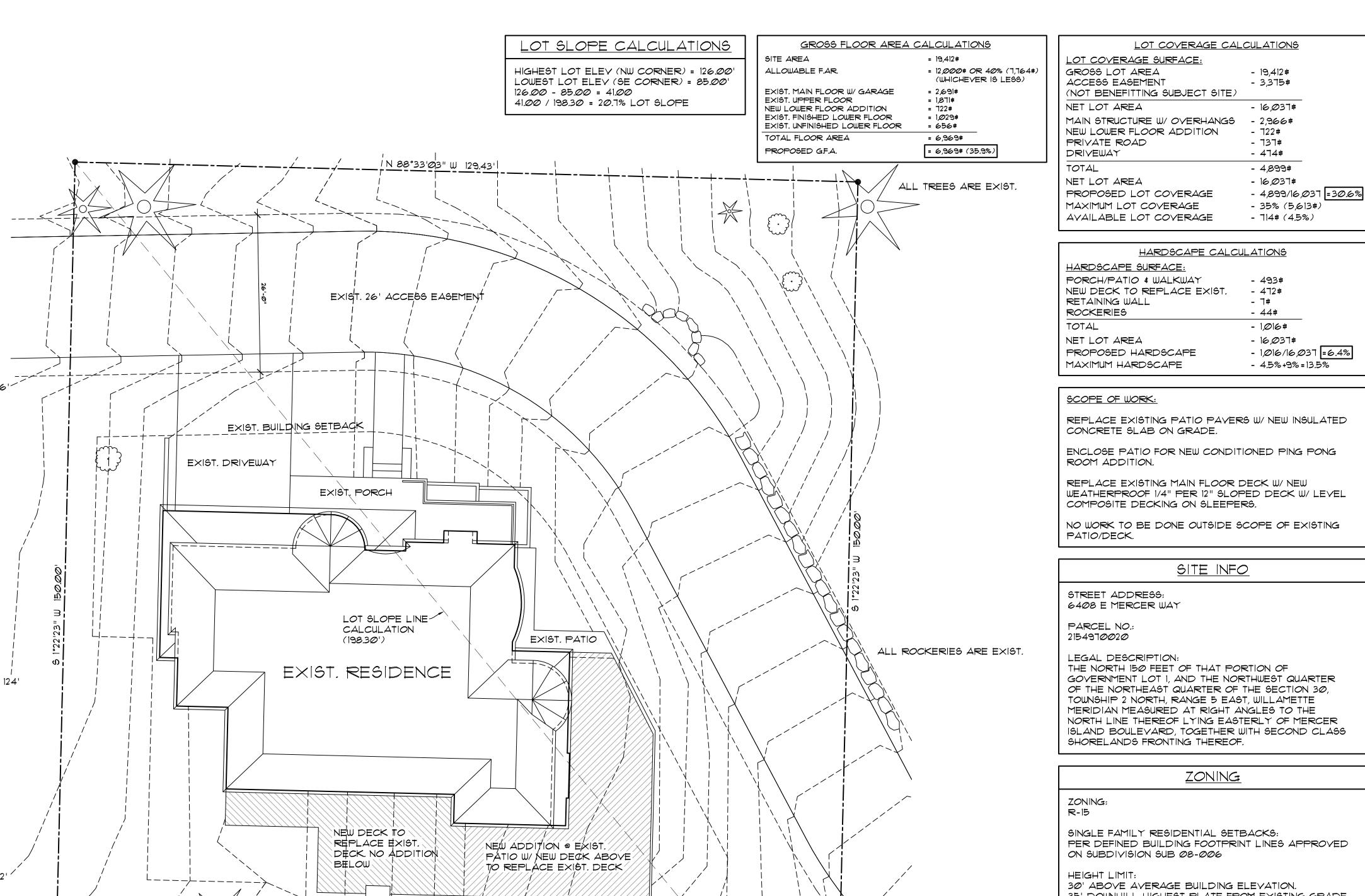
JOB NO: 20-012 DATE: 10/16/20 DRWN. BY: MM REVISED:

SHEET NO.



~EXIST, F.P. TO REMAIN ,

EXIST, BUILDING SETBACK

ALL GRADES ARE EXIST. NO CHANGE TO EXIST. GRADE

EXIST! 10' PRIVATE SEWER ÉASEMENT

N 88°33'03" W 129.43'

35' DOWNHILL HIGHEST PLATE FROM EXISTING GRADE.

PROJECT DATA:

PROJECT DESCRIPTION: NEW LOWER FLOOR ADDITION

4 MAIN FLOOR DECK.

SITE ADDRESS: 6408 E MERCER WAY MERCER ISLAND, WASHINGTON 98040

MATTHEW MAWER RESIDENTIAL DESIGN, INC. BUILDING DESIGN: MATT MAWER

PH: 425.417.7817

MAWER BROTHERS LLC CONTRACTOR: MASON MAWER PH: 425.417.7819

MDT ENGINEERING

STRUCT. ENGINEER: MICHELLE THOMPSON

PH: 253.887.8725

SITE PLAN

SCALE: 1" = 10'

6408 E MERCER WAY MERCER ISLAND, WA 98040

CONSTRUCTION SEQUENCE:

2. FLAG OR FENCE CLEARING LIMITS.

1. HOLD AN ONSITE PRE-CONSTRUCTION MEETING.

3. INSTALL CATCH BASIN PROTECTION, IF REQUIRED.

4. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).

6. CONSTRUCT SEDIMENT POND(S) AND/OR TRAP(S).

SEDIMENTATION CONTROL REQUIREMENTS.

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

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

8. MAINTAIN TESC MEASURES IN ACCORDANCE WITH CITY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

9. RELOCATE SURFACE WATER CONTROLS OR TESC MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE TESC IS ALWAYS IN ACCORDANCE WITH THE CITY OF YARROW POINT TEMPORARY EROSION AND

10. COVER ALL AREAS THAT WILL BE UN-WORKED FOR MORE THAN TWO DAYS DURING THE WET SEASON (OCT. I TO APRIL 30) OR SEVEN DAYS DURING THE DRY SEASON (MAY I TO SEPT. 30) WITH STRAW, WOOD FIVER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.

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

12. SEED OR SOD ANY AREAS TO REMAIN UN-WORKED FOR MORE THAN 30 DAYS.

13. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE TESC MEASURES IF APPROPRIATE.

24 HOUR EROSION CONTROL CONTACT INFO: MASON MAWER - 425.417.7819

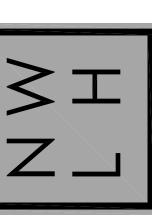
COPYRIGHT 2003 MATTHEW MAWER RESIDENTIAL DESIGN. NO REPRODUCTION OF THESE PLANS WITHOUT WRITTEN AUTHORIZATION FROM MATTHEW MAWER RESIDENTIAL DESIGN.

LOT COVERAGE CALCULATIONS LOT COVERAGE SURFACE: GROSS LOT AREA - 19,412# ACCESS EASEMENT - 3,375# (NOT BENEFITTING SUBJECT SITE) NET LOT AREA - 16,037# MAIN STRUCTURE W/ OVERHANGS - 2,966# NEW LOWER FLOOR ADDITION - 722# PRIVATE ROAD - 737# DRIVEWAY - 474# TOTAL - 4,899# NET LOT AREA - 16*,*037# - 4,899/16,037 =30.6% PROPOSED LOT COVERAGE MAXIMUM LOT COVERAGE - 35% (5,613#) ⁻ AVAILABLE LOT COVERAGE - T14# (4.5%)

HARDSCAPE CALCULATIONS HARDSCAPE SURFACE: PORCH/PATIO & WALKWAY - 493# NEW DECK TO REPLACE EXIST. - 472# RETAINING WALL - 7# ROCKERIES - 44# TOTAL - 1,016# NET LOT AREA - 16*,*037# - 1,016/16,037 =6.4% PROPOSED HARDSCAPE - 4.5%+9%=13.5% MAXIMUM HARDSCAPE

matthew mawer

lifestyle



ZHANG ADDITION 6408 E MERCER WAY MERCER ISLAND, WA 98040

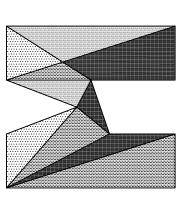
JOB NO: 20-012 DATE: 10/16/20 DRWN. BY:MM REVISED:

SHEET NO.

LOT COVERAGE CALCS. 0 10

SCALE: 1" = 10'

6408 E MERCER WAY MERCER ISLAND, WA 98040

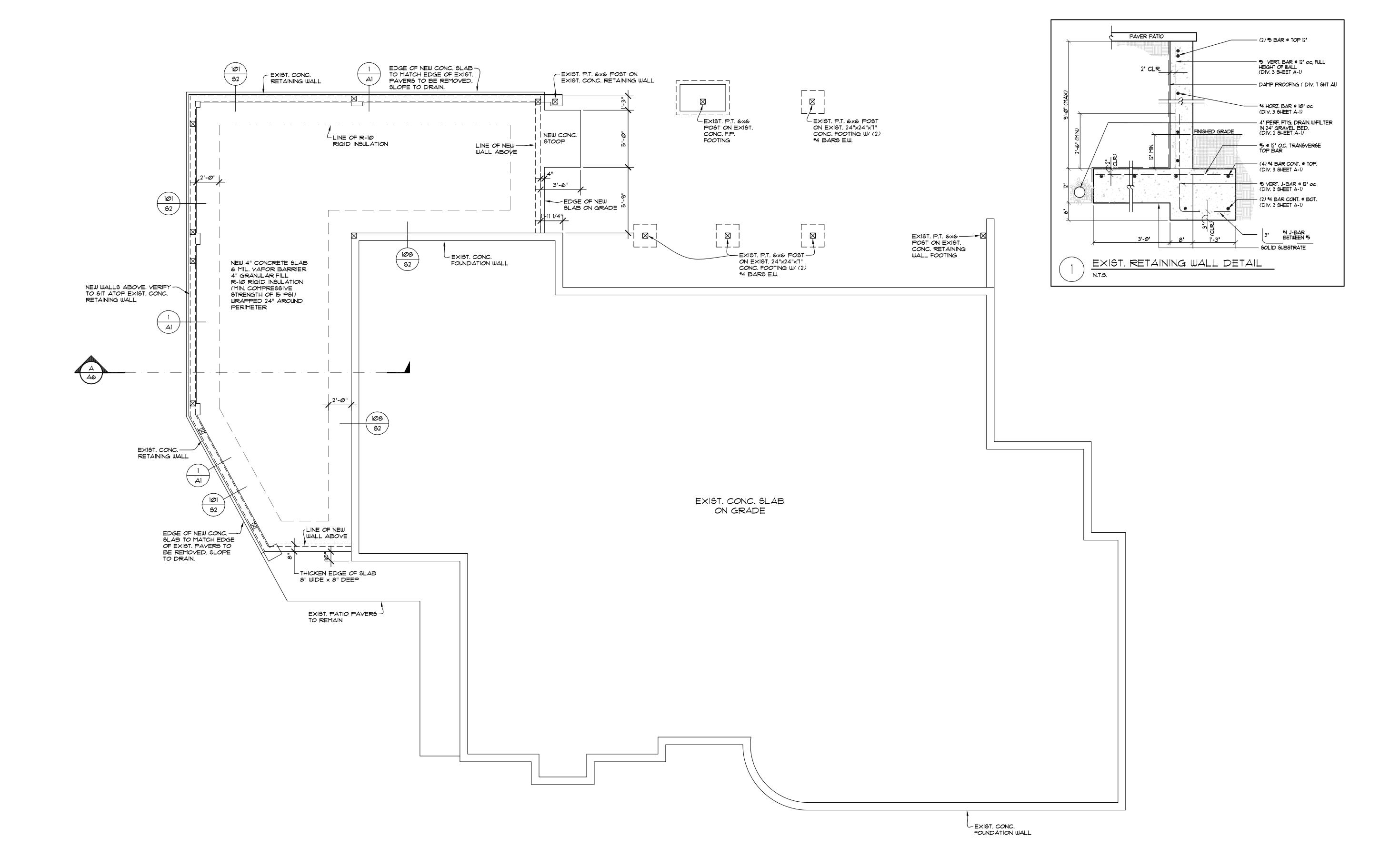


lifestyle

ZHANG ADDITION 6408 E MERCER WAY MERCER ISLAND, WA 98040

JOB NO: 19-020 DATE: 10/16/20 DRWN. BY:MM REVISED:

SHEET NO.



FOUNDATION PLAN SCALE: 1/4" = 1' - Ø"

1,685#

2,161#

1,871#

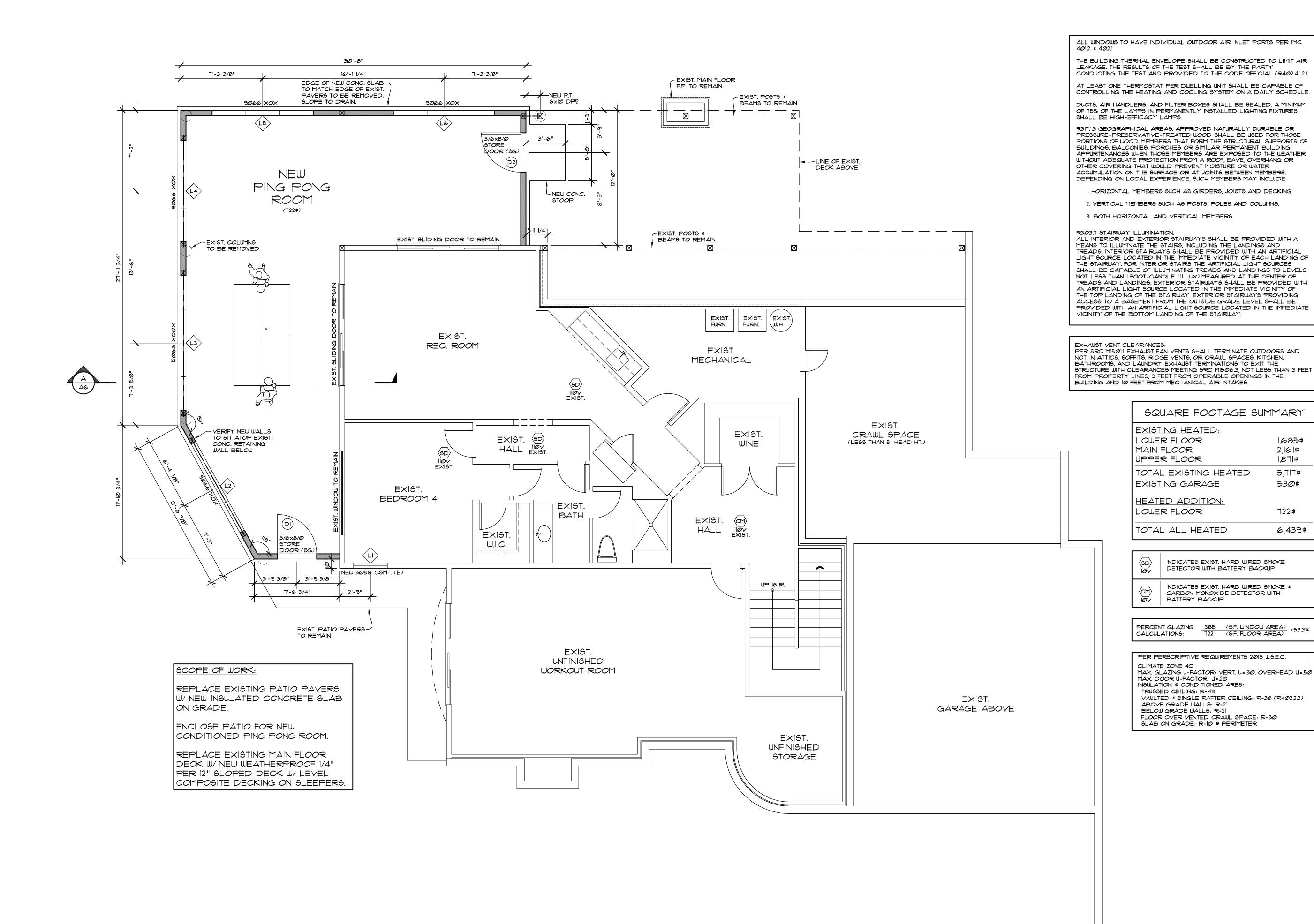
5,717#

53Ø#

722#

6,439#

SHEET NO.



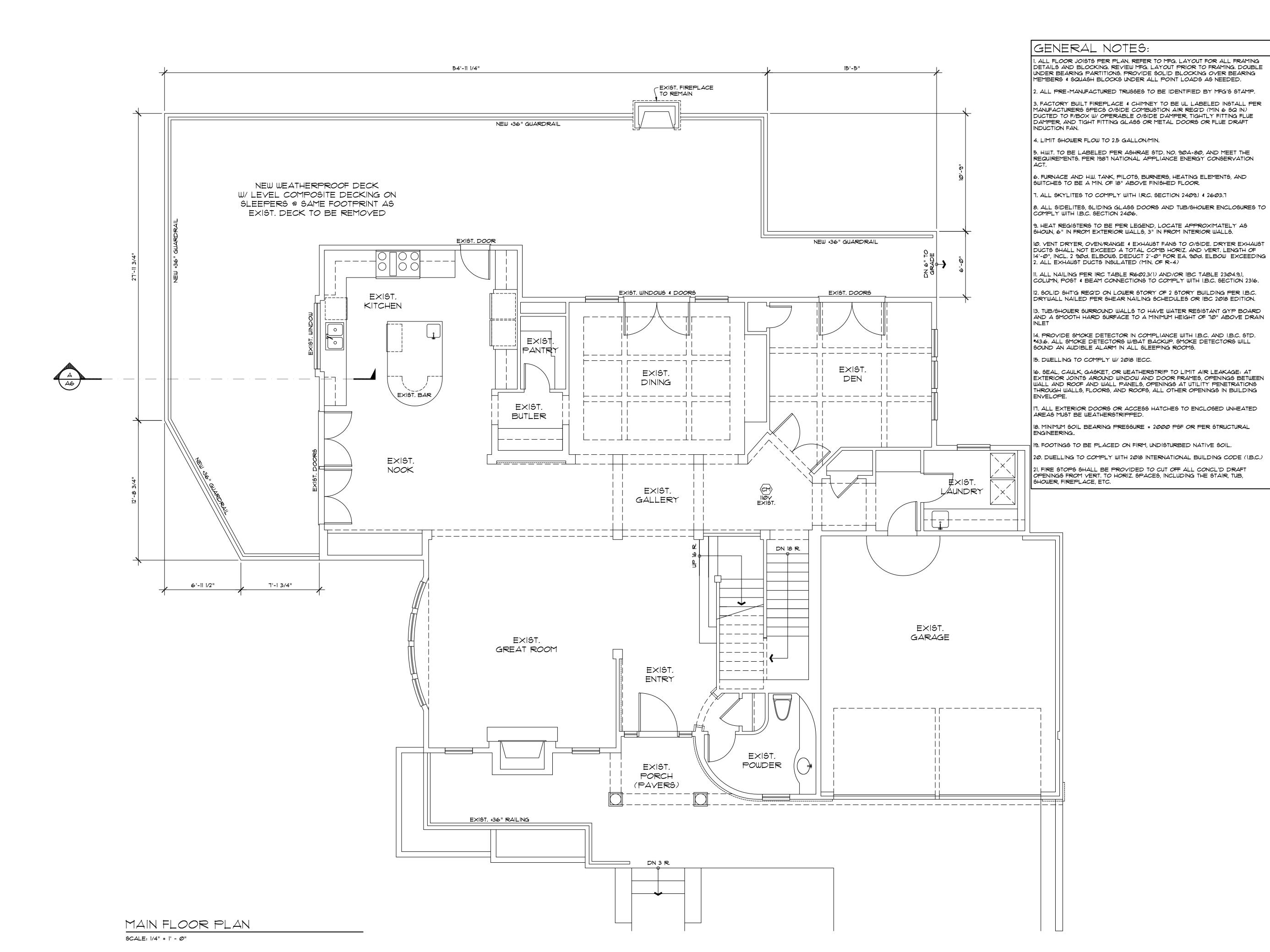
LOWER FLOOR PLAN

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

JOB NO: 19-020 DATE: 10/16/20 DRWN. BY:MM REVISED:

SHEET NO.

A3

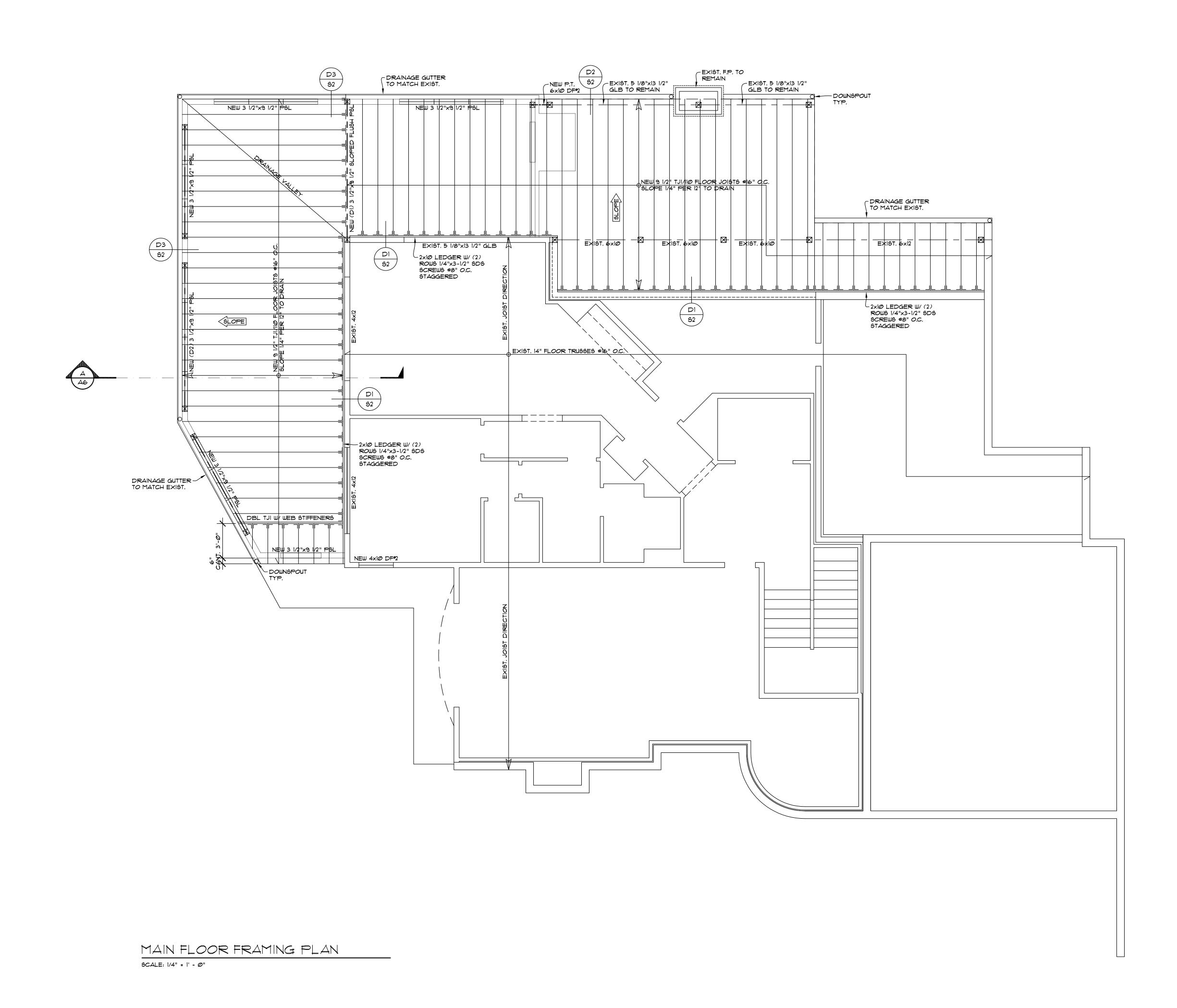


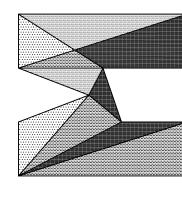
ZHANG ADDITION 6408 E MERCER WAY MERCER ISLAND, WA 98040

JOB NO: 20-012 DATE: 10/16/20 DRWN. BY:MM REVISED:

SHEET NO.

A4





lifestyle

ZHANG ADDITION 6408 E MERCER WAY MERCER ISLAND, WA 98040

JOB NO: 19-020 DATE: 10/16/20 DRWN. BY:MM REVISED:

SHEET NO.



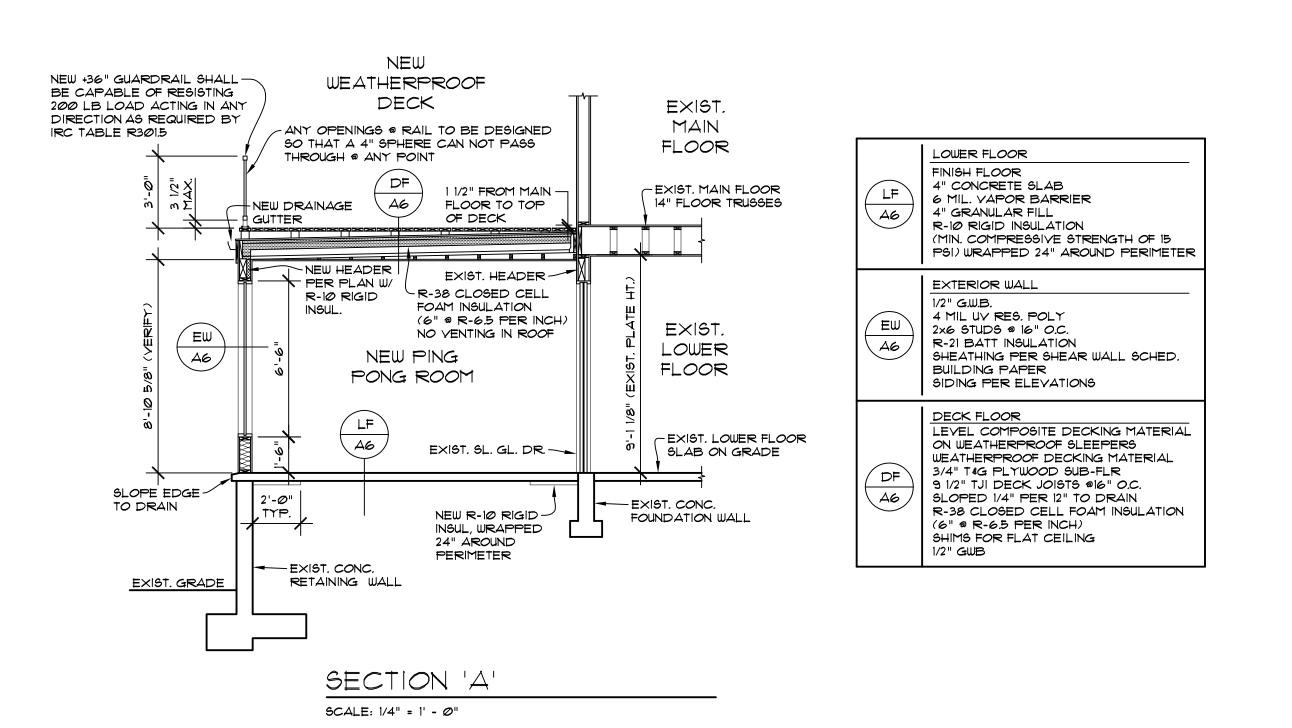
lifestyle

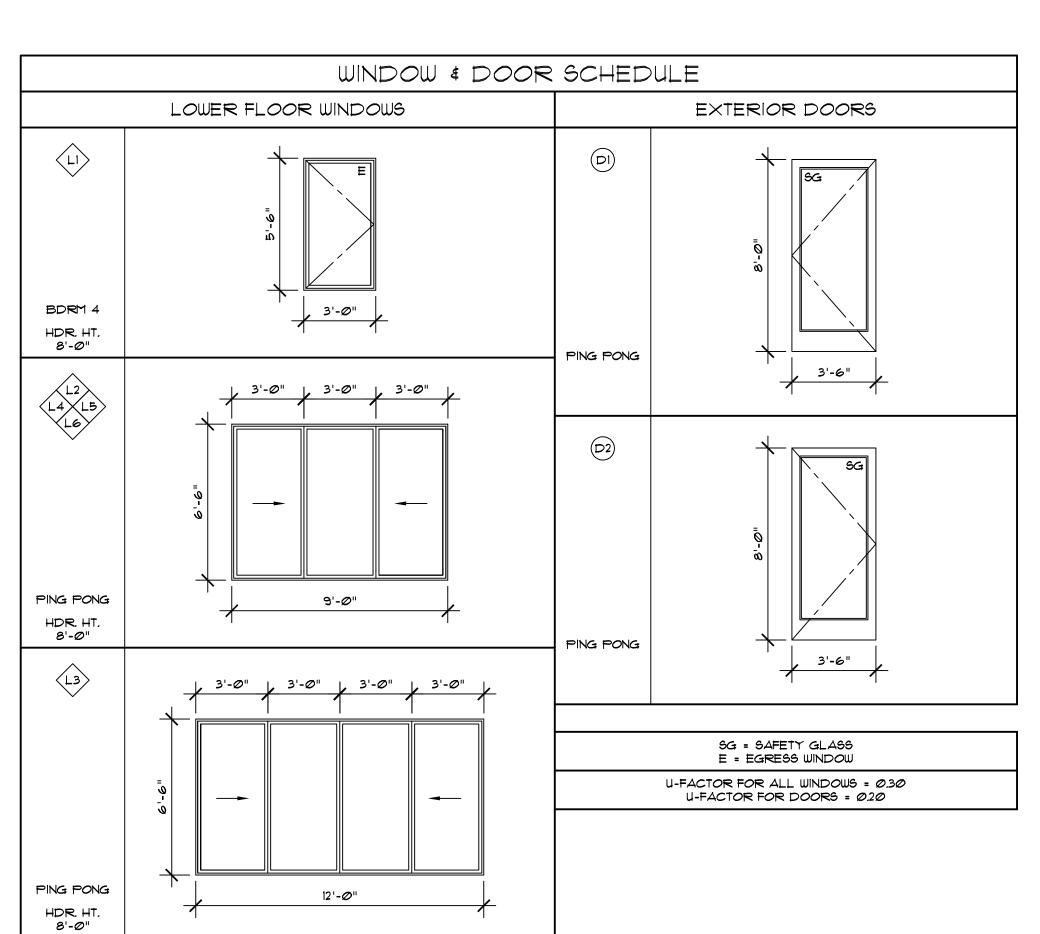
ZHANG ADDITION 6408 E MERCER WAY MERCER ISLAND, WA 98040

JOB NO: 19-020 DATE: 10/16/20 DRWN. BY:MM REVISED:

SHEET NO.







DRILL & EPOXY -

EMBED 10"

NOTE: ALL EXISTING WALLS ARE

ADEQUATE.

SHEAR WALL PLAN



MDT ENGINEERING 31403 44th AVE S AUBURN, WA. 98001 PHONE: (253) 709-9852 EMAIL: md.thompson@earthlink.net

REVISION DATES:

project: MAWER—ZHANG	SHEET IITLE: STRUCTURAL NOTES
PR X	R C
SCALE:	DATE:
NO SCALE	10-14-20
DRAWN BY:	SHEET NO.
MDT	
PROJECT NO.	S_1
MAWER-ZHANG	

1. INTERNATIONAL BUILDING CODE, 2015 EDITION, ASCE 7–10

2. INTERNATIONAL RESIDENTIAL CODE, 2015 EDITION
3. SIMPSON STRONG TIE WOOD CONSTRUCTION CONNECTORS 2019—2020

4. FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD MUST BE STAINLESS STEEL, ZMAX(G185HDG PER ASTM A653).

BATCH/POST HOT-DIP GALVANIZED (PER ASTM B695, CLASS 55 OR GREATER). UNCOATED AND PAINTED PRODUCTS SHOULD NOT BE USED WITH TREATED WOOD. WHEN USING STAINLESS STEEL HOT-DIP GALVANIZED CONNECTORS, THE CONNECTORS AND FASTENERS SHOULD BE MADE OF THE SAME MATERIAL.

DESIGN CRITERIA

STRUCTURAL NOTES

1. WIND LOAD: INTERNATIONAL BUILDING CODE, 2015, ASCE 7-10, ALTERNATE ALL-HEIGHTS METHOD, ULTIMATE DESIGN WIND SPEED = 110 MPH, NOMINAL DESIGN WIND SPEED = 85 MPH, EXPOSURE B

2. SEISMIC: INTERNATIONAL BUILDING CODE, 2015, ASCE 7-10 RISK CATEGORY II, SEISMIC IMPORTANCE CATEGORY, Ie=1.0

MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS, Ss=1.5, S1=0.5 SITE CLASS D

DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS, Sds=1.0g, Sd=0.5g SEISMIC DESIGN CATEGORY, D2

BASIC SEISMIC FORCE—RESISTING SYSTEM: LIGHT FRAME WALLS WITH WOOD SHEAR WALLS

DESIGN BASE SHEAR, V + F(Sds)(W)/R = 0.1846WRESPONSE MODIFICATION COEFFICIENT, R=6.5

ANALYSIS PROCEDURE USED: SIMPLIFIED ALTERNATIVE STRUCTURAL DESIGN FOR SIMPLE BEARING WALL SYSTEMS

3. ROOF LOAD: DL = 15 PSF LL = 25 PSF (ROOF SNOW LOAD)

4. FLOOR LOAD: DL = 10 PSF LL = 40 PSF

5. DECK LOAD: DL = 10 PSF LL = 60 PSF

6. SOILS: ASSUMED 1000 PSF ALLOWABLE SOIL BEARING
ASSUMED 35 PCF ACTIVE SOIL PRESSURE, 350 PCF PASSIVE PRESSURE, 0.35 COEFFICIENT OF FRICTION
ALL FOOTINGS AND SLABS SHALL BEAR ON UNDISTURBED SOIL OR FILL COMPACTED TO 95% MODIFIED PROCTOR.

7. CONCRETE: 3000 PSI @ 28 DAYS (2500 PSI USED FOR DESIGN)

GRADE 40 REINFORCEMENT
MINIMUM 3" COVER FOR ALL REINFORCEMENT EXCEPT AS NOTED AT RETAINING WALL OR OTHER DETAILS.

TIMBER CONSTRUCTION DETAILS

1. LUMBER GRADES AND ALLOWABLE STRESSES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON PLANS:

ALL SAWN LUMBER HF#2 OR BETTER, Fb = 875 PSI, Fv = 75 PSI, E = 1,300,000 GLULAM BEAMS 24F-V4, Fb = 2400 PSI, Fv = 165 PSI, E = 1,800,000

MICROLAM, LVL Fb = 2600 PSI, Fv = 285 PSI, E = 1,900,000 PSI

PARALLAMS, PSL Fb = 2600 PSI, Fv = 290 PSI, E = 2,900,000 2. WHEN TOP PLATE IS INTERRUPTED BY HEADER, HEADER SHALL HAVE STRAP CONNECTORS TO THE TOP PLATE EACH END. USE

2-SIMPSON MSTA24 CONNECTORS, UNLESS NOTED OTHERWISE.
3. ALL SHEAR WALL SHEATHING, NAILS AND ANCHORS SHALL BE AS DETAILED ON THE DRAWINGS AND AS NOTED IN THE SHEAR WALL

SCHEDULE.
4. FLOOR SHEATHING SHALL BE 3" MINIMUM APA RATED FLOOR SHEATHING WITH 10d COMMON @ 6"OC AT ALL SUPPORTED PANEL

EDGES AND 10d @ 12"OC AT INTERMEDIATE SUPPORTS.

5. ROOF SHEATHING SHALL BE 7" MINIMUM APA RATED ROOF SHEATHING WITH 8d COMMON @ 6"OC AT ALL SUPPORTED PANEL EDGES AND 8d @ 12"OC AT INTERMEDIATE SUPPORTS.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD. ANY VARIATIONS FROM THE DRAWINGS SHALL BE BROUGHT TO THE

ATTENTION OF THE DESIGNER OR THE ENGINEER OF RECORD.

2. ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION SHALL BE PROVIDED.

3. ANY PROPOSED FIELD CHANGES MUST HAVE THE APPROVAL OF THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

SHEAR WALL SCHEDULE							
SHEAR WALL TYPE	SHEATHING (NOTE 5)	FASTENER SPACING (COMMON OR GALVANIZED BOX NAILS)	BOTTOM PLATE NAILING OR ANCHOR BOLTS	FRAMING ANCHORS (NOTES 7 & 8)	ALLOWABLE SHEAR	NOTES	
1A	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 6" OC	16d @ 8" OC OR ½" A.B. @ 5'-6" OC	RBC @ 32" OC LTP4 @ 48" OC A35 @ 48" OC	130 PLF	1, 2, 3, 11	
1	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 6" OC	16d @ 6" OC OR ½" A.B. @ 3'-2" OC OR ½" A.B. @ 5'-0" OC	RBC @ 18" OC LTP4 @ 30" OC A35 @ 30" OC	242 PLF	1, 2, 3, 11	
2	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 4" OC	16d @ 4" OC OR ½" A.B. @ 2'-2" OC OR ½" A.B. @ 3'-4" OC	RBC @ 12" OC LTP4 @ 18" OC A35 @ 18" OC	353 PLF	1, 2, 3, 11	
3	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	8d @ 3" OC	1" X 5" LAG SCREW @ 8"OC OR 1" A.B. @ 3'-2" OC OR 8" A.B. @ 5'-0" OC	RBC @ 10" OC LTP4 @ 15" OC A35 @ 15" OC	456 PLF	1, 2, 3, 4, 9, 10, 11	
4	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	10d @ 3" OC	1 X 5" LAG SCREW @ 6"OC OR 1 A.B. @ 1'-4" OC OR 8 A.B. @ 2'-0" OC	RBC @ 8" OC LTP4 @ 12" OC A35 @ 12" OC	558 PLF	1, 2, 3, 4, 9, 10, 11	
5	7/16" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 ONE SIDE	10d @ 2" OC	1" X 5" LAG SCREW @ 5"OC OR 1" A.B. @ 1'-0" OC OR 1" A.B. @ 1'-8" OC	RBC @ 6" OC LTP4 @ 10" OC A35 @ 10" OC	716 PLF	1, 2, 3, 4, 9, 10, 11	
6	19/32" MIN. APA RATED SHEATHING OR APA RATED SIDING 303 BOTH SIDES	10d @ 2" OC	1 X 5" LAG SCREW @ 2"OC OR 1 A.B. @ 1'-0" OC	LTP4 @ 6" OC A35 @ 6" OC	1618 PLF	1, 2, 3, 4, 6, 9, 10, 1	

1. ALL FASTENERS SHALL MEET THE FOLLOWING CRITERIA: 8d COMMON = 0.131" DIAMETER X 2 ½", 8d GALVANIZED BOX = 0.113 DIAMETER X 2 ½", 10d COMMON = 0.148 DIAMETER X 3", 10d GALVANIZED BOX = 0.128" X 3", 16d COMMON = 0.162" X 3 ½".

2. PANEL EDGES SHALL BE BACKED WITH 2" NOMINAL OR WIDER FRAMING. SPACE FASTENERS @ 12" OC ON INTERMEDIATE SUPPORTS.

3. PROVIDE ALL ANCHOR BOLTS WITH 3" X 3" X 1 PLATE WASHERS. LOCATE WITHIN 1 OF SHEATHING.

4. AT GARAGE JAMBS, REFER TO LATERAL RESTRAINT PANEL DETAIL 401/S1.

5. PROVIDE 16" APA RATED SHEATHING (PLYWOOD OR OSB) OR APA RATED SIDING 303 OR INNER SEAL OSB RATED PANEL SIDING ON ALL EXTERIOR WALLS DESIGNATED AS SHEAR WALLS.

6. WHERE PANELS ARE APPLIED ON BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" OC ON EITHER SIDE, PANLE JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.

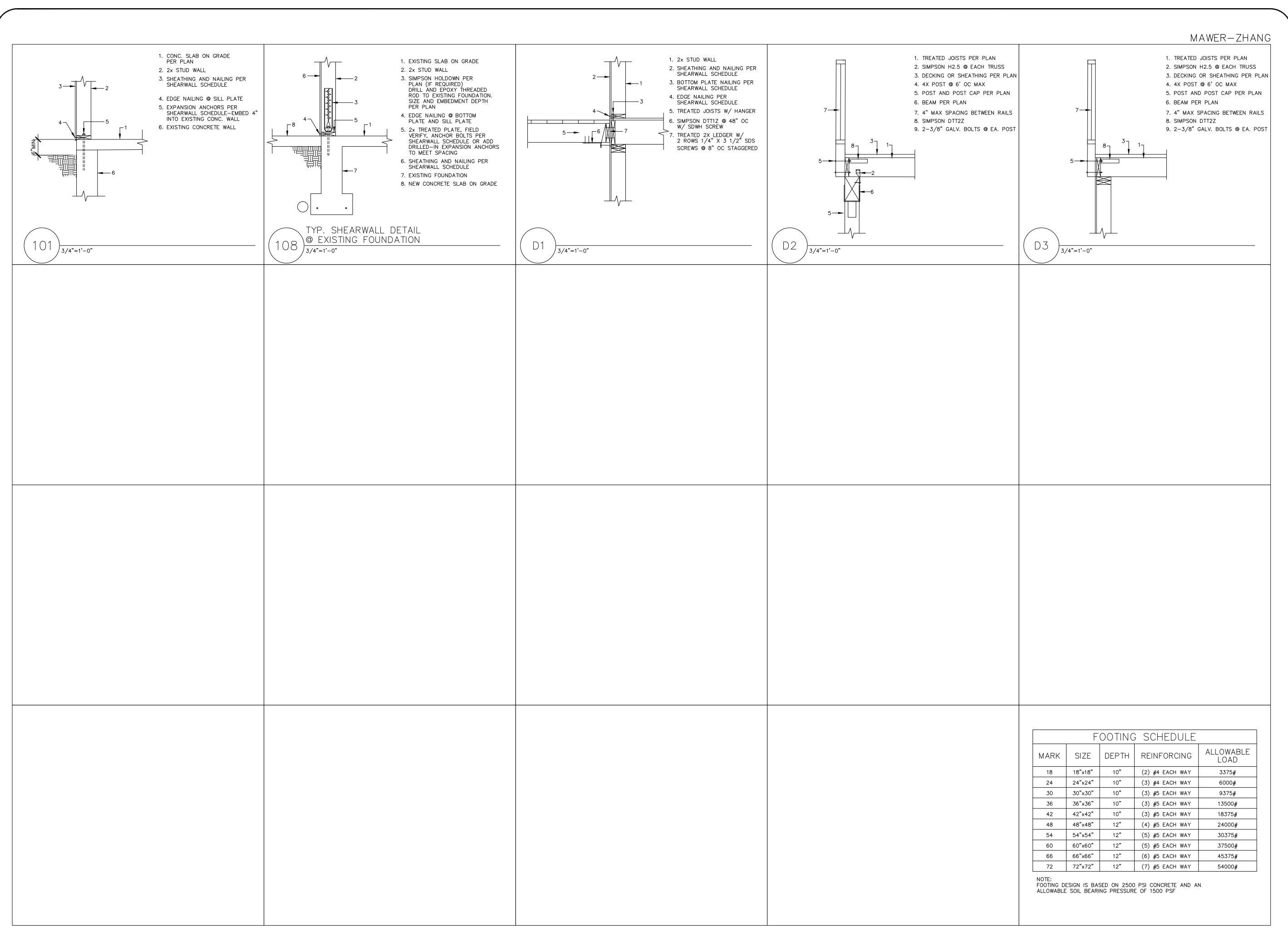
7. REFER TO TYPICAL SHEAR WALL DETAILS ON STRUCTURAL DETAIL SHEET FOR LOCATION OF FRAMING ANCHORS.

B. AT UPPER FLOOR INTERIOR SHEAR WALLS, REFER TO DETAIL 303/S2 OR 304/S2.

9. AT SHEAR WALL TYPES 3, 4, 5 AND 6, ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A SINGLE 3X MEMBER OR (2) 2X MEMBERS. FOR EXAMPLE, PROVIDE A 3X STUD AT VERTICAL JOINTS IN THE SHEATHING.
10. AT SHEAR WALL TYPES 3, 4, 5 AND 6, FOUNDATION SILL PLATES AND BOTTOM PLATES OF SHEAR WALLS SHALL NOT BE LESS THAN A SINGLE 3X MEMBER OR (2) 2X MEMBERS. ALSO, PROVIDE A 3X MINIMUM WIDTH MEMBER BELOW SHEAR WALL.

WIDTH MEMBER BELOW SHEAR WALL TO RECEIVE LAG SCREWS SUCH AS A 3X RIM JOIST, 3X JOIST OR BEAM OR BLOCKING BELOW SHEAR WALL.

11. FASTENERS AT PRESSURE PRESERVATIVE AND FIRE RETARDANT TREATED WOOD SHALL BE STAINLESS STEEL, G185 HDG, BATCH/POST HOT-DIP GALVANIZED OR MECHANICALLY GALVANIZED.





MDT ENGINEERING 31403 44th AVE S AUBURN, WA. 98001 PHONE: (253) 709-9852 EMAIL: md.thompson@earthlink.net

REVISION DATES:

DRAWN BY:

MDT

PROJECT NO.

MDT

PROJECT NO.

MDT

PROJECT NO.

MAWER-ZHANG

AMAMER-ZHANG

AMAMER-ZHANG