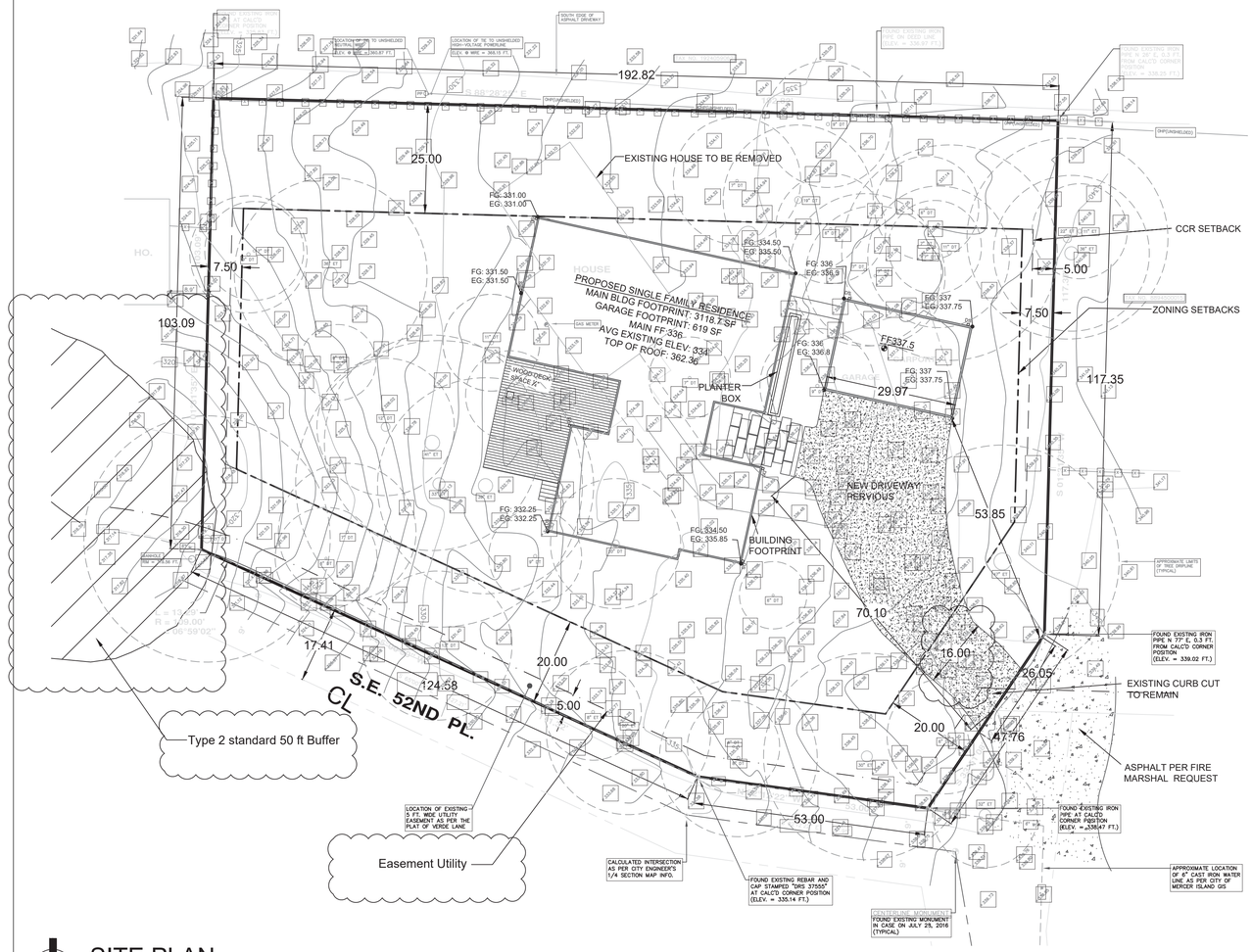


SITE PLAN

SCALE 1:16

DRAWING INDEX

Vicinity Map:

Address: 8720 SE 52ND Pl

Owner: Build URBAN

Legal Description: VERDE LANE TGW UND INT IN TRACT A

APN: 889450-0030

Zoning Notes
Zone: R-9.6
Occupancy:
Construction Type: New Single Family Home
Proposed Use:
Lot Area: 26348

Structural Height:
-Allowed: 30'-0" to Plate and 35'-0" to Ridge
-Proposed: 28'-4" to top of roof

Lot Coverage 40% of lot size
Allowed:10539.2 Sq ft
Proposed: 5708 Sq ft without deck (6238 Sq ft with deck)

City Setback:
-Front : 20 feet
-Rear : 25 feet
-Side : 7.5 feet
-Side : 7.5 feet

CCR Setback:
-Front : 20 feet
-Rear: 25 feet
-Side : 5 feet
-Side : 5 feet

Propose Setback:
-Front : 20 feet
-Rear : 25 feet
-Side : 7.5 feet
-Side : 7.5 feet

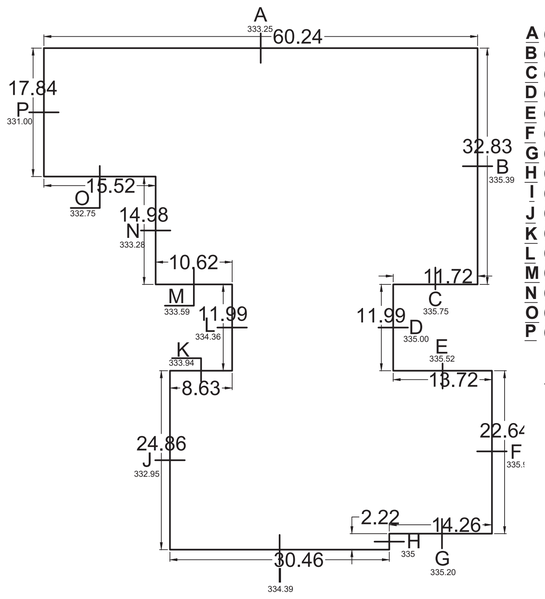
Parking:
-Stalls Required: 3
-Stalls Proposed: 3 CAR GARAGE

Average Grade Level: 334

Light & Glare: Exterior lighting shall be shielded and directed away from adjacent properties.

Gross Buildig Sq Ft: Lot 26348 Sq ft
Allowed : 45% or 11856.6 Sq Ft
Proposed : 39% or 5755 Sq Ft

Existing Average Grade Calculation



ELEVATION X FACADE	FACADE LENGTH
A (333.25x60.24)+	60.24 +
B (335.39x32.91)+	32.83 +
C (335.75x11.75)+	11.72 +
D (335.0x11.99)+	11.99 +
E (335.52x13.75)+	13.75 +
F (335.95x22.5)+	22.5 +
G (335.20x14.25)+	14.25 +
H (335x2.4)+	2.22 +
I (334.39x30.7)+	30.46 +
J (332.95x29)+	29 +
K (333.94x9.167)+	9.16 +
L (334.36x11.99)+	11.99 +
M (333.59x10.66)+	10.66 +
N (333.28x15.04)+	15.04 +
O (332.75x15.58)+	15.58 +
P (331x17.91) = 101831.5	17.91 = 304.52

101831.5/ 304.52 = 334

PERMIT APPROVAL STAMP

Z:\BU_Design\3_Typicals\Logo_White.jpg

PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER
JW

PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
Site Plan & Project Notes

PROJECT NO.
2.15.17

DATE

PROJECT NETWORK PATH

SHEET NUMBER
A1.0 SET

NOTES

1. THIS SURVEY WAS PERFORMED BY FIELD TRAVERSE USING A 10 SECOND "TOTAL STATION" THEODOLITE SUPPLEMENTED WITH A 100 FT. STEEL TAPE. THIS SURVEY MEETS OR EXCEEDS THE STANDARDS FOR LAND BOUNDARY SURVEYS AS SET FORTH IN WAC CHAPTER 332-130-090.
2. CONTOUR INTERVAL = 1 FT.
3. ELEVATION DATUM = NAVD'88, AS PER DIRECT OBSERVATIONS USING GPS EQUIPMENT ON JULY 28, 2016.
4. PARCEL AREA = 26,236 SQ. FT.
5. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. THEREFORE EASEMENTS AFFECTING THE PROPERTY, IF ANY, ARE NOT SHOWN HEREON.
6. TREE DIAMETERS AND DRIPLINES DISPLAYED HEREON ARE APPROXIMATE. FOR SPECIFIC GENUS AND DIAMETER, TREES SHOULD BE EVALUATED BY A CERTIFIED ARBORIST.
7. TAX PARCEL NO. 8894500030
8. WE HAVE DETERMINED TO THE BEST OF OUR ABILITY THE OVERHEAD HIGH VOLTAGE POWERLINE WHICH IS CLOSEST TO THE PROJECT SITE AND HAVE DISPLAYED ITS HORIZONTAL AND VERTICAL LOCATION HEREON. HOWEVER, ADDITIONAL OVERHEAD SERVICE LINES MAY EXIST WHICH ARE NOT OBVIOUS TO US BY FIELD OBSERVATION AND POTENTIALLY IMPACT PROJECT DESIGN. THEREFORE, PRIOR TO DESIGN AND CONSTRUCTION WE RECOMMEND THAT SEATTLE CITY LIGHT BE CONSULTED REGARDING THE POSSIBLE EXISTANCE OF ADDITIONAL SERVICE LINES NOT DISPLAYED HEREON WHICH SHOULD BE CONSIDERED FOR PROJECT DESIGN.

PROPERTY DESCRIPTION

LOT 3 OF VERDE LANE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 89 OF PLATS, PAGE 22, RECORDS OF KING COUNTY, WA.

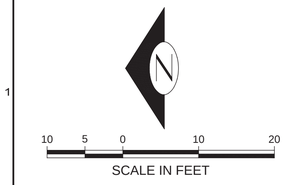
ROBERT H. WINTERS
STATE OF WASHINGTON
18107
REGISTERED PROFESSIONAL LAND SURVEYOR

DATE: 8/31/17

TOPOGRAPHIC SURVEY
8720 S.E. 52ND PL.
MERCER ISLAND, WASHINGTON

CHADWICK WINTERS
LAND SURVEYING AND MAPPING
1422 N.W. 85TH ST., SEATTLE, WA 98117
PHONE: 206.297.0996
FAX: 206.297.0997
WEB: WWW.CHADWICKWINTERS.COM

PROJECT #: 16-5559
DRAWING: 16-5559TOPO.DWG
CLIENT: BUILD URBAN
DRAWN BY: SAL



KEY NOTES		
KEY	DESCRIPTION	DETAIL/ SHEET
1	INSTALL APPROX 203 LF PERIMETER PROTECTION*	A/C05
2	PROPOSED STOCKPILE LOCATION. CONTRACTOR TO DETERMINE FINAL LOCATION IN FIELD	-
3	CONTRACTOR TO REUSE EXISTING DRIVEWAY AS TEMPORARY STABILIZED CONSTRUCTION ENTRANCE OR INSTALL NEW TEMPORARY STABILIZED CONSTRUCTION ENTRANCE	C\C05
4	CONTRACTOR TO SWEEP STREET DAILY OR AT MORE FREQUENT INTERVALS AS NEEDED	-
5	INSTALL TEMPORARY STORM DRAIN INLET PROTECTION TO EXISTING AND PROPOSED STORM DRAIN INLETS INCLUDING CLOSEST STORM DRAIN INLET DOWNSTREAM OF SITE	B/C05
6	ALL EX ONSITE IMPERVIOUS SURFACES TO BE REMOVED UNLESS OTHERWISE NOTED	-
7	INSTALL APPROX 22 LF PERIMETER PROTECTION*	A/C05
8	INSTALL APPROX 28 LF PERIMETER PROTECTION*	A/C05
9	TYPE 2 50' STREAM BUFFER	-

*INSTALL PERIMETER PROTECTION SUCH AS SILT FENCING, COMPOST SOCKS, OR STRAW WATTLES IN ACCORDANCE WITH VOL. II OF THE 2014 DOE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON

LEGEND:

- STABILIZED CONSTRUCTION ENTRANCE
- PERIMETER PROTECTION*
- TREE PROTECTION FENCING
- EXISTING TREE TO BE REMOVED

PROJECT INFORMATION:
8720 SE 52ND PL
MERCER ISLAND, WA 98040

OWNER/APPLICANT:
BUILD URBAN
999 N NORTHLAKE WAY #215
SEATTLE, WA 98103

ARCHITECT:
BUILD URBAN
999 N NORTHLAKE WAY #215
SEATTLE, WA 98103

CIVIL ENGINEER:
DAVIDO CONSULTING GROUP, INC.
9706 4TH AVE NE, SUITE 300
SEATTLE, WA 98115
PH: (206) 523.0024
CONTACT: BEN IDDINS, P.E.

SURVEYOR:
CHADWICK & WINTERS
1422 NW 85TH ST
SEATTLE, WA 98117
PH: (206) 297-0996
FAX: (206) 297-0997
CONTACT: ROBERT WINTERS, P.L.S.

GEOTECHNICAL ENGINEER:
AGES ENGINEERING, LLC
P.O. BOX 935
PUYALLUP, WA 98371
PH:(253) 845-7000
CONTACT: BERNIE KNOLL

No.	DATE	BY	REVISION

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SEATTLE, WA 98115
P: 206.523.0024
F: 206.523.1022
www.dcgeng.com

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2 BUSINESS DAYS
BEFORE YOU DIG
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

BENJAMIN IDDINS — STATE OF WASHINGTON — 54911 — REGISTERED PROFESSIONAL ENGINEER
Digitally signed by Benjamin Iddins
Date: 2020.03.12 14:25:13 -07'00'

BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER EX FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

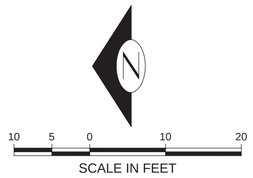
OWNER: BUILD URBAN, LLC
999 N. NORTHGATE WAY, SUITE 215
SEATTLE, WA 98103

PROJECT: 8720 SE 52ND PL
MERCER ISLAND, WA 98040
SMALL PARCEL ESC PLAN

PROJ. MANAGER:	TG, BI
DESIGNED BY:	BI
DRAWN BY:	JA, RB
CHECKED BY:	TG
SCALE:	SCALE
DATE: 3/12/2020	REV. A
SHEET	1 OF 6

SHEET NUMBER
C01

CAD FILE NUMBER: P:\CLIENTS\BUILD URBAN\8720 SE 52ND PL - MERCER ISLAND\DWG\DRAWING\8720 SE 52ND PL.DWG|LAST MODIFIED BY: RBRYANT - SAVE DATE: 3/12/2020 10:15 AM - SHEET SET: 8720 SE 52ND PL - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (34.00 X 22.00 INCHES)|AUTOCAD VERSION: CIVIL 3D 2015



TREE/ TAG #	SPECIES	DBH (INCHES)	DRIP-LINE/LIMITS OF DISTURBANCE (FEET)				CONDITION	VIABILITY	PROPOSAL
			N	S	E	W			
8744	WESTERN RED CEDAR	47	12/12	18/10	11\10	10\8	GOOD	VIABLE	RETAIN
8303	LINDEN	9	10\8	13\7	15\3	16\8	GOOD	VIABLE	REMOVE
1601	RED OAK	7,4	6\5	10\7	3\5	12\7	GOOD	VIABLE	REMOVE
1602	RED OAK	3,7	0\5	21\8	5\5	6\5	GOOD	VIABLE	REMOVE
8293	RED OAK	7	0\5	18\8	3\5	5\5	GOOD	VIABLE	RETAIN
8294	RED OAK	7	17\8	6\5	2\5	9\5	GOOD	VIABLE	RETAIN
8292	WHITE OAK	12	10\8	16\8	11\8	-	GOOD	VIABLE	RETAIN
8315	PACIFIC YEW	7	8\5	7\5	-	7\5	GOOD	VIABLE	RETAIN
8316	MAGNOLIA	6,5,5	7\6	13\6	4\6	12\6	GOOD	VIABLE	RETAIN
8295	MAGNOLIA	6	7\5	8\5	3\5	11\5	GOOD	VIABLE	RETAIN
8330	BITTER CHERRY	5	-	-	-	-	FAIR	VIABLE	RETAIN
8329	PACIFIC DOGWOOD	8,7,8,7,7	12\8	13\8	3\8	14\8	GOOD	VIABLE	RETAIN
1603	BLACK TUPELO	7	0\5	18\5	0\5	13\5	FAIR	VIABLE	RETAIN
8325	FLOWING CHERRY	10	5\5	17\8	7\5	7\5	FAIR	VIABLE	RETAIN
8301	MAGNOLIA	8,4	6\3	9\6	7\6	6\6	FAIR	VIABLE	REMOVE
8386	MAGNOLIA	7,9	11\6	8\6	10\6	10\6	GOOD	VIABLE	RETAIN
8367	WESTERN HEMLOCK	36	19\15	15\15	22\15	17\15	GOOD	VIABLE	REMOVE
8638	JAPANESE MAPLE	9,8	14\8	10\8	9\8	15\8	GOOD	VIABLE	REMOVE
8368	MAGNOLIA	9	3\5	10\5	11\5	4\5	GOOD	VIABLE	REMOVE
8401	PACIFIC DOGWOOD	12	17\6	11\6	5\6	26\6	FAIR	VIABLE	RETAIN
8394	MAGNOLIA	6	7\5	0\5	0\5	9\5	GOOD	VIABLE	RETAIN
8409	WESTERN RED CEDAR	42	12\20	8\20	11\12	-	GOOD	VIABLE	RETAIN
8410	WESTERN HEMLOCK	35	14\16	15\16	10\10	17\16	GOOD	VIABLE	RETAIN
8408	WESTERN RED CEDAR	40	-	-	-	-	GOOD	VIABLE	REMOVE
8418	SPANISH CHESTNUT	7	9\5	7\5	16\5	5\5	FAIR	VIABLE	RETAIN
8419	MAGNOLIA	7,5	10\6	5\6	6\6	9\6	FAIR	VIABLE	RETAIN
8489	WHITE OAK	23	18\12	23\12	22\12	19\12	GOOD	VIABLE	RETAIN
8414	PACIFIC GODWOOD	12	-	8\6	12\6	11\6	FAIR	VIABLE	RETAIN
8413	SPANISH CHESTNUT	8	9\5	7\5	13\5	0\5	FAIR	VIABLE	RETAIN
8407	JAPANESE MAPLE	9	6\5	19\5	9\5	4\5	GOOD	VIABLE	REMOVE
8285	SWEETGUM	21	11\10	10\10	18\10	8\10	FAIR	VIABLE	REMOVE
8253	ENGLISH HOLLY	6	3\5	8\5	4\5	5\5	FAIR	VIABLE	REMOVE
8251	WESTERN HEMLOCK	20	12\10	14\10	14\10	11\10	GOOD	VIABLE	REMOVE
8248	JAPANESE MAPLE	8	4\5	19\5	10\5	5\5	GOOD	VIABLE	RETAIN
8249	JAPANESE MAPLE	6	13\5	5\5	5\5	5\5	GOOD	VIABLE	RETAIN
8164	WESTERN HEMLOCK	27	22\14	17\14	13\14	19\14	GOOD	VIABLE	RETAIN
8263	MAGNOLIA	6	5\5	7\5	7\5	6\5	GOOD	VIABLE	RETAIN
1604	DOULAS-FIR	4	6\5	6\5	8\5	7\5	GOOD	VIABLE	REMOVE
NEIGHBORING TREES									
201	DOUGLAS-FIR	36	-	-	-	8\10	GOOD	VIABLE	PROTECT
202	WESTERN RED CEDAR	24	9\10	16\10	-	15\10	GOOD	VIABLE	PROTECT
203	WESTERN RED CEDAR	11	12\5	-	-	-	GOOD	VIABLE	PROTECT
8159	WESTERN RED CEDAR	30	8\14	6\5	6\5	7\14	GOOD	VIABLE	PROTECT

DRIP-LINE AND LIMITS OF DISTURBANCE MEASUREMENTS FROM FACE OF TRUNK
TREES ON NEIGHBORING PROPERTIES - DRIP-LINE AND LIMITS OF DISTURBANCE MEASUREMENTS FROM PROPERTY LINES

KEY NOTES		
KEY	DESCRIPTION	DETAIL/ SHEET
1	TREE LOCATION APPROXIMATE PER ARBORIST REPORT	-
2	NON SIGNIFICANT	-
3	TYPE 2 STREAM AND 50' BUFFER	-

LEGEND:

TREE PROTECTION FENCING

EXISTING TREE TO BE REMOVED

GENERAL NOTES:

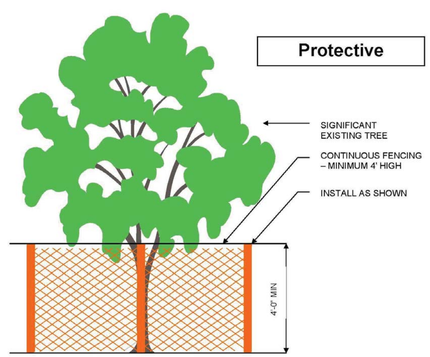
TREE DATA INCLUDING SPECIES AND SIZE PER ARBORIST REPORT CREATED BY AMERICAN FOREST MANAGEMENT (AFM) AND DATED OCTOBER 7, 2016. ARBORIST SHOULD BE ONSITE DURING CLEARING TO VERIFY TREES TO REMAIN VS REMOVED.

TREE PROTECTION STANDARDS:

1. TREE PROTECTION FENCING SHALL BE ERECTED AT PRESCRIBED DISTANCE PER ARBORIST REPORT. FENCES SHALL BE CONSTRUCTED OF CHAIN LINK AND BE AT LEAST 4 FEET HIGH.
2. INSTALL HIGHLY VISIBLE SIGNS ON PROTECTION FENCING SPACED NO FURTHER THAN 15 FEET APART. SIGNS SHALL STATE "TREE PROTECTION AREA-ENTRANCE PROHIBITED", AND "CITY OF MERCER ISLAND" CODE ENFORCEMENT PHONE NUMBER.
3. NO WORK SHALL BE PERFORMED WITHIN PROTECTION FENCING UNLESS APPROVED BY PLANNING OFFICIAL. IN SUCH CASES, ACTIVITIES WILL BE APPROVED AND SUPERVISED BY A "QUALIFIED TREE PROFESSIONAL".
4. THE ORIGINAL GRADE SHALL NOT BE ELEVATED OR REDUCED WITHIN PROTECTION FENCING WITHOUT THE PLANNING OFFICIAL AUTHORIZATION BASED ON RECOMMENDATIONS FROM A QUALIFIED PROFESSIONAL.
5. NO BUILDING MATERIALS, SPOILS, CHEMICALS OR SUBSTANCES OF ANY KIND WILL BE PERMITTED WITHIN PROTECTION FENCING.
6. PROTECTION FENCING SHALL BE MAINTAINED UNTIL THE PLANNING OFFICIAL AUTHORIZES ITS REMOVAL.
7. ENSURE THAT ANY APPROVED LANDSCAPING WITHIN THE PROTECTED ZONE SUBSEQUENT TO THE APPROVED REMOVAL OF PROTECTION FENCING BE PERFORMED WITH HAND LABOR.

IN ADDITION TO THE ABOVE, THE PLANNING OFFICIAL MAY REQUIRE THE FOLLOWING:

A. IF EQUIPMENT IS AUTHORIZED TO OPERATE WITHIN THE ROOT ZONE, THE AREA WILL BE MULCHED TO A DEPTH OF 6" OR COVERED WITH PLYWOOD OR SIMILAR MATERIAL TO PROTECT ROOTS FROM DAMAGE CAUSED BY HEAVY EQUIPMENT.
B. MINIMIZE ROOT DAMAGE BY EXCAVATING A 2-FOOT DEEP TRENCH, AT EDGE OF PROTECTION FENCING TO CLEANLY SEVER THE ROOTS OF PROTECTED TREES.
C. CORRECTIVE PRUNING TO AVOID DAMAGE FROM MACHINERY OR BUILDING ACTIVITY.
D. MAINTENANCE OF TREES THROUGHOUT CONSTRUCTION PERIOD BY WATERING AND FERTILIZATION.



1. PROTECTIVE FENCING SHALL BE LOCATED WHERE SHOWN ON PLANS. FENCE SHALL COMPLETELY ENCIRCLE TREE(S) AT THE DRIPLINE OR BEYOND. AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS. FENCE MUST REMAIN UP THROUGHOUT PROJECT.
2. NO STOCKPILING OF MATERIALS, GRADE CHANGES, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. PLEASE CALL ARBORIST FOR MITIGATION MEASURES IF FENCING MUST COME DOWN.
3. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER 1" IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP WITH CONTINUOUS IRRIGATION, TO PREVENT DRYING. COVER WITH SOIL AS SOON AS POSSIBLE—3" OF MULCH RECOMMENDED.

S:\DSG\FORMS\TreeFencing 08/2009

No.	DATE	BY	REVISION

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F: 206.523.1022
www.dcgengr.com

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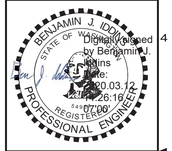

Digitally signed by Benjamin J. Idkins
Date: 2020.03.12 07:07:16 -08'00'

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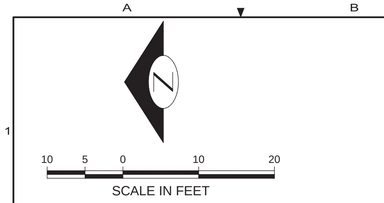
OWNER: BUILD URBAN, LLC
999 N. NORTHGATE WAY, SUITE 215
SEATTLE, WA 98103

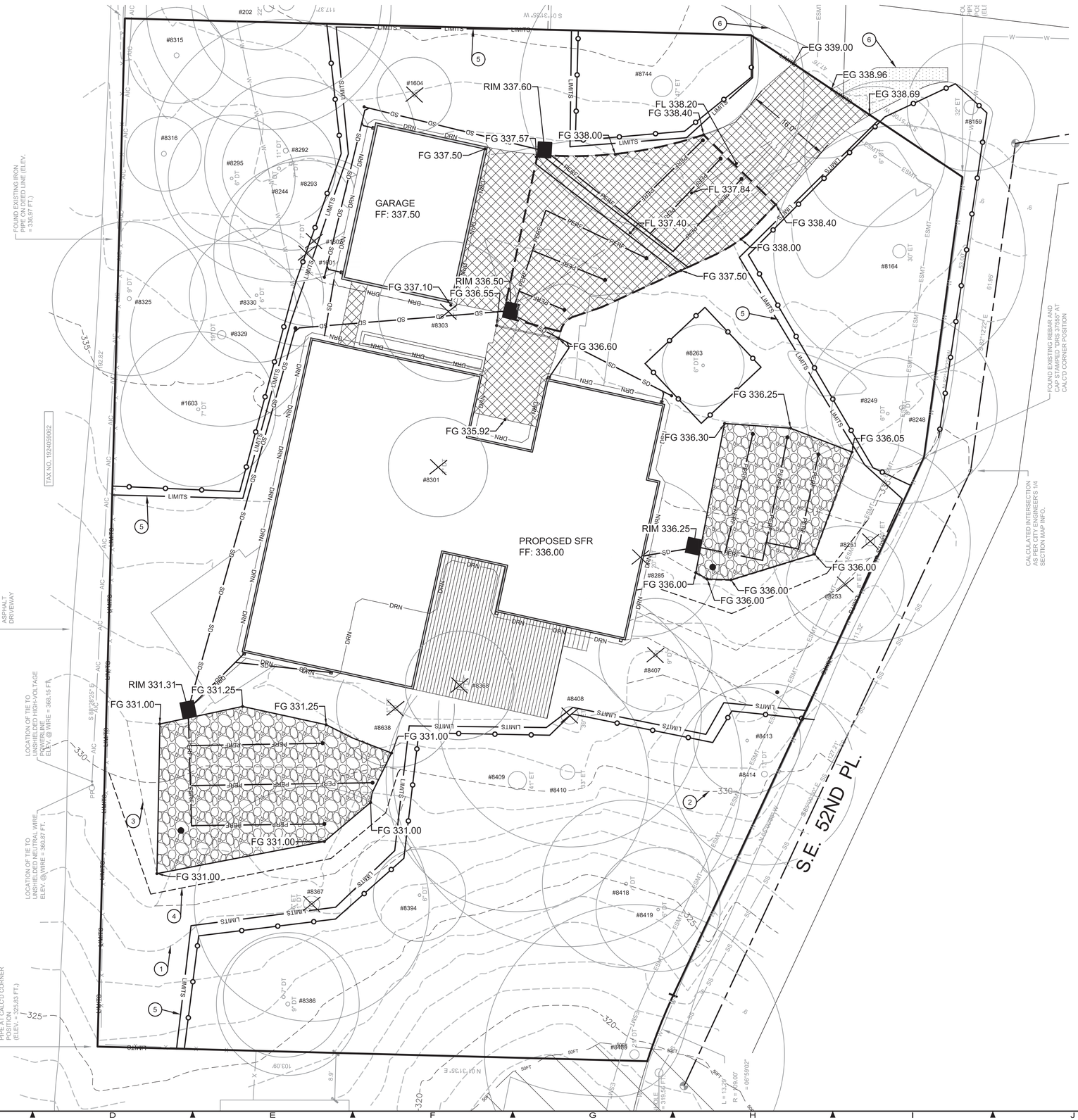
PROJECT: 8720 SE 52ND PL
MERCER ISLAND, WA 98040
TREE RETENTION PLAN

PROJ. MANAGER:	TG, BI
DESIGNED BY:	BI
DRAWN BY:	JA, RB
CHECKED BY:	TG
SCALE:	SCALE
DATE: 3/12/2020	REV. A
SHEET	2 OF 6

SHEET NUMBER
C02

C:\4D FILE NUMBER P:\CLIENTS\BUILD URBAN\8720 SE 52ND PL - MERCER ISLAND\DWG\DRAWING\8720 SE 52ND PL.DWG\LAST MODIFIED BY: RBRYANT - SAVE DATE: 3/12/2020 10:15 AM - SHEET SET: 8720 SE 52ND PL - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (34.00 X 22.00 INCHES)\AUTOCAD VERSION: CIVIL 3D 2015





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10 5 0 10 20
SCALE IN FEET

KEY NOTES

KEY	DESCRIPTION	DETAIL/ SHEET
①	EX MINOR CONTOUR (TYP)	-
②	EX MAJOR CONTOUR (TYP)	-
③	PROPOSED MINOR CONTOUR (TYP)	-
④	PROPOSED MAJOR CONTOUR (TYP)	-
⑤	LIMITS OF DISTURBANCE. PRIOR TO START OF CONSTRUCTION, CONTRACTOR TO STAKE LIMITS OF DISTURBANCE FOR ARBORIST SITE INSPECTION	-
⑥	SAWCUT EX ASPHALT	-

△2

LEGEND:

- ▨ PERMEABLE PAVEMENT FACILITY EXTENTS
- ▨ BELOW GRADE GRAVEL INFILTRATION FACILITY
- ▨ PERMEABLE PAVERS (D / C05)
- ▨ ASPHALT
- —o— TREE PROTECTION FENCING
- ⊠ EXISTING TREE TO BE REMOVED
- — LIMITS — LIMITS OF DISTURBANCE

No.	DATE	BY	REVISION

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BENJAMIN J. IDDINS
PROFESSIONAL ENGINEER
Digitally signed by Benjamin J. Iddins
Date: 2020.03.12 14:26:46 -07'00'

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BUILD URBAN, LLC
999 N. NORTHGATE WAY, SUITE 215
SEATTLE, WA 98103

PROJECT:
8720 SE 52ND PL
MERCER ISLAND, WA 98040
GRADING PLAN

PROJ. MANAGER:	TG, BI
DESIGNED BY:	BI
DRAWN BY:	JA, RB
CHECKED BY:	TG
SCALE:	SCALE

DATE:	REV.	SHEET
3/12/2020	A	3 OF 6

SHEET NUMBER
C03

KEY NOTES

KEY	DESCRIPTION	DETAIL/ SHEET
1	25 LF 6" PERF PVC @ ELEV 328.50	-
2	22 LF 6" PERF PVC @ ELEV 328.50	-
3	25 LF 6" PERF PVC @ ELEV 328.50	-
4	43 LF 6" PERF PVC @ ELEV 328.50	-
5	970 SF (MIN) INFILTRATION TRENCH #1 FG 331.00 (MIN) TOP OF FACILITY 330.00 BOTTOM OF FACILITY 328.00	I/C06
6	4" ROOF DOWNSPOUT TIGHTLINE @ 2.00% MIN SLOPE AND 2' MIN COVER (TYP)	-
7	24 LF 6" PERF PVC @ ELEV 333.50	-
8	13 LF 6" PERF PVC @ ELEV 333.50	-
9	18 LF 6" PERF PVC @ ELEV 333.50	-
10	600 SF (MIN) INFILTRATION TRENCH #2 FG 336.00 (MIN) TOP OF FACILITY 335.00 BOTTOM OF FACILITY 333.00	J/C06
11	PERIMETER FOOTING DRAIN - 4" PERFORATED PVC PIPE IN 6" MIN WASHED GRAVEL. WRAPPED IN NON-WOVEN FILTER FABRIC (TYP)	-
12	9 LF 6" PERF PVC @ ELEV 334.75	-
13	20 LF 6" PERF PVC @ ELEV 334.75	-
14	19 LF 6" PERF PVC @ ELEV 334.75	-
15	21 LF 6" PERF PVC @ ELEV 334.75	-
16	IMPERMEABLE CHECK DAM FG 337.50 TOP ELEV 336.90 BOTTOM ELEV 333.50± BOTTOM OF CHECK DAM TO EXTEND DOWN TO EX HARDPAN ELEV (APPROX. 4' BELOW EG)	K/C06
17	29 LF 6" PERF PVC @ ELEV 335.75	-
18	20 LF 6" PERF PVC @ ELEV 335.75	-
19	19 LF 6" PERF PVC @ ELEV 335.75	-
20	19 LF 6" PERF PVC @ ELEV 335.75	-
21	1,120 SF (MIN) PERMEABLE PAVEMENT FACILITY W/ 1' MIN PONDING WITHIN UNDERLYING GRAVEL STORAGE LAYER. FG AND BOTTOM OF FACILITY ELEVATIONS VARY	H/C05
22	±60' DISPERSION OVERFLOW VEGETATED FLOWPATH	-
23	±98' DISPERSION OVERFLOW VEGETATED FLOWPATH	-
24	4" SOLID WALL FOOTING DRAIN TIGHTLINE @ 2.00% MIN SLOPE	-
25	APPROX LOCATION OF EX SSS PER CITY OF MERCER ISLAND ONLINE GIS PORTAL. CONTRACTOR TO DETERMINE EXACT LOCATION AND DEPTH IN FIELD PRIOR TO CONSTRUCTION OF THE ONSITE SSS. PROVIDE TV INSPECTION OF EX PRIVATE SSS BETWEEN THE PROPERTY AND THE PUBLIC SEWER MAIN AND REPLACE IF FOUND TO BE DEFECTIVE (E.G. CRACKS, BREAKS, LEAKS, BAD JOINTS, SAGS)	-
26	INSTALL SSSCO. CONTRACTOR TO DETERMINE DEPTH OF EXISTING SSS AND ADJUST ONSITE SSS AS NECESSARY	G/C05
27	APPROX LOCATION OF EX WATER SERVICE PER CITY OF MERCER ISLAND ONLINE GIS PORTAL. EX WATER METER AND SERVICE TO BE RETIRED	-
28	PUBLIC WATER MAIN LOCATED IN 88TH AVE SE (NOT SHOWN)	-
29	SDCO (TYP)	G/C05
30	12" PERFORATED PVC OBSERVATION WELL RIM 336.10	L/C06
31	12" PERFORATED PVC OBSERVATION WELL RIM 331.10	L/C06
32	23 LF 6" PERF PVC @ ELEV 333.50	-
33	INSTALL NEW 1" WATER SERVICE (SIZE TO BE CONFIRMED BY OTHERS)	-
34	NEW 1" DOMESTIC WATER METER (SIZE TO BE CONFIRMED BY OTHERS)	-
35	CONNECT NEW 1" WATER SERVICE TO EX 6" CAST IRON WATER MAIN W/ TAP (SIZE TO BE CONFIRMED BY OTHERS)	-
36	EX 5' WIDE UTILITY EASEMENT	-

DRAINAGE NOTES:

ROOF DRAINS:

1. NUMBER AND SIZE SHALL BE IN CONFORMANCE WITH THE UNIFORM PLUMBING CODE.
2. DOWNSPOUTS SHALL BE TIED INTO A NON-PERFORATED, RIGID, SMOOTH-BORE PIPE, WHICH DRAINS TO AN APPROVED STORM SYSTEM.
3. DRAINPIPE SHALL MEET MATERIAL STANDARDS FOR D2729 FOR P.V.C. PIPE, GR F-405 FOR SMOOTH-BORE H.D.P.E. PIPE.
4. PROVIDE CLEANOUTS AT THE UPPER END OF THE SYSTEM AND AT EACH CUMULATIVE CHANGE OF DIRECTION IN EXCESS OF 135 DEGREES.
5. ALL PIPE FITTINGS SHALL BE MADE OF THE SAME MATERIAL AS THE STRAIGHT PIPE. GLUED JOINTS SHALL USE A BONDING AGENT RECOMMENDED BY THE PIPE MANUFACTURER.

FOOTING DRAINS:

1. FOOTING DRAINS SHALL BE INSTALLED AROUND ALL FOUNDATIONS WHICH ENCLOSE A CRAWL SPACE, CELLAR, BASEMENT, GARAGE OR OTHER BUILDING SPACE.
2. DRAINS SHALL BE CONSTRUCTED OF PERFORATED PIPE INSTALLED AT THE BASE OF THE FOOTING.
3. DRAIN PIPE SHALL MEET MATERIAL STANDARDS FOR D2729 FOR P.V.C. PIPE, WITH THE PERFORATIONS DIRECTED DOWNWARD.
4. GRANULAR BACKFILL SHALL BE PLACED AROUND AND ABOVE THE FOOTING DRAIN TO A DEPTH OF 2/3 OF THE HEIGHT OF THE WALL.
5. A FILTER FABRIC SHALL BE USED TO PREVENT SOIL PARTICLES FROM ENTERING THE FOOTING DRAIN. IT IS PREFERABLE THAT THE FABRIC BE PLACED BETWEEN THE GRANULAR BACKFILL AND THE NATIVE SOILS.

DRIVEWAY/PARKING AREA DRAINS:

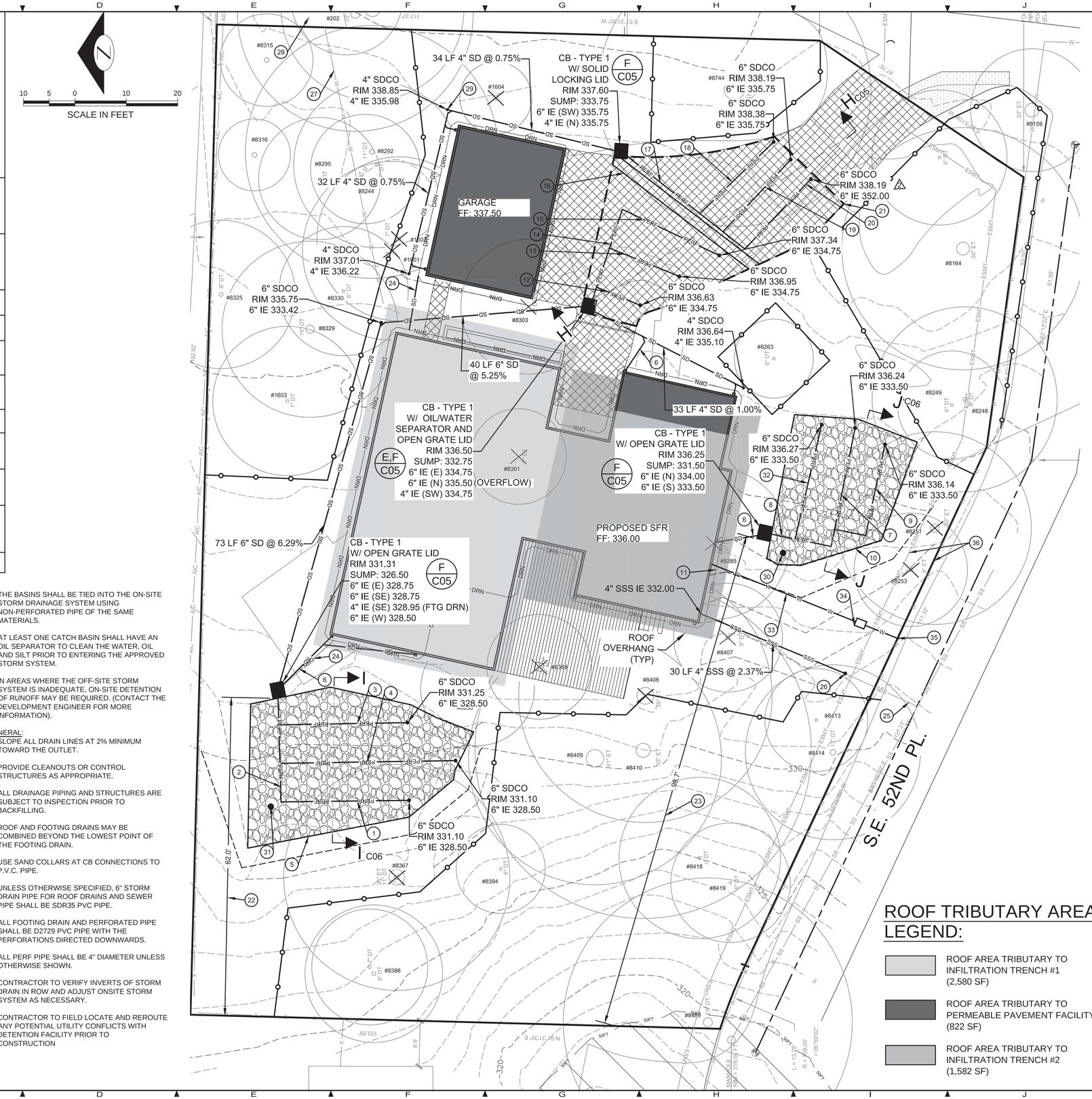
1. LARGE IMPERVIOUS AREAS USED FOR PARKING OR MANEUVERING OF VEHICLES SHALL BE SLOPED TO DRAIN TO ONE OR MORE CATCH BASINS.
2. THE BASINS SHALL BE TIED INTO THE ON-SITE STORM DRAINAGE SYSTEM USING NON-PERFORATED PIPE OF THE SAME MATERIALS.
3. AT LEAST ONE CATCH BASIN SHALL HAVE AN OIL SEPARATOR TO CLEAN THE WATER, OIL AND SILT PRIOR TO ENTERING THE APPROVED STORM SYSTEM.
4. IN AREAS WHERE THE OFF-SITE STORM SYSTEM IS INADEQUATE, ON-SITE DETENTION OF RUNOFF MAY BE REQUIRED. (CONTACT THE DEVELOPMENT ENGINEER FOR MORE INFORMATION).

GENERAL:

1. SLOPE ALL DRAIN LINES AT 2% MINIMUM TOWARD THE OUTLET.
2. PROVIDE CLEANOUTS OR CONTROL STRUCTURES AS APPROPRIATE.
3. ALL DRAINAGE PIPING AND STRUCTURES ARE SUBJECT TO INSPECTION PRIOR TO BACKFILLING.
4. ROOF AND FOOTING DRAINS MAY BE COMBINED BEYOND THE LOWEST POINT OF THE FOOTING DRAIN.
5. USE SAND COLLARS AT CB CONNECTIONS TO P.V.C. PIPE.
6. UNLESS OTHERWISE SPECIFIED, 6" STORM DRAIN PIPE FOR ROOF DRAINS AND SEWER PIPE SHALL BE SDR35 PVC PIPE.
7. ALL FOOTING DRAIN AND PERFORATED PIPE SHALL BE D2729 PVC PIPE WITH THE PERFORATIONS DIRECTED DOWNWARDS.
8. ALL PERF PIPE SHALL BE 4" DIAMETER UNLESS OTHERWISE SHOWN.
9. CONTRACTOR TO VERIFY INVERTS OF STORM DRAIN IN ROW AND ADJUST ONSITE STORM SYSTEM AS NECESSARY.
10. CONTRACTOR TO FIELD LOCATE AND REROUTE ANY POTENTIAL UTILITY CONFLICTS WITH DETENTION FACILITY PRIOR TO CONSTRUCTION

LEGEND:

- PERMEABLE PAVEMENT FACILITY EXTENTS
- BELOW GRADE GRAVEL INFILTRATION FACILITY
- ASPHALT
- PERMEABLE PAVERS (D / C05)
- TREE PROTECTION FENCING
- EXISTING TREE TO BE REMOVED



ROOF TRIBUTARY AREA LEGEND:

- ROOF AREA TRIBUTARY TO INFILTRATION TRENCH #1 (2,580 SF)
- ROOF AREA TRIBUTARY TO PERMEABLE PAVEMENT FACILITY (822 SF)
- ROOF AREA TRIBUTARY TO INFILTRATION TRENCH #2 (1,582 SF)

No.	DATE	BY	REVISION

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(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

BENJAMIN J. IDDINGS — STATE OF WASHINGTON — 21611 — REGISTERED PROFESSIONAL ENGINEER
Digitally signed by Benjamin J. Iddings
Date: 2020.03.12 12:27:18 -07'00'

BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, & ALL OTHER EX FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN &/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

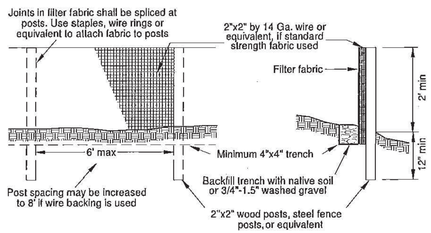
OWNER: BUILD URBAN, LLC
999 N. NORTHGATE WAY, SUITE 215
SEATTLE, WA 98103

PROJECT: 8720 SE 52ND PL
MERCER ISLAND, WA 98040
DRAINAGE & UTILITY PLAN

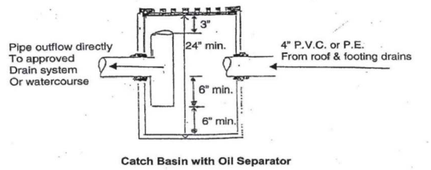
PROJ. MANAGER:	TG, BI
DESIGNED BY:	BI
DRAWN BY:	JA, RB
CHECKED BY:	TG
SCALE:	SCALE
DATE:	3/12/2020
REV.	A
SHEET	4 OF 6

SHEET NUMBER
C04

CAD FILE NUMBER: P:\CLIENTS\BUILD URBAN\8720 SE 52ND PL - MERCER ISLAND\DWG\DRAWINGS\8720 SE 52ND PL DWG\LAST MODIFIED BY: RBRYANT - SAVE DATE: 3/12/2020 10:15 AM - SHEET SET: 8720 SE 52ND PL - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (34.00 X 22.00 INCHES)\AUTOCAD VERSION: CIVIL 3D 2015

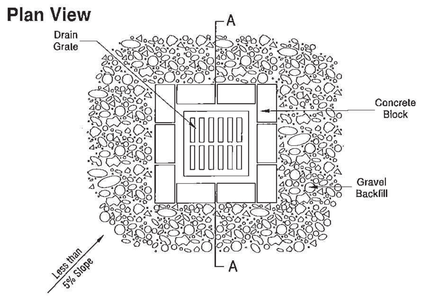


SILT FENCE
D.O.E. FIGURE 4.20
NOT TO SCALE
A C01



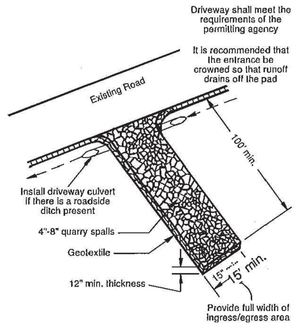
Catch Basin with Oil Separator

CB W/ OIL/WATER SEPARATOR
NOT TO SCALE
E C04

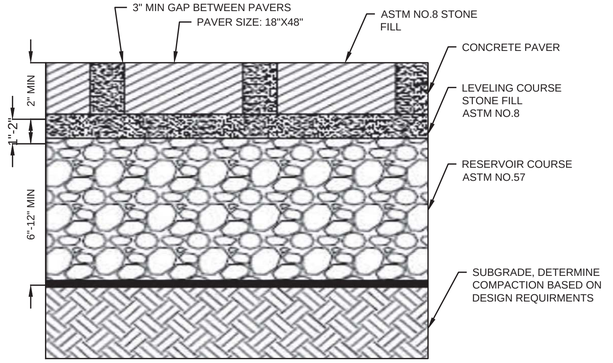


Notes:
1. Drop inlet sediment barriers are to be used for small, nearly level drainage areas. (less than 5%)
2. Excavate a basin of sufficient size adjacent to the drop inlet.
3. The top of the structure (ponding height) must be well below the ground elevation downslope to prevent runoff from bypassing the inlet. A temporary dike may be necessary on the downslope side of the structure.

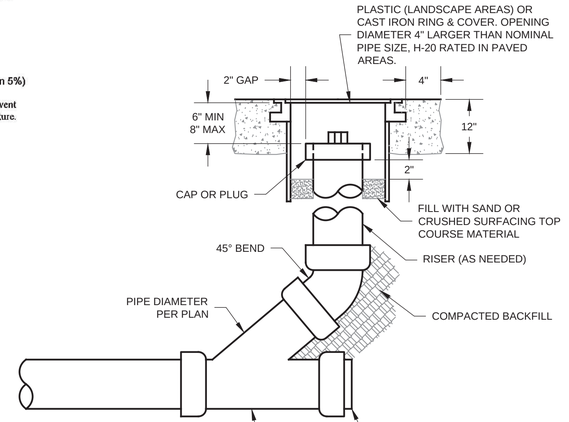
TEMPORARY INLET PROTECTION
NOT TO SCALE
B C01



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE
C C01

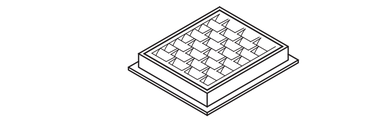


PERVIOUS CONCRETE BLOCK OR PAVER SYSTEM
NOT TO SCALE
D C03 & C04

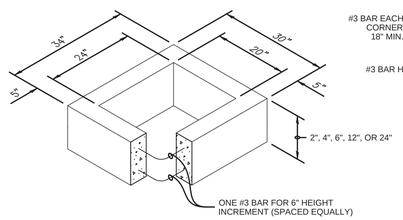


NOTE
CAST IRON COVER SHALL READ "SEWER", "STORM" OR "CO."

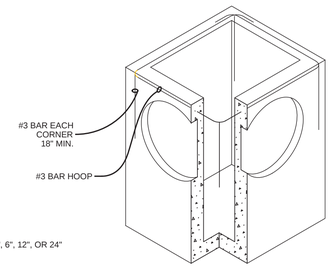
STORM DRAIN & SEWER CLEANOUT
NOT TO SCALE
G C04



FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION

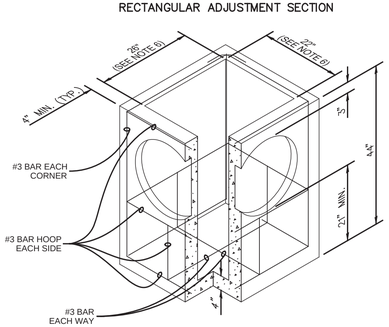


(SEE NOTE 1)

ALTERNATIVE PRECAST BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP ⁎ **(STD. SPEC. 9-05.20)**	12"
SOLID WALL PVC **(STD. SPEC. 9-05.12(1))**	15"
PROFILE WALL PVC **(STD. SPEC. 9-05.12(2))**	15"

⁎ CORRUGATED POLYETHYLENE STORM SEWER PIPE

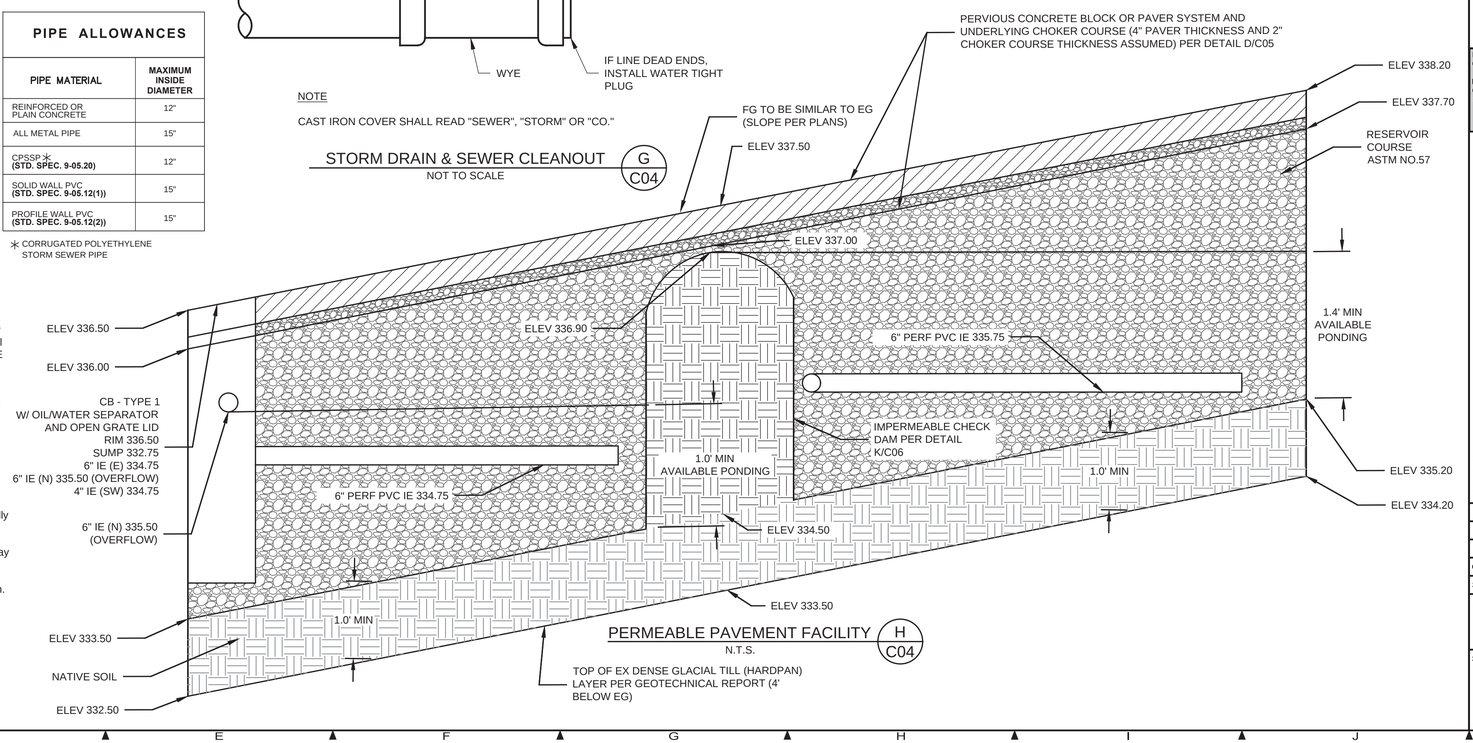


PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the ALTERNATIVE PRECAST BASE SECTION. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20". Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum. Provide a 1.5" minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification 9-04.3.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5'.
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1:24 or steeper.
6. The opening shall be measured at the top of the Precast Base Section.
7. All pickup holes shall be grouted full after the basin has been placed.

CATCH BASIN TYPE 1
PER WSDOT STD PLAN B-5.20-00
NOT TO SCALE
F C04



PERMEABLE PAVEMENT FACILITY
N.T.S.
H C04

No.	DATE	BY	REVISION

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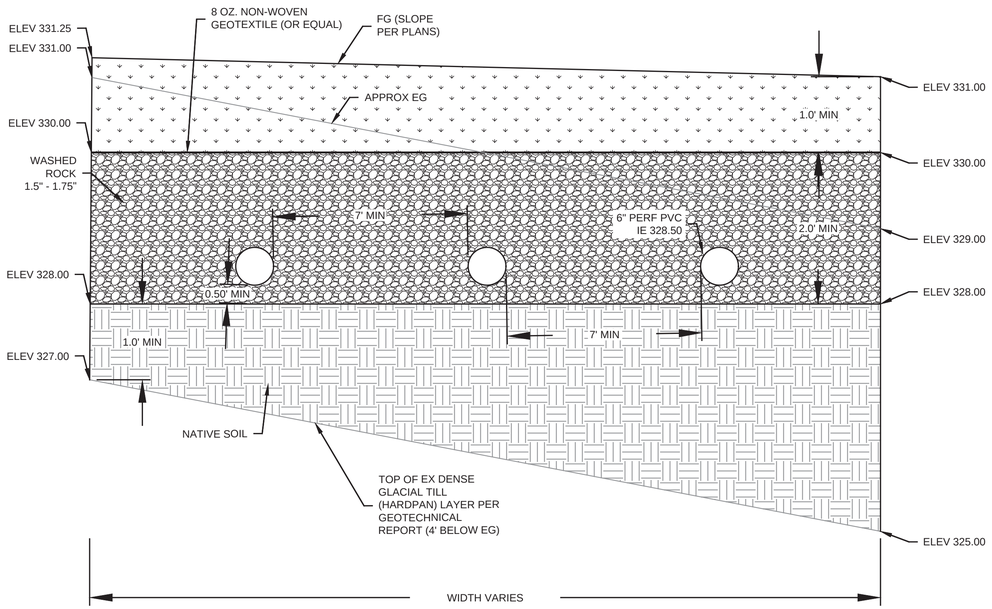
OWNER: BUILD URBAN, LLC
999 N. NORTHGATE WAY, SUITE 215
SEATTLE, WA 98103

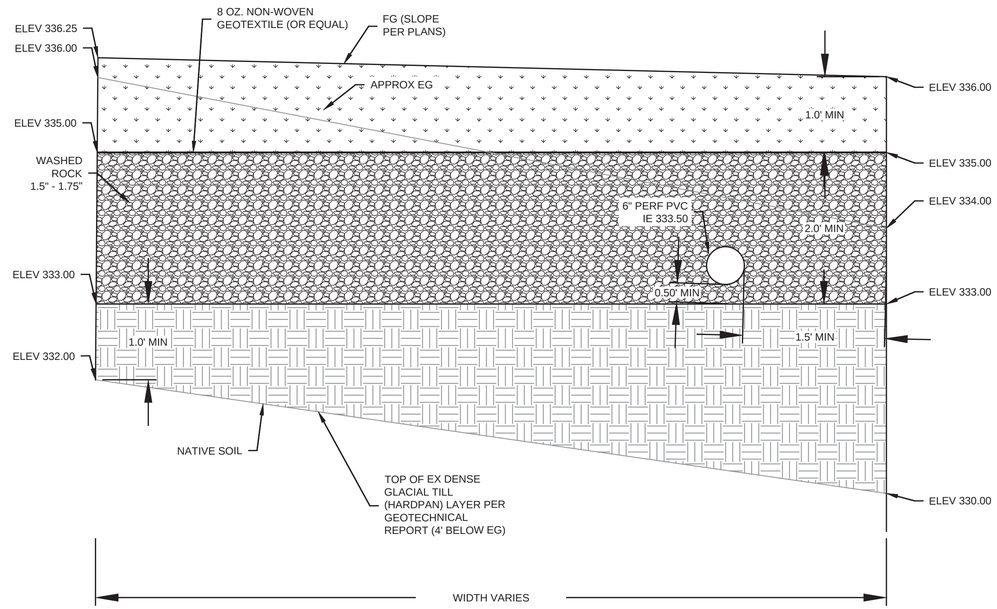
PROJECT: 8720 SE 52ND PL
MERCER ISLAND, WA 98040
ESC & DRAINAGE DETAIL

PROJ. MANAGER:	TG, BI
DESIGNED BY:	BI
DRAWN BY:	JA, RB
CHECKED BY:	TG
SCALE:	SCALE
DATE:	REV. / SHEET
3/12/2020	A / 5 OF 6

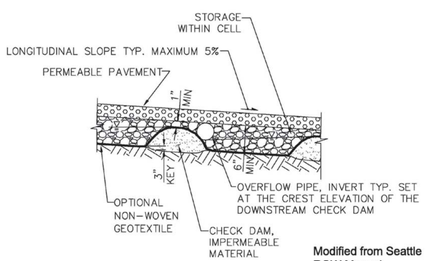
SHEET NUMBER
C05



INFILTRATION TRENCH #1 (I / C04)
N.T.S.

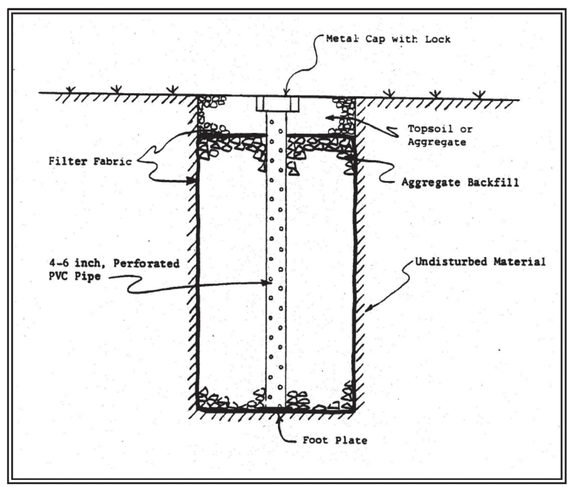


INFILTRATION TRENCH #2 (J / C04)
N.T.S.



Modified from Seattle ROW Manual Figure 6-25

CHECK DAM (K / C04)
PER 2012 DOE MANUAL FIG. 5.3.6
N.T.S.



OBSERVATION WELL
PER D.O.E. FIGURE 3.3.10
N.T.S.
(L / C04)

No.	DATE	BY	REVISION

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OWNER: BUILD URBAN, LLC
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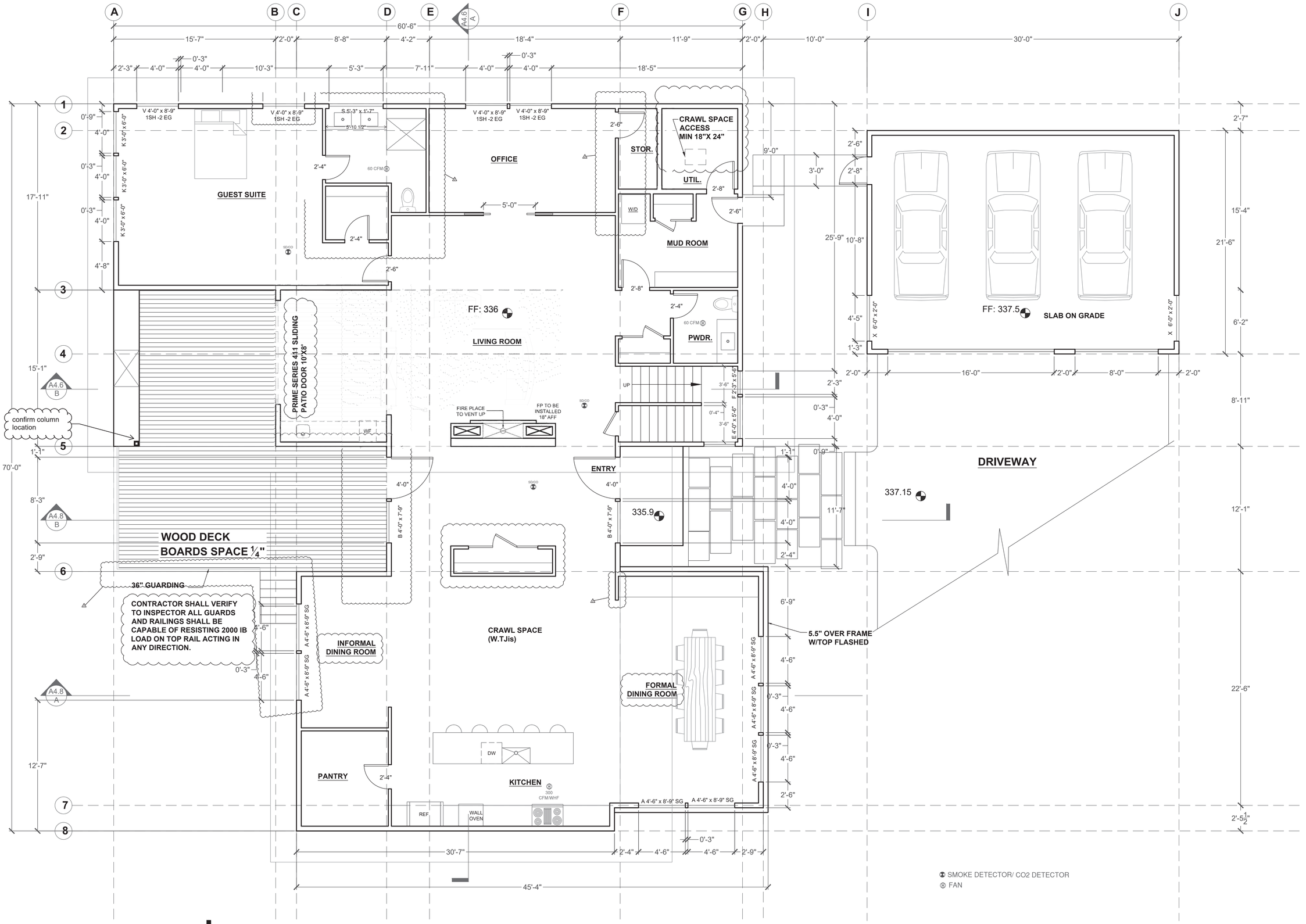
SEATTLE, WA 98103

PROJECT: 8720 SE 52ND PL
MERCER ISLAND, WA 98040
DETAILS

PROJ. MANAGER:	TG, BI
DESIGNED BY:	BI
DRAWN BY:	JA, RB
CHECKED BY:	TG
SCALE:	SCALE
DATE: 3/12/2020	REV. A
SHEET	6 OF 6

SHEET NUMBER
C06

CAD FILE NUMBER: P:\CLIENTS\BUILD URBAN\8720 SE 52ND PL - MERCER ISLAND\DWGS\DRAWINGS\8720 SE 52ND PL.DWG|LAST MODIFIED BY: RBRYANT - SAVE DATE: 3/12/2020 10:15 AM - SHEET SET: 8720 SE 52ND PL - ORIGINAL SHEET SIZE: ANSI FULL BLEED D (34.00 X 22.00 INCHES)|AUTOCAD VERSION: CIVIL 3D 2015



FIRST FLOOR PLAN

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

PERMIT APPROVAL STAMP

Z:\BU_Design\3_Typicals\Logo_White.jpg

PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE REVISION
	3.13.18
2	5.04.18

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER
JW

PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
First Floor
Floor Plans

PROJECT NO.

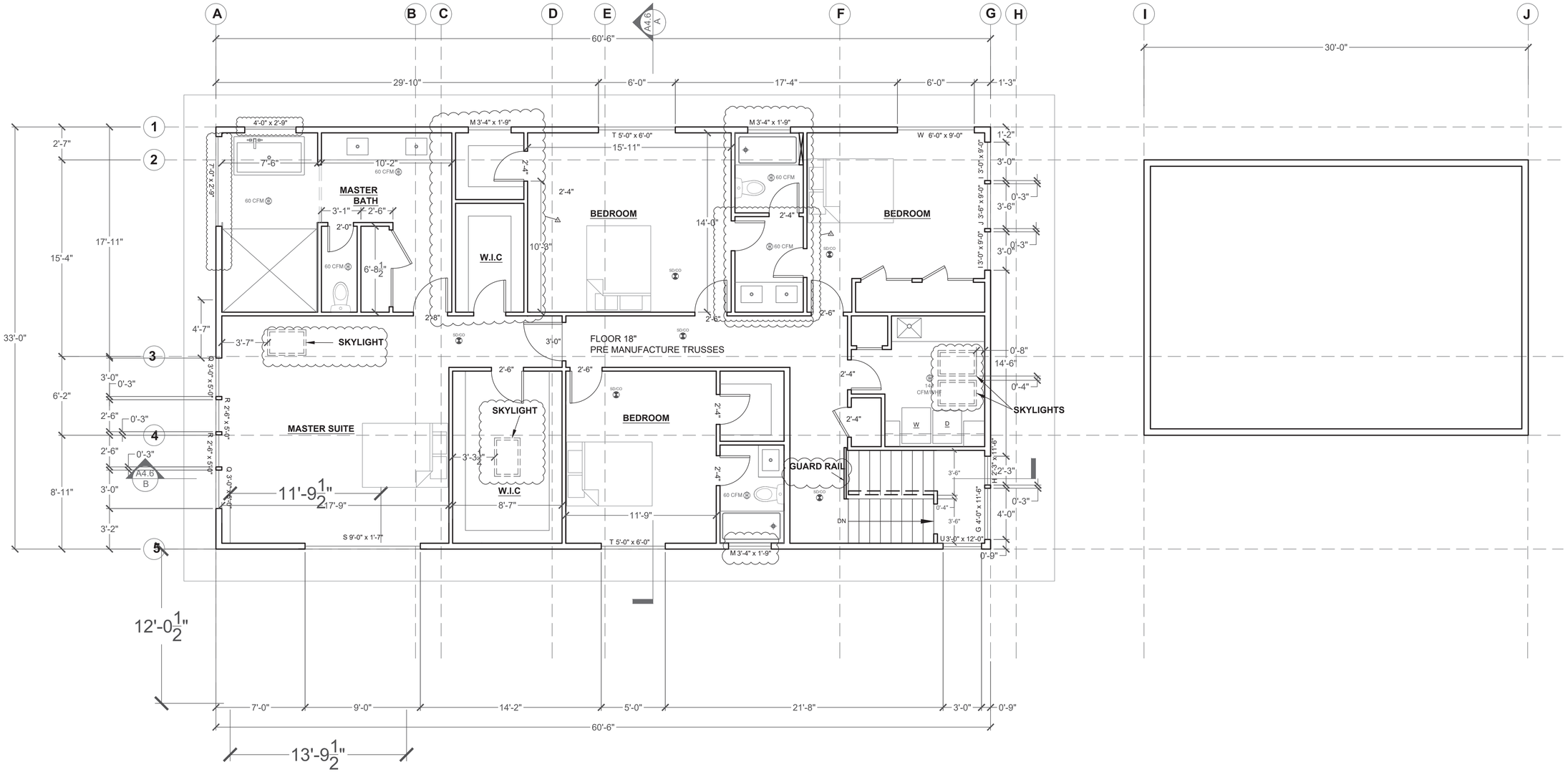
DATE
5.04.18

PROJECT NETWORK PATH

SHEET NUMBER
A4.0 SET

PLOT DATE: 4 May 2018

52nd Construction Set 9.19.18 (1).pdf



SMOKE DETECTOR/ CO2 DETECTOR
FAN

SECOND FLOOR PLAN

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

PERMIT APPROVAL STAMP

Z:\BU_Design\3_Typicals\Logo_White.jpg

PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION
	3.13.18	
2	5.04.18	

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER
JW
PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
Second Floor
Floor Plans

PROJECT NO.

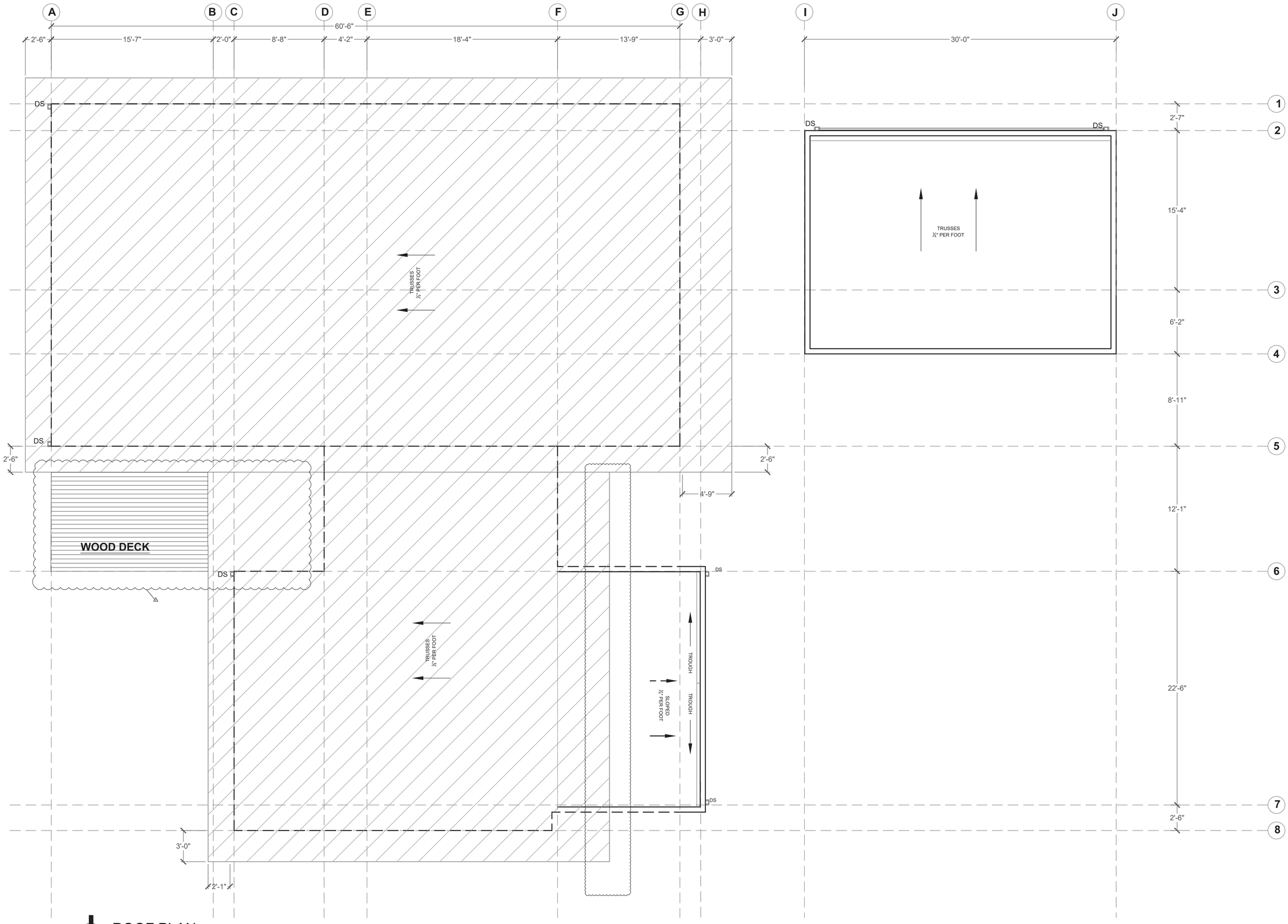
DATE
5.04.18

PROJECT NETWORK PATH

SHEET NUMBER
A4.1 SET

PLOT DATE: 4 May 2018

52nd Construction Set 9.19.18 (1).pdf



ROOF PLAN

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

PERMIT APPROVAL STAMP

Z:\BU_Design\3_Typicals\Logo_White.jpg

PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION
	3.13.18	
2	5.04.18	

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER

JW
PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
Roof Plan

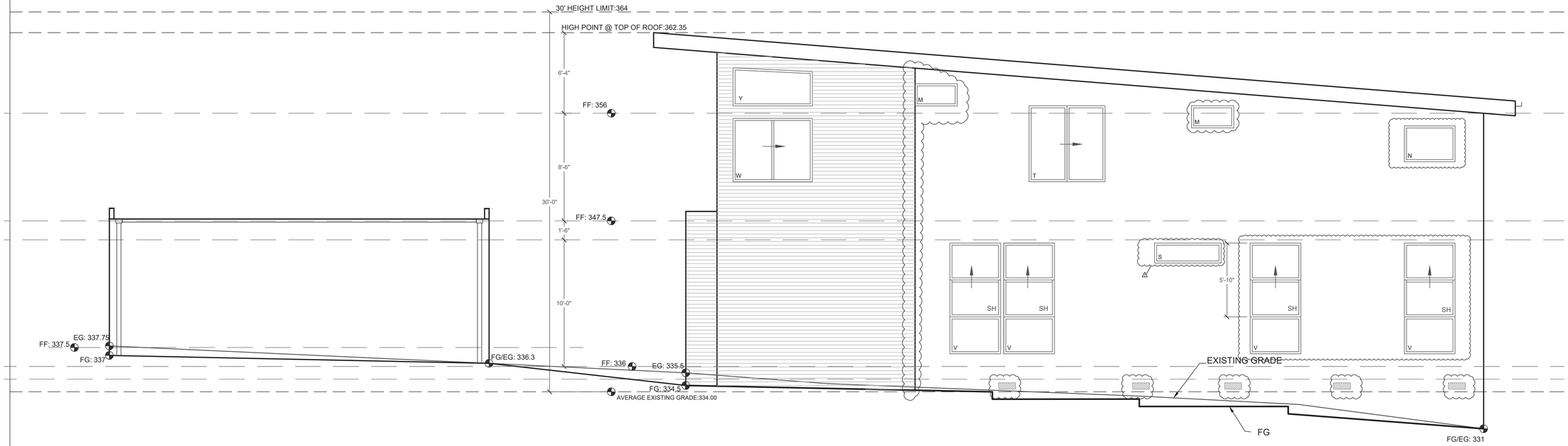
PROJECT NO.

DATE
5.04.18

PROJECT NETWORK PATH

SHEET NUMBER
A4.2 SET

PLOT DATE: 4 May 2018



NORTH ELEVATION

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

EAST ELEVATION

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

PERMIT APPROVAL STAMP

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PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION
	5.04.18	

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER
JW

PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
BLD 1
Elevations

PROJECT NO.

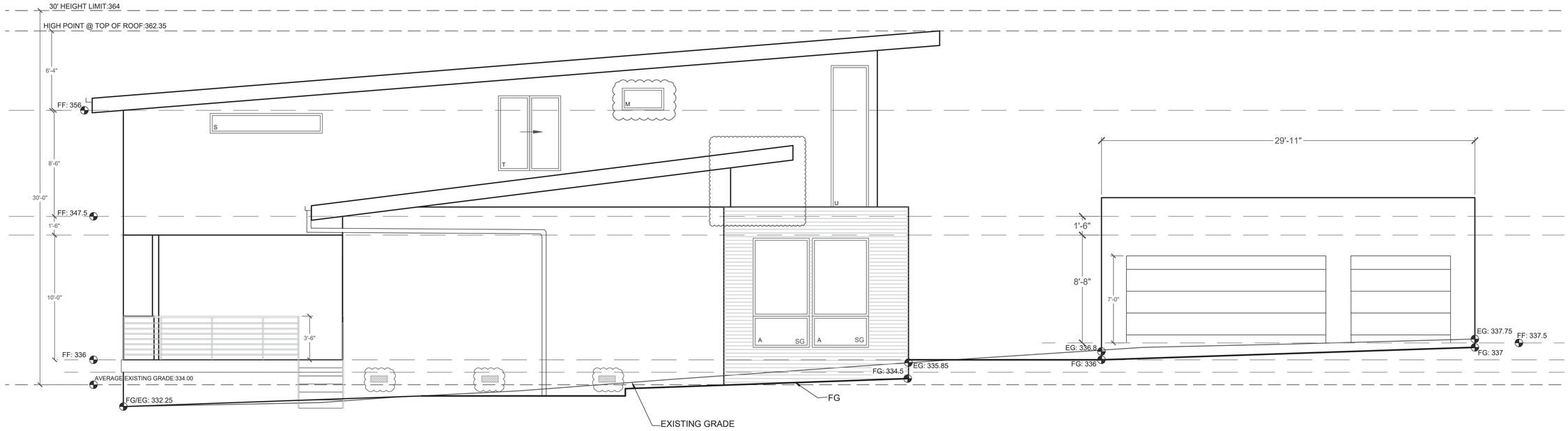
DATE
5.04.18

PROJECT NETWORK PATH

SHEET NUMBER
A4.3 SET

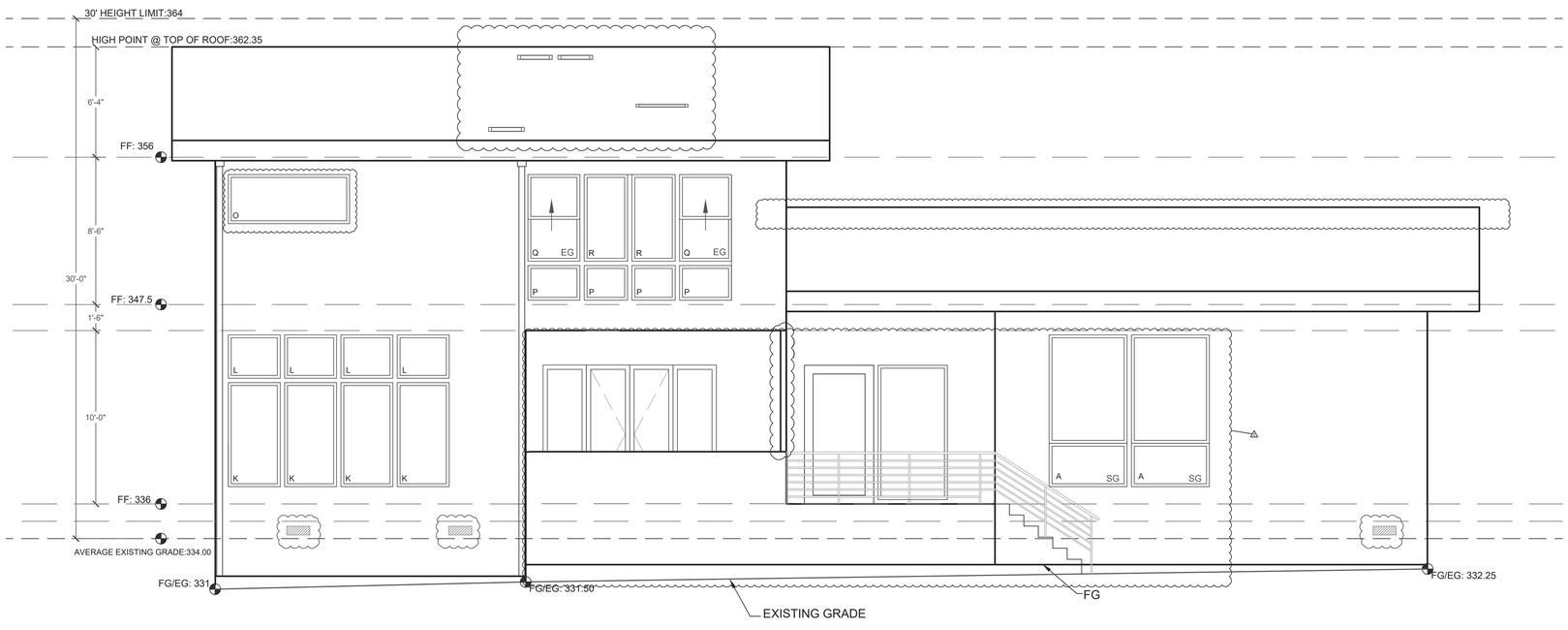
PLOT DATE: 4 May 2018

52nd Construction Set 9.19.18 (1).pdf



SOUTH ELEVATION

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



WEST ELEVATION

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

PERMIT APPROVAL STAMP

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PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION
	3.13.18	
2	5.04.18	

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER

JW
PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
BLD 1
Elevations

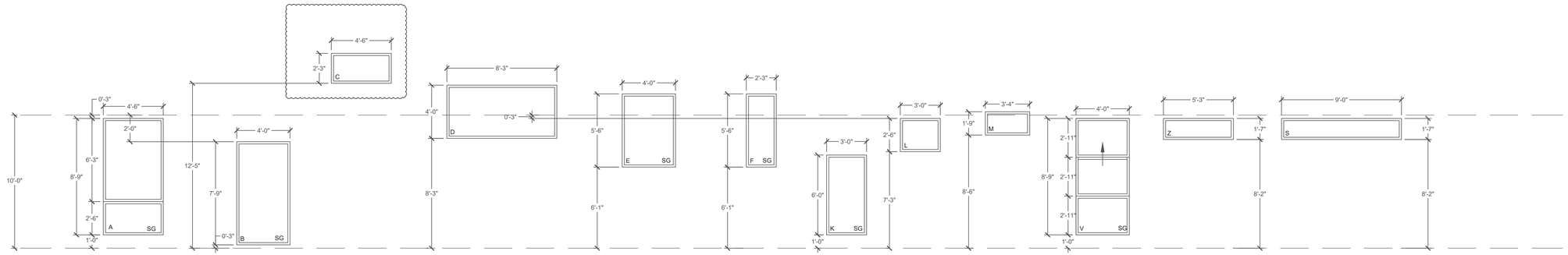
PROJECT NO.

DATE
5.04.18

PROJECT NETWORK PATH

SHEET NUMBER
A4.4 SET

PLOT DATE: 4 May 2018



WINDOW SCHEDULE

SCALE: NTS

ENERGY - WA STATE 2015 ENERGY CODE

EACH DWELLING UNIT IS REQUIRED TO BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR THE REGULATION OF TEMPERATURE.

ADDITIONAL ENERGY EFFICIENCY CREDIT - 1a, 3a, 4, 5a, 5c = 4.5 Credits

1a-EFFICIENT BUILDING ENVELOPE: PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS: FENESTRATION U=.28, FLOOR R-38, SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB, BELOW GRADE SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB. - 0.5

3a-HIGH EFFICIENCY HVAC EQUIPMENT:GAS, PROPANE OR OIL-FIRED FURNACE WITH MINIMUM AFUE OF 94% - 1.0

4-HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM: ALL HEATING & COOLING SYSTEM COMPONENTS INSTALLED INSIDE THE CONDITIONED SPACE. SEE TABLE 406.2 ENERGY CREDITS OPTION 4 - 1.0

5a-EFFICIENT WATER HEATING:ALL SHOWERHEADS/SINK FAUCETS TO BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS TO BE RATED AT 1.0 GPM OR LESS. - 0.5

5c-EFFICIENT WATER HEATING: GAS, PROPANE, OR OIL WATER HEATER WITH A MINIMUM EF OF 0.91 **GAS, NAVIEN NPE240A 97% TANKLESS WATER HEATER** - 1.5

REQUIRED PRIOR TO FINAL INSPECTION

ELECTRIC:
A RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE COMPLYING WITH SEC R401.3 IS REQUIRED TO BE COMPLETED BY THE DESIGN PROFESSIONAL OR BUILDER AND PERMANENTLY POSTED WITHIN 3 FEET OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.

ENERGY:
BUILDING AIR LEAKAGE TESTING, DEMONSTRATING THE SPECIFIC LEAKAGE AREA IS < OR EQUAL TO 0.00030 (SEC R402.4), IS REQUIRED PRIOR TO FINAL INSPECTION.

A SIGNED AFFIDAVIT DOCUMENTING THE DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR PRIOR TO AN APPROVED FINAL INSPECTION.

A MINIMUM 75% OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS. (SEC R404.1

PRESCRIPTIVE REQUIREMENTS

OPTION III WA State Energy Code	
VERTICAL GLAZING	U 0.30
OVERHEAD GLAZING	U 0.50
DOORS	U 0.20
CEILING	R-48 or R-38 adv
VAULTED CEILING	R-38
WALL ABOVE GRADE	R-21
WALL BELOW GRADE	R-21
FLOOR OVER UNHEATED SPACE	R-30
SLAB ON GRADE	R-10

EXHAUST FAN REQUIREMENTS

ROOM	CAPACITY
KITCHEN	MIN. 300 CFM
LAUNDRY	MIN. 140 CFM
BATHROOMS	MIN. 60 CFM

ROOF VENTILATION CALCS

UNIT 1 Roof Area: 4297 sq ft

CLOSE CELL FOAM @ ROOFS. NO VENTING REQUIRED.

CRAWL SPACE VENTILATION CALCS.

Per WA State Amendment, WAC 51-51-0408
Crawl Space Area: 3117 sq ft

. . . . . of venting area is required.

. . . . . .

. . . . . ~~1406.16 / 120~~ = 11.6

Total Number of Vents req. = 12

CRAWL SPACE VENTILATION CALCS.

Per WA State Amendment, WAC 51-51-0408
Crawl Space Area: 2979 sq ft

. . . . . venting area is required.

. . . . . .

. . . . . ~~1429.9 / 120~~ = 10.0

Total Number of Vents req. = 11

WHOLE HOUSE VENTILATION

EXHAUST FAN	
BUILDING SQ FT	5110
BEDROOMS	5

CALCULATION:
Ventilation air req. (from table M1508.2) :105

105/.75 ventilation effectiveness = 140 CFM
WHF W/Continuous 24 hr. timer

Min 4 square inch outdoor air inlet required in each habitable room or vents in windows.

TYPICAL FLOOR PLAN NOTES

INTERIOR DOORS TO BE 6'-8" TALL UNLESS NOTED OTHERWISE.

DOORS TO BE FRAMED 5" FROM PERPENDICULAR WALLS (ROOM ALLOWING) UNLESS CENTERED ON WALL OR OTHERWISE NOTED

ALL PAINTS AND ADHESIVES TO BE LOW OR NO VOC

FIXTURE STANDARDS:
- ALL SHOWER HEADS TO BE INSTALLED 7' FROM FF
- KITCHEN ISLAND PENDANT LIGHTS TO BE INSTALLED ON CENTER OVER THE ISLAND (NOT THE SINK)

GROSS FLOOR AREA

UNIT 1	LIVING	DECKS	ROOF DECKS	GARAGE	CLERESTORY /STAIRS	TOTAL
FIRST	3117	797	-	645	-	4559
SECOND	1993	N/A	-		-	1993
					-	
TOTALS	5110			645	-	6552

N/A = NOT APPLICABLE FOR THE GROSS FLOOR AREA CALCULATION

8720 SE 52nd Pl

WINDOW SCHEDULE
ATRIUM DUAL PANE VINYL ATRIUM 9000 SERIES

ID	QUAN	R.O. DIMENSION W X H	SQ. FT.	DESCRIPTION (SG = safety glass, EG = egress)	U VALUE
A	7	4'-6" x 8'-9"	275.8	FIXED MULLED SG	.28
B	1	4'-0" x 7'-9"	31.00	FIXED SG	.28
C	4	4'-6" x 2'-3"	43.2	FIXED	.28
D	1	8'-3" x 4'-0"	33	FIXED	.28
E	1	4'-0" x 5'-6"	22	FIXED SG	.28
F	1	2'-3" x 5'-6"	12.3	FIXED SG	.28
G	1	4'-0" x 11'-6"	46	FIXED	.28
H	1	2'-3" x 11'-6"	25.8	FIXED	.28
I	2	3'-7" x 9'-0"	54	FIXED	.28
J	1	3'-6" x 9'-0"	32.40	FIXED SG	.28
K	4	3'-0" x 6'-0"	72	FIXED SG	.28
L	1	3'-0" x 2'-6"	30	FIXED	.28
M	7	3'-3" x 1'-9"	40	FIXED	.28
N	1	4'-0" x 2'-9"	11	FIXED	.28
O	1	7'-0" x 2'-9"	19.25	FIXED	.28
P	6	3'-0" x 2'-0"	30	FIXED	.28
Q	2	3'-0" x 5'-0"	30	SH EG	.28
R	2	2'-6" x 5'-0"	50	FIXED	.28
S	1	9'-0" x 1'-7"	14.25	FIXED	.28
T	2	5'-0" x 6'-0"	60	XO	.28
U	1	3'-0" x 12'-0"	36	FIXED SG	.28
V	4	4'-0" x 8'-9"	140	FIXED MULLED SH (2-EG)(1-SG)	.28
W	1	3'-0" x 5'-0"	15	XO EG	.28
X	2	6'-0" x 2'-0"	24	XO	.28
Y	1	6'-3" x 3-0"	18.75	FIXED	.28
Z	1	5'-3" x 1'-7"	8.3	FIXED	.28

TOTAL AREA OF GLAZING	1135 SQ.FT.
TOTAL HEATED FLOOR AREA	4868 SQ.FT.
WINDOW AREA/FLOOR AREA	23%
WEIGHTED AVERAGE U FACTOR	.28

FENESTRATION MUST BEAR NFRC FACTORY LABELS.
ALL GLAZING TO BE NFRC CERTIFIED.

EG = EGRESS
SH = SINGLE HUNG

PERMIT APPROVAL STAMP

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PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION
	3.13.18	
2	5.04.18	

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER
JW
PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

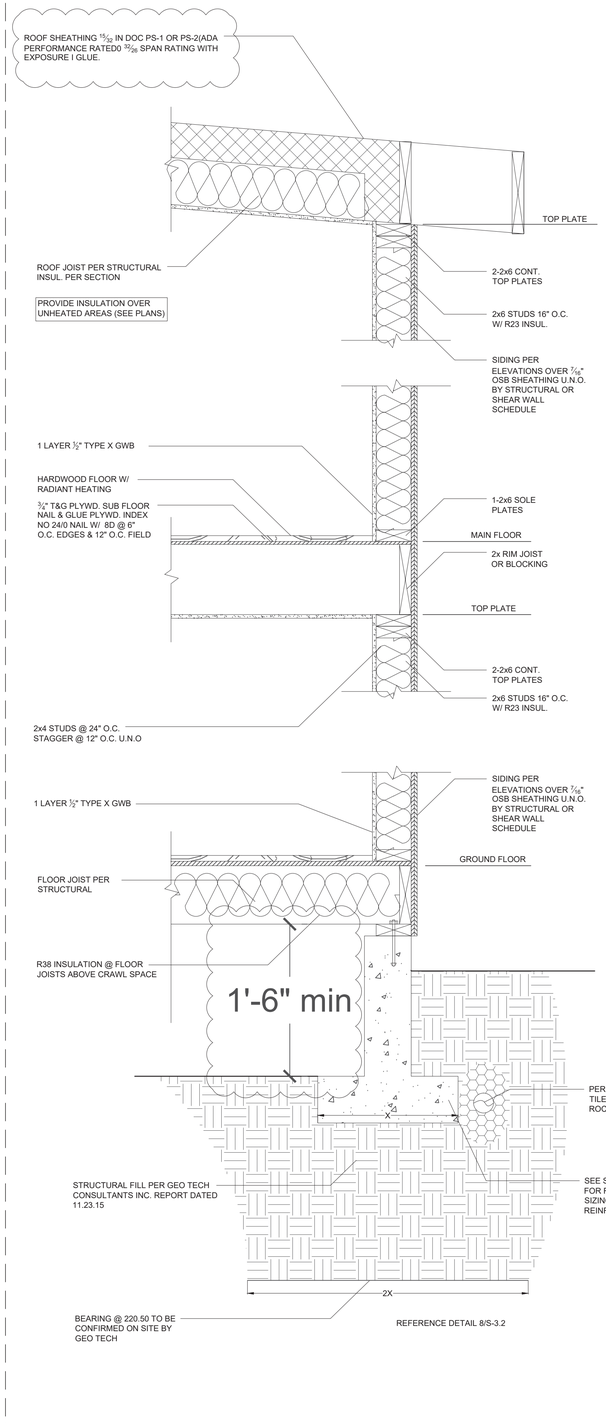
TITLE
Building 1
Window Schedule

PROJECT NO.

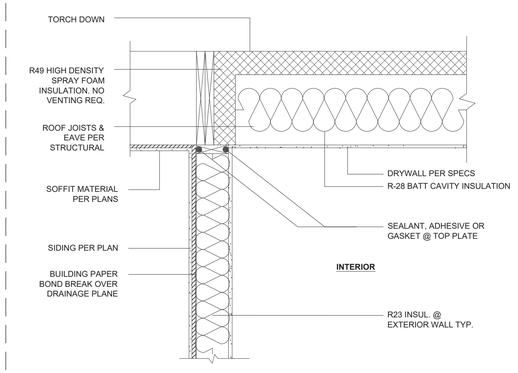
DATE
5.04.18
PROJECT NETWORK PATH

SHEET NUMBER
A4.7 SET

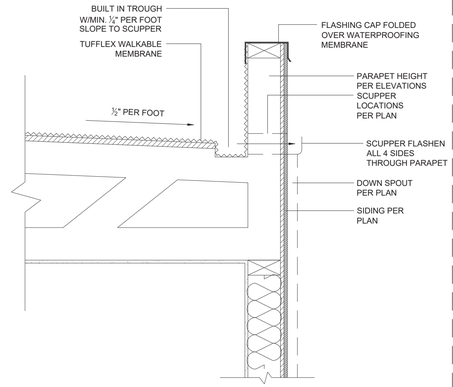
PLOT DATE: 4 May 2018



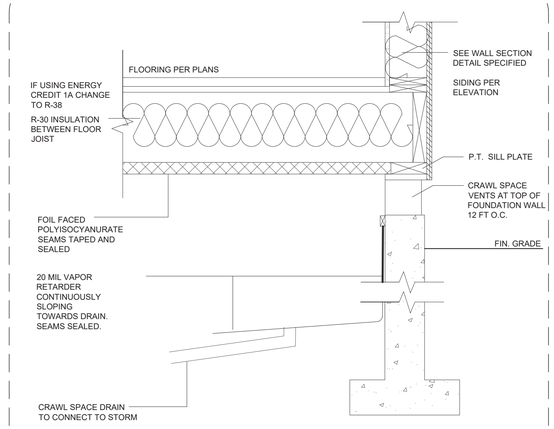
A TYPICAL WALL SECTION W/CRAWL SPACE
NTS



B INSULATION @ LID
NTS A4.1



E DRAINAGE AT DECKS
NTS

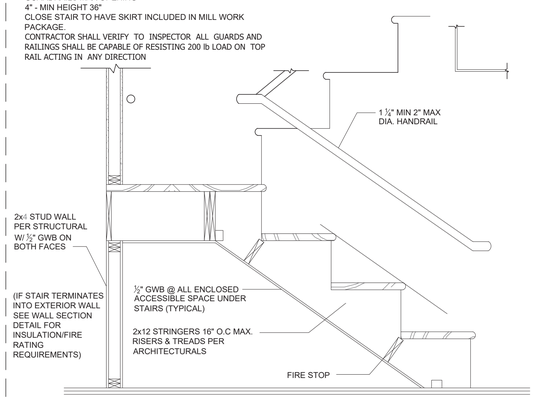


G CRAWL SPACE
NTS

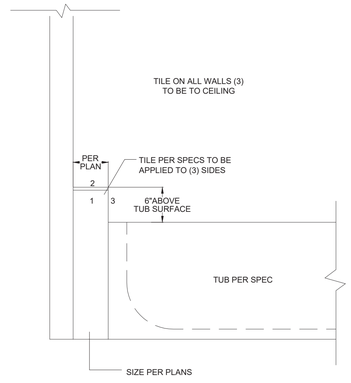
TYPICAL STAIR NOTES:
ALL HANDRAILS TO BE 34-38" ABOVE STAIR NOSING

MAX7.75" RISE MIN 10 RUN

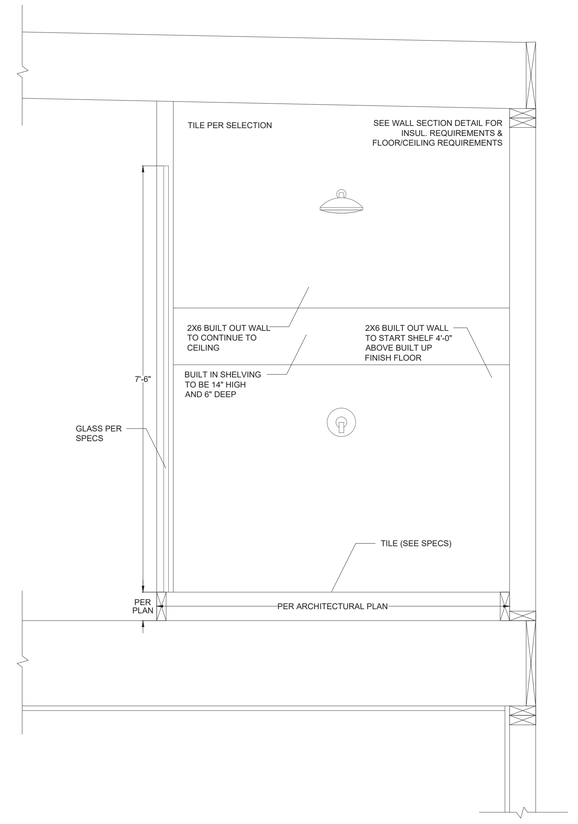
GUARDRAILS MAX OPENING
4" - MIN HEIGHT 36"
CLOSE STAIR TO HAVE SKIRT INCLUDED IN MILL WORK PACKAGE.
CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 lb LOAD ON TOP RAIL ACTING IN ANY DIRECTION



C INTERIOR WOOD STAIR CASE
NTS



D FRAMING @ END OF TUB
NTS



F ELEVATED SHOWER FLOOR/BUILT IN SHOWER SHELVING
NTS

PERMIT APPROVAL STAMP

BUILD URBAN

PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER
JW
PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
Details

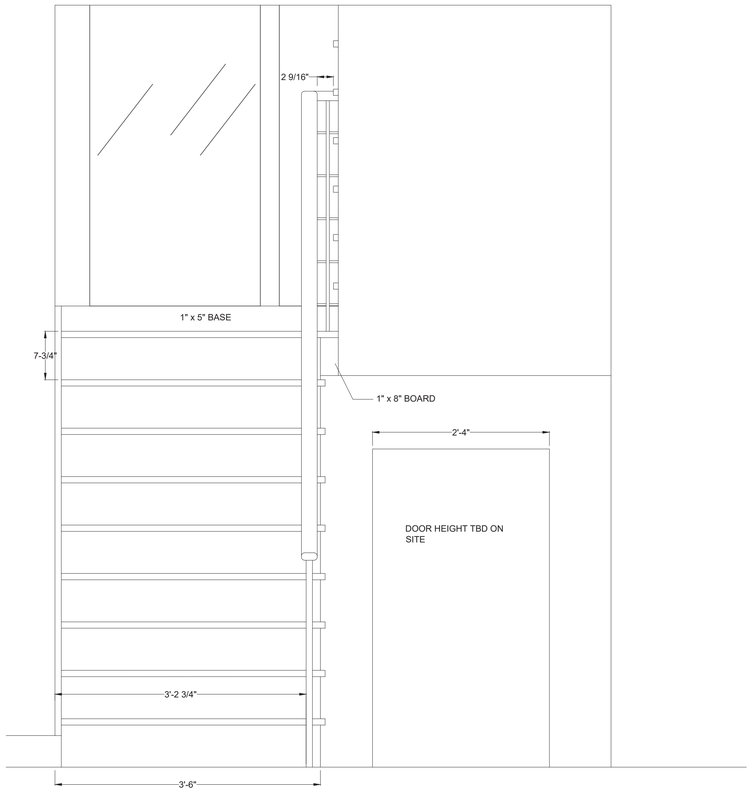
PROJECT NO.

DATE
2.15.17

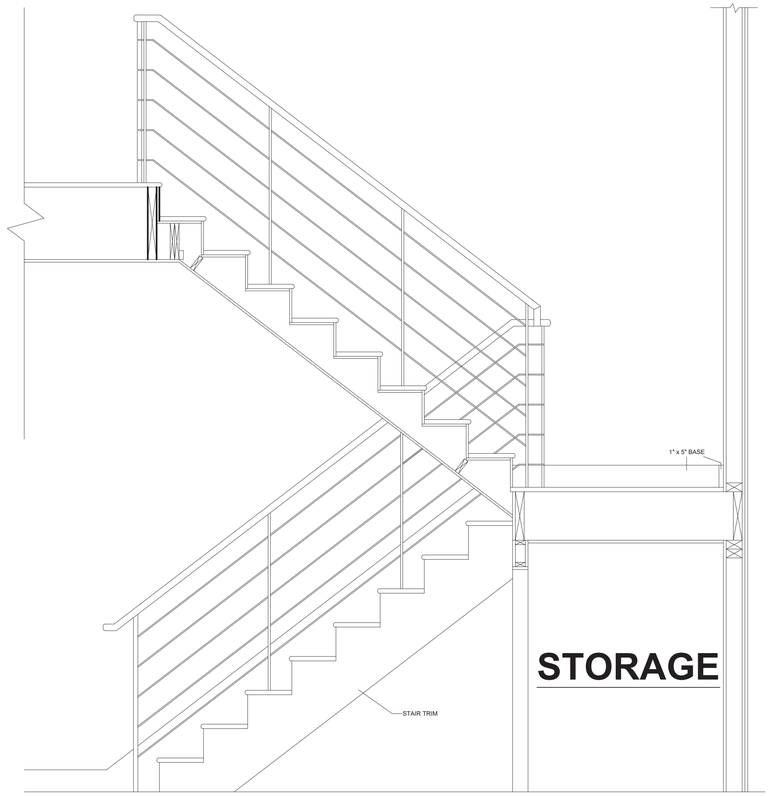
PROJECT NETWORK PATH

SHEET NUMBER
A5.0 SET

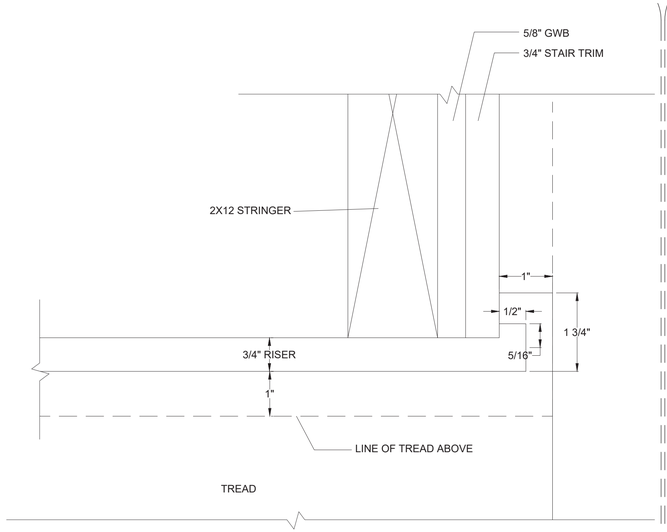
52nd Construction Set 9.19.18 (1).pdf



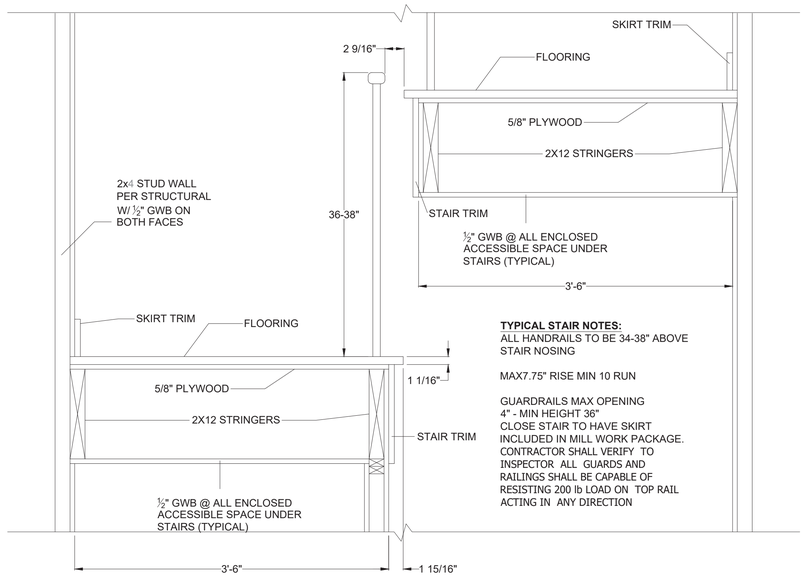
INTERIOR STAIRCASE ELEVATION
NTS



STAIRCASE SECTION
NTS



H STAIR RISER/STRINGER ATTACHMENT
NTS



TYPICAL STAIR NOTES:
ALL HANDRAILS TO BE 34-38" ABOVE STAIR NOSING

MAX7.75" RISE MIN 10 RUN

GUARDRAILS MAX OPENING
4" - MIN HEIGHT 36"
CLOSE STAIR TO HAVE SKIRT INCLUDED IN MILL WORK PACKAGE.
CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 lb LOAD ON TOP RAIL ACTING IN ANY DIRECTION

I STAIR TREAD ATTACHMENT
NTS

TYPICAL STAIR NOTES:
ALL HANDRAILS TO BE 34-38" ABOVE STAIR NOSING

MAX7.75" RISE MIN 10 RUN

GUARDRAILS MAX OPENING
4" - MIN HEIGHT 36"
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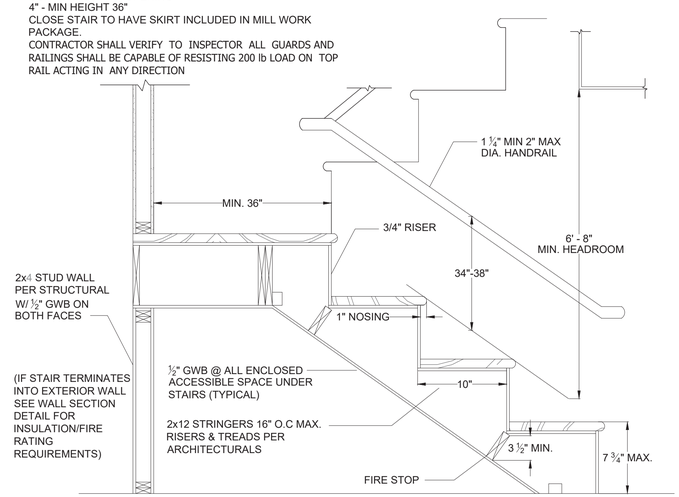
CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200 lb LOAD ON TOP RAIL ACTING IN ANY DIRECTION



J INTERIOR STAIR (CLOSED)
NTS

PERMIT APPROVAL STAMP

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PROJECT:
8720 SE 52nd Pl

LOCATION:
Mercer Island, WA

KEY MAP

NO.	DATE	REVISION
	3.13.18	

52nd Construction Set 9.19.18

PRINCIPAL IN CHARGE

PROJECT MANAGER
JW
PROJECT ARCHITECT

PROJECT TEAM MEMBER

CHECK

ARCHITECT SEAL

TITLE
Staircase Details

PROJECT NO.

DATE
3.13.18

PROJECT NETWORK PATH

SHEET NUMBER
A5.1 SET

PLOT DATE: 27 March 2018

GENERAL

1. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).
2. THE ARCHITECT/ENGINEER (ARCH/ENGR) IS NOT RESPONSIBLE FOR THE LOCATION OF PROPERTY LINES AND/OR EASEMENT, SOIL CONDITIONS, MECHANICAL AND ELECTRICAL WORK, AND THE PRESENCE OF UTILITIES NOT REPORTED TO THE ARCH/ENGR IN WRITING BY THE OWNER.
3. THE ENGINEER IS NOT RESPONSIBLE FOR FIELD REVIEW OF CONSTRUCTION UNLESS SPECIFICALLY RETAINED FOR THAT PURPOSE.
4. DRAWINGS SHALL NOT BE SCALED, WRITTEN DIMENSIONS SHALL GOVERN CONSTRUCTION. THE CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO CONSTRUCTION AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCH/ENGR SO THAT CLARIFICATION CAN BE MADE. ALL DIMENSIONS RELATED TO EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL BE SUBMITTED TO THE ARCH/ENGR FOR REVIEW PRIOR TO CONSTRUCTION. DIMENSIONS FOLLOWED BY A +/- SYMBOL SHALL BE FIELD MEASURED AND VERIFIED PRIOR TO COMMENCEMENT.
5. DETAILS OF CONSTRUCTION NOT SHOWN OR NOTED SHALL BE CONSIDERED OF THE SAME CHARACTER SHOWN FOR SIMILAR CONSTRUCTION, SPECIFICATIONS, WHEN PROVIDED, ARE A PART OF THESE DRAWINGS, SEE SPECIFICATIONS FOR MATERIAL AND WORKMANSHIP REQUIREMENTS.
6. THE CONTRACTOR SHALL PROVIDE ALL LABOR EQUIPMENT, MATERIAL AND SERVICES NECESSARY FOR THE EXECUTION OF ALL CONSTRUCTION WORK AS SHOWN ON THE DRAWINGS AND AS NOTED IN THE SPECIFICATIONS.
7. THE CONTRACTOR SHALL COMPARE THE DRAWINGS AND NOTIFY THE ARCH/ENGR OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH THE WORK.
8. TEMPORARY BRACING AND SHORING NECESSARY TO SUPPORT ANY PORTION OF THE STRUCTURE DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.

FOUNDATIONS

1. REFER TO GEO-TECHNICAL DATA BELOW FOR THE PROJECT DESIGN PARAMETERS. GEOTECHNICAL ENGINEER SHALL VERIFY PLACEMENT OF FILLS AND FOUNDATIONS PRIOR TO PLACEMENT OF FILLS.

2. SPECIFIED CONCRETE MIX AS FOLLOWS:

CONCRETE MIX				
TYPE OF CONSTRUCTION	COMPRESSION STRENGTH @ 28 DAYS, PSI	MAX W/C RATIO	ENTRAINED AIR	SACK MIX
SLAB ON GRADE (INTERIOR)	3000			
SLAB ON GRADE (EXTERIOR)	3000	0.45	5%	
BASEMENT WALL	2500	0.50		5 1/2
FOOTINGS	2500	0.50		5 1/2
CONT. FOOTINGS	2500	0.50		5 1/2

3. CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A615, AND PER BELOW.

REBAR - PER ASTM A615	
#4 & LESS	GRADE 40
#5 & GREATER	GRADE 60

COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:

FOOTINGS & RETAINING WALLS (CAST AGAINST SOIL)	3" COVER
SURFACES EXPOSE TO EARTH OR WEATHER	2" COVER
COLUMNS & BEAMS	1 1/2" COVER
SLABS & INTERIOR WALLS	3/4" COVER

4. FOUNDATION WALL SHALL EXTEND 6" ABOVE FINISHED GRADE.
5. FOUNDATION PLATES SHALL BE PRESSURE TREATED (PT) HF 2.
6. INSTALL FOUNDATION ANCHOR BOLTS 4' ON CENTER (UNO) AND EMBED A MINIMUM 7" IN CONCRETE.
7. INSTALL WATER PROOFING MATERIALS ON FOUNDATION WALL SUPPORTING SOIL.
8. ALL FOOTING EXCAVATIONS SHALL BE NEXT AND AS CLOSE TO FOOTING DIMENSIONS AS PRACTICABLE.
9. ALL FOUNDATIONS SHALL BEAR ON FIRM UNDISTURBED NATIVE SOILS OR ENGINEERED FILLS AT OR EXCEEDING DEPTHS SHOWN ON THE DRAWINGS. ALL SOILS WORK AND SITE GRADING SHALL BE IN ACCORDANCE WITH CHAPTERS 18 OF THE IBC.

GEOTECHNICAL

IN ABSENCE OF GEOTECHNICAL ANALYSIS, THE FOLLOWING DESIGN CRITERIA IS USED:

SOIL BEARING PRESSURE:	2000 PSF
ACTIVE EARTH PRESSURE (RETAINING WALLS):	35 PCF
AT REST EARTH PRESSURE (BASEMENT WALLS):	60 PCF
PASSIVE PRESSURE:	350 PCF
FRICTION COEFFICIENT:	0.35

REPORT PREPARED BY:

PROJECT SPECIFIC DESIGN CRITERIA

Wind Design Data

Wind Design Speed, Vu = 110 MPH, Vasd = 85 MPH
Wind Exposure = B
Wind Importance Factor, Iw = 1.0
Internal Pressure Coefficient = +/- 0.18
Ktz = 1.90
Ktz = 0.85

Seismic Design Data

Importance factor = 1.0
Ss = 1.51g, S1 = 0.52g
Site Class = D
SDS = 1.01g, SD1 = 0.52g
SDC = D
Seismic System = K. Light frame walls with shear panels - wood structural panels/sheet steel panels
Design Base Shear = 37.49 kips
Cs = 0.155
R = 6.5
Analysis procedure: ASCE 11.4, 11.5 & 12.8

Snow Loads

Flat-roof snow load, *pf* = 25.0 psf
Snow exposure factor, *Ce* = 1.00
Snow load important factor, *Is* = 1.00
Thermal factor, *Ct* = 1.00

Gravity Loads*

Roof Dead Load = 15 psf
Roof Live Load = 25 psf
Floor Live Load (Office) = 50 psf
Floor Live Load (Residential) = 40 psf, Balcony = 60 psf
Floor live Load (Corridor) = 100 psf
Partition Loads = 10 psf (residential)
Partition Loads = 20 psf (office)
Floor Dead Loads = 12 psf (residential)
At rest earth pressure = 60 pcf
*As Applicable

WOOD CONSTRUCTION (CARPENTRY)

REFERENCE STANDARD: WOOD FRAMING SHALL CONFIRM TO THE REQUIREMENTS OF THE FOLLOWINF STANDARDS:

NFPA - NATIONAL DESIGN FOR WOOD CONSTRUCTION
ANSI/TPI - NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION.

MATERIAL

SAWN LUMBER			
USE	SIZE	SPECIES/GRADE	MIN. DESIGN VALUE
STUD	2 X 4, 2 X 6, 3 X 4, 3 X 6	HEM-FIR (N)	Fb = 775 psi Fc = 925 psi
Sill Plate	2 X 4, 2 X 6, 3 X 4, 3 X 6	HEM-FIR (N)	Fb = 775 psi Fc = 925 psi
Post / Columns	4 x	DOUG-FIR # 1	Fc = 1350 psi
Post / Column	6 x	DOUG-FIR #1	Fc = 1000 psi
JOISTS	2 X 8 TO 2 X 12	HEM-FIR (N) #2	Fb = 850 psi Fv= 95 psi
Beam & Headers	4 x 6 To 4 x 12	HEM-FIR (N) #1	Fb = 850 psi Fv= 95 psi

Glue-Laminated Beams (GLB)	Top Fiber	Btm Fiber stress	Fc (Compression)
24F-V4	1200 psi	2400 psi	
24F-V8	2400 psi	2400 psi	
Parallam Beams (PSL) - 2.0E	2900 psi	2900 psi	2900 psi**

**WHERE PSL COLUMNS ARE REQ'D PER PLAN, USE ONLY PSL BEAMS WITH (E = 2.0 X 10^6) - 2.0E

Roof Sheathing - 15/32 inch DOC PS-1 or PS-2 (APA Performance rated) 32/16 span rating with Exposure l glue.

Sub-Floor Sheathing - 3/4 inch DOC PS-1 or PS-2 (APA Performance rated) Sturd-l-Floor 24-in o/c rating with Exposure l glue.

Wall structural panels - Refer to Table 1 for thickness. 32/16 index rating - 5 ply with Exposure l glue.

REPLACE SPLIT MEMBERS AND PRE-DRILL HOLES WHERE NAILING MAY CAUSE WOOD TO SPLIT.

METAL FRAMING CLIPS, HANGERS, ETC. SHALL BE SIMPSON STRONG TIE. NAILING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS WITH A NAIL PROVIDED FOR EACH PUNCHED HOLE. WHERE NAILS ARE TO BE FURNISHED BY THE MANUFACTURER, THEY SHALL BE USED IN PLACE OF COMMON NAILS.

BOLTS IN NOT PRESSURE TREATED LUMBER SHALL BE UNFINISHED MACHINE BOLTS OF SIZES SHOWN ON DRAWINGS, CONFORMING TO ASTM A307. LENGTH OF BOLTS SHALL NOT PROJECT LESS THAN 1/16" OR MORE THAN 1/2" BEYOND THE END OF NUT. BOLT HOLES IN WOOD SHALL BE 1/32" MIN. 1/16" MAX. LARGER THAN THE BOLT DIAMETER. PROVIDE STANDARD CUT OR MALLEABLE IRON WASHER UNDER BOLT HEAD AND NUT WHERE THEY WOULD BEAR ON WOOD. NUTS SHALL BE TIGHTENED WHEN PLACED AND RETIGHTENED BEFORE CONCEALMENT.

WOOD BELOW MAIN BUILDING PANELS SHALL BE DOUGLAS FIR FOR SUPPORTING BEAMS, AND PRESSURE TREATED.

STRUCTURAL MEMBERS SHALL NOT BE NOTCHED, CUT OR OTHERWISE ALTERED FOR DUCTS, PIPES, ECT. WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.

ROOF TRUSSES SHALL NOT HAVE AREA BETWEEN WEB MEMBERS LARGER THAN 42" HIGH X 24" WIDE UNLESS SPECIFICALLY NOTED ON PLANS.

PRESSURE TREATING:

ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED WITH 0.25 POUNDS PWE CUBIC FOOT OF WATERBORNE (ACZA) PRESERVATIVES IN ACCORDANCE WITH AWPA PRESSURE- TREATMENT RETENTIONS FOR WESTERN SPECIES ONLY AND THE CORRESPONDING AWPB QUALITY ASSURANCE PROCEDURE ASSOCIATED WITH THE AWPA STANDARD. PRODUCTS SHALL BEAR THE AWPB MARK. BOLTS, NAILS & SCREWS USED IN EXTERIOR APPLICATIONS, OR IN PRESSURE TREATED MATERIAL SHALL BE HOT-DIPPED GALVANIZED (PER ASTM A153) OR STAINLESS STEEL . HOLD DOWN DEVICES COATED WITH CORROSION PROTECTION PER ASTM A123.

ENGINEERED WOOD CONSTRUCTION REQUIREMENTS

2303.1.1 Lumber. Lumber used for load-supporting purposes,
including end-jointed or edge-glued lumber, machine stress-rated or machine evaluated lumber, shall be identified by the grade mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOC PS 20 or equivalent. Grading practices
and identification shall comply with rules published by an agency approved in accordance with the procedures of DOCPS 20 or equivalent procedures. In lieu of a grade mark on the material, a certificate of inspection as to species and grade issued by a lumber-grading or inspection agency meeting the requirements of this section is permitted to be accepted for precut, remanufactured or rough-sawn lumber, and for sizes larger than 3 inches (76 mm) nominal thickness.
Approved end-jointed lumber is permitted to be used interchangeably
with solid-sawn members of the same species
and grade.

2303.1.2 Prefabricated wood I-joists. Structural capacities and design provisions for prefabricated wood I-joists shall be established and monitored in accordance with ASTM D 5055.

2303.1.3 Structural glued-laminated timber. Glued-laminated timbers shall be manufactured and identified as required in AITC A190.1 and ASTM D 3737.

2303.1.4 Wood structural panels.Wood structural panels, when used structurally (including those used for siding, roof and wall sheathing, subflooring, diaphragms and built-up members), shall conform to the requirements for their type in DOC PS 1 or PS 2. Each panel or member shall be identified
for grade and glue type by the trademarks of an approved testing and grading agency. Wood structural panel components shall be designed and fabricated in accordance with the applicable standards listed in Section 2306.1 and identified by the trademarks of an approved testing and inspection
agency indicating conformance with the applicable standard. In addition, wood structural panels when permanently
exposed in outdoor applications shall be of exterior type, except that wood structural panel roof sheathing exposed to the outdoors on the underside is permitted to be interior
type bonded with exterior glue, Exposure 1.

STRUCTURAL TESTS AND INSPECTIONS

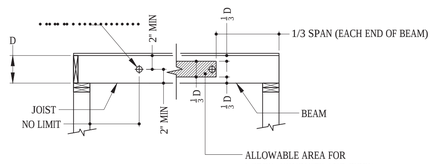
(Where applicable)

1. CONCRETE SPECIMEN TESTING AND PLACING OF REINFORCED CONCRETE PER IBC SECTION 1704.4

2. STEEL REINFORCEMENT PLACING PER IBC TABLE 1704.4.

3. STRUCTURAL STEEL WELDING AND BOLT PLACEMENT PER IBC 1704.3.3, STRUCTURAL WELDING PER IBC 1704.3.1. ALL WELDING, SHOP OR FIELD SHALL BE PERFORMED BY WABO CERTIFIED WELDERS.

4. MASONRY CONSTRUCTION SHALL BE INSPECTED & EVALUATED IN ACCORDANCE OF SECTION 1704.5.2 AND PER MASONRY NOTES ON THESE DRAWINGS (WHERE APPLICABLE).



HOLES IN BEAMS & JOISTS

ROOF/FLOOR TRUSS FRAMING PLAN NOTES

TRUSS DESIGN LOADS:
SNOW: 25 PSF
ROOF DEAD = 15 PSF
UPLIFT = 20 PSF
MINIMUM LWR CHORD DESIGN LOAD = 20 PSF
FLOOR LOAD = 40 PSF
FLOOR DEAD LOAD= 15 PSF

PRE-MANUFACTURED TRUSSES PER SECTION IBC 2303.4.1
Truss design drawings. Truss construction documents shall be prepared by a Washington State Licensed Engineer and shall be provided to the building official and approved prior to installation. These construction documents shall include, at a minimum, the information specified below. Truss shop drawings shall be provided with the shipment of trusses delivered to the job site.

1. Slope or depth, span and spacing;
2. Location of joints;
3. Required bearing widths;
4. Design loads as applicable;
5. Top chord live load (including snow loads);
6. Top chord dead load;
7. Bottom chord live load;
8. Bottom chord dead load;
9. Concentrated loads and their points of application;
10. Controlling wind and earthquake loads;
11. Adjustments to lumber and metal connector plate design value for conditions of use;
12. Each reaction force and direction;
13. Metal connector plate type, size, thickness or gage, and the dimensioned location of each metal connector plate except where symmetrically located relative to the joint interface;
14. Lumber size, species and grade for each member;
15. Connection requirements for:
15.1. Truss to truss girder;
15.2. Truss ply to ply; and
15.3. Field species;
15.4. Drag truss connection to shear walls for the loads specified (where applicable).
16. Calculated deflection ratio or maximum deflection for live and total load;
17. Maximum axial compression forces in the truss members to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss construction documents or on supplemental documents; and
18. Required permanent truss member bracing location.

- Provide 4 x 6 DF 1 post under all girder truss support locations. These supports must follow to foundation to distribute bearing loads
- UNLESS NOTED OTHERWISE THE ROOF STRUCTURE SHALL CONSIST OF THE FOLLOWING:
  1. Light Weight roof not exceeding 6 PSF. This may consist of: Light weight tile, cedar shakes, composition roof, light gauge metal.
  2. 15# felt (or as specified by Architect).
  3. 15 / 32 CDX or 1/2" OSB. Nailed to 2x nominal framing members with 10d @ 6" o.c. Edges & 12" o.c. Field. No blocking is required, unless specified on plan.
  4. Insulation per architectural drawings.
- No modification is allowed on pre-engineered trusses.
- FRAMING/BRACING IS ERECTORS RESPONSIBILITY.
- Over framing shall consist of the following:
  1. 2 x 4 HF #2 for spans up to 6'
  2. 2 x 6 HF #2 for spans up to 8'
  3. 2 x 8 HF #2 for spans up to 12'
  4. 2 x 10 HF #2 for spans up to 16'
- All headers shall be 4 x 10 DF 2 OR 6 x 8 DF 2 (UNO)
- All Gluelam beams (GLB) shall be 24F-V4 (UNO)

NAILS	
SHALL BE A MINIMUM OF 2 NAILS AT EACH CONTACT, 8d FOR 1x AND 16d FOR 2x MATERIAL	
JOIST OR RAFTERS AT ALL BEARING • TOE NAIL	3-10d
JOIST OR RAFTERS TO SIDES OF STUD:	
2x8 MEMBER OR SHALLOWER	3-16d
FOR EACH ADDITIONAL FOUR (4) INCHES IN DEPTH	1-16d
DOUBLE JOISTS, RAFTERS, AND HEADERS	2-•
BLOCKING BETWEEN JOIST OR RAFTERS:	
TO JOIST OR RAFTER • TOE NAILS, EACH SIDE, EACH END	2-10d
TO JOIST OR RAFTERS BEARINGS • TOE NAILS, EACH SIDE	2-10d
BLOCKING BETWEEN STUDS, TOE NAILS, EACH END	2-10d
BUILDUP CORNER STUDS	•
• FACE NAIL •	
TOP PLATE OR SOLE PLATE TO STUD, END NAIL	2-16d AT 2x4, 3-16d AT 2x6
TOE NAIL	4-8d
DOUBLED STUDS, FACE NAIL	•
DOUBLED TOP PLATES, FACE NAIL	2-16d AT 16• •
•	16-16d
TOP PLATES, INTERSECTIONS, FACE NAIL	2-16d
CONTINUOUS HEADER TO STUD, TOE NAIL	4-8d
CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL	3-16d
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	3-16d
CEILING JOIST LEDGER • FACE NAIL TO STUDS:	
2x4 AND 2x6	2-16d
2x8 AND UP TO 2x12	3-16d
LEDGER TO STUDS:	
2x8 MEMBER OR SHALLOWER	3-16d
•	1-16d

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PROJECT NAME: SFR - 8720 SE 52ND PL

PROJECT ADDRESS: 8720 SE 52ND PL MERCER ISLAND WA

DWG TITLE: STRUCTURAL NOTES

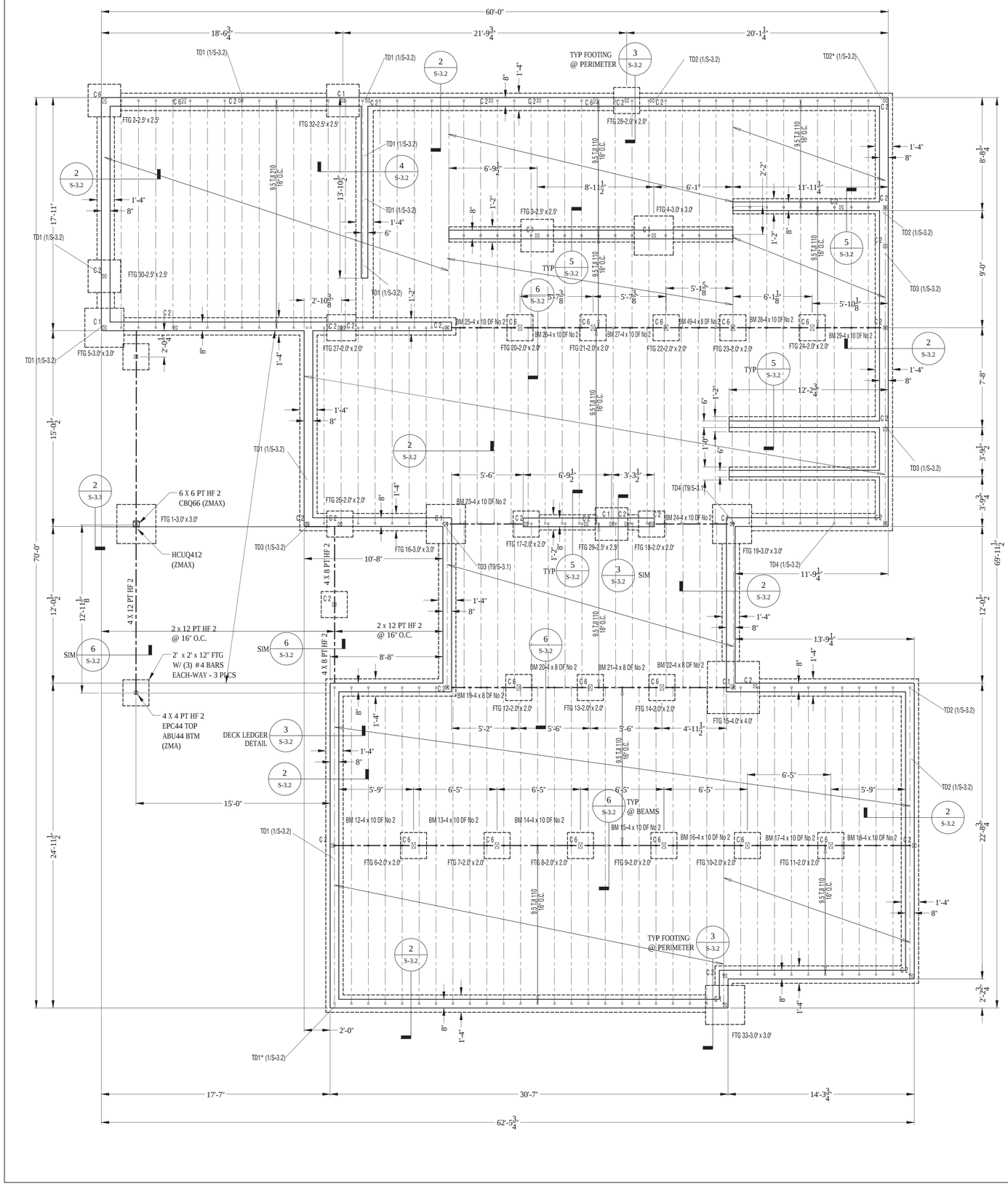
Date 8-06-2017
Revision CURRENT VERSION
Number:

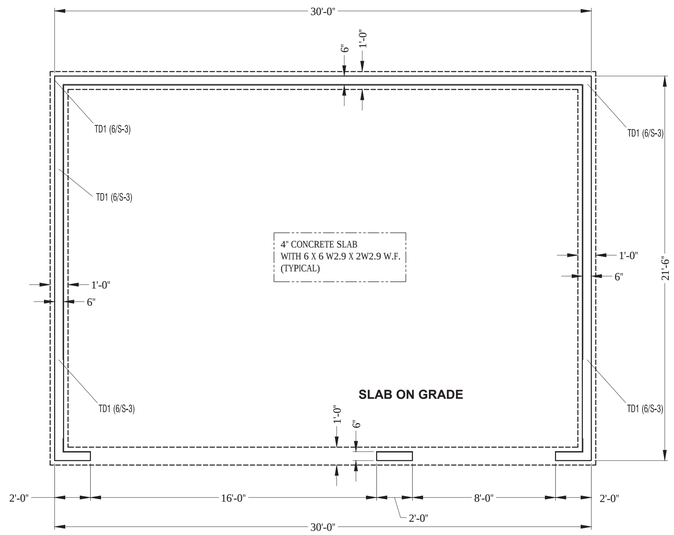
52nd Construction Set 9.19.18

STEVEN K. MORGESTON — STATE OF WASHINGTON — 19966 — REGISTERED PROFESSIONAL ENGINEER — 9-06-2017

PROJECT # T2-2092

SHEET NO S-1





COLUMN SCHEDULE	
COLUMN MARK	TYPE
COL C 1	4 x 4 DF No 2
COL C 2	4 x 4 DF No 2**
COL C 3	4 x 6 DF No 1
COL C 4	4 x 6 DF No 1 & btr
COL C 5	4 x 6 DF No 2
COL C 6	4 x 6 DF No 2**
COL C 7	6 x 6 DF No 2
COL C 8	6 x 6 DF No 1

FOUNDATION PLAN

- 3 X 3 X 1/4" GALVANIZED PLATE WASHER IS REQUIRED
- EMBED ANCHOR BOLTS 7.5" MIN
- REFER TO SHEAR WALL PLANS FOR HOLD-DOWN LOCATIONS

- THE FOUNDATION PLAN SHOWN ON THIS SHEET PROVIDES THE FOOTING SIZES AND DIMENSIONS, ALONG WITH THE STRUCTURAL DETAILS. REFER TO THE ARCHITECTURAL DWGS FOR OVERALL DIMENSIONS (WHICH IS THE BASIS OF THE DESIGN).

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Date 9-06-2018

DWG TITLE FOUNDATION PLAN

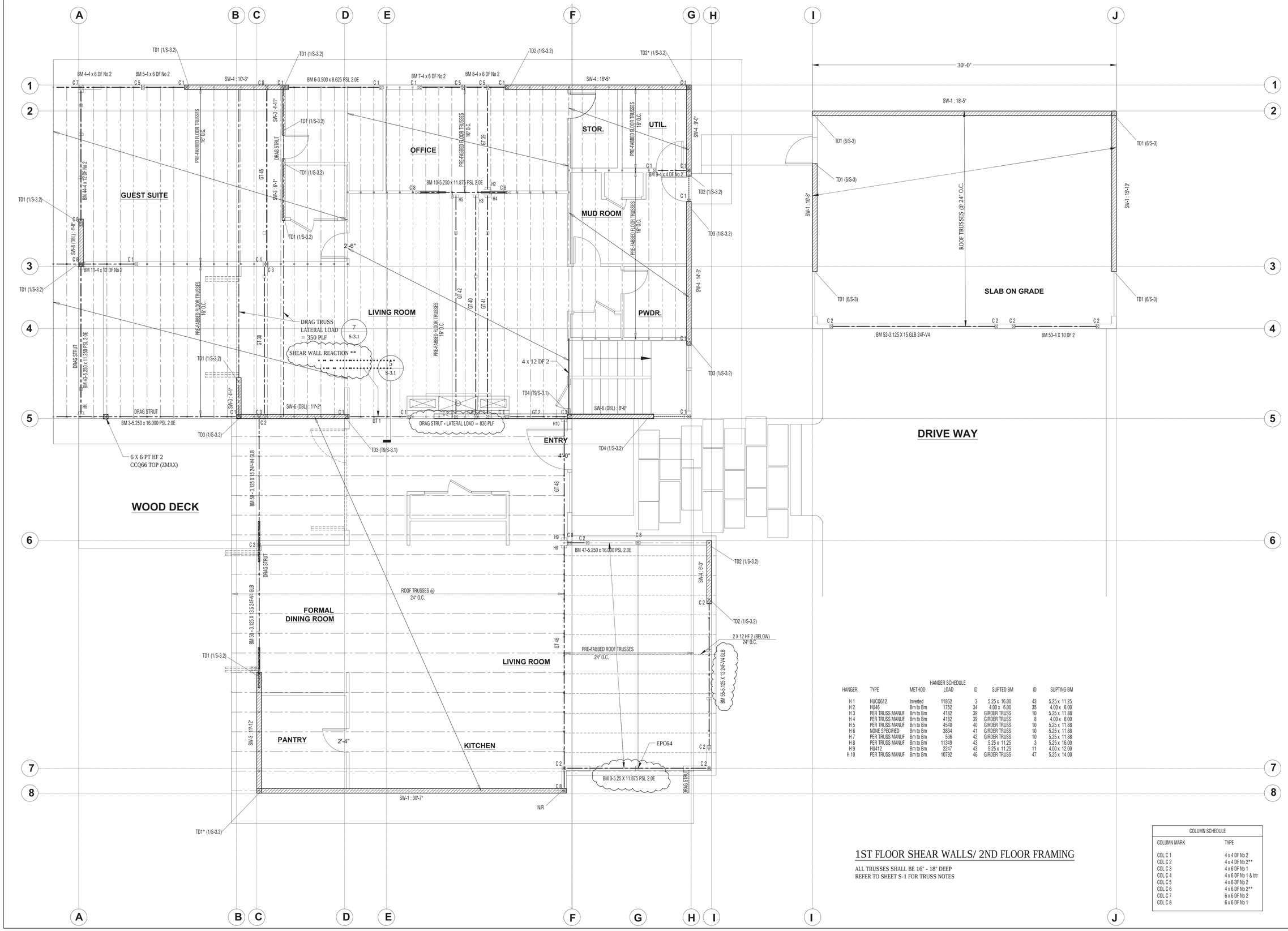
Number: Revision CURRENT VERSION

52nd Construction Set 9.19.18

PATRICK MORRISON 36923 STRUCTURAL ENGINEER PROFESSIONAL ENGINEER 9-06-2018

PROJECT # T2-2092

SHEET NO S-2.1



HANGER SCHEDULE

HANGER	TYPE	METHOD	LOAD	ID	SUPTED BM	ID	SUPTING BM
H 1	HUC612	Inverted	11862	3	5.25 x 16.00	43	5.25 x 11.25
H 2	HU46	Bm to Bm	1752	34	4.00 x 6.00	35	4.00 x 6.00
H 3	PER TRUSS MANUF	Bm to Bm	4182	39	GIRDER TRUSS	10	5.25 x 11.88
H 4	PER TRUSS MANUF	Bm to Bm	4182	39	GIRDER TRUSS	8	4.00 x 6.00
H 5	PER TRUSS MANUF	Bm to Bm	4540	40	GIRDER TRUSS	10	5.25 x 11.88
H 6	NONE SPECIFIED	Bm to Bm	3834	41	GIRDER TRUSS	10	5.25 x 11.88
H 7	PER TRUSS MANUF	Bm to Bm	536	42	GIRDER TRUSS	10	5.25 x 11.88
H 8	PER TRUSS MANUF	Bm to Bm	11349	43	5.25 x 11.25	3	5.25 x 16.00
H 9	HU412	Bm to Bm	2247	43	5.25 x 11.25	11	4.00 x 12.00
H 10	PER TRUSS MANUF	Bm to Bm	10792	46	GIRDER TRUSS	47	5.25 x 14.00

1ST FLOOR SHEAR WALLS/ 2ND FLOOR FRAMING

ALL TRUSSES SHALL BE 16" - 18" DEEP
REFER TO SHEET S-1 FOR TRUSS NOTES

COLUMN SCHEDULE

COLUMN MARK	TYPE
COL C 1	4 x 4 DF No 2
COL C 2	4 x 4 DF No 2**
COL C 3	4 x 6 DF No 1
COL C 4	4 x 6 DF No 1 & btr
COL C 5	4 x 6 DF No 2
COL C 6	4 x 6 DF No 2**
COL C 7	6 x 6 DF No 2
COL C 8	6 x 6 DF No 1

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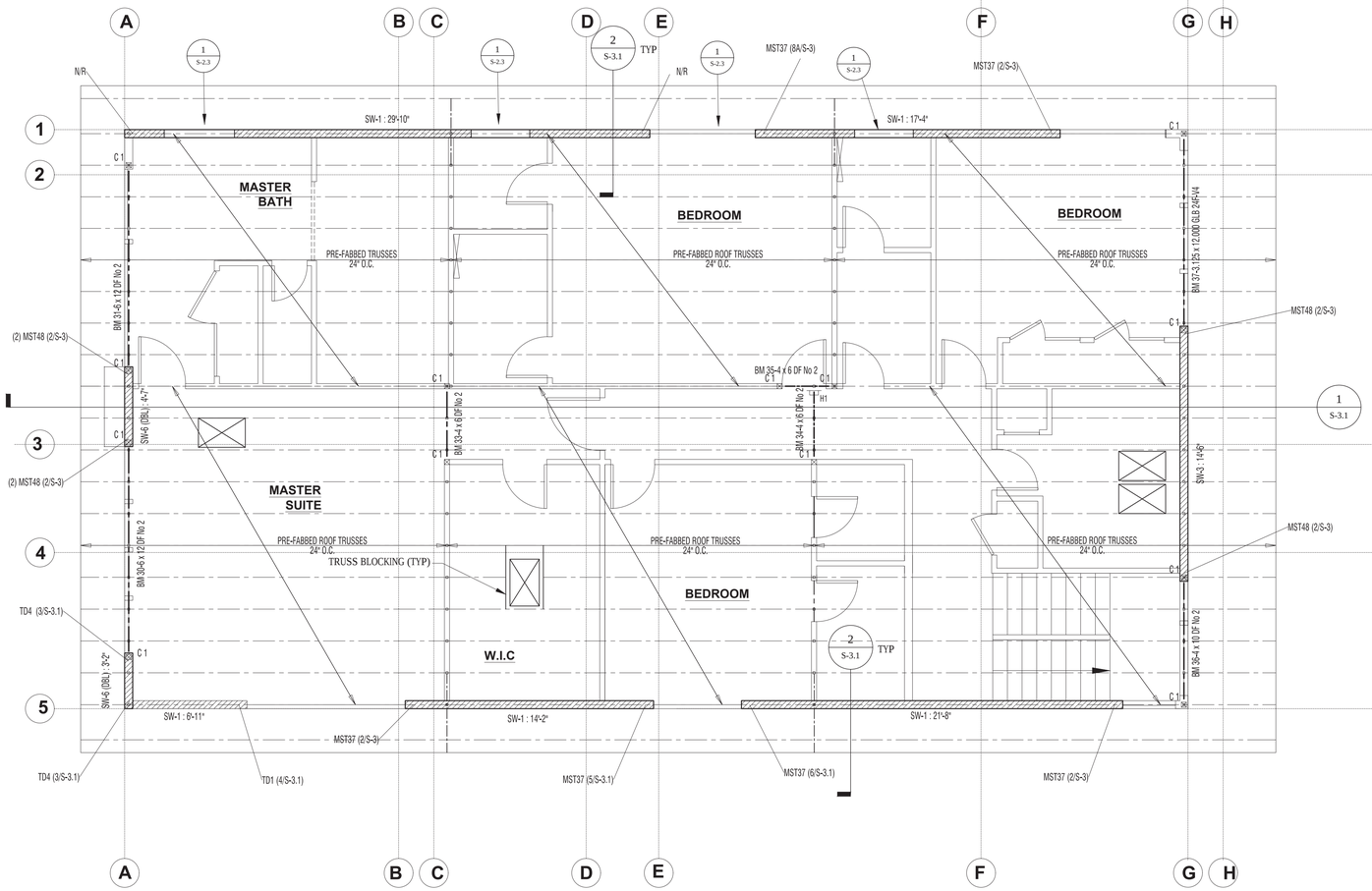
DWG TITLE: 1ST FLOOR SHEAR WALLS 2ND FLOOR FRAMING

Number: | Revision: CURRENT VERSION | Date: 9-06-2018

52nd Construction Set 9.19.18

PROJECT # T2-2092

SHEET NO S-2.2



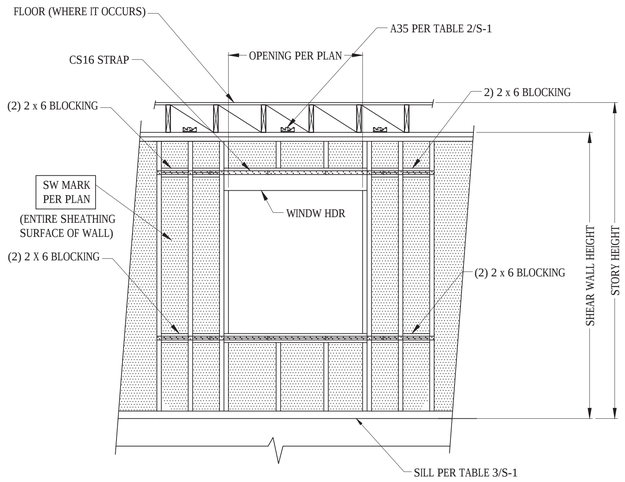
2ND FLOOR SHEAR WALLS/ ROOF FRAMING

REFER TO SHEET S-1 FOR ROOF TRUSS NOTES

COLUMN SCHEDULE	
COLUMN MARK	TYPE
COL C 1	4 x 4 DF No 2
COL C 2	4 x 4 DF No 2**
COL C 3	4 x 6 DF No 1
COL C 4	4 x 6 DF No 1 & btr
COL C 5	4 x 6 DF No 2
COL C 6	4 x 6 DF No 2**
COL C 7	6 x 6 DF No 2
COL C 8	6 x 6 DF No 1

HANGER SCHEDULE

HANGER	TYPE	METHOD	LOAD	ID	SUPTED BM	ID	SUPTING BM
H 1	HUCQ612	Inverted	11862	3	5.25 x 16.00	43	5.25 x 11.25
H 2	HUA6	Bm to Bm	1752	34	4.00 x 6.00	35	4.00 x 6.00
H 3	PER TRUSS MANUF	Bm to Bm	4182	39	GIRDER TRUSS	10	5.25 x 11.88
H 4	PER TRUSS MANUF	Bm to Bm	4182	39	GIRDER TRUSS	8	4.00 x 6.00
H 5	PER TRUSS MANUF	Bm to Bm	4540	40	GIRDER TRUSS	10	5.25 x 11.88
H 6	NONE SPECIFIED	Bm to Bm	3834	41	GIRDER TRUSS	10	5.25 x 11.88
H 7	PER TRUSS MANUF	Bm to Bm	536	42	GIRDER TRUSS	10	5.25 x 11.88
H 8	PER TRUSS MANUF	Bm to Bm	11349	43	5.25 x 11.25	3	5.25 x 16.00
H 9	HU412	Bm to Bm	2247	43	5.25 x 11.25	11	4.00 x 12.00
H 10	PER TRUSS MANUF	Bm to Bm	10792	46	GIRDER TRUSS	47	5.25 x 14.00



1 FORCE TRANSFER SHEAR WALL

PANEL THICKNESS & NAILING PER SW SCHEDULE ON TABLE 1/S-1 ACCORDING TO THE SHEAR WALL MARK [SW MARK PER PLAN] INDICATED

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DWG TITLE: 2ND FLOOR SHEAR WALLS ROOF FRAMING

Number: Revision: CURRENT VERSION Date: 9-06-2018

52nd Construction Set 9.19.18

PROJECT # T2-2092

SHEET NO S-2.3

HOLD-DOWN SCHEDULE - HOLD DOWNS ATTACHED TO CONCRETE

MARK	TYPE	CAPACITY	ANCHOR BOLT (MONO POUR)	ANCHOR BOLT (TWO POUR)	NUMBER OF STUDS / SOLID COLUMN	NAILS / SCREWS /BOLTS
TD1	STHD14 OR HDU4-SDS2.5	2275	SSTB20 (FOR HDU4)	SSTB24 (FOR HDU4)	(2) 2 X HEM-FIR	30 - 10d (0.148" DIA)
TD2	HDU5-SDS2.5 (SPF/HF)	4065	SSTB24 (FOR HDU5)	SSTB24 (FOR HDU5)	(2) 2 X DOUG-FIR	38 - 10d (0.148" DIA)
TD3	HDU5-SDS2.5 (DF/SP)	5645	"	"	(2) 2 X DOUG-FIR	40 - 10d (0.148" DIA)
TD4	HDU8-SDS2.5	7460	SSTB28	SSTB34	(2) 2 X DOUG-FIR	20 - $\frac{1}{4}$" X 3 - SCREWS
TD5	HDU11-SDS2.5	9540	"	"	(3) 2 X 6 DF 2 POST	26 - $\frac{1}{4}$" X 3 - SCREWS
TD6	HDU11-SDS2.5	11175	"	"	(4) 2 X 6 DF 1 POST	
TD7	HDU14-SDS2.5	14445	"	"	(4) 2 X 6 DF 1 POST	

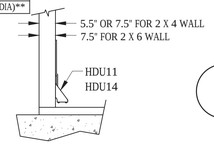
NOTES:

1. HOLDDOWNS SHALL BE MANUFACTURED BY THE SIMPSON STRONG-TIE CO, OR EQUIVALENT.
2. ALL BUILTUP STUDS SHALL RECEIVE SHEAR WALL EDGE NAILING.
3. INSTALL HOLD-DOWN BOLTS THRU THE THICKER SECTION OF THE SOLID POST.
4. 5/8" DIA ASTM A36 THREADED ROD EMBEDDED 12 INCHES IS ACCEPTABLE SUBSTITUTION FOR SST20, SST24, OR SST28.
   3/4" DIA ASTM A36 THREADED ROD EMBEDDED 12 INCHES IS ACCEPTABLE SUBSTITUTION FOR SST28 OR SST34.

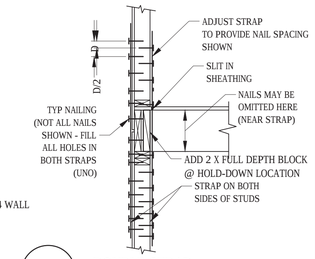
HOLD-DOWN SCHEDULE - HOLD DOWNS ATTACHED BETWEEN FRAMED WALLS

TYPE (2)	CAPACITY (3)(4)	NUMBER OF STUDS / SOLID COLUMN	NAILS / SCREWS /BOLTS
MST37	2010	(2) 2 X HEM-FIR	30 - 10d (0.148" DIA)
MST48	3105	(2) 2 X DOUG-FIR	38 - 10d (0.148" DIA)
MST60	4800	(2) 2 X DOUG-FIR	40 - 10d (0.148" DIA)
(2) MST48	6210	(2) 2 X DOUG-FIR	(2) 38 - 10d (0.148" DIA)**
(2) MST60	9600	(3) 2 X DOUG-FIR	(2) 40 - 10d (0.148" DIA)**

NOTES:
(1) FILL ALL HOLES WITH 10d COMMONS NAILS (EXCEPTION SEE NOTE 3).
(2) WHERE DOUBLE STRAPS ARE INDICATED SUCH AS (2) MST37 USE
10d X 1-1/2" COMMONS NAILS. SEE DETAIL A/S-3 FOR DETAIL.
(3) THE VALUES ABOVE ARE BASED ON A 16" CLEAR SPAN WITH HEM-FIR
FRAMING & WIND LOAD DURATION.
** STAGGER NAILING PER DETAIL B



A POST ALIGNMENT
NO SCALE



B DOUBLE STRAP AT EACH-SIDE OF WALL

SHEAR WALL SCHEDULE

MARK	CAPACITY (LB/FT) (1)	SHEATHING (PLYWOOD/OSB) (2)	NAIL SIZE (3)	EDGE NAIL SPACING (4)	FIELD NAIL SPACING	BOTTOM PLATE NAILING (2ND FLOOR) (6)	SILL PLATE CONN. TO FOUNDATION (10)	SHEAR CLIP SPACING (LTP4 OR A35 REFER TO DETAILS)	TYP FRAMING (U.N.O)	FRAMING AT ABUTTING EDGES (11)	FOUNDATION SILL PLATES	PLATES
SW-1	213	7/16	8d (0.131" DIA)	6	SEE NOTE 5	16d @ 6" O.C.	$\frac{1}{4}$" X 10 @ 35" O.C.	LTP4 or A35 @ 16" O.C.	2 X	2 X	2 X	(2) 2 X
SW-2	254	7/16	8d (0.131" DIA)	4	SEE NOTE 5	16d @ 4" O.C.	$\frac{1}{4}$" X 10 @ 30" O.C.	LTP4 or A35 @ 16" O.C.	2 X	2 X	2 X	(2) 2 X
SW-3	350	7/16	8d (0.131" DIA)	3	SEE NOTE 5	16d @ 4" O.C.	$\frac{1}{4}$" X 10 @ 20" O.C.	LTP4 or A35 @ 16" O.C.	2 X	3 X	3 X	(2) 2 X
SW-4	492	15/32	10d (0.148 DIA)	3	SEE NOTE 5	16d @ 3" O.C.	$\frac{1}{4}$" X 10 @ 24" O.C.	LTP4 or A35 @ 12" O.C.	2 X	3 X	3 X	(2) 2 X
SW-5	631	15/32	10d (0.148 DIA)	2	SEE NOTE 5	16d @ 2" O.C.	$\frac{1}{4}$" X 10 @ 18" O.C.	LTP4 or A35 @ 9" O.C.	2 X	3 X	3 X	(2) 2 X
SW-6	836	$\frac{15}{32}$" BOTH SIDES	10d (0.148 DIA)	4	SEE NOTE 5	$\frac{1}{4}$" DIA LAG SCREW @ 4" O.C.	$\frac{1}{4}$" X 10 @ 18" O.C.	SEE DETAIL 1	2 X	3 X	3 X	(2) 2 X
SW-7	1200	$\frac{15}{32}$" BOTH SIDES	10d (0.148 DIA)	3	SEE NOTE 5	$\frac{1}{4}$" DIA LAG SCREW @ 3" O.C.	$\frac{1}{4}$" X 10 @ 14" O.C.	SEE DETAIL 1	2 X	3 X	3 X	(2) 2 X
SW-8	1540	$\frac{15}{32}$" BOTH SIDES	10d (0.148 DIA)	2	SEE NOTE 5	$\frac{1}{4}$" DIA LAG SCREW @ 3" O.C.	$\frac{1}{4}$" X 10 @ 24" O.C.	SEE DETAIL 1	2 X	3 X	3 X	(2) 2 X

NOTES

1 ALLOWABLE SHEAR CAPACITY ASSUMES HEM-FIR FRAMING, AND IS BASED ON THE 2015 IBC WITH INCREASES FOR LOAD DURATION. SW-7 & SW-8 REQUIRES DOUG-FIR FRAMING.

2 UPON ENGINEERS APPROVAL, 19/32" RATED SHEATHING MAY BE USED WITH NO CAPACITY REDUCTION. O.S. INDICATES ONE SIDE OR WALL TO BE SHEATHED, B.S. INDICATES SHEATHING ON BOTH SIDES.

3 8d NAILS = 0.131" dia 10d NAILS = 0.148" dia

4 FOR SHEAR WALL TYPES SW-3 AND HIGHER, ALL PANEL EDGE NAILING AND FOUNDATION SILL NAILING SHALL BE STAGGERED.

5 12" FIELD NAILING FOR STUDS 16" O.C. AND 6" FIELD NAILING FOR STUDS 24" O.C.

6 WHERE LAG SCREWS ARE REQUIRED, SCREW LENGTH MUST BE ADEQUATE TO ENSURE 2-1/4" PENETRATION OF THE LAG INTO THE RIM JOIST BELOW. PRE DRILL WITH 3/16" DIA LEAD HOLE.

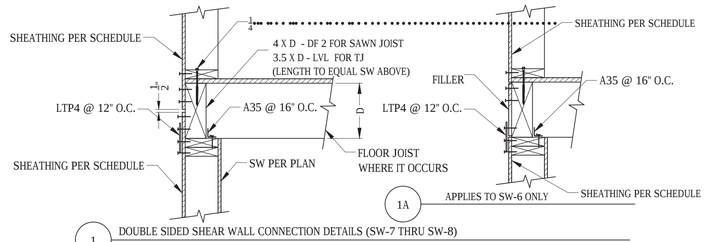
7 ADDITIONAL BOTTOM PLATE ANCHORS ARE ONLY REQUIRED AT WALLS DESIGNATED ON PLANS AS PERFORATED SHEAR WALLS. THESE ANCHORS ARE NOT REQUIRED AT FOUNDATION SILL PLATES.

8 ALIGN STRAPS WITH WALL STUDS AND CENTER AT FLOOR SHEATHING.

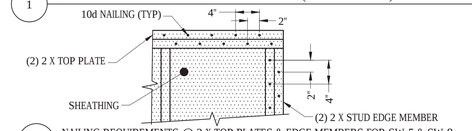
9 WALLS WITH OUT SHEAR WALL ID SHALL CONFORM SW-1.

10 3" x 3" x 1/4" GALVANIZED PLATE WASHER IS REQUIRED. EMBED ANCHOR BOLTS 7.5" MINIMUM. REFER TO S-1 TO PRESSURE TREATING NOTES FOR ANCHOR BOLTS IN CONTACT WITH PRESSURE TREATED LUMBER. REFER TO FOUNDATION WALL SILL BOLTING REQUIREMENTS WHERE ANCHOR BOLT SPACING MAY LESS THAN SHOWN PER THIS TABLE.

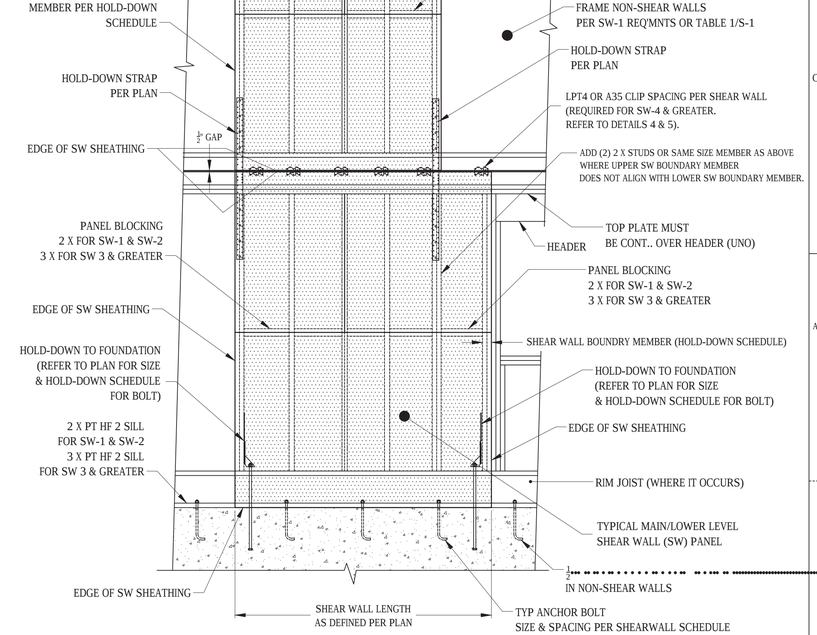
11 REFER TO HOLD-DOWN TABLE WHERE SHEAR WALL EDGE MEMBERS ARE CONTROLED BY THE REQ'D HOLD-DOWN. AS A MINIMUM REQUIREMENT, A 3X MEMBER AT HOLD DOWNS SHALL BE USED. WHERE (3) 2 X MEMBERS ARE REQUIRED PER THE HOLD-DOWN TABLE, USE (1) 3 X & (1) 2 X .



1 DOUBLE SIDED SHEAR WALL CONNECTION DETAILS (SW-7 THRU SW-8)

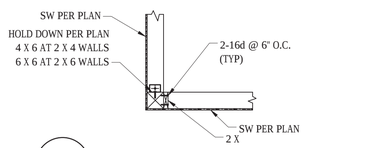


2 NAILING REQUIREMENTS @ 2 X TOP PLATES & EDGE MEMBERS FOR SW-5 & SW-8

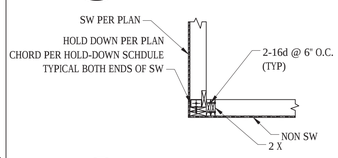


2 TYPICAL SEGMENTED SHEAR WALLS (SW)
NO SCALE

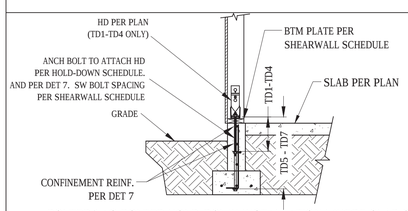
1. REFER TO PLAN FOR SHEAR WALL LENGTH & HOLD-DOWN SIZES.
2. REFER TO SHEAR WALL SCHEDULE FOR SW PANEL SIZE, NAILING AND BLOCKING.
3. REFER TO SHEAR WALL SCHEDULE FOR BOUNDARY MEMBERS.
4. REFER TO HOLD-DOWN SCHEDULE FOR HOLD-DOWNS & BOLTS.



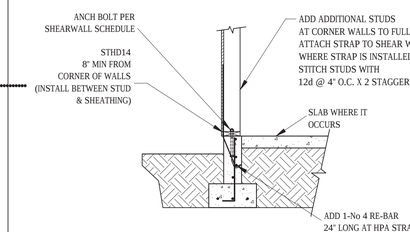
3A HOLD DOWN AT CORNER (WHERE IT OCCURS)
SEE VIEW 3B FOR OPTION (SW1-SW3 ONLY)



3B HOLD DOWN AT CORNER (WHERE IT OCCURS)
SW1-SW3 ONLY

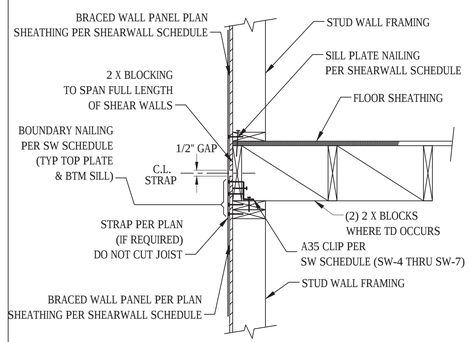


BOLTED/LAG BOLTED HOLD-DOWN INSTALLATION WHERE SLAB OCCURS

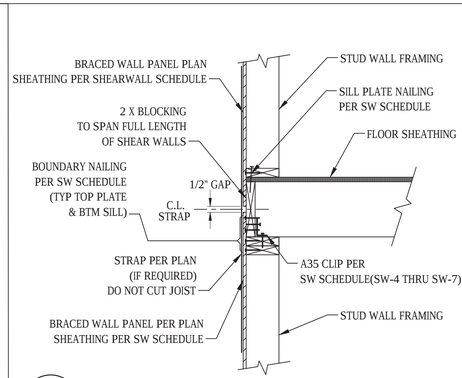


OPTIONAL STHD14 INSTALLATION WHERE SLAB OCCURS (TD1 & TD2 ONLY)

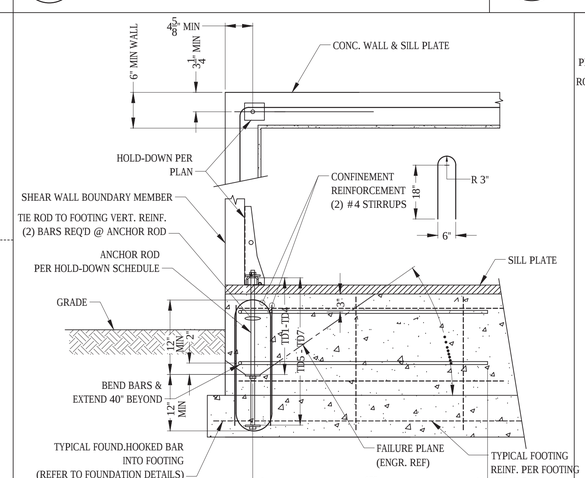
6 TYPICAL HOLD-DOWN ATTACHED DIRECTLY TO CONCRETE



4 EXTERIOR BRACED WALL AT PARALLEL JOIST

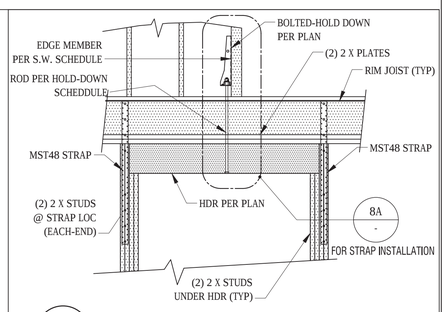


5 EXTERIOR BRACED WALL AT PERPENDICULAR JOIST

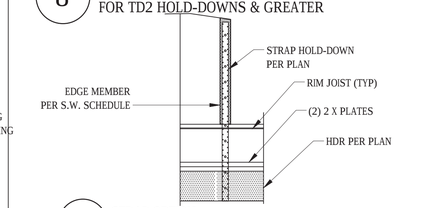


7 THREADED ROD HOLD-DOWN REQUIREMENTS

1. THIS A TYPICIAL DETAIL IS APPLICABLE TO HOLD-DOWNS TD1-TD4. AND FOUNDATION WALLS AT LEAST 48" LONG. REFER TO SPECIFIC DETAILS FOR OTHER CONDITIONS.
2. THIS DETAIL IS APPLICABLE TO FOUNDATIONS WITH CRAWLSPACE. EXTEND THREADED ABOVE FLOOR RIM.



8 TYPICAL HOLD-DOWN OVER HEADER BEAM FOR TD2 HOLD-DOWNS & GREATER



8A STRAP OPTION
FOR MST48 STRAP INSTL ONLY.

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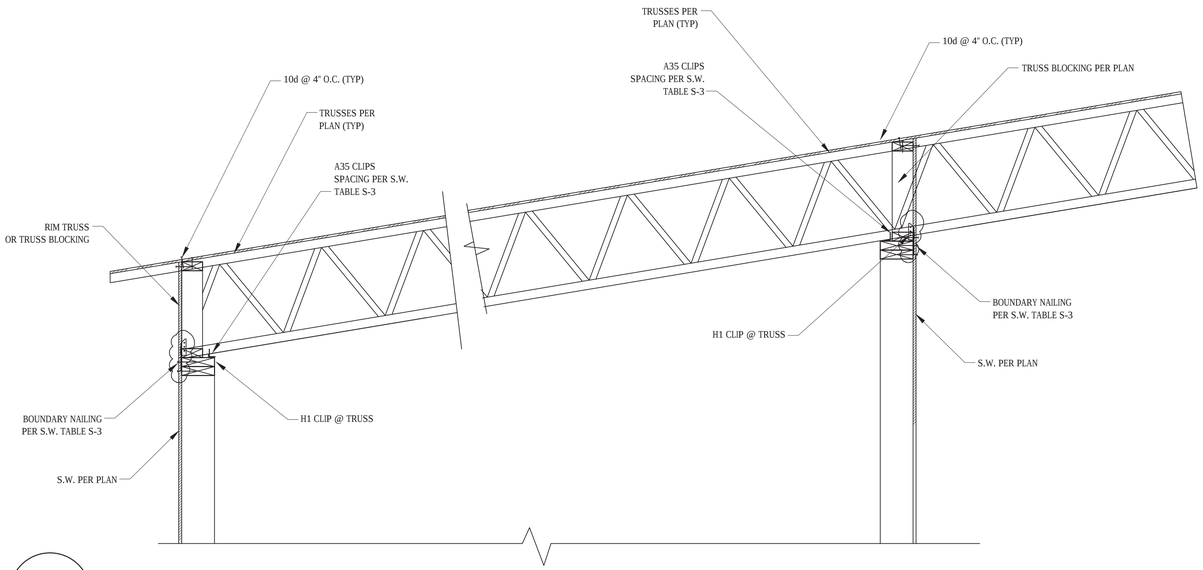
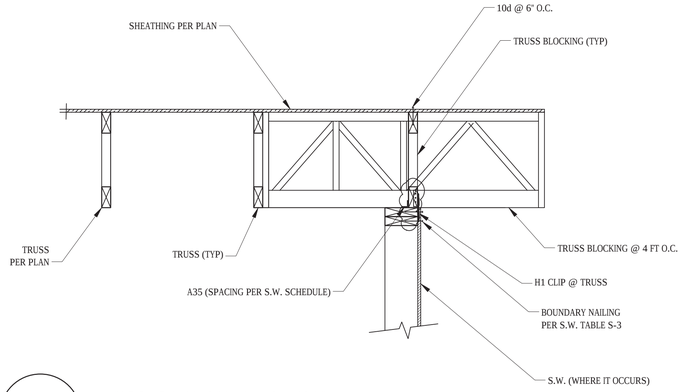
52nd Construction Set 9.19.18

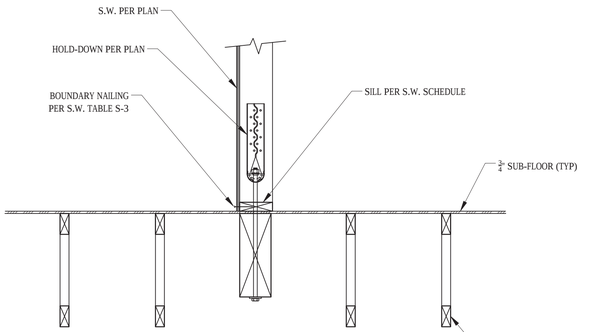
52nd Construction Set 9.19.18 (1).pdf



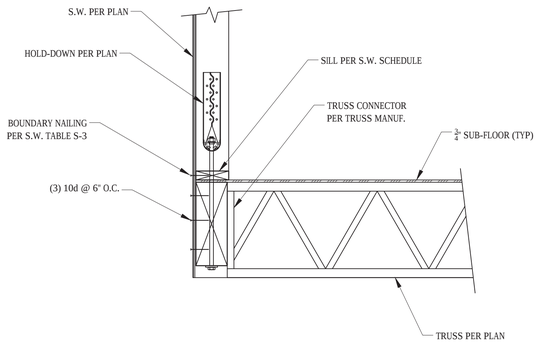
1 ROOF FRAMING TO S.W. CONNECTION



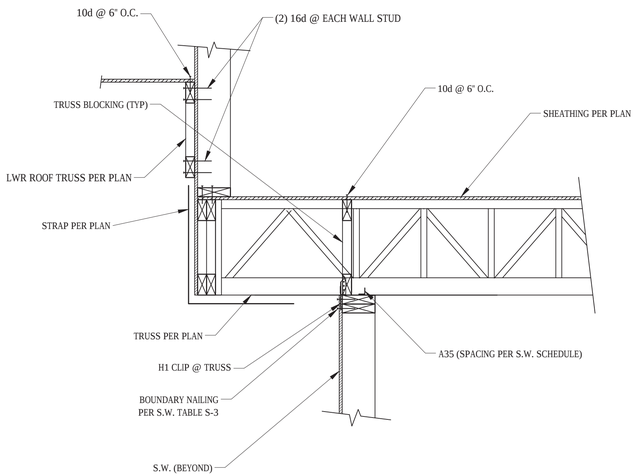
2 TRUSSES PARALLEL TO WALL



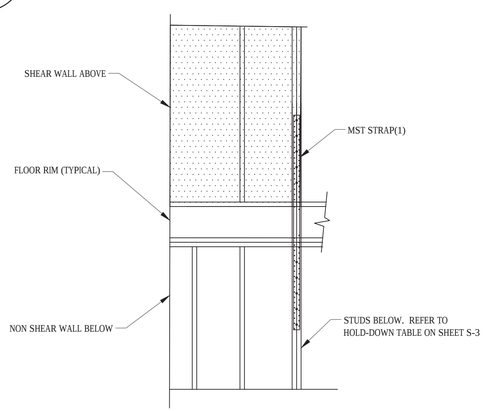
3 HOLD-DOWN @ SUPPORT BM (W/ TRUSS JOIST)



4 HOLD-DOWN @ SUPPORT BM (W/ TRUSS JOIST)



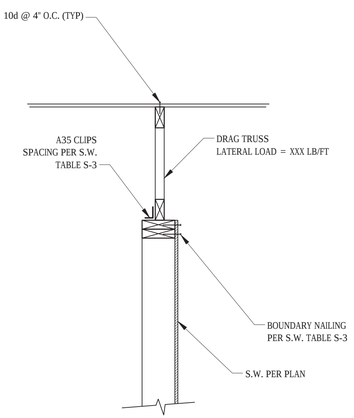
5 HOLD-DOWN @ SUPPORT BM (W/ TRUSS JOIST)



6 HOLD DOWN OVER SUPPORTING COLUMN & EXISTING FOUNDATION

(NO SCALE)

NOTES:
1. IF (2) TWO STRAPS ARE REQ'D, INSTALL ON OPPOSITE FACES OF COLUMN IF PRACTICAL. CUT FLOOR SHEATHING MIN AMOUNT TO ALLOW INSTALLATION OF HOLD-DWON STRAP.



7 DIAPHRAGM CONNECTION TO BRACED WALL BELOW

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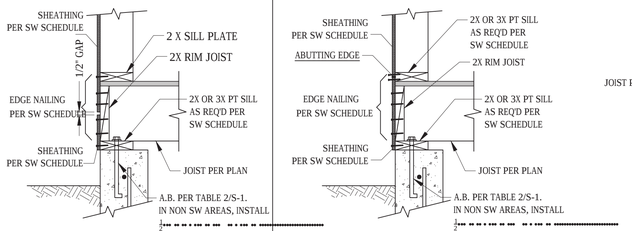
ANDREW K. MOROSKEOS — STATE OF WASHINGTON — 36923 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER — 8-06-2017

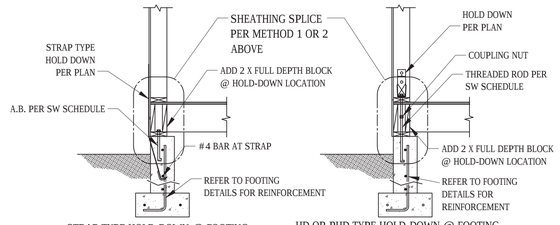
PROJECT # T2-2092

SHEET NO S-3.1



METHOD 1 - SHEATHING TO SILL CONNECTION

METHOD 2 - SHEATHING TO SILL CONNECTION

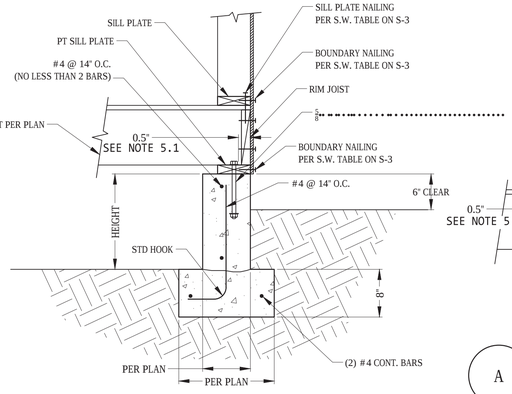


STRAP TYPE HOLD-DOWN @ FOOTING
REFER TO HOLD-DOWN SCHEDULE FOR LIMITATIONS

HD OR PHD TYPE HOLD-DOWN @ FOOTING
REFER TO HOLD-DOWN SCHEDULE FOR LIMITATIONS

1 TYPICAL HOLD-DOWN ATTACHED ABOVE FLOOR FRAMING

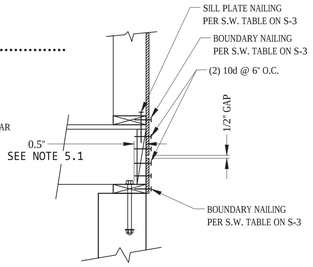
(NO SCALE)



2 TYPICAL FOOTING WITH CRAWLSPACE

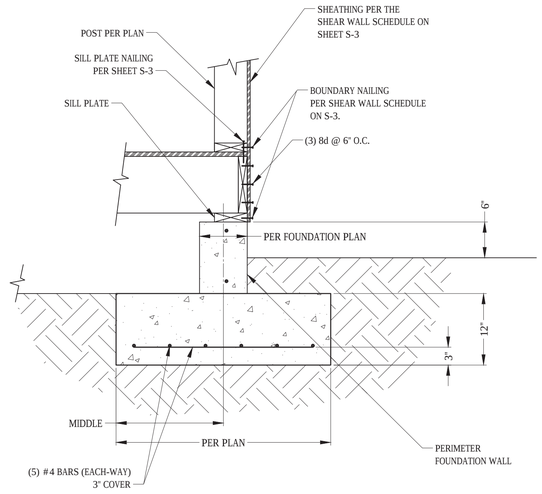
(NO SCALE)

NOTES:
1. MAXIMUM ALLOWED HEIGHT OF WALL IS 4 FT.
2. 3" COVER REQ'D FOR ALL REINFORCEMENT.
3. USE GRADE 40 OR GRADE 60 REINFORCEMENT.
4. REFER TO SHEAR WALL TABLE ON S-3 FOR THE BOLTED SILL PLATE. 3 X REQUIRED FOR SW-3 AND GREATER.
5. ANCHOR BOLT (A.B.) REQUIREMENTS:
   - 5.1. ALL WASHERS SHALL BE 3 X 3 X $\frac{1}{4}$" PLATE. MAX DISTANCE FROM EDGE OF PLATE WASHER TO SHEATHING SHALL BE 1/2".
   - 5.2. SPACE A.B. @ 48" O.C. IN NON SHEAR WALLS.
   - 5.3. FOR A.B. AS SPECIFIED PER THE SHEAR WALL (S.W.) PLANS, REFER TO S.W. TABLE ON S-3.



A OPTIONAL SHEATHING SPLICE AT RIM

(NO SCALE)



3 FOOTING AT PERIMETER WALL

(NO SCALE)

4 BEARING WALL SUPPORTED BY STRIP FOOTING

(NO SCALE)

NOTES:
1. USE SIMPSON TITEN HD OR EQUAL FOR THE EXPANSION BOLT.
2. 3" COVER REQUIRED FOR ALL REINFORCEMENT.

5 BEARING WALL SUPPORTED BY STRIP FOOTING

(NO SCALE)

NOTES:
1. USE SIMPSON TITEN HD OR EQUAL FOR THE EXPANSION BOLT.
2. 3" COVER REQUIRED FOR ALL REINFORCEMENT.

6 ISOLATED FOOTING SUPPORTING BM DETAIL

(NO SCALE)

NOTES:
1. USE SIMPSON TITEN HD OR EQUAL FOR THE EXPANSION BOLT.
2. 3" COVER REQUIRED FOR ALL REINFORCEMENT.

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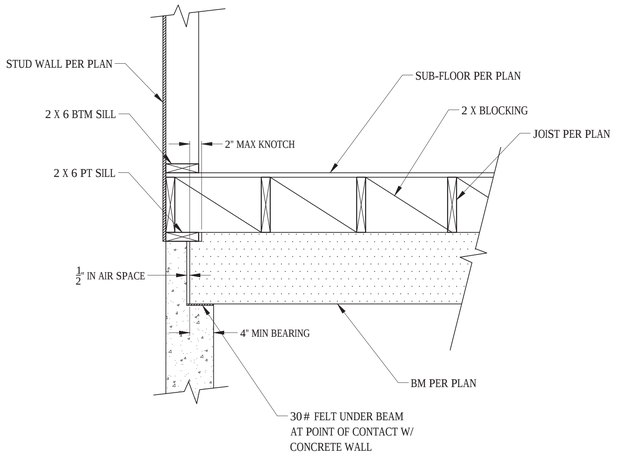
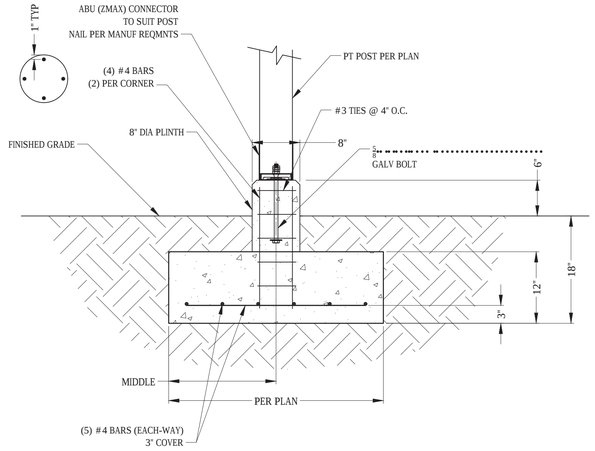


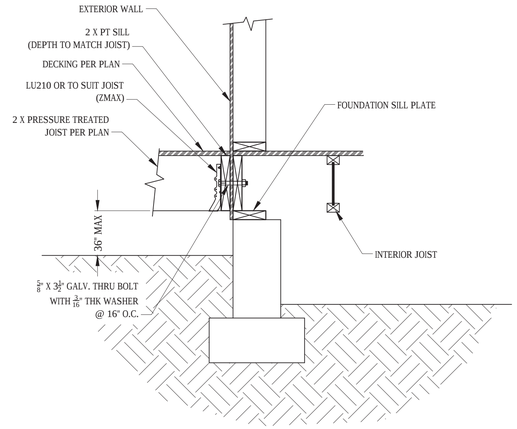
1 TYPICAL BEAM POCKET - CONCRETE FOUNDATION WALL

NO SCALE



2 FOOTING AT EXTERIOR GRADE

(NO SCALE)

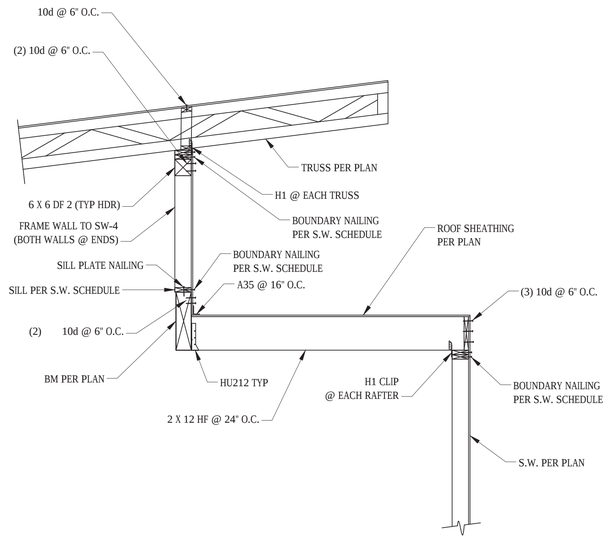


3 DECK LEDGER ATTACHMENT DETAIL

(FOR DECKS ABOVE GRADE)

NO WATER PROOFING IS PROVIDED

THIS IS A STRUCTURAL DETAIL ONLY



4 DECK LEDGER ATTACHMENT DETAIL

(FOR DECKS ABOVE GRADE)

NO WATER PROOFING IS PROVIDED

THIS IS A STRUCTURAL DETAIL ONLY

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SHEET NO

S-3.3