FENCE LINE (CHAIN LINK)   |  | ROCKERY                |
|  | FENCE LINE (WOOD)         |  | SEWER LINE             |
|  | GAS LINE                  |  | SEWER MANHOLE          |
|  | GAS METER                 |  | TREE (AS NOTED)        |
|  | HEDGE FOLIAGE LINE        |  | WATER LINE             |
|  | INLET (TYPE 1)            |  | WATER METER            |
|  | MONUMENT (IN CASE, FOUND) |  | YARD LIGHT             |
|  | MONUMENT (SURFACE, FOUND) |  |                        |

## VICINITY MAP

N.T.S.



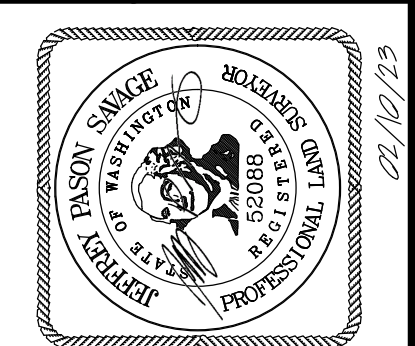
**STEEP SLOPE/BUFFER DISCLAIMER:**  
THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF 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.



INDEXING INFORMATION	
NE 1/4 SW 1/4	SECTION: 12
SW 1/4 SE 1/4	TOWNSHIP: 24N
	RANGE: 04E, W.M.
	COUNTY: KING

TOPOGRAPHIC & BOUNDARY SURVEY  
PARCEL NO. 1300301381

VAN HOOK RESIDENCE  
3419 72ND PL SE  
MERCER ISLAND, WA 98040



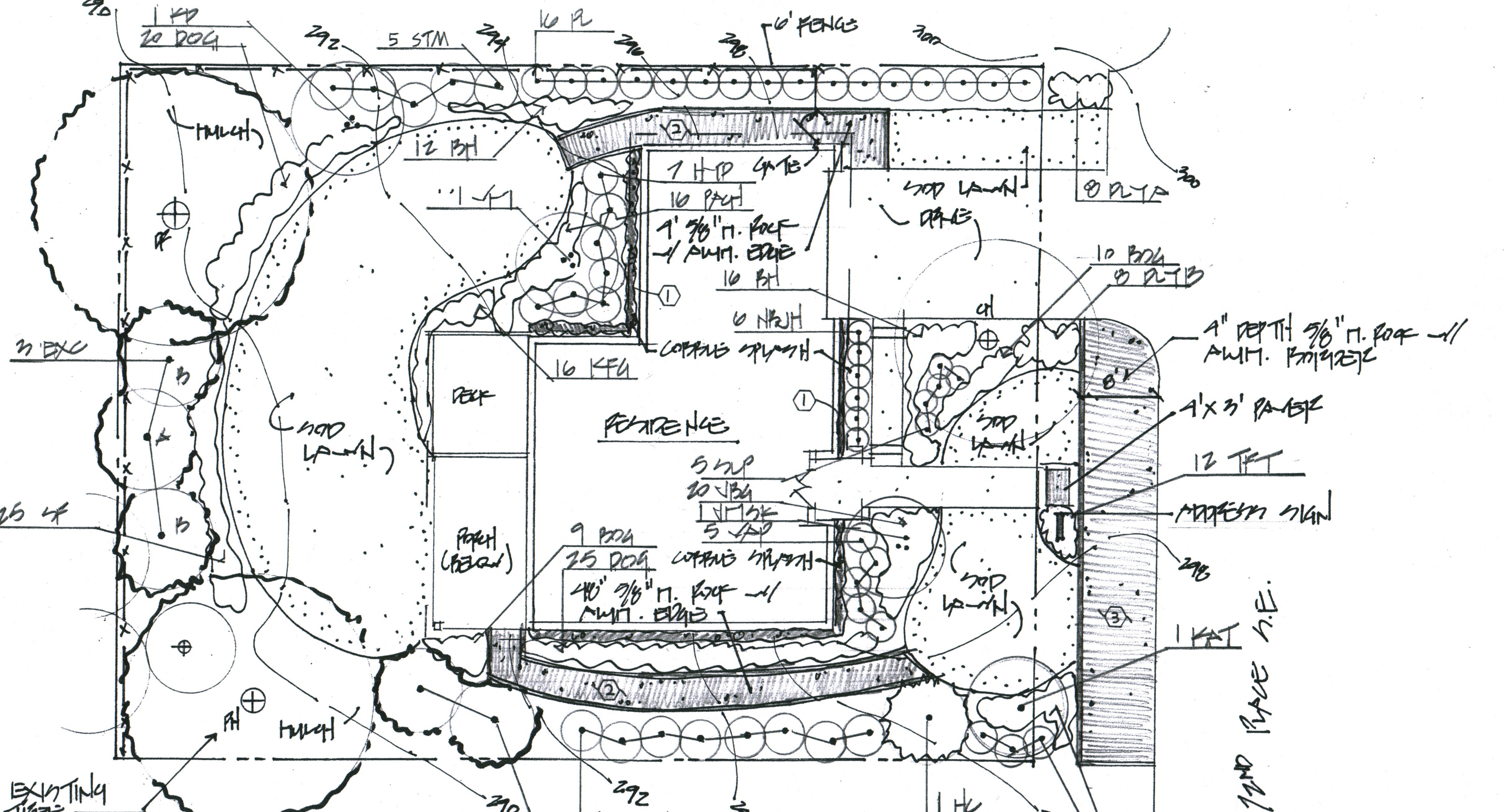
# TERRANE

10801 Main Street, Suite 102  
Bellevue, WA 98004  
p: 425-458-4488 | e: info@terrane.net

JOB NUMBER:	220111
DATE:	02/25/22
DRAFTED BY:	IDV / RPM
CHECKED BY:	JS
SCALE:	1" = 10'
REVISION HISTORY	
01/31/23	ADDITIONAL TOPO
02/09/23	ADDITIONAL TOPO
SHEET NUMBER	
1 OF 1	

We are the measure | terrane.net





EXISTING TREE  
(STEM TIP)

**LANDSCAPE PLANTING PLAN**  
SCALE 1" = 10'-0"  
NORTH

\* NOTE  
SEE SHEET L 1.1 FOR  
PLANT LIST, NOTES & SCHEDULES

**RKK CONSTRUCTION**  
3419 72<sup>nd</sup> Place SE  
Mercer Island, Washington 98040  
DATE: 1/9/23 REVISED:  
JOB# 223101 SHEET #  
SCALE: 1" = 10'-0" L1.0  
COPYRIGHT LRBA 2023  
Lauchlin R. Bethune Associates, Inc.  
Landscape Architecture & Planning, ASLA  
P.O. Box 1442 phone: (425) 432-9877  
Maple Valley, Washington 98038 www.bethuneassociates.com



## PLANT MATERIAL LEGEND

Abrev.	Common Name	Botanical Name	Size
<i>trees:</i>			
EXC	Excelsa Cedar	<i>Thuja plicata "excelsa"</i>	A=6' hgt./B&B, B=8' hgt./B&B
HC	Hinoke Cypress	<i>Chamaecyparis obtusa "Hinoke"</i>	6' hgt./B&B
JMSK	Japanese Maple Sango Kaku	<i>Acer palmatum "Sango Kaku"</i>	8' hgt./B&B, Specimen
KAT	Katsura	<i>Cercidiphyllum japonicum</i>	10' hgt./B&B
KD	Kousa Dogwood	<i>Cornus kousa</i>	8' hgt./B&B
VM	Vine Maple	<i>Acer circinatum</i>	6' hgt./B&B
<i>shrubs:</i>			
GFS	Spirea Goldflame	<i>Spirea japonica "Goldflame"</i>	16" hgt./cont.
HYD	Peegee Hydrangea	<i>Hydrangea paniculata "Grandiflora"</i>	24" hgt./cont.
NBJH	Northern Beauty Japanese Holly	<i>Ilex crenata "Northern Beauty"</i>	16" hgt./cont.
PL	Portuguese Laurel	<i>Prunus lusitanica</i>	24" hgt./cont.
SBV	Spring Bouquet Viburnum	<i>Viburnum tinus "Spring Bouquet"</i>	24" hgt./cont.
SLP	Spirea Little Princess	<i>Spirea japonica "Little Princess"</i>	18" hgt./cont.
STM	Strawberry Madrone	<i>Arbutus unedo</i>	30" hgt./cont.
VAP	Variiegated Pieris	<i>Pieris japonica "Variegata"</i>	24" hgt./cont.
<i>grasses:</i>			
BOG	Blue Oat Grass	<i>Helictotrichon sempervirens</i>	1 gal./cont.
JBG	Japanese Blood Grass	<i>Imperata cylindrical</i>	1 gal./cont.
KFG	Karl Foerster Grass	<i>Calamagrostis x acutiflora</i>	1 gal./cont.
<i>symbols/ground covers:</i>			
BH	Bishops Hat	<i>Epimedium grandiflorum</i>	1 gal./cont.
DLY A	Day Lilly	<i>Hemerocallis "Chicage Apache"</i>	1 gal./cont.
DLY B	Day Lilly	<i>Hemerocallis "Cherry Cheeks"</i>	1 gal./cont.
DOG	Dwarf Oregon Grape	<i>Mahonia repens</i>	1 gal./cont.
MCS	Magic Carpet Spiraea	<i>Spiraea japonica "Magic Carpet"</i>	1 gal./cont.
PACH	Pachysandra	<i>Pachysandra terminalis</i>	1 gal./cont.
TFT	Thrift	<i>Armeria species</i>	1 gal./cont.
<i>Ferns:</i>			
SF	Sword Fern	<i>Polystichum munitum</i>	1 gal./cont.



Lawn Sod from Country Green 1 800 300 1763

## SITE SPECIFIC NOTES

- 1 ROCK SPLASH. Cobble rock 4-6" washed 10" deep and 10" wide.
- 2 GRAVEL WALK AND HEADER. Rake area smooth, remove from site all rocks, roots and debris ½" diameter and greater. Place on grade 5/8" minus compacted crushed rock, 4" depth, 48" wide. Install aluminum edge.
- 3 SHOULDER. 4" Depth, 5/8" minus rock with aluminum border.

## GENERAL CONSTRUCTION NOTES

1. All work performed shall conform to the City of Mercer Island landscape and irrigation requirements, codes and specifications.
2. Owner to secure all necessary permits for required work per Landscape and Irrigation Plan.
3. Clean subgrade by removing all undesirable vegetation including grasses and weeds including roots. Leave subgrade in landscape areas minimum 8" below paving for shrub beds and 6" depth for lawn. Remove all debris from site.
4. Provide minimum 6" depth 60-40 mix from Corliss Materials (253) 891-6680 in all shrub beds. Scarify subgrade by rototilling to 12" depth and add topsoil on surface, mix topsoil and subgrade thoroughly. Add additional topsoil as needed to contour shrub beds including required berms.
5. Provide minimum 6" depth 60-40 mix from Corliss Materials (253) 891-6680 in all lawn areas. Scarify subgrade by rototilling to 12" depth and add topsoil on surface. Add additional topsoil as needed to level and slope to drain at 2%. shrub beds including required berms.
6. Provide minimum 2" depth fine blend hem-fir mulch to all planting beds. Mulch from approved source. Fill all planting beds and lawn areas to within 1" of top of all curbs and walks. Slope all planting beds and lawn areas to drain.
7. Provide one (1) year warranty for all plant materials and workmanship.
8. Locate, protect and avoid disruption of all above and below grade utilities and site features prior to construction. Contractor is responsible for any resulting damages during construction. Call locate before you dig at 811.
9. Verify all quantities shown on the plant list and plans. If discrepancies exist between the graphic representation and the numeric totals, the graphic representation shall rule.
10. All plant materials to be specimen quality with full, symmetrical trunk and foliage, unless otherwise noted.
11. Insure proper drainage of all planting holes prior to installing plant materials. If planting holes do not drain or if heavy clay soils are evident contact landscape architect.
12. Coordinate drainage, irrigation and lighting with planting plan.
13. Locate prior to construction, preserve and protect septic tanks, drainfield and reserve.

## RKK CONSTRUCTION

3419 72<sup>nd</sup> Place SE

Mercer Island, Washington 98040

DATE: 1/9/23 REVISED:

JOB# 223101

SCALE: 1" = 10'-0"

SHEET # L1.1

COPYRIGHT LRBA 2023

Lauchlin R. Bethune Associates, Inc.

■ Landscape Architecture & Planning, ASLA

P.O. Box 1442

phone: (425) 432-9877

Maple Valley, Washington 98038 www.bethuneassociates.com



**LEGAL DESCRIPTION**

PER STATUTORY WARRANTY DEED RECORDING #7305080073)  
 LOTS 6, 7 AND THE NORTH HALF OF LOT 3, BLOCK 5, C. C. CALKINS 1ST ADDITION TO EAST SEATTLE, ACCORDING TO PLAT RECORDED IN VOLUME 4 OF PLATS, PAGE 88, IN KING COUNTY, WASHINGTON.

**ORGANIC SOIL REQUIREMENT**

**MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED**

**SOIL AMENDMENT REQUIRED**

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

ESTIMATED TOPSOIL IMPORT = 31 CY

**SOIL INSPECTION REQUIRED BY ENGINEER**

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

**TREE PROTECTION DETAIL**

**TREE PROTECTION AREA (TPZ)**

**KEEP OUT!**

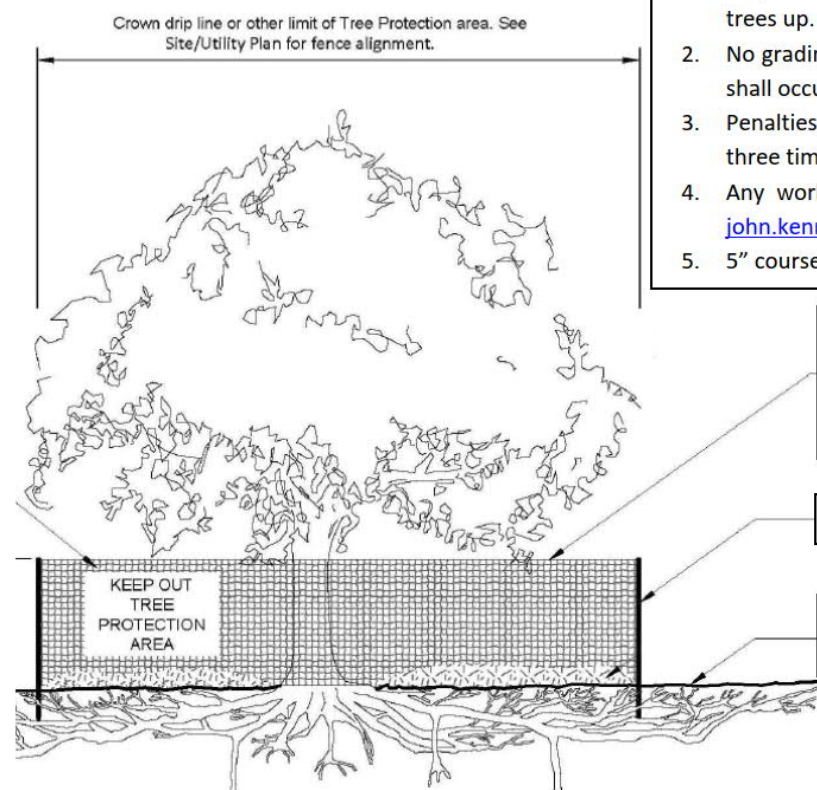
**DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA**

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees/financial penalties
3. Arborist reports recommending mitigation

**Notes**

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
4. Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kenney@mercergov.org.
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.



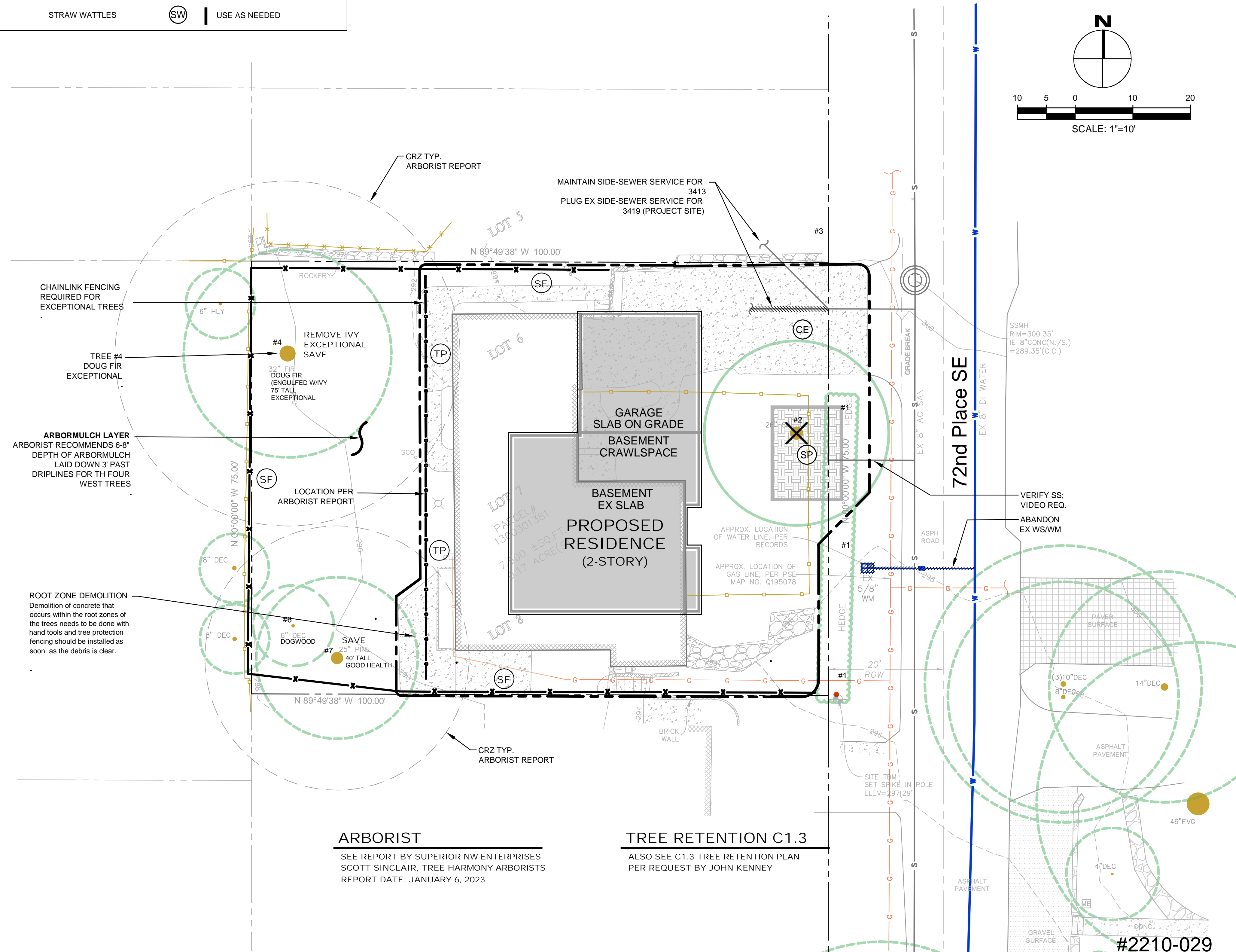
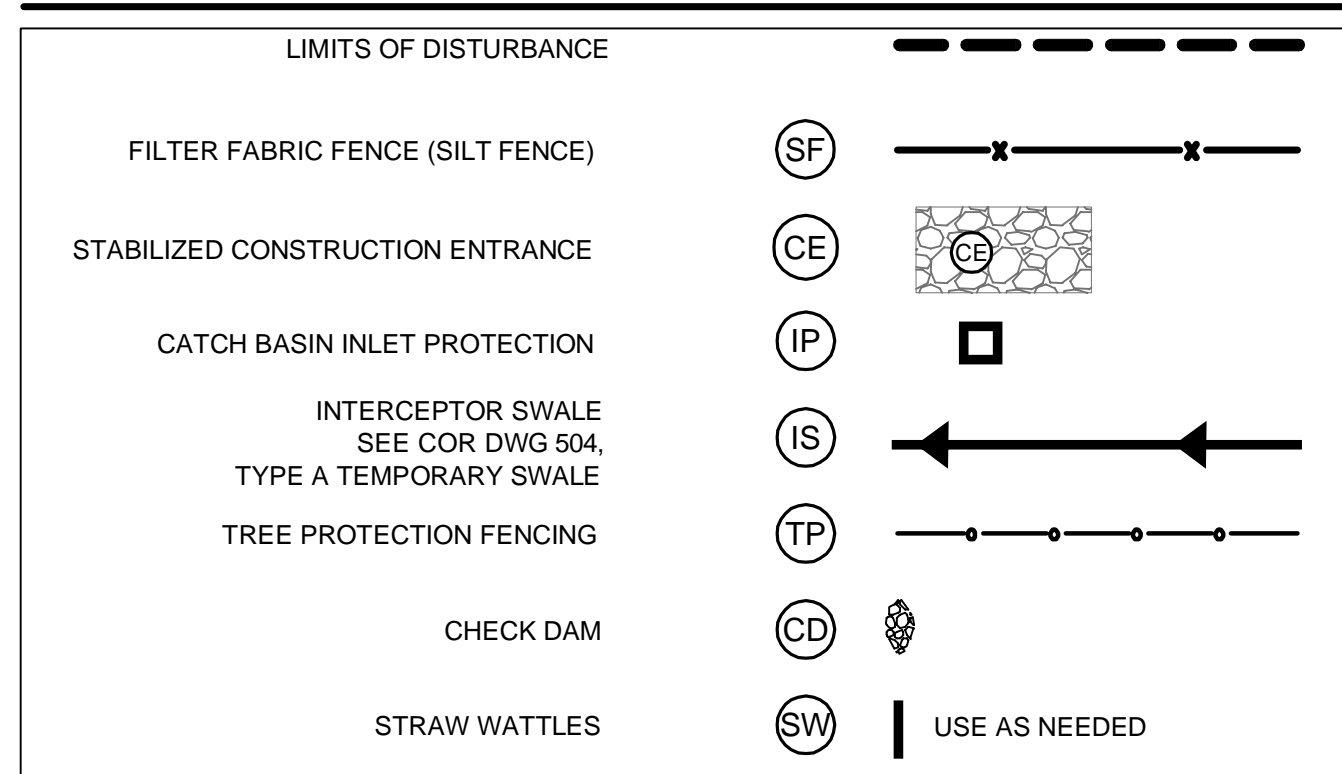
Tree protection fence: 4-6" chain link fence, solidly anchored into the ground, or if authorized High-density polyethylene fencing with 3.5" x 1.5" openings; color orange. Steel posts installed at 8' o.c.

2" x 6" steel posts or approved equal

Maintain existing grade with the tree protection fence unless otherwise indication on the plans

Any Work in the protected area must be with the permission of the City Arborist [john.kenney@mercergov.org](mailto:john.kenney@mercergov.org)

**EROSION CONTROL LEGEND**



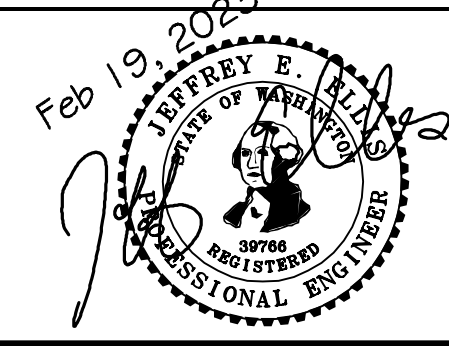
**ARBORIST**  
 SEE REPORT BY SUPERIOR NW ENTERPRISES  
 SCOTT SINCLAIR, TREE HARMONY ARBORISTS  
 REPORT DATE: JANUARY 6, 2023

**TREE RETENTION C1.3**  
 ALSO SEE C1.3 TREE RETENTION PLAN  
 PER REQUEST BY JOHN KENNEY

NO.	DATE	BY	REVISIONS

APPLICANT  
 JASON KOHLER  
 RKK CONSTRUCTION  
 3056 70th AVENUE SE  
 MERCER ISLAND, WA 98040  
 (206) 236-2920

DATE: Feb 19, 2023  
 JOB# 2036  
 DRAFTED: SS DESIGN: SS  
 DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**  
 102 NW CANAL STREET SEATTLE, WA 98107  
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

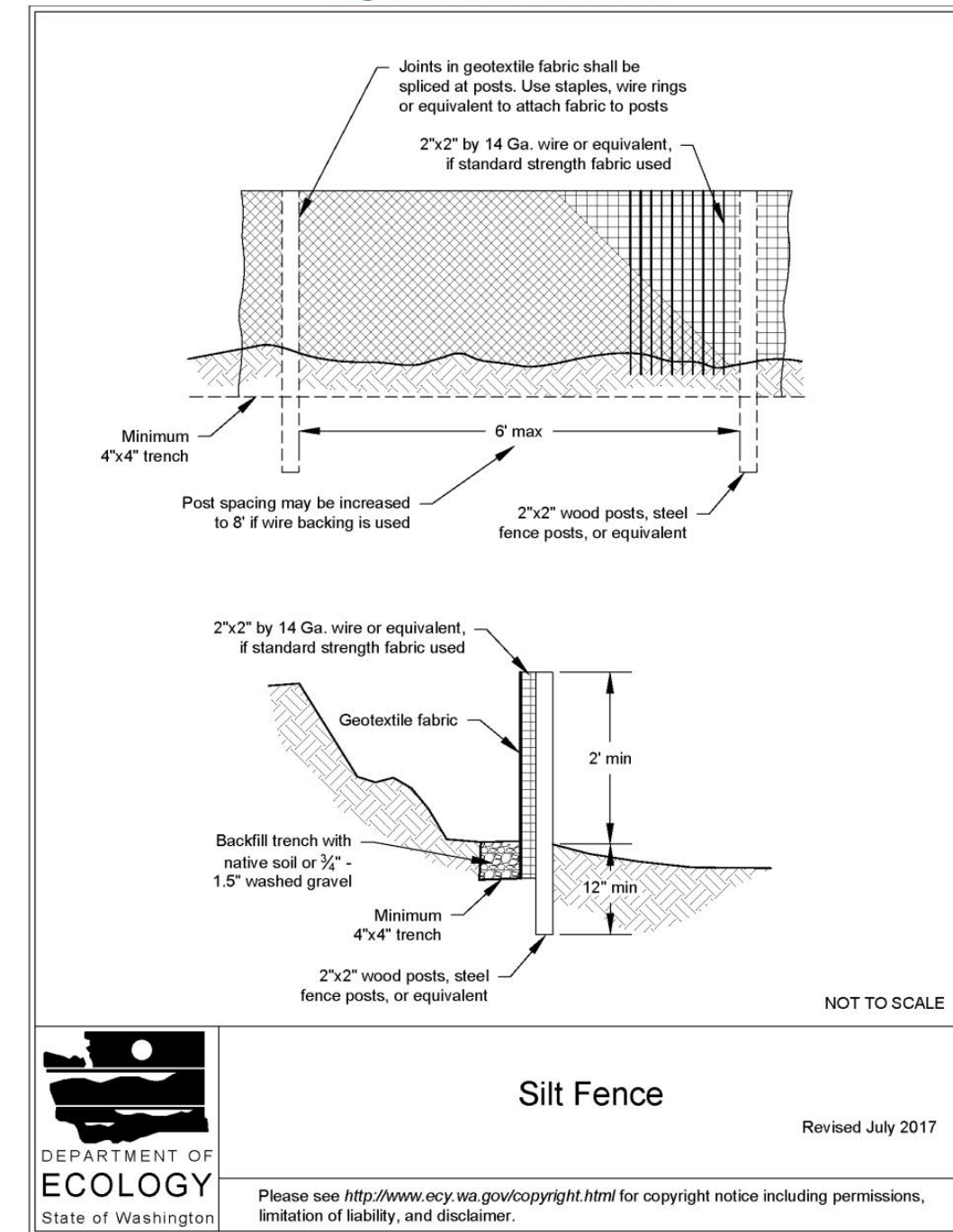
**TESC PLAN**  
 RKK CONSTRUCTION PROJECT  
 3419 72nd PLACE SE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C1.0**  
 APN 130030-1381  
 #2210-029



SILT FENCE DETAIL DOE

Figure II-3.22: Silt Fence



**Silt Fence**  
Revised July 2017  
Please see <http://www.ecy.wa.gov/copyright.html> for copyright notice including permissions, limitation of liability, and disclaimer.

2019 Stormwater Management Manual for Western Washington  
Volume II - Chapter 3 - Page 371

RECOMMENDED CONSTRUCTION SEQUENCE

A DETAILED CONSTRUCTION SEQUENCE IS NEEDED TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE APPLIED AT THE APPROPRIATE TIMES. A RECOMMENDED CONSTRUCTION SEQUENCE IS PROVIDED BELOW:

- HOLD AN ONSITE PRE-CONSTRUCTION MEETING.
- POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).
- FLAG OR FENCE CLEARING LIMITS.
- INSTALL CATCH BASIN PROTECTION, IF REQUIRED.
- GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
- INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
- CONSTRUCT SEDIMENT PONDS AND TRAPS.
- GRADE AND STABILIZE CONSTRUCTION ROADS.
- CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
- MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- RELOCATE SURFACE WATER CONTROLS OR TESC MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE TESC IS ALWAYS IN ACCORDANCE WITH CITY OF MERCER ISLAND TESC REQUIREMENTS.
- COVER ALL AREAS THAT WILL BE UN-WORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) OR TWO DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
- STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
- SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPs IF APPROPRIATE.

EROSION CONTROL NOTES

D.8.2 STANDARD ESC PLAN NOTES  
THE STANDARD ESC PLAN NOTES MUST BE INCLUDED ON ALL ESC PLANS. AT THE APPLICANT'S DISCRETION, NOTES THAT IN NO WAY APPLY TO THE PROJECT MAY BE OMITTED; HOWEVER, THE REMAINING NOTES MUST NOT BE RENUMBERED. FOR EXAMPLE, IF ESC NOTE #3 WERE OMITTED, THE REMAINING NOTES SHOULD BE NUMBERED 1, 2, 4, 5, 6, ETC.

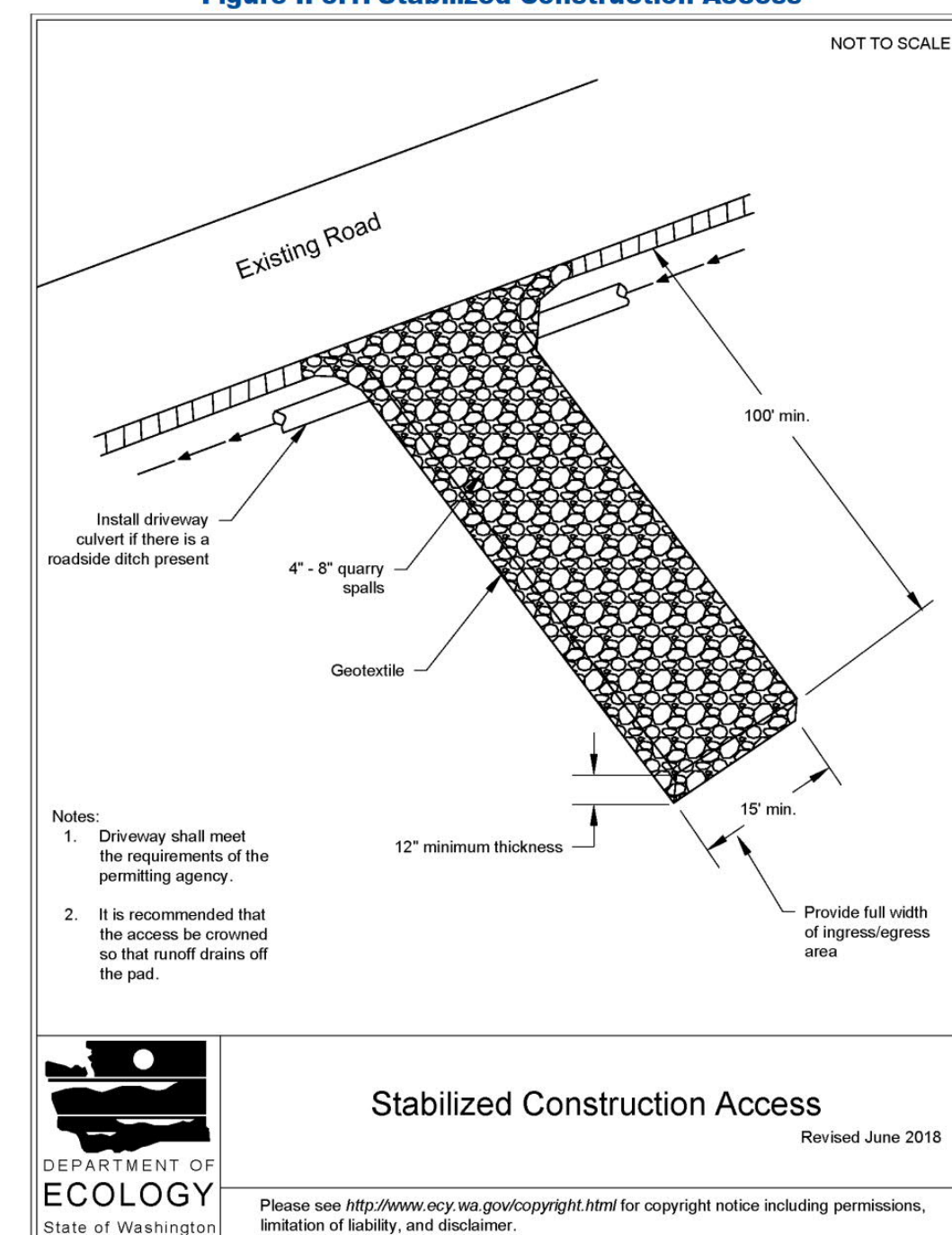
- APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY CITY OF MERCER ISLAND.
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.
- ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
- ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH DURING THE DRY SEASON, BI-MONTHLY DURING THE WET SEASON, OR WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.
- 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.
- ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
- COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL.
- PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

CITY NOTES

- ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.
- APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.
- CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.
- CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITIES.
- AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555
- DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED
- EROSION CONTROL: ALL "LAND DISTURBING ACTIVITY" IS SUBJECT TO PROVISIONS OF MERCER ISLAND ORDINANCE 95C-118 'STORM WATER MANAGEMENT.' SPECIFIC ITEMS TO BE FOLLOWED AT YOUR SITE:
- PROTECT ADJACENT PROPERTIES FROM ANY INCREASED RUNOFF OR SEDIMENTATION DUE TO THE CONSTRUCTION PROJECT THROUGH THE USE OF APPROPRIATE "BEST MANAGEMENT PRACTICES" (BMP) EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT TRAPS, SEDIMENT PONDS, FILTER FABRIC FENCES, VEGETATIVE BUFFER STRIPS OR BIOENGINEERED SWALES.
- CONSTRUCTION ACCESS TO THE SITE SHOULD BE LIMITED TO ONE ROUTE. STABILIZE ENTRANCE WITH QUARRY SPALLS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING THE STORM DRAINS.
- PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.
- ALL EXPOSED SOILS SHALL REMAIN DENUDE FOR NO LONGER THAN SEVEN (7) DAYS AND SHALL BE STABILIZED WITH MULCH, HAY, OR THE APPROPRIATE GROUND COVER. ALL EXPOSED SOILS SHALL BE COVERED IMMEDIATELY DURING ANY RAIN EVENT.
- INSTALLATION OF CONCRETE DRIVEWAYS, TREES, SHRUBS, IRRIGATION, BOULDERS, BERMS, WALLS, GATES, AND OTHER IMPROVEMENTS ARE NOT ALLOWED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL, AND AN ENCROACHMENT AGREEMENT AND RIGHT OF WAY PERMIT FROM THE SENIOR DEVELOPMENT ENGINEER.
- OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THIS PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.
- POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
- REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.
- ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.
- SILENT FENCE: CLEAN AND PROVIDE REGULAR MAINTENANCE OF THE SILT FENCE. THE FENCE IS TO REMAIN VERTICAL AND IS TO FUNCTION PROPERLY THROUGHOUT THE TERM OF THE PROJECT.
- WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.
- REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.
- THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED. ALTERNATELY, A PRESSURE TEST OF THE SIDE SEWER, FROM SEWER MAIN TO POINT OF CONNECTION, MAY BE SUBSTITUTED FOR THE VIDEO INSPECTION.
- NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.
- POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
- THE LIMITS AND EXTENDS OF THE PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY ENGINEER PRIOR TO FINALIZE THE PROJECT.

CONSTRUCTION ENTRANCE DOE

Figure II-3.1: Stabilized Construction Access



**Stabilized Construction Access**  
Revised June 2018  
Please see <http://www.ecy.wa.gov/copyright.html> for copyright notice including permissions, limitation of liability, and disclaimer.

2019 Stormwater Management Manual for Western Washington  
Volume II - Chapter 3 - Page 279

DENUDED AREAS REQUIREMENTS

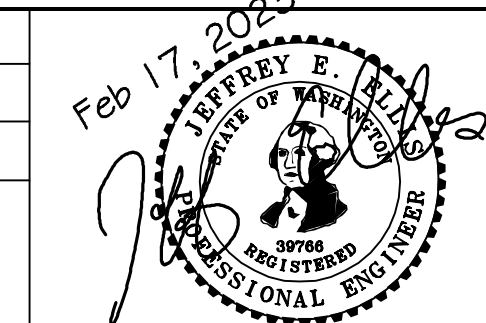
- APRIL 1 TO SEPT 30  
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF CONSTRUCTION. PLEASE READ ALL CITY TESC NOTES ON SHEET C1.2.
- OCT 1 TO MARCH 31  
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING. IF AN EROSION PROBLEM ALREADY EXISTS ON THE SITE, OTHER COVER PROTECTION AND EROSION CONTROL WILL BE REQUIRED.

#2210-029

NO.	DATE	BY	REVISIONS

APPLICANT  
JASON KOHLER  
RKK CONSTRUCTION  
3056 70th AVENUE SE  
MERCER ISLAND, WA 98040  
(206) 236-2920

DATE: Feb 17, 2023  
JOB# 2036  
DRAFTED: SS DESIGN: DE  
DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**  
102 NW CANAL STREET SEATTLE, WA 98107  
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**TESC & CITY NOTES**  
**TESC DETAILS**  
RKK CONSTRUCTION PROJECT  
3419 72nd PLACE SE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C1.2**  
APN 130030-1381  
#2210-029



**LEGAL DESCRIPTION**

PER STATUTORY WARRANTY DEED RECORDING #7305080073)  
 LOTS 6, 7 AND THE NORTH HALF OF LOT 3, BLOCK 5, C. C. CALKINS 1ST ADDITION TO EAST SEATTLE, ACCORDING TO PLAT RECORDED IN VOLUME 4 OF PLATS, PAGE 88, IN KING COUNTY, WASHINGTON.

**ORGANIC SOIL REQUIREMENT**

**MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED**

**SOIL AMENDMENT REQUIRED**

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

ESTIMATED TOPSOIL IMPORT = 31 CY

**SOIL INSPECTION REQUIRED BY ENGINEER**

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

**TREE PROTECTION DETAIL**

**TREE PROTECTION AREA (TPZ)**

**KEEP OUT!**

**DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA**

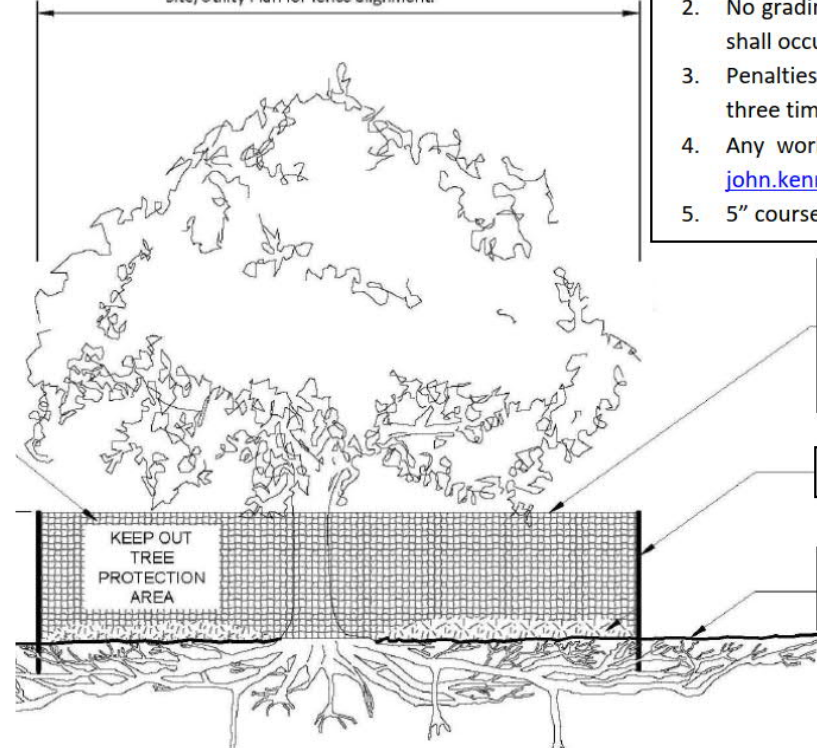
Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees/financial penalties
3. Arborist reports recommending mitigation

**Notes**

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
4. Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, [john.kenney@mercergov.org](mailto:john.kenney@mercergov.org).
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.

Crown drip line or other limit of Tree Protection area. See SW/Utility Plan for fence alignment.



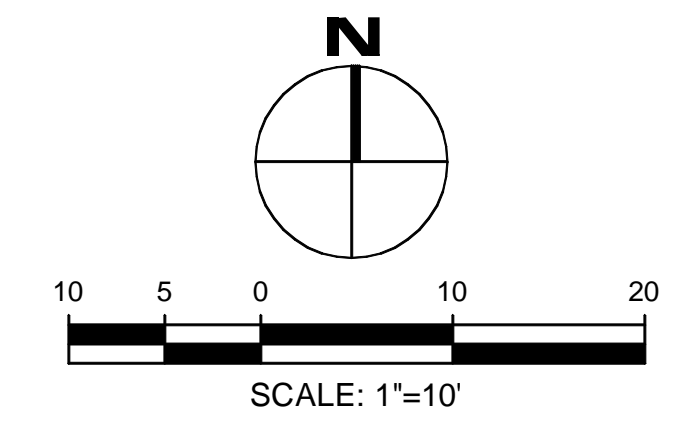
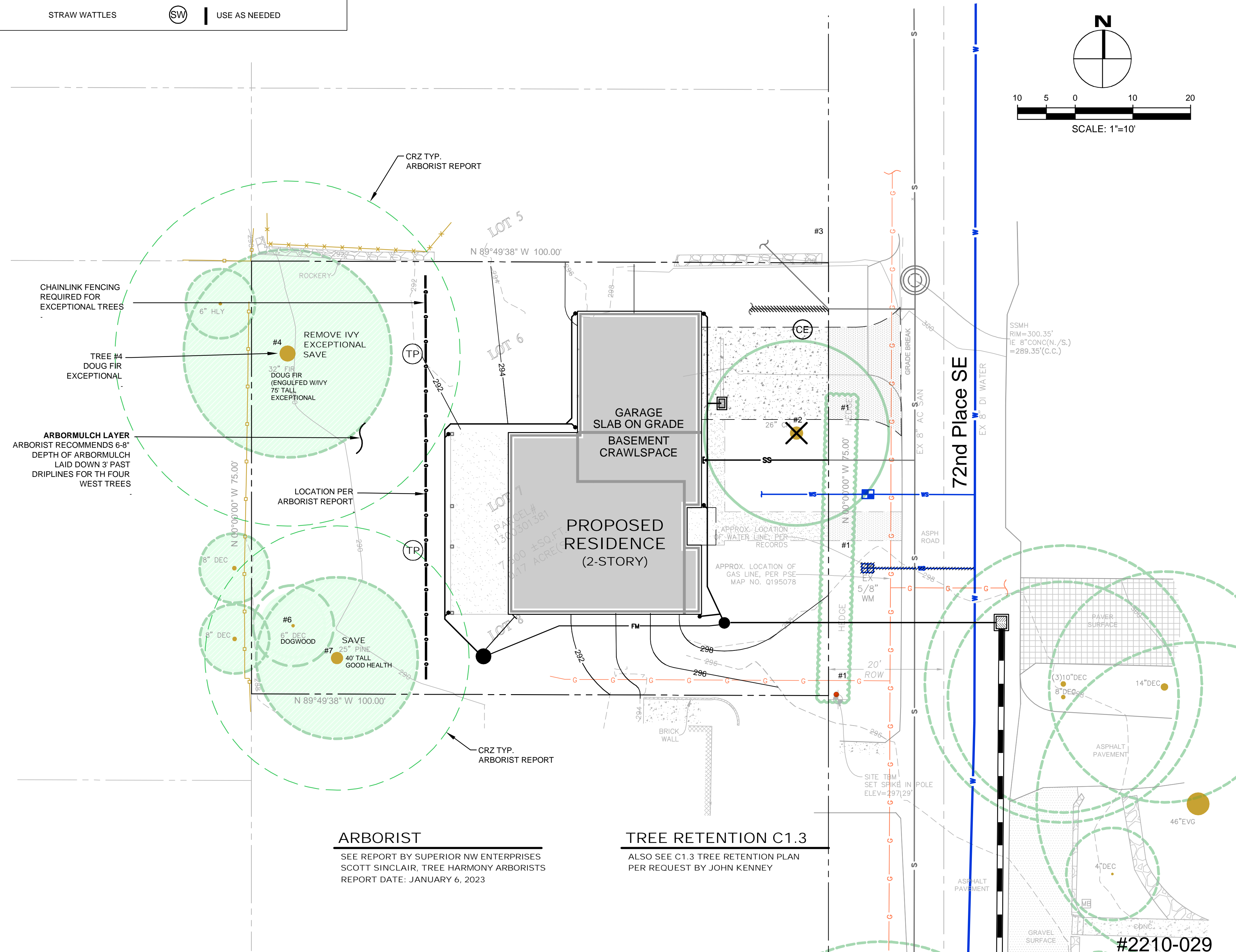
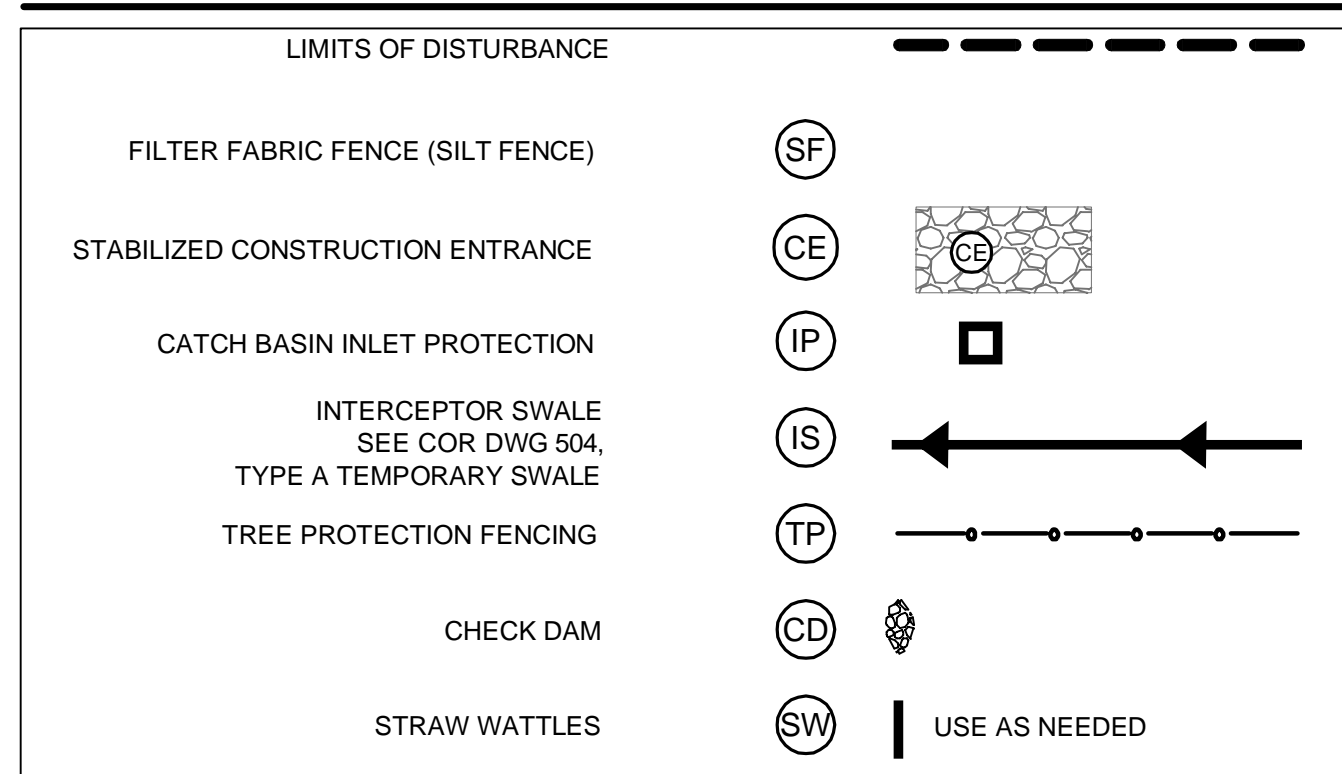
Tree protection fence: 4-6" chain link fence, solidly anchored into the ground, or if authorized High-density polyethylene fencing with 3.5" x 1.5" openings; color orange. Steel posts installed at 8' o.c.

2" x 6" steel posts or approved equal

Maintain existing grade with the tree protection fence unless otherwise indication on the plans

Any Work in the protected area must be with the permission of the City Arborist [john.kenney@mercergov.org](mailto:john.kenney@mercergov.org)

**EROSION CONTROL LEGEND**



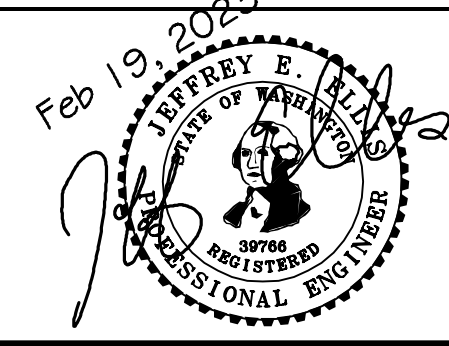
**ARBORIST**  
 SEE REPORT BY SUPERIOR NW ENTERPRISES  
 SCOTT SINCLAIR, TREE HARMONY ARBORISTS  
 REPORT DATE: JANUARY 6, 2023

**TREE RETENTION C1.3**  
 ALSO SEE C1.3 TREE RETENTION PLAN  
 PER REQUEST BY JOHN KENNEY

NO.	DATE	BY	REVISIONS

APPLICANT  
 JASON KOHLER  
 RKK CONSTRUCTION  
 3056 70th AVENUE SE  
 MERCER ISLAND, WA 98040  
 (206) 236-2920

DATE: Feb 19, 2023  
 JOB# 2036  
 DRAFTED: SS DESIGN: SS  
 DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**  
 102 NW CANAL STREET SEATTLE, WA 98107  
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**TREE RETENTION PLAN**

RKK CONSTRUCTION PROJECT  
 3419 72nd PLACE SE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C1.3**  
 APN 130030-1381  
 #2210-029



**SANITARY SEWER IMPROVEMENTS**

- 1 -
- 2 - 6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %.
- 3 -
- 4 -
- 7 - LOCATE AND VIDEO CONDITION OF EXISTING SANITARY SIDE SEWER. REPLACE LINE IF FOUND DEFECTIVE AS DETERMINED BY CITY INSPECTOR.

**WATER IMPROVEMENTS**

- 10 - 1" WATER METER AND WATER SERVICE IS REQUIRED PER STANDARD DETAIL W-13. FIRE REQUIRES 13D SPRINKLER SYSTEM.
- 11 - 1.5" 250 PSI PRIVATE HDPE WATER (ASTM D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER.
- 12 -
- 14 -

**STORM DRAIN**

- 20 - 4" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE
- 21 - 4" FOUNDATION DRAIN (3034 PVC) @ MIN 1 % GRADE
- 22 - 6" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE
- 23 -
- 24 - 12" STORM DRAIN (HDPE N12 OR EQUAL). SEE PROFILE SHEET.
- 25 - STORM DRAIN FORCE MAIN @ MIN. 30" DEPTH
- 26 -

- 28 -
- 29 - BED & TRENCH PIPE. COMPACT TRENCH TO 95 % STD PROCTOR UNDER PAVED AREAS.

**STORM DRAIN STRUCTURES**

- 30 -
- 31 -
- 32 - TYPE 1 CB WITH SOLID LID
- 33 -
- 34 -
- 35 - 18" OR 24" YARD DRAIN (OR EQUAL) WITH SOLID LID.
- 36 - 6" WIDE NDS DURASLOPE CHANNEL DRAIN OR EQUAL. CLASS B VEHICLE RATED GRATE.
- 38A -
- 39 -
- 40 - TYPE 40 CATCH BASIN. IN DRIVEWAY ADD WATER QUALITY RISER TEE FOR EXITING PIPE (OR DOWNTURNED ELBOW).
- 41 -
- 43 -
- 46 - DUPLEX STORM PUMPS REQUIRED. USE MIN 30" DIAMETER RIBBED PVC BASIN. SEE C5.0 FOR ALL PUMP DETAILS AND ASSOCIATED CALCULATIONS.
- 47 -
- 48 -

**STORM BMP's**

- 50 - COMPOST AMENDED SOIL TO ALL DISTURBED AREAS (SEE DETAIL SHEET C3.5). TILL 2-3" OF COMPOST INTO UPPER 8" OF SOIL. LOOSEN COMPACTED SUBSOIL, IF NEEDED BY RIPPING TO 12" DEPTH. MULCH LANDSCAPE BEDS AFTER PLANTING.

- 51 -
- 52 -
- 53 -
- 54 -
- 55 -
- 56 -
- 57 -
- 58 -

**STREET IMPROVEMENTS**

- 71 - PAVEMENT RESTORATION - COORDINATE SCOPE OF PAVEMENT RESTORATION WITH CITY INSPECTOR

**MINIMUM 10% ORGANIC - COMPOST & MULCH REQUIRED**

**SOILS**

NO REPORT FOR THIS PROJECT, TO ENGINEER'S KNOWLEDGE  
MERCER ISLAND SHOWS GLACIAL TILL  
MERCER ISLAND INFILTRATION MAP SHOWS MODERATE POTENTIAL

**SURVEYOR**

TOPOGRAPHIC SURVEY BY:  
TERRANE  
10801 MAIN STREET, SUITE 102  
BELLEVUE, WA 98004  
PHONE 425-458-4488

**VERTICAL DATUM**

NAVD 88 PER WGS SURVEY DATA WAREHOUSE 6457  
SEE SURVEY

**LEGAL DESCRIPTION**

SEE C1.0

**SOIL AMENDMENT REQUIRED**

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

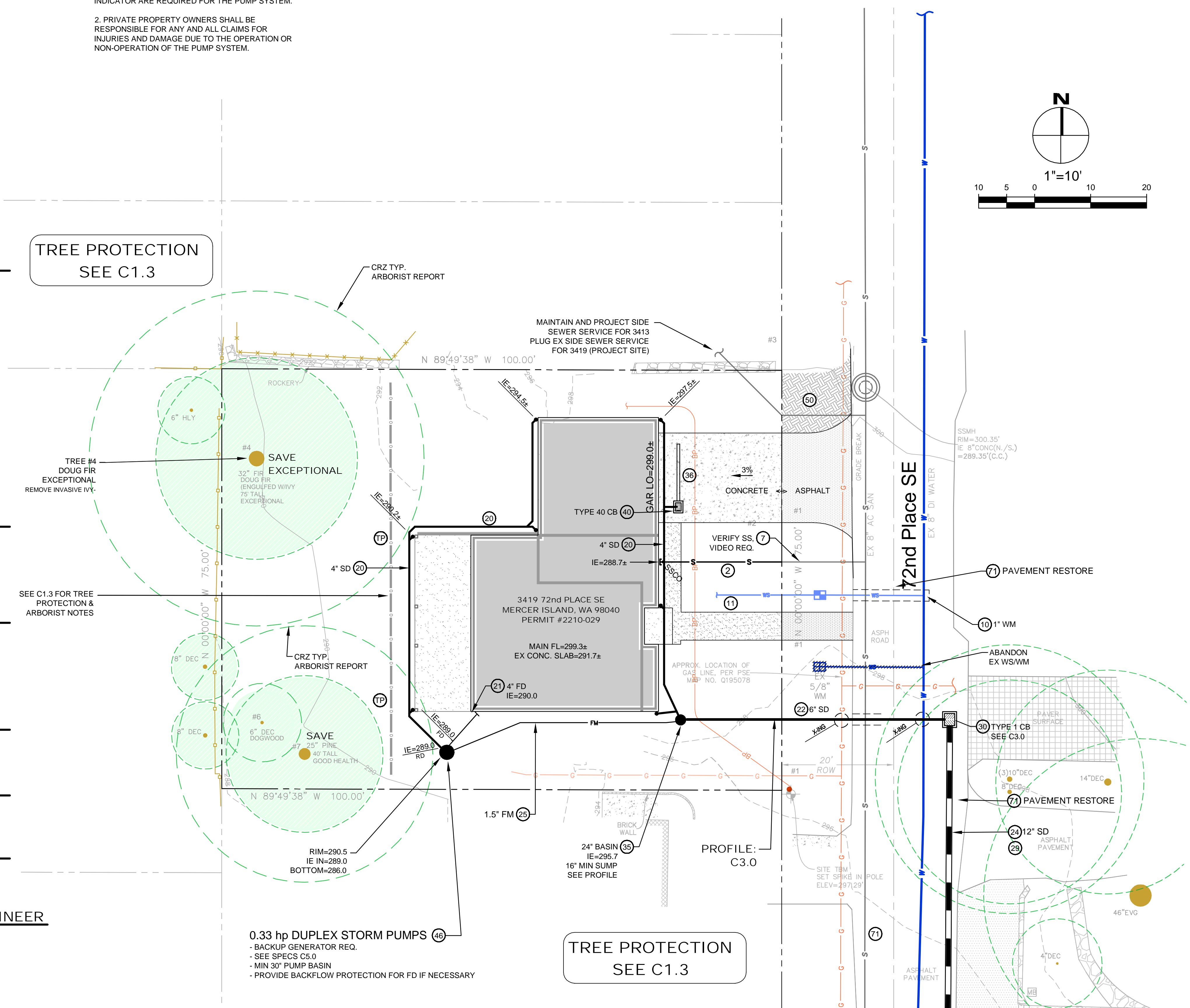
**SOIL INSPECTION REQUIRED BY ENGINEER**

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

**STORM PUMP NOTES:**

1. AN EMERGENCY ON-SITE, BACK-UP POWER SUPPLY AND AN EXTERNAL ALARM SYSTEM FOR SYSTEM FAILURE AND HIGH WATER LEVEL INDICATOR ARE REQUIRED FOR THE PUMP SYSTEM.
2. PRIVATE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR ANY AND ALL CLAIMS FOR INJURIES AND DAMAGE DUE TO THE OPERATION OR NON-OPERATION OF THE PUMP SYSTEM.

TREE PROTECTION  
SEE C1.3



TREE PROTECTION  
SEE C1.3

**0.33 hp DUPLEX STORM PUMPS** (46)  
- BACKUP GENERATOR REQ.  
- SEE SPECS C5.0  
- MIN 30" PUMP BASIN  
- PROVIDE BACKFLOW PROTECTION FOR FD IF NECESSARY

MATCHLINE - SEE C3.0

#2210-029

NO.	DATE	BY	REVISIONS

APPLICANT JASON KOHLER RKK CONSTRUCTION 3056 70th AVENUE SE MERCER ISLAND, WA 98040 (206) 236-2920	DATE: Feb 19, 2023 JOB# 2036 DRAFTED: DE DESIGN: DE DIGITAL SIGNATURE
---	--

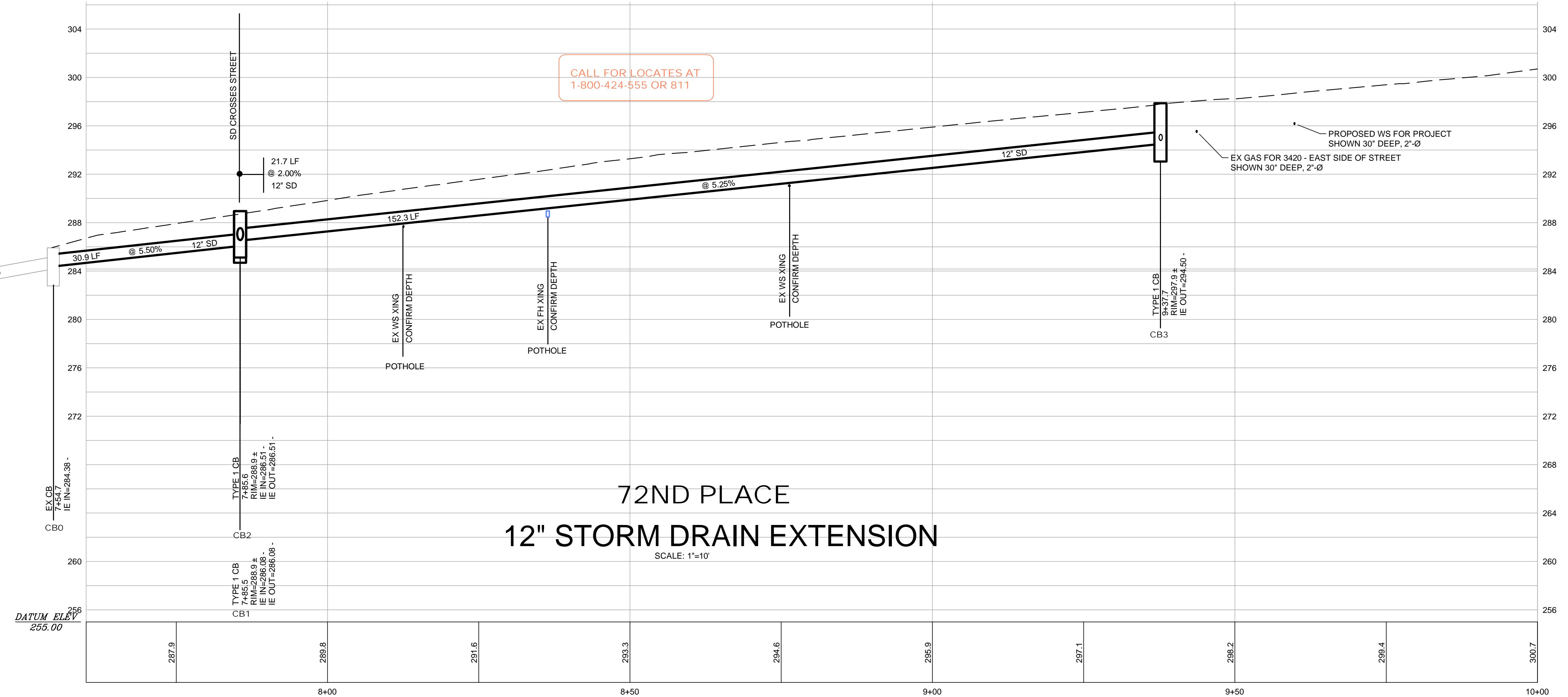
Feb 19, 2023

**CIVIL ENGINEERING SOLUTIONS**  
 102 NW CANAL STREET SEATTLE, WA 98107  
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**DRAINAGE / CIVIL PLAN**  
 RKK CONSTRUCTION PROJECT  
 3419 72nd PLACE SE, MERCER ISLAND, WA 98040

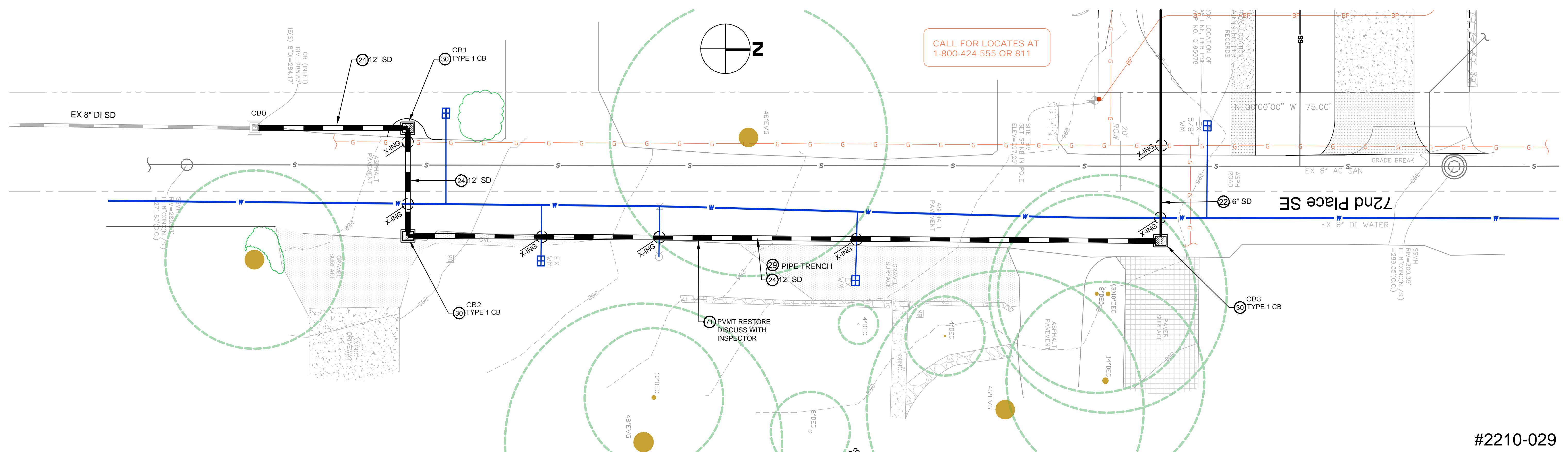
DRAWING NO:  
**C2.0**  
 APN 130030-1381  
 #2210-029





**72ND PLACE  
12" STORM DRAIN EXTENSION**

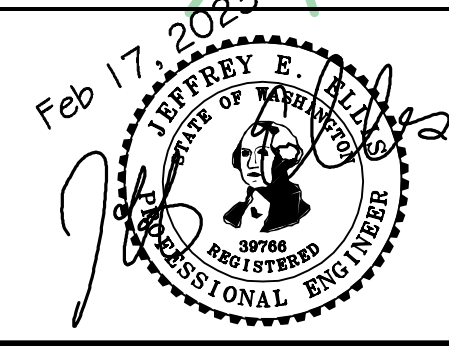
SCALE: 1"=10'



NO.	DATE	BY	REVISIONS

APPLICANT  
 JASON KOHLER  
 RKK CONSTRUCTION  
 3056 70th AVENUE SE  
 MERCER ISLAND, WA 98040  
 (206) 236-2920

DATE: Feb 17, 2023  
 JOB# 2036  
 DRAFTED: SS DESIGN: DE  
 DIGITAL SIGNATURE



**CIVIL ENGINEERING  
SOLUTIONS**  
 102 NW CANAL STREET SEATTLE, WA 98107  
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**72ND PLACE  
STORM DRAIN EXTENSION**  
 RKK CONSTRUCTION PROJECT  
 3419 72nd PLACE SE, MERCER ISLAND, WA 98040

#2210-029  
 DRAWING NO:  
**C3.0**  
 APN 130030-1381  
 #2210-029



**MINIMUM 10% ORGANIC -  
COMPOST SOIL  
REQUIRED**

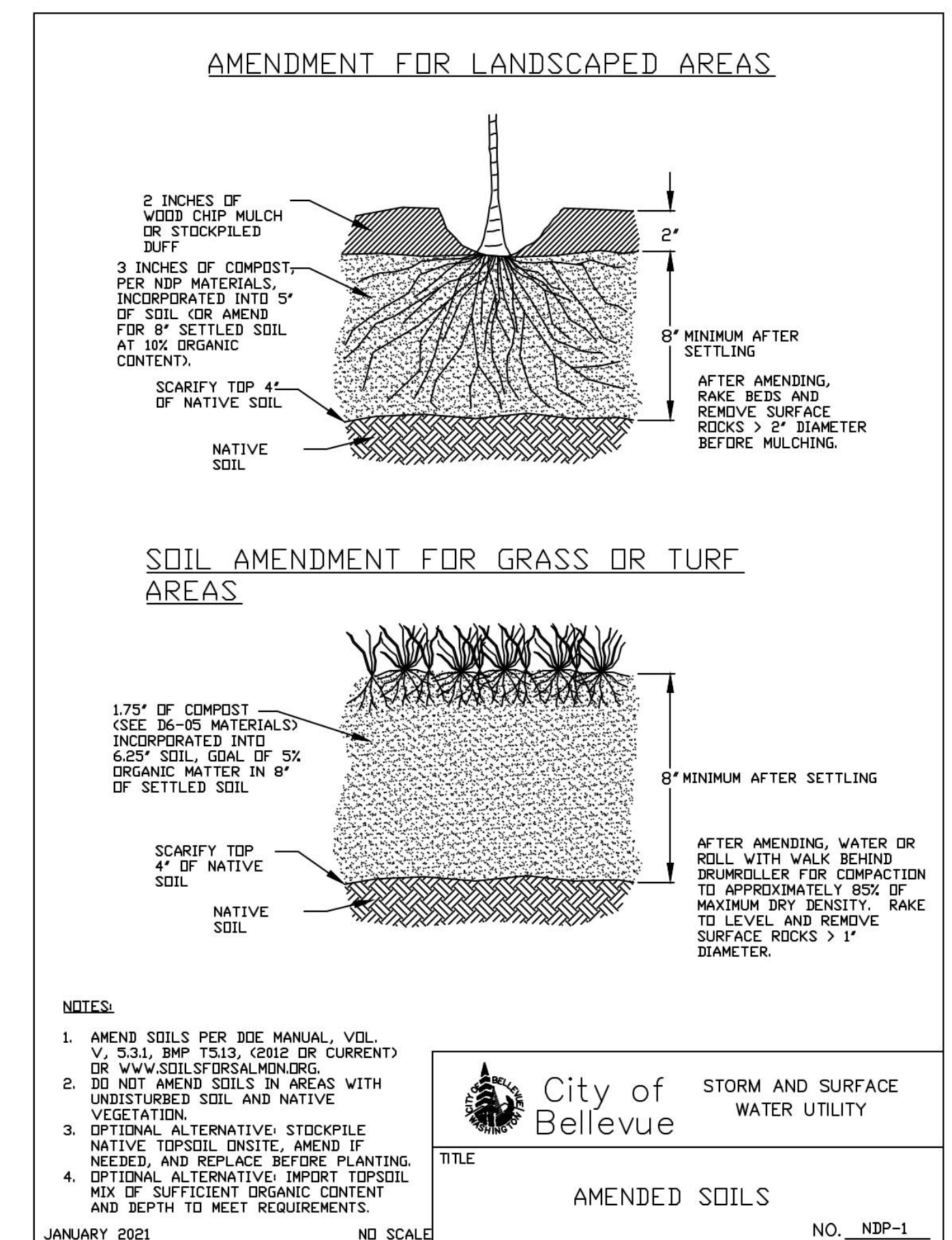
**SOIL AMENDMENT REQUIRED**

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL BELOW.

**SOIL INSPECTION REQUIRED BY ENGINEER**

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

**COMPOST AMENDED SOIL SPEC**

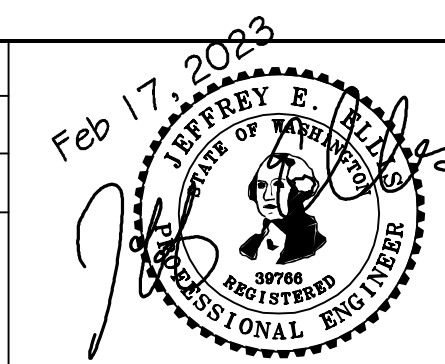


#2210-029

NO.	DATE	BY	REVISIONS

APPLICANT  
JASON KOHLER  
RKK CONSTRUCTION  
3056 70th AVENUE SE  
MERCER ISLAND, WA 98040  
(206) 236-2920

DATE: Feb 17, 2023  
JOB# 2036  
DRAFTED: SS DESIGN: SS  
DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**  
102 NW CANAL STREET SEATTLE, WA 98107  
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**STORM, BMP DETAILS**  
RKK CONSTRUCTION PROJECT  
3419 72nd PLACE SE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C3.5**  
APN 130030-1381  
#2210-029



# RHOMBUS 122 PANEL

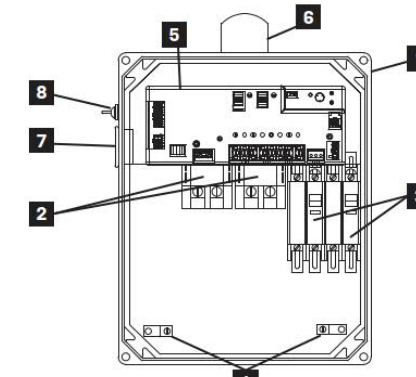
## MODEL 122 Control Panel

Single phase, duplex alternating pump control with override.

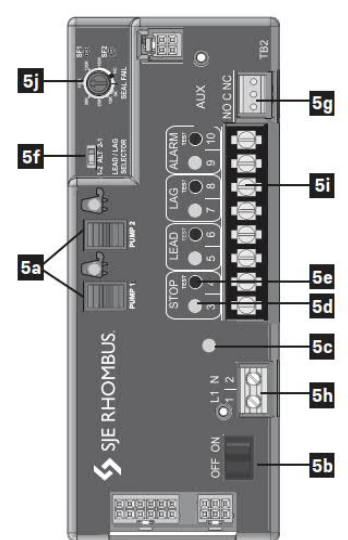
The Model 122 control panel is designed to alternately control two 120, 208, or 240 VAC single phase pumps in water and sewage installations. The controller is provided with a pump selector switch that can be set to alternate the pumps to equalize wear or to call either pump to activate first with the other pump to activate in lag condition. If an alarm occurs, the alarm activates the audible-visual system. The alarm conditions include: high water, float out-of-sequence, pump fail-to-run, seal failure (optional). Common applications include: lift stations, pump chambers, and irrigation systems.

### PANEL COMPONENTS

- Enclosure** measures 12x10x8 inches (30.48x25.4x15.24). Choice of NEMA 1 (suit for indoor use) or NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel 1/4 turn set screw; for outdoor or indoor use). Note: added options may change enclosure size and enclosure features.
- Magnetic Motor Contactors** control pumps by switching electrical lines.
- Circuit Breakers** (optional) provide pump disconnect and branch circuit protection.
- Ground Lugs**
- Duplex Controller** provides pump control, alternation and alarm; elevated in the enclosure for easy access and field wiring.
  - HOA switches for manual control Hand/Off/Automatic
  - Control Power ON/OFF switch
  - Power ON green LED indicator
  - Float status red LED indicators
  - Float push-to-test buttons
  - Pump selector switch: Alt, 1-lead 2-lag, 2-lead 1-lag
  - Auxiliary alarm contacts Form-C
  - Terminal block incoming power
  - Terminal block float switches
  - Option: adjustable seal failure circuits and red LED indicators (must select option SE when ordering)



Model Shown 122W1K16A10E18B LISTED



NOTE: Schematic Diagram is located inside the panel on enclosure cover.

### STANDARD ALARM PACKAGE

- Red Alarm Beacon** provides 360° visual check of alarm condition.
- Alarm Horn** provides audible alarm warning (83 to 85 decibel rating).
- Exterior Alarm Test/Normal/Silence Switch** allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition is cleared unless the controller is programmed to manual alarm reset.

NOTE: other options available.

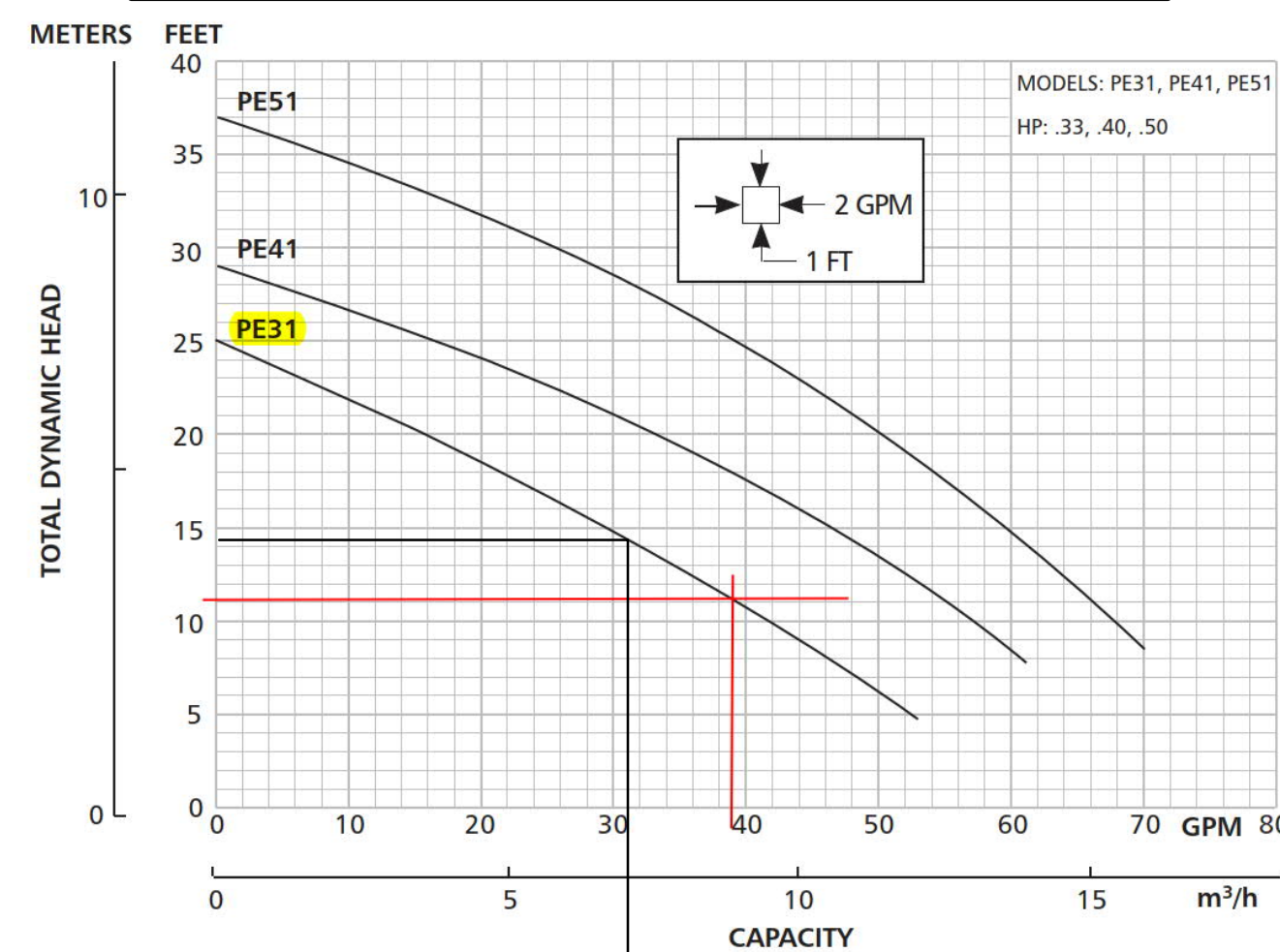
### FEATURES

- Touch safe circuit board housing and low voltage 12 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump fail-to-run detection (field programmable to deactivate)
- Controller protected by four auto resettable fuses, no fuse replacement
- Three second lag pump delay time, prevents simultaneous pump start-up
- Standard package includes three 20' control switches or EZonner® float system
- Five-year limited warranty.



1-888-DIAL-SJE • 1-218-847-1317  
1-218-847-4617 Fax  
email: customer.service@sjeinc.com  
www.sjerhombus.com B.39

# GOULD PE31 STORM PUMP CURVE



# STORM PUMP SPEC



### TECHNICAL BROCHURE

#### FEATURES

- Corrosion resistant construction
- Cast iron body
- Thermoplastic impeller and cover.
- Upper sleeve and lower heavy duty ball bearing construction.
- Motor is permanently lubricated for extended service life.
- Powered for continuous operation.
- All ratings are within the working limits of the motor.
- Quick disconnect power cord, 20' standard length, heavy duty 16/3 SJTW with 115 or 230 volt grounding plug.
- Complete unit is heavy duty, portable and compact.
- Mechanical seal is carbon, ceramic, BUNA and stainless steel.
- Stainless steel fasteners

## PE

SUBMERSIBLE EFFLUENT PUMP



# Goulds Water Technology

### Wastewater

#### APPLICATIONS

- Specially designed for the following uses:
- Mound Systems
- Effluent/Dosing Systems
- Low Pressure Pipe Systems
- Basement Draining
- Heavy Duty Sump/Dewatering

#### SPECIFICATIONS

- Pump - General:**
- Discharge: 1 1/2" NPT
  - Temperature: 104°F (40°C) maximum, continuous when fully submerged.
  - Solids handling: 1/2" maximum sphere.
  - Automatic models include a float switch.
  - Manual models available.
  - Pumping range: see performance chart or curve.

#### PE31 Pump:

- Maximum capacity: 53 GPM
- Maximum head: 25' TDH

#### PE41 Pump:

- Maximum capacity: 61 GPM
- Maximum head: 29' TDH

#### PE51 Pump:

- Maximum capacity: 70 GPM
- Maximum head: 37' TDH

#### MOTOR

- General:**
- Single phase
  - 60 Hertz
  - 115 and 230 volts
  - Built-in thermal overload protection with automatic reset.
  - Class B insulation
  - Oil-filled design
  - High strength carbon steel shaft

#### PE31 Motor:

- 33 HP, 3000 RPM
- 115 volts
- Shaded pole design

#### PE41 Motor:

- 40 HP, 3400 RPM
- 115 and 230 volts
- PSC design

#### PE51 Motor:

- 50 HP, 3400 RPM
- 115 and 230 volts
- PSC design

#### AGENCY LISTINGS

Tested to UL 778 and CSA 22.2 108 Standards  
By Canadian Standards Association  
File #LR38549

#### PUMP INFORMATION

Order No.	HP	Volts	Amps	Minimum Circuit Breaker	Phase	Float Switch Style	Cord Length	Discharge Connection	Minimum Basin Diameter	Maximum Solids Size	Shipping Weight (lb/kg)
PE31M	33	115	10	20	1	Manual / No Switch	20'	1.5"	18"	5"	31 / 14.1
PE31F	33	115	10	20	1	Piggyback Float Switch					
PE41M	40	115	7.5	15	1	Manual / No Switch					
PE41F	40	115	7.5	15	1	Piggyback Float Switch					
PE42M	40	230	3.7	10	1	Manual / No Switch					
PE42F	40	230	3.7	10	1	Piggyback Float Switch					
PE51M	50	115	9.5	20	1	Manual / No Switch					
PE51F	50	115	9.5	20	1	Piggyback Float Switch					
PE52M	50	230	4.7	10	1	Manual / No Switch					
PE52F	50	230	4.7	10	1	Piggyback Float Switch					

PAGE 2

# PUMPING DEPTH CALCULATOR

## Storm Pump-Float Depth / Pump Interval Calculator

	Value	Units	Comments
Input Pump Basin Diameter (feet)=	2.5	feet	
Calculate pump basin radius=	1.3	feet	
Calculate cross section Area of basin=	4.91	sf	
Input a pump depth to achieve 2 min run time=	2.0	feet	
Calculate volume of water per pump cycle=	9.8	cf	
Convert volume to gallons	73.4	gallons	convert to gallons pumped
Input pump rate based on pump curve and TDH	33	gpm	
Calculated time for pump to operate per cycle	2.2	Minutes	Ensure greater than 2 minutes

RECOMMENDED PUMP CYCLE DEPTH

# PUMP DESIGN HYDROLOGY

Peak Flow Rates in Puget Sound					
100 year, 24 hour storm event					
I=4.0 inches/24 hours per isopluvials					
Impervious Area	Acres	SBUH		SBUH	
		(CFS)	(GPM)	(CFS)	(GPM)
		Tc=6.3		Tc=10	
500	0.011	0.01	4	0.011	5
1,000	0.023	0.02	9	0.023	10
2,000	0.046	0.041	18	0.045	20
3,000	0.069	0.062	28	0.067	30
4,000	0.092	0.082	36	0.085	38
5,000	0.115	0.103	46	0.112	50
6,000	0.138	0.124	55	0.135	60
7,000	0.161	0.143	64	0.156	69
8,000	0.184	0.164	73	0.179	80

GIVEN DUPLEX PUMPS, SIZE EACH PUMP FOR 50% OF 30 GPM SINCE BOTH CAN ACTIVATE DURING LARGER STORM FLOWS

# TOTAL DYNAMIC HEAD CALCULATOR

**Total Dynamic Head (TDH) Calculator**

Flow Rate: 33 GPM

Pipe Diameter: 1.5 inch Inside diameter

Pipe Length: 50 ft Total length

Differential Elevation: 10 ft From water drawdown level to highest point in the pipe set up. Water drawdown level is defined as the lowest water level in the well, after long time pumping.

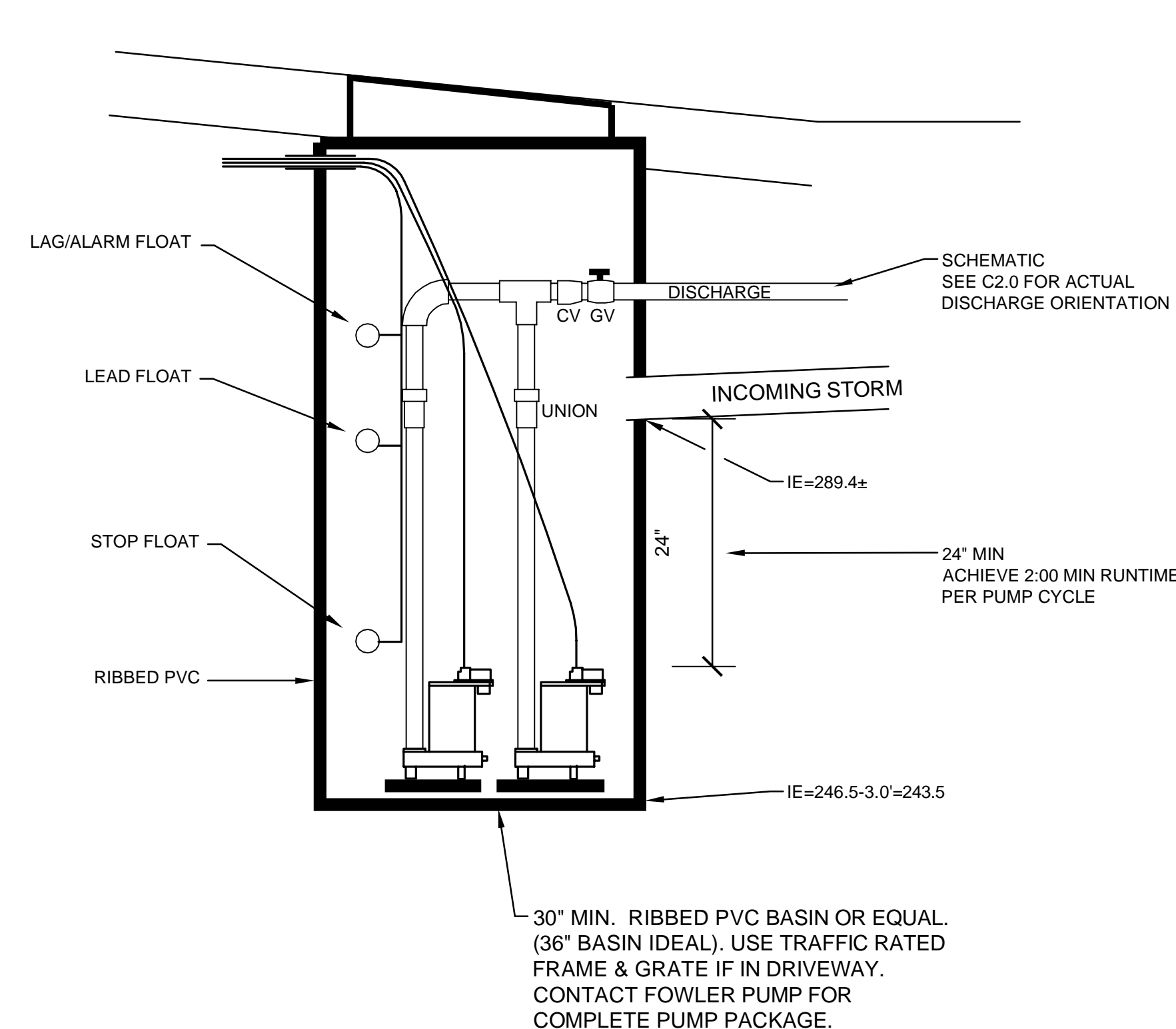
Pipe Material: Plastic

Pressure required: 0 PSI The average pressure in a domestic water system with a pressure tank used; or the pressure that is required for an application if a pressure tank is not used (e.g. a direct driven sprinkler system).

Total Dynamic Head TDH: 14.41 ft

# STORM PUMP & PVC PUMP BASIN SCHEMATIC

3-FLOAT DUPLEX

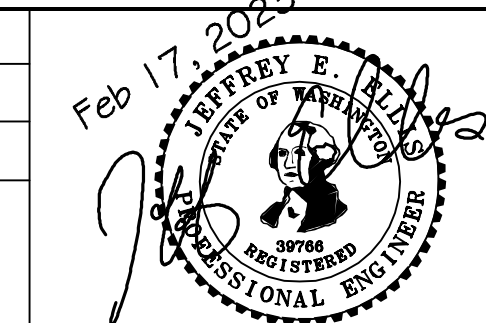


#2210-029

NO.	DATE	BY	REVISIONS

APPLICANT  
JASON KOHLER  
RKK CONSTRUCTION  
3056 70th AVENUE SE  
MERCER ISLAND, WA 98040  
(206) 236-2920

DATE: Feb 17, 2023  
JOB# 2036  
DRAFTED: DE DESIGN: DE  
DIGITAL SIGNATURE



CIVIL ENGINEERING SOLUTIONS  
102 NW CANAL STREET SEATTLE, WA 98107  
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

## STORM PUMPS

RKK CONSTRUCTION PROJECT  
3419 72nd PLACE SE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C5.0**  
APN 130030-1381  
#2210-029



**BUILDING CODE:** 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), AND BY REFERENCE, THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) AS AMENDED BY LOCAL JURISDICTION.  
**ROOF LIVE LOAD** = 25 PSF SNOW (GROUND SNOW = 30 PSF)  
**ROOF DEAD LOAD** = 15 PSF  
**FLOOR LIVE LOAD** = 40 PSF (30 PSF AT SLEEPING AREAS)  
**FLOOR DEAD LOAD** = 15 PSF  
**BALCONIES & DECKS** = 60 PSF (LIVE LOAD) + 10 PSF (DEAD LOAD)  
**WIND SPEED (NORMAL 3 SEC GUST)** = 100 MPH FOR RISK CATEGORY I, EXPOSURE "C", K<sub>z1</sub>+160  
**SOIL SITE CLASS** "D" - SEISMIC CATEGORY D1-D2, S<sub>w</sub>+142, S<sub>u</sub>+123  
**OCCUPANCY GROUP:** R-3 CONSTRUCTION TYPE: V-B

CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO ARCHITECT AND/OR ENGINEER OF RECORD FOR RESOLUTION PRIOR TO COMMENCING WORK. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS. ARCHITECT AND/OR ENGINEER OF RECORD ARE NOT RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

**DEFERRED SUBMITTAL ITEMS**

THE FOLLOWING IS A LIST OF ITEMS THAT ARE NOT INCLUDED IN THIS PLAN AND SHOULD BE PROVIDED BY THE BUILDER AT THE TIME OF APPLICATION FOR PERMIT OR AS A DEFERRED SUBMITTAL ITEM:  
 - ALTERNATIVE 1-JOIST/BEAM/MANUFACTURER PLANS.  
 - MANUFACTURED TRUSS DESIGNS AND LAYOUTS

**GENERAL**

FOUNDATION DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING OF 1500 PSF. EXTERIOR FOOTINGS SHALL BEAR (MINIMUM) BELOW FINISHED GRADE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. BACKFILL TO BE THOROUGHLY COMPACTED.  
 BOLT HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH 0.225"x3"x3" PLATE WASHERS. WOOD BEARING ON OR INSTALLED WITHIN 1" OF MASONRY OR CONCRETE TO BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE.  
 FOUNDATION SILL BOLTS (MIN. 1" EMBED) TO BE 5/8" DIAMETER AT 6'-0" O.C. (4'-0" AT BUILDINGS OVER 2 STORIES) UNO. METAL FRAMING CONNECTORS TO BE SIMPSON STRONG-TIE OR USP STEEL CONNECTORS.

**CONCRETE**

MINIMUM COMPRESSIVE STRENGTH OF CONCRETE:

TYPE OR LOCATIONS OF CONCRETE CONSTRUCTION	MINIMUM COMPRESSIVE STRENGTH (f <sub>c</sub> ) AT 28 DAYS	MODERATE WEATHERING POTENTIAL
BASEMENT WALLS, FOUNDATION FOOTINGS, BASEMENT SLABS, & INTERIOR SLABS ON GRADE (EXCEPT GARAGE) NOT EXPOSED TO THE WEATHER	3000 psi	
BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS, PORCHES, STEPS, GARAGE & CARPORT SLABS, & OTHER CONCRETE WORK EXPOSED TO THE WEATHER	3000 psi (6% air entrained +/- 1%)	

CONCRETE MIXTURE SHALL CONTAIN AT LEAST OF 5 1/2 SACKS OF CEMENT PER CUBIC YARD. CONCRETE "BATCH TICKET" SHALL BE AVAILABLE ON SITE FOR REVIEW BY BUILDING OFFICIAL. VERTICAL REINFORCING STEEL TO COMPLY WITH ASTM A615 GRADE 40 (GRADE 60 AT WALLS RETAINING MORE THAN 4FT OF SOIL).

**CARPENTRY**

**GENERAL**

ALL NAILING TO COMPLY WITH REQUIREMENTS OF IRC TABLE R602.3(1) AND/OR IBC TABLE 2304.10.1. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED. FIELD CUT ENDS, NOTCHES, AND DRILLED HOLES OF PRESSURE TREATED LUMBER SHALL BE RETREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4. PER IRC 310.3, FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE RETARDANT TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER.  
 6" MIN. CLEARANCE BETWEEN WOOD AND EARTH.  
 12" MIN. CLEARANCE BETWEEN FLOOR BEAMS AND EARTH.  
 18" MIN. CLEARANCE BETWEEN FLOOR JOIST AND EARTH.

**FASTENER DIMENSIONS**

ALL NAILS SPECIFIED ON THIS PLAN SHALL BE OF THE DIAMETER AND LENGTH LISTED BELOW OR AS PER APPENDIX L OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS):  
 8d COMMON (0.131" DIA, 2-1/2" LENGTH), 8d BOX (0.113" DIA, 2-1/2" LONG), 10d COMMON (0.148" DIA, 3" LONG), 10d BOX (0.128" DIA, 3" LENGTH), 16d COMMON (0.162" DIA, 3-1/2" LONG), 16d SINKER (0.148" DIA, 3-1/4" LONG), 5d COOLER (0.086" DIA, 1-5/8" LONG), 6d COOLER (0.092" DIA, 1-7/8" LONG)

**LUMBER GRADES**

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN PRODUCTS ASSOCIATION OR THE WEST COST LUMBER INSPECTION BUREAU. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE THE FOLLOWING UNADJUSTED MINIMUM DESIGN PROPERTIES, UNLESS NOTED OTHERWISE.

JOISTS:	WOOD TYPE:
2X4 TO 2X8	DF-L F2 - Fb+900 psi, Fv+180 psi, Fc+1350 psi, E+1600000psi
2X10 OR LARGER	DF-L F2 - Fb+900 psi, Fv+180 psi, Fc+1350 psi, E+1600000psi
BEAM	WOOD TYPE:
4X	DF-L F2 - Fb+900 psi, Fv+180 psi, Fc+1350 psi, E+1600000psi
6X OR LARGER	DF-L F2 - Fb+875 psi, Fv+170 psi, Fc+600 psi, E+1300000psi
STUDS	WOOD TYPE:
2X4 & 2X6	DF STUD - Fb+700 psi, Fv+180 psi, Fc+850 psi, E+1400000psi
2X8 OR LARGER	DF-L F2 - Fb+900 psi, Fv+180 psi, Fc+1350 psi, E+1600000psi
POSTS	WOOD TYPE:
4X4	DF-L F2 - Fb+900 psi, Fv+180 psi, Fc+1350 psi, E+1600000psi
4X6	DF-L F2 - Fb+900 psi, Fv+180 psi, Fc+1350 psi, E+1600000psi
6X6 OR LARGER	DF-L F1 - Fb+1200 psi, Fv+170 psi, Fc+1000 psi, E+1600000psi

**GLUED-LAMINATED BEAM (GLB)**

SHALL BE 24F-V4 FOR SINGLE SPANS & 24F-V8 FOR CONTINUOUS OR CANTILEVER SPANS WITH THE FOLLOWING MINIMUM PROPERTIES:  
 Fb = 2,400 PSI, Fv = 165 PSI, Fc = 650 PSI (PERPENDICULAR), E = 1,800,000 PSI.

**ENGINEERED WOOD BEAMS AND I-JOIST**

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR APPROVAL BY BUILDING OFFICIAL. DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH THE LATEST ICC EVALUATION REPORT.

BEAMS DESIGNATED AS "L9L" SHALL HAVE THE MINIMUM PROPERTIES:  
 Fb = 2,325 PSI, Fv = 310 PSI, Fc = 800 PSI (PERPENDICULAR), E = 1,550,000 PSI.

BEAMS DESIGNATED AS "LVL" SHALL HAVE THE MINIMUM PROPERTIES:  
 Fb = 2,600 PSI, Fv = 285 PSI, Fc = 750 PSI (PERPENDICULAR), E = 1,500,000 PSI.

BEAMS DESIGNATED AS "PSL" SHALL HAVE THE MINIMUM PROPERTIES:  
 Fb = 2,300 PSI, Fv = 230 PSI, Fc = 750 PSI (PERPENDICULAR), E = 2,000,000 PSI.

CALCULATIONS SHALL INCLUDE DEFLECTION AND CAMBER REQUIREMENTS. DEFLECTION SHALL BE LIMITED AS FOLLOWS:  
 FLOOR LIVE LOAD MAXIMUM = L/480, FLOOR TOTAL LOAD MAXIMUM = L/240.

**PREFABRICATED WOOD TRUSSES**

PRE-FABRICATED WOOD TRUSSES SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOADS & IMPOSED DEAD LOADS AS STATED IN THE GENERAL NOTES. TRUSSES SHALL BE DESIGNED & STAMPED BY A REGISTERED DESIGN PROFESSIONAL AND FABRICATED ONLY FROM THOSE DESIGNS. NON-BEARING WALLS SHALL BE HELD AWAY FROM THE TRUSS BOTTOM CHORD W/ AN APPROVED FASTENER (SUCH AS SIMPSON STC) TO ENSURE THAT THE TRUSS BOTTOM CHORD DOES NOT BEAR ON THE WALL. ALL PERMANENT TRUSS MEMBER BRACING SHALL BE INSTALLED PER THE TRUSS DESIGN DRAWINGS.

**ROOF/WALL/FLOOR SHEATHING**

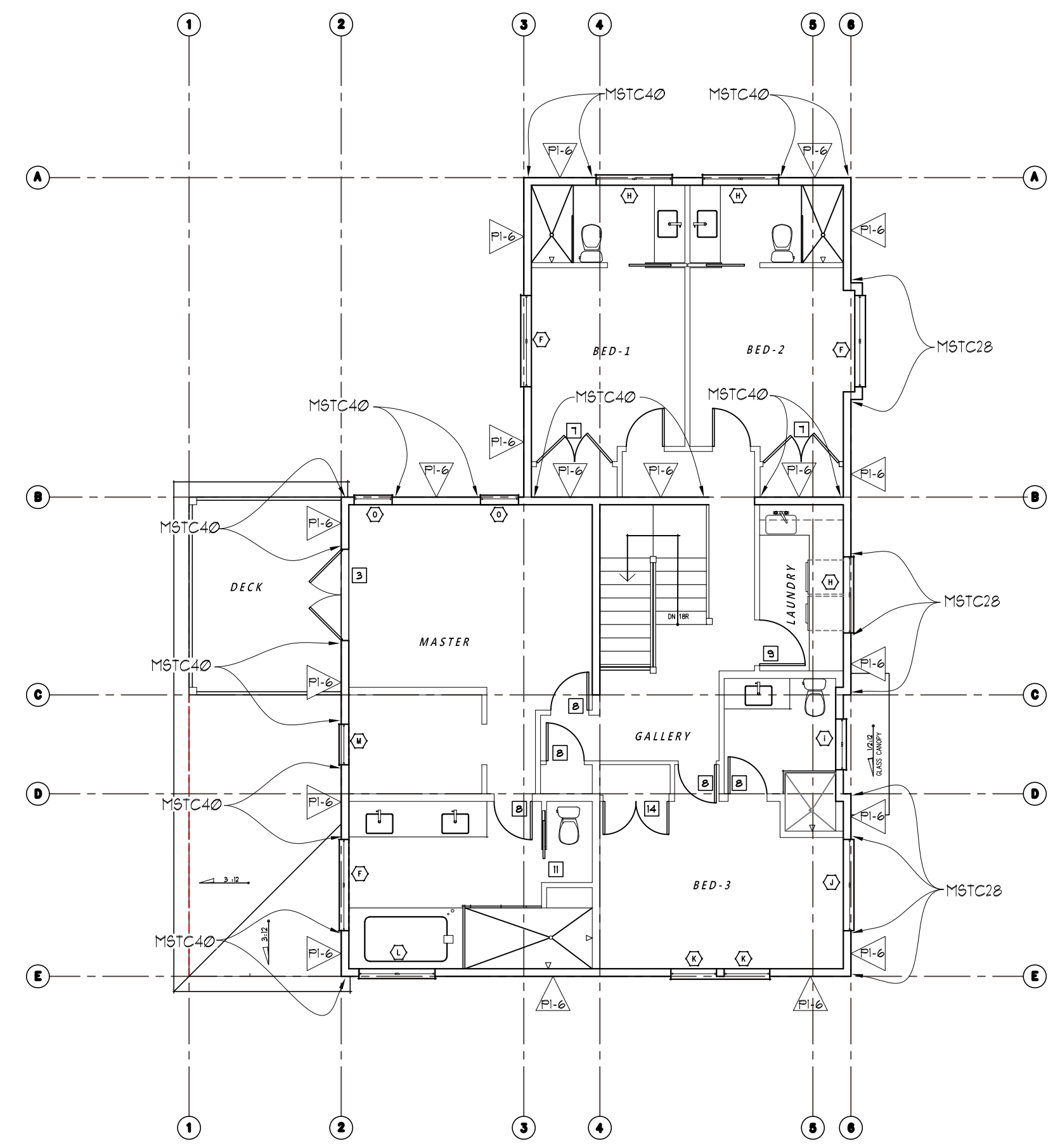
ROOF SHEATHING SHALL BE MINIMUM 3/4" SHEATHING W/ 3/4" SPAN INDEX UNO. WALL SHEATHING, INCLUDING GABLES, SHALL BE 3/4" SHEATHING W/ 3/4" SPAN INDEX MINIMUM UNO. FLOOR SHEATHING SHALL BE MINIMUM 3/4" SHEATHING W/ 40% SPAN INDEX MINIMUM UNO. MINIMUM NAILING SHALL BE 8d COMMON NAILS @ 6" O.C. @ PANEL EDGES & 12" O.C. IN PANEL FIELD UNO ON SHEAR WALL SCHEDULE. ROOF AND FLOOR SHEATHING SHALL BE LAID OUT W/ LONG DIMENSION PERPENDICULAR TO FRAMING MEMBERS W/ END LAP'S STAGGERED. WALL SHEATHING, INCLUDING GABLES, SHALL BE FULLY BLOCKED & EDGE NAILED AT ALL UNSUPPORTED SHEATHING PANEL EDGES.

**STAIR FRAMING**

UNLESS NOTED OTHERWISE SPECIFIED, TYPICAL STAIR FRAMING SHALL CONSIST OF 2X12 STAIR STRINGERS SPACED AT NO MORE THAN 18" O.C. AND REINFORCED W/ 2X6 SCABS ATTACHED W/ 10d COMMON NAILS STAGGERED AT 8" O.C. STRINGERS SHALL BE SUPPORTED AT UPPER END BY BEARING ON TOP PLATE OF WALL OR APPROVED CONNECTOR TO FLOOR BEAM SUCH AS SIMPSON LRU OR LSC. LANDINGS SHALL CONSIST OF CONVENTIONAL PLATFORM FRAMING W/ MINIMUM 2X6 JOISTS @ 16" O.C.

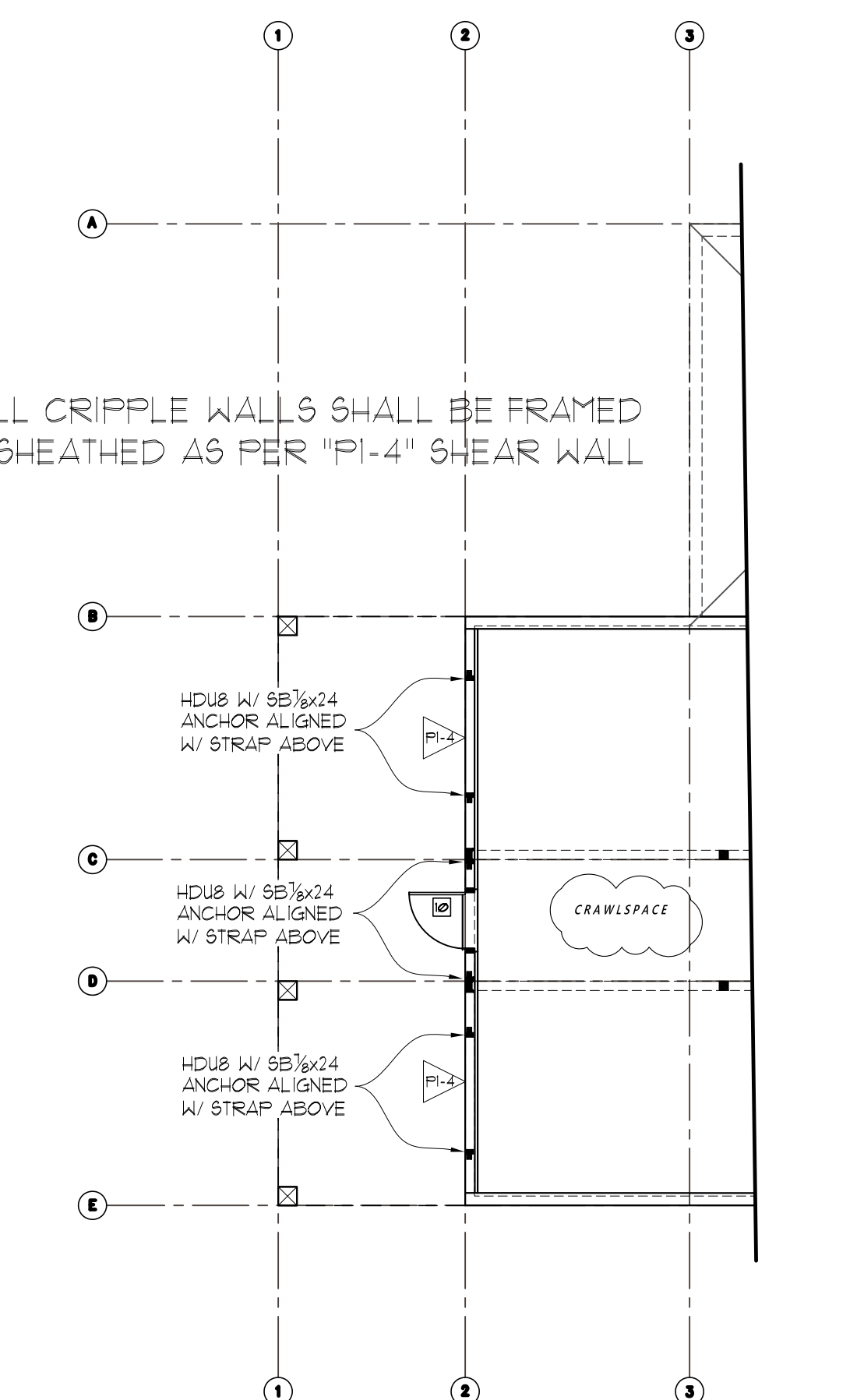
WALL MARK	SHEATHING (MINIMUM)	EDGE NAILING	FIELD NAILING	FRAMING @ ADJOINING PANEL EDGES	SOLE PLATE NAILING (STAGGER)	MINIMUM RIM BOARD OR BLOCKING WIDTH BELOW WALL	SILL PLATE	ANCHOR BOLT DIA. & SPACING
PI-6	3/4" SHEATHING ONE SIDE	8d (0.131"x2.5") AT 6" O.C.	12" O.C.	2X	(1) ROW 16d SINKER (0.148"x3 1/2") @ 6" O.C.	125" LSL (13E) UNLESS NOTED OTHERWISE	2X	5/8" DIA. @ 60" O.C.
PI-4	3/4" SHEATHING ONE SIDE	8d (0.131"x2.5") AT 4" O.C.	12" O.C.	2X	(1) ROW 16d SINKER (0.148"x3 1/2") @ 4" O.C.	125" LSL (13E) UNLESS NOTED OTHERWISE	2X	5/8" DIA. @ 36" O.C.
H3	3/4" SHEATHING ONE SIDE	SEE DETAIL H3 ON SHEET 56 FOR FRAMING CONFIGURATION & SPECIFICATION OF NAILING, STRAPS, & HOLD-DOWNS (REFER TO APA TECHNICAL TOPIC T1-100, "A PORTAL FRAME W/ HOLD-DOWNS FOR ENGINEERED APPLICATIONS")						

- FRAMING SHALL BE 2X DOUG-FIR @ 16" O.C. MAX UNLESS NOTED OTHERWISE IN SCHEDULE.
- SHEATHING PANELS MAY BE LAYED VERTICAL OR HORIZONTAL. BLOCK ALL ADJOINING HORIZONTAL EDGES W/ 2X OR 3X BLOCKING PER SCHEDULE.
- ALL EXTERIOR WALLS NOT DESIGNATED AS SHEAR WALLS SHALL RECEIVE APA RATED SHEATHING OR ALL VENEER PLYWOOD SIDING OF EQUIVALENT THICKNESS AT POINT OF FASTENING ON PANEL EDGES, FULLY BLOCKED WITH MINIMUM NAILING OF 8d (0.131"x2.5") @ 6" O.C. EDGE & 12" O.C. FIELD.
- NAILING APPLIES TO ALL STUDS, TOP PLATES, SOLE PLATES, SILL PLATES, & BLOCKING. PANEL EDGE AND SILL/SOLE PLATE NAILING SHALL BE STAGGERED.
- ANCHOR BOLT SPACING IS 6'-0" O.C. (4'-0" AT BUILDINGS OVER 2 STORIES) UNLESS NOTED OTHERWISE IN SCHEDULE. MINIMUM OF 2 ANCHOR BOLTS PER PIECE OF FOUNDATION PLATE. ANCHOR BOLTS SPACED NO GREATER THAN 12" AND NO LESS THAN 1 TIMES THE ANCHOR BOLT DIAMETER AT ENDS AND SPLICES. PROVIDE 0.225"x3"x3" WASHERS AT ANCHOR BOLTS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE SHEATHED EDGE OF THE SILL PLATE ON WALLS W/ EDGE NAILING AT 4" O.C. OR TIGHTER. DIAGONALLY SLOTTED WASHERS MAY BE USED W/ A STANDARD CUT WASHER PROVIDED BETWEEN PLATE WASHER & NUT. DO NOT RECESS BOLTS.
- ALL NAILS FOR SHEAR WALLS SHALL BE COMMON OR GALVANIZED BOX NAILS (UNO). ALL SPECIFIED NAILS SHALL HAVE THE FOLLOWING DIMENSIONS: 8d (0.131" DIA x 2.5" LONG), 10d (0.148" DIA x 3" LONG), 16d COMMON (0.162" DIA x 3.5" LONG), 16d SINKER (0.148" DIA x 3.25" LONG).
- IN LIEU OF 3X STUDS OR BLOCKING AT ADJOINING PANEL EDGES, 2-2X'S FACE NAILED W/ 10d COMMON NAILS (0.148" DIA x 3" LONG) STAGGERED AT THE SAME SPACING AS PANEL EDGE NAILING MAY BE SUBSTITUTED. SHEATHING EDGES SHALL BE CENTERED BETWEEN THE 2-2X MEMBERS (SHALL NOT APPLY TO WALLS SHEATHED ON BOTH SIDES UNLESS ADJOINING PANEL EDGES ARE STAGGERED ON OPPOSITE FACES).
- HOLD-DOWNS AND STRAPS OF EQUIVALENT CAPACITY (W/ CURRENT ICC EVALUATION REPORT OR SIMILAR) MAY ONLY BE SUBSTITUTED FOR THOSE SPECIFIED ON PLAN WITH PRIOR APPROVAL OF BUILDING OFFICIAL OR ENGINEER OF RECORD.
- BLOCKING IN FLOOR JOIST CAVITY IS REQUIRED AT ENDS OF SHEAR WALLS WHERE FULL BEARING IS NOT PROVIDED BY THE FRAMING BELOW. BLOCKING SHALL HAVE WOOD GRAIN ORIENTED VERTICALLY UNLESS NOTED OTHERWISE.
- SIMPSON MAS4P MUDSILL ANCHORS, MAY BE SUBSTITUTED (1) FOR (1) AT 2X SILL PLATES FOR THE 5/8" DIA. SILL PLATE ANCHOR BOLTS SPECIFIED.



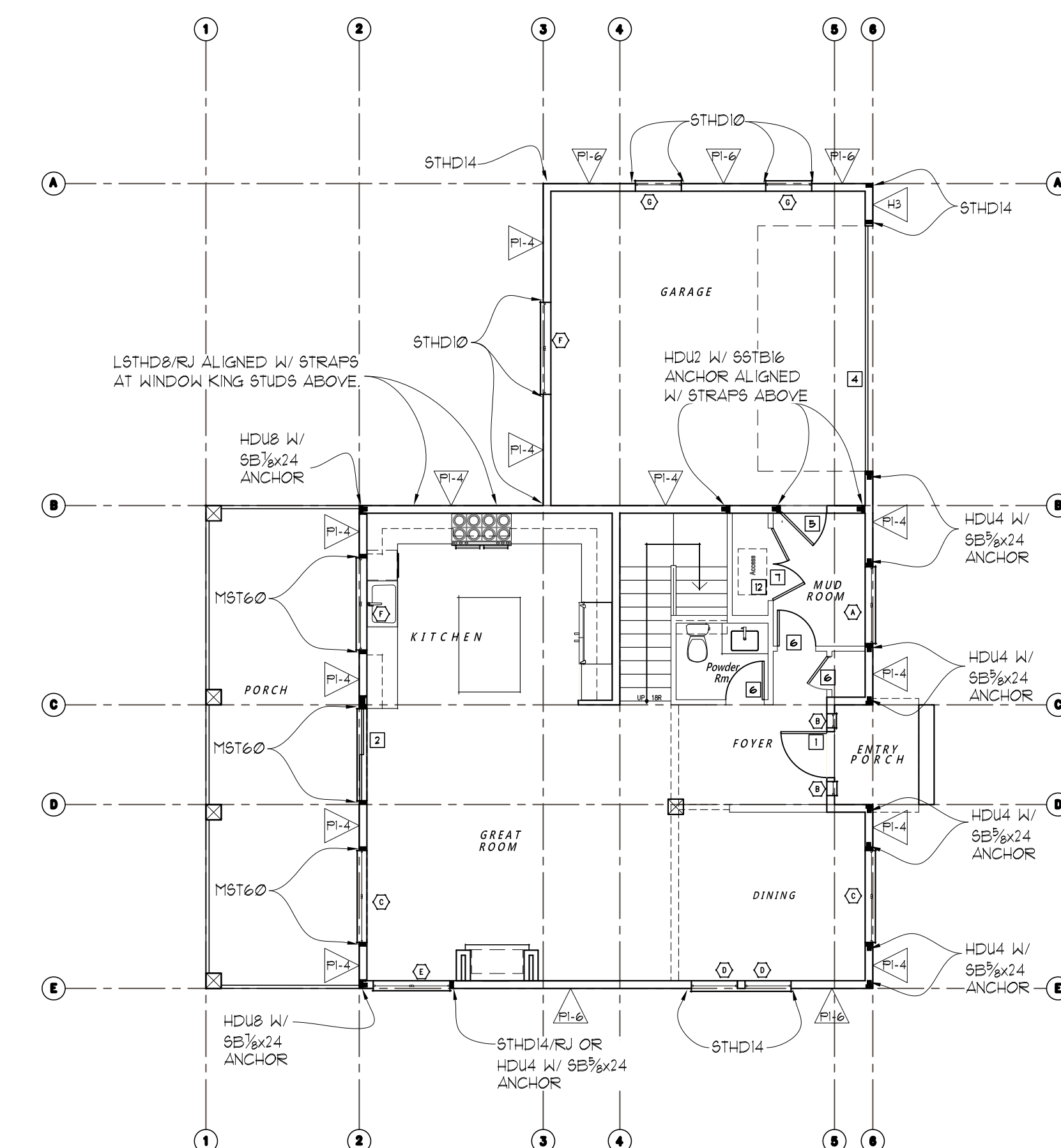
UPPER FLOOR SHEAR WALL KEY PLAN  
 SCALE: 1/8"=1'-0"

SEE SHEET 56 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS



LOWER LEVEL SHEAR WALL KEY PLAN  
 SCALE: 1/8"=1'-0"

SEE SHEET 56 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS



MAIN FLOOR SHEAR WALL KEY PLAN  
 SCALE: 1/8"=1'-0"

SEE SHEET 56 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS

STRUCTURAL PLANS

RKK CONSTRUCTION  
 3419 72nd PLACE SE  
 MERCER ISLAND, WA

Myers Engineering, LLC  
 3206 50th Street Court, Ste. 210-B  
 Gig Harbor, WA 98335  
 PH: 253-858-3248  
 Email: myengineer@centurytel.net



BUILDING DEPT. APPROVAL STAMP:

REVISION:	INITI:	DATE:
PLAN REVIEW	MM	2-1-2023

**S1**

DATE: 6-15-2022  
 INIT: MM  
 PROJECT #: 2431



# STRUCTURAL PLANS

RKK CONSTRUCTION  
3419 72nd PLACE SE  
MERCER ISLAND, WA

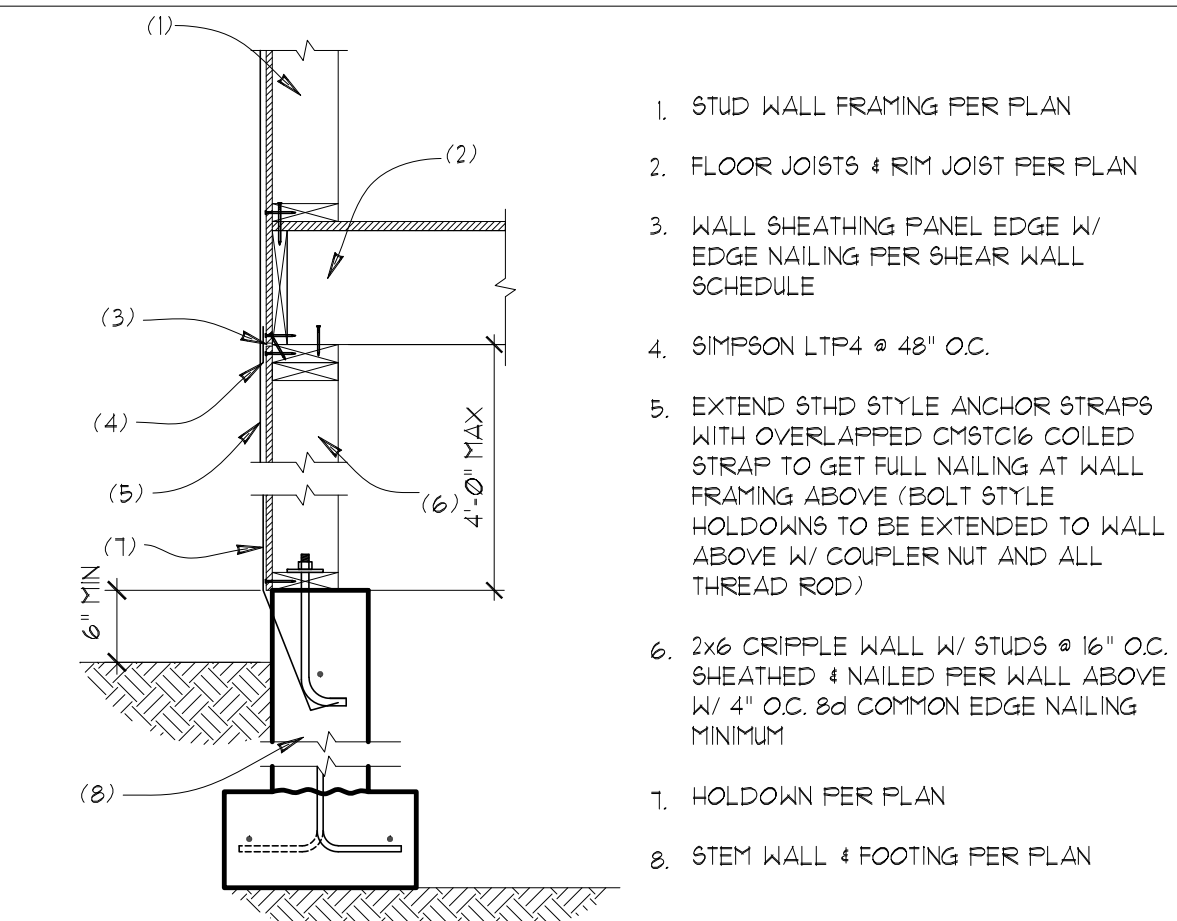
Myers Engineering, LLC  
3206 50th Street Court, Ste. 210-B  
Gig Harbor, WA 98335  
PH: 253-858-3248  
Email: myengineer@centurytel.net



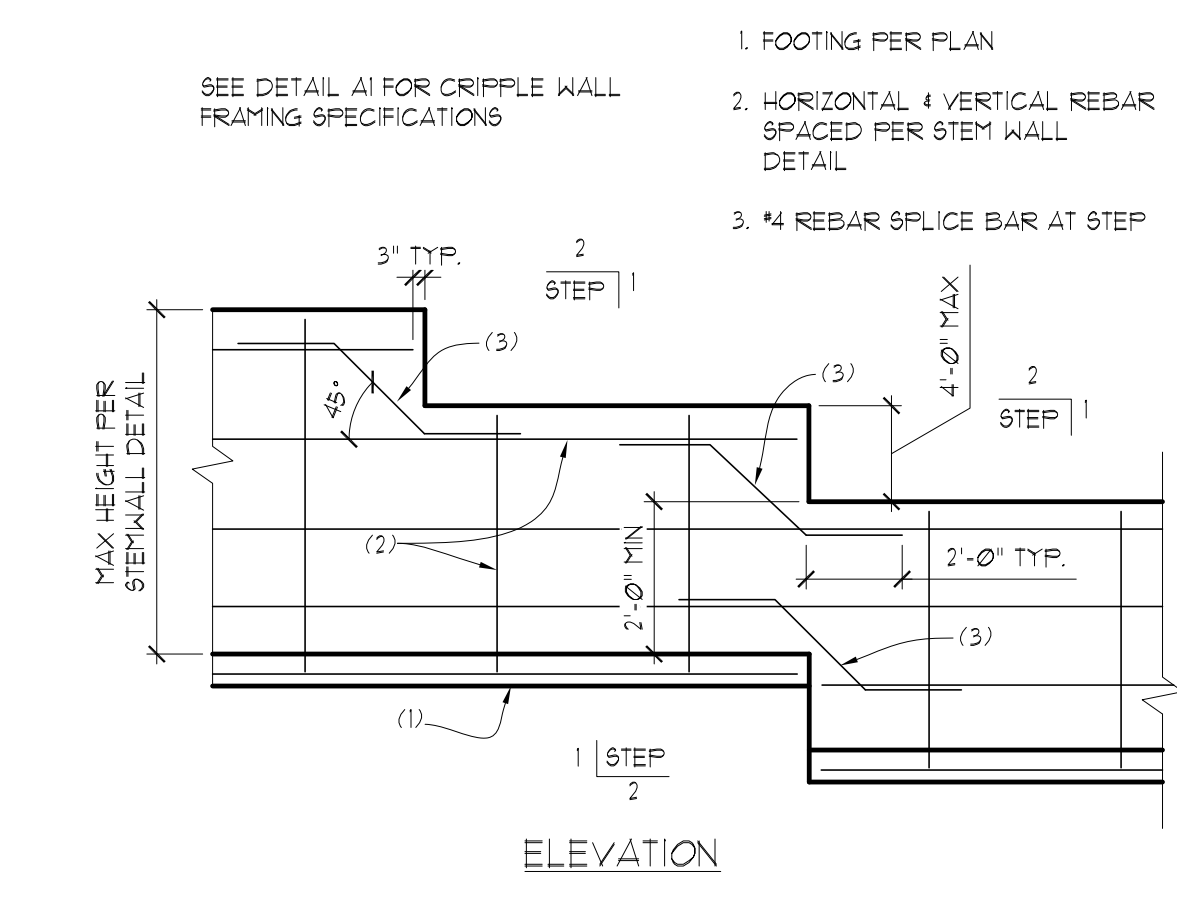
Digitally signed by Mark Myers, PE  
Date: 2023.02.07 18:31:22 -08'00'

BUILDING DEPT. APPROVAL STAMPS:

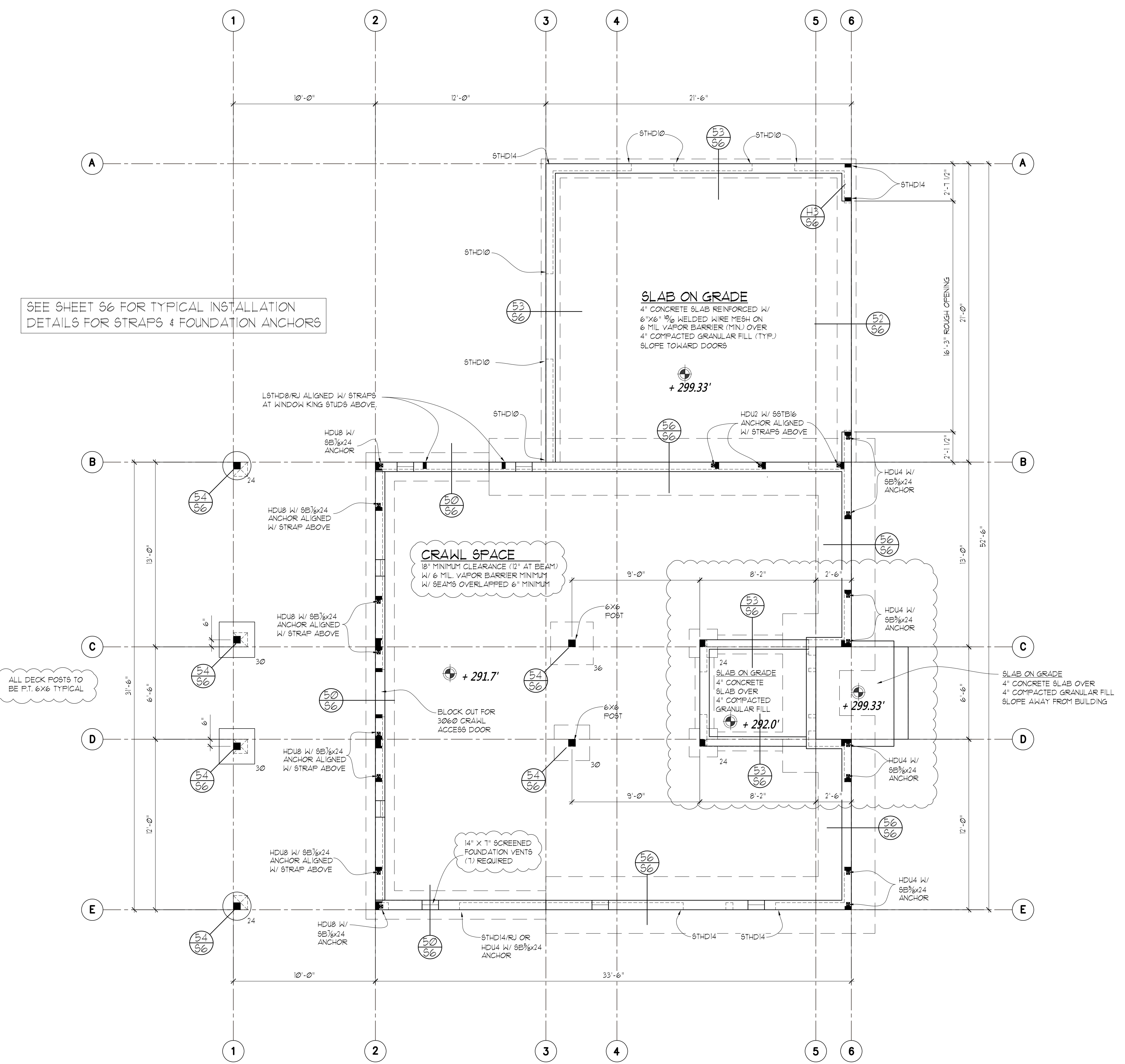
REVISION:	INITI:	DATE:
PLAN REVIEW	MM	2-7-2023
		DATE: 6-15-2022
		INITI: MM
<b>S2</b>		PROJECT #: 2431



A1 CRIPPLE WALL FOR SLOPED LOTS  
SCALE: 3/4"=1'



A2 STEPPED FOOTING AT SLOPED LOT  
SCALE: NTS



SEE SHEET S6 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS

ALL DECK POSTS TO BE P.T. 6X6 TYPICAL

SEE SHEET S6 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS

## FOUNDATION PLAN

- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED
- SOFFIT, VENT, AND INSULATE ALL CANTILEVERED AREAS
- PROVIDE SOLID BLOCKING OVER SUPPORTS
- ALL FOOTINGS TO REST ON UNDISTURBED SOIL
- PROVIDE COPY OF CONCRETE "BATCH TICKET" ON SITE FOR REVIEW BY BUILDING OFFICIAL

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

### FOOTING SCHEDULE

24	P.T. POST ON 24" DIA. X 10" THICK PLAIN CONC. FOOTING
24	P.T. POST ON 24" X 24" X 10" THICK CONC. FOOTING W/ 2- # 4 BARS EACH WAY
30	P.T. POST ON 30" X 30" X 12" THICK CONC. FOOTING W/ 3- # 5 BARS EACH WAY
36	P.T. POST ON 36" X 36" X 12" THICK CONC. FOOTING W/ 3- # 5 BARS EACH WAY
42	P.T. POST ON 42" X 42" X 12" THICK CONC. FOOTING W/ 4- # 5 BARS EACH WAY

FOOTING SIZES BASED ON 1500 PSF SOIL BEARING CAPACITY

### CRAWL SPACE # 1 VENTILATION

CRAWL AREA	= NET VENT AREA REQ'D (N.V.A.) (ASSUMES CROSS VENTILATION)
300	
990	= 3.3 SQ. FT. N.V.A. REQUIRED
300	
IF 14" X 7" SCREENED FOUNDATION VENTS USED	
(1) VENT = 0.52 SQ. FT. NET FREE VENT AREA	
N.V.A.	= QTY. OF VENTS REQUIRED
0.52	
3.30	= 6.35 ( 7 ) 14"x7" VENTS REQUIRED
0.52	

NOTE: USE MIN. 6" WIDE POST BELOW BEAM SPLICES  
USE P.T. 4 X 4 POSTS BELOW 4 X BEAMS U.N.O.  
USE P.T. 6 X 6 POST BELOW 6 X BEAMS U.N.O.

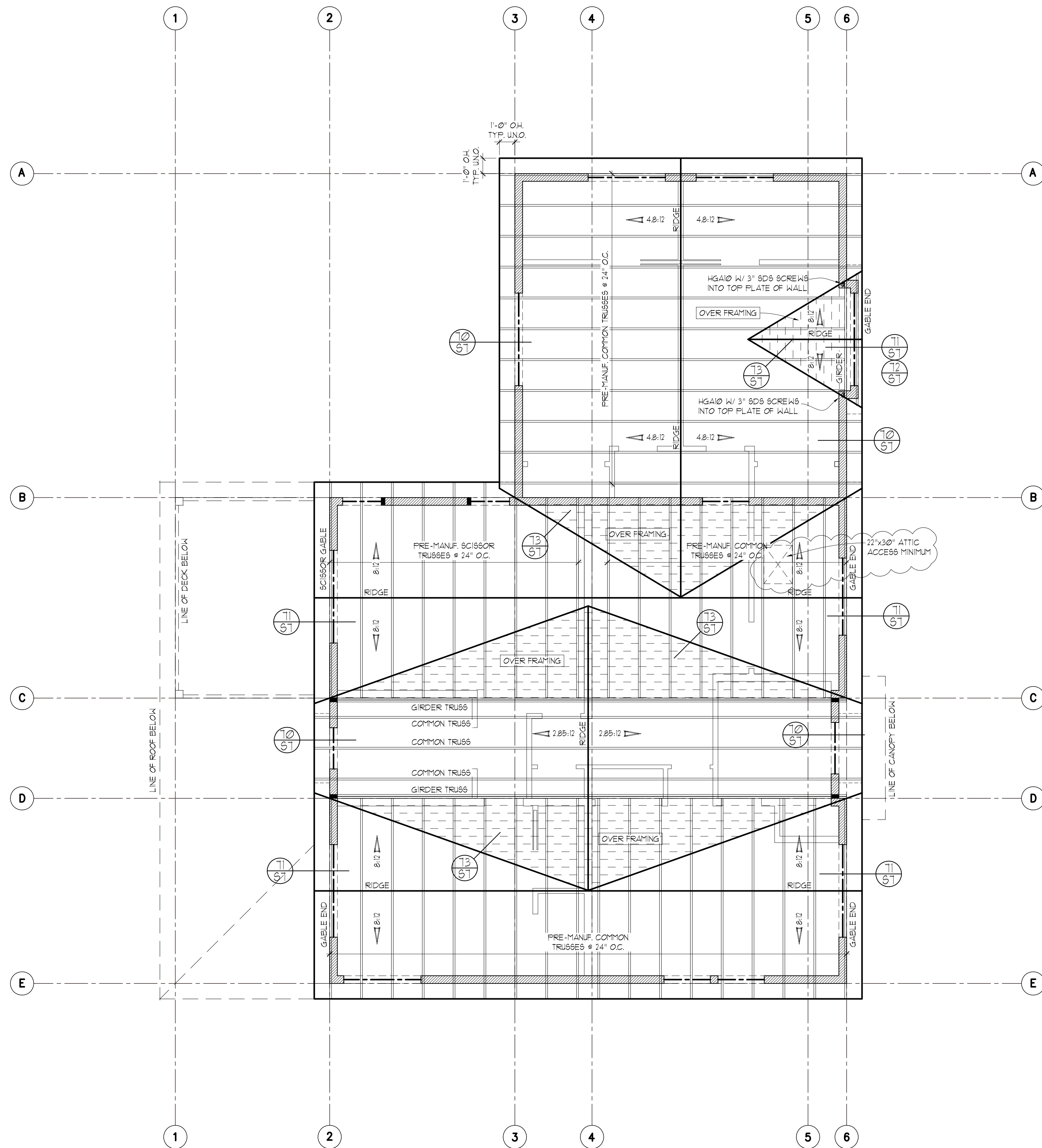




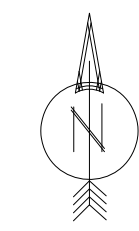








## ROOF FRAMING PLAN



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

- PROVIDE VENTED BLOCKING AT REQUIRED TRUSS/RAFTER BAYS
- ALL MANUFACTURED TRUSSES:
  - \* SHALL HAVE DESIGN DETAILS AND DRAWINGS ON SITE FOR FRAMING INSPECTION
  - \* SHALL NOT BE FIELD ALTERED WITHOUT ENGINEER'S APPROVAL
  - \* SHALL BE INSTALLED AND BRACED TO MANUFACTURER'S SPECIFICATION
  - \* SHALL CARRY MANUFACTURER'S STAMP ON EACH TRUSS
- ALL BEAMS AND HEADERS AT THIS LEVEL TO BE 4X8 DF #2 AT BEARING WALLS, U.N.O., 6'-0" MAX. SPAN
- HEADERS 8FT OR LONGER SHALL BE PROVIDED W/ (2) TRIMMER (JACK) STUDS AT EACH END U.N.O.
- PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)
- PROVIDE SUPPLEMENTAL BLOCKING IN FLOOR CAVITY BELOW SUPPORT POSTS FOR GIRDERS, BEAMS, AND END POSTS FOR SHEAR WALLS TO MATCH FULL WIDTH OF POSTS IN WALL ABV. W/ GRAIN ORIENTED VERTICALLY AND PROVIDE MATCHING POSTS IN WALL BELOW UNLESS LARGER POSTS ARE SPECIFIED ON PLAN

# STRUCTURAL PLANS

**RKK CONSTRUCTION**  
 3419 72nd PLACE SE  
 MERCER ISLAND, WA

**Myers Engineering, LLC**  
 3206 50th Street Court, Ste. 210-B  
 Gig Harbor, WA 98335  
 PH: 253-858-3248  
 Email: myengineer@centurytel.net



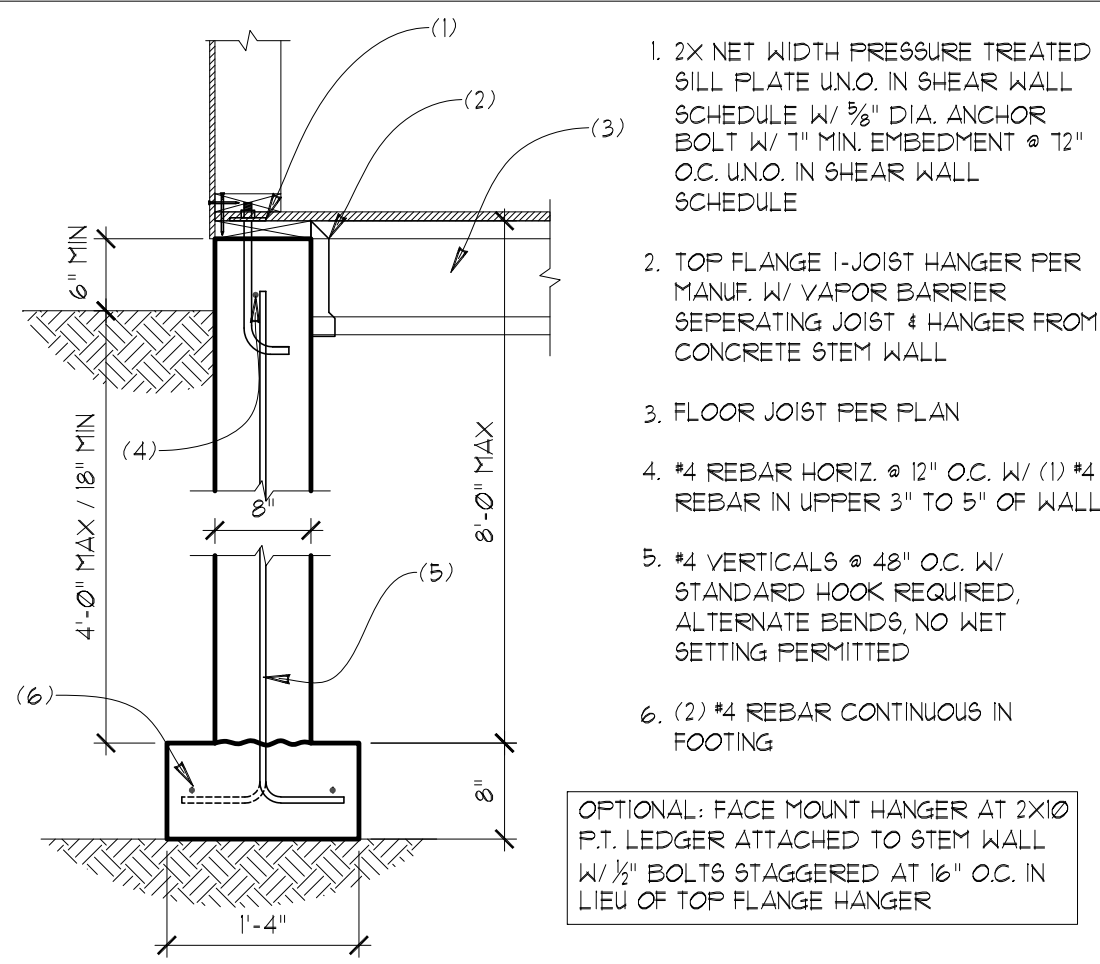
Digitally signed  
 by Mark Myers, PE  
 Date: 2023.02.07  
 18:29:29 -08'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:
PLAN REVIEW	MM	2-1-2023

S5	DATE: 6-15-2022
	INIT: MM
	PROJECT #: 2431





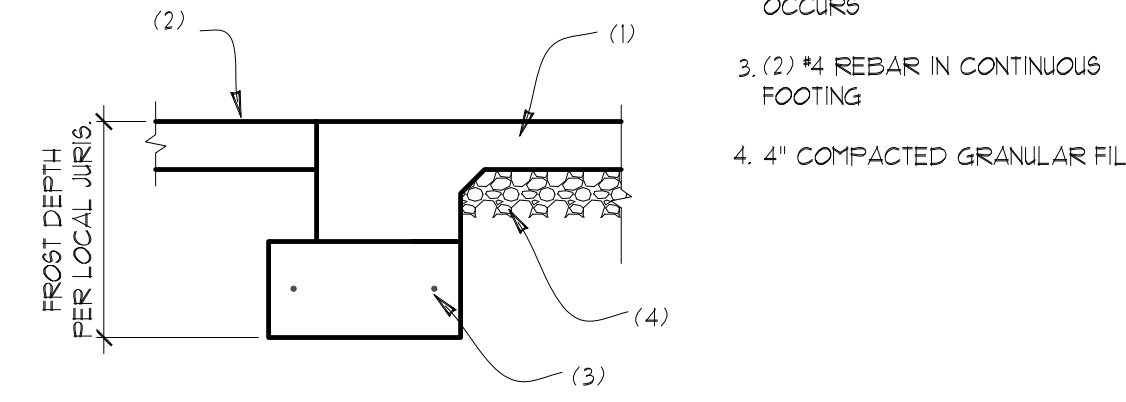
- 2X NET WIDTH PRESSURE TREATED SILL PLATE UNO. IN SHEAR WALL SCHEDULE W/ 3/8" DIA. ANCHOR BOLT W/ 1" MIN. EMBEDMENT @ 12" O.C. UNO. IN SHEAR WALL SCHEDULE
- TOP FLANGE 1-JOIST HANGER PER MANUF. W/ VAPOR BARRIER SEPARATING JOIST & HANGER FROM CONCRETE STEM WALL
- FLOOR JOIST PER PLAN
- #4 REBAR HORIZ. @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5" OF WALL
- #4 VERTICALS @ 48" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED
- (2) #4 REBAR CONTINUOUS IN FOOTING

OPTIONAL: FACE MOUNT HANGER AT 2X10 P.T. LEDGER ATTACHED TO STEM WALL W/ 1/2" BOLTS STAGGERED AT 16" O.C. IN LIEU OF TOP FLANGE HANGER

50 8" STEM WALL AT DROPPED JOISTS  
SCALE: 3/4"=1'

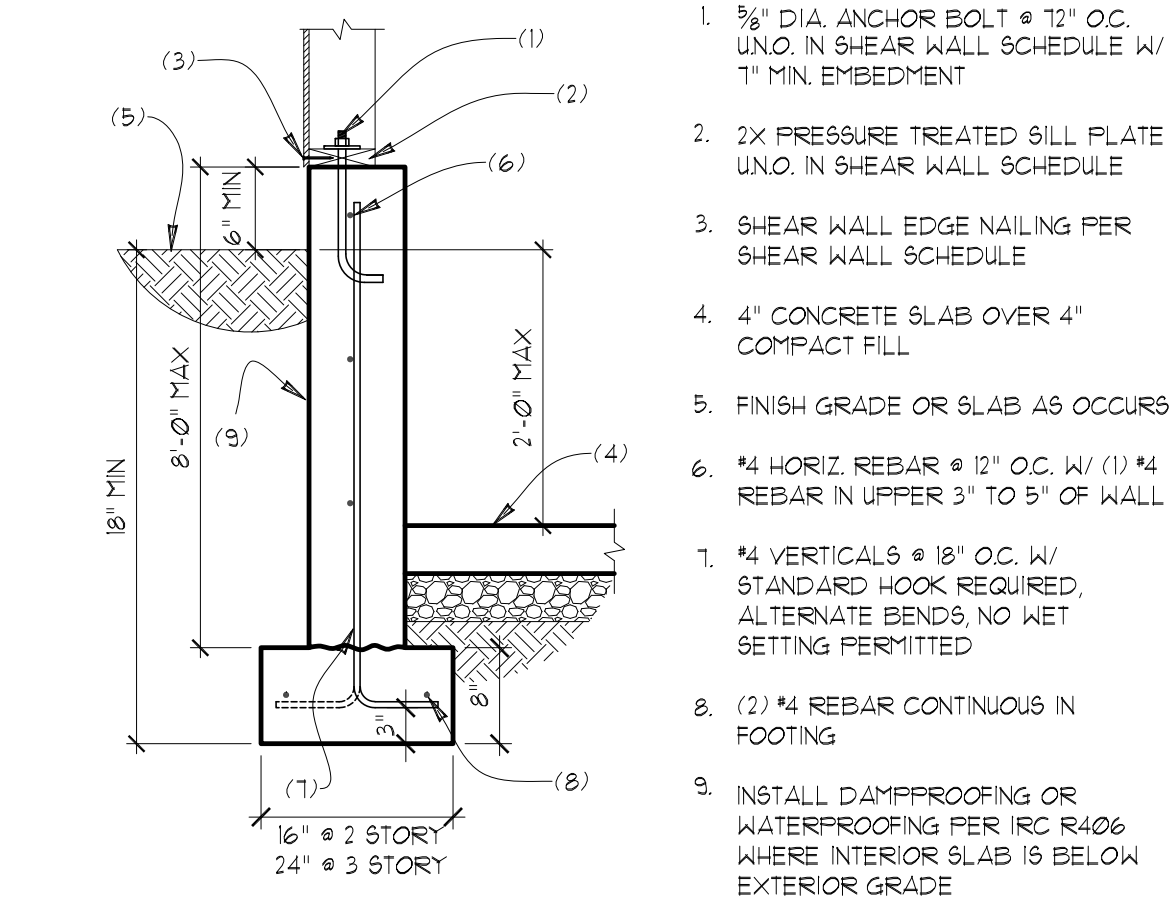
NOT USED / DETAIL REMOVED

51 NOT USED / DETAIL REMOVED  
SCALE: 3/4"=1'



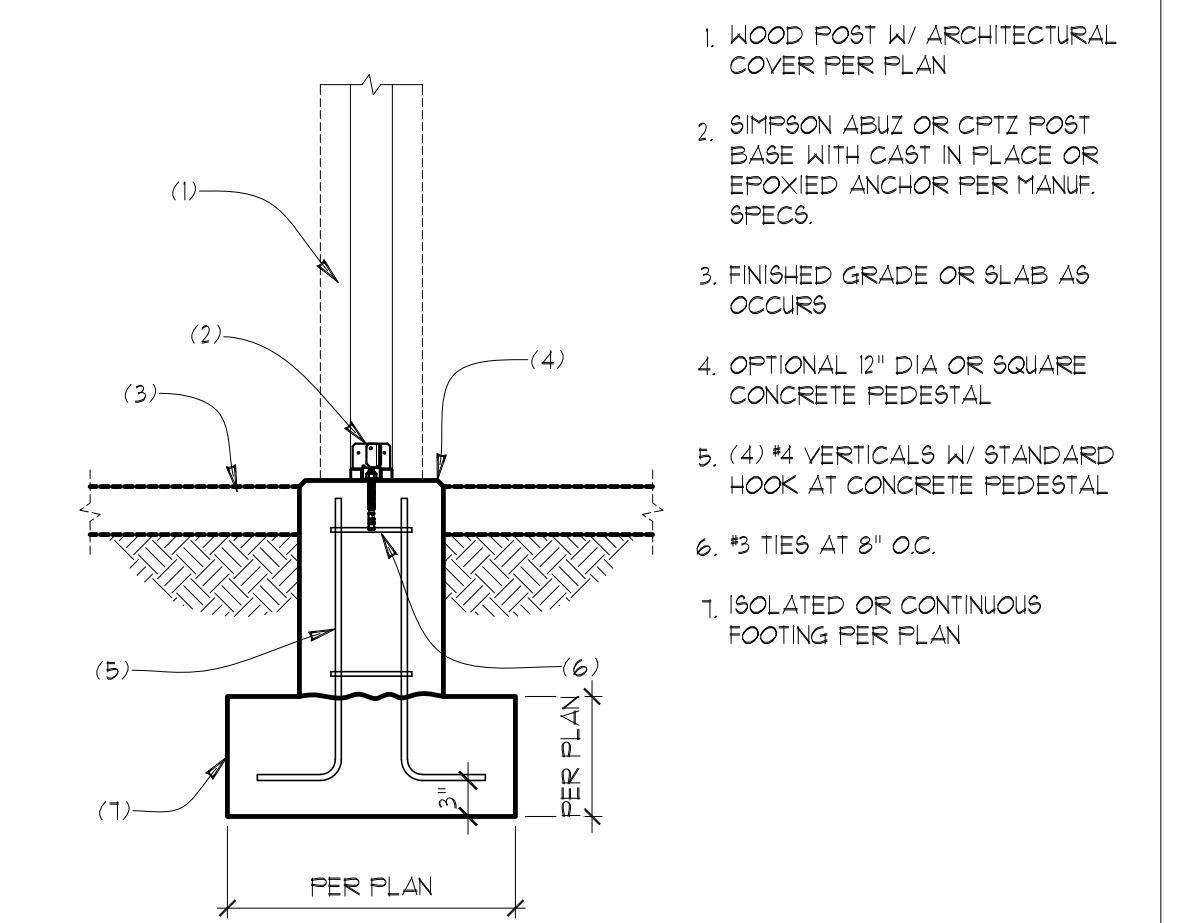
- 4" CONCRETE SLAB PER PLAN W/ THICKENED EDGE AT DOOR OPENING
- FINISH GRADE OR SLAB AS OCCURS
- (2) #4 REBAR IN CONTINUOUS FOOTING
- 4" COMPACTED GRANULAR FILL

52 THICKENED SLAB EDGE AT GARAGE  
SCALE: 3/4"=1'



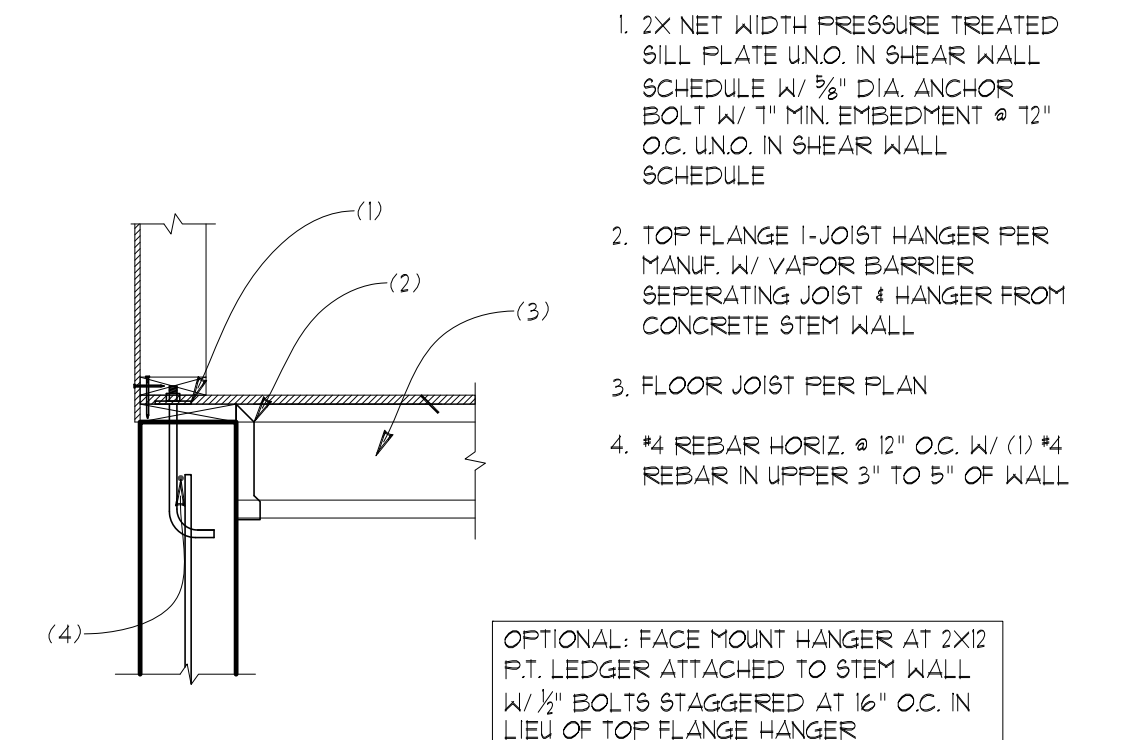
- 3/4" DIA. ANCHOR BOLT @ 12" O.C. UNO. IN SHEAR WALL SCHEDULE W/ 1" MIN. EMBEDMENT
- 2X PRESSURE TREATED SILL PLATE UNO. IN SHEAR WALL SCHEDULE
- SHEAR WALL EDGE NAILING PER SHEAR WALL SCHEDULE
- 4" CONCRETE SLAB OVER 4" COMPACT FILL
- FINISH GRADE OR SLAB AS OCCURS
- #4 HORIZ. REBAR @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5" OF WALL
- #4 VERTICALS @ 18" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED
- (2) #4 REBAR CONTINUOUS IN FOOTING
- INSTALL DAMP-PROOFING OR WATERPROOFING PER IRC R408 WHERE INTERIOR SLAB IS BELOW EXTERIOR GRADE

53 8" STEM WALL AT SLAB ON GRADE  
SCALE: 3/4"=1'



- WOOD POST W/ ARCHITECTURAL COVER PER PLAN
- SIMPSON ABUZ OR CPTZ POST BASE WITH CAST IN PLACE OR EPOXIED ANCHOR PER MANUF. SPECS.
- FINISH GRADE OR SLAB AS OCCURS
- OPTIONAL 12" DIA OR SQUARE CONCRETE PEDESTAL
- (4) #4 VERTICALS W/ STANDARD HOOK AT CONCRETE PEDESTAL
- #3 TIES AT 8" O.C.

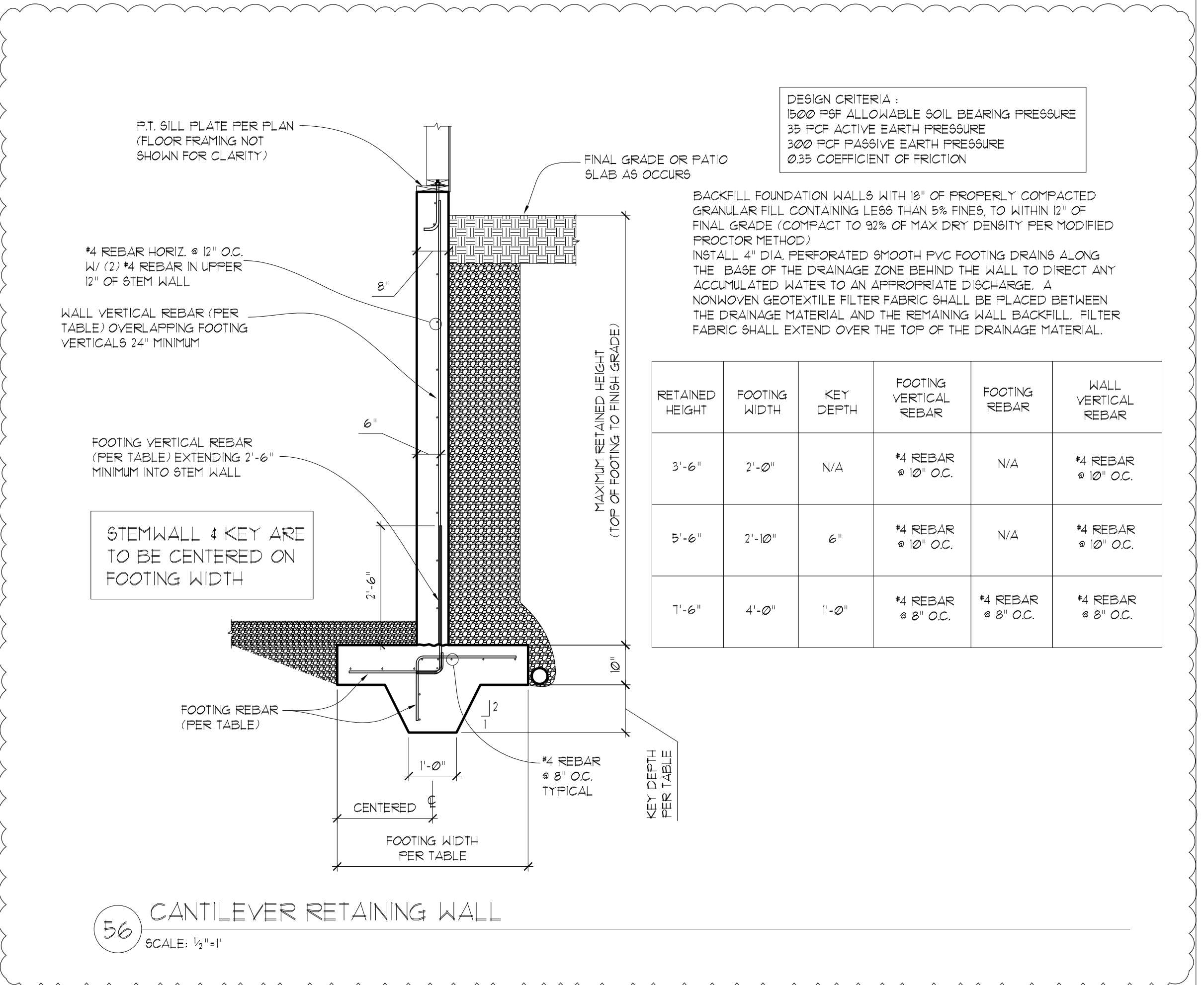
54 FOOTING AT WOOD COLUMN  
SCALE: 3/4"=1'



- 2X NET WIDTH PRESSURE TREATED SILL PLATE UNO. IN SHEAR WALL SCHEDULE W/ 3/8" DIA. ANCHOR BOLT W/ 1" MIN. EMBEDMENT @ 12" O.C. UNO. IN SHEAR WALL SCHEDULE
- TOP FLANGE 1-JOIST HANGER PER MANUF. W/ VAPOR BARRIER SEPARATING JOIST & HANGER FROM CONCRETE STEM WALL
- FLOOR JOIST PER PLAN
- #4 REBAR HORIZ. @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5" OF WALL

OPTIONAL: FACE MOUNT HANGER AT 2X12 P.T. LEDGER ATTACHED TO STEM WALL W/ 1/2" BOLTS STAGGERED AT 16" O.C. IN LIEU OF TOP FLANGE HANGER

55 FLOOR JOISTS AT A RAISED STEM WALL  
SCALE: 3/4"=1'

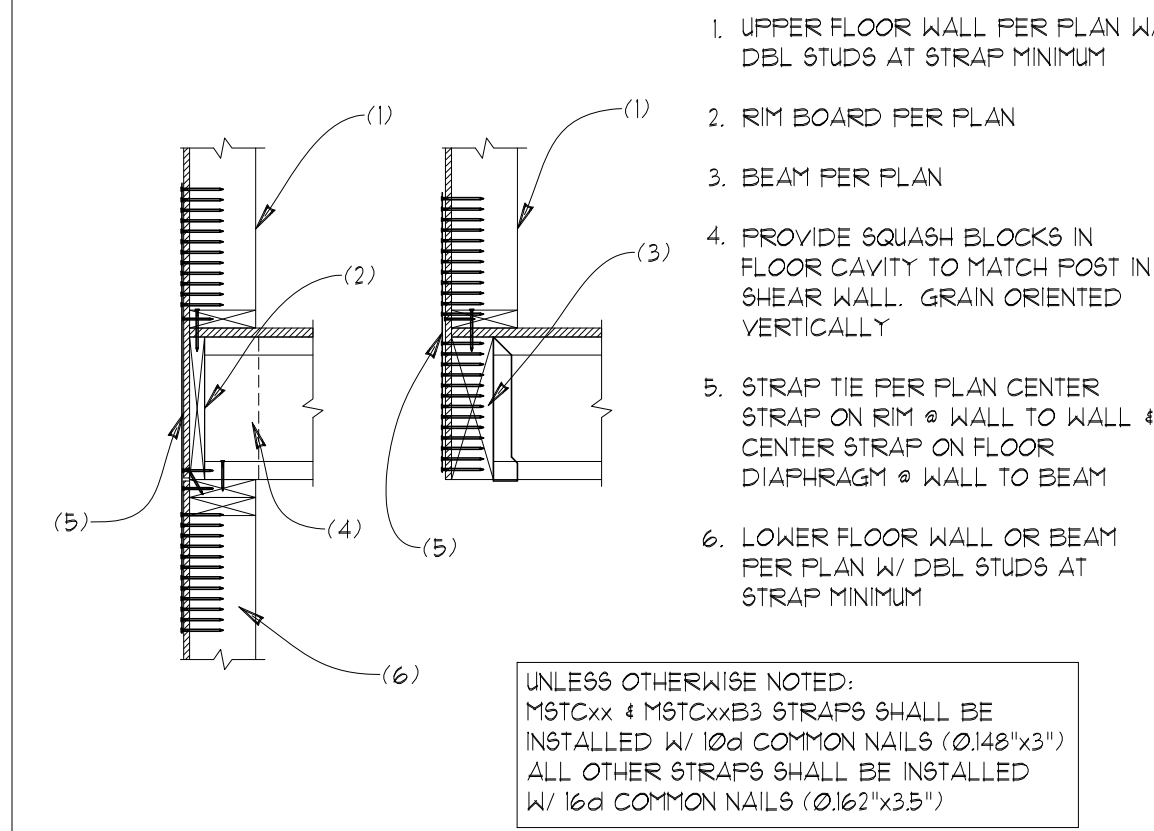


DESIGN CRITERIA:  
1500 PSF ALLOWABLE SOIL BEARING PRESSURE  
35 PCF ACTIVE EARTH PRESSURE  
300 PCF PASSIVE EARTH PRESSURE  
0.35 COEFFICIENT OF FRICTION

BACKFILL FOUNDATION WALLS WITH 18" OF PROPERLY COMPACTED GRANULAR FILL CONTAINING LESS THAN 5% FINES TO WITHIN 12" OF FINAL GRADE (COMPACT TO 92% OF MAX DRY DENSITY PER MODIFIED PROCTOR METHOD)  
INSTALL 4" DIA. PERFORATED SMOOTH PVC FOOTING DRAINS ALONG THE BASE OF THE DRAINAGE ZONE BEHIND THE WALL TO DIRECT ANY ACCUMULATED WATER TO AN APPROPRIATE DISCHARGE. A NONWOVEN GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE DRAINAGE MATERIAL AND THE REMAINING WALL BACKFILL. FILTER FABRIC SHALL EXTEND OVER THE TOP OF THE DRAINAGE MATERIAL.

RETAINED HEIGHT	FOOTING WIDTH	KEY DEPTH	FOOTING VERTICAL REBAR	FOOTING REBAR	WALL VERTICAL REBAR
3'-6"	2'-0"	N/A	#4 REBAR @ 10" O.C.	N/A	#4 REBAR @ 10" O.C.
5'-6"	2'-10"	6"	#4 REBAR @ 10" O.C.	N/A	#4 REBAR @ 10" O.C.
7'-6"	4'-0"	1'-0"	#4 REBAR @ 8" O.C.	#4 REBAR @ 8" O.C.	#4 REBAR @ 8" O.C.

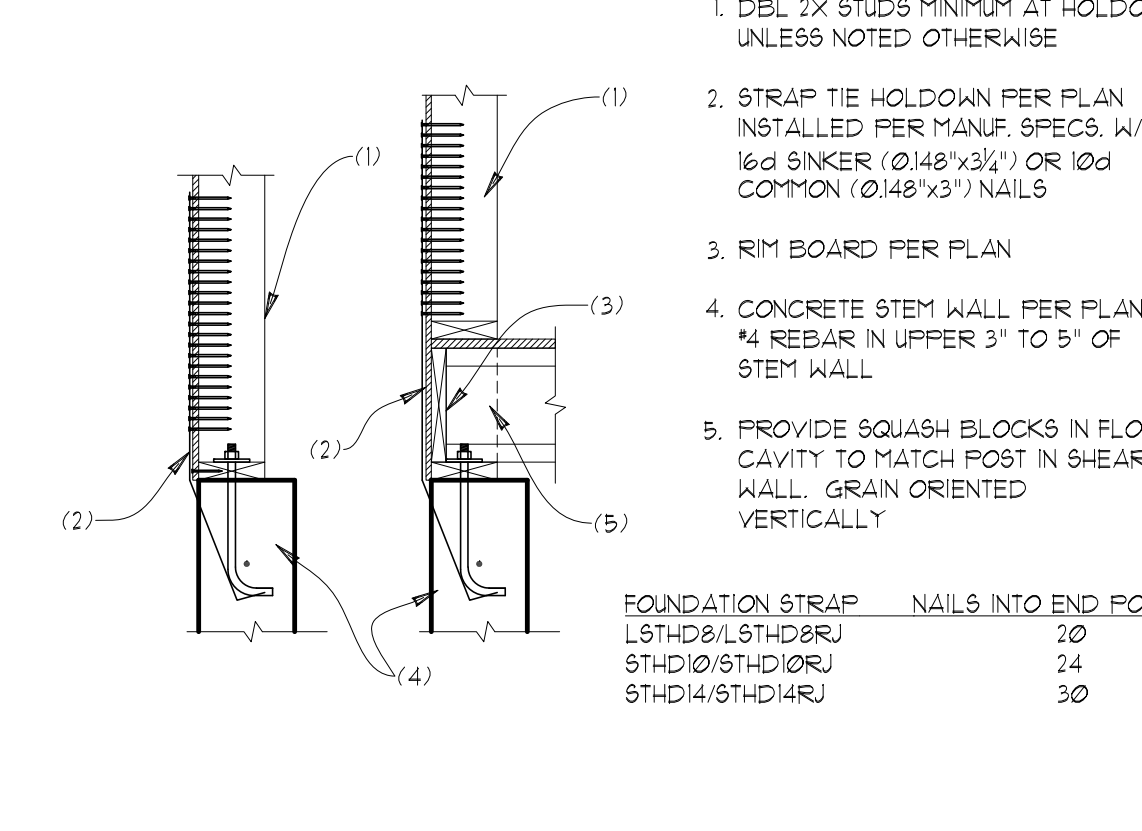
56 CANTILEVER RETAINING WALL  
SCALE: 1/2"=1'



- UPPER FLOOR WALL PER PLAN W/ DBL STUDS AT STRAP MINIMUM
- RIM BOARD PER PLAN
- BEAM PER PLAN
- PROVIDE SQUASH BLOCKS IN FLOOR CAVITY TO MATCH POST IN SHEAR WALL. GRAIN ORIENTED VERTICALLY
- STRAP TIE PER PLAN CENTER STRAP ON RIM @ WALL TO WALL & CENTER STRAP ON FLOOR DIAPHRAGM @ WALL TO BEAM
- LOWER FLOOR WALL OR BEAM PER PLAN W/ DBL STUDS AT STRAP MINIMUM

UNLESS OTHERWISE NOTED: MSTCxx4 MSTCxxB3 STRAPS SHALL BE INSTALLED W/ 10d COMMON NAILS (Ø148"x3") ALL OTHER STRAPS SHALL BE INSTALLED W/ 16d COMMON NAILS (Ø162"x3.5")

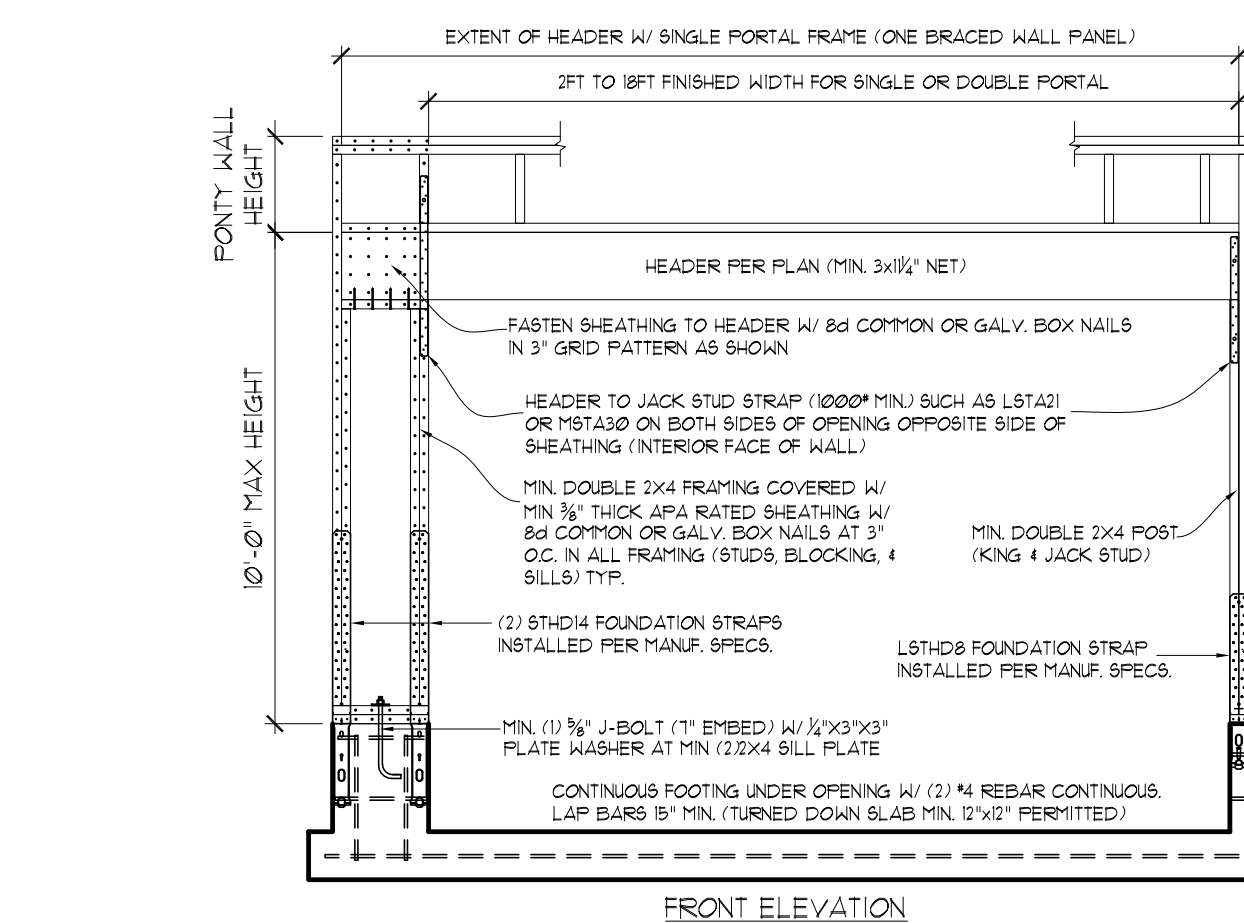
H1 TYPICAL STRAP TIE @ UPPER FLOORS  
SCALE: 3/4"=1'



- DBL 2X STUDS MINIMUM AT HOLDOWN UNLESS NOTED OTHERWISE
- STRAP TIE HOLDOWN PER PLAN INSTALLED PER MANUF. SPECS. W/ 16d SINKER (Ø148"x3/4") OR 10d COMMON (Ø148"x3") NAILS
- RIM BOARD PER PLAN
- CONCRETE STEM WALL PER PLAN W/ #4 REBAR IN UPPER 3" TO 5" OF STEM WALL
- PROVIDE SQUASH BLOCKS IN FLOOR CAVITY TO MATCH POST IN SHEAR WALL. GRAIN ORIENTED VERTICALLY

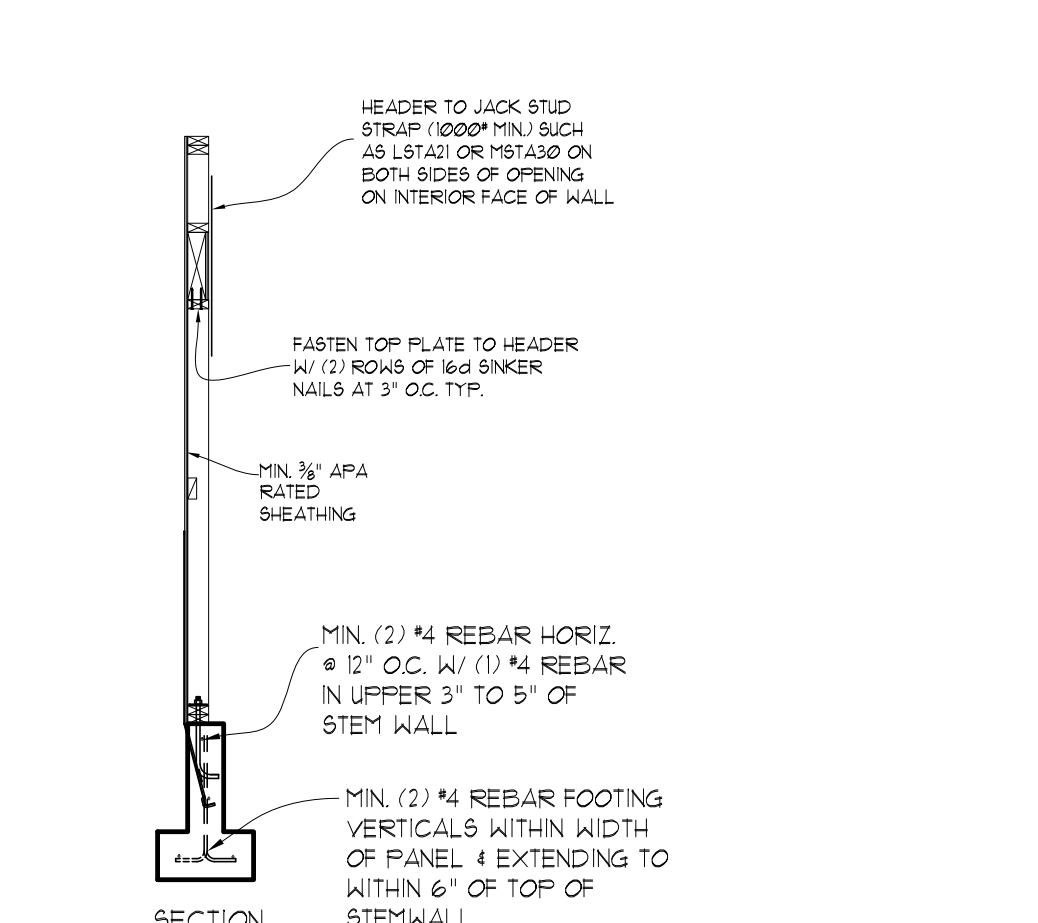
FOUNDATION STRAP	NAILS INTO END POST
L6THD8/L6THD8RJ	20
5THD10/5THD10RJ	24
5THD14/5THD14RJ	30

H2 TYPICAL STRAP TIE HOLDOWN  
SCALE: 3/4"=1'



- EXTENT OF HEADER W/ SINGLE PORTAL FRAME (ONE BRACED WALL PANEL) 2FT TO 18FT FINISHED WIDTH FOR SINGLE OR DOUBLE PORTAL
- FASTEN SHEATHING TO HEADER W/ 8d COMMON OR GALV. BOX NAILS IN 3" GRID PATTERN AS SHOWN
- HEADER TO JACK STUD STRAP (1000" MIN) SUCH AS L5TA1 OR H5TA30 ON BOTH SIDES OF OPENING OPPOSITE SIDE OF SHEATHING (INTERIOR FACE OF WALL)
- MIN DOUBLE 2X4 FRAMING COVERED W/ MIN 3/8" THICK APA RATED SHEATHING W/ 8d COMMON OR GALV. BOX NAILS AT 3" O.C. IN ALL FRAMING (STUDS, BLOCKING, & SILL) TYP.
- MIN DOUBLE 2X4 POST (KING & JACK STUD)
- (2) 5THD14 FOUNDATION STRAPS INSTALLED PER MANUF. SPECS.
- L6THD8 FOUNDATION STRAP INSTALLED PER MANUF. SPECS.

H3 PORTAL FRAME CONSTRUCTION (FIELD BUILT)  
SCALE: NTS



- DBL 2X STUDS MINIMUM AT HOLDOWN UNLESS NOTED OTHERWISE
- ANCHOR BOLT STYLE HOLDOWN PER PLAN INSTALLED PER MANUF. SPECS.
- RIM BOARD PER PLAN
- PROVIDE SQUASH BLOCKS IN FLOOR CAVITY TO MATCH POST IN SHEAR WALL. GRAIN ORIENTED VERTICALLY
- ANCHOR BOLT INSTALLED PER MANUF. SPECS. (SEE BELOW FOR SIZE PER HOLDOWN) MAINTAIN 5" CLEARANCE FROM FINDT VENTS.
- CONCRETE STEM WALL PER PLAN
- EXTEND ANCHOR BOLT W/ COUPLER NUT & ALL THREAD ROD

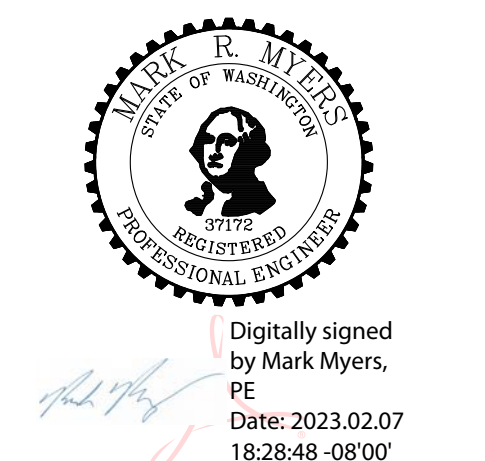
ANCHOR	EMBED.
55TB16 (DIA. = 3/8")	12 3/4"
55TB20 (DIA. = 1/2")	16 3/8"
55TB24 (DIA. = 5/8")	20 3/8"
55TB28 (DIA. = 3/4")	24 3/8"
55TB34, 55TB36 (DIA. = 7/8")	28 3/8"
55TB42, 55TB44	18"
55TB50	24"

H4 TYPICAL ANCHOR BOLT HOLDOWN  
SCALE: 3/4"=1'

# STRUCTURAL PLANS

## RKK CONSTRUCTION 3419 72nd PLACE SE MERCER ISLAND, WA

**Myers Engineering, LLC**  
3206 50th Street Court, Ste. 210-B  
Gig Harbor, WA 98335  
PH: 253-858-3248  
Email: myengineer@centurytel.net



Digitally signed by Mark Myers, PE  
Date: 2023.02.07 18:28:48 -0800

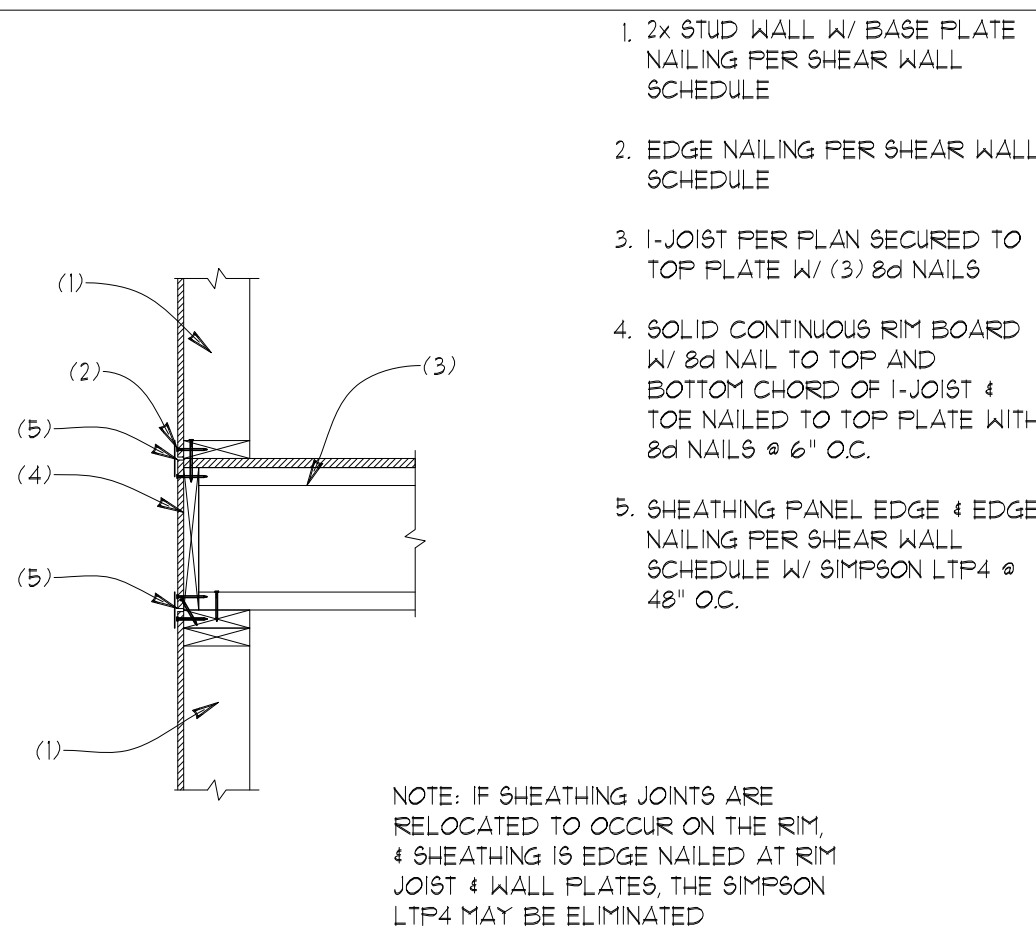
BUILDING DEPT. APPROVAL STAMPS:

REVISION	INIT.	DATE
PLAN REVIEW	MM	2-7-2023

S6

DATE: 6-15-2022  
INIT: MM  
PROJECT #: 2431

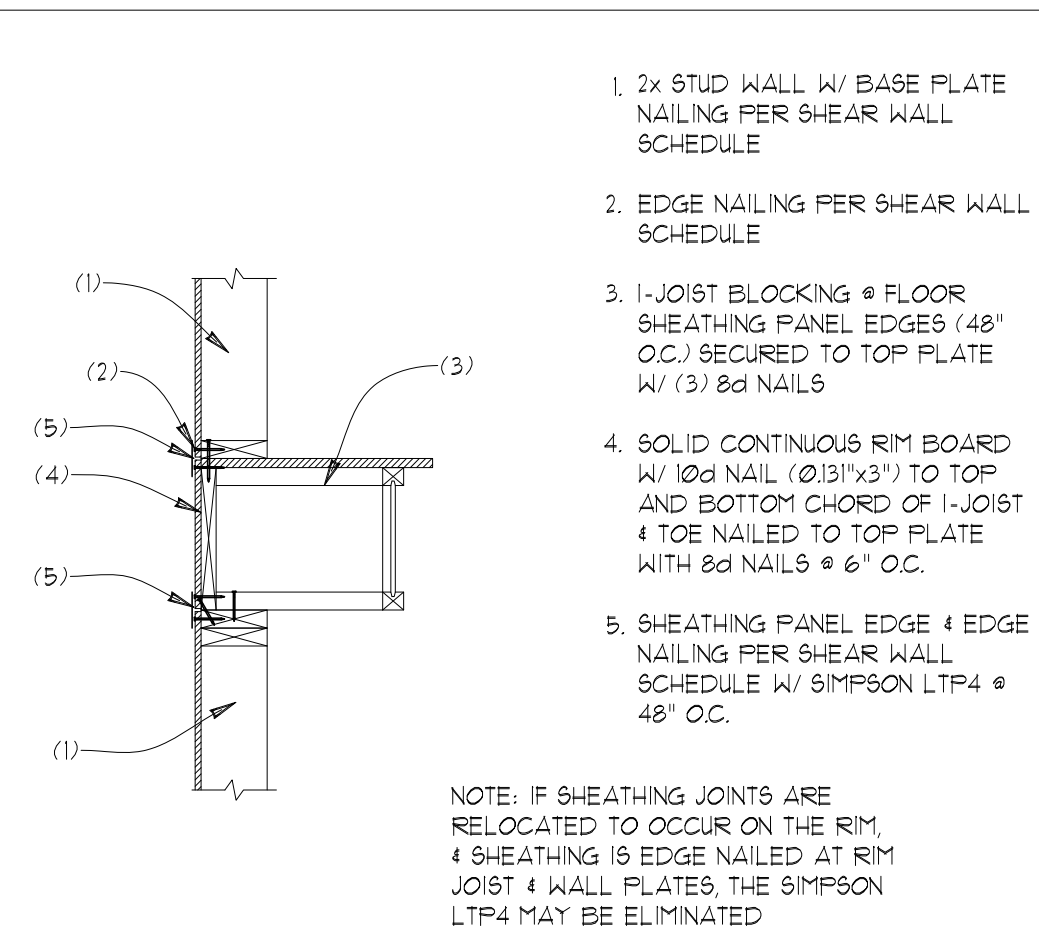




- 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
- EDGE NAILING PER SHEAR WALL SCHEDULE
- 1-JOIST PER PLAN SECURED TO TOP PLATE W/ (3) 8d NAILS
- SOLID CONTINUOUS RIM BOARD W/ 8d NAIL TO TOP AND BOTTOM CHORD OF 1-JOIST & TOE NAILED TO TOP PLATE WITH 8d NAILS @ 6" O.C.
- SHEATHING PANEL EDGE & EDGE NAILING PER SHEAR WALL SCHEDULE W/ SIMPSON LTP4 @ 48" O.C.

NOTE: IF SHEATHING JOINTS ARE RELOCATED TO OCCUR ON THE RIM, SHEATHING IS EDGE NAILED AT RIM JOIST & WALL FLATES, THE SIMPSON LTP4 MAY BE ELIMINATED

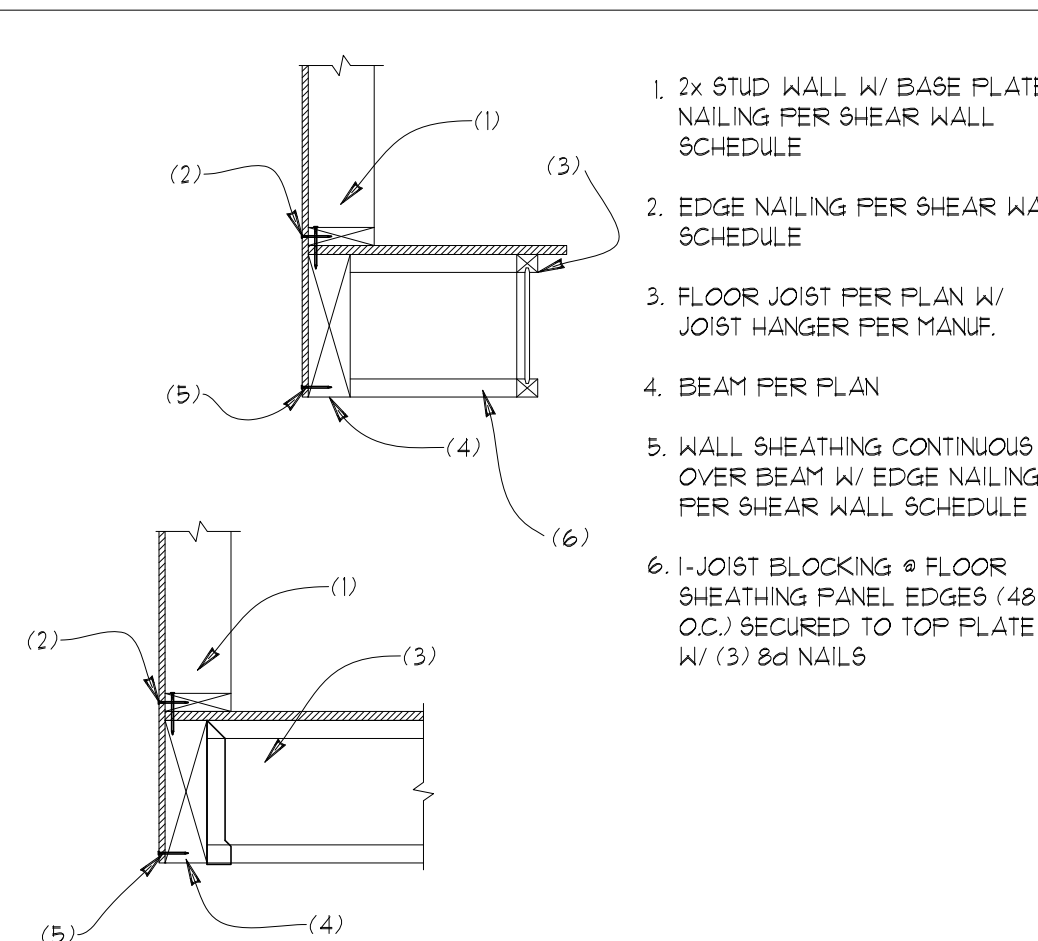
60 FLOOR JOIST BEARING AT STUD WALL  
SCALE: 3/4"=1"



- 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
- EDGE NAILING PER SHEAR WALL SCHEDULE
- 1-JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.) SECURED TO TOP PLATE W/ (3) 8d NAILS
- SOLID CONTINUOUS RIM BOARD W/ 10d NAIL (Ø13"x3") TO TOP AND BOTTOM CHORD OF 1-JOIST & TOE NAILED TO TOP PLATE WITH 8d NAILS @ 6" O.C.
- SHEATHING PANEL EDGE & EDGE NAILING PER SHEAR WALL SCHEDULE W/ SIMPSON LTP4 @ 48" O.C.

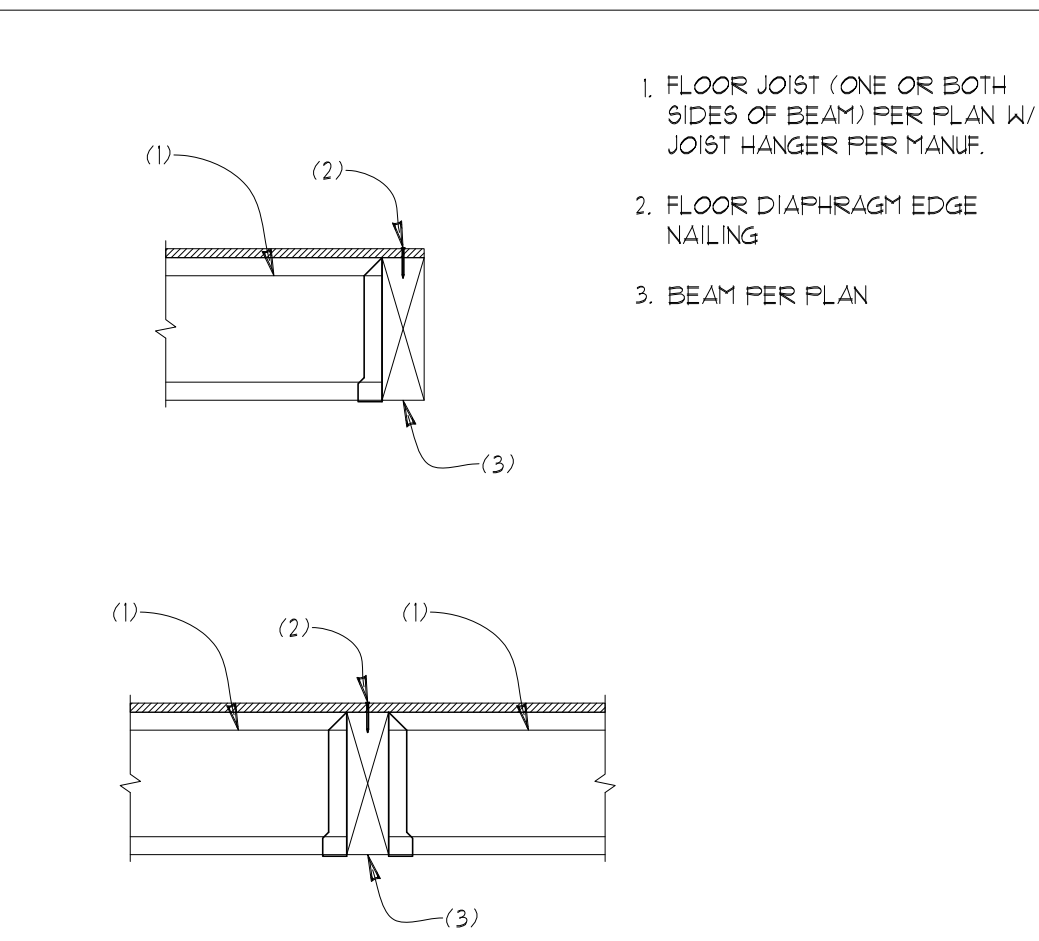
NOTE: IF SHEATHING JOINTS ARE RELOCATED TO OCCUR ON THE RIM, SHEATHING IS EDGE NAILED AT RIM JOIST & WALL FLATES, THE SIMPSON LTP4 MAY BE ELIMINATED

61 FLOOR JOIST PARALLEL TO STUD WALL  
SCALE: 3/4"=1"



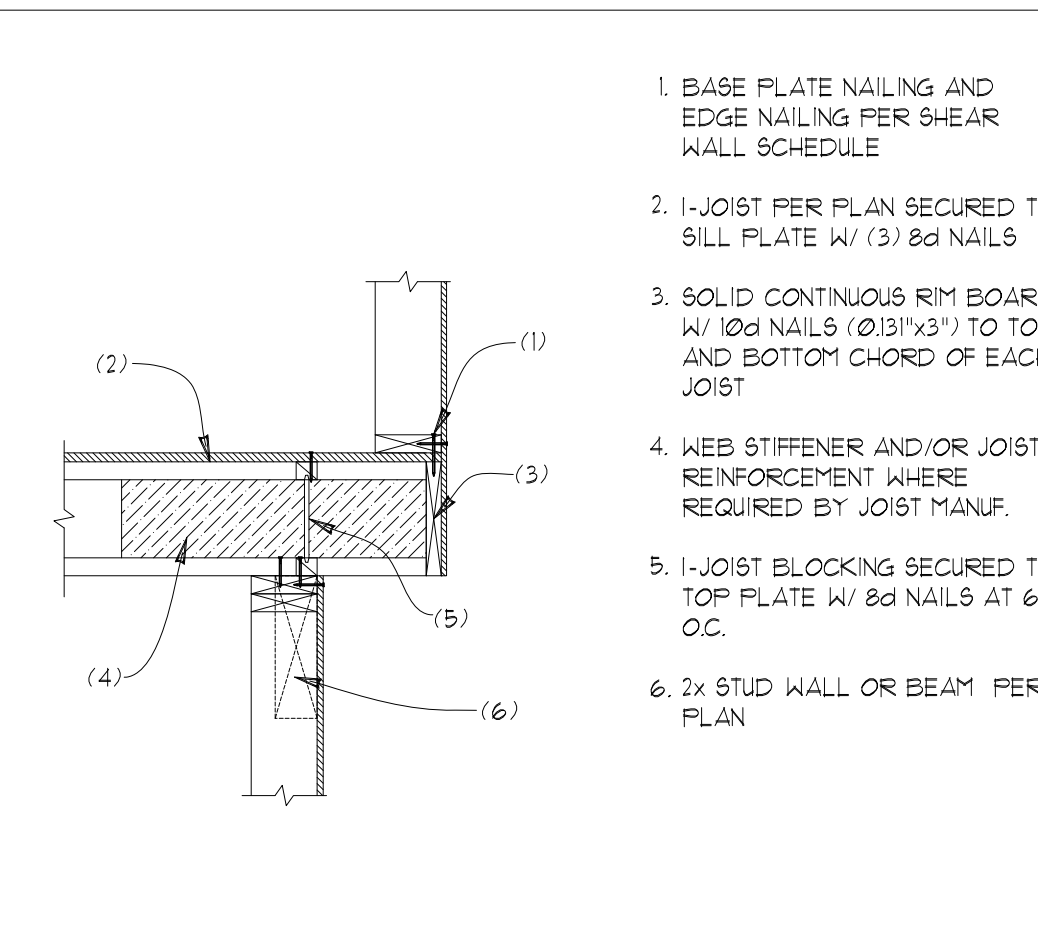
- 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
- EDGE NAILING PER SHEAR WALL SCHEDULE
- FLOOR JOIST PER PLAN W/ JOIST HANGER PER MANUF.
- BEAM PER PLAN
- WALL SHEATHING CONTINUOUS OVER BEAM W/ EDGE NAILING PER SHEAR WALL SCHEDULE
- 1-JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.) SECURED TO TOP PLATE W/ (3) 8d NAILS

62 FLOOR JOIST AT BEAM  
SCALE: 3/4"=1"



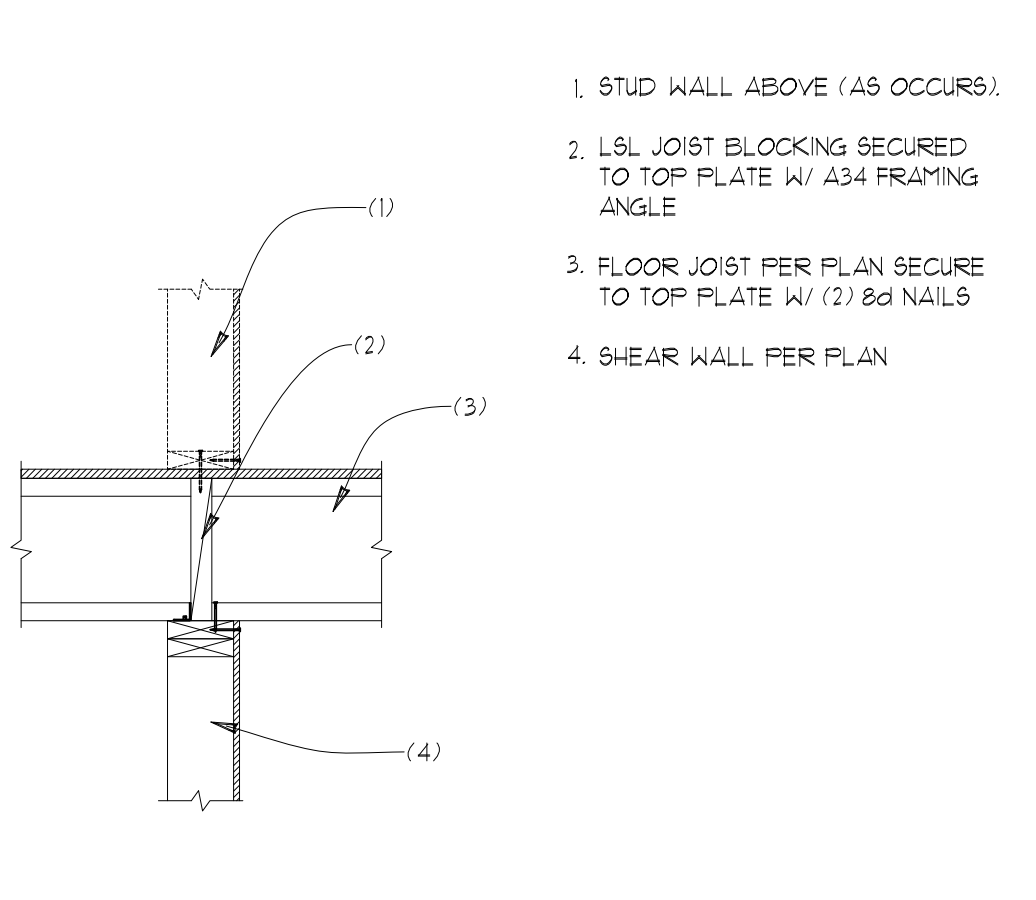
- FLOOR JOIST (ONE OR BOTH SIDES OF BEAM) PER PLAN W/ JOIST HANGER PER MANUF.
- FLOOR DIAPHRAGM EDGE NAILING
- BEAM PER PLAN

63 FLOOR JOIST AT BEAM  
SCALE: 3/4"=1"



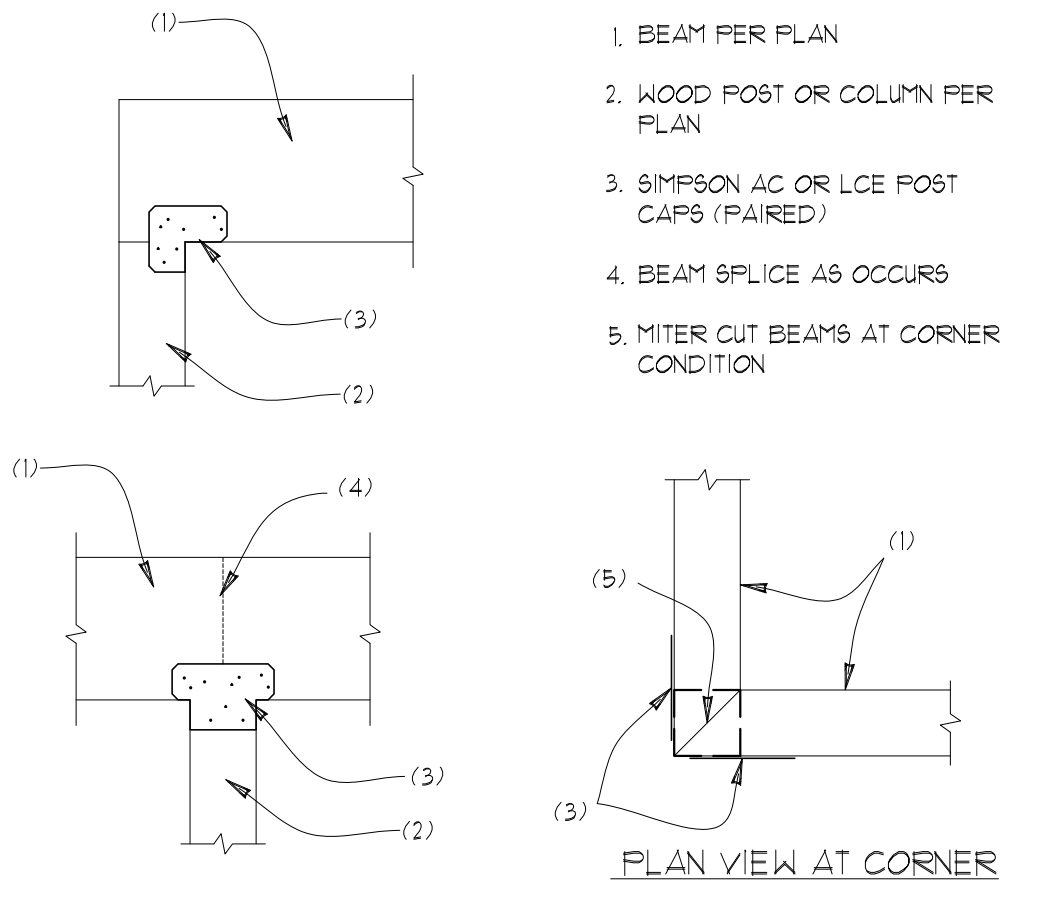
- BASE PLATE NAILING AND EDGE NAILING PER SHEAR WALL SCHEDULE
- 1-JOIST PER PLAN SECURED TO BILL FLATE W/ (3) 8d NAILS
- SOLID CONTINUOUS RIM BOARD W/ 10d NAILS (Ø13"x3") TO TOP AND BOTTOM CHORD OF EACH JOIST
- WEB STIFFENER AND/OR JOIST REINFORCEMENT WHERE REQUIRED BY JOIST MANUF.
- 1-JOIST BLOCKING SECURED TO TOP PLATE W/ 8d NAILS AT 6" O.C.
- 2x STUD WALL OR BEAM PER PLAN

64 1-JOIST CANTILEVER  
SCALE: 3/4"=1"



- STUD WALL ABOVE (AS OCCURS)
- LSL JOIST BLOCKING SECURED TO TOP PLATE W/ A34 FRAMING ANGLE
- FLOOR JOIST PER PLAN SECURE TO TOP PLATE W/ (2) 8d NAILS
- SHEAR WALL PER PLAN

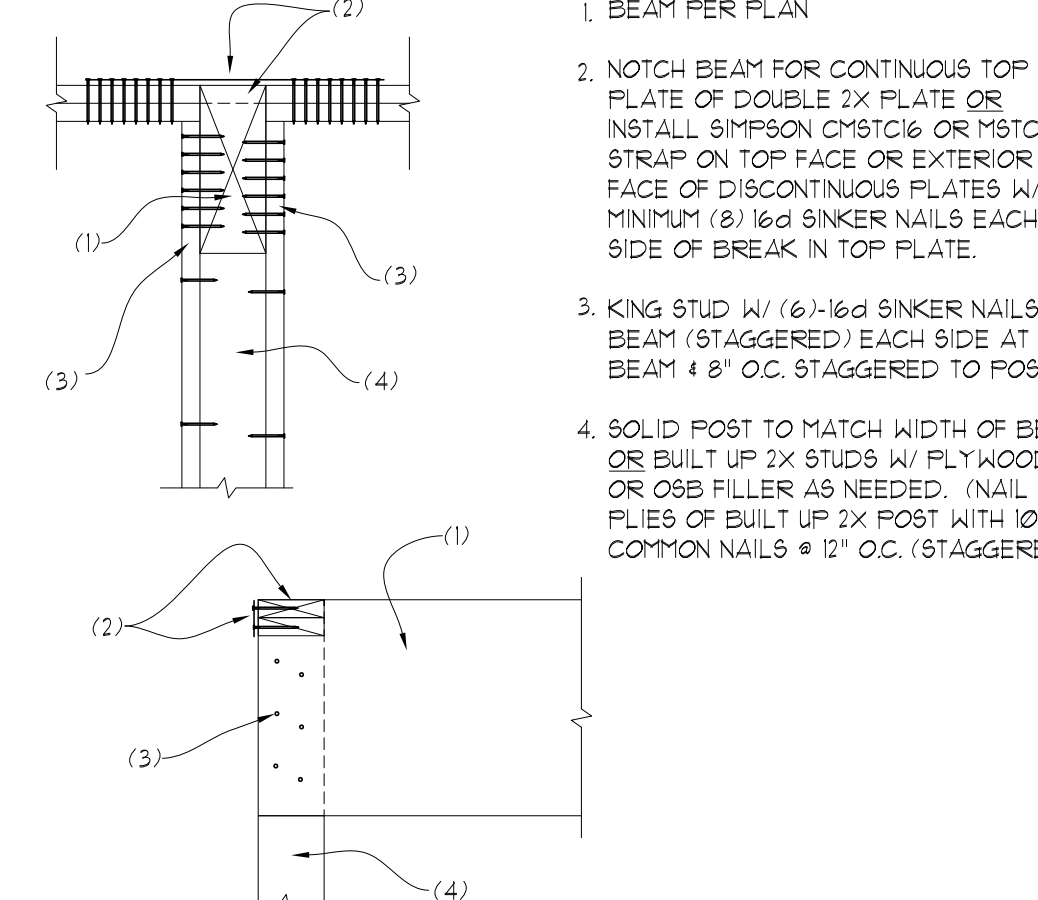
65 FLOOR JOIST AT INT. WALL OR BEAM  
SCALE: 3/4"=1"



- BEAM PER PLAN
- WOOD POST OR COLUMN PER PLAN
- SIMPSON AC OR LCE POST CAPS (PAIRED)
- BEAM SPLICE AS OCCURS
- MITER CUT BEAMS AT CORNER CONDITION

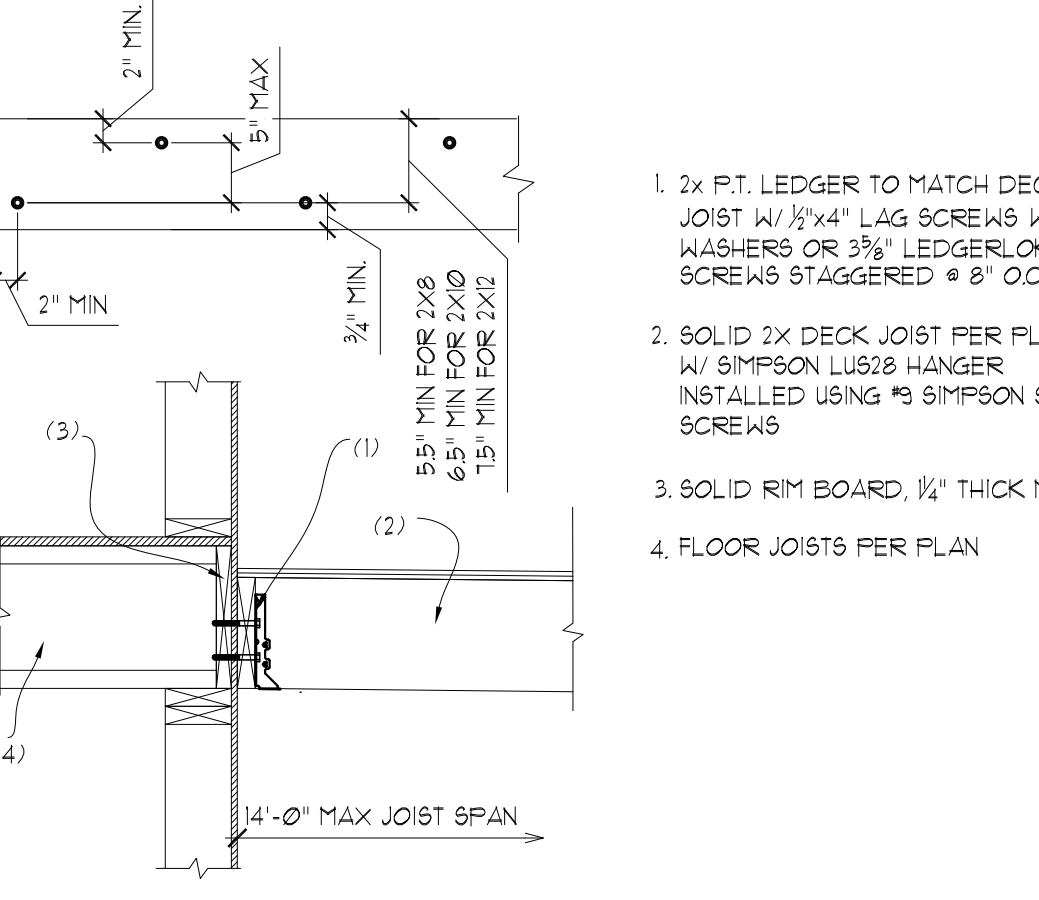
PLAN VIEW AT CORNER

66 WOOD BEAM AT WOOD POST  
SCALE: 3/4"=1"



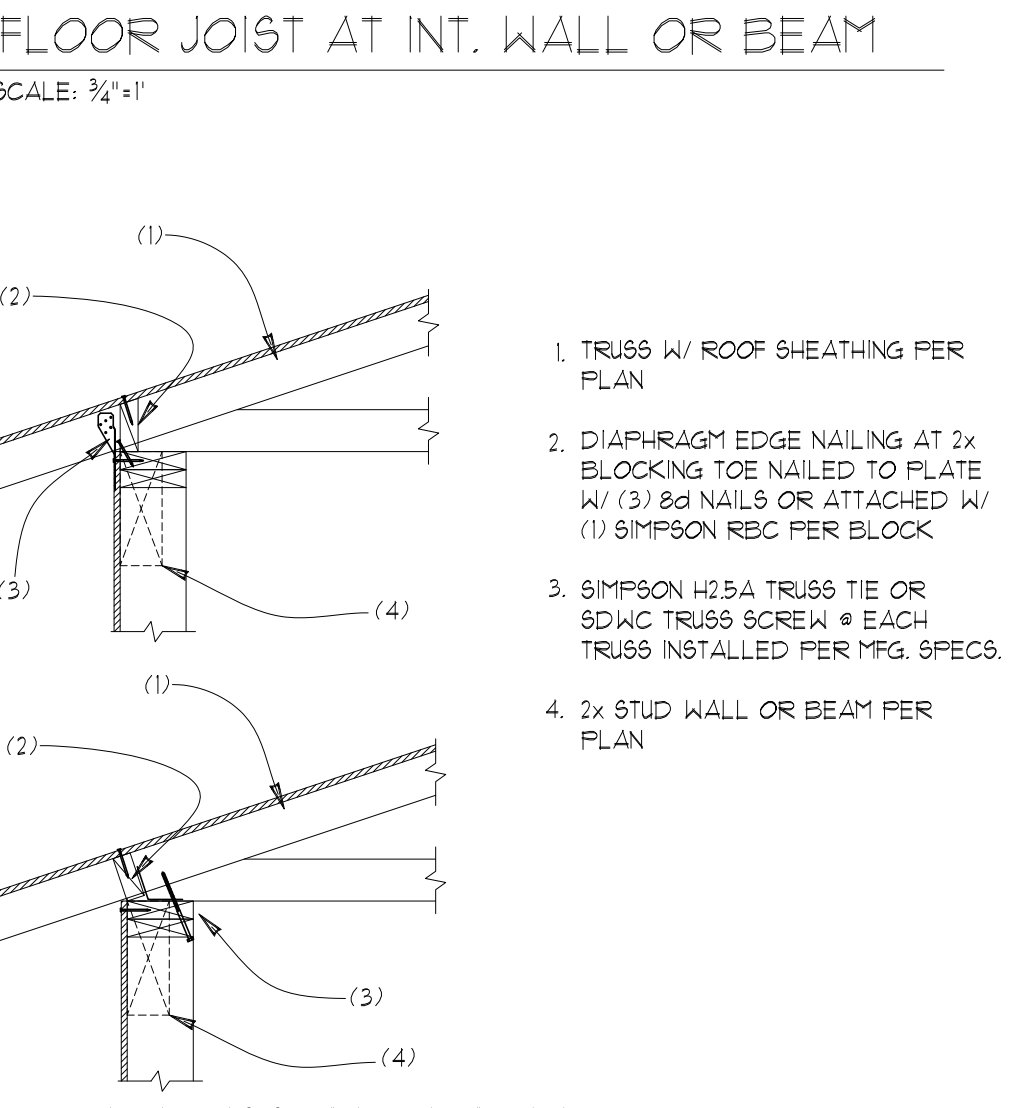
- BEAM PER PLAN
- NOTCH BEAM FOR CONTINUOUS TOP 2x PLATE OF DOUBLE 2x PLATE OR INSTALL SIMPSON CHST26 OR M5TC28 STRAP ON TOP FACE OR EXTERIOR FACE OF DISCONTINUOUS FLATES W/ MINIMUM (Ø) 16d SINKER NAILS EACH SIDE OF BREAK IN TOP PLATE
- KING STUD W/ (6)-16d SINKER NAILS TO BEAM (STAGGERED) EACH SIDE AT BEAM 4 8" O.C. STAGGERED TO POST
- SOLID POST TO MATCH WIDTH OF BEAM OR BUILT UP 2x STUDS W/ PLYWOOD OR OSB FILLER AS NEEDED. NAIL FLIES OF BUILT UP 2x POST WITH 10d COMMON NAILS @ 12" O.C. (STAGGERED)

67 BEAM POCKET AT WALL  
SCALE: 3/4"=1"



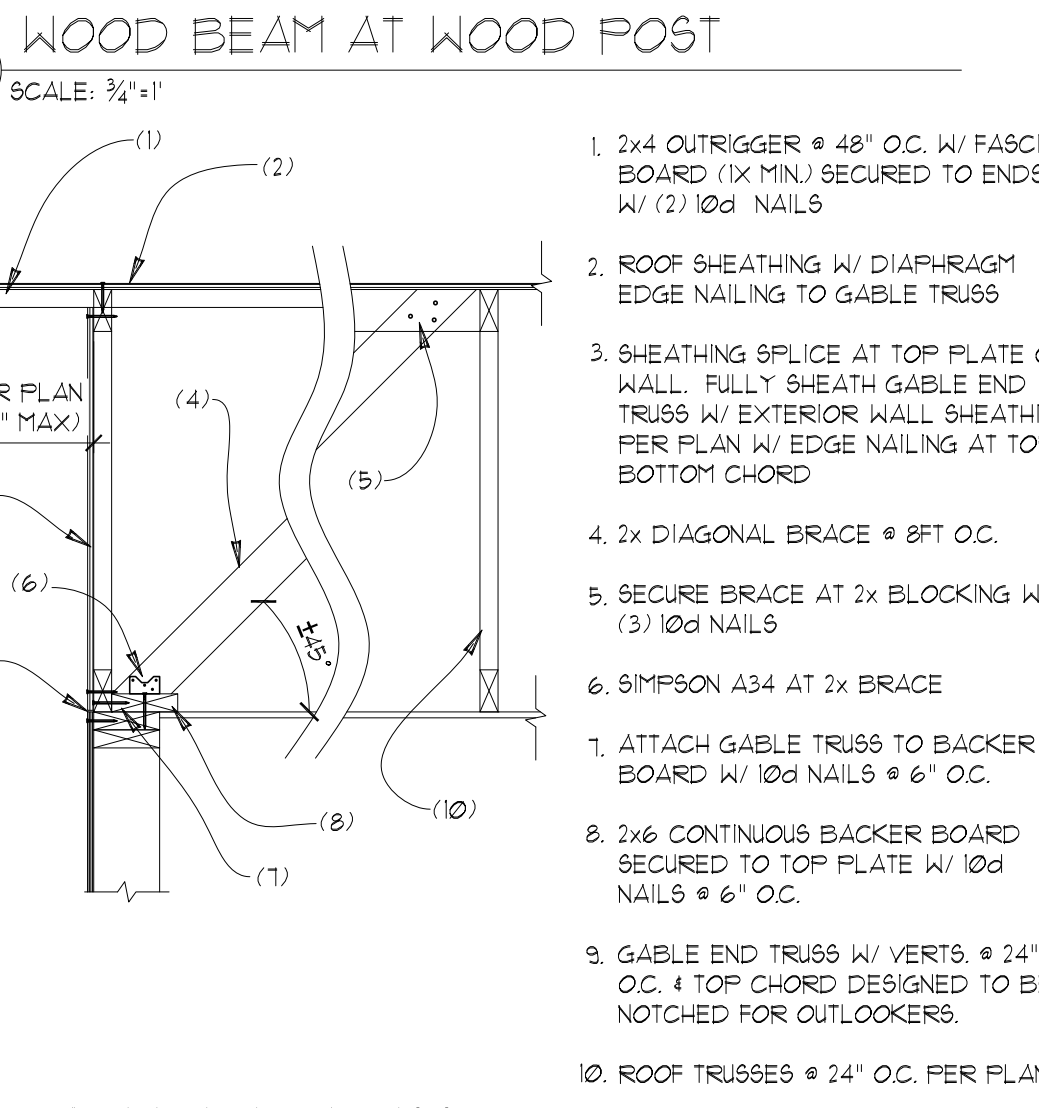
- 2x P.T. LEDGER TO MATCH DECK JOIST W/ 1/2"x4" LAG SCREWS W/ WASHERS OR 3/8" LEDGERLOK® SCREWS STAGGERED @ 8" O.C.
- SOLID 2x DECK JOIST PER PLAN W/ SIMPSON LUS28 HANGER INSTALLED USING 3 SIMPSON SD SCREWS
- SOLID RIM BOARD, 1/2" THICK MIN.
- FLOOR JOISTS PER PLAN

68 DECK LEDGER AT RIM BOARD  
SCALE: 3/4"=1"



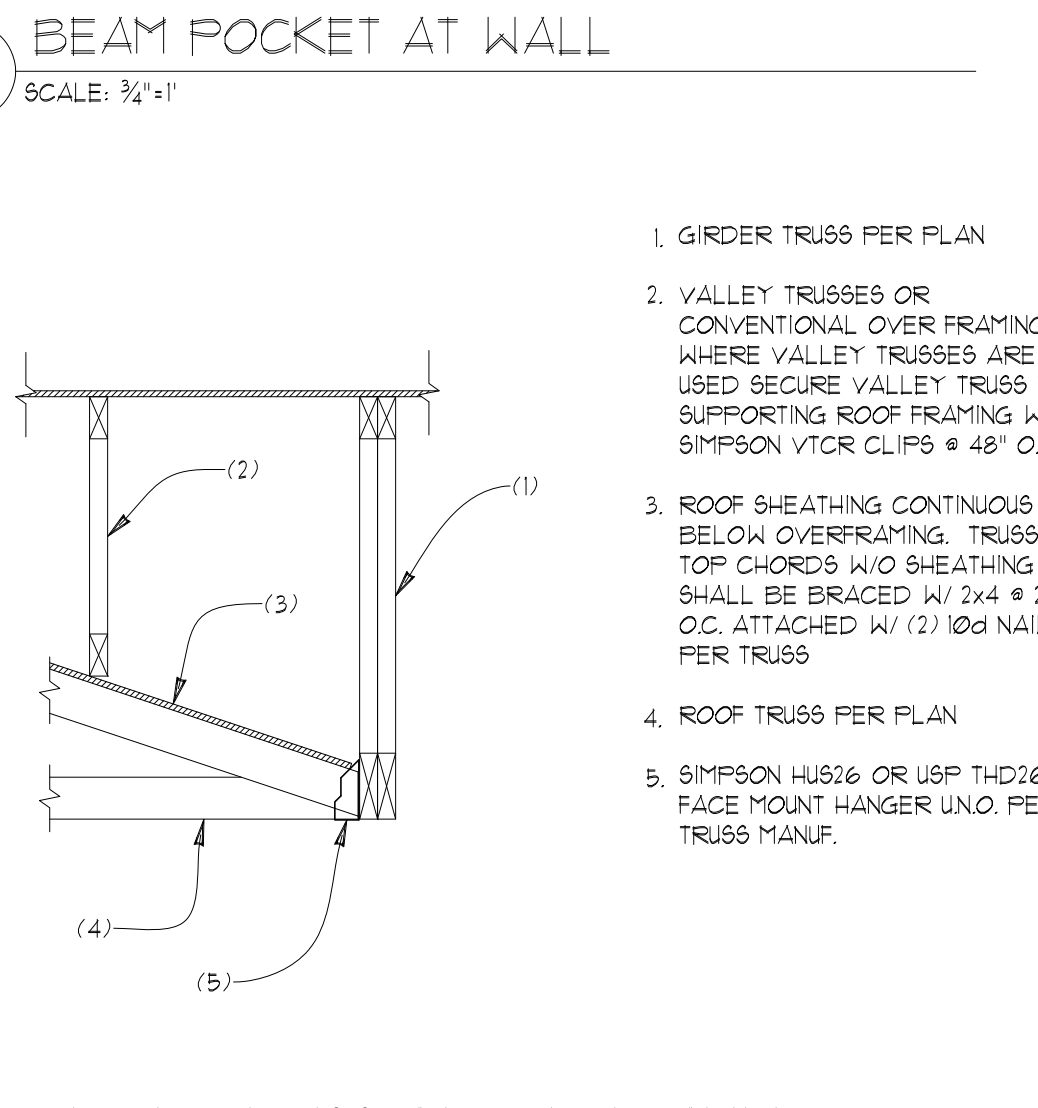
- TRUSS W/ ROOF SHEATHING PER PLAN
- DIAPHRAGM EDGE NAILING AT 2x BLOCKING TOE NAILED TO PLATE W/ (3) 8d NAILS OR ATTACHED W/ (1) SIMPSON REC PER BLOCK
- SIMPSON H25A TRUSS TIE OR SDAC TRUSS SCREW @ EACH TRUSS INSTALLED PER MFG. SPECS.
- 2x STUD WALL OR BEAM PER PLAN

69 ROOF TRUSS AT BEARING  
SCALE: 3/4"=1"



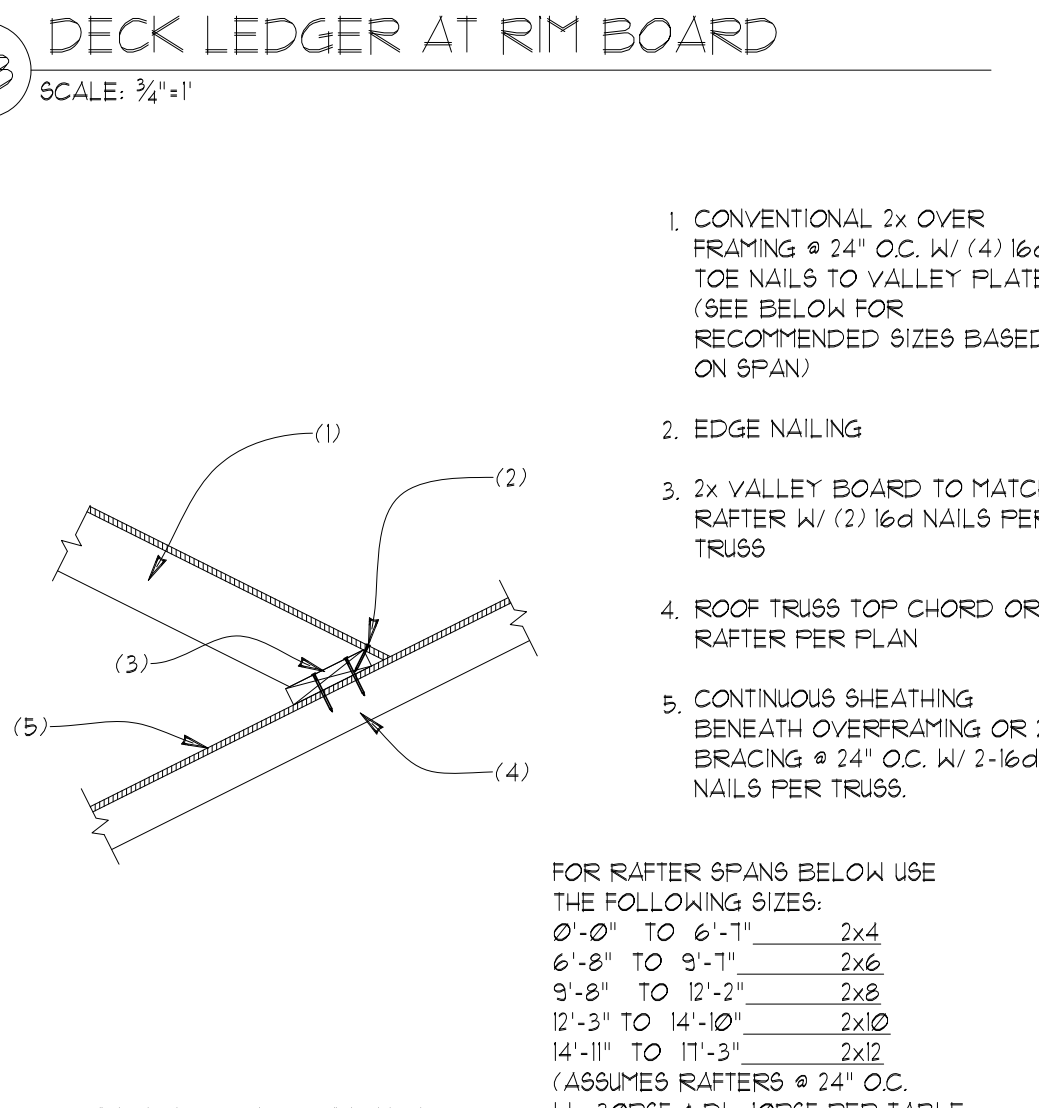
- 2x4 OUTRIGGER @ 48" O.C. W/ FASCIA BOARD (1X MIN) SECURED TO ENDS W/ (2) 10d NAILS
- ROOF SHEATHING W/ DIAPHRAGM EDGE NAILING TO GABLE TRUSS
- SHEATHING SPLICE AT TOP PLATE OF WALL. FULLY SHEATH GABLE END TRUSS W/ EXTERIOR WALL SHEATHING PER PLAN W/ EDGE NAILING AT TOP & BOTTOM CHORD
- 2x DIAGONAL BRACE @ 8FT O.C.
- SECURE BRACE AT 2x BLOCKING W/ (3) 10d NAILS
- SIMPSON A34 AT 2x BRACE
- ATTACH GABLE TRUSS TO BACKER BOARD W/ 10d NAILS @ 6" O.C.
- 2x6 CONTINUOUS BACKER BOARD SECURED TO TOP PLATE W/ 10d NAILS @ 6" O.C.
- GABLE END TRUSS W/ VERTS @ 24" O.C. & TOP CHORD DESIGNED TO BE NOTCHED FOR OUTLOOKERS.
- ROOF TRUSSES @ 24" O.C. PER PLAN

70 GABLE END TRUSS  
SCALE: 3/4"=1"



- GIRDER TRUSS PER PLAN
- VALLEY TRUSSES OR CONVENTIONAL OVER FRAMING WHERE VALLEY TRUSSES ARE USED SECURE VALLEY TRUSS TO SUPPORTING ROOF FRAMING W/ SIMPSON VTRC CLIPS @ 48" O.C.
- ROOF SHEATHING CONTINUOUS BELOW OVERFRAMING. TRUSS TOP CHORDS W/O SHEATHING SHALL BE BRACED W/ 2x4 @ 24" O.C. ATTACHED W/ (2) 10d NAILS PER TRUSS
- ROOF TRUSS PER PLAN
- SIMPSON HUS26 OR USF THD26 FACE MOUNT HANGER UNO. PER TRUSS MANUF.

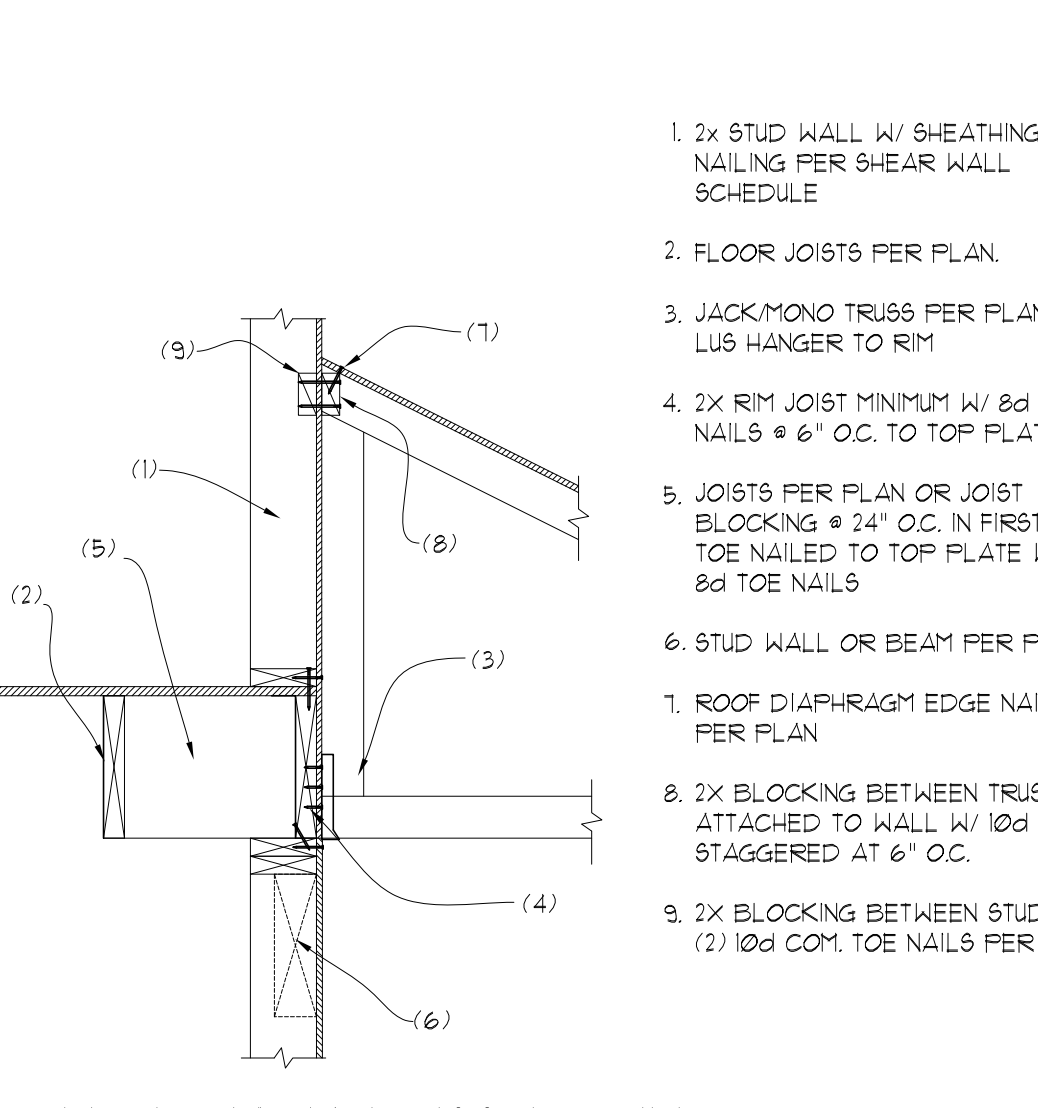
71 GIRDER TRUSS AT OVERFRAMING  
SCALE: 3/4"=1"



- CONVENTIONAL 2x OVER FRAMING @ 24" O.C. W/ (4) 16d TOE NAILS TO VALLEY PLATE (SEE BELOW FOR RECOMMENDED SIZES BASED ON SPAN)
- EDGE NAILING
- 2x VALLEY BOARD TO MATCH RAFTER W/ (2) 16d NAILS PER TRUSS
- ROOF TRUSS TOP CHORD OR RAFTER PER PLAN
- CONTINUOUS SHEATHING BENEATH OVERFRAMING OR 2x4 BRACING @ 24" O.C. W/ 2-16d NAILS PER TRUSS.

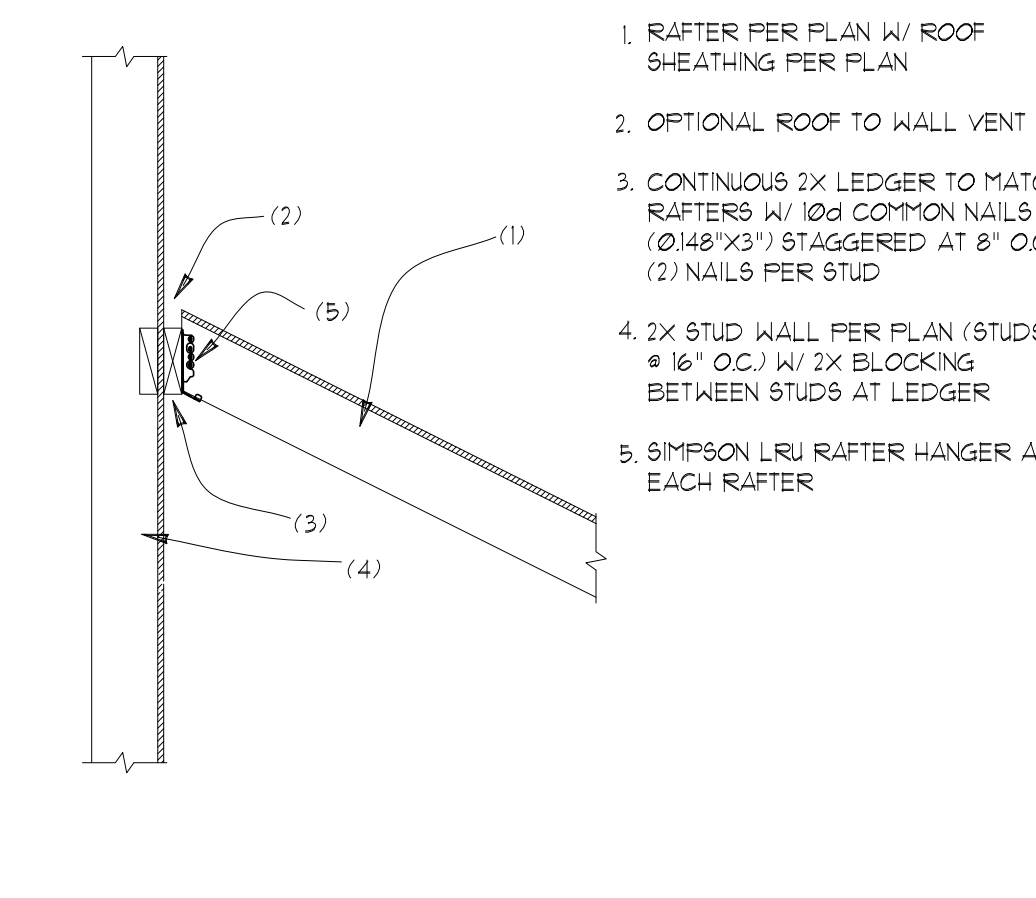
FOR RAFTER SPANS BELOW USE THE FOLLOWING SIZES:  
0'-0" TO 6'-1" 2x4  
6'-0" TO 9'-1" 2x6  
9'-0" TO 12'-1" 2x8  
12'-0" TO 14'-10" 2x10  
14'-11" TO 17'-3" 2x12  
(ASSUMES RAFTERS @ 24" O.C. LL+30PSF & DL+10PSF PER TABLE R202.5(13) FOR HF #2)

72 VALLEY FRAMING  
SCALE: 3/4"=1"



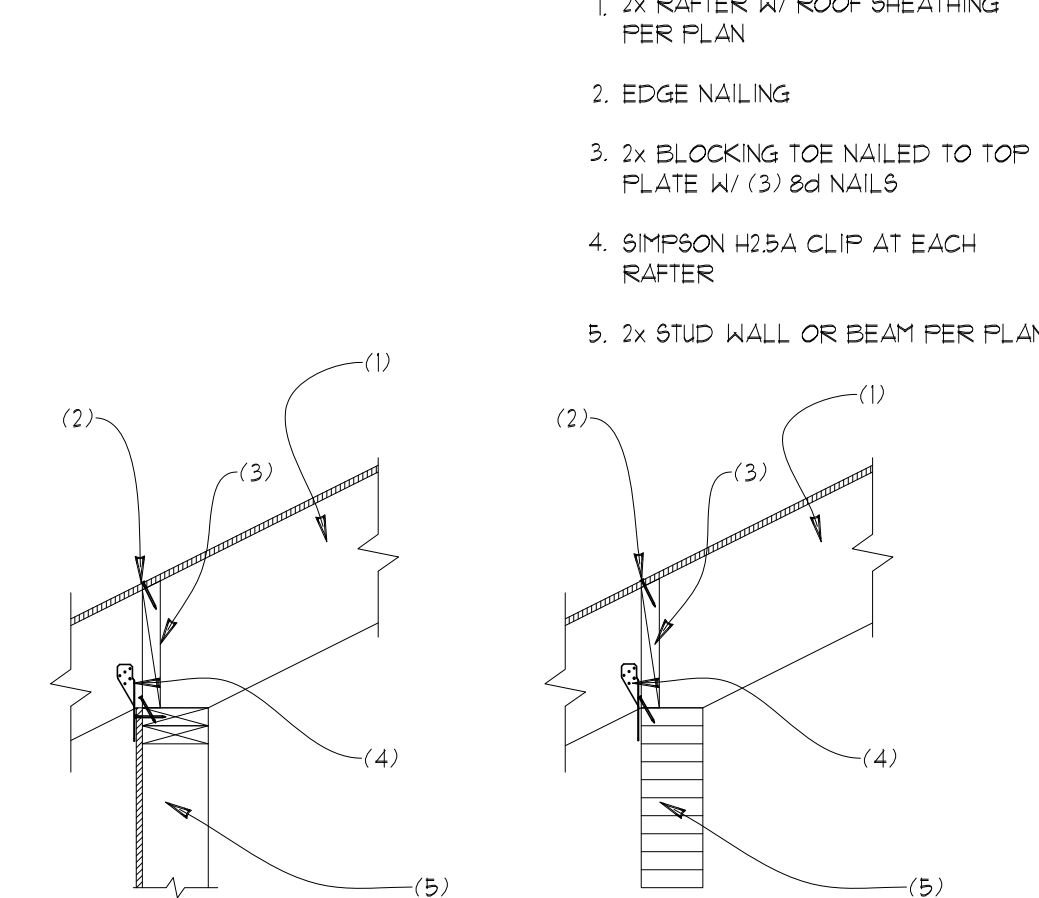
- 2x STUD WALL W/ SHEATHING & NAILING PER SHEAR WALL SCHEDULE
- FLOOR JOISTS PER PLAN
- JACK/MONO TRUSS PER PLAN W/ LUS HANGER TO RIM
- 2x RIM JOIST MINIMUM W/ 8d TOE NAILS @ 6" O.C. TO TOP PLATE
- JOISTS PER PLAN OR JOIST BLOCKING @ 24" O.C. IN FIRST BAY, TOE NAILED TO TOP PLATE W/ (2) 8d TOE NAILS
- STUD WALL OR BEAM PER PLAN
- ROOF DIAPHRAGM EDGE NAILING PER PLAN
- 2x BLOCKING BETWEEN TRUSSES ATTACHED TO WALL W/ 10d NAILS STAGGERED AT 6" O.C.
- 2x BLOCKING BETWEEN STUDS W/ (2) 10d COM. TOE NAILS PER STUD

73 MONO/JACK TRUSS TO RIM  
SCALE: 3/4"=1"



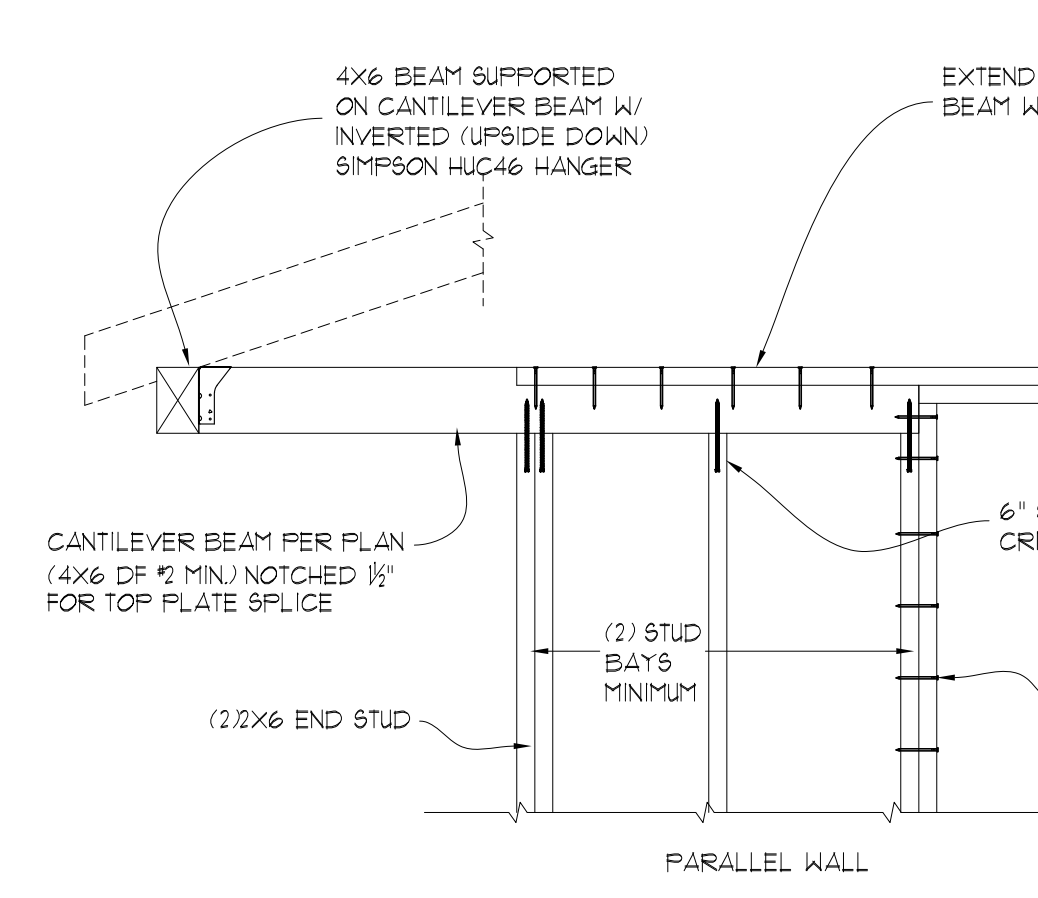
- RAFTER PER PLAN W/ ROOF SHEATHING PER PLAN
- OPTIONAL ROOF TO WALL VENT
- CONTINUOUS 2x LEDGER TO MATCH RAFTERS W/ 10d COMMON NAILS (Ø148"x3") STAGGERED AT 8" O.C. & (2) NAILS PER STUD
- 2x STUD WALL PER PLAN (STUDS @ 18" O.C.) W/ 2x BLOCKING BETWEEN STUDS AT LEDGER
- SIMPSON LRU RAFTER HANGER AT EACH RAFTER

74 RAFTER TO WALL  
SCALE: 3/4"=1"



- 2x RAFTER W/ ROOF SHEATHING PER PLAN
- EDGE NAILING
- 2x BLOCKING TOE NAILED TO TOP PLATE W/ (3) 8d NAILS
- SIMPSON H25A CLIP AT EACH RAFTER
- 2x STUD WALL OR BEAM PER PLAN

75 RAFTER AT WALL  
SCALE: 3/4"=1"

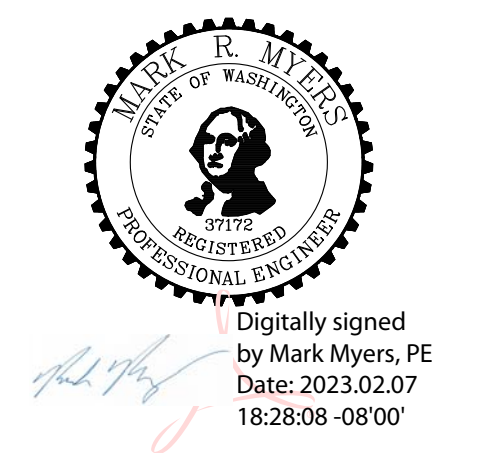


- 4x6 BEAM SUPPORTED ON CANTILEVER BEAM W/ INVERTED (UPSIDE DOWN) SIMPSON HUC46 HANGER
- EXTEND TOP 2x6 OF TOP PLATE & SECURE TO BEAM W/ (6) 16d SINKER NAILS (STAGGER)
- 6" SIMPSON SDAC EACH CRIPPLE STUD TO BEAM
- 2x STUD BAYS MINIMUM
- KING STUD W/ 16d SINKER NAILS STAGGERED @ 6" O.C. INTO POST
- 2x6 STUDS OF PARALLEL WALL NOTCHED TO LET IN 4x6 CANTILEVER BEAM

76 CANTILEVER BEAMS AT CORNERS FOR PORCH ROOF  
SCALE: 3/4"=1"

**STRUCTURAL PLANS**  
**RKK CONSTRUCTION**  
3419 72nd PLACE SE  
MERCER ISLAND, WA

**Myers Engineering, LLC**  
3206 50th Street Court, Ste. 210-B  
Gig Harbor, WA 98335  
PH: 253-858-3248  
Email: myengineer@centurytel.net



BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INITI:	DATE:
PLAN REVIEW	MM	2-7-2023

<b>S7</b>	DATE:	6-15-2022
	INITI:	MM
PROJECT #:		2431