

4"-8" QUARRY SPALLS

(RECYCLED CONCRETE IS

**←**(CE)

SOIL AMENDMENT

SOIL TO 8" DEPTH OR

SUBSOIL SCARIFIED 4"

AMENDED LAYER (12)
BELOW SOIL SURFACE)

FILTER FENCE

BELOW COMPOST

8" OF IMPORT TOPSOIL

2"-4" MULCH

GEO-TEXTILE FABRIC

PARKING, INCLUDING PLANTING STRIPS. RECYCLED CONCRETE IS NOT ALLOWED.

PLANTING BEDS

1. POST CONSTRUCTION SOIL AMENDMENT IS REQUIRED ON ALL AREAS NOT COVERED BY

3. IMPORT TOPSOIL, IF USED, MUST MEET THE REQUIREMENTS OF THE 2016 SEATTLE

IMPERVIOUS SURFACE WHERE SOIL IS DISTURBED DURING CONSTRUCTION

2. SOIL AMENDMENT MUST PASS A 12 INCH MINIMUM PROBE TEST.

STORMWATER MANUAL, VOL. 1, SECTIONS 5.1.5.1 AND 5.1.5.3.

SYMBOL: (SA) AREA REQUIRING SOIL AMENDMENT

- METAL FENCE POSTS,

MAXIMUM

NOTE: ANGLE SILT FENCE BACK UP THE SLOPE AT THE END OF RUN.

SYMBOL: -× × FF

TURF (LAWN) AREAS

GRASS: SEED OR SOD

1 3/4" OF COMPOST

SOIL TO 8" DEPTH OF

F SUBSOIL SCARIFIED 4"

BELOW SOIL SURFACE

BELOW COMPOST

AMENDED LAYER (12\*

USE STAPLES OR WIRE RINGS TO ATTACH FABRIC TO WIRE MIRAFI 700X OR PRE-APPROVED EQUAL

2" X 2" X 14ga WIRE FABRIC OR

BURY BOTTOM OF FILTER

FILTER FABRIC MATERIAL

GRAVEL BACKFILL IN TRENCH AND ON BOTH SIDES OF

MAY BE USED IF APPROVED

FENCE FABRIC ON THE

MATERIAL IN 8" X 12" TRENCH

EQUIV. (OPTIONAL-PER SITE CONDITION)

SEE NOTE 3

I 8" OF IMPORT TOPSOIL

12" MIN. THICKNESS -

STABILIZED ACCESS SHALL BE USED IN ALL AREAS OF THE SITE WITH VEHICLE TRAFFIC AND

# EROSION AND SEDIMENTATION CONTROL NOTES

### 1. NOT USED

- 2. NOT USED
- 3. PERIMETER PROTECTION MAY BE USED AS THE SOLE FORM OR TREATMENT WHEN THE FLOWPATH MEETS THE CRITERIA LISTED BELOW. IF THESE ARE NOT MET, PERIMETER PROTECTION SHALL ONLY BE USED AS A BACKUP TO A SEDIMENT TRAP OR POND.

AVERAGE SLOPE	SLOPE PERCENT	FLOWPATH LENGTH
1.5H:1V OR LESS	67% OR LESS	100 FEET
2H:1V OR LESS	50% OR LESS	115 FEET
4H:1V OR LESS	25% OR LESS	150 FEET
6H:1V OR LESS	16.7% OR LESS	200 FEET
10H:1V OR LESS	10% OR LESS	250 FEET

- THE CONTRACTOR SHALL STABILIZE DENUDED AREAS AND SOIL STOCKPILES AS FOLLOWS:
- DENUDED AREAS SHALL BE COVERED BY MULCH, SOD, PLASTIC, OR OTHER BMP'S APPROVED BY THE ENGINEER. WHERE POSSIBLE NATURAL VEGETATION SHALL BE MAINTAINED FOR EROSION AND SEDIMENT CONTROL.
- 5. AS CONSTRUCTION PROGRESSES AND SEASONAL CONDITIONS DICTATE, THE EROSION CONTROL FACILITIES SHALL BE MAINTAINED AND/OR ALTERED AS REQUIRED TO ENSURE CONTINUING EROSION/SEDIMENT CONTROL.
- 6. EVERY EFFORT SHALL BE MADE TO CLOSE UTILITY TRENCHES BY THE END OF THE DAY AND MATERIAL EXCAVATED DURING UNDERGROUND UTILITY CONSTRUCTION SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES (WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS).
- 7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED. PERMANENT DRAINAGE FACILITIES ARE IN OPERATION. AND THE POTENTIAL FOR EROSION HAS PASSED.
- 8. AT A MINIMUM, EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED MONTHLY, OR FOLLOWING EACH RUNOFF-PRODUCING STORM, TO ENSURE PROPER OPERATION OF ALL EROSION AND SEDIMENT CONTROL FACILITIES. SEDIMENT SHALL BE REMOVED FROM BMP'S WHEN IT REACHES D-FOOT DEPTH.
- 9. THE PUBLIC RIGHT-OF-WAY SHALL BE KEPT CLEAN. TRACKING OF MUD AND DEBRIS FROM THE SITE WILL NOT BE ALLOWED. FAILURE TO COMPLY WITH THIS CONDITION MAY RESULT IN ALL WORK ON SITE BEING STOPPED.
- 10. THE WASHINGTON STATE CLEAN AIR ACT REQUIRES THE USE OF ALL KNOWN AVAILABLE, AND REASONABLE MEANS OF CONTROLLING AIR POLLUTION, INCLUDING DUST. DUST CAN BE CONTROLLED BY WETTING EXPOSED SOILS, WASHING TRUCK WHEELS BEFORE THEY LEAVE THE SITE, AND INSTALLING AND MAINTAINING ROCK CONSTRUCTION ENTRANCES. CONSTRUCTION VEHICLE TRACK-OUT IS A MAJOR SOURCE OF DUST AND ANY EVIDENCE OF TRACK-OUT CAN TRIGGER FINES FROM THE DEPARTMENT OF ECOLOGY OF THE PUGET SOUND AIR POLLUTION CONTROL AGENCY.
- 11. NOT USED
- THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL BMP'S WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THEY ARE NO LONGER NECESSARY.

## PRIOR TO BEGINNING CLEARING OR GRADING

13. INSTALL THE SLIT FENCE AS INDICATED ON THE SITE PLAN & SHEET C1.0

14. PLACE A THICK LATER OF STRAW OR MULCH ON ALL AREAS OF BARE SOIL OUTSIDE OF THE PLANNED NEW CONSTRUCTION. THIS IS PARTICULARLY IMPORTANT IN THE SOUTH, LOW END OF THE LOT.

15. INSTALL PRE MANUFACTURED SILT SOCKS IN THE TWO EXISTING CATCH BASINS LOCATED SOUTH & EAST OF THE SITE. THIS CATCH BASIN PROTECTION MUST BE CHECKED PERIODICALLY, & CLEANED AS NECESSARY, TO PREVENT THE SILT SOCKS FROM BECOMING OVERLOADED WITH SILT & DEBRIS FROM SURFACE RUNOFF.

16. CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE, AS SHOWN ON SHEET C1.0 OF THE DRAWINGS, WHEREVER TRUCKS WILL DRIVE OFF AF PAVED SURFACES TO IMPORT OR EXPORT DEBRIS & SOIL.

## DURING GRADING AND CONSTRUCTION

17. COVER ANY SOIL STOCKPILES WITH PLASTIC SHEETING THAT IS STAKED OR WEIGHTED TO PREVENT IT FROM BLOWING AWAY

18. ALLOW NO RUNOFF FROM THE EXCAVATION FOR THE SOUTHERN ADDITION TO FLOW ACROSS THE GROUND SURFACE TOWARD THE SOUTH. THIS MAY REQUIRE CREATING A SOIL BERM ALONG THE SOUTHERN EDGE OF THE EXCAVATION. IF SILTY RUNOFF COLLECTS IN THE EXCAVATION, IT MAY NEED TO BE PUMPED TO A TEMPORARY HOLDING TANK FOR DISPOSAL OFF SITE.

19. FOLLOWING CONSTRUCTION OF THE FOUNDATION WALLS, PROCEED IMMEDIATELY WITH INSTALLATION OF DRAINAGE & WATER PROOFING, THEN COMPLETION OF BACKFILLING.

20. SPREAD STRAW OR MULCH AGAIN ON ALL BARE SOIL OUTSIDE OF THE BACKFILLED FOUNDATIONS, UNLESS PERMANENT LANDSCAPING & VEGETATION WILL BE IMMEDIATELY ESTABLISHED.

## CONSTRUCTION STORMWATER CONTROL (CSC) NOTES

- 1. BMPS SHALL BE INSTALLED PRIOR TO STARTING CONSTRUCTION TO ENSURE SEDIMENT-LADEN WATER DOES NOT LEAVE THE PROJECT SITE OR ENTER ROADSIDE DITCHES, STORM DRAINS, SURFACE WATERS, OR WETLANDS.
- 2. THE BMPS INCLUDED IN THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. THE APPLICANT IS RESPONSIBLE FOR ENSURING THAT BMPS ARE MODIFIED AS NEEDED FOR UNEXPECTED STORM EVENTS OR OTHER UNFORESEEN CIRCUMSTANCES, AND TO ACCOUNT FOR CHANGING SITE CONDITIONS.
- 3. ANY AREAS OF DISTURBED SOIL THAT WILL NOT BE WORKED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) OR SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) SHALL BE IMMEDIATELY STABILIZED WITH APPROVED BMPS METHODS (E.G. STRAW, MULCH, PLASTIC COVERING, COLD MIX, ETC.)
- 4. CITY STREETS AND SIDEWALKS SHALL BE KEPT CLEAN AT ALL TIMES.
- 5. POLLUTION CONTROL MEASURES SHALL BE FOLLOWED TO ENSURE THAT NO LIQUID PRODUCTS OR CONTAMINATED WATER ENTERS ANY STORM DRAINAGE FACILITIES OR OTHERWISE LEAVES THE PROJECT SITE. ANY HAZARDOUS MATERIALS OR LIQUID PRODUCTS THAT HAVE THE POTENTIAL TO POLLUTE RUNOFF SHALL BE STORED AND DISPOSED OF PROPERLY.
- 6. ENSURE THAT WASHOUT FROM CONCRETE TRUCKS IS PERFORMED OFF-SITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY. DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR TO STORM DRAINS OR OPEN DITCHES. DO NOT DUMP EXCESS CONCRETE ONSITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS.
- 7. ALL AREAS OF DISTURBED SOIL SHALL BE FULLY STABILIZED WITH THE APPROPRIATE SOIL AMENDMENT AND COVER MEASURES AT COMPLETION OF THE PROJECT. TYPICAL COVER MEASURES INCLUDE LANDSCAPING OR HYDROSEED WITH MULCH.

## **CONSTRUCTION SEQUENCE**

1. SCHEDULE THE PRE-CONSTRUCTION MEETING.

2. FLAG OR FENCE ALL CRITICAL AREAS AND CLEARING LIMITS.

3. POST A SIGN WITH THE NAME AND PHONE NUMBER OF THE E.S.C. SUPERVISOR.

4. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).

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

6. CONSTRUCT SEDIMENT PONDS AND TRAPS, IF REQUIRED.

7. GRADE AND STABILIZE CONSTRUCTION ROADS.

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

9. INSTALL UTILITIES.

10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH LOCAL STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

11. RELOCATE SURFACE WATER CONTROLS OR EROSION CONTROL MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE ACCEPTED STANDARD BMP's.

12. 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 FOLIVALENT

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

14. SEED OR SOD ANY AREAS OF THE PROJECT, STABILIZE ALL DISTURBED AREA AND REMOVE BMP's IFF APPROPRIATE

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

## **COVER MEASURES**

TEMPORARY EROSION CONTROL SEED MIX:			
	% WEIGHT	% PURITY	% GERMINATION
ANNUAL OR PERENNIAL RYE (LOLIUM MULTIFLORUM OR LOLIUM PERENNE)	40	98	90
REDTOP OR COLONIAL BENTGRASS (AGROSTIS ALBA OR AGROSTIS TENUIS)	10	92	85

COVER METHODS INCLUDE THE USE OF MULCH, EROSION CONTROL NETS AND BLANKETS, PLASTIC COVERING, SEEDING, AND SODDING. MULCH AND PLASTIC SHEETING ARE PRIMARILY INTENDED TO PROTECT DISTURBED AREAS FOR A SHORT PERIOD OF TIME, TYPICALLY DAYS TO A FEW MONTHS. SEEDING AND SODDING ARE MEASURES FOR AREAS THAT ARE TO REMAIN UNWORKED FOR MONTHS.

PERMANENT SEED MIX:				
	% WEIGHT	% PURITY	% GERMINATION	REMARKS
PERENNIAL RYE BLEND (LOLIUM PERENNE)	70	98	90	THIS MIX IS PROVIDED AS JUST ONE RECOMMENDED POSSIBILITY. LOCAL SUPPLIERS SHOULD BE CONSULTED FOR THEIR RECOMMENDATIONS BECAUSE THE
CHEWINGS AND RED FESCUE BLEND (FESTUCA RUBRA VAR. COMMUTATA OR FESTUCA RUBRA)	30	98	90	APPROPRIATE MIX DEPENDS ON A VARIETY OF FACTORS, INCLUDING EXPOSURE, SOIL TYPE, SLOPE, AND EXPECTED FOOT TRAFFIC.

MULCH STANDARDS AN	D GUIDELINES:		
MULCH MATERIAL	QUALITY STANDARDS	APPLICATION RATES	REMARKS
STRAW	AIR-DRIED; FREE FROM UNDESIRABLE SEED AND COARSE MATERIAL.	2"-3" THICK; 2-3 BALES PER 1000 SF OR 2-3 TONS PER ACRE	COST-EFFECTIVE PROTECTION WHEN APPLIED WITH ADEQUATE THICKNESS. HAND-APPLICATION GENERALLY REQUIRES GREATER THICKNESS THAN BLOWN STRAW. STRAW SHOULD BE CRIMPED TO AVOID WIND BLOW. THE THICKNESS OF STRAW MAY BE REDUCED BY HALF WHEN USED IN CONJUNCTION WITH SEEDING.
CHIPPED SITE VEGETATION	AVERAGE SIZE SHALL BE SEVERAL INCHES.	2" MINIMUM THICKNESS	THIS IS A COST-EFFECTIVE WAY TO DISPOSE OF DEFRIS FROM CLEARING AND GRUBBING, AND IT ELIMINATES THE PROBLEMS ASSOCIATED WITH BURNING. GENERALLY, IT SHOULD NOT BE USED ON SLOPES ABOVE APPROXIMATELY 10% BECAUSE OF ITS TENDENCY TO BE TRANSPORTED BY RUNOFF. IT IS NOT RECOMMENDED WITHIN 200 FEET OF SURFACE WATERS. IF SEEDING IS EXPECTED SHORTLY AFTER MULCH, THE DECOMPOSITION OF THE CHIPPED VEGETATION MAY TIE UP NUTRIENTS IMPORTANT TO GRASS ESTABLISHMENT.

### INTERCEPTOR DIKE AND SWALE NOTES AND FIGURES

INTERCEPTOR DIKES AND SWALES ARE REQUIRED IN THE FOLLOWING SITUATIONS:

1. AT THE TOP OF ALL SLOPES IN EXCESS OF 3H:1V AND WITH MORE THAN 20 FEET OF VERTICAL RELIEF.

2. AT INTERVALS ON ANY SLOPE THAT EXCEEDS THE DIMENSIONS SPECIFIED IN THIS SECTION FOR THE HORIZONTAL SPACING OF DIKES AND SWALES.

3. INTERCEPTOR DIKES AND SWALES SHALL BE SPACED HORIZONTALLY AS FOLLOWS:

AVERAGE SLOPE	SLOPE PERCENT	FLOWPATH
20H:1V OR LESS	3-5%	300 FEET
(10 TO 20)H:1V	5-10%	200 FEET
(4 TO 10)H:1V	10-25%	100 FEET
(2 TO 4)H:1V	25-50%	50 FEET
,		

4. FOR SLOPES STEEPER THAN 2H:1V WITH MORE THAN 10 FEET OF VERTICAL RELIEF, BENCHES MAY BE CONSTRUCTED OR CLOSER SPACED INTERCEPTOR DIKES OR SWALES CAN BE USED. WHICHEVER MEASURE IS CHOSEN, THE SPACING AND CAPACITY OF THE MEASURES MUST BE DESIGNED BY THE ENGINEER AND THE DESIGN MUST INCLUDE PROVISIONS FOR EFFECTIVELY INTERCEPTING THE HIGH VELOCITY RUNOFF ASSOCIATED WITH STEEP SLOPES.

5. IF THE DIKES OR SWALES INTERCEPTS RUNOFF FROM THE DISTURBED AREAS, IT SHALL DISCHARGE TO A STABLE CONVEYANCE SYSTEM THAT ROUTES THE RUNOFF TO AN ACCEPTABLE BMP. IF THE DIKE OR SWALE INTERCEPTS RUNOFF THAT ORIGINATES FROM UNDISTURBED AREAS, IT SHALL DISCHARGE TO A STABLE CONVEYANCE SYSTEM THAT ROUTES THE RUNOFF DOWNSLOPE OF ANY DISTURBED AREAS AND RELEASE THE WATER AT A STABILIZED OUTLET.

6. CONSTRUCTION TRAFFIC OVER TEMPORARY DIKES AND SWALES SHALL BE MINIMIZED.

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS
A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

PERMIT SET 10/09/19

PLOT DATE: 10/9/2019 FILE NAME:

STURMAN

TEL (425) 451-7003

9 103rd Avenue NE Suite 203 Bellevue, WA 98004

REGISTERED ARCHITECT

BRADLEY J. STURMAN STATE OF WASHINGTON

www.sturmanarchitects.com

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IARSHALL RESIDEN

ERMIT SET

307 EAST MERCER WAY

FREER ISLAND WA 98040

OSION & CONSTRUCTIC ORMWATER CONTROL TES AND DETAILS

2 2019-8-26 DESIGN REVISIONS
3 2019-10-9 PERMIT CORRECTIONS
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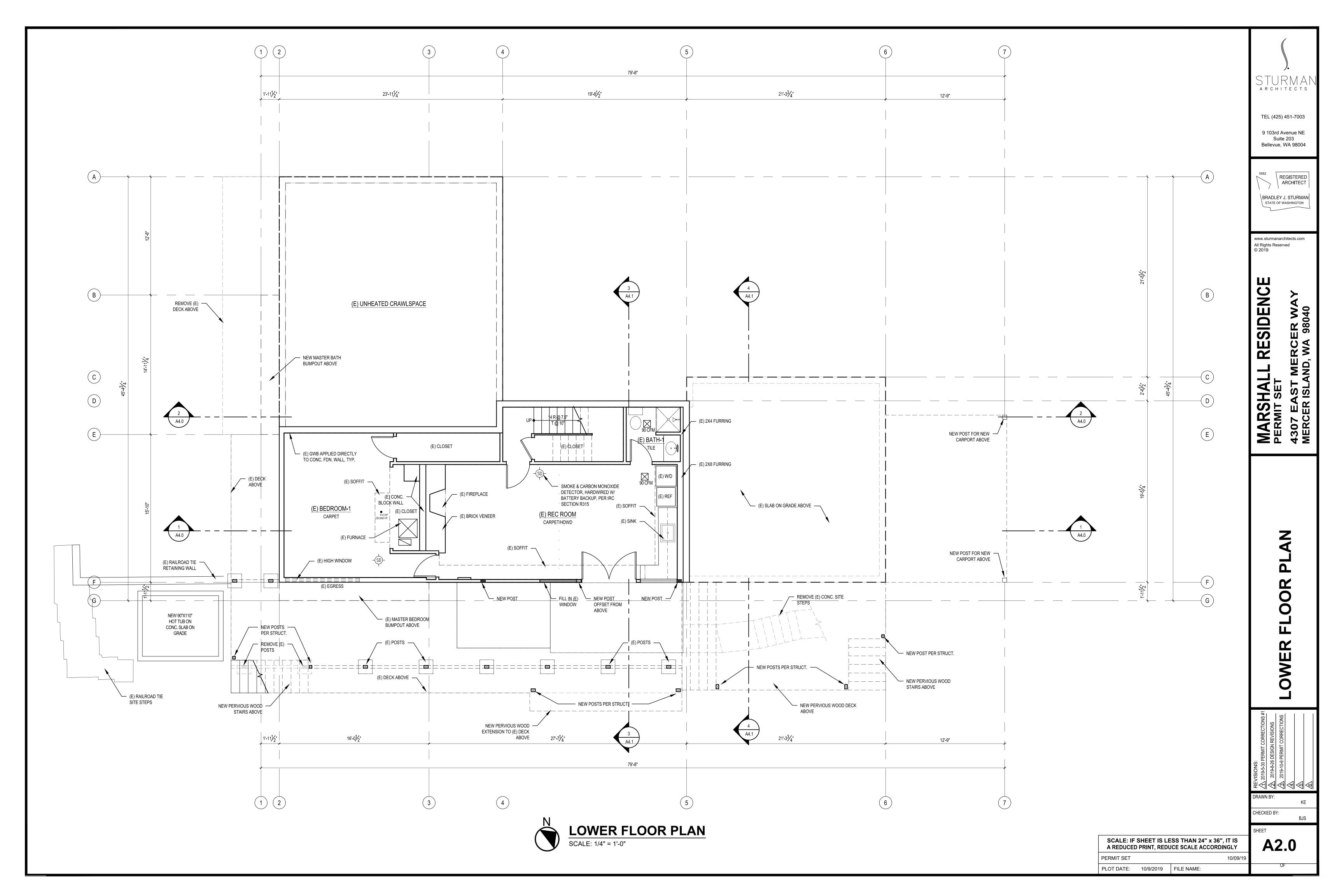
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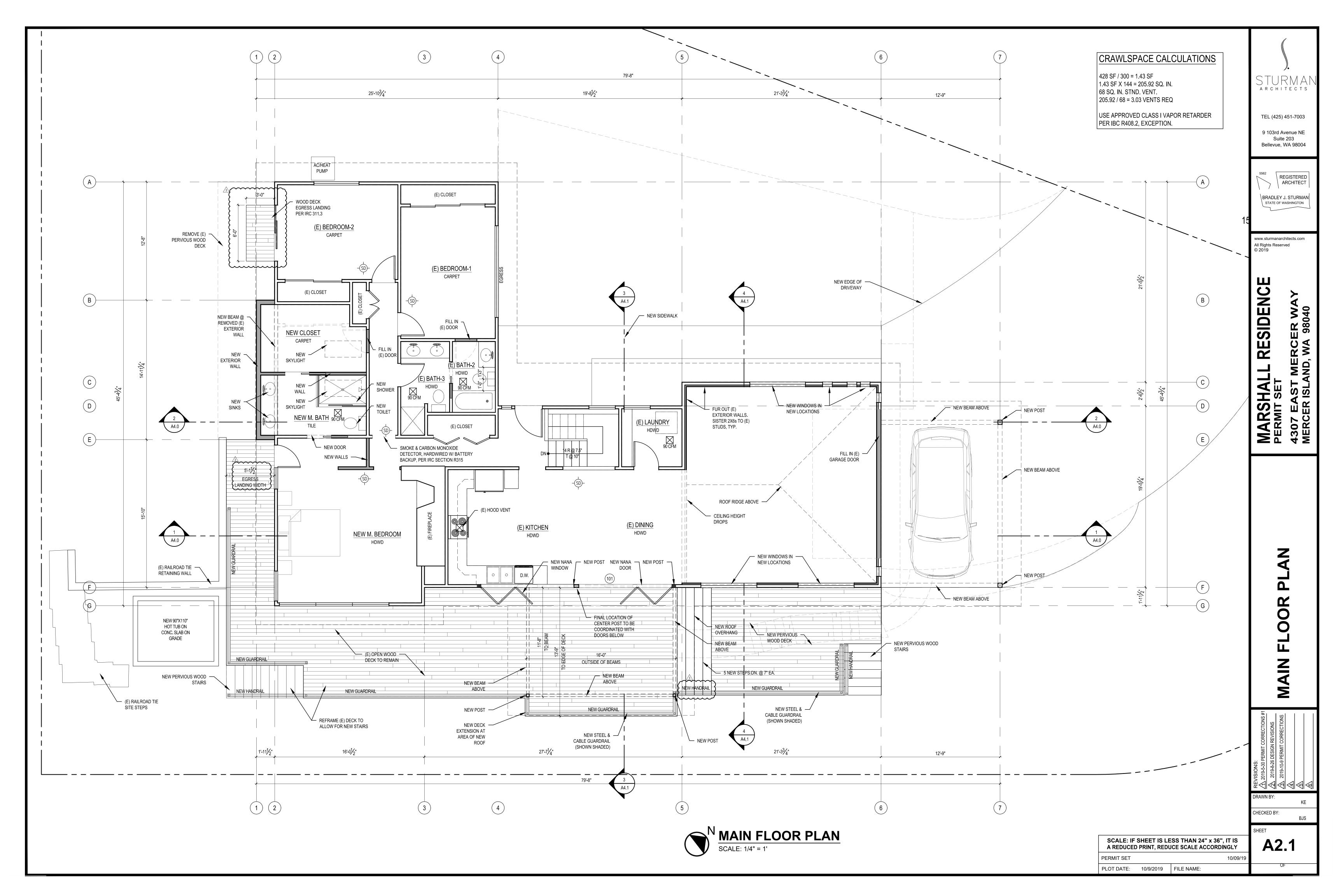
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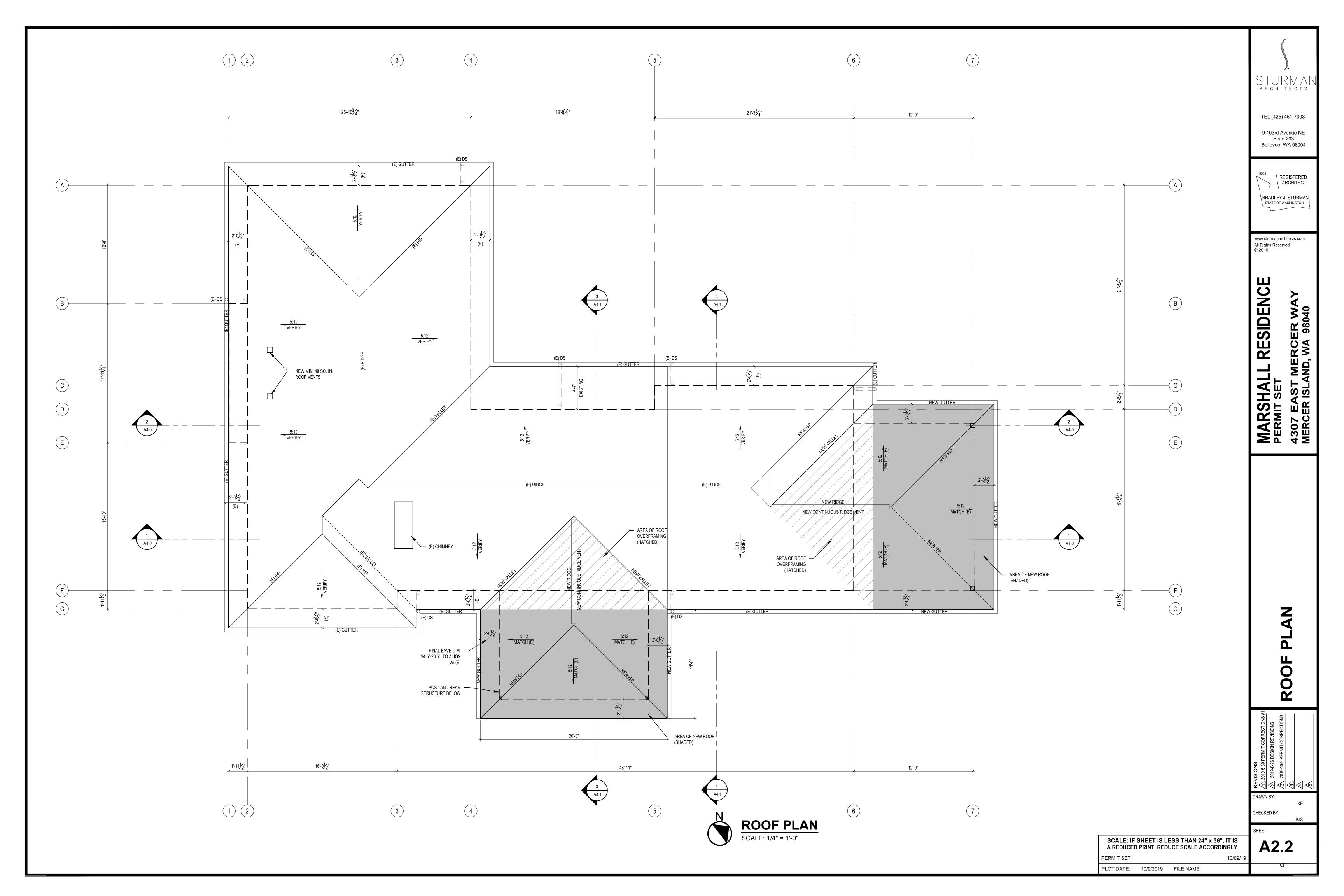
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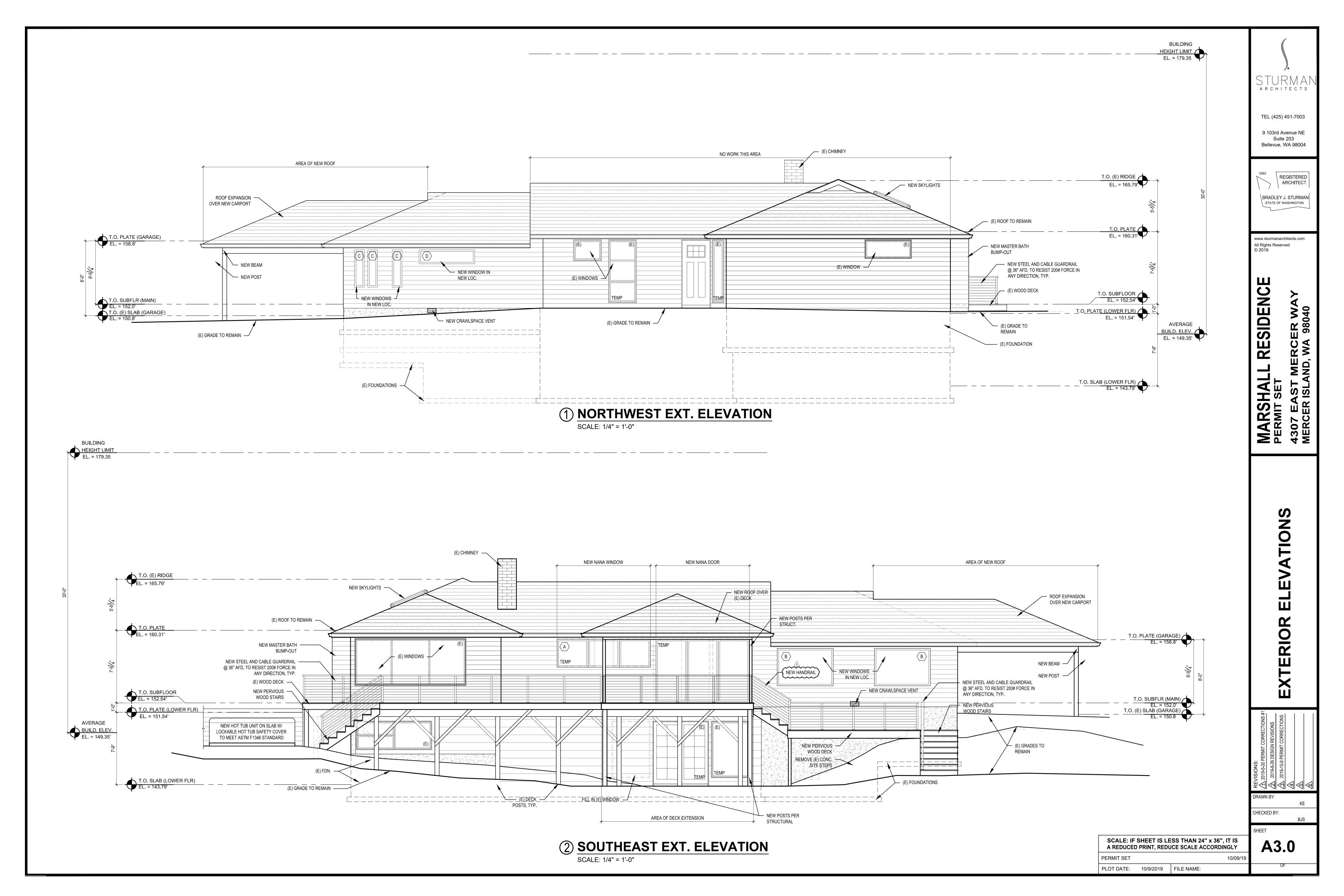
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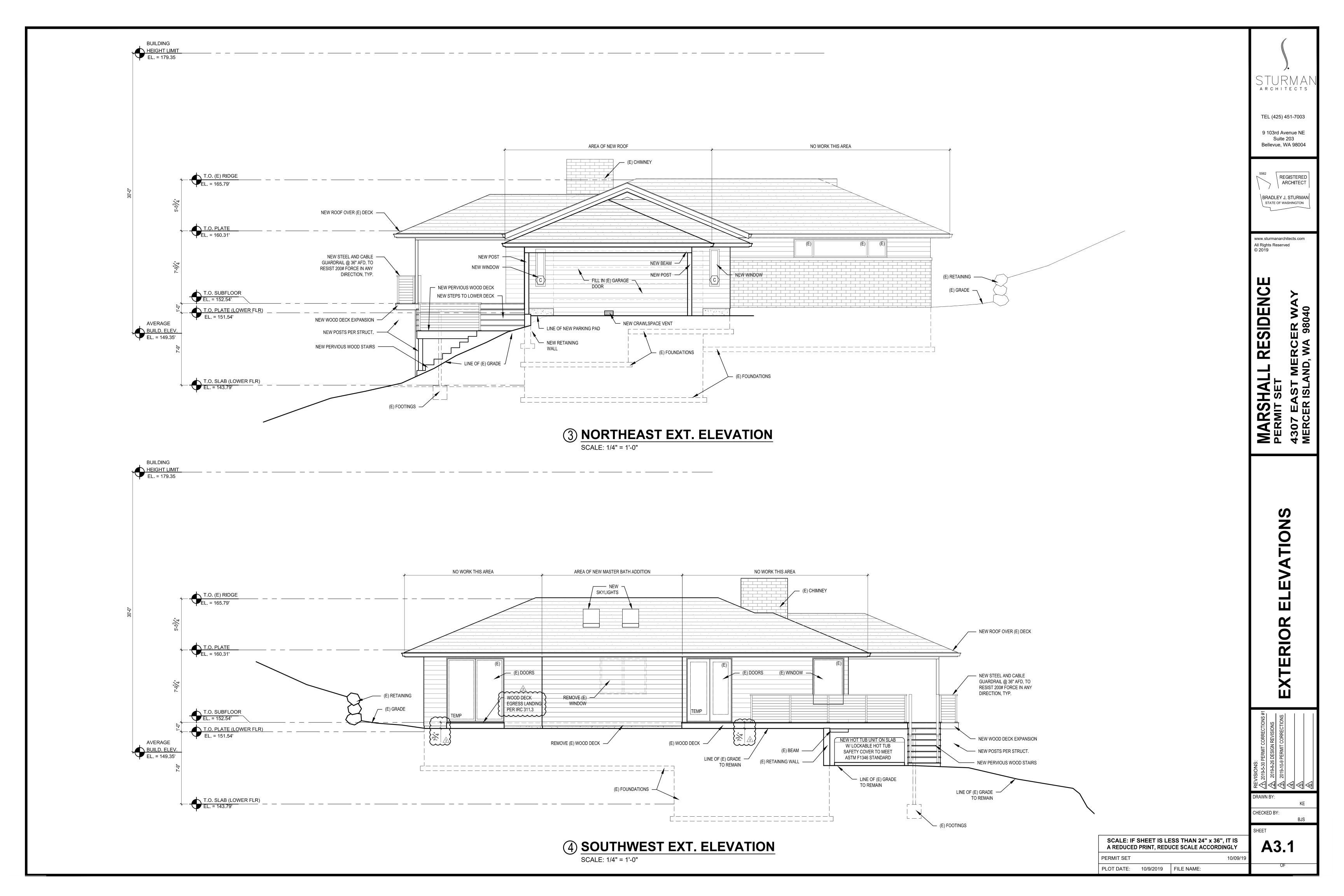
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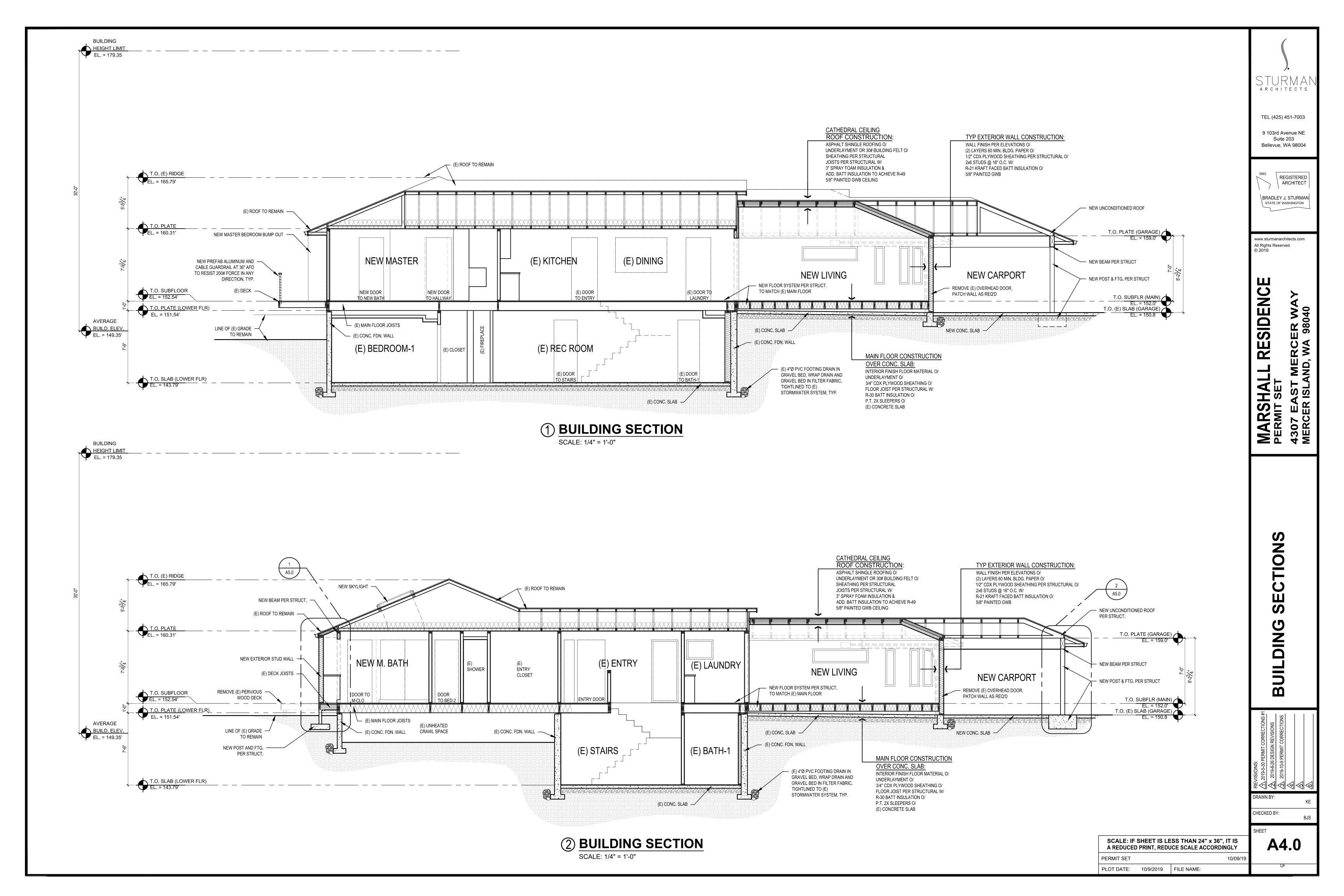


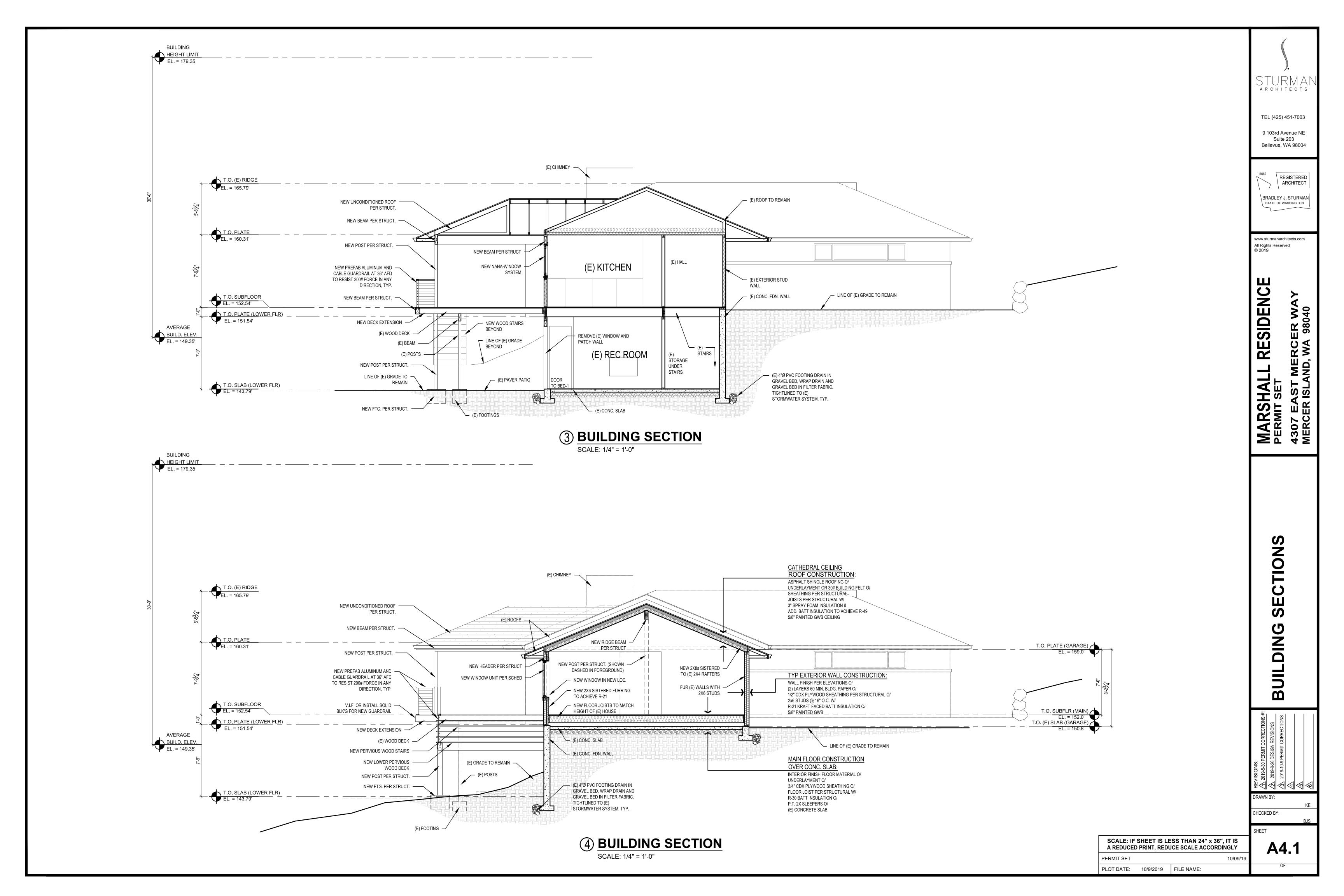


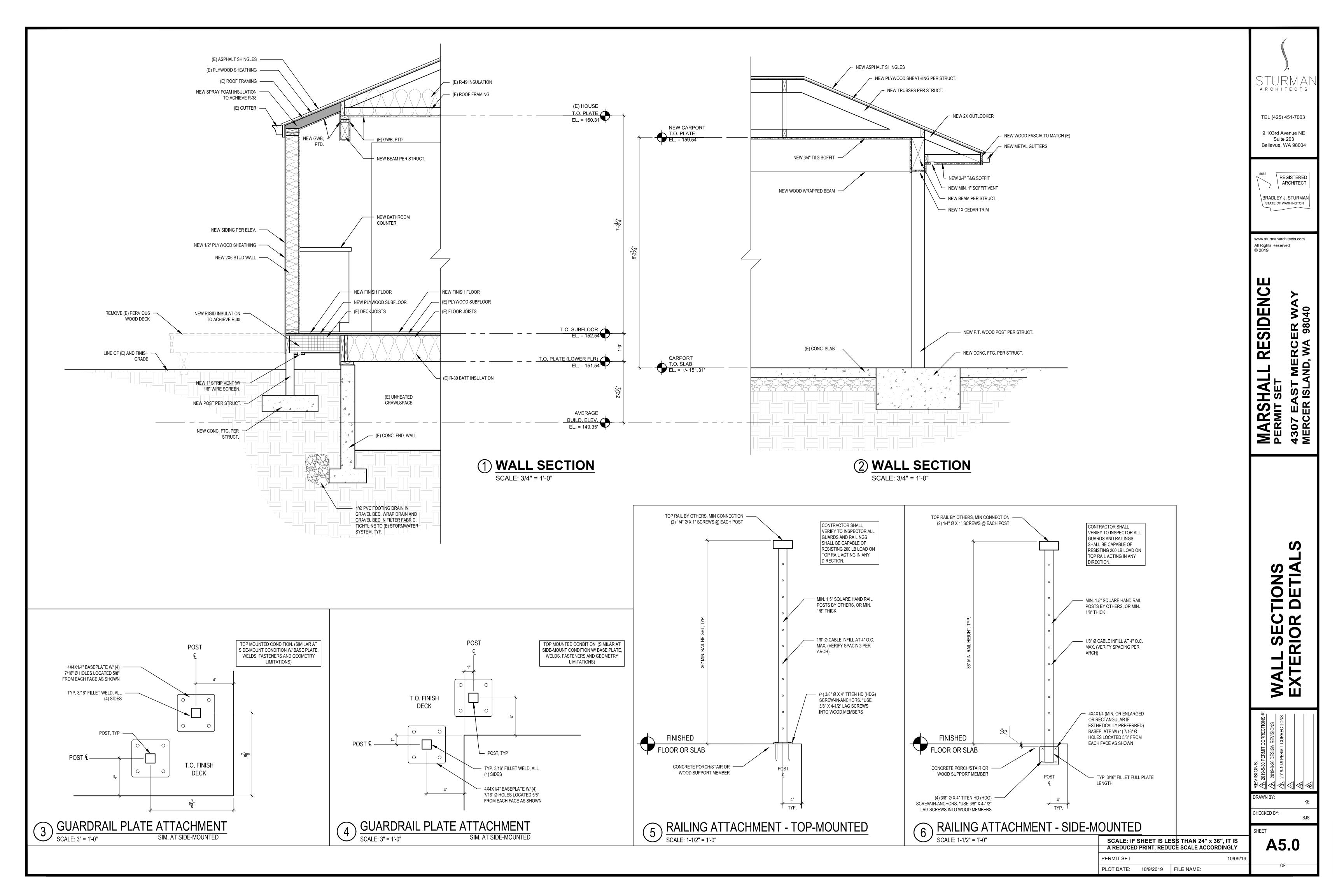












### General Structural Notes

#### THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

# 1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2015 INTERNATIONAL BUILDING CODE. 2. DESIGN LOADING CRITERIA: RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS

WIND . . Kzt= 1.23, GCpi=0.18, 110 MPH, RISK CATEGORY II, EXPOSURE "C"

EARTHQUAKE . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS

SITE CLASS=D, Ss=141, Sds=.94, S1=.54, SD1=.54, Cs=0.144

SDC D, Ie=1.0, R=6.5

- 3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
- 4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS 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 TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- 6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".
- 7. 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.
- 8. ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
- 9. SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

CONNECTOR PLATE WOOD ROOF TRUSSES

10. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, 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 WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

### GEOTECHNICAL

11. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

## RENOVATION

- 12. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.
- 13. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.

### CONCRETE

- 14. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. 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. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH f'c = 2,500 PSI.
- 15. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60, FY=60,000 PSI.
- 16. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . 3" FORMED SURFACES EXPOSED TO EARTH OR WEATHER ( #5 BARS OR SMALLER). . 1-1/2"

### WOOD

17. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD, GRADING RULES FOR WEST COAST LUMBER NO. 17, OR WWPA STANDARD, WESTERN LUMBER GRADING RULES 2011. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS	(2X & 3X MEMBERS)	HEM-FIR NO. 2
AND BEAMS	,	MINIMUM BASE VALUE, Fb = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1
	,	MINIMUM BASE VALUE, Fb = 1000 PSI
BEAMS	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1
		MINIMUM BASE VALUE, Fb = 1350 PSI
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2
		MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1
		MINIMUM BASE VALUE, Fc = 1000 PS

18. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA-EWS IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA-EWS CERTIFICATE OF CONFORMANCE. ALL BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 265 PSI.

DOUGLAS-FIR-LARCH OR HEM-FIR NO. 2

19. PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:

TOP CHORD LIVE LOAD	25	PSF
TOP CHORD DEAD LOAD	10	PSF
BOTTOM CHORD DEAD LOAD	5	PSF
TOTAL LOAD	40	PSF
WIND UPLIFT (TOP CHORD)	10	PSF
BOTTOM CHORD LIVE LOAD	10	PSF
(BOTTOM CHORD LIVE LOAD DOES NOT AG	CT	
CONCURRENTLY WITH THE ROOF LIVE LOA		

STUDS, PLATES & MISC. FRAMING:

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

20. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16. FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24. WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

- 21. ALL WOOD IN DIRECT CONTACT WITH CONCRETE SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE.
- 22. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.
- 23. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

WOOD TREATMENT	CONDITION	PROTECTION
HAS NO AMMONIA CARRIER	INTERIOR DRY	G90 GALVANIZED
CONTAINS AMMONIA CARRIER	INTERIOR DRY	G185 OR A185 HOT DIPPED OR
		CONTINUOUS HOT-GALVANIZED
		PER ASTM A653
CONTAINS AMMONIA CARRIER	INTERIOR WET	TYPE 304 OR 316 STAINLESS
CONTAINS AMMONIA CARRIER	EXTERIOR	TYPE 304 OR 316 STAINLESS
AZCA	ANY	TYPE 304 OR 316 STAINLESS

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

24. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

### 25. WOOD FASTENERS

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

SIZE	LENGTH	DIAMETER
8d	2-1/2"	0. 131"
16d	3-1/4"	0. 131"

- B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.
- 26. 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 INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". 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.
- B. ROOF FRAMING: PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES.



p: 206.443.6212 ssfengineers.com

934 Broadway - Tacoma, WA 98402
p: 253.284.9470 ssfengineers.com

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DESIGN:	ABB	
CHECKED:	ABB	
APPROVED:	ABB	

REVISIO	NS:	

JURISDICTIONAL APPROVAL STAMP:

DPO ISCT TITLE

Marshall Residence 4307 East Mercer Way

Mercer Island, WA 98040

Phase 1B

ARCHITECT:

Sturman Architects
9 103rd Ave NE Suite 203
Bellevue, WA 98004

# Permit Set

SHEET TITLE:

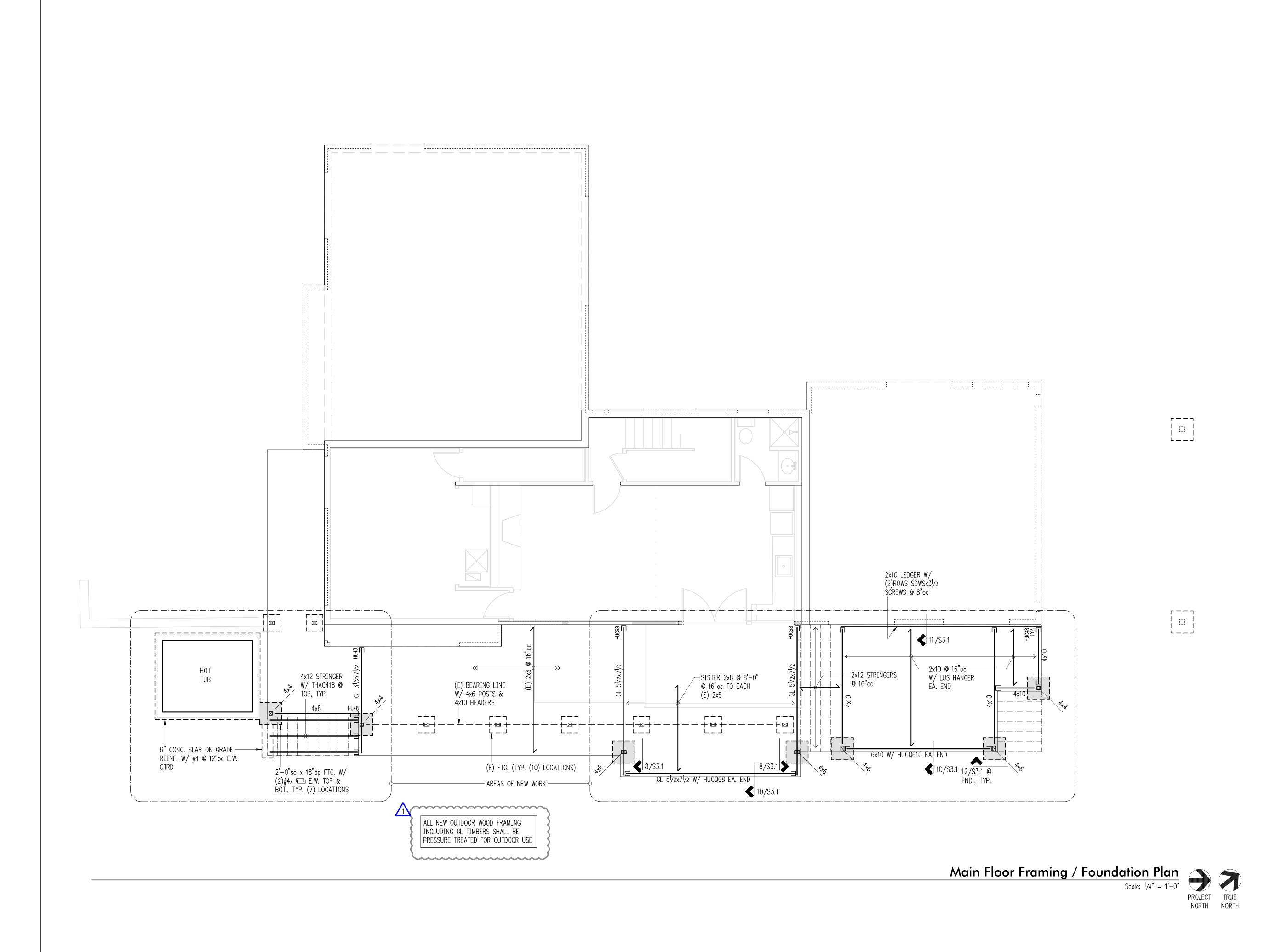
Structural Notes

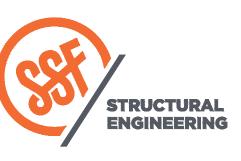
General

DATE:
Aug. 20, 2019
PROJECT NO:

PROJECT NO: 01310-2019-02
SHEET NO:

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2124 Third Avenue - Suite 100 - Seattle, WA 98121 p: 206.443.6212 ssfengineers.com 934 Broadway - Tacoma, WA 98402 p: 253.284.9470 ssfengineers.com

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PROJECT TITLE:

# Marshall Residence

4307 East Mercer Way Mercer Island, WA 98040

Phase 1B

ARCHITECT:

Sturman Architects 9 103rd Ave NE Suite 203 Bellevue, WA 98004

SUF:

Permit Set

SHEET TITI

Main Floor Framing / Foundation Plan

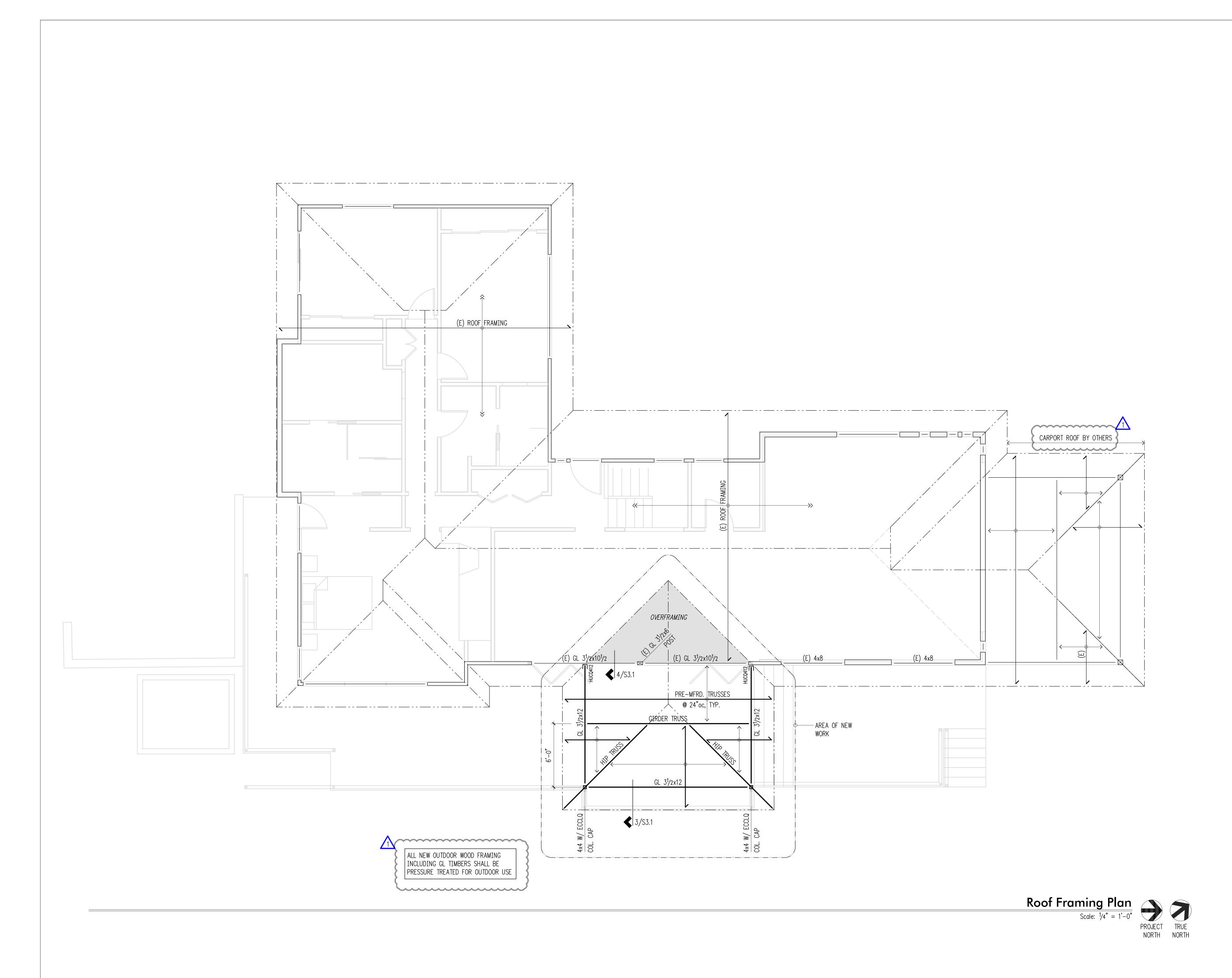
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DATE: Aug. 20, 2019

PROJECT NO: 10315-2019-02

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PROJECT TITLE

# Marshall Residence

4307 East Mercer Way Mercer Island, WA 98040

Phase 1B

ARCHITE

Sturman Architects 9 103rd Ave NE Suite 203 Bellevue, WA 98004

ISSUE:

# Permit Set

FFT TITLE:

Roof Farming Plan

SCALE: 1/4" = 1'-0" U.N.O.

DATE: Aug. 20, 2019

PROJECT NO: 10315-2019-02

SHEET NO:

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