

# ABBREVIATIONS:

ABV	ABOVE
ADD	ADDITIONAL
AFB	ABOVE FINISHED FLOOR
BLW	BELOW
BLK	BLOCK, BLOCKING
BOT	BOTTOM
BOW	BOTTOM OF WALL
CAB	CABINET
CL	CENTERLINE
CLG	CILING
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CONTR	CONTRACTOR
CP	CENTERPOINT
CSMT	CASEMENT
DBL	DOUBLE
DET	DETAIL
DIA	DIAMETER
DM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DW	DISHWASHER
EACH	EACH
EXH	EXHAUST
EX	EXISTING
EXT	EXTERIOR
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FN GRDE	FINISHED GRADE
FN	FINISHED
FNDN	FOUNDATION
FLR	FLOOR
FP	FIREPLACE
FRZR	FREEZER
GA	GAUGE
GL	GLASS
GR	GRADE
GRB	GYPSUM WALL BOARD
HB	HOSE BIBB
HGT	HEIGHT(H)
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
LT	LIGHTING
LV	LOW VOLTAGE
MEMB	MEMBRANE
MATL	MATERIAL
MTL	METAL
MFR	MANUFACTURER
MT	MOUNTED
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NFC	NOT FOR CONSTRUCTION
NO.	NUMBER
NOM	NOMINAL
OC	ON CENTER
OPH	OPPOSITE HAND
PNL	PANEL
PL	PLATE, PROPERTY LINE
PLYWD	PLYWOOD
R	RISER(S), RADIUS
RAD	RADIUS
RE	REFER TO
RFG	REFER TO ROOFING
RFR	REFRIGERATOR
SM	SIMILAR
T	TREAD(S)
TBD	TO BE DETERMINED
TG	TEMPERED GLASS
T&G	TONGUE & GROOVE
THK	THICKNESS
TOP	TOPPING
TOP	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLTAGE
VIF	VEEY IN FIELD
WD	WOOD
WDW	WINDOW

# E M E R C E R P A R C E L 3

## 8 3 7 9 E. M E R C E R W A Y M E R C E R I S L A N D W A 9 8 0 4 0

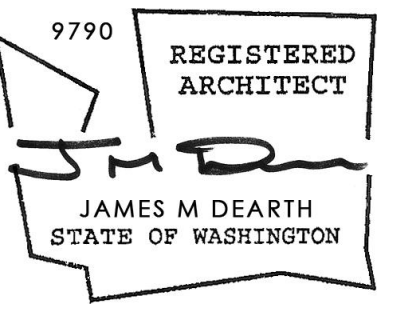


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206.913.2333  
4303 STONE WAY N  
SEATTLE, WA 98103



8379 E. MERCER WAY MERCER ISLAND, WA

E M E R C E R P A R C E L 3

# FLOOR PLAN LEGEND:

	EXISTING WALL TO REMAIN
	NEW FULL-HEIGHT WALL
	NEW FULL-HEIGHT CONCRETE WALL
	PARTIAL-HEIGHT WALL
	PROPERTY LINE
	BUILDING / STRUCTURE ABOVE
	BUILDING / STRUCTURE BELOW
	CENTERLINE
	AREA OF DRAWING REVISION
	ELEVATION MARKER
	SECTION MARKER

# GENERAL PROJECT NOTES:

- DO NOT SCALE DRAWINGS.
- THIS PROJECT SHALL COMPLY WITH ALL GOVERNING REGULATIONS, ORDINANCES, BUILDING CODES, OR COVENANTS OF THE AREA IN WHICH IT IS BUILT.
- APPROVAL BY AN INSPECTOR DOES NOT CONSTITUTE AUTHORITY TO DEVIATE FROM THE DRAWINGS OR SPECIFICATIONS.
- THE CONTRACTOR SHALL SCHEDULE WALK-THROUGHS AT EACH OF BELOW NOTED INTERVALS:
  - PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
  - PRIOR TO THE COMMENCEMENT OF ALL MECHANICAL + ELECTRICAL WORK.
  - PROVIDE ALL NECESSARY BARRICADES, WARNING SIGNS, + DEVICES TO PROTECT PUBLIC + CONSTRUCTION PERSONNEL DURING CONSTRUCTION.
  - MAINTAIN ALL REQUIRED ACCESS + EGRESS DURING CONSTRUCTION.

# DUTY OF COOPERATION:

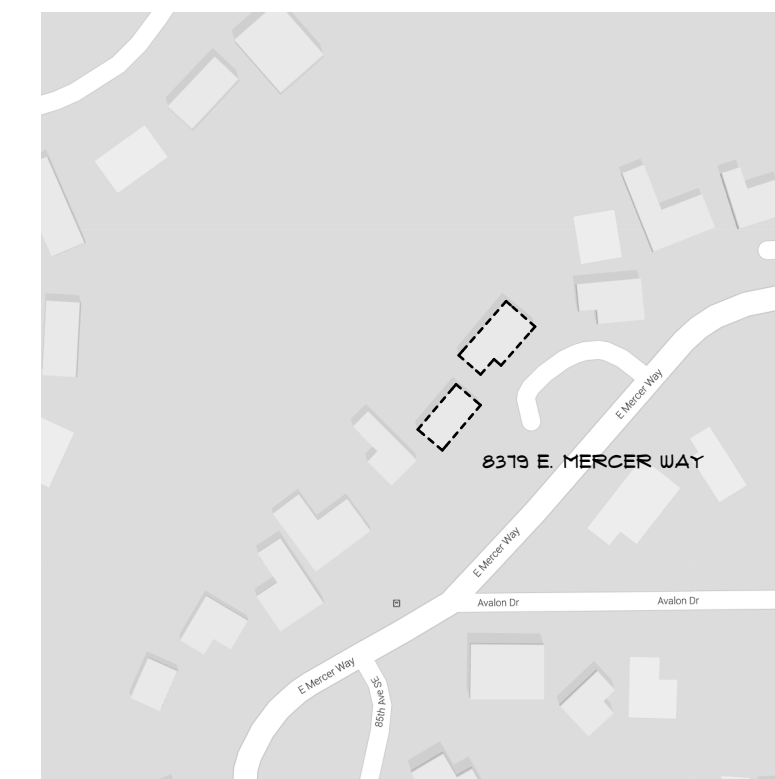
RELEASE + ACCEPTANCE OF THESE DOCUMENTS INDICATES COOPERATION AMONG THE OWNER, THE CONTRACTOR, + RIPPLE DESIGN STUDIO. ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED BY THE USE OF THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO RIPPLE DESIGN STUDIO. FAILURE TO DO SO SHALL RELIEVE RIPPLE DESIGN STUDIO FROM ANY RESPONSIBILITY OF THE CONSEQUENCES.

ANY DEVIATIONS FROM THESE DOCUMENTS WITHOUT THE CONSENT OF RIPPLE DESIGN STUDIO ARE UNAUTHORIZED. FAILURE TO OBSERVE THESE PROCEDURES SHALL RELIEVE RIPPLE DESIGN STUDIO OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING OUT OF SUCH ACTIONS.

# WSEC 2015 NOTES:

- THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2015 PRESCRIPTIVE METHOD.
- INSULATION VALUES SHALL BE AS FOLLOWS:
  - ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MAX.
  - ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MAX.
  - ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
  - ALL CEILINGS OVER CONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
  - ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.
  - ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
  - ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
  - ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
  - ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
  - ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
- RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
- PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
- PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
- NATURAL GAS, PROPANE OR OIL WATER HEATER SHALL HAVE A MINIMUM EF OF 0.91 (WSEC 406.2, CREDIT 5c).
- AT CRAWLSPACES THE MIN NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 FT<sup>2</sup> FOR EACH 300 FT<sup>2</sup> OF UNDER-FLOOR AREA. ONE VENTILATION OPENING SHALL BE WITHIN 3'-0" OF EACH CORNER OF THE BUILDING AT CRAWLSPACE, EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS, OR CRAWLSPACE SHALL BE MECHANICALLY VENTED.
- THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R402.41 THROUGH R402.44. WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY AND A WRITTEN REPORT OF THE TESTING RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE CODE OFFICIAL.
- AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE.

# VICINITY MAP:



# IMPERVIOUS SURFACE CALCULATIONS:

LOT AREA:	26,053 FT <sup>2</sup>
<b>ALLOWABLE LOT COVERAGE:</b> <small>(LOT SLOPE IS BETWEEN 15% AND 30%)</small>	<b>9,119 FT<sup>2</sup> (35%)</b>
PROPOSED RESIDENCE ROOF AREA:	2,748 FT <sup>2</sup>
PROPOSED DRIVES + WALK AREA:	1,127 FT <sup>2</sup>
EXISTING WETLAND AREA TO REMAIN:	1,948 FT <sup>2</sup>
<b>TOTAL IMPERVIOUS SURFACE UPON COMPLETION:</b>	<b>5,823 FT<sup>2</sup> (22.35%)</b>

# PROJECT INFO:

**PROJECT ADDRESS:**  
8379 E. MERCER WAY PARCEL 3  
MERCER ISLAND, WA 98040

**SCOPE OF WORK:**  
NEW SINGLE FAMILY RESIDENCE

**ZONE:**  
R-8.4 + R-9.6

**LEGAL DESCRIPTION:**  
AVALON PARK ADD & SELV 40 FT OF POR OF NW 1/4 NWLY LN OF SD 7 & BET SWLY & NELV LNS THOF EXTND WLY

**ACCESSORS PARCEL NUMBER:**  
#Project Status

**BUILDING CODE + OCCUPANCY:**  
2019 IRC (ARCHITECTURAL) + 2019 IBC (STRUCTURAL)  
R-3 SINGLE-FAMILY RESIDENTIAL (RESIDENCE)  
U STORAGE (GARAGE, STORAGE)

**TYPE OF CONSTRUCTION:**  
TYPE-V-N NON-SPRINKLERED

**OCCUPANT LOAD CALCULATIONS:**

PROPOSED BASEMENT GROSS FLOOR AREA:	1,145 FT <sup>2</sup>
OCCUPANT LOAD FACTOR (ACCESSORY STORAGE):	1 PER 200 FT <sup>2</sup>
BASEMENT OCCUPANT LOAD:	6 OCCUPANTS
PROPOSED FIRST FLOOR GROSS FLOOR AREA:	1,898 FT <sup>2</sup>
OCCUPANT LOAD FACTOR (ACCESSORY STORAGE):	1 PER 200 FT <sup>2</sup>
FIRST FLOOR OCCUPANT LOAD:	10 OCCUPANTS
PROPOSED SECOND FLOOR GROSS FLOOR AREA:	1,843 FT <sup>2</sup>
OCCUPANT LOAD FACTOR (RESIDENTIAL):	1 PER 200 FT <sup>2</sup>
SECOND FLOOR OCCUPANT LOAD:	10 OCCUPANTS
TOTAL OCCUPANT LOAD:	26 OCCUPANTS

# BUILDING AREA CALCULATIONS:

LOT AREA:	26,053 FT <sup>2</sup>
<b>MAX ALLOWABLE BUILDING GROSS FLOOR AREA:</b>	<b>11,723.85 FT<sup>2</sup> (45%)</b>
PROPOSED BASEMENT AREA:	1,246 FT <sup>2</sup>
PROPOSED FIRST FLOOR:	953 FT <sup>2</sup>
PROPOSED GARAGE:	2,083 FT <sup>2</sup>
PROPOSED SECOND FLOOR:	1,943 FT <sup>2</sup>
<b>TOTAL BUILDING GROSS FLOOR AREA:</b>	<b>6,225 FT<sup>2</sup> (23.8%)</b>

# PROJECT TEAM:

**CLIENT:**  
NEW HORIZON REAL ESTATE DEVELOPMENT  
8744 126TH AVE NE  
KIRKLAND, WA  
206.5570772

**ARCHITECT / APPLICANT:**  
RIPPLE DESIGN STUDIO, INC. - JIM DEARTH  
4303 STONE WAY N  
SEATTLE, WA 98103  
206.913.2333

**SURVEYOR:**  
GEODIMENSIONS, INC. - KEN GREEN  
10801 MAIN STREET, SUITE 102  
BELLEVUE, WA 98004  
425.458.4488

**GEOTECHNICAL ENGINEER:**  
PANGEQ, INC. - MICHAEL XUE  
3213 EASTLAKE AVE E SUITE B  
SEATTLE, WA 98102  
206.262.0307

**CIVIL ENGINEER:**  
CIVIL ENGINEERING SOLUTIONS - JEFFREY ELLIS  
2244 NW MARKET ST UNIT B  
SEATTLE, WA 98107  
206.930.0342

**STRUCTURAL ENGINEER:**  
BUKER ENGINEERING - DANIEL BUKER  
PO BOX 28551  
SEATTLE, WA 98118  
206.310.3559

**CONTRACTOR:**  
TBD

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RELEASE  
SCHEMATIC DESIGN  
20 JUNE 2017

# RUN YONG USA

## MERCER ISLAND LOT LINE REVISION NO. SUB 16-004

### DECLARATION

WE THE UNDERSIGNED OWNER(S) IN FEE SIMPLE [AND CONTRACT PURCHASER(S)] OF THE LAND HEREIN DESCRIBED, DO HEREBY MAKE A LOT LINE REVISION THEREOF PURSUANT TO RCW 58.17.060 AND DECLARE THIS LOT LINE REVISION TO BE THE GRAPHIC REPRESENTATION OF THE SAME, AND THAT SAID SHORT SUBDIVISION IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE OWNER(S).

IN WITNESS WHEREOF WE HAVE SET OUR HANDS AND SEALS.

BY: \_\_\_\_\_  
RUN YONG USA

### ACKNOWLEDGEMENTS

STATE OF WASHINGTON }  
                                  } SS.  
COUNTY OF KING      }

I CERTIFY THAT I KNOW OR HAVE SATISFACTORY EVIDENCE THAT \_\_\_\_\_ IS THE PERSON WHO APPEARED BEFORE ME, AND SAID PERSON ACKNOWLEDGED THAT HE/SHE SIGNED THIS INSTRUMENT, ON OATH STATED THAT HE/SHE WAS AUTHORIZED TO EXECUTE THE INSTRUMENT AND ACKNOWLEDGED IT AS THE \_\_\_\_\_ OF RUN YONG USA, TO BE THE FREE AND VOLUNTARY ACT OF SUCH PARTY FOR THE USES AND PURPOSES MENTIONED IN THE INSTRUMENT.

GIVEN UNDER MY HAND AND OFFICIAL SEAL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2016.

NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON

PRINTED NAME \_\_\_\_\_  
MY COMMISSION EXPIRES \_\_\_\_\_

### CITY OF MERCER ISLAND APPROVALS

EXAMINED AND APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2016.

\_\_\_\_\_  
CODE OFFICIAL

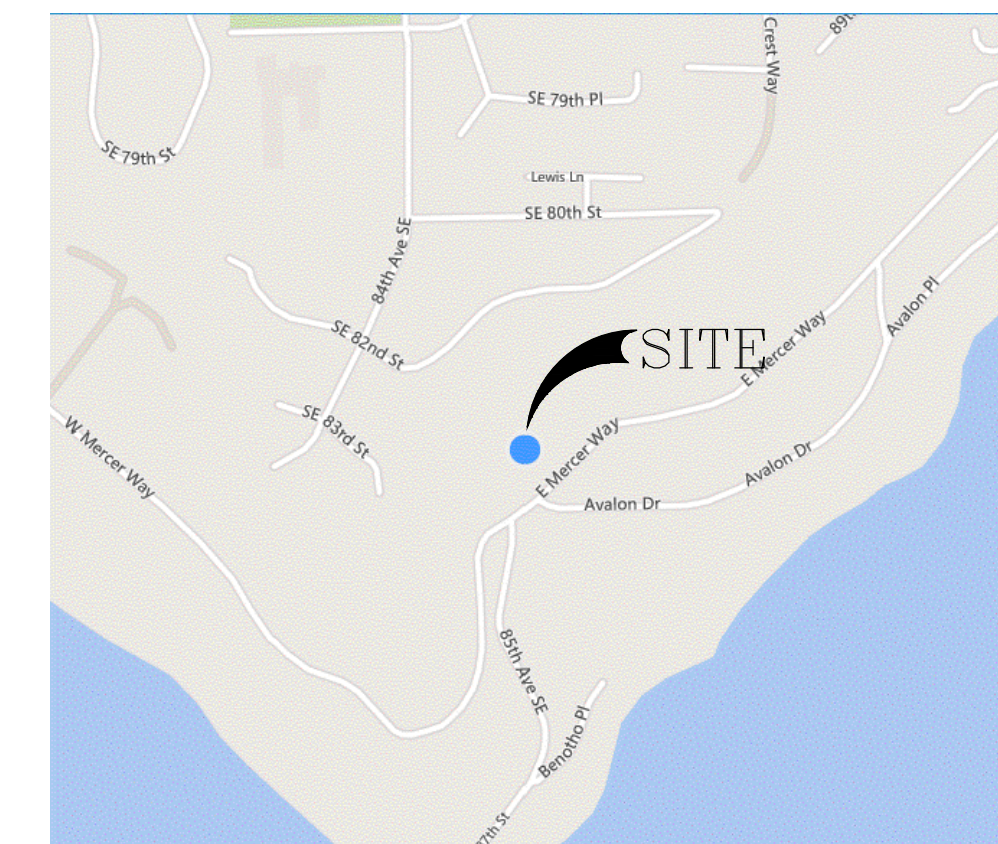
EXAMINED AND APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2016.

\_\_\_\_\_  
CITY ENGINEER

### KING COUNTY DEPARTMENT OF ASSESSMENTS

EXAMINED AND APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2016.

\_\_\_\_\_  
ASSESSOR



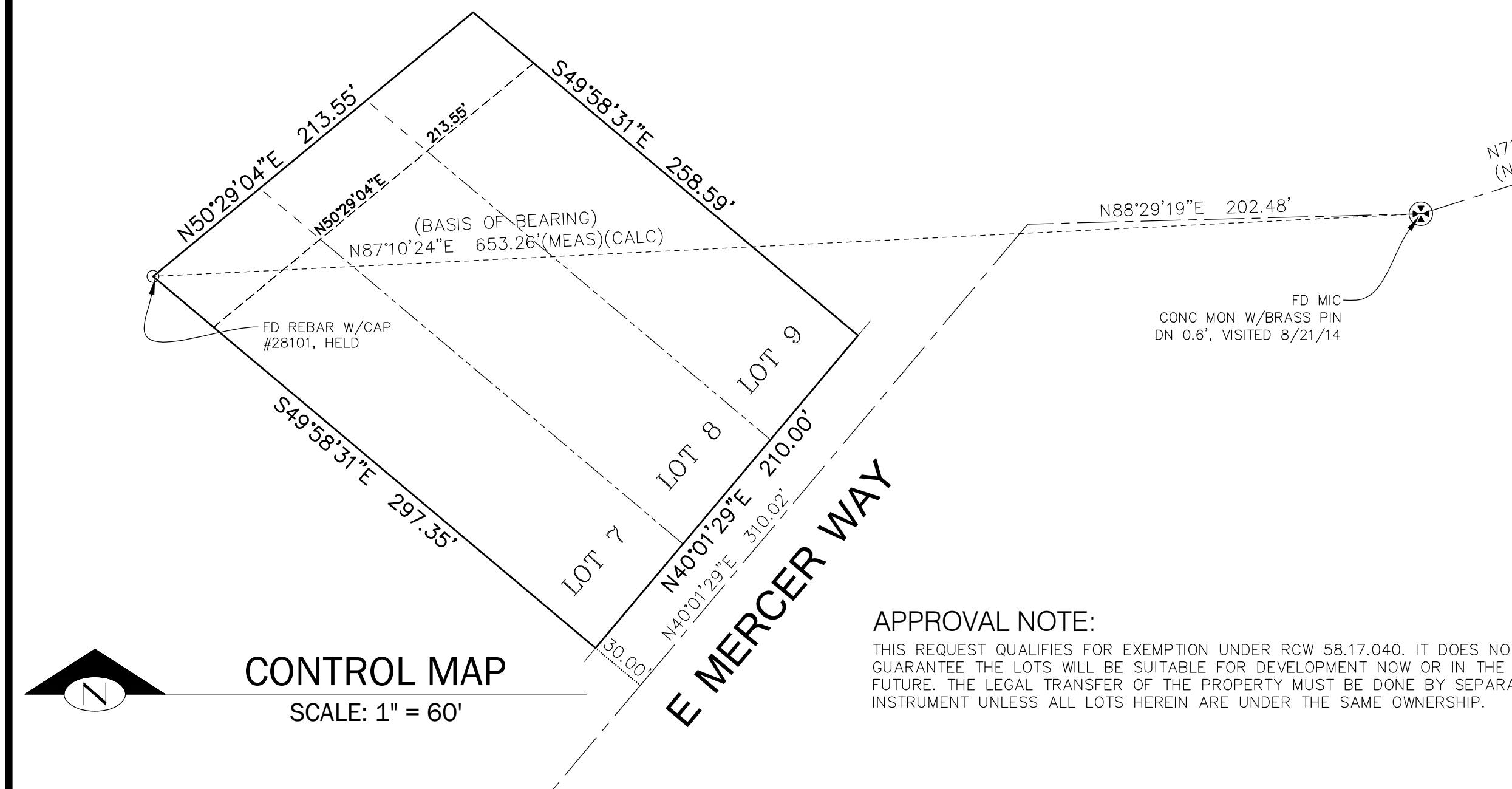
VICINITY MAP  
NOT TO SCALE

### BASIS OF BEARINGS

PER PLAT OF AVALON PARK, VOL. 49, PAGE(S) 64 & 65, RECORDS OF KING COUNTY, WASHINGTON.

### SURVEY NOTES:

1. THE SURVEY SHOWN HEREON WAS PERFORMED IN AUGUST OF 2014. 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.
2. INSTRUMENTATION FOR THIS SURVEY WAS A LEICA TOTAL STATION UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS WASHINGTON STATE STANDARDS SET BY WAC 332-130-090.
3. SEWER AND WATER UTILITIES FROM PUBLIC SERVICE.



### ORIGINAL LEGAL DESCRIPTION:

BASED ON DEED FURNISHED BY FIRST AMERICAN TITLE, RECORDED IN KING COUNTY UNDER INSTRUMENT NUMBER 20140523001500, DATED MAY 23, 2014.

LOT 9, BLOCK 3, AVALON PARK, ACCORDING TO PLAT RECORDED IN VOLUME 49 OF PLATS AT PAGE(S) 64 AND 65, IN KING COUNTY, WASHINGTON.

ALSO THE SOUTHEASTERLY 40 FEET OF THE PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M. AND GOVERNMENT LOT 1 OF SAID SECTION ADJACENT TO THE NORTHWESTERLY LINE OF SAID LOT 9 AND BETWEEN THE SOUTHWESTERLY AND NORTHEASTERLY LINES THEREOF, EXTENDED NORTHWESTERLY.

LOT 8, BLOCK 3, AVALON PARK, ACCORDING TO PLAT RECORDED IN VOLUME 49 OF PLATS AT PAGE(S) 64 AND 65, IN KING COUNTY, WASHINGTON.

ALSO THE SOUTHEASTERLY 40 FEET OF THE PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M. AND GOVERNMENT LOT 1 OF SAID SECTION ADJACENT TO THE NORTHWESTERLY LINE OF SAID LOT 8 AND BETWEEN THE SOUTHWESTERLY AND NORTHEASTERLY LINES THEREOF, EXTENDED NORTHWESTERLY.

LOT 7, BLOCK 3, AVALON PARK, ACCORDING TO PLAT RECORDED IN VOLUME 49 OF PLATS AT PAGE(S) 64 AND 65, IN KING COUNTY, WASHINGTON.

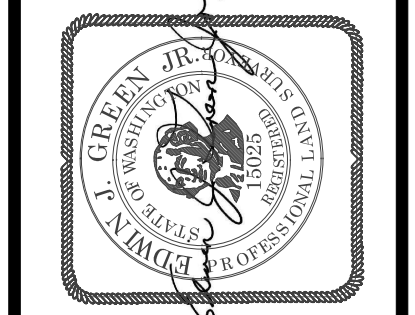
ALSO THE SOUTHEASTERLY 40 FEET OF THE PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M. AND GOVERNMENT LOT 1 OF SAID SECTION ADJACENT TO THE NORTHWESTERLY LINE OF SAID LOT 7 AND BETWEEN THE SOUTHWESTERLY AND NORTHEASTERLY LINES THEREOF, EXTENDED NORTHWESTERLY.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

### APPROVAL NOTE:

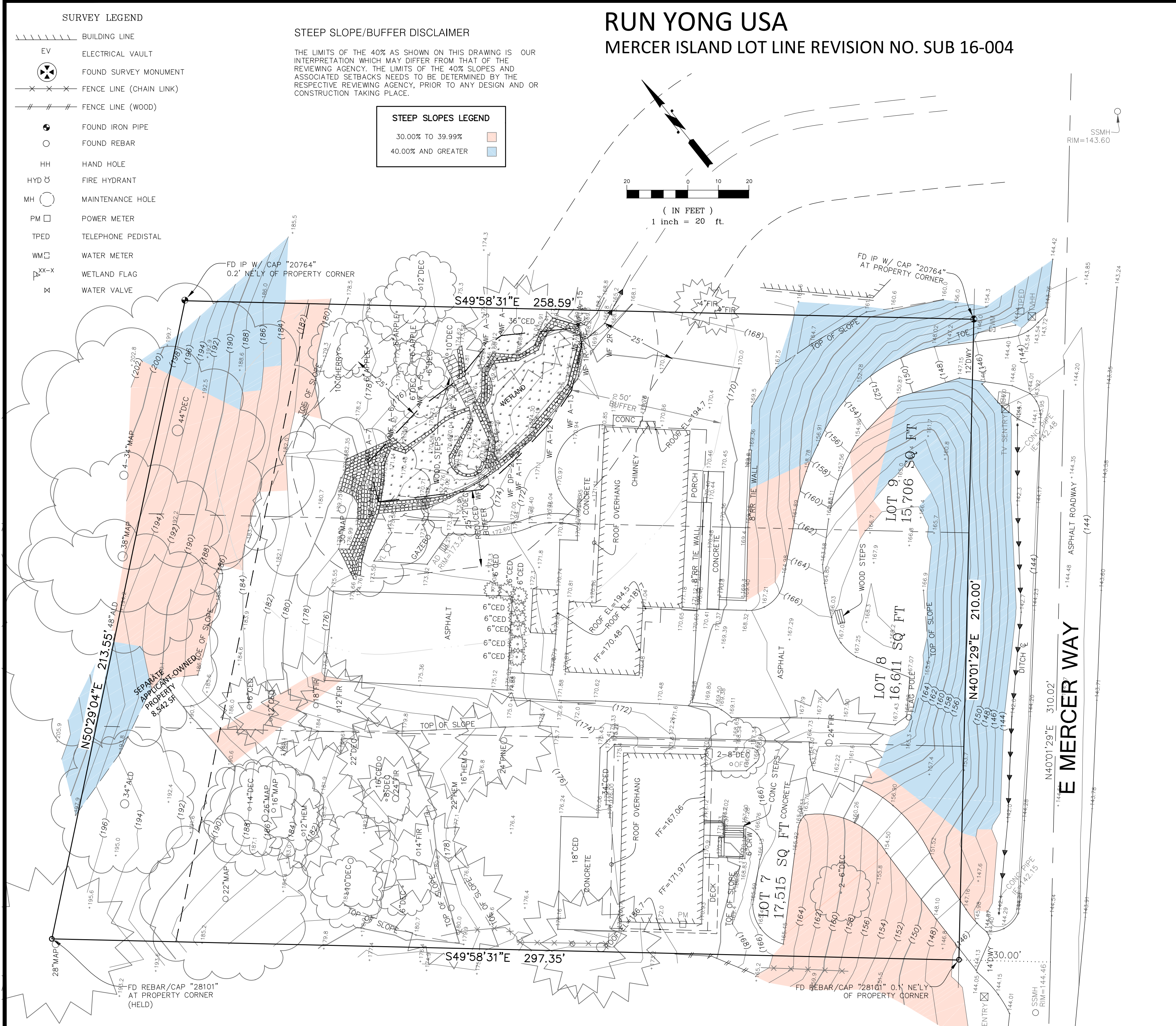
THIS REQUEST QUALIFIES FOR EXEMPTION UNDER RCW 58.17.040. IT DOES NOT GUARANTEE THE LOTS WILL BE SUITABLE FOR DEVELOPMENT NOW OR IN THE FUTURE. THE LEGAL TRANSFER OF THE PROPERTY MUST BE DONE BY SEPARATE INSTRUMENT UNLESS ALL LOTS HEREIN ARE UNDER THE SAME OWNERSHIP.

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



CITY OF MERCER ISLAND SUB16-004  
 NW 1/4, NW 1/4, SEC 31, T 24N, R 5E, W.M.  
**RUN YONG USA**  
 8375 & 8383 E MERCER WAY  
 MERCER ISLAND, WA

JOB NO.:	140845
DATE:	9/16/16
DRAFTED BY:	TLR
CHECKED BY:	EJG/SRM
SCALE:	1" = 60'
1 OF 4	



**SURVEY LEGEND**

=====	BUILDING LINE
EV	ELECTRICAL VAULT
⊗	FOUND SURVEY MONUMENT
---x---x---	FENCE LINE (CHAIN LINK)
###	FENCE LINE (WOOD)
●	FOUND IRON PIPE
○	FOUND REBAR
HH	HAND HOLE
HYD	FIRE HYDRANT
MH	MAINTENANCE HOLE
PM	POWER METER
TPED	TELEPHONE PEDISTAL
WM	WATER METER
W-X-X	WETLAND FLAG
M	WATER VALVE

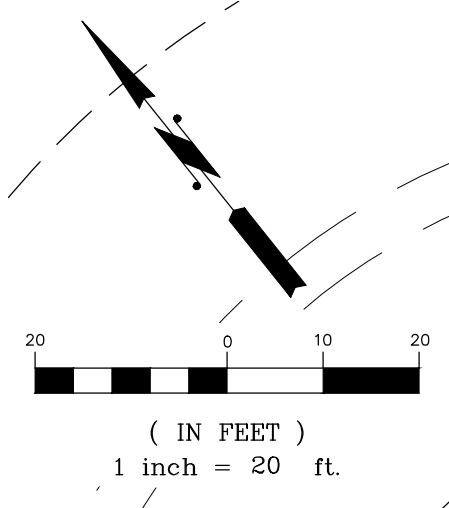
**STEEP SLOPE/BUFFER DISCLAIMER**

THE LIMITS OF THE 40% AS SHOWN ON THIS DRAWING IS OUR INTERPRETATION WHICH MAY DIFFER FROM THAT OF THE REVIEWING AGENCY. THE LIMITS OF THE 40% SLOPES AND ASSOCIATED SETBACKS NEEDS TO BE DETERMINED BY THE RESPECTIVE REVIEWING AGENCY, PRIOR TO ANY DESIGN AND OR CONSTRUCTION TAKING PLACE.

**STEEP SLOPES LEGEND**

[Light Blue Box]	30.00% TO 39.99%
[Dark Blue Box]	40.00% AND GREATER

**RUN YONG USA**  
**MERCER ISLAND LOT LINE REVISION NO. SUB 16-004**



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 phone 425.458.4488 support@terrane.net  
[www.terrane.net](http://www.terrane.net)



TOPOGRAPHIC SURVEY  
 NW 1/4, NW 1/4, SEC 31, T 24N, R 5E, W.M.  
**RUN YONG USA**  
 8375 & 8383 E MERCER WAY  
 MERCER ISLAND, WA

JOB NO.:	140845
DATE:	9/16/16
DRAFTED BY:	TLR
CHECKED BY:	EJG/SRM
SCALE:	1" = 20'
2 OF 4	

TOTAL SITE AREA IS 58,373 SF OR 1.34 ACRES.

PARCEL A  
 GROSS = 15,683 SF  
 WETLAND BUFFER = 2,839 SF  
 ACCESS ESM'T = 524 SF  
 NET = 12,320 SF

PARCEL B  
 GROSS = 16,638 SF  
 ACCESS ESM'T = 3,704 SF  
 NET = 12,934 SF

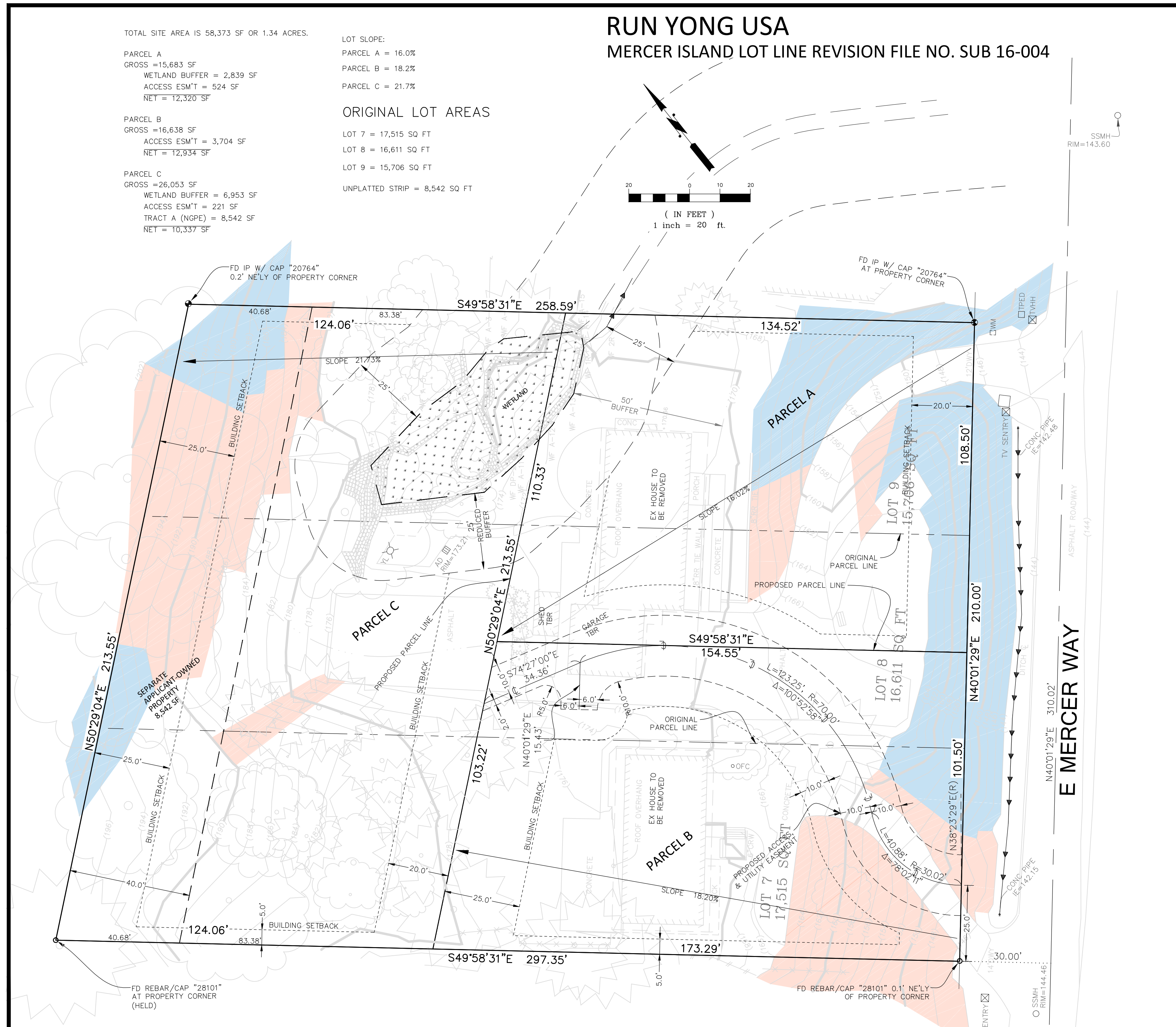
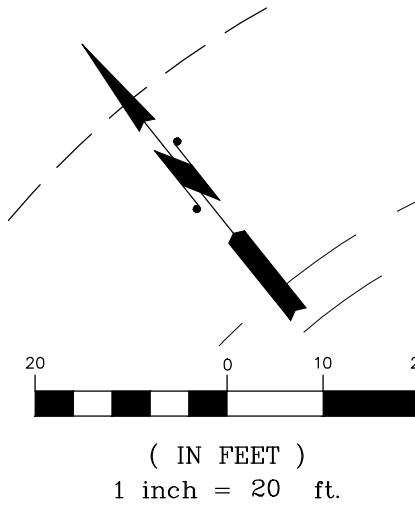
PARCEL C  
 GROSS = 26,053 SF  
 WETLAND BUFFER = 6,953 SF  
 ACCESS ESM'T = 221 SF  
 TRACT A (NGPE) = 8,542 SF  
 NET = 10,337 SF

LOT SLOPE:  
 PARCEL A = 16.0%  
 PARCEL B = 18.2%  
 PARCEL C = 21.7%

ORIGINAL LOT AREAS

LOT 7 = 17,515 SQ FT  
 LOT 8 = 16,611 SQ FT  
 LOT 9 = 15,706 SQ FT  
 UNPLATTED STRIP = 8,542 SQ FT

**RUN YONG USA**  
 MERCER ISLAND LOT LINE REVISION FILE NO. SUB 16-004



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LOT LAYOUT  
 NW 1/4, NW 1/4, SEC 31, T 24N, R 5E, W.M.  
**RUN YONG USA**  
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3 OF 4	

**RUN YONG USA**  
MERCER ISLAND LOT LINE REVISION FILE NO. SUB 16-004

**NEW LEGAL DESCRIPTIONS:**

PARCEL A

LOT 9 AND THE NORTHEASTERLY 38.50 FEET OF LOT 8, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT PAGES 64 AND 65, IN KING COUNTY, WASHINGTON,

EXCEPT THE NORTHWESTERLY 82.00 FEET THEREOF.

PARCEL B

LOTS 7 AND 8, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT PAGES 64 AND 65, IN KING COUNTY, WASHINGTON,

EXCEPT THE NORTHEASTERLY 38.50 FEET OF SAID LOT 8;  
AND EXCEPT THE NORTHWESTERLY 82.00 FEET THEREOF.

PARCEL C

THE NORTHWESTERLY 82.00 FEET OF LOTS 7, 8 AND 9, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT PAGES 64 AND 65, IN KING COUNTY, WASHINGTON;

TOGETHER WITH THE SOUTHEASTERLY 40 FEET OF THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M. AND GOVERNMENT LOT 1 OF SAID SECTION LYING BETWEEN THE SOUTHWESTERLY LINE OF LOT 7 IN BLOCK 3 OF SAID PLAT EXTENDED NORTHWESTERLY AND THE NORTHEASTERLY LINE OF LOT 9 IN BLOCK 3 OF SAID PLAT EXTENDED NORTHWESTERLY.

ACCESS AND UTILITY EASEMENT

THAT PORTION OF LOTS 7 AND 8, BLOCK 3, AVALON PARK, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS, AT PAGES 64 AND 65, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

A STRIP OF LAND, 20.00 FEET IN WIDTH, HAVING 10.00 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT THE MOST SOUTHERLY CORNER OF SAID LOT 7;  
THENCE NORTH 40°01'29" EAST, ALONG THE SOUTHEASTERLY LINE OF SAID LOT 7, A DISTANCE OF 25.00 FEET, TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT FROM WHICH THE CENTER BEARS NORTH 38°23'29" EAST, 30.02 FEET DISTANT, AND THE POINT OF BEGINNING OF THIS CENTERLINE DESCRIPTION;  
THENCE NORTHWESTERLY, NORTHERLY AND NORTHEASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 78°02'11" AND AN ARC DISTANCE OF 40.88 FEET, TO A POINT OF REVERSE CURVATURE HAVING A RADIUS OF 70.00 FEET;  
THENCE NORTHEASTERLY, NORTHERLY AND NORTHWESTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 100°52'58" AND AN ARC DISTANCE OF 123.25 FEET, TO A POINT HEREINAFTER REFERRED TO AS POINT "A" AND THE TERMINUS OF THIS CENTERLINE DESCRIPTION;

TOGETHER WITH A STRIP OF LAND, 12.00 FEET IN WIDTH, HAVING 6.00 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT THE HEREINBEFORE REFERENCED POINT "A";  
THENCE SOUTH 40°01'29" WEST 15.43 FEET, TO THE TERMINUS OF THIS CENTERLINE DESCRIPTION;

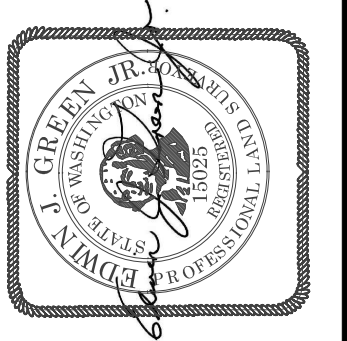
TOGETHER WITH THAT PORTION OF SAID LOT 8, LYING NORTHERLY OF A FILLETED CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 10.00 FEET BETWEEN THE SOUTHEASTERLY LINE OF SAID 12.00 FOOT STRIP AND THE SOUTHERLY LINE OF SAID 20.00 FOOT STRIP;

TOGETHER WITH A STRIP OF LAND, 12.00 FEET IN WIDTH, HAVING 10.00 FEET ON THE NORTH SIDE AND 2.00 FEET ON THE SOUTH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE;

BEGINNING AT THE HEREINBEFORE REFERENCED POINT "A";  
THENCE NORTH 74°27'00" WEST 34.36 FEET, TO THE TERMINUS OF THIS CENTERLINE DESCRIPTION, AND A POINT ON THE SOUTHEASTERLY LINE OF THE NORTHWESTERLY 82.00 FEET OF SAID LOTS 7 AND 8;

TOGETHER WITH THAT PORTION OF SAID LOT 8, LYING NORTHERLY OF A FILLETED CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 5.00 FEET BETWEEN THE SOUTHWESTERLY LINE OF SAID 12.00 FOOT STRIP AND THE NORTHWESTERLY LINE OF SAID 12.00 FOOT STRIP;

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



LOT LAYOUT  
NW 1/4, NW 1/4, SEC 31, T 24N, R 5E, W.M.  
**RUN YONG USA**  
8375 & 8383 E MERCER WAY  
MERCER ISLAND, WA

JOB NO.: 140845

DATE: 9/16/16

DRAFTED BY: TLR

CHECKED BY: E.JG./SRM

SCALE: 1" = 20'

4 OF 4

**SITE NOTES:**

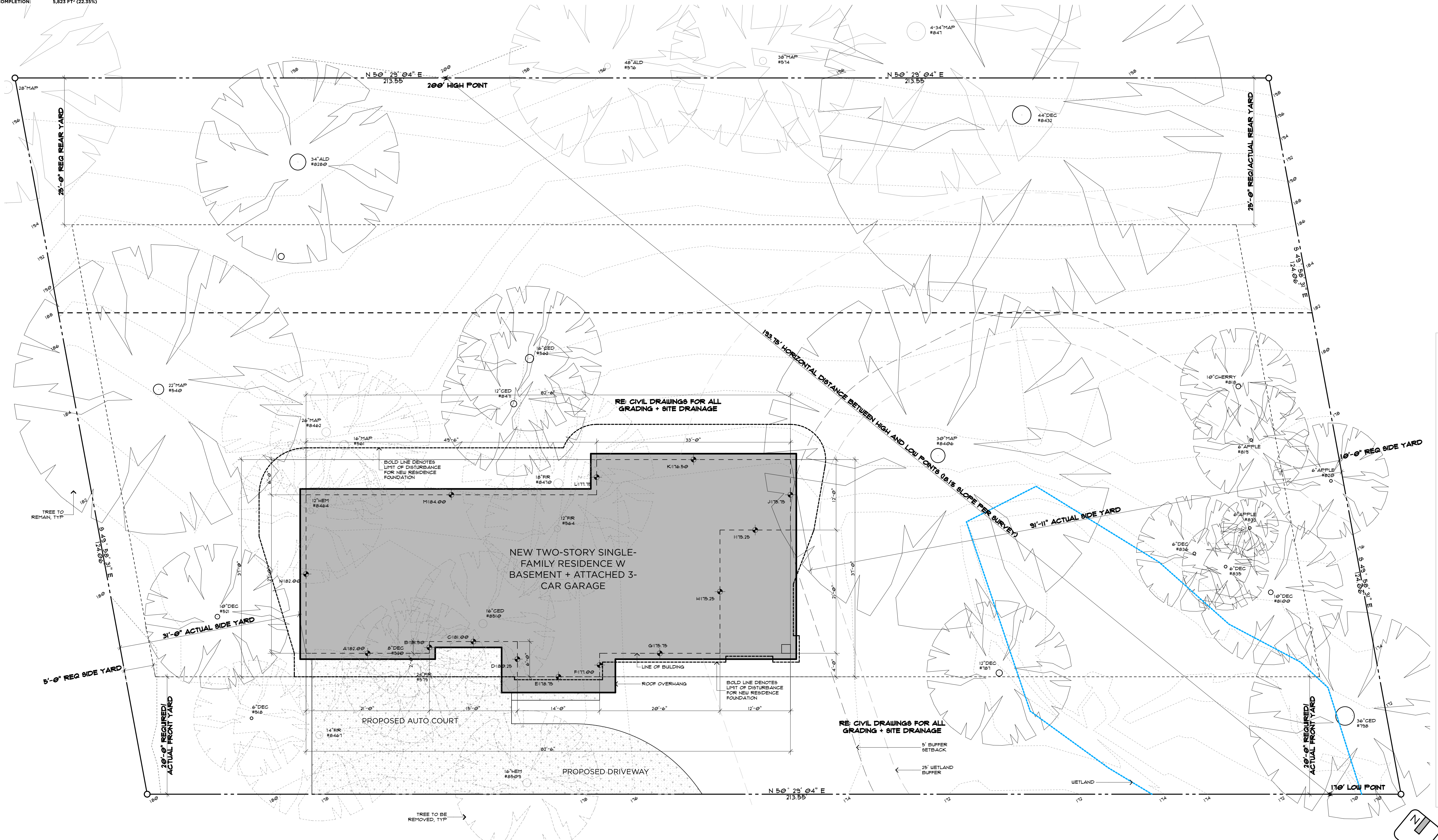
1. ALL IMMEDIATE AREAS AFFECTED BY NEW DEVELOPMENT SHALL BE GRADED AWAY FROM FOUNDATIONS + ADJACENT PROPERTIES @ 10% AS POSSIBLE, 2% MIN.

**BUILDING AREA CALCULATIONS:**

LOT AREA:	26,053 FT <sup>2</sup>
MAX ALLOWABLE BUILDING GROSS FLOOR AREA:	11,723.85 FT <sup>2</sup> (45%)
PROPOSED BASEMENT AREA:	1,246 FT <sup>2</sup>
PROPOSED FIRST FLOOR:	933 FT <sup>2</sup>
PROPOSED GARAGE:	2,083 FT <sup>2</sup>
PROPOSED SECOND FLOOR:	1,943 FT <sup>2</sup>
TOTAL BUILDING GROSS FLOOR AREA:	6,225 FT <sup>2</sup> (23.9%)

**IMPERVIOUS SURFACE CALCULATIONS:**

LOT AREA:	26,053 FT <sup>2</sup>
ALLOWABLE LOT COVERAGE:	9,119 FT <sup>2</sup> (35%)
<i>(LOT SLOPE IS BETWEEN 15% AND 30%)</i>	
PROPOSED RESIDENCE ROOF AREA:	2,748 FT <sup>2</sup>
PROPOSED DRIVES + WALK AREA:	1,027 FT <sup>2</sup>
EXISTING WETLAND AREA TO REMAIN:	1,948 FT <sup>2</sup>
TOTAL IMPERVIOUS SURFACE UPON COMPLETION:	5,823 FT <sup>2</sup> (22.35%)



**SITE PLAN**

SCALE: 1/8" = 1'-0"

**SITE PLAN**

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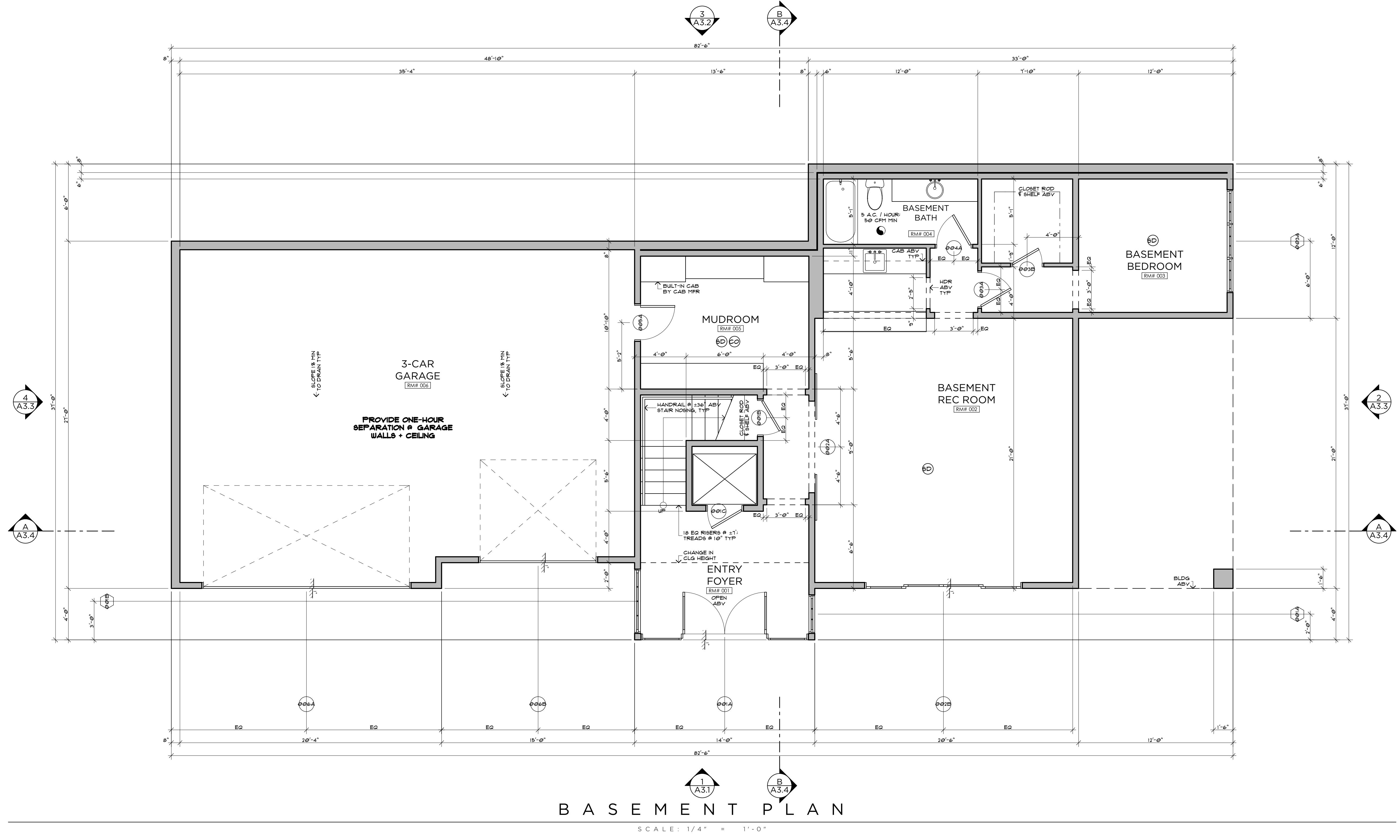
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# FLOOR PLAN NOTES:

- THIS PROJECT SHALL BE DESIGNED, ENGINEERED, + CONSTRUCTED IN FULL COMPLIANCE W/ ALL CODES + REGULATIONS.
- ALL EXTERIOR WALLS SHALL BE 2x6 UWD.
- ALL INTERIOR WALLS SHALL BE 2x6 UWD.
- ALL HANDRAILS SHALL BE LOCATED @ 36" ABOVE STAIR NOSING WITH A GRASP DIMENSION BETWEEN 1" - 2".
- ALL HANDRAILS SHALL BE CONTINUOUS OR TERMINATE AT NEWEL POST.
- ALL GUARDRAILS SHALL BE 36" ABOVE FINISHED FLOOR AND DESIGNED SUCH THAT THE MAXIMUM OPENING WILL NOT ALLOW PASSAGE OF A 4' SPHERE.
- ALL GUARDRAILS SHALL BE DESIGNED TO RESIST A 200LB CONCENTRATED LOAD AT THE TOP RAIL AND 50 PSF ON ALL GUARDRAIL INFILL COMPONENTS.
- 5/8" GWB AT ALL GARAGE WALLS AND CEILING AS WELL AS ANY POSTS + BEAMS.
- ACCESSIBLE AREA UNDER STAIR SHALL BE 1/2" GWB MINIMUM PER 302.7.
- PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.11.
- A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.
- ALL SHOWERHEADS + KITCHEN SINK FAUCETS INSTALLED IN THE UNIT SHALL BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS.
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  - MAXIMUM 7 3/4" RISER, MINIMUM 10" TREAD.
  - MINIMUM 6'-8" HEAD ROOM.
  - MINIMUM LANDING LENGTH 36"
- A WRITTEN REPORT OF THE AIR LEAKAGE TEST RESULTS SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR PRIOR TO CALL FOR FINAL INSPECTION. AIR LEAKAGE SHALL NOT EXCEED 2.0 AIR CHANGES/HOUR.

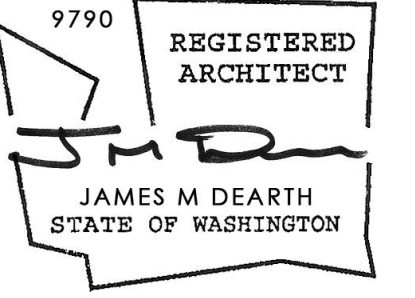
# ENERGY CREDIT CALCULATIONS:

- |  |            |
|--|------------|
| 2b. A. TESTED AIR LEAKAGE SHALL BE 2.0 AIR CHANGES PER HOUR MAXIMUM.   | 10         |
| B. HEAT RECOVERY VENTILATION SYSTEM SHALL BE INSTALLED WITH A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.70. |            |
| 3a. PROPANE FURNACE WITH MINIMUM AFUE OF 94%.  | 10         |
| 5c. PROPANE WATER HEATER WITH MINIMUM EF OF 0.91.  | 15         |
| <b>TOTAL CREDITS:</b>  | <b>3.5</b> |



**B A S E M E N T P L A N**

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

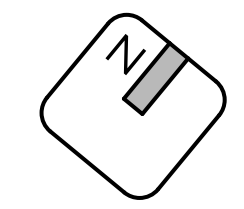


8379 E. MERCER WAY MERCER ISLAND, WA  
**E M E R C E R P A R C E L 3**

**B A S E M E N T P L A N**

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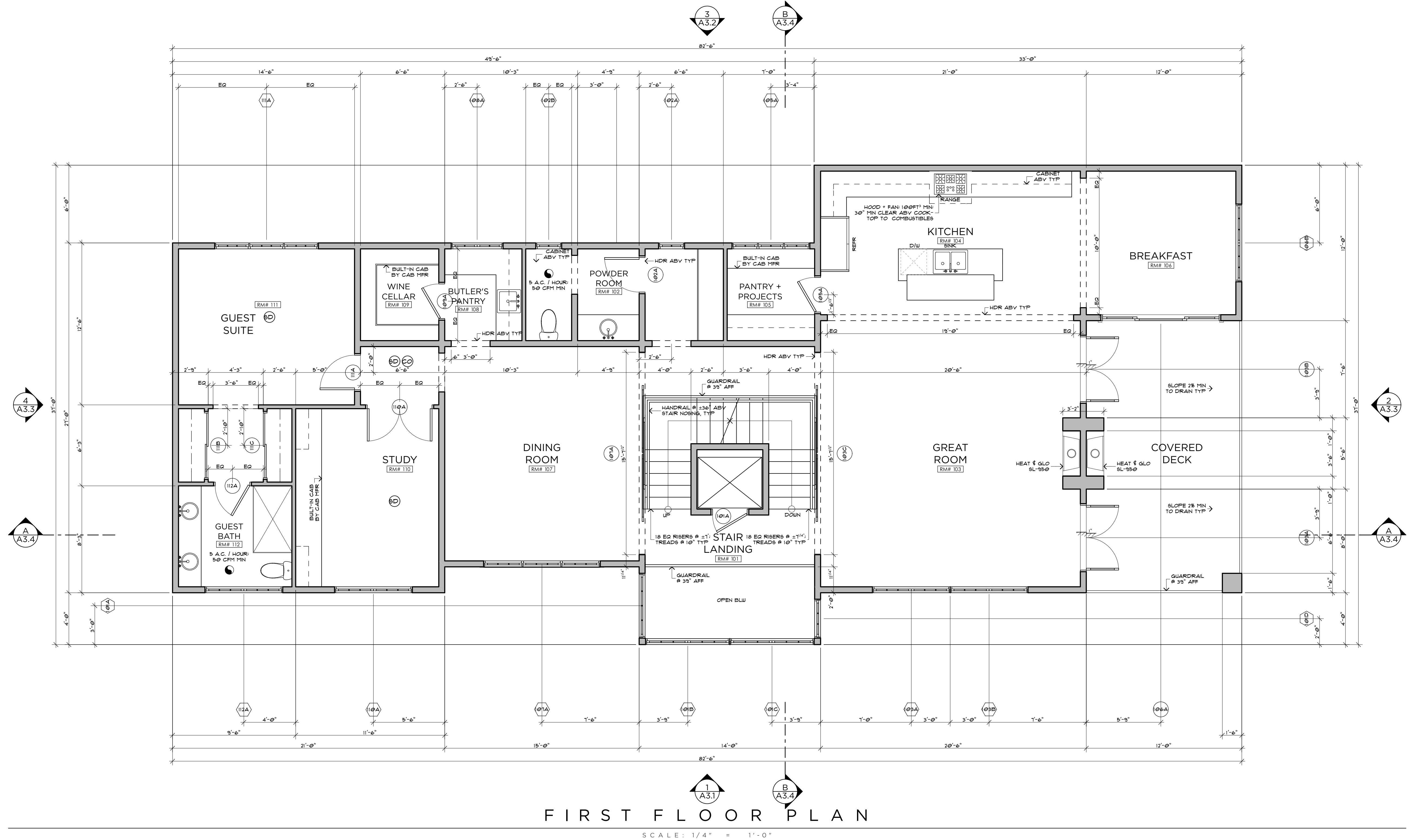


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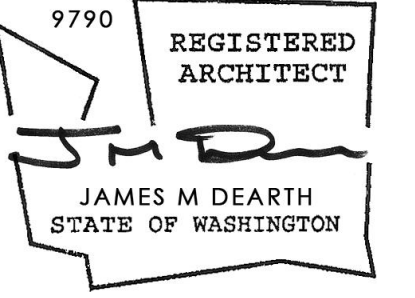
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- |  |             |
|--|-------------|
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| B. HEAT RECOVERY VENTILATION SYSTEM SHALL BE INSTALLED WITH A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.70. | 10          |
| 3a. PROPANE FURNACE WITH MINIMUM AFUE OF 94%.  | 15          |
| 5c. PROPANE WATER HEATER WITH MINIMUM EF OF 0.91.  | 3.5         |
| <b>TOTAL CREDITS:</b>  | <b>53.5</b> |



## FIRST FLOOR PLAN

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



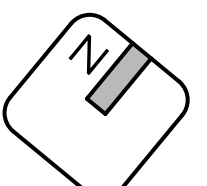
EMERCCER PARCEL 3

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FIRST FLOOR PLAN

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**A 2.1**

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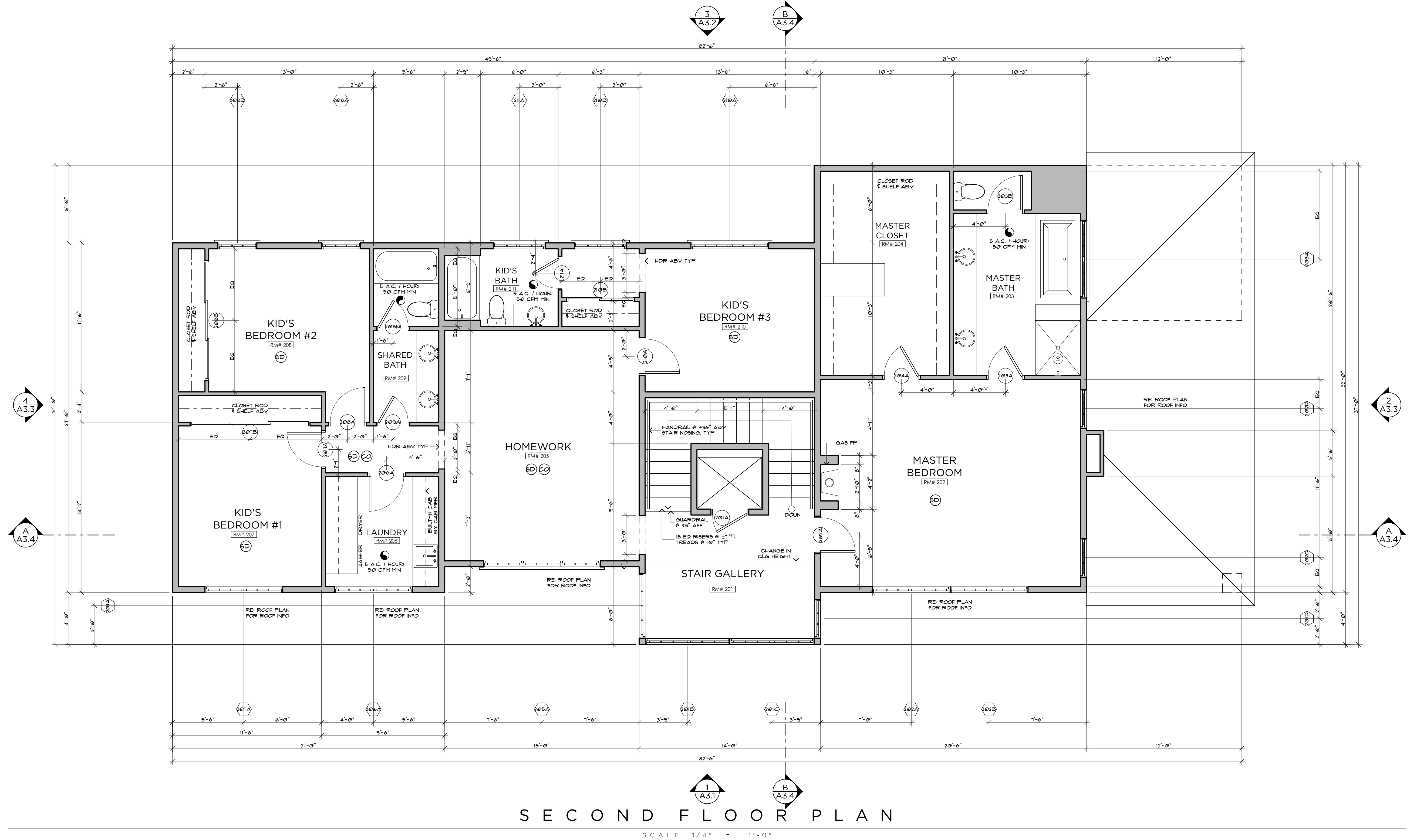


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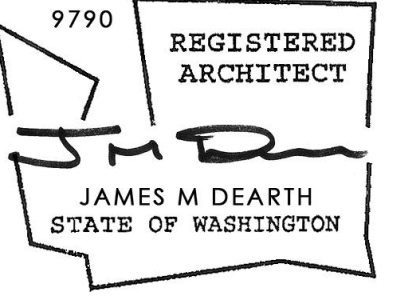
# ENERGY CREDIT CALCULATIONS:

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  - HEAT RECOVERY VENTILATION SYSTEM SHALL BE INSTALLED WITH A MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.70.
  - PROPANE FURNACE WITH MINIMUM AFUE OF 94%.
  - PROPANE WATER HEATER WITH MINIMUM EF OF 0.91.
- TOTAL CREDITS:** 3.5



## SECOND FLOOR PLAN

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



EMERCER  
PARCEL 3

8379 E. MERCER WAY MERCER ISLAND, WA

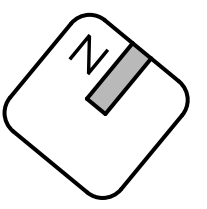
SECOND FLOOR  
PLAN

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**A 2 . 2**

EMERCER  
PARCEL 3





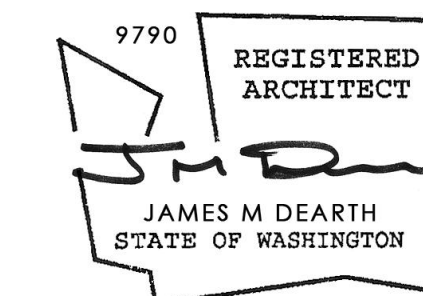
**RIPPLE**  
DESIGN STUDIO

206.913.2333

4303 STONE WAY N  
SEATTLE, WA 98103

### ROOF NOTES:

1. CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABV ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL.
2. COORDINATE DOWNSPOUT LOCATION W/ RIPPLE DESIGN STUDIO, INC. PRIOR TO INSTALLATION.
3. ALL VENTS SHALL BE LOCATED AWAY FROM VISIBILITY @ PUBLIC RIGHT-OF-WAY.
4. TRUSS MANUFACTURERS TO PROVIDE TRUSS SHOP DRAWINGS TO RIPPLE DESIGN STUDIO FOR DESIGN APPROVAL PRIOR TO TRUSS MANUFACTURING.



### MAIN ATTIC VENTILATION CALCS:

PROPOSED ATTIC AREA 1,986 FT<sup>2</sup>  
 REQUIRED VENTILATION (1/150<sup>th</sup> OF ATTIC AREA) 13.24 FT<sup>2</sup> @ CONTINUOUS SOFFIT VENTS + RIDGE VENTS

### COVERED TERRACE ATTIC VENT CALCS:

PROPOSED ATTIC AREA 396 FT<sup>2</sup>  
 REQUIRED VENTILATION (1/150<sup>th</sup> OF ATTIC AREA) 2.64 FT<sup>2</sup> @ CONTINUOUS SOFFIT VENTS + RIDGE VENTS

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**EMERCER PARCEL 3**

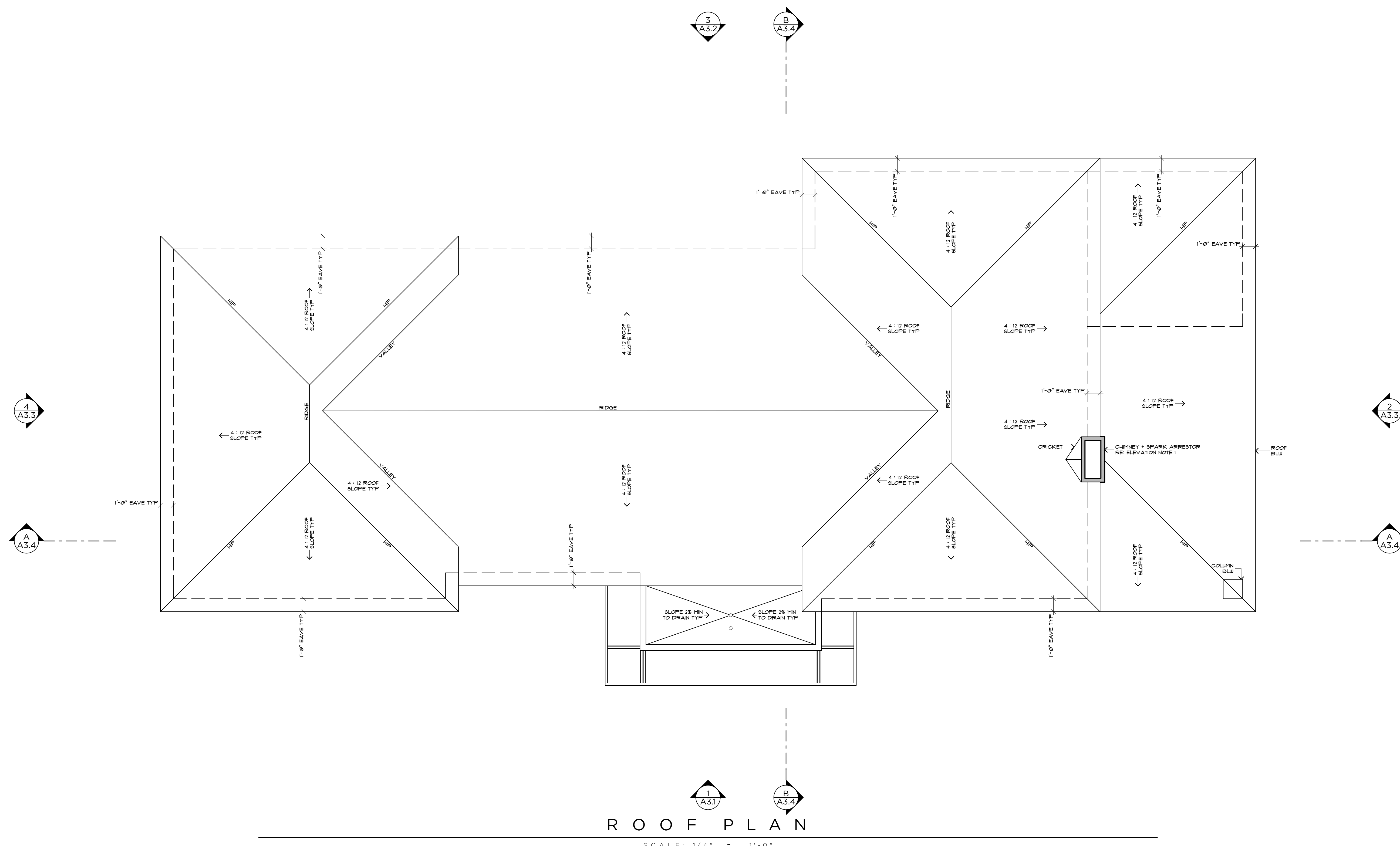
## ROOF PLAN

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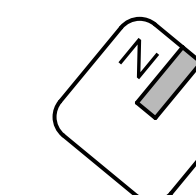
**A 2 . 3**

EMERCER  
PARCEL 3



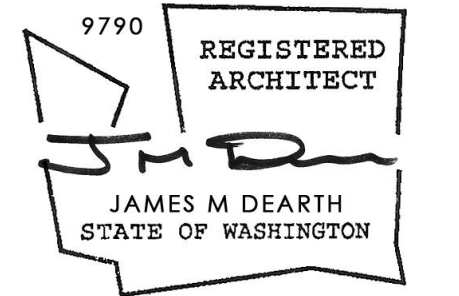
## ROOF PLAN

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



# ELEVATION + SECTION NOTES:

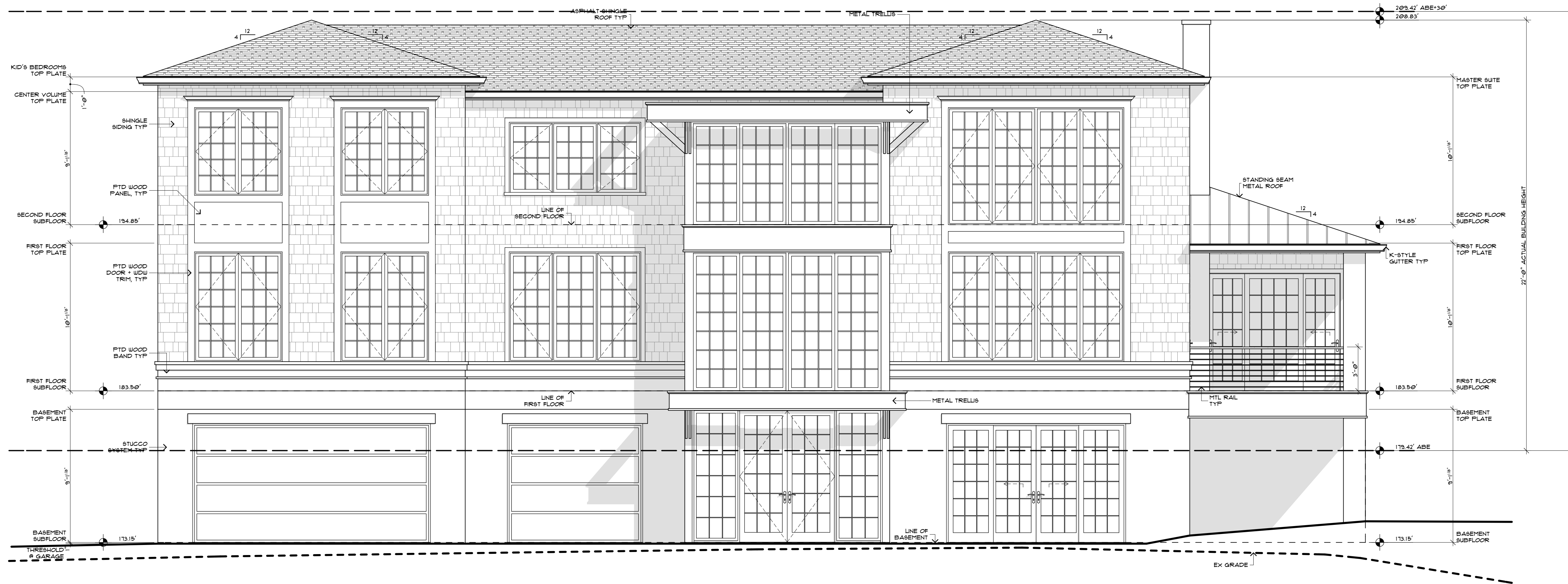
- CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABOV ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL.
- OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERN SUCH THAT A 4" SPHERE CANNOT PASS THROUGH.



8379 E. MERCER WAY MERCER ISLAND, WA  
**EMERCER PARCEL 3**

## AVERAGE BUILDING ELEVATION CALC.S:

ELEVATION @ POINT A:	182.00'
SEGMENT LENGTH @ POINT A:	21.00'
	(3,822.00' @ ELEV x LENGTH)
ELEVATION @ POINT B:	181.50'
SEGMENT LENGTH @ POINT B:	2.00'
	(363.00' @ ELEV x LENGTH)
ELEVATION @ POINT C:	181.00'
SEGMENT LENGTH @ POINT C:	15'
	(2,715.00' @ ELEV x LENGTH)
ELEVATION @ POINT D:	180.25'
SEGMENT LENGTH @ POINT D:	6.00'
	(1,081.50' @ ELEV x LENGTH)
ELEVATION @ POINT E:	178.75'
SEGMENT LENGTH @ POINT E:	14.00'
	(2,502.50' @ ELEV x LENGTH)
ELEVATION @ POINT F:	177.00'
SEGMENT LENGTH @ POINT F:	4.00'
	(708.00' @ ELEV x LENGTH)
ELEVATION @ POINT G:	175.75'
SEGMENT LENGTH @ POINT G:	20.50'
	(3,602.88' @ ELEV x LENGTH)
ELEVATION @ POINT H:	175.25'
SEGMENT LENGTH @ POINT H:	21.00'
	(3,680.25' @ ELEV x LENGTH)
ELEVATION @ POINT I:	175.25'
SEGMENT LENGTH @ POINT I:	12.00'
	(2,103.00' @ ELEV x LENGTH)
ELEVATION @ POINT J:	175.75'
SEGMENT LENGTH @ POINT J:	12.00'
	(2,109.00' @ ELEV x LENGTH)
ELEVATION @ POINT K:	176.50'
SEGMENT LENGTH @ POINT K:	53.00'
	(5,824.50' @ ELEV x LENGTH)
ELEVATION @ POINT L:	177.75'
SEGMENT LENGTH @ POINT L:	6.00'
	(1,066.50' @ ELEV x LENGTH)
ELEVATION @ POINT M:	184.00'
SEGMENT LENGTH @ POINT M:	49.50'
	(9,108.00' @ ELEV x LENGTH)
ELEVATION @ POINT N:	182.00'
SEGMENT LENGTH @ POINT N:	27.00'
	(4,914.00' @ ELEV x LENGTH)
TOTAL ELEVS x SEGMENT LENGTHS:	43,600.13'
TOTAL SEGMENT LENGTHS:	243'
<b>AVERAGE BUILDING ELEVATION (ABE):</b>	<b>179.42'</b>



## EAST ELEVATION

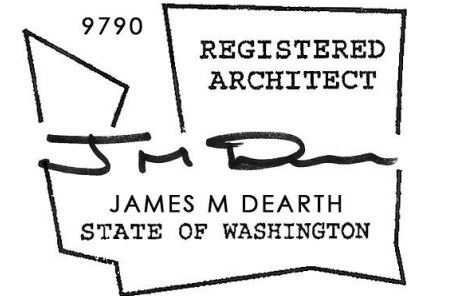
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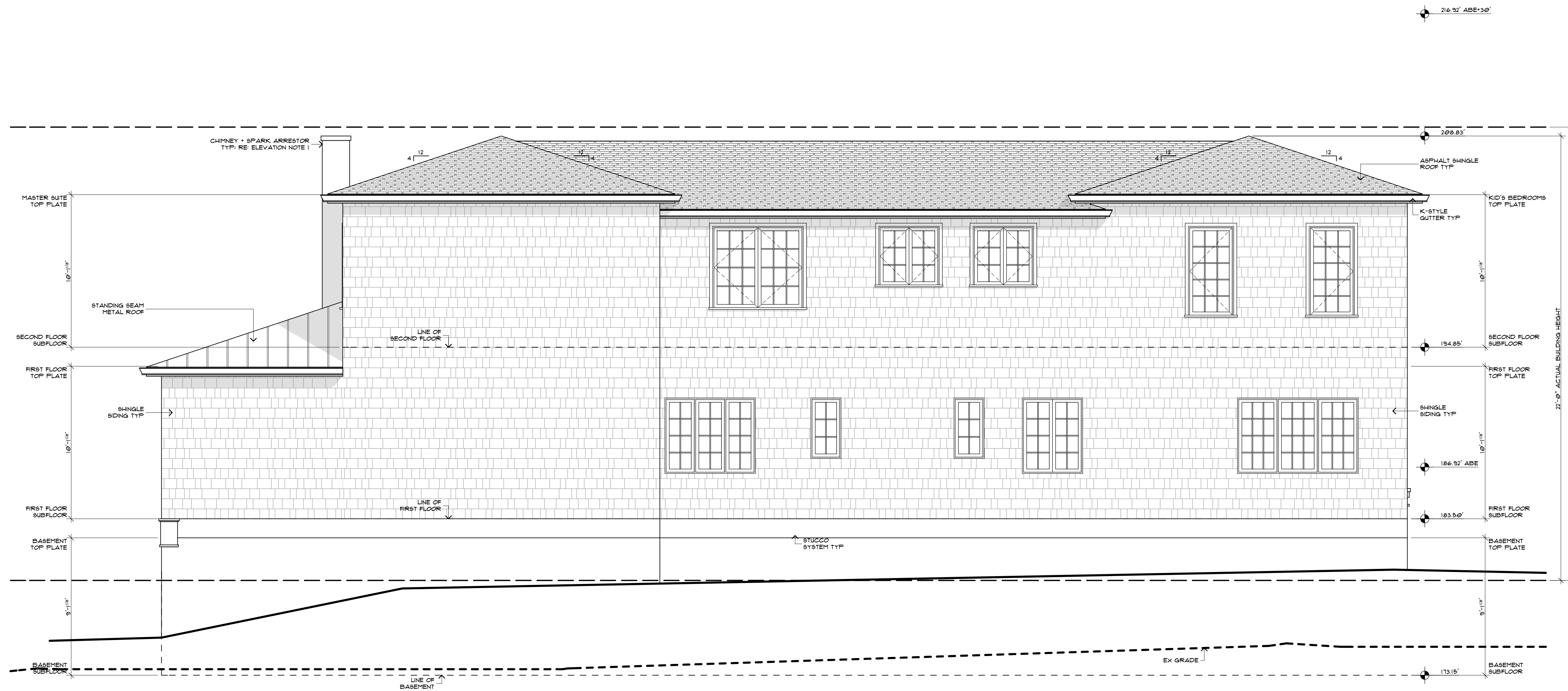
8379 E. MERCER WAY MERCER ISLAND, WA  
**EMERCCER**  
**PARCEL 3**

## BASEMENT FLOOR AREA CALC.S:

WALL SEGMENT A LENGTH:	27'
WALL SEGMENT A COVERAGE:	55.9% (15.09 FT % RESULT)
WALL SEGMENT B LENGTH:	13.5'
WALL SEGMENT B COVERAGE:	100% (33.5 FT % RESULT)
WALL SEGMENT C LENGTH:	6'
WALL SEGMENT C COVERAGE:	67.4% (4.04 FT % RESULT)
WALL SEGMENT D LENGTH:	33'
WALL SEGMENT D COVERAGE:	100% (33 FT % RESULT)
WALL SEGMENT E LENGTH:	12'
WALL SEGMENT E COVERAGE:	27.3 FT % (3.28 FT % RESULT)
WALL SEGMENT F LENGTH:	12'
WALL SEGMENT F COVERAGE:	0 FT % (0 FT % RESULT)
WALL SEGMENT G LENGTH:	21'
WALL SEGMENT G COVERAGE:	15.5 FT % (3.26 FT % RESULT)
WALL SEGMENT H LENGTH:	20.6'
WALL SEGMENT H COVERAGE:	0 FT % (0 FT % RESULT)
WALL SEGMENT I LENGTH:	4'
WALL SEGMENT I COVERAGE:	0 FT % (0 FT % RESULT)
WALL SEGMENT J LENGTH:	14'
WALL SEGMENT J COVERAGE:	0 FT % (0 FT % RESULT)
TOTAL SEGMENT LENGTHS:	163'
TOTAL SEGMENT COVERAGE RESULTS:	36.61 FT %
GROSS BASEMENT FLOOR AREA	1345 FT <sup>2</sup>
<b>GROSS BASEMENT FLOOR % TO BE EXCLUDED:</b>	<b>36.61%</b>
<b>GROSS BASEMENT FLOOR AREA TO BE EXCLUDED:</b>	<b>419 FT<sup>2</sup></b>

## AVERAGE BUILDING ELEVATION CALC.S:

ELEVATION @ POINT A:	178.00'
SEGMENT LENGTH @ POINT A:	6' (1.068' @ ELEV x LENGTH)
ELEVATION @ POINT B:	180.00'
SEGMENT LENGTH @ POINT B:	15' (2.700' @ ELEV x LENGTH)
ELEVATION @ POINT C:	180.80'
SEGMENT LENGTH @ POINT C:	2' (361.60' @ ELEV x LENGTH)
ELEVATION @ POINT D:	180.60'
SEGMENT LENGTH @ POINT D:	21' (3,792.60' @ ELEV x LENGTH)
ELEVATION @ POINT E:	182.20'
SEGMENT LENGTH @ POINT E:	27' (4,919.40' @ ELEV x LENGTH)
ELEVATION @ POINT F:	183.80'
SEGMENT LENGTH @ POINT F:	49.5' (9,098.10' @ ELEV x LENGTH)
ELEVATION @ POINT G:	176.00'
SEGMENT LENGTH @ POINT G:	6' (1,056' @ ELEV x LENGTH)
ELEVATION @ POINT H:	177.00'
SEGMENT LENGTH @ POINT H:	21' (3,717' @ ELEV x LENGTH)
ELEVATION @ POINT I:	174.60'
SEGMENT LENGTH @ POINT I:	33' (5,761.80' @ ELEV x LENGTH)
ELEVATION @ POINT J:	174.80'
SEGMENT LENGTH @ POINT J:	20.5' (3,583.40' @ ELEV x LENGTH)
ELEVATION @ POINT K:	175.20'
SEGMENT LENGTH @ POINT K:	4' (700.80' @ ELEV x LENGTH)
ELEVATION @ POINT L:	176.00'
SEGMENT LENGTH @ POINT L:	14' (2,464' @ ELEV x LENGTH)
TOTAL ELEV x SEGMENT LENGTHS:	39,222.70'
TOTAL SEGMENT LENGTHS:	219'
<b>AVERAGE NATURAL GRADE (ANG):</b>	<b>179.10'</b>



## WEST ELEVATION

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

**WEST BUILDINGS**  
**ELEVATIONS**

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# AVG BUILDING ELEV CALC.S:

ELEVATION @ POINT A:	178.00'
SEGMENT LENGTH @ POINT A:	6' (1.068' @ ELEV x LENGTH)
ELEVATION @ POINT B:	180.00'
SEGMENT LENGTH @ POINT B:	15' (2.700' @ ELEV x LENGTH)
ELEVATION @ POINT C:	180.80'
SEGMENT LENGTH @ POINT C:	2' (361.60' @ ELEV x LENGTH)
ELEVATION @ POINT D:	180.60'
SEGMENT LENGTH @ POINT D:	21' (3,792.60' @ ELEV x LENGTH)
ELEVATION @ POINT E:	182.20'
SEGMENT LENGTH @ POINT E:	27' (4,919.40' @ ELEV x LENGTH)
ELEVATION @ POINT F:	183.80'
SEGMENT LENGTH @ POINT F:	49.5' (9,098.10' @ ELEV x LENGTH)
ELEVATION @ POINT G:	176.00'
SEGMENT LENGTH @ POINT G:	6' (1,056' @ ELEV x LENGTH)
ELEVATION @ POINT H:	177.00'
SEGMENT LENGTH @ POINT H:	21' (3,717' @ ELEV x LENGTH)
ELEVATION @ POINT I:	174.60'
SEGMENT LENGTH @ POINT I:	33' (5,761.80' @ ELEV x LENGTH)
ELEVATION @ POINT J:	174.80'
SEGMENT LENGTH @ POINT J:	20.5' (3,583.40' @ ELEV x LENGTH)
ELEVATION @ POINT K:	175.20'
SEGMENT LENGTH @ POINT K:	4' (700.80' @ ELEV x LENGTH)
ELEVATION @ POINT L:	176.00'
SEGMENT LENGTH @ POINT L:	14' (2,464' @ ELEV x LENGTH)
TOTAL ELEVS x SEGMENT LENGTHS:	39,222.70'
TOTAL SEGMENT LENGTHS:	219'
AVERAGE NATURAL GRADE (ANG):	179.10'

# ELEVATION + SECTION NOTES:

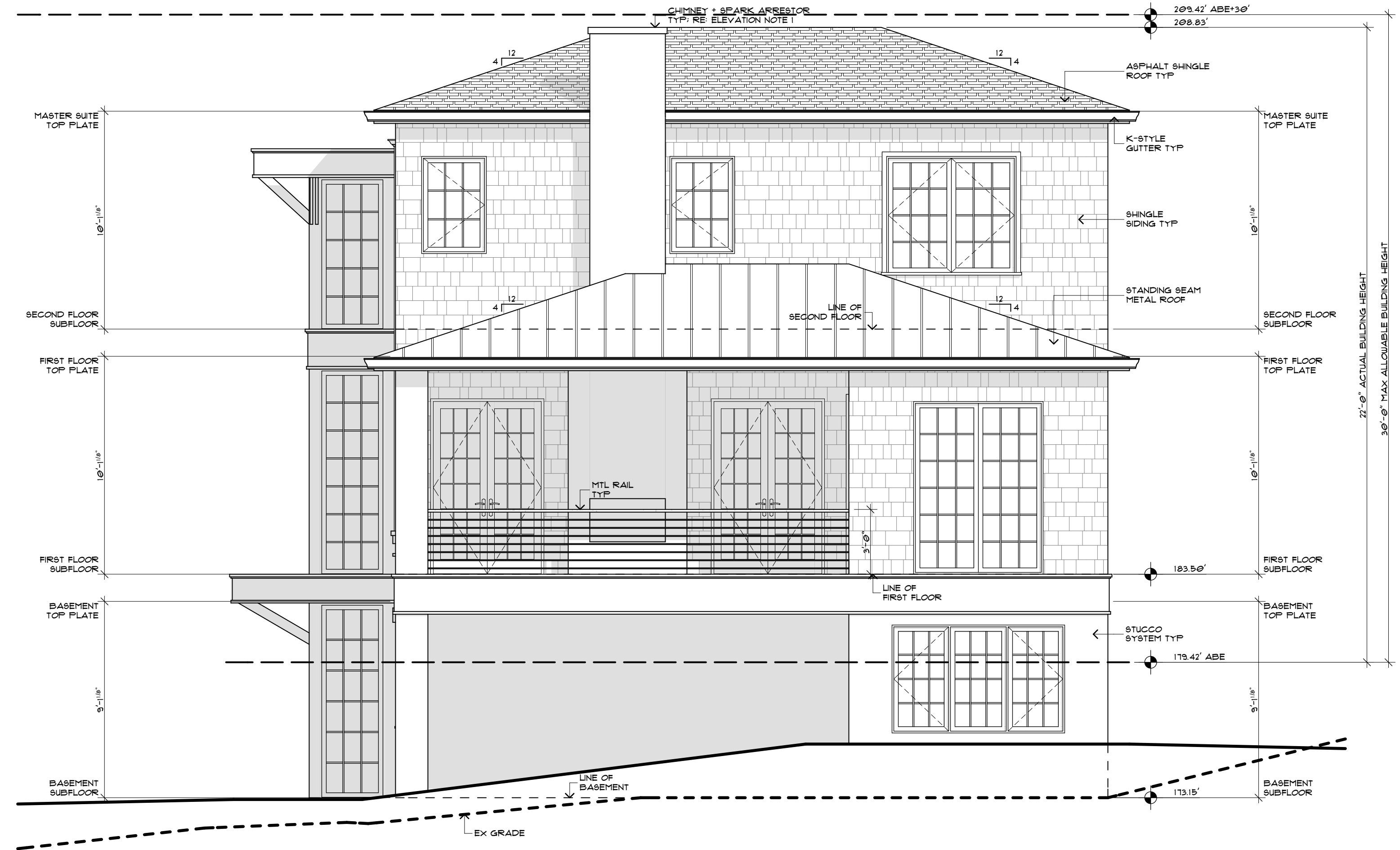
- CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABV ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL.
- OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERN SUCH THAT A 4" SPHERE CANNOT PASS THROUGH.

# BASEMENT FLOOR AREA CALC.S:

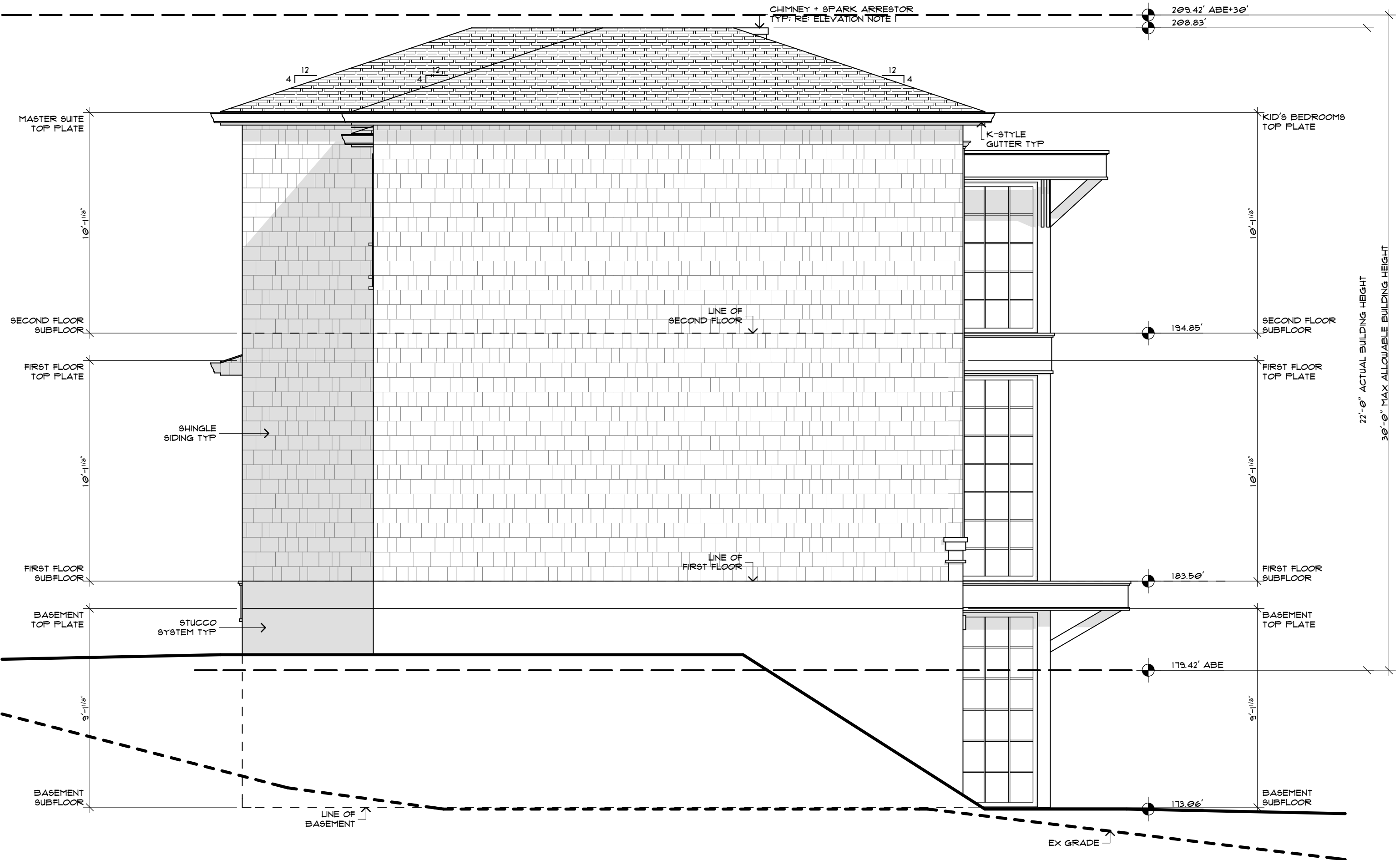
WALL SEGMENT A LENGTH:	27'
WALL SEGMENT A COVERAGE:	55.9% (15.09 FT % RESULT)
WALL SEGMENT B LENGTH:	13.5'
WALL SEGMENT B COVERAGE:	100% (13.5 FT % RESULT)
WALL SEGMENT C LENGTH:	6'
WALL SEGMENT C COVERAGE:	67.4% (4.04 FT % RESULT)
WALL SEGMENT D LENGTH:	33'
WALL SEGMENT D COVERAGE:	100% (33 FT % RESULT)
WALL SEGMENT E LENGTH:	12'
WALL SEGMENT E COVERAGE:	27.3 FT % (3.28 FT % RESULT)
WALL SEGMENT F LENGTH:	12'
WALL SEGMENT F COVERAGE:	0 FT % (0 FT % RESULT)
WALL SEGMENT G LENGTH:	21'
WALL SEGMENT G COVERAGE:	15.5 FT % (3.26 FT % RESULT)
WALL SEGMENT H LENGTH:	20.6'
WALL SEGMENT H COVERAGE:	0 FT % (0 FT % RESULT)
WALL SEGMENT I LENGTH:	4'
WALL SEGMENT I COVERAGE:	0 FT % (0 FT % RESULT)
WALL SEGMENT J LENGTH:	14'
WALL SEGMENT J COVERAGE:	0 FT % (0 FT % RESULT)
TOTAL SEGMENT LENGTHS:	163'
TOTAL SEGMENT COVERAGE RESULTS:	36.61 FT %
GROSS BASEMENT FLOOR AREA:	1,145 FT <sup>2</sup>
GROSS BASEMENT FLOOR % TO BE EXCLUDED:	36.61%
GROSS BASEMENT FLOOR AREA TO BE EXCLUDED:	419 FT <sup>2</sup>



9790 REGISTERED ARCHITECT  
 JAMES M DEARTH  
 STATE OF WASHINGTON  
 8379 E. MERCER WAY MERCER ISLAND, WA  
**EMERCER PARCEL 3**



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



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

**NORTH + SOUTH BUILDINGS ELEVATIONS**  
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# ELEVATION + SECTION NOTES:

1. CHIMNEY SHALL EXTEND A MIN OF 2'-0" ABV ROOF OR PARAPET WITHIN 10'-0" RADIUS OF CHIMNEY. PROVIDE APPROVED SPARK ARRESTOR @ ALL CHIMNEY CAPS. ALL ARCHITECTURAL FEATURES MUST BE PERMITTED BY FLU + SPARK ARRESTOR MFR APPROVAL.
2. OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERN SUCH THAT A 4" SPHERE CANNOT PASS THROUGH.

# WSEC 2012 NOTES:

1. THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2012 PRESCRIPTIVE METHOD.
2. INSULATION VALUES SHALL BE AS FOLLOWS:
  - A. ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MIN.
  - B. ALL OVERHEAD GLAZING SHALL BE 0.30 U-FACTOR MIN.
  - C. ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
  - D. ALL CEILINGS IN UNCONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
  - E. ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.
  - F. ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
  - G. ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
  - H. ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
  - I. ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
  - J. ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
3. RE: STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
4. PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
5. PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
6. GAS FURNACE, BOILER, OR TANKLESS WATER HEATER SHALL BE 92% AFU MIN (WSEC TABLE 9-1, CREDIT 1a).



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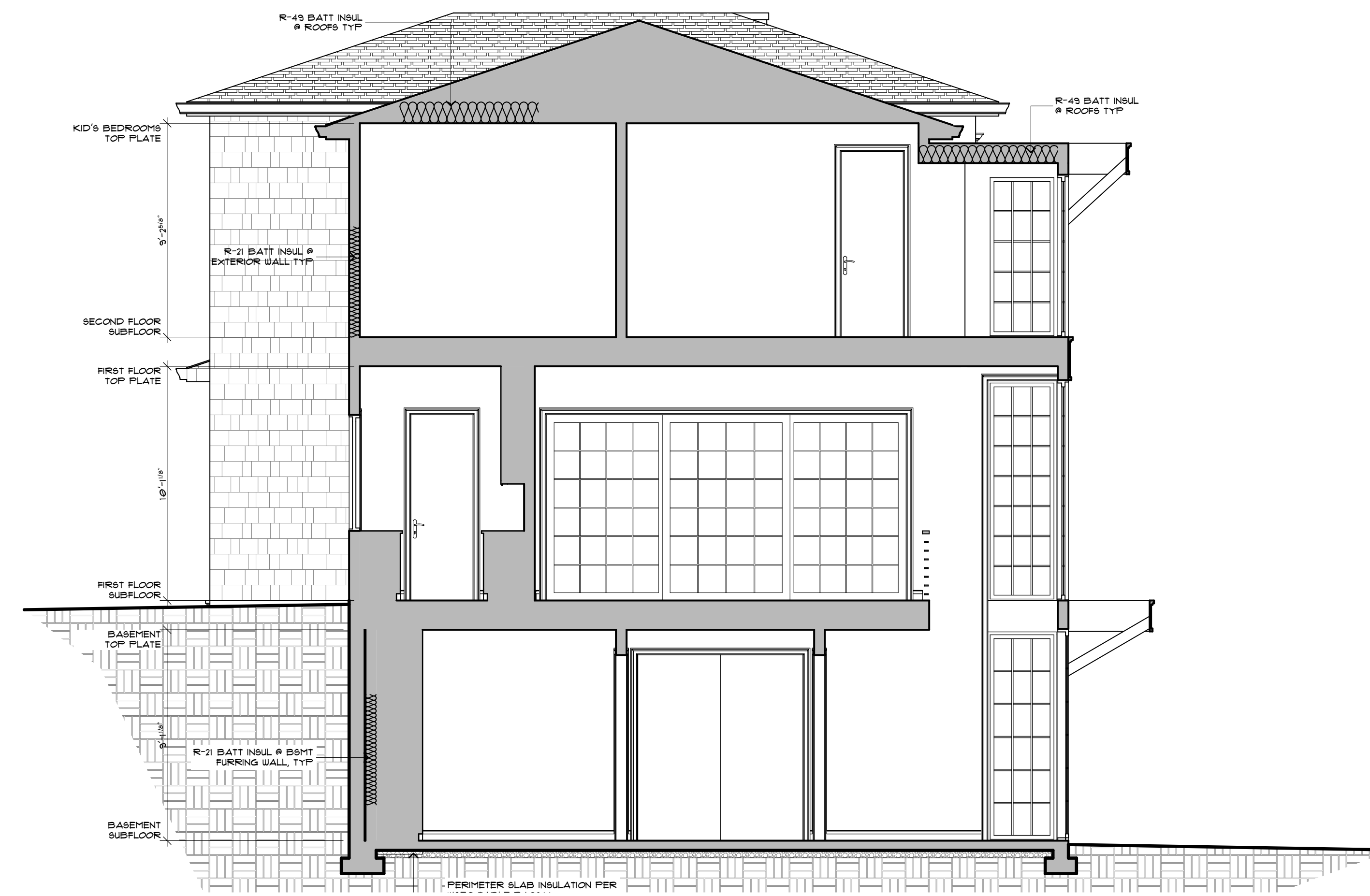
9790 REGISTERED ARCHITECT  
JAMES M DEARTH  
STATE OF WASHINGTON

8379 E. MERCER WAY MERCER ISLAND, WA  
**EMERCER PARCEL 3**



LONGITUDINAL SECTION A - A

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



LATERAL SECTION B - B

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

BUILDING A - A  
 SECTIONS B - B  
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## DOOR SCHEDULE:

DOOR NO.	WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	REMARKS
001A	6'-6"	9'-0"	FRENCH	CLAD WOOD / GLASS		PAIR, DIVIDED LIGHT, W/ 3'-3" SIDELIGHTS
001B	2'-8"	7'-0"	PANEL	WOOD		
001C	2'-8"	8'-0"	PANEL	WOOD		ELEVATOR, LOCKING, AUTO-CLOSER
002A	7'-0"	8'-0"	SURFACE SLIDER	WOOD		BARN STYLE SLIDING DOOR
002B	12'-0"	8'-0"	FRENCH SLIDER	CLAD WOOD / GLASS		4-PANEL, DIVIDED LIGHT
003A	2'-8"	7'-0"	PANEL	WOOD		
003B	2'-4"	7'-0"	PANEL	WOOD		
004A	2'-8"	8'-0"	PANEL	WOOD		PRIVACY LOCK
005A	2'-8"	8'-0"	PANEL	WOOD		20-MINUTE RATED, AUTO-CLOSER
006A	16'-0"	8'-0"	OVERHEAD	WOOD		GARAGE DOOR
006B	9'-0"	8'-0"	OVERHEAD	WOOD		GARAGE DOOR
101A	2'-8"	8'-0"	PANEL	WOOD		ELEVATOR, LOCKING, AUTO-CLOSER
102A	2'-8"	8'-0"	PANEL	WOOD		PRIVACY LOCK
103A	5'-0"	8'-0"	FRENCH	CLAD WOOD / GLASS		PAIR, DIVIDED LIGHT
103B	5'-0"	8'-0"	FRENCH	CLAD WOOD / GLASS		PAIR, DIVIDED LIGHT
103C	15'-6"	8'-0"	SLIDER	WOOD		3-PANEL, 2 OUTBOARD OPERABLE
105A	2'-8"	8'-0"	PANEL	WOOD		
106A	9'-0"	8'-0"	SLIDER	CLAD WOOD / GLASS		3-PANEL, DIVIDED LIGHT
107A	15'-6"	8'-0"	SLIDER	WOOD		3-PANEL, 2 OUTBOARD OPERABLE
109A	2'-8"	8'-0"	PANEL	WOOD		
110A	5'-0"	8'-0"	PANEL	WOOD		PAIR
111A	2'-8"	7'-0"	PANEL	WOOD		
111B	5'-0"	7'-0"	SLIDER	WOOD		PAIR, BY-PASS CLOSET
111C	5'-0"	7'-0"	SLIDER	WOOD		PAIR, BY-PASS CLOSET
112A	2'-8"	8'-0"	PANEL	WOOD		
201A	2'-8"	7'-0"	PANEL	WOOD		ELEVATOR, LOCKING, AUTO-CLOSER
202A	2'-8"	8'-0"	PANEL	WOOD		PRIVACY
203A	2'-8"	8'-0"		WOOD		
203B	2'-8"	8'-0"		WOOD		
204A	2'-8"	8'-0"		WOOD		
206A	2'-8"	8'-0"	PANEL	WOOD		
207A	2'-8"	7'-0"	PANEL	WOOD		
207B	9'-0"	7'-0"	SLIDER	WOOD		TRIPLE BY-PASS CLOSET
208A	2'-8"	7'-0"	PANEL	WOOD		
208B	9'-0"	7'-0"	SLIDER	WOOD		TRIPLE BY-PASS CLOSET
209A	2'-4"	7'-0"	PANEL	WOOD		PRIVACY LOCK
209B	2'-4"	7'-0"	PANEL	WOOD		PRIVACY LOCK
210A	2'-8"	7'-0"		WOOD		
210B	5'-0"	7'-0"	SLIDER	WOOD		BY-PASS CLOSET
211A	2'-4"	7'-0"	PANEL	WOOD		

## WINDOW SCHEDULE:

WINDOW NO.	WIDTH	HEIGHT	HEADER	TYPE	MATERIAL	FINISH	REMARKS
001A	3'-0"	9'-0"	9'-0"	FIXED	CLAD WOOD		DIVIDED LIGHT
001B	5'-0"	9'-0"	9'-0"	FIXED	CLAD WOOD		DIVIDED LIGHT
003A	8'-0"	5'-0"	8'-0"	CASEMENT	CLAD WOOD		TRIPLE, DIVIDED LIGHT, SAFETY GLAZING, EGRESS
101A	5'-0"	9'-6"	9'-6"	FIXED	CLAD WOOD		DIVIDED LIGHT
101B	6'-6"	9'-6"	9'-6"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT
101C	6'-6"	9'-6"	9'-6"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT
101D	3'-0"	9'-6"	9'-6"	FIXED	CLAD WOOD		DIVIDED LIGHT
102A	2'-0"	4'-0"	8'-0"	FIXED	CLAD WOOD		DIVIDED LIGHT
102B	2'-0"	4'-0"	8'-0"	CASEMENT	CLAD WOOD		DIVIDED LIGHT
103A	6'-0"	7'-6"	9'-6"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
103B	6'-0"	7'-6"	9'-6"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
105A	6'-0"	5'-0"	8'-0"	CASEMENT	CLAD WOOD		TRIPLE, DIVIDED LIGHT
106B	6'-0"	8'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT
107A	9'-0"	7'-6"	9'-6"	FIXED	CLAD WOOD		TRIPLE, DIVIDED LIGHT, SAFETY GLAZING
108A	4'-0"	5'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT
110A	6'-0"	7'-6"	9'-6"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
111A	8'-0"	5'-0"	8'-0"	CASEMENT	CLAD WOOD		TRIPLE, DIVIDED LIGHT, EGRESS
112A	6'-0"	7'-6"	9'-6"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT, FROSTED GLASS
201A	5'-0"	7'-0"	7'-0"	FIXED	CLAD WOOD		DIVIDED LIGHT, SAFETY GLAZING
201B	6'-6"	7'-0"	7'-0"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
201C	6'-6"	7'-0"	7'-0"	FIXED	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
201D	3'-0"	7'-0"	7'-0"	FIXED	CLAD WOOD		DIVIDED LIGHT, SAFETY GLAZING
202A	6'-0"	8'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
202B	6'-0"	8'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
202C	3'-0"	4'-6"	8'-0"	CASEMENT	CLAD WOOD		DIVIDED LIGHT, EGRESS
202D	3'-0"	4'-6"	8'-0"	CASEMENT	CLAD WOOD		DIVIDED LIGHT, EGRESS
203A	6'-0"	5'-6"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT, SAFETY GLAZING
205A	9'-0"	5'-0"	7'-0"	CASEMENT	CLAD WOOD		TRIPLE, DIVIDED LIGHT
206A	6'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT
207A	6'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT, EGRESS
208A	3'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD		DIVIDED LIGHT, EGRESS
208B	3'-0"	6'-0"	8'-0"	CASEMENT	CLAD WOOD		DIVIDED LIGHT, EGRESS
210A	6'-0"	5'-6"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT, EGRESS
210B	4'-0"	4'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT
211A	4'-0"	4'-0"	8'-0"	CASEMENT	CLAD WOOD		PAIR, DIVIDED LIGHT

## WSEC 2012 NOTES:

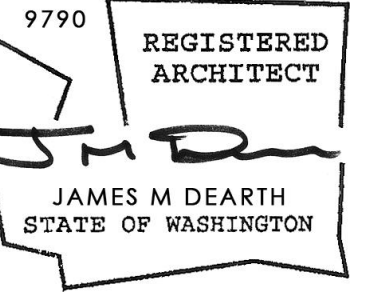
- THIS PROJECT IS ELIGIBLE AND COMPLIANT W/ WSEC 2012 PRESCRIPTIVE METHOD.
- INSULATION VALUES SHALL BE AS FOLLOWS:
  - ALL VERTICAL GLAZING SHALL BE 0.30 U-FACTOR MIN.
  - ALL OVERHEAD GLAZING SHALL BE 0.50 U-FACTOR MIN.
  - ALL EXTERIOR DOORS (INCLUDING DOORS FROM CONDITIONED SPACE TO UNCONDITIONED SPACE) SHALL BE 0.20 U-FACTOR MIN.
  - ALL CEILINGS IN UNCONDITIONED SPACE SHALL RECEIVE R-49 BLOWN-IN INSULATION MIN.
  - ALL VAULTED CEILINGS SHALL RECEIVE R-38 BATT INSULATION MIN.
  - ALL ABOVE-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN.
  - ALL BELOW-GRADE EXTERIOR WALLS SHALL RECEIVE R-21 BATT INSULATION MIN @ INTERIOR FRAMED WALL.
  - ALL FLOORS OVER UNCONDITIONED SPACE SHALL RECEIVE R-30 BATT INSULATION MIN.
  - ALL SLAB-ON-GRADE WITHIN CONDITIONED SPACE SHALL RECEIVE R-10 RIGID INSULATION WITHIN 24" OF SLAB PERIMETER.
  - ALL HEADERS @ EXTERIOR WALLS SHALL RECEIVE R-10 RIGID INSULATION @ INTERIOR SIDE OF WALL.
  - RE-STRUCTURAL DRAWINGS FOR ALL FRAMING COMPLIANCE REQUIREMENTS.
  - PROVIDE 100 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ KITCHEN.
  - PROVIDE 50 CFM INTERMITTENTLY OPERATING POINT-OF-USE VENTILATION @ ALL BATHS + LAUNDRY.
  - GAS FURNACE, BOILER, OR TANKLESS WATER HEATER SHALL BE 92% AFU MIN [WSEC TABLE 9-1, CREDIT 1d].



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SEATTLE, WA 98103



8379 E. MERCER WAY MERCER ISLAND, WA  
**E M E R C E R**  
**P A R C E L 3**

**D O O R O R +**  
**S C H E D U L E S**  
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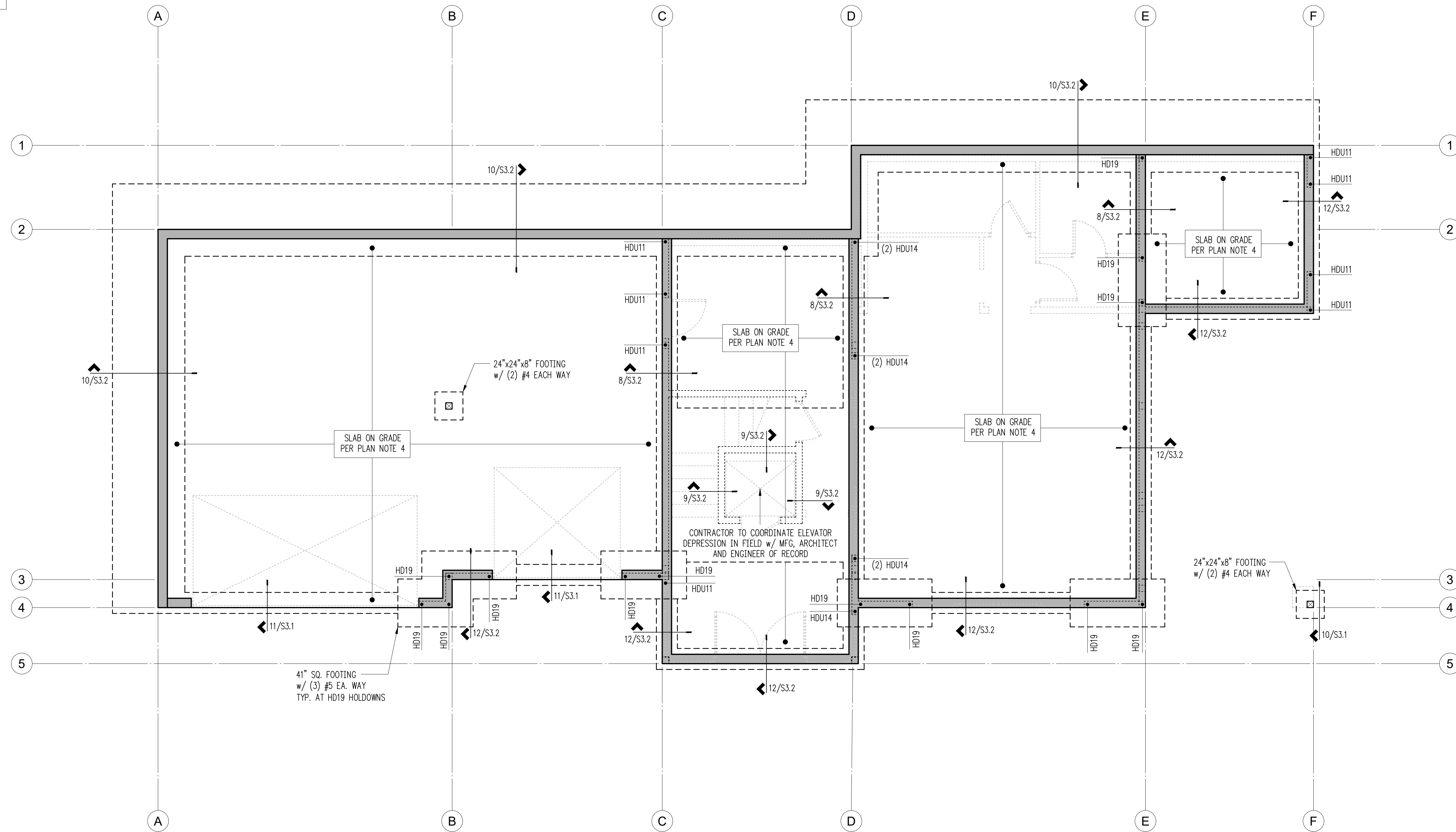
**A 4 . 1**

E M E R C E R  
P A R C E L 3





NOTE: FOUNDATION DESIGN BASED ON INSTALLATION OF AGGREGATE PIERS IN ACCORDANCE WITH RECOMMENDATIONS OF GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE ALL SOIL CONDITIONS PRIOR TO FORMING FOUNDATIONS



### Basement / Foundation Plan

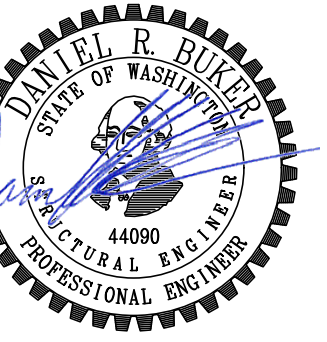
Scale: 1/4"=1'-0"

#### Plan Notes

- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS (S1.1).
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS UNLESS SPECIFICALLY NOTED ON STRUCTURAL PLANS.
- ALL FOOTINGS SHALL BEAR ON FIRM, NATIVE SOIL.
- 4" CONCRETE SLAB ON GRADE REINFORCED WITH #3 @ 12"oc EACH WAY, CENTERED IN SLAB. PROVIDE A BASE OF 4" COMPACTED, CLEAN 3/4" MINUS GRAVEL COVERED WITH 4 MIL. VAPOR BARRIER. PROVIDE JOINTS PER 2/S3.1.
- PROVIDE DRAINAGE BEHIND ALL FOUNDATION WALLS.
- REINFORCE FOOTING AND WALL CORNERS AND INTERSECTIONS PER 6/S3.1.
- "HDU\_" REFERS TO HOLDDOWNS PER 8/S3.1
- REFER 9/S3.1 WHERE PIPES PENETRATE FOUNDATION.
- CONTRACTOR TO VERIFY TOP OF FOOTING ELEVATION w/ ARCHITECTURAL PLANS.

#### Legend

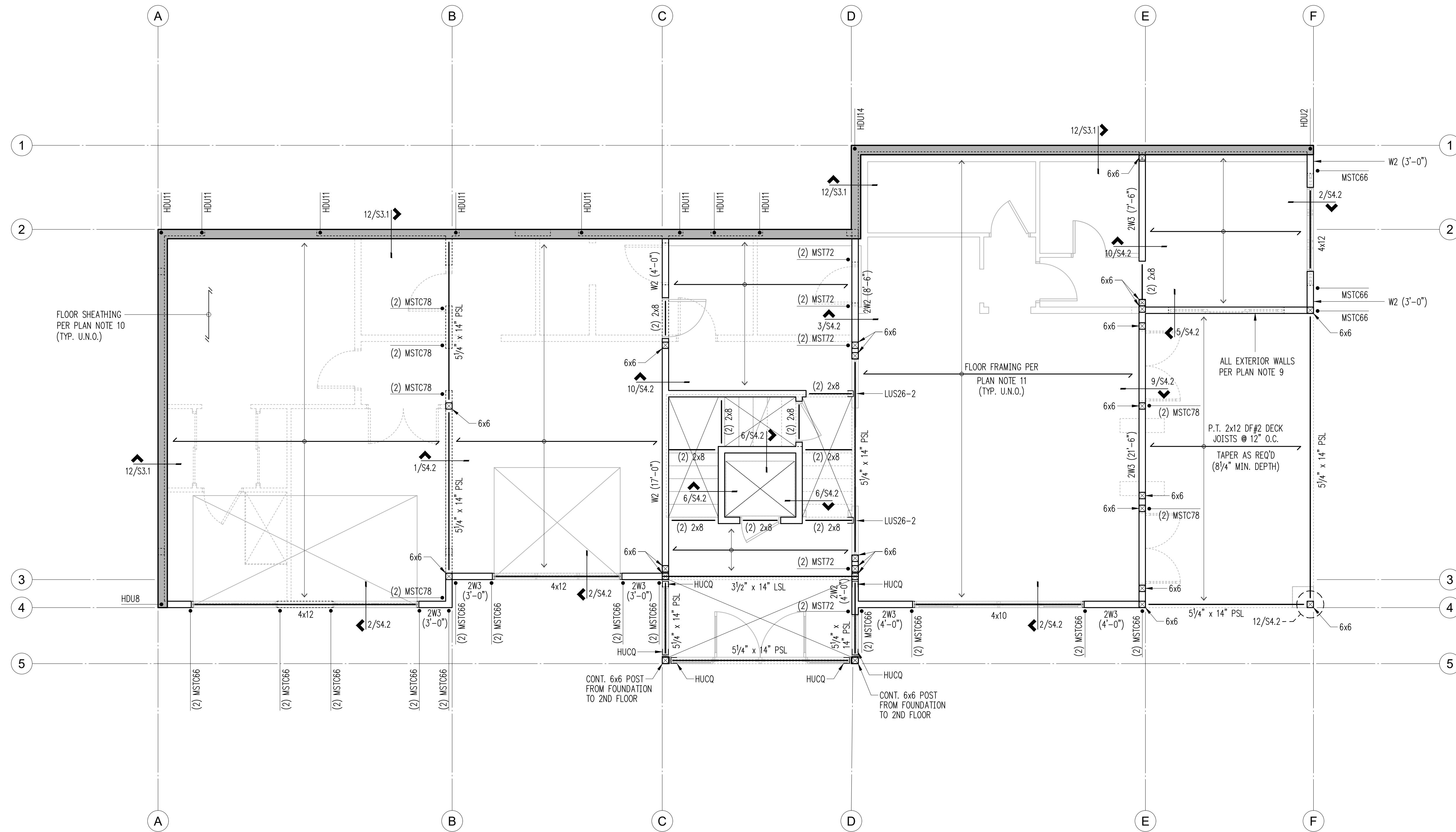
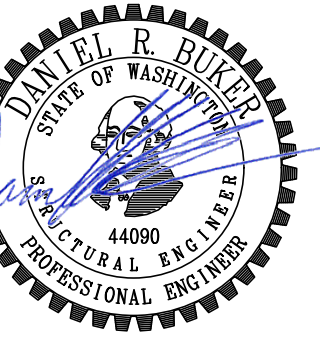
- (N) CONCRETE WALL ABOVE THIS LEVEL
- (N) CONCRETE FOOTING
- (N) SPAN DIRECTION
- EXTENT OF SPAN
- JOIST or BEAM HANGER PROVIDE HU HANGER u.n.o.
- HOLDOWN TYPE



No.	Date	Issue
	7/26/17	Permit

Sheet Contents  
Basement /  
Foundation Plan

Sheet No.



**East Mercer - Parcel 3**

E Mercer Way  
Mercer Island, WA, 98040

**First Floor Framing Plan**

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

**Plan Notes**

- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS (S1.1).
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS UNLESS SPECIFICALLY NOTED ON STRUCTURAL PLANS.
- PROVIDE DRAINAGE BEHIND ALL FOUNDATION WALLS.
- REINFORCE FOOTING AND WALL CORNERS AND INTERSECTIONS PER 6/S3.1.
- "HDU\_" REFERS TO HOLDOWNS PER 8/S3.1
- REFER 9/S3.1 WHERE PIPES PENETRATE FOUNDATION.
- "W#" REFERS TO SHEARWALL TYPE PER 3/S4.1 & 7/S4.1. ALL OTHER NON-DESIGNATED EXTERIOR WALLS SHALL BE SHEARWALL TYPE W6. WHERE INDICATED, "(X-X)" REFERS TO MINIMUM SHEARWALL LENGTH. COORDINATE ACTUAL LENGTH WITH ARCHITECTURAL.
- FLOOR SHEATHING SHALL BE 1/8" T&G PLYWOOD SHEATHING WITH 48/24 SPAN RATING. NAIL FRAMED PANEL EDGES W/ 8d COMMON (0.131"dia. x 2 1/2") @ 6"oc, FIELD @ 12"oc. (REFER TO 9/S4.1)
- FLOOR FRAMING TO BE 14" TJI/230 @ 16"oc (U.N.O.)
- "MSTC66" & "CS16" REFER TO 60" LONG HOLDOWNS PER 11/S4.2 & 7/S4.2 RESPECTIVELY.

- PROVIDE TOP PLATE SPLICES PER 1/S4.1
- REFER TO 11/S4.1 AT SHEARWALL INTERSECTIONS.
- "D.S." REFERS TO DRAG STRUT. NAIL FLOOR SHEATHING TO DRAG STRUT WITH (2) ROWS OF 8d COMMON (0.131"dia. x 2 1/2") @ 4"oc. (REFER TO 5/S4.1)

**Legend**

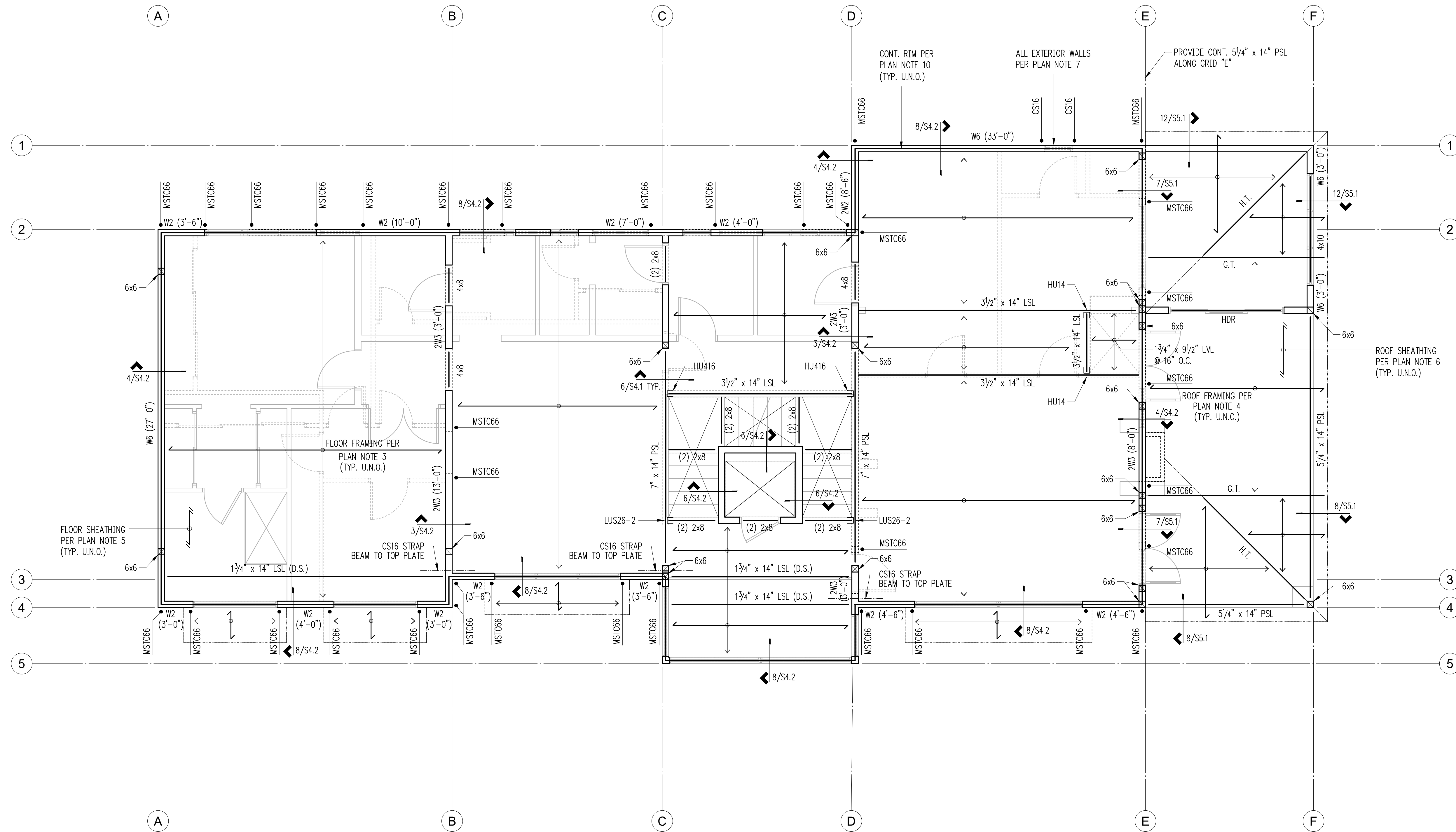
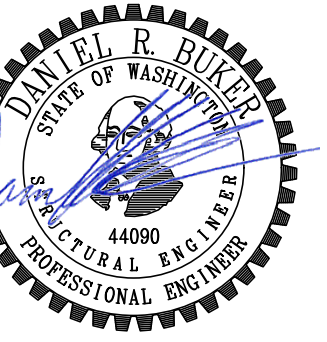
- |  |   |  |                |  |  |
|--|---|--|----------------|--|--|
|  | STRUCTURAL WOOD WALL or POST BELOW THIS LEVEL |  | SPAN DIRECTION |  | BLOCK DIAPH. 2X'S LAID FLAT @ ALL PANEL EDGES. 8D @ 4"OC @ ALL PANEL EDGES & 12"OC IN FIELD. (REFER TO 9/S4.1) |
|  | STRUCTURAL WOOD WALL or POST ABOVE THIS LEVEL |  | EXTENT OF SPAN |  | JOIST or BEAM HANGER   |
|  | CONCRETE WALL ABOVE THIS LEVEL                |  | HOLDOWN TYPE   |  |  |

No.	Date	Issue
	7/26/17	Permit

Sheet Contents  
**First Floor Framing Plan**

Sheet No.

**S2.1**



## Second Floor Framing Plan

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

### Plan Notes

- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS (S1.1).
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS UNLESS SPECIFICALLY NOTED ON STRUCTURAL PLANS.
- FLOOR FRAMING TO BE 14" TJI/230 @ 16"oc (U.N.O.)
- ROOF FRAMING (where occurs) SHALL BE PRE-MANUFACTURED ROOF TRUSSES @ 24"oc. (Truss design by others).
- FLOOR SHEATHING SHALL BE 1 1/2" T&G PLYWOOD SHEATHING WITH 48/24 SPAN RATING. NAIL FRAMED PANEL EDGES W/ 8d COMMON (0.131"dia. x 2 1/2") @ 6"oc, FIELD @ 12"oc. (REFER TO 9/S4.1)
- ROOF SHEATHING SHALL BE 5/8" CDX PLYWOOD SHEATHING WITH 40/20 SPAN RATING. NAIL FRAMED PANEL EDGES W/ 8d COMMON (0.131"dia. x 2 1/2") @ 6"oc, FIELD @ 12"oc. (REFER TO 9/S4.1)
- "W6" REFERS TO SHEARWALL TYPE PER 3/S4.1 & 7/S4.1. ALL OTHER NON-DESIGNATED EXTERIOR WALLS SHALL BE SHEARWALL TYPE W6. WHERE INDICATED, "(X-X)" REFERS TO MINIMUM SHEARWALL LENGTH. COORDINATE ACTUAL LENGTH WITH ARCHITECTURAL.
- "MSTC66" & "CS16" REFER TO HOLDDOWNS PER 11/S4.2 & 7/S4.2 RESPECTIVELY.
- PROVIDE TOP PLATE SPLICES PER 1/S4.1
- AT EXTERIOR WALLS, PROVIDE CONTINUOUS FLUSH FRAMED 3 1/2" x 14" LSL STRUCTURAL RIM JOIST, UNLESS NOTED OTHERWISE. RIM JOISTS OVER OPENINGS SHALL BE CONTINUOUS w/ NO SPLICES. REFER TO 4/S4.2 & 8/S4.2.
- REFER TO 11/S4.1 AT SHEARWALL INTERSECTIONS.
- "D.S." REFERS TO DRAG STRUT. NAIL FLOOR SHEATHING TO DRAG STRUT WITH (2) ROWS OF 8d COMMON (0.131"dia. x 2 1/2") @ 4"oc. (REFER TO 5/S4.1)

### Legend

	STRUCTURAL WOOD WALL or POST BELOW THIS LEVEL		SPAN DIRECTION		BLOCK DIAPH. 2X'S LAID FLAT @ ALL PANEL EDGES. 8d @ 4"OC @ ALL PANEL EDGES & 12"OC IN FIELD. (REFER TO 9/S4.1)
	STRUCTURAL WOOD WALL or POST ABOVE THIS LEVEL		EXTENT OF SPAN		JOIST or BEAM HANGER
	HOLDOWN TYPE		G.T. GIRDER TRUSS		H.T. HIP TRUSS

East Mercer - Parcel 3

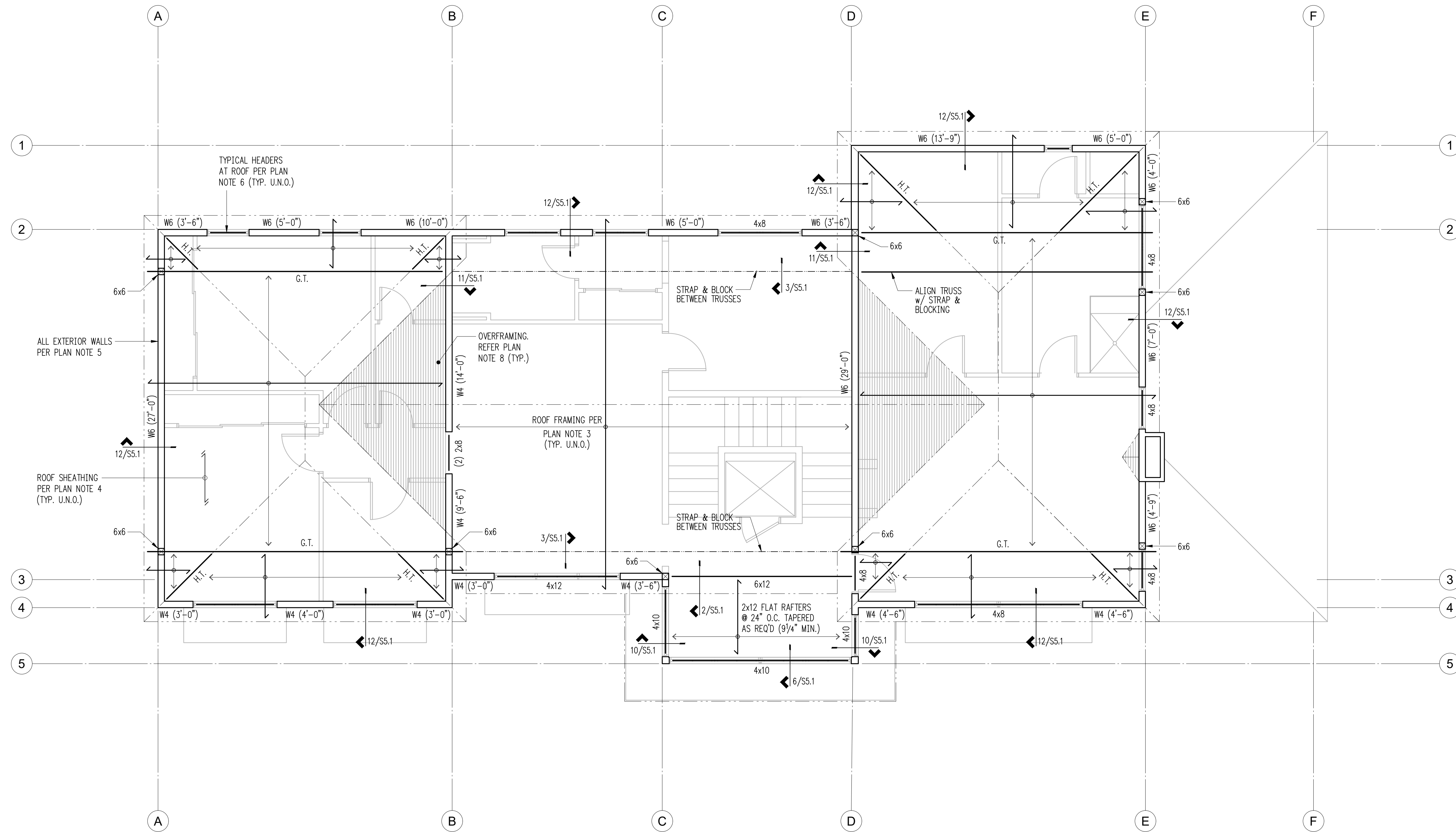
E Mercer Way  
Mercer Island, WA, 98040

No.	Date	Issue
	7/26/17	Permit

Sheet Contents  
Second Floor Framing Plan

Sheet No.

S2.2



### Roof Framing Plan

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

#### Plan Notes

- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS (S1.1).
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS UNLESS SPECIFICALLY NOTED ON STRUCTURAL PLANS.
- ROOF FRAMING SHALL BE PRE-MANUFACTURED ROOF TRUSSES @ 24"oc. (TRUSS DESIGN BY OTHERS).
- ROOF SHEATHING SHALL BE 5/8" CDX PLYWOOD SHEATHING WITH 40/20 SPAN RATING. NAIL FRAMED PANEL EDGES W/ 8d COMMON (0.131"dia. x 2 1/2") @ 6"oc, FIELD @ 12"oc. (REFER TO 9/S4.1)
- "W#" REFERS TO SHEARWALL TYPE PER 3/S4.1 & 7/S4.1. ALL OTHER NON-DESIGNATED EXTERIOR WALLS SHALL BE SHEARWALL TYPE W6. WHERE INDICATED, "(X-X)" REFERS TO MINIMUM SHEARWALL LENGTH. COORDINATE ACTUAL LENGTH WITH ARCHITECTURAL.
- ALL HEADERS AT ROOF NOT NOTED OTHERWISE ON PLAN SHALL BE (2) 2X8. (REFER TO DETAIL 2/S4.1)
- PROVIDE TOP PLATE SPLICES PER 1/S4.1
- WHERE OVERFRAMING IS INDICATED, OVERFRAME WITH 2x6 @ 24" O.C. w/ 4'-0" MAX. SPAN. (REFER TO DETAIL 4/S5.1)

#### Legend

- STRUCTURAL WOOD WALL or POST BELOW THIS LEVEL
- SPAN DIRECTION
- EXTENT OF SPAN
- JOIST or BEAM HANGER
- G.T. GIRDER TRUSS
- H.T. HIP TRUSS

East Mercer - Parcel 3

E Mercer Way  
Mercer Island, WA, 98040

No.	Date	Issue
	7/26/17	Permit

Sheet Contents  
Roof Framing Plan

Sheet No.

**S2.3**

### REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE

FOR  $F_c = 2500$  psi, GRADE 60 REINFORCING

MINIMUM STRAIGHT DEVELOPMENT LENGTH ( $\ell_d$ )

BAR SIZE	TOP BARS	OTHER BARS
#3	23"	18"
#4	31"	24"
#5	40"	30"
#6	47"	36"
#7	68"	53"
#8	78"	60"
#9	88"	68"
#10	99"	77"
#11	110"	85"

MINIMUM LAP SPLICE LENGTHS ( $\ell_s$ )

BAR SIZE	TOP BARS	OTHER BARS
#3	31"	23"
#4	41"	31"
#5	51"	40"
#6	62"	47"
#7	89"	68"
#8	102"	78"
#9	114"	88"
#10	130"	99"
#11	143"	110"

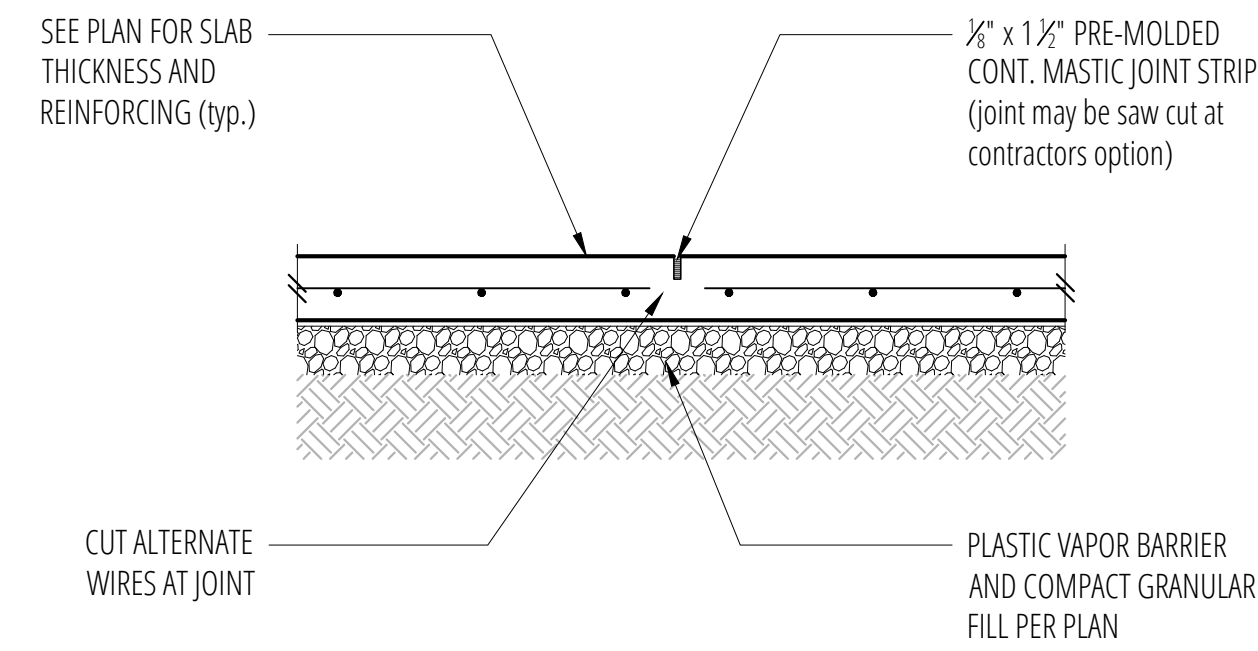
TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM.

IF CLEAR CONCRETE COVER IS NOT GREATER THAN THE DIAMETER OF THE BAR, OR THE CENTER TO CENTER SPACING IS NOT GREATER THAN 3 BAR DIAMETERS, THEN LENGTHS SHALL BE INCREASED BY 50%

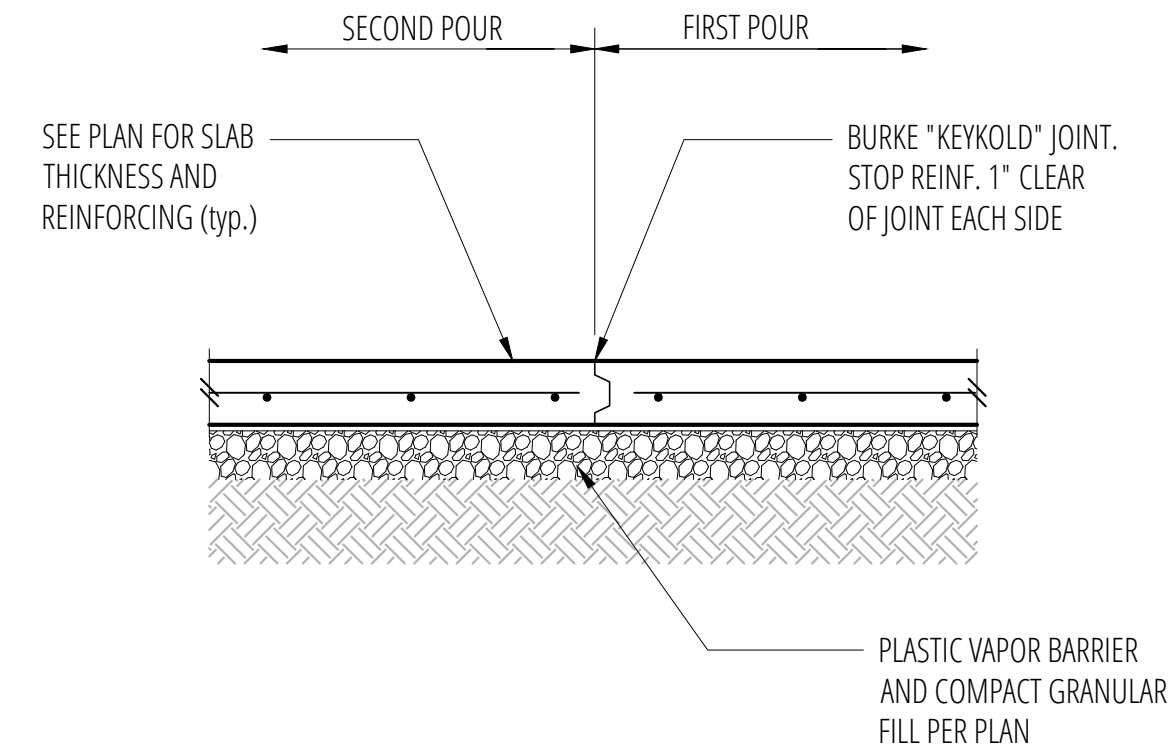
MINIMUM EMBEDMENT LENGTHS ( $\ell_{dh}$ ) FOR STANDARD END HOOKS

BAR SIZE	LENGTH
#3	7"
#4	9"
#5	11"
#6	13"
#7	14"
#8	17"
#9	19"
#10	21"
#11	24"

- SIDE COVER MUST BE EQUAL TO OR GREATER THAN  $2\frac{1}{2}$ "
- END COVER FOR 90° HOOKS MUST BE EQUAL TO OR GREATER THAN 2"

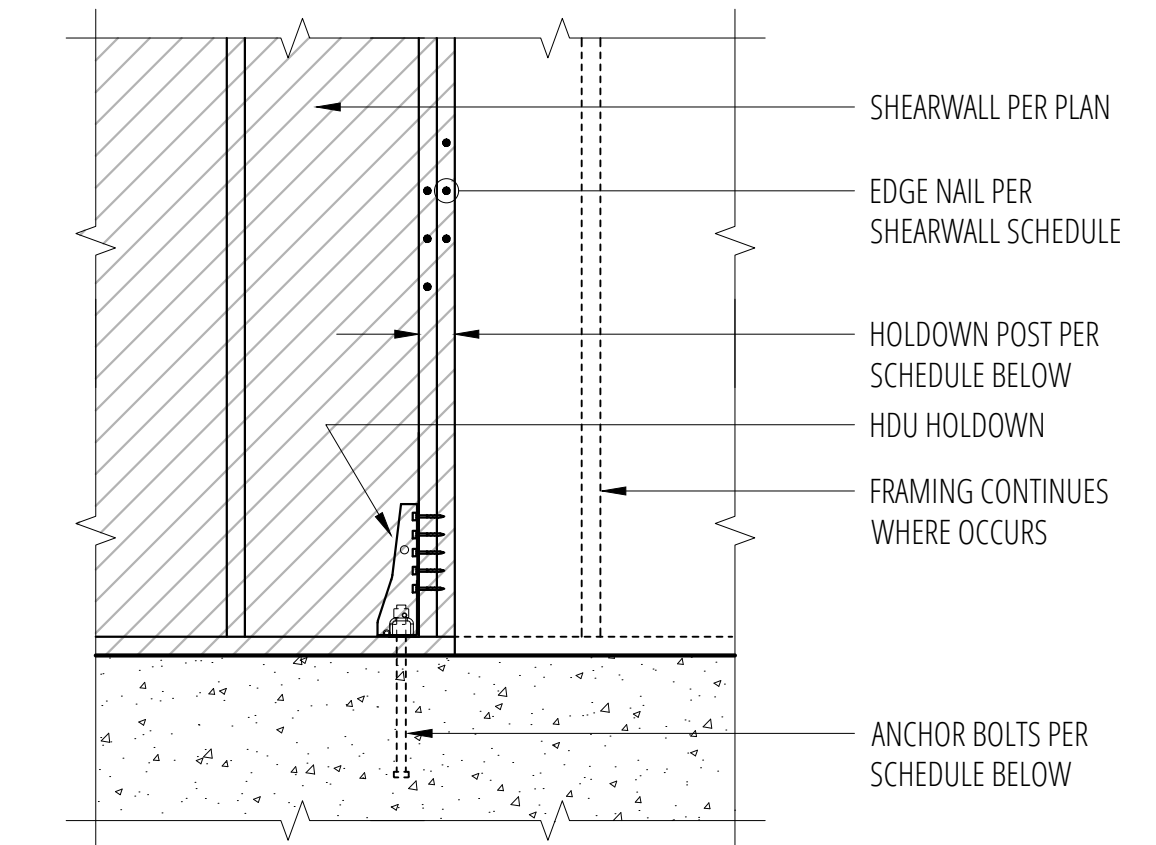


CONTROL JOINT



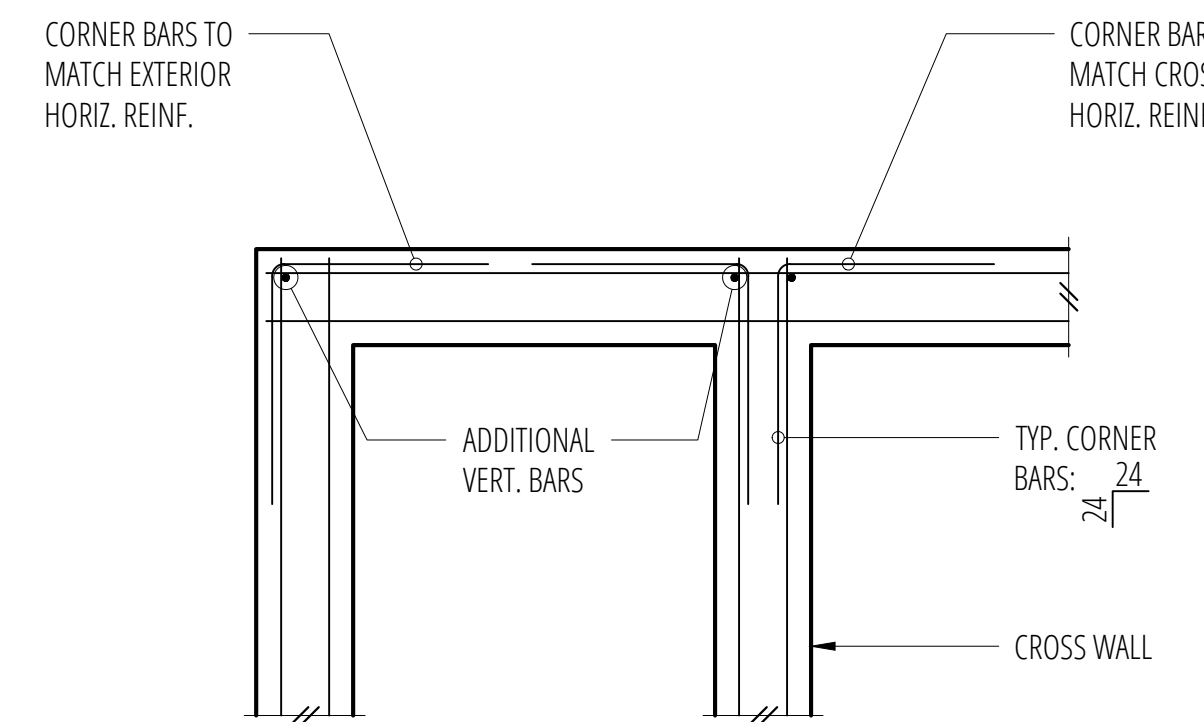
CONSTRUCTION JOINT

PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 400 SQUARE FEET OR LESS. AREAS TO BE APPROX. SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

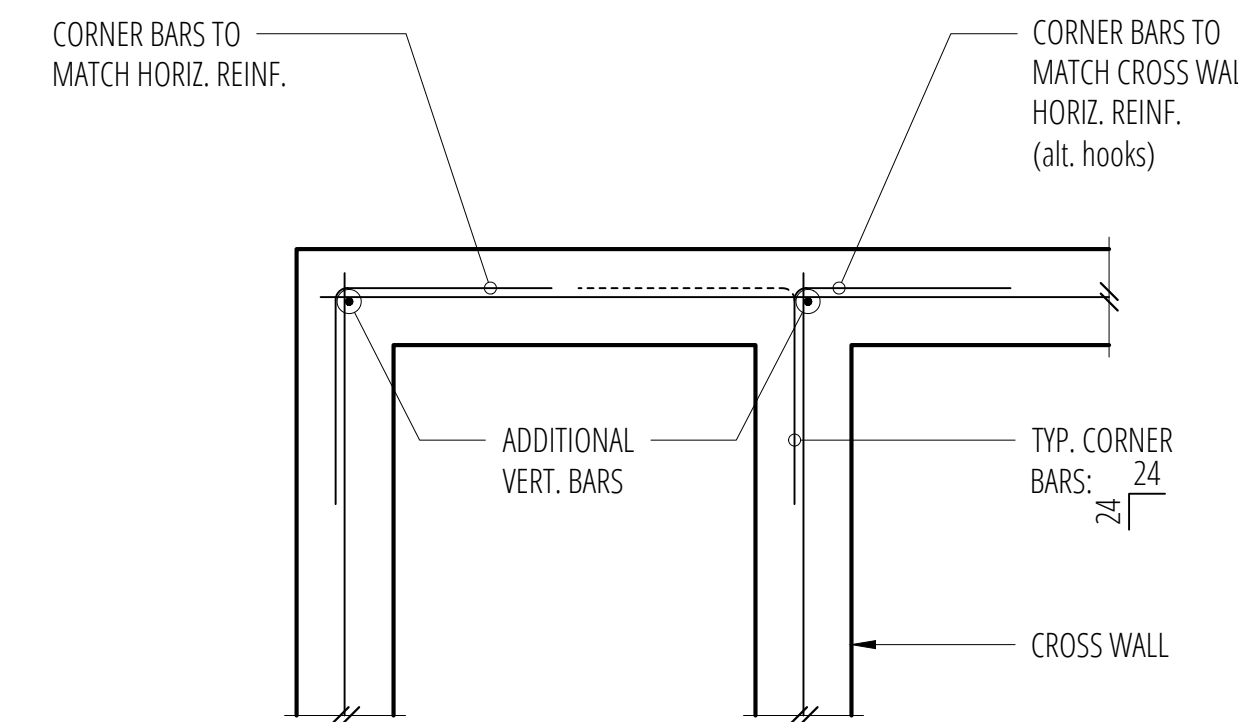


### 2 Typical Slab Joints

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



DOUBLE CURTAIN



SINGLE CURTAIN

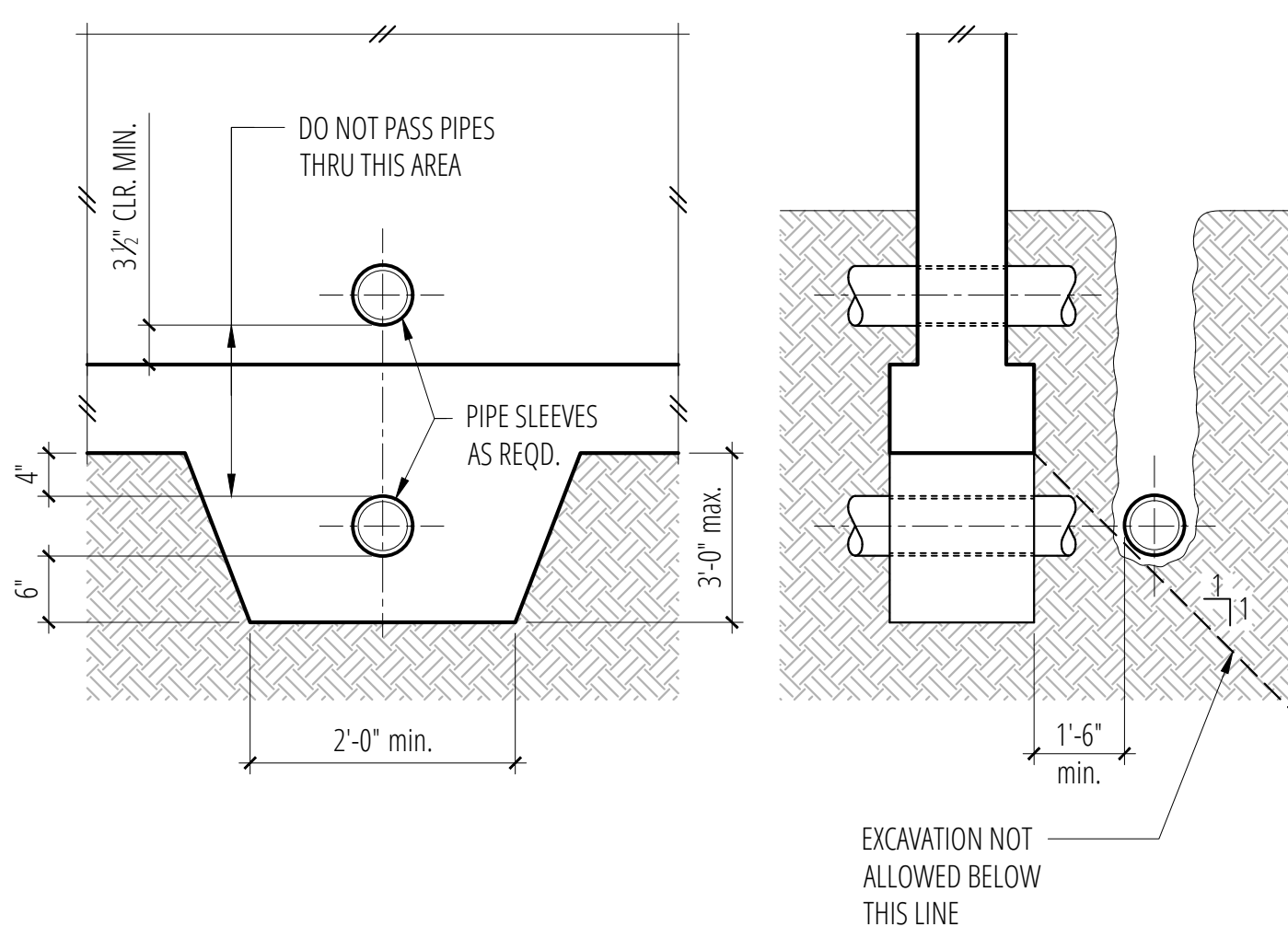
### Holdown Schedule

Plan Mark	Screws	Anchor Bolt ②	A.B. Embed	Holdown Post ①		Capacity #
				IF 2x4	IF 2x6	
HDU2-SDS2.5	(6) SDS 1/2" x 2 1/2"	SSTB16	12 3/4"	(2) 2x4	4x6	2215/2075
HDU4-SDS2.5	(10) SDS 1/2" x 2 1/2"	SB 3/8 x 24	18"	4x4	4x6	4565
HDU5-SDS2.5	(14) SDS 1/2" x 2 1/2"	SB 3/8 x 24	18"	4x4	4x6	5645
HDU8-SDS2.5	(20) SDS 1/2" x 2 1/2"	SB 3/8 x 24	18"	4x4	4x6	6970
HDU11-SDS2.5	(30) SDS 1/2" x 2 1/2"	SB 1 x 30	24"	4x8	6x6	9535
HDU14-SDS2.5	(36) SDS 1/2" x 2 1/2"	SB 1 x 30	24"	4x8	6x6	10770
HD19	(5) 1" THRU BOLTS	PAB10H	21"	N/A	6x6	26690+

- MINIMUM SIZE OF POST AT END OF WALL UNLESS NOTED OTHERWISE ON FRAMING PLANS.
- "SSTB" & "SB" REFER TO ANCHOR BOLTS BY SIMPSON STRONG-TIE. INSTALL PER MANUFACTURER.

### 5 Typical Lap Splice & Development Length

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

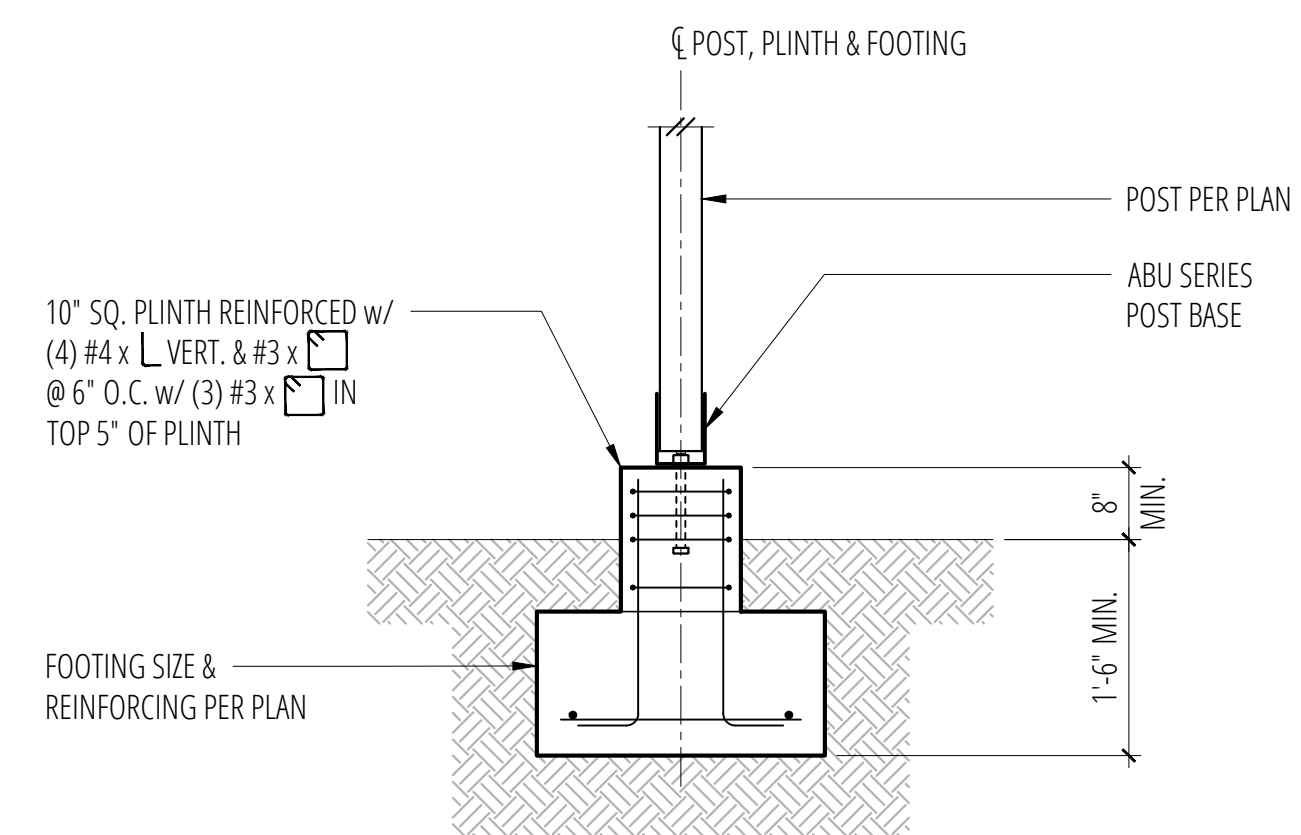


### 9 Pipe and Trench Locations

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

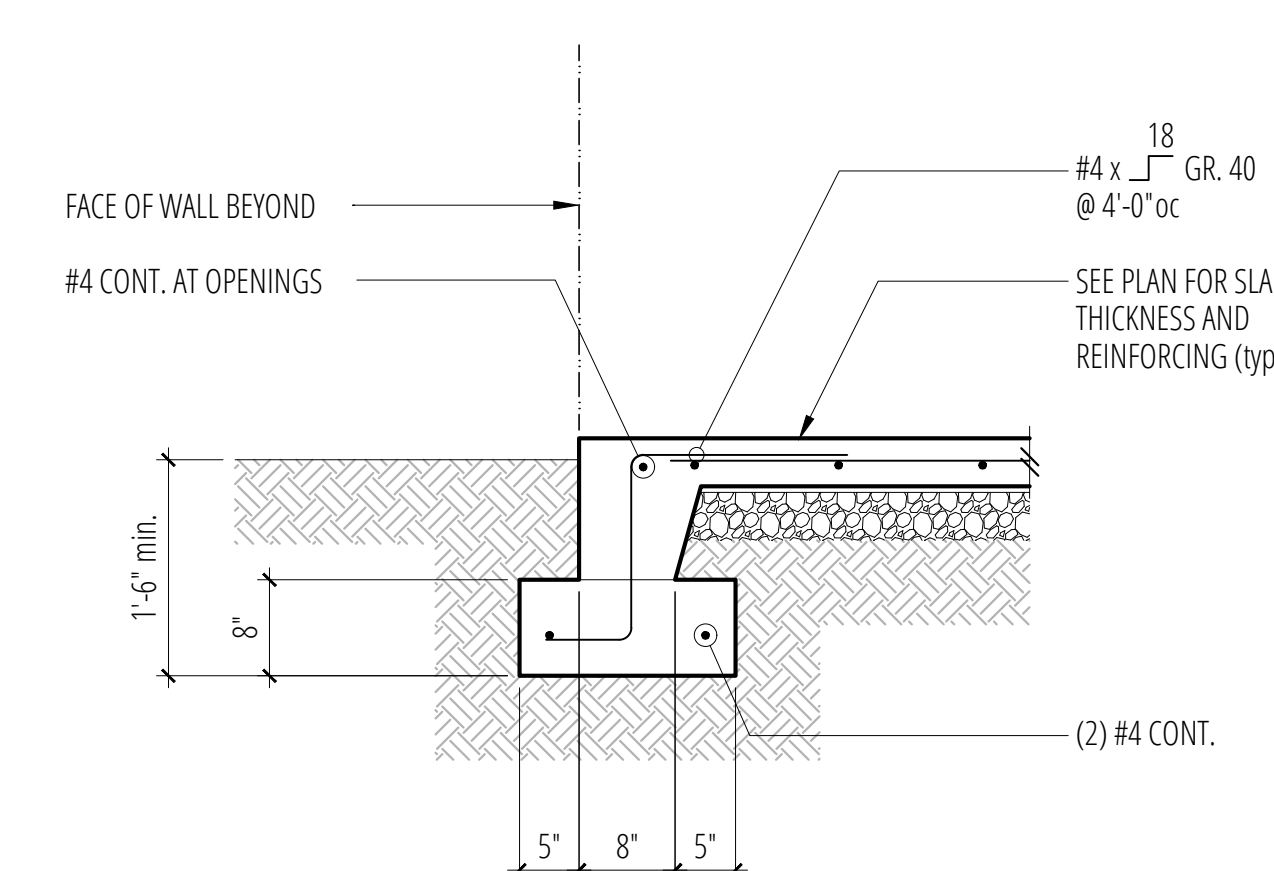
### 6 Typical Corner Bars at Concrete Walls and Footings

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



### 10 Post or Canopy Footing

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

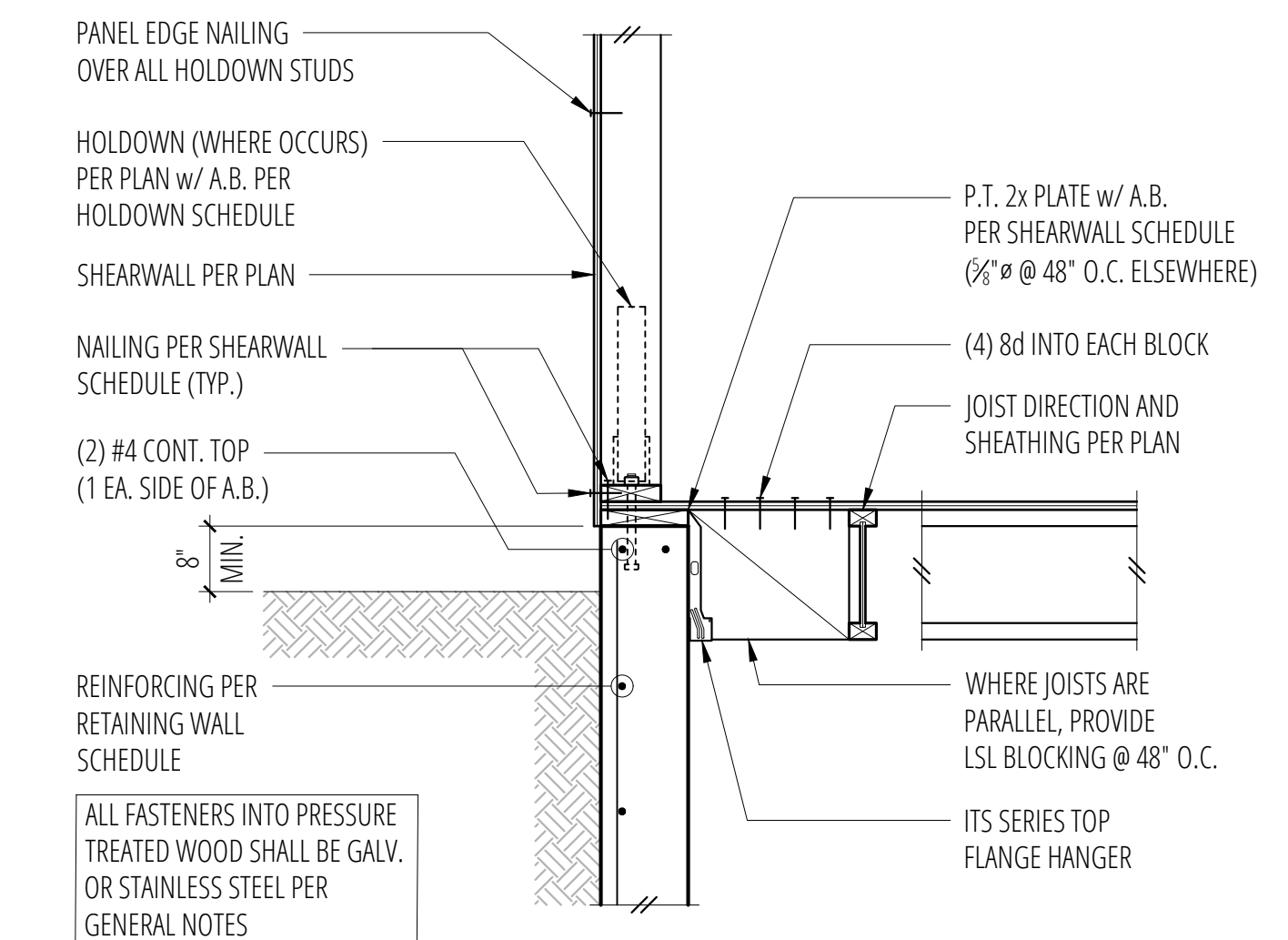


### 11 Typical Turned-Down Slab Edge

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

### 8 Typical HDU Holdown

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



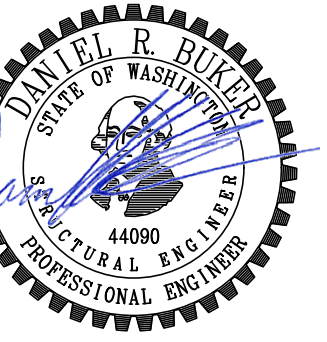
### 12 Exterior Framing at Basement (Dropped Joist)

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

No.	Date	Issue
1/20/17	Partial Permit	

Sheet Contents  
**Concrete Details**

Sheet No.



**Zheng Residence 3**

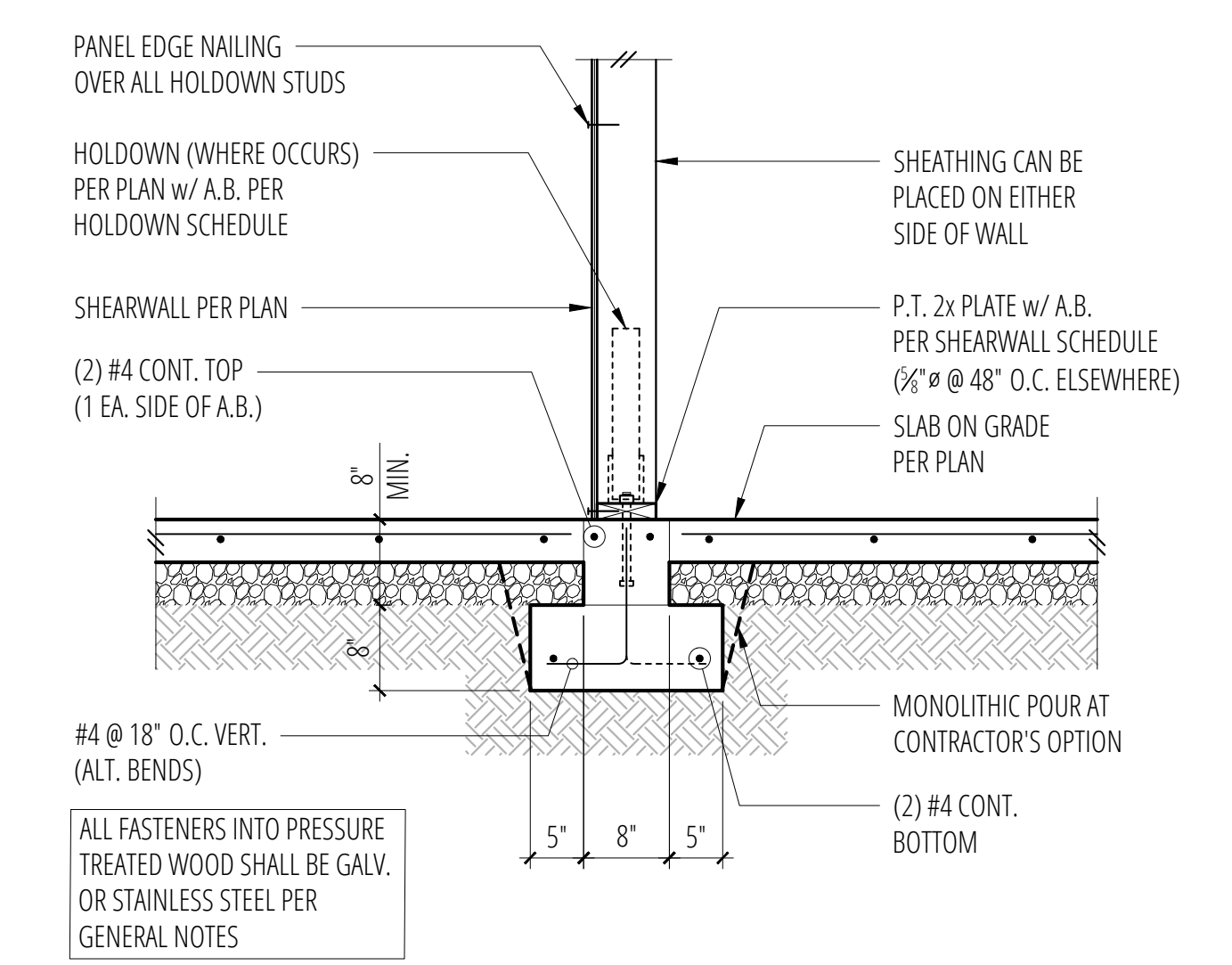
8375 + 8383 E. Mercer Way  
Mercer Island, WA, 98040

**1** SCALE: 3/4"=1'-0"

**2** SCALE: 3/4"=1'-0"

**3** SCALE: 3/4"=1'-0"

**4** SCALE: 3/4"=1'-0"

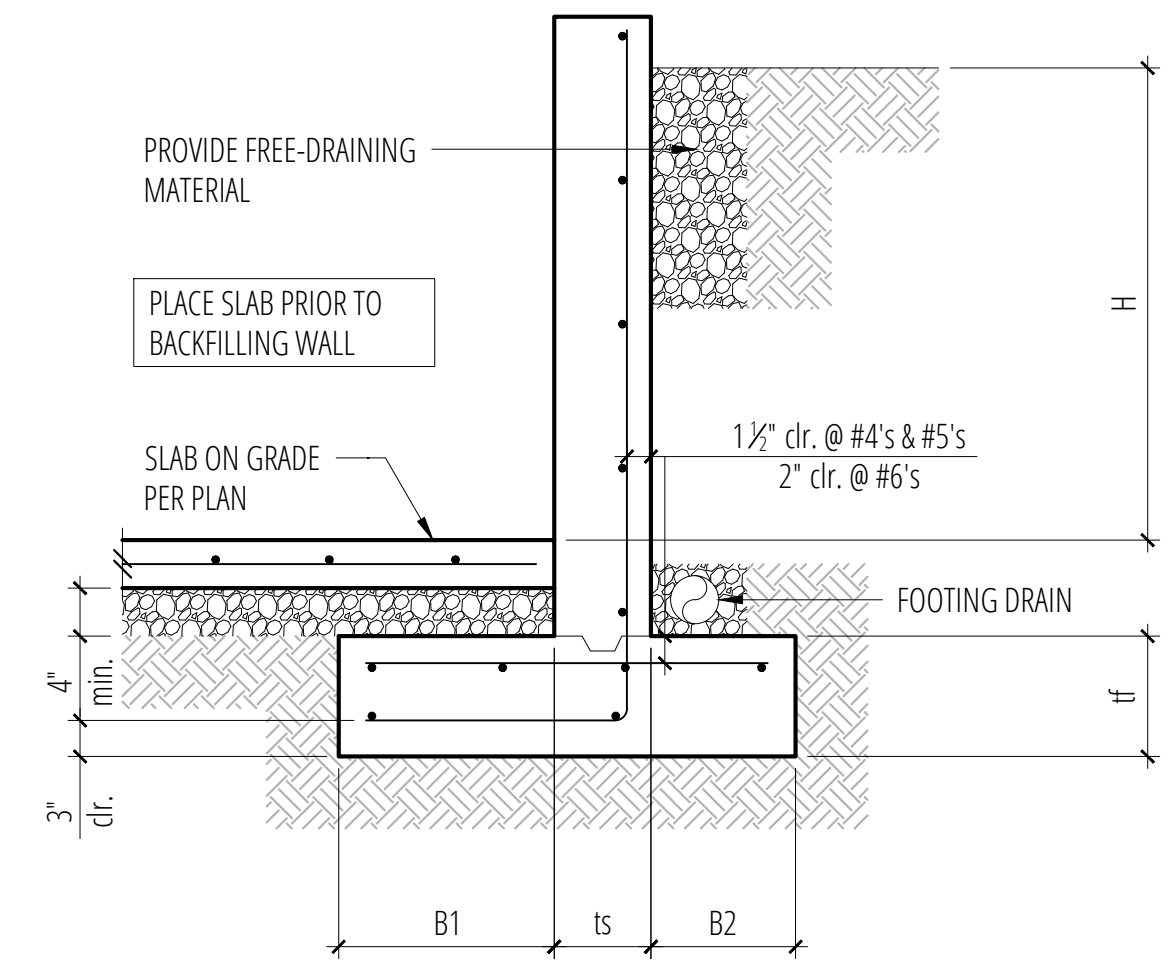
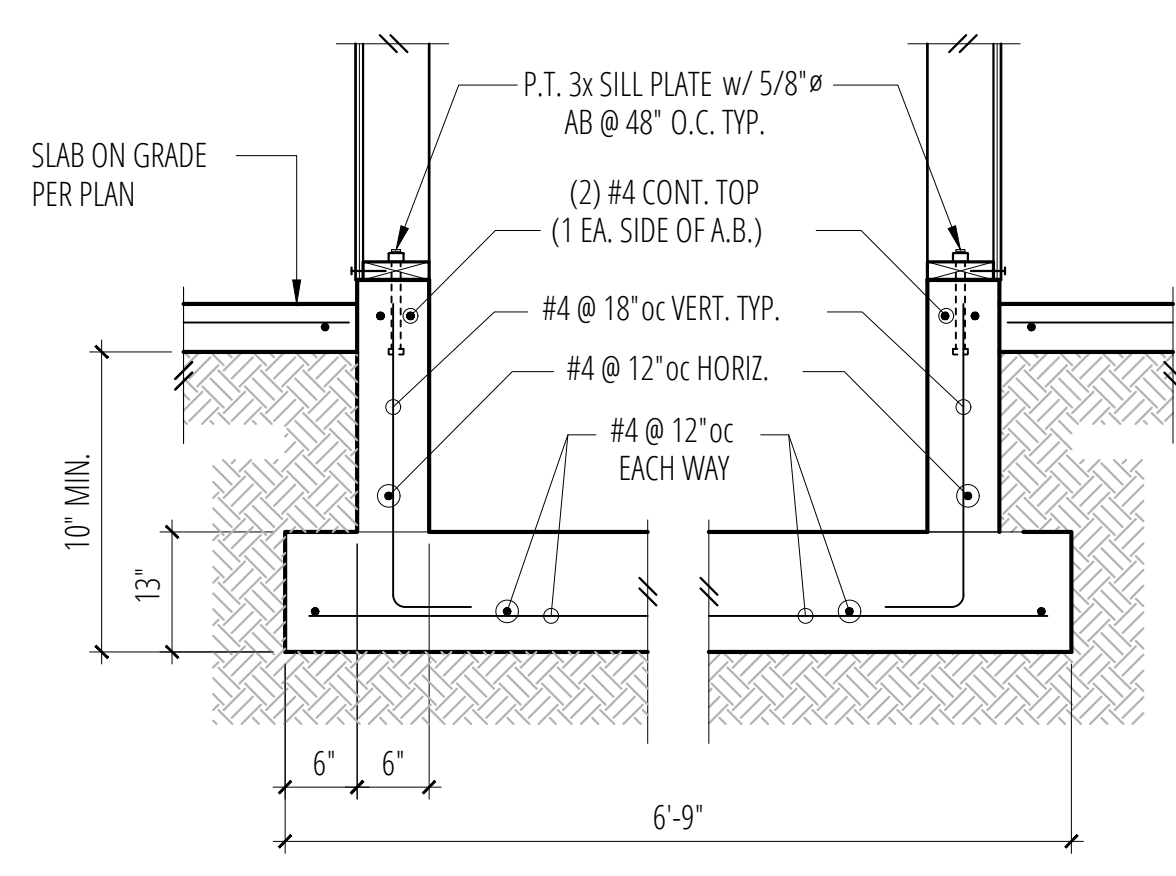
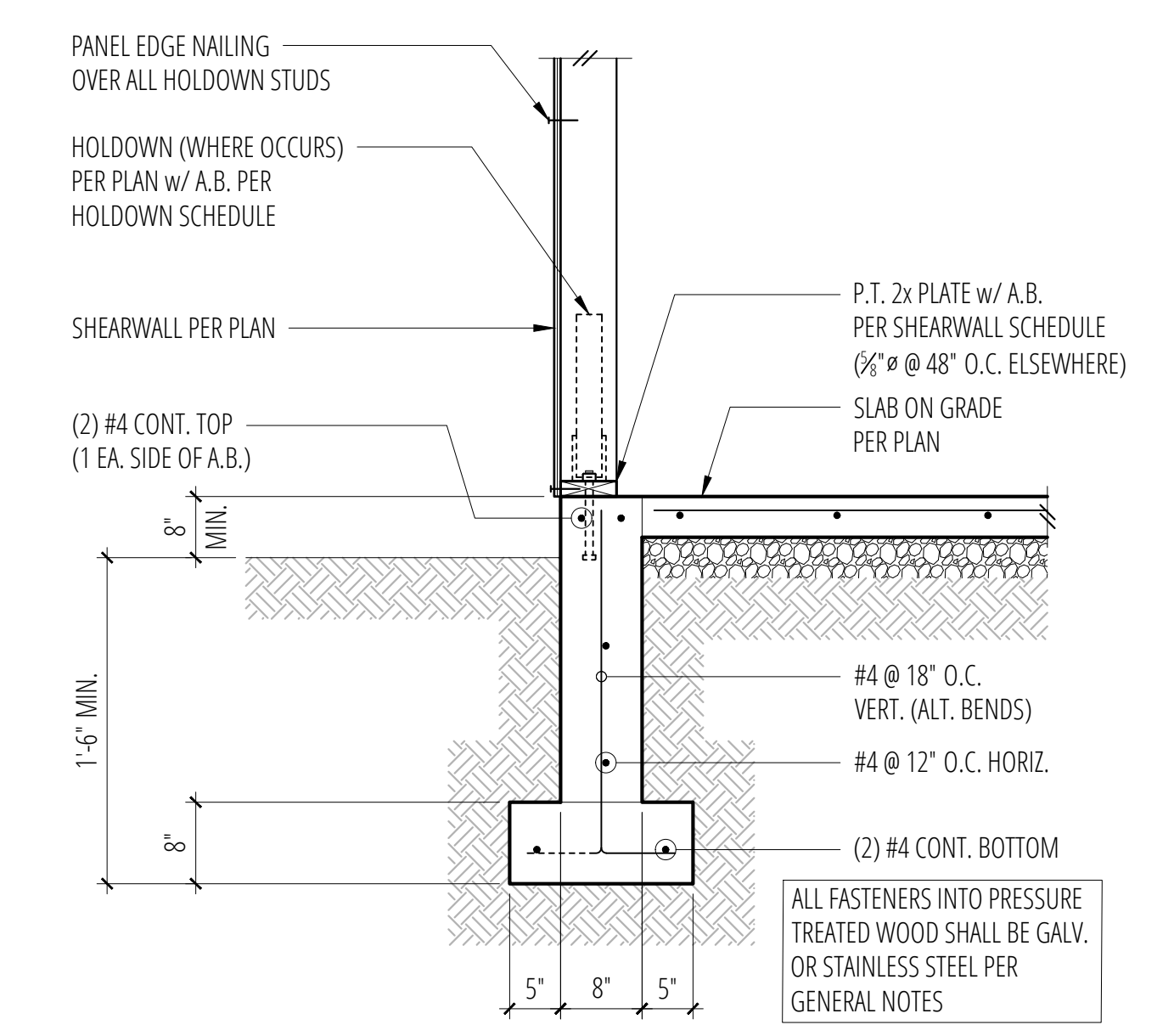


**5** SCALE: 3/4"=1'-0"

**6** SCALE: 3/4"=1'-0"

**7** SCALE: 3/4"=1'-0"

**8** Interior Wall w/ Stem Wall & Footing  
SCALE: 3/4"=1'-0"



RETAINING WALL SCHEDULE w/ SLAB

H (ft.)	B1	ts	B2	tf	STEM REINFORCING		FOOTING REINFORCING	
					VERT.	HORIZ.	TOP	LONGIT.
3'-0"	5"	8"	5"	8"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(2) #4
4'-0"	1'-0"	8"	5"	8"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(2) #4
5'-0"	1'-6"	8"	5"	10"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(3) #4
6'-0"	2'-0"	8"	5"	10"	#4 @ 18" O.C.	#4 @ 12" O.C.	-	(4) #4
7'-0"	2'-3"	8"	9"	10"	#4 @ 12" O.C.	#4 @ 12" O.C.	-	(5) #4
8'-0"	2'-9"	8"	1'-0"	12"	#5 @ 12" O.C.	#4 @ 12" O.C.	#5 @ 18" O.C.	(5) #5
9'-0"	3'-3"	8"	1'-3"	13"	#5 @ 12" O.C.	#4 @ 12" O.C.	#4 @ 18" O.C.	(6) #5
10'-0"	3'-9"	8"	1'-6"	15"	#6 @ 12" O.C.	#4 @ 12" O.C.	#4 @ 18" O.C.	(7) #5
11'-0"	4'-3"	10"	2'-0"	15"	#6 @ 12" O.C.	#4 @ 10" O.C.	#4 @ 18" O.C.	(8) #5
12'-0"	4'-9"	10"	2'-3"	15"	#6 @ 9" O.C.	#4 @ 10" O.C.	#4 @ 12" O.C.	(9) #5

**9** Elevator Pit  
SCALE: 3/4"=1'-0"

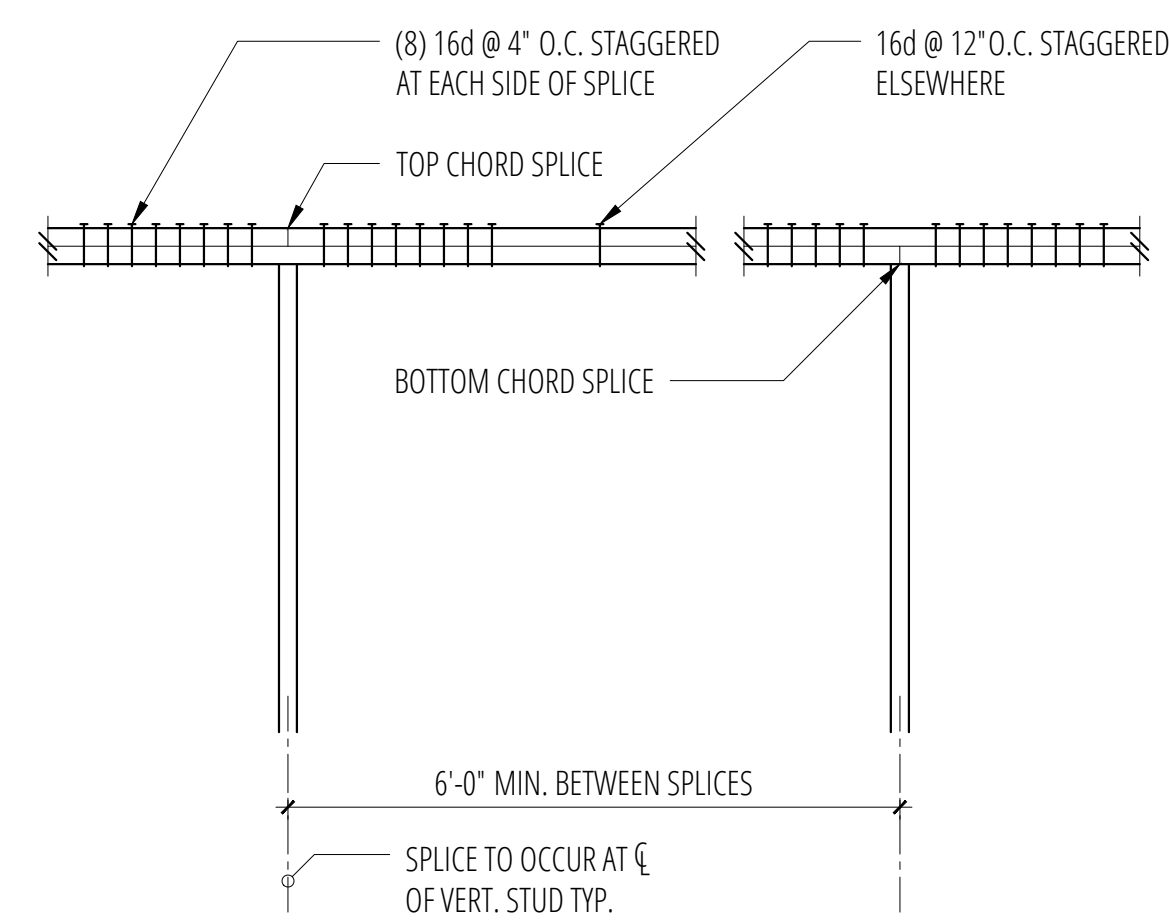
**10** Retaining Wall Schedule  
SCALE: 3/4"=1'-0"

**12** Exterior Wall w/ Slab on Grade  
SCALE: 3/4"=1'-0"

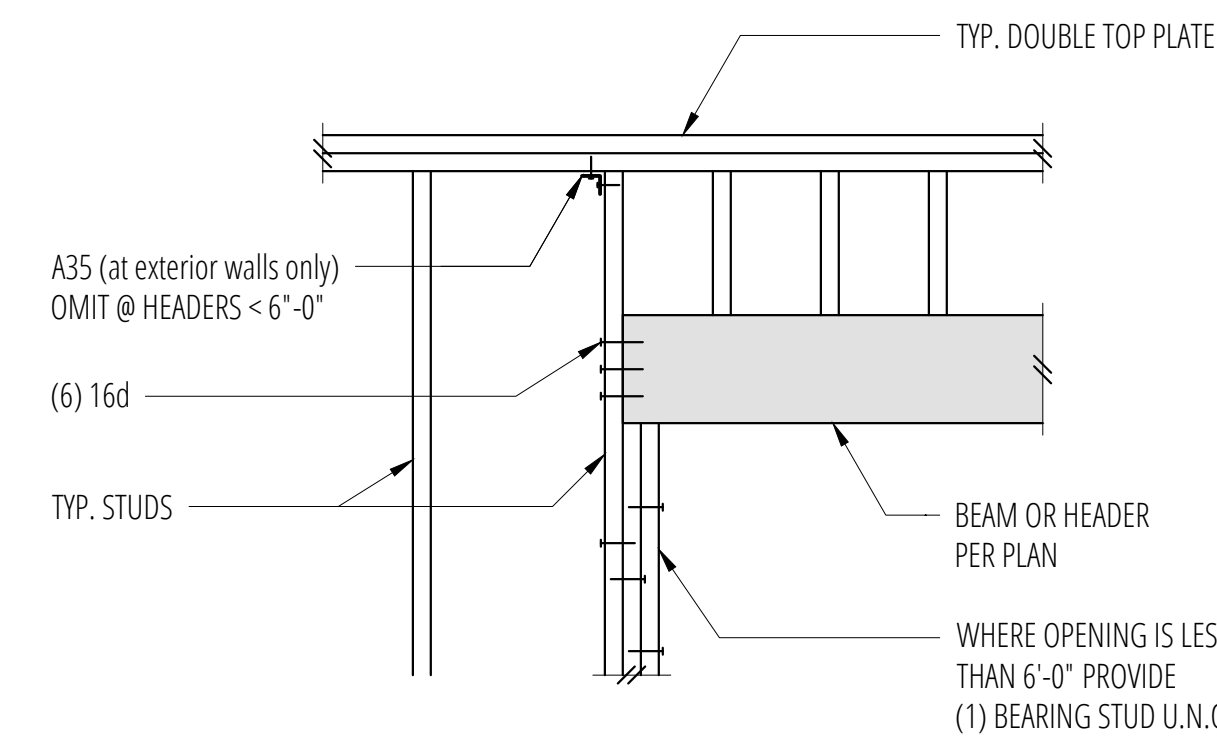
No.	Date	Issue
1	1/20/17	Partial Permit

Sheet Contents  
**Concrete Details**

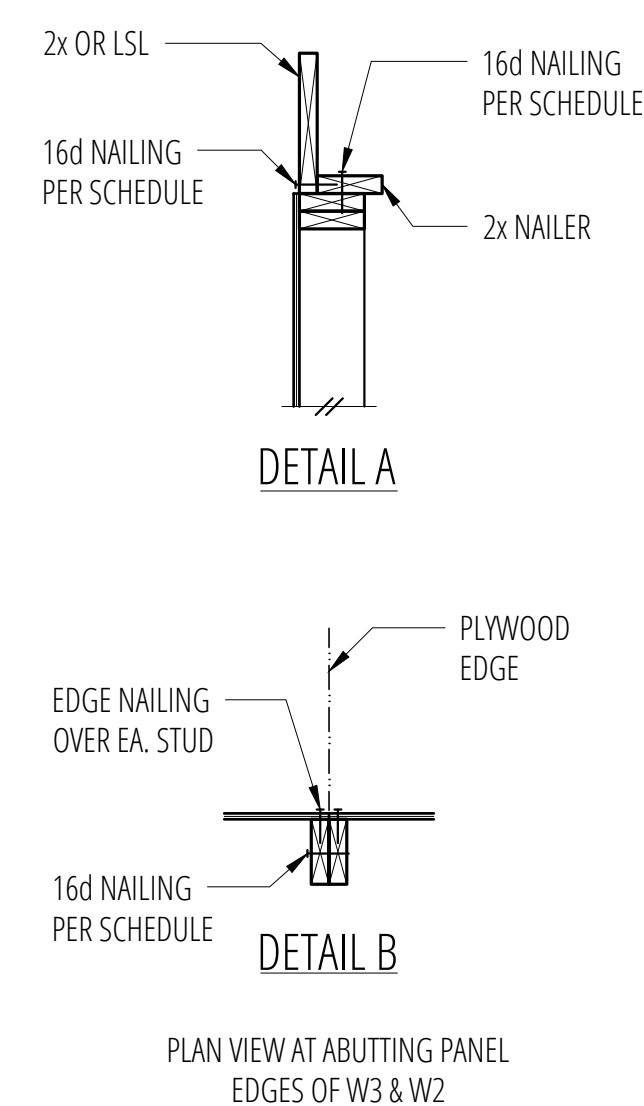
Sheet No.



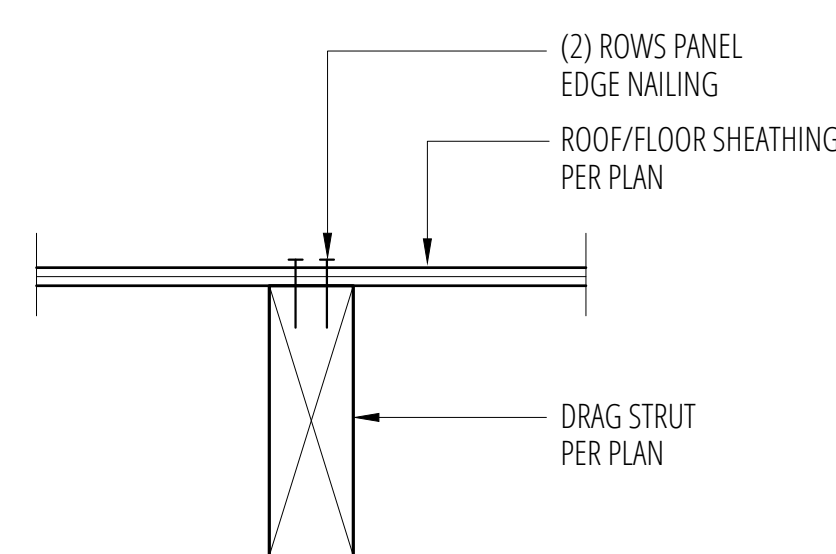
**1 Typical Top Plate Splice**  
SCALE: 3/4"=1'-0"



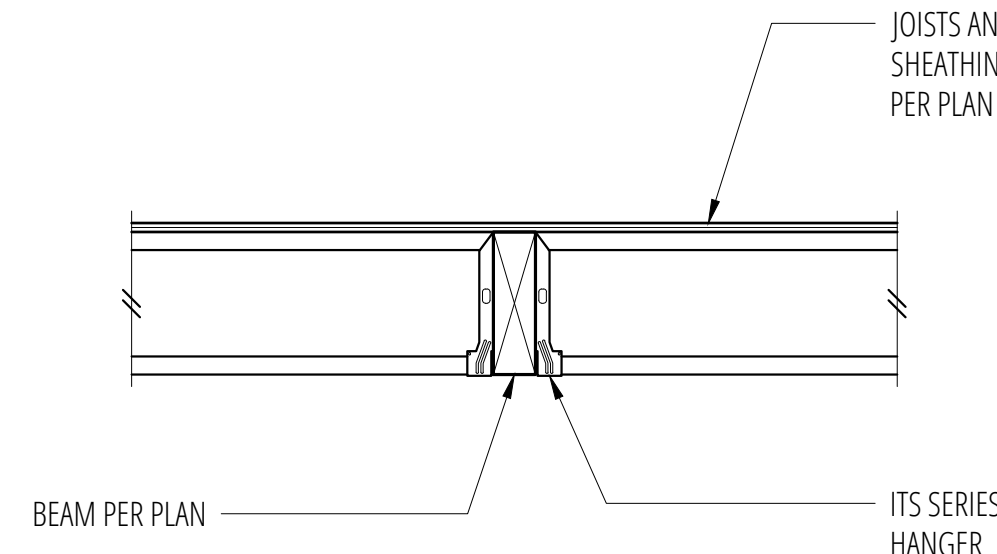
**2 Typical Header Support**  
SCALE: 3/4"=1'-0"



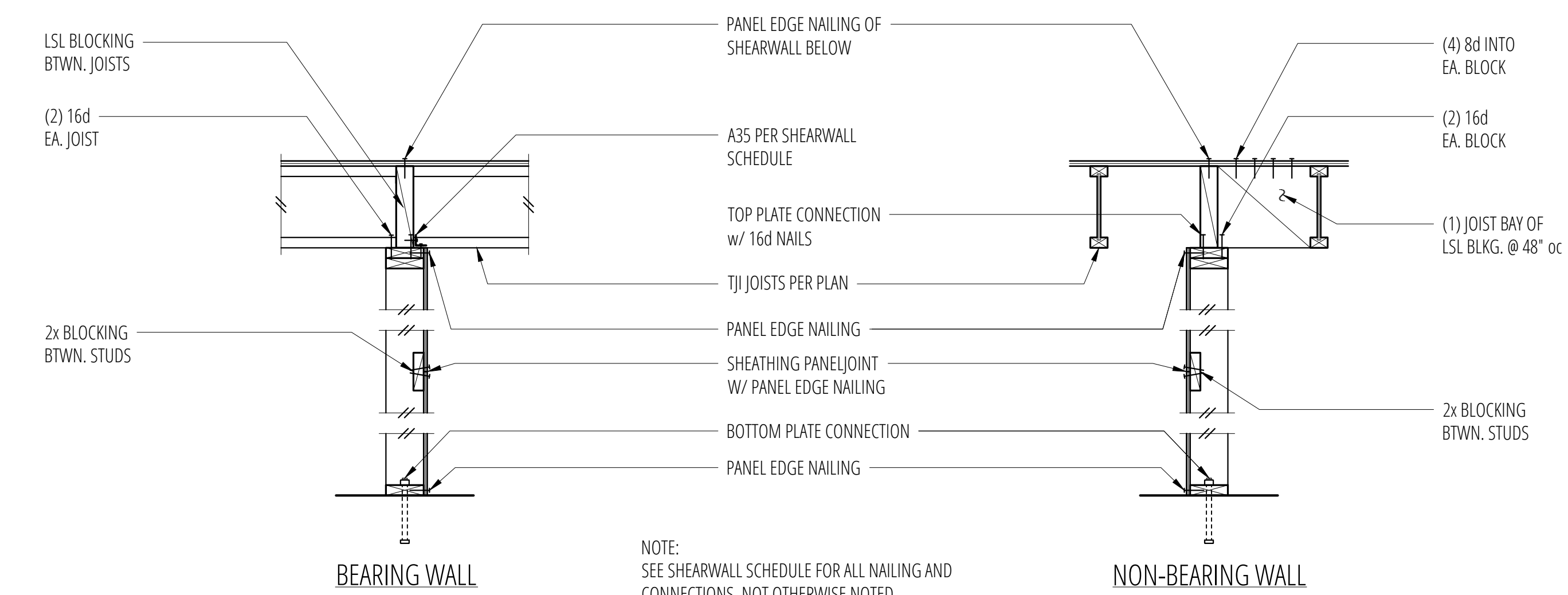
**3 Shearwall Schedule**  
SCALE: N.T.S.



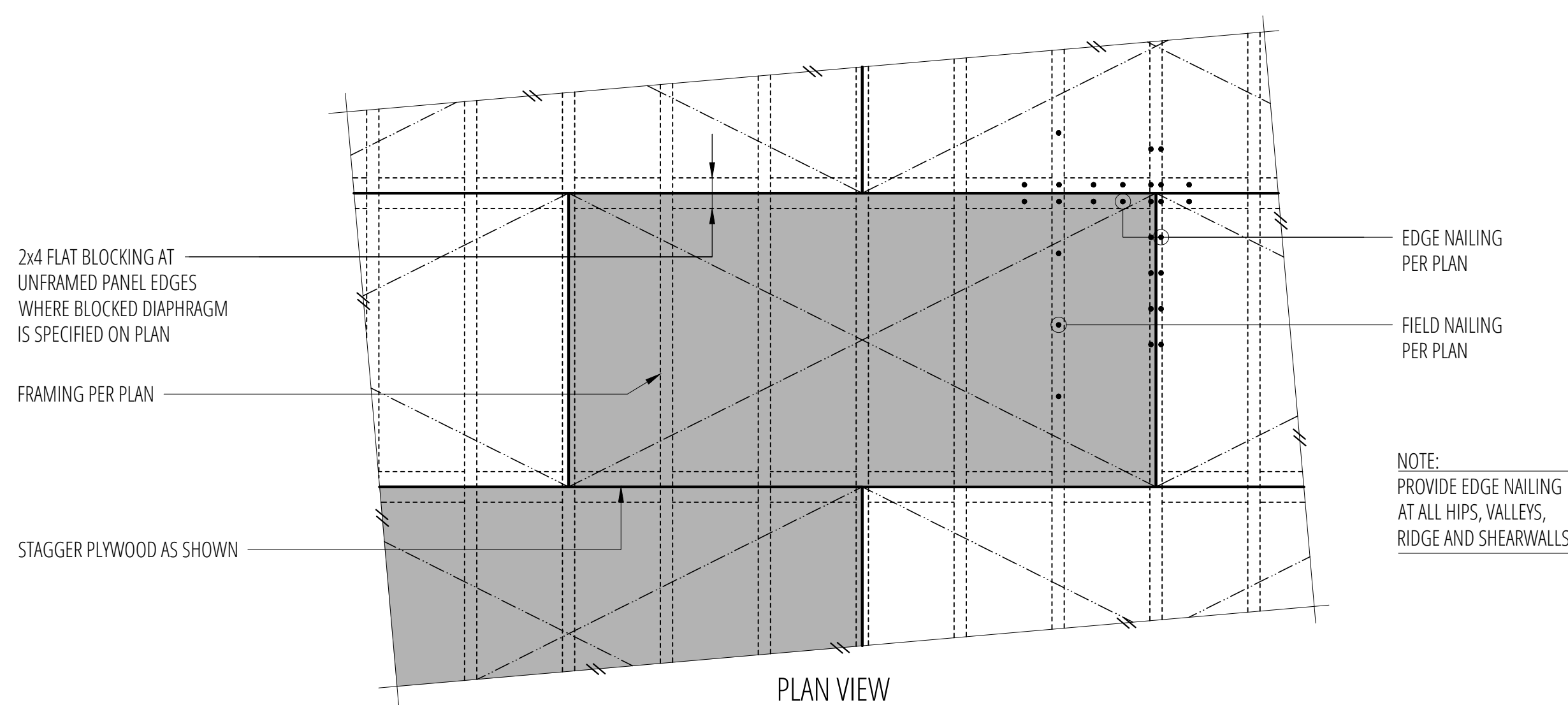
**5 Typical Drag Strut (D.S.)**  
SCALE: 3/4"=1'-0"



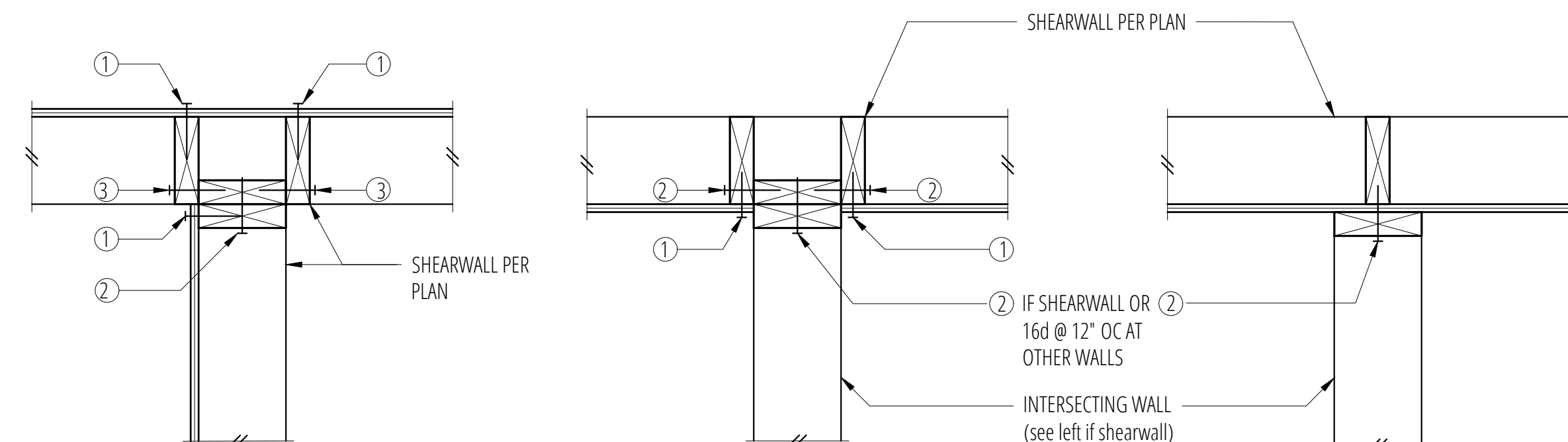
**6 Typical Flush Beam**  
SCALE: 3/4"=1'-0"



**7 Typical Shearwall Construction**  
SCALE: N.T.S.



**9 Typical Diaphragm Sheathing and Nailing**  
SCALE: 3/4"=1'-0"



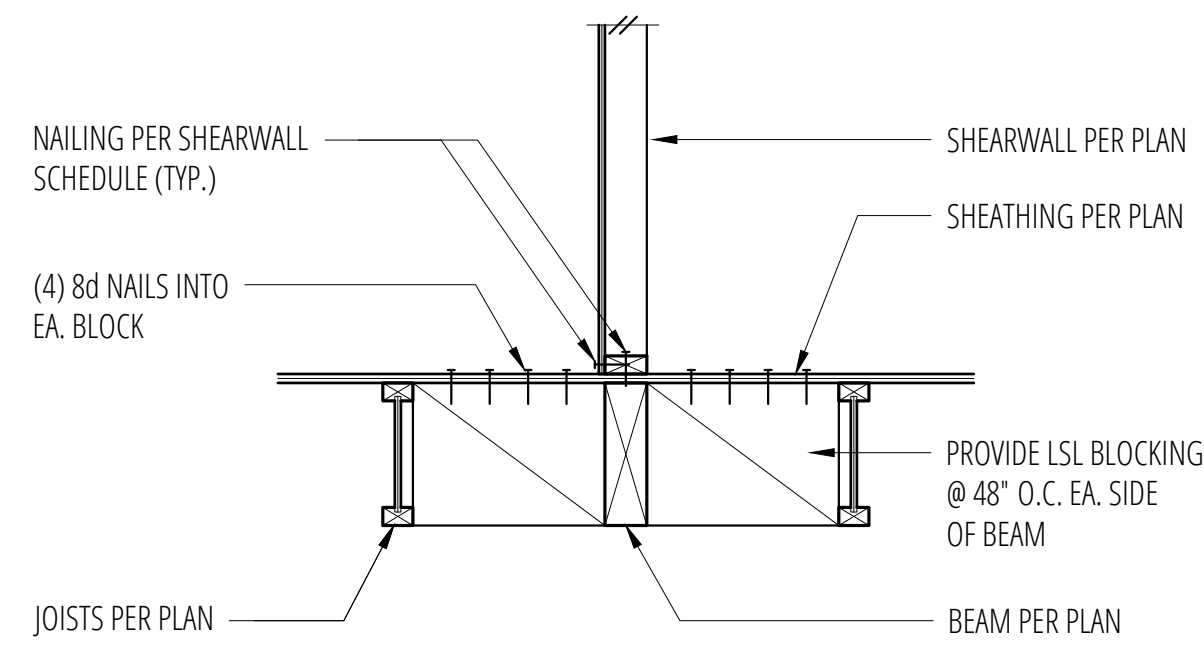
**11 Typical Shearwall Intersections**  
SCALE: N.T.S.

- ① PLYWOOD PANEL EDGE NAILING PER SHEARWALL SCHEDULE
- ② BASE PLATE NAILING PER SHEARWALL SCHEDULE
- ③ 16d @ 8" OC

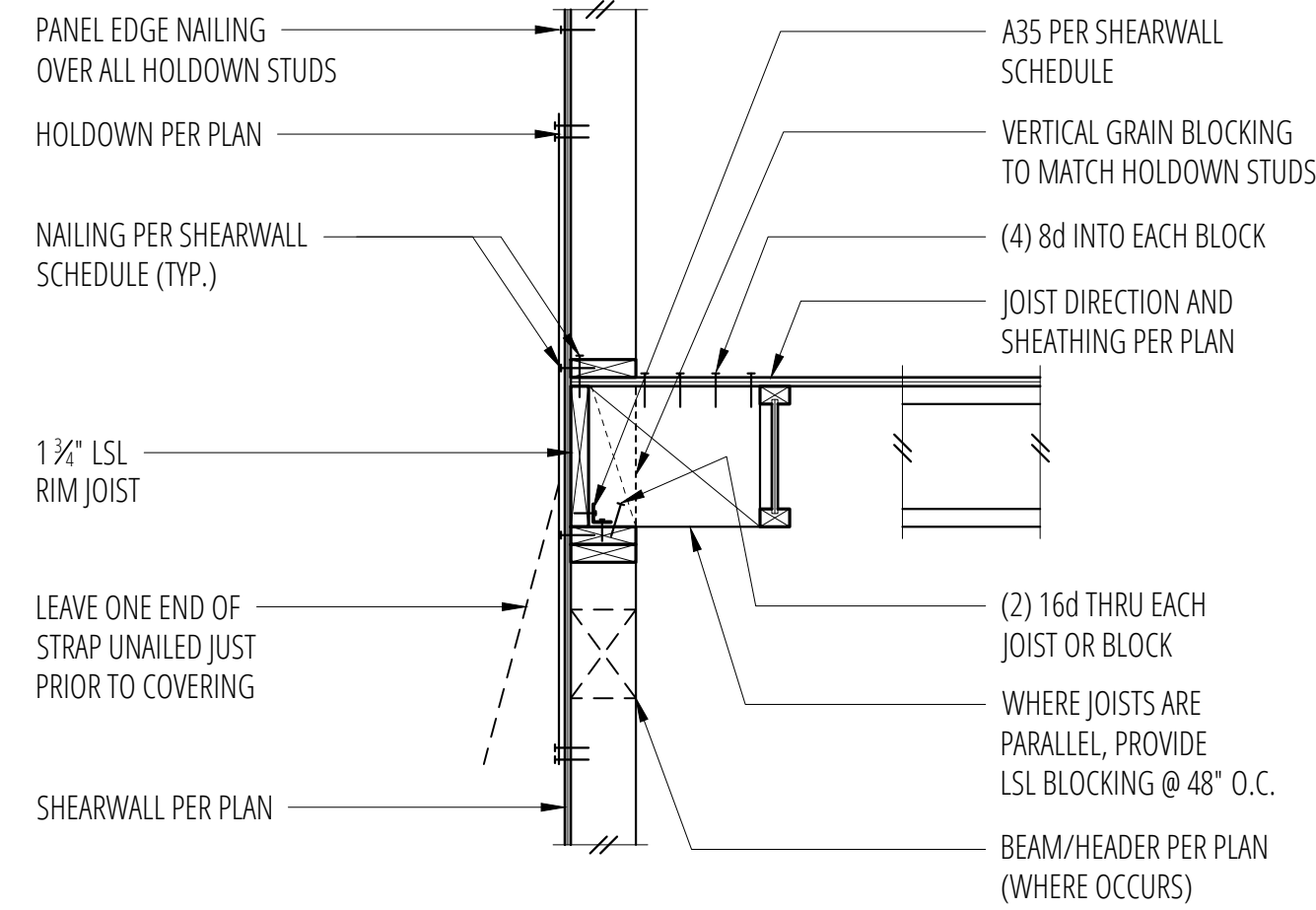
No.	Date	Issue
1/20/17	Partial Permit	

Sheet Contents  
**Floor Framing Details**

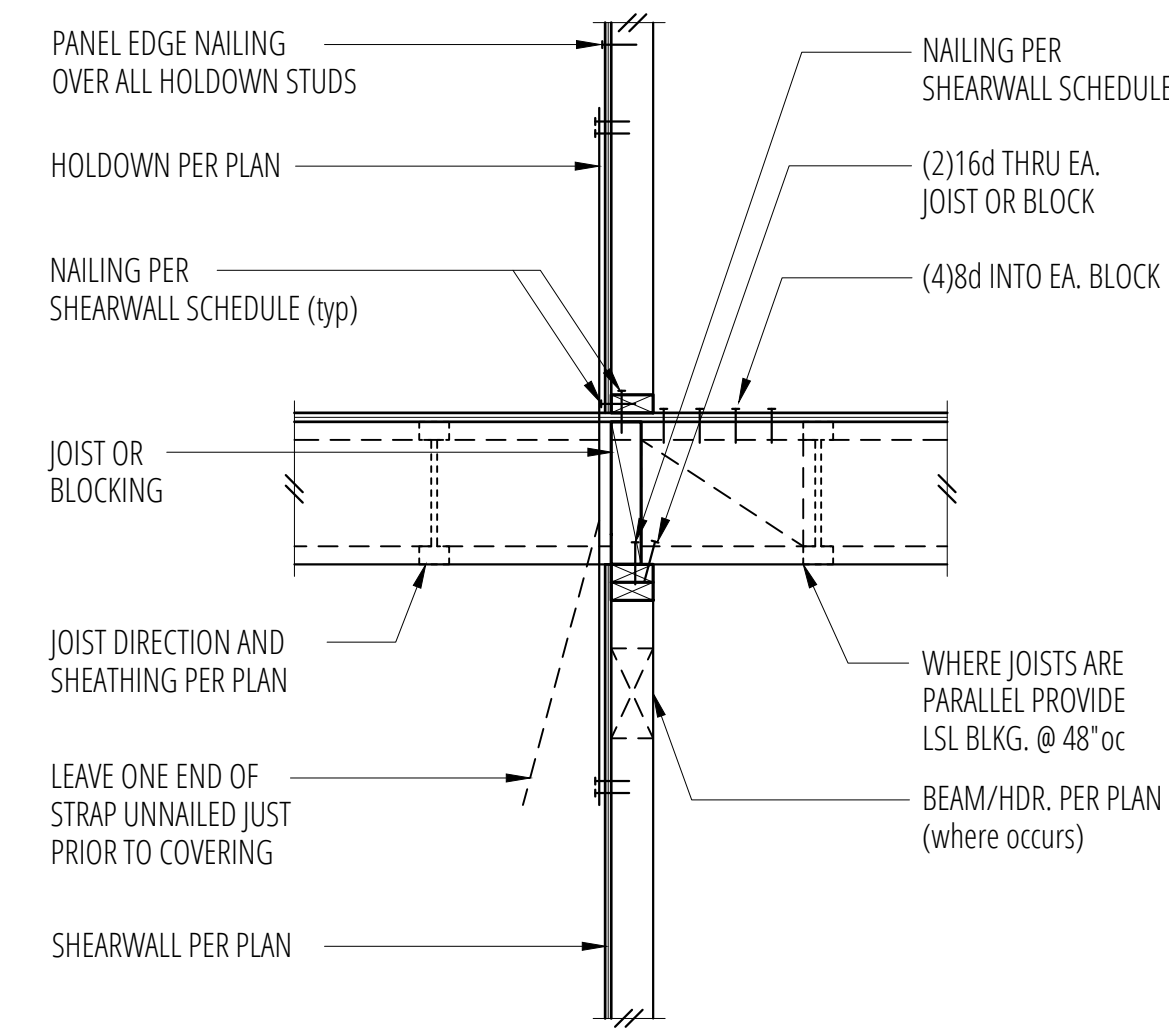
Sheet No.



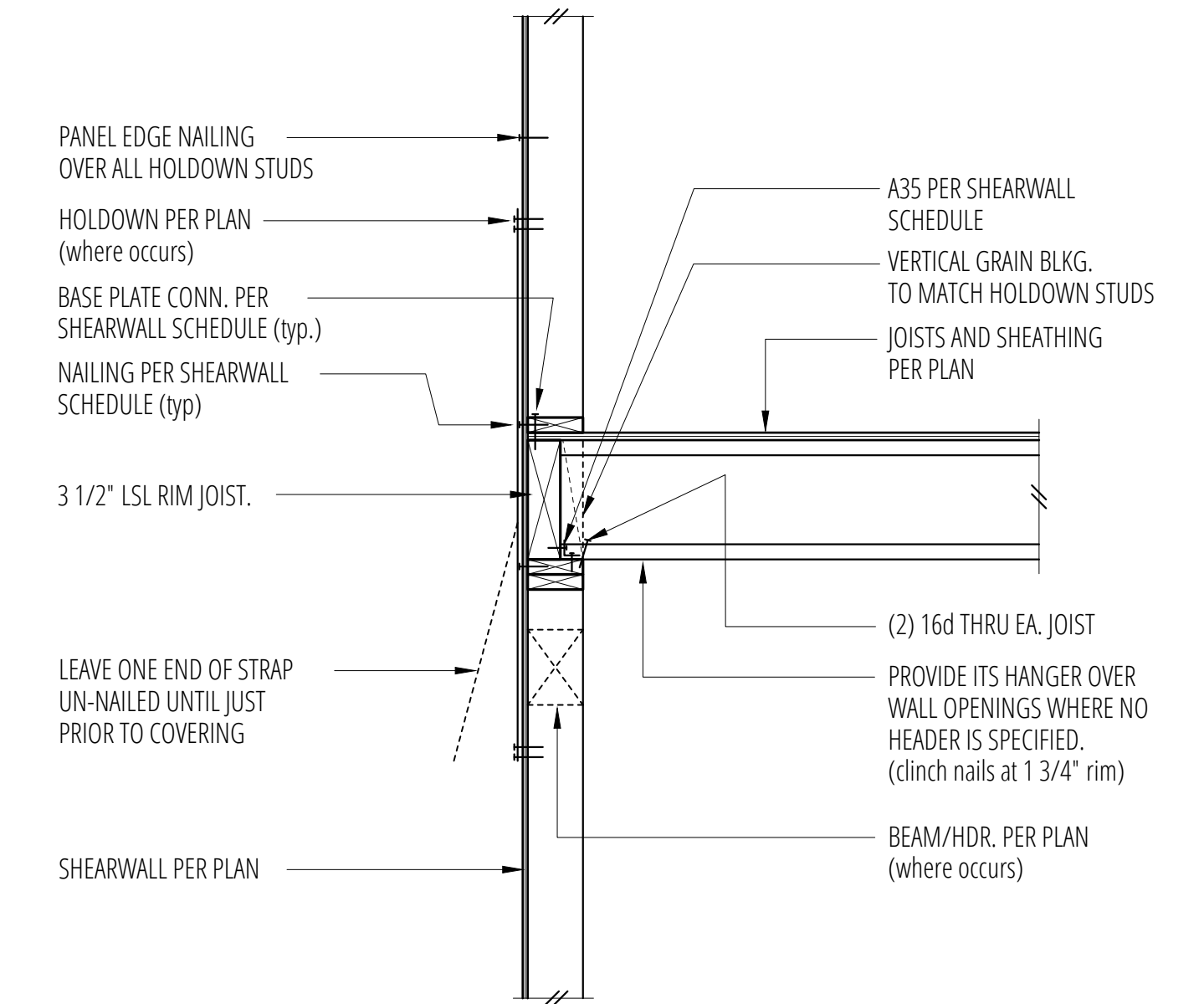
**1 Shearwall over Beam (w/TJI)**  
SCALE: 3/4"=1'-0"



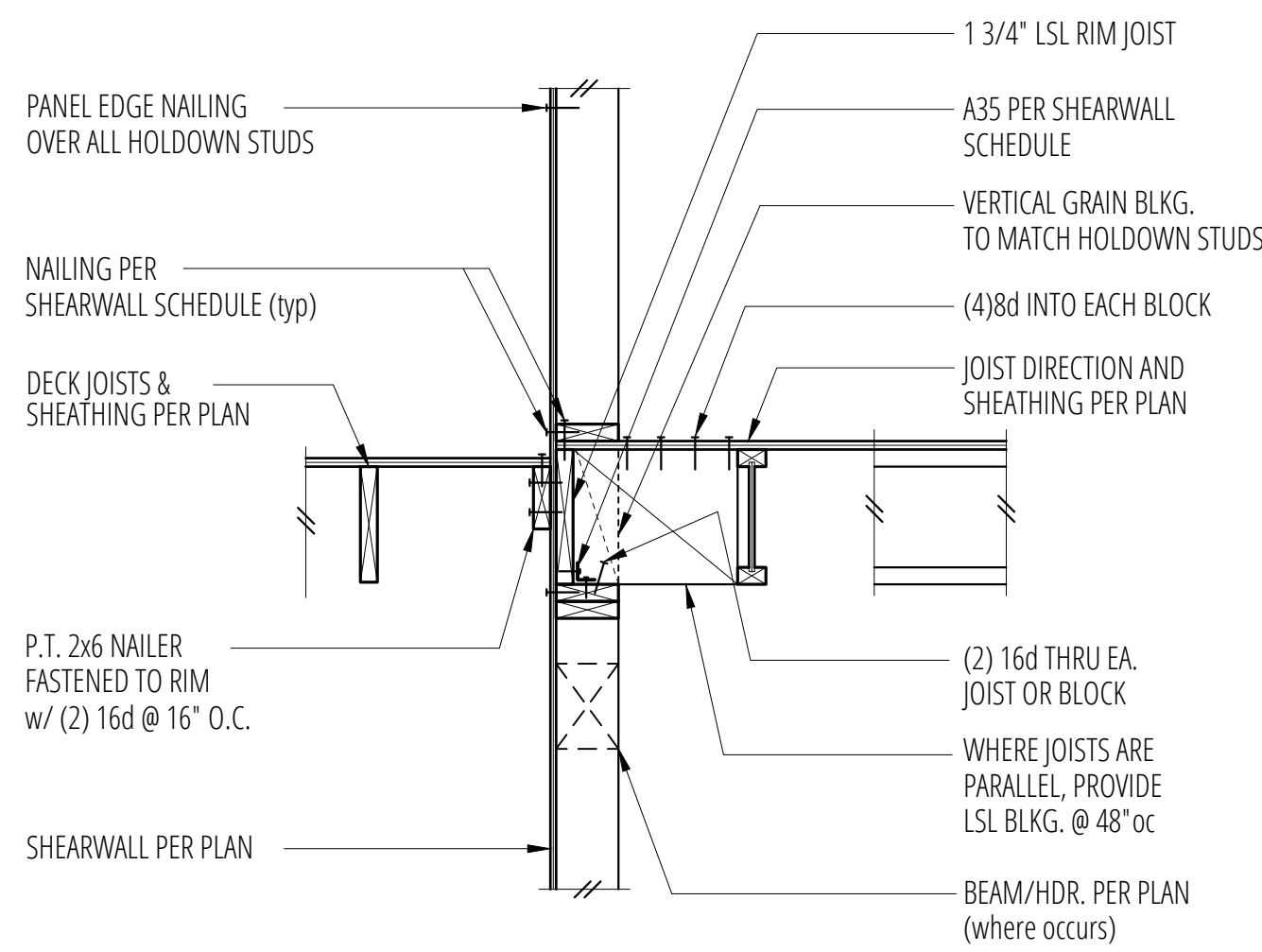
**2 Exterior Floor Framing (w/ TJI's)**  
SCALE: 3/4"=1'-0"



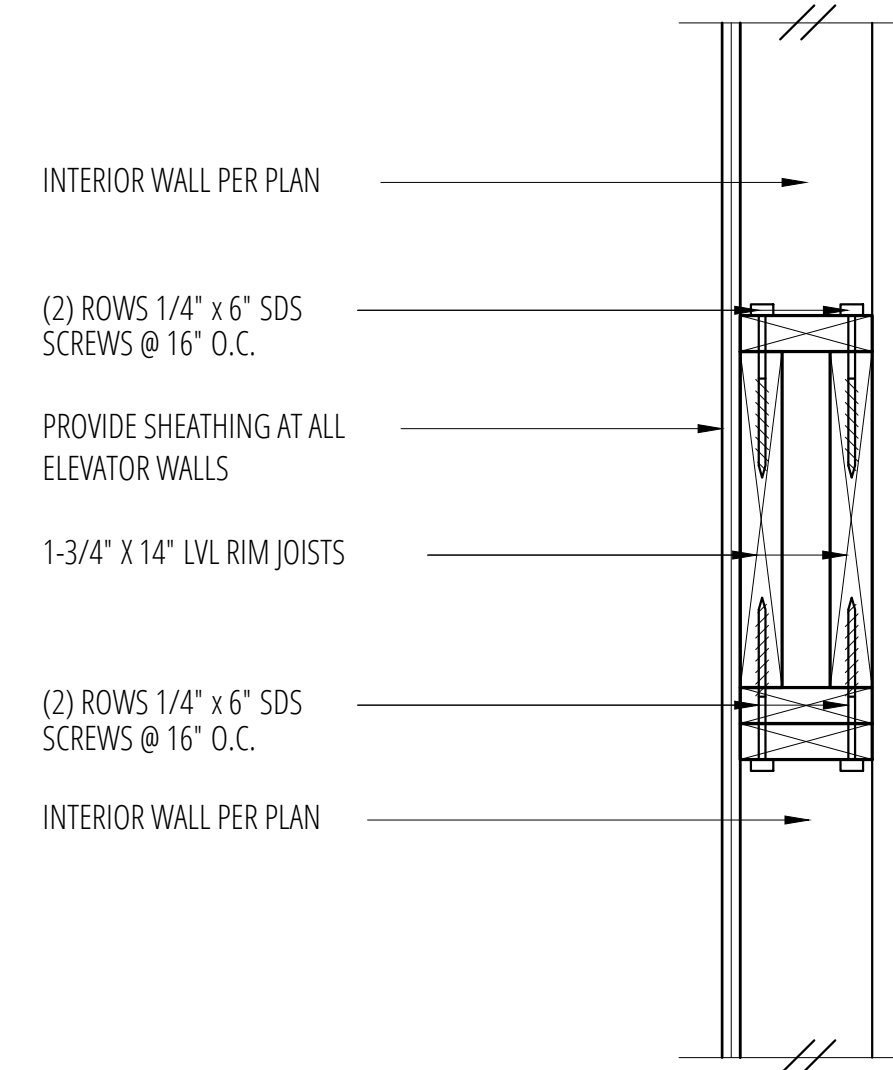
**3 Interior Shearwall (w/TJI's)**  
SCALE: 3/4"=1'-0"



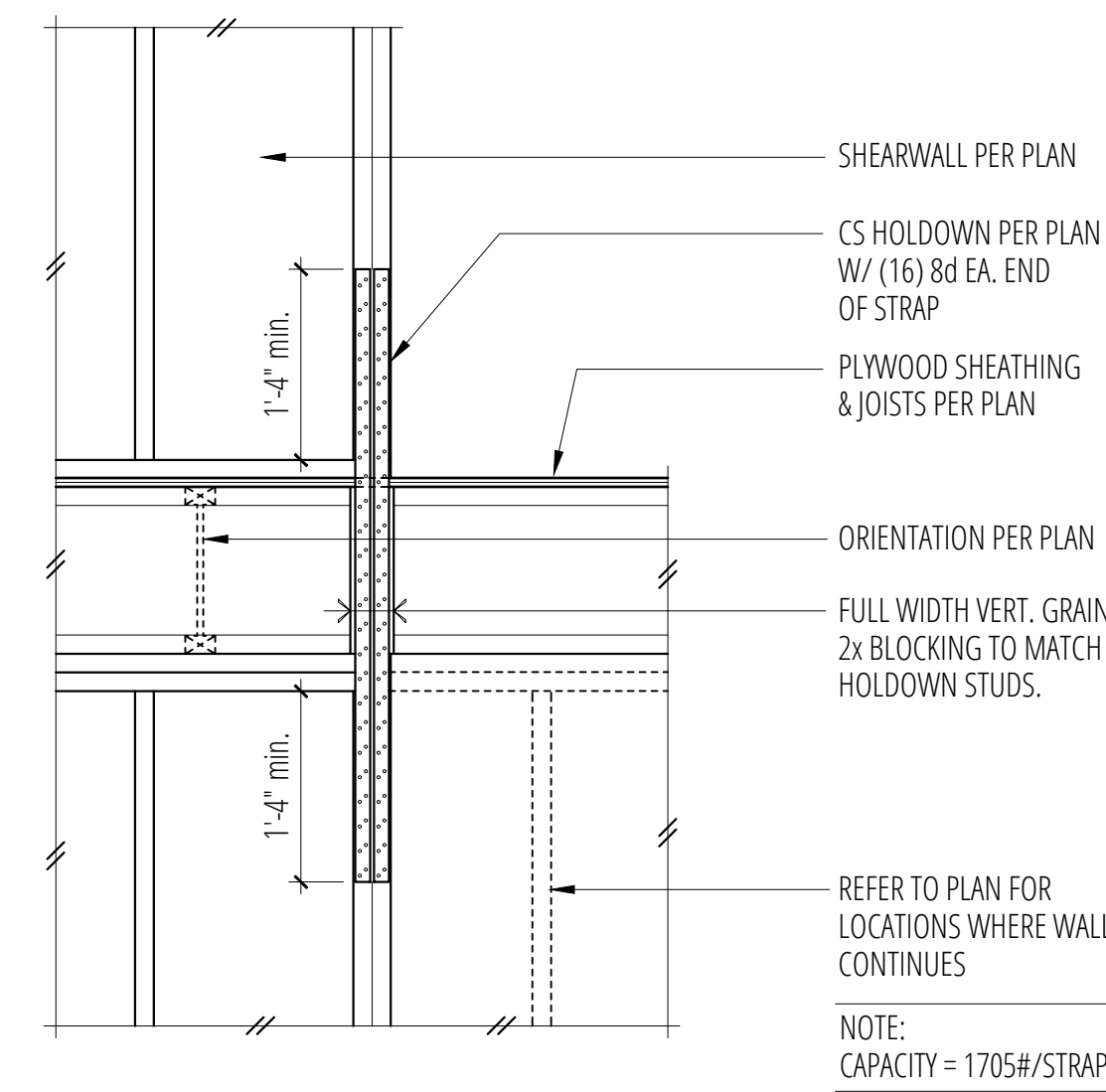
**4 Perpendicular Framing at Exterior walls**  
SCALE: 3/4"=1'-0"



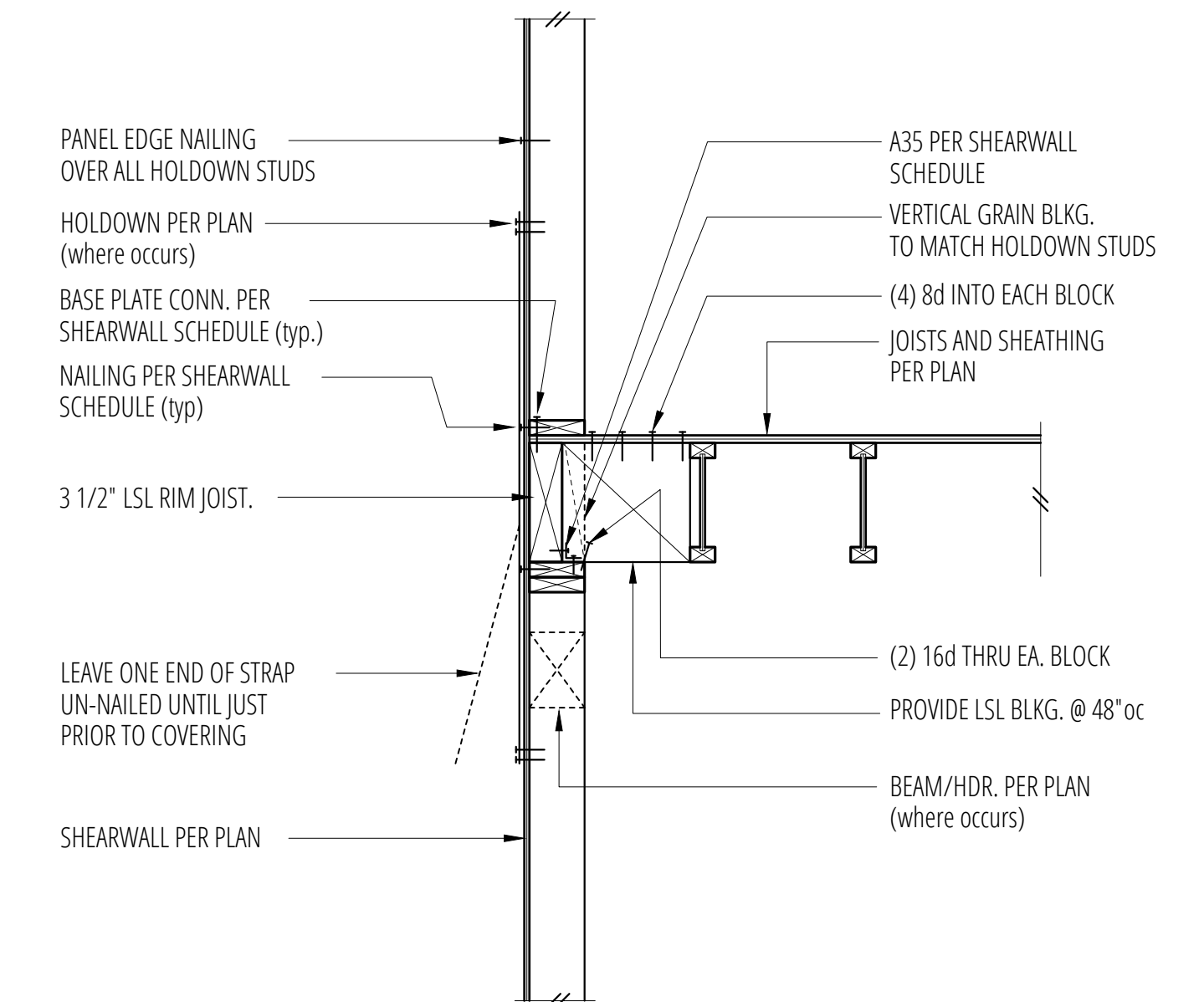
**5 Exterior Floor Framing at Deck**  
SCALE: 3/4"=1'-0"



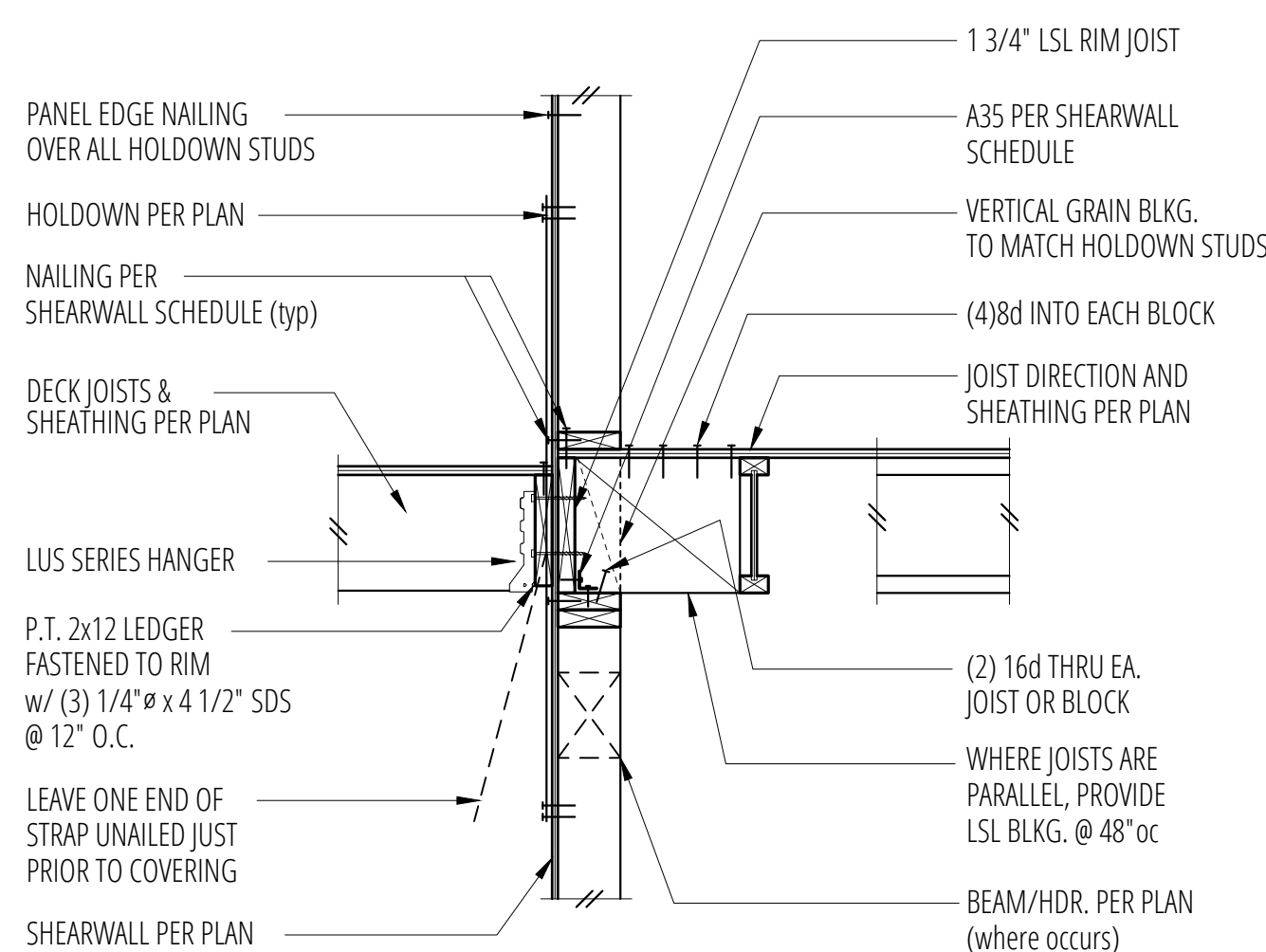
**6 Floor Header at Elevator Wall**  
SCALE: 3/4"=1'-0"



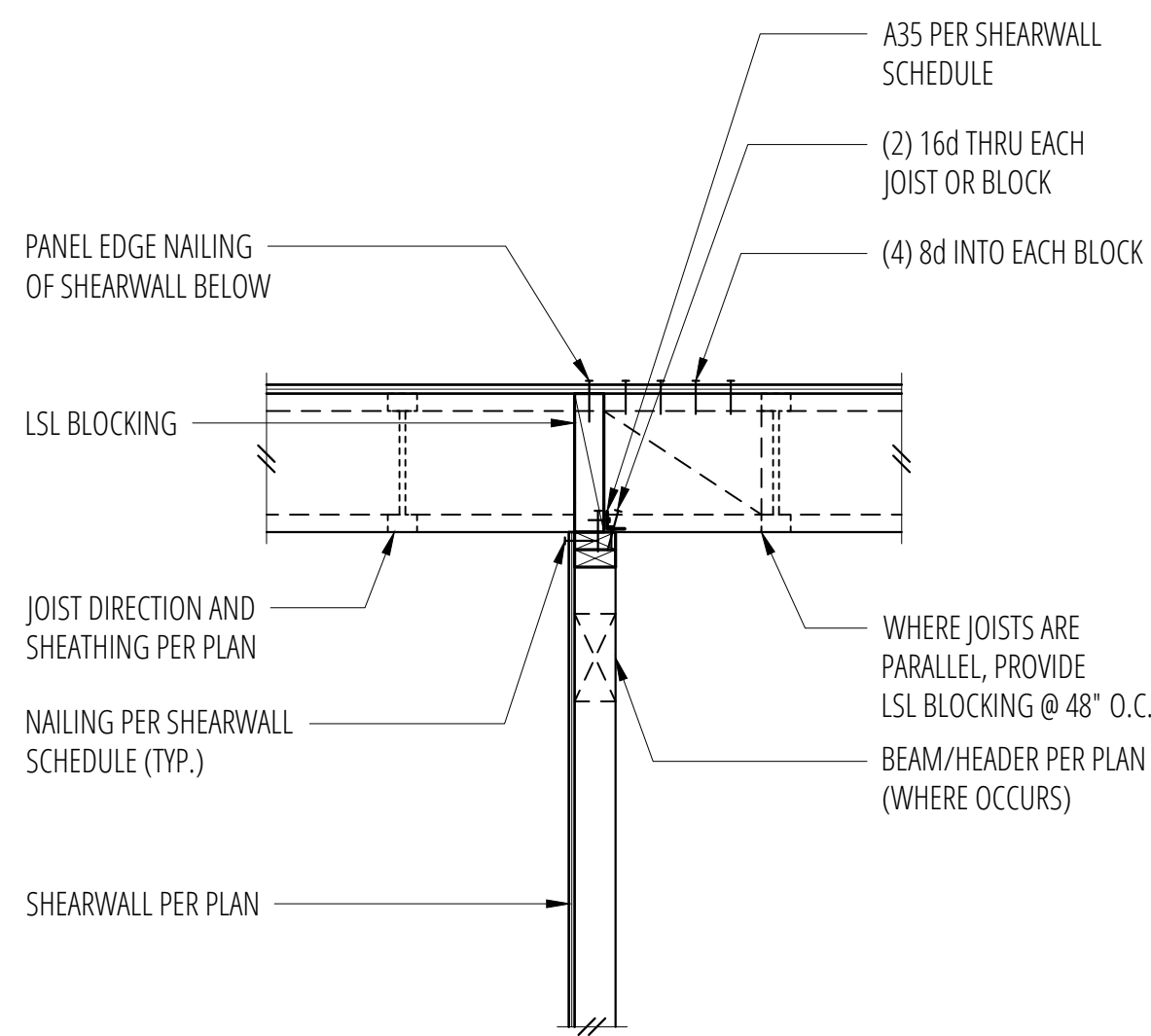
**7 Typical CS16 Holdown Strap**  
SCALE: 3/4"=1'-0"



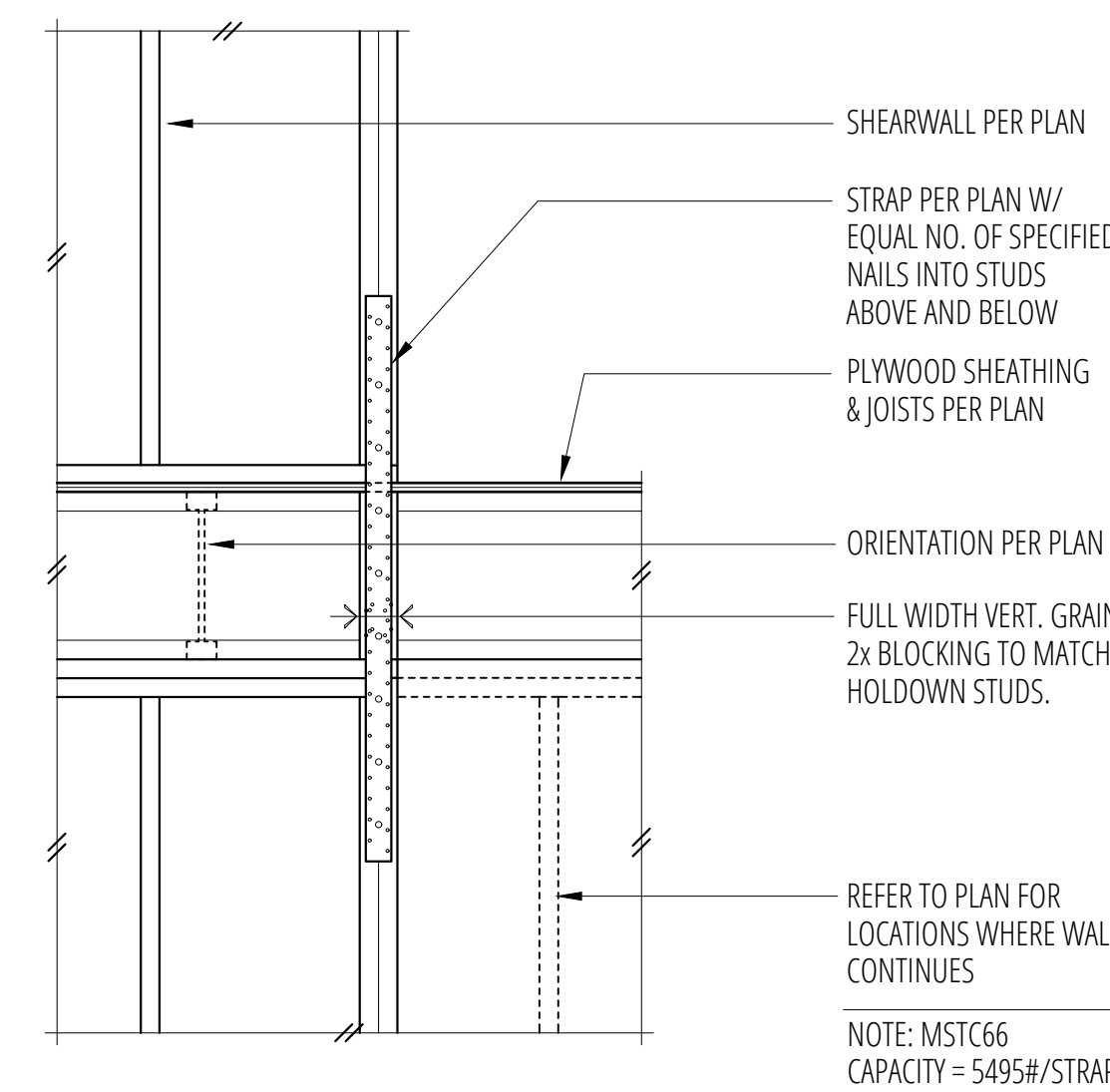
**8 Parallel Framing at Exterior Walls**  
SCALE: 3/4"=1'-0"



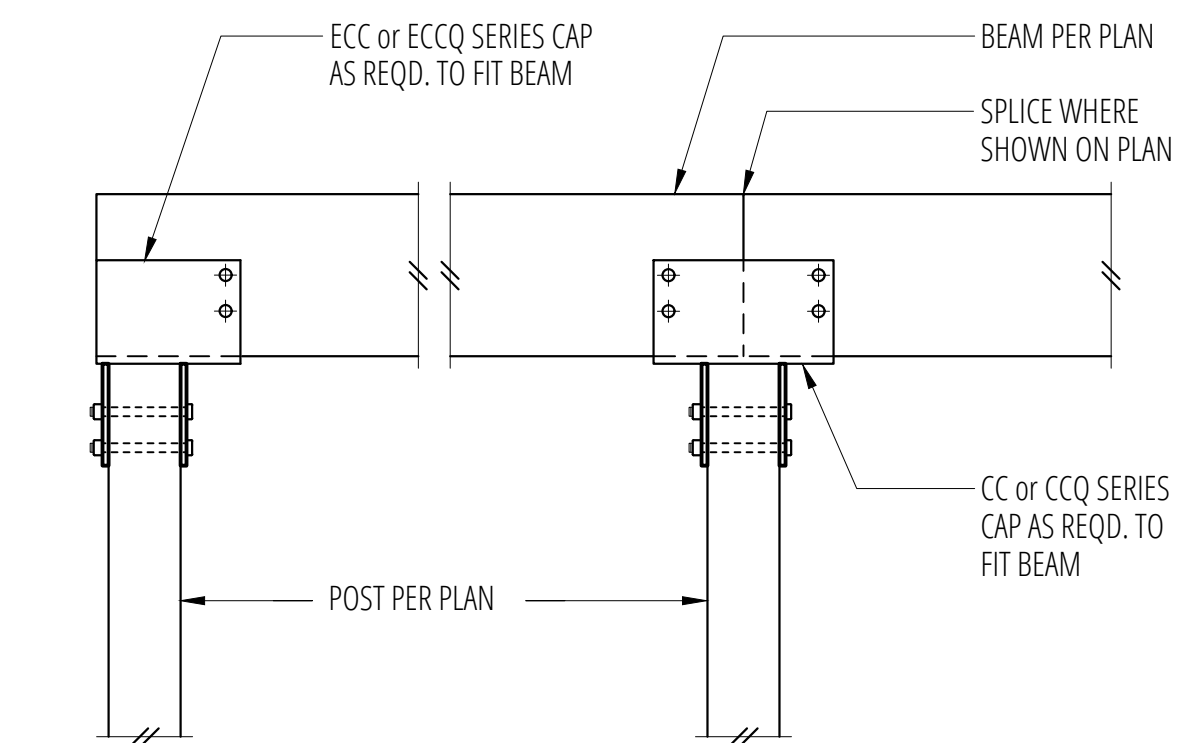
**9 Exterior Floor Framing at Deck**  
SCALE: 3/4"=1'-0"



**10 Interior Shearwall Below (w/TJI's)**  
SCALE: 3/4"=1'-0"



**11 Typical MST/MSTC Strap**  
SCALE: 3/4"=1'-0"



**12 CC/CCQ Series Connection**  
SCALE: 3/4"=1'-0"

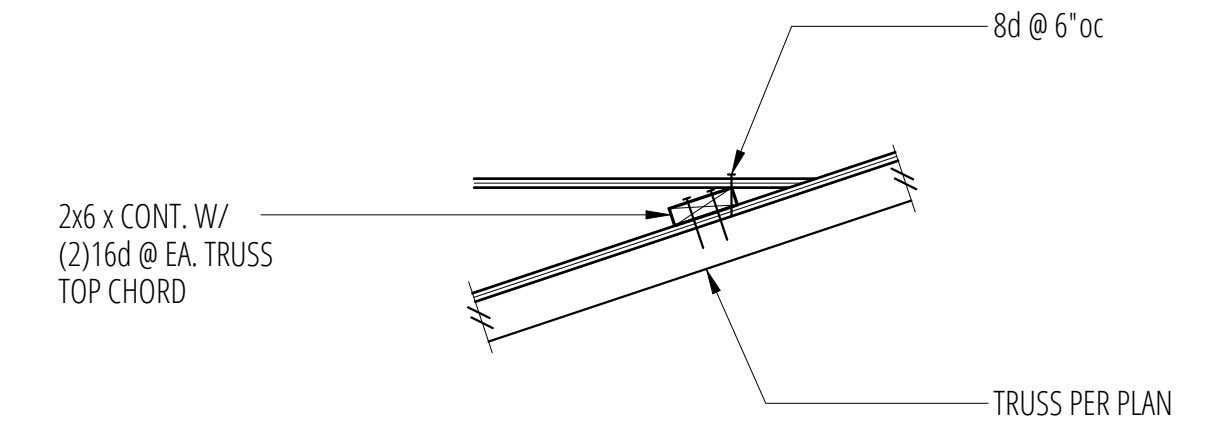
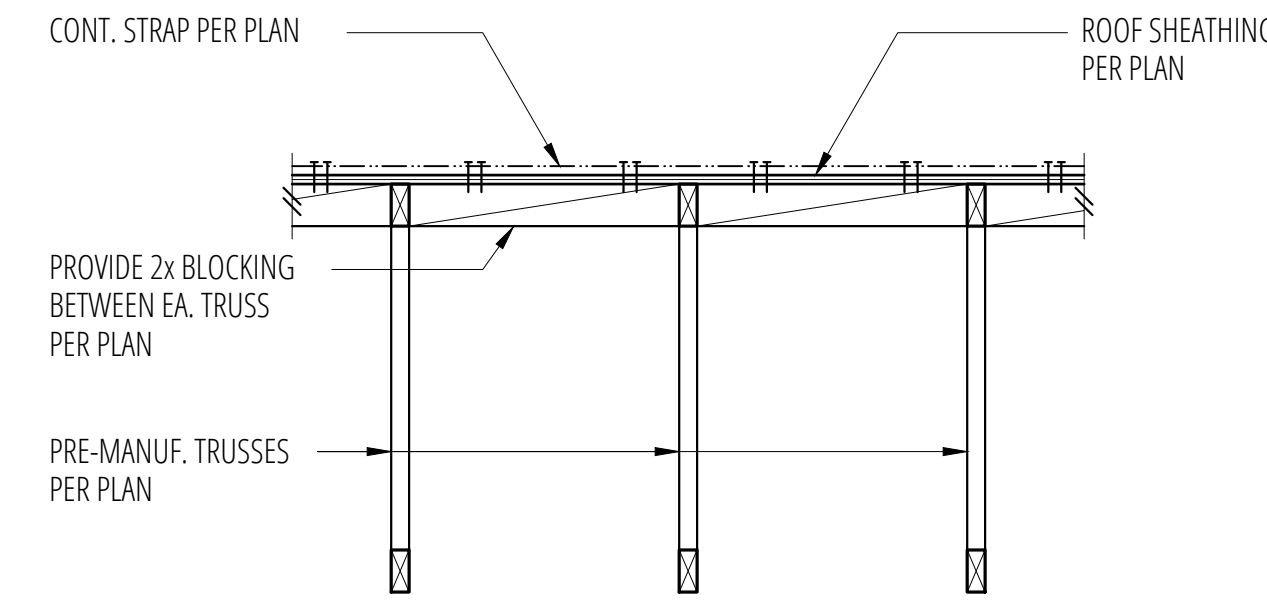
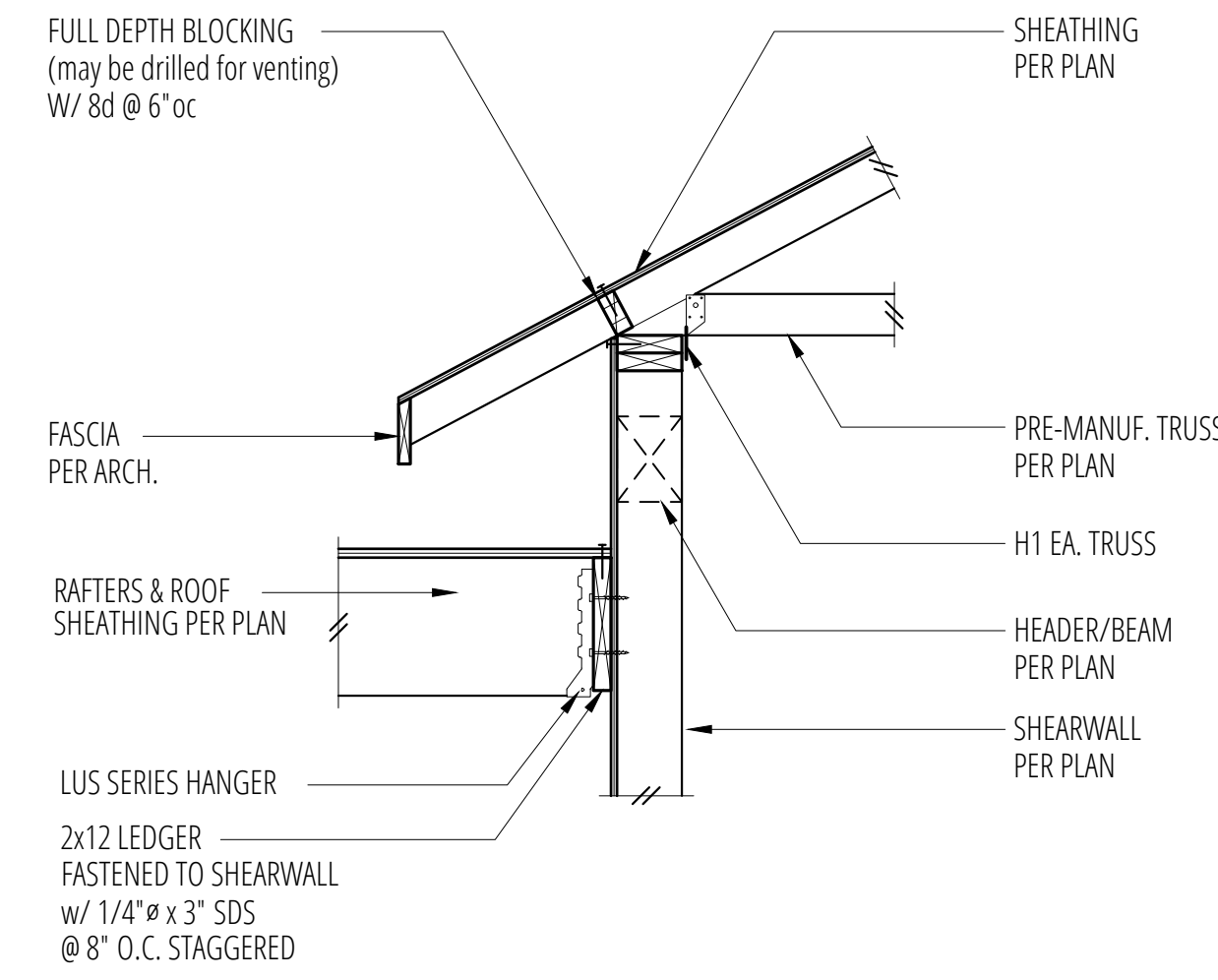
No.	Date	Issue
1/20/17	Partial Permit	

Sheet Contents

**Floor Framing Details**

Sheet No.



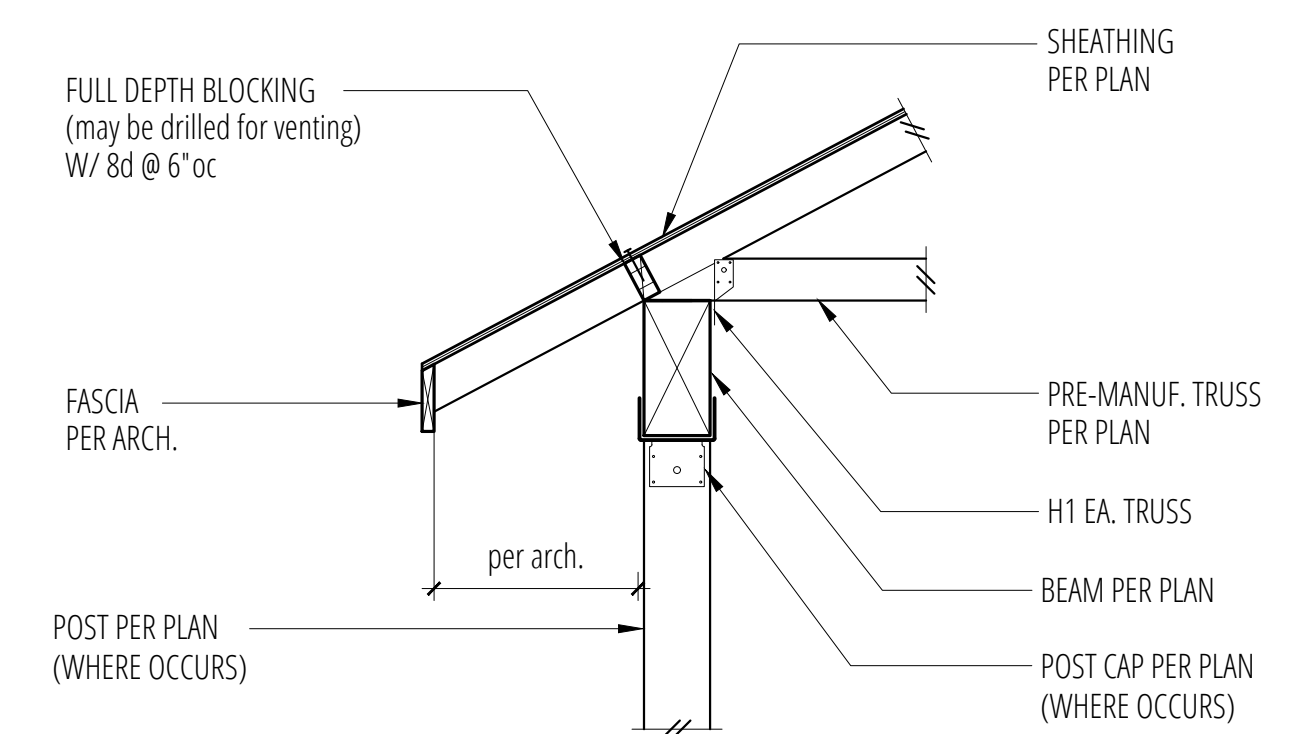
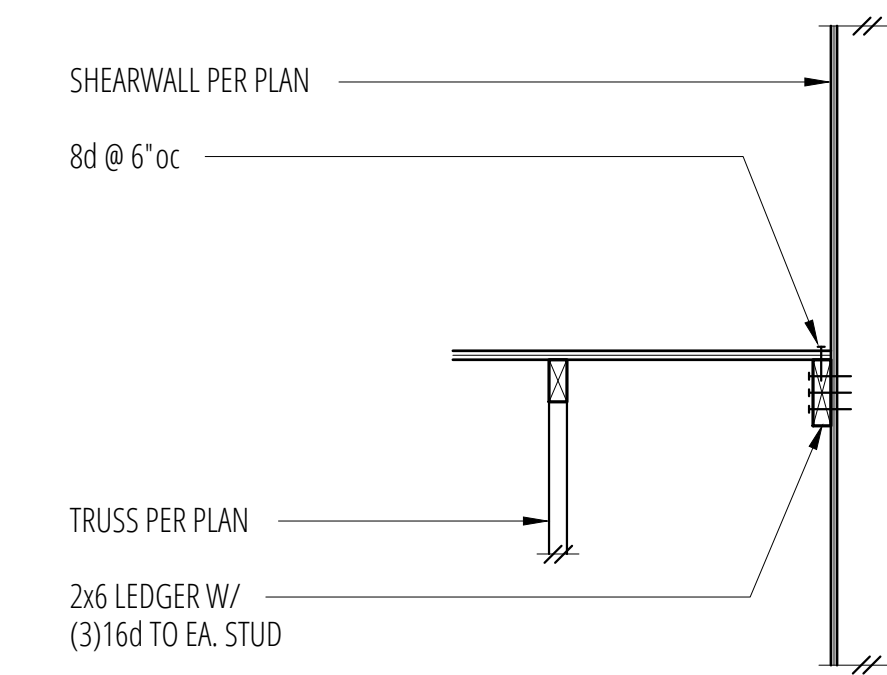
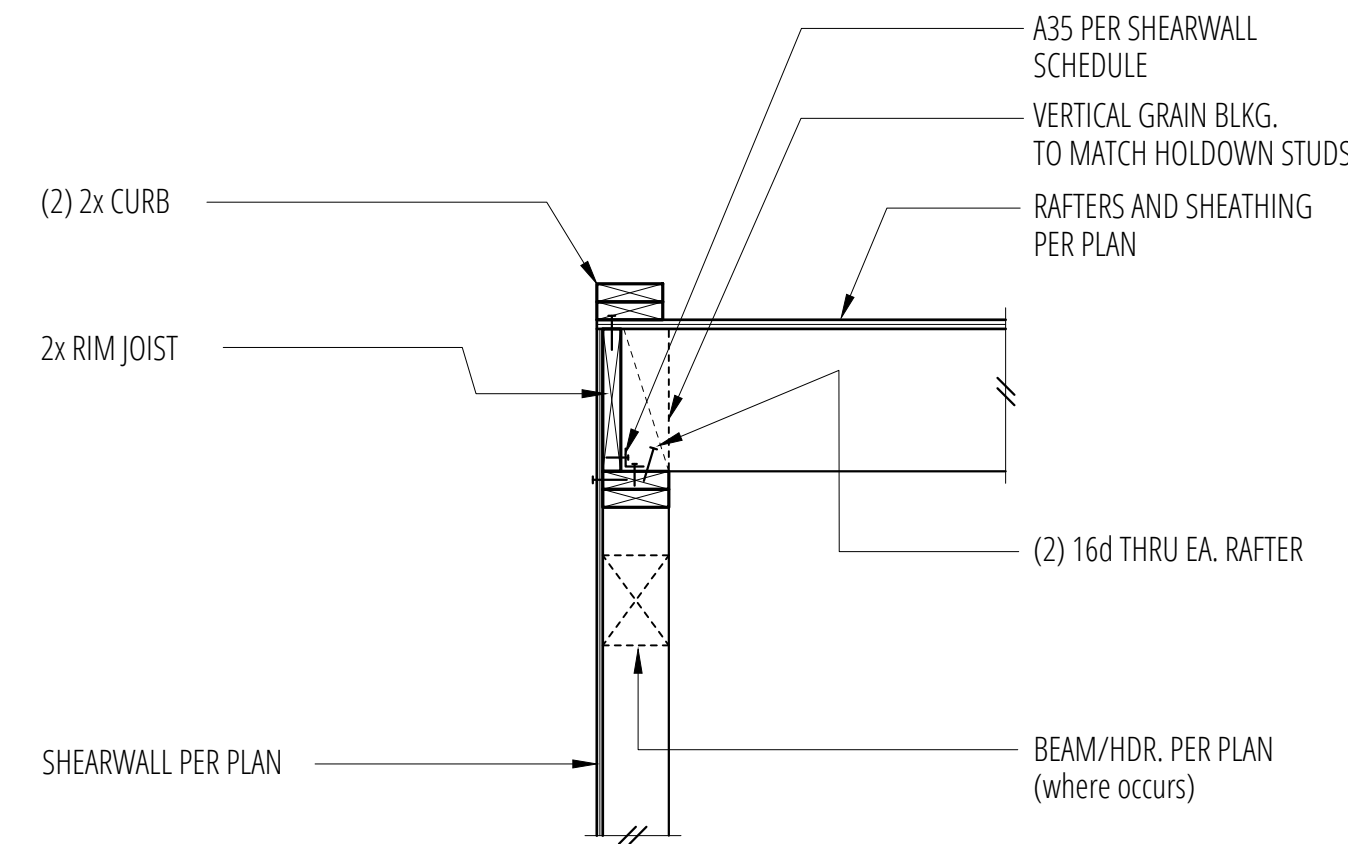


1 SCALE: 3/4"=1'-0"

2 Flat Roof at Exterior Wall SCALE: 3/4"=1'-0"

3 Truss Blocking with Strap SCALE: 3/4"=1'-0"

4 Overframing Connection SCALE: 3/4"=1'-0"

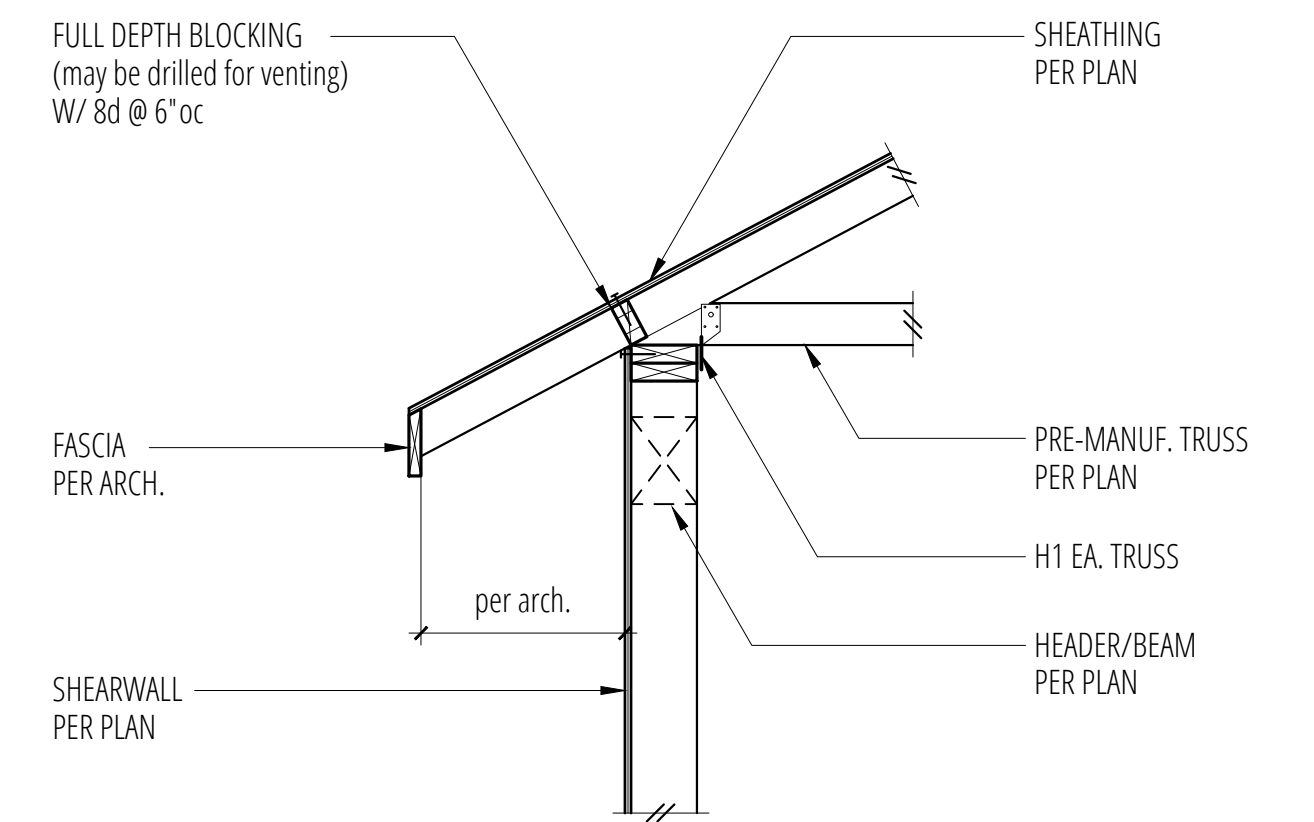
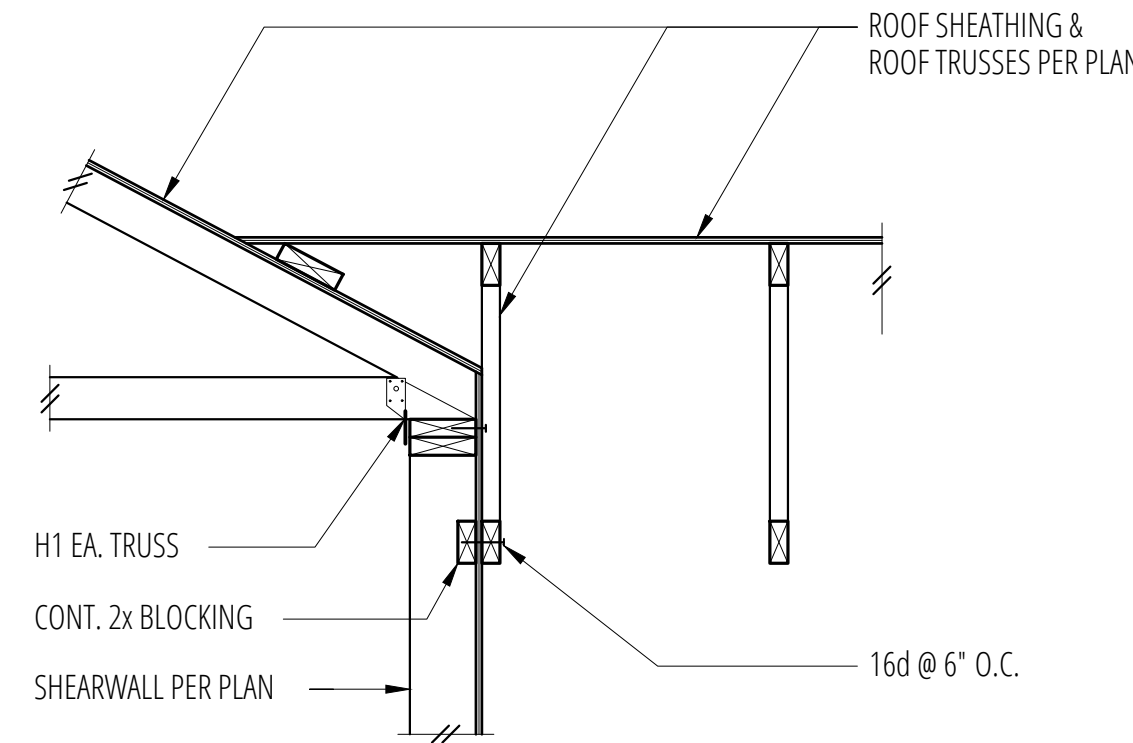
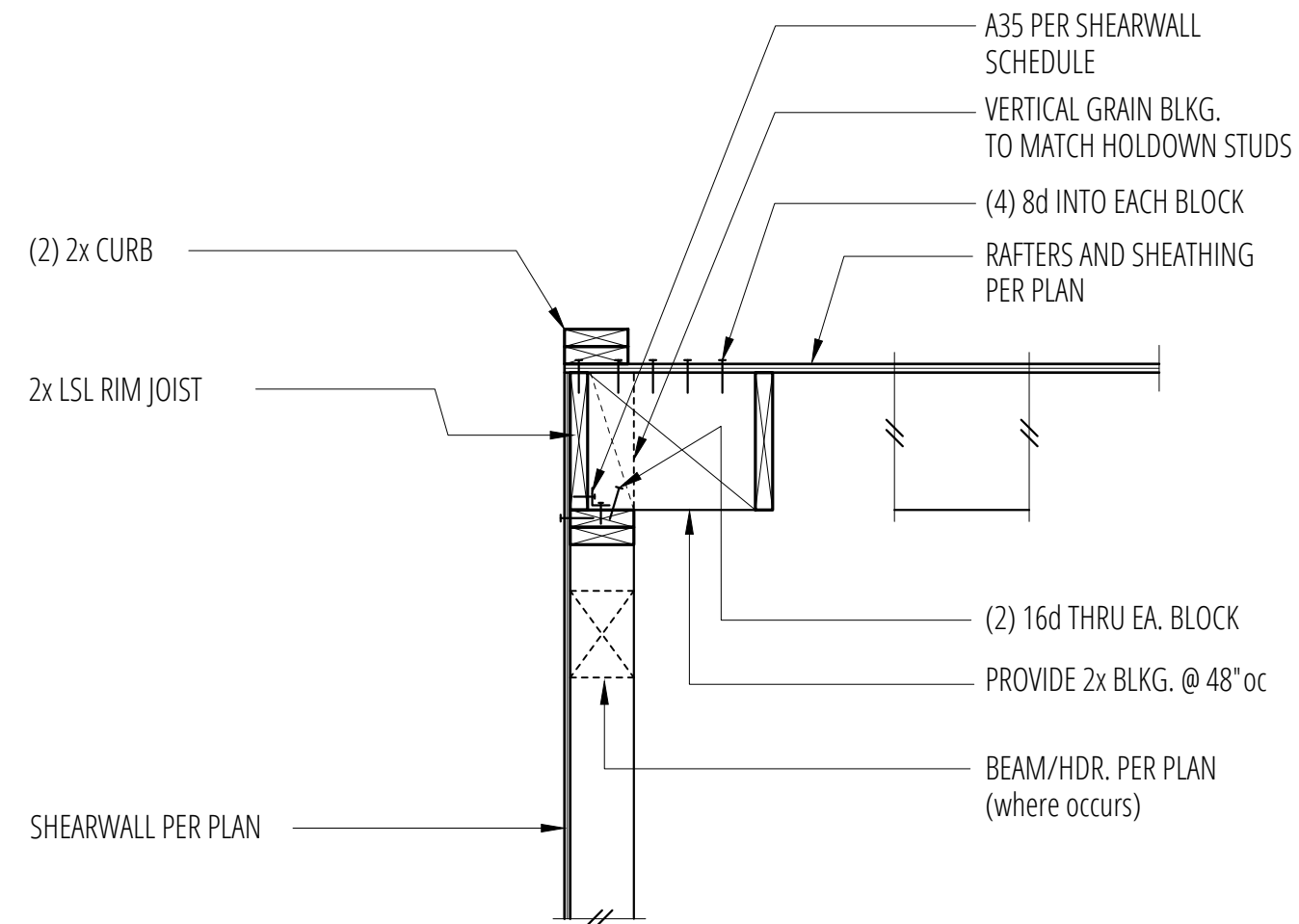


5 SCALE: 3/4"=1'-0"

6 Exterior Bearing Wall at Flat Roof SCALE: 3/4"=1'-0"

7 Trusses Parallel to Exterior Wall SCALE: 3/4"=1'-0"

8 Beam & Post at Roof SCALE: 3/4"=1'-0"



9 SCALE: 3/4"=1'-0"

10 Exterior Bearing Wall at Flat Roof SCALE: 3/4"=1'-0"

11 Change in Roof Height SCALE: 3/4"=1'-0"

12 Exterior Bearing Wall at Roof SCALE: 3/4"=1'-0"

Zheng Residence 3

8375 + 8383 E. Mercer Way  
Mercer Island, WA, 98040

No.	Date	Issue
1/20/17	Partial Permit	

Sheet Contents	
Roof Framing	Details

Sheet No.

**TREE TABLE** BY AMERICAN FOREST MANAGEMENT

**Tree Summary Table**  
 For: 8383 E Mercer Way  
 American Forest Management, Inc.  
 Date: 8/29/14  
 Inspector: Wilkinson

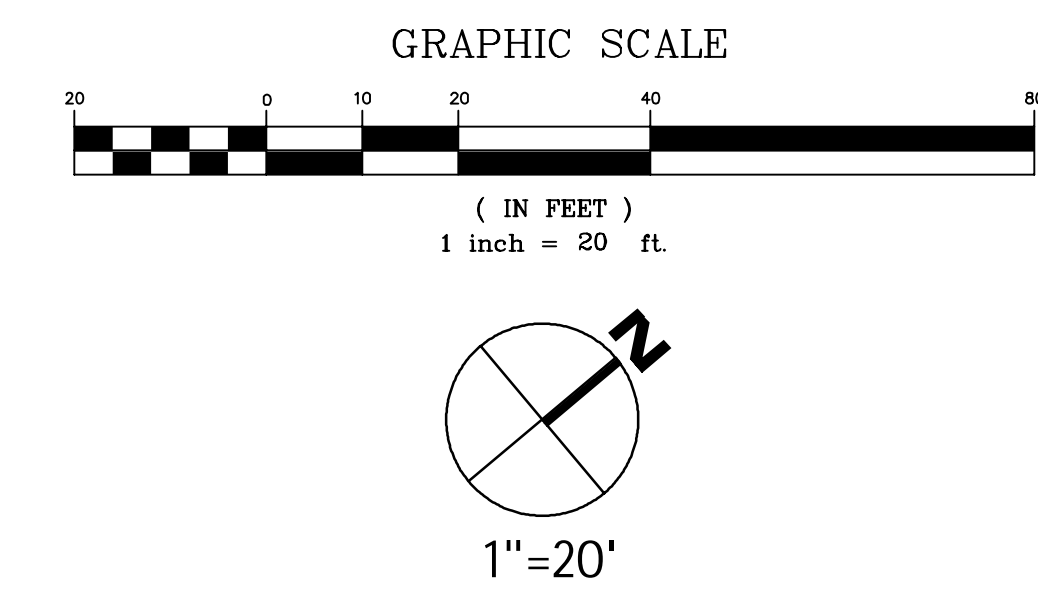
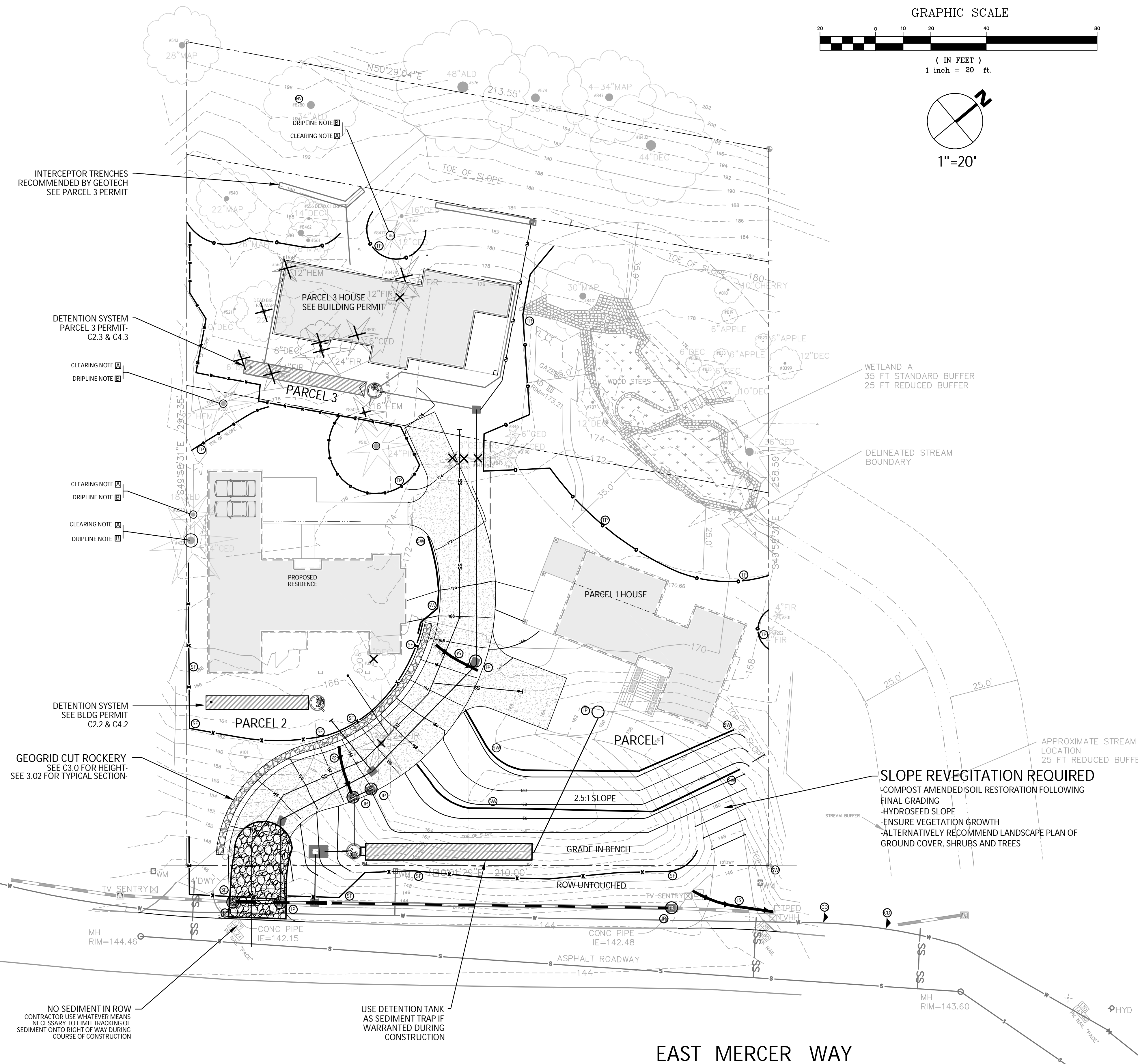
Tree/ Tag #	Species	DBH (inches)	Height (feet)	Drip-Line/Limits of Disturbance (feet)				Condition	Viability	Comments
				N	S	E	W			
8185	Douglas fir	26	85		17 / 12		15 / 12	good	viable	driveway is 12' south of tree, good taper, was crown thinned in the past
101	deciduous ornamental	5, 7	20	15 / 8	10 / 8	10 / 8	12 / 8	good	viable	forks at 2', was topped
8538	western red cedar	19	55	13 / 12			18 / 12	fair-poor	borderline	was topped in the past, lots of new leaders, pink ribbon - 507
422	western red cedar	9, 22	55	14 / 12			16 / 12	fair-poor	borderline	was topped in the past, lots of new leaders, pink ribbon - 722, co-dominant stem forks at 1'
508	western hemlock	22	75	22 / 15		23 / 15	13 / 15	fair	viable	hemlock woolly adelgid
518	deciduous	5						good	viable	
8467	sitka spruce	17	75	6 / 10	16 / 10	20 / 10	4 / 10	fair	viable	foliage dieback, co dominant stems fork at 40', minor bleeding on trunk
521	Washington hawthorne	9	52	12 / 6			12 / 6	fair	viable	suppressed
519	Douglas fir	22	125		14 / 12	11 / 12	6 / 12	good	viable	no concerns
520	European mountain ash	7	25	15 / 6	10 / 6	13 / 6		good	viable	co-dominant forks at 10'
8509	western hemlock	20	90	15 / 12	12 / 12	14 / 12	8 / 12	fair	viable	was crown thinned, poor form, spike knot
510	western white pine	22	95	12 / 12	18 / 12	15 / 10	12 / 12	fair	viable	was pruned
8510	western red cedar	17	75	11 / 10	12 / 10	5 / 10	11 / 10	fair	viable	ribbon - 841, 15 deg lean NW, lean self correcting
8464	western hemlock	12	88		10 / 8		2 / 8	fair	viable	ribbon - 535, covered in ivy, crown thinned
561	big leaf maple	19	90			12 / 10		fair	viable	ivy covering the trunk
8462	big leaf maple	18	90	5 / 10			18 / 10	fair	viable	ribbon - 560, forks at 1', dead co-dominant stem
540	big leaf maple	22	90	25 / 15	25 / 15	17 / 15	10 / 15	good	viable	some past branch failure, good form
328	deciduous	6, 6	12	8		10	5	fair	viable	
8280	red alder	25	95					poor	non-viable	ribbon - 548

Neighboring Trees

Tree/ Tag #	Species	DBH (inches)	Height (feet)	Drip-Line/Limits of Disturbance (feet)				Condition	Viability	Comments
				N	S	E	W			
8471	western red cedar	11	50	10 / 8	10 / 8	12 / 8	9 / 8	good	viable	ribbon - 542
8432	big leaf maple	38	100		38 / 20	35 / 20		fair	viable	ribbon - 837, leans SE, some dead branches
839	Pyramidalis arborvitae	5	25					fair	viable	
8497	Pyramidalis arborvitae	10	15					fair-poor	borderline	topped, co dominant stems, ribbon - 840
841	Pyramidalis arborvitae	6	28					fair	viable	
842	Pyramidalis arborvitae	6	30					fair	viable	
843	Pyramidalis arborvitae	6	30					fair	viable	
8498	Pyramidalis arborvitae	7	30					fair	viable	ribbon - 844
845	Pyramidalis arborvitae	6	35					fair	viable	
846	Pyramidalis arborvitae	7	35					fair	viable	
564	Douglas-fir	13	92		7 / 8	10 / 8	4 / 8	good	viable	good taper
8470	Douglas-fir	18	95	12 / 8		12 / 8	6 / 8	good	viable	ribbon - 563, good taper
562	western red cedar	18	85	11 / 10	25 / 10	15 / 12	5 / 10	good	viable	no concerns
8401	big leaf maple	36	95	20 / 18	25 / 10	29 / 10	26 / 18	fair	viable	ribbon - 845, some past branch failures, pond is adjacent and SE
787	cherry	13	18					poor	non-viable	growths
8100	deciduous	8	22	4 / 4	15 / 4	4 / 4		fair-poor	borderline	ribbon - 834, leans south, foliage discoloration
835	fruit	5, 2	20	5 / 4	4 / 4	8 / 4		fair	viable	
833	apple	6	18	5 / 4	2 / 4	4 / 4	4 / 4	fair	viable	
819	fruit tree	5, 3	15	4 / 4	10 / 4	5 / 4	5 / 4	fair	viable	
818	cherry	9	22			10 / 8		fair	viable	cherry gummosis, heavy pruning
820	fruit tree	5, 2	12	2 / 4	8 / 4	4 / 4	6 / 4	fair	viable	pruned
798	western red cedar	26	70	10 / 12	15 / 12		18 / 12	fair	viable	growing on a stump, picture

Neighboring Trees

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

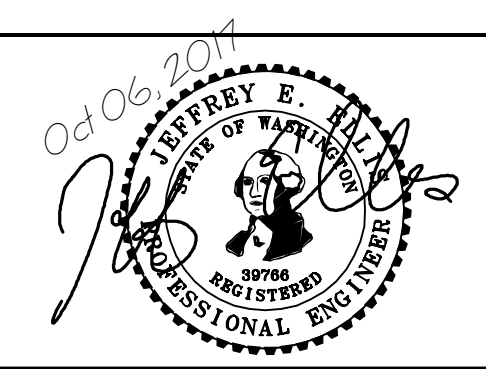


NO.	DATE	BY	REVISIONS

APPLICANT  
 New Horizon Real Estate  
 Development  
 8744 126th Ave NE  
 Kirkland, WA 98033



DATE: Oct 06, 2017  
 JOB# 1337  
 DRAFTED: CH DESIGN: DE  
 DIGITAL SIGNATURE



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

**EROSION CONTROL PLAN**  
 SITE DEVELOPMENT & PARCELS 1-3  
 New Horizon Real Estate Development  
 8375 AND 8383 EAST MERCER WAY  
 MERCER ISLAND, WA 98040

DRAWING NO:  
**C1.0**  
 APN 032110-0145  
 & 032110-0140

**SANITARY SEWER IMPROVEMENTS**

- ① -
- ② - 6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0%.
- ③ -
- ④ - 6" SEWER CLEANOUT
- ⑦ -
- ⑧ -

**WATER IMPROVEMENTS**

- ⑩ -
- ⑪ - WATER SERVICE FROM METER TO HOUSE. CONFIRM DIAMETER WITH FIRE SPRINKLER DESIGNER. USE 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 1% GRADE.
- ㉑ 4" FOUNDATION DRAIN (3034 PVC) @ MIN 1% GRADE.
- ㉒ 6" STORM DRAIN (3034 PVC) @ MIN 1% GRADE.
- ㉓ -
- ㉔ -
- ㉕ -
- ㉖ -

**STORM DRAIN STRUCTURES**

- ㉗ -
- ㉘ -
- ㉙ - TYPE 1 CB WITH SOLID LID
- ㉚ -
- ㉛ -
- ㉜ -
- ㉝ -
- ㉞ - DURASLOPE CHANNEL / TRENCH DRAIN OR EQUAL: MIN 6" DEEP CHANNEL.
- ㉟ -
- ㊱ -
- ㊲ - 54" ID TYPE 2 MH CONTROL STRUCTURE WITH SOLID LID. SEE ALL DETAILS AND PROFILE C4.0.
- ㊳ -
- ㊴ -
- ㊵ -
- ㊶ -
- ㊷ - DETENTION PIPE: ALUMINIZED CMP @ 0.5% GRADE. SEE PLAN FOR SIZE AND CONFIGURATION. SEE PROFILE, NOTES, AND DETAILS ON C4.0.

**☐ CLEARING LIMIT NOTE**

ALL SELECTIVE CLEARING, TRENCHING AND OTHER WORK WITHIN THE DRIPLINES OF SIGNIFICANT TREES SHALL BE BY LOW IMPACT/HAND METHODS ONLY AND WORK SHALL BE ADJUSTED AS POSSIBLE TO MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED TREES AND PROTECTED UNDERSTORY. CONSTRUCTION MATERIALS AND VEHICLES SHALL NOT BE STORED OUTSIDE THE CLEARING LIMITS.

**☐ TREE DRIPLINE NOTE**

WORK WITHIN THE DRIPLINE OF TREES TO BE SAVED MUST BE UNDER THE DIRECTION OF A CERTIFIED ARBORIST (TP). SEE ALSO CLEARING LIMIT NOTE ON THIS SHEET.

**SURVEYOR**

TOPOGRAPHIC SURVEY BY:  
TERRANE LAND SURVEYING  
(FORMERLY GEODIMENSIONS)  
10801 MAIN STREET, SUITE 102  
BELLEVUE, WA 98004  
PHONE 425.458.4488  
WWW.TERRANE.NET

**LEGAL DESCRIPTION**

SEE SURVEY

**BASIS OF BEARINGS**

PER PLAT

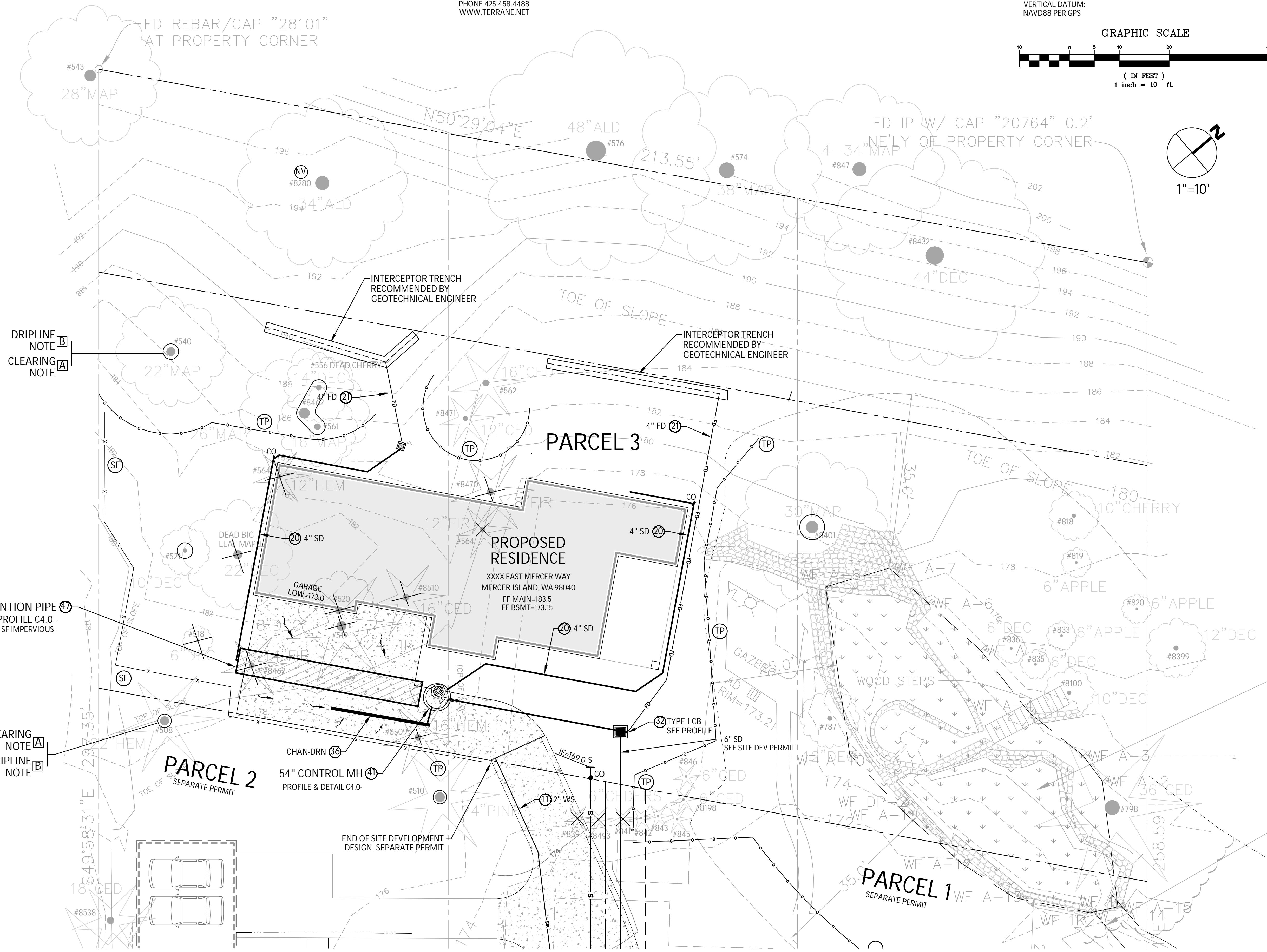
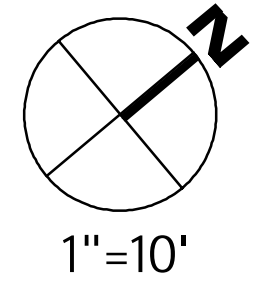
**VERTICAL DATUM**

VERTICAL DATUM:  
NAVD88 PER GPS

**GRAPHIC SCALE**



( IN FEET )  
1 inch = 10 ft.

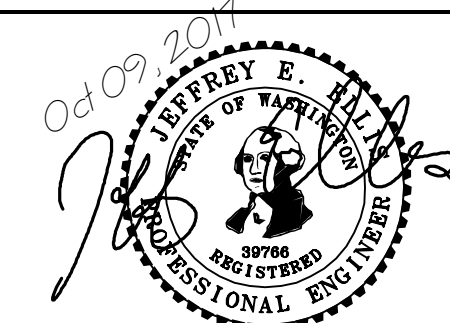


NO.	DATE	BY	REVISIONS

APPLICANT  
New Horizon Real Estate  
Development  
8744 126th Ave NE  
Kirkland, WA 98033



DATE: Oct 09, 2017  
JOB# 1337  
DRAFTED: CH DESIGN: DE  
DIGITAL SIGNATURE



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

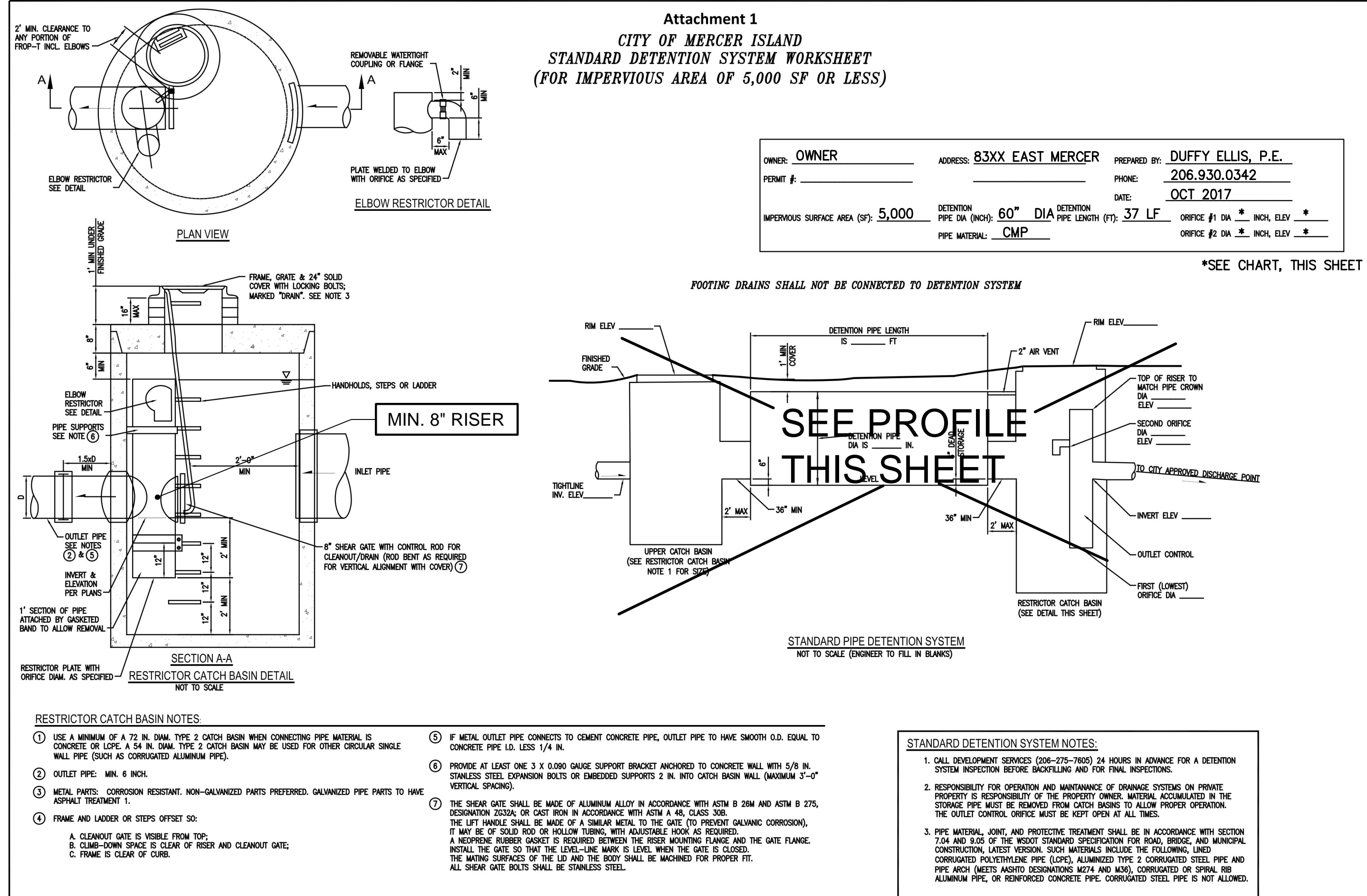
**DRAINAGE PLAN  
PARCEL 3**

New Horizon Real Estate Development  
8375 AND 8383 EAST MERCER WAY  
MERCER ISLAND, WA 98040

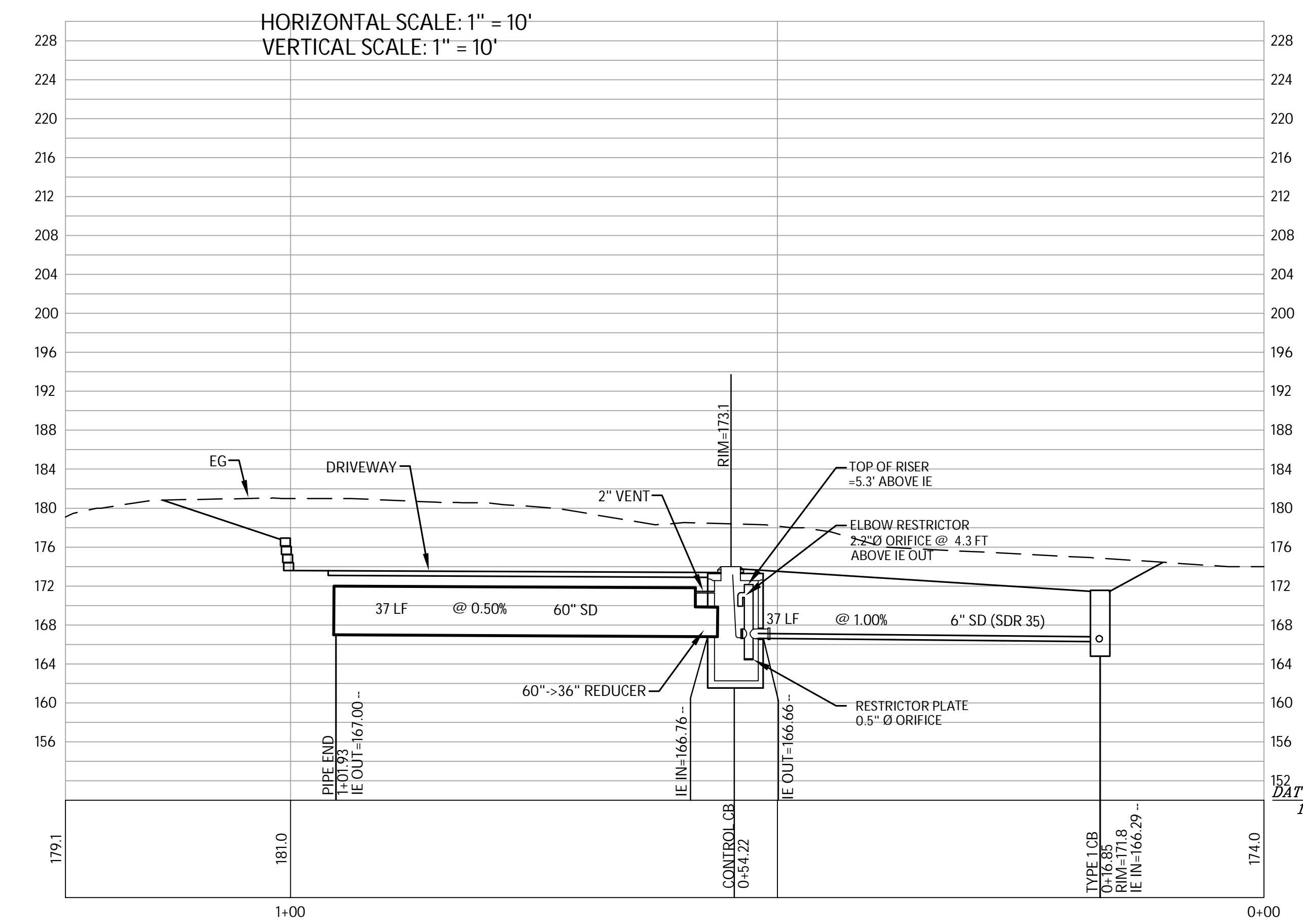
DRAWING NO:  
**C2.3**

APN 032110-0145  
& 032110-0140

MERCER ISLAND DETENTION DETAIL



DETENTION PROFILE PARCEL 3



PARCEL 3 IMPERVIOUS TABLE

Impervious Area Spreadsheet	
Parcel 3, East Mercer	
Gross Site area	17,511 sf
	0.402 acres
Existing Impervious Area	
Ex House	- sf
Ex driveway, on-site	- sf
<b>total existing =</b>	<b>0 sf</b>
Proposed Impervious Area (on-site)	
Roof	2,805 sf
Exposed, on-site driveway	940 sf
<b>total on-site proposed =</b>	<b>3,745 sf</b>
<b>total on-site new + replaced =</b>	<b>3,745 sf</b>
Proposed Impervious Area (off-site)	
New Driveway	- sf
<b>total off-site proposed =</b>	<b>0 sf</b>
<b>total proposed =</b>	<b>3,745</b> Size detention

oversized at 5,000 sf sizing. Will downsize if project truly is below 4,000 sf at 2nd submittal.

MERCER ISLAND DETENTION "TABLE 2"

TABLE 2 - STANDARD DETENTION PIPE DESIGN FOR PROJECTS BETWEEN 500 SF AND 5,000 SF IMPERVIOUS AREA (WITH 120% CORRECTION FACTOR)

Soil Type*	New Impervious Area (sf)														
	500 to 1,000 sf			1,001 to 2,000 sf			2,001 to 3,000 sf			3,001 to 4,000 sf			4,001 to 5,000 sf		
	Detention Pipe Size (in.) and Length (ft)			Detention Pipe Size (in.) and Length (ft)			Detention Pipe Size (in.) and Length (ft)			Detention Pipe Size (in.) and Length (ft)			Detention Pipe Size (in.) and Length (ft)		
B	36"	48"	60"	36"	48"	60"	36"	48"	60"	36"	48"	60"	36"	48"	60"
C	30	18	11	66	34	22	90	48	30	120	62	42	186	90	48
	22	11	7	43	23	14	66	36	20	78	42	26	132	60	37

\*Minimum diameter = 0.5 inches  
 \* Geotechnical Analysis Required  
 Basis of Sizing Assumptions:  
 - Based on the Stormwater Management Manual for Puget Sound Basin (1992 Manual)  
 - Converting 2nd growth forest to impervious  
 - Assumes 0.5 foot sediment storage in detention pipe  
 - Moderate slope  
 - Includes Volume Correction Factor, assuming 120% safety factor

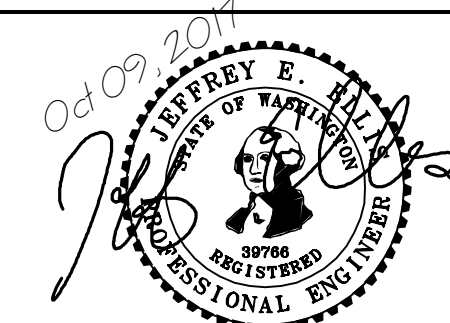
CONTROL STRUCTURE SIZING

NO.	DATE	BY	REVISIONS

APPLICANT  
 New Horizon Real Estate  
 Development  
 8744 126th Ave NE  
 Kirkland, WA 98033



DATE: Oct 09, 2017  
 JOB# 1337  
 DRAFTED: DE DESIGN: DE  
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CIVIL ENGINEERING SOLUTIONS  
 102 NW CANAL STREET SEATTLE, WA 98107  
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.WA

DETENTION PROFILE AND DETAIL  
 PARCEL 3  
 New Horizon Real Estate Development  
 8375 AND 8383 EAST MERCER WAY  
 MERCER ISLAND, WA 98040

DRAWING NO:  
**C4.3**  
 APN 032110-0145  
 & 032110-0140