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 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. POLYETHELENE

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 FARENHEIT 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 2015 WASHINGTON STATE ENERGY CODE.

a. ALL HEATING DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED WITH A MIN. OF R-8. ALL SEAM JOINTS SHALL BE TAPED, SEALED AND FASTENED WITH THE MINIMUM OF FASTENERS PER 2015 WSEC.

LIGHTING:
RECESSED LIGHTING FIXTURES INSTALLED IN BUILDING ENVELOPE SHALL COMPLY WITH WSEC PROVISIONS AND SHALL BE IC LISTED.

PIPE INSULATION:
NON RECIRCULATING HOT AND COLD WATER PIPES LOCATED IN UNCONDITIONED SPACE SHALL BE INSULATED TO R-3 MIN.

WHOLE HOUSE VENTILATION:
VENTILATION TO BE SUPPLIED BY FORCED AIR FURNACE

a. FAN SIZE TO BE DESIGNED BY MECHANICAL CONTRACTOR, TO MEET CURRENT WSEC.
R403.1.1 PROGRAMMABLE THERMOSTAT. WHERE THE PRIMARY HEATING SYSTEM IS A FORCED-AIR FURNACE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THE THERMOSTAT SHALL ALLOW FOR, AT A MINIMUM, A 5–2 PROGRAMMABLE SCHEDULE (WEEKDAYS/WEEKENDS) AND BE CAPABLE OF PROVIDING AT LEAST TWO PROGRAMMABLE SETBACK PERIODS PER DAY. THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C). THE THERMOSTAT SHALL INITIALLY BE PROGRAMMED BY THE MANUFACTURER WITH A HEATING TEMPERATURE SET POINT NO HIGHER THAN 70°F (21°C) AND A COOLING TEMPERATURE SET POINT NO LOWER THAN 78°F (26°C). THE THERMOSTAT AND/OR CONTROL SYSTEM SHALL HAVE AN ADJUSTABLE DEADBAND OF NOT LESS THAN 10°F.
EXCEPTIONS:
1. SYSTEMS CONTROLLED BY AN OCCUPANT SENSOR THAT IS CAPABLE OF SHUTTING THE SYSTEM OFF WHEN NO OCCUPANT IS SENSED FOR A PERIOD OF UP TO 30 MINUTES.
2. SYSTEMS CONTROLLED SOLELY BY A MANUALLY OPERATED TIMER CAPABLE OF OPERATING THE SYSTEM FOR NO MORE THAN TWO HOURS.

GENERAL NOTES

1. **CODE COMPLIANCE**
ALL WORK SHALL COMPLY WITH THE 2018 IBC, 2018 IRC, 2018 IMC, 2018 IFGC, 2018 NATIONAL FUEL GAS CODE, NFPA 54, 2018 LIQUEFIED PETROLEUM GAS CODE, NFPA 58, 2018 IFC, 2018 UPC, 2018 WSEC, WAC 51-11, 2018 VIAQ, WAC 51-13, 2018 NEC, AND WITH ALL LOCAL CODES AND ORDINANCES.

2. **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.

3. **DOCUMENT REVIEW/VERIFICATION:** CONSULT WITH ARCHITECT REGARDING ANY SUSPECTED ERRORS, OMISSIONS, OR CHANGES ON PLANS BEFORE PROCEEDING WITH THE WORK.

4. **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.

5. **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.

6. **GRADES:** VERIFY ALL GRADES AND THEIR RELATIONSHIP TO THE BUILDING(S).

7. **FLOOR LINES:** "FLOOR LINE" REFERS TO TOP OF CONCRETE SLAB OR TOP OF WOOD SUBFLOOR.

8. **REPETITIVE FEATURES:** OFTEN DRAWN ONLY ONCE AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.

9. **DOORS:** DOORS NOT DIMENSIONALLY LOCATED SHALL BE 6" FROM STUD FACE TO EDGE OF DOOR, ROUGH OPENING OR CENTERED BETWEEN WALLS AS SHOWN.

10. **WOOD ON CONCRETE:** WOOD MEMBERS IN CONTACT WITH CONCRETE AND/OR EXPOSED TO WEATHER, PROVIDE PRESSURE TREATED SILL PLATES.

11. **FRAMING:** INTERIOR FURRING & PARTITION WALLS TO BE 2x4 @ 16" O.C.

12. **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.

13. **FLUES:** FLUES TO BE LOCATED MINIMUM 2" FROM ALL COMBUSTIBLE MATERIALS.

14. **BASEMENT:** NO LPG PROPANE GAS APPLIANCES ARE ALLOWED IN THE BASEMENT.

15. **OTHER DOCUMENTATION:** REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL AND/OR LANDSCAPE DRAWINGS FOR ADDITIONAL DRAWINGS, NOTES, SCHEDULES AND SYMBOLS.

16. **PROTECTION:** PROTECT ALL EXISTING FINISHES & SURFACES. ANY DAMAGE TO BE REPAIRED @ NO ADDITIONAL EXPENSE TO OWNER.

17. **PERMITS:** SEPARATE ELECTRICAL, MECHANICAL AND PLUMBING PERMITS ARE REQUIRED IN ADDITION TO THE BASIC BUILDING PERMIT.

18. **ROOFING:** SHEET METAL ROOFING PER IRC TABLE 905.10.3(1) & LOCAL ROOFING STANDARDS.

19. **FIREPLACE:** PREFABRICATED GAS FIREPLACE SHALL BE PROVIDED WITH THE FOLLOWING:
A. PREFABRICATED FIREPLACE TO BEAR STAMP OF APPROVED TESTING LAB.
B. TIGHT FITTING GLASS OR METAL DOORS
C. OUTSIDE SOURCE OF COMBUSTION AIR DUCTED INTO THE FIREBOX, PER PREFAB. GAS FIREPLACE REQUIREMENTS. (6 SQ. INCHES MIN. W/OPERAVLE OUTSIDE AIR DUCT DAMPER.)
D. TIGHT FITTING FLUE DAMPERS, OPERATED BY A READILY ACCESSIBLE MANUAL

20. **GAS WATER HEATER:** GAS WATER HEATER SHALL BE STRAPPED TO PREVENT DISPLACEMENT IN AN EARTHQUAKE PER UMC 304.4.

21. **EXHAUST DUCTS:** PROVIDE BACKDRAFT DAMPERS AT ALL EXHAUST DUCTS.

22. **FURNACE ROOM:** PROVIDE COMBUSITON AIR OPENINGS INTO FURNACE RM. PER UMC 703.

23. **APPLIANCES:** CLEARANCES OF UL LISTED APPLIANCES FROM COMBUSTIBLE MATERIALS SHALL BE AS SPECIFIED IN UL LISTING.

24. **WATER FLOW:** SHOWER SHALL BE EQUIPMED WITH FLOW CONTROL DEVICE TO LIMIT WATER FLOW TO 2.5 GALLONS PER MINUTE.

25. **SMOKE DETECTORS:** S.D. THROUGHOUT NEW CONSTRUCTION PER 2018 IRC R313. TO BE MONITORED PER FIRE DEPT. REQUIREMENTS

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 HSPF 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 IV
WINDOWS – 0.28 U-FACTOR
DOORS – 0.20 U-FACTOR

(A.B.E.)
AVERAGE BUILDING ELEVATION

MARK	WALL LENGTH	GRADE / ELEVATION	CALCULATION
A	17'	+330.5'	5618.5
B	3.5'	+330.5'	1157
C	22'	+330.5'	7271
D	2.0'	+330.5'	661
E	22'	+330.5'	7271
F	1'	+330.5'	330.5
G	10'	+330.5'	3305
H	21'	+331'	6951
I	16.5'	+331'	5461.5
J	9.5'	+331'	3144.5
K	65'	+331'	21515
L	33'	+331'	10923

TOTAL = 222.5'

222.5/73,609

A.B.E. = + 330.826

Or 330'–10"

LOT INFORMATION

ZONE: R-9.6
LOT: 11,233 s.f.

LOT SLOPE:
HIGH ELEVATION = +333.8' / LOW ELEVATION =+328' :: 5.8' of SLOPE
DISTANCE BETWEEN : 5.8/224 = 4.8 %

GROSS FLOOR AREA(s) (G.F.A.)

UPPER FLOOR :	1,959 S.F.
MAIN FLOOR :	1,359 S.F.
GARAGE :	694 S.F.
TOTAL G.F.A.	= 4,012.5 S.F.
Or	35.7 %

⚠1 MAX. G.F.A. = 40% Or 4,493 s.f.

LOT COVERAGE

MAIN STRUCTURE ROOF AREA : (Includes All Attached Porches)	2898 S.F.
VEHICULAR USE :	532 S.F.
TOTAL COVERAGE	3430 S.F.
Or	30.5 %

⚠1 MAX. G.F.A. = 40% Or 4,493 s.f.

LOT HARDSCAPE

WALKWAY :	100 S.F.
BACK PATIO :	128 S.F.
TOTAL HARDSCAPE	228 S.F. Or 2.0 %

⚠1 MAX. HARDSCAPE = 9% Or 1,010 s.f.

SITE NOTES

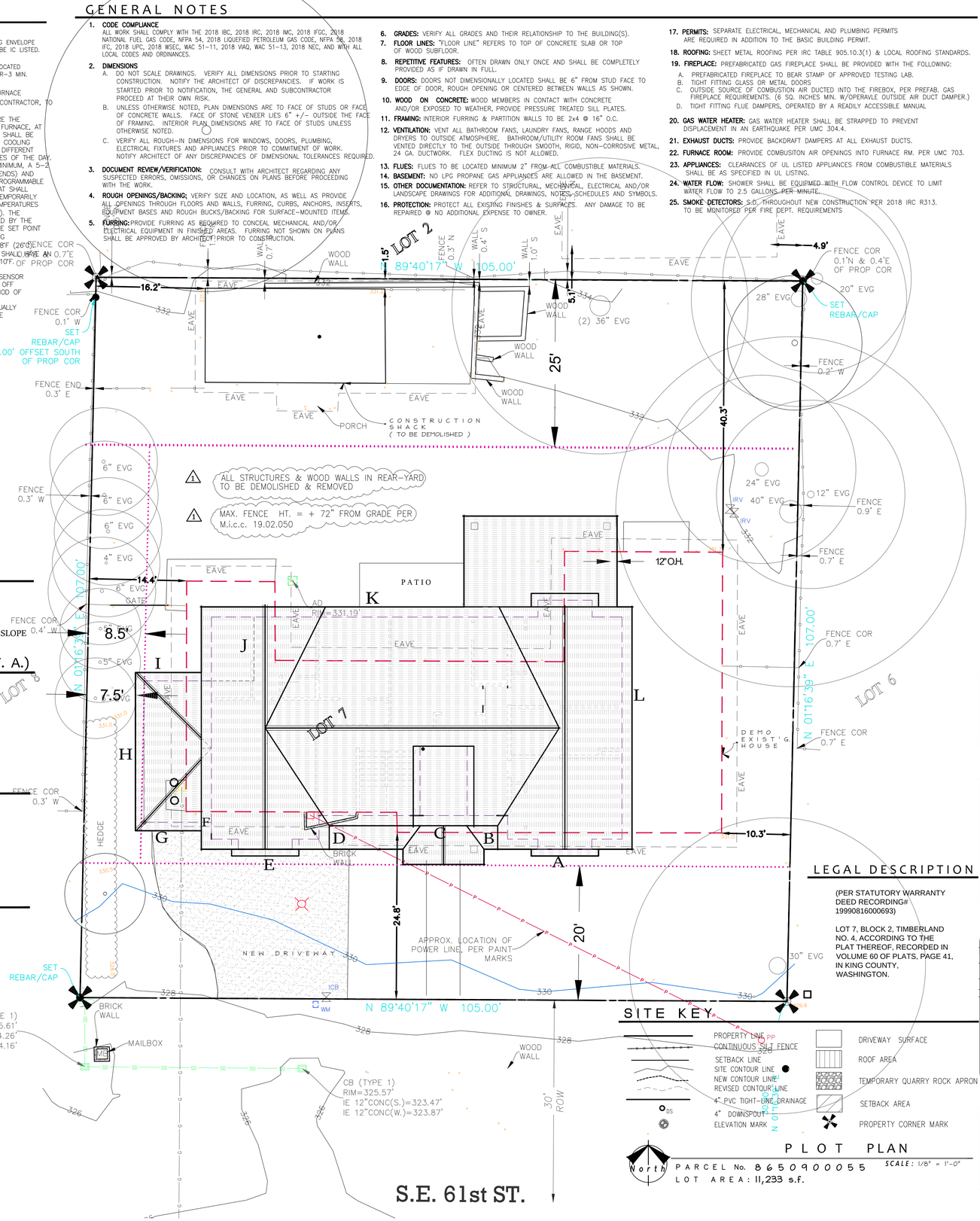
A. PLACE COMPOST SOCKS, COMPOST BERMS, FILTER FABRIC FENCING, STRAW BAILS, STRAW WATTLES, OR OTHER APPROVED PERIMETER CONTROLL BMP'S TO ELIMINATE CONSTRUCTION STORMWATER RUN-OFF.

B. ELLIMINATE UNCONTROLLED CONVEYANCE OF MUD & DIRT INTO THE RIGHT-OF-WAY (R.O.W)

C. COVER BARE SOILS WITH COMPOST BLANKETS, STRAW, MULCH, MATTING, OR OTHER APPROVED EQUAL TO CONTROL CONSTRUCTION STORMWATER RUN-OFF.

D. COVER STOCKPILES OF BARE SLOPES WITH COMPOST BLANKETS, TARPS, MATTING OR OTHER APPROVED EQUAL TO CONTROL CONSTRUCTION STORMWATER RUN-OFF.

E. 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.)



SITE KEY

PROPERTY LINE
CONTINUOUS SILT FENCE
SETBACK LINE
SITE CONTOUR LINE
NEW CONTOUR LINE
REVISED CONTOUR LINE
4" PVC TIGHT-LINE DRAINAGE
4" DOWNSPOUT
ELEVATION MARK
DRIVEWAY SURFACE
ROOF AREA
TEMPORARY QUARRY ROCK APRON
SETBACK AREA
PROPERTY CORNER MARK

PLOT PLAN

North

PARCEL No. 8650900055 SCALE: 1/8" = 1'-0"
LOT AREA: 11,233 s.f.

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING# 19990816000693)

LOT 7, BLOCK 2, TIMBERLAND NO. 4, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 60 OF PLATS, PAGE 41, IN KING COUNTY, WASHINGTON.

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

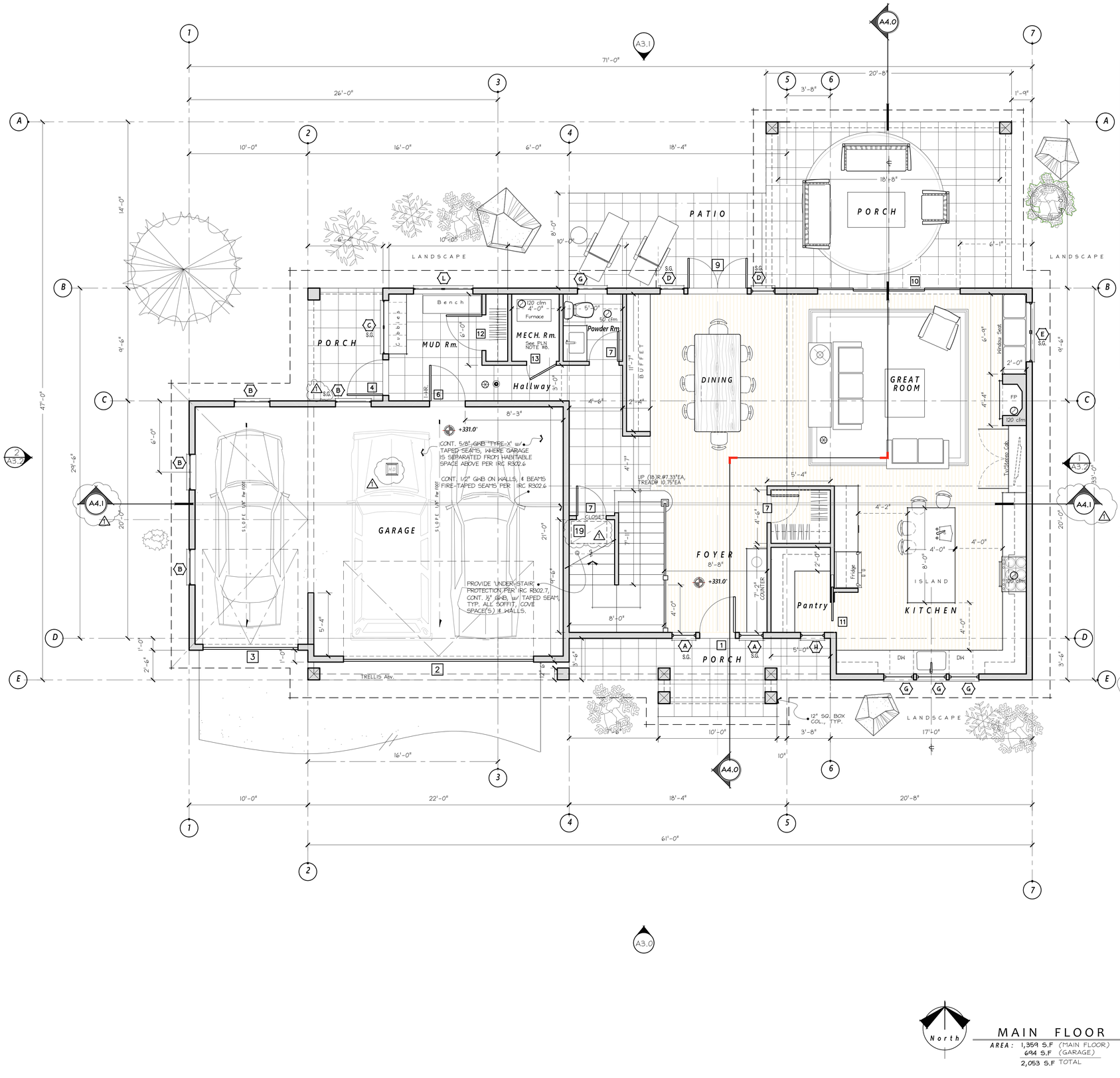
PROJECT NAME:	PROJECT ADDRESS:
R K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

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

STAMP:
4884
RICHARD A. FISHER STATE OF WASHINGTON

PROJECT #:	21020
DATE:	NOV. 8, 2021
DRAWN BY:	N.F.W
REVISIONS:	
No.	DESCRIPTION
⚠1	BLDG. DEPT. REVIEW - 2/22

SHEET No.:
A1.0



WINDOW SCHEDULE

TAG	DIMENSIONS (R.O. = w x h.)	TYPE	NOTES
A	2'-0" X 6'-0"	SIDELITE	SAFETY GLAZE / (4) LITES Ea.
B	3'-0" X 3'-0"	CASEMENT	
C	(2) 2'-6" X 3'-6"	CSMNT/CSMNT	EGRESS / SAFETY GLAZE
D	2'-0" X 5'-0"	SIDELITE	SAFETY GLAZE
E	(2) 2'-6" X 5'-0"	CSMNT/CSMNT	SAFETY GLAZE
F	(2) 2'-6" X 3'-0"	CSMNT/CSMNT	SAFETY GLAZE
G	2'-6" X 3'-6"	CASEMENT	
H	2'-0" X 3'-0"	CASEMENT	(4) LITES
I	6'-0" X 3'-0"	PICTURE	(4) LITES
J	3'-0" X 4'-0"	CASEMENT	SAFETY GLAZE / (4) LITES Ea.
K	(2) 3'-0" X 4'-0"	CSMNT/CSMNT	SAFETY GLAZE / (4) LITES Ea.
L	(2) 2'-6" X 4'-0"	CSMNT/CSMNT	(4) LITES
M	(3) 2'-6" X 4'-0"	CASE/PIC/CASE	
N	(2) 2'-6" X 3'-6"	CSMNT/CSMNT	SAFETY GLAZE / (4) LITES Ea.
O	4'-0" X 2'-0"	SLIDER	SAFETY GLAZE / (2) LITES
P	(2) 2'-0" X 2'-0"	AWNING/AWN'G	SAFETY GLAZE
t	Width below X 1'-6"	TRANSOM	

1,359 S.F

NOTES:
1. S.G. ' = SAFTEY GLAZING.
2. DOOR 'U-FACTOR' = 0.20
3. WINDOW 'U-FACTOR' = 0.28

DOOR SCHEDULE

TAG	DIMENSIONS (R.O. = w x h.)	TYPE	NOTES
1	3'-0" X 6'-8"	ENTRY	SOLID WD./SAFTEY GLAZE / LOCKSET
2	16'-0" X 8'-0"	GARAGE	'CARRAIGE STYLE'
3	8'-0" X 8'-0"	GARAGE	'CARRAIGE STYLE'
4	3'-0" X 6'-8"	GLASS	SAFETY GLAZE
5	5'-0" X 6'-8"	BARN SLIDER	EXPOSED HARDWARE
6	3'-0" X 6'-8"	SEPARATION	1-HR. FIRE RATED w/ INTEGRAL SMOKE GASKETS 'SELF-CLOSER' REQUIRED PER R302.5.1
7	2'-6" X 6'-8"	STND. WOOD	
8	(2) 3'-0" X 6'-8"	GLASS	SAFETY GLAZE
9	(2) 2'-6" X 6'-8"	GLASS	SAFETY GLAZE
10	(4) 3'-0" X 6'-8"	DBL.SLIDER	.
11	2'-6" X 6'-8"	POCKET	POCKET HARDWARE
12	3'-0" X 6'-8"	STND. WOOD	
13	3'-0" X 6'-8"	SOLID WOOD	LOUVERED MECH. DOOR - SEE PLAN NOTE #8
14	2'-0" X 6'-8"	STND. WOOD	
15	(2) 3'-0" X 6'-8"	STND. WOOD	
16	(2) 2'-6" X 6'-8"	STND. WOOD	
17	(2) 2'-6" X 6'-8"	GLASS INTERIOR	
18	22.5# X 4'-0"	ATTIC ACCESS	DROP DOWN LADDER
19	22.5# X 3'-0"	CRAWL ACCESS	INSULATED / REMOVABLE PANEL

NOTES:
1. 'S.G.' = SAFTEY GLAZING.
2. DOOR 'U-FACTOR' = 0.20
3. WINDOW 'U-FACTOR' = 0.28

PLAN NOTES

1. WHOLE HOUSE VENTILATION TO BE- PROVIDE BY FORCED AIR FURNACE WITH DIRECT OUTSIDE AIR.
2. SMOKE DETECTORS SHALL BE HARD-WIRED & PROVIDED IN EXISTING SPACES WITH BATTERY BACK-UP PER IRC 313 & INSTALLED PER IRC 314.2.2
3. STAIR HANDRAILS TO CONFORM TO I.R.C. SECT. 311.5.6. w/ 36" ht. FROM TREAD NOSING, TYP.
4. ALL OUTLETS @ COUNTER HEIGHT, (#BATHS, KITCHEN, LAUNDRY) SHALL BE G.F.C.I.
5. 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
6. SEE SHEET A2.0 FOR DOOR & WINDOW SCHEDULES.
7. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS & RAILINGS SHALL BE CAPABLE OF RESISTING 200 Lb.
8. 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.

PLAN KEY

- 4" PARTITION WALL
- 6" EXTERIOR WALL
- STRUCTURE BELOW
- SITE SETBACK AREA
- xx cfm — MECHANICAL VENT FAN (CUBIC FEET PER MINUTE)
- ELEVATION MARKER
- CARBON MONOXIDE DETECTOR (APPROVED PER IRC315.1)
- CENTERLINE
- PROPERTY CORNER MARK
- SMOKE DETECTOR (PER R313 & R314.2.2)
- S.G. SAFTEY-GLAZING
- HEAT DETECTOR (PER R314.2.3)

North

MAIN FLOOR PLAN

AREA: 1,359 S.F (MAIN FLOOR)
694 S.F (GARAGE)
2,053 S.F TOTAL

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

PROJECT NAME: R K Construction LOT - 7

PROJECT ADDRESS: 9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE: PERMIT SET

SHEET TITLE: MAIN FLOOR PLAN

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 21020

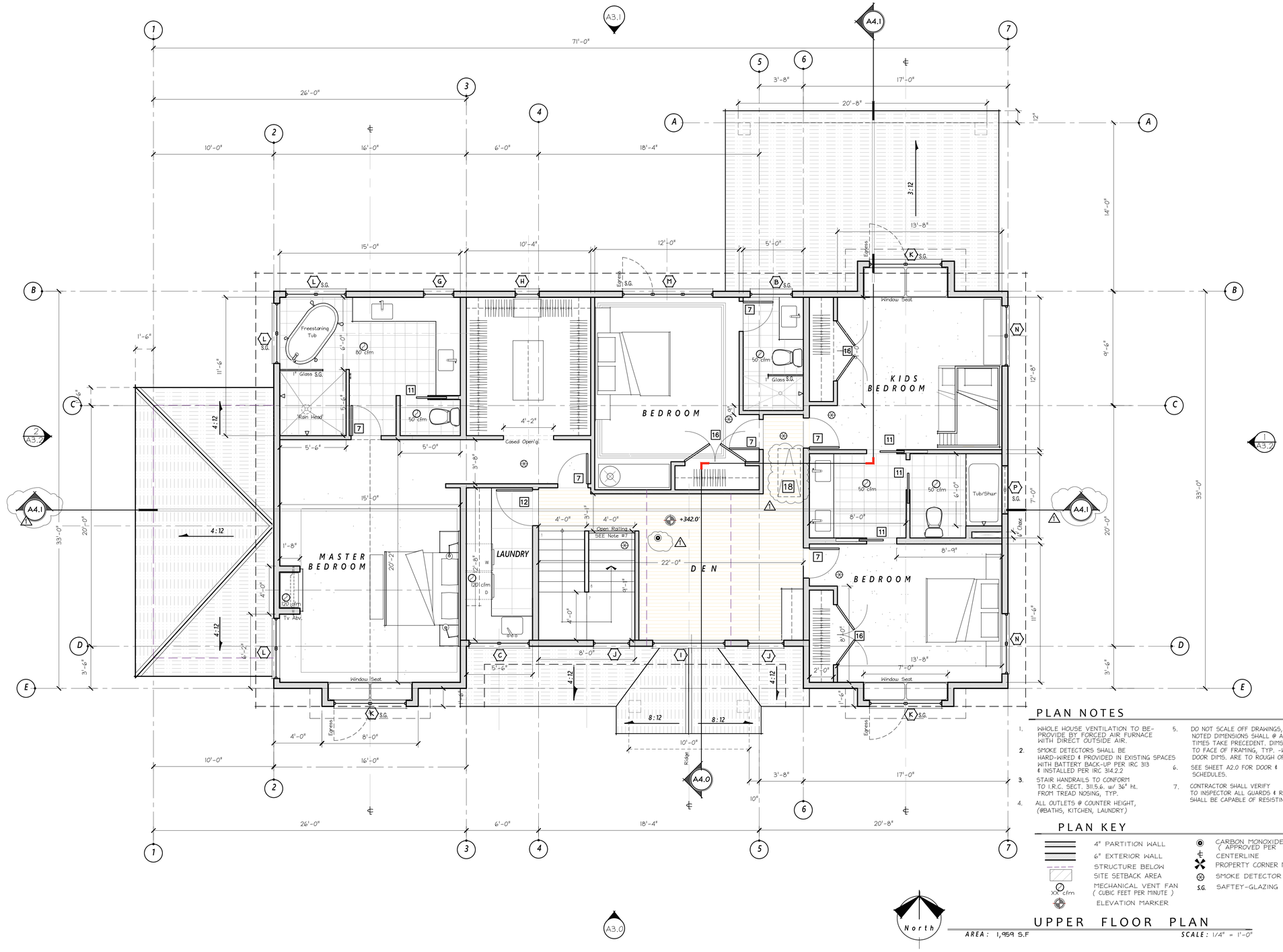
DATE: NOV. 8, 2021

DRAWN BY: N.F.W

REVISIONS:

Tag	Description
1	M.I. BLDG. DEPT. REVIEW

SHEET No.: A2.0



PLAN NOTES

1. WHOLE HOUSE VENTILATION TO BE- PROVIDE BY FORCED AIR FURNACE WITH DIRECT OUTSIDE AIR.
2. SMOKE DETECTORS SHALL BE HARD-WIRED & PROVIDED IN EXISTING SPACES WITH BATTERY BACK-UP PER IRC 313 & INSTALLED PER IRC 314.2.2
3. STAIR HANDRAILS TO CONFORM TO I.R.C. SECT. 311.5.6. w/ 36" ht. FROM TREAD NOSING, TYP.
4. ALL OUTLETS @ COUNTER HEIGHT, (@BATHS, KITCHEN, LAUNDRY)
5. 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
6. SEE SHEET A2.0 FOR DOOR & WINDOW SCHEDULES.
7. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS & RAILINGS SHALL BE CAPABLE OF RESISTING 200 Lb.

PLAN KEY

- 4" PARTITION WALL
- 6" EXTERIOR WALL
- STRUCTURE BELOW
- SITE SETBACK AREA
- XX cfm — MECHANICAL VENT FAN (CUBIC FEET PER MINUTE)
- ELEVATION MARKER
- CARBON MONOXIDE DETECTOR (APPROVED PER IRC315.1)
- CENTERLINE
- PROPERTY CORNER MARK
- SMOKE DETECTOR
- S.G. — SAFTEY-GLAZING

North

UPPER FLOOR PLAN

AREA: 1,959 S.F

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

PROJECT NAME:	PROJECT ADDRESS:
R K K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	UPPER FLOOR PLAN

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #:	21020
DATE:	NOV. 8, 2021
DRAWN BY:	N. F. W.
REVISIONS:	

Tag	Description
1	M.I. BLDG. DEPT. REVIEW

SHEET No.:

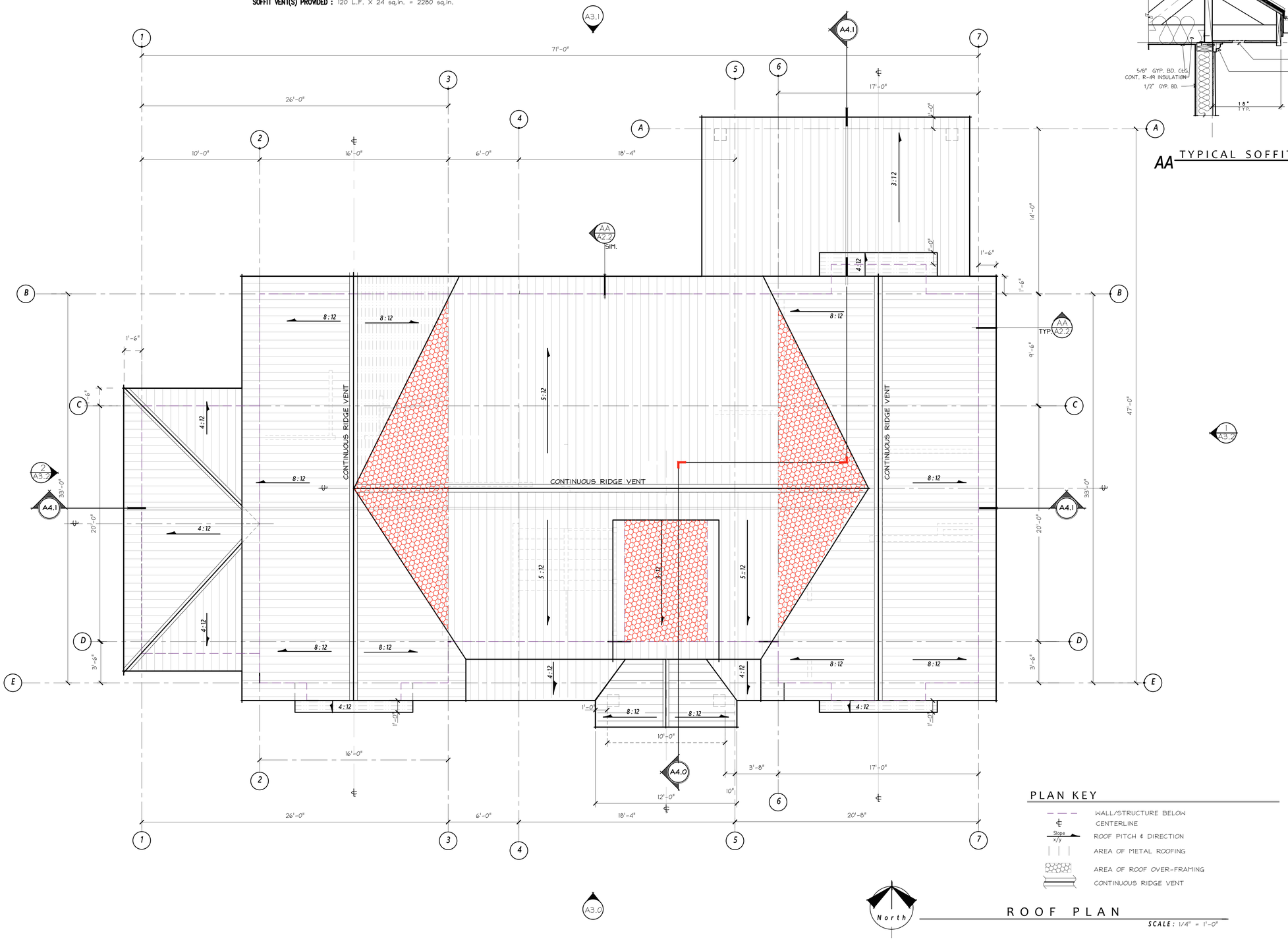
A2.1

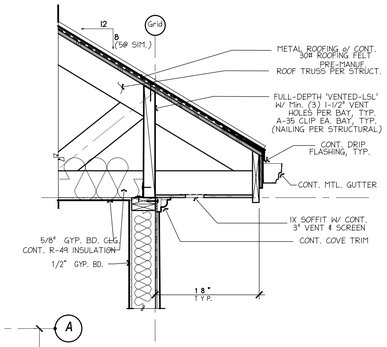
ATTIC VENTING

HOUSE AREA = 1,959 s.f.

1959 / 300 = 6.53 s.f.

RIDGE VENT(S) PROVIDED : 94 L.F. X 16 sq.in. = 1504 sq.in.
SOFFIT VENT(S) PROVIDED : 120 L.F. X 24 sq.in. = 2280 sq.in.





AA TYPICAL SOFFIT DETAIL
SCALE : 3/4" = 1'-0"

PLAN KEY

- WALL/STRUCTURE BELOW
- ℄ CENTERLINE
- Slope x/12 — ROOF PITCH & DIRECTION
- AREA OF METAL ROOFING
- AREA OF ROOF OVER-FRAMING
- CONTINUOUS RIDGE VENT

ROOF PLAN
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

PROJECT NAME:	PROJECT ADDRESS:
R K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	ROOF PLAN

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #: 21020
DATE: NOV. 8, 2021
DRAWN BY: N.F.W.
REVISIONS:

Tag	Description

SHEET No.:

A2.2

SOUTH ELEVATION

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

PROJECT NAME:	PROJECT ADDRESS:
R K K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	*ELEVATIONS*

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #:	21020
DATE:	NOV. 8, 2021
DRAWN BY:	N.F.W

REVISIONS:

Tag	Description

SHEET No.:

A3.0

NORTH ELEVATION

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

PROJECT NAME:	PROJECT ADDRESS:
R K K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	*ELEVATIONS*

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

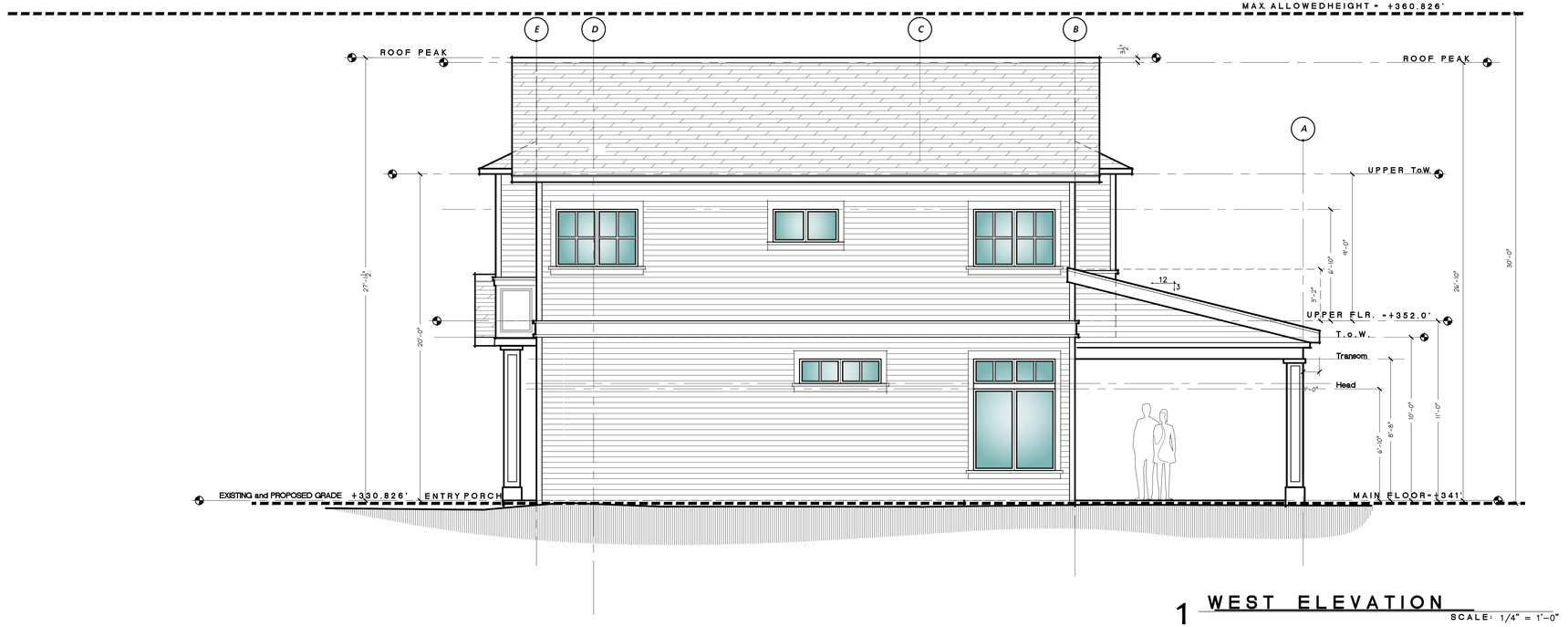
PROJECT #:	21020
DATE:	NOV. 8, 2021
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

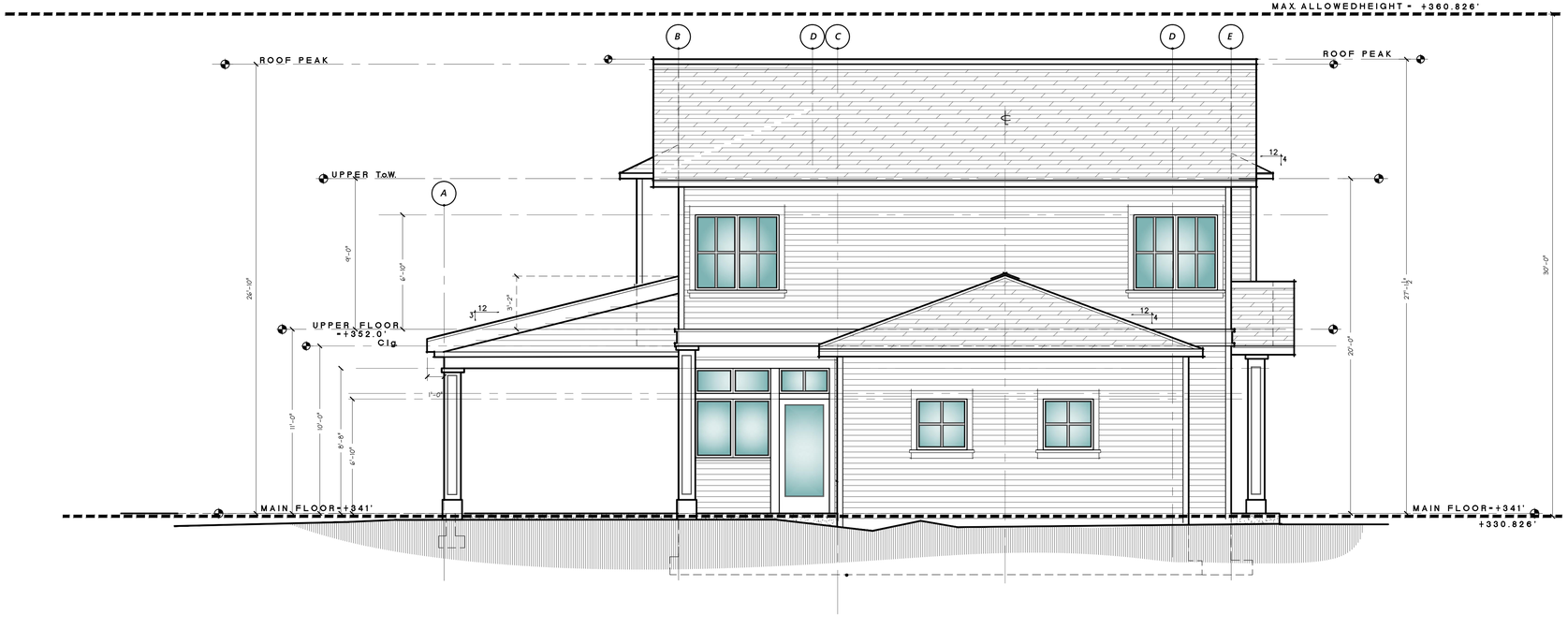
SHEET No.:

A3.1



1 WEST ELEVATION

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



2 EAST ELEVATION

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

PROJECT NAME:	PROJECT ADDRESS:
R K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	*ELEVATION*

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

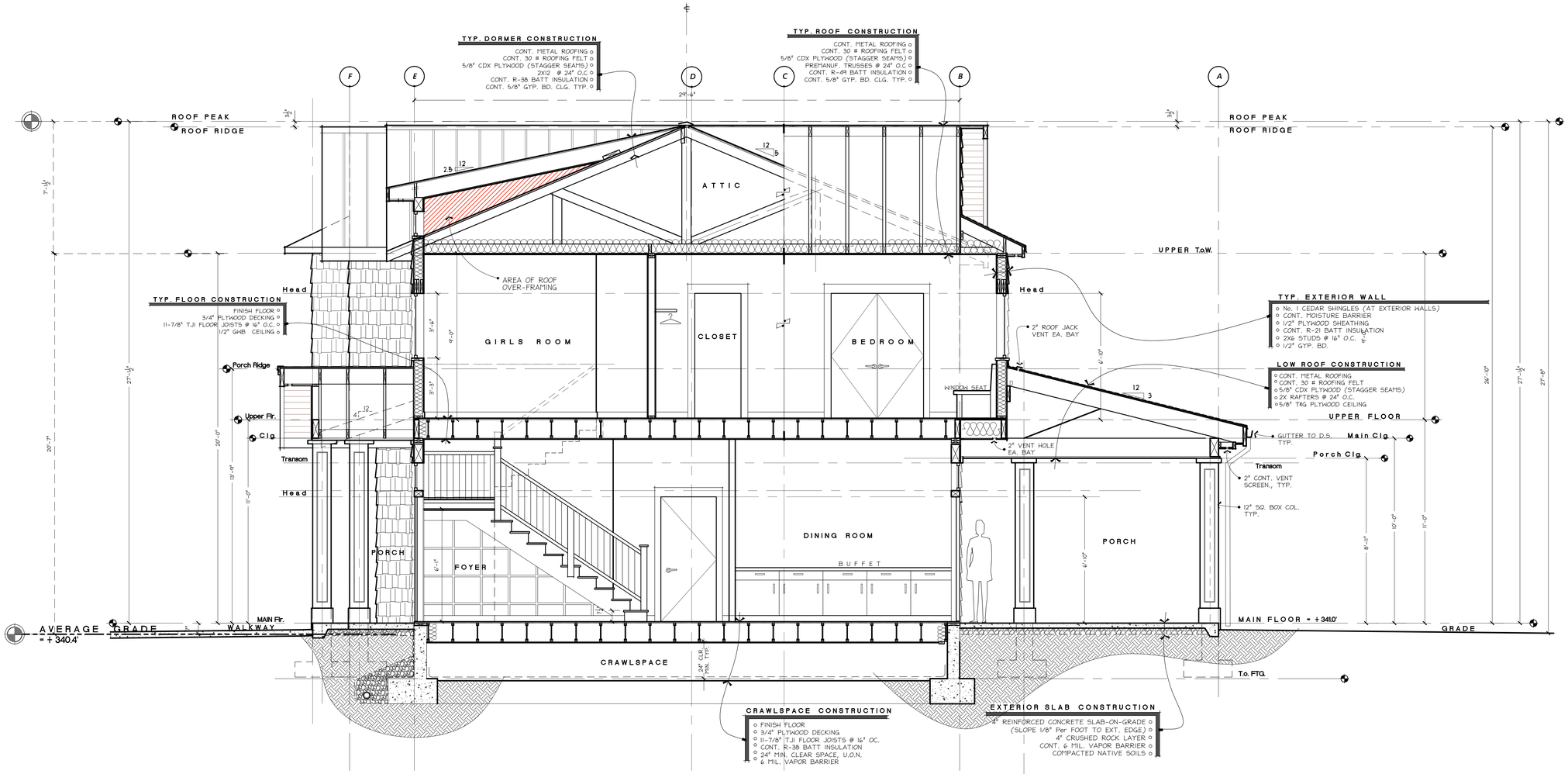
PROJECT #:	21020
DATE:	NOV. 8, 2021
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

SHEET No.:

A3.2



SECTION

SCALE: 3/8" = 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

PROJECT NAME:	PROJECT ADDRESS:
R K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	SECTION

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

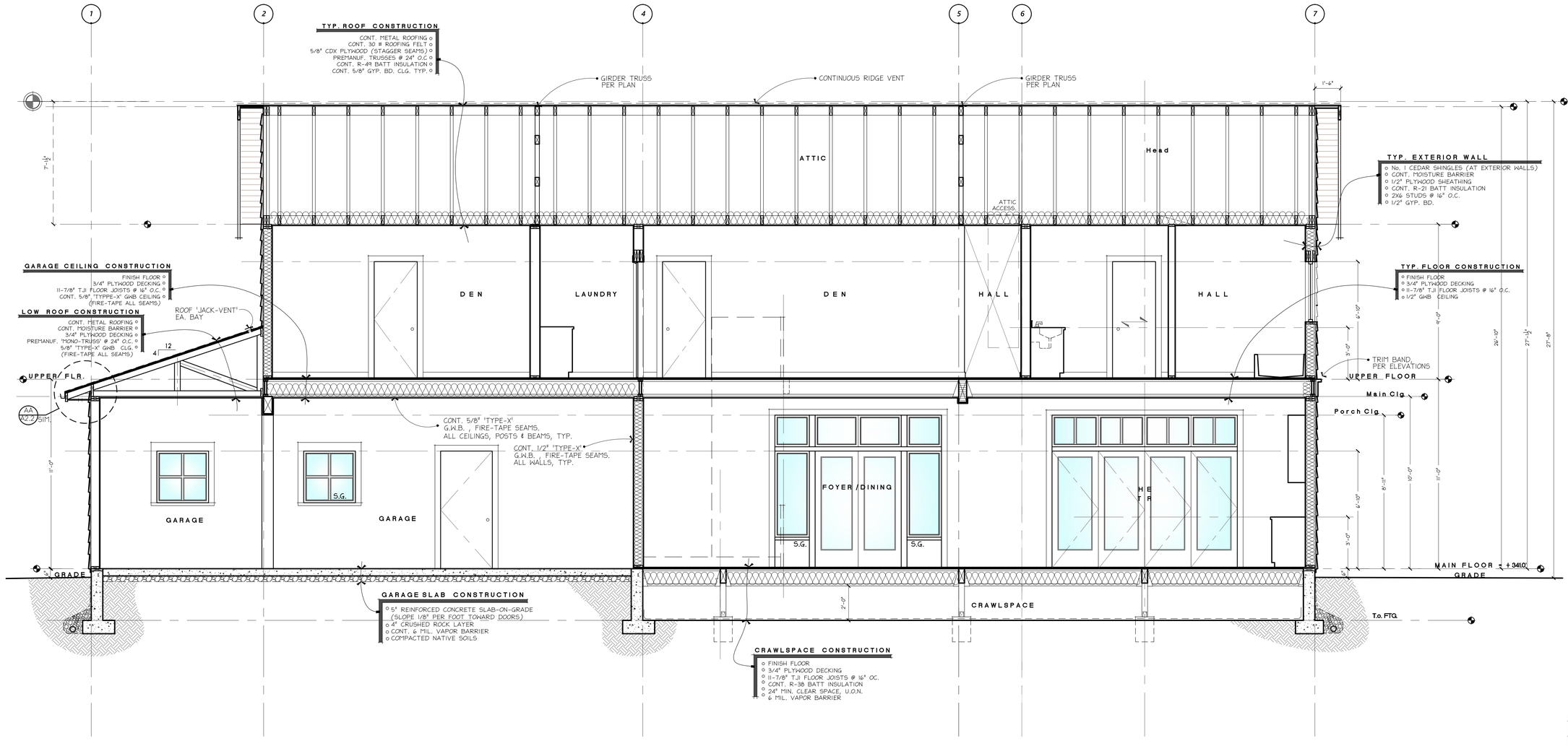
PROJECT #:	21020
DATE:	NOV. 8, 2021
DRAWN BY:	N.F.W.

REVISIONS:

Tag	Description

SHEET No.:

A4.0



SECTION

SCALE: 3/8" = 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

PROJECT NAME:	PROJECT ADDRESS:
R K Construction LOT - 7	9026 S.E. 61st St. Mercer Is., WA 98040

SET TITLE:	PERMIT SET
SHEET TITLE:	SECTION

STAMP:

4884
RICHARD A. FISHER
STATE OF WASHINGTON

PROJECT #:	21020
DATE:	NOV. 8, 2021
DRAWN BY:	N.F.W.
REVISIONS:	
1	M.I. BLDG. DEPT REVIEW

SHEET No.: A4.1

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING# 19990816000693)

LOT 7, BLOCK 2, TIMBERLAND NO. 4, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 60 OF PLATS, PAGE 41, IN KING COUNTY, WASHINGTON.

BASIS OF BEARINGS

N 89°30'25" W BETWEEN SURVEY MONUMENTS FOUND AND HELD AS SHOWN HEREON, ON THE CENTERLINE OF S.E. 60TH ST., AS CALCULATED PER TIMBERLAND NO. 2, NO. 4 & NO. 6.

REFERENCES

R1 TIMBERLAND NO. 2, RECORDED IN VOLUME 58 OF PLATS, PAGE 27, RECORDS OF KING COUNTY, WASHINGTON.
R2 TIMBERLAND NO. 4, RECORDED IN VOLUME 60 OF PLATS, PAGE 41, RECORDS OF KING COUNTY, WASHINGTON.
R3 TIMBERLAND NO. 6, RECORDED IN VOLUME 68 OF PLATS, PAGE 15, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD(88) PER CITY OF MERCER ISLAND BENCHMARK NO. 1064
4" X 4" CONCRETE POST WITH BRASS NAIL IN CASE DOWN 1.0', NORTHERLY MOST OF 2 MONUMENTS IN CUL-DE-SAC OF S.E. 60TH ST.
EL: 302.38'

SURVEYOR'S NOTES

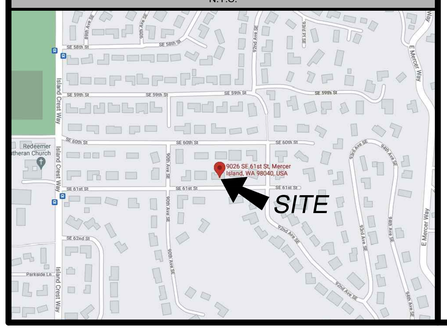
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN APRIL OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 865090-0055.
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 11,233 ±S.F. (0.26 ACRES)
6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

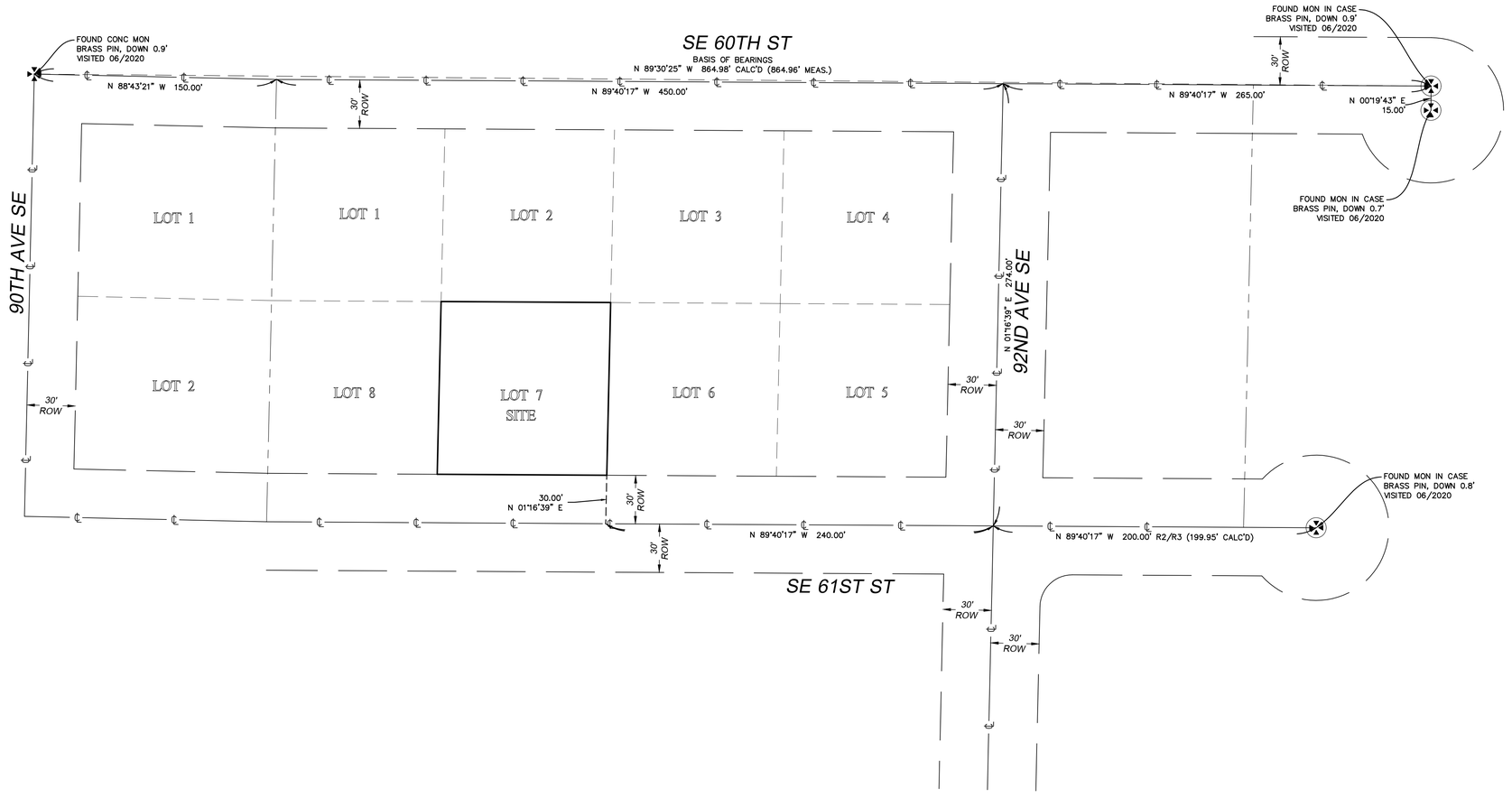
LEGEND

AREA DRAIN	MONUMENT (SURFACE, FOUND)
ASPHALT SURFACE	POST
BOLLARD	POWER METER
BUILDING	POWER (OVERHEAD)
CENTERLINE ROW	POWER POLE
CONCRETE SURFACE	REBAR & CAP (SET)
RETAINING WALL	SEWER LINE
FENCE LINE (WOOD)	SEWER MANHOLE
GAS LINE	STORM DRAIN LINE
GAS METER	TELEPHONE (OVERHEAD)
HEDGE FOLIAGE LINE	TREE (AS NOTED)
INLET (TYPE 1)	TV LINE
IRRIGATION CONTROL VALVE	WATER LINE
MAILBOX (RESIDENTIAL)	WATER METER
MONUMENT IN CASE (FOUND)	YARD LIGHT

VICINITY MAP

N.T.S.





CONTROL 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

SE 1/4 SW 1/4
SECTION: 19
TOWNSHIP: 24N
RANGE: 05E, W.M.
COUNTY: KING

measure success

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 8650900055

RKK CONSTRUCTION
9026 SE 61ST STREET
MERCER ISLAND, WA 98040

GOODMAN MILLER NICHOLAS — REGISTERED PROFESSIONAL LAND SURVEYOR — STATE OF WASHINGTON — 04/23/21

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

JOB NUMBER:	210621
DATE:	04/23/21
DRAFTED BY:	IDV / RPM
CHECKED BY:	TBR / JGM
SCALE:	N.T.S.

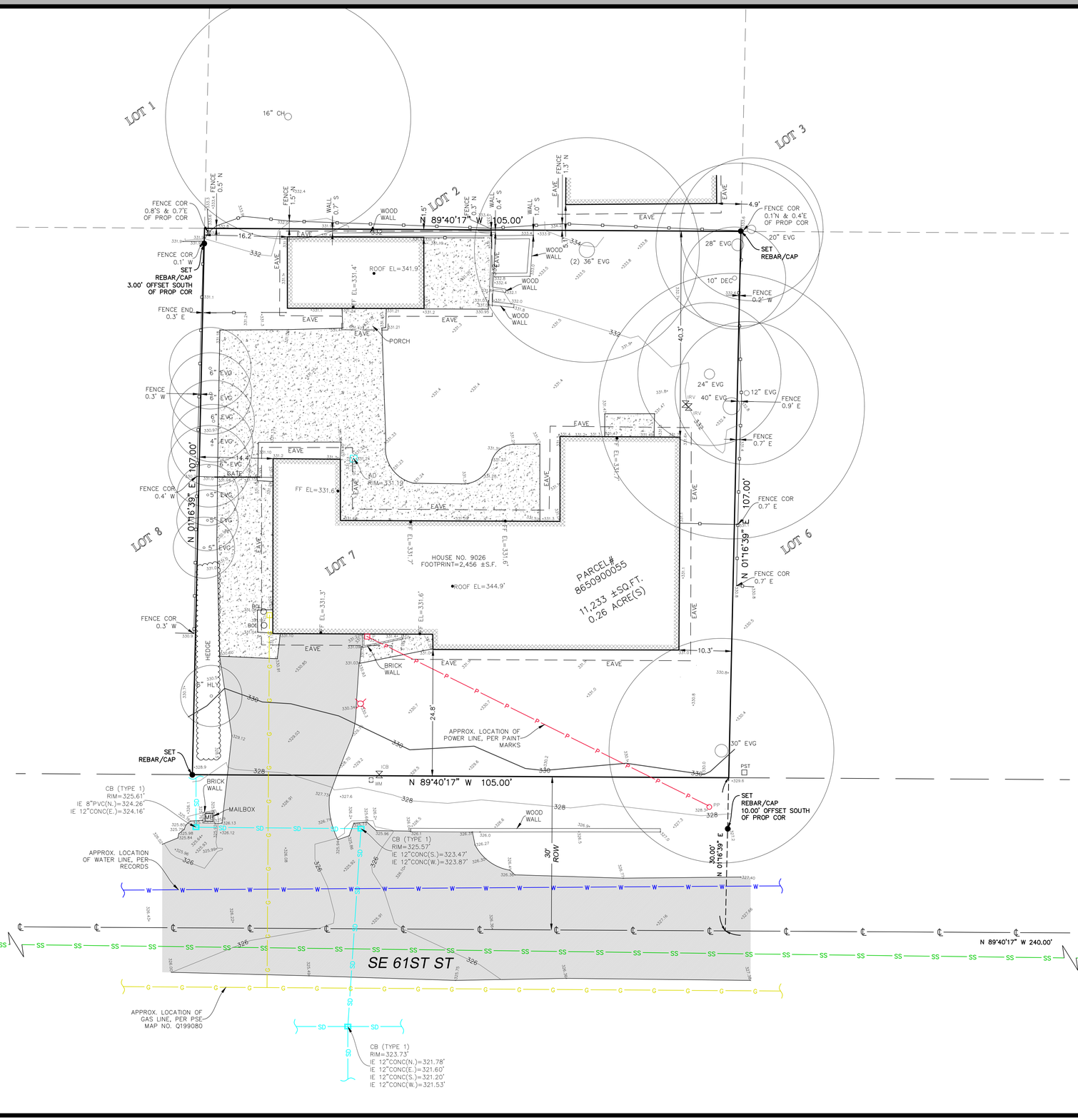
REVISION HISTORY

SHEET NUMBER
1 OF 2

TOPOGRAPHIC & BOUNDARY SURVEY

LEGEND

	AREA DRAIN		MONUMENT (SURFACE, FOUND)
	ASPHALT SURFACE	PST	POST
BOL	BOLLARD	P	POWER METER
	BUILDING	P	POWER (OVERHEAD)
	CENTERLINE ROW	PP	POWER POLE
	CONCRETE SURFACE		REBAR & CAP (SET)
	RETAINING WALL	SS	SEWER LINE
	FENCE LINE (WOOD)		SEWER MANHOLE
G	GAS LINE	SD	STORM DRAIN LINE
G	GAS METER	T	TELEPHONE (OVERHEAD)
	HEDGE FOLIAGE LINE	SIZE TYPE	TREE (AS NOTED)
	INLET (TYPE 1)	TV	TV LINE
ICB	IRRIGATION CONTROL VALVE	W	WATER LINE
MB	MAILBOX (RESIDENTIAL)	WM	WATER METER
	MONUMENT IN CASE (FOUND)		YARD LIGHT



(IN FEET)
1 INCH = 10 FT.

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

SE 1/4 SW 1/4
SECTION: 19
TOWNSHIP: 24N
RANGE: 05E, W.M.
COUNTY: KING

measure success

TOPOGRAPHIC & BOUNDARY SURVEY

RKK CONSTRUCTION
9026 SE 61ST STREET
MERCER ISLAND, WA 98040

GOODMAN MILLER NORTHWEST LAND SURVEYOR STATE OF WASHINGTON 21911 PROFESSIONAL 04/23/21

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

JOB NUMBER:	210621
DATE:	04/23/21
DRAFTED BY:	IDV / RPM
CHECKED BY:	TBR / JGM
SCALE:	1"=10'
REVISION HISTORY	
SHEET NUMBER	
2 OF 2	

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.

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

TP .....CHAIN LINK FENCE REQ FOR TREE PROTECTION

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE		
FILTER FABRIC FENCE (SILT FENCE)	SF	
STABILIZED CONSTRUCTION ENTRANCE	CE	
CATCH BASIN INLET PROTECTION	IP	
INTERCEPTOR SWALE SEE COR DWG 504, TYPE A TEMPORARY SWALE	IS	
TREE PROTECTION FENCING	TP	
CHECK DAM	CD	
STRAW WATTLES	SW	USE AS NEEDED

TREE PROTECTION NOTES (SOURCED FROM ARBORIST)

(REF: SEATTLE TREE CONSULTING, DOUGLAS SMITH, CERTIFIED ARBORIST)

-FOR THE TREES BEING RETAINED, TREE PROTECTION FENCING SHOULD BE INSTALLED AT THE OUTER EDGE OF THE DRIP LINE OR AS CLOSE TO IT AS IS PRACTICALLY POSSIBLE.

-FENCING SHOULD BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES AND REMAIN IN PLACE FOR THE DURATION OF THE PROJECT. FENCING SHOULD ONLY BE MOVED TEMPORARILY IF MINOR DISTURBANCES MUST OCCUR WITHIN THE DRIP LINE AND THE FENCING SHOULD BE REPLACED IMMEDIATELY ONCE THAT PORTION OF THE WORK IS COMPLETED.

-THE TREE PROTECTION AREA IS DESIGNATED TO BE AN AREA OF NO IMPACT, NO STORING OF MATERIALS, NO ENCROACHMENT AND NO STAGING OF DEBRIS.

-THE TREE PROTECTION FENCING SHOULD HAVE SIGNS EVERY 8' FACING ACCESS THAT INDICATE THE AREA IS A TREE PROTECTION ZONE.

-TRENCHING THROUGH THE CRZ FOR UTILITIES IS NOT PERMITTED (TUNNELING IS THE PREFERRED METHOD).

-GRADE CHANGES IN THE CRZ ARE NOT PERMITTED.

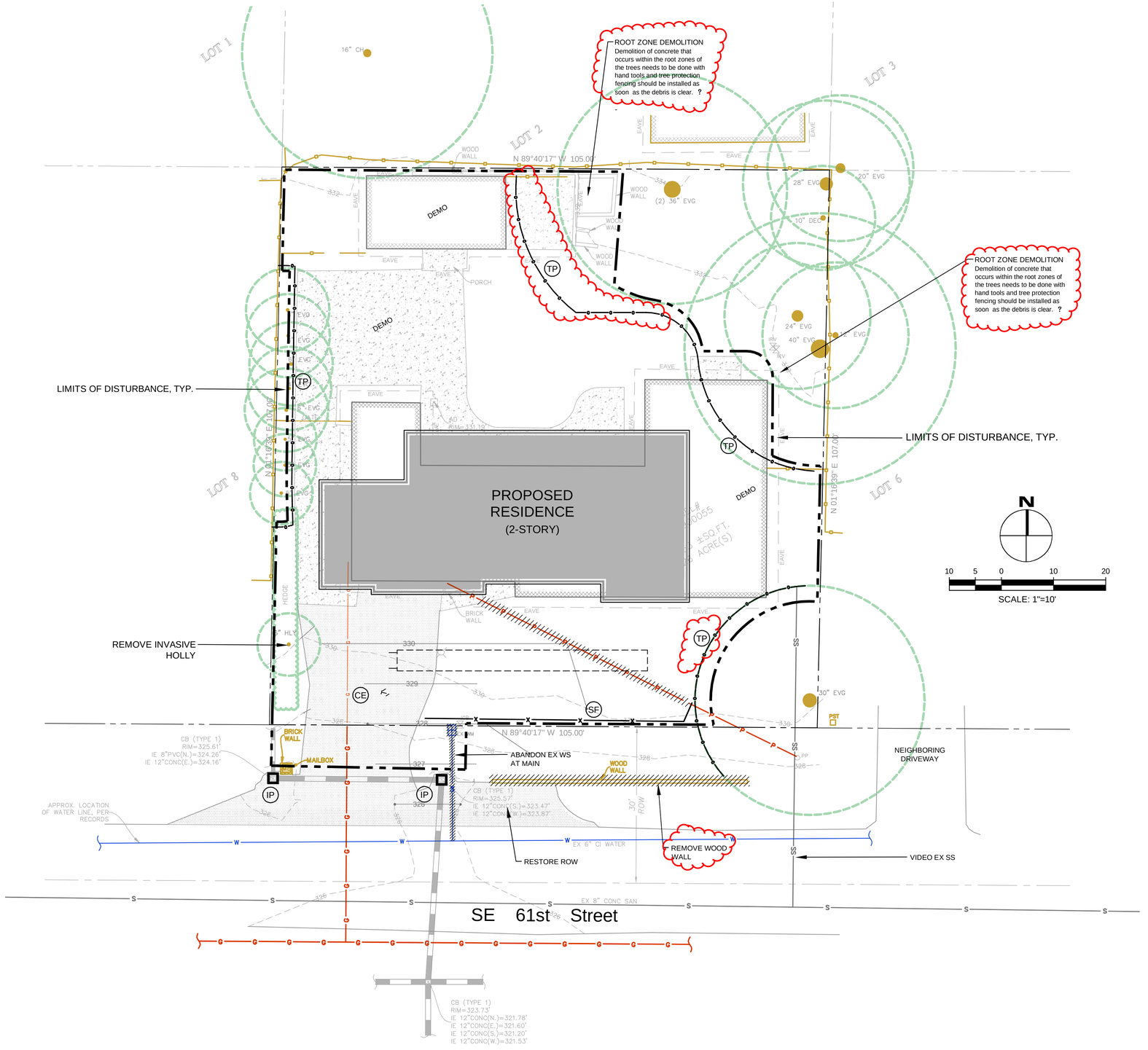
-VEHICLE MAINTENANCE AND WASHING OF EQUIPMENT (ESPECIALLY CONCRETE), IS NOT PERMITTED.

-NO ATTACHING ANYTHING TO THE TREE WITH CINCHING KNOTS OR HARDWARE.

-ROOT FLARE SHOULD BE PROTECTED WITH CHIPS SO THAT LAWN MAINTENANCE EQUIPMENT DOES NOT HAVE TO WORK CLOSE TO THE SYSTEM.

-PROPER CLEARANCES SHOULD BE MONITORED.

-THE CRZ OR CRITICAL ROOT ZONE NEEDS TO BE PROTECTED. THE INNER CRZ IS 50 % OF THE RADIUS OF THE CRZ AND THERE SHOULD BE ZERO DISTURBANCE IN THIS ZONE. A DISTURBANCE OF UP TO 33 % OF THE OUTER CRZ IS PERMISSIBLE PROVIDED THAT ANY HEAVY DIGGING EQUIPMENT WORKS TOWARD THE TREE, AND THAT ANY ROOTS ENCOUNTERED THAT ARE OVER 1" IN DIAMETER ARE EXCAVATED AROUND WITH HAND TOOLS AND CUT CLEAN WITH A SHARP SAW BEHIND THE EXCAVATION ZONE SO THAT THE ROOT CAN BIFURCATE AND CONTINUE TO GROW. IN SOME CASES, IF EXCESSIVE PRUNING HAS BEEN DONE, THE CRZ CAN BE LARGER THAN THE DRIP LINE RADIUS.



NO.	DATE	BY	REVISIONS

APPLICANT
JASON KOEHLER
RKK CONSTRUCTION

DATE: Mar 03, 2022
JOB# 1990
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Mar 03, 2022
JEFFREY E. RING
STATE OF WASHINGTON
39766
REGISTERED PROFESSIONAL ENGINEER

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

TESC PLAN
TREE RETENTION PLAN

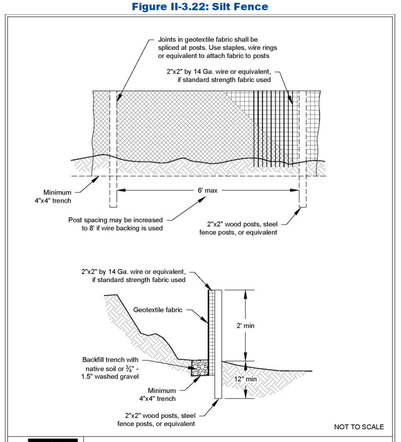
PROPOSED RESIDENCE
9026 SE 61st STREET, MERCER ISLAND, WA 98040

DRAWING NO:
C1.0

APN 865090-0055

SILT FENCE DETAIL DOE

Figure II-3.22: Silt Fence

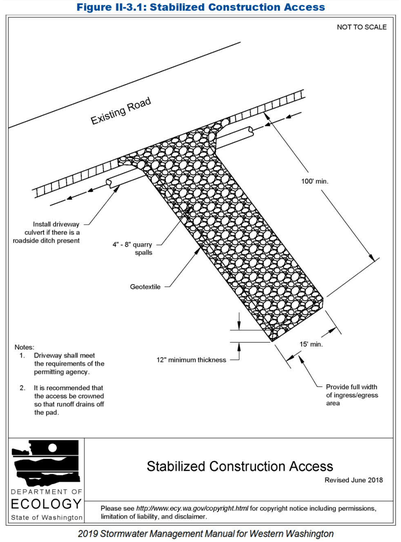


2019 Stormwater Management Manual for Western Washington

Volume II - Chapter 3 - Page 371

CONSTRUCTION ENTRANCE DOE

Figure II-3.1: Stabilized Construction Access



2019 Stormwater Management Manual for Western Washington

Volume II - Chapter 3 - Page 279

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:

1. HOLD AN ONSITE PRE-CONSTRUCTION MEETING.

2. POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).

3. FLAG OR FENCE CLEARING LIMITS.

4. INSTALL CATCH BASIN PROTECTION, IF REQUIRED.

5. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).

6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).

7. CONSTRUCT SEDIMENT PONDS AND TRAPS.

8. GRADE AND STABILIZE CONSTRUCTION ROADS.

9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.

10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

11. RELOCATE SURFACE 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.

12. 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.

13. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.

14. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.

15. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPS IF APPROPRIATE.

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.

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.

1. 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.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND
UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.

3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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.).

9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.

10. 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.

11. 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.

12. 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.

13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL

14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

CITY NOTES

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.

2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.

3. 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.

4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITES.

5. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555

6. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED

7. 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:

8. 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.

9. 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.

10. PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.

11. ALL EXPOSED SOILS SHALL REMAIN DENUDED 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.

12. 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.

13. 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.

14. 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.

15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.

16. ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.

17. 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.

18. WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.

19. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.

16. 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.

20. NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.

21. 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.

22. 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.

NO.	DATE	BY	REVISIONS

APPLICANT
JASON KOEHLER
RKK CONSTRUCTION

DATE: Mar 03, 2022
JOB# 1990
DRAFTED: SS DESIGN: DE
DIGITAL SIGNATURE

Mar 03, 2022
JEFFREY E. DUFFY
STATE OF WASHINGTON
59766
REGISTERED PROFESSIONAL ENGINEER

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

TESC & CITY NOTES
TESC DETAILS
PROPOSED RESIDENCE
9026 SE 61st STREET, MERCER ISLAND, WA 98040

DRAWING NO:
C1.2

APN 865090-0055

SANITARY SEWER IMPROVEMENTS

1 -

2 -SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %.

3 -

4 -

7 -

WATER IMPROVEMENTS

10 -1-1/2" WM & 2" WATER SERVICE . CONFIRM REQUIRED SIZE WITH BUILDING PERMIT REVIEW. INSTALL PER MERCER ISLAND DETAIL W-13, W-14, OR W-14A DEPENDING ON SIZE REQUIREMENT.

11 -MIN 1.5" (2" PREFERRED) 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 -8" STORM DRAIN. (SDR 35 PVC OR EQUAL). SEE PROFILE FOR GRADE

24 -

25 -

26 -

28 -

29 -

STORM DRAIN STRUCTURES

30 -

31 -

32 -

33 -

34 -

35 -

36 -6" WIDE NDS DURASLOPE CHANNEL DRAIN KIT OR EQUAL. MINIMUM 6" CHANNEL. CLASS B VEHICLE RATED GRATE.

39 -

40 -

41 -54" ID TYPE 2 MH CONTROL STRUCTURE WITH SOLID LID. SEE ALL DETAILS AND PROFILE C4.0.

43 -

46 -

47 -DETENTION PIPE: ALUMINIZED CMP @ 0.5 % GRADE. SEE PLAN FOR SIZE AND CONFIGURATION. SEE PROFILE, NOTES, AND DETAILS ON C4.0.

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 -

MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED

SURVEYOR

TOPOGRAPHIC & BOUNDARY SURVEY BY:
TERRANE
10801 MAIN STREET, SUITE 102
BELLEVUE, WA 98004
PHONE 425-458-4488
www.terrane.net

VERTICAL DATUM

NAVD(88) PER CITY OF MERCER ISLAND BENCHMARK NO. 1064
SEE SURVEY

LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED RECORDING # 19990816000693)

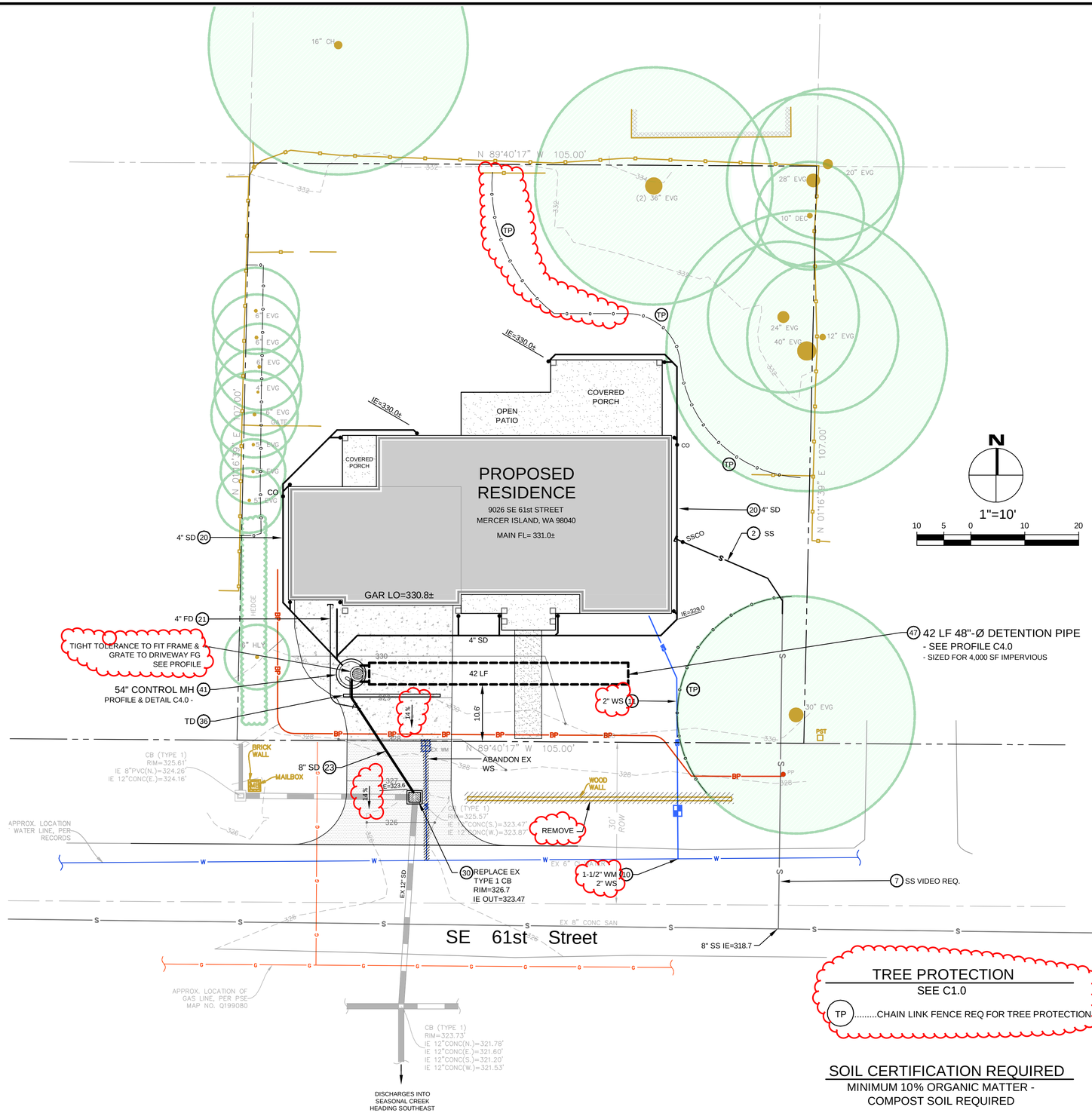
LOT 7, BLOCK 2, TIMBERLAND NO. 4, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 60 OF PLATS, PAGE 41, IN KING COUNTY, WASHINGTON.

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.



TREE PROTECTION
SEE C1.0

TP .....CHAIN LINK FENCE REQ FOR TREE PROTECTION

SOIL CERTIFICATION REQUIRED
MINIMUM 10% ORGANIC MATTER - COMPOST SOIL REQUIRED

NO.	DATE	BY	REVISIONS

APPLICANT
JASON KOEHLER
RKK CONSTRUCTION

DATE: Mar 03, 2022
JOB# 1990
DRAFTED: DE DESIGN: DE
DIGITAL SIGNATURE

Mar 03, 2022
JEFFREY E. HILLER
STATE OF WASHINGTON
39766
REGISTERED
PROFESSIONAL ENGINEER

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

DRAINAGE / CIVIL PLAN

PROPOSED RESIDENCE
9026 SE 61st STREET, MERCER ISLAND, WA 98040

DRAWING NO: C2.0

APN 865090-0055

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.

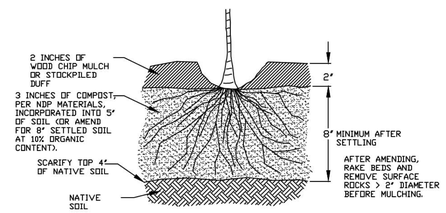
SOIL CERTIFICATION REQ

MINIMUM 10% ORGANIC MATTER - COMPOST SOIL REQUIRED

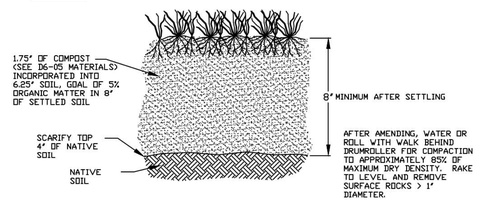
GATHER ALL DELIVERY RECEIPTS & FORWARD TO ENGINEER

COMPOST AMENDED SOIL SPEC

AMENDMENT FOR LANDSCAPED AREAS



SOIL AMENDMENT FOR GRASS OR TURF AREAS



NOTES:

1. AMEND SOILS PER DOE MANUAL, VOL. V, 5.31, BMP T5.13, (2012 OR CURRENT) OR WWW.SOILSFORSALMON.ORG.
2. DO NOT AMEND SOILS IN AREAS WITH UNDISTURBED SOIL AND NATIVE VEGETATION.
3. OPTIONAL ALTERNATIVE: STOCKPILE NATIVE TOPSOIL ONSITE, AMEND IF NEEDED, AND REPLACE BEFORE PLANTING.
4. OPTIONAL ALTERNATIVE: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET REQUIREMENTS.

JANUARY 2021 NO SCALE

City of Bellevue — STORM AND SURFACE WATER UTILITY

TITLE: AMENDED SOILS

NO. NDP-1

NO.	DATE	BY	REVISIONS

APPLICANT
JASON KOEHLER
RKK CONSTRUCTION

DATE: Mar 03, 2022
JOB# 1990
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Mar 03, 2022
JEFFREY E. DUFFY — STATE OF WASHINGTON — 39766 — REGISTERED PROFESSIONAL ENGINEER

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

BMP DETAILS

PROPOSED RESIDENCE
9026 SE 61st STREET, MERCER ISLAND, WA 98040

DRAWING NO: C3.5

APN 865090-0055

MERCER ISLAND DETENTION "TABLE 1"

Table 1

ON-SITE DETENTION DESIGN FOR PROJECTS BETWEEN 500 SF AND 9,500 SF NEW PLUS REPLACED IMPERVIOUS SURFACE AREA

New and Replaced Impervious Surface Area (sf)	Detention Pipe Diameter (in)	Detention Pipe Length (ft)		Lowest Orifice Diameter (in)[3]		Distance from Outlet Invert to Second Orifice (ft)		Second Orifice Diameter (in)	
		B soils	C soils	B soils	C soils	B soils	C soils	B soils	C soils
500 to 1,000 sf	36"	30	22	0.5	0.5	2.2	2.0	0.5	0.8
	48"	18	11	0.5	0.5	3.3	3.2	0.9	0.8
	60"	11	7	0.5	0.5	4.2	3.4	0.5	0.6
1,001 to 2,000 sf	36"	66	43	0.5	0.5	2.2	2.3	0.9	1.4
	48"	34	23	0.5	0.5	3.2	3.3	0.9	1.2
	60"	22	14	0.5	0.5	4.3	3.6	0.9	0.9
2,001 to 3,000 sf	36"	90	66	0.5	0.5	2.2	2.4	0.9	1.9
	48"	48	36	0.5	0.5	3.1	2.8	0.9	1.5
	60"	30	20	0.5	0.5	4.2	3.7	0.9	1.1
3,001 to 4,000 sf	36"	120	78	0.5	0.5	2.4	2.2	1.4	1.6
	48"	62	42	0.5	0.5	2.8	2.9	0.8	1.3
	60"	42	26	0.5	0.5	3.8	3.9	0.9	1.3
4,001 to 5,000 sf	36"	134	91	0.5	0.5	2.8	2.2	1.7	1.5
	48"	73	49	0.5	0.5	3.6	2.9	1.6	1.5
	60"	46	31	0.5	0.5	4.6	3.5	1.6	1.3
5,001 to 6,000 sf	36"	162	109	0.5	0.5	2.7	2.2	1.8	1.6
	48"	90	59	0.5	0.5	3.5	2.9	1.7	1.5
	60"	54	37	0.5	0.5	4.6	3.6	1.6	1.4
6,001 to 7,000 sf	36"	192	128	0.5	0.5	2.7	2.2	1.9	1.8
	48"	102	68	0.5	0.5	3.7	2.9	1.9	1.6
	60"	64	43	0.5	0.5	4.6	3.6	1.8	1.5
7,001 to 8,000 sf	36"	216	146	0.5	0.5	2.8	2.2	2.0	1.9
	48"	119	79	0.5	0.5	3.8	2.9	2.2	1.7
	60"	73	49	0.5	0.5	4.5	3.6	2.0	1.6
8,001 to 8,500 sf[1]	36"	228	155	0.5	0.5	2.8	2.2	2.1	1.9
	48"	124	84	0.5	0.5	3.7	2.9	1.9	1.8
	60"	77	53	0.5	0.5	4.6	3.6	2.0	1.6
8,501 to 9,000 sf	36"	NA [1]	164	0.5	0.5	NA [1]	2.2	NA [1]	1.9
	48"	NA [1]	89	0.5	0.5	NA [1]	2.9	NA [1]	1.9
	60"	NA [1]	55	0.5	0.5	NA [1]	3.6	NA [1]	1.7
9,001 to 9,500 sf[2]	36"	NA [1]	174	0.5	0.5	NA [1]	2.2	NA [1]	2.1
	48"	NA [1]	94	0.5	0.5	NA [1]	2.9	NA [1]	2.0
	60"	NA [1]	58	0.5	0.5	NA [1]	3.7	NA [1]	1.7

Notes:

• Minimum Requirement #7 (Flow Control) is required when the 100-year flow frequency causes a 0.15 cubic feet per second increase (when modeled in WWHM with a 15-minute timestep). Breakpoints shown in this table are based on a flat slope (0-5%). The 100-year flow frequency will need to be evaluated on a site-specific basis for projects on moderate (5-15%) or steep (> 15%) slopes.

• Soil type to be determined by geotechnical analysis or soil map.

• Sizing includes a Volume Correction Factor of 120%.

• Upper bound contributing area used for sizing.

[1] On Type B soils, new plus replaced impervious surface areas exceeding 8,500 sf trigger Minimum Requirement #7 (Flow Control)

[2] On Type C soils, new plus replaced impervious surface areas exceeding 9,500 sf trigger Minimum Requirement #7 (Flow Control)

[3] Minimum orifice diameter = 0.5 inches

in = inch

ft = feet

sf = square feet

Basis of Sizing Assumptions:

Sized per MR#5 in the Stormwater Management Manual for Puget Sound Basin (1992 Ecology Manual)

SBUH, Type 1A, 24-hour hydrograph

2-year, 24-hour storm = 2 in; 10-year, 24-hour storm = 3 in; 100-year, 24-hour storm = 4 in

Predeveloped = second growth forest (CN = 72 for Type B soils, CN = 81 for Type C soils)

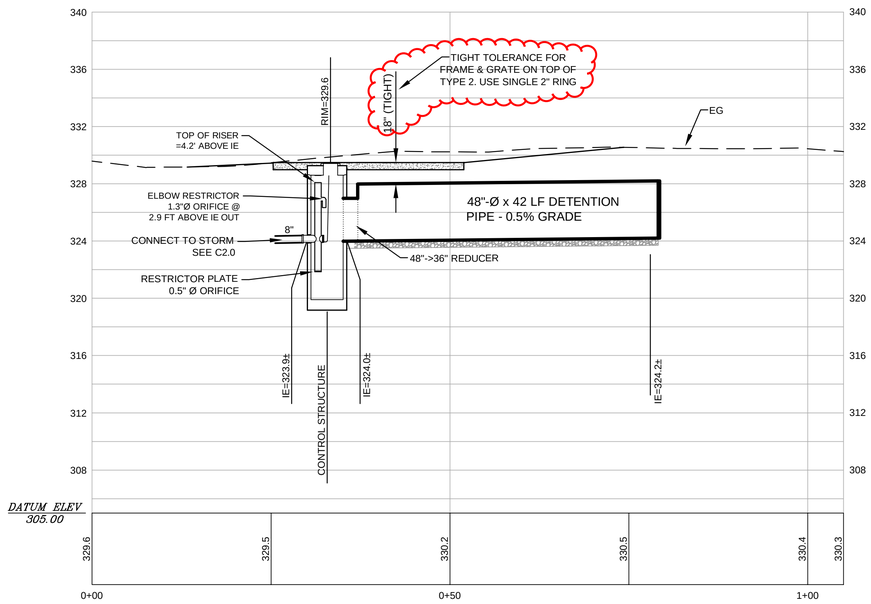
Developed = impervious (CN = 98)

0.5 foot of sediment storage in detention pipe

Overland slope = 5%

DETENTION PROFILE

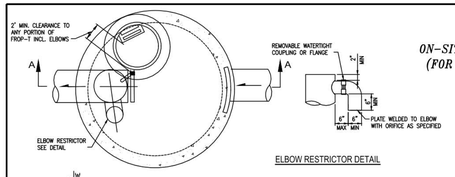
SCALE: HORIZONTAL 1"=10', VERTICAL 1"=5'



IMPERVIOUS TABLE - STORMWATER

Impervious Area Spreadsheet		
Proposed Residence - 9026 SE 61st Street, Mercer Island, WA 98040		
Gross Site area	11,233	sf
	0.258	acres
Existing Impervious Area to be demolished	5,833	sf
Existing Impervious Area to remain	0	sf
total existing impervious area =	**5,833**	**sf**
total existing vegetated area =	**5,400**	**sf**
Proposed Impervious Area (on-site)		
Roof	2,885	sf
Exposed, on-site driveway	553	sf
Exposed back patio	113	sf
Proposed front walkway, on-site	97	sf
total on-site proposed =	3,648	sf
total new + replaced impervious =	**(2,185)**	**sf**
total proposed vetetated area =	**7,585**	**sf**

MERCER ISLAND DETENTION DETAIL



PLAN VIEW

ELBOW RESTRICTOR DETAIL

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

OWNER: RKK CONSTRUCTION ADDRESS: 9026 SE 61st STREET Mercer Island, WA 98040 PREPARED BY: DUFFY ELLIS, P.E. PHONE: 206.930.0342 DATE: NOV 2021

PERMIT #: _____

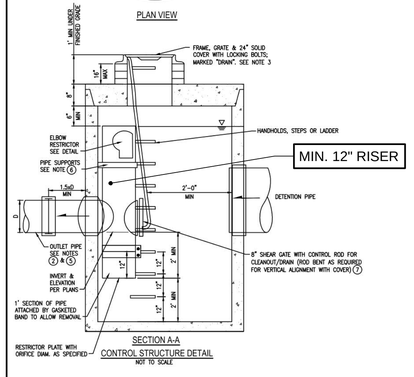
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 3,648 SF DETENTION PIPE DIA (INCH): 48" DIA DETENTION PIPE LENGTH (FT): 42 LF

SOIL TYPE: Type C per "Geologic Map of Mercer Island" PIPE MATERIAL: CMP OR HDPE

ORIFICE #1 DIA. * INCH, ELEV. *

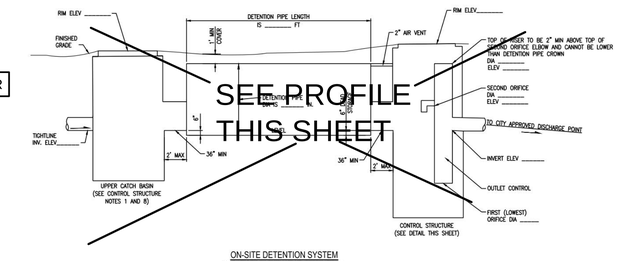
ORIFICE #2 DIA. * INCH, ELEV. *

*SEE TABLE 1, THIS SHEET



SECTION A-A

CONTROL STRUCTURE DETAIL
NOT TO SCALE



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

CONTROL STRUCTURE NOTES

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT, NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
   A. CLEANOUT GATE IS VISIBLE FROM TOP;
   B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
   C. FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
6. PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION 21320, OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

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

NO.	DATE	BY	REVISIONS

APPLICANT
JASON KOEHLER
RKK CONSTRUCTION

DATE: Mar 03, 2022
JOB# 1990
DRAFTED: SS DESIGN: SS
DIGITAL SIGNATURE

Mar 03, 2022
JEFFREY B. ELLIS
STATE OF WASHINGTON
38766
REGISTERED
PROFESSIONAL ENGINEER

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

DETENTION PROFILE AND DETAIL

PROPOSED RESIDENCE
9026 SE 61st STREET, MERCER ISLAND, WA 98040

DRAWING NO: C4.0

APN 865090-0055

BUILDING CODE: 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), AND BY REFERENCE, THE 2018 INTERNATION 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 (NOMINAL 3 SEC GUST) = 100 MPH FOR RISK CATEGORY II, EXPOSURE "B", Kzt=1.39
SOIL SITE CLASS "D" , SEISMIC CATEGORY D1/D2, Sds=1.455, Sd1=1.164
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 TIME OF APPLICATION FOR PERMIT OR AS A DEFERRED SUBMITTAL ITEM:
- ALTERNATIVE I-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 18" (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 Ø229"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. 7" EMBED.) TO BE 5/8" DIAMETER AT 6'-0" OC. (4'-0" AT BUILDINGS OVER 2 STORIES) U.N.O.
METAL FRAMING CONNECTORS TO BE MANUFACTURED BY SIMPSON STRONG-TIE OR USP STEEL CONNECTORS

CONCRETE

MINIMUM COMPRESSIVE STRENGTH OF CONCRETE:

TYPE OR LOCATIONS OF CONCRETE CONSTRUCTION	MINIMUM COMPRESSIVE STRENGTH (f'c) AT 28 DAYS
	MODERATE WEATHERING POTENTIAL
BASEMENT WALLS, FOUNDATION FOOTINGS, BASEMENT SLABS, & INTERIOR SLABS ON GRADE (EXCEPT GARAGE) NOT EXPOSED TO THE WEATHER	2500 psi
BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS, PORCHES, STEPS, GARAGE & CARPORT SLABS, & OTHER CONCRETE WORK EXPOSED TO THE WEATHER	3,000 psi (6% air entrained +/- 1%)

CONCRETE MIXTURE SHALL CONTAIN AT LEAST OF 5½ 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 A615M 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 319.3, 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 (Ø.131" DIA, 2-1/2" LENGTH) 8d BOX (Ø.113" DIA, 2-1/2" LONG), 10d COMMON (Ø.148" DIA, 3" LONG)
10d BOX (Ø.128" DIA, 3" LENGTH), 16d COMMON (Ø.162" DIA, 3-1/2" LONG), 16d SINKER (Ø.148 DIA, 3-1/4" LONG)
5d COOLER (Ø.086" DIA, 1-5/8" LONG), 6d COOLER (Ø.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 #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
2X10 OR LARGER	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
BEAM	
4X	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
6X OR LARGER	DF-L #2 - Fb=875 psi, Fv=170 psi, Fc=600 psi, E=1300000psi
STUDS	
2X4 & 2X6	DF STUD - Fb=700 psi, Fv=180 psi, Fc=850 psi, E=1400000psi
2X8 OR LARGER	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
POSTS	
4X4	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
4X6	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi
6X6 OR LARGER	DF-L #1 - 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 "LSL" 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 = 1,900,000 PSI.

BEAMS DESIGNATED AS "PSL" SHALL HAVE THE MINIMUM PROPERTIES:
Fb = 2,900 PSI, Fv = 290 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:

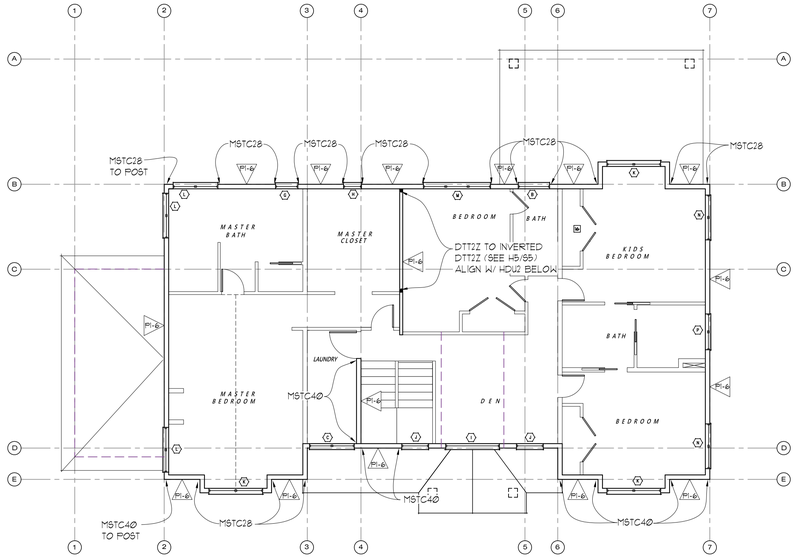
PRE-FABRICATED WOOD TRUSSES SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOADS & IMPOSED DEAD LOADS AS STATED IN THE GENERAL NOTES. TRUSSES SHALL BE DESIGNED & STAMPED BY A REGISTERED DESIGN PROFESSIONAL AND FABRICATED ONLY FROM THOSE DESIGNS. NON-BEARING WALLS SHALL BE HELD AWAY FROM THE TRUSS 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 7/16 SHEATHING W/ 24/0 SPAN INDEX U.N.O. WALL SHEATHING, INCLUDING GABLES, SHALL BE 7/16 SHEATHING W/ 24/0 SPAN INDEX MINIMUM U.N.O. FLOOR SHEATHING SHALL BE MINIMUM 23/32 T&G SHEATHING W/ 40/20 SPAN INDEX MINIMUM U.N.O. MINIMUM NAILING SHALL BE 8d COMMON NAILS @ 6" O.C. @ PANEL EDGES & 12" O.C. IN PANEL FIELD U.N.O. ON SHEAR WALL SCHEDULE. ROOF AND FLOOR SHEATHING SHALL BE LAID OUT W/ LONG DIMENSION PERPENDICULAR TO FRAMING MEMBERS W/ END LAPS 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.



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

North

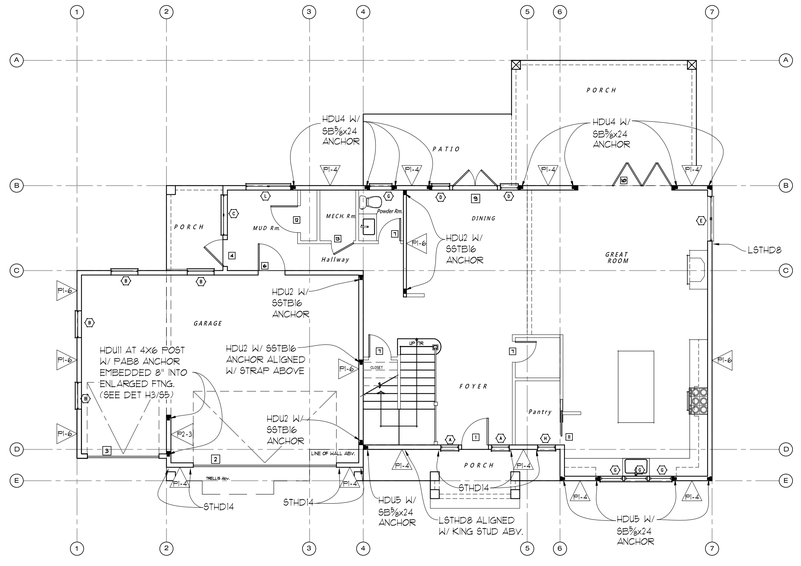
SEE SHEET S5 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS

SHEAR WALL SCHEDULE

WALL MARK	SHEATHING THICKNESS	SIDES	SHEAR PANEL EDGE NAILING	FIELD NAILING	FRAMING @ ABUTTING PANEL EDGES	SOLE/BASE PLATE NAILING TO JOIST OR BLKG/RIM BELOW	ANCHOR BOLT DIA. & SPACING	SILL PLATE SIZE	POST AT ENDS OF SHEAR WALL/ HOLDOWN U.N.O.
P1-6	7/16"	ONE	8d @ 6" O.C.	12" O.C.	2X	16d SINKER NAILS (Ø.148"x3¼") @ 8" O.C.	5/8" DIA. @ 72" O.C.	2X	(2) 2X POST (FACE NAIL W/ 10d (Ø.131"x3") NAILS @ 12" O.C. (STAGGER)
P1-4	7/16"	ONE	8d @ 4" O.C.	12" O.C.	2X	16d SINKER NAILS (Ø.148"x3¼") @ 6" O.C.	5/8" DIA. @ 48" O.C.	2X	(2) 2X POST (FACE NAIL W/ 10d (Ø.131"x3") NAILS @ 12" O.C. (STAGGER)
P2-2	7/16"	BOTH	8d @ 2" O.C.	12" O.C.	3X	NOT APPLICABLE	5/8" DIA. @ 16" O.C.	3X	4X6 DOUG-FIR

1. FRAMING SHALL BE 2X DOUG-FIR @ 16" O.C. MAX UNLESS NOTED OTHERWISE IN SCHEDULE.
2. SHEATHING PANELS MAY BE LAYED VERTICAL OR HORIZONTAL. BLOCK ALL HORIZONTAL EDGES W/ 2X OR 3X BLOCKING PER SCHEDULE (U.N.O.)
3. ALL EXTERIOR WALLS NOT DESIGNATED AS SHEARWALLS 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 @ 6" O.C. EDGE, 12" O.C. FIELD.
4. NAILING APPLIES TO ALL STUDS, TOP AND BOTTOM PLATES, AND BLOCKING. PLYWOOD JOINT AND SILL PLATE NAILING SHALL BE STAGGERED
5. 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 Ø229"x3"x3" WASHERS AT ANCHOR BOLTS. PLATE WASHERS SHALL EXTEND TO WITHIN ½" OF THE SHEATHED EDGE OF THE SILL PLATE ON WALLS W/ EDGE NAILING AT 4" O.C. OR TIGHTER. DO NOT RECESS BOLTS.
6. ALL NAILS FOR SHEAR WALLS SHALL BE COMMON OR GALVANIZED BOX NAILS (U.N.O.) ALL SPECIFIED NAILS SHALL HAVE THE FOLLOWING DIMENSIONS: 8d COMMON (Ø.131" DIA, 2½" LONG), 8d BOX (Ø.113" DIA, 2½" LONG), 10d COMMON (Ø.148" DIA, 3" LONG), 10d BOX (Ø.128" DIA, 3" LONG), 16d COMMON (Ø.162" DIA, 3½" LONG), 16d SINKER (Ø.148" DIA, 3¼" LONG), 5d COOLER (Ø.086" DIA, 1⅝" LONG), 6d COOLER (Ø.092" DIA, 1 7/8" LONG)
7. 1¼" No. 6 DRYWALL SCREWS (TYPE W OR S) MAY BE SUBSTITUTED FOR NAILS LISTED AS 5d COOLER OR 6d COOLER FOR GYPSUM WALL BOARD SHEARWALLS
8. IN LIEU OF 3x VERTICALS AND BLOCKING AT PANEL EDGES, 2-2x'S W/ 10d (Ø.131"x3") FACE NAILS STAGGERED AT THE SAME SPACING AS PANEL EDGE NAILING MAY BE SUBSTITUTED. PLYWOOD EDGES TO BE CENTERED BETWEEN THE 2-2x MEMBERS (THIS ALTERNATIVE DOES NOT APPLY TO FOUNDATION SILL PLATES OR TO WALLS WITH 8d EDGE NAILING AT 2" O.C. OR 10d EDGE NAILING AT 3" O.C. OR 2" O.C. OR WALLS SHEATHED ON BOTH SIDES)
9. HOLDDOWNS AND STRAPS OF EQUIVALENT UPLIFT CAPACITY WITH CURRENT ICC EVALUATION REPORT OR SIMILAR MAY BE SUBSTITUTED FOR THOSE LISTED IN THE SHEARWALL SCHEDULE WITH PRIOR APPROVAL OF BUILDING OFFICIAL OR ENGINEER OF RECORD.
10. SQUASH BLOCKS IN FLOOR JOIST CAVITY ARE REQUIRED AT ENDS OF SHEAR WALLS WHERE FULL BEARING IS NOT PROVIDED BY THE FRAMING BELOW.
11. SIMPSON MASAP MUDSILL ANCHORS, MAY BE SUBSTITUTED (1) FOR (1) AT 2X SILL PLATES FOR THE 5/8" DIA. SILL PLATE ANCHOR BOLTS SPECIFIED.

ALL CRIPPLE WALLS SHALL BE FRAMED & SHEATHED AS PER "P1-4" SHEAR WALL



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

North

SEE SHEET S5 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS

STRUCTURAL PLANS

RKK CONSTRUCTION
9026 SE 61st STREET
MERCER ISLAND, WA

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

MARK R. MYERS STATE OF WASHINGTON 21176 REGISTERED PROFESSIONAL ENGINEER

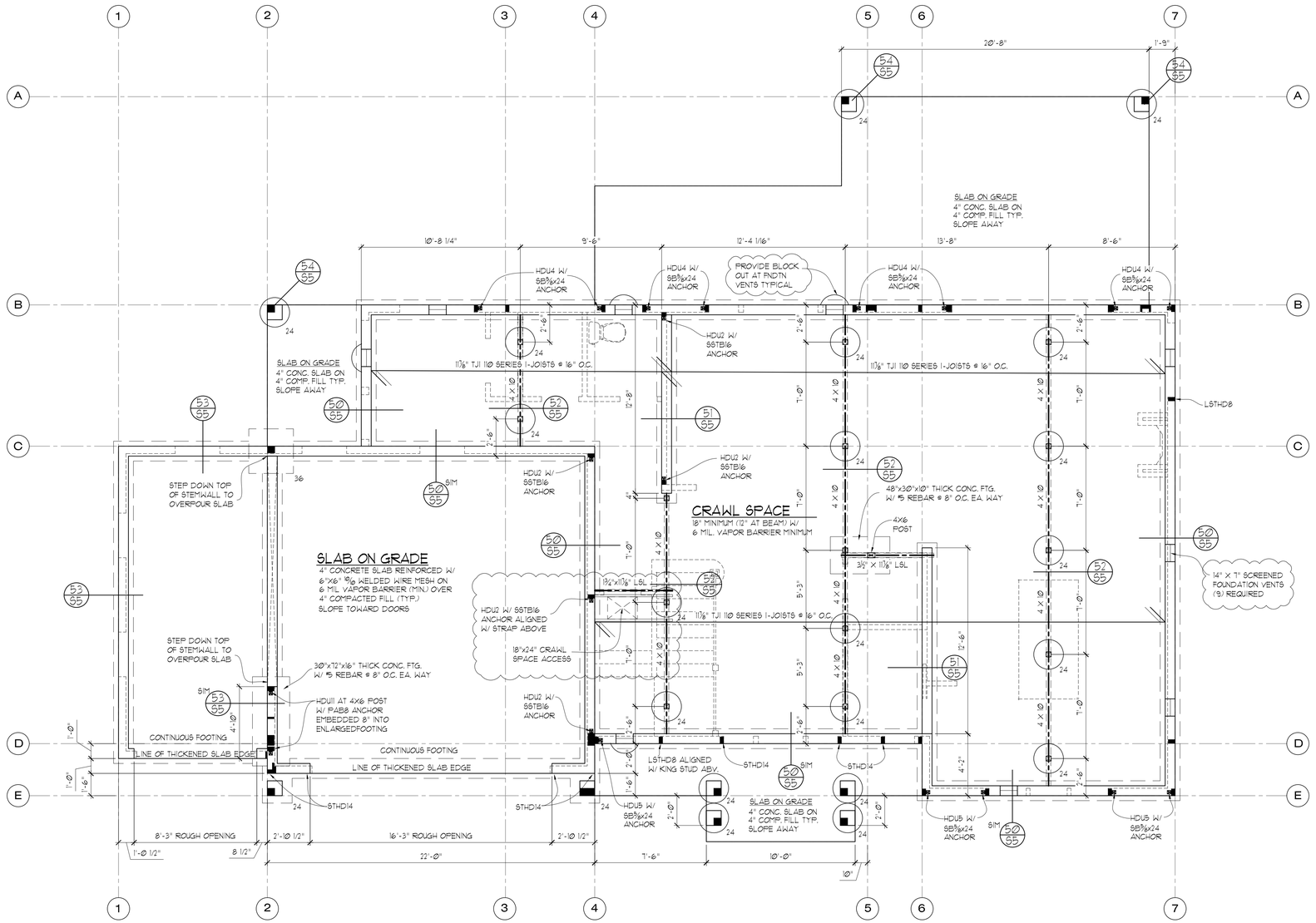
Digitally signed by Mark Myers, PE
Date: 2022.02.15 12:40:26 -08'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:
PLAN REVIEW	MM	2-15-2022

S1

DATE: 10-2-2021
INIT: MM
PROJECT #: 2394



SEE SHEET S5 FOR TYPICAL INSTALLATION DETAILS FOR STRAPS & FOUNDATION ANCHORS

FOUNDATION/FLOOR FRAMING PLAN

SCALE : ¼"= 1'-Ø"

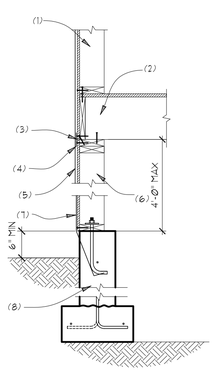
- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED
- SOFFIT, VENT, AND INSULATE ALL CANTILEVERED AREAS
- PROVIDE SOLID BLOCKING OVER SUPPORTS
- ALL FOOTINGS TO REST ON UNDISTURBED SOIL
- PROVIDE COPY OF CONCRETE "BATCH TICKET" ON SITE FOR REVIEW BY BUILDING OFFICIAL
- PROVIDE SOLID FRAMING EQUAL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

FOOTING SCHEDULE

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.

● 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

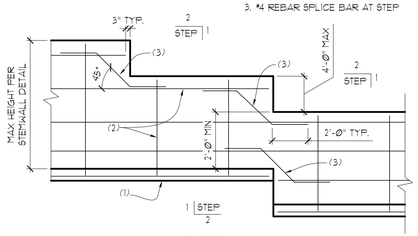


1. STUD WALL FRAMING PER PLAN
2. FLOOR JOISTS & RIM JOIST PER PLAN
3. WALL SHEATHING PANEL EDGE W/ EDGE NAILING PER SHEAR WALL SCHEDULE
4. SIMPSON LTP4 @ 48" O.C.
5. EXTEND STHD STYLE ANCHOR STRAPS WITH OVERLAPPED CMSTC16 COILED STRAP TO GET FULL NAILING AT WALL FRAMING ABOVE (BOLT STYLE HOLDOWNS TO BE EXTENDED TO WALL ABOVE W/ COUPLER NUT AND ALL THREAD ROD)
6. 2x6 CRIPPLE WALL W/ STUDS @ 16" O.C. SHEATHED & NAILED PER WALL ABOVE W/ 4" O.C. 8d COMMON EDGE NAILING MINIMUM
7. HOLDOWN PER PLAN
8. STEM WALL & FOOTING PER PLAN

A1 CRIPPLE WALL FOR SLOPED LOTS
SCALE: ¾"=1'

SEE DETAIL A1 FOR CRIPPLE WALL FRAMING SPECIFICATIONS

1. FOOTING PER PLAN
2. HORIZONTAL & VERTICAL REBAR SPACED PER STEM WALL DETAIL
3. #4 REBAR SPLICE BAR AT STEP



ELEVATION

A2 STEPPED FOOTING AT SLOPED LOT
SCALE: NTS

CRAWL SPACE VENTILATION

CRAWL AREA / 300 = NET VENT AREA REQ'D (N.V.A.) (ASSUMES CROSS VENTILATION)

1296 / 300 = 4.32 SQ. FT. N.V.A. REQUIRED

USE 14" X 7" SCREENED FOUNDATION VENTS

(1) VENT = 0.52 SQ. FT. NET FREE VENT AREA

N.V.A. / 0.52 = QTY. OF VENTS REQUIRED

4.32 / 0.52 = 8.31 (9) 14"x7" VENTS REQUIRED

STRUCTURAL PLANS

RKK CONSTRUCTION
9026 SE 61st STREET
MERCER ISLAND, WA

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

MARK R. MYERS STATE OF WASHINGTON 31170 REGISTERED PROFESSIONAL ENGINEER

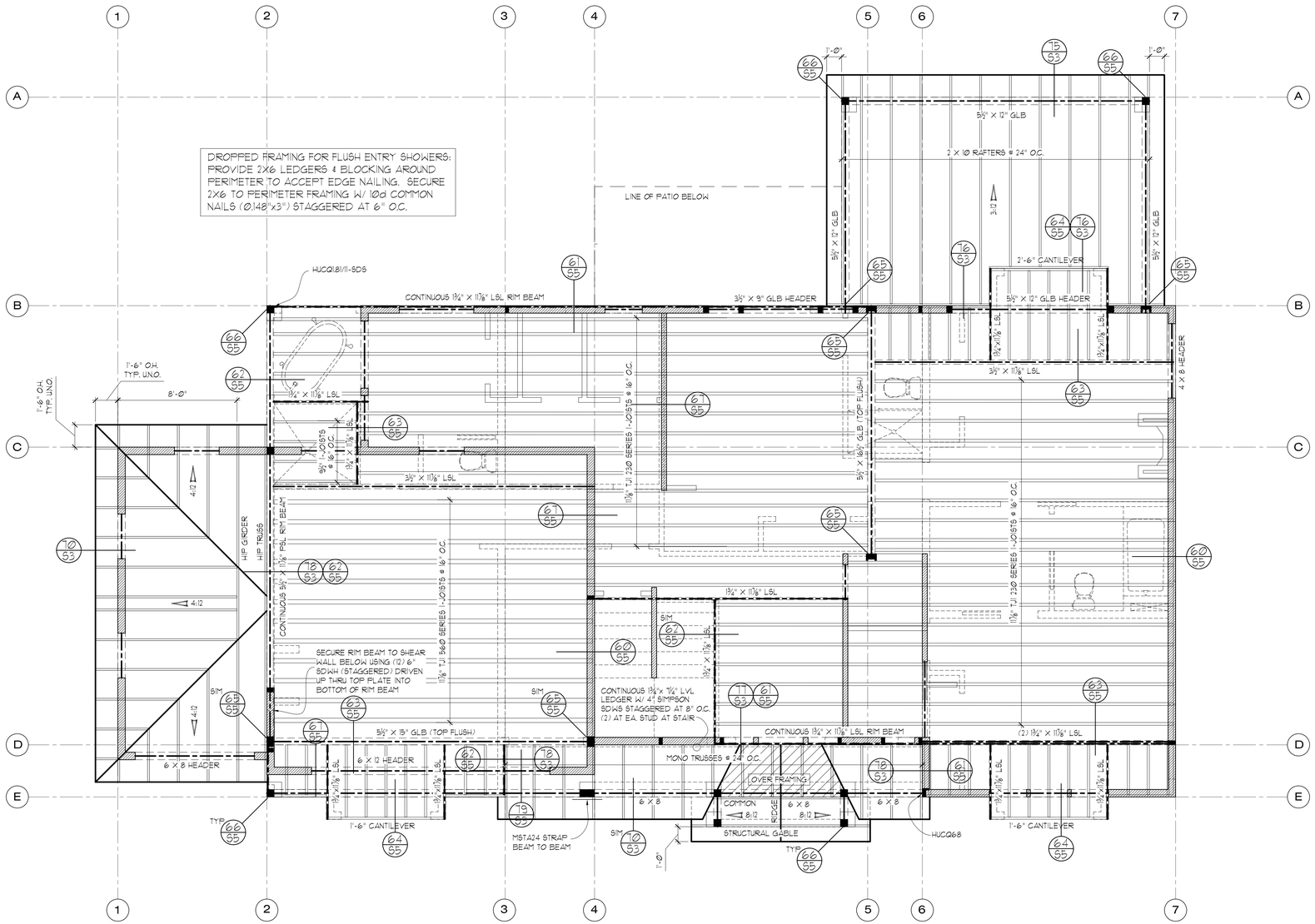
Digitally signed by Mark Myers, PE
Date: 2022.02.15 12:40:04 -08'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:
PLAN REVIEW	MM	2-15-2022

S2

DATE: 10-2-2021
INIT: MM
PROJECT #: 2394



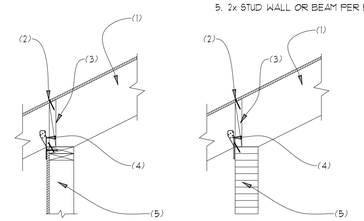
UPPER FLOOR FRAMING PLAN

SCALE : ¼"= 1'-Ø"

- SOFFIT, VENT, AND INSULATE ALL CANTILEVERED AREAS
- EXTERIOR WALLS TO BE 2X6 AT 16" O.C., U.N.O.
- ALL DOOR/WINDOW HEADERS AT THIS LEVEL TO BE 4X8 DF #2 AT BEARING WALLS , U.N.O., 6'-0" MAX. SPAN
- INTERIOR PARTITIONS TO BE 2X4 AT 16" O.C. (2X6 @ PLUMBING WALLS) U.N.O.
- 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

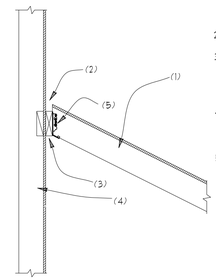
North

1. 2x RAFTER W/ ROOF SHEATHING PER PLAN
2. EDGE NAILING
3. 2x BLOCKING TOE NAILED TO TOP PLATE W/ (3) 8d NAILS
4. SIMPSON H25A CLIP AT EACH RAFTER
5. 2x STUD WALL OR BEAM PER PLAN



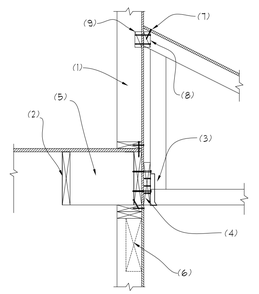
75 RAFTER AT WALL
SCALE: 3/4"=1'

1. RAFTER PER PLAN W/ ROOF SHEATHING PER PLAN
2. OPTIONAL ROOF TO WALL VENT
3. CONTINUOUS 2X LEDGER TO MATCH RAFTERS W/ 10d COMMON NAILS (Ø.148"X3") STAGGERED AT 8" O.C. & (2) NAILS PER STUD
4. 2X STUD WALL PER PLAN (STUDS @ 16" O.C.) W/ 2X BLOCKING BETWEEN STUDS AT LEDGER
5. SIMPSON LRU RAFTER HANGER AT EACH RAFTER



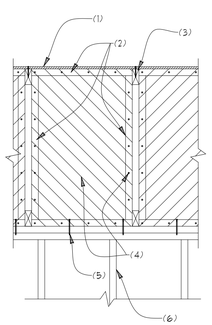
76 RAFTER TO WALL
SCALE: 3/4"=1'

1. 2X STUD WALL W/ SHEATHING & NAILING PER SHEAR WALL SCHEDULE
2. FLOOR JOISTS PER PLAN.
3. JACK/MONO TRUSS PER PLAN W/ LUS HANGER TO RIM
4. 1¾" X 9½" LSL LEDGER W/ 4" SDS OR SDWS SCREWS STAGGERED @ 8" O.C. TO RIM JOIST
5. FLOOR FRAMING PER PLAN OR JOIST BLOCKING @ 24" O.C. IN FIRST BAY, TOE NAILED TO TOP PLATE W/ (2) 8d TOE NAILS
6. STUD WALL OR BEAM PER PLAN
7. ROOF DIAPHRAGM EDGE NAILING PER PLAN
8. 2X BLOCKING BETWEEN TRUSSES ATTACHED TO WALL W/ 10d NAILS STAGGERED AT 6" O.C.
9. 2X BLOCKING BETWEEN STUDS W/ (2) 10d COM. TOE NAILS PER STUD



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

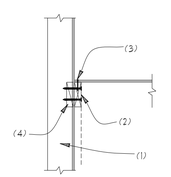
1. ROOF SHEATHING W/ DIAPHRAGM NAILING TO TRUSSES
2. 2x4 FLAT BLOCKING AT (4) SIDES OF BLOCKING PANEL
3. ROOF TRUSSES PER PLAN
4. SHEATHING AND EDGE NAILING PER SHEAR WALL SCHEDULE FOR WALL BELOW
5. BLOCKING NAILED TO TOP PLATE PER BASE PLATE NAILING OF WALL BELOW
6. INTERIOR SHEAR WALL PER PLAN



OPTION: PRE-MANUF TRUSS BLOCKING PANEL MAY BE USED IN LIEU OF SITE BUILT ASSEMBLY SHOWN.

79 SHEAR BLOCKING @ INT. SHEAR WALL
SCALE: 3/4"=1'

1. EXTERIOR STUD WALL PER PLAN
2. RAFTER, TRUSS TOP CHORD, OR 2X6 LEDGER SECURED TO WALL W/ (2) 4" SIMPSON SDWS SCREWS PER WALL STUD (16" O.C.)
3. ROOF DIAPHRAGM EDGE NAILING PER PLAN
4. 2X6 BLOCKING BETWEEN STUDS



78 ROOF DIAPHRAGM TO WALL
SCALE: 3/4"=1'

STRUCTURAL PLANS

RKK CONSTRUCTION
9026 SE 61st STREET
MERCER ISLAND, WA

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

MARK R. MYERS STATE OF WASHINGTON 19779 REGISTERED PROFESSIONAL ENGINEER

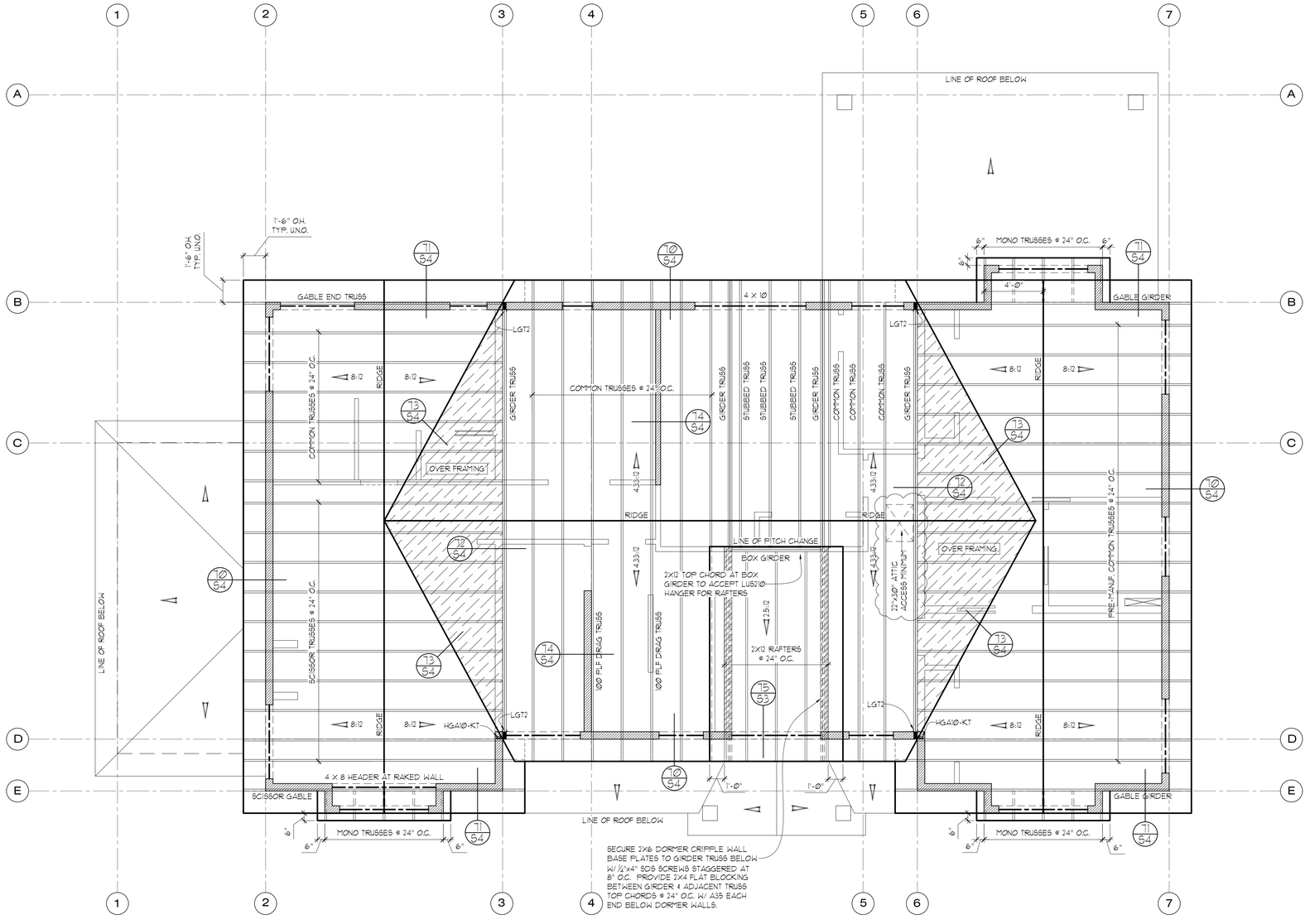
Digitally signed by Mark Myers, PE
Date: 2022.02.15 12:39:46 -08'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:
PLAN REVIEW	MM	2-15-2022

DATE: 10-2-2021
INIT: MM
PROJECT #: 2394

S3

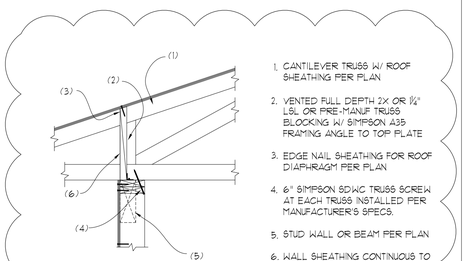


ROOF FRAMING PLAN

SCALE : ¼"= 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

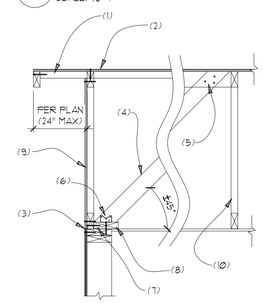
North



1. CANTILEVER TRUSS W/ ROOF SHEATHING PER PLAN
2. VENTED FULL DEPTH 2X OR 1¼" LSL OR PRE-MANUF TRUSS BLOCKING W/ SIMPSON A35 FRAMING ANGLE TO TOP PLATE
3. EDGE NAIL SHEATHING FOR ROOF DIAPHRAGM PER PLAN
4. 6" SIMPSON SDWC TRUSS SCREW AT EACH TRUSS INSTALLED PER MANUFACTURER'S SPECS.
5. STUD WALL OR BEAM PER PLAN
6. WALL SHEATHING CONTINUOUS TO UNDERSIDE OF TRUSS CHORD

10 CANTILEVER HEEL OPTION AT BEARING

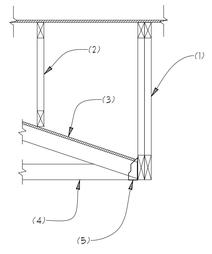
SCALE: 3/4"=1'



1. 2x4 OUTRIGGER @ 48" O.C. W/ FASCIA BOARD (1X MIN.) SECURED TO ENDS W/ (2) 10d NAILS
2. ROOF SHEATHING W/ DIAPHRAGM EDGE NAILING TO GABLE TRUSS
3. 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
4. 2x DIAGONAL BRACE @ 8FT O.C.
5. SECURE BRACE AT 2x BLOCKING W/ (3) 10d NAILS
6. SIMPSON A34 AT 2x BRACE
7. ATTACH GABLE TRUSS TO BACKER BOARD W/ 10d NAILS @ 6" O.C.
8. 2x6 CONTINUOUS BACKER BOARD SECURED TO TOP PLATE W/ 10d NAILS @ 6" O.C.
9. GABLE END TRUSS W/ VERTS. @ 24" O.C. & TOP CHORD DESIGNED TO BE NOTCHED FOR OUTLOOKERS.
10. ROOF TRUSSES @ 24" O.C. PER PLAN

71 GABLE END TRUSS

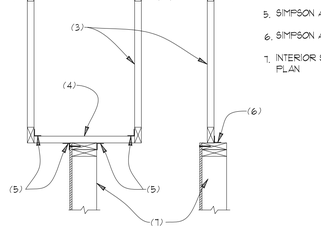
SCALE: 3/4"=1'



1. GIRDER TRUSS PER PLAN
2. VALLEY TRUSSES OR CONVENTIONAL OVER FRAMING. WHERE VALLEY TRUSSES ARE USED SECURE VALLEY TRUSS TO SUPPORTING ROOF FRAMING W/ SIMPSON VTCR CLIPS @ 48" O.C.
3. 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
4. ROOF TRUSS PER PLAN
5. SIMPSON HUS26 OR USP THD26 FACE MOUNT HANGER U.N.O. PER TRUSS MANUF.

72 GIRDER TRUSS AT OVERFRAMING

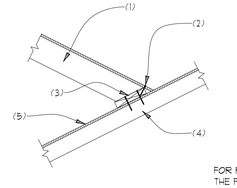
SCALE: 3/4"=1'



1. ROOF SHEATHING PER PLAN
2. EDGE NAILING WHERE APPLIES
3. ROOF TRUSSES PER PLAN
4. 2x6 FLAT BLOCKING @ 12" O.C.
5. SIMPSON A35 AT EACH BLOCK
6. SIMPSON A35 @ 12" O.C.
7. INTERIOR SHEAR WALL PER PLAN

74 ROOF SHEAR TRANSFER @ INT. WALL

SCALE: 3/4"=1'



1. CONVENTIONAL 2x OVER FRAMING @ 24" O.C. W/ (4) 16d TOE NAILS TO VALLEY PLATE (SEE BELOW FOR RECOMMENDED SIZES BASED ON SPAN)
2. EDGE NAILING
3. 2x VALLEY BOARD TO MATCH RAFTER W/ (2) 16d NAILS PER TRUSS
4. ROOF TRUSS TOP CHORD OR RAFTER PER PLAN
5. 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'-7"	2x4
6'-8" TO 9'-7"	2x6
9'-8" TO 12'-2"	2x8
12'-3" TO 14'-10"	2x10
14'-11" TO 17'-3"	2x12

(ASSUMES RAFTERS @ 24" O.C. LL=30PSF & DL=10PSF PER TABLE R802.5.1(1) FOR HF #2)

73 VALLEY FRAMING

SCALE: 3/4"=1'

STRUCTURAL PLANS

RKK CONSTRUCTION
9026 SE 61st STREET
MERCER ISLAND, WA

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

MARK R. MYERS — STATE OF WASHINGTON — REGISTERED — PROFESSIONAL ENGINEER

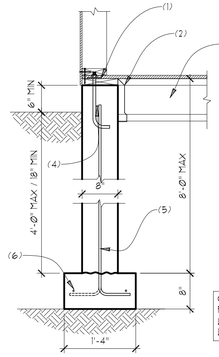
Digitally signed by Mark Myers, PE
Date: 2022.02.15 12:39:25 -08'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:
PLAN REVIEW	MM	2-15-2022

S4

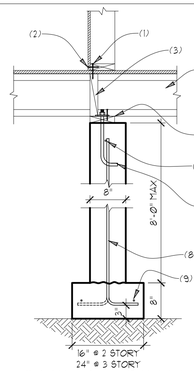
DATE: 10-2-2021
INIT: MM
PROJECT #: 2354



1. 2X NET WIDTH PRESSURE TREATED SILL PLATE U.N.O. IN SHEAR WALL SCHEDULE W/ ⅝" DIA. ANCHOR BOLT W/ 7" MIN. EMBEDMENT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE
2. TOP FLANGE I-JOIST HANGER PER MANUF. W/ VAPOR BARRIER SEPERATING JOIST & HANGER FROM CONCRETE STEM WALL
3. FLOOR JOIST PER PLAN
4. #4 REBAR HORIZ. @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5" OF WALL
5. #4 VERTICALS @ 48" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED
6. (2) #4 REBAR CONTINUOUS IN FOOTING

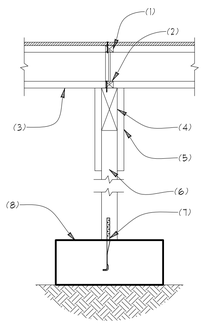
OPTIONAL: FACE MOUNT HANGER AT 2X10 P.T. LEDGER ATTACHED TO STEM WALL W/ ½" BOLTS STAGGERED AT 16" O.C. IN LIEU OF TOP FLANGE HANGER

50 8" STEM WALL AT DROPPED JOISTS
SCALE: ¾"=1'



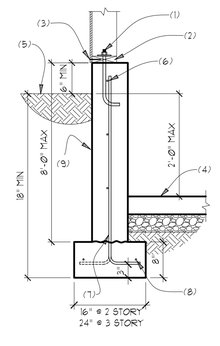
1. BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. SHEAR WALL EDGE NAILING PER SHEAR WALL SCHEDULE
3. L6L BLOCKING W/ SIMPSON A35 TO SILL PLATE
4. FLOOR JOIST PER PLAN SECURED TO SILL PLATE W/ (2) 8d NAILS
5. 2X PRESSURE TREATED SILL PLATE U.N.O. IN SHEAR WALL SCHEDULE
6. #4 REBAR HORIZ. @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5"
7. ⅝" DIA. ANCHOR BOLT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE W/ 7" MIN. EMBEDMENT
8. #4 VERTICALS @ 48" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED
9. (2) #4 REBAR CONTINUOUS IN FOOTING

51 8" INTERIOR STEM WALL
SCALE: ¾"=1'



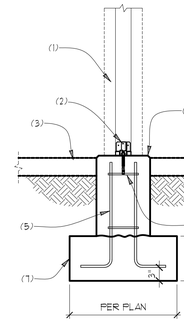
1. I-JOIST BLOCKING REQUIRED AT BEARING OR SHEAR WALLS ABOVE OR WHEN JOISTS ARE NOT CONTINUOUS AT BEAM
2. SECURE BLOCKING TO BEAM W/ 8d NAILS @ 6" O.C.
3. I-JOIST PER PLAN
4. BEAM PER PLAN
5. 2X OR SHEATHING CLEATS BOTH SIDES TO SECURE BEAM TO POST (3) 10d NAILS PER CLEAT PER MEMBER
6. 4X OR 6X TREATED POST (4X6 MIN AT BEAM SPLICE)
7. SIMPSON MABI5 ANCHOR W/ 10dx1½" COMMON NAILS (Ø.148"x1.5") TO POST
8. ISOLATED OR CONTINUOUS SPREAD FOOTING PER PLAN

52 INTERIOR FOOTING @ BEAM LINE
SCALE: ¾"=1'



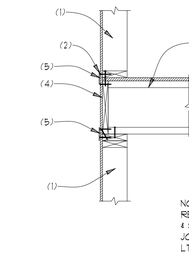
1. ⅝" DIA. ANCHOR BOLT @ 72" O.C. U.N.O. IN SHEAR WALL SCHEDULE W/ 7" MIN. EMBEDMENT
2. 2X PRESSURE TREATED SILL PLATE U.N.O. IN SHEAR WALL SCHEDULE
3. SHEAR WALL EDGE NAILING PER SHEAR WALL SCHEDULE
4. 4" CONCRETE SLAB OVER 4" COMPACT FILL
5. FINISH GRADE OR SLAB AS OCCURS
6. #4 HORIZ. REBAR @ 12" O.C. W/ (1) #4 REBAR IN UPPER 3" TO 5" OF WALL
7. #4 VERTICALS @ 18" O.C. W/ STANDARD HOOK REQUIRED, ALTERNATE BENDS, NO WET SETTING PERMITTED
8. (2) #4 REBAR CONTINUOUS IN FOOTING
9. INSTALL DAMPPROOFING OR WATERPROOFING PER IRC R406 WHERE INTERIOR SLAB IS BELOW EXTERIOR GRADE

53 8" STEM WALL AT SLAB ON GRADE
SCALE: ¾"=1'



1. WOOD POST W/ ARCHITECTURAL COVER PER PLAN
2. SIMPSON ABUZ OR CPTZ POST BASE WITH CAST IN PLACE OR EPOXIED ANCHOR PER MANUF. SPECS.
3. FINISHED GRADE OR SLAB AS OCCURS
4. OPTIONAL 12" DIA OR SQUARE CONCRETE PEDESTAL
5. (4) #4 VERTICALS W/ STANDARD HOOK AT CONCRETE PEDESTAL
6. #3 TIES AT 8" O.C.
7. ISOLATED OR CONTINUOUS FOOTING PER PLAN

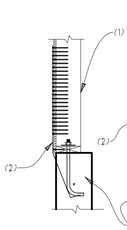
54 FOOTING AT WOOD COLUMN
SCALE: ¾"=1'



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

UNLESS OTHERWISE NOTED: MSTCxx & MSTCxxB3 STRAPS SHALL BE INSTALLED W/ 10d COMMON NAILS (Ø.148"x3") ALL OTHER STRAPS SHALL BE INSTALLED W/ 16d COMMON NAILS (Ø.162"x3.5")

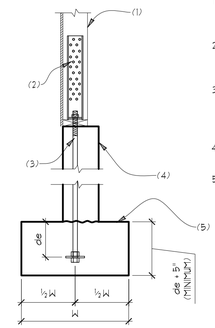
H1 TYPICAL STRAP TIE @ UPPER FLOORS
SCALE: ¾"=1'



1. DBL 2X STUDS MINIMUM AT HOLDOWN UNLESS NOTED OTHERWISE
2. STRAP TIE HOLDOWN PER PLAN INSTALLED PER MANUF. SPECS. W/ 16d SINKER (Ø.148"x3½") OR 10d COMMON (Ø.148"x3") NAILS
3. RIM BOARD PER PLAN
4. CONCRETE STEM WALL PER PLAN W/ #4 REBAR IN UPPER 3" TO 5" OF STEM WALL
5. PROVIDE SQUASH BLOCKS IN FLOOR CAVITY TO MATCH POST IN SHEAR WALL. GRAIN ORIENTED VERTICALLY

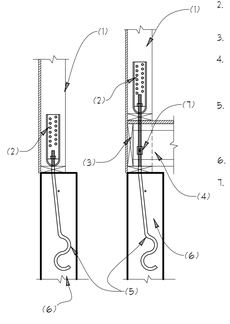
FOUNDATION STRAP	NAILS INTO END POST
LSTHD8/LSTHD8RJ	20
STHD10/STHD10RJ	24
STHD14/STHD14RJ	30

H2 TYPICAL STRAP TIE HOLDOWN
SCALE: ¾"=1'



1. SHEAR WALL PER PLAN W/ SOLID DOUG-FIR POST PER SHEAR WALL KEY PLAN
2. HEAVY DUTY HOLDOWN PER PLAN INSTALLED PER MANUF. SPECS.
3. SIMPSON PAB ANCHOR BOLT PER PLAN W/ EMBEDDED INTO FOOTING AS SPECIFIED ON SHEAR WALL KEY PLAN
4. NEW CONCRETE STEM WALL PER PLAN
5. ENLARGED CONCRETE FOOTING PER PLAN

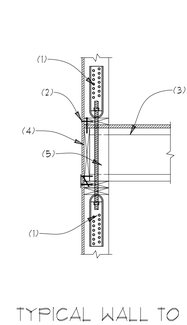
H3 PAB ANCHOR BOLT AT HOLDOWN
SCALE: ¾"=1'



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

ANCHOR	EMBED.
S6TB16 (DIA. = ⅝")	12⅝"
S6TB20 (DIA. = ⅝")	16⅛"
S6TB24 (DIA. = ⅝")	20⅞"
S6TB28 (DIA. = ⅞")	24⅛"
S6TB34, S6TB36 (DIA. = ⅞")	28⅛"
SB5/8x24, SB7/8x24	18"
SB1x30	24"

H4 TYPICAL ANCHOR BOLT HOLDOWN
SCALE: ¾"=1'



1. ANCHOR BOLT STYLE HOLDOWNS PER PLAN W/ ALL THREAD ROD (DBL 2x STUD MINIMUM AT HOLDOWN)
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST PER PLAN SECURED TO TOP PLATE W/ (2) 8d NAILS
4. SOLID CONTINUOUS RIM BOARD W/ 8d NAIL TO TOP AND BOTTOM CHORD OF I-JOIST & TOE NAILED TO TOP PLATE WITH 8d NAILS @ 6" O.C.
5. SOLID BLOCKING BELOW SHEAR WALL END POST REQUIRED

H5 TYPICAL WALL TO WALL HOLDOWN CONNECTION BETWEEN FLOORS
SCALE: ¾"=1'

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

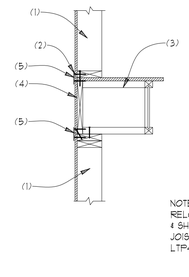
UNLESS OTHERWISE NOTED: MSTCxx & MSTCxxB3 STRAPS SHALL BE INSTALLED W/ 10d COMMON NAILS (Ø.148"x3") ALL OTHER STRAPS SHALL BE INSTALLED W/ 16d COMMON NAILS (Ø.162"x3.5")

H1 TYPICAL STRAP TIE @ UPPER FLOORS
SCALE: ¾"=1'

1. 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST PER PLAN SECURED TO TOP PLATE W/ (3) 8d NAILS
4. SOLID CONTINUOUS RIM BOARD W/ 8d NAIL TO TOP AND BOTTOM CHORD OF I-JOIST & TOE NAILED TO TOP PLATE WITH 8d NAILS @ 6" O.C.
5. 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 PLATES, THE SIMPSON LTP4 MAY BE ELIMINATED

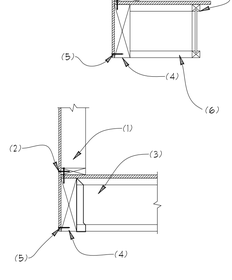
60 FLOOR JOIST BEARING AT STUD WALL
SCALE: ¾"=1'



1. 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.) SECURED TO TOP PLATE W/ (3) 8d NAILS
4. SOLID CONTINUOUS RIM BOARD W/ 10d NAIL (Ø.131"x3") TO TOP AND BOTTOM CHORD OF I-JOIST & TOE NAILED TO TOP PLATE WITH 8d NAILS @ 6" O.C.
5. SHEATHING PANEL EDGE & EDGE NAILING PER SHEAR WALL SCHEDULE W/ SIMPSON LTP4 @ 48" O.C.

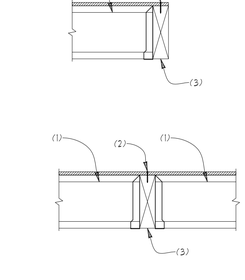
NOTE: IF SHEATHING JOINTS ARE RELOCATED TO OCCUR ON THE RIM, & SHEATHING IS EDGE NAILED AT RIM JOIST & WALL PLATES, THE SIMPSON LTP4 MAY BE ELIMINATED

61 FLOOR JOIST PARALLEL TO STUD WALL
SCALE: ¾"=1'



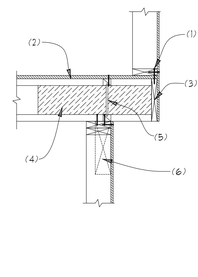
1. 2x STUD WALL W/ BASE PLATE NAILING PER SHEAR WALL SCHEDULE
2. EDGE NAILING PER SHEAR WALL SCHEDULE
3. I-JOIST PER PLAN W/ JOIST HANGER PER MANUF.
4. BEAM PER PLAN
5. WALL SHEATHING CONTINUOUS OVER BEAM W/ EDGE NAILING PER SHEAR WALL SCHEDULE
6. I-JOIST BLOCKING @ FLOOR SHEATHING PANEL EDGES (48" O.C.)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

62 FLOOR JOIST AT BEAM
SCALE: ¾"=1'



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

63 FLOOR JOIST AT BEAM
SCALE: ¾"=1'



1. BASE PLATE NAILING AND EDGE NAILING PER SHEAR WALL SCHEDULE
2. I-JOIST PER PLAN SECURED TO SILL PLATE W/ (3) 8d NAILS
3. SOLID CONTINUOUS RIM BOARD W/ 10d NAILS (Ø.131"x3") TO TOP AND BOTTOM CHORD OF EACH JOIST
4. WEB STIFFENER AND/OR JOIST REINFORCEMENT WHERE REQUIRED BY JOIST MANUF.
5. I-JOIST BLOCKING SECURED TO TOP PLATE W/ 8d NAILS AT 6" O.C.
6. 2x STUD WALL OR BEAM PER PLAN

64 I-JOIST CANTILEVER
SCALE: ¾"=1'

1. WOOD POST OR COLUMN PER PLAN
2. BEAM SPLICE AS OCCURS
3. MITER CUT BEAMS AT CORNER CONDITION

PLAN VIEW AT CORNER

65 BEAM POCKET AT WALL
SCALE: ¾"=1'

1. SIMPSON AC OR LCE POST CAPS (PAIRED)

66 WOOD BEAM AT WOOD POST
SCALE: ¾"=1'

1. WALL ABOVE PER PLAN (AS OCCURS).
2. FLOOR JOIST PER PLAN SECURE TO TOP PLATE W/ (3) 8d TOE NAILS
3. L6L JOIST BLOCKING SECURED TO TOP PLATE W/ SIMPSON A35
4. FLOOR SHEATHING PER PLAN W/ EDGE NAILING TO JOIST BLOCKING
5. SHEAR WALL PER PLAN

67 FLOOR JOIST AT INT. SHEAR WALL
SCALE: ¾"=1'

STRUCTURAL PLANS

RKK CONSTRUCTION
9026 SE 61st STREET
MERCER ISLAND, WA

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

MARK R. MYERS STATE OF WASHINGTON 19776 REGISTERED PROFESSIONAL ENGINEER

Digitally signed by Mark Myers, PE
Date: 2022.02.15 12:39:04 -08'00'

BUILDING DEPT. APPROVAL STAMPS:

REVISION:	INIT:	DATE:
PLAN REVIEW	MM	2-15-2022

S5

DATE: 10-21-2021
INIT: MM
PROJECT #: 2394