PROJECT TEAM

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SURVEYOR
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PROPERTY DATA

PROJECT ADDRESS
4041 West Mercer Way
Mercer Island, WA 98040

LOT AREA
0.48 acres (20,812 square feet)

ASSESSOR'S TAX NUMBER
362350-0387

LEGAL DESCRIPTION
ISLAND PARK REPLAT OF "LOT 3" TGW UND INT IN TRACTS 'A & B' TGW UND INT IN NWLY 10.00 FT OF NELY 203.00 FT OF SELY 1/2 OF LOT 5 MERCER ISLAND SHORT PLAT NO SUB05-006 REC NO 20070726900003 SD SHORT PLAT DAF-- LOT 4 AND THE NWLY 1/2 OF LOT 5 IN BLOCK C OF REPLAT OF ISLAND PARK PLAT

ZONING DESIGNATION
Residential (R-15)

SETBACKS (MICC 19.02.020C.iii)
Side (North) setback: 10'
Front (East) setback: 10' from existing retaining wall (Vested per 2005 plat permit)
Side (South) setback: 5' (Vested per 2005 plat permit setback lines)
Rear (West) setback: See **1/A-1.2** for shoreline setbacks

BUILDING HEIGHT LIMIT
30'-0" ON DOWNHILL SIDE FROM EXISTING OR FINISHED GRADE TO TOP PLATE OF ROOF, WITH ROOF RIDGE NOT EXCEEDING 30' ABOVE THE AVERAGE BUILDING ELEVATION.

30' ABOVE THE A.B.E. (28.55') = 58.55' ABOVE SEA LEVEL

SEE **3/A-1.0** FOR A.B.E. CALCULATIONS AND HEIGHT LIMIT DETERMINATION.

LOT SLOPE
HIGHEST ELEVATION POINT OF LOT 122' ABOVE SEA LEVEL
LOWEST ELEVATION POINT OF LOT 18.5' ABOVE SEA LEVEL
ELEVATION DIFFERENCE 103.5'
HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS 253.6'
LOT SLOPE: 103.5' / 253.6' = 40.81%

LOT COVERAGE
See **1/A-1.2** for Lot Coverage Diagram + Lot Coverage Calculations (MICC 19.02.060)

SHORELINE SETBACKS
See **1/A-1.2** for Shoreline Setback Impervious Coverage

CONSTRUCTION DATA

SCOPE OF WORK
- Construction of new single family residence with attached garage.
- Construction of new driveway, site walls and exterior stair.
- Project team to develop and implement sustainable technologies and building practices.

AREA SUMMARY

Floor Area
- Main Floor (including Mechanical) 1,823ft²
- Lower Floor (including Mechanical) 2,686ft²
- **Total Conditioned Floor Areas 4,509ft²**
- Unconditioned Garage (inc. Storage) 538ft²
- Covered Terrace 325ft²
- **Total Conditioned & Uncond. Area 5,372ft²**

Roof Area
- Non-vegetated Roof 2,686ft²
- Vegetated Roof 0ft²
- **Total Roof Area 2,686ft²**

LOT COVERAGE CALCULATIONS

MICC 19.02.060
- Gross Lot Area (0.48 Acres) 20,812ft²
- Net Lot Area (-614ft² shared road) 20,198ft²
- Main Structure Roof Area 2,686ft²
- Vehicular Use 2,551ft²
- **Total Lot Coverage 5,328ft²**

- Allowable Lot Coverage (30%-50% slope) 30%
- Proposed Lot Coverage (5,328/20,198) 26.38%

GFA CALCULATIONS

MICC 19.02.020D
- Gross Lot Area (0.48 Acres) 20,812ft²
- Allowed GFA (R-15, 40%) 8,324.8ft²
- Upper Floor GFA (150% GFA Mod) 2,735ft²
- Main (Lower) Floor 2,686ft²
- **Total Proposed GFA 5,959ft²**

ENERGY DATA

ENERGY CODE COMPLIANCE

PRESCRIPTIVE COMPLIANCE INSULATION & FENESTRATION REQUIREMENTS (2015 WASHINGTON STATE ENERGY CODE)

CLIMATE ZONE 4C

THE BUILDER SHALL COMPLETE AND POST AN "INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION" WITHIN THREE (3) FEET OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION PER SEC R401.3

PROVIDE MINIMUM BUILDING THERMAL ENVELOPE OR BETTER PER SECTION R402

MINIMUM INSULATION R-VALUES

CEILING	49
VAULTED CEILING	38
WOOD-FRAMED WALL	21 INT.
MASS WALL	21/21
FLOOR	30
BELOW-GRADE WALL	21 INT.
SLAB	10
WINDOW & DOOR HEADER	10

MINIMUM INSULATION U-FACTORS

FENESTRATION	0.30
SKYLIGHT	0.30

VENTILATION DATA

SYSTEM CRITERIA
PER 2015 IRC TABLE M1507.3.3 (1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS: PROVIDE 135 CFM AIRFLOW .

PER 2015 IRC TABLE M1507.3.3 (2) INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS, RUN TIME % IN EACH 4-HOUR SEGMENT TO BE 75% WITH A FACTOR OF 1.3: 135 CFM X 1.3 = 175.5 CFM

MINIMUM OF .35 AIR EXCHANGES PER HOUR FOR ALL HABITABLE ROOMS.
MAXIMUM OF .50 AIR EXCHANGES PER HOUR FOR ALL HABITABLE ROOMS.

SYSTEM COMPONENTS
- TIMER
- INTAKE GRILL & DUCTING (FROM EXTERIOR)
- MOTORIZED DAMPER
- ELECTRIC AIR TEMPERING UNIT
- INTAKE BLOWER
- DISTRIBUTION DUCTING (HABITABLE ROOMS)
- DISTRIBUTION GRILLS (HABITABLE ROOMS)
- ELECTRIC EXHAUST FAN
- EXHAUST DUCTING
- EXHAUST PORT WITH BACK DRAFT DAMPER

SYSTEM FUNCTION
INTAKE BLOWER, AIR TEMPERING UNIT, AND EXHAUST FAN TO BE CONNECTED TO TIMER FOR SYNCHRONIZED, INTERMITTENT USE THROUGHOUT EACH DAY. FRESH AIR FROM THE EXTERIOR IS PULLED THROUGH AIR TEMPERING UNIT, THEN DISTRIBUTED THROUGH DUCTING TO ALL HABITABLE ROOMS. A BALANCED QUANTITY OF AIR IS SIMULTANEOUSLY EVACUATED FROM THE INTERIOR VIA THE EXHAUST FAN DUCTED TO THE EXTERIOR.

FIRE PROTECTION DATA

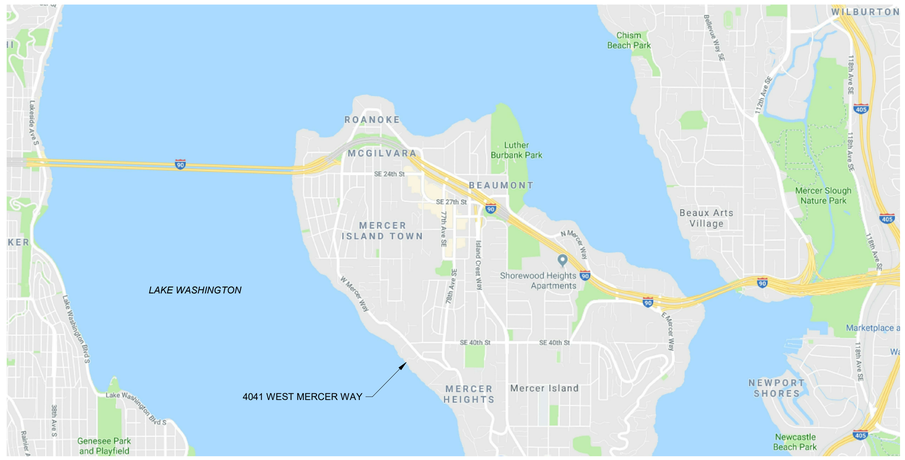
PROVIDE AUTOMATIC SPRINKLER PROTECTION IN ACCORDANCE WITH NFPA 13D FOR SINGLE FAMILY RESIDENCE

EGRESS, SEPARATION, FIRE PROTECTION SYSTEMS AND EMERGENCY ACCESS SHALL MEET THE REQUIREMENTS OF 2015 INTERNATIONAL FIRE CODE

AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND SLEEPING UNITS, PER SECTION R315.

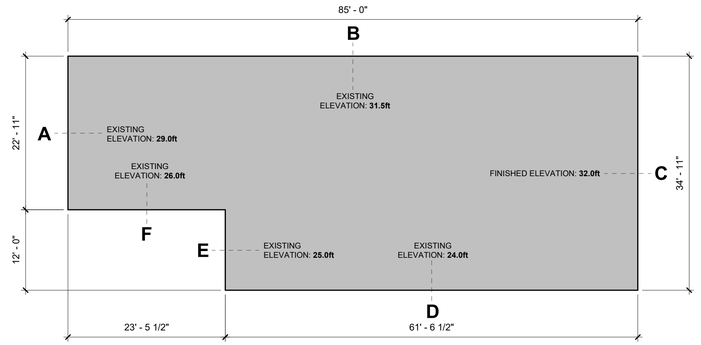
NOTE: WHEN MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE UNIT.

SHEET INDEX



1 LOCATION MAP
NOT TO SCALE

2 VICINITY MAP
NOT TO SCALE



AVERAGE BUILDING ELEVATION (per MERCER ISLAND CITY CODE **19.02.020.E**) = (**WEIGHTED SUM OF WALL MID-POINT ELEVATIONS**) / (**TOTAL LENGTH OF WALL SEGMENTS**)

[**WEIGHTED SUM** = SUM OF: (MID-POINT ELEVATION OF EACH INDIVIDUAL WALL SEGMENT) x (LENGTH OF EACH INDIVIDUAL WALL SEGMENT)]

or **(A x a) + (B x b) + (C x c) + (D x d) + (E x e) + (F x f) / (a + b + c + d + e + f)**

- WEIGHTED SUM CALCULATION: (**WALL A** = 29 x 22.92) + (**WALL B** = 31.5 x 85) + (**WALL C** = 32 x 34.92) + (**WALL D** = 24.0 x 61.54) + (**WALL E** = 25 x 12) + (**WALL F** = 26 x 23.46) = **6815.77**
- TOTAL LENGTH OF WALL SEGMENTS: 22.92ft + 85ft + 34.92ft + 61.54ft + 12ft + 23.46ft = **239.84ft**
- AVG. BUILDING ELEVATION CALCULATION: 6846.54 / 239.84 = **28.55ft**

3 AVERAGE BUILDING ELEVATION CALCULATION
NOT TO SCALE

ENERGY CODE CREDITS

MEDIUM DWELLING UNIT (<5000 ft²): 3.5 CREDITS REQUIRED

OPTION	DESCRIPTION
3A	HIGH EFFICIENCY HVAC EQUIPMENT: GAS, PROPANE OR OIL-FIRED FURNACE WITH MINIMUM AFUE OF 94 OR GAS, PROPANE OR OIL-FIRED BOILER WITH MINIMUM AFUE OF 92% TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE HEATING EQUIPMENT TYPE AND THE MINIMUM EQUIPMENT EFFICIENCY. **1.0 CREDIT**

OPTION	DESCRIPTION
4	HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM: ALL HEATING AND COOLING SYSTEM COMPONENTS INSTALLED INSIDE CONDITIONED SPACE. THIS INCLUDES ALL EQUIPMENT AND DISTRIBUTION SYSTEM COMPONENTS SUCH AS FORCED AIR DUCTS, HYDRONIC PIPING, HYDRONIC FLOOR HEATING LOOP, CONVECTORS AND RADIATORS. ALL COMBUSTION EQUIPMENT SHALL BE DIRECT VENT OR SEALED COMBUSTION. FOR FORCED AIR DUCTS: A MAXIMUM OF 10 LINEAR FEET OF RETURN DUCTS AND 5 LINEAR FEET OF SUPPLY DUCTS MAY BE LOCATED OUTSIDE THE CONDITIONED SPACE. ALL METALLIC DUCTS LOCATED OUTSIDE THE CONDITIONED SPACE MUST HAVE BOTH TRANSVERSE AND LONGITUDINAL JOINTS SEALED WITH MASTIC. IF FLEX DUCTS ARE USED, THEY CANNOT CONTAIN SPLICES. FLEX DUCT CONNECTIONS MUST BE MADE WITH NYLON STRAPS AND INSTALLED USING A PLASTIC STRAPPING TENSIONING TOOL. DUCTS LOCATED OUTSIDE THE CONDITIONED SPACE MUST BE INSULATED TO A MINIMUM OF R-8. LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION. TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE HEATING EQUIPMENT TYPE AND SHALL SHOW THE LOCATION OF THE HEATING AND COOLING EQUIPMENT AND ALL THE DUCTWORK. **1.0 CREDIT**

OPTION	DESCRIPTION
5C	EFFICIENT WATER HEATING: GAS, PROPANE OR OIL WATER HEATER WITH A MINIMUM E.F. OF 0.91 **1.5 CREDITS**

3257 REGISTERED ARCHITECT
STUART NAYLOR SILK
STATE OF WASHINGTON

DESIGN	SNS, KM
DRAWN	TES
CHECKED	DM
SHEET ISSUE DATE	01/08/2019

DRAWING SETS
-
-
-
-

REVISIONS

#	DATE	DESCRIPTION

Stuart Silk Architects

2400 N. 45th Street
Seattle, WA 98103

WWW.STUARTSILK.COM

LUNDIN RESIDENCE

4041 West Mercer Way
Mercer Island, WA 98040

PERMIT SET

PROJECT DATA

A-1.0

PLOT DATE: 1/21/2019 3:49:53 PM

GENERAL NOTES

1. ALL WORK TO COMPLY WITH 2015 IRC WITH STATE AND CITY AMENDMENTS.
2. ALL APPLICABLE CODES, ORDINANCES AND MINIMUM STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER ALL DRAWINGS, NOTES AND SPECIFICATIONS.
3. DO NOT SCALE DRAWINGS; USE PRINTED DIMENSIONS ONLY. NOTIFY ARCHITECT OF ANY OMISSIONS OR DISCREPANCIES BEFORE PROCEEDING WITH WORK IN QUESTION.
4. CONTRACTOR MUST CONTACT ARCHITECT IMMEDIATELY FOR ANY DISCREPANCIES IN CONTRACT DOCUMENTS OR EXISTING CONDITIONS PRIOR TO PROCEEDING WITH WORK.
5. CONTRACTOR MUST CONTACT ARCHITECT IMMEDIATELY FOR ANY DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND APPLICABLE CODES PRIOR TO PROCEEDING WITH WORK.
6. CONTRACTOR TO VERIFY ALL DIMENSIONS, GRADES AND EXISTING CONDITIONS BEFORE PROCEEDING WITH WORK.
7. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF/HERSELF WITH ALL ASPECTS OF THE WORK PRIOR TO CONTRACTING WITH THE OWNER TO PERFORM THE WORK.
8. CONTRACTOR SHALL VERIFY CONFORMANCE OF ACTUAL SOIL CONDITIONS WITH SOILS REPORT AND DESIGN ASSUMPTIONS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS FOR THE WORK, EXCEPT FOR THE BUILDING PERMIT WHICH IS THE RESPONSIBILITY OF THE ARCHITECT.
10. GUARANTEE ON ALL MATERIALS AND WORKMANSHIP TO BE (1) YEAR FROM DATE OF COMPLETION UNLESS NOTED OTHERWISE IN CONTRACT.
11. REPETITIVE FEATURES MAY BE DRAWN ONLY ONCE, BUT SHALL BE PROVIDED AS IF DRAWN IN FULL. REPETITIVE NOTES MAY BE CALLED OUT ONLY ONCE AND INDICATED AS TYPICAL.
12. DIMENSIONS ARE TO FACE OF STUD OR FACE OF CONCRETE OR CENTERLINE OF INTERIOR COLUMNS UNLESS NOTED OTHERWISE.
13. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS AND NOTIFYING THE ARCHITECT OF ANY DISCREPANCIES IN FRAMING PRIOR TO PROCEEDING WITH WORK.
14. THIS PROJECT TO BE DESIGN-BUILD IN THE AREAS OF MECHANICAL, ELECTRICAL AND PLUMBING.

JOB SITE SAFETY

1. THE ARCHITECT HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS.
2. PERIODIC SITE VISITS PERFORMED BY THE ARCHITECT SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION SAFETY PRECAUTIONS.
3. THE ARCHITECT IS NOT RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES OR EMPLOYEES OF SUPPLIERS OR SUBCONTRACTORS, OR FOR ACCESS, VISITS, USE, WORK, TRAVEL OR OCCUPANCY BY ANY PERSON.

SITE WORK

1. ALL EXCAVATION AND FILL SHALL BE STORED AND PROTECTED SUCH AS TO PREVENT RUN OFF OF MATERIAL TO ADJACENT PROPERTIES.
2. FOOTING DRAIN TO BE SEPARATE FROM ROOF AND IMPERVIOUS AREA DRAINS.
3. DOWNSPOUT DRAIN TO BE 4" DIAMETER TIGHTLINE UNLESS NOTED OTHERWISE.
4. FOOTING DRAIN TO BE 4" DIAMETER PERFORATED PIPE UNLESS NOTED OTHERWISE
5. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH REQUIRED SEPTIC AND/OR STORM WATER DETENTION SYSTEMS.

EARTH WORK

1. EXTEND EXCAVATION DOWN TO UNDISTURBED SOIL OF THE SPECIFIED STRENGTH WITH A MINIMUM OF 18" BELOW LOWEST ADJACENT FINISH GRADE, OR DEEPER PER RECOMMENDATIONS OF GEOTECH AND STRUCTURAL ENGINEERS.
2. COMPACTED FILL TO BE WELL GRADED AND GRANULAR WITH NOT MORE THAN 5% PASSING A 200 SIEVE. PLACE IN 8" LOOSE LIFTS AND COMPACT TO 95% MODIFIED AASHO DENSITY AT OPTIMUM MOISTURE CONTENT.
3. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

MOISTURE PROTECTION

1. PROVIDE PRESSURE TREATED PLATES BETWEEN CONCRETE AND FRAMING.
2. PROVIDE A MINIMUM OF 12" CLEAR BETWEEN WOOD GIRDERS AND EARTH.
3. PROVIDE A MINIMUM OF 18" CLEAR BETWEEN WOOD JOISTS AND EARTH.
4. PROVIDE A MINIMUM OF 8" CLEAR BETWEEN WOOD POSTS AND EARTH.
5. PROVIDE A MINIMUM OF 1" CLEAR BETWEEN WOOD POSTS AND CONCRETE FLOORS.
6. CAULK ALL OPENINGS THOROUGHLY.
7. FLASH ALL OPENINGS WITH A MINIMUM OF 26 GAUGE GALVANIZED STEEL TO ACCEPTABLE INDUSTRY STANDARDS.
8. METAL COPING AT PARAPET TO BE A MINIMUM OF 22 GAUGE GALVANIZED STEEL.

SAFETY AND SECURITY

1. DEADBOLTS WITH A MINIMUM THROW OF 1/2" AND A VIEWPORT ARE REQUIRED AT ALL EXTERIOR DOORS.
2. DEADBOLTS OR APPROVED LOCKING DEVICES ARE REQUIRED ON ALL SLIDING DOORS.
3. ALL LOCKS SHALL BE OPENABLE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT.
4. WINDOWS WITHIN 10'-0" OF FINISHED GRADE SHALL BE PROVIDED WITH LATCHING DEVICES.
5. STAIRWAYS TO MEET THE FOLLOWING REQUIREMENTS:
(OCCUPANCIES LESS THAN 10)

STAIR WIDTH	36" (Minimum)
TREAD WIDTH	10" (Minimum), 6" Minimum for Winders
RISER HEIGHT	7 3/4" (Maximum)
HEADROOM	80" (Minimum)
HANDRAIL HEIGHT	34" to 38" above nosing
HANDRAIL GRASP	1-1/4"(Min) to 2" (Max)

6. HANDRAIL INTERMEDIATE MEMBERS SHALL BE CONFIGURED AS TO PROHIBIT PASSING A 4"-DIAMETER SPHERE THROUGH ANY OPENING.
7. GUARDRAILS SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR.
8. GUARDRAIL INTERMEDIATE MEMBERS SHALL BE CONFIGURED AS TO PROHIBIT PASSING A 4" DIAMETER SPHERE THROUGH ANY OPENING.

ENERGY NOTES

1. ALL WORK SHALL COMPLY WITH THE RESIDENTIAL PROVISIONS OF THE 2015 WASHINGTON STATE ENERGY CODE (WSEC).
2. HEATING UNIT(S) SHALL MAINTAIN 70 DEGREES FAHRENHEIT AT 36" ABOVE FLOOR WHEN OUTSIDE TEMPERATURE IS 24 DEGREES FAHRENHEIT, OR CURRENT REQUIREMENTS.
3. PROVIDE NIGHT SETBACK THERMOSTAT.
4. CAULK ALL JOINTS AROUND EXTERIOR OPENINGS AND ALL JOINTS IN SIDING AND FLASHING WHERE INFILTRATION MAY BE POSSIBLE.
5. SEAL ALL TEARS AND JOINTS IN INSULATION WITH APPROVED TAPE.
6. SHOWER FLOW CONTROL SHALL BE LIMITED TO 2.5 GALLONS PER MINUTE, OR CURRENT REQUIREMENTS.
7. ALL CRAWLSPACES SHALL HAVE A MINIMUM OF 6 MIL BLACK VISQUEEN GROUND COVER EXTENDED OVER THE TOP OF THE FOOTINGS. LAP ALL JOINTS 12" MINIMUM.
8. FIREPLACE(S) SHALL HAVE TIGHT FITTING DAMPERS AND SHALL BE PROVIDED WITH A MINIMUM OF 6 SQUARE INCHES OF OUTSIDE COMBUSTIBLE AIR SUPPLY.
9. METAL DUCTS OUTSIDE THE CONDITIONED SPACE SHALL BE INSULATED TO R-8 MINIMUM PER THE 2012 WSEC, SECTION R403.2.1. PROVIDE WEATHER BARRIER IF LOCATED ON THE EXTERIOR OF THE BUILDING.
10. HOT WATER PIPES SHALL BE WRAPPED WITH INSULATION (R-4 MINIMUM) PER THE 2015 WSEC, SECTION R403.4.2.
11. WATER HEATER(S) SHALL MEET 1987 NATIONAL APPLIANCE ENERGY CONSERVATION ACT.
12. MINIMUM INSULATION VALUES UNLESS NOTED OTHERWISE:

CEILING	R-49
CATHEDRAL CEILING	R-38 (1" clear vent space)
ABOVE GRADE WALL	R-21
BELOW GRADE WALL	R-21 (Interior) with/ thermal break @ slab
BELOW GRADE WALL	R-10 (Exterior)
FLOOR	R-30
SLAB ON GRADE	R-10 (First 24")
WINDOW AND DOOR HEADER	R-10

13. VAPOR RETARDER SHALL BE INSTALLED ON THE CONDITIONED ROOM SIDE OF THE INSULATION.
14. BLOWER DOOR TESTING: AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/HOUR, AND SHALL BE TESTED PER THE 2015 WSEC, SECTION R402.4.1.2. PROVIDE A WRITTEN REPORT OF THE TEST RESULTS, SIGNED BY THE TESTING PARTY, TO THE BUILDING INSPECTOR, PRIOR TO APPROVED FINAL INSPECTION.
15. 75% MIN. OF LUMINAIRES TO BE HIGH EFFICACY LUMINARIES PER THE 2015 WSEC, SECTION R404.
16. ALL EXTERIOR LIGHTING SHALL BE HIGH EFFICACY LUMINARIES.
17. EXISTING CEILING, WALL OR FLOOR CAVITIES EXPOSED DURING CONSTRUCTION FOUND UNINSULATED, OR WITH DAMAGED INSULATION, SHALL BE FILLED WITH R15 INSULATION AT 2X4 FRAMING AND R21 INSULATION AT 2X6 FRAMING PER SEC R101.4.3-EXCEPTION 3
18. DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR AND HOMEOWNER PRIOR TO AN APPROVED FINAL INSPECTION.

VENTILATION NOTES

1. VENTILATION AND EXHAUST SYSTEMS TO COMPLY WITH THE REQUIREMENTS OF CHAPTER 15 OF THE 2015 WASHINGTON RESIDENTIAL CODE (WRC).
2. SOURCE SPECIFIC FANS SHALL BE LOCATED IN ALL KITCHENS, BATHROOMS, WATER CLOSETS, AND LAUNDRY FACILITIES IN COMPLIANCE WITH THE 2015 WRC, SECTION M1507.4 VENTILATION CAPACITY SHALL BE AT LEAST 50 cfm FOR BATHROOMS, WATER CLOSETS, AND LAUNDRY ROOMS (Intermittent use) AND 100 cfm FOR KITCHENS (INTERMITTENT USE). RANGE HOODS SHALL BE EXHAUSTED IN ACCORDANCE WITH SECTION M1503.
3. CLOTHES DRYERS SHALL BE EXHAUSTED IN ACCORDANCE WITH THE 2015 RC, SECTION M1502. DUCT LENGTH SHALL NOT EXCEED 35 FEET, PLUS THE LENGTH OF THE TRANSITION DUCT, LESS THE EQUIVALENT LENGTH OF FITTINGS PER TABLE M1502.4.4.1.
4. INTERMITTENT WHOLE HOUSE VENTILATION SYSTEM SHALL COMPLY WITH THE 2015 RC, SECTION M1507.3. INTERMITTENT VENTILATION SHALL OCCUR AT LEAST 25% OF EACH 4-HOUR SEGMENT. VENTILATION RATE SHALL BE NOT LESS THAN AS SPECIFIED BY TABLE M1507.3.3(1), MULTIPLIED BY THE RATE FACTOR INDICATED ON TABLE M1507.3.3(2). FAN SHALL HAVE A SONE RATING OF 1.0 OR LESS MEASURED AT 0.1 INCHES WATER GAUGE. OUTDOOR AIR SHALL BE PROVIDED TO ALL HABITABLE ROOMS.
5. EXHAUST DUCT WORK SHALL CONFORM TO THE 2012 WRC, CHAPTER 16. EXHAUST DUCTING TERMINATIONS SHALL BE OUTSIDE THE BUILDING, SHALL BE LOCATED IN COMPLIANCE WITH SECTION M1506.2, AND SHALL BE EQUIPPED WITH BACKDRAFT DAMPERS.
6. SUPPLY DUCTS WITHIN CONDITIONED SPACE SHALL BE INSULATED TO A MINIMUM OF R-4
7. PROVIDE A MINIMUM NET AREA OF 1 SQUARE FOOT OF VENTILATION AREA FOR EACH 300 SQUARE FEET OF CRAWLSPACE AREA. PLACE OPENINGS AS NEAR AS TO CORNERS AS PRACTICABLE AND SHALL PROVIDE CROSS VENTILATION.
8. ALL CRAWLSPACE VENTS SHALL BE PROVIDED WITH 1/4" NON-CORROSIVE WIRE MESH.
9. PROVIDE A MINIMUM NET AREA OF 1 SQUARE FOOT OF VENTILATION AREA FOR EVERY 150 SQUARE FEET OF ATTIC AREA. PROVIDE A CONTINUOUS 1 INCH MINIMUM AIR SPACE ABOVE INSULATION FOR CROSS VENTILATION.
10. ALL ATTIC VENTS SHALL BE PROVIDED WITH 1/4" NON-CORROSIVE WIRE MESH OR APPROVED SOFFIT VENTS.

GLAZING NOTES

1. ALL GLAZING TO BE TWO (2) PANE INSULATED GLASS OR BETTER UNLESS NOTED OTHERWISE.
2. SLIDING DOORS TO BE SAFETY GLASS, LAMINATED GLASS, OR TEMPERED GLASS.
3. SHOWER DOORS AND ENCLOSURES TO BE SAFETY GLASS, LAMINATED GLASS, OR TEMPERED GLASS.
4. REFER TO WINDOW SCHEDULE FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE NATURAL LIGHT BY MEANS OF EXTERIOR GLAZED OPENINGS IN ACCORDANCE WITH SECTION 1205.2, OR IT SHALL BE PROVIDED WITH ARTIFICIAL LIGHT IN ACCORDANCE WITH SECTION 1205.3.

BATHROOM NOTES

1. WALL COVERINGS IN SHOWERS TO BE MOISTURE-RESISTANT MATERIAL TO 72" (minimum) ABOVE DRAIN INLET.
2. TOILET TO HAVE CLEAR SPACE OF 30" WIDE (Minimum) AND 24" CLEAR (Minimum) IN FRONT OF STOOL.

SHOP DRAWINGS

1. SHOP DRAWINGS ARE REVIEWED FOR DESIGN INTENT ONLY.
2. THE CONTRACTOR IS TO REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ARCHITECT OR STRUCTURAL ENGINEER.
3. SEE STRUCTURAL NOTES AND PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND CLARIFICATIONS REGARDING SHOP DRAWINGS.

FIRE PROTECTION

A 13R SPRINKLER SYSTEM AND HOUSEHOLD MONITORED FIRE ALARM WILL BE INSTALLED PER CURRENT MERCER ISLAND MUNICIPAL CODE TITLE 17 REQUIREMENTS AND STANDARDS. THE FOLLOWING SIZING WILL BE INSTALLED TO SUPPORT THE 13R SPRINKLER SYSTEM:

WATER METER: 1.5"
SERVICE LINE (MAIN TO METER): 2"
SUPPLY LINE: (METER TO HOUSE): 2"

1. THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND IT'S ATTIC BY NOT LESS THAN THE FOLLOWING:
   A. 5/8" GYPSUM WALLBOARD REQUIRED AT ALL WALLS SEPARATING GARAGE AND DWELLING. NOT LESS THAN (1) LAYERS OF 5/8" TYPE "X" GYPSUM WALLBOARD AT CEILINGS.
   B. 1-3/8" MINIMUM THICK, SOLID CORE, OR HONEYCOMB CORE STEEL DOOR, OR A 20-MIN. FIRE-RATED DOOR.
   C. DUCTS PIERCING FIRE SEPARATION TO BE A MINIMUM OF 26 GAUGE, AND HAVE NO OPENINGS INTO THE GROUP "U" OCCUPANCY.
2. FIRE SEPARATION TO BE HORIZONTAL AND VERTICAL INCLUDING ALL STRUCTURAL MEMBERS SUPPORTING THE FIRE SEPARATION.
3. ALL ENCLOSED USEABLE SPACE UNDER STAIRWAYS SHALL BE (1) LAYER OF 5/8" TYPE 'X' GYPSUM WALLBOARD ON ENCLOSED SIDE.
4. SMOKE ALARMS SHALL MEET 2015 WASHINGTON RESIDENTIAL CODE. SMOKE ALARMS SHALL BE HARDWIRED, PROVIDED A BATTERY BACKUP, AND INTERCONNECTED WITHIN EACH DWELLING UNIT. IN ORDER TO REDUCE THE CHANCES OF NUISANCE ACTIVATIONS, SMOKE ALARMS SHOULD NOT BE LOCATED NEAR KITCHEN APPLIANCES.
5. SMOKE DETECTORS SHALL BE AUDIBLE IN ALL SLEEPING ROOMS, AND OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
6. A MINIMUM OF ONE (1) SMOKE DETECTOR SHALL BE INSTALLED ON EACH FLOOR INCLUDING THE GARAGE.
7. FIRESTOPPING AND DRAFTSTOPPING SHALL CONSIST OF 2" NOMINAL LUMBER.
8. FIRESTOPPING AND DRAFTSTOPPING IS REQUIRED IN THE FOLLOWING PLACES:
   A. CONCEALED SPACES AT ALL FLOOR AND CEILING LEVELS AND AT 10-FOOT INTERVALS ALONG THE LENGTH OF THE WALL.
   B. INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES (i.e. soffits)
   C. CONCEALED SPACES BETWEEN STAIR STRINGERS AT TOP AND BOTTOM OF THE RUN.
9. ROCK WOOL AROUND ALL OPENINGS FOR VENTS, PIPES, DUCTS, ETC.
10. EMERGENCY EGRESS WINDOWS SHALL MEET THE FOLLOWING REQUIREMENTS:

CLEAR OPEN WIDTH	20" (Minimum)
CLEAR OPEN HEIGHT	24" (Minimum)
CLEAR OPEN AREA	5.7 s.f. (Minimum)
SILL HEIGHT	44" (Maximum)

11. PREFABRICATED FIREPLACES SHALL BEAR U.L. OR I.C.B.O. SEAL OF APPROVAL AND SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS.
12. APPLIANCE GENERATING A GLOW, A SPARK, OR FLAME MAY BE INSTALLED IN THE GARAGE PROVIDED THE HEATING ELEMENTS AND SWITCHES ARE 18" ABOVE THE FLOOR.
13. GARAGE FLOOR TO BE CONSTRUCTED OF NON COMBUSTIBLE MATERIAL (CONCRETE).
14. CARBON MONOXIDE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH 2015 WASHINGTON RESIDENTIAL CODE. USE OF COMBINATION SMOKE ALARM/CARBON MONOXIDE ALARM DEVICES IS ACCEPTABLE.

SHOP DRAWINGS

1. SHOP DRAWINGS ARE REVIEWED FOR DESIGN INTENT ONLY.
2. THE CONTRACTOR IS TO REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ARCHITECT OR STRUCTURAL ENGINEER.
3. SEE STRUCTURAL NOTES AND PROJECT SPECIFICATIOSN FOR ADDITIONAL REQUIREMENTS AND CLARIFICATIONS REGARDING SHOP DRAWINGS.

MATERIAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EARTH / COMPACT FILL		FINISH WOOD
	GRAVEL / POROUS FILL		RIGID INSULATION
	CONCRETE		BATT INSULATION
	CMU / BRICK / STONE VENEER		PLYWOOD
	GYPSUM WALL BOARD / PLASTER		ROUGH WOOD FRAMING
	STEEL OR OTHER METALS		WOOD BLOCKING
	NATURAL STONE		

ABBREVIATION LIST

AB	ANCHOR BOLT	JST	JOIST
ABV	ABOVE	JT	JOINT
AC	AIR CONDITIONING		
ACT	ACOUSTICAL TILE	KD	KILN DRIED
ADDT	ADDITIONAL		
ADJ	ADJUSTABLE	LAM	LAMINATED
AFF	ABOVE FINISH FLOOR	LB	POUNDS
AGG	AGGREGATE	LF	LINEAL FOOT
ALT	ALTERNATE	LH	LEFT HAND
ALUM	ALUMINUM	LL	LIVE LOAD
APPR	APPROXIMATE	LT	LIGHT
ARCH	ARCHITECT/ARCHITECTURAL	LTG	LIGHTING
ASPH	ASPHALT		
		MATL	MATERIAL
BD	BOARD	MAX	MAXIMUM
BEL	BELOW	MB	MACHINE BOLT
BLDG	BUILDING	MC	MEDICINE CABINET
BLK	BLOCKING	MECH	MECHANICAL
BM	BEAM	MEMB	MEMBRANE
BO	BY OTHERS	MFR	MANUFACTURER
BOF	BOTTOM OF FOOTING	MIN	MINIMUM
BOT	BOTTOM	MIR	MIRROR
BOW	BOTTOM OF WALL	MISC	MISCELLANEOUS
BRG	BEARING	MTL	METAL
BSMT	BASEMENT		
BTWN	BETWEEN	N	NORTH
BUR	BUILT UP ROOFING	NA	NOT APPLICABLE
		NIC	NOT IN CONTRACT
CAB	CABINET	NO	NUMBER
CAP	CAPACITY	NOM	NOMINAL
CATV	CABLE TELEVISION	NTS	NOT TO SCALE
CB	CATCH BASIN		
CIP	CAST IN PLACE	O/	OVER
CJ	CONTROL JOINT	OBSC	OBSCURE
CL	CENTER LINE	OC	ON CENTER
CLG	CEILING	OD	OUTSIDE DIAMETER
CLKG	CAULKING	OD	OVERFLOW DRAIN
CLR	CLEAR	OH	OVERHEAD
CMU	CONCRETE MASONRY UNIT	OPNG	OPENING
CNTR	CENTER	OPP	OPPOSITE
CO	CLEAN OUT		
COL	COLUMN	PBD	PARTICLE BOARD
CONC	CONCRETE	PERF	PERFORATED
CONST	CONSTRUCTION	PERP	PERPENDICULAR
CONT	CONTINUOUS	PH	PAPER HOLDER
CONTR	CONTRACTOR	PL	PLATE
CPT	CARPET	PL	PROPERTY LINE
CRV	CONTINUOUS RIDGE VENT	PLAM	PLASTIC LAMINATE
CSMT	CASEMENT	PLYWD	PLYWOOD
CT	CERAMIC TILE	POL	POLISHED
CY	CUBIC YARD	PR	PAIR
		PSF	POUNDS PER SQUARE FOOT
d	PENNY	PSI	POUNDS PER SQUARE INCH
D	DEEP	PT	PRESSURE TREATED
D	DRYER	PTD	PAINTED
DBL	DOUBLE		
DIA	DIAMETER	QT	QUARRY TILE
DIAG	DIAGONAL	QTY	QUANTITY
DIM	DIMENSION		
DN	DOWN	R	RADIUS
DR	DOOR	R	RISER
DS	DOWNSPOUT (EXTERIOR)	RD	ROOF DRAIN
DTL	DETAIL	REF	REFRIGERATOR
DW	DISHWASHER	REINF	REINFORCING
DWG	DRAWING	REQD	REQUIRED
DWR	DRAWER	RH	RIGHT HAND
		RJ	ROOF JACK/VENT
E	EAST	RM	ROOM
EA	EACH	RO	ROUGH OPENING
EJ	EXPANSION JOINT	RV	RIDGE VENT
EL	ELEVATION		
ELEC	ELECTRIC	S	SOUTH
ELEV	ELEVATION	SB	SETBACK
ENCL	ENCLOSURE	SB	SAND BLAST
ENG	ENGINEER	SC	SOLID CORE
EQ	EQUAL	SCHED	SCHEDULE
EQUIP	EQUIPMENT	SF	SQUARE FOOT
EW	EACH WAY	SHMTL	SHEET METAL
EXIST	EXISTING	SHTHG	SHEATHING
EXT	EXTERIOR	SIM	SIMILAR
		SPECS	SPECIFICATIONS
FB	FLAT BAR	SQ	SQUARE
FD	FLOOR DRAIN	SS	STAINLESS
FF	FINISH FLOOR	SS STL	STAINLESS STEEL
FIN	FINISH	STD	STANDARD
FLASH	FLASHING	STL	STEEL
FLR	FLOOR	STOR	STORAGE
FLUOR	FLUORESCENT	STRUC	STRUCTURAL
FND	FOUNDATION	SV	SOFFIT VENT
FOC	FACE OF CONCRETE	SYM	SYMBOL
FOF	FACE OF FINISH		
FOS	FACE OF STUD	T	TREAD
FRMG	FRAMING	TEL	TELEPHONE
FT	FOOT/FEET	TEMP	TEMPERED
FTG	FOOTING	TEMP	TEMPERATURE
		T&G	TONGUE AND GROOVE
GA	GAUGE	THK	THICK
GAL	GALLON	TO	TOP OF
GALV	GALVANIZED	TOP	TOP OF PLATE
GFI	GROUND FAULT INTERRUPTER	TOS	TOP OF SLAB
GL	GLASS	TOW	TOP OF WALL
GLB	GLU-LAMINATED BEAM	TV	TELEVISION
GR	GRADE	TYP	TYPICAL
GWB	GYPSUM WALL BOARD		
GYP	GYPSUM	UBC	UNIFORM BUILDING CODE
		UNO	UNLESS NOTED OTHERWISE
H	HEIGHT		
HB	HOSE BIBB	VCT	VINYL COMPOSITION TILE
HC	HOLLOW CORE	VTE	VENTED TO EXTERIOR
HD	HEAVY DUTY	VER	VERIFY
HDR	HEADER	VERT	VERTICAL
HDWD	HARDWOOD	VG	VERTICAL GRAIN
HDWR	HARDWARE		
HGR	HANGER	W	WEST
HORZ	HORIZONTAL	W	WATT
HR	HOUR	W	WIDTH
HT	HEIGHT	W/	WITH
HWT	HOT WATER TANK	W/O	WITHOUT
		WD	WOOD
ID	INSIDE DIAMETER	WP	WATERPROOF
IDS	INTERIOR DOWNSPOUT	WR	WATER RESISTANT
IN	INCH	WS	WOOD SCREW
INSUL	INSULATION	WT	WEIGHT
INT	INTERIOR	WWM	WELDED WIRE MESH
		YD	YARD

3257
REGISTERED ARCHITECT
STUART NAYLOR SILK
STATE OF WASHINGTON

DESIGN	SNS, KM
DRAWN	CA
CHECKED	DM
SHEET ISSUE DATE	01/08/2019

DRAWING SETS

-
-
-
-

REVISIONS

#	DATE	DESCRIPTION

Stuart Silk Architects

2400 N. 45th Street
Seattle, WA 98103

WWW.STUARTSILK.COM

LUNDIN RESIDENCE

4041 West Mercer Way
Mercer Island, WA 98040

PERMIT SET

GENERAL NOTES

A-1.1

PLOT DATE: 1/21/2019 3:49:53 PM

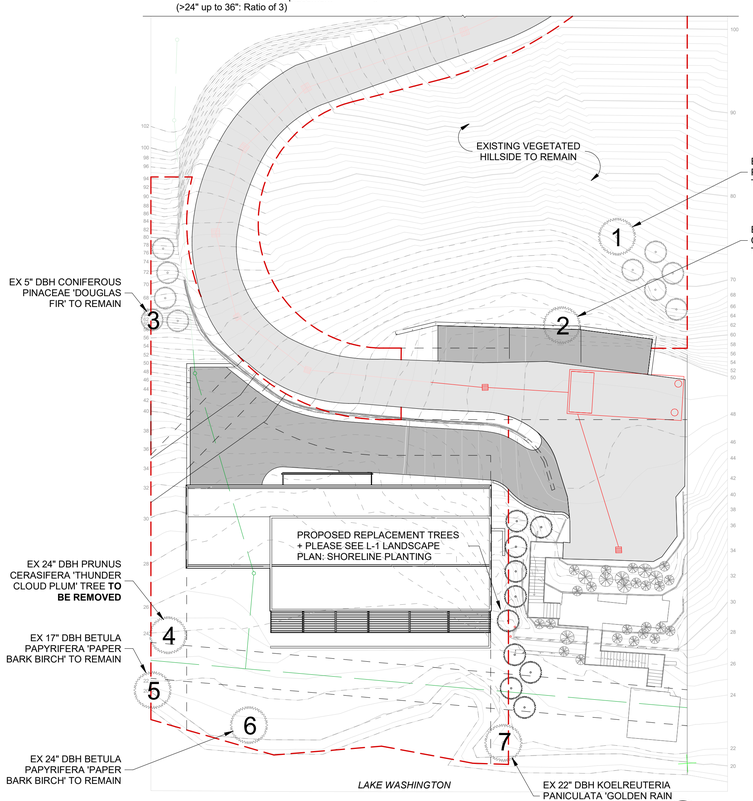
TREE CALCULATIONS

MICC 19.10.010

• No. of Trees 36" or greater	0
• No. of Trees 24" or greater	3
• No. of Exceptional Trees	0
• No. of Large Regulated Trees (over 10" D)	6
• No. of Large Reg. Trees Proposed Removal	2
• **% of Trees to be Retained**	**66.66%**
•	

TREE REPLACEMENT

• No. of Trees Proposed for Removal	2
• No. of Trees Reuied for Replacement (>24" up to 36": Ratio of 3)	6



1 SITE TREE PLAN
1" = 20'-0"

LOT COVERAGE CALCULATIONS

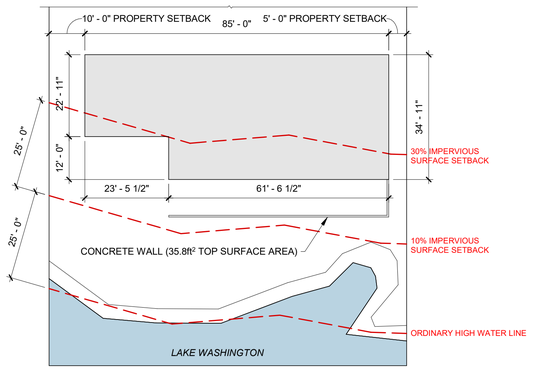
MICC 19.02.060

• Gross Lot Area (0.48 Acres)	20,812ft²
• Net Lot Area (-614ft² shared road)	20,198ft²
• Main Structure Roof Area	2,686ft²
• Vehicular Use	2,551ft²
• **Total Lot Coverage**	**5,328**ft²
•	
• Allowable Lot Coverage (30%-50% slope)	30%
• Proposed Lot Coverage (5,328/20,198)	26.38%

GFA CALCULATIONS

MICC 19.02.020D

• Gross Lot Area (0.48 Acres)	20,812ft²
• Allowed GFA (R-15, 40%)	8,324.8ft²
• Upper Floor GFA (150% GFA Mod)	2,735ft²
• Main (Lower) Floor	2,686ft²
• **Total Proposed GFA**	**5,959**ft²



AREA OF PROPERTY WITHIN 30% IMPERVIOUS SERVICE SETBACK: 2553ft²

MAXIMUM 765.9ft² IMPERVIOUS SURFACE

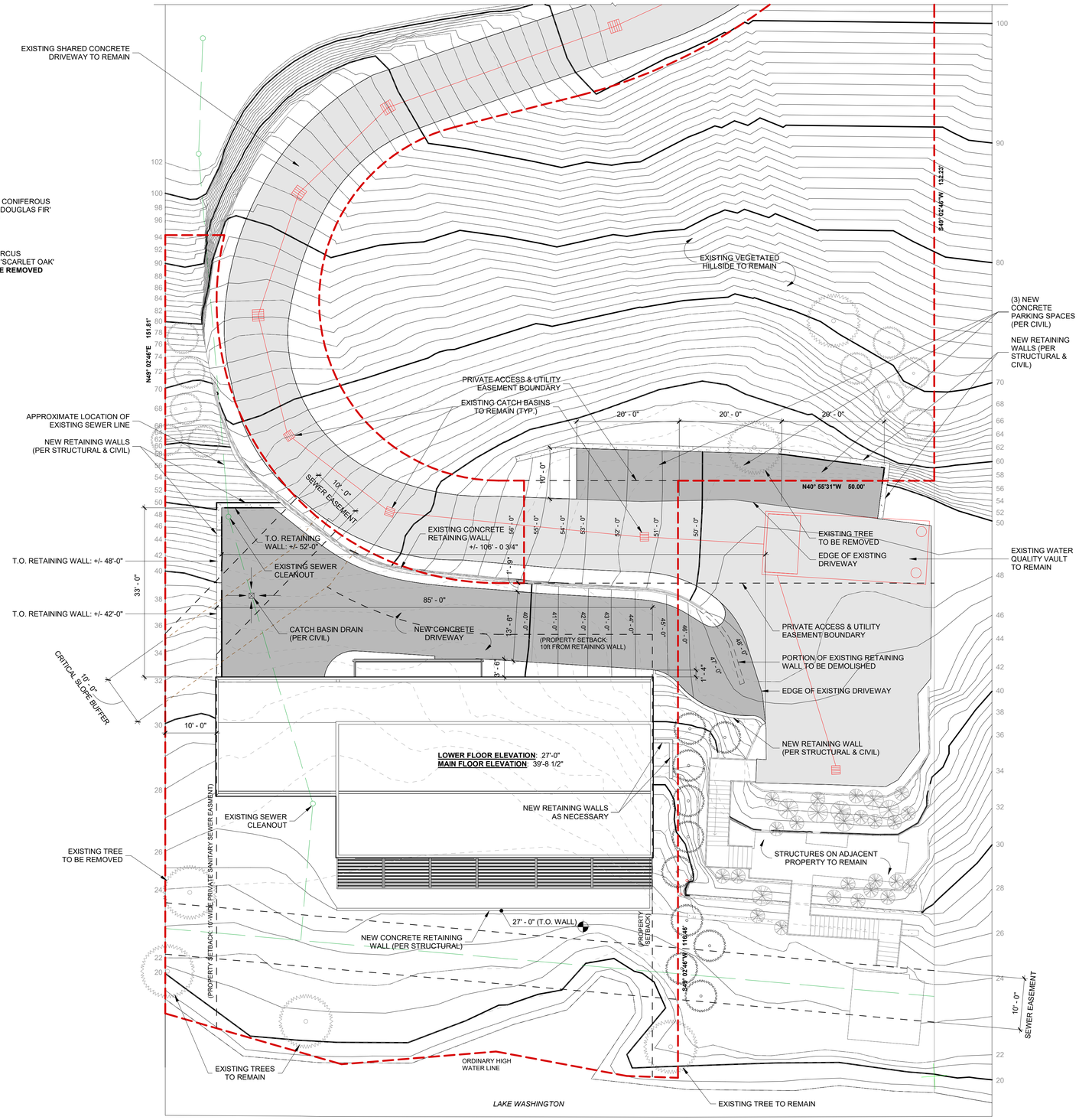
AREA OF BUILDING WITHIN SETBACK: 728ft² (765.9ft² - 728ft² = 37.9ft² MAXIMUM REMAINING FOR EXTERIOR CONCRETE STAIR AND WALL COVERAGE)

AREA OF PROPERTY WITHIN 10% IMPERVIOUS SERVICE SETBACK: 2550ft²

MAXIMUM 255ft² IMPERVIOUS SURFACE

AREA OF HOUSE WITHIN SETBACK: 0ft²

2 LOT COVERAGE & SHORELINE SETBACK IMPERVIOUS COVERAGE DIAGRAM
1" = 20'-0"



3 SITE PLAN
3/32" = 1'-0"

3257
REGISTERED ARCHITECT
STUART NAYLOR SILK
STATE OF WASHINGTON

DESIGN	SNS, KM
DRAWN	TES
CHECKED	DM
SHEET ISSUE DATE	01/14/2019
DRAWING SETS	
	-
	-
	-
	-
REVISIONS	

#	DATE	DESCRIPTION

Stuart Silk Architects

2400 N. 45th Street
Seattle, WA 98103

WWW.STUARTSILK.COM

LUNDIN RESIDENCE

4041 West Mercer Way
Mercer Island, WA 98040

PERMIT SET

SITE PLAN

A-1.2

PLOT DATE: 1/21/2019 3:49:59 PM

PORTION OF THE NE 1/4, NW 1/4, SECTION 13, TWP. 24 N., RGE. 4 E., W.M.

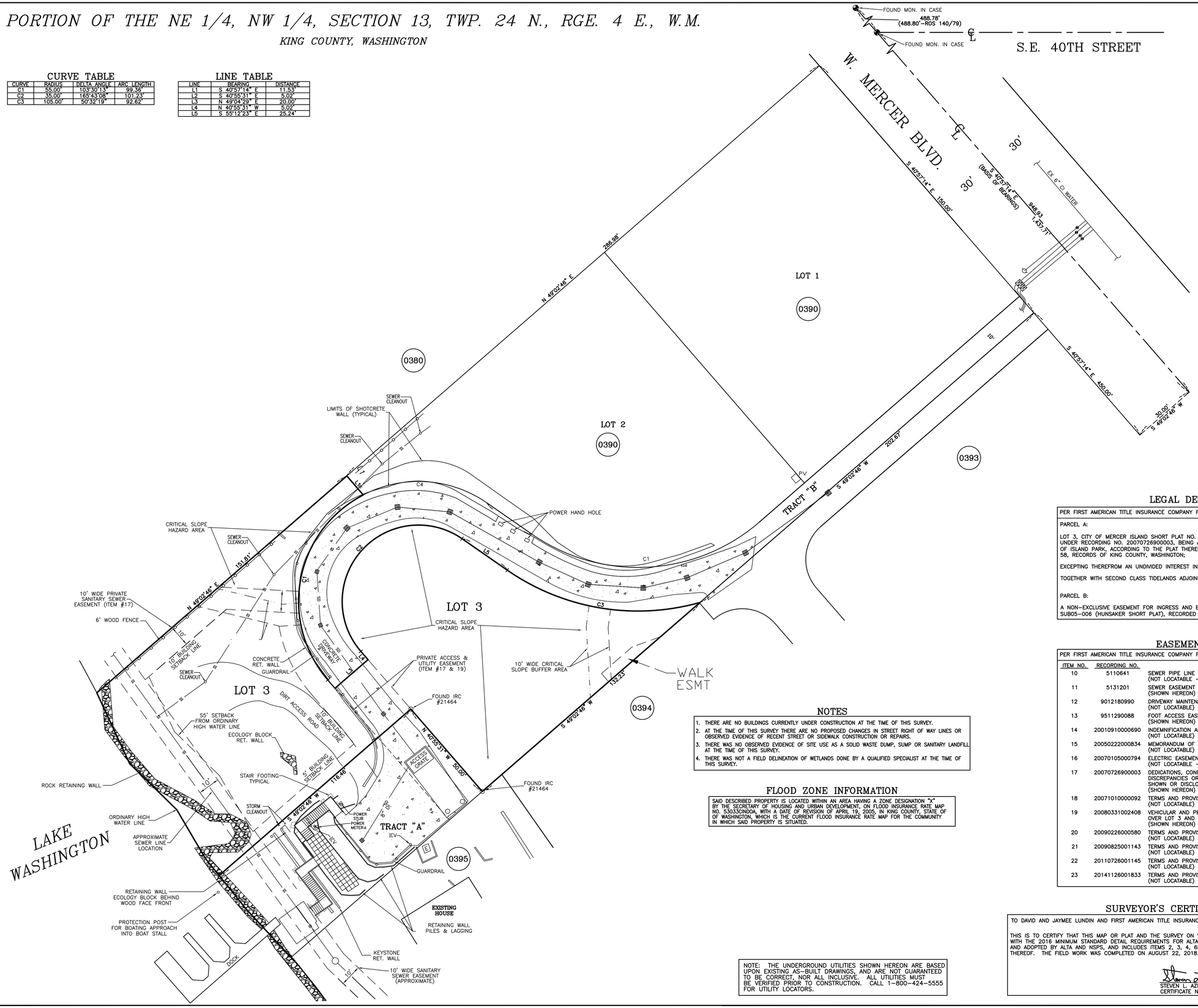
KING COUNTY, WASHINGTON

CURVE TABLE

CURVE	RADIUS	DELTA ANGLE	ARC LENGTH
C1	55.00'	103°01'39"	99.36'
C2	55.00'	165°43'08"	101.23'
C3	105.00'	50°32'19"	92.62'

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 40°57'14" E	11.53'
L2	S 40°55'31" E	5.02'
L3	N 49°04'29" E	20.00'
L4	N 40°55'31" W	5.02'
L5	S 55°12'23" E	25.24'



N

1" = 20'

0' 20' 40'

BASIS OF BEARINGS IS PER HUNSAKER SHORT PLAT SUB05-006, KING COUNTY REC. NO. 20070726900003

TOTAL SITE AREA=20,781.8 S.F. OR 0.48 ACRES +/-

KING COUNTY TAX PARCEL NO. 362350-0387-03

ADDRESS: 4041 WEST MERCER WAY, MERCER ISLAND, WA 98040

LEGEND

SS	= SANITARY SEWER
SD	= STORM SEWER
G	= GAS LINE
W	= WATER LINE
	= GAS VALVE
	= WATER VALVE
	= WATER METER
	= FIRE HYDRANT
	= CATCH BASIN
	= MANHOLE
	= UTILITY POLE
	= LIGHT POST
	= GUY ANCHOR
	= SIGN
	= POWER VAULT/TRANSFORMER
	= TELE./TV PEDESTAL
	= PARKING METER
	= SECTION CORNER
	= QUARTER CORNER
	= FOUND MON. IN CASE
	= FOUND PROP. COR. AS NOTED
	= SET 1/2" I.R. W/CAP #29538
50.00	= SPOT ELEVATION

NOTES

1. THERE ARE NO BUILDINGS CURRENTLY UNDER CONSTRUCTION AT THE TIME OF THIS SURVEY.
2. AT THE TIME OF THIS SURVEY THERE ARE NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES OR OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
3. THERE WAS NO OBSERVED EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL AT THE TIME OF THIS SURVEY.
4. THERE WAS NOT A FIELD DELINEATION OF WETLANDS DONE BY A QUALIFIED SPECIALIST AT THE TIME OF THIS SURVEY.

FLOOD ZONE INFORMATION

SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION "X" BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT, ON FLOOD INSURANCE RATE MAP NO. 53033CIND0A, WITH A DATE OF REVISION OF APRIL 19, 2005, IN KING COUNTY, STATE OF OF WASHINGTON, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.

NOTE: THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON EXISTING AS-BUILT DRAWINGS, AND ARE NOT GUARANTEED TO BE CORRECT, NOR ALL INCLUSIVE. ALL UTILITIES MUST BE VERIFIED PRIOR TO CONSTRUCTION. CALL 1-800-424-5555 FOR UTILITY LOCATORS.

LEGAL DESCRIPTION

PER FIRST AMERICAN TITLE INSURANCE COMPANY FILE NO. 4201-3084704 DATED JULY 2, 2018

PARCEL A:

LOT 3, CITY OF MERCER ISLAND SHORT PLAT NO. SUB05-006 (HUNSAKER SHORT PLAT), RECORDED UNDER RECORDING NO. 20070726900003, BEING A PORTION OF LOTS 4 AND 5, BLOCK C, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 13 OF PLATS, PAGE(S) 58, RECORDS OF KING COUNTY, WASHINGTON;

EXCEPTING THEREFROM AN UNDIVIDED INTEREST IN TRACT A OF SAID SHORT PLAT.

TOGETHER WITH SECOND CLASS TIDELANDS ADJOINING;

PARCEL B:

A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS DELINEATED ON SHORT PLAT NO. SUB05-006 (HUNSAKER SHORT PLAT), RECORDED UNDER RECORDING NO. 20070726900003.

EASEMENT TABLE

PER FIRST AMERICAN TITLE INSURANCE COMPANY FILE NO. 4201-3084704 DATED JULY 2, 2018

ITEM NO.	RECORDING NO.	NOTE
10	5110641	SEWER PIPE LINE EASEMENT (NOT LOCATABLE - AS CONSTRUCTED)
11	5131201	SEWER EASEMENT (SHOWN HEREON)
12	9012180990	DRIVEWAY MAINTENANCE AGREEMENT (NOT LOCATABLE)
13	9511290088	FOOT ACCESS EASEMENT (SHOWN HEREON)
14	20010910000690	INDEMNIFICATION AND COVENANT FOR GELOGICALLY HAZARDOUS AREAS (NOT LOCATABLE)
15	20050222000834	MEMORANDUM OF AGREEMENT (NOT LOCATABLE)
16	20070105000794	ELECTRIC EASEMENT (NOT LOCATABLE - AS CONSTRUCTED)
17	20070726900003	DEDICATIONS, CONDITIONS, RESTRICTIONS, EASEMENTS, BOUNDARY DISCREPANCIES OR ENCROACHMENTS, NOTES AND/OR PROVISIONS SHOWN OR DISCLOSED BY SHORT PLAT (SHOWN HEREON)
18	20071010000092	TERMS AND PROVISIONS CONTAINED IN DOCUMENT (NOT LOCATABLE)
19	20080331002408	VEHICULAR AND PEDETSTRIAN INGRESS AND EGRESS EASEMENT OVER LOT 3 AND UTILITY SERVICE OVER TRACT A (SHOWN HEREON)
20	20090226000580	TERMS AND PROVISIONS CONTAINED IN DOCUMENT (NOT LOCATABLE)
21	20090825001143	TERMS AND PROVISIONS CONTAINED IN DOCUMENT (NOT LOCATABLE)
22	20110726001145	TERMS AND PROVISIONS CONTAINED IN DOCUMENT (NOT LOCATABLE)
23	20141126001833	TERMS AND PROVISIONS CONTAINED IN DOCUMENT (NOT LOCATABLE)

SURVEYOR'S CERTIFICATION

TO DAVID AND JAYMEE LUNDIN AND FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 6(b), 7(a), 7(b)(1), 8, 11, 14, 16, 17 AND 18 THEREOF. THE FIELD WORK WAS COMPLETED ON AUGUST 22, 2018.

STEVEN L. AZELTINE
CERTIFICATE NO. 29538

8/29/18
DATE

NO.	REVISIONS	DATE
1	REVISED ADDRESSES	3/16/18

STATE OF WASHINGTON
STEVEN L. AZELTINE
29538
REGISTERED PROFESSIONAL LAND SURVEYOR
8/29/18

HANSEN SURVEYING & CONSULTING
a SITE SURVEYING, LLC dba
4227 S. MERIDIAN STE. C-445, PUYALLUP, WA. 98373
TEL: 425-235-8440 EMAIL: hansensurvey@comcast.net

ALTA SURVEY OF 4041 WEST MERCER WAY FOR DAVID AND JAYMEE LUNDIN

MERCER ISLAND, WASHINGTON

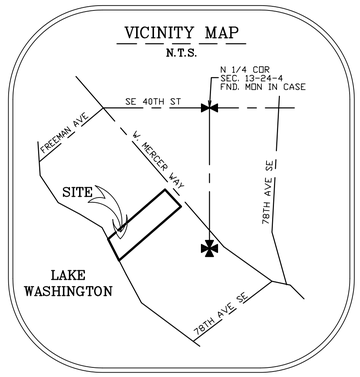
DATE:	DRAWN BY:	CHKED BY:
8/29/18	RF	SLA

SHEET	OF
1	1

JOB NUMBER
96001 LOT 3 ALTA

PORTION OF THE N.E. 1/4, N.W. 1/4, SECTION 13, TWP. 24 N., RGE. 4 E., W.M.

MERCER ISLAND, KING COUNTY, WASHINGTON



CURVE TABLE

CURVE	DELTA ANGLE	RADIUS	ARC LENGTH
C1	75°44'51"	85.00'	112.37'
C2	50°32'19"	105.00'	92.62'
C3	165°43'08"	35.00'	101.23'
C4	62°12'55"	55.00'	59.72'
C5	103°30'13"	55.00'	99.36'

N

1" = 20'

0' 20' 40'

BASIS OF BEARINGS:
MONUMENTED CENTERLINE OF
W. MERCER BLVD. (S 40°57'14"E)

LEGEND

SS	= SANITARY SEWER
SD	= STORM SEWER
G	= GAS LINE
W	= WATER LINE
G	= GAS VALVE
W	= WATER VALVE
W	= WATER METER
	= FIRE HYDRANT
	= CATCH BASIN
	= MANHOLE
	= UTILITY POLE
	= LIGHT POST
	= GUY ANCHOR
	= SIGN
	= POWER VAULT/TRANSFORMER
	= TELE./TV PEDESTAL
	= PARKING METER
	= SECTION CORNER
	= QUARTER CORNER
	= FOUND MON. IN CASE
	= FOUND PROP. COR. AS NOTED
	= SET 1/2" I.R. W/CAP #21464
50.00	= SPOT ELEVATION
ICV	= IRREGATION CONTROL VALVE
12"F	= 12" FIR TREE
12"D	= 12" DECIDUOUS TREE
41.9' B.O.W.	= ACTUAL BOTTOM OF WALL

BENCH MARK

VERTICAL DATUM: NAVD 88

CITY OF MERCER ISLAND CONTROL POINT No. 7999

2" BRASS CAP WITH CHISELED "X" IN 4" CONCRETE MON LOCATED AT THE INTERSECTION OF SE 40TH STREET AND WEST MERCER WAY.

ELEVATION = 144.320 FEET

LEGAL DESCRIPTION

LOT 3

THAT PORTION OF LOT 4 AND THE NORTHWESTERLY HALF OF LOT 5, BLOCK C, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST NORTHERLY CORNER OF SAID LOT 4;
THENCE S 49°02'46" W ALONG THE NORTHWEST LINE OF SAID LOT 4, A DISTANCE OF 286.98 FEET TO THE TRUE POINT OF BEGINNING;
THENCE S 40°57'14" E 11.53 TO A POINT ON A CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 55.00 FEET,
AND THROUGH WHICH POINT A RADIAL LINE BEARS N 27°25'19" W
THENCE SOUTHERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 103°30'13", AN ARC DISTANCE OF 99.36 FEET;
THENCE S 40°55'31" E 5.02 FEET;
THENCE N 49°04'29" E 20.00 FEET;
THENCE N 40°55'31" W, 5.02 FEET TO A POINT OF CURVE TO THE RIGHT, HAVING A RADIUS OF 35.00 FEET;
THENCE ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 165°43'08", AN ARC DISTANCE OF 101.23 FEET;
THENCE S 55°17'23" E 25.24 FEET TO A POINT OF A CURVE TO THE LEFT, HAVING A RADIUS OF 105.00 FEET;
THENCE ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 50°32'19", AN ARC DISTANCE OF 92.62 FEET
THE SOUTHEASTERLY LINE OF THE NORTHWESTERLY HALF OF SAID LOT 5,
THENCE, ON A NON-TANGENT BEARING, S 49°02'46" W, ALONG SAID SOUTHEASTERLY LINE, A DISTANCE OF 131.89 FEET;
THENCE N 40°55'31" W, 50.00 FEET;
THENCE S 49°02'46" W PARALLEL WITH THE NORTHWESTERLY LINE OF SAID LOT 4, A DISTANCE OF 117 FEET, MORE OR LESS, TO THE SHORELINE OF LAKE WASHINGTON;
THENCE NORTHWESTERLY, ALONG THE SHORELINE OF LAKE WASHINGTON, TO THE NORTHWESTERLY LINE OF SAID LOT 4;
THENCE N 49°02'46" E, ALONG SAID NORTHWESTERLY LINE, A DISTANCE OF 152 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING.

SHARED WATER FRONT TRACT "A"

THAT PORTION OF LOT 4 AND THE NORTHWESTERLY HALF OF LOT 5, BLOCK C, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST NORTHERLY CORNER OF SAID LOT 4;
THENCE S 40°57'14"E, ALONG THE NORTHEASTERLY LINE OF 4 AND LOT 5, A DISTANCE OF 150.00 FEET TO THE MOST NORTHERLY CORNER OF THE NORTHWESTERLY HALF OF SAID LOT 5;
THENCE S 49°02'46"W, ALONG THE SOUTHEASTERLY LINE OF SAID NORTHWESTERLY HALF OF SAID LOT 5, A DISTANCE OF 334.89 FEET TO THE TRUE POINT OF BEGINNING;
THENCE N 40°55'31"W 50.00 FEET;
THENCE S 49°02'46"W 116 FEET, MORE OR LESS TO THE SHORELINE OF LAKE WASHINGTON;
THENCE SOUTHEASTERLY, ALONG SAID SHORELINE TO A POINT WHICH BEARS S 49°02'46"W FROM THE POINT OF BEGINNING;
THENCE N 49°02'46"E 116 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

TOGETHER WITH SECOND CLASS TIDELANDS ADJOINING.

LOT 3 ADDRESS: 4043 WEST MERCER WAY

NOTE: THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON EXISTING AS-BUILT DRAWINGS, AND ARE NOT GUARANTEED TO BE CORRECT, NOR ALL INCLUSIVE. ALL UTILITIES MUST BE VERIFIED PRIOR TO CONSTRUCTION. CALL 1-800-424-5555 FOR UTILITY LOCATORS.

NO.	REVISIONS	DATE

HANSEN SURVEYING
LAND SURVEYORS & CONSULTANTS
17420 116TH AVE. S.E., RENTON, WA 98058
TEL: 425-235-8440 FAX: 425-235-0266

TOPOGRAPHICAL SURVEY OF LOT 3

HUNSACKER SHORT PLAT
CITY OF MERCER ISLAND, WASHINGTON.

DATE: 8/27/18	DRAWN BY: PJC	CHKED BY: SLA

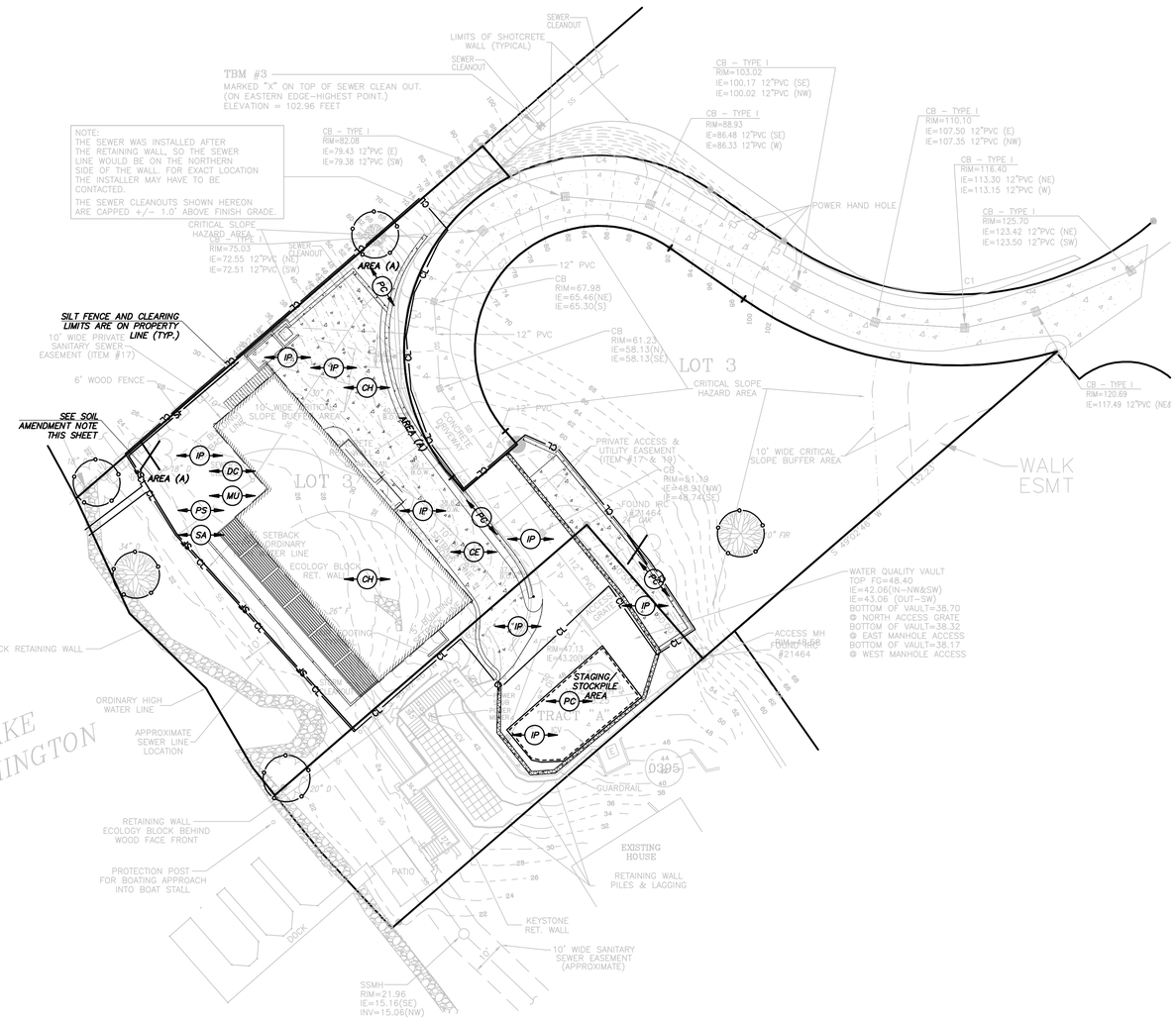
SHEET	OF
1	1

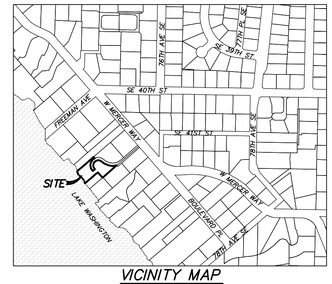
JOB NUMBER
96001

K:\1996\96001\NAVD 88 DRAWINGS\LOT 3 TOPO

NW 1/4 SECTION 13, TOWNSHIP 24 N, RANGE 4 E, W.M.

4041 W. MERCER WAY





VICINITY MAP
1"=500'

PROJECT CONTACTS:

OWNER	DAVID & JAYMEE LUNDIN 2221 22ND AVE EAST SEATTLE WA 98112
ARCHITECT	STUART SILK ARCHITECTS 2400 N. 45TH ST, SUITE 200 SEATTLE, WASHINGTON 98103 206.728.9500 CONTACT: KELLY MCSHANE KELLYM@STUARTSILK.COM
CIVIL ENGINEER	D.R. STRONG CONSULTING ENGINEERS, INC. 620 7TH AVE NE KIRKLAND, WASHINGTON 98033 425.827.3063 CONTACT: WALTER J. SHOSTAK, P.E. WALT.SHOSTAK@DRSTRONG.COM
SURVEYOR	HANSEN SURVEYING & CONSULTING 4227 S. MERIDIAN, SUITE C-445 PUYALLUP, WASHINGTON 98373 425.235.8440 CONTACT: CHRIS FOX

TESC LEGEND:

FOR ADDITIONAL TESC DETAILS REFER TO DOE 2012 SWMMWW

- CL — CONSTRUCTION LIMITS. TO BE FLAGGED OR FENCED WHEN NO SILT FENCE IS PROPOSED (BMP C103)
- SF — SILT FENCE IS PROPOSED (BMP C233)
- STRAW WATTLES (BMP C235)
- CE — STABILIZED CONSTRUCTION ENTRANCE (BMP C105)
- IP — INLET PROTECTION (BMP C220)
- DC — DUST CONTROL (BMP C140)
- MU — MULCHING, MATTING, & COMPOST BLANKETS (BMP C121, BMP C125)
- PS — PERMANENT SEEDING AND PLANTING (BMP C120)
- SA — POST-CONSTRUCTION SOIL AMENDMENT QUALITY & DEPTH (BMP C120)
- CH — CONCRETE HANDLING (BMP C151)
- PC — PLASTIC COVERING (BMP C123)
- TREE TO BE REMOVED
- TREE TO BE SAVED. PROVIDE TREE PROTECTION FENCING

SHEET INDEX:

GENERAL EROSION CONTROL NOTES:

ALL DISTURBED AREAS SHALL BE STABILIZED USING TYPICAL TESC BMP'S. THE LIMITS OF DISTURBANCE WILL BE DELINEATED WITH HIGH VISIBILITY CONSTRUCTION FENCING. DURING CONSTRUCTION SILT FENCES WILL BE PLACED DOWN SLOPE OF DISTURBED AREAS ALONG WITH STRAW MATTING, NETS, OR PLASTIC COVERING OVER EXPOSED SOIL OR STOCKPILES. TREES TO BE RETAINED WILL BE PROTECTED WITH HIGH VISIBILITY CONSTRUCTION FENCING.

AT THE COMPLETION OF THE PROJECT ALL DISTURBED AREAS WILL BE STABILIZED WITH COMPOST AMENDED SOILS AND HYDROSEEDING OR SOD.

SITE VOLUME CALCULATIONS

CUT VOLUME (CU. YDS.)	FILL VOLUME (CU. YDS.)	NET VOLUME (CU. YDS.)
456	458	2 FILL

ALL VOLUMES ARE APPROXIMATE AND ARE PROVIDED FOR PERMITTING PURPOSES AND REPRESENT FINISH GRADE TO EXISTING GRADE AS SHOWN. CONTRACTOR SHALL RELY ON HIS/HER OWN ESTIMATES FOR DETERMINING ACTUAL EARTHWORK QUANTITIES.
THE VOLUMES DO NOT INCLUDE STRIPPING, STRUCTURAL EXCAVATION, EXPANSION/COMPACTION FACTOR OR ANY SOIL TYPE RESTRICTIONS.

GRADING NOTE:

TOTAL AREA TO BE DISTURBED ON-SITE.....9,187 S.F.

TOTAL AREA TO BE DISTURBED OFF-SITE.....1,090 S.F.

TOTAL AREA TO BE DISTURBED FOR PROJECT..10,277 S.F.

FILL SHALL CONSIST OF SUITABLE MATERIAL ORIGINATING FROM THE SITE OR FROM AN APPROVED SUPPLIER.

SOIL AMENDMENT NOTE:

AREA (A): STOCKPILE SITE DUFF AND TOPSOIL FOR ALL DISTURBED PERVIOUS AREAS AND REAPPLY WITH SOIL AMENDMENT AFTER GRADING AND CONSTRUCTION. MINIMUM SCARIFICATION DEPTH 8-INCHES. PROVIDE A TOTAL OF 15 C.Y. OF AMENDMENT FOR AN AREA OF 2,764 S.F.

ON-SITE SOILS:

THE ENTIRE SITE CONTAINS KITSAP SILT LOAM (KpD) SOILS PER THE NRCS SOIL MAP

P.E. CERTIFICATION FOR SECTION B:

I HEREBY STATE THAT THIS CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN FOR 4041 W. MERCER WAY HAS BEEN PREPARED BY ME OR UNDER MY SUPERVISION AND MEETS THE STANDARD OF CARE AND EXPERTISE WHICH IS USUAL AND CUSTOMARY IN THIS COMMUNITY FOR PROFESSIONAL ENGINEERS. I UNDERSTAND THAT THE CITY OF MERCER ISLAND DOES NOT AND WILL NOT ASSUME LIABILITY FOR THE SUFFICIENCY, SUITABILITY, OR PERFORMANCE OF CONSTRUCTION SWPPP BMPS PREPARED BY ME.

LEGAL DESCRIPTION OF LOT 3: (BY SURVEYOR)

THAT PORTION OF LOT 4 AND THE NORTHWESTERLY HALF OF LOT 5, BLOCK C, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
COMMENCING AT THE MOST NORTHERLY CORNER OF SAID LOT 4; THENCE S 49°02'46" W ALONG THE NORTHWEST LINE OF SAID LOT 4, A DISTANCE OF 286.98 FEET TO THE TRUE POINT OF BEGINNING; THENCE S 40°57'14" E 11.53 TO A POINT ON A CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 55.00 FEET, AND THROUGH WHICH POINT A RADIAL LINE BEARS N 27°25'19" W THENCE SOUTHERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 103°30'13", AN ARC DISTANCE OF 99.36 FEET; THENCE S 40°55'31" E 5.02 FEET; THENCE N 49°04'29" E 20.00 FEET; THENCE N 40°55'31" W, 5.02 FEET TO A POINT OF CURVE TO THE RIGHT, HAVING A RADIUS OF 35.00 FEET; THENCE ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 165°43'08", AN ARC DISTANCE OF 101.23 FEET, THENCE S 55°12'23" E 25.24 FEET TO A POINT OF A CURVE TO THE LEFT, HAVING A RADIUS OF 105.00 FEET; THENCE ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 50°32'19", AN ARC DISTANCE OF 92.62 FEET THE SOUTHEASTERLY LINE OF THE NORTHWESTERLY HALF OF SAID LOT 5, THENCE, ON A NON-TANGENT BEARING, S 49°02'46" W, ALONG SAID SOUTHEASTERLY LINE, A DISTANCE OF 131.89 FEET; THENCE N 40°55'31" W, 50.00 FEET; THENCE S 49°02'46" W, PARALLEL WITH THE NORTHWESTERLY LINE OF SAID LOT 4, A DISTANCE OF 117 FEET, MORE OR LESS, TO THE SHORELINE OF LAKE WASHINGTON; THENCE NORTHWESTERLY, ALONG THE SHORELINE OF LAKE WASHINGTON, TO THE NORTHWESTERLY LINE OF SAID LOT 4; THENCE N 49°02'46" E, ALONG SAID NORTHWESTERLY LINE, A DISTANCE OF 152 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING.

LEGAL DESCRIPTION OF SHARED WATER FRONT TRACT "A": (BY SURVEYOR)

THAT PORTION OF LOT 4 AND THE NORTHWESTERLY HALF OF LOT 5, BLOCK C, REPLAT OF ISLAND PARK, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 13 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:
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CONSTRUCTION SEQUENCE

1. ARRANGE AND ATTEND A PRE-CONSTRUCTION MEETING WITH THE CITY INSPECTOR.
2. FLAG OR FENCE CLEARING LIMITS.
3. CALL ONE-CALL UTILITY LOCATE SERVICE PRIOR TO ANY EXCAVATION WORK.
4. GRADE ACCESS ROAD & CONSTRUCT/INSTALL ROCK CONSTRUCTION ENTRANCE IF NECESSARY.
5. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
6. INSTALL SHORING WALL.
7. CONSTRUCT RESIDENCE AND OTHER SITE IMPROVEMENTS.
8. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OR COUNTY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
9. MAINTAIN ACCESS TO OFF-SITE ROADS AND DRIVEWAYS AT ALL TIMES DURING THE DURATION OF THE PROJECT.
10. RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY TESC MINIMUM REQUIREMENTS.
11. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING OR EQUIVALENT.
12. STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN SEVEN DAYS.
13. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
14. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BMPS REMOVED IF APPROPRIATE AFTER ACCEPTANCE BY INSPECTOR.

BENCHMARK: (BY SURVEYOR)

VERTICAL DATUM: NAVD 88 CITY OF MERCER ISLAND CONTROL POINT NO. 7999
2" BRASS CAP WITH CHISELED "X" IN 4" CONCRETE MON
LOCATED AT THE INTERSECTION OF SE 40TH STREET AND WEST MERCER WAY.
ELEVATION = 144.320 FEET

BASIS OF BEARINGS: (BY SURVEYOR)

PER HUNSAKER SHORT PLAT SUB05-006, KING COUNTY REC. NO. 20070726900003

NORTH

GRAPHIC SCALE
0 10 20 40
1 INCH = 20 FT.

Call 2 Working Days Before You Dig
811
Utilities Underground Location Center
(ID,MT,ND,OR,WA)

D.R. STRONG CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

4041 W. MERCER WAY
LUNDIN RESIDENCE

TESC PLAN

PARCEL NO. 3623500387
4041 W. MERCER WAY
MERCER ISLAND, WA 98040

DAVID & JAYMEE LUNDIN

2221 22ND AVE E
SEATTLE WA 98112

WALTER J. SHOSTAK — STATE OF WASHINGTON — 22331 — REGISTERED PROFESSIONAL ENGINEER
1-8-19

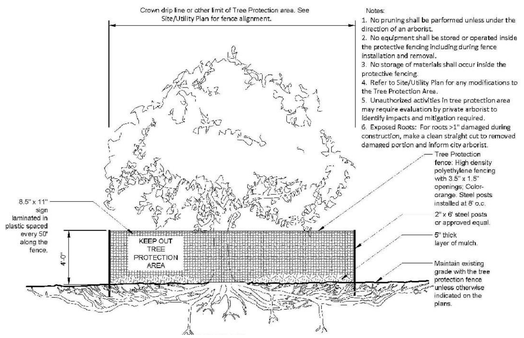
DATE	REVISION	APR

DRAFTED BY: DLR
DESIGNED BY: WJS
PROJECT ENGINEER: WJS
DATE: 1.8.19
PROJECT NO.: 18113

DRAWING: C1
SHEET: 1 OF 5

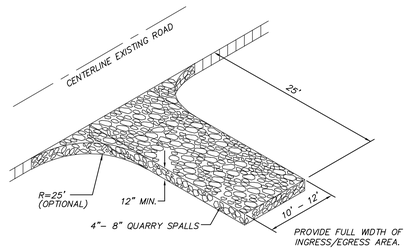
NW 1/4 SECTION 13, TOWNSHIP 24 N, RANGE 4 E, W.M.

4041 W. MERCER WAY



TREE PROTECTION FENCING

NTS

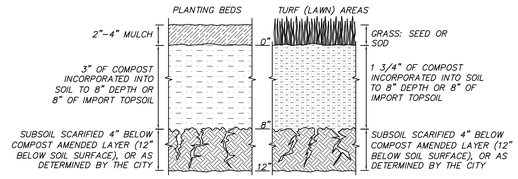


DRIVEWAYS SHALL BE PAVED TO THE EDGE OF R–O–W PRIOR TO INSTALLATION OF THE CONSTRUCTION ENTRANCE TO AVOID DAMAGING OF THE ROADWAY

IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD

GRAVEL CONSTRUCTION ENTRANCE

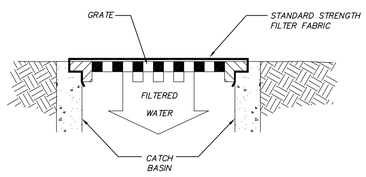
NTS



SOIL AMENDMENT

PER BMP T5.13

NTS



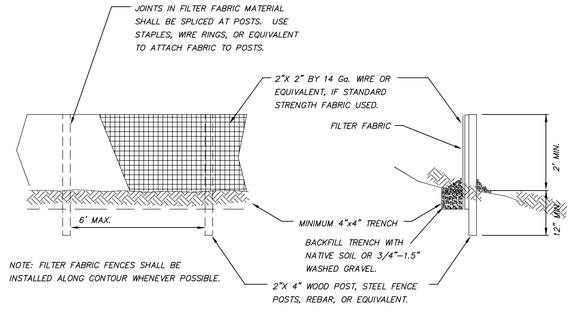
NOTE: ONLY TO BE USED WHERE PONDING OF WATER ABOVE THE CATCH BASIN WILL NOT CAUSE TRAFFIC PROBLEMS AND WHERE OVERFLOW WILL NOR RESULT IN EROSION OF SLOPES.

CATCH BASIN INSERT MAINTENANCE STANDARDS

1. ANY ACCUMULATED SEDIMENT ON OR AROUND THE FILTER FABRIC PROTECTION SHALL BE REMOVED IMMEDIATELY. SEDIMENT SHALL NOT BE REMOVED WITH WATER, AND ALL SEDIMENT MUST BE DISPOSED OF AS FILL ON SITE OR HAULED OFF SITE.
2. ANY SEDIMENT IN THE CATCH BASIN INSERT SHALL BE REMOVED WHEN THE SEDIMENT HAS FILLED ONE–THIRD OF THE AVAILABLE STORAGE. THE FILTER MEDIA FOR THE INSERT SHALL BE CLEANED OR REPLACED AT LEAST MONTHLY.
3. REGULAR MAINTENANCE IS CRITICAL FOR BOTH FORMS OF CATCH BASINS PROTECTION. UNLIKE MANY FORMS OF PROTECTION THAT FAIL GRADUALLY, CATCH BASIN PROTECTION WILL FAIL SUDDENLY AND COMPLETELY IF NOT MAINTAINED PROPERLY.

CATCH BASIN INLET FILTER

NTS



NOTE: FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.

1. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
2. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
3. IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
4. SEDIMENT MUST BE REMOVED WHEN THE SEDIMENT IS 6 INCHES HIGH.
5. IF THE FILTER FABRIC (GEOTEXTILE) HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

SILT FENCE DETAIL

NTS

EROSION AND SEDIMENT CONTROL NOTES:

1. APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY TAPE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE TESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
7. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
8. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. ALL DISTURBED AREAS SHALL BE STABILIZED USING TYPICAL TESC BMP'S. THE LIMITS OF DISTURBANCE WILL BE DELINEATED WITH HIGH VISIBILITY CONSTRUCTION FENCING. DURING CONSTRUCTION SILT FENCES WILL BE PLACED DOWN SLOPE OF DISTURBED AREAS ALONG WITH STRAW MATTING, NETS, OR PLASTIC COVERING OVER EXPOSED SOIL OR STOCKPILES. TREES TO BE RETAINED WILL BE PROTECTED WITH HIGH VISIBILITY CONSTRUCTION FENCING.
10. ALL SOIL STOCKPILES TO BE COVERED WITH PLASTIC SHEETING UNTIL SUCH TIME THAT THE SOIL IS EITHER USED OR REMOVED. PILES SHOULD BE SITUATED AND LOCATED SUCH THAT SEDIMENT DOES NOT RUN INTO THE STREET OR ONTO ADJOINING PROPERTIES.
11. ALL EXPOSED SOIL AREAS SHALL BE COVERED OR PROTECTED USING AN APPROPRIATE BMP. STABILIZE DENUDED AREAS OF THE SITE BY MULCHING, SEEDING, PLANTING, OR SODDING.
12. ALL ADJACENT PROPERTIES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION BY APPROPRIATE USE OF VEGETATION BUFFER STRIPS, SEDIMENT BARRIERS, OR FILTERS, DIKES, MULCHING, OR BY A COMBINATION OF THESE MEASURES AND OTHER APPROPRIATE BMP'S.
13. PROVIDE FOR PERIODIC STREET CLEANING TO REMOVE ANY SEDIMENT THAT MAY HAVE BEEN TRACKED OFF–SITE. SEDIMENT SHOULD BE REMOVED BY SHOVELING OR SWEEPING AND CAREFULLY REMOVED TO A SUITABLE DISPOSAL AREA WHERE IT WILL NOT BE RE–ERODED.
14. ALL INSTALLED EROSION AND SEDIMENT CONTROL BMP'S SHALL BE INSPECTED REGULARLY BY THE GENERAL CONTRACTOR ESPECIALLY AFTER ANY LARGE STORM. MAINTENANCE, INCLUDING REMOVAL AND PROPER DISPOSAL OF SEDIMENT SHOULD BE A NECESSARY TO INSURE THAT SEDIMENT AND EROSION IS CONTROLLED ON SITE.

SOIL AMENDMENT NOTES

•SOIL RETENTION: RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.

•SOIL QUALITY: ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE THE FOLLOWING:

1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
2. MULCH PLANTING BEDS WITH 2–4 INCHES OF ORGANIC MATERIAL.
3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
   A. THE ORGANIC CONTENT FOR "PRE–APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65% AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
   B. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A.) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220–B, TESTING PARAMETERS, IN WAC 173–350–220.

THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.

•IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:

1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE–APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE–APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.

MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

MAINTENANCE:
•ESTABLISH SOIL QUALITY AND DEPTH TOWARD THE END OF CONSTRUCTION AND ONCE ESTABLISHED, PROTECT FROM COMPACTION, SUCH AS FROM LARGE MACHINERY USE, AND FROM EROSION.
•PLANT VEGETATION AND MULCH THE AMENDED SOIL AREA AFTER INSTALLATION.
•LEAVE PLANT DEBRIS OR ITS EQUIVALENT ON THE SOIL SURFACE TO REPLENISH ORGANIC MATTER.
•REDUCE AND ADJUST, WHERE POSSIBLE, THE USE OF IRRIGATION, FERTILIZERS, HERBICIDES AND PESTICIDES, RATHER THAN CONTINUING TO IMPLEMENT FORMERLY ESTABLISHED PRACTICES.

D.R. STRONG CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

4041 W. MERCER WAY
LUNDIN RESIDENCE

TESC DETAILS

PARCEL NO. 3623500387
4041 W. MERCER WAY
MERCER ISLAND, WA 98040

DAVID & JAYMEE LUNDIN

2221 22ND AVE E
SEATTLE WA 98112

WALTER J. SHORT
STATE OF WASHINGTON
22851
REGISTERED PROFESSIONAL ENGINEER
1-8-19

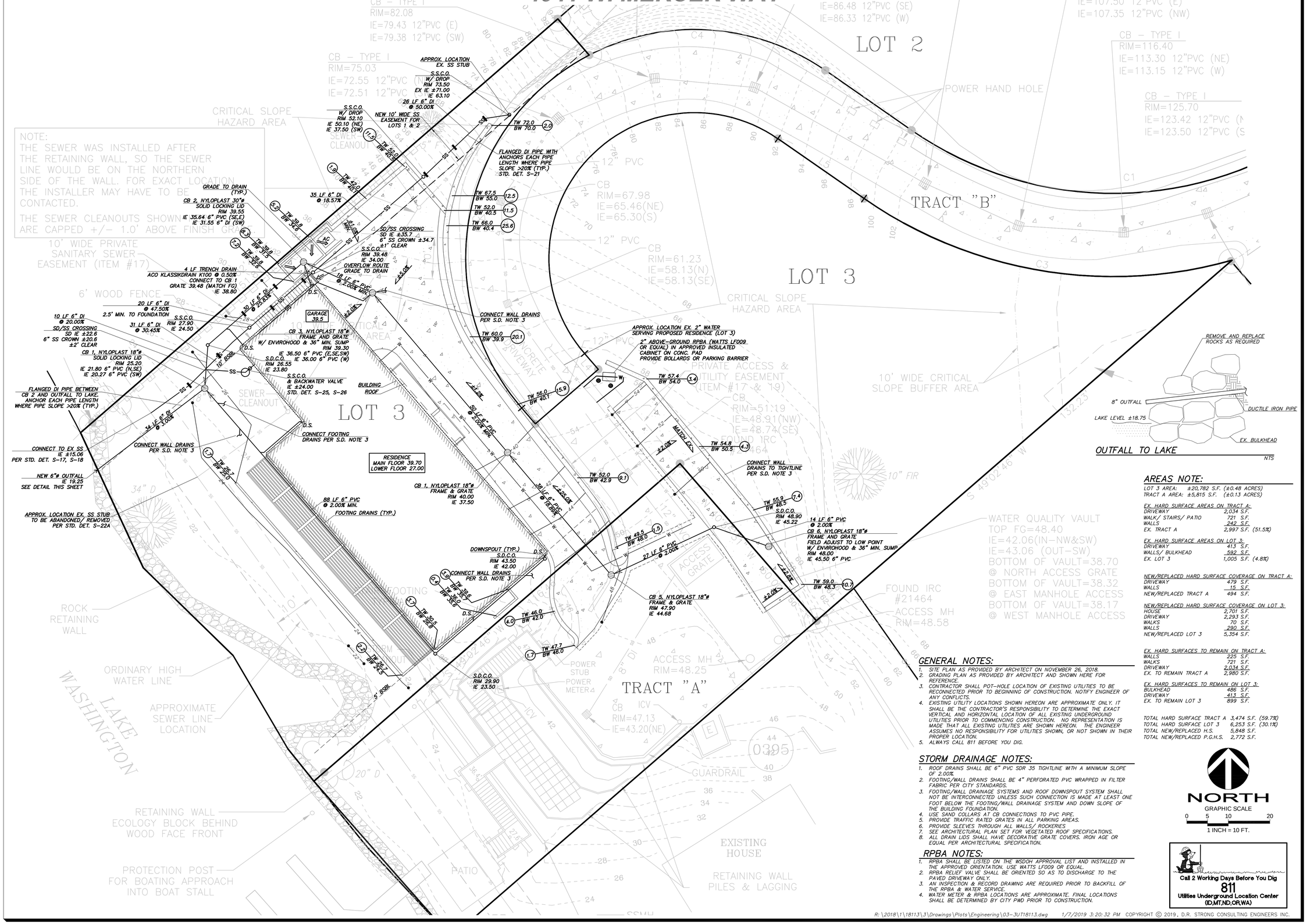
DATE	REVISION
APR	

DRAFTED BY: DLR
DESIGNED BY: WJS
PROJECT ENGINEER: WJS
DATE: 1.8.19
PROJECT NO.: 18113

DRAWING: C2
SHEET: 2 OF 5

NW 1/4 SECTION 13, TOWNSHIP 24 N, RANGE 4 E, W.M.

4041 W. MERCER WAY



AREAS NOTE:

LOT 3 AREA: ±20,782 S.F. (±0.48 ACRES)
TRACT A AREA: ±5,815 S.F. (±0.13 ACRES)

EX. HARD SURFACE AREAS ON TRACT A:

DRIVEWAY	2,034 S.F.
WALK/ STAIRS/ PATIO	721 S.F.
WALLS	242 S.F.
EX. TRACT A	2,997 S.F. (51.5%)

EX. HARD SURFACE AREAS ON LOT 3:

DRIVEWAY	413 S.F.
WALLS/ BULKHEAD	592 S.F.
EX. LOT 3	1,005 S.F. (4.8%)

NEW/REPLACED HARD SURFACE COVERAGE ON TRACT A:

DRIVEWAY	479 S.F.
WALLS	15 S.F.
NEW/REPLACED TRACT A	494 S.F.

NEW/REPLACED HARD SURFACE COVERAGE ON LOT 3:

HOUSE	2,701 S.F.
DRIVEWAY	2,293 S.F.
WALKS	70 S.F.
WALLS	290 S.F.
NEW/REPLACED LOT 3	5,354 S.F.

EX. HARD SURFACES TO REMAIN ON TRACT A:

WALLS	225 S.F.
WALKS	721 S.F.
DRIVEWAY	2,034 S.F.
EX. TO REMAIN TRACT A	2,980 S.F.

EX. HARD SURFACES TO REMAIN ON LOT 3:

BULKHEAD	486 S.F.
DRIVEWAY	413 S.F.
EX. TO REMAIN LOT 3	899 S.F.

TOTAL HARD SURFACE TRACT A	3,474 S.F. (59.7%)
TOTAL HARD SURFACE LOT 3	6,253 S.F. (30.1%)
TOTAL NEW/REPLACED H.S.	5,848 S.F.
TOTAL NEW/REPLACED P.G.H.S.	2,772 S.F.

GENERAL NOTES:

1. SITE PLAN AS PROVIDED BY ARCHITECT ON NOVEMBER 26, 2018.
2. GRADING PLAN AS PROVIDED BY ARCHITECT AND SHOWN HERE FOR REFERENCE.
3. CONTRACTOR SHALL POT–HOLE LOCATION OF EXISTING UTILITIES TO BE RECONNECTED PRIOR TO BEGINNING OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONFLICTS.
4. EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES SHOWN, OR NOT SHOWN IN THEIR PROPER LOCATION.
5. ALWAYS CALL 811 BEFORE YOU DIG.

STORM DRAINAGE NOTES:

1. ROOF DRAINS SHALL BE 6" PVC SDR 35 TIGHTLINE WITH A MINIMUM SLOPE OF 2.00%
2. FOOTING/WALL DRAINS SHALL BE 4" PERFORATED PVC WRAPPED IN FILTER FABRIC PER CITY STANDARDS.
3. FOOTING/WALL DRAINAGE SYSTEMS AND ROOF DOWNSPOUT SYSTEM SHALL NOT BE INTERCONNECTED UNLESS SUCH CONNECTION IS MADE AT LEAST ONE FOOT BELOW THE FOOTING/WALL DRAINAGE SYSTEM AND DOWN SLOPE OF THE BUILDING FOUNDATION.
4. USE SAND COLLARS AT CB CONNECTIONS TO PVC PIPE.
5. PROVIDE TRAFFIC RATED GRATES IN ALL PARKING AREAS.
6. PROVIDE SLEEVES THROUGH ALL WALLS/ ROCKERIES.
7. SEE ARCHITECTURAL PLAN SET FOR VEGETATED ROOF SPECIFICATIONS.
8. ALL DRAIN LIDS SHALL HAVE DECORATIVE GRATE COVERS. IRON AGE OR EQUAL PER ARCHITECTURAL SPECIFICATION.

RPBA NOTES:

1. RPBA SHALL BE LISTED ON THE WSDOH APPROVAL LIST AND INSTALLED IN THE APPROVED ORIENTATION. USE WATTS LF009 OR EQUAL.
2. RPBA RELIEF VALVE SHALL BE ORIENTED SO AS TO DISCHARGE TO THE PAVED DRIVEWAY ONLY.
3. AN INSPECTION & RECORD DRAWING ARE REQUIRED PRIOR TO BACKFILL OF THE RPBA & WATER SERVICE.
4. WATER METER & RPBA LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED BY CITY PWD PRIOR TO CONSTRUCTION.

NORTH
GRAPHIC SCALE
0 5 10 20
1 INCH = 10 FT.

Call 2 Working Days Before You Dig
811
Utilities Underground Location Center
(ID,MT,ND,OR,WA)

D.R. STRONG CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

4041 W. MERCER WAY LUNDIN RESIDENCE

STORM DRAINAGE PLAN
PARCEL NO. 3623500387
4041 W. MERCER WAY
MERCER ISLAND, WA 98040

DAVID & JAYMEE LUNDIN

2221 22ND AVE E.
SEATTLE WA 98112

WALTER J. SHOSTEK — STATE OF WASHINGTON — 19381 — REGISTERED PROFESSIONAL ENGINEER
1-8-19

DATE	REVISION
APR	

DRAFTED BY: DLR
DESIGNED BY: WJS
PROJECT ENGINEER: WJS
DATE: 1.8.19
PROJECT NO.: 18113

DRAWING: C3
SHEET: 3 OF 5

NW 1/4 SECTION 13, TOWNSHIP 24 N, RANGE 4 E, W.M.

4041 W. MERCER WAY

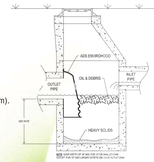
NYLOPLAST ENVIROHOOD SPECIFICATION

SCOPE

This specification describes the EnviroHood for use in stormwater conveyance systems.

REQUIREMENTS

- All hoods shall be constructed of polyethylene.
- The size and position of the hood shall be determined by the outlet pipe size as per manufacturer's recommendation.
- The bottom of the hood shall extend downward a minimum distance of 6" (15 cm) for pipes < 12" (30 cm).
- Installation hardware and instructions shall be provided by manufacturer.
- Installation shall be in accordance with Nyloplast installation procedures and those issues by local building/construction regulations.



TYPICAL INSTALLATION

STRUCTURE TYPE	OUTLET COVERED	PART NUMBER*	GENERAL DIMENSIONS in. (cm) A	B	C	D
48" (120 cm) Round Concrete	up to 18" (45 cm)	5818AGR	30.2 (75)	14.9 (35)	17.2 (45)	20.5 (50)
48"-54" (120-135 cm) Round Concrete	up to 24" (60 cm)	5824AGR	41.7 (105)	18.0 (45)	26.9 (70)	26.9 (70)
54"-60" (135-150 cm)Round Concrete	up to 30" (75 cm)	5830AGR	48.7 (120)	20.5 (50)	30.5 (75)	33.1 (85)
Flat Concrete	up to 18" (45 cm)	5818AGF	30.2 (75)	11.8 (30)	17.2 (45)	20.4 (50)
Flat Concrete	up to 24" (60 cm)	5824AGF	41.8 (105)	15.3 (40)	26.9 (70)	27.0 (70)
Flat Concrete	up to 30" (75 cm)	5830AGF	48.8 (120)	18.3 (45)	30.5 (75)	34.0 (85)
18" (45 cm) Nyloplast	up to 12" (30 cm)	5818AGD412	19.4 (50)	9.8 (25)	12.3 (30)	13.8 (35)
24" (60 cm)Nyloplast	up to 15" (40 cm)	5824AGD415	26.5 (65)	12.8 (30)	14.5 (35)	20.0 (50)
30"(75 cm) Nyloplast	up to 18" (45 cm)	5830AGD418	32.8 (85)	15.4 (40)	18.7 (45)	26.0 (65)

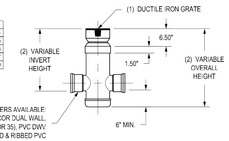
*Includes installation hardware

For more information on EnviroHood and other ADS products, please contact our Customer Service Representatives at 1-800-821-6710

Advanced Drainage Systems, Inc.
4640 Trueman Blvd., Hilliard, OH 43026
1-800-821-6710 www.ads-pipe.com

2808AG_ _X — 8" CUSTOM DRAIN BASIN

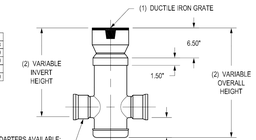
GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
STANDARD	LIGHT DUTY	0899CGS	7001-110-194
SOLID COVER	LIGHT DUTY	0899CGC	7001-110-195
BRONZE	N/A	0899CGB	7001-110-196
DOME	N/A	0899CGD	7001-110-197
DROP IN GRATE	LIGHT DUTY	0801DI	7001-110-019



(3,4) VARIOUS TYPES OF INLET & OUTLET ADAPTERS AVAILABLE: 4" - 8" FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL, ADS/HANCOR SINGLE WALL), PVC SEWER (EX: SDR 35), PVC DWV (EX: SCH 40), PVC C900/C905, CORRUGATED & RIBBED PVC

2810AG_ _X — 10" CUSTOM DRAIN BASIN

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
STANDARD	LIGHT DUTY	1099CGS	7001-110-198
SOLID COVER	LIGHT DUTY	1099CGC	7001-110-199
BRONZE	N/A	1099CGB	7001-110-200
DOME	N/A	1099CGD	7001-110-201
DROP IN GRATE	LIGHT DUTY	1001DI	7001-110-020



(3,4) VARIOUS TYPES OF INLET & OUTLET ADAPTERS AVAILABLE: 4" - 10" FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL, ADS/HANCOR SINGLE WALL), PVC SEWER (EX: SDR 35), PVC DWV (EX: SCH 40), PVC C900/C905, CORRUGATED & RIBBED PVC

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - CUSTOM DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
3 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & I-HANCOR DUAL WALL) & SDR 35 PVC
4 - STANDARD DRAIN BASIN HAS FIXED ADAPTER LOCATIONS OF 0° & 180°. CUSTOM DRAIN BASIN ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
5 - DIMENSIONS ARE FOR REFERENCE ONLY ACTUAL DIMENSIONS MAY VARY

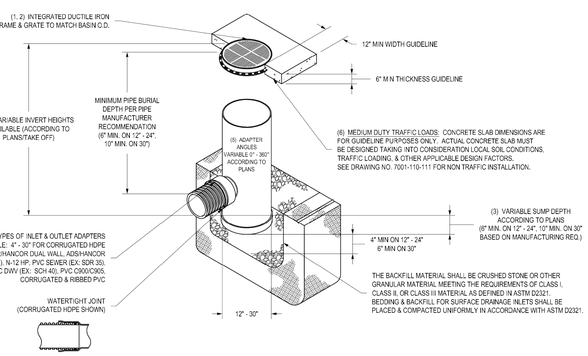
DRAWN BY	AWA
DATE	8-11-00
REVISED BY	EBC
DATE	3-18-10
DWG SIZE	A
MATERIAL	
PROJECT NO./NAME	
SCALE	NTS
SHEET	1 OF 1

Nyloplast — 3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

TITLE: 8 IN & 10 IN DRAIN BASIN DESIGN DETAILS

DWG NO. 7001-110-045 REV G

NYLOPLAST DRAIN BASIN WITH PEDESTRIAN GRATE



1 - 12" - 30" PEDESTRIAN GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 12" - 24" PEDESTRIAN GRATES SHALL MEET H-10 LOAD RATING. 30" PEDESTRIAN GRATE SHALL MEET H-20 LOAD RATING (SEE DRAWING NO. 7001-110-144 FOR H-20 TRAFFIC LOAD GUIDELINES).

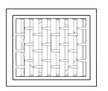
DRAWN BY	EBC
DATE	4-20-07
REVISED BY	NHH
DATE	03-11-16
DWG SIZE	A
MATERIAL	PVC
PROJECT NO./NAME	
SCALE	1:40
SHEET	1 OF 1

Nyloplast — 3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com

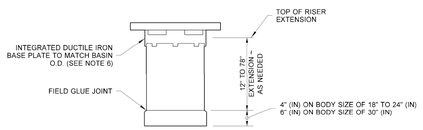
TITLE: DRAIN BASIN WITH PEDESTRIAN GRATE QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-283 REV D

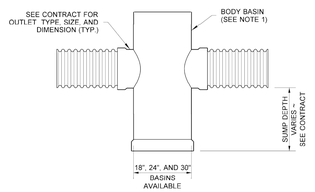
DRAWN BY: FERN LIDDELL


NOTE: ALL DRAIN LIDS SHALL HAVE DECORATIVE GRATE COVERS. IRON AGE OR EQUAL PER ARCHITECTURAL SPECIFICATION.

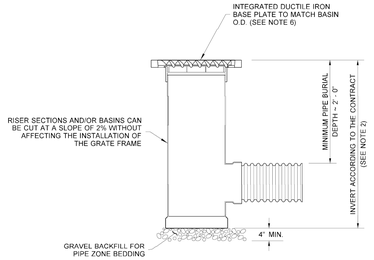
PLAN VIEW
FRAME AND VANED GRATE



RISER EXTENSION



BASIN BODY



ELEVATION VIEW

NOTES

1. Drain basin to be custom manufactured according to plan details. Risers are needed for basins over 84" (in) due to shipping restrictions. The maximum depth from finished grade to the lowest invert shall be 8' (ft).
2. Drainage connections shall utilize flexable elastometric seals conforming to **ASTM F477** and shall meet the requirements of **ASTM D3212**.
3. Risers can be trimmed down to 3" (in) extension without interfering with the installation of the frame.
4. These structures can be used for Type 1, Type 1L, and Type 2 structures. usage for the Type 2 structures shall be limited to pipe size use only.
5. Basins shall be manufactured from PVC pipe stock meeting the requirements of **ASTM D1784**, cell classification **12454**.
6. Ductile iron castings for PVC catch basins shall conform to the requirements of **ASTM A536**, **grade 70-50-05**, and shall meet the proof load testing requirements of **AASHTO M 306**.
7. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC × 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.

JULIE HEILMAN — STATE OF WASHINGTON — 43928 — REGISTERED PROFESSIONAL ENGINEER

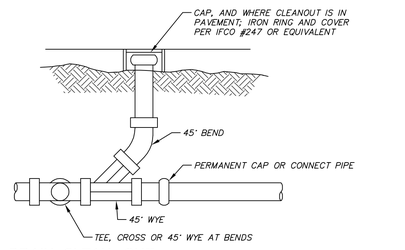
Julie Heilman
Heilman, Julie
Jan 25 2017 2:57 PM
foresight

CATCH BASIN - PVC

STANDARD PLAN B-10.70-00

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jan 26 2017 6:50 AM
foresight
STATE DESIGN ENGINEER
Washington State Department of Transportation



STORM DRAIN CLEAN-OUT

NTS

D.R. STRONG CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

4041 W. MERCER WAY
LUNDIN RESIDENCE

NOTES & DETAILS

PARCEL NO. 3623500387
4041 W. MERCER WAY
MERCER ISLAND, WA 98040

DAVID & JAYMEE LUNDIN

2221 22ND AVE E
SEATTLE WA 98112

WALTER J. SHEARER — STATE OF WASHINGTON — 20261 — REGISTERED PROFESSIONAL ENGINEER
1-8-19

DATE	REVISION	APR

DRAFTED BY: DLR
DESIGNED BY: WJS
PROJECT ENGINEER: WJS
DATE: 1.8.19
PROJECT NO.: 18113

DRAWING: C4
SHEET: 4 OF 5

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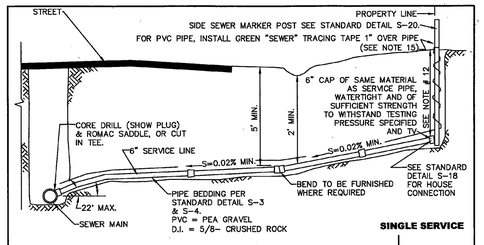
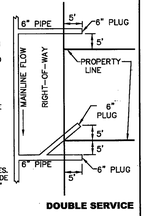
NW 1/4 SECTION 13, TOWNSHIP 24 N, RANGE 4 E, W.M.

4041 W. MERCER WAY



SINGLE SERVICE



DOUBLE SERVICE

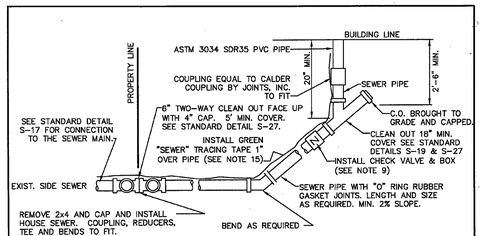
NOTES

1. ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
3. RIGHT-OF-WAY RESTORATION SHALL MATCH OR EXCEED THE ORIGINAL CONDITION AND BE IN ACCORDANCE WITH CITY STANDARDS.
4. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-03.9(3) OR BANK RUN GRAVEL PER WSDOT 9-03.19, COMPACTED IN 6" LIFTS OR MAY BE CDF WHEN DIRECTED BY THE CITY ENGINEER (SEE DETAIL S-3).
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8 BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 6" SEWER PIPE MINIMUM SIZE IN RIGHT-OF-WAY, AND ELSEWHERE AS DIRECTED BY ENGINEER. 2% MIN. GRADE (UNLESS DIRECTED BY ENGINEER), 50% MAXIMUM.
7. ALL A.C. MAINS TO BE TAPPED IN ACCORDANCE WITH WAC 296-82-60775 STATE/FEDERAL GUIDELINES AND CERTIFICATION.
8. CONSTRUCTION IN RIGHT-OF-WAY MUST BE DONE BY A REGISTERED AND LICENSED CONTRACTOR.
9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT CITY SEWER ORDINANCES.
10. WHERE CITY ENGINEER ALLOWS SIDE SEWER CONNECTIONS TO MANHOLE, INVERT OF SIDE SEWER SHALL BE EQUAL TO OR ABOVE MAIN SEWER CROWN, BUT NOT TO EXCEED 18" ABOVE INVERT OF MAIN SEWER.
11. UNLESS OTHERWISE INDICATED ON PLAN, SIDE SEWER SHALL BE MIN. OF 6' DEEP AT PROPERTY LINE, OR 5' LOWER THAN THE LOWEST ELEVATION, WHICH EVER IS LOWER.
12. ALL PIPE MATERIALS NOT TO STANDARDS WILL BE ABANDONED AND REPLACED WITH DUCTILE IRON OR PVC PIPE OF THE SAME SIZE.
13. IF A BUILDING SEWER IS TO SERVE MORE THAN ONE PROPERTY, BY JOINT AGREEMENT OF THE OWNERS, AN APPROVED EASEMENT INSURING THAT ALL PROPERTIES INVOLVED SHALL HAVE PERPETUAL USE OF THE SIDE SEWER, HAVING PROVISIONS FOR OPERATION, MAINTENANCE, RECONSTRUCTION AND FOR ACCESS FOR REPAIR PURPOSES, SHALL BE SIGNED BY THE OWNERS. THIS EASEMENT SHALL BE RECORDED WITH THE COUNTY AUDITOR. A SIX INCH (MINIMUM) DIAMETER PIPE SHALL BE USED FOR THE COMMON LINE AND A SIX INCH CLEANOUT EXTENDING TO WITHIN 12 INCHES OF THE GROUND SURFACE SHALL BE PROVIDED AT THE WYE WHERE THE UPPER GRADE CONNECTIONS ARE MADE. BACKWATER VALVES SHALL BE INSTALLED ON SERVICE LINES UPSTREAM OF THE CONNECTION TO THE SHARED SIDE SEWER.
14. THE CITY ENGINEER MAY REQUIRE BACKWATER VALVES ON SIDE SEWERS WHEN DEEMED NECESSARY. THE EFFECTIVE OPERATION AND MAINTENANCE OF ANY BACKWATER VALVE SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE SIDE SEWER.
15. UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SIDE SEWER CONNECTION AND STUB

6-5-2009	NO SCALE	S-17

REV DATE | APPROVED



BUILDING CONNECTION

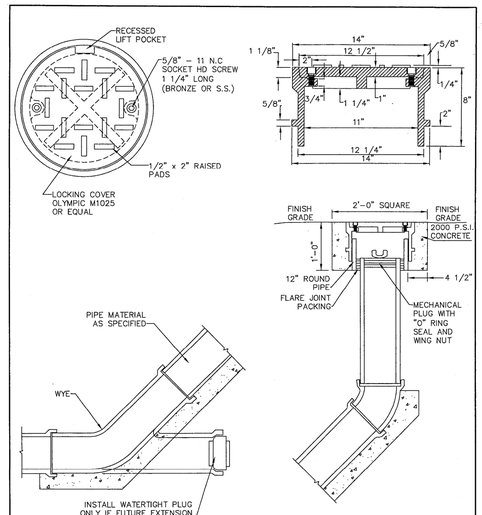
NOTES

1. ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
3. ALL HOUSE PLUMBING OUTLETS MUST BE CONNECTED TO THE SEWER. NO DOWN SPOUTS OR STORM DRAINAGE MAY BE CONNECTED TO THE SEWER SYSTEM.
4. 18" MINIMUM COVERAGE OVER PIPE.
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8 BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 4" SEWER PIPE MINIMUM SIZE ON PROPERTY. 2% MINIMUM GRADE.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT SEWER ORDINANCES.
8. ALL CONSTRUCTION REQUIRES A PLAN SHOWING PROPERTY AND DIMENSIONS AND COMPLETION OF SIDE SEWER APPLICATION AND MAINTENANCE AGREEMENT, AS NEEDED.
9. BACK WATER VALVE (CHECK VALVE) IS REQUIRED:
   A. IF CONNECTED TO A SHARED SIDE SEWER.
   B. IF CONNECTION AT HOUSE IS LOWER THAN BOTH UPSTREAM AND DOWNSTREAM MANHOLE.
   C. SEE S-23 & S-24 FOR LAKE LINE REQUIREMENTS.
10. AS-BUILT DRAWING SHOWING LOCATION OF SIDE SEWER & ALL BENDS, C.O. ETC., IN RELATION TO THE HOUSE IS REQUIRED AFTER INSPECTION & INSTALLATION. SEE STANDARD DETAIL S-38 FOR A TYPICAL "AS BUILT".
11. THE MINIMUM PIPE SIZE FOR SIDE SEWERS SHALL BE:
    6" – WITHIN THE PUBLIC RIGHT-OF-WAY.
    4" – SINGLE FAMILY RESIDENCES.
    6" – 2 TO 6 SINGLE FAMILY RESIDENCES.
    6" – BUILDINGS OTHER THAN SINGLE FAMILY RESIDENCES.
12. UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
HOUSE SEWER CONNECTION

6-5-2009	NO SCALE	S-18

REV DATE | APPROVED



FOR PVC PIPE

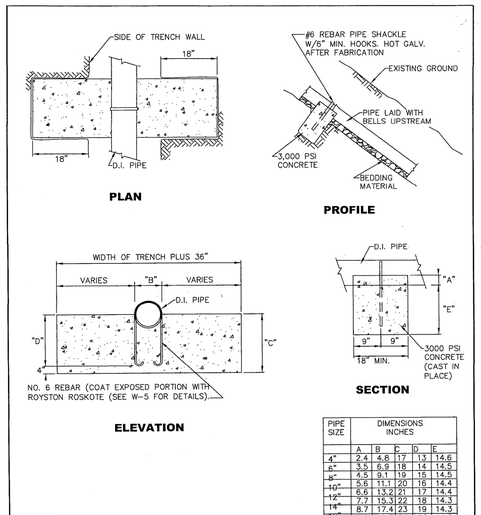
NOTES

1. SEE S-27 FOR INSTALLATION DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
CLEAN OUT DETAIL

6-5-2009	NO SCALE	S-19

REV DATE | APPROVED



PLAN

PROFILE

ELEVATION

SECTION

PIPE SIZE	DIMENSIONS INCHES				
	A	B	C	D	E
4"	2.4	4.8	17	13	14.6
6"	3.5	6.9	18	14	14.5
8"	4.5	9.1	19	15	14.5
10"	5.6	11.1	20	16	14.4
12"	6.6	13.2	21	17	14.4
12"	7.7	15.3	22	18	14.3
14"	8.7	17.4	23	19	14.3
16"	9.8	19.5	24	20	14.2
18"					

NOTES

1. PIPE ANCHORS TO BE USED ONLY AS APPROVED BY THE ENGINEER.
2. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I.
3. TIE ROD ASSEMBLIES SHALL BE COATED WITH ROYSTON ROSKOTE #612SM OR APPROVED EQUAL.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
PIPE ANCHOR DETAIL

6-5-2009	NO SCALE	S-21

REV DATE | APPROVED

DISCONNECTION

WHEN ABANDONING A SIDE SEWER IT SHALL BE DISCONNECTED AT THE MAIN PRIOR TO REMOVAL OF BUILDING FOUNDATIONS. THE CONTRACTOR SHALL PLUG THE CONNECTION AT THE MAIN WITH A MECHANICAL PLUG AND NON-SHRINK GROUT. DISCONNECTION'S SHALL BE PERFORMED IN THE PRESENCE OF THE CITY'S UTILITY INSPECTOR. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT DRAWING DEPICTING THE DISCONNECTED SIDE SEWER UPON COMPLETION OF THE WORK.

RECONNECTION

WHEN RECONNECTING TO AN EXISTING SIDE SEWER, THE POINT OF RECONNECTION WILL BE DETERMINED BASED ON THE MAGNITUDE OF THE CONSTRUCTION ON THE PROPERTY.

1. PARTIAL INTERIOR REMODEL AND/OR BUILDING ADDITION WITH NO ADDITIONAL PLUMBING FIXTURES – NO SIDE SEWER REPLACEMENT REQUIRED UNLESS A KNOWN PROBLEM EXISTS IN THE SIDE SEWER.
2. PARTIAL INTERIOR REMODEL AND/OR BUILDING ADDITION WITH ADDITIONAL PLUMBING FIXTURES– ASSESS CONDITION OF EXISTING SIDE SEWER THROUGH VIDEO INSPECTION FROM BUILDING TO PROPERTY LINE AND REPLACE AS NEEDED.
3. COMPLETE INTERIOR REMODEL – ASSESS CONDITION OF EXISTING SIDE SEWER THROUGH VIDEO INSPECTION FROM BUILDING TO SEWER MAIN AND REPLACE AS NEEDED. IF EXISTING SIDE SEWER IS ASBESTOS CEMENT OR CONCRETE, SIDE SEWER SHALL BE REPLACED FROM BUILDING TO PROPERTY LINE.*
4. COMPLETE INTERIOR REMODEL AND BUILDING ADDITION – NEW SIDE SEWER FROM BUILDING AT LEAST TO PROPERTY LINE.*
5. CONSTRUCTION OF A NEW BUILDING – NEW SIDE SEWER FROM BUILDING AT LEAST TO MAIN.*

BACK WATER VALVE INSTALLATION PER CITY ENGINEER, IF SCENARIO 2, 3, 4, OR 5 IS DIRECTLY ATTACHED TO THE LAKE LINE OR THE ELEVATION OF THE LOWEST DRAIN IN THE RESIDENCE IS LOWER THAN THE RIM ELEVATION OF THE UPSTREAM SEWER MANHOLE ON THE MAIN.

VIDEO INSPECTION OF THE EXISTING SIDE SEWER, BETWEEN THE PROPERTY LINE AND THE SEWER MAIN SHALL BE PERFORMED FOR SCENARIO NUMBER 4.

PROVIDE A COPY OF THE VIDEO DOCUMENTATION (VIDEO AND HARDCOPY REPORT) TO THE CITY ENGINEER.

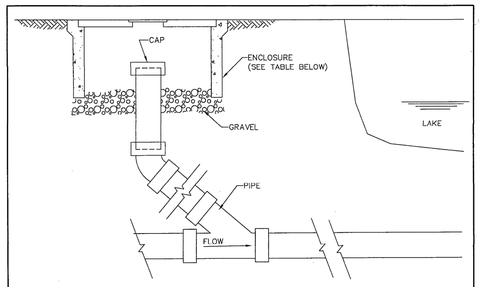
REPLACEMENT OR REPAIR OF THAT PORTION OF THE SIDE SEWER BETWEEN THE PROPERTY LINE AND THE SEWER MAIN, WILL BE DETERMINED BY THE CITY ENGINEER, BASED ON THE VIDEO INSPECTION.

*IF THE EXISTING SIDE SEWER IS PVC AND IS LESS THAN TEN YEARS OLD, THE SIDE SEWER DOES NOT HAVE TO BE REPLACED IF A VIDEO INSPECTION AND HYDROSTATIC PRESSURE TEST CONFIRMS THAT THE SIDE SEWER IS IN PROPER WORKING CONDITION. THESE TESTS SHALL BE PERFORMED AFTER ALL HEAVY EQUIPMENT THAT COULD DAMAGE THE SIDE SEWER IS OFF OF THE SITE.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
COMMERCIAL/MULTI FAMILY SIDE SEWER DISCONNECTION & RECONNECTION

6-5-2009	NO SCALE	S-22A

REV DATE | APPROVED



LAKE LINE CLEANOUT

PIPE SIZE	MATERIAL	CAP	ENCLOSURE	COMMENTS
6"	PVC	SIDU MECHANICAL SEWER PLUG	CONC. METER BOX, FOGTITE 1–D	INSTALLATION BELOW HYDRAULIC GRADIENT
6"	PVC	PVC CAP W/O GASKET	CONC. METER BOX, FOGTITE 1–D	INSTALLATION ABOVE HYDRAULIC GRADIENT
6"	DIP	MECHANICAL JOINT CAP	CONC. METER BOX, FOGTITE 1–D	INSTALLATION ABOVE HYDRAULIC GRADIENT
8"	PVC	PVC CAP W/O GASKET	CONC. METER BOX, FOGTITE NO. 2 (CONC. LID W/ ALUM. INS. PLATE)	INSTALLATION ABOVE HYDRAULIC GRADIENT
8"	DIP	MECHANICAL JOINT CAP	CONC. METER BOX, FOGTITE NO. 2 (CONC. LID W/ ALUM. INS. PLATE)	INSTALLATION ABOVE HYDRAULIC GRADIENT

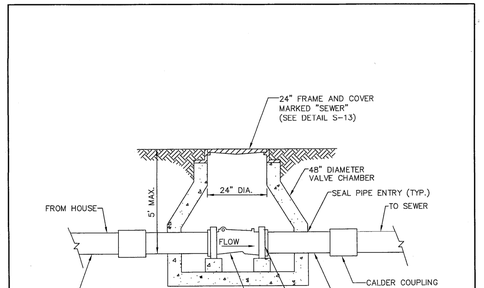
NOTES

1. IF POSSIBLE, CLEANOUT TO BE LOCATED JUST ABOVE HYDRAULIC GRADIENT OF LAKE LINE. CLEANOUT SHOULD ALSO BE LOCATED TO PROVIDE EASY ACCESS FOR INSPECTION AND MAINTENANCE BY THE HOME OWNER.
2. SEE S-23 & S-24 FOR BACK WATER VALVE LOCATION.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SIDE SEWER CLEANOUT FOR LAKE LINE CONNECTIONS

6-5-2009	NO SCALE	S-25

REV DATE | APPROVED



CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
BACK WATER VALVE ASSEMBLY FOR JOINT USE SIDE SEWER (4" OR 6" DIAMETER)

6-5-2009	NO SCALE	S-26

REV DATE | APPROVED

SIDE SEWER NOTES:

1. FOUR-INCH (4") PIPE MUST BE LAID AT A MINIMUM 2% GRADE. SIX-INCH (6") PIPE MUST BE LAID AT A MINIMUM 1.2% GRADE.
2. SIDE SEWERS MUST NOT BE CLOSER THAN 30" TO ANY FOUNDATION WALL OR OUTER LINE OF ANY FOOTINGS, PILINGS, OR BUILDING SUPPORTS. A CLEAN-OUT MUST BE INSTALLED AT THE CONNECTION, AND MUST BE 36" FROM THE FOUNDATION.
3. MINIMUM COVER MUST BE 42" IN THE PUBLIC RIGHT-OF-WAY, 30" IN PRIVATE ROADWAYS AND UNDER DITCHES, AND 18" ON PRIVATE PROPERTY.
4. SEWER MAINS MAY BE CORED OR A "T" INSTALLED IN THE MAIN LINE WHERE NO SEWER STUB EXISTS.
5. SIDE SEWERS WHEN USING OPEN CUT CONSTRUCTION METHODS MUST BE BEDDED WITH IMPORTED MATERIAL TO 4" BELOW AND 6" ABOVE THE INSTALLED PIPE. THE BROAD, "BELL" ENDS OF PIPE MUST BE LAID UPHILL.
6. IMPORTED BACKFILL MATERIAL WILL BE REQUIRED IN ALL PAVED AREAS AND MUST BE COMPACTED TO 95% OF MAXIMUM DENSITY IN 1 FT. LIFTS. IN PUBLIC RIGHT OF WAY, ONLY SELECT MATERIAL (5/8" MINUS C.R.) WILL BE ALLOWED FOR BEDDING AND BACKFILL.
7. PARALLEL SEWER AND WATER SERVICE LINES MUST BE AT LEAST 4 FEET APART WHEN LAID HORIZONTALLY, AND AT LEAST 2 FEET APART WHEN LAID VERTICALLY, WITH THE SEWER THE DEEPER OF THE TWO LINES. IF THE LINES MUST CROSS, THEY MUST CROSS AT 90 DEGREES TO ONE ANOTHER AND HAVE AT LEAST 2 FEET OF VERTICAL CLEARANCE.
8. ALL CHANGES IN DIRECTION MUST BE MADE WITH 1/8 BENDS (45 DEGREES), 1/16 BENDS (22 ½ DEGREES), OR "Y" BRANCHES WITH THE STRAIGHT-THROUGH OPENING PLUGGED FOR CLEAN-OUT. NO MORE THAN TWO BENDS ARE PERMITTED BETWEEN CLEAN-OUTS, WHICH MUST BE PLACED AT LEAST EVERY 100 FEET. CLEAN-OUTS MUST EXTEND TO WITHIN 12" OF THE FINISHED GRADE AND CAPPED WITH A WATER-TIGHT PLUG. CLEAN-OUTS IN PAVED AREAS, PATIOS, OR SIDEWALKS MUST HAVE CAST IRON FRAMES AND COVERS WITH LOCKING LIDS SET TO FINISHED PAVED GRADE.
9. PIPE MATERIALS: ASTM 3034 SDR 35 PVC PIPE, FUSED SOLID WALL HDPE, SCHEDULE 40 ABS, DIP OR CIP (UP TO 8 FT. DEPTH). OVER 8 FT. DEPTH AND SLOPES MORE THAN 20% DIP, CIP, OR FUSED SOLID WALL HDPE ARE REQUIRED.
10. BEDDING MATERIAL FOR OPEN CUT CONSTRUCTION MUST BE PEA GRAVEL, SAND, CONTROL DENSITY FILL (CDF), OR 5/8" MINUS C.R.
11. SELECT BACKFILL MATERIAL SHALL BE 5/8" MINUS C.R. OR CONTROL DENSITY FILL (CDF).
12. IMPORTED BACKFILL MATERIAL SHALL BE BANK RUN GRAVEL OR PIT RUN GRAVEL FROM AN APPROVED SUPPLIER MEETING APWA/WSDOT GRADATION SPECIFICATIONS. NOT ALLOWED IN RIGHT-OF-WAY.
13. RUBBER GASKETS MUST BE USED WHEN APPROPRIATE.
14. RIGID COUPLINGS MUST BE USED FOR CONNECTIONS TO EXISTING STUBS IN RIGHT-OF-WAY.
15. A STAINLESS STEEL STRAP AND SADDLE (ROMAC) MUST BE USED FOR CORING.
16. TESTING: THE RATE OF LEAKAGE MUST NOT EXCEED THE FOLLOWING AMOUNTS PER 100 FT. OF PIPE:
    4" PIPE 1.6 GAL/HR 6" PIPE 2.4 GAL/HR
17. INSPECTION IS REQUIRED PRIOR TO BACKFILLING. THE CITY REQUIRES AT LEAST 24 HOURS NOTICE PRIOR TO INSPECTIONS.

D.R. STRONG CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

4041 W. MERCER WAY
LUNDIN RESIDENCE

NOTES & DETAILS

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4041 W. MERCER WAY
MERCER ISLAND, WA 98040

DAVID & JAYMEE LUNDIN

2221 22ND AVE E
SEATTLE WA 98112

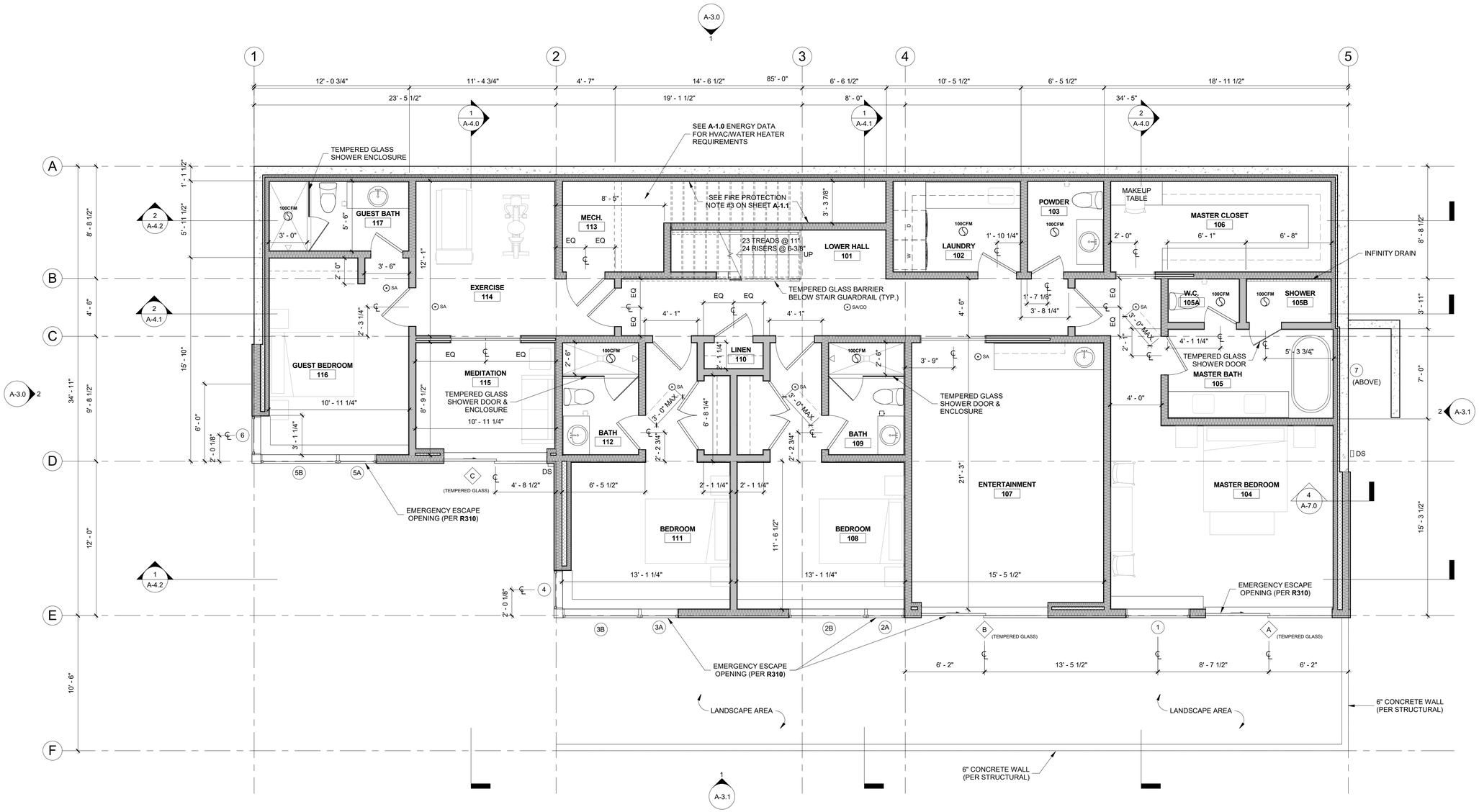
WALTER J. SHORT — STATE OF WASHINGTON — 10281 — REGISTERED PROFESSIONAL ENGINEER
1-8-19

DATE	REVISION
APR	

DRAFTED BY: DLR
DESIGNED BY: WJS
PROJECT ENGINEER: WJS
DATE: 1.8.19
PROJECT NO.: 18113

DRAWING: C5
SHEET: 5 OF 5

FLOOR PLAN LEGEND		
SYMBOL	**DESCRIPTION**	**NOTES**
	EXHAUST FAN	- SEE MECHANICAL PLANS - EXHAUST VENTS MUST TERMINATE AT EXTERIOR OF STRUCTURE WITH CLEARANCES PER **WAC M1506.2**
SA	SMOKE ALARM	
SA/CO	SMOKE ALARM & CARBON MONOXIDE DETECTOR	
GENERAL PLAN NOTES		
1. ALL GRID LINES AND DIMENSIONS ARE TO FACE OF STUD/CONCRETE 2. ALL EXTERIOR WALLS ARE 2x6 UNLESS OTHERWISE NOTED		



1 LOWER FLOOR PLAN
1/4" = 1'-0"

PLAN NORTH

3257 REGISTERED ARCHITECT
STUART TAYLOR SILK
STATE OF WASHINGTON

DESIGN	SNS, KM
DRAWN	CA, TES
CHECKED	DM
SHEET ISSUE DATE	01/08/2019

DRAWING SETS

-
-
-
-

REVISIONS

#	DATE	DESCRIPTION

Stuart Silk Architects

2400 N. 45th Street
Seattle, WA 98103

WWW.STUARTSILK.COM

LUNDIN RESIDENCE

4041 West Mercer Way
Mercer Island, WA 98040

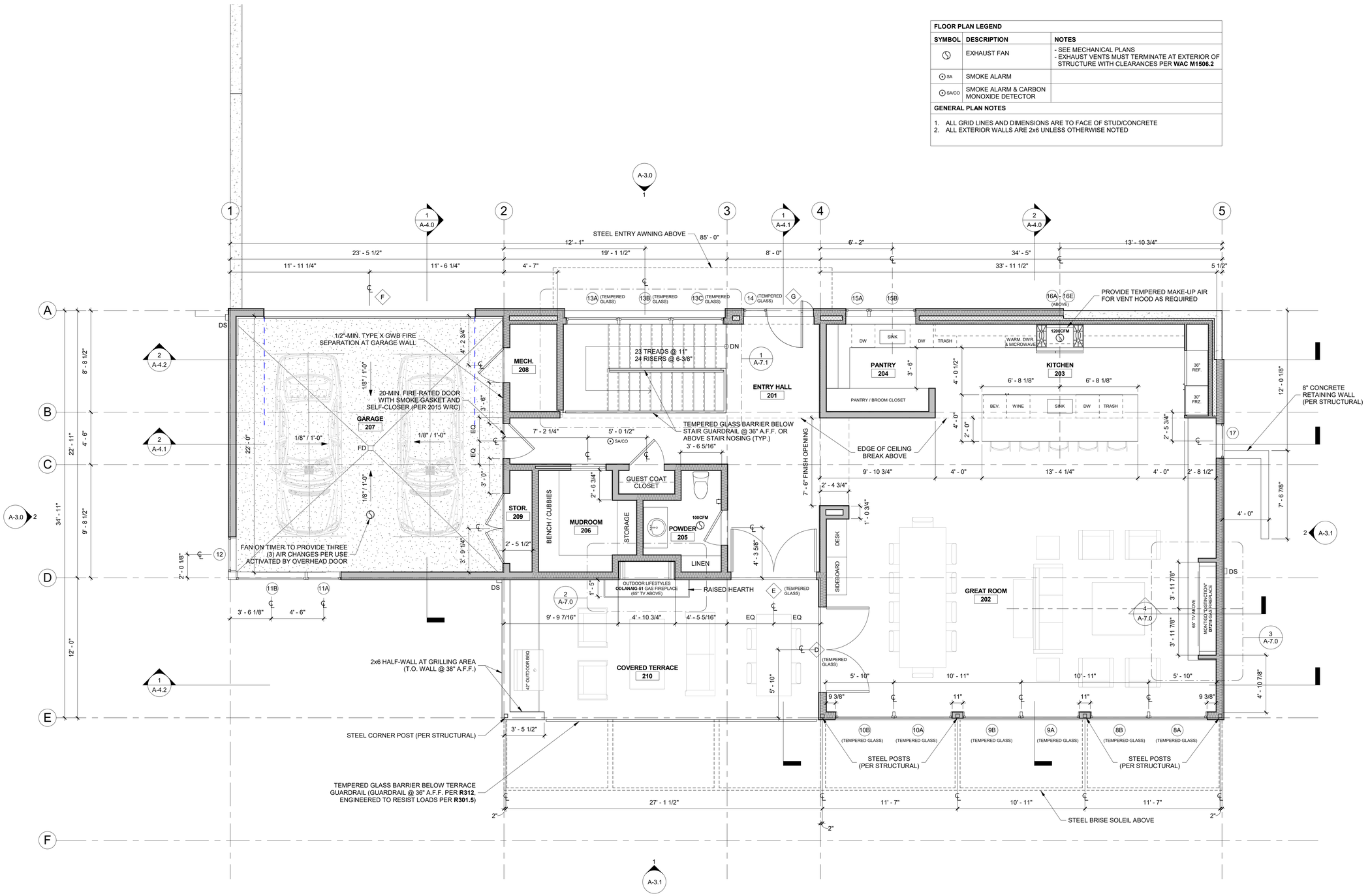
PERMIT SET

LOWER FLOOR PLAN

A-2.1

PLOT DATE: 1/21/2019 4:23:33 PM

FLOOR PLAN LEGEND		
SYMBOL	**DESCRIPTION**	**NOTES**
⊘	EXHAUST FAN	- SEE MECHANICAL PLANS - EXHAUST VENTS MUST TERMINATE AT EXTERIOR OF STRUCTURE WITH CLEARANCES PER **WAC M1506.2**
⊙ SA	SMOKE ALARM	
⊙ SA/CO	SMOKE ALARM & CARBON MONOXIDE DETECTOR	
GENERAL PLAN NOTES		
1. ALL GRID LINES AND DIMENSIONS ARE TO FACE OF STUD/CONCRETE 2. ALL EXTERIOR WALLS ARE 2x6 UNLESS OTHERWISE NOTED		



1 MAIN FLOOR PLAN
1/4" = 1'-0"

PLAN NORTH

3257 REGISTERED ARCHITECT
STUART NAYLOR SILK
STATE OF WASHINGTON

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Mercer Island, WA 98040

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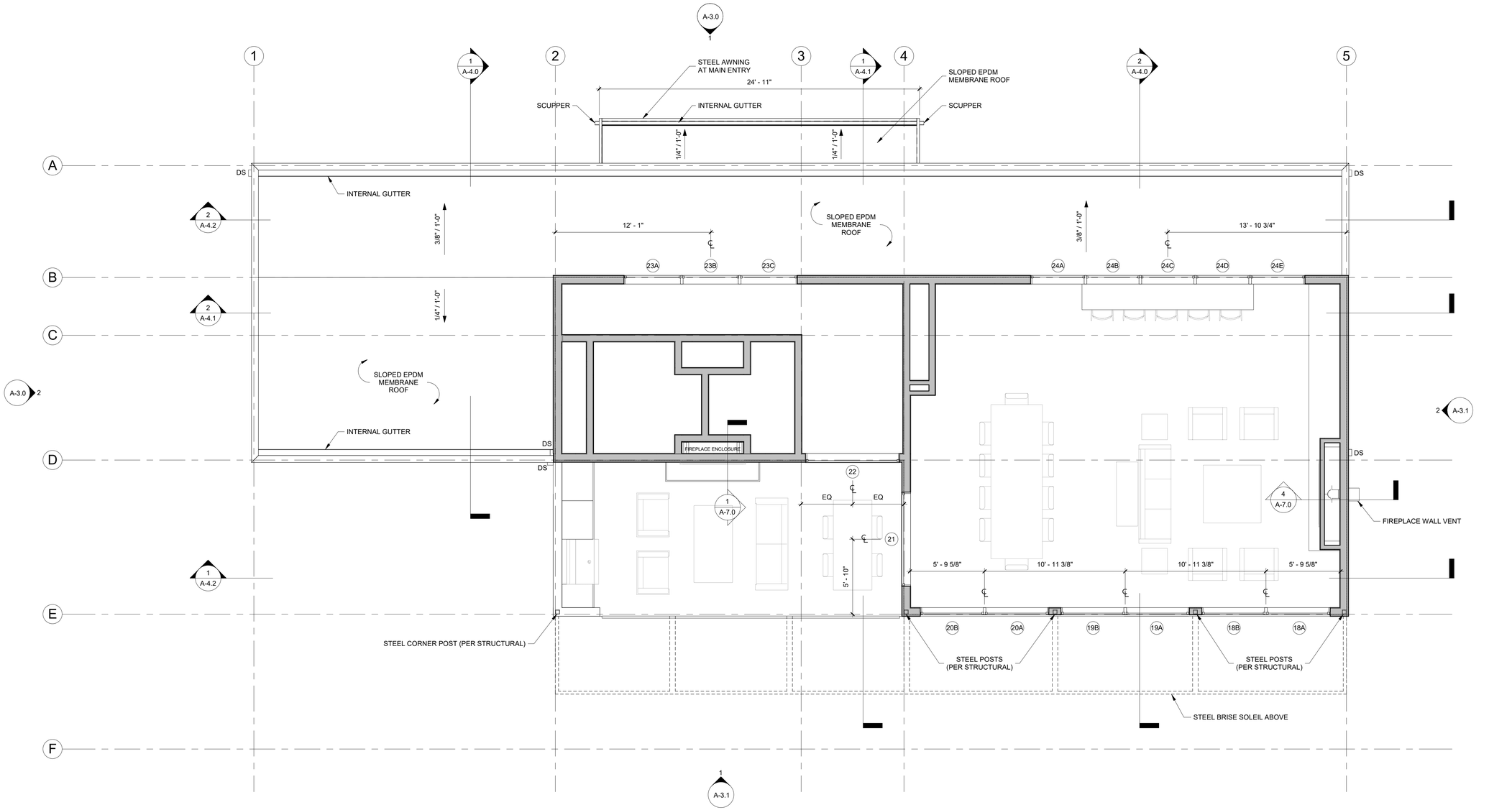
MAIN FLOOR PLAN

A-2.2

PLOT DATE: 1/21/2019 4:23:34 PM

FLOOR PLAN LEGEND		
SYMBOL	**DESCRIPTION**	**NOTES**
	EXHAUST FAN	- SEE MECHANICAL PLANS - EXHAUST VENTS MUST TERMINATE AT EXTERIOR OF STRUCTURE WITH CLEARANCES PER **WAC M1506.2**
SA	SMOKE ALARM	
SA/CO	SMOKE ALARM & CARBON MONOXIDE DETECTOR	
GENERAL PLAN NOTES		
1. ALL GRID LINES AND DIMENSIONS ARE TO FACE OF STUD/CONCRETE 2. ALL EXTERIOR WALLS ARE 2x6 UNLESS OTHERWISE NOTED		



1 CLERESTORY PLAN
1/4" = 1'-0"

PLAN NORTH

3257 REGISTERED ARCHITECT
STUART NAYLOR SILK
STATE OF WASHINGTON

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CLERESTORY PLAN

A-2.3

PLOT DATE: 1/21/2019 4:23:34 PM

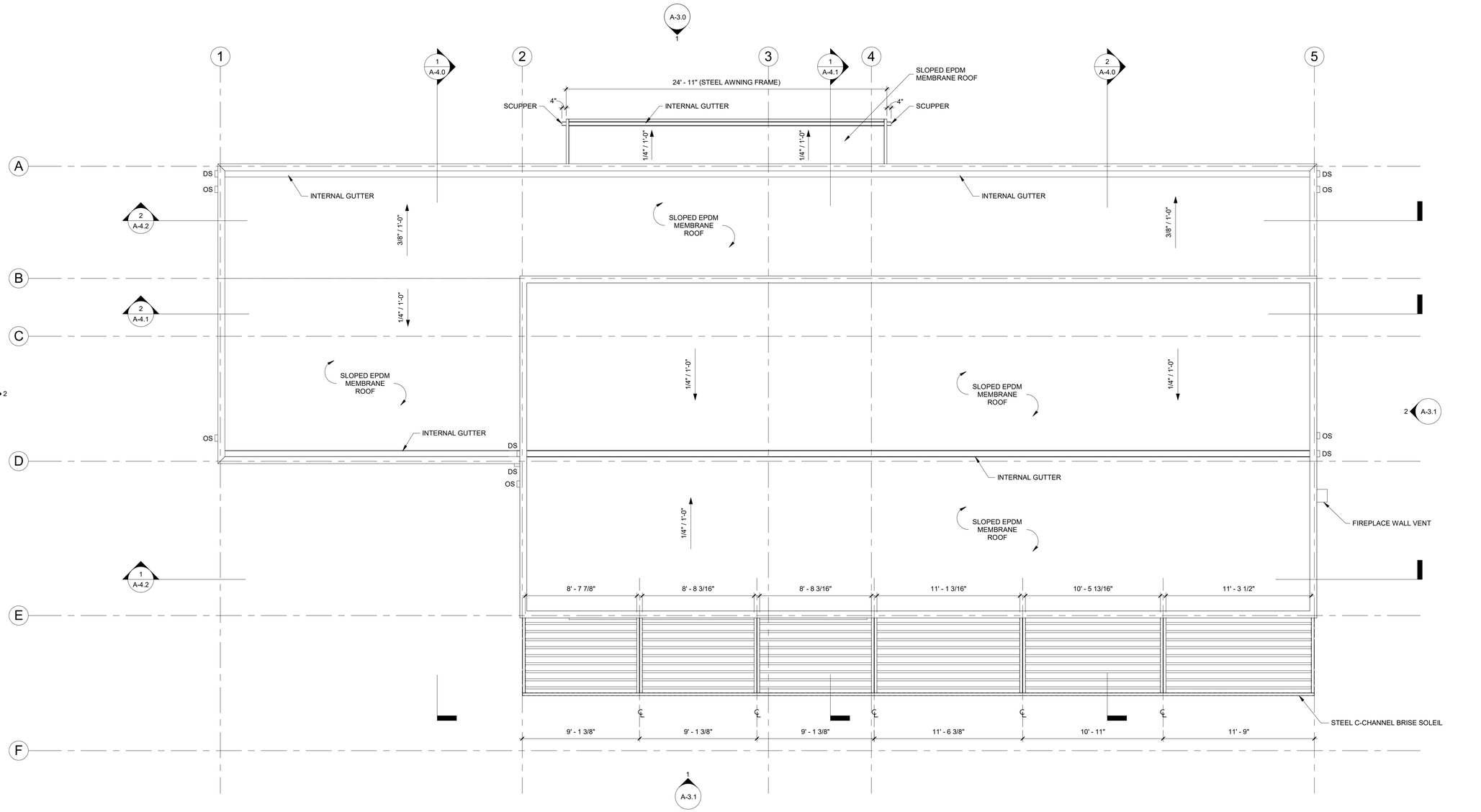
ROOF PLAN LEGEND		
SYMBOL	**DESCRIPTION**	**REMARKS**
DS	EXTERIOR DOWNSPOUT	(3" diameter, round, painted)
RS	ROOF SCUPPER	(Size, finish, detail callout T.B.D.)
OS	OVERFLOW SCUPPER	(Size, finish, detail callout T.B.D.)

ROOF PLAN NOTES

1. Flood test all flat roofs for 24 hours prior to insulating.
2. Roofing Contractor to guarantee materials and workmanship for 10 years.
3. All roof penetration locations to be approved by Architect prior to rough in.
   No roof penetrations on the (front) side of roof.
   Minimize quantities of roof penetrations as much as possible. Combine vent stacks.
4. Contractor to field verify venting continuity and 1" minimum airspace above insulation.
5. Flat Roof Slope = 1/4" per Foot, Typical.

ROOF VENTILATION NOTES

1. Provide ventless roof framing and insulation at all flat roof planes:
   - Framing per structural drawings
   - R-21 batt insulation
   - R-21 closed-cell spray-foam insulation
   - Rooftop rigid insulation (sloped to drain - 1/4" slope per linear foot)



1 ROOF PLAN
1/4" = 1'-0"

PLAN NORTH

3257
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STUART NAYLOR SILK
STATE OF WASHINGTON

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Mercer Island, WA 98040

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ROOF PLAN

A-2.4

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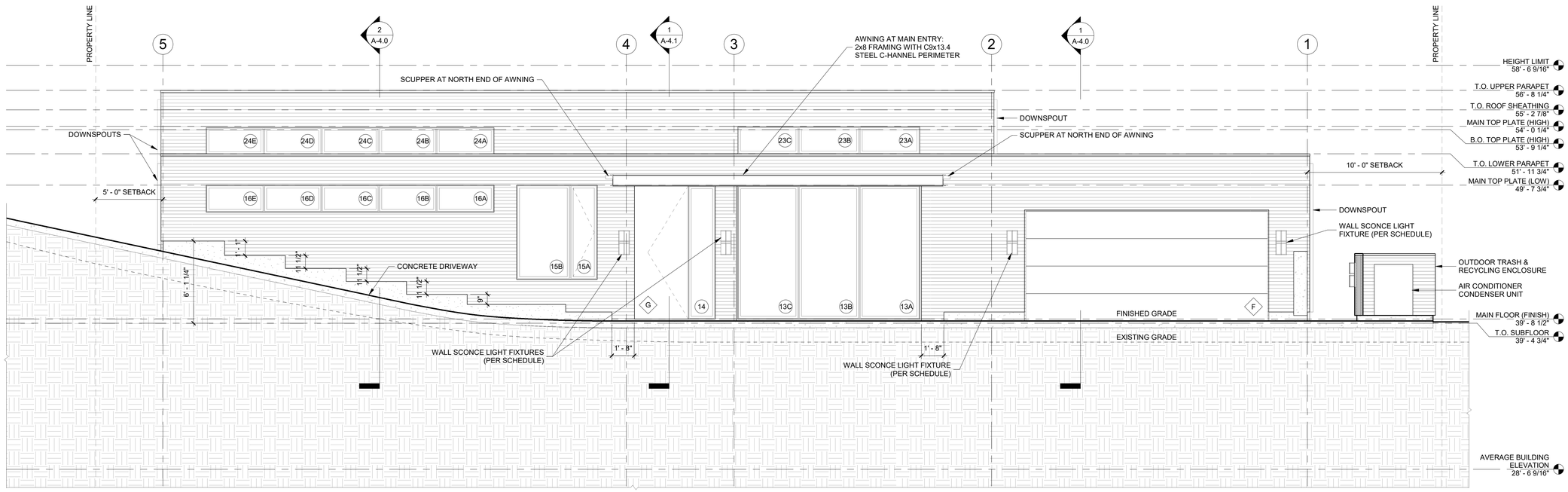
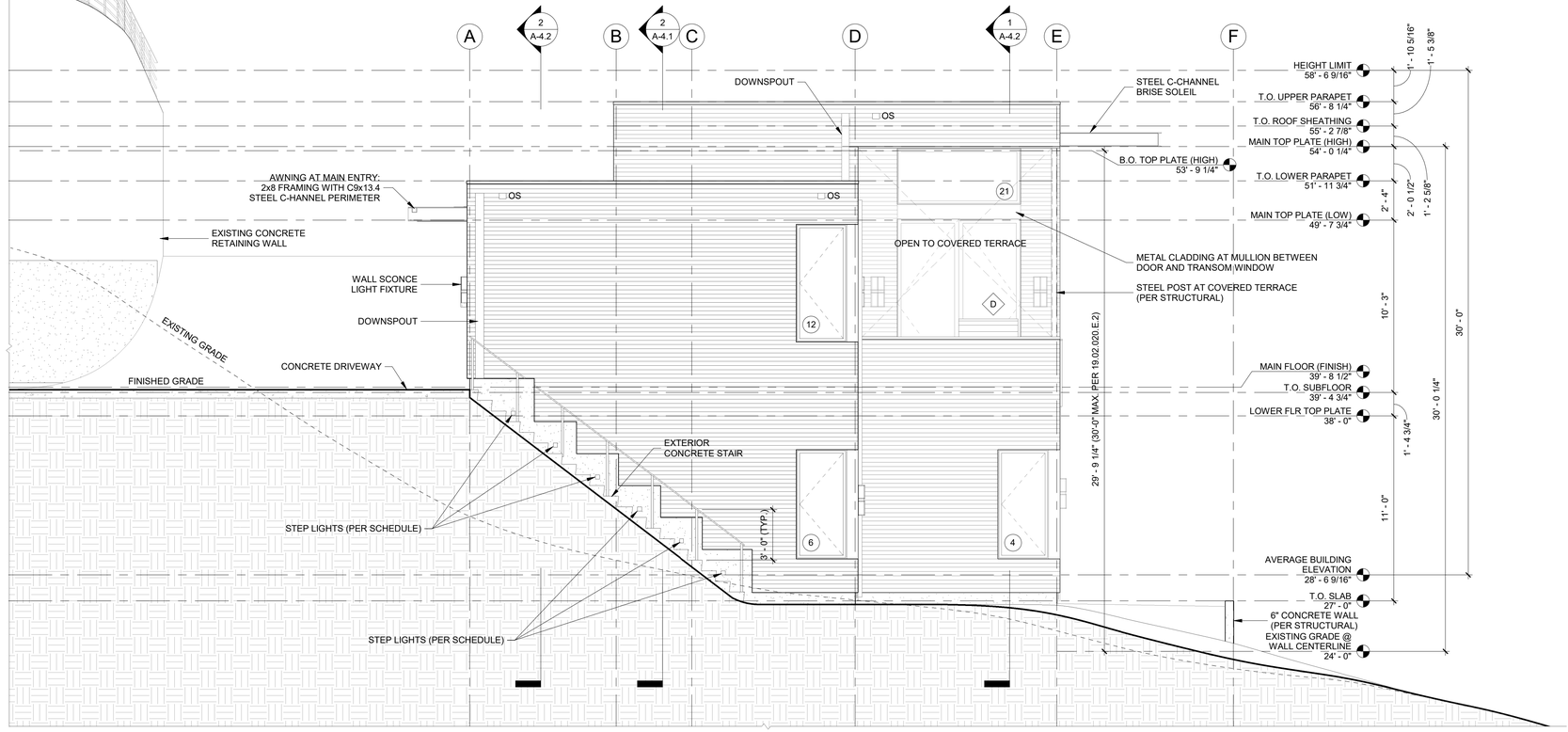


1 EAST ELEVATION
1/4" = 1'-0"



2 NORTH ELEVATION
1/4" = 1'-0"

3257
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STATE OF WASHINGTON

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EXTERIOR ELEVATIONS

A-3.0

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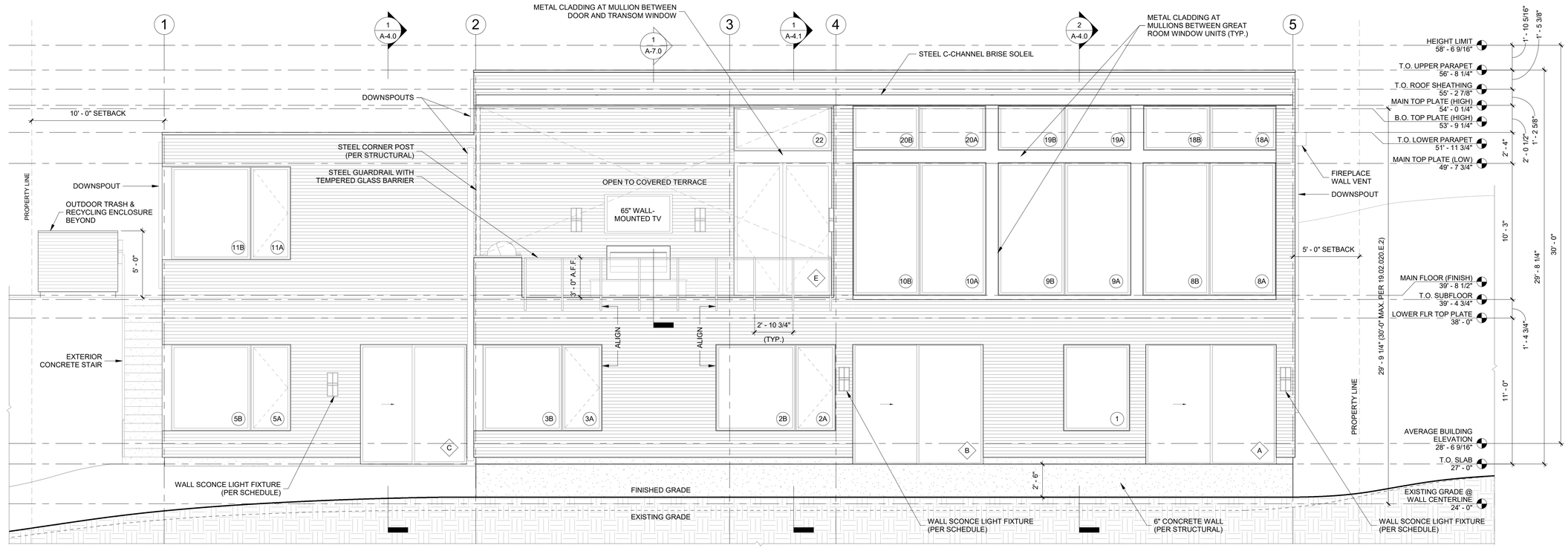
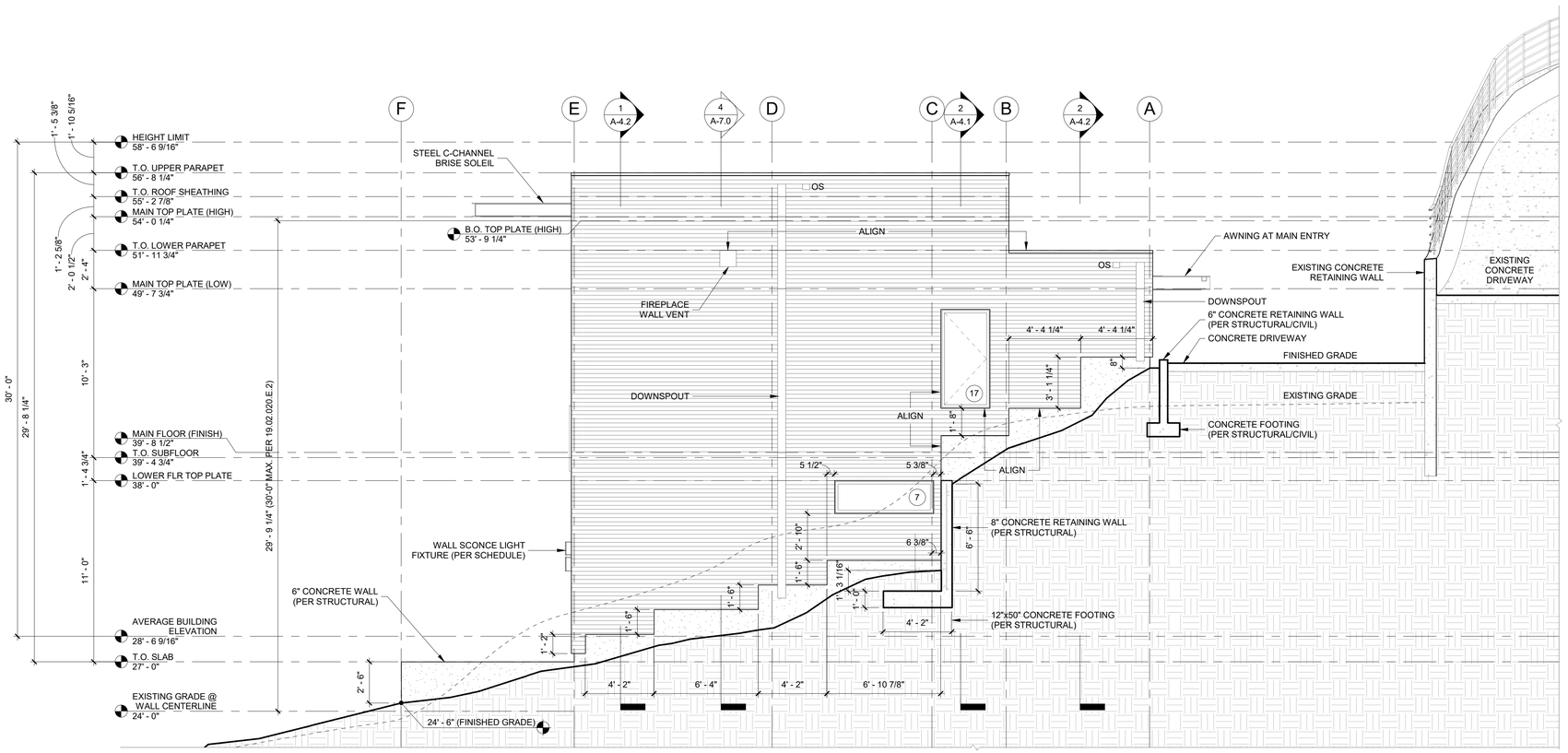


1 WEST ELEVATION
1/4" = 1'-0"



2 SOUTH ELEVATION
1/4" = 1'-0"

3257
REGISTERED ARCHITECT
STUART NAYLOR SILK
STATE OF WASHINGTON

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Mercer Island, WA 98040

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EXTERIOR ELEVATIONS

A-3.1

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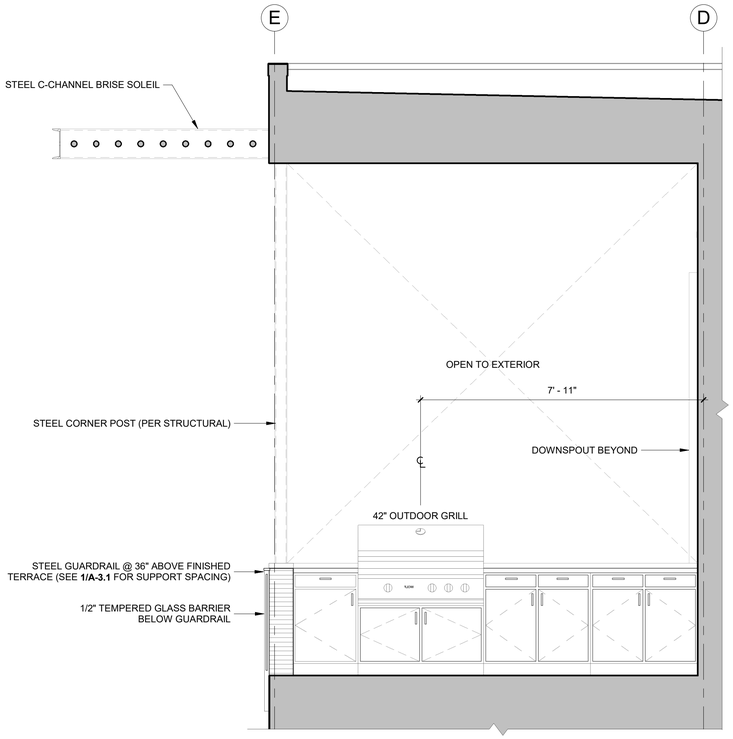
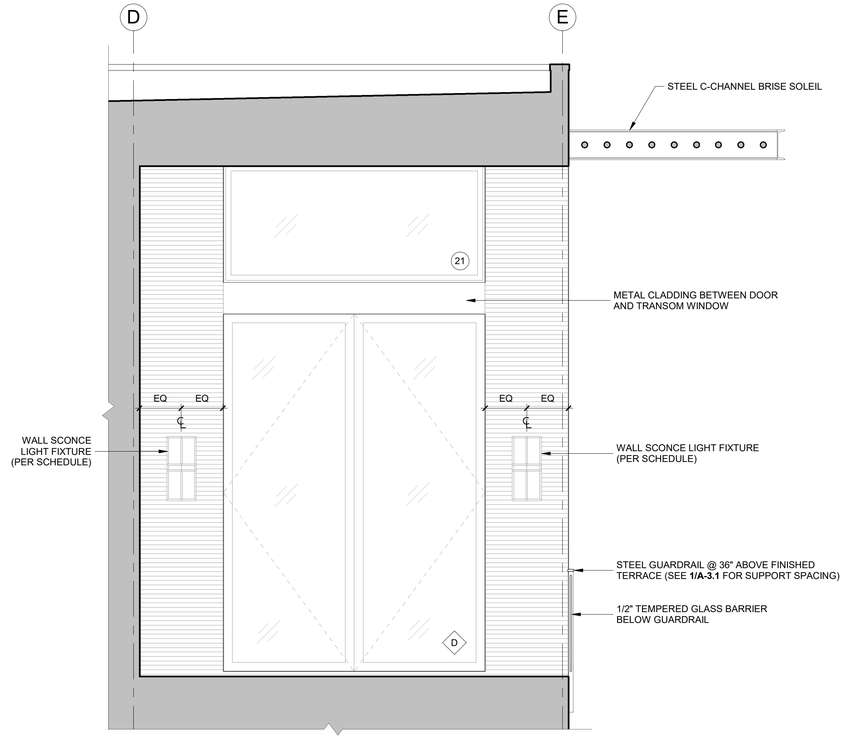
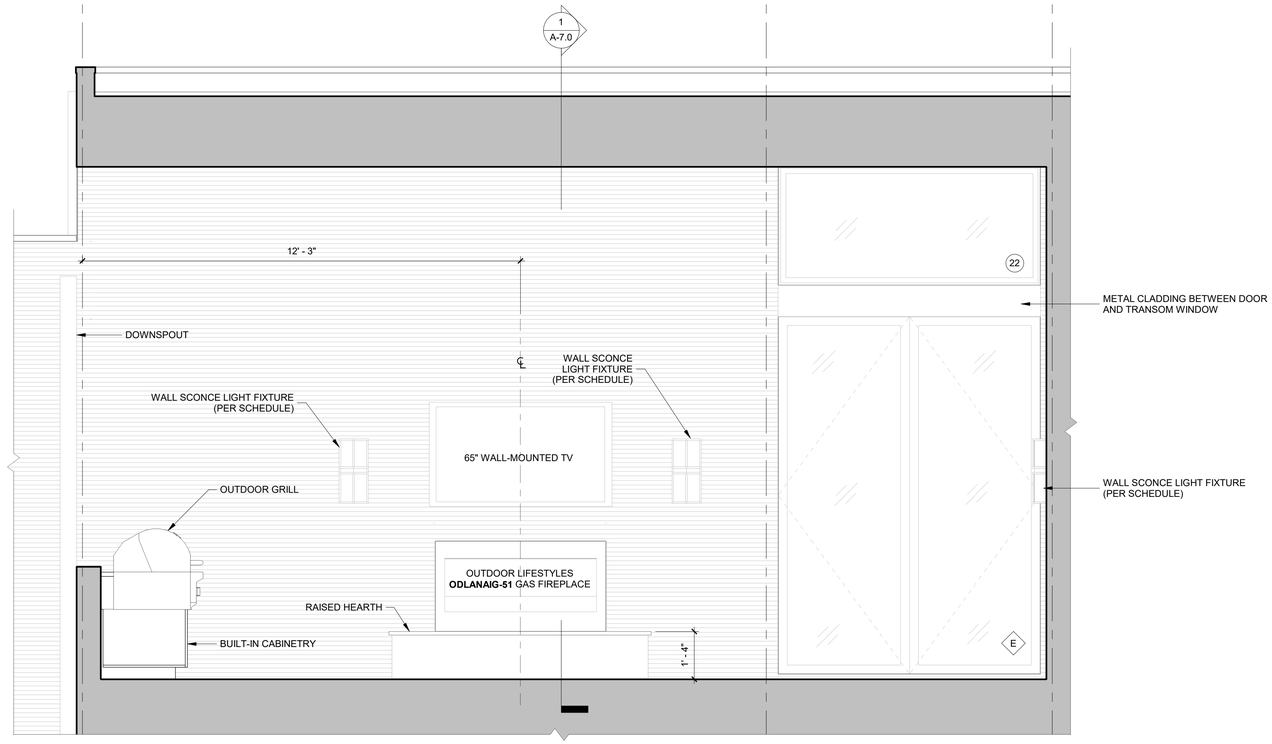


1 210 COVERED TERRACE - NORTH
1/2" = 1'-0"



2 210 COVERED TERRACE - SOUTH
1/2" = 1'-0"



3 210 COVERED TERRACE - EAST
1/2" = 1'-0"

3257
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STUART NAYLOR SILK
STATE OF WASHINGTON

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4041 West Mercer Way
Mercer Island, WA 98040

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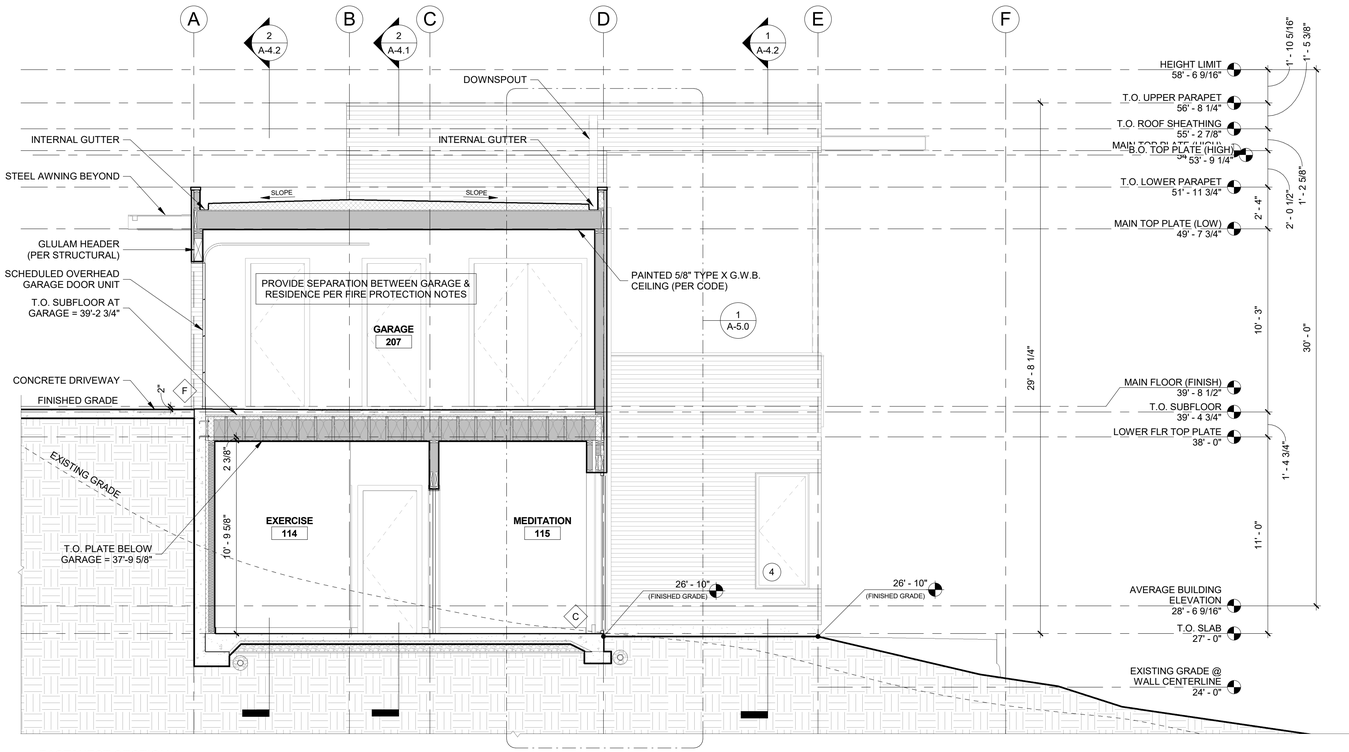
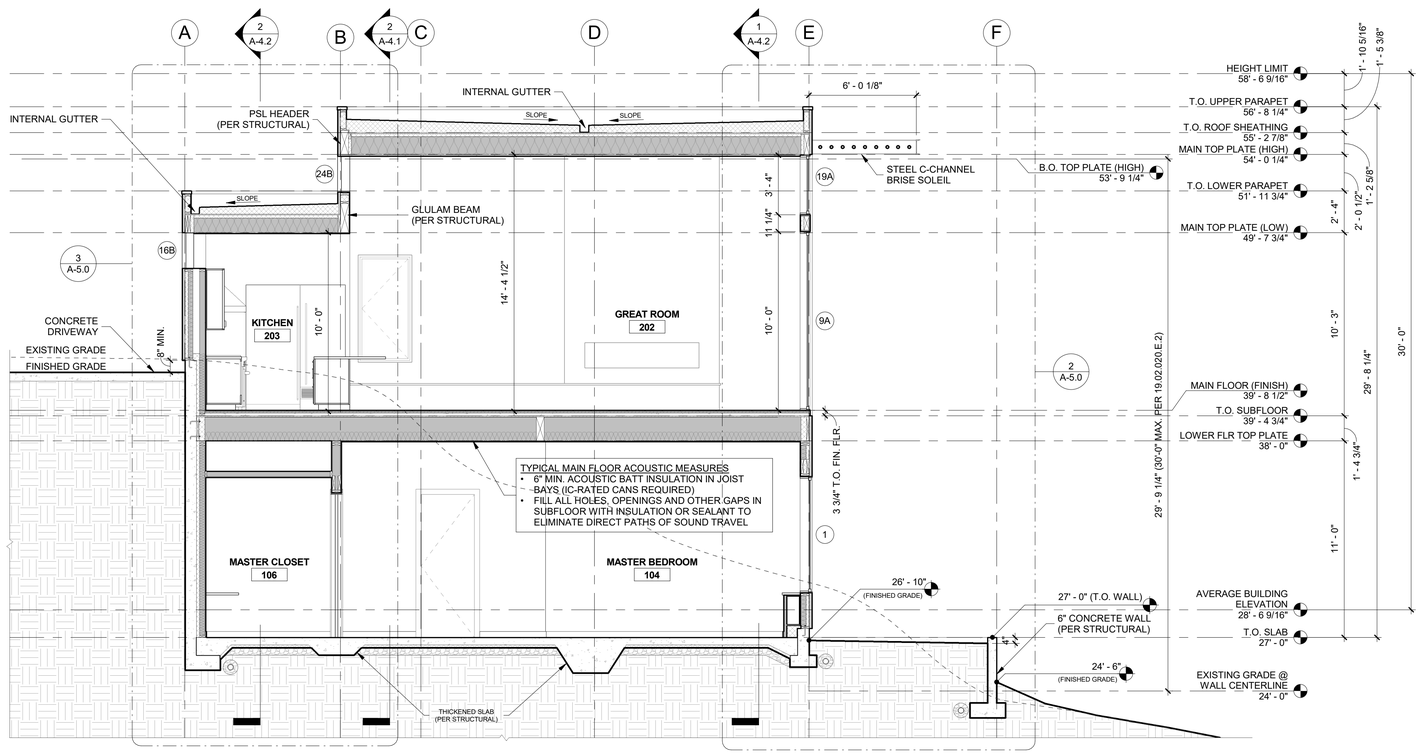
EXTERIOR ELEVATIONS

A-3.2

PLOT DATE: 1/21/2019 3:50:12 PM



1 EAST/WEST SECTION 1
1/4" = 1'-0"



2 EAST/WEST SECTION 2
1/4" = 1'-0"

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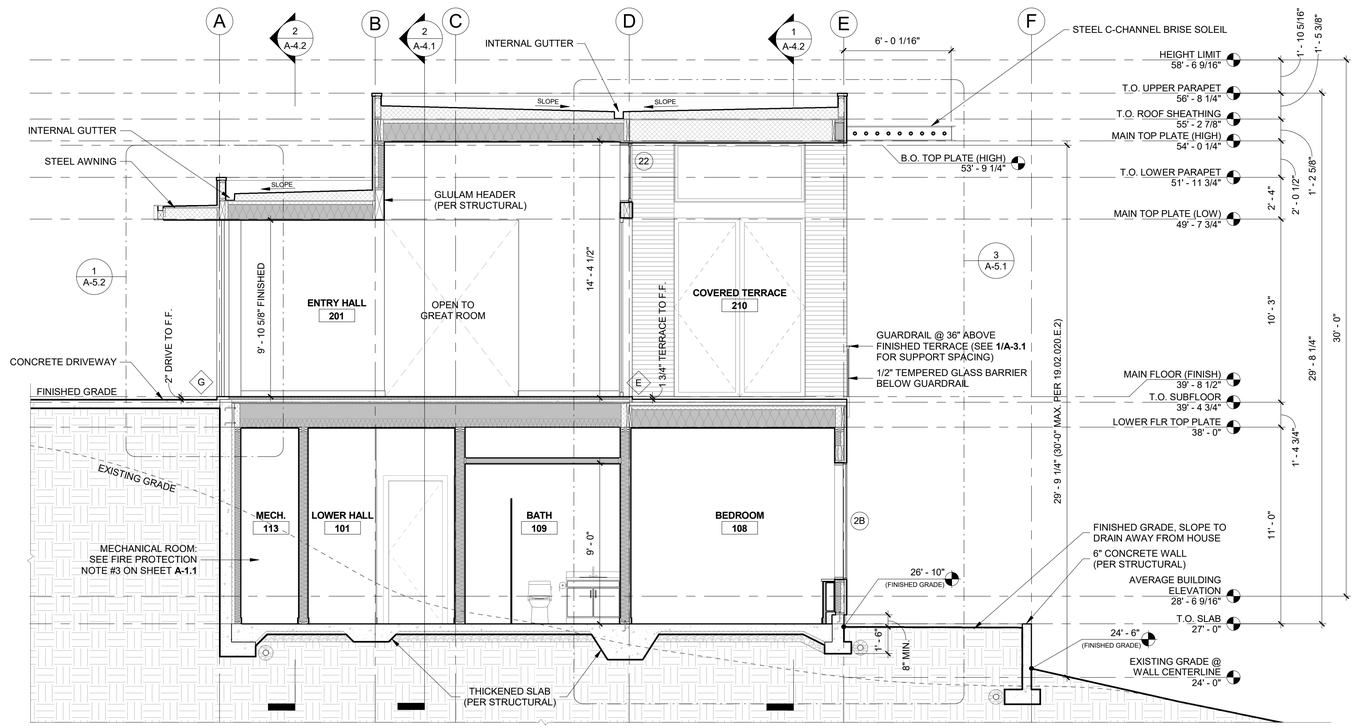
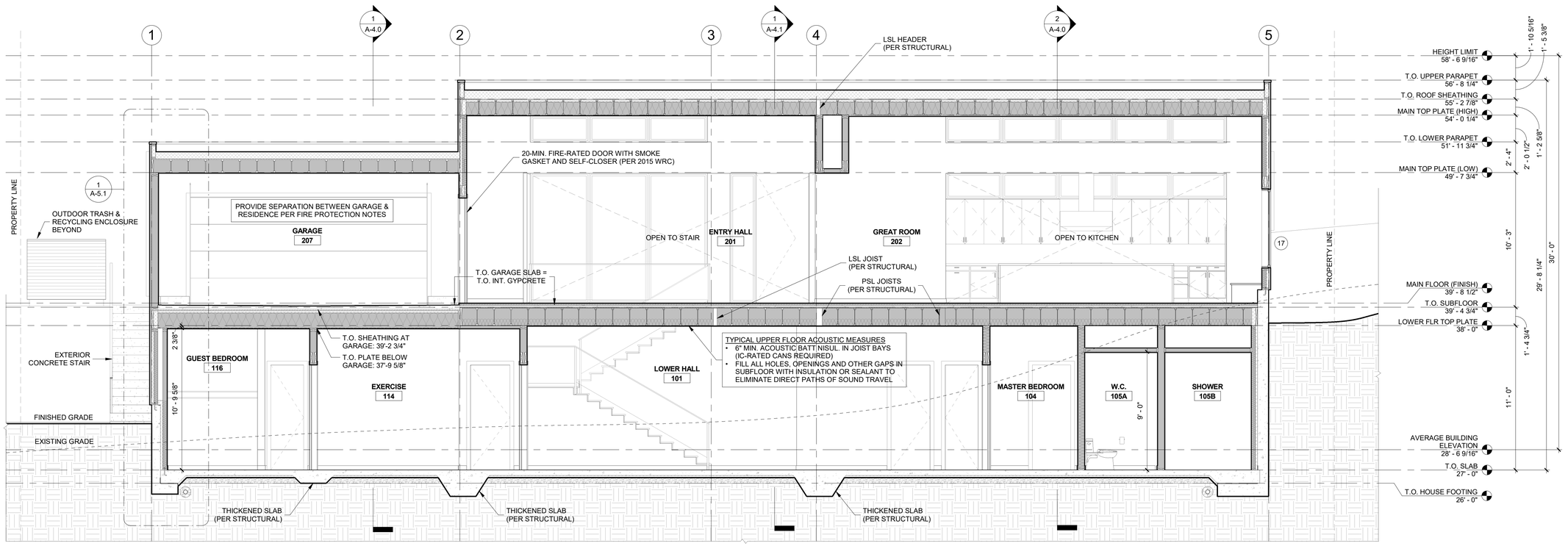
BUILDING SECTIONS

A-4.0

PLOT DATE: 1/21/2019 3:50:14 PM



1 EAST/WEST SECTION 3
1/4" = 1'-0"



2 NORTH/SOUTH SECTION 1
1/4" = 1'-0"

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STATE OF WASHINGTON

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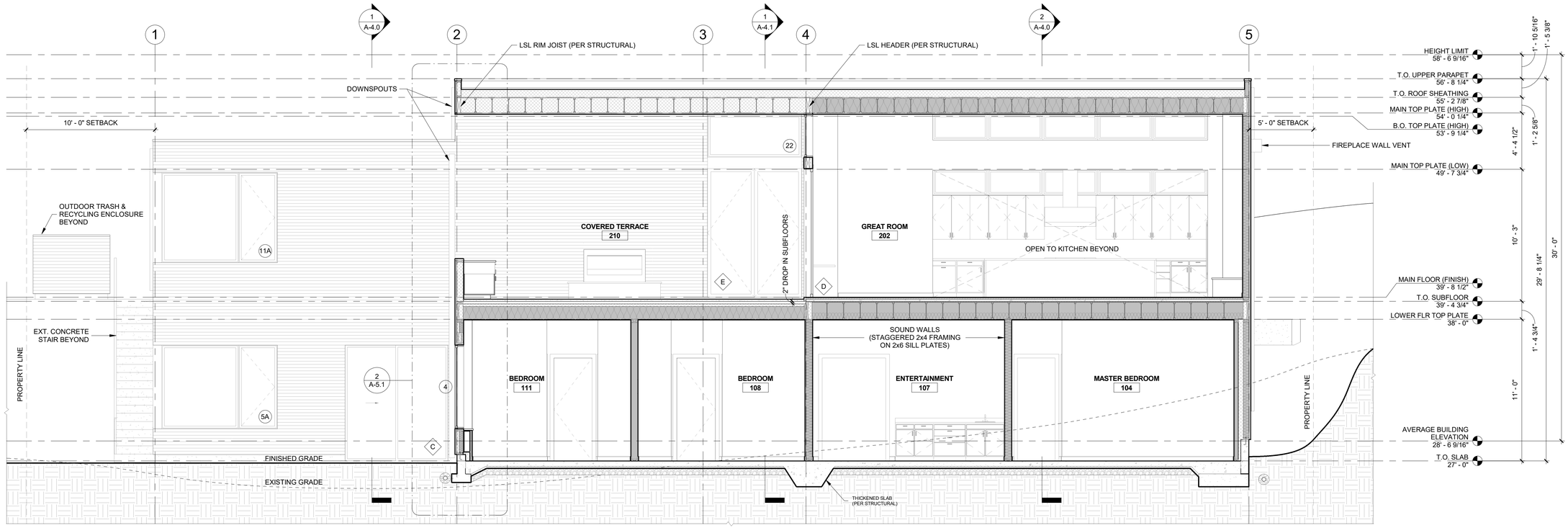
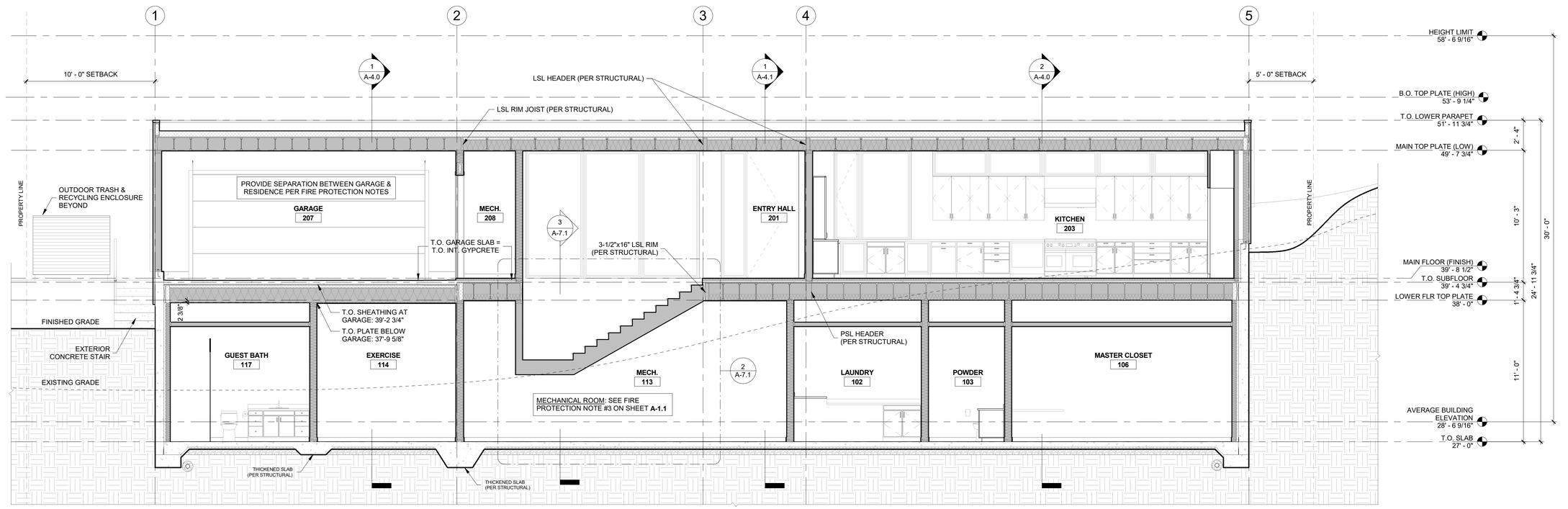


1 NORTH/SOUTH SECTION 2
1/4" = 1'-0"



2 LOWER
1/4" = 1'-0"

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A-4.2

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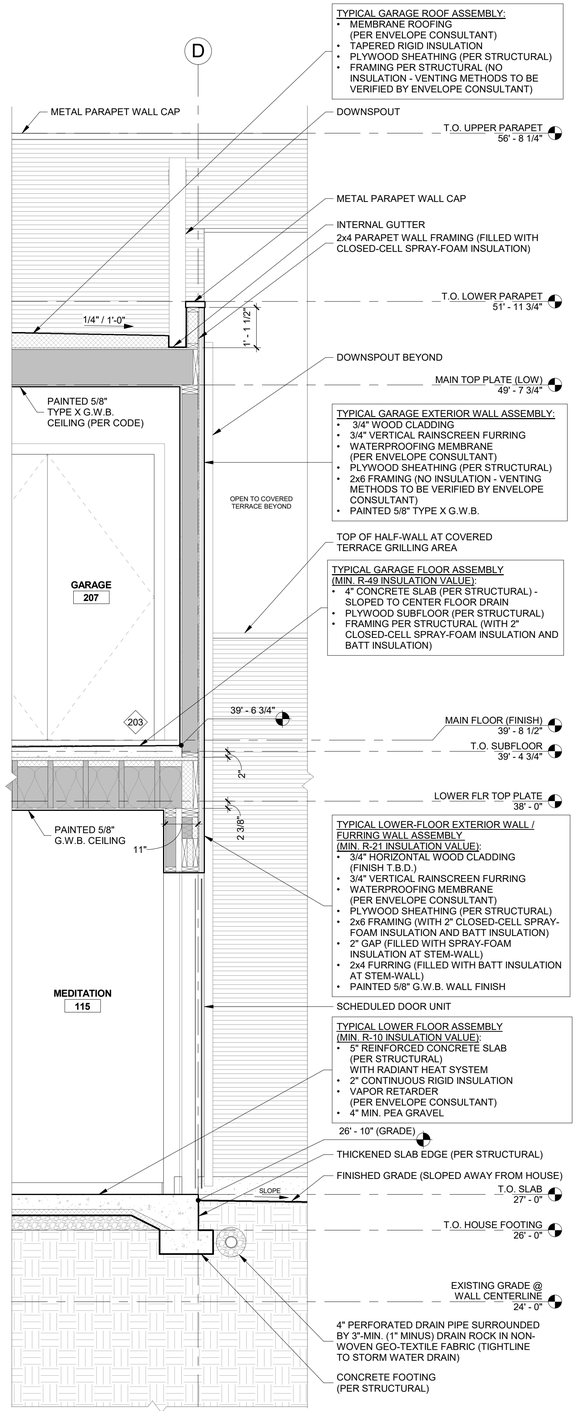
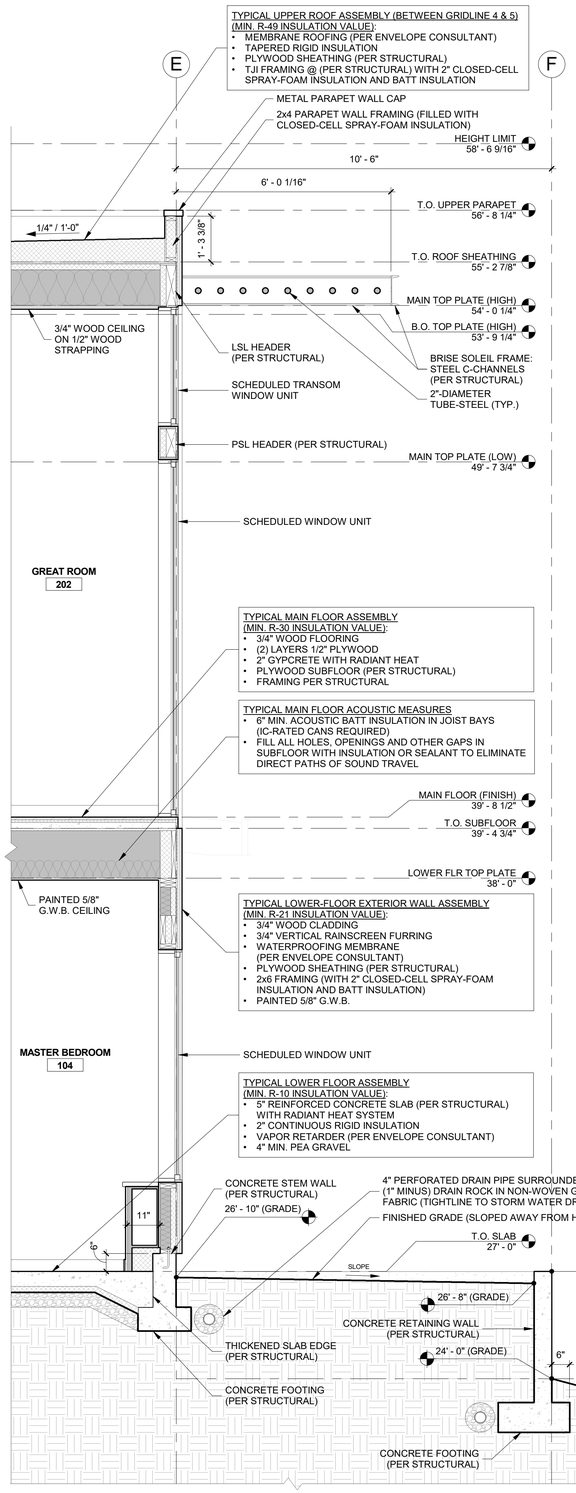
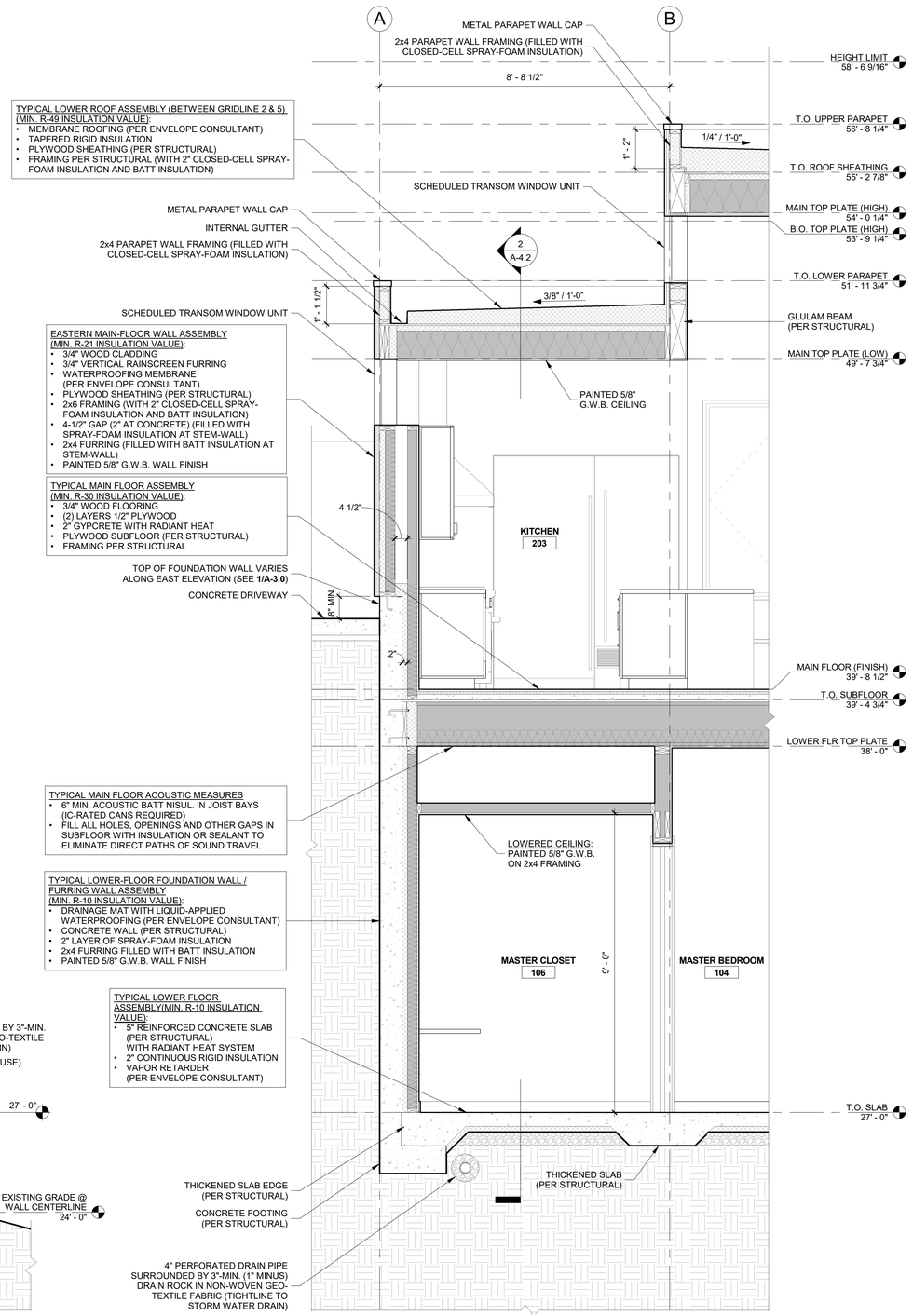


1 WALL SECTION AT GARAGE 207 / MEDITATION 115
1/2" = 1'-0"



2 WALL SECTION AT GREAT ROOM 202 / MASTER BEDROOM 104
1/2" = 1'-0"



3 WALL SECTION AT KITCHEN 203 / MASTER CLOSET 106
1/2" = 1'-0"

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WALL SECTIONS

A-5.0

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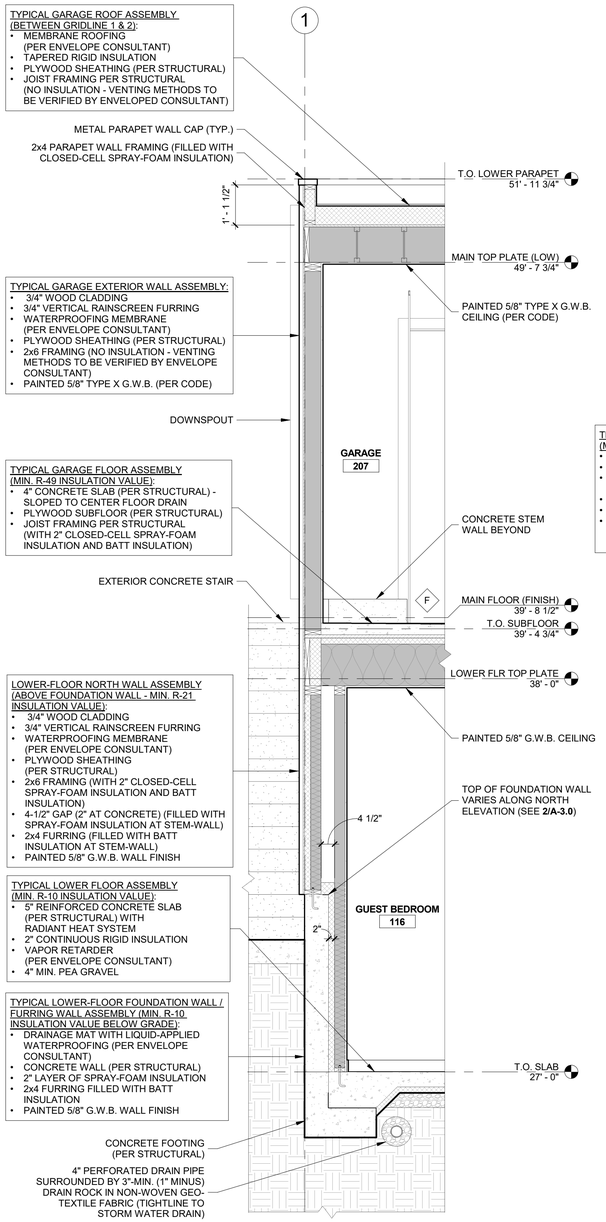
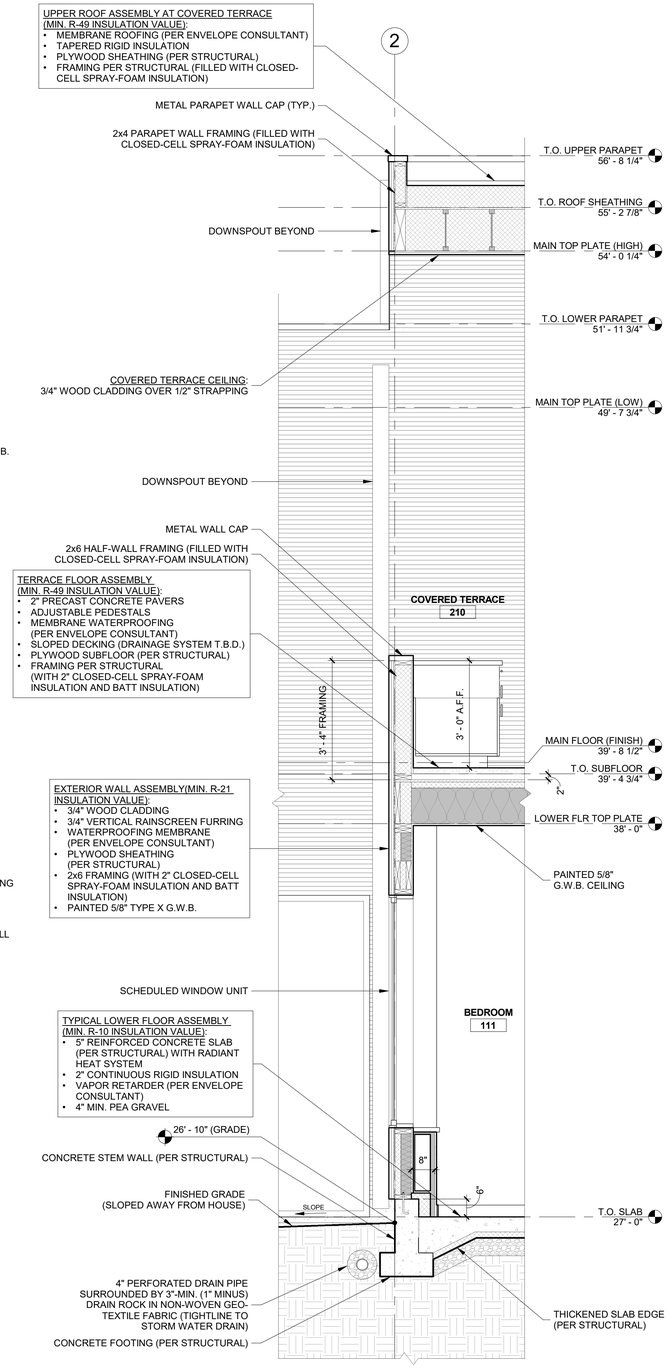
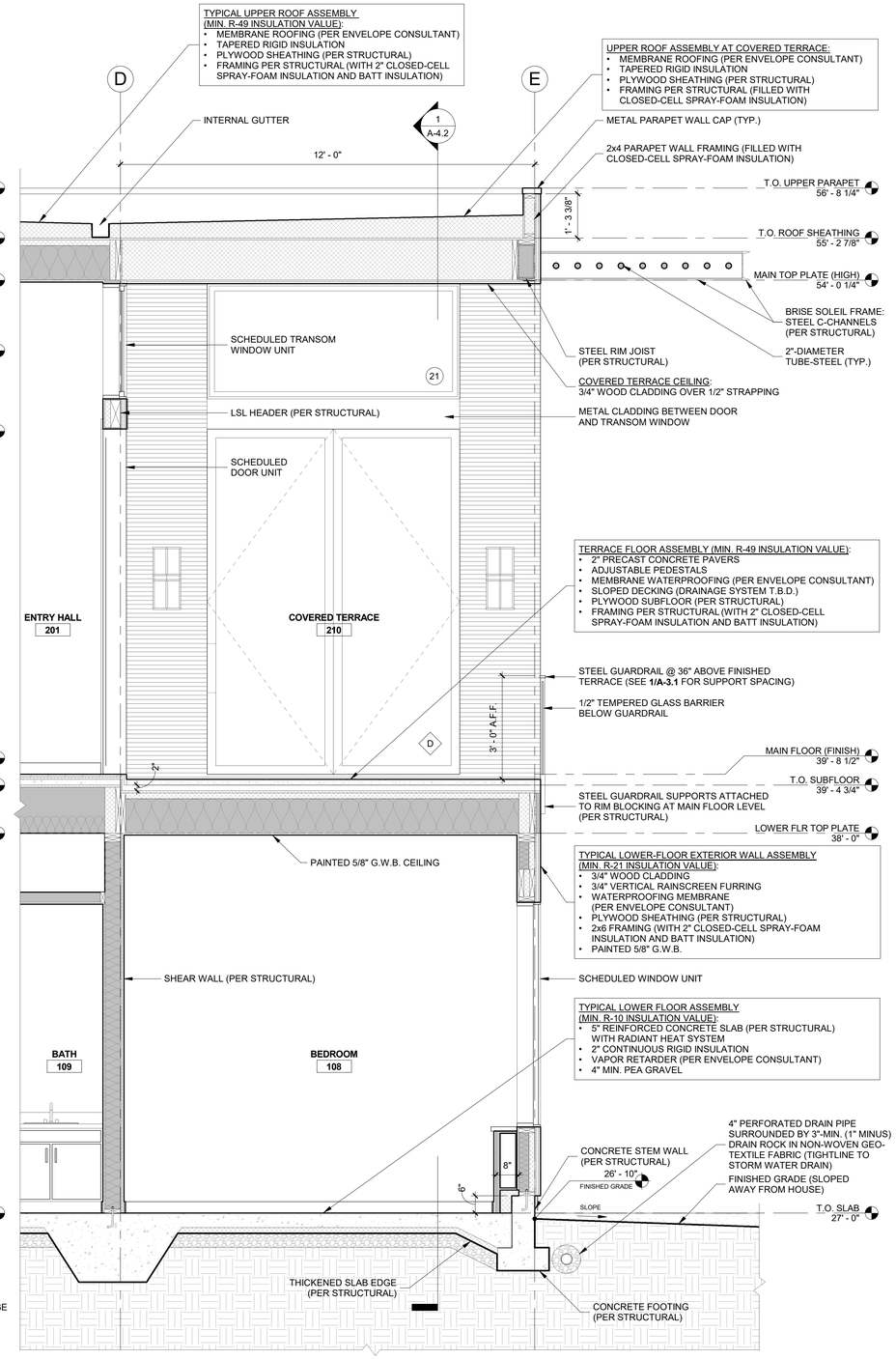


1 WALL SECTION AT GARAGE 207 / GUEST BEDROOM 116
1/2" = 1'-0"



2 WALL SECTION AT COVERED TERRACE 210 / BEDROOM 111
1/2" = 1'-0"



3 WALL SECTION AT COVERED TERRACE 210 / BEDROOM 108
1/2" = 1'-0"

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STUART TAYLOR SILK
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WALL SECTIONS

A-5.1

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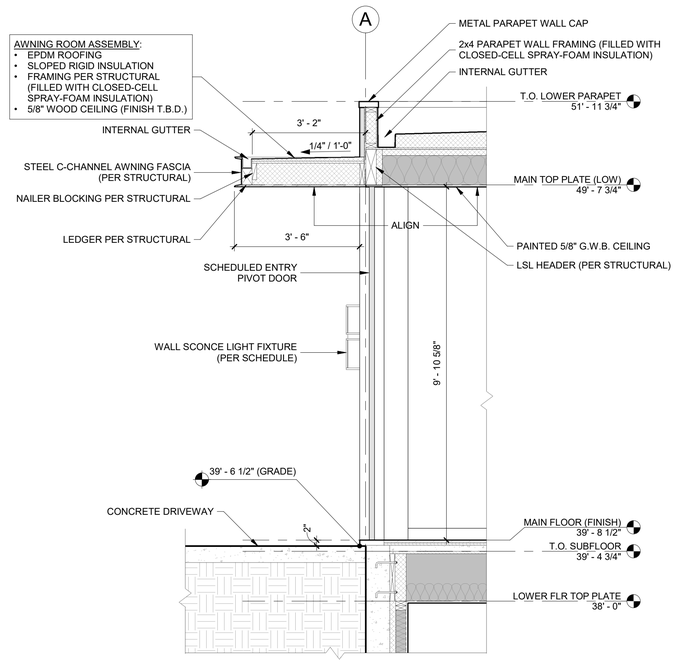

1 WALL SECTION AT MAIN ENTRY
1/2" = 1'-0"

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WALL SECTIONS

A-5.2

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EXTERIOR DOOR SCHEDULE

MARK	LOCATION	ROOM	DESCRIPTION	DIAGRAM	WIDTH	HEIGHT	FRAME TYPE	FIRE RATING	U VALUE	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	HARDWARE REQUIREMENTS	LOCK FUNCTION	COMMENTS
A	MASTER BEDROOM	104	BYPASS SLIDER (GLASS PANEL)		9' - 10"	9' - 0"									SAFETY GLAZING
B	ENTERTAINMENT	107	BYPASS SLIDER (GLASS PANEL)		9' - 10"	9' - 0"									SAFETY GLAZING
C	MEDITATION	115	BYPASS SLIDER (GLASS PANEL)		8' - 0"	9' - 0"									SAFETY GLAZING
D	GREAT ROOM	202	DOUBLE HINGED (GLASS PANEL)		7' - 4"	10' - 0"									SAFETY GLAZING
E	ENTRY HALL	201	DOUBLE HINGED (GLASS PANEL)		7' - 4"	10' - 0"									SAFETY GLAZING
F	GARAGE	207	OVERHEAD DOOR		18' - 0"	8' - 2"									
G	ENTRY HALL	201	PIVOT HINGE (SOLID DOOR)		4' - 0"	9' - 10 5/8"									
H			SINGLE HINGED (SOLID DOOR)		3' - 0"	4' - 6"									TRASH ENCLOSURE GATE

DOOR SCHEDULE NOTES

1. ALL UNIT DIMENSIONS ARE TO OUTSIDE OF FRAME.
2. PROVIDE EXTERIOR TRIM ACCESSORIES AS SHOWN IN ARCHITECTURAL DETAILS.
3. SEE DOOR DETAILS FOR CRITICAL DOOR INFORMATION.
4. SHOP DRAWING APPROVAL BY ARCHITECT REQUIRED PRIOR TO FABRICATION.
5. CONTRACTOR TO CONFIRM ALL REQUIRED ROUGH OPENING SIZES WITH MANUFACTURER PRIOR TO FRAMING.
6. MANUFACTURER TO REVIEW INSTALLATION LOCATIONS AND DETERMINE WHICH LITES ARE REQUIRED TO HAVE SAFETY GLAZING.
7. MANUFACTURER TO REVIEW INSTALLATION LOCATIONS AND SIZES TO DETERMINE IF OPERABLE DOORS MEET EGRESS REQUIREMENTS.

DOOR SCHEDULE ORGANIZATION

1. EXTERIOR DOORS ARE CALLED OUT WITH A SINGLE LETTER (EXAMPLE: A, B, C...).
2. LABELING BEGINS AT THE LOWER LEVEL, THEN MAIN, THEN UPPER.
3. LABELING BEGINS AT THE EAST ELEVATION AND PROCEEDS CLOCKWISE.

WINDOW SCHEDULE

MARK	LOCATION	ROOM	DESCRIPTION	WIDTH	HEIGHT	U VALUE	COMMENTS
1	MASTER BEDROOM	104	FIXED	5' - 0"	6' - 6"	0.3	
2A	BEDROOM	108	CASEMENT	3' - 0"	6' - 6"	0.3	MULLED UNIT
2B	BEDROOM	108	FIXED	6' - 0"	6' - 6"	0.3	MULLED UNIT
3A	BEDROOM	111	CASEMENT	3' - 0"	6' - 6"	0.3	MULLED UNIT
3B	BEDROOM	111	FIXED	6' - 0"	6' - 6"	0.3	MULLED UNIT
4	BEDROOM	111	CASEMENT	3' - 0"	6' - 6"	0.3	SINGLE CASEMENT
5A	GUEST BEDROOM	116	CASEMENT	3' - 0"	6' - 6"	0.3	MULLED UNIT
5B	GUEST BEDROOM	116	FIXED	6' - 0"	6' - 6"	0.3	MULLED UNIT
6	GUEST BEDROOM	116	CASEMENT	3' - 0"	6' - 6"	0.3	SINGLE CASEMENT
7	MASTER BATH	105	FIXED	6' - 0"	2' - 0"	0.3	
8A	GREAT ROOM	202	FIXED	5' - 0"	10' - 0"	0.3	MULLED UNIT WITH SAFETY GLAZING
8B	GREAT ROOM	202	FIXED	5' - 0"	10' - 0"	0.3	MULLED UNIT WITH SAFETY GLAZING
9A	GREAT ROOM	202	FIXED	5' - 0"	10' - 0"	0.3	MULLED UNIT WITH SAFETY GLAZING
9B	GREAT ROOM	202	FIXED	5' - 0"	10' - 0"	0.3	MULLED UNIT WITH SAFETY GLAZING
10A	GREAT ROOM	202	FIXED	5' - 0"	10' - 0"	0.3	MULLED UNIT WITH SAFETY GLAZING
10B	GREAT ROOM	202	FIXED	5' - 0"	10' - 0"	0.3	MULLED UNIT WITH SAFETY GLAZING
11A	GARAGE	207	CASEMENT	3' - 0"	7' - 0"	0.3	MULLED UNIT
11B	GARAGE	207	FIXED	6' - 0"	7' - 0"	0.3	MULLED UNIT
12	GARAGE	207	CASEMENT	3' - 0"	7' - 0"	0.3	SINGLE CASEMENT
13A	ENTRY HALL	201	FIXED	4' - 6"	9' - 10 5/8"	0.3	MULLED UNIT WITH SAFETY GLAZING
13B	ENTRY HALL	201	FIXED	4' - 6"	9' - 10 5/8"	0.3	MULLED UNIT WITH SAFETY GLAZING
13C	ENTRY HALL	201	FIXED	4' - 6"	9' - 10 5/8"	0.3	MULLED UNIT WITH SAFETY GLAZING
14	ENTRY HALL	201	FIXED SIDELITE	2' - 0"	9' - 10 5/8"	0.3	MULLED UNIT
15A	PANTRY	204	CASEMENT	2' - 0"	7' - 0"	0.3	MULLED UNIT
15B	PANTRY	204	FIXED	4' - 0"	7' - 0"	0.3	MULLED UNIT
16A	KITCHEN	203	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
16B	KITCHEN	203	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
16C	KITCHEN	203	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
16D	KITCHEN	203	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
16E	KITCHEN	203	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
17	GREAT ROOM	202	CASEMENT	3' - 0"	6' - 0"	0.3	SINGLE CASEMENT
18A	GREAT ROOM	202		5' - 0"	3' - 4"	0.3	MULLED UNIT
18B	GREAT ROOM	202		5' - 0"	3' - 4"	0.3	MULLED UNIT
19A	GREAT ROOM	202		5' - 0"	3' - 4"	0.3	MULLED UNIT
19B	GREAT ROOM	202		5' - 0"	3' - 4"	0.3	MULLED UNIT
20A	GREAT ROOM	202		5' - 0"	3' - 4"	0.3	MULLED UNIT
20B	GREAT ROOM	202		5' - 0"	3' - 4"	0.3	MULLED UNIT
21	COVERED TERRACE	210		7' - 4"	3' - 4"	0.3	
22	COVERED TERRACE	210		7' - 4"	3' - 4"	0.3	
23A	ENTRY HALL	201	FIXED	4' - 6"	2' - 0"	0.3	MULLED UNIT
23B	ENTRY HALL	201	FIXED	4' - 6"	2' - 0"	0.3	MULLED UNIT
23C	ENTRY HALL	201	FIXED	4' - 6"	2' - 0"	0.3	MULLED UNIT
24A	GREAT ROOM	202	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
24B	GREAT ROOM	202	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
24C	GREAT ROOM	202	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
24D	GREAT ROOM	202	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT
24E	GREAT ROOM	202	FIXED TRANSOM	4' - 3 1/4"	2' - 0"	0.3	MULLED UNIT

WINDOW SCHEDULE ORGANIZATION

1. WINDOWS ARE CALLED OUT WITH A SINGLE NUMBER (EXAMPLE: 1, 2, 3...).
2. LABELING BEGINS AT THE LOWER LEVEL, THEN MAIN, THEN UPPER.
3. LABELING BEGINS AT THE EAST ELEVATION AND PROCEEDS CLOCKWISE.

GENERAL WINDOW NOTES

1. WINDOWS ADJACENT TO DOORS AND/OR LESS THAN 18" FROM FINISH FLOOR TO INCLUDE TEMPERED GLASS.

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DOOR & WINDOW SCHEDULES

A-6.0

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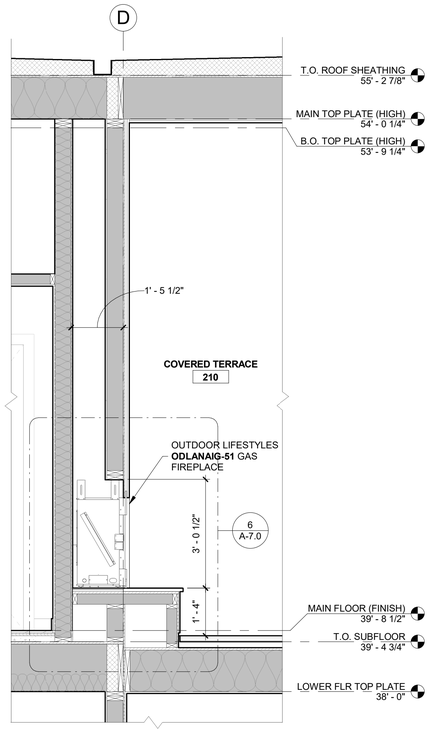
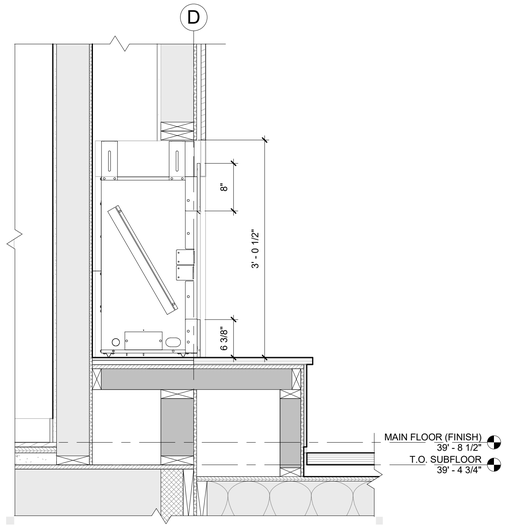
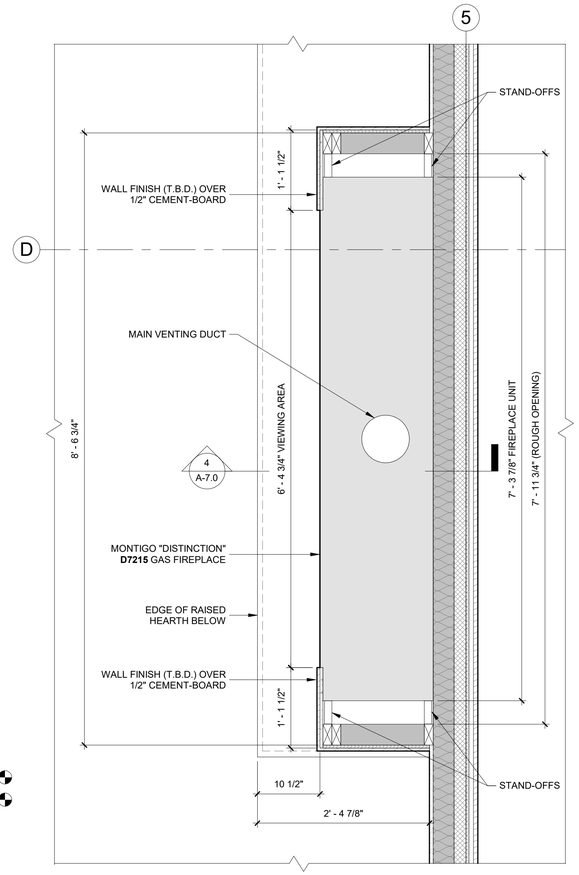


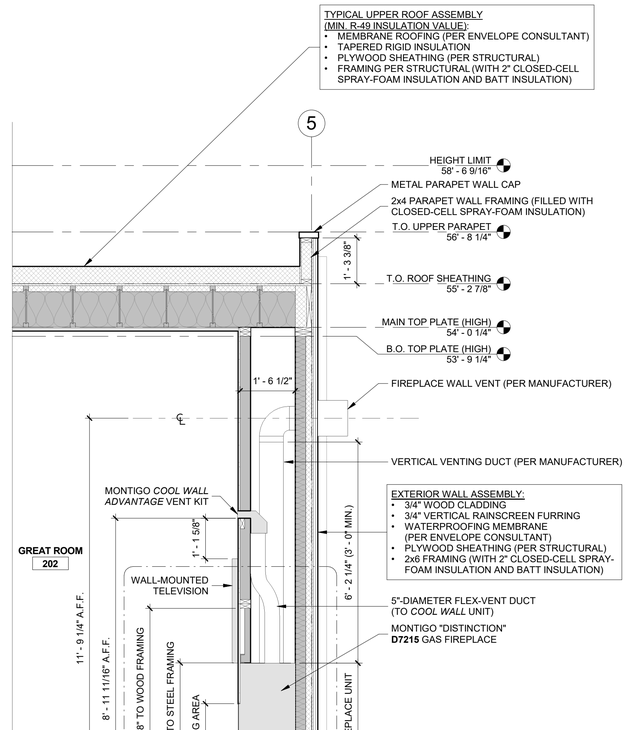
1 FIREPLACE WALL SECTION (COVERED TERRACE)
1/2" = 1'-0"



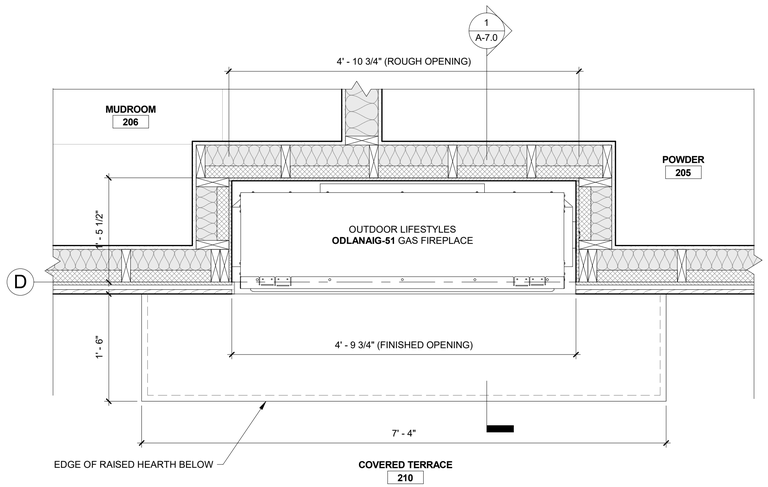
6 FIREPLACE SECTION DETAIL (COVERED TERRACE)
1" = 1'-0"



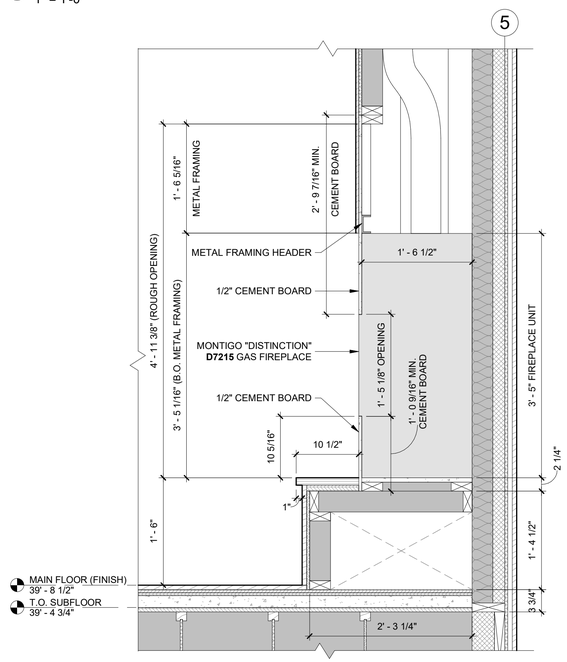
3 FIREPLACE PLAN DETAIL (GREAT ROOM)
1" = 1'-0"



4 FIREPLACE WALL SECTION (GREAT ROOM)
1/2" = 1'-0"



2 FIREPLACE PLAN DETAIL (COVERED TERRACE)
1" = 1'-0"



5 FIREPLACE SECTION DETAIL (GREAT ROOM)
1" = 1'-0"

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FIREPLACE DETAILS

A-7.0

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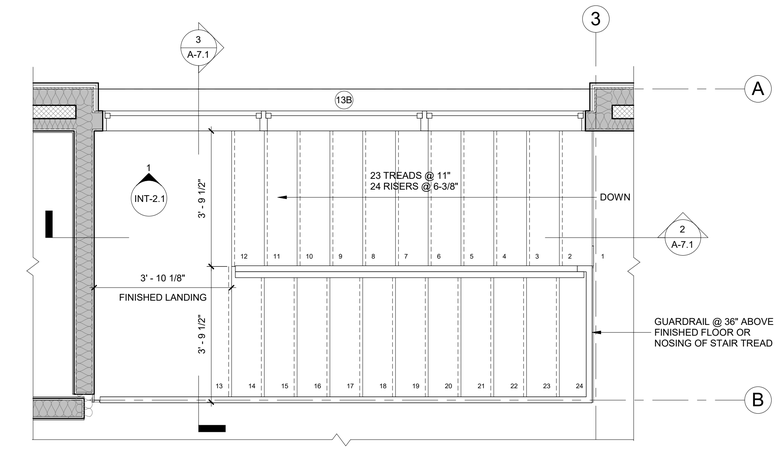
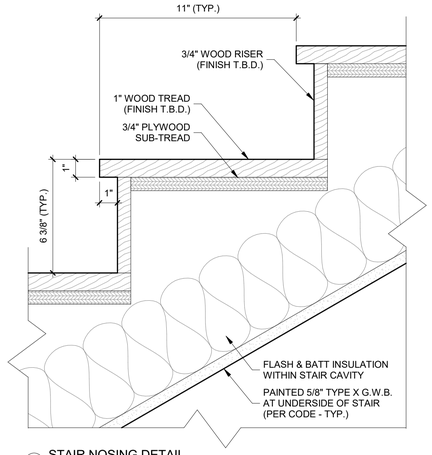
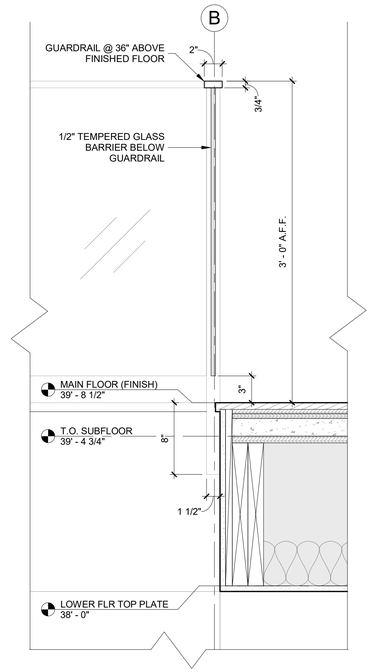


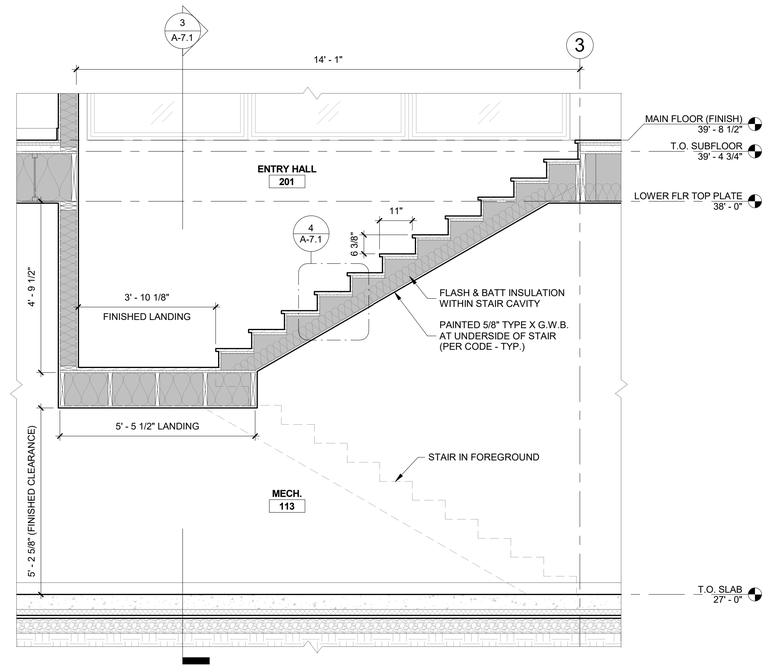
1 ENLARGED STAIR PLAN
1/2" = 1'-0"



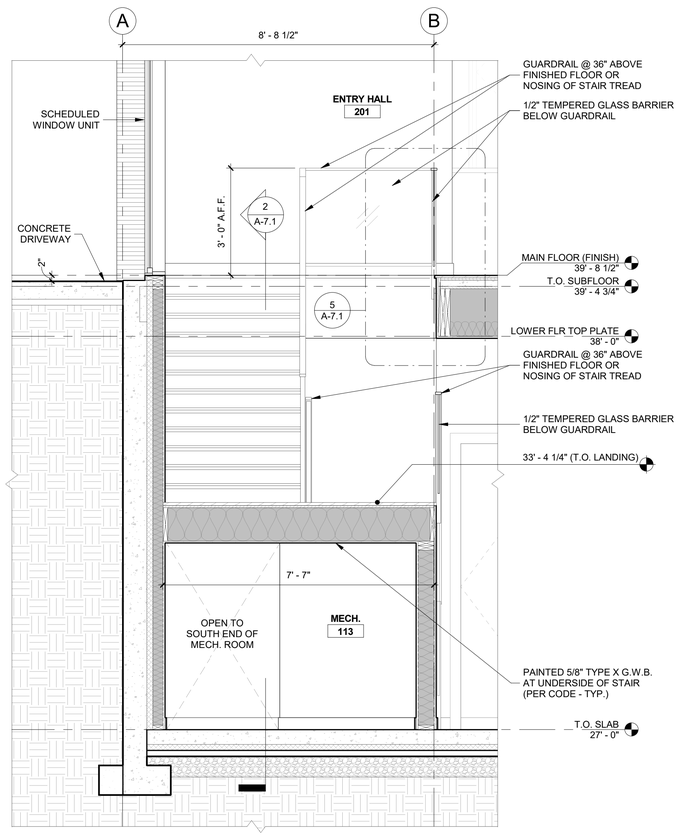
4 STAIR NOSING DETAIL
3" = 1'-0"



5 SECTION DETAIL AT STAIR GUARDRAIL
1 1/2" = 1'-0"



2 STAIR SECTION 1
1/2" = 1'-0"



3 STAIR SECTION 2
1/2" = 1'-0"

3257
REGISTERED
ARCHITECT
STUART NAYLOR SILK
STATE OF WASHINGTON

DESIGN	SNS, KM
DRAWN	TES
CHECKED	DM
SHEET ISSUE DATE	01/08/2019
DRAWING SETS	
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REVISIONS

#	DATE	DESCRIPTION

Stuart Silk Architects

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LUNDIN RESIDENCE

4041 West Mercer Way
Mercer Island, WA 98040

PERMIT SET

STAIR DETAILS

A-7.1

PLOT DATE: 1/21/2019 3:50:31 PM

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).

2. DESIGN LOADING CRITERIA

ROOF SNOW LOAD	30 PSF
FLOOR LIVE LOAD (RESIDENTIAL)	40 PSF
FLOOR LIVE LOAD (RESIDENTIAL EXTERIOR DECKS AND BALCONIES)	60 PSF
GUARDRAILS/BALCONY RAILS (ONE OR TWO UNIT DWELLING)	200 LBS OR 50 PLF

WIND	ANALYSIS PROCEDURE: ASCE 7-10 CHAPTER 27 "PART II - ENCLOSED SIMPLE DIAPHRAGM"
	RISK CATEGORY II
	110 MPH
	EXPOSURE "C"
	TOPOGRAPHIC FACTOR Kzt = 1.0
	WIND BASE SHEAR, NORTH/SOUTH Vn = 24.6 K
	WIND BASE SHEAR, EAST/WEST Vn = 50.7 K
EARTHQUAKE	ANALYSIS PROCEDURE: IBC "EQUIVALENT LATERAL FORCE PROCEDURE"
	SEISMIC DESIGN CATEGORY (SDC) = D
	RISK CATEGORY = II
	SEISMIC SITE CLASS = D
	IMPORTANCE FACTOR Ie = 1.0
	MAPPED MCE Ss = 1.41; S1 = 0.55
	DESIGN ACCELERATION Sds = 0.94; Sd1 = 0.55
	SEISMIC RESISTING SYSTEM: WOOD PANEL BEARING SHEAR WALL, R = 6.5
	SEISMIC BASE SHEAR, Vs = 33.4 K

3. LATERAL LOADS ARE TRANSFERRED BY THE ROOF AND FLOOR DIAPHRAGMS TO THE SHEAR WALLS. FORCES ARE BASED ON THE TRIBUTARY AREA FOR EACH SHEAR WALL AND ARE CARRIED BY THE SHEAR WALLS TO THE FOUNDATION.

4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THEIR WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. WHERE INFORMATION ON THE DRAWINGS IS IN CONFLICT WITH THE SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. DO NOT SCALE THE DRAWINGS.

9. ALL STRUCTURAL SYSTEMS WHICH ARE COMPOSED OF FIELD ERECTED COMPONENTS SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

10. SHOP DRAWINGS FOR REINFORCING STEEL, STRUCTURAL STEEL AND GLUED LAMINATED MEMBERS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

11. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, AND THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED. A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR REVIEW.

12. SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

13. SPECIAL INSPECTION: SHALL BE SUPERVISED BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER IN ACCORDANCE WITH SECTION 1704 OF THE SEATTLE BUILDING CODE AND THE PROJECT SPECIFICATIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR AND THE SEATTLE DCI. ANY MATERIALS WHICH FAIL TO MEET PROJECT SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

14. SPECIAL INSPECTION: CONCRETE CONSTRUCTION, STRUCTURAL STEEL FABRICATION AND ERECTION (INCLUDING FIELD WELDING AND HIGH-STRENGTH FIELD BOLTING), EXPANSION BOLTS AND EPOXY GROUTED INSTALLATIONS SHALL BE SUPERVISED IN ACCORDANCE WITH IBC SECTION 1704 AND THE PROJECT SPECIFICATIONS BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET PROJECT SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

GEOTECHNICAL

15. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND GEOTECHNICAL ENGINEER. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED UNDER COLUMNS OR WALLS ABOVE.

    BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE GEOTECHNICAL REPORT.

    THE STRUCTURAL DESIGN IS BASED ON THE FOLLOWING VALUES FROM THE REFERENCED GEOTECHNICAL REPORT:

ALLOWABLE SOIL PRESSURE	3000 PSF
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)	50 PCF/30 PCF
SEISMIC SURCHARGE PRESSURE (RESTRAINED/UNRESTRAINED)	TH PSF
PASSIVE SOIL PRESSURE (FACTOR OF SAFETY OF 1.5 INCLUDED)	300 PCF
COEFFICIENT OF FRICTION (FACTOR OF SAFETY OF 1.5 INCLUDED)	0.30

16. GEOTECHNICAL REPORT REFERENCE: #18-282 BY PANGEO INCORPORATED

CONCRETE

17. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301. CONSTRUCTION TOLERANCES SHALL NOT EXCEED THOSE LISTED IN ACI 117. CONCRETE SHALL ATTAIN A 28 DAY STRENGTH OF f'c = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS (BEFORE THE ADDITION OF ADMIXTURES). THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.55 FOR FOOTINGS AND 0.45 FOR ALL SLABS AND EXPOSED CONCRETE UNLESS OTHERWISE NOTED.

    THE MINIMUM AMOUNT OF CEMENT AND THE MAXIMUM SLUMP MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE SEATTLE DCI FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE CONCRETE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, CEMENTITIOUS MATERIAL, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 301. CHEMICAL ADMIXTURES AND FLY ASH SHALL CONFORM TO ASTM C494 AND C618 RESPECTIVELY. FLY ASH PERCENTAGE OF TOTAL CEMENTITIOUS MATERIAL SHALL NOT EXCEED 20%. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY TO CONTRACT DOCUMENTS. CONTRACTOR MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

    ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR ENTRAINED WITH AN AIR ENTRAINING AGENT CONFORMING TO ASTM C260. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.3.1. ALL CONCRETE EXPOSED TO THE WEATHER AND ALL GARAGE SLABS-ON-GRADE SHALL OBTAIN A 28-DAY STRENGTH f'c OF 3,000 PSI IN ACCORDANCE WITH ACI 318 TABLE 19.3.2.1 AND IBC SECTION 1904.1. THIS INCREASE IN REQUIRED STRENGTH IS FOR DURABILITY ONLY (SPECIAL INSPECTION IS NOT REQUIRED).

18. REINFORCING STEEL SHALL CONSIST OF #4 BARS CONFORMING TO ASTM A615, GRADE 40, fy = 40,000 PSI, #5 BARS CONFORMING TO ASTM A615, GRADE 60, fy = 60,000 PSI AND SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT 48 BAR DIAMETERS, 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS, LAP 2'-0" MINIMUM. PROVIDE (2) #4 MIN. U.N.O. TRIM BARS AROUND ALL OPENINGS IN CONCRETE WALLS OR SLABS EXTENDING 2'-0" PAST CORNERS, TYPICAL.

    WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

    NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO REINFORCING BARS SHALL BE "WET-SET" INTO THE CONCRETE. PROVIDE A 20' LONG REBAR GROUND (UFER GROUND) PER ELECTRICIAN.

19. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER (#6 BARS OR LARGER)	2"
SLABS AND WALLS (INTERIOR FACE)	1"

20. CONCRETE WALL REINFORCING--PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:
    WALL THICKNESS VERTICAL BARS HORIZONTAL BARS

WALL THICKNESS	VERTICAL BARS		HORIZONTAL BARS	
6" WALLS	#4 @ 18"	1 CURTAIN	#4 @ 12"	1 CURTAIN
8" WALLS	#4 @ 16"	1 CURTAIN	#4 @ 10"	1 CURTAIN

21. NON-SHRINK GROUT SHALL BE NON-METALLIC CONFORMING TO ASTM C1107 AND BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (5000 PSI MINIMUM).

22. CONCRETE MAY BE PLACED BY THE "SHOTCRETE" METHOD, PROVIDED THE APPROVALS, TESTS, AND INSPECTIONS REQUIRED BY THE CITY OF MERCER ISLAND ARE OBTAINED. SHOTCRETE MATERIALS, EQUIPMENT, PROCEDURES, PROPORTIONS, BATCHING AND MIXING AND PLACEMENT SHALL BE IN ACCORDANCE WITH ACI 506R, ACI 506.2 AND IBC SECTION 1908. SHOTCRETE AGGREGATE SIZE SHALL NOT EXCEED 3/8".

    THE "SHOTCRETE" METHOD SHALL NOT BE USED WITHOUT MAKING SPECIAL ARRANGEMENTS THROUGH OWNER AND ENGINEER UNLESS STRUCTURAL DRAWINGS ARE SPECIFICALLY DETAILED TO ACCOMMODATE SHOTCRETING.

ANCHORAGE

23. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2 WEDGE ANCHOR", AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-3037 INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION IS REQUIRED FOR ALL EXPANSION BOLT INSTALLATION.

24. SCREW ANCHORS INTO CONCRETE SHALL BE "TITEN HD", AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-2713 INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION IS REQUIRED FOR ALL SCREW ANCHOR INSTALLATION.

25. DRIVE PINS, SHOT PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE FASTENERS AS MANUFACTURED BY HILTI CORPORATION. WHEN CALLED FOR IN THE DRAWINGS, PROVIDE THE APPROPRIATE FASTENER AS NOTED IN THE TABLE BELOW FOR EACH GIVEN APPLICATION. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORTS NO. ESR-2269 FOR THE X-U FASTENERS AND ESR-2379 FOR THE X-CP FASTENERS. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3" TO NEAREST CONCRETE EDGE AND 4" CENTER TO CENTER SPACING. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES.

APPLICATION	FASTENER TYPE	ALLOWABLE SHEAR CAPACITY (LBS)	ALLOWABLE TENSION CAPACITY (LBS)
2x TREATED LUMBER TO CONCRETE (2000 PSI MIN.)	X-CP 72 P8 S23 w/ 1.33" EMBED	250	175
2x LUMBER TO STRUCTURAL STEEL (3/16" MIN., A36 OR GR. 50)	X-U 52 MX PLUS R-23 WASHERS	250	175

26. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) INTO CONCRETE SHALL BE INSTALLED USING "AT-XP" ADHESIVE AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH IAPMO UES REPORT NO. ER-263, INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED. RODS SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.

STEEL

27. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE LATEST EDITIONS OF THE A.I.S.C. SPECIFICATIONS AND CODES:

    A. AISC - STEEL CONSTRUCTION MANUAL, 14TH EDITION
    B. CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

28. STRUCTURAL STEEL, WIDE FLANGE (W AND WT) SHAPES SHALL CONFORM TO ASTM A992, Fy = 50 KSI; ALL OTHER ROLLED SHAPES SHALL CONFORM TO ASTM A36, FY = 36 KSI. STEEL PLATE SHALL CONFORM TO ASTM A36, Fy = 36 KSI. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B, Fy = 35 KSI. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B, Fy = 46 KSI. CONNECTION BOLTS SHALL CONFORM TO ASTM A307. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36, Fy = 36 KSI.

29. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

30. ALL A-325 CONNECTION BOLTS SHALL BE INSTALLED TO THE SNUG-TIGHT CONDITION PER AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. ALL NUTS SHALL CONFORM TO ASTM A563. ALL WASHERS SHALL CONFORM TO ASTM F436 OR ASTM F959 TYPE 325. ALL BOLT HOLES SHALL BE STANDARD SIZE UNLESS OTHERWISE NOTED.

31. ALL A-307 CONNECTION BOLTS SHALL BE PROVIDED WITH LOCK WASHERS UNDER NUTS OR SELF-LOCKING NUTS. ALL BOLT HOLES SHALL BE STANDARD SIZE UNLESS OTHERWISE NOTED.

32. ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND A.W.S. STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY A.W.S.) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES. WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70XX ELECTRODES. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS. ALL WELDING OF STAINLESS STEEL SHALL USE E309 ELECTRODES WITH A GMAW PROCESS. ALL WELDING SHALL BE PERFORMED BY WELDERS WITH AWS / W.A.B.O. CERTIFICATION WITH THE MATERIAL AND METHOD REQUIRED.

    SHOP DRAWINGS SHALL SHOW ALL WELDING WITH AWS A2.4 SYMBOLS. WELDS SHOWN ON DRAWINGS ARE MINIMUM SIZES. INCREASE WELDS SIZE TO AWS MINIMUM SIZES BASED ON PLATE THICKNESS. MINIMUM WELDING SHALL BE 3/16-INCH. THE WELDS SHOWN ARE FOR THE FINAL CONNECTIONS. FIELD WELD ARROWS ARE SHOWN WHERE A FIELD WELD IS REQUIRED BY THE STRUCTURAL DESIGN; THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF A WELD SHOULD BE SHOP OR FIELD WELDED IN ORDER TO FACILITATE THE STRUCTURAL STEEL DELIVERY AND ERECTION.

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DESIGN	SKK
DRAWN	SC
CHECKED	SKK
DATE	1/8/2019

REVISIONS

PERMIT SET	1/8/2019

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PROJECT NO. 18689.01

GENERAL STRUCTURAL NOTES

S1.0

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

WOOD

33. FRAMING LUMBER: SHALL BE KILN DRIED OR MC-19 (MOISTURE CONTENT LESS THAN 19%), AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD NO. 17 GRADING RULES FOR WEST COAST LUMBER. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

    JOISTS: (2X, 3X, AND 4X MEMBERS) . . . . . DOUGLAS FIR OR HEM-FIR NO. 2

    BEAMS AND STRINGERS: (INCLUDING 6 X AND LARGER MEMBERS) . . . . . DOUGLAS FIR NO. 1

    POSTS AND TIMBERS: . . . . . DOUGLAS FIR NO. 1

    STUDS, PLATES & MISCELLANEOUS LIGHT FRAMING: . . . . . DOUGLAS FIR OR HEM-FIR NO. 2 (AS NOTED ON PLANS / DETAILS)

    2X 3X AND 4X TONGUE AND GROOVE DECKING: . . . . . HEM-FIR COMMERICAL DEX

34. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM D3737 AND ANSI A190.1 STANDARDS. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. CERTIFICATES OF CONFORMANCE MUST BE MADE AVAILABLE TO BUILDING INSPECTORS. CITY INSPECTION IS REQUIRED PRIOR TO COVERING GLUED LAMINATED MEMBERS. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800 KSI. ALL CANTILEVERED OR CONTINUOUS BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800 KSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS TO 5,000' RADIUS UNLESS SHOWN OTHERWISE ON THE PLANS.

35. LAMINATED VENEER LUMBER (LVL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL LAMINATED VENEER LUMBER SHALL BE MANUFACTURED USING DOUGLAS FIR VENEER GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

    $Fb = 2600$ PSI, $E = 2.0 \times 10^6$ PSI, $Fv = 285$ PSI

    DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

36. LAMINATED STRAND LUMBER (LSL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL LAMINATED STRAND LUMBER SHALL BE MANUFACTURED USING A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

    RIM JOISTS AND BLOCKING (1-1/4" MINIMUM THICKNESS):

    $Fb = 1700$ PSI, $E = 1.3 \times 10^6$ PSI, $Fv = 400$ PSI

    BEAMS AND HEADERS:

    $Fb = 2325$ PSI, $E = 1.55 \times 10^6$ PSI, $Fv = 310$ PSI

    DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

37. PARALLEL STRAND LUMBER (PSL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL PARALLEL STRAND LUMBER SHALL BE MANUFACTURED USING DOUGLAS FIR STRANDS GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

    $Fb = 2900$ PSI, $E = 2.2 \times 10^6$ PSI, $Fv = 290$ PSI

    DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

38. WOOD I-JOISTS DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE I-JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH WOOD JOIST PROVIDED. GLUE FLOOR JOISTS TO SHEATHING AS REQUIRED BY THE JOIST MANUFACTURER.

39. WOOD SHEATHING SHALL BE APA RATED, EXTERIOR GLUE; EXPOSURE 1, IN CONFORMANCE WITH THE REQUIREMENTS FOR THEIR TYPE IN DOC PS-1 OR PS-2. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS.

    UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE AND GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH (2) 10d-F NAILS AT EACH END, UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND NAIL WITH EDGE NAILING SPACED PER PLANS. WHERE NOT NOTED OTHERWISE, NAIL PANEL EDGES WITH 8d NAILS @ 6" O.C. EDGES, 12" O.C. IN THE FIELD.

40. ALL WOOD EXPOSED TO WEATHER, OR BEARING ON UNPROTECTED CONCRETE LESS THAN 8" FROM EXPOSED EARTH SHALL BE PRESSURE TREATED, U.O.N. PRESSURE TREATMENT SHALL BE WITH AN APPROVED PRESERVATIVE AND BRANDED WITH A QUALITY CONTROL AGENCY MARK BY THE AMERICAN WOOD PRESERVERS BUREAU OR EQUAL. ALL METAL HARDWARE IN CONTACT WITH TREATED WOOD SHALL BE PROTECTED WITH A G185 GALVANIZED COATING (ZMAX) OR BETTER. ALL NAILS IN TREATED WOOD SHALL BE HOT-DIP GALVANIZED OR BETTER. PROVIDE 2 LAYERS OF 30# ASPHALT IMPREGNATED BUILDING PAPER BETWEEN NON-PRESSURE-TREATED LEDGERS, BLOCKING, ETC., AND CONCRETE.

41. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-2017. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. ALL BOLTS TIGHTENED TO SNUG TIGHT.

42. WOOD FASTENERS:

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

DRAWING ID	NAIL NAME	NAIL DIAMETER	NAIL LENGTH
"6d"	6d Common	0.113"	2"
"8d Box"	8d Box	0.113"	2-1/2"
"8d"	8d Common	0.131"	2-1/2"
"10d-F"	10d Framer	0.131"	3"
"10d"	10d Shear	0.148"	2-1/4"
"16d"	16d Sinker	0.148"	3-1/4"

    IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

    B. NAILS - SHEATHING FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

    C. HOT DIPPED GALVANIZED NAILS, BOLTS AND METAL PLATES - ALL NAILS, BOLTS AND METAL PLATES IN CONTACT WITH PRESSURE TREATED (INCLUDING FIRE-RETARDANT TREATED) LUMBER SHALL BE HOT DIPPED GALVANIZED.

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

    A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. TIGHTEN BOLTS AND LAG SCREWS SNUGLY AGAINST WOOD FRAMING AFTER WOOD HAS REACHED SPECIFIED MOISTURE CONTENT.

    B. WALL FRAMING: ALL BEARING AND SHEAR WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2 x 4 STUDS @ 16" O.C. AT INTERIOR WALLS AND 2 x 6 @ 16" O.C. AT EXTERIOR WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL BEARING AND SHEAR WALLS AND AT EACH SIDE OF ALL OPENINGS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW.

    ALL BEARING STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 8" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS WITH 3"x3"x1/4" PLATE WASHERS @ 4'-0" O.C., UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT UP POSTS SHALL BE NAILED TO EACH OTHER WITH 10d-F NAILS @ 8" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES AND GYPSUM SHEATHING ON EXTERIOR SURFACES ATTACHED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH SCREWS AT 8" O.C. USE 1-1/4 " W #6 SCREWS FOR 1/2" GNB AND 5/8" GNB WHERE OCCURS. USE 1-1/4" W #6 GALVANIZED SCREWS FOR 1/2" GNB AND 5/8" EXTERIOR GYPSUM SHEATHING, WHERE OCCURS. VERIFY THE FIRE ASSEMBLY REQUIREMENTS WHERE APPLICABLE WITH THE ARCHITECT.

    C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH 10d-F NAILS @ 8" O.C. STAGGERED UNLESS OTHERWISE NOTED.

    D. POSITIVE CONNECTIONS: PROVIDE THE FOLLOWING SIMPSON CONNECTORS AT TYPICAL FRAMING UNLESS OTHERWISE NOTED ON PLAN OR DETAIL. PROVIDE CCQ/ECCQ CAPS AND PBS BASES AT POSTS. PROVIDE BC BASE WHERE POST BEARS ON WOOD FRAMING BELOW. PROVIDE LUS SERIES HANGERS FOR 2X FLOOR AND ROOF JOISTS. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED.

ABBREVIATIONS

@	At	L	Angle
d	Penny (Nails)	LL	Live Load
ϕ	Diameter	LLH	Long Leg Horizontal
		LLV	Long Leg Vertical
A.B.	Anchor Bolt	LONGIT.	Longitudinal
ADD'L	Additional	LT. WT.	Lightweight
ALT.	Alternate		
APPROX.	Approximate	MATL.	Material
ARCH.	Architect	MAX.	Maximum
		MECH.	Mechanical
B.U.	Built-up	MEZZ	Mezzanine
B/	Bottom of	MF	Moment Frame
BF	Braced Frame	MFR.	Manufacturer
BLKG.	Blocking	MIN.	Minimum
BLDG.	Building	MISC.	Miscellaneous
BM.	Beam	MK.	Mark
BOT.	Bottom		
BRG.	Bearing	N.	North
BTWN.	Between	N.S.	Near Side
		NIC	Not in Contract
℄	Centerline	NO.	Number
C	Camber	NOM.	Nominal
C TO C	Center to Center	NTS	Not to Scale
CIP	Cast In Place		
C.J.	Construction Joint or Control Joint	O.C.	On Center
CLG.	Ceiling	O.D.	Outside Diameter
CLR.	Clear	O.F.	Outside Face
CMU	Concrete Masonry Unit	O.H.	Opposite Hand
CNTR.	Center	OPNG.	Opening
COL.	Column	OPP.	Opposite
CONC.	Concrete		
CONN.	Connections	PAF	Powder Actuated Fastener
CONST.	Construction	PC	Precast
CONT.	Continuous	PERM.	Permanent
CJP	Complete Joint Penetration	PERP.	Perpendicular
CSK.	Countersink	PL or ℗	Plate
		PLF	Pounds per linear Foot
DBA.	Deformed Bar Anchor	PLYWD	Plywood
DBL.	Double	PJP	Partial Joint Penetration
DEG.	Degree	PREFAB.	Prefabricated
DET.	Detail	PROJ.	Project
DF	Doug Fir-Larch	PSF	Pounds per Square Foot
DIA.	Diameter	PSI	Pounds per Square Inch
DIAG.	Diagonal	P.T.	Post-Tensioning
DIAPH.	Diaphragm	P/T	Pressure-Treated
DIM.	Dimension		
DN.	Down	RAD.	Radius
DO	Ditto	REF.	Reference
DWG.	Drawing	REINF.	Reinforce or Reinforcement
		REQD.	Required
(E)	Existing	REV.	Revise
E.	East	R.O.	Rough Opening
EA.	Each		
E.F.	Each Face	S.	South
EL.	Elevation	SCH. or SCHED.	Schedule
ELEV.	Elevator	SECT.	Section
EMBED.	Embedment Length	SHT.	Sheet
ENGR.	Engineer	SIM.	Similar
E.W.	Each Way	SOG	Slab On Grade
EXP.	Expansion	SPEC.	Specification
EXT.	Exterior	SQ.	Square
		SQ. FT.	Square Feet
FDN.	Foundation	SQ. IN.	Square Inch (Inches)
FIN.	Finish	STD.	Standard
FLR.	Floor	STIFF.	Stiffener
FRP	Fiber Reinforced Polymer	STL.	Steel
F.S.	Far Side	STR.	Structural
FT.	Foot or Feet	SUB.	Substitute
FTG.	Footing	SYM.	Symmetrical
GA.	Gauge	T/	Top of
GALV.	Galvanized	T&B	Top and Bottom
GL	Glue Laminated	T&G	Tongue & Groove
GRD.	Grade	THRU	Through
GNB	Gypsum Wall Board	TEMP.	Temporary
		T.O.C.	Top of Concrete
HF	Hem Fir	T.O.S.	Top of Steel
HGR.	Hanger	T.O.W.	Top of Wall
HORIZ.	Horizontal	TRANS.	Transverse
HSS	Hollow Structural Section	TS	Tube Steel
HT.	Height	TYP.	Typical
I.D.	Inside Diameter	U.O.N or UNO	Unless Otherwise Noted
I.F.	Inside Face		
IN.	Inch	VERT.	Vertical
INFO.	Information	VIF	Verify in Field
INT.	Interior		
		W.	West
JT.	Joint	W/ or w/	With
		WD	Wood
KSF	Kips per Square Foot	W.H.S.	Welded Headed Stud
KSI	Kips per Square Inch	W/O	Without
		WP	Work Point
		W.T.S.	Welded Threaded Stud
		WWF	Welded Wire Fabric
		X SECT.	Cross Section
		X-STR	Extra Strong

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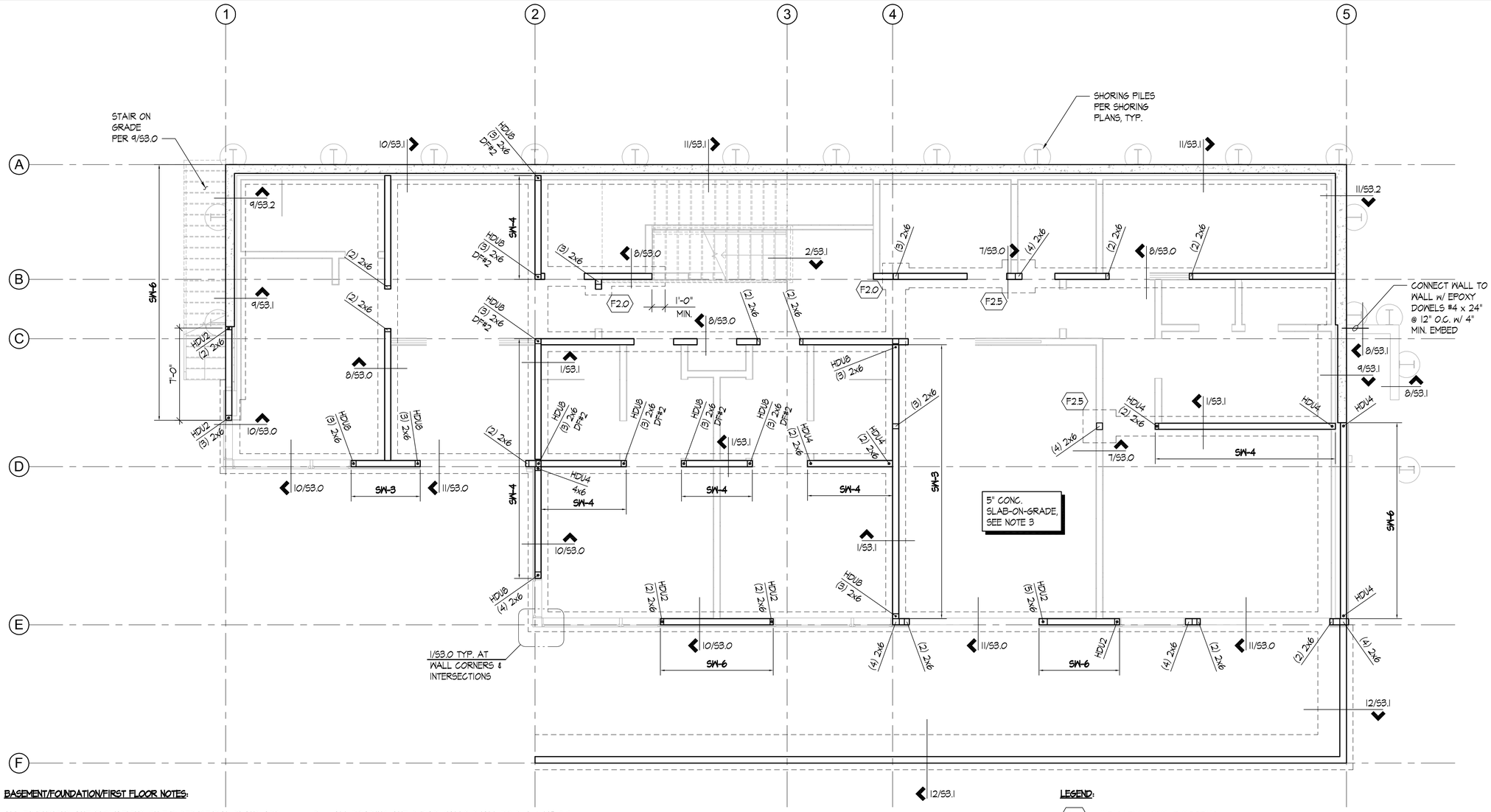
GENERAL STRUCTURAL NOTES

S1.1



BASEMENT/FOUNDATION/FIRST FLOOR NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEET S3.0 FOR TYPICAL CONCRETE AND FOUNDATION DETAILS. SEE SHEET S4.0 FOR TYPICAL WOOD DETAILS.
3. SLAB-ON-GRADE SHALL BE 5" THICK CONCRETE REINFORCED WITH #4 @ 16" O.C. EACH WAY, U.O.N. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SUB-GRADE MOISTURE BARRIER AND ELEVATIONS, ETC.
4. FOR SLAB-ON-GRADE JOINTS, SEE DETAIL 2/S3.0.
5. ALL WOOD BEARING ON UNPROTECTED CONCRETE, EXPOSED TO WEATHER, OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED, U.O.N.
6. FOR SILL PLATE ANCHOR BOLT LAYOUT TO CONCRETE FOUNDATION WALLS AND SLABS, SEE DETAIL 1/S4.0.
7. ALL BEARING AND SHEAR WALLS SHALL BE 2x6 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
8. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
9. Fx.x INDICATES SPREAD FOOTING TYPE, SEE 12/S3.0 FOR SCHEDULE.
10. SW-x INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SW-6 CRITERIA U.O.N.
11. HDUx INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.

LEGEND:

- Fxx — INDICATES SPREAD FOOTING SEE 12/S3.0 FOR SCHEDULE
- INDICATES FOOTING
- INDICATES FOUNDATION WALL, WOOD BEARING WALL OR SHEAR WALL ABOVE FLOOR FRAMING
- INDICATES WOOD BEARING WALL OR SHEAR WALL ABOVE. SEE PLAN NOTES 7 & 10
- INDICATES NON-BEARING/ NON-SHEAR WALL ABOVE. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS
- (#)24 — INDICATES MULTIPLE STUD POST ABOVE. SEE PLAN NOTE 8
- HDUx — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 11

FOUNDATION PLAN

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

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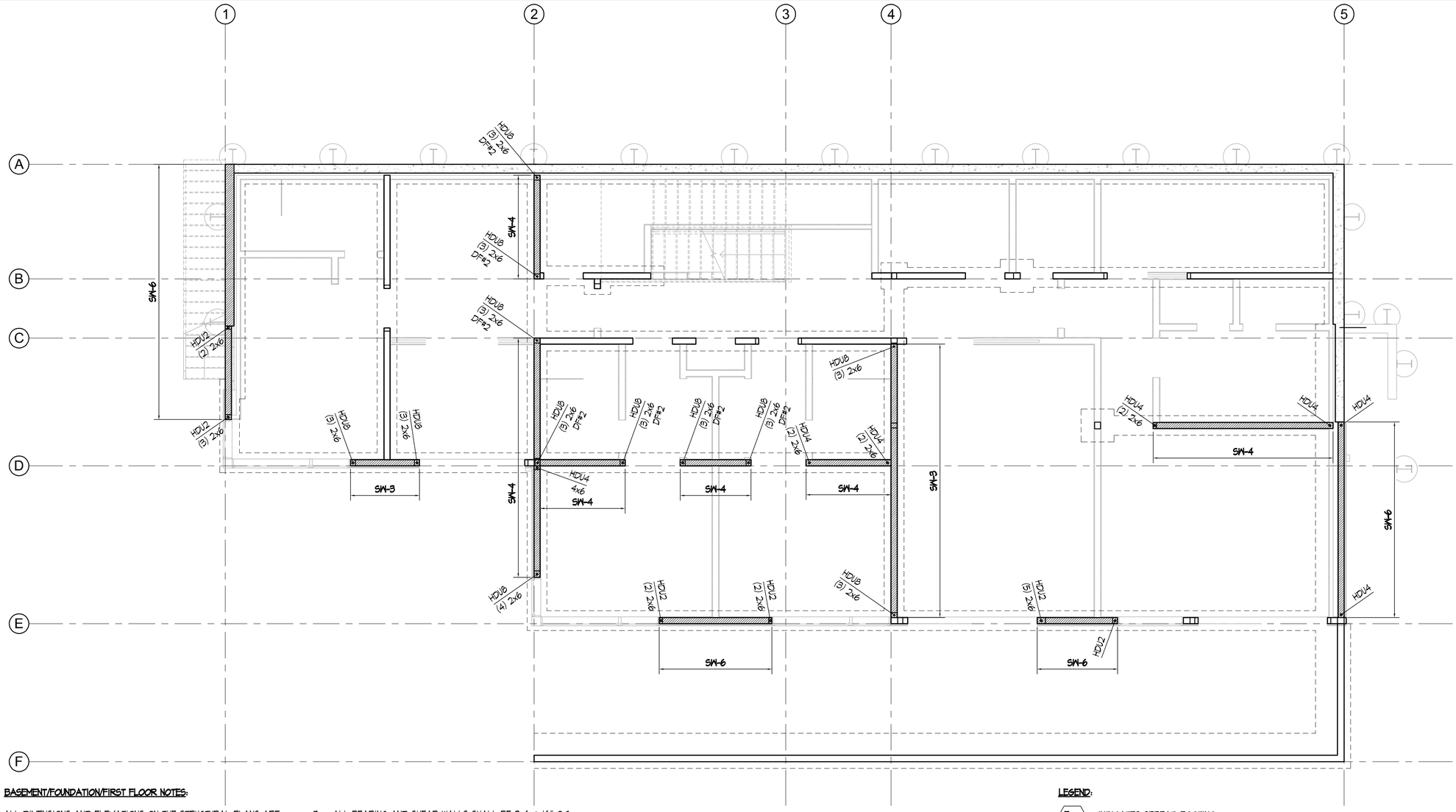
FOUNDATION PLAN

S2.0



BASEMENT/FOUNDATION/FIRST FLOOR NOTES:

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2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEET S3.0 FOR TYPICAL CONCRETE AND FOUNDATION DETAILS. SEE SHEET S4.0 FOR TYPICAL WOOD DETAILS.
3. SLAB-ON-GRADE SHALL BE 5" THICK CONCRETE REINFORCED WITH #4 @ 16" O.C. EACH WAY, U.O.N. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SUB-GRADE MOISTURE BARRIER AND ELEVATIONS, ETC.
4. FOR SLAB-ON-GRADE JOINTS, SEE DETAIL 2/S3.0.
5. ALL WOOD BEARING ON UNPROTECTED CONCRETE, EXPOSED TO WEATHER, OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED, U.O.N.
6. FOR SILL PLATE ANCHOR BOLT LAYOUT TO CONCRETE FOUNDATION WALLS AND SLABS, SEE DETAIL 1/S4.0.
7. ALL BEARING AND SHEAR WALLS SHALL BE 2x6 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
8. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
9. Fx.x INDICATES SPREAD FOOTING TYPE, SEE 12/S3.0 FOR SCHEDULE.
10. SW-x INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SW-6 CRITERIA U.O.N.
11. HDUx INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.

LEGEND:

- Fx.x — INDICATES SPREAD FOOTING SEE 12/S3.0 FOR SCHEDULE
- INDICATES FOOTING
- INDICATES FOUNDATION WALL, WOOD BEARING WALL OR SHEAR WALL ABOVE FLOOR FRAMING
- INDICATES WOOD BEARING WALL OR SHEAR WALL ABOVE. SEE PLAN NOTES 7 & 10
- INDICATES NON-BEARING/ NON-SHEAR WALL ABOVE. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS
- (#)2x — INDICATES MULTIPLE STUD POST ABOVE. SEE PLAN NOTE 8
- HDUx — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 11

FOUNDATION SHEAR WALL PLAN

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

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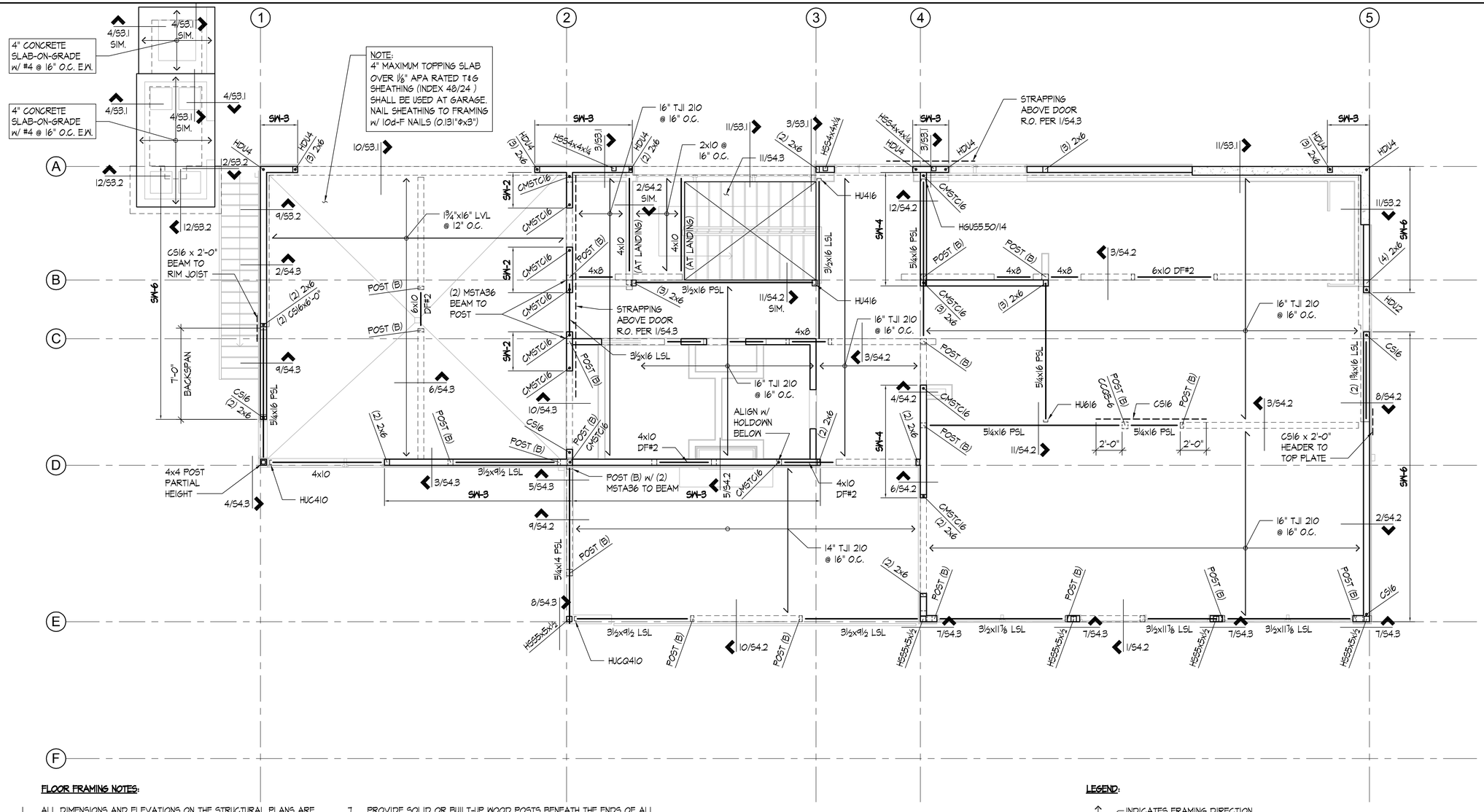
FOUNDATION SHEAR WALL PLAN

S2.0A



FLOOR FRAMING NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.2 FOR TYPICAL WOOD DETAILS.
3. TYPICAL FLOOR FRAMING CONSISTS OF 23/32" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER 16" TJI 210 JOISTS AT 16" O.C. HANG TJI JOISTS WITH ITS TOP FLANGE HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
4. NAIL FLOOR SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
5. ALL BEARING AND SHEAR WALLS SHALL BE 2x6 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
6. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
7. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL FLOOR BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS PER DETAIL 7/S4.1.
8. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x8 FOR EXTERIOR BEARING WALLS AND (2) 2x8 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
9. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.
10. ALIGN A JOIST OR JOIST BLOCKING OVER THE FULL LENGTH OF ALL BEARING/SHEAR WALLS. SEE 8/S4.0 FOR SPECIAL SHEAR WALL BLOCKING REQUIREMENTS.
11. SW-x INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SW-6 CRITERIA U.O.N.
12. HDUx INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.
13. CSxx CMSTCxx INDICATES HOLDOWN STRAP TO FRAMING BELOW WALL. SEE 10/S4.0 FOR STRAP HOLDOWN DETAIL AT FLOOR-TO-FLOOR AND BEAM SUPPORTING SHEAR WALL END. USE MIN. (2) 2x POST U.O.N.

MAIN FLOOR FRAMING PLAN

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

LEGEND:

- INDICATES FRAMING DIRECTION
- INDICATES EXTENT OF FRAMING
- SW-x — INDICATES SHEAR WALL TYPE AT THIS LEVEL. SEE PLAN NOTE 11
- INDICATES WOOD BEARING WALL OR SHEAR WALL ABOVE. SEE PLAN NOTES 5 & 11
- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW.
- INDICATES NON-BEARING/ NON-SHEAR WALL ABOVE. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS
- INDICATES HEADER MEMBER. SEE PLAN NOTE 8
- (#)24 — INDICATES MULTIPLE STUD POST ABOVE. SEE PLAN NOTE 6
- CSxx / CMSTCxx / HDUx — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 12 & 13

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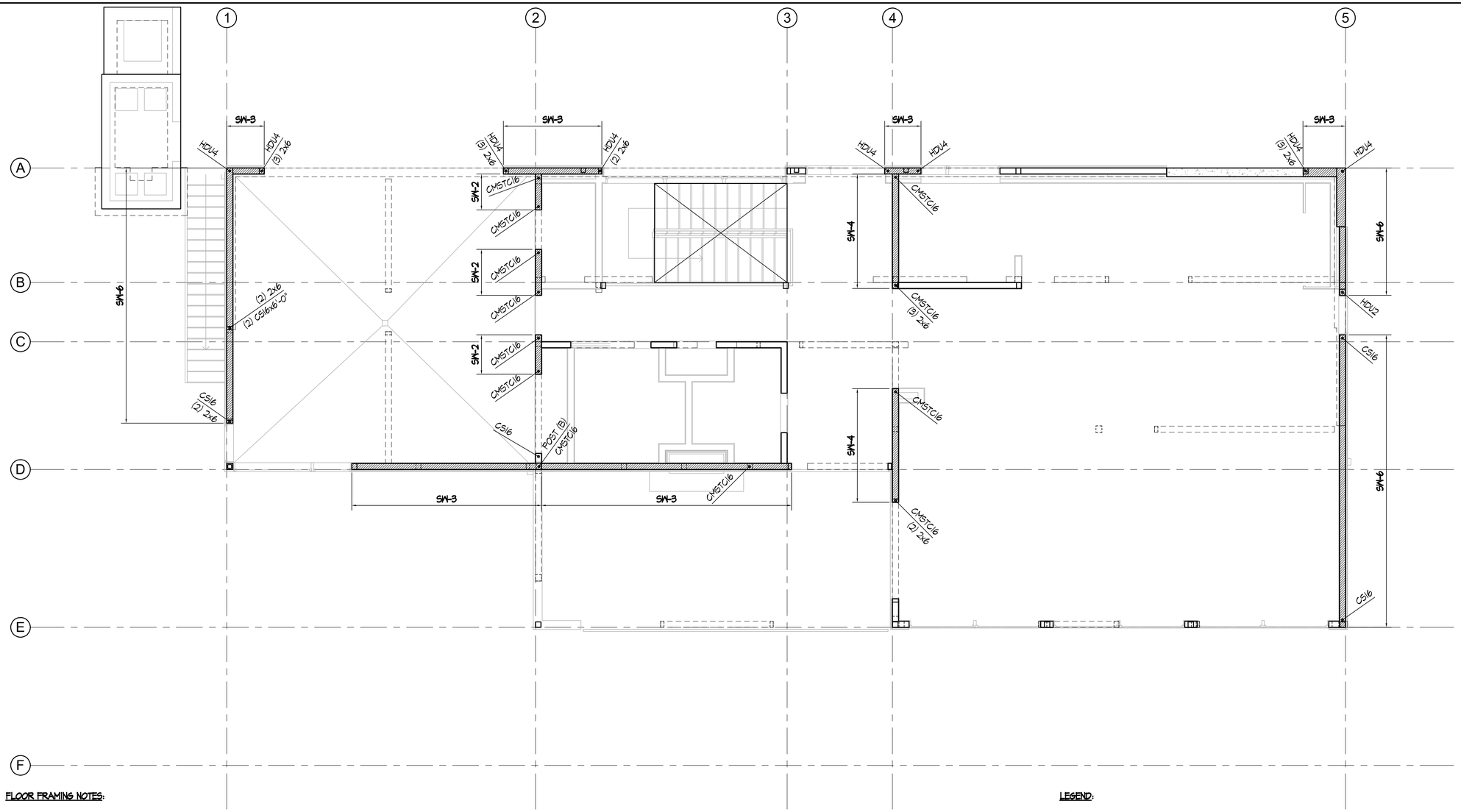
MERCER ISLAND, WA 98040

PROJECT NO. 18689.01

MAIN FLOOR FRAMING PLAN

S2.1



FLOOR FRAMING NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.2 FOR TYPICAL WOOD DETAILS.
3. TYPICAL FLOOR FRAMING CONSISTS OF 23/32" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER 16" TJI 210 JOISTS AT 16" O.C. HANG TJI JOISTS WITH ITS TOP FLANGE HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
4. NAIL FLOOR SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
5. ALL BEARING AND SHEAR WALLS SHALL BE 2x6 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
6. POSTS INDICATED ARE AT THIS LEVEL.
   ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
7. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL FLOOR BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS PER DETAIL 7/S4.1.
8. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x8 FOR EXTERIOR BEARING WALLS AND (2) 2x8 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
9. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.
10. ALIGN A JOIST OR JOIST BLOCKING OVER THE FULL LENGTH OF ALL BEARING/SHEAR WALLS. SEE 8/S4.0 FOR SPECIAL SHEAR WALL BLOCKING REQUIREMENTS.
11. SW-x — INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SW-6 CRITERIA U.O.N.
12. HDUx — INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.
13. CSxx CMSTCxx — INDICATES HOLDOWN STRAP TO FRAMING BELOW WALL. SEE 10/S4.0 FOR STRAP HOLDOWN DETAIL AT FLOOR-TO-FLOOR AND BEAM SUPPORTING SHEAR WALL END. USE MIN. (2) 2x POST U.O.N.

MAIN FLOOR SHEAR WALL PLAN

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

LEGEND:

- INDICATES FRAMING DIRECTION
- INDICATES EXTENT OF FRAMING
- SW-x — INDICATES SHEAR WALL TYPE AT THIS LEVEL. SEE PLAN NOTE 11
- INDICATES WOOD BEARING WALL OR SHEAR WALL ABOVE. SEE PLAN NOTES 5 & 11
- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW.
- INDICATES NON-BEARING/ NON-SHEAR WALL ABOVE. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS
- INDICATES HEADER MEMBER. SEE PLAN NOTE 8
- (N)2x — INDICATES MULTIPLE STUD POST ABOVE. SEE PLAN NOTE 6
- CSxx / CMSTCxx / HDUx — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 12 & 13

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SANDRO K. KODAMA — STATE OF WASHINGTON — 36613 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

DESIGN	SKK
DRAWN	SC
CHECKED	SKK
DATE	1/8/2019

REVISIONS

PERMIT SET	1/8/2019

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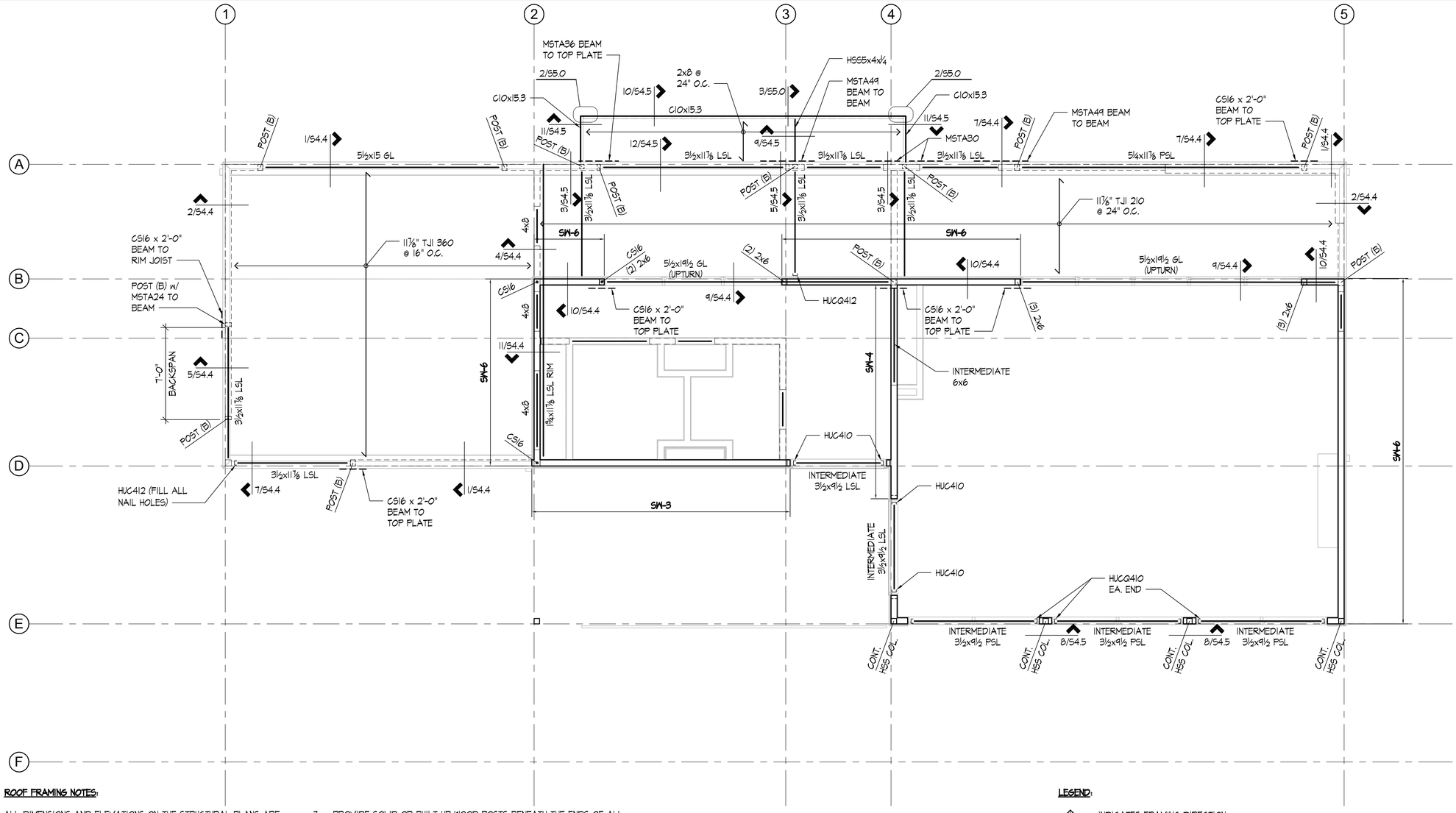
LUNDIN RESIDENCE

4041 WEST MERCER WAY
MERCER ISLAND, WA 98040

PROJECT NO. 18689.01

MAIN FLOOR SHEAR WALL PLAN

S2.1A



ROOF FRAMING NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.2 FOR TYPICAL WOOD DETAILS.
3. TYPICAL ROOF FRAMING CONSISTS OF 5/8" APA RATED SHEATHING (INDEX 32/16), LAID FACE GRAIN PERPENDICULAR OVER 11-7/8" TJI 210 JOISTS AT 24" O.C. HANG TJI JOISTS WITH IUS FACE MOUNT HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
4. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131"Ø x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
5. ALL BEARING AND SHEAR WALLS SHALL BE 2x6 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
6. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
7. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL ROOF BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS PER DETAIL 7/S4.1.
8. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x8 FOR EXTERIOR BEARING WALLS AND (2) 2x8 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
9. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.
10. ALIGN A JOIST OR JOIST BLOCKING OVER THE FULL LENGTH OF ALL BEARING/SHEAR WALLS. SEE 8/S4.0 FOR SPECIAL SHEAR WALL BLOCKING REQUIREMENTS.
11. SW-x INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SW-6 CRITERIA U.O.N.
12. CSxx INDICATES HOLDOWN STRAP TO FRAMING BELOW WALL. SEE 10/S4.0 FOR STRAP HOLDOWN DETAIL AT FLOOR-TO-FLOOR AND BEAM SUPPORTING SHEAR WALL END. USE MIN. (2) 2x POST U.O.N.

LOW ROOF / CLERESTORY FRAMING PLAN

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

LEGEND:

- INDICATES FRAMING DIRECTION / INDICATES EXTENT OF FRAMING
- SW-x — INDICATES SHEAR WALL TYPE AT THIS LEVEL. SEE PLAN NOTE 11
- INDICATES WOOD BEARING WALL OR SHEAR WALL ABOVE. SEE PLAN NOTES 5 & 11
- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW.
- INDICATES NON-BEARING/ NON-SHEAR WALL ABOVE. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS
- INDICATES HEADER MEMBER. SEE PLAN NOTE 8
- (8)/24 — INDICATES MULTIPLE STUD POST ABOVE. SEE PLAN NOTE 6
- CS24 — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 12

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LUNDIN RESIDENCE

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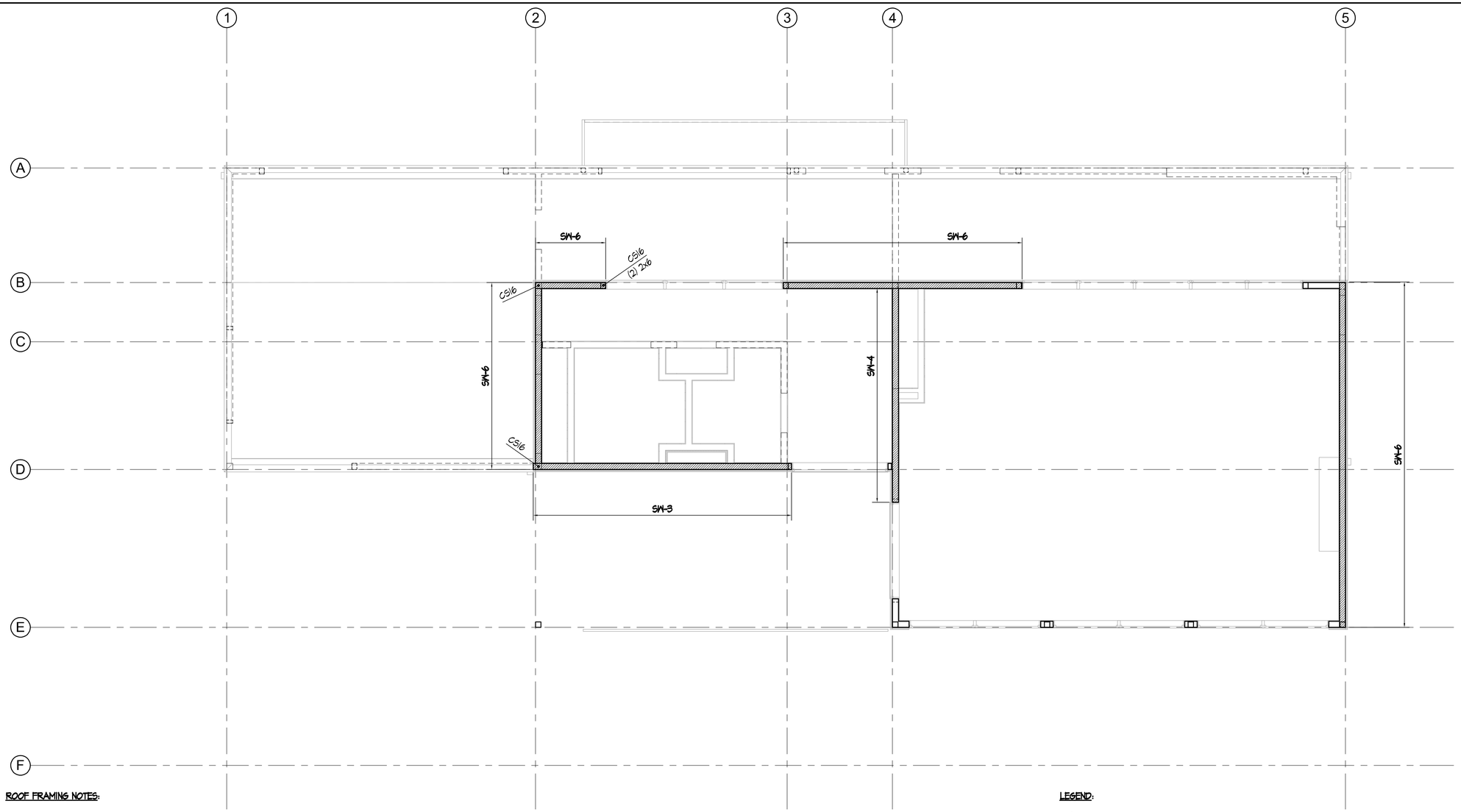
LOW ROOF / CLERESTORY FRAMING PLAN

S2.2



ROOF FRAMING NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.2 FOR TYPICAL WOOD DETAILS.
3. TYPICAL ROOF FRAMING CONSISTS OF 5/8" APA RATED SHEATHING (INDEX 32/16), LAID FACE GRAIN PERPENDICULAR OVER 11-7/8" TJI 210 JOISTS AT 24" O.C. HANG TJI JOISTS WITH IUS FACE MOUNT HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
4. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
5. ALL BEARING AND SHEAR WALLS SHALL BE 2x6 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
6. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
7. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL ROOF BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS PER DETAIL 7/S4.1.
8. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x8 FOR EXTERIOR BEARING WALLS AND (2) 2x8 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
9. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.
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12. CSxx INDICATES HOLDOWN STRAP TO FRAMING BELOW WALL. SEE 10/S4.0 FOR STRAP HOLDOWN DETAIL AT FLOOR-TO-FLOOR AND BEAM SUPPORTING SHEAR WALL END. USE MIN. (2) 2x POST U.O.N.

LOW ROOF / CLERE STORY SHEAR WALL PLAN

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

LEGEND:

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- INDICATES EXTENT OF FRAMING
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- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW.
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- INDICATES HEADER MEMBER. SEE PLAN NOTE 8
- (#)2x# — INDICATES MULTIPLE STUD POST ABOVE. SEE PLAN NOTE 6
- CSx# — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 12

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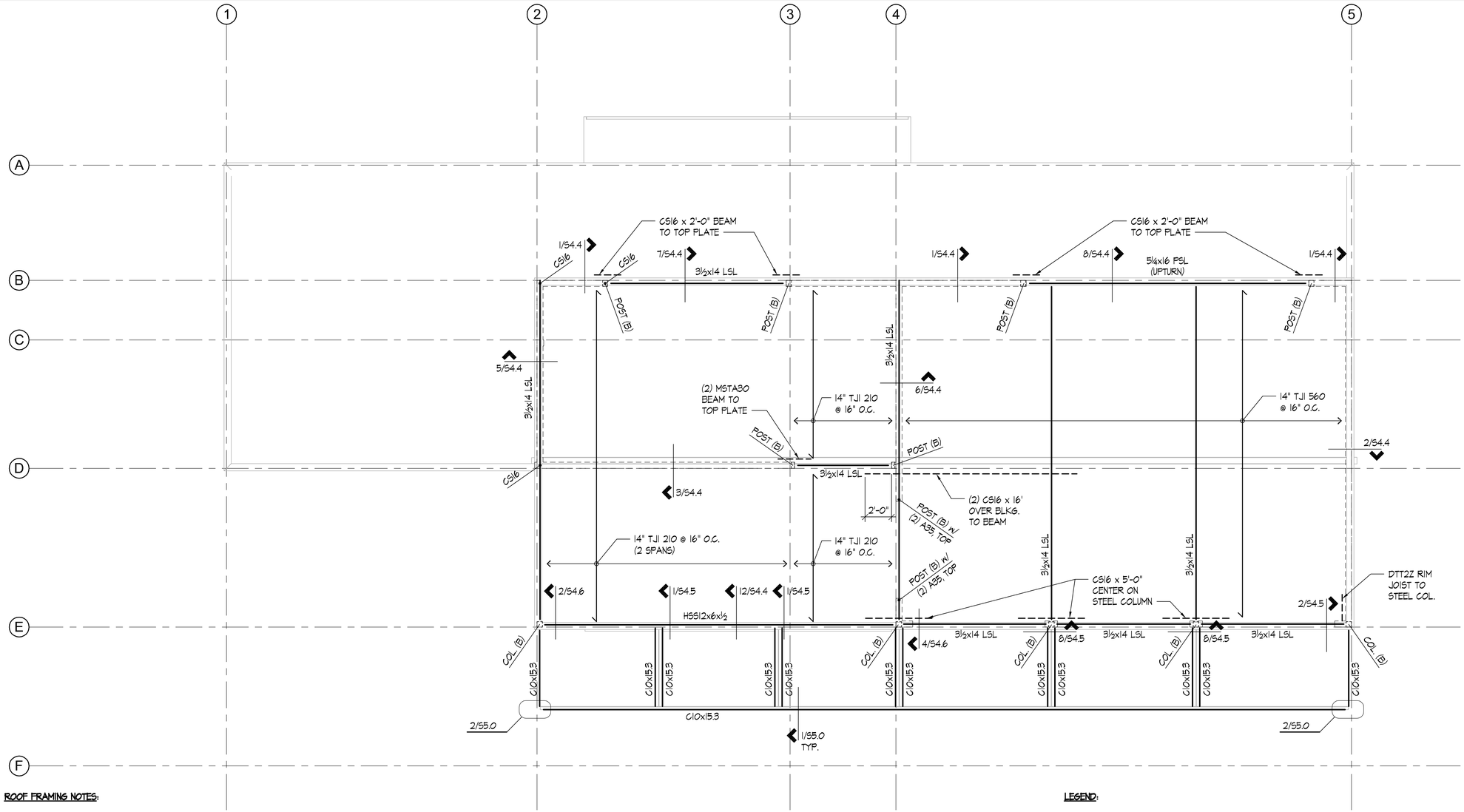
LOW ROOF / CLERESTORY SHEAR WALL PLAN

S2.2A



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3. TYPICAL ROOF FRAMING CONSISTS OF 5/8" APA RATED SHEATHING (INDEX 32/16), LAID FACE GRAIN PERPENDICULAR OVER 14" TJI 210 @ 16" O.C., U.O.N. HANG JOISTS WITH IUS FACE MOUNT HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
4. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
5. PROVIDE SOLID BLOCKING BETWEEN EACH ROOF JOIST AT SUPPORTS. PROVIDE AN H2.5A CLIP AT EVERY MEMBER TO TOP PLATE.
6. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x8 FOR EXTERIOR BEARING WALLS AND (2) 2x8 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
7. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL ROOF BEAMS FOR FULL BEARING.
8. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.

LEGEND:

- INDICATES FRAMING DIRECTION
- INDICATES EXTENT OF FRAMING
- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW.
- INDICATES HEADER MEMBER. SEE PLAN NOTE 6

UPPER ROOF FRAMING PLAN

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

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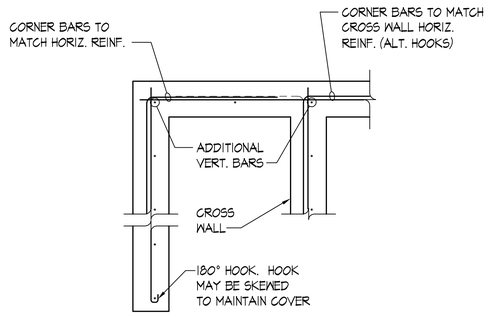
UPPER ROOF FRAMING PLAN

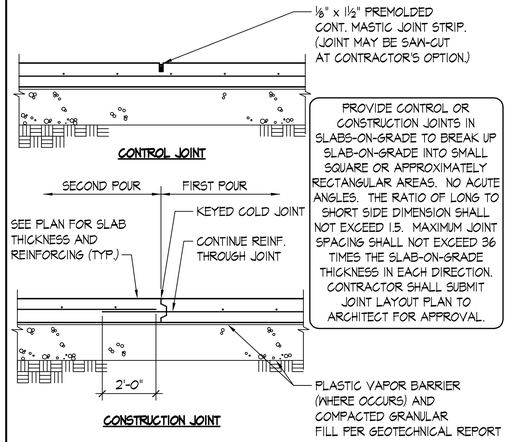
S2.3

File: 689-s203.dwg Plotted: Mon, 01/07/2019 5:19 pm



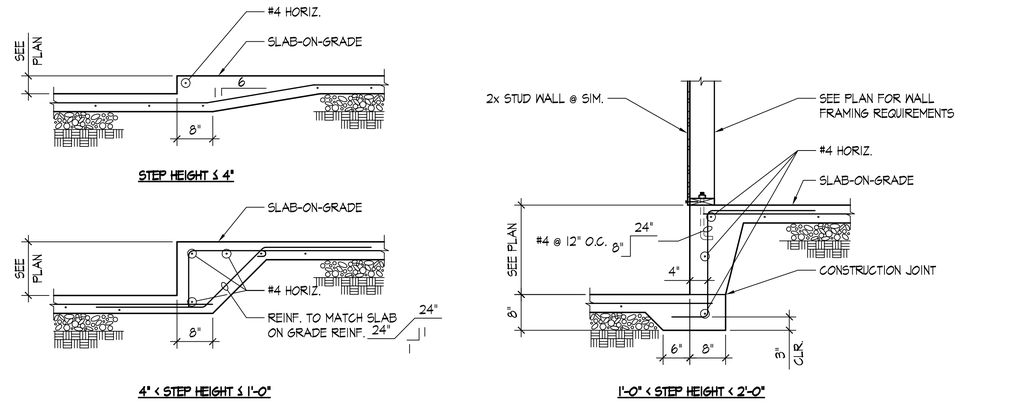
TYPICAL CORNER BAR AND WALL END BAR ARRANGEMENT AT CONCRETE WALLS OR FOOTINGS

SCALE: NONE | 1



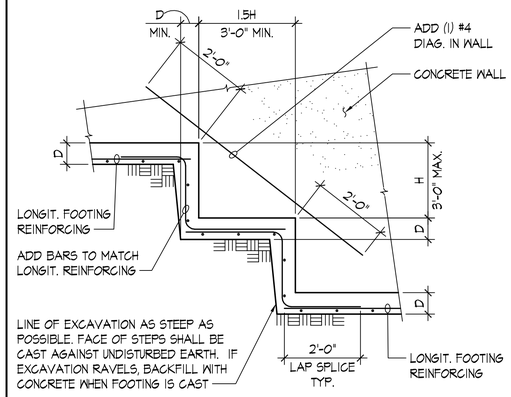
TYPICAL SLAB-ON-GRADE JOINTS

SCALE: NONE | 2



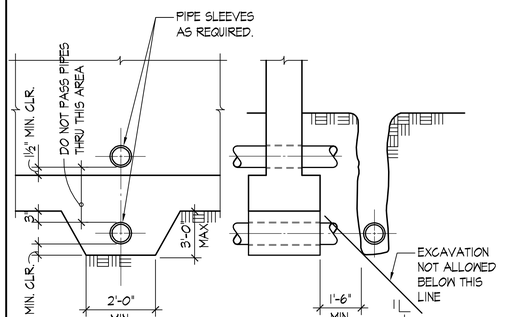
TYPICAL SLAB-ON-GRADE STEP DETAIL

SCALE: NONE | 4



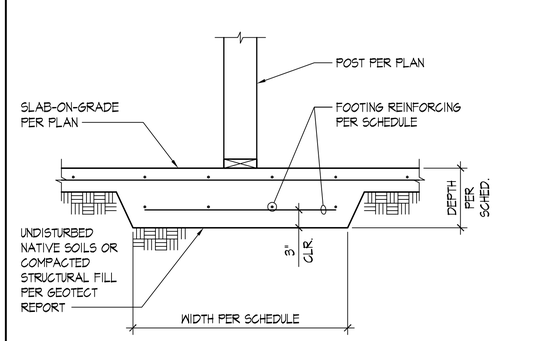
TYPICAL STEPPED FOOTING

SCALE: NONE | 5



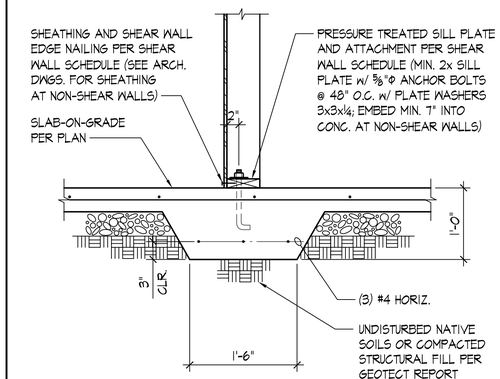
TYPICAL PIPE AND TRENCH LOCATIONS PERPENDICULAR TO FOOTING

SCALE: NONE | 6



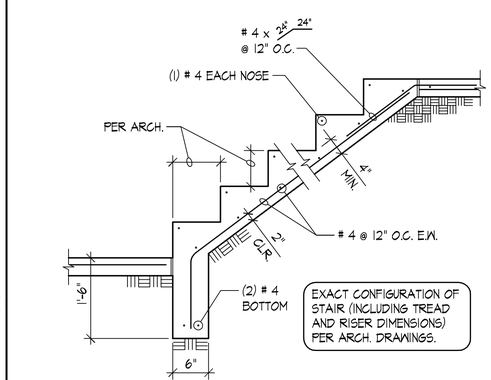
TYPICAL SPREAD FOOTING AT SLAB-ON-GRADE

SCALE: NONE | 7



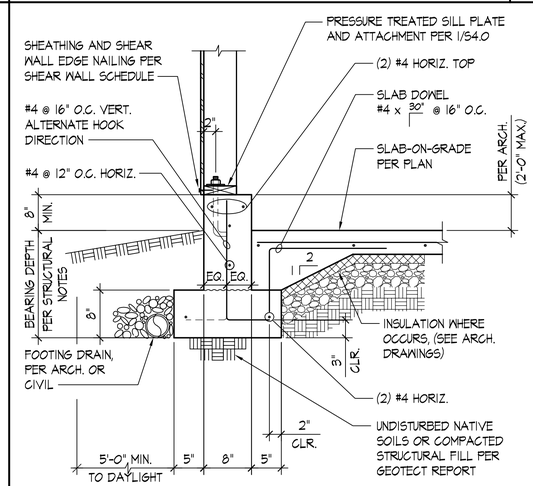
TYPICAL INTERIOR WALL FOUNDATION (THICKENED SLAB)

SCALE: NONE | 8



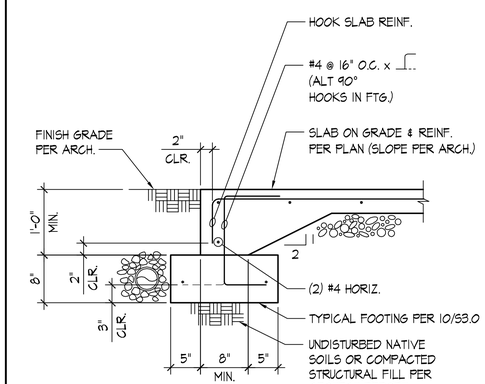
TYPICAL STAIR ON GRADE

SCALE: NONE | 9



TYPICAL PERIMETER WALL FOUNDATION AT SLAB-ON-GRADE

SCALE: NONE | 10



TYPICAL THICKENED SLAB AT DOOR

SCALE: NONE | 11

MARK	SIZE	DEPTH	REINFORCING	REMARKS
F2.0	2'-0" x 2'-0"	12"	(3) #4 EA. WAY BOT.	.
F2.5	2'-6" x 2'-6"	12"	(4) #4 EA. WAY BOT.	.

SPREAD FOOTING SCHEDULE

SCALE: NONE | 12

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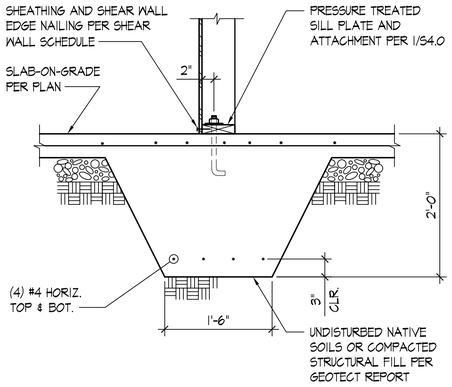
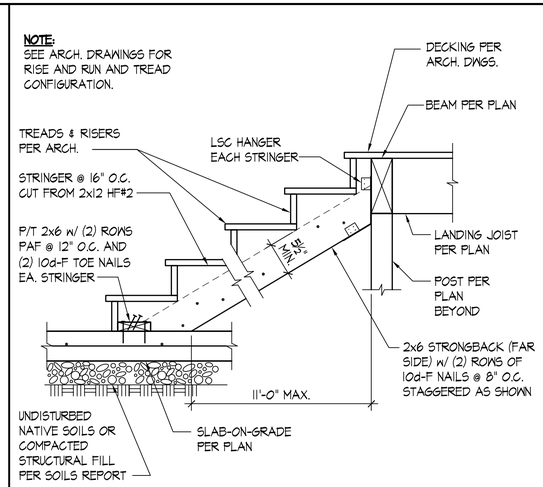
TYPICAL FOUNDATION/SLAB DETAILS

S3.0

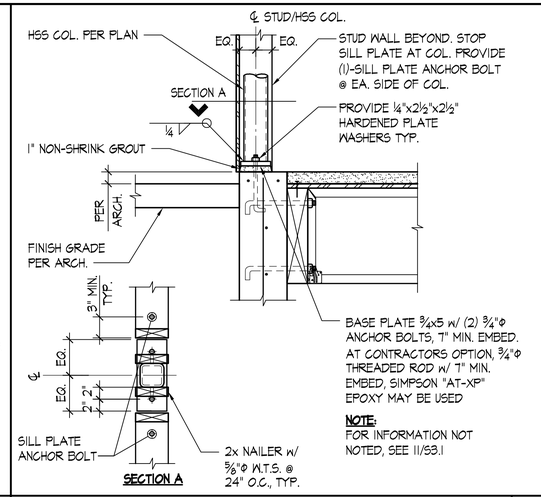
File: 689-s300.dwg Plotted: Mon, 01/07/2019 5:20 pm



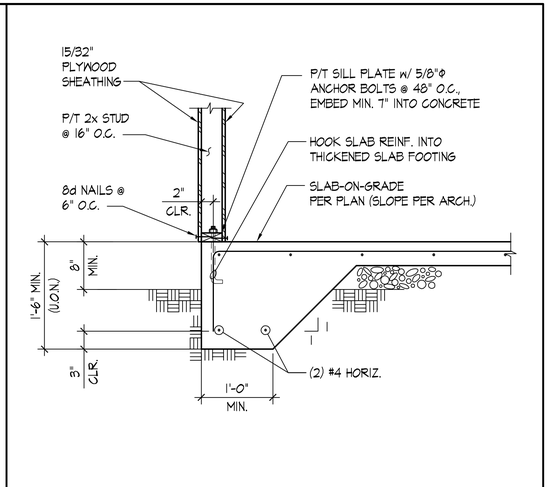
TYPICAL THICKENED SLAB AT SHEAR WALL SCALE: 1"=1'-0" | 1



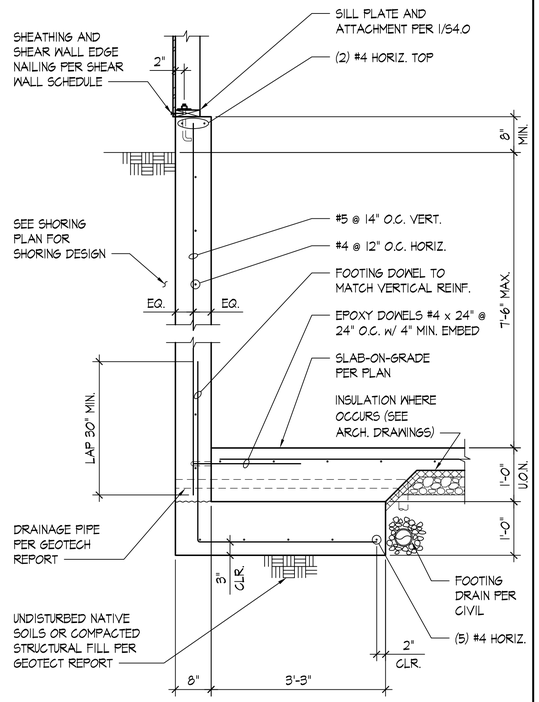
STAIR STRINGER TO FOOTING SCALE: NONE | 2



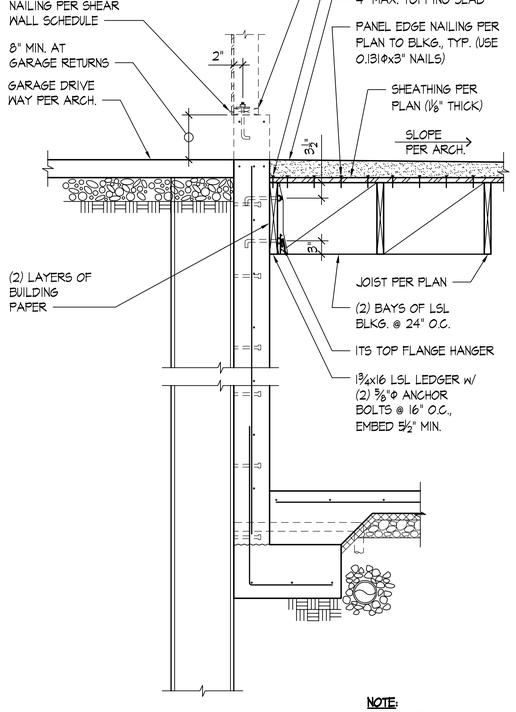
HSS COLUMN BASE CONNECTION SCALE: 1"=1'-0" | 3



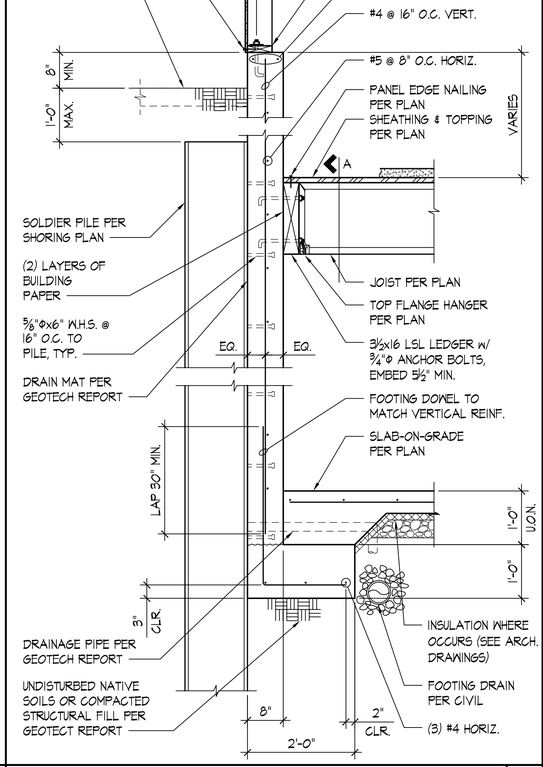
THICKENED SLAB EDGE AT TRASH ENCLOSURE SCALE: 1"=1'-0" | 4



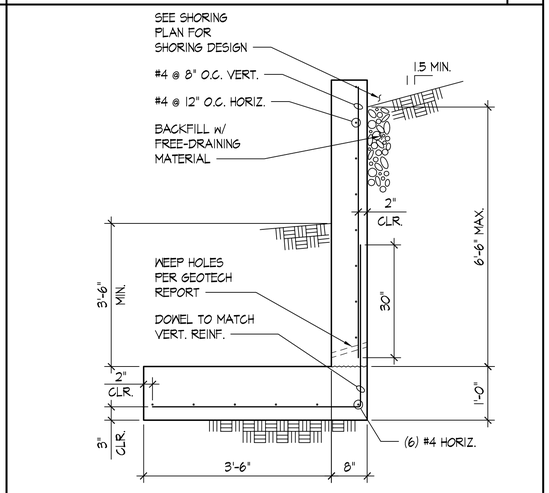
PARTIAL HEIGHT CONCRETE WALL SCALE: 3/4"=1'-0" | 9



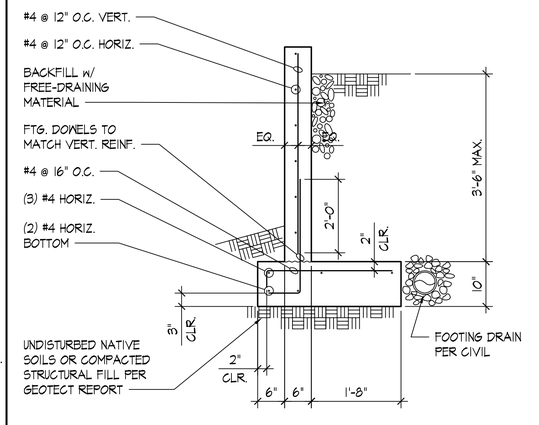
CONCRETE WALL AT GARAGE SCALE: 3/4"=1'-0" | 10



DETAIL SCALE: 3/4"=1'-0" | 11



CANTILEVER RETAINING WALL SCALE: NONE | 8



CANTILEVER RETAINING WALL SCALE: 3/4"=1'-0" | 12

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DESIGN	SKK
DRAWN	SC
CHECKED	SKK
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PERMIT SET	1/8/2019

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LUNDIN RESIDENCE

4041 WEST MERCER WAY
MERCER ISLAND, WA 98040

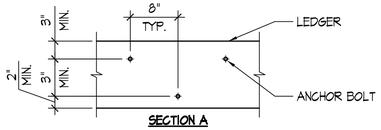
PROJECT NO. 18689.01

DETAILS

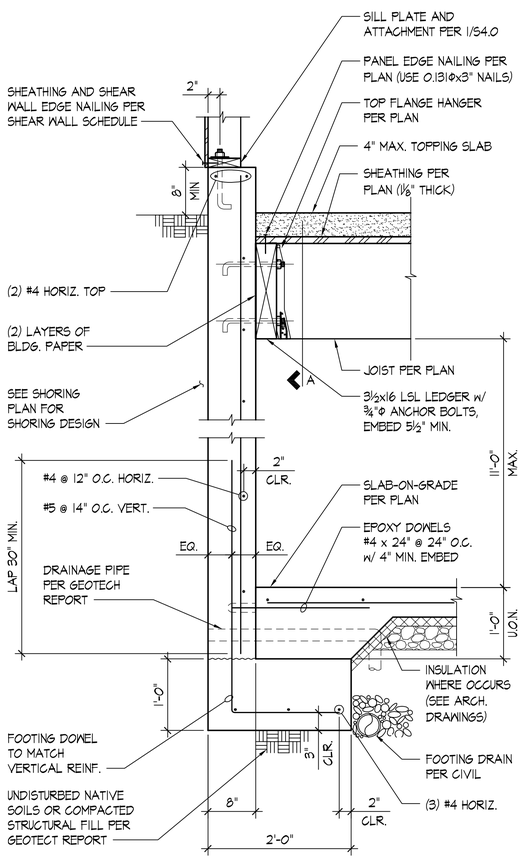
S3.1

File: 689-s301.dwg Plotted: Mon, 01/07/2019 5:20 pm

DETAIL SCALE: 1"=1'-0" 1

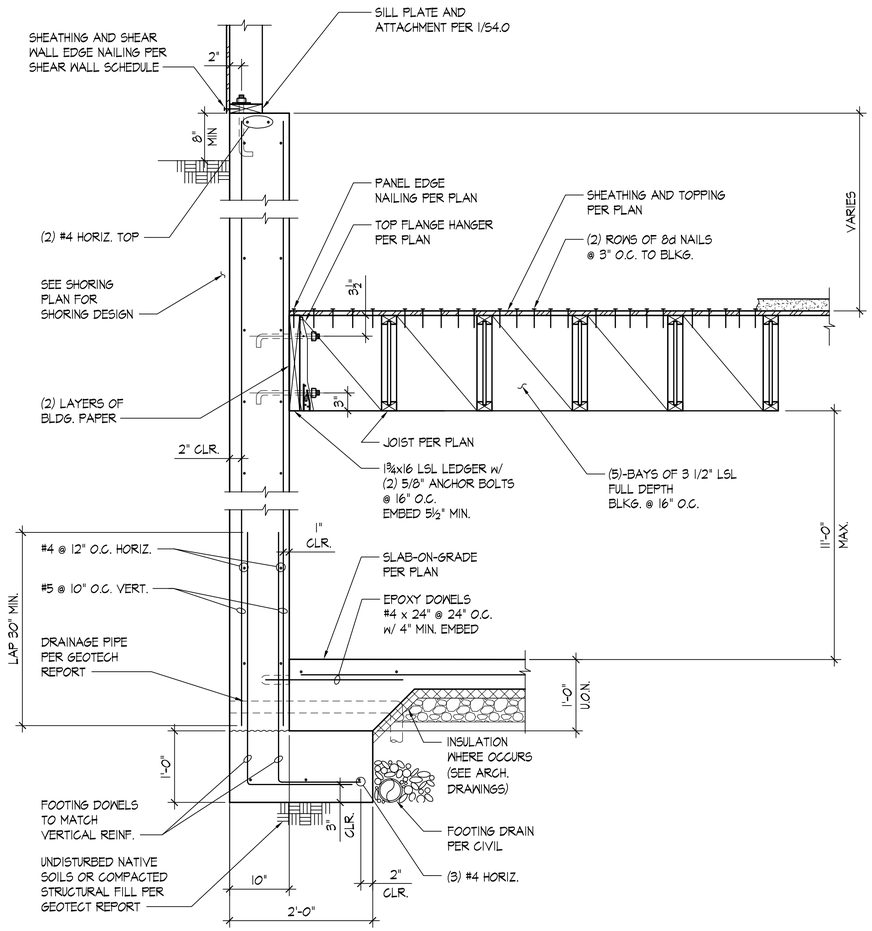


SECTION A



BASEMENT WALL SCALE: 1"=1'-0" 9

DETAIL SCALE: 1"=1'-0" 2

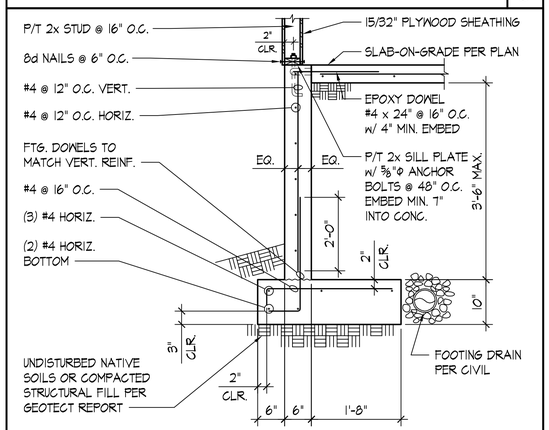


BASEMENT WALL SCALE: 1"=1'-0" 11

DETAIL SCALE: 1"=1'-0" 3

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

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



TRASH ENCLOSURE FOOTING SCALE: 3/4"=1'-0" 12

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PROJECT NO. 18689.01

DETAILS

S3.2

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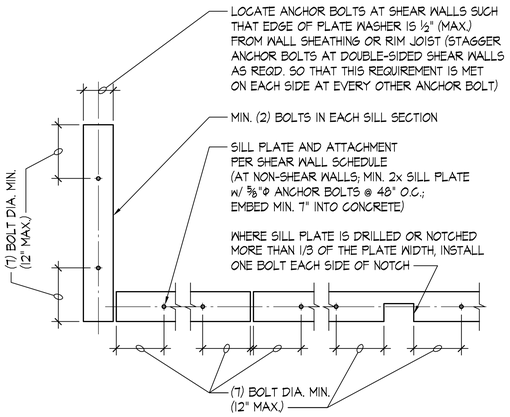
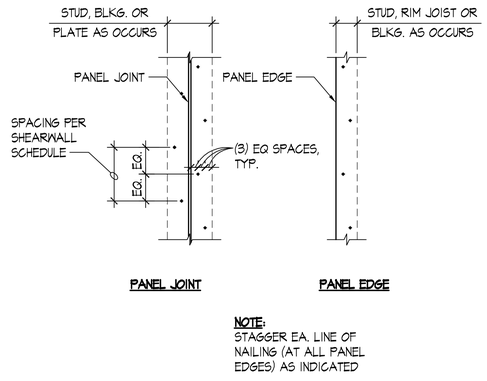


TYPICAL SILL PLATE BOLTING - PLAN VIEW — SCALE: NONE | 1



NOTE:
STAGGER EA. LINE OF NAILING (AT ALL PANEL EDGES) AS INDICATED

TYPICAL STAGGERED NAILING — SCALE: NONE | 2

SHEAR WALL SCHEDULE

SHEAR WALL TYPE	SHEAR WALL SHEATHING (1)	PANEL EDGE FRAMING (2)(7)	PANEL EDGE NAILING (3)	BOTTOM PLATE ATTACHMENT			TOP PLATE ATTACHMENT	
				2x BOTTOM PLATE CONNECTION TO RIM JOIST OR BLOCKING BELOW	ANCHOR BOLTING OF SILL PLATE TO CONCRETE BELOW (4)(5)		RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE (6)	
					3x PLATE	2x PLATE	INTERIOR WALL	EXTERIOR WALL
SW-6	15/32" APA ONE-SIDE SHTG.	2x	0.131"Φx2½" @ 6" O.C.	0.148"Φx3¼" @ 6" O.C. (10)	⅝"Φ @ 48" O.C.	⅝"Φ @ 48" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.
SW-4	15/32" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.131"Φx2½" @ 4" O.C. (8)	0.148"Φx3¼" @ 4" O.C. (10)	⅝"Φ @ 48" O.C.	⅝"Φ @ 32" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.
SW-3	15/32" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.131"Φx2½" @ 3" O.C. (8)	0.148"Φx3¼" @ 3" O.C. (10)	⅝"Φ @ 32" O.C.	⅝"Φ @ 24" O.C.	A35 @ 12" O.C.	LTP4 @ 12" O.C.
SW-2	15/32" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.131"Φx2½" @ 2" O.C. (8)	(2) ROWS 0.148"Φx3¼" @ 4" O.C. STAGGERED (11)	⅝"Φ @ 24" O.C.	⅝"Φ @ 16" O.C.	A35 @ 8" O.C.	LTP4 @ 8" O.C.

NOTES:

(1) INSTALL PANEL SHEATHING EITHER HORIZONTALLY OR VERTICALLY FOR THE ENTIRE LENGTH OF THE WALL PER PLAN.

(2) ALL INTERMEDIATE WALL STUDS SHALL BE PER PLAN. PROVIDE BACKING FRAMING AT ALL PANEL EDGES INCLUDING HORIZONTAL BLOCKING PER THE SCHEDULE.

(3) PROVIDE NAILING TO ALL PANEL EDGES, TOP & BOTTOM PLATES AND HORIZONTAL BLOCKING. PROVIDE THE SAME NAILING PATTERN TO EACH MULTIPLE STUD OF THE BUILT-UP HOLD DOWN POST. NAIL PANEL TO INTERMEDIATE FRAMING MEMBERS w/ 0.131"Φ x 2½" @ 12" O.C.

(4) EMBED CAST-IN-PLACE 5/8"Φ ANCHOR BOLTS 7" MIN. (OR EMBED ADHESIVE ANCHOR BOLTS 5 1/2" IN (E) CONCRETE; SEE STRUCTURAL NOTES). PROVIDE PLATE WASHER 3" x 3" x 1/4" AT EACH ANCHOR BOLT. SILL PLATES SHALL BE TREATED PER GENERAL NOTES, AND SHALL BE 2x OR 3x PER THE SCHEDULE. SEE DETAIL 1/S4.0 FOR OTHER REQUIREMENTS.

(5) PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.

(6) PROVIDE 0.131"Φ x 1-1/2" LONG NAILS FOR CLIPS DIRECTLY ATTACHED TO FRAMING MEMBERS; PROVIDE 0.131"Φ x 2-1/2" LONG NAILS FOR CLIPS INSTALLED OVER FLOOR OR WALL SHEATHING ON FRAMING MEMBERS. SEE 6/S4.1 FOR TOP PLATE SPLICE.

(7) ALTERNATIVE TO 3x STUDS AND 3x HORIZ. BLOCKING IS (2) 2x STUDS/BLKG. NAILED TOGETHER WITH 0.148"Φ x 3" LONG NAILS WITH THE SAME SPACING AS THE PANEL EDGE NAILING PER THE SCHEDULE (STAGGER).

(8) STAGGER NAILS PER 2/S4.0.

(9) STAGGER PANEL EDGE JOINTS AT DOUBLE-SIDED SHEAR WALLS SO THAT JOINTS ON OPPOSITE SIDES ARE NOT AT THE SAME STUD.

(10) RIM JOIST/BLOCKING MINIMUM WIDTH OF 1⅜". STAGGER NAILS PER 2/S4.0 WHERE SPACING IS LESS THAN 6" O.C.

(11) RIM JOIST/BLOCKING MINIMUM WIDTH OF 1⅜" AT EXTERIOR WALLS, 3½" AT INTERIOR WALLS. STAGGER NAILS PER 2/S4.0.

(12) STAGGER ANCHOR BOLTS ON EITHER SIDE OF SILL PLATE AS NOTED ON 1/S4.0.

TYPICAL ROOF AND FLOOR DIAPHRAGM SHEATHING — SCALE: NONE | 6

DETAIL A
FLAT BLOCKING AT PANEL EDGES (WHERE REQD.)

DETAIL B
PANEL EDGE NAILING AT JOIST SPLICE

NOTES:

1. RUN LONG DIMENSION OF SHEATHING PANELS PERPENDICULAR TO FRAMING.
2. WHERE FRAMING LAP SPLICE AND SHEATHING JOINTS ARE OFFSET, SEE DETAIL B ABOVE.

SHEAR WALL SCHEDULE - 8d NAILS — SCALE: NONE | 8

HOLDOWN STRAP	MIN. NUMBER OF NAILS EACH END	MIN. STRAP END LENGTH "A"
CS16	(15) 8d	1'-4"
CMSTC16	(30) 16d SINKERS	2'-4"

* (38) INTO STUDS, (12) INTO BEAM FACE, (4) INTO BEAM BOTTOM

TYPICAL FLOOR TO FLOOR HOLDOWN STRAP & FLOOR TO HEADER HOLDOWN STRAP — SCALE: NONE | 10

HOLDOWN	ANCHOR BOLT Φ	ANCHOR BOLT IN CONCRETE EMBED LENGTH	CONNECTORS TO HOLDOWN STUDS
HDU2	⅝"Φ	13"	(6) SDS ¼"x2½" SCREWS
HDU4	⅝"Φ	13"	(10) SDS ¼"x2½" SCREWS
HDU8	⅞"Φ	18"	(20) SDS ¼"x2½" SCREWS

NOTE:
PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.

TYPICAL HOLDOWN TO CONCRETE AT RIM JOIST — SCALE: NONE | 12

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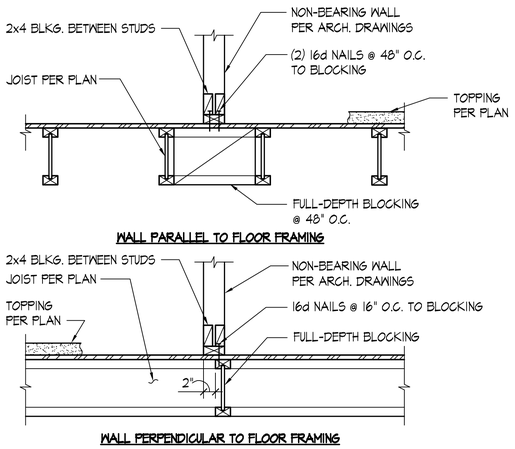
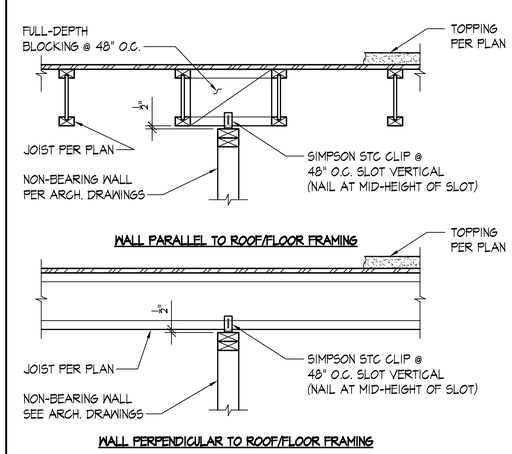
PROJECT NO. 18689.01

TYPICAL WOOD DETAILS

S4.0



TYPICAL NON-STRUCTURAL WALL SUPPORT (BOTTOM) - I-JOIST SCALE: NONE | 1



TYPICAL NON-STRUCTURAL WALL SUPPORT (TOP) - I-JOIST SCALE: NONE | 2

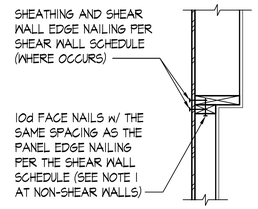
CEILING JOIST SCHEDULE	
SIZE	MAX. SPAN
2x4 @ 24" O.C. 2x4 @ 16" O.C.	8'-0" 9'-2"
2x6 @ 24" O.C. 2x6 @ 16" O.C.	12'-6" 14'-4"
2x8 @ 24" O.C. 2x8 @ 16" O.C.	16'-6" 19'-0"
2x10 @ 24" O.C. 2x10 @ 16" O.C.	21'-2" 24'-3"

NOTES:
CEILING JOIST TABLE BASED ON HF #2, Fb=850 PSI (REPETITIVE MEMBER USE), Fv = 150 PSI
$E=1.3X10^6$ PSI, DEFL. < L/240

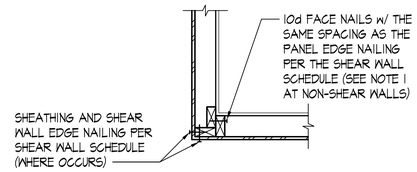
ATTIC LIVE LOAD = 10.0 PSF
CEILING DEAD LOAD = 5.0 PSF

CEILING JOIST SCHEDULE SCALE: NONE | 3

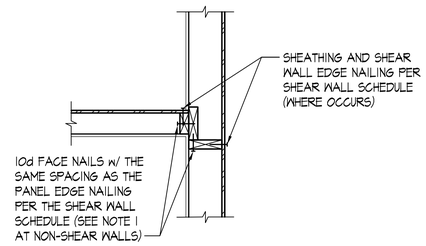
NOTES:
1. AT NON-SHEAR WALLS, NAIL STUDS TOGETHER WITH 10d-F NAILS @ 8" O.C.
2. ADDITIONAL STUDS REQUIRED AS NAILERS, ETC. ARE NOT SHOWN.



VARYING WALL SIZE

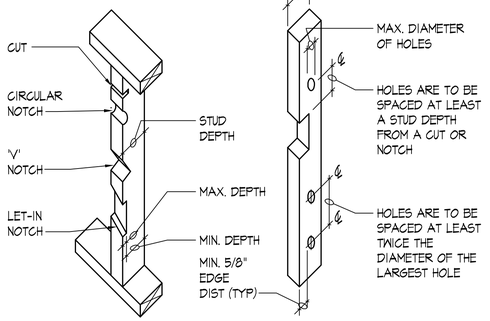


WALL CORNER



WALL INTERSECTION

TYPICAL WALL INTERSECTIONS - RESIDENTIAL SCALE: NONE | 8



A. CUTTING AND NOTCHING WOOD STUDS
(DO NOT NOTCH MORE THAN 3 ADJACENT STUDS w/o REVIEW BY ENGINEER)

BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	1/8"	2-3/8"
2x6	1-3/8"	4-1/8"
2x8	1-7/8"	5-3/8"

NON-BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	1-1/2"	2"
2x6	2-3/8"	3-1/8"
2x8	3"	4-1/4"

B. HOLES IN WOOD STUDS

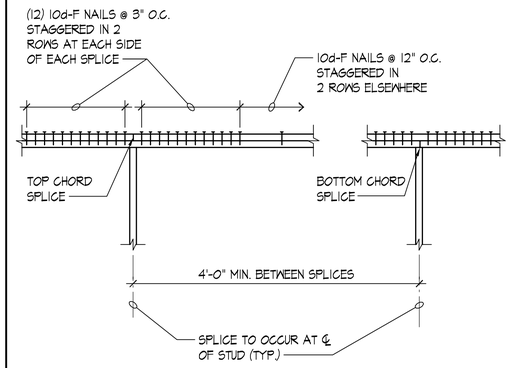
BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	1-1/2"
2x6	2-3/8"
2x8	3"

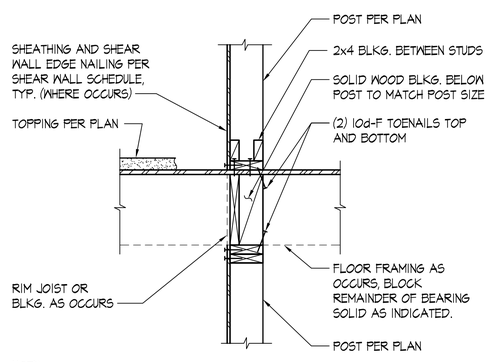
NON-BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	2-1/4"
2x6	3-3/8"
2x8	4-1/2"

TYPICAL ALLOWABLE HOLES AND NOTCHES IN STUDS SCALE: NONE | 9

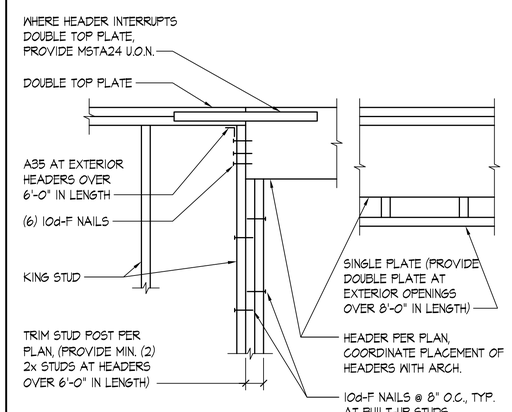


TYPICAL TOP PLATE SPLICE SCALE: NONE | 6

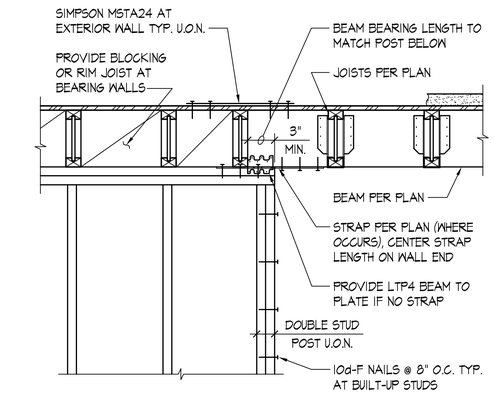


NOTE:
FRAMING CONDITIONS VARY, FOR INFORMATION NOT NOTED SEE PLAN & APPROPRIATE DETAILS

TYPICAL POST AT FLOOR SCALE: NONE | 7



TYPICAL HEADER DETAIL SCALE: NONE | 10



TYPICAL FLUSH BEAM DETAIL SCALE: NONE | 11

DETAIL SCALE: NONE | 12

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TYPICAL WOOD DETAILS

S4.1

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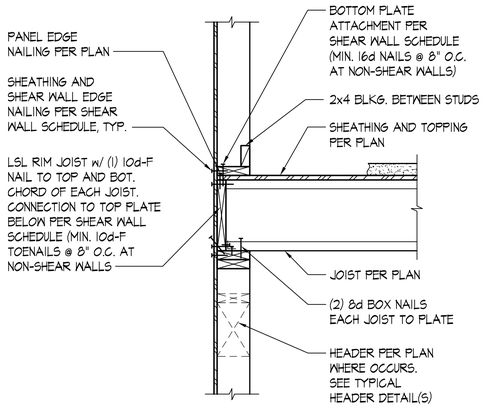
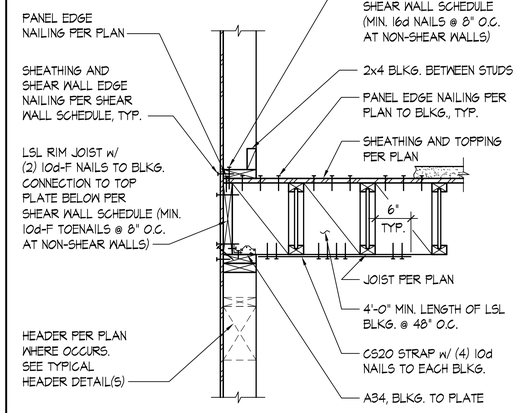
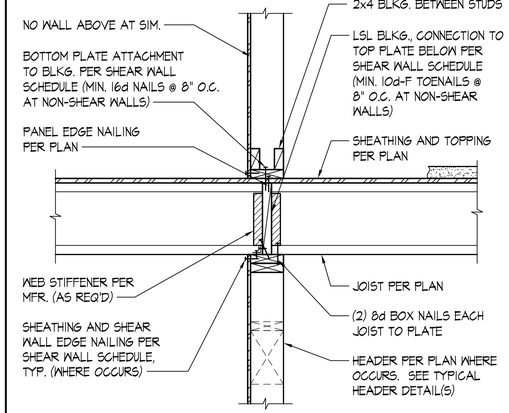


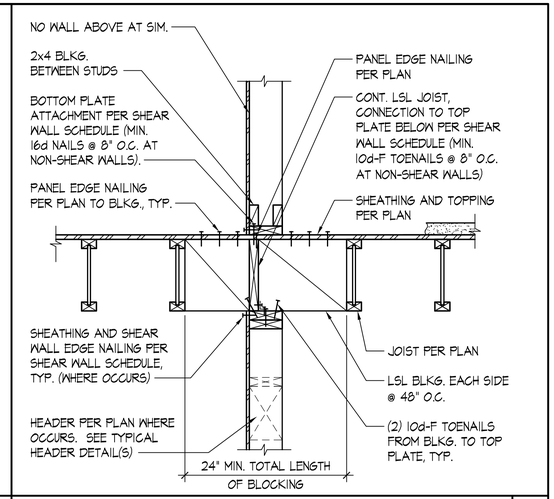
TYPICAL EXTERIOR WALL - I-JOIST PERPENDICULAR — SCALE: NONE — 1



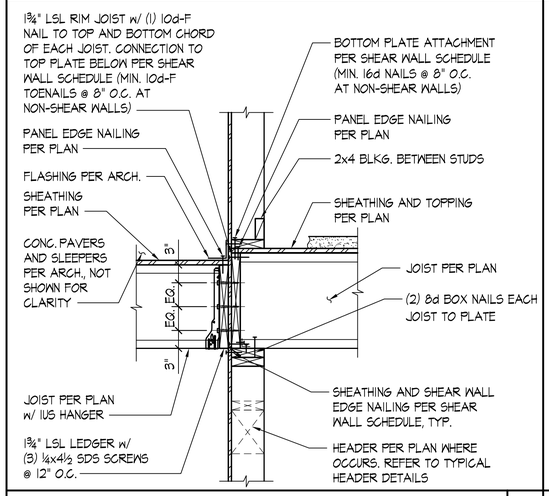
TYPICAL EXTERIOR WALL - I-JOIST PARALLEL — SCALE: NONE — 2



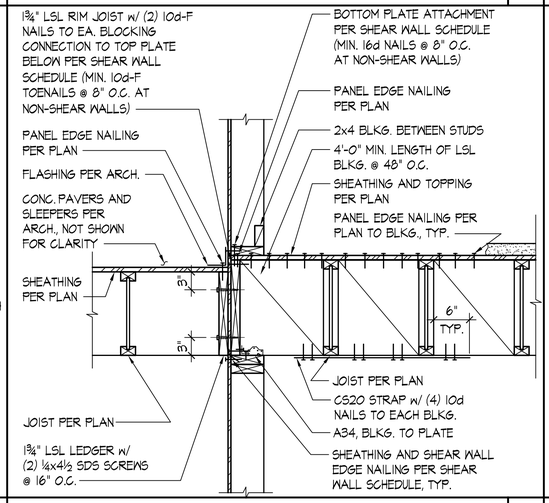
TYPICAL INTERIOR WALL - I-JOIST PERPENDICULAR — SCALE: NONE — 3



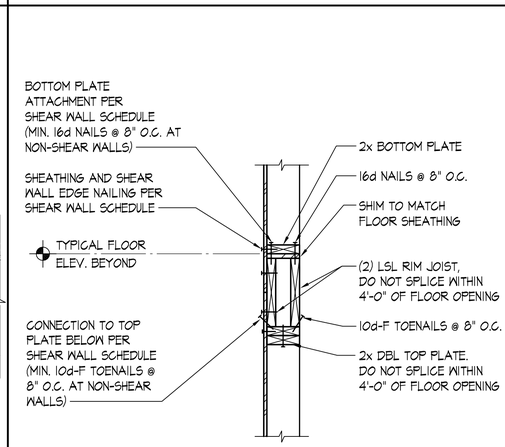
TYPICAL INTERIOR WALL - I-JOIST PARALLEL — SCALE: NONE — 4



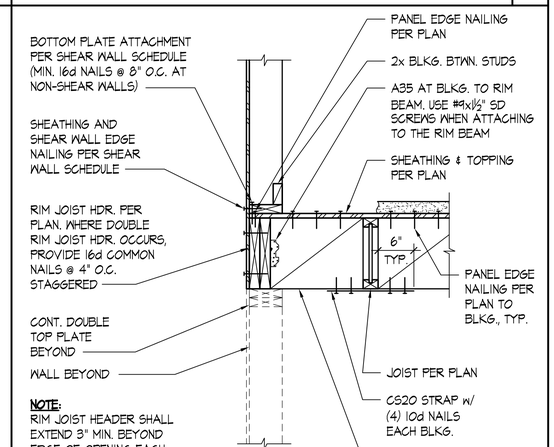
TERRACE TO HOUSE - I-JOIST PERPEENDICULAR — SCALE: NONE — 5



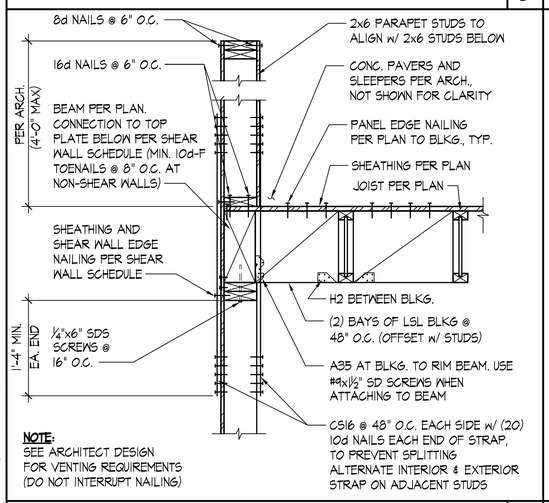
TERRACE TO HOUSE - I-JOIST PARALLEL — SCALE: NONE — 6



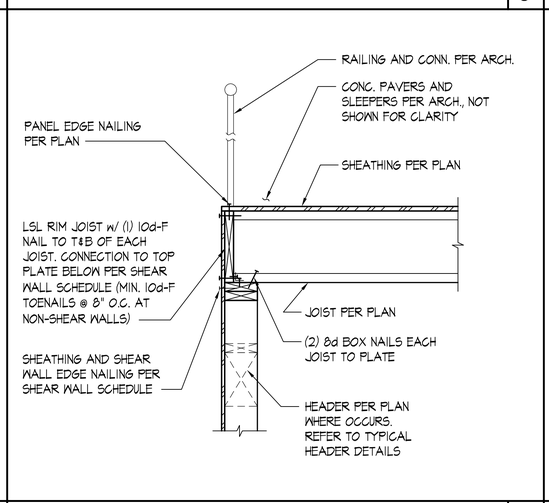
EXTERIOR WALL AT FLOOR OPENING - I-JOIST — SCALE: NONE — 7



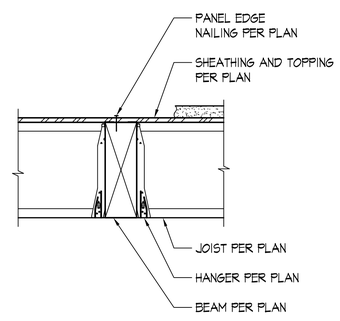
FLUSHED FRAMED HEADER — SCALE: NONE — 8



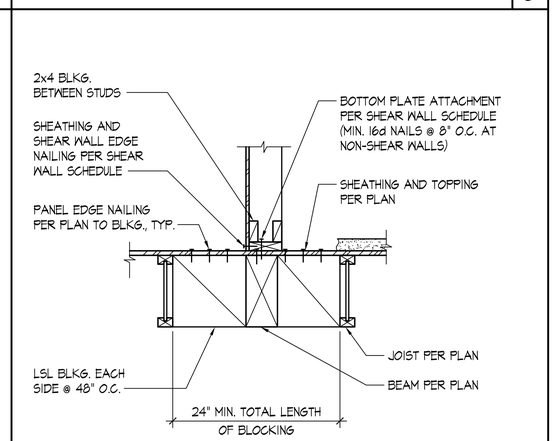
PARAPET AT COVERED TERRACE — SCALE: NONE — 9



DECK EDGE - JOIST PERPENDICULAR TO WALL SUPPORT — SCALE: NONE — 10



TYPICAL I-JOIST TO FLUSH BEAM CONNECTION — SCALE: NONE — 11



TYPICAL STRUCTURAL WALL TO PARALLEL BEAM BELOW - I-JOIST PARALLEL — SCALE: NONE — 12

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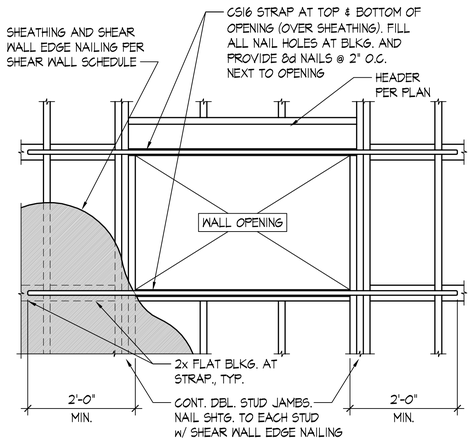
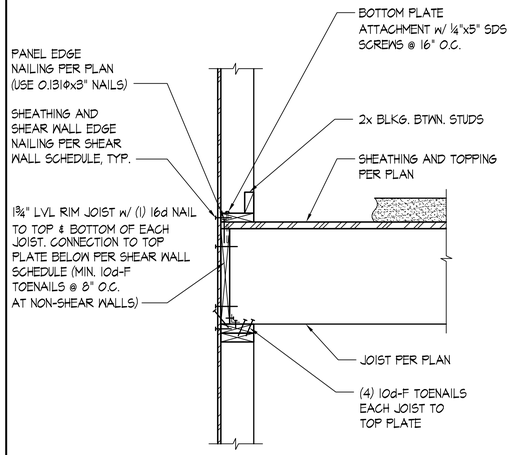
PROJECT NO. 18689.01

TYPICAL FLOOR DETAILS

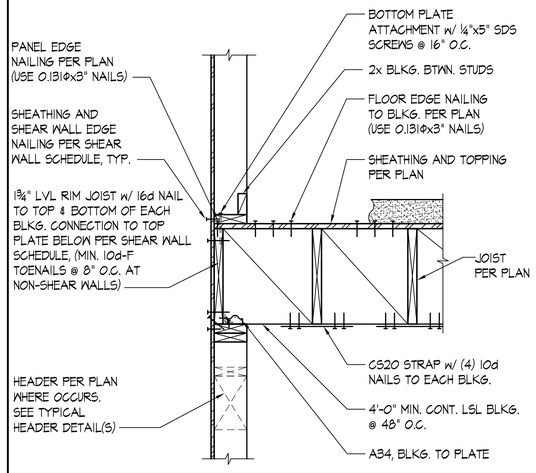
S4.2



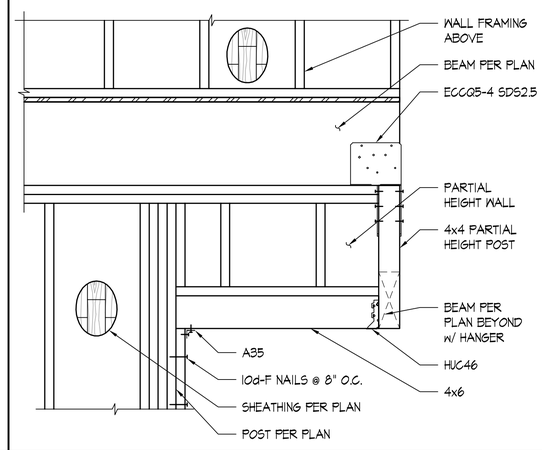
STRAPPING AROUND SHEAR WALL OPENING SCALE: NONE | 1



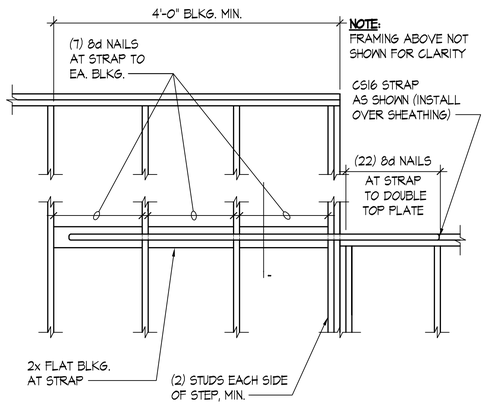
EXTERIOR WALL AT GARAGE - LVL JOIST PERPENDICULAR SCALE: NONE | 2



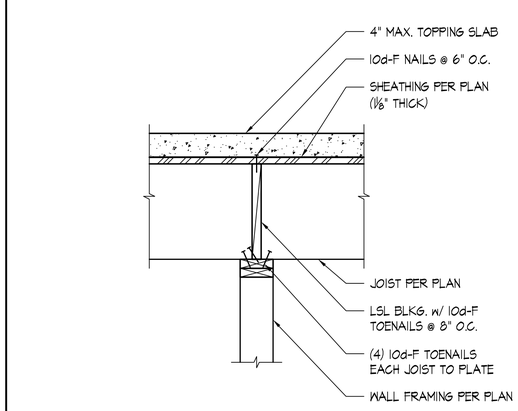
EXTERIOR WALL AT GARAGE - LVL JOIST PARALLEL SCALE: NONE | 3



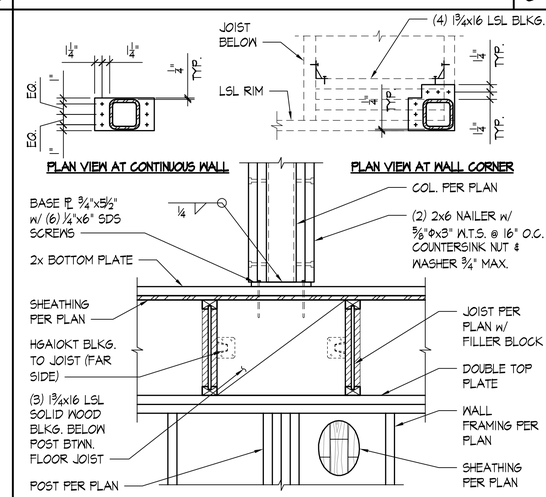
DETAIL SCALE: NONE | 4



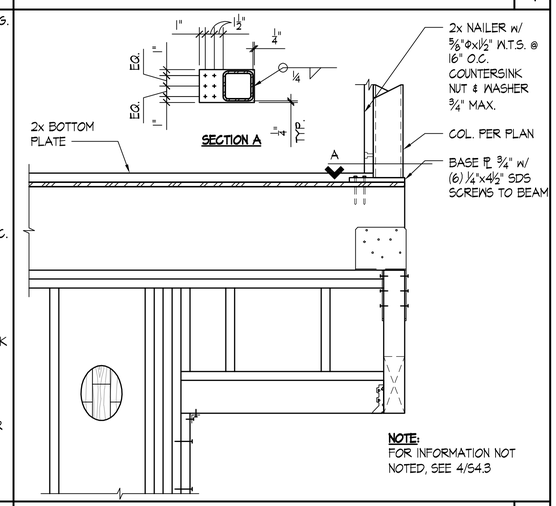
TYPICAL PLATE HEIGHT STEP SCALE: NONE | 5



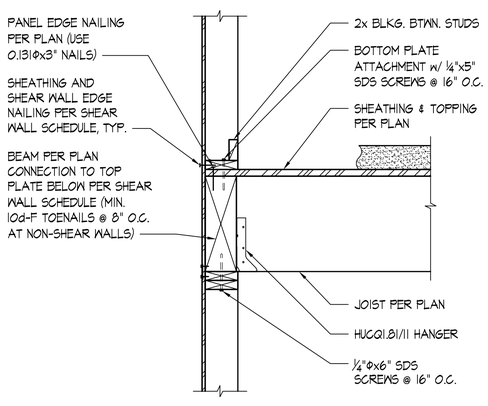
INTERIOR BEARING WALL - GARAGE SCALE: NONE | 6



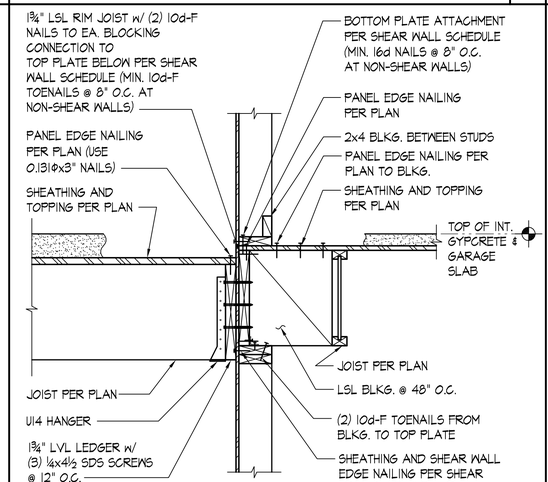
STEEL COLUMN BASE CONNECTION SCALE: NONE | 7



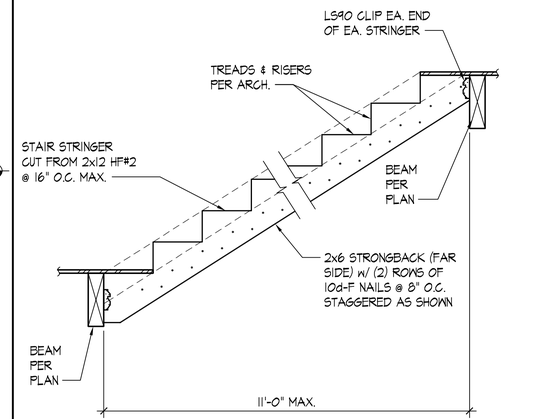
STEEL COLUMN BASE CONNECTION - TERRACE SCALE: NONE | 8



DETAIL SCALE: NONE | 9



DETAIL SCALE: NONE | 10



TYPICAL STAIR STRINGER SCALE: NONE | 11

DETAIL SCALE: NONE | 12

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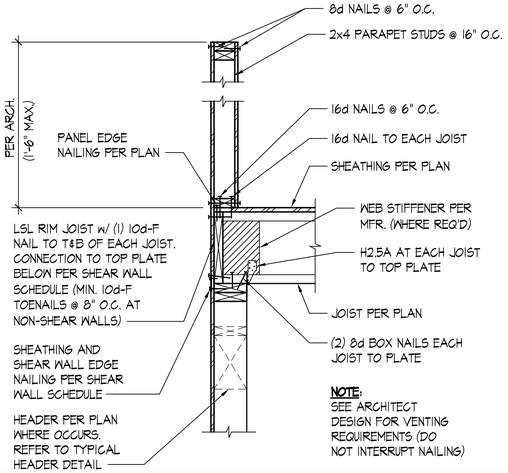
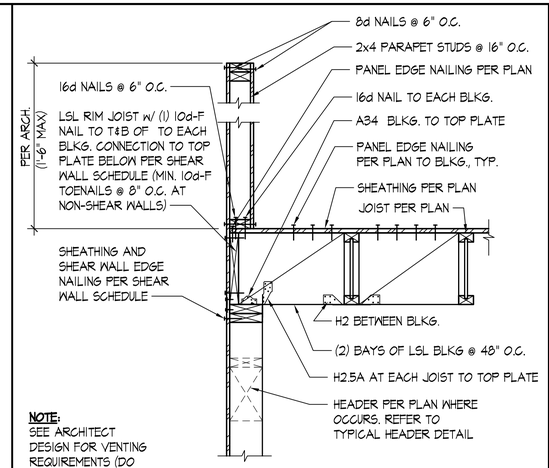
TYPICAL DETAILS

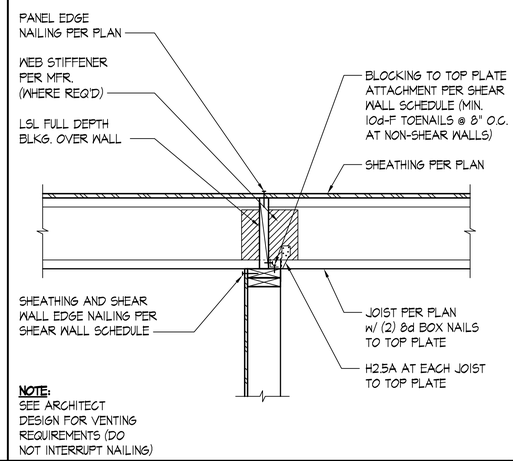
S4.3



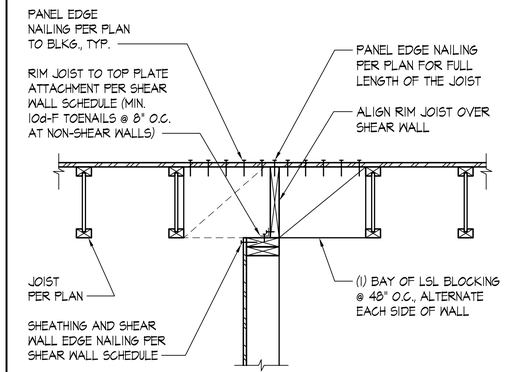
TYPICAL PARAPET - I-JOIST PERPENDICULAR SCALE: NONE | 1



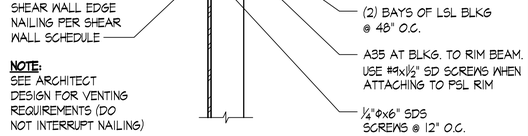
TYPICAL PARAPET - I-JOIST PARALLEL SCALE: NONE | 2



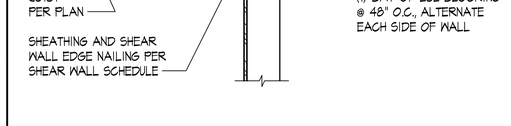
EXTERIOR STRUCTURAL WALL AT ROOF - I-JOIST PERPENDICULAR SCALE: NONE | 3



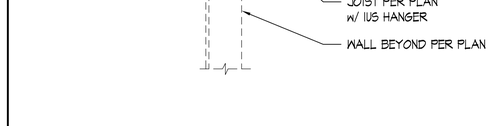
TYPICAL INTERIOR STRUCTURAL WALL AT ROOF - I-JOIST PARALLEL SCALE: NONE | 4



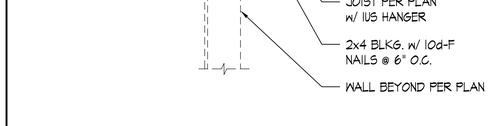
PARAPET - I-JOIST PARALLEL SCALE: NONE | 5



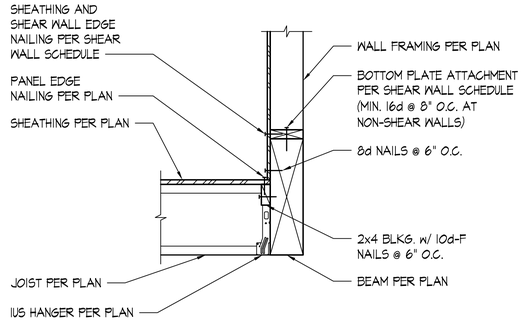
DETAIL SCALE: NONE | 6



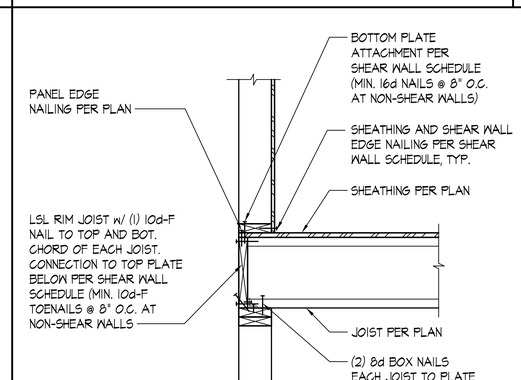
DETAIL SCALE: NONE | 7



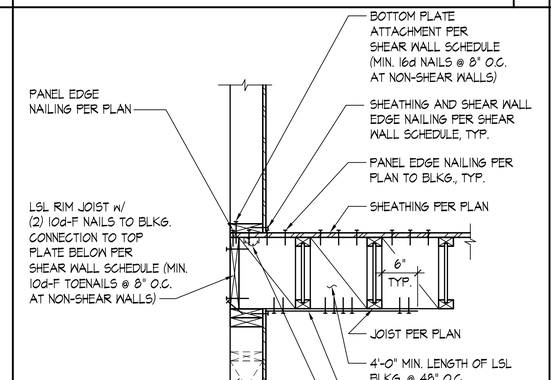
DETAIL SCALE: NONE | 8



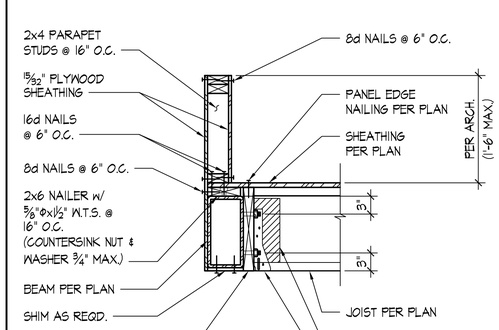
DETAIL SCALE: NONE | 9



DETAIL SCALE: NONE | 10



DETAIL SCALE: NONE | 11



DETAIL SCALE: NONE | 12

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LUNDIN RESIDENCE

4041 WEST MERCER WAY
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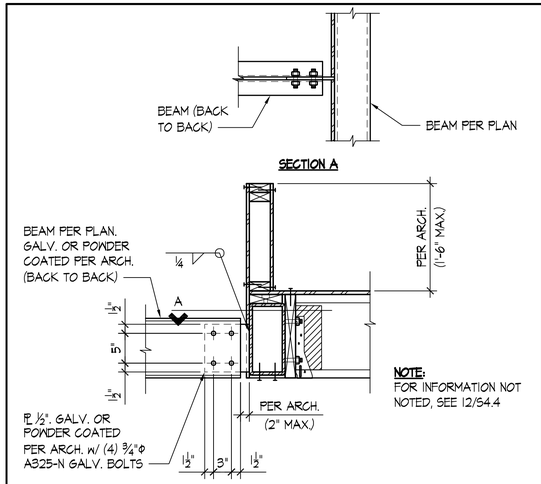
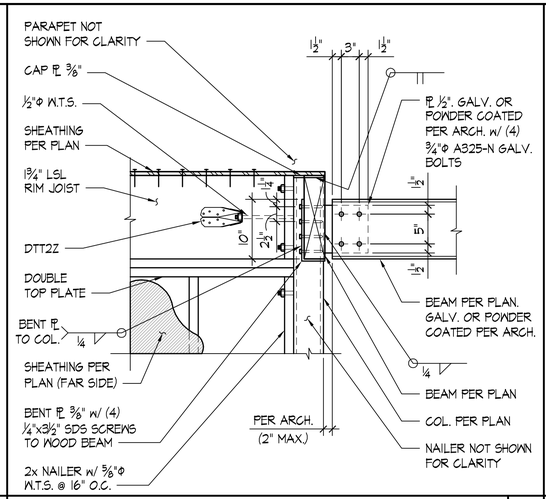
PROJECT NO. 18689.01

DETAILS

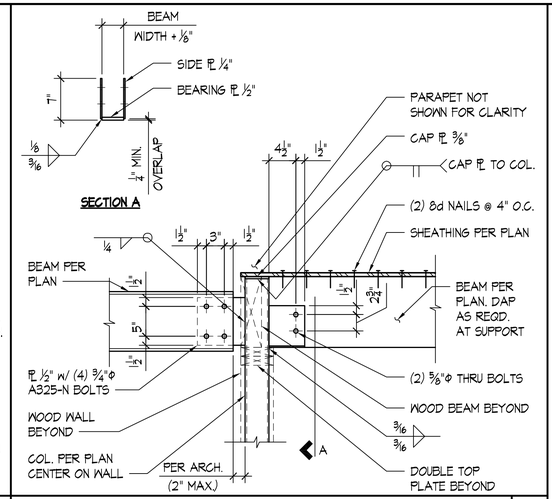
S4.4



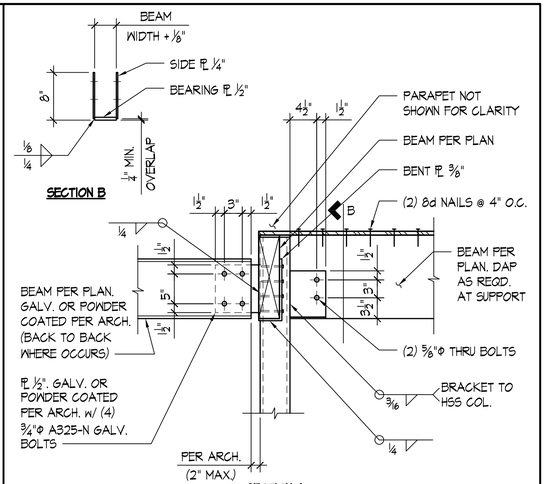
DETAIL SCALE: 1"=1'-0" 1



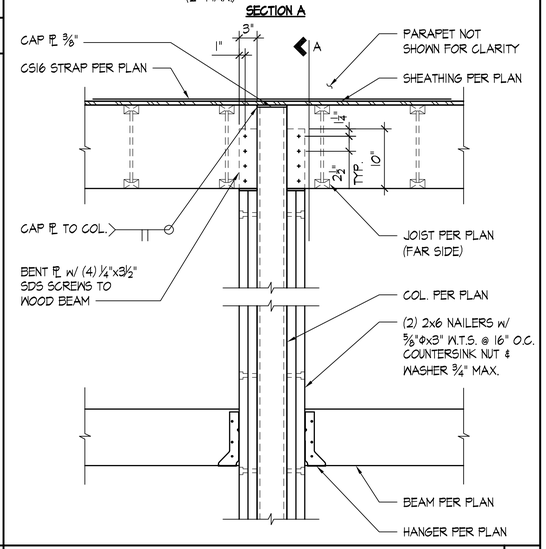
DETAIL SCALE: 1"=1'-0" 2



DETAIL SCALE: 1"=1'-0" 3



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



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

DETAIL SCALE: 1"=1'-0" 5

DETAIL SCALE: 1"=1'-0" 6

DETAIL SCALE: 1"=1'-0" 7

DETAIL SCALE: 1"=1'-0" 9

FRONT ENTRY AWNING SCALE: 1"=1'-0" 10

FRONT ENTRY AWNING SCALE: 1"=1'-0" 11

FRONT AWNING ATTACHMENT TO HOUSE SCALE: 1"=1'-0" 12

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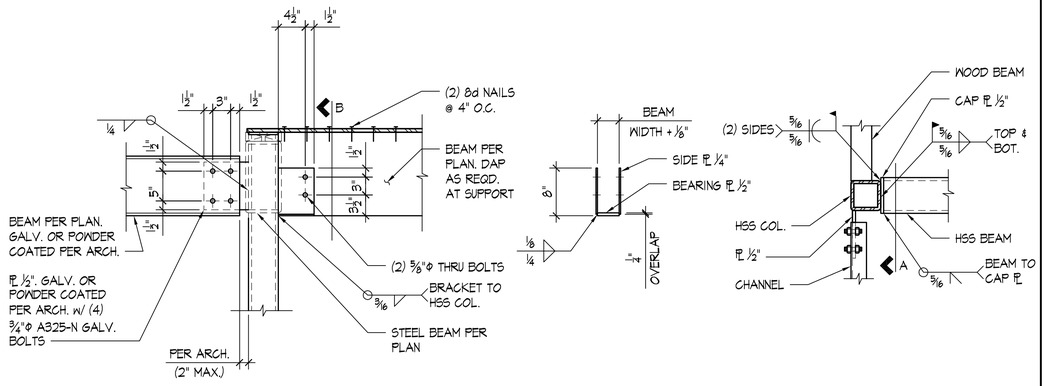
DETAILS

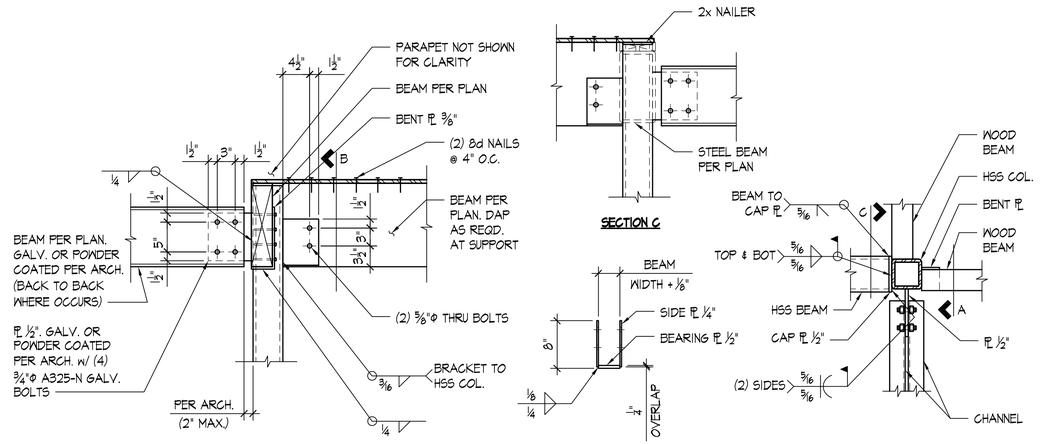
S4.5

File: 689-s403.dwg Plotted: Mon, 01/07/2019 5:21 pm



SECTION A | SECTION B | PLAN VIEW

DETAIL SCALE: 1"=1'-0" 2



SECTION A | SECTION C | SECTION B | PLAN VIEW

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

DETAIL SCALE: 1"=1'-0" 5

DETAIL SCALE: 1"=1'-0" 6

DETAIL SCALE: 1"=1'-0" 7

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

DETAIL SCALE: 1"=1'-0" 9

DETAIL SCALE: 1"=1'-0" 10

DETAIL SCALE: 1"=1'-0" 11

DETAIL SCALE: 1"=1'-0" 12

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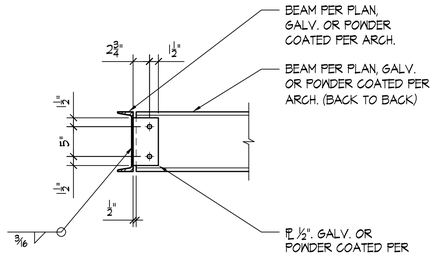
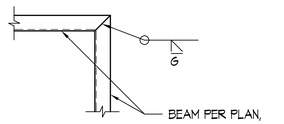
DETAILS

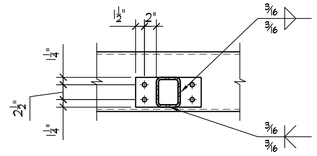
S4.6



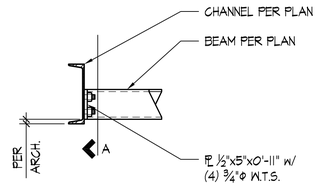
CHANNEL TO CHANNEL SCALE: 1"=1'-0" 1



CHANNEL TO CHANNEL SCALE: 1"=1'-0" 2



SECTION A



DETAIL SCALE: 1"=1'-0" 3

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

DETAIL SCALE: 1"=1'-0" 5

DETAIL SCALE: 1"=1'-0" 6

DETAIL SCALE: 1"=1'-0" 7

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

DETAIL SCALE: 1"=1'-0" 9

DETAIL SCALE: 1"=1'-0" 10

DETAIL SCALE: 1"=1'-0" 11

DETAIL SCALE: 1"=1'-0" 12

File: 689-s500.dwg Plotted: Mon, 01/07/2019 5:21 pm

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DETAILS

S5.0

GENERAL SHORING NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION: SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).

2. REFERENCE DOCUMENTS:

   A. TOPOGRAPHICAL AND BOUNDARY ALTA/ACSM LAND TITLE SURVEY BY HANSEN SURVEYING & CONSULTING, DATED AUGUST 29, 2018.
   B. GEOTECHNICAL ENGINEERING INVESTIGATION REPORT #18-282 BY PanGEO, INC., DATED OCTOBER 12, 2018.

3. DESIGN LOADS: THE SOIL PRESSURE DIAGRAMS SHOWN ON THIS SHEET WERE USED FOR DESIGN.

4. SUBMITTALS: SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO ANY FABRICATION OR CONSTRUCTION FOR ALL STRUCTURAL ITEMS INCLUDING THE FOLLOWING: STRUCTURAL STEEL, MISCELLANEOUS METAL, TENDONS, AND ANCHORS. PROPOSEDDEMOLITION AND SHORING SEQUENCE SHALL ALSO BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW.

5. INSPECTION: INSPECTION BY THE GEOTECHNICAL ENGINEER SHALL BE PERFORMED FORPILE PLACEMENT AND TIEBACK PLACING AND STRESSING. ALL PREPARED SOIL BEARING SURFACES SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF PILE. SOIL COMPACTION SHALL BE SUPERVISED BY AN APPROVED TESTING LAB. INSPECTION BY A QUALIFIED TESTING LAB SHALL BE PERFORMED FOR STEEL FABRICATION, ERECTION AND WELDING.

6. UTILITY LOCATION THE SHORING CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRILLING PILE HOLES, OR CUTTING OR DIGGING IN STREETS OR ALLEYS. THE UTILITIES INFORMATION SHOWN ON THE SURVEY MAY BE NOT COMPLETE.

7. VERIFICATION: CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING STRUCTURES PRIOR TO FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBER. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL DISCREPANCIES IN DIMENSIONS AND ALL FIELD CHANGES PRIOR TO FABRICATION AND INSTALLATION.

8. SOILS: SEE GEOTECHNICAL REPORT FOR MORE COMPLETE INFORMATION (NOTE 2 ABOVE). FOLLOW THE RECOMMENDATIONS OF THE REPORT INCLUDING THE FOLLOWING ITEMS:

   A. SHORING - SEE DETAILS ON THIS SHEET FOR THE SOIL PRESSURE DIAGRAM. ALL PILES SHALL BE EMBEDDED PER THESE DRAWINGS, A MINIMUM OF 10 FEET BELOW THE EXCAVATION BASE AND 5 FEET BELOW ANY EXCAVATIONS LOCATED WITHIN 10 FEET HORIZONTALLY OF THE PILE.

   B. TIEBACKS - PER THE GEOTECHNICAL REPORT, TIEBACK ANCHORS SHALL BE TESTED. SEE THE SEPARATE SECTION AT THE END OF THESE NOTES.

   C. SHORING MONITORING - PER THE GEOTECHNICAL REPORT, THE GEOTECHNICAL ENGINEER SHALL CONTINUOUSLY MONITOR THE INSTALLATION OF THE PILES. PER SECTION 7.0 OF THE REPORT, THE GEOTECHNICAL ENGINEER SHALL ALSO REVIEW THE SHORING WALL DEFLECTION DATA COLLECTED BY THE PROJECT SURVEYOR. AT A MINIMUM THE SHORING SHALL BE SURVEYED BEFORE EXCAVATION BEGINS, DURING EXCAVATION, ONCE THE EXCAVATION IS COMPLETE, AND AFTER THE EXCAVATION IS COMPLETE. SURVEYING MUST CONTINUE UNTIL THE PERMANENT STRUCTURE (INCLUDING FLOOR SLABS AS BRACES) IS COMPLETE UP TO STREET GRADES. THE FREQUENCY AND DURATION OF MONITORING SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER BASED ON SHORING PERFORMANCE.

   D. EXCAVATION - PER THE GEOTECHNICAL REPORT, EXPECT BOTH STRUCTURAL FILL AND GLACIAL TILL SOIL TYPES TO BE ENCOUNTERED. SEE REPORT FOR RECOMMENDATIONS.

   E. LAGGING - PER THE GEOTECHNICAL REPORT, LAGGING SHALL BE INSTALLED BETWEEN ALL SHORING PILES.

   F. BACKFILL - PER THE GEOTECHNICAL REPORT, PEA GRAVEL, SAND AND SUITABLE EXCAVATION SPOILS MAY BE USED AS SHORING WALL BACKFILL, WHEREAS CONCRETE, CDF OR OTHER IMPERMEABLE MATERIALS MAY NOT BE USED.

   G. DRAINAGE - PER THE GEOTECHNICAL REPORT, BACKFILL BEHIND THE WALL SHOULD CONNECT TO A CONTINUOUS HORIZONTAL DRAIN LOCATED IN FRONT OF THE WALL THROUGH THE USE OF PREFABRICATED VERTICAL DRAINAGE STRIPS.

9. PRE-CONSTRUCTION MEETING: A PRE-CONSTRUCTION MEETING WITH THE BUILDING DEPARTMENT, IS REQUIRED BEFORE THE START OF SHORING INSTALLATION. ATTENDEES SHALL INCLUDE REPRESENTATIVES OF THE OWNER, GENERAL CONTRACTOR, EXCAVATION AND SHORING SUBCONTRACTORS, THE GEOTECHNICAL ENGINEER, SURVEYOR, STRUCTURAL ENGINEER AND BUILDING DEPARTMENT PERSONNEL.

CONCRETE GROUT

10. CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF CHAPTER 19 OF THE IBC. CONCRETE GROUT STRENGTHS OVER 1,000 PSI SHALL BE VERIFIED BY STANDARD CYLINDER TESTS, UNLESS APPROVED OTHERWISE. REQUIRED ULTIMATE COMPRESSIVE STRENGTHS OF CONCRETE GROUT SHALL BE REACHED BY 7 DAYS FOR TIEBACKS AND 28 DAYS FOR PILES.

F'C (PSI)	MINIMUM CEMENT PER CUBIC YARD	MAXIMUM WATER PER 94 LB OF CEMENT	USE
500	1-1/2 SACKS	-	PILE & TIEBACK (ZONE "B") LEAN CONCRETE GROUT
2,500	5 SACKS	-	PILE STRUCTURAL CONCRETE GROUT
3,000	6 SACKS	6 GALLONS	UNDERPINNING STRUCTURAL GROUT
3,000	6 SACKS	6 GALLONS	TIEBACK STRUCTURAL GROUT (ZONE "A")

THE CONTRACTOR SHALL SUBMIT A CONCRETE GROUT MIX DESIGN FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE MIX DESIGNS WILL BE REVIEWED FOR CONFORMANCE TO IBC CH. 19.

STEEL

11. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS," LATEST EDITION, PLUS ALL REFERENCED CODES.

12. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
A. PLATES, SHAPES, ANGLES, AND RODS	A36	36 KSI
B. SOLDIER PILES	A992 OR A572, GRADE 50	50 KSI
C. HEADED SHEAR STUDS	A108	44 KSI
D. PIPE SECTIONS	A53 (TYPE E OR S, GRADE B)	35 KSI
E. PIPE SECTIONS	A500 (GRADE B)	42 KSI
F. STRUCTURAL TUBING	A500 (GRADE B)	46 KSI

13. ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND A.W.S. STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70xx ELECTRODES OR 70 KSI WELD METAL. ONLY PREQUALIFIED WELDS (AS DEFINED BY A.W.S.) SHALL BE USED.

14. PRE-STRESSING STEEL:

   A. HIGH STRENGTH RODS (STRESSED AND NON-STRESSED) SHALL BE DYWIDAG THREAD BARS WITH APPROPRIATE ANCHORAGE PLATES, NUTS AND COUPLERS, IN CONFORMANCE WITH ASTM A722 (Fpu = 150,000 PSI).

   B. STRAND SHALL BE 1/2" DIAMETER, 7-WIRE STRESS-RELIEVED (OR LOW RELAXATION), CLEAN AND FREE FROM CORROSION, HAVING A GUARANTEED MINIMUM ULTIMATE STRENGTH OF 41,300 POUNDS AND MANUFACTURED IN ACCORDANCE WITH ASTM A416, GRADE 270. ONE MILL TEST SHALL BE SUBMITTED FOR REVIEW FOR EACH REEL USED.

WOOD LAGGING

15. SAWN LUMBER:SAWN LUMBER SHALL CONFORM TO "GRADING AND DRESSING RULES," WEST COAST LUMBER INSPECTION BUREAU (WCLIB), LATEST EDITION. LUMBER SHALL BE THE SPECIES AND GRADE NOTED BELOW:

USE	GRADE	MAX. SPAN	SIZE	DEPTH BELOW GRADE
TIMBER LAGGING	HEM-FIR OR DF-L NO. 2	7'-8"	6x12	0'-0" TO 20'-0" (EAST/SOUTH WALL)
TIMBER LAGGING	HEM-FIR OR DF-L NO. 2	8'-0"	4x12	0'-0" TO 12'-0"

TIMBER LAGGING SHALL BE PRESSURE TREATED WITH WATERBORNE PRESERVATIVES IN ACCORDANCE WITH AWPA STANDARD U1 TO A MINIMUM RETENTION OF 0.4 LBS/CU.FT.

SHORING INSTALLATION

16. DEMOLITION: SHORING AND SOIL EXCAVATION SHALL BE DONE SIMULTANEOUSLY.

17. HOLE DIGGING: PILE AND ANCHOR HOLES SHALL BE DRILLED WITHOUT LOSS OF GROUND AND WITHOUT ENDANGERING PREVIOUSLY INSTALLED PILES AND ANCHORS. THIS MAY INVOLVE CASING THE HOLES OR OTHER METHODS OF PROTECTION FROM CAVING. SEE GEOTECHNICAL REPORT FOR RECOMMENDED HOLE DIGGING PROCEDURE. THE BOTTOM OF THE BORED HOLES SHALL BE CLEANED OUT USING A BUCKET AUGER.

18. PILE PLACEMENT: FOR ALL PILES SPACED CLOSER THAN 7' O.C., ALTERNATE PILES SHALL BE PLACED SO THAT A MINIMUM OF 24 HOURS IS ALLOWED FOR THE CONCRETE GROUT TO CURE BEFORE DRILLING THE DIRECTLY ADJACENT PILES.

19. STEEL PILE TOLERANCES:
    1" INSIDE PERPENDICULAR TO SHORING WALL.
    1" OUTSIDE PERPENDICULAR TO SHORING WALL.
    3" LATERALLY.

20. EXCAVATION BELOW TIEBACKS: TIEBACK INSTALLATION AND PRE-STRESSING SHALL BE COMPLETED BEFORE EXCAVATING MORE THAN 2 FEET BELOW THE TIEBACK LEVEL.

21. LAGGING: TIMBER LAGGING SHALL BE INSTALLED IN ALL AREAS. VOIDS BETWEEN LAGGING AND SOIL SHALL BE BACKFILLEDRAINAGE BEHIND THE WALL MUST BE MAINTAINED (SEE ITEM 8F ABOVE). IT IS THE CONTRACTOR'S RESPONSIBILITY TO LIMIT THE AMOUNT OF EXPOSED SOIL WITHOUT LAGGING TO AVOID LOSS OF SOIL. IN NO CASE SHALL THE EXPOSED SOIL HEIGHT EXCEED 4'-0". SPECIAL CARE SHOULD BE TAKEN TO AVOID GROUND LOSS DURING EXCAVATION. NO EXCAVATION FOR THE IMMEDIATE LOWER LIFT IS ALLOWED UNTIL VOIDS BEHIND THE LAGGING OF THE PRECEDING LIFT ARE FILLED WITH APPROVED MATERIALS.

22. SHORING MONITORING: SYSTEMATIC PROGRAM OF OBSERVATION SHALL BE CONDUCTED DURING THE PROJECT EXECUTION TO DETERMINE THE EFFECT OF CONSTRUCTION ON ADJACENT FACILITIES AND STRUCTURES IN ORDER TO PROTECT THEM FROM SERIOUS DAMAGE. SEE GEOTECHNICAL REPORT FOR RECOMMENDATIONS. A LICENSED SURVEYOR (NOT THE CONTRACTOR) MUST DO THE SURVEYING AT LEAST ONCE A WEEK. FIELD DATA AND MEASUREMENTS ARE TO BE SUBMITTED TO STRUCTURAL AND GEOTECHNICAL ENGINEER FOR REVIEW (SEE ITEM 8B ABOVE).

23. SLOPES: ALL SLOPES SHALL BE PROTECTED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.

24. REMOVAL: ALL PILES, ANCHORS, GROUT AND LAGGING LOCATED WITHIN THE CITY R.O.W. SHALL BE REMOVED TO A DEPTH OF 4'-0" BELOW FINAL GRADE ONCE THEY ARE NO LONGER NEEDED FOR CONSTRUCTION.

TIEBACK TESTING AND STRESSING

25. VERIFICATION TESTS (200% TESTS):
    * PRIOR TO INSTALLING PRODUCTION ANCHORS, PERFORM A MINIMUM OF TWO TESTS EACH ON EACH ANCHOR TYPE, INSTALLATION METHOD AND SOIL TYPE WITH THE TESTED ANCHORS CONSTRUCTED TO THE SAME DIMENSIONS AS PRODUCTION ANCHORS.
    * TEST LOCATIONS TO BE DETERMINED IN CONJUNCTION WITH AND APPROVED BY THE GEOTECHNICAL ENGINEER.
    * TEST ANCHORS, WHICH WILL BE LOADED TO 200% OF THE DESIGN LOAD, MAY REQUIRE ADDITIONAL PRESTRESSING STEEL (STEEL LOAD NOT TO EXCEED 80% OF THE ULTIMATE TENSILE STRENGTH) OR REINFORCING OF THE SOLDIER PILE.
    * LOAD TEST ANCHORS TO 150% LOAD IN 25% LOAD INCREMENTS, HOLDING EACH INCREMENTAL LOAD FOR AT LEAST 5 MINUTES AND RECORDING DEFLECTION OF THE ANCHOR HEAD AT VARIOUS TIMES WITHIN EACH HOLD TO THE NEAREST 0.01 INCH.
    * AT THE 150% LOAD, THE HOLDING PERIOR SHALL BE AT LEAST 60 MINUTES.
    * AFTER COMPLETION OF THE 150% HOLD, LOAD THE ANCHOR IN 25% INCREMENTS TO THE 200% LOAD, WHICH WILL BE HELD FOR 10 MINUTES.
    * A SUCCESSFUL TEST SHALL PROVIDE A MEASURED CREEP RATE OF 0.04 INCHES OR LESS AT THE 150% LOAD BETWEEN 1 AND 10 MINUTES, AND 0.08 INCHES OR LESS BETWEEN 6 AND 60 MINUTES, AND ALL TIME INCREMENTS SHALL HAVE A CREEP RATE THAT IS LINEAR OR DECREASING WITH TIME. THE APPLIED LOAD MUST REMAIN CONSTANT DURING ALL HOLDING PERIODS (I.E., NO MORE THAN 5% VARIATION FROM THE SPECIFIED LOAD).

26. PROOF TESTS (130% TESTS ON ALL LOAD ANCHORS):
    * LOAD TEST ALL PRODUCTION ANCHORS TO 130% OF THE DESIGN LOAD IN 25% LOAD INCREMENTS, HOLDING EACH INCREMENTAL LOAD UNTIL A STABLE DEFLECTION IS ACHIEVED (RECORD DEFLECTION OF THE ANCHOR HEAD AT VARIOUS TIMES WITHIN EACH HOLD TO THE NEAREST 0.01 INCH).
    * AT THE 130% LOAD, THE HOLDING PERIOD SHALL BE AT LEAST 10 MINUTES.
    * A SUCCESSFUL TEST SHALL PROVIDE A MEASURED CREEP RATE OF 0.04 INCHES OR LESS AT THE 130% LOAD BETWEEN 1 AND 10 MINUTES WITH A CREEP RATE THAT IS LINEAR OR DECREASING WITH TIME. THE APPLIED LOAD MUST REMAIN CONSTANT DURING THE HOLDING PERIOD (I.E., NO MORE THAN 5% VARIATION FROM THE 130% LOAD). ANCHORS FAILING THIS PROOF TESTING CREEP ACCEPTANCE CRITERIA MAY BE HELD AN ADDITIONAL 50 MINUTES FOR CREEP MEASUREMENT. ACCEPTABLE PERFORMANCE WOULD EQUATE TO A CREEP OF 0.08 INCHES OR LESS BETWEEN 5 AND 50 MINUTES WITH A LINEAR OR DECREASING CREEP RATE.

    FOLLOWING PROOF LOADING, EACH ANCHOR SHALL BE LOCKED OFF AT 100% OF DESIGN LOADING.

    VERIFICATION TESTED ANCHORS OR EXTENDED CREEP PROOF TESTED ANCHORS NOT MEETING THE ACCEPTANCE CRITERIA WILL REQUIRE A REDESIGN BY THE CONTRACTOR TO ACHIEVE THE ACCEPTANCE CRITERIA.

27. TIEBACK NOTES: ALL TIEBACKS ARE TO BE REMAIN STRESSED.

    A BOND BREAKER (SUCH AS A SLIP SHEATH) SHALL BE CONSTRUCTED IN THE NO LOAD ZONE WHEN THE INSTALLATION PROCEDURES USE SINGLE STAGE GROUTING.

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PROJECT NO. 18689.01

TYPICAL SHORING NOTES

SH1.0

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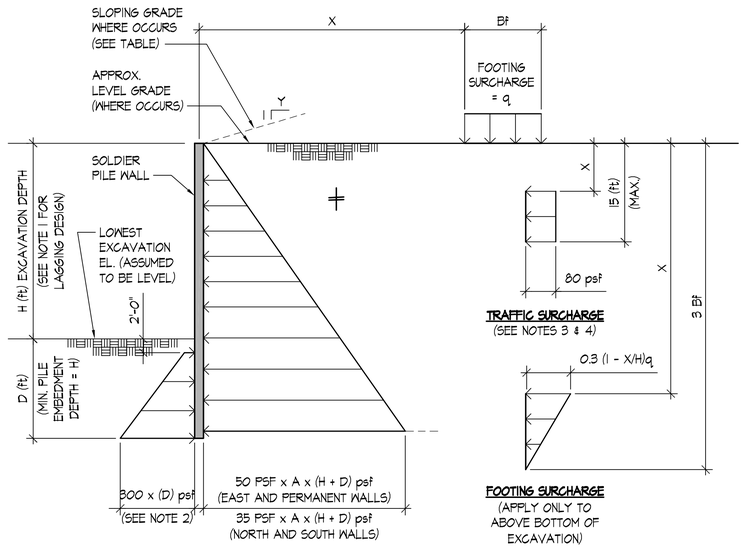


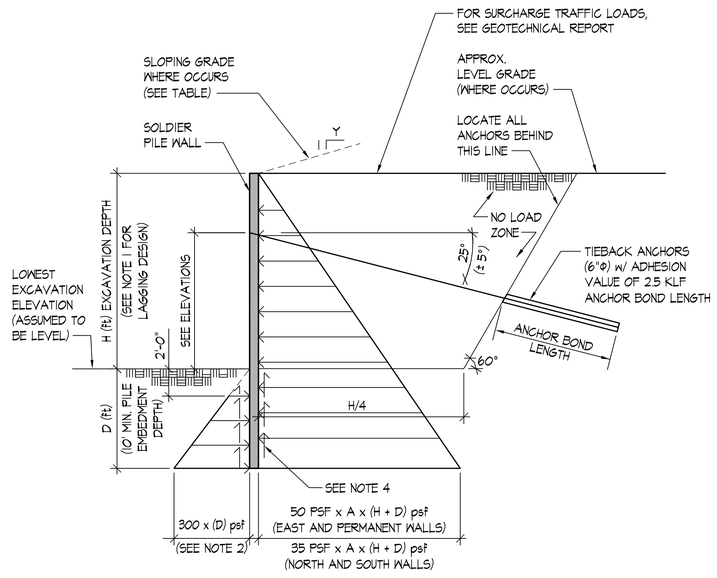
PASSIVE PRESSURE ACTIVE PRESSURE

NOTES:

1. 50% OF THE LATERAL EARTH PRESSURE USED TO DESIGN TIMBER LAGGING.
2. PASSIVE PRESSURE ACTS OVER 2.0 TIMES THE GROUTED SOLDIER PILE DIAMETER.
3. ACTIVE AND AT-REST SOIL PRESSURES ACT OVER THE PILE SPACING ABOVE AND PILE DIAMETER BELOW BOTTOM OF EXCAVATION. IT IS ASSUMED THAT NO HYDROSTATIC PRESSURES ACT ON THE BACK OF SHORING.
4. 80 PSF UNIFORM SURCHARGE NOT APPLIED AT SLOPED BACKSLOPE CONDITION.

EARTH PRESSURE FACTOR FOR BACKSLOPE	
BACKSLOPE Y:1	EARTH PRESSURE FACTOR, A
FLAT	1.00
2 : 1	1.35
1.5 : 1	1.50

SOIL PRESSURE DIAGRAM FOR CANTILEVERED SOLDIER PILE SHORING WALLS — SCALE: NONE — 6



PASSIVE PRESSURE ACTIVE PRESSURE

NOTES:

1. 50% OF THE LATERAL EARTH PRESSURE USED TO DESIGN TIMBER LAGGING. EXCAVATION PER GEOTECHNICAL REPORT.
2. PASSIVE PRESSURE ACT OVER 2.0 TIMES THE GROUTED SOLDIER PILE DIAMETER.
3. ACTIVE AND AT-REST PRESSURES ACT OVER THE PILE SPACING ABOVE AND PILE DIAMETER BELOW BOTTOM OF EXCAVATION. IT IS ASSUMED THAT NO HYDROSTATIC PRESSURES ACT ON THE BACK OF SHORING WALLS.

EARTH PRESSURE FACTOR FOR BACKSLOPE	
BACKSLOPE Y:1	EARTH PRESSURE FACTOR, A
FLAT	1.00
2 : 1	1.35
1.5 : 1	1.50

SOIL PRESSURE DIAGRAM FOR SINGLE TIED-BACK SHORING WALLS — SCALE: NONE — 8

DETAIL — SCALE: 3/4"=1'-0" — 9

DETAIL — SCALE: 3/4"=1'-0" — 10

DETAIL — SCALE: 3/4"=1'-0" — 11

DETAIL — SCALE: 3/4"=1'-0" — 12

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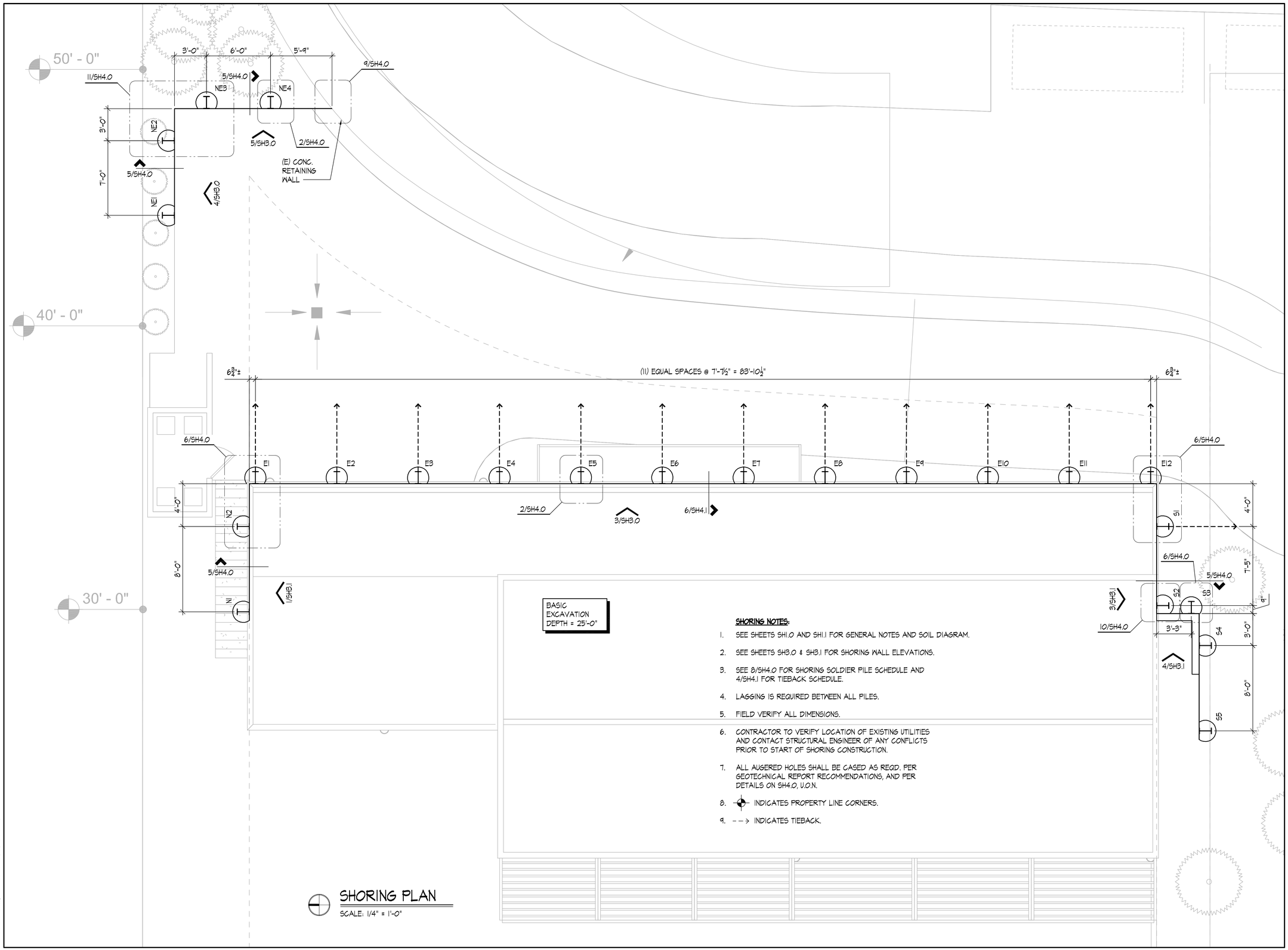
TYPICAL SHORING DIAGRAM

SH1.1



SHORING NOTES:

1. SEE SHEETS SH1.0 AND SH1.1 FOR GENERAL NOTES AND SOIL DIAGRAM.
2. SEE SHEETS SH3.0 & SH3.1 FOR SHORING WALL ELEVATIONS.
3. SEE 8/SH4.0 FOR SHORING SOLDIER PILE SCHEDULE AND 4/SH4.1 FOR TIEBACK SCHEDULE.
4. LAGGING IS REQUIRED BETWEEN ALL PILES.
5. FIELD VERIFY ALL DIMENSIONS.
6. CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES AND CONTACT STRUCTURAL ENGINEER OF ANY CONFLICTS PRIOR TO START OF SHORING CONSTRUCTION.
7. ALL AUGERED HOLES SHALL BE CASED AS REQD. PER GEOTECHNICAL REPORT RECOMMENDATIONS, AND PER DETAILS ON SH4.0, U.O.N.
8. ⊕ INDICATES PROPERTY LINE CORNERS.
9. - - → INDICATES TIEBACK.

SHORING PLAN

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

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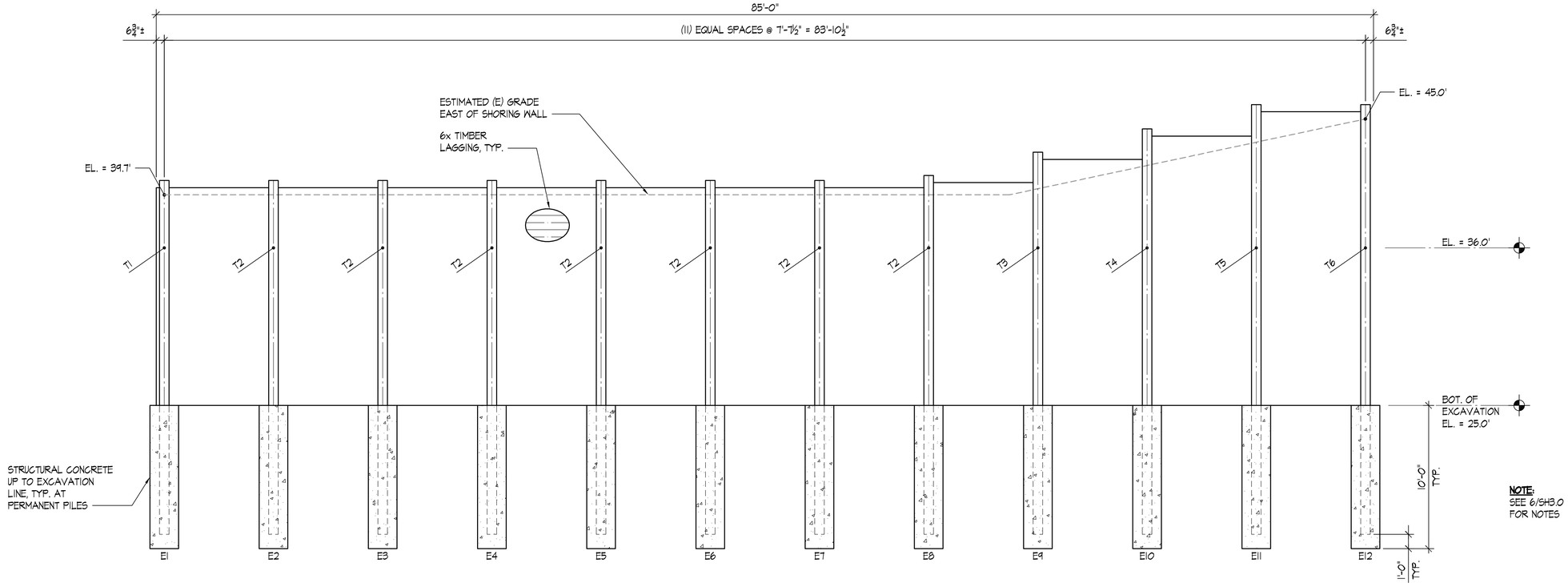
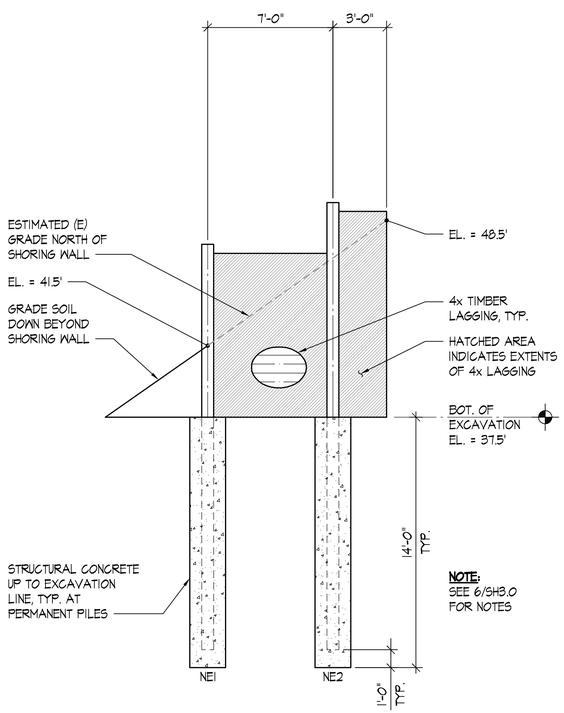
SHORING PLAN

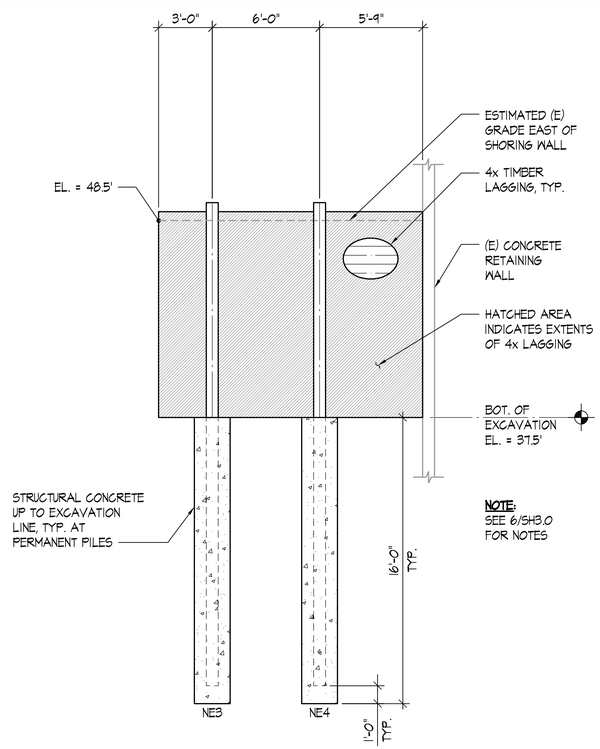
SH2.0



EAST SHORING WALL ELEVATION — SCALE: 1/4"=1'-0" — 3



NORTHEAST SHORING WALL ELEVATION — SCALE: 1/4"=1'-0" — 4



NORTHEAST SHORING WALL ELEVATION — SCALE: 1/4"=1'-0" — 5

NOTES:

1. W1 INDICATES SOLDIER PILE PER SCHEDULE ON 8/SH4.0.
2. T1 = XX' INDICATES TIE BACK PER SCHEDULE ON 4/SH4.1.
3. SPOT GRADE ELEVATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
4. CONTRACTOR TO VERIFY AND COORDINATE ELEVATIONS & PILE HEIGHT/DEPTH WITH FIELD CONDITIONS.

SHORING NOTES — SCALE: 1/4"=1'-0" — 6

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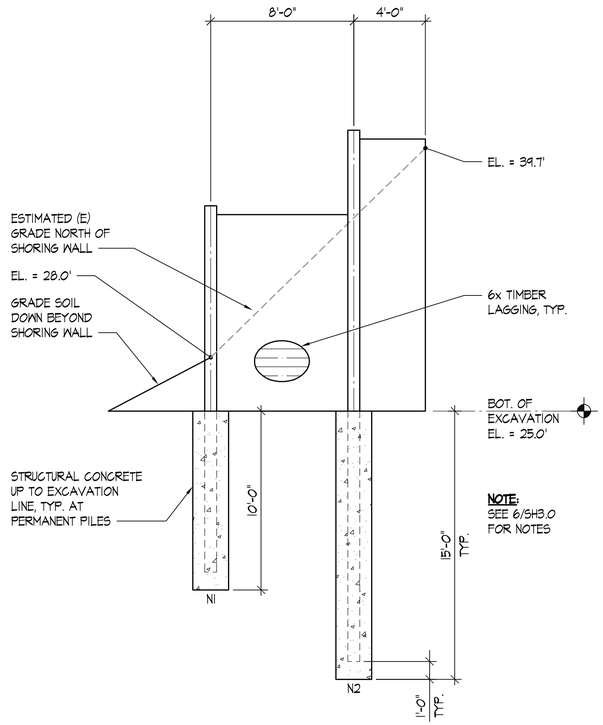
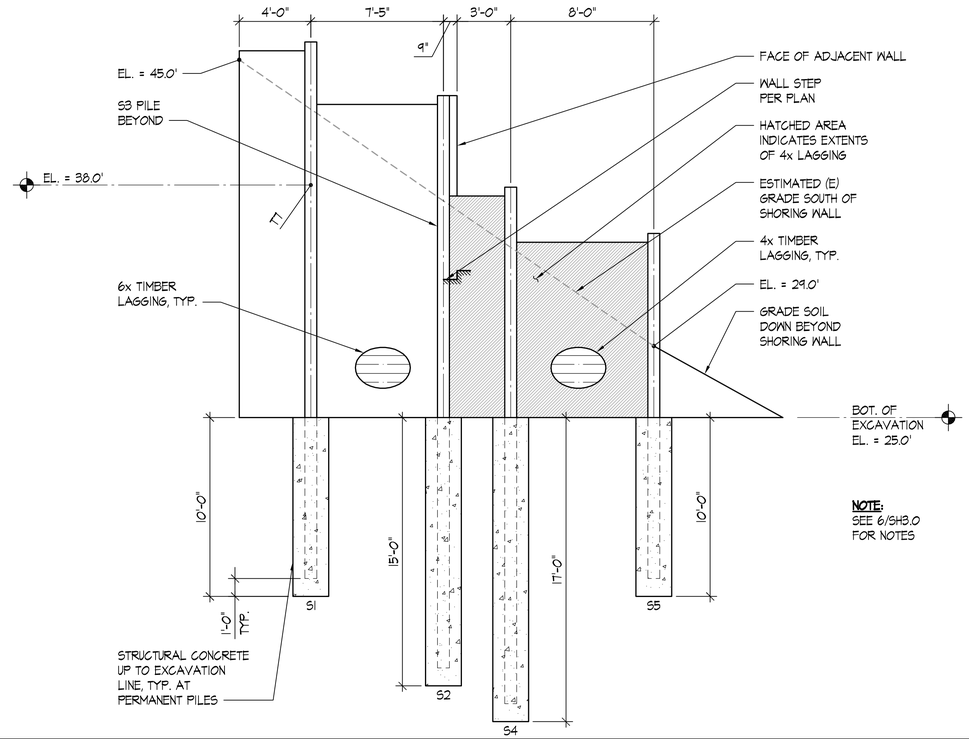
SHORING ELEVATIONS

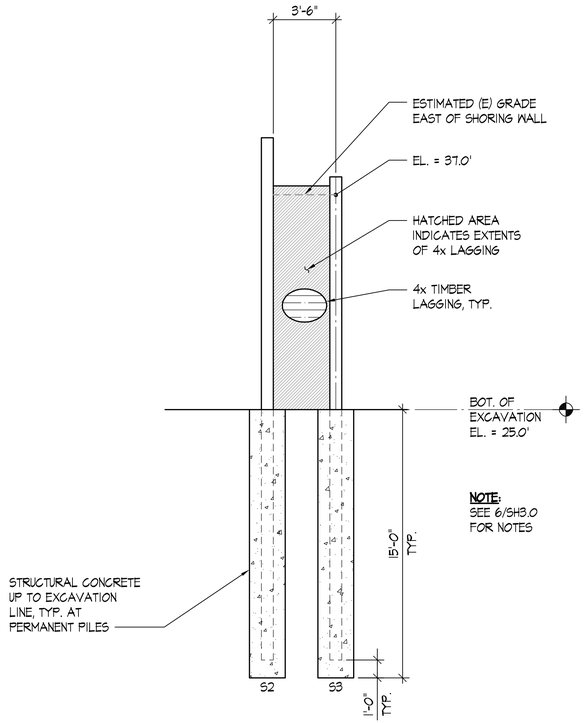
SH3.0



NORTH SHORING WALL ELEVATION — SCALE: 1/4"=1'-0" | 1



SOUTH SHORING WALL ELEVATION — SCALE: 1/4"=1'-0" | 3



SOUTH SHORING WALL ELEVATION — SCALE: 1/4"=1'-0" | 4

DETAIL — SCALE: 1/4"=1'-0" | 5

DETAIL — SCALE: 1/4"=1'-0" | 6

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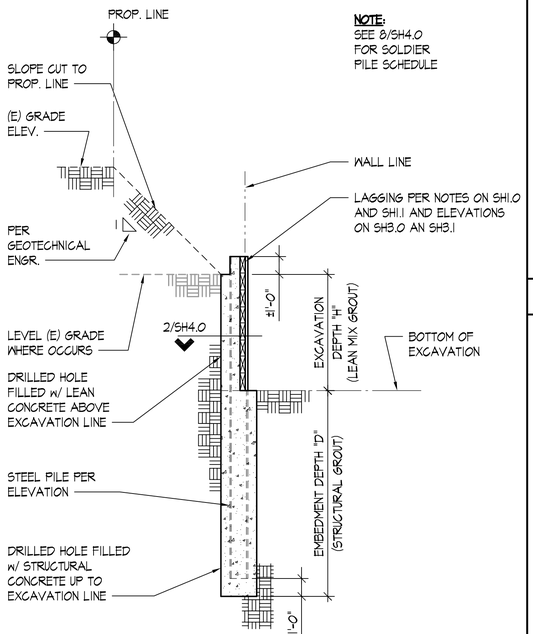
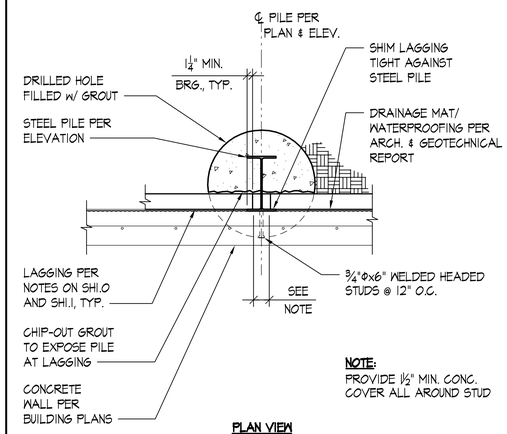
SHORING ELEVATIONS

SH3.1



NOTE:
SEE 8/SH4.0
FOR SOLDIER
PILE SCHEDULE

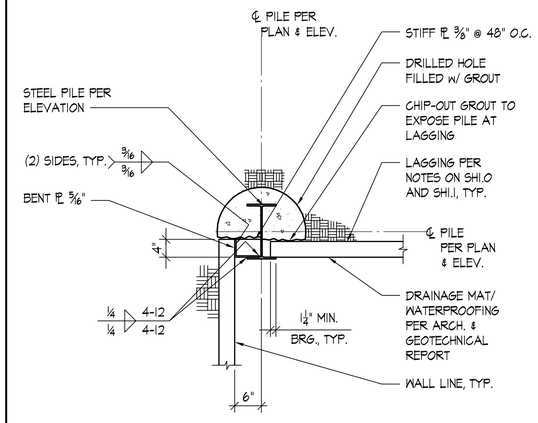
TYPICAL SOLDIER PILE SHORING SECTION — SCALE: NONE — 5



NOTE:
PROVIDE ½" MIN. CONC.
COVER ALL AROUND STUD

PLAN VIEW

TYPICAL PERMANENT SOLDIER PILE — SCALE: NONE — 2



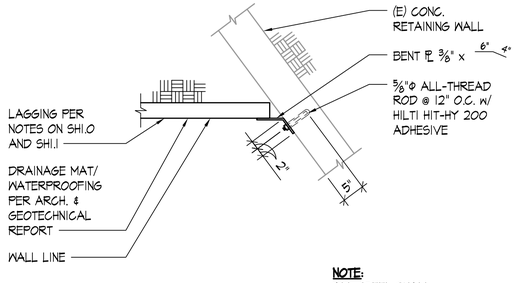
OUTSIDE CORNER DETAIL — SCALE: NONE — 6

SOLDIER PILE SCHEDULE

PILE MARK	PILE DIAMETER	SOLDIER PILE STEEL SECTION	BOTTOM EL. OF EXCAVATION	EMBEDMENT DEPTH 'D'	MAX. APPROX. HT. 'H'	STEEL SECTION LENGTH (ESTIMATED)	REMARKS
E1	24"	WI4x26	25.0'	10'-0"	14'-8"	24'-8"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
E2 - E8	24"	WI4x38	25.0'	10'-0"	14'-8"	24'-8"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
E9	24"	WI4x43	25.0'	10'-0"	15'-6"	27'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
E10	24"	WI4x43	25.0'	10'-0"	17'-0"	29'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
E11	24"	WI4x48	25.0'	10'-0"	18'-6"	30'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
E12	24"	WI4x26	25.0'	10'-0"	20'-0"	30'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
N1	24"	WI2x14	25.0'	10'-0"	4'-0"	21'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
N2	24"	WI4x74	25.0'	15'-0"	12'-0"	30'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
NE1	24"	WI2x26	37.5'	14'-0"	6'-0"	23'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
NE2	24"	WI2x26	37.5'	14'-0"	9'-0"	24'-8"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
NE3	24"	WI4x68	37.5'	16'-0"	11'-0"	27'-3"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
NE4	24"	WI4x74	37.5'	16'-0"	11'-0"	27'-3"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
S1	24"	WI4x43	25.0'	10'-0"	18'-0"	30'-0"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
S2	24"	WI4x74	25.0'	15'-0"	12'-0"	31'-8"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
S3	24"	WI4x68	25.0'	15'-0"	12'-0"	27'-3"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
S4	24"	WI4x48	25.0'	17'-0"	10'-0"	28'-4"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE
S5	24"	WI2x14	25.0'	10'-0"	6'-0"	19'-6"	PILE AND LAGGING EXTEND ABOVE FINISHED GRADE

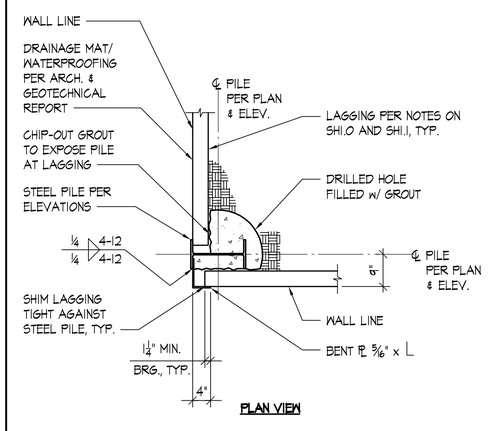
NOTE:
CONTRACTOR TO COORDINATE
FINISH GRADE ELEVATION
AND PILE HEIGHT w/ FIELD
CONDITIONS

SOLDIER PILE SCHEDULE — SCALE: NONE — 8



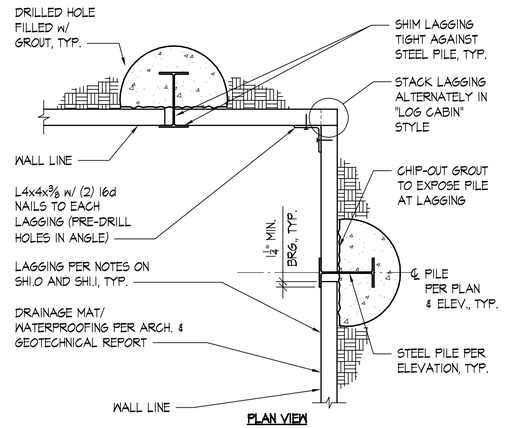
NOTE:
ALL STEEL SHALL
BE TOT DIP GALV.

DETAIL — SCALE: NONE — 9



PLAN VIEW

TYPICAL INSIDE CORNER — SCALE: NONE — 10



PLAN VIEW

TYPICAL OUTSIDE CORNER — SCALE: NONE — 11

DETAIL — SCALE: NONE — 12

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SANDRO K. KODAMA — STATE OF WASHINGTON — 36613 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

DESIGN	SKK
DRAWN	SC
CHECKED	SKK
DATE	1/8/2019

REVISIONS

PERMIT SET	1/8/2019

Stuart Silk Architects
2400 North 45th Street
Seattle, Washington 98103
206 728 9500 phone
206 448 1337 fax
generaloffice@stuartsilk.com

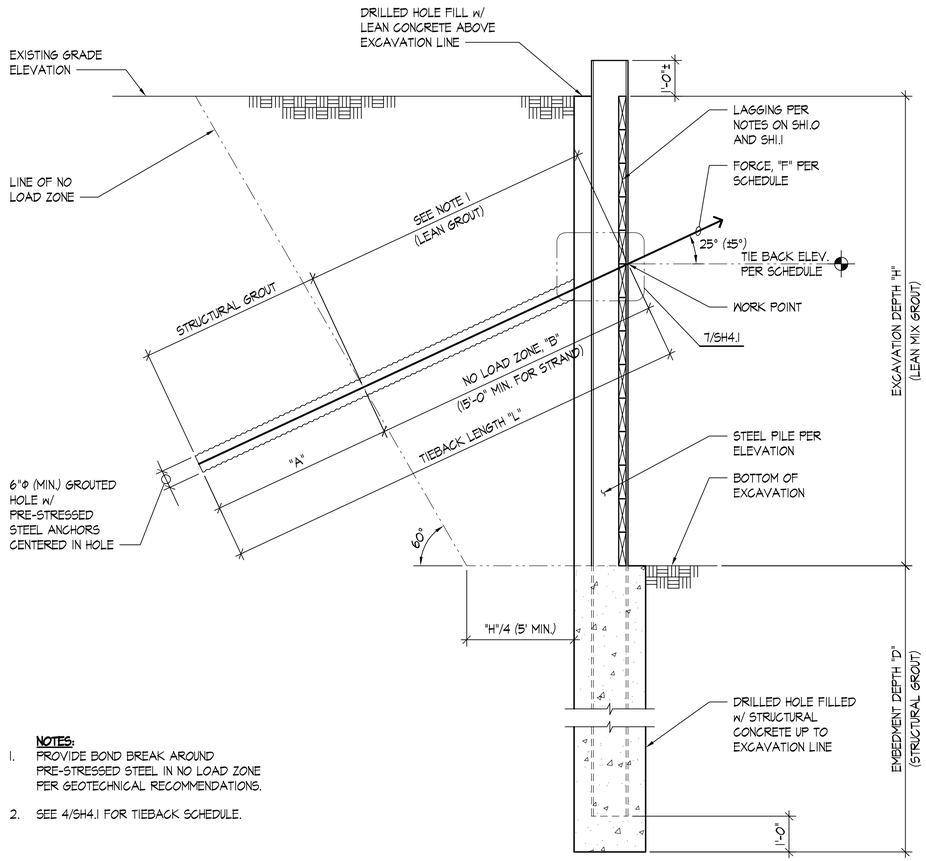
LUNDIN RESIDENCE

4041 WEST MERCER WAY
MERCER ISLAND, WA 98040

PROJECT NO. 18689.01

TYPICAL SHORING SCHEDULE AND DETAILS

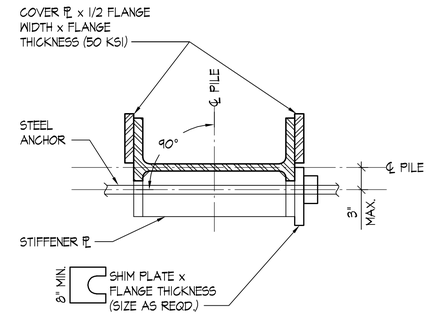
SH4.0



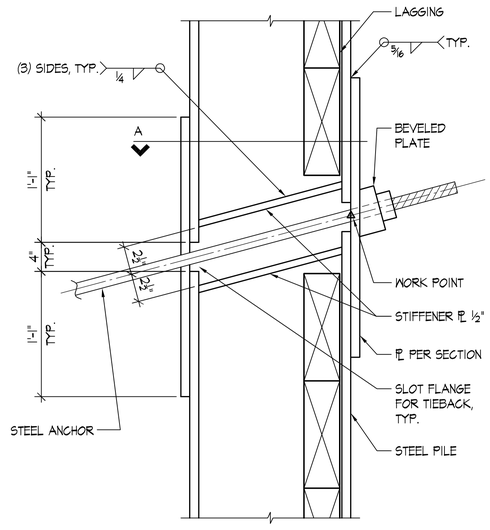
NOTES:

1. PROVIDE BOND BREAK AROUND PRE-STRESSED STEEL IN NO LOAD ZONE PER GEOTECHNICAL RECOMMENDATIONS.
2. SEE 4/SH4.1 FOR TIEBACK SCHEDULE.

TYPICAL SOLDIER PILE SHORING SECTION - WITH TIEBACKS — SCALE: NONE — 6



PLAN SECTION A



TYPICAL TIEBACK CONNECTION AT PILE — SCALE: NONE — 7

TIEBACK SCHEDULE

TIEBACK MARK	ELEV.	F (k)	B (ft)	A (ft)	L (ft)	NOTES
T1	36.0'	23.0k	8.6'	9.2'	17.8'	PILE E1
T2	36.0'	45.8k	9.8'	18.3'	28.1'	PILE E2 - E8
T3	36.0'	51.3k	9.8'	20.5'	30.3'	PILE E9
T4	36.0'	63.8k	9.8'	25.5'	35.3'	PILE E10
T5	36.0'	79.4k	9.8'	31.8'	41.6'	PILE E11
T6	36.0'	48.2k	9.8'	19.3'	29.1'	PILE E12
T7	38.0'	39.5k	10.4'	15.8'	26.2'	PILE S1

NOTES:

1. TIEBACK LENGTHS ARE BASED ON 6"Φ GROUTED HOLES WITH PRE-STRESSED STEEL ANCHORS. LENGTHS MAY BE REVISED BASED ON RECOMMENDATION OF GEOTECHNICAL ENGINEER.
2. LENGTHS PROVIDED IN SCHEDULE ARE MINIMUMS.
3. SEE ELEVATIONS FOR EXCAVATION AND PILE EMBEDMENT DEPTHS.

TIEBACK SCHEDULE — SCALE: NONE — 4

DETAIL — SCALE: NONE — 8

DETAIL — SCALE: NONE — 9

DETAIL — SCALE: NONE — 10

DETAIL — SCALE: NONE — 11

DETAIL — SCALE: NONE — 12

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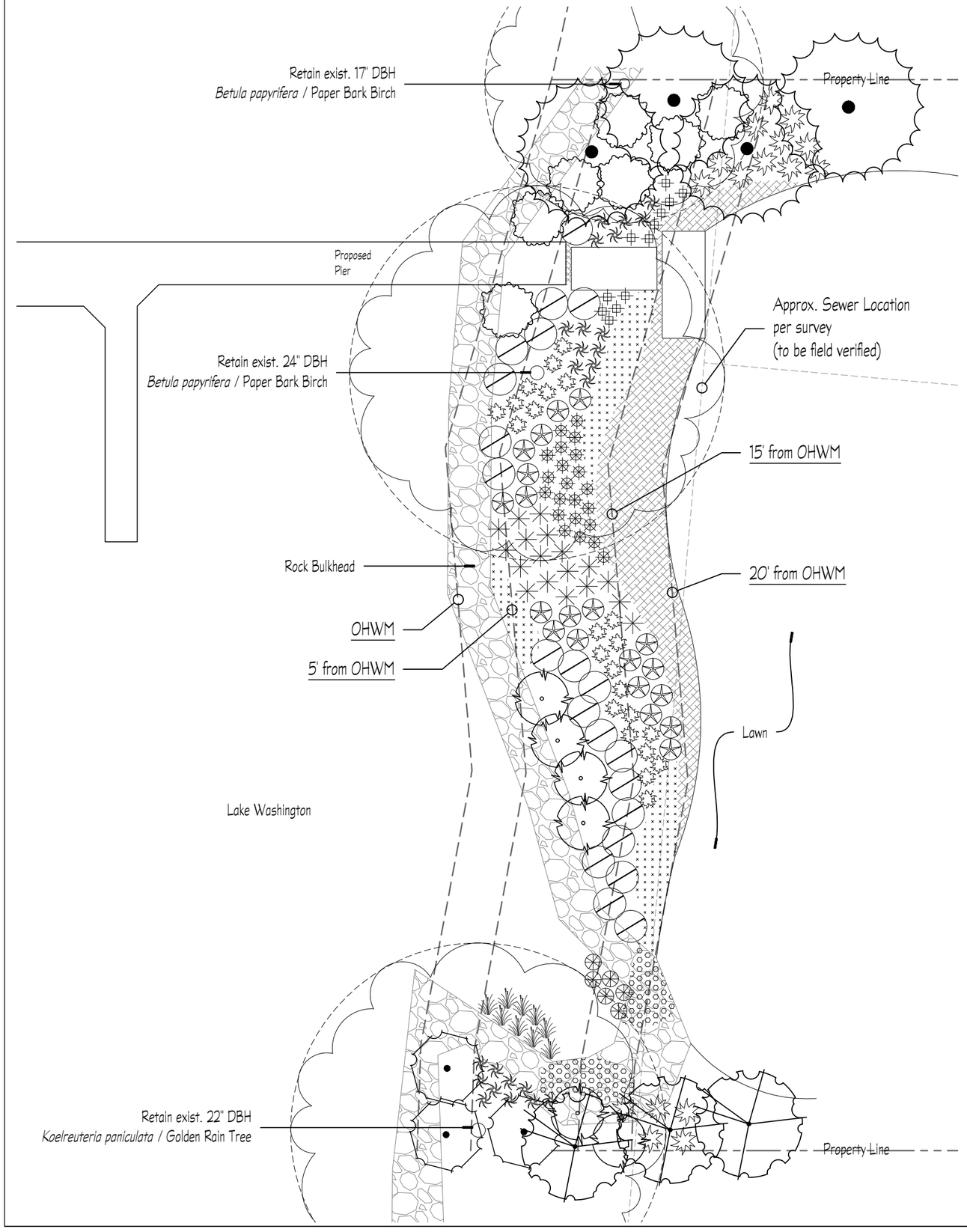
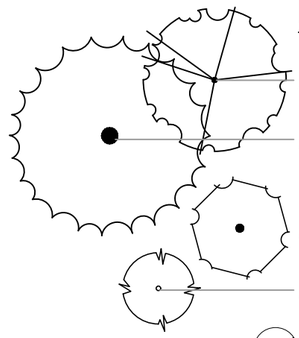
TYPICAL SHORING SCHEDULE AND DETAILS

SH4.1





LEGEND: new plants	QTY.	SIZE/NOTES
Amelanchier alnifolia / Western Service Berry	3	6' - 7' height
Pinus contorta var 'Contorta' / Shore Pine	3	5' - 6' ht.
Ribes sanguineum / Red-Flowering Currant	3	3 gallon container
Rubus parviflorus / Thimbleberry	6	3 gal.
Symphoricarpos albus / Snowberry	21	3 gal.
Vaccinium ovatum / Evergreen Huckleberry	8	3 gal.
Camassia quamash / Camas	20	1 gal.
Deschampsia cespitosa / Tufted Hair Grass	18	1 gal.
Dicentra formosa / Bleeding Heart	12	1 gal.
Festuca idahoensis / Idaho Fescue	22	1 gal.
Iris tenax / Oregon Iris	24	1 gal.
Juncus ensifolius / Dagger-leaf Rush	6	1 gal.
Mahonia nervosa / Small Oregon Grape	23	1 gal.
Polystichum munitum / Sword Fern	16	1 gal.
Scirpus microcarpus / Small-fruited Bulrush	9	1 gal.
Fragaria chiloensis / Beach Strawberry	135	4" pot, 16" on center
Sisyrinchium idahoense / Idaho Blue-eyed-grass	63	4" pot, 16" on center
Sedum & Lewisia / Native Stonecrop and Lewisia mix	45	4" pot, 12" on center

0 10 20 30 feet

SCALE:	PER_DWG
REVISED:	
REVISED:	
REVISED:	
REVISED:	
DRAWN BY:	ML
CHECKED BY:	JB
DATE:	10-26-2018

Cambium Inc.
701 34TH Ave.
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Preliminary Design.
Not For Construction

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Landscape Plan: Shoreline Planting

4041 West Mercer Way, Mercer Island, WA 98040

SHEET

L 1