

VERTICAL DATUM: NAVD 88 BASED ON GPS MEASUREMENTS UTILIZING THE VIRTUAL REFERENCE NETWORK AND GEOID 2012A MODEL.

ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS OTHERWISE NOTED.

THE LOCATION AND DESCRIPTION OF ALL SURVEY MARKERS SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS TAKEN IN APRIL, 2021, UNLESS OTHERWISE INDICATED.

WORK PERFORMED IN CONJUNCTION WITH THIS SURVEY UTILIZED THE FOLLOWING EQUIPMENT AND PROCEDURES: (A) 1" TRIMBLE S7 SERIES ELECTRONIC TOTAL STATION, MAINTAINED TO THE MANUFACTURER'S SPECIFICATIONS PER W.A.C. 332-130-100. (B) FIELD TRAVERSE, EXCEEDING REQUIREMENTS SET FORTH IN W.A.C. 332-130-090. (C) LEASE SQUARE ADJUSTMENT USING StarNet VERSION 9.0 EXCEEDING REQUIREMENTS PER W.A.C. 332-130-080.

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ALL EASEMENTS.

THIS TOPOGRAPHIC SURVEY DRAWING ACCURATELY PRESENTS SURFACE FEATURES LOCATED DURING THE COURSE OF THIS SURVEY. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED SOLELY UPON INFORMATION PROVIDED BY OTHERS AND PACE ENGINEERS, INC. DOES NOT ACCEPT RESPONSIBILITY OR ASSUME LIABILITY FOR THEIR ACCURACY OR COMPLETENESS. CONTRACTOR/ENGINEERS SHALL VERIFY EXACT SIZE AND LOCATION PRIOR TO CONSTRUCTION. CALL FOR LOCATE: UTILITY LOCATION SERVICE: 811

REVISION

REFERENCES

RECORD OF SURVEY VOLUME 385 AT PAGE 281 DATED 06/06/2018 PSE GAS AND POWER PER AS BUILT RECORDS WATER PER CITY OF MERCER ISLAND GIS

WATER BLOW OFF WATER METER O IRR. CONTROL VALVE Ø MANHOLES (SS/SD) Д POWER TRANSFORMER

P C POWER/COMM. VAULT

GUY ANCHOR

W U WATER/UTILITY VAULT POWER MANHOLE COMM. MANHOLE WATER MANHOLE POWER METER

SURFACE JUNCTION BOX SUBSURFACE JUNCTION BOX POWER/UTILITY POLE -Q- POWER/UTILITY POLE W/DROP ANCHOR POLE

AREA LIGHT GAS METER GAS VALVE SIGN MAILBOX

NEWS PAPER BOX TRASH CAN COOC ROCKERY × SPOT ELEVATION SIZE & TYPE (CONIFEROUS TREE)

SIZE & TYPE (DECIDUOUS TREE) PK NAIL W/ WASHER REBAR AND CAP (SET) REBAR AND CAP (FOUND) TACK AND LEAD

HUB AND TACK

CASED MONUMENT

SURFACE MONUMENT

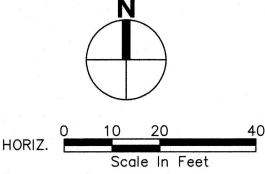
---- SIXTEENTH SECTION LINE HISTORICAL LINES --- --- EASEMENT LINES --- LOT LINES ----- DITCH LINE WATER LINE SANITARY SEWER LINE

STORM DRAIN LINE GAS LINE UNDERGROUND POWER LINES UNDERGROUND COMMUNICATION LINES OVERHEAD UTILITY LINES OHW HIGH WATER LINE

— x — x — x — x — wire fence WOOD FENCE EDGE OF VEGETATION/HEDGE LINE TOGETHER WITH SHORELANDS OF THE SECOND CLASS IN FRONT AND ABUTTING UPON SAID PORTION OF SADI GOVERNMENT LOT 1.

TOGETHER WITH AN EASEMENT FOR UNOBSTRUCTED INGRESS AND EGRESS OVER THE EXISTING PRIVATE ROADWAY EXTENDING NORTHWESTERLY TO EAST MERCER WAY APPURTENANT TO THE PROPERTY HEREBY CONVEYED.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON



PORTION OF: NE1/4, NE1/4, SECTION 30, T.24N., R5E., W.M.

TOPOGRAPHIC SURVEY FOR

SHEET 1 OF 2

11255 Kirkland Way, Suite 300 Kirkland, WA 98033 p. 425.827.2014 | f. 425.827.5043 Civil | Structural | Planning | Survey www. paceengrs.com

KONERU RES 6610 E. MERCER WAY **MERCER ISLAND, WA. 98040**

APRIL 202 1" = 20SURVEY TEAM BL/JC V21436-SRV.DW0

SCALE

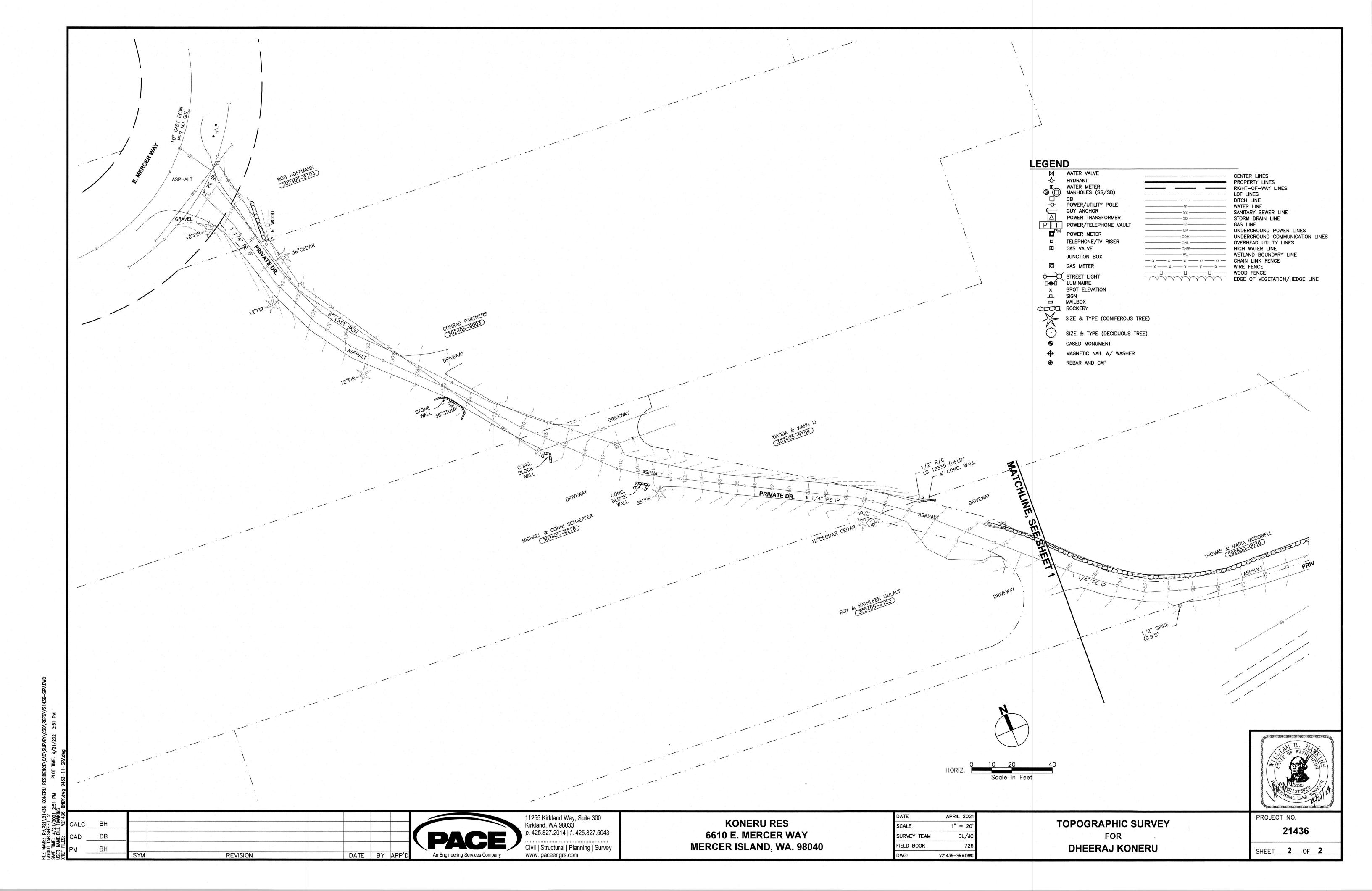
FIELD BOOK

DHEERAJ KONERU

PROJECT NO. 21436

CALC NAME DLB WRH

An Engineering Services Company





KONERU SINGLE FAMILY RESIDENCE (PERMIT NO. 2112-250)

6610 EAST MERCER WAY MERCER ISLAND, WA. 98040

PROJECT CONTACTS

OWNER/APPLICANT: DHEERAJ KONERU

7002 93RD AVENUE SE MERCER ISLAND, WA 98040

ENGINEER/SURVEY: PACE ENGINEERS, INC.

11255 KIRKLAND WAY, SUITE 300 KIRKLAND, WA 98033 JOHN ANDERSON, PE BILL HAWKINS, PLS PHONE: (425) 827-2014 JOHNA@PACEENGRS.COM BILLH@PACEENGRS.COM

ARBORIST: TREE 133, LLC

12408 17TH AVENUE NE SEATTLE, WA. 98125 CRAIG BACHMANN, CERTIFIED ARBORIST PHONE: (206) 745-0473 ARBORIST@TREE133.COM

GEOTECHNICAL: GEOTECH CONSULTANTS, INC.

2401 10TH AVENUE E. SEATTLE, WA 98102 MARC MCGINNIS, PE PHONE: (425) 747-5618

PROJECT INFORMATION

SITE DATA

LEGAL DESCRIPTION:

ADDRESS: 6610 EAST MERCER WAY

PARCEL NUMBER: 3024059153

PARCEL AREA: 50,094 SF

> THE SOUTH HALF OF THAT PORTION OF GOVERNMENT LOT 1, SECTION 30, TOWNSHIP 24 NORTH, RANGE 5 EAST, LYING BETWEEN THE NORTH 498 FEET THEREOF AND SOUTH 471 FEET THEREOF AND EASTERLY OF A LINE PARALLEL WITH AND 1588.78 FEET EASTERLY OF (MEASURED AT RIGHT

TOGETHER WITH SHORELANDS OF THE SECOND CLASS IN FRONT AND ABUTTING UPON SAID PORTION OF SADI

ANGLES TO) THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SÉCTION 30; EXCEPT THE SOUTH 9 FEET THEREOF.

GOVERNMENT LOT 1.

TOGETHER WITH AN EASEMENT FOR UNOBSTRUCTED INGRESS AND EGRESS OVER THE EXISTING PRIVATE ROADWAY EXTENDING NORTHWESTERLY TO EAST MERCER WAY APPURTENANT TO THE PROPERTY HEREBY CONVEYED.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON

ZONING SUMMARY

EXISTING ZONING:

MINIMUM LOT SIZE: 15,000 SQ. FT.

MAXIMUM HEIGHT: 30' ABOVE ABE

MAX. LOT COVERAGE: LOT 1 13,588 SQ. FT.

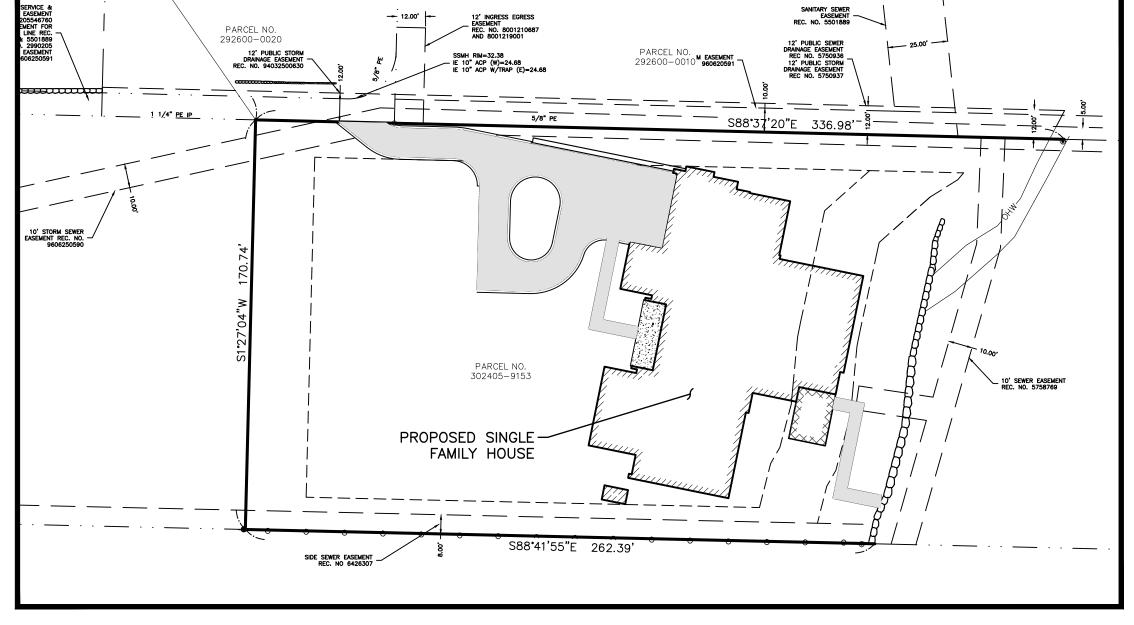
R-15

BUILDING SETBACKS

SIDE:

SUM 15' WITH 5' MIN. REAR: 25

FRONT: 20



SITE MAP



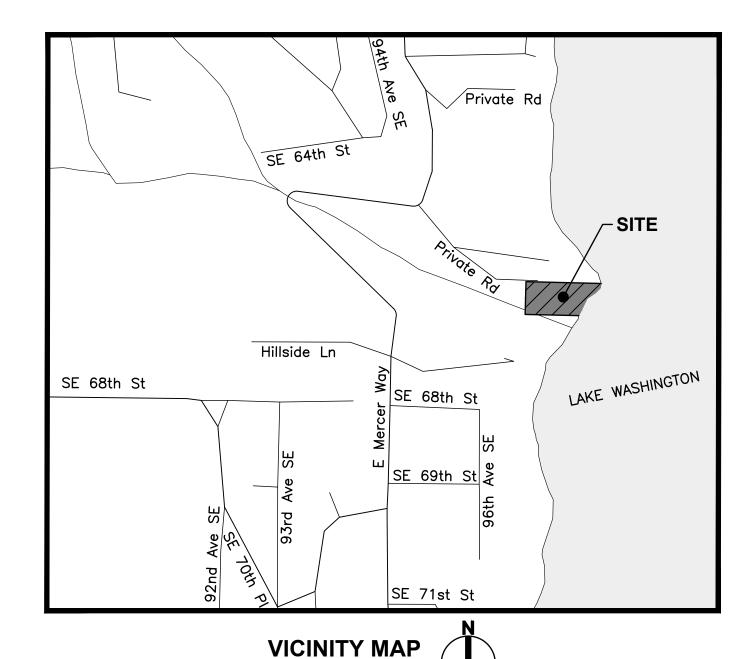
13,527 SQ. FT.

DEVELOPMENT SUMMARY

PROPOSED IMPERVIOUS AREA:

PROPOSED NUMBER LOTS: NUMBER OF DWELLING UNITS: SQ. FT. GROSS SITE AREA: 50,094 NET SITE AREA: 50,094 SQ. FT. EXISTING IMPERVIOUS AREA: 9,073 SQ. FT.

PROJECT INFORMATION



SHEET NO.	SHEET TITLE
00.0	
C0.0	COVER
C0.1	NOTES
C1.0	EXISTING CONDITIONS
C2.0	TESC PLAN
C2.1	TESC DETAILS
C3.0	STORM & GRADING PLAN
C4.0	UTILITY PLAN
C4.1	UTILITY DETAILS
L1.0	TREE RETENTION PLAN

CITY OF MERCER ISLAND FILE NUMBER

PRE-SUBMITTAL CONFERENCE NUMBER: PRE21-023

UTILITY PURVEYORS

WATER: CITY OF MERCER ISLAND CITY OF MERCER ISLAND SEWER: ELECTRICITY: PUGET SOUND ENERGY PUGET SOUND ENERGY GAS: TELEPHONE: CENTURY LINK CABLE: CENTURY LINK/XFINITY SCHOOL DISTRICT: MERCER ISLAND SCHOOL DISTRICT

EARTHWORK SUMMARY

APPROX. CUT 464 CY APPROX. FILL 1251 CY 787 CY FILL

> **CALL BEFORE** YOU DIG 811





RMIT

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWIN ADJUST SCALES ACCORDINGLY. 05/11/22 AS SHOWN DESIGNED BY: | CHECKED BY:

PACE PROJECT NO. 21436.00

---- SHEET

DRAINAGE NOTES:

- 1. PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO CITY PRIOR TO THE PRECONSTRUCTION MEETING.
- 2. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT 7-02.3(1). THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL, AND ANY REQUIRED PIPE BEDDING, TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE.
- 3. STEEL PIPE SHALL BE GALVANIZED AND HAVE ASPHALT TREATMENT #1 OR BETTER INSIDE AND OUTSIDE
- 4. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS AND MANHOLES, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT RETENTION/DETENTION FACILITY SHALL HAVE SOLID LOCKING
- 5. ALL CATCH BASIN GRATES SHALL CONFORM TO WSDOT DRAWING NUMBERS B-35.20-00 AND B-35.40-00, WHICH INCLUDES THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS".
- 6. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF 1 FOOT, AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"- 8" ROCK/40%-70% PASSING; 2"-4" ROCK/30%-40% PASSING; AND -2" ROCK/10%-20% PASSING. INSTALLATION SHALL BE IN ACCORDANCE WITH WSDOT STANDARDS

PERMANENT SEEDING NOTES

- SEEDING SHOULD BE DONE IMMEDIATELY AFTER FINAL SHAPING IF COMPLETED DURING THE PERIODS OF APRIL 1 THROUGH JUNE 30 AND SEPTEMBER 1 THROUGH OCTOBER 1 (IF PLANTED BETWEEN JULY 1 AND AUGUST 31 IRRIGATION MAY BE REQUIRED). SITES WHICH CANNOT BE SEEDED DURING THIS TIME PERIOD SHOULD BE PROTECTED UNTIL THE NEXT SEEDING PERIOD WITH MULCH.
- 2. PERMANENT VEGETATION MAY BE IN THE FORM OF GRASS SEED MIXTURES, SOD, OR WETLANDS SEED/TUBER MIXTURES. SEED ESTABLISHMENT SHALL INCLUDE THE USE OF SUPPLEMENTAL MATERIALS, SUCH AS MULCH.
- SITE PREPARATION INSTALL ALL REQUIRED SURFACE WATER CONTROL MEASURES.
- 4. SEEDBED PREPARATION MAY INCLUDE THE FOLLOWING:
- IF INFERTILE OR COARSE TEXTURED SUBSOIL WILL BE EXPOSED DURING GRADING, STOCKPILE TOPSOIL AND RE-SPREAD IT OVER THE FINISHED SLOPE AND ROLL IT TO PROVIDE A FIRM SEEDBED.
- IF CONSTRUCTION FILLS HAVE LEFT SOIL EXPOSED WITH A LOOSE, ROUGH, OR IRREGULAR SURFACE, TRACK WALK UP SLOPE.
- C. IF CUTS OR CONSTRUCTION EQUIPMENT HAVE LEFT A TIGHTLY COMPACTED SURFACE, BREAK WITH CHISEL PLOW OR OTHER SUITABLE IMPLEMENT. PERFORM ALL CULTURAL OPERATIONS ACROSS OR AT RIGHT ANGLES TO THE SLOPES (CONTOURED). THE SEEDBED SHOULD BE FIRM WITH A FAIRLY FINE SURFACE AFTER ROUGHENING.
- 5. FERTILIZATION IN GENERAL, 10-20-20 N-P-K FERTILIZER AT A RATE OF 90 LBS./ACRE. DEVELOPMENTS ADJACENT TO WATER BODIES AND WETLANDS MUST USE SLOW RELEASE LOW-PHOSPHORUS FERTILIZER (TYPICAL 3-1-2 N-P-K).
- 6. "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED, AS LONG AS TACKIFIER IS INCLUDED.
- 7. SEEDING APPLY APPROPRIATE MIXTURE TO THE PREPARED SEEDBED AT A RATE OF 120 LBS./ACRE, COVER THE SEED WITH TOPSOIL OR MULCH NO DEEPER THAN 1/2 INCH.
- 8. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RE-SEEDINGS IMMEDIATELY.
- A. IF VEGETATIVE COVER IS INADEQUATE TO PREVENT RILL EROSION, OVERSEED AND FERTILIZE IN ACCORDANCE WITH SOIL TEST.
- B. IF A STAND HAS LESS THAN 40% COVER, REEVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER. RE-ESTABLISH THE STAND FOLLOWING SEEDBED PREPARATION AND SEEDING RECOMMENDATIONS, OMITTING LIME AND FERTILIZER IN THE ABSENCE OF SOIL TEST RESULTS.

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MERCER ISLAND STANDARDS, AND THE CITY CONDITIONS OF APPROVAL. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL CIVIL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE ABOVE REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO KING COUNTY.
- 2. BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CITY INSPECTION UNIT, THE APPLICANT, AND THE APPLICANT'S CONSTRUCTION REPRESENTATIVE.
- 3. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. CONSTRUCTION NOISE SHALL BE LIMITED AS PER CODE; NORMALLY, THIS IS 7 A.M. TO 10 P.M. WEEKDAYS AND 9 A.M. TO 10 P.M. ON WEEKENDS
- 4. IT SHALL BE THE APPLICANT'S/CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS NECESSARY BEFORE INITIATING OFF-SITE WORK WITHIN THE ROAD RIGHTS-OF-WAY. DATUM SHALL BE KCAS UNLESS OTHERWISE APPROVED BY THE CITY. GROUNDWATER SYSTEM CONSTRUCTION SHALL BE WITHIN A RIGHT-OF-WAY OR APPROPRIATE DRAINAGE EASEMENT, BUT NOT UNDERNEATH THE ROADWAY SECTION. ALL GROUNDWATER SYSTEMS MUST BE CONSTRUCTED IN ACCORDANCE WITH SECTION B1 3.02 OF THE APWA STANDARD SPECIFICATIONS.
- 5. ALL UTILITY TRENCHES SHALL BE BACK FILLED AND COMPACTED TO 95 PERCENT DENSITY.
- 6. OPEN CUTTING OF EXISTING ROADWAYS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY AND NOTED ON THESE APPROVED
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07.23 - TRAFFIC CONTROL, SHALL APPLY.

EMBANKMENT NOTES

- 1. EMBANKMENTS SHALL BE CONSTRUCTED IN ALL ASPECTS TO THE PROVISIONS OF SECTION 2.03 OF THE WSDOT / APWA STANDARD SPECIFICATIONS.
- 2. COMPACTION OF THE TOP TWO FEET OF FILL SUBGRADE AND TOP SIX INCHES OF CUT SUBGRADE SHALL MEET A MINIMUM 95% MAXIMUM DENSITY IN ACCORDANCE WITH WSDOT / APWA STANDARD SPECIFICATION SECTION 2-03.3(14)C - METHOD B. SUBGRADE FILL BELOW THE TOP TWO FEET SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY.
- 3. IN CASES WHERE TESTS DO NOT MEET THE MINIMUM STANDARD, CORRECTIVE ACTION SHALL BE TAKEN SUCH AS ADDING WATER. AERATING, REPLACING MATERIAL, OR APPLYING MORE COMPACTIVE EFFORT AS DIRECTED BY THE DEVELOPERS GEOTECHNICAL ENGINEER. RETESTS SHALL SHOW PASSING DENSITIES PRIOR TO PLACING THE NEXT LIFT OF SUBGRADE FILL.
- 4. IMMEDIATELY UPON COMPLETING EMBANKMENT CONSTRUCTION, THE SIDESLOPES SHALL BE SEEDED WITH A KING COUNTY APPROVED EROSION CONTROL SEED MIX AND JUTE MATTING PLACED AND ANCHORED PER MANUFACTURER. NO FERTILIZER SHALL BE USED. 5. SIDESLOPES SHALL NOT EXCEED 2:1 WITHOUT RECEIVING PRIOR APPROVAL FROM THE DEVELOPER'S GEOTECHNICAL ENGINEER.

GRADING NOTES:

- 1. ALL CUT MATERIAL GENERATED DURING THE PROJECT THAT IS NOT ACCEPTABLE FOR USE AS COMPACTED FILL MATERIAL AT ANOTHER LOCATION ON-SITE MUST BE HAULED TO AN APPROVED LOCATION
- 2. ALL TEMPORARY OR PERMANENT SLOPES SHALL NOT EXCEED 2H:1V UNLESS APPROVED BY A GEOTECHNICAL ENGINEER.
- 3. FILL MATERIAL PLACED UNDER BUILDING FOUNDATIONS OR PAVEMENT SHALL BE CRUSHED BASE ROCK OR COMPACTED STRUCTURAL FILL IN ACCORDANCE TO WSDOT STANDARD SPECIFICATIONS.
- 4. ROCKERY AND/OR RETAINING WALLS GREATER THAN FOUR (4) FEET IN HEIGHT REQUIRES A BUILDING PERMIT FROM THE CITY OF MERCER ISLAND.
- IT WILL BE THE PERMITEE'S RESPONSIBILITY TO SUCCESSFULLY CAP AND ABANDON ALL EXISTING UTILITIES WITHIN THE DEVELOPMENT IN ACCORDANCE TO THE GOVERNING UTILITY AGENCY.
- 7. ALL STRUCTURAL FILL AND BACKFILL AREAS MUST BE INSPECTED AND APPROVED AFTER STRIPPING AND PRIOR TO PLACING FILL. BY THE PROJECT GEOTECHNICAL ENGINEER OR DESIGNATED REPRESENTATIVE. PROPER FILL PLACEMENT AND COMPACTION SHALL BE VERIFIED WITH FIELD AND LABORATORY DENSITY TESTING BY THE GEOTECHNICAL ENGINEER OR A QUALIFIED TESTING LABORATORY. WRITTEN CERTIFICATION OF ALL APPROVALS SHALL BE GIVEN TO THE KING COUNTY SITE INSPECTOR.

ADDITIONAL NOTES

- 1. THIS PLAN MAY NOT SHOW THE LOCATION OF ALL EXISTING UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIOR TO EXCAVATION.
- 2. THE CONTRACTOR SHALL EXPOSE ALL EXISTING PIPING THAT WILL BE CONNECTED TO WITH NEW PIPING, DEPTH, LOCATION, AND CONDITION SHALL BE RELAYED TO THE ENGINEER IF CONDITIONS VARY SIGNIFICANTLY FROM WHAT IS DETAILED OR ANTICIPATED.

STRUCTURAL NOTES

ROCKERIES ARE CONSIDERED TO BE A METHOD OF BANK STABILIZATION AND EROSION CONTROL. ROCKERIES SHALL NOT BE CONSTRUCTED TO SERVE AS RETAINING WALLS. ALL ROCKERIES SHALL BE DESIGNED. SEE DETAIL INCLUDED IN PLAN SET.

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. ANY AREA NEEDING ESC MEASURES, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
- 9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.
- 10. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A 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.
- 11. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- 12. ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
- 13. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF TWO TO THREE
- 14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DDES INSPECTOR. THE DDES INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

SEEDING NOTES

TEMPORARY SEED MIX	WEIGHT	PURITY	GERMINATION
CHEWINGS OR RED FESCUE	40%	98%	90%
FESTUCA RUBRA VAR. COMMUTATA OR FESTUCA RUBRA			
ANNUAL OR PERENNIAL RYE	40%	98%	90%
LOLIUM MULTIFLORUM OR LOLIUM PERENN			
RED TOP OR COLONIAL BENTGRASS	10%	92%	85%
AGROSTIS ALBA OR AGROSTIS TENUIS			
WHITE DUTCH CLOVER	10%	92%	85%
TRIFOLIUM REPENS			

LANDSCAPE SEED MIX	WEIGHT	PURITY	GERMINATION
CHEWINGS OR RED FESCUE	40%	98%	90%
FESTUCA RUBRA VAR. COMMUTATA OR FESTUCA RUBRA			
PERENNIAL RYE BLEND	40%	98%	90%
LOLIUM PERENNE			

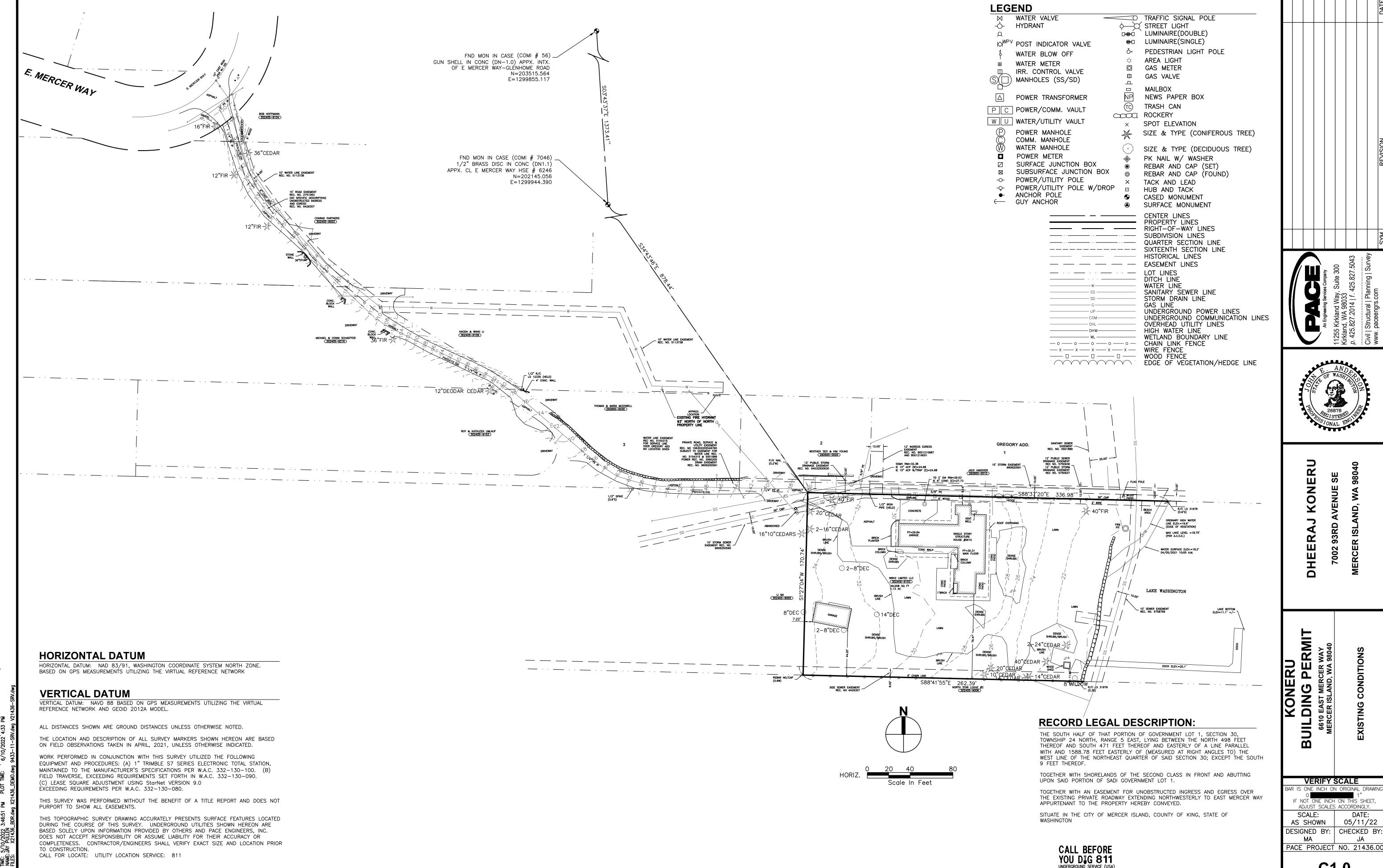


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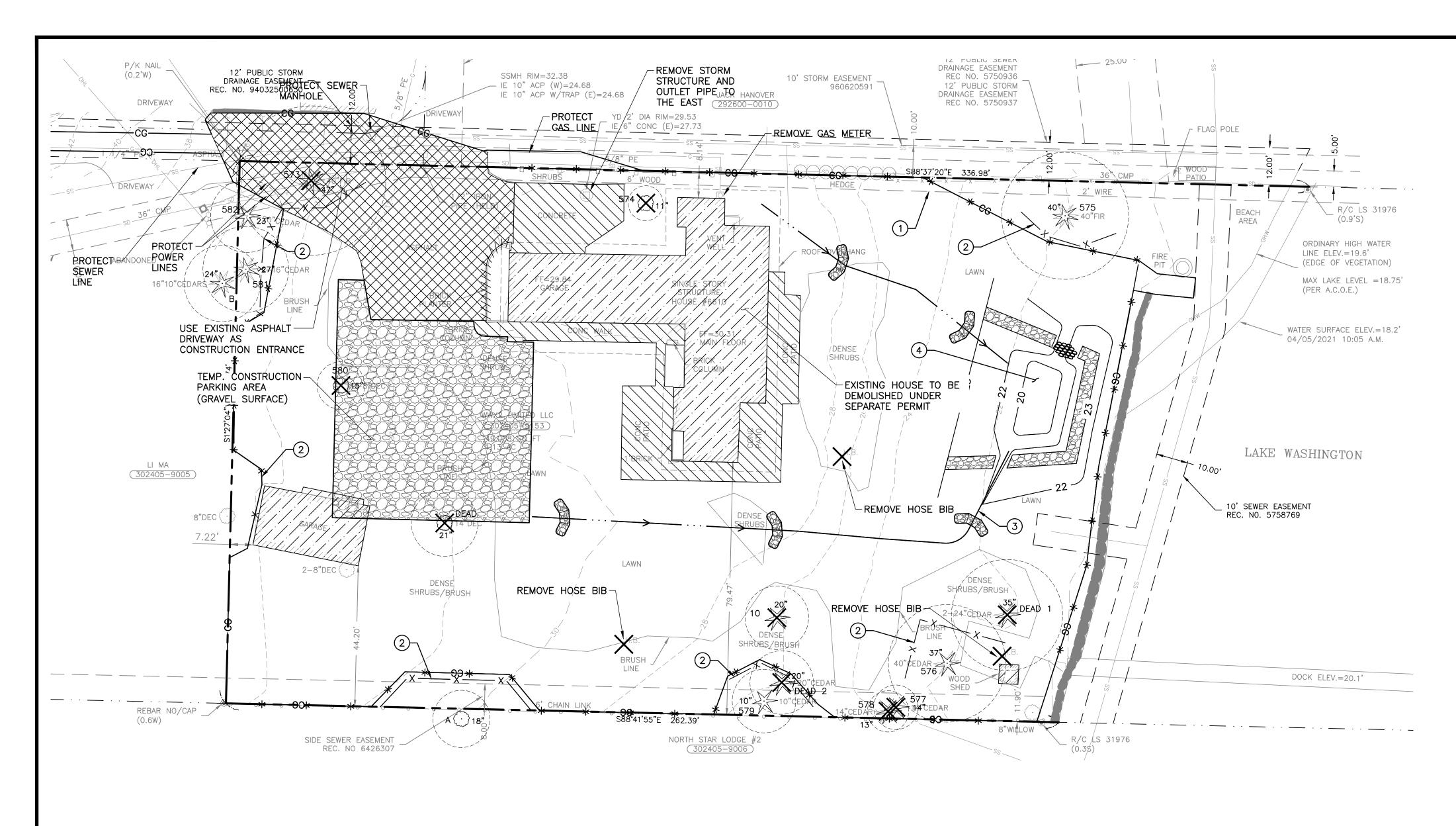
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> VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWI ADJUST SCALES ACCORDINGLY. 05/11/22 AS SHOWN DESIGNED BY: | CHECKED BY: PACE PROJECT NO. 21436.00

CALL BEFORE YOU DIG 811



---- SHEET **C1.0**



LEGEND:

INLET PROTECTION SILT FENCE CLEARING AND GRADING LIMITS TREE PROTECTION FENCE PER CITY OF MERCER ISLAND DETAIL ON SEE SHEET C2.1 INTERCEPTOR SWALE -/-/-/-/-/-/-/-/-/-/-/-/-/-DEMOLISH FEATURE STRUCTURE TO BE DEMOLISHED PAVEMENT TO BE REMOVED CONCRETE TO BE REMOVED OBJECT TO BE REMOVED ROCK CHECK DAM PER DOE DETAIL ON SHEET C2.1

TEMPORARY SEDIMENT TRAP

GENERAL NOTES:

- 1. PRIOR TO ORDERING MATERIALS AND CONSTRUCTION, THE CONTRACTOR SHALL REVIEW THE PROJECT PLANS AND SITE CONDITIONS AND IDENTIFY IF ANY CONFLICTS EXIST. THE CONTRACTOR SHALL CALL "ONE-CALL" AND IDENTIFY AND ABOVE OR BELOW GRADE FEATURES ARE IN CONFLICT WITH THE PLANS. IF CONFLICTS EXIST CONTACT PACE ENGINEERS (425) 827-2014 WITH THE HORIZONTAL AND VERTICAL LOCATION OF THE CONFLICTS.
- 2. ALL WORK SHALL BE PERFORMED PER THE MOST CURRENT VERSION OF THE CITY OF MERCER ISLAND STANDARDS AND SPECIFICATIONS AS
- PROVIDED IN THIS PLAN SET. 3. SITE INPSECTIONS SHALL BE CONDUCTED BY A CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL) WHO SHALL BE PRESENT ON-SITE OR ON-CALL AT ALL TIMES.

PROJECT	CESCL:		
	-		

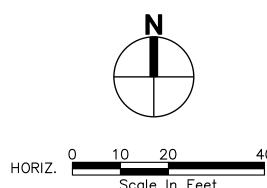
PHONE: _____

EROSION CONTROL NOTES:

- 1) INSTALL SILT FENCE AT CLEARING LIMITS PER DETAIL X.XX ON SHEET C2.1.
- (2) INSTALL TREE PROTECTION FENCING PER DETAIL ON SHEET C2.1.
- 3 INSTALL INTERCEPTOR SWALE WITH CHECK DAMS PER DETAIL ON SHEET
- 4 SEDIMENT TRAP PER DETAIL ON SHEET 2.1. TOP OF BERM ELEVATION = 23.0 BOTTOM OF POND ELEVATION = 20.0 MINIMUM SURFACE AREA REQUIRED = 730 SF

CONSTRUCTION SEQUENCE

- INSTALL FILTER FABRIC FENCES WHERE SHOWN ON THE PLAN. INSTALL PROTECTION FENCING AROUND TREES WHERE SHOWN ON THE
- 3. COORDINATE AND ATTEND PRE-CONSTRUCTION MEETING WITH CITY INSPECTOR.
- INSTALL ROCK FOR CONSTRUCTION ACCESS.
- DEMOLISH EXISTING HOUSE, GARAGE AND SHED WITHIN THE PROPERTY.
- ROUGH GRADE SITE TO ESTABLISH BUILDING PAD AND DRIVEWAY. 7. INSTALL SEWER, STORM, WATER SERVICE LINES. FROM MAIN TO
- BUILDING SITE 8. INSTALL BUILDING FOUNDATION.
- 9. FINISH GRADE LOT AND INSTALL LANDSCAPE PLANTING. 10. INSTALL FINAL PAVEMENT LIFT FOR DRIVEWAY.
- 11. REMOVE TESC MEASURES UPON APPROVAL OF CITY OF MERCER ISLAND INSPECTOR.



CALL BEFORE HORIZ Scale In Feet YOU DIG 811

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RMIT WAY 98040

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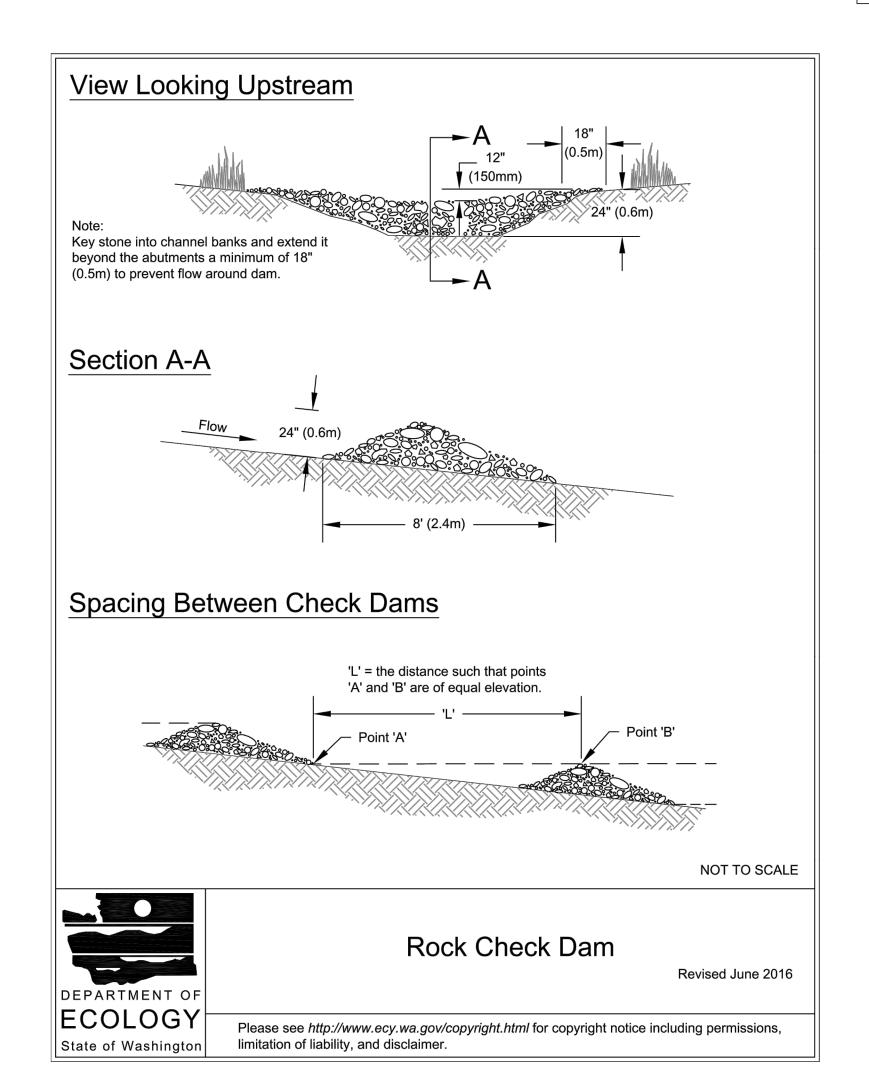
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWIN

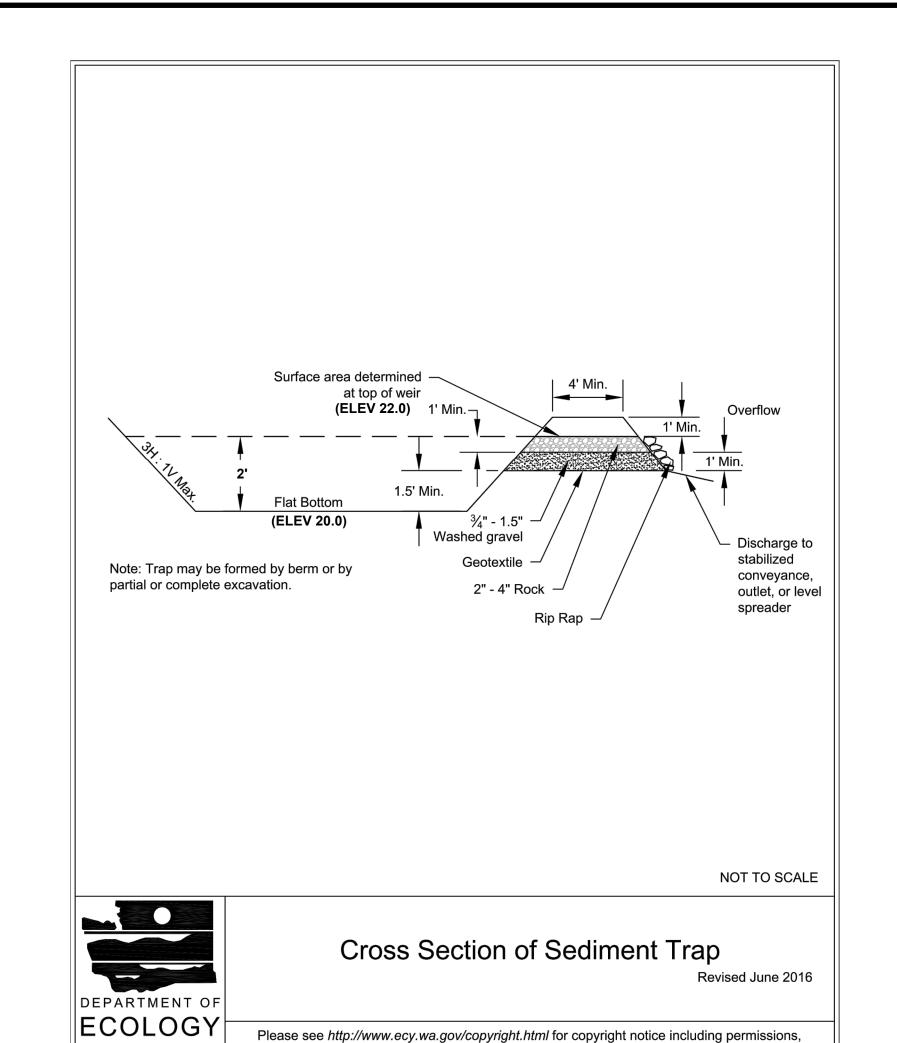
ADJUST SCALES ACCORDINGLY.

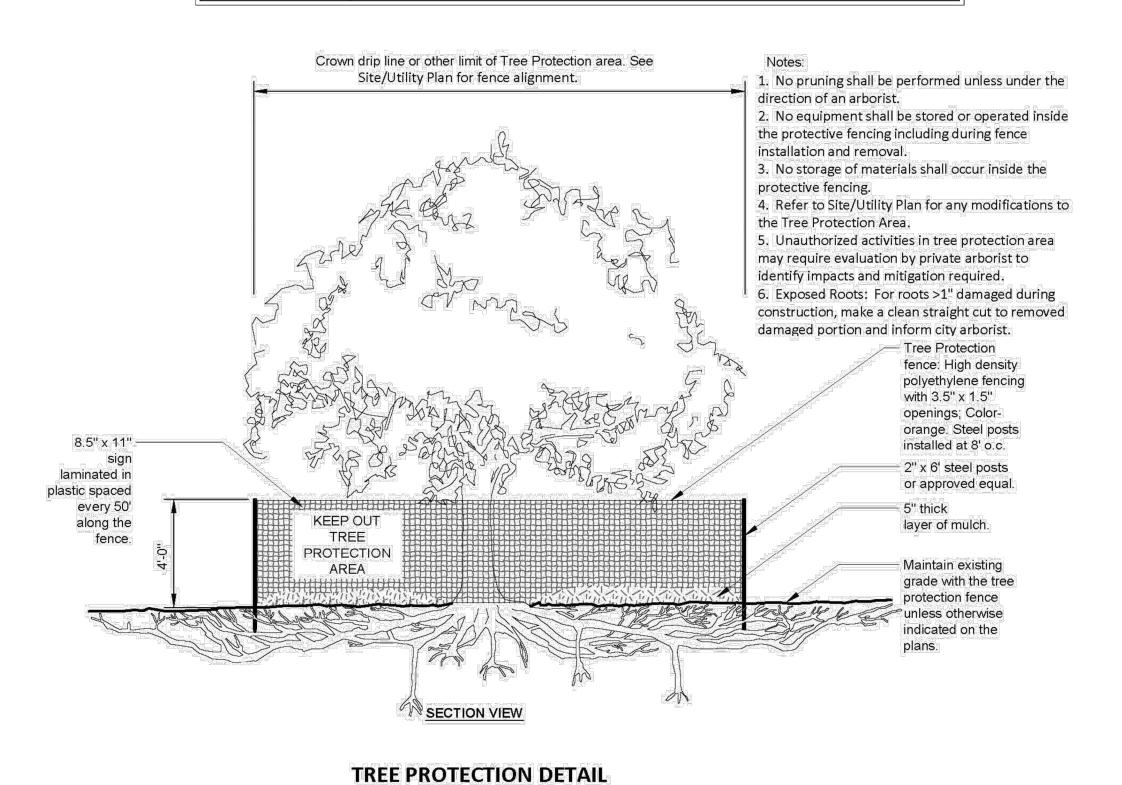
DESIGNED BY: | CHECKED BY:

PACE PROJECT NO. 21436.00

DATE: 05/11/22







limitation of liability, and disclaimer.

State of Washington

CALL BEFORE YOU DJG 811 UNDERGROUND SERVICE (USA)

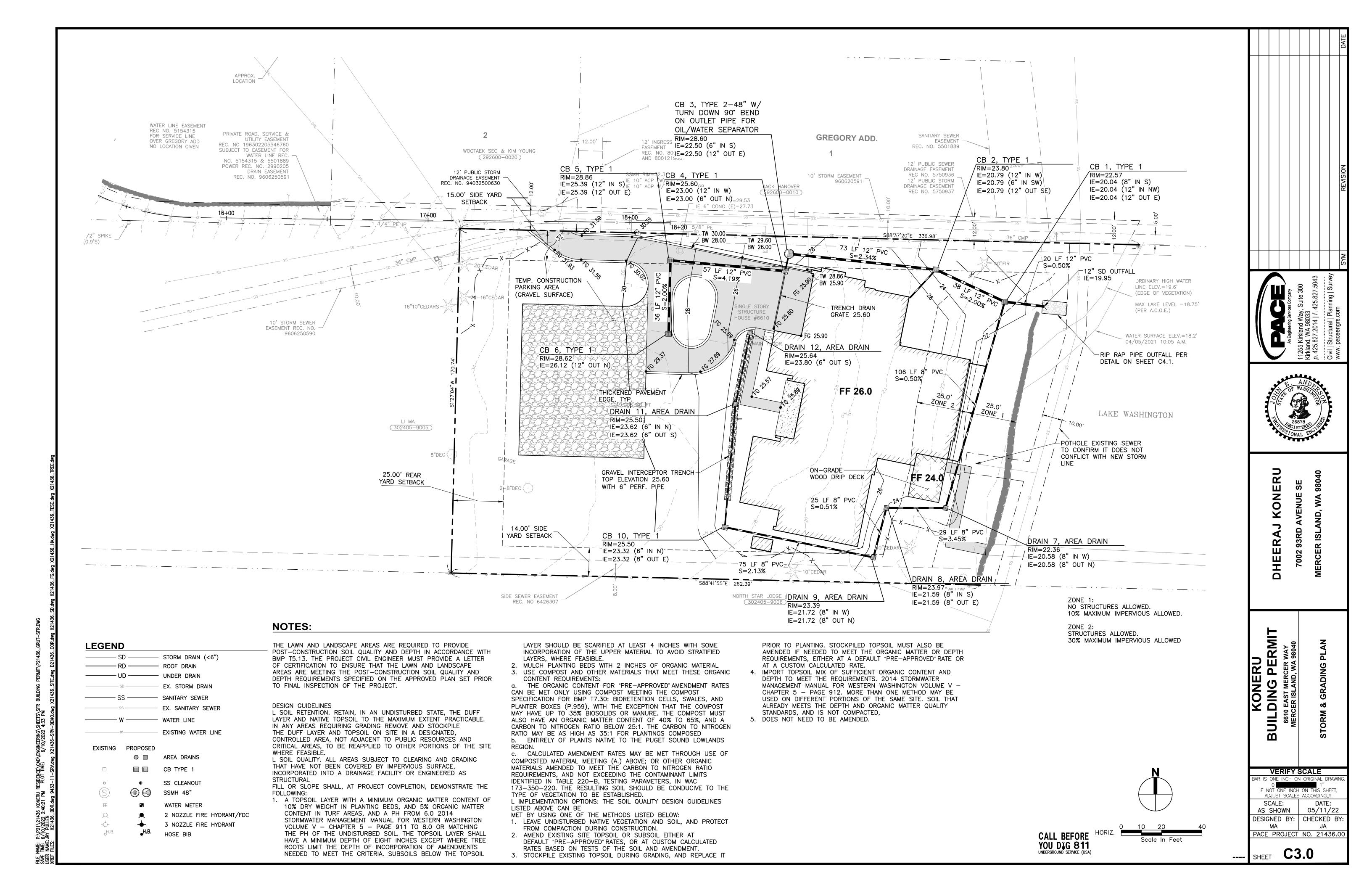
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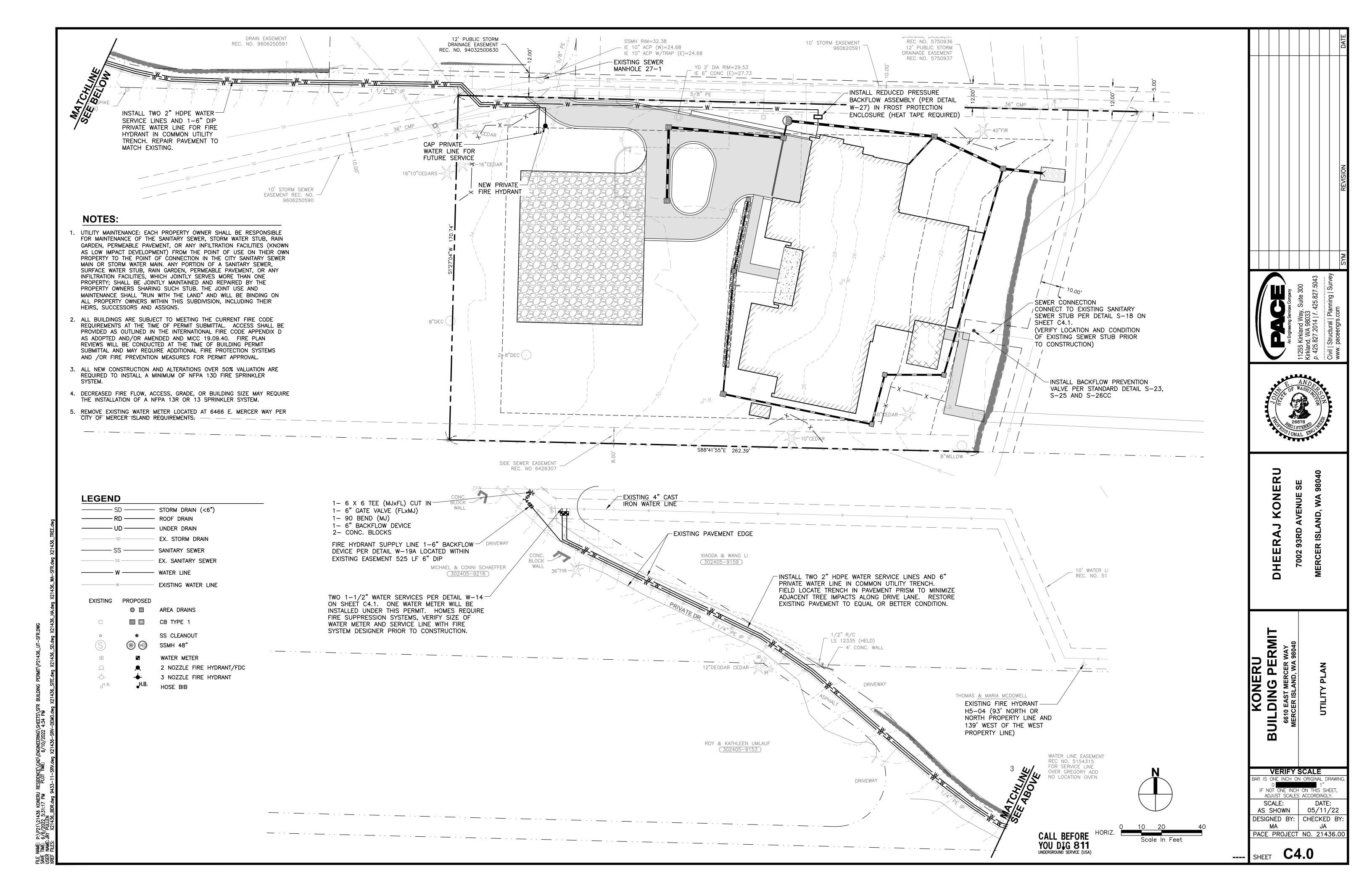
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAV IF NOT ONE INCH ON THIS SHEET ADJUST SCALES ACCORDINGLY. 05/11/22 AS SHOWN

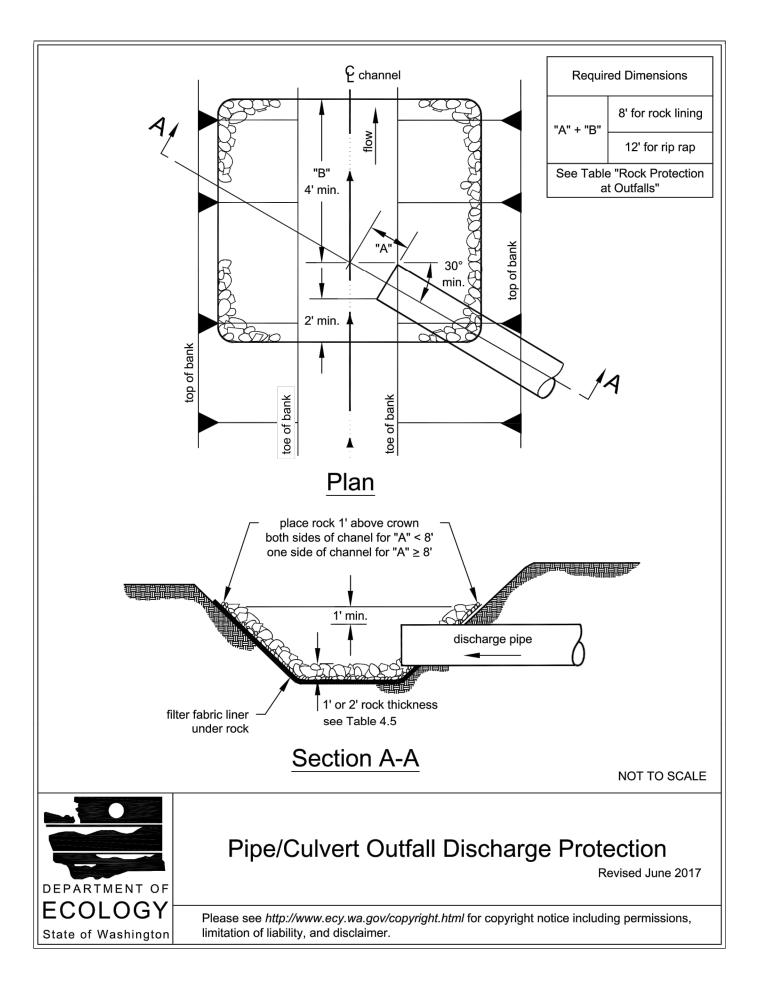
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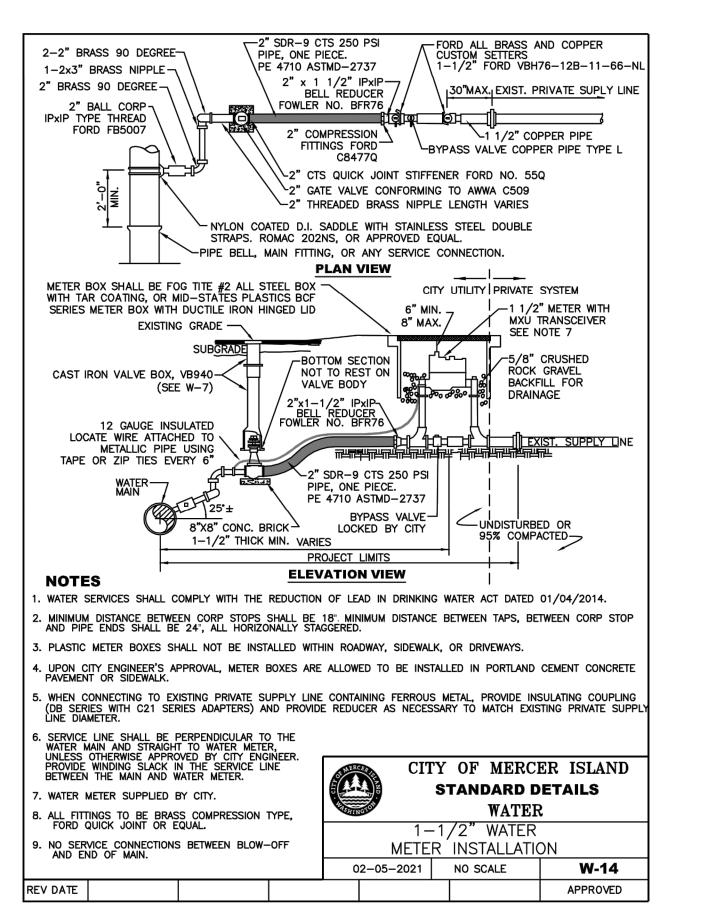
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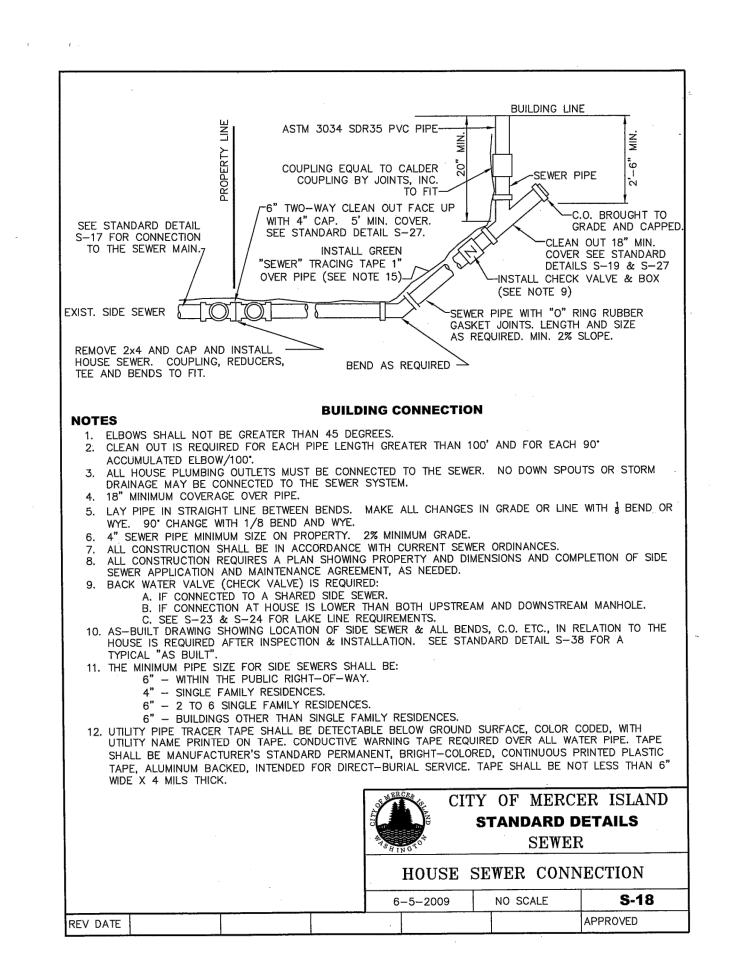
---- SHEET

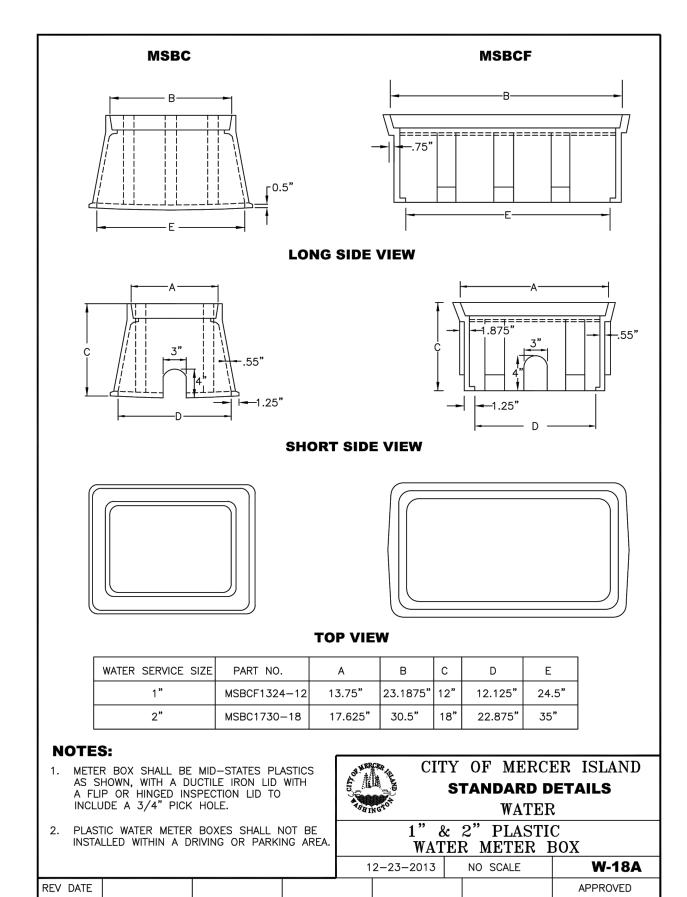


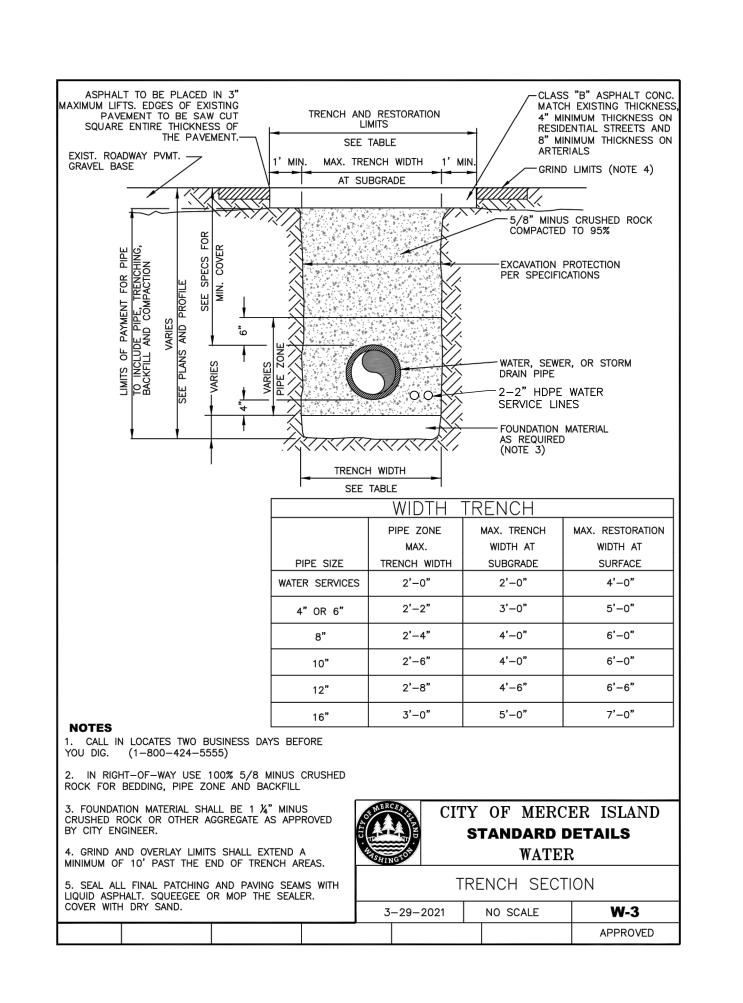


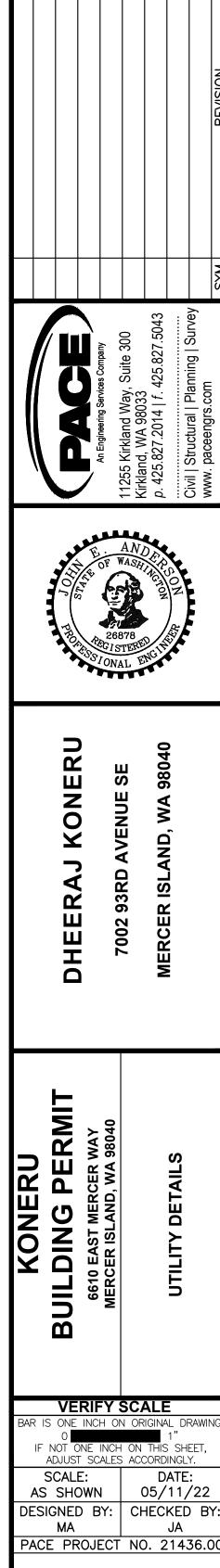






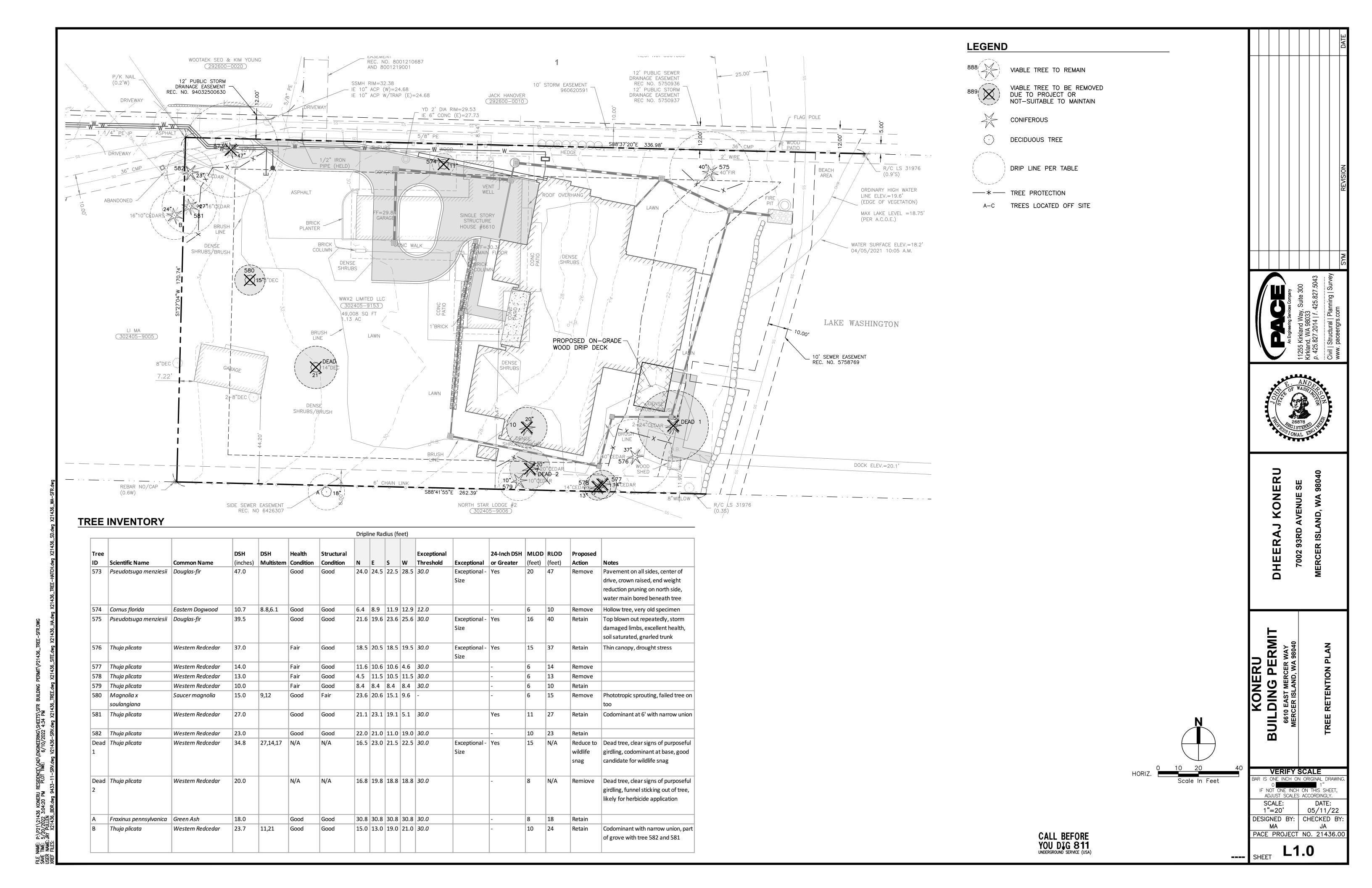






CALL BEFORE YOU DIG 811

SHEET



KONERU 6610 E Mercer V Mercer Island, V

QTY. REMARKS

SPACING @ 18" OC

SPACING @ 18" OC

4'-5'

1 GAL.

1 GAL.

1 GAL.

4" POT

1 GAL.

4" POT

4" POT

1 GAL.

4" POT

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT

DARWIN D. WEBB CERTIFICATE NO. 564

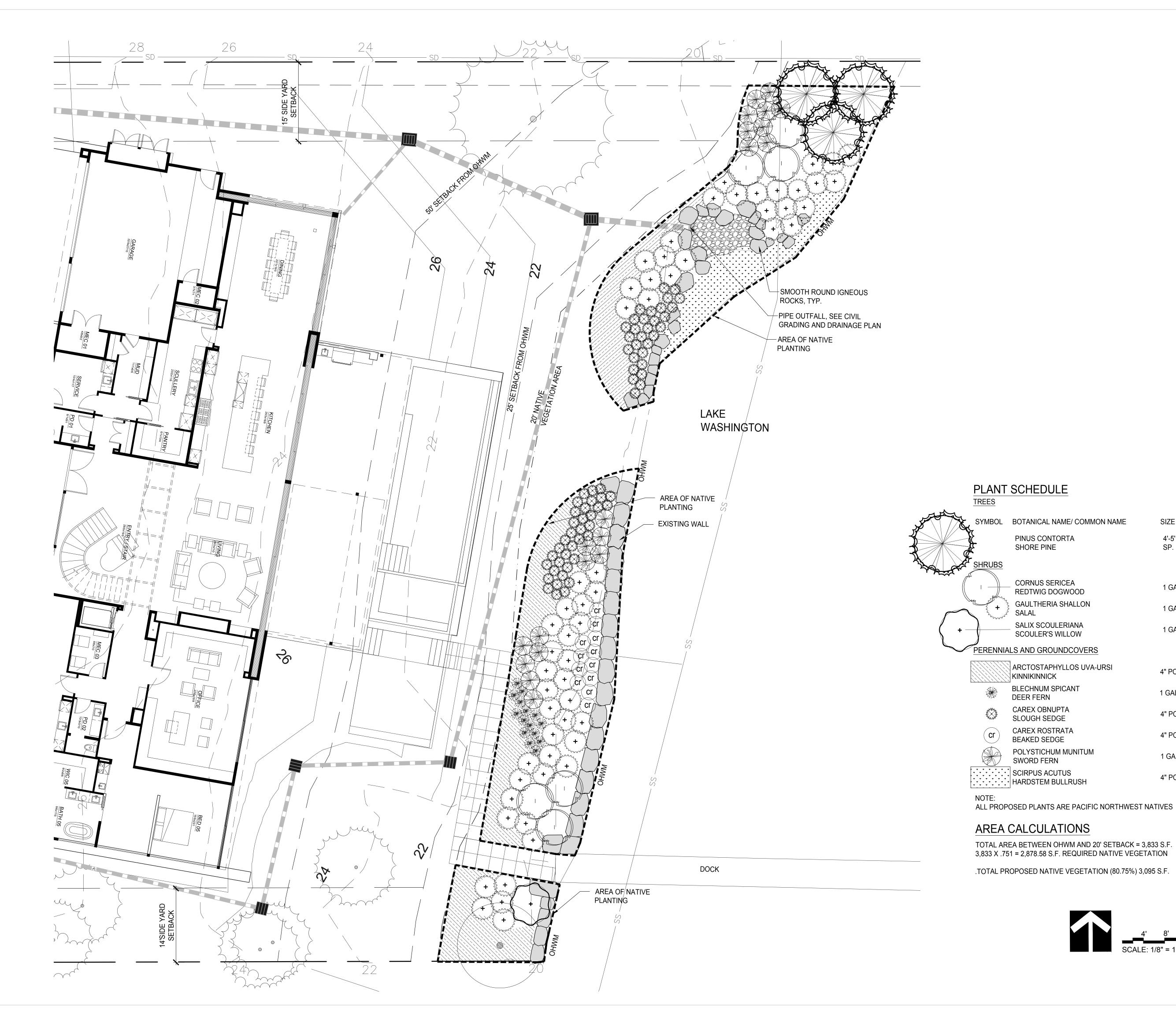
ISSUES: NO.: DATE: DESCRIPTION: 1 12.17.21 REVIEW 2 05.25.22 REVISIONS 3 06.09.22 REVISIONS

PROJECT #: 21.14

DRAWN: RB CHECKED: DW

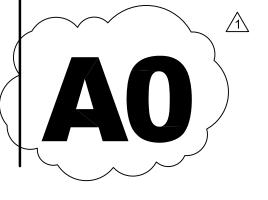
> SHORELINE PLANTING PLAN

> > L3.0



KONERU [residence]

PERMIT SET



ALL WORK SHALL CONFORM TO APPLICABLE CODES. INCLUDING BUT NOT LIMITED TO THE 2018 INTERNATIONAL BUILDING CODE INTERNATIONAL RESIDENTIAL CODE, THE CURRENT WASHINGTON STATE ENERGY CODE, THE WASHINGTON STATE BUILDING CODE, CHAPTER 51-20 AND 51-21 WAC, THE AMERICANS WITH DISABILITIES ACT, AND ALL RULES, REGULATIONS AND ORDINANCES OF THE

 $oldsymbol{\mathsf{s}}$. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, AND SITE CONDITIONS, AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF ANY DISCREPANCIES, ERRORS, OR OMISSIONS PRIOR TO PROCEEDING WITH THE WORK.\ 4. DO NOT SCALE THE DRAWINGS FOR CRITICAL DIMENSIONS. DIMENSIONS ARE SHOWN TO FACE OF STUDS, POSTS AND CONCRETE 5. THE PROJECT SHALL BE SCHEDULED AND INSTALLATION OF ELEMENTS COORDINATED AS NECESSARY BY THE CONTRACTOR TO

PERMIT WORK BETWEEN DIFFERENT TRADES TO PROCEED WITHOUT UPSETTING PROPER CONSTRUCTION SEQUENCES OR DELAYING CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS DURING CONSTRUCTION. '. THE CONTRACTOR SHALL VERIFY ALL DOOR AND WINDOW ROUGH-OPENING DIMENSIONS WITH THE DOOR AND WINDOW

8. PLUMBING, ELECTRICAL AND MECHANICAL CONTRACTORS SHALL VERIFY ALL REQUIREMENTS FOR THIS PROJECT AND COMPLY WITH ALL LOCAL CODES. SUBMIT PLANS FOR APPROVAL AND OBTAIN PERMIT BEFORE STARTING WORK. 9. SHOWN ONLY ONCE. TYPICAL DETAILS ARE NOT REFERENCED AT ALL LOCATIONS; THE INTENT IS THAT THEY APPLY THROUGHOUT THE PROJECT UNLESS OTHERWISE NOTED. 0. ALL REQUIRED SHOP DRAWINGS AND SUBMITTALS SHALL BE REVIEWED BY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK. 11. ALL DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO $oldsymbol{dash}$ SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE

DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENT HAVE BEEN APPROVED BY THE 12. ALL SHOP DRAWING DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR. 13. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED BY HIMSELF OR OTHER TRADES. 14. INSPECTIONS ARE TO BE PER IRC SECTION R109.

15. ADDRESS MUST BE POSTED AND VISIBLE AT CONSTRUCTION SITE PER IRC SEC R319: BUILDINGS SHALL HAVE APPROVED ADDRESS

NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE

IRC M1505 (WA AMENDMENTS)

ENGINEERED DESIGN IN ACCORDANCE WITH THE IBC IS PERMITTED.

FROM THE STREET OR ROAD FRONTING THE PROPERTY.

IRC M1505.4: WHOLE-HOUSE VENTILATION SYSTEM

WAC 51.51.1505 M1505.4: WHOLE HOUSE MECHANICAL VENTILATION SYSTEM. EACH DWELLING UNIT SHALL BE EQUIPPED WITH A VENTILATION SYSTEM. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS

IRC M1505.4.1: SYSTEM DESIGN. THE WHOLE HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY FANS, ONE OR MORE EXHAUST FANS. OR AN ERV/HRV WITH INTEGRAL FANS. ASSOCIATED DUCTS AND CONTROLS. WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM WITH SUPPLY AND EXHAUST FANS PER SECTIONS M1505.4.1.2, M1505.4.1.3, M1505.4.1.4 AND M1505.4.1.5. LOCAL EXHAUST FANS ARE PERMITTED TO SERVE AS PART OF THE WHOLE HOUSE VENTILATION SYSTEM WHEN PROVIDED WITH THE PROPER CONTROLS PER SECTION M1505.4.2. THE SYSTEMS SHALL BE DESIGNED AND INSTALLED TO EXHAUST AND/OR SUPPLY THE MINIMUM OUTDOOR AIRFLOW RATES PER SECTION M1505.4.3 AS MODIFIED BY WHOLE HOUSE VENTILATION SYSTEM COEFFICIENTS IN SECTION M1505.4.3.1 WHERE APPLICABLE. THE WHOLE HOUSE VENTILATION SYSTEM SHALL OPERATE CONTINUOUSLY AT THE MINIMUM VENTILATION RATE DETERMINED PER SECTION M1505.4.2 UNLESS CONFIGURED WITH INTERMITTENT OFF CONTROLS PER SECTION M1505.4.3.2. WAC 51-51-1505 AMENDMENT M1505.4.1.1: WHOLE HOUSE SYSTEM COMPONENT REQUIREMENTS. WHOLE HOUSE VENTILATION SUPPLY AND EXHAUST FANS SPECIFIED IN THIS SECTION SHALL HAVE A MINIMUM EFFICACY AS PRESCRIBED IN THE WAS STATE ENERGY CODE. DESIGN AND INSTALLATION OF THE SYSTEM OR EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. WHOLE HOUSE VENTILATION FANS SHALL BE RATED FOR SOUND AT NO LESS THAN THE MINIMUM AIRFLOW RATE REQUIRED BY SECTION M1505.4.31, VENTILATION FANS SHALL BE RATED FOR SOUND AT A MAXIMUM OF 1.0 SONE, THIS SOUND RATING SHALL BE AT A MINIMUM OF 0.1 IN w.c. (25 Pa) STATIC PRESSURE IN ACCORDANCE WITH HVI PROCEDURES SPECIFIED IN SECTIONS

EXCEPTION: HVAC AIR HANDLERS, ERV/HRV UNITS, AND REMOTE MOUNTED FANS NEED NOT MEET THE JND REQUIREMENTS. TO BE CONSIDERED FOR THIS EXCEPTION, A REMOTE MOUNTED FAN MUST BE MOUNTED OUTSIDE THE HABITABLE SPACES, BATHROOMS, TOILETS, AND HALLWAYS, AND THERE

MUST BE AT LEAST 4 FT. OF DUCTWORK BETWEEN THE FAN AND THE INTAKE GRILLE THE WHOLE HOUSE SUPPLY FAN SHALL PROVIDE DUCTED OUTDOOR VENTILATION AIR TO EACH HABITABLE SPACE WITHIN THE RESIDENTIAL UNIT. EXCEPTION: INTERIOR JOINING SPACES PROVIDED WITH A 30 CFM WHOLE HOUSE TRANSFER RAN OR A PERMANENT OPENING WITH

AN AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF THE INTERIOR ADJOINING SPACE BUT NOT LESS THAN 25 SQUARE OUTDOOR VENTILATION AIR TO BE SUPPLIED DIRECTLY TO THE SPACE. WHOLE HOUSE TRANSFER FANS SHALL MEET THE SONE RATING OF SECTION M1505.4.1.1 AND SHALL HAVE WHOLE HOSE VENTILATION CONTROLS THAT COMPLY WITH SECTION M1505.4.2

<u>WAC 51-51-1505 M1505.4.1.2:</u> <u>EXHAUST FANS.</u> EXHAUST FANS REQUIRED SHALL BE DUCTED DIRECTLY TO THE OUTSIDE. EXHAUST AIR OUTLETS SHALL BE DESIGNED TO LIMIT THE PRESSURE DIFFERENCE TO THE OUTSIDE AND EQUIPPED WITH BACKDRAFT DAMPERS OR MOTORIZED DAMPERS IN ACCORDANCE WITH THE WA STATE ENERGY CODE. EXHAUST FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH THE AIRFLOW AND SOUND RATING PROCEDURES OF THE HOME VENTILATING INSTITUTE (HVI 915, HVI LOUDNESS TESTING AND RATING PROCEDURE, HVI 916 AIRFLOW TEST PROCEDURE, AND HVI 920, HVI PRODUCT PERFORMANCE CERTIFICATION PROCEDURE. AS APPLICABLE). EXHAUST FANS REQUIRED IN THIS SECTION MAY BE USED TO PROVIDE LOCAL VENTILATION. BATHROOM EXHAUST FANS THAT ARE DESIGNED FOR INTERMITTENT EXHAUST AIRFLOW RATES HIGHER THAN THE CONTINUOUS EXHAUST AIRFLOW RATES IN TABLE M1505.4.3(3) SHALL BE PROVIDED WITH OCCUPANCY SENSORS OR HUMIDITY SENSORS TO AUTOMATICALLY OVERRIDE THE FAN TO THE HIGH SPEED AIRFLOW RATE. THE EXHAUST FANS SHALL BE TESTED AND THE TESTING RESULTS SHALL BE SUBMITTED AND

WAC 51.51.1505 M1505.4.1.3: SUPPLY FANS. SUPPLY FANS USED IN MEETING THE REQUIREMENTS OF THIS SECTION SHALL SUPPLY OUTDOOR AIR FROM INTAKE OPENINGS IN ACCORDANCE WITH IMC SECTIONS 401.4 AND 401.5. WHEN DESIGNED FOR INTERMITTENT OFF OPERATION, SUPPLY SYSTEMS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS IN ACCORDANCE WITH THE WA STATE ENERGY CODE. SUPPLY FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH THE AIRFLOW ANSD SOUND RATING PROCEDURES OF THE HOME VENTILATING INSTITUTE (HVI 915, HVI LOUDNESS TESTING AND RATING PROCEDURE, HVI 916, HVI AIRFLOW TEST PROCEDURE, AND HVI 920, HVI PRODUCT PERFORMANCE CERTIFICATION PROCEDURE, AS APPLICABLE). WHERE OUTDOOR AIR IS PROVIDED BY SUPPLY FAN SYSTEMS THE OUTDOOR AIR SHALL BE FILTERED. THE FILTER SHALL BE ACCESSIBLE FOR REGULAR MAINTENANCE AND REPLACEMENT. THE FILTER SHALL HAVE A MINIMUM EFFICIENCY RATING VALUE (MERVo OF AT LEAST 8.

WAC 51.51.1505 M1505.4.1.4: BALANCED WHOLE HOUSE VENTILATION SYSTEM. A BALANCED WHOLE HOUSE VENTILATING SYSTEM SHALL INCLUDE BOTH SUPPLY AND EXHAUST FANS. THE SUPPLY AND EXHAUST FANS SHALL HAVE AIRFLOW THAT IS WITHIN 10 PERCENT OF EACH OTHER. THE TESTED AND BALANCED TOTAL MECHANICAL EXHAUST AIRFLOW RATE IS WITHIN 10 PERCENT OR 5cfm, WHICHEVER IS GREATER, OF THE TOTAL MECHANICAL SUPPLY AIRFLOW RATE. THE FLOW RATE TEST RESULTS SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH SECTION M1505.4.1.7. THE EXHAUST FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.2. THE SUPPLY FAN SHALL MEET THE REQUIREMENTS OF SECTION M1505.4.1.3. BALANCED VENTILATION SYSTEMS WITH BOTH SUPPLY AND EXHAUST AIRFLOW RATES ABOVE THE RESIDENTIAL DWELLING OR SLEEPING UNIT MINIMUM VENTILATION RATE ARE EXEMPT FROM THE BALANCED AIRFLOW

WAC 51.51.1505 M1505.4.1.5: FURNACE INTEGRATED SUPPLY. SYSTEMS USING SPACE HEATING AND/OR COOLING AIR HANDLER FANS FOR OUTDOOR AIR SUPPLY DISTRIBUTION ARE NOT PERMITTED EXCEPTION: AIR HANDLER FANS SHALL HAVE MULTI-SPEED OR VARIABLE SPEED SUPPLY AIRFLOW CONTROL CAPABILITY WITH A LOW SPEED OPERATION NOT GREATER THAN 25 PERCENT OF THE RATED SUPPLY AIRFLOW CAPACITY DURING VENTIL ATION ONLY OPERATION. OUTDOOR AIR INTAKE OPENINGS MUST MEET THE PROVISIONS OF SECTIONS R303.2 AND R303.6 AND MUST INCLUDE A MOTORIZED DAMPER THAT IS ACTIVATED BY THE WHOLE HOUSE VENTILATION SYSTEM CONTROLLER. THE MOTORIZED DAMPER MUST BE CONTROLLED TO MAINTAIN THE OUTDOOR AIRFLOW INTAKE AIRFLOW WITHIN 10 PERCENT OF THE WHOLE HOUSE MECHANICAL EXHAUST AIRFLOW RATE. THE FLOW RATE FOR THE OUTDOOR AIR INTAKE MUST BE TESTED AND VERIFIED AT THE MINIMUM VENTILATION FAN SPEED AND THE MAXIMUM HEATING OR COOLING FAN SPEED. THE RESULTS OF THE TEST SHALL BE SUBMITTED AND POSTED IN ACCORDANCE WITH

WAC 51.51.1505 M1505.4.1.6: TESTING. WHOLE HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE TESTED, BALANCED AND VERIFIED TO PROVIDE A FLOW RATE NOT LESS THAN THE MINIMUM REQUIRED BY SECTIONS M1505.4.3 AND M1505.4.4. TESTING SHALL BE PERFORMED ACCORDING TO THE VENTILATION EQUIPMENT MANUFACTURER'S INSTRUCTIONS, OR BY USING A FLOW HOOD, FLOW GRID, OR OTHER AIRFLOW MEASURING DEVICE AT THE MECHANICAL VENTILATION FAN'S INLET TERMINALS, OUTLET TERMINALS, OR GRILLES OR IN THE CONNECTED VENTILATION DUCTS. WHERE REQUIRED BY THE BUILDING OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING OFFICIAL AND BE POSTED IN THE DWELLING UNIT PER SECTION M1505.4.1.7.

WAC 51.51.1505 M1505.4.1.7: CERTIFICATE. A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE MECHANICAL CONTRACTOR. TEST AND BALANCE CONTRACTOR OR OTHER APPROVED PARTY AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING. WHEN LOCATED ON AN ELECTRICAL PANEL, THE CERTIFICATE SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL, OR OTHER REQUIRED LABELS THE CERTIFICATE SHALL LIST THE FLOW RATE DETERMINED FROM THE DELIVERED AIRFLOW OF THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AS INSTALLED AND THE TYPE OF MECHANICAL WHOLE HOUSE VENTILATION SYSTEM USED TO COMPLY WITH SECTION M1505.4.3.1.

WAC 51.51.1505 M1505.4.2: SYSTEM CONTROLS. THE WHOLE HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH 1. THE WHOLE HOUSE VENTILATION SYSTEM SHALL BE CONTROLLED WITH MANUAL SWITCHES, TIMERS OR

OTHER MEANS THAT PROVIDE FOR AUTOMATIC OPERATION OF THE VENTILATION SYSTEM THAT ARE READILY ACCESSIBLE BY THE OCCUPANT

2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE OFF OF THE SYSTEM BY THE OCCUPANT DURING PERIODS OF POOR OUTDOOR AIR QUALITY. CONTROLS SHALL INCLUDE PERMANENT TEXT OR A SYMBOL INDICATING THEIR FUNCTION. RECOMMENDED CONTROL PERMANENT LABELING TO INCLUDE TEXT SIMILAR TO THE FOLLOWING: "LEAVE

ON UNLESS OUTDOOR AIR QUALITY IS VERY POOR." MANUAL CONTROLS SHALL BE READILY ACCESSIBLE BY 3. WHOLE HOUSE VENTILATION SYSTEMS SHALL BE CONFIGURED TO OPERATE CONTINUOUSLY EXCEPT WHERE INTERMITTENT OFF CONTROLS AND SIZING ARE PROVIDED PER SECTION M1505.4.3.2.

IRC TABLE 1505.4.3(1)

VENTILATION RATE IN CUBIC FEET PER MINUTE = (0.1 x TOTAL SF AREA OF HOUSE) + [7.5 x (NUMBER OF BEDROOMS + 1)] BUT NOT LESS THAN 30 CFM FOR EACH DWELLING UNIT.

M1505.4.3.1 VENTILATION QUALITY ADJUSTMENT. THE MIN. WHOLE HOUSE VENTILATION RATE FROM SECTION 1505.4.3 SHALL BE ADJUSTED BY THE SYSTEM COEFFICIENT IN TABLE M1505.4.3(2) BASED ON THE SYSTEM TYPE NOT MEETING THE DEFINITION OF A BALANCED WHOLE HOUSE VENTILATION SYSTEM AND/OR NOT MEETING THE DEFINITION

M1505.4.3.2 INTERMITTENT OFF OPERATION. WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE PROVIDED WITH ADVANCED CONTROLS THAT ARE CONFIGURED TO OPERATE THE SYSTEM WITH INTERMITTENT OFF OPERATION SHALL OPERATE FOR AT LEAST A TWO HOURS IN EACH FOUR-HOUR SEGMENT. THE WHOLE HOUSE VENTILATION AIRFLOW RATE DETERMINED IN ACCORDANCE WITH SECTION M1505.4.3 AS CORRECTED BY SECTION M1505.4.3.1 IS ,MULTIPLIED BY THE FACTOR DETERMINED IN ACCORDANCE

INTERMITTENT OFF WHOLE HOUSE MECHANICAL VENTILATION RATE FACTORS RUN TIME % EA 4hr SEGMENT 50% 66% 75% 100%

WHOLE-HOUSE MECHANICAL VENTILATION AIRFLOW RATE

FLOOR AREA

CFM = (0.01 x 9,966 SF) + [7.5 x (5+1

OF DISTRIBUTED WHOLE HOSE VENTILATION SYSTEM.

IRC TABLE 1505.4.3(2)

IRČ TABLE 1505.4.3(3)

SYSTEM TYPE | DISTRIBUTED | NOT DIST.

SYSTEM COEFFICIENT (Csystem)

NOT BALANCED

CFM = 99.66 + 45

WAC 51.51.1505 M1505.4.3: MECHANICAL VENTILATION RATE. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE UTDOOR AIR AT A CONTINUOUS RATE AS DETERMINED IN ACCORDANCE WITH EQUATION 15-1 VENTILATION RATE IN CUBIC FEET PER MINUTE = (0.01 X TOTAL SQ. FT.) + [7.5 X (NUMBER OF BEDROOMS +1)] BUT NOT LESS THAN 30 CFM FOR EACH DWELLING UNIT.

60 70 75 85 90

M1505.4.4 LOCAL EXHAUST RATES. LOCAL EXHAUST SYSTEMS SHALL BE DESIGNED TO HAVE THE CAPACITY TO EXHAUST THE MIN. AIRLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M1505.4.4(1). IF THE LOCAL EXHAUST FAN IS INCLUDED IN THE WHOLE HOUSE VENTILATION SYSTEM, IN ACCORDANCE WITH SECTION 1505.4.1 THEN THE EXHAUST FAN SHALL BE CONTROLLED TO OPERATE AS M1505.4.4.1 LOCAL EXHAUST. BATHROOMS, TOILET ROOMS, AND KITCHENS SHALL INCLUDE A LOCAL EXHAUST SYSTEM. SUCH LOCAL

EXHAUST SYSTEMS SHALL HAVE THE CAPACITY TO EXHAUST THE MIN. AIRFLOW RATE IN ACCORDANCE WITH TABLE M1505.4.4(1). FANS

REQUIRED BY THIS SECTION SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE OR AUTOMATIC OCCUPANCY SENSOR,

HUMIDITY SENSOR OR POLLUTANT SENSOR CONTROLS. AN "ON/OFF" SWITCH SHALL MEET THIS REQUIREMENT FOR MANUAL CONTROLS.

MANUAL FAN CONTROLS SHALL BE READILY ACCESSIBLE IN THE ROOM SERVED BY THE FAN. IRC TABLE 1505.4.4(1)

IIN. LOCAL EXHAUST RATES		
AREAS TO BE EXHAUSTED	INTERMITTENT	CONTINUOUS
KITCHEN	100 cfm	30 cfm
BATHROOMS - TOILET ROOMS	50 cfm	20 cfm

M1505.4.4 LOCAL EXHAUST FANS. EXHAUST FANS SHALL MEET THE FOLLOWING CRITERIA:

1. EXHAUST FANS SHALL BE TESTED AND RATED IN ACCORDANCE WITH THE AIRFLOW AND SOUND RATING PROCEDURES OF THE HOME VENTILATING INSTITUTE (HVI 915 HVI I OUDNESS AND RATING PROCEDURE HVI AIRFLOW TEST PROCEDURE, AND HVI 920, HVI PRODUCT PERFORMANCE CERTIFICATION PROCEDURE). EXCEPTION: WHERE A RANGE HOOD OR DOWN DRAFT EXHAUST FAN IS USED FOR LOCAL EXHAUST FOR A KITCHEN. THE DEVICE IS NOT REQUIRED TO BE RATED PER THESE STANDARDS. 2. $\,$ FAN AIRFLOW RATING AND DUCT SYSTEM SHALL BE DESIGNED AND INSTALLED TO DELIVER AT LEAST THE EXHAUST AIRFLOW REQUIRED BU TABLE M1505.4.4(1). THE AIRFLOWS REQUIRED REFER TO THE DELIVERED AIRFLOW OF THE SYSTEM AS INSTALLED AND TESTED USING A FLOW HOOD. FLOW GRID. OR OTHER AIRFLOW MEASUREMENT DEVICE. LOCAL EXHAUST SYSTEMS SHALL BE TESTED, BALANCED AND VERIFIED TO PROVIDE A FLOW RATE NOT LESS THAN THE MINIMUM REQUIRED BY THIS SECTION. 3. DESIGN AND INSTALLATION OF THE SYSTEM OR EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. 4. FAN AIRFLOW RATING AND DUCT SYSTEM SHALL BE DESIGNED AND INSTALLED TO DELIVER AT LEAST THE EXHAUST AIRFLOW REQUIRED BY TABLE M1505.4.4(1). EXCEPTIONS: 1. AN EXHAUST AIRFLOW RATING AT A PRESSURE OF 0.25 IN. w.g. MAY BE USED.

EXHAUST SHALL NOT BE LESS THAN 100 cfm AT 0.10 IN. w.g.

PROVIDED THE DUCT SIZING MEETS THE PRESCRIPTIVE REQUIREMENTS OF TABLE

2. WHERE A RANGE HOOD OR DOWN DRAFT EXHAUST FAN IS USED TO SATISFY THE

LOCAL VENTILATION REQUIREMENTS FOR KITCHENS, THE RANGE HOOD OR DOWN DRAFT

IRC TABLE 1505.4.4(2)

PRESCRIPTIVE EX	CHAUST DUCT	SIZING			
FAN TESTED cfm @ 0.25 (Square feet)	MIN. FLEX DIA. (IN.)	MAX. LENGTH (FT.)	MIN. SMOOTH DIA. (IN.)	MAX. LENGTH (FT.)	MAX. ELBOWS
50	4	25	4	70	3
50	5	90	5	100	3
50	6	NO LIMIT	6	NO LIMIT	3
80	4	NA	4	20	3
80	5	15	5	100	3
80	6	90	6	NO LIMIT	3
100	5	NA	5	50	3
100	6	45	6	NO LIMIT	3
125	6	15	6	NO LIMIT	3

BUILDING THERMAL ENVELOPE

COMPLIANCE & CERTIFICATE POSTED

THE BUILDING THERMAL ENVELOPE SHALL MEET THE PRESCRIPTIVE REQUIREMENTS OF SECTION R401 THROUGH R404 OF THE WSEC. IN ADDITION, DWELLING UNITS AND SLEEPING UNITS IN A RESIDENTIAL BUILDING SHALL COMPLY WITH SECTION R406 OF THE WSEC. R401.3 CERTIFICATE, A PERMANENT CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR OTHER APPROVED PARTY AND POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING. THE CERTIFICATE SHALL LIST THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION (SLAB, BELOW-GRADE WALL, ADN/OR FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES; U-FACTORS FOR FENESTRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION; THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING DONE ON THE BUILDING; AND THE RESULTS FROM THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FLOW RATE TEST. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATE SHALL LIST THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATE SHALL LIST THE TYPES OF EFFICIENCIES OF HEATING, COOLING WHOLE-HOUSE MECHANICAL VENTILATION, AND SERVICE WATER HEATING APPLIANCES, WHERE A GAS-FIRED UNVENTED ROOM HEATER, ELECTRIC FURNACE, OR BASEBOARD ELECTRIC HEATER IS INSTALLED IN THE RESIDENCE, THE CERTIFICATE SHALL LIST "GAS-FIRED UNVENTED ROOM HEATER", "ELECTRIC FURNACE" OR "BASEBOARD ELECTRIC HEATER," AS APPROPRIATE. AN EFFICIENCY SHALL NOT BE *LISTED* FOR GAS-FIRED UNVENTED ROOM HEATERS, ELECTRIC FURNACES OR ELECTRIC BASEBOARD HEATERS.

THE CODE OFFICIAL MAY REQUIRE THAT DOCUMENTATION FOR ANY REQUIRED TEST RESULTS INCLUDE AN ELECTRONIC RECORD OF THE TIME, DATE, AND LOCATION OF THE TEST. A DATE-STAMPED SMART PHONE PHOTO OR AIR LEAKAGE TESTING SOFTWARE MAY BE USED TO

FENESTRATION

AN AREA-WEIGHTED AVERAGE OF FENESTRATION PRODUCTS SHALL BE PERMITTED TO SATISFY THE U-FACTOR REQUIREMENTS. UP TO 15 SQUARE FEET OF GLAZED FENESTRATION PER DWELLING UNIT SHALL BE PERMITTED TO BE EXEMPT FROM U-FACTOR. ONE SIDE-HINGED OPAQUE DOOR ASSEMBLY UP TO 24 SQUARE FEET IN AREA IS EXEMPTED FROM THE U-FACTOR REQUIREMENT

A. CEILINGS (VAULTED)= R-38, MIN 1. PROVIDE MINIMUM R-10 SPRAY FOAM INSULATION @ BOTTOM SIDE OF SHEATHING. COMPLETELY FILL REMAINING JOIST CAVITY WITH BATT INSULATION. TOTAL INSULATION VALUE (SPRAY FOAM + BATT) TO BE R-38 MIN 2. SPRAY FOAM INSULATION TO MEET THE REQUIREMENTS SET FORTH IN IRC R806.5. ITEM 5.1.33

1. ALL EXTERIOR WALL CAVITIES, INCLUDING CAVITIES ISOLATED DURING FRAMING, MUST BE FILLED WITH UNCOMPRESSED INSULATION. 2. RIGID BOARD INSULATION IS TO BE PLACED BEHIND ALL RECESSED FIXTURES IN EXTERIOR WALLS. 3. FACED BATTS ARE LAPPED AND ARE TO BE STAPLED TO FACE OF STUDS. 4. INSULATE BEHIND TUB/ SHOWER PARTITIONS AND CORNERS.

C. FLOORS = R-30 1. FLOOR INSULATION SHALL BE INSTALLED TO MAINTAIN PERMANENT CONTACT WITH THE UNDERSIDE OF THE SUBFLOOR DECKING. 2. INSULATION SUPPORTS SHALL BE INSTALLED SO SPACING IS NO MORE THAN 24-INCHES ON CENTER. 3. FOUNDATION VENTS SHALL BE PLACED SO THAT THE TOP OF THE VENT IS BELOW THE LOWER SURFACE OF THE FLOOR INSULATION.

1. 2" RIGID INSULATION UNDER ENTIRE CONCRETE SLAB IN HEATED SPACES. THE INSULATION SHALL EXTEND DOWNWARD FROM THE TOP OF THE SLAB FOR A MINIMUM DISTANCE AS SHOWN IN THE TABLE OR TO THE TOP OF THE FOOTING, WHICHEVER IS LESS, OR DOWNWARD TO AT LEAST THE BOTTOM OF THE SLAB AND THEN HORIZONTALLY TO THE INTERIOR OR EXTERIOR FOR THE TOTAL 2. A TWO-INCH BY TWO-INCH (MAXIMUM) PRESSURE TREATED NAILER MAY BE PLACED AT THE FINISHED FLOOR ELEVATION FOR ATTACHMENT OF INTERIOR FINISH MATERIALS. E. 4X HEADERS = R-10

F. DUCTS = DUCTS SHALL BE INSULATED TO A MINIMUM OF R-8. EXCEPTION: DUCTS OR PORTIONS THEREOF LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE.

G. PIPING = MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105°F OR BELOW 55°F SHALL BE INSULATED TO A MINIMUM 1. PIPING INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED FROM DAMAGE. INCLUDING THAT CAUSED BY SUNLIGHT. MOISTURE, EQUIPMENT MAINTENANCE, AND WIND, AND SHALL PROVIDE SHIELDING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHESIVE TAPE SHALL NOT BE PERMITTED.

INSULATION FOR HOT WATER PIPE SHALL HAVE A MINIMUM THERMAL RESISTANCE (R-VALUE) OF R-4. H. ELECTRIC WATER HEATERS = ALL ELECTRIC WATER HEATERS IN UNHEATED SPACES OR ON CONCRETE FLOORS SHALL BE PLACED ON AN INCOMPRESSIBLE, INSULATED SURFACE WITH A MINIMUM THERMAL RESISTANCE OF R-10, AND A MIN. COMPRESSIVE STRENGTH OF 40 psi OR ENGINEERED TO SUPPORT THE APPLIANCE.

MOISTURE CONTROL

VAPOR RETARDERS	
(SLABS CONTINUOUS GCP PREPRUFE 300R PLUS UNDERSLAB WATERPROOFING SYSTEM)	
FLOORS 3/4" CDX PLYWOOD or 3/4" O.S.B.	
(WALLS KRAFT FACED FIBERGLASS BATTS)	
CEILING NO PVA PAINT @ UNVENTED CEILING PER IRC R806.5, INTERIOR VAPOR RETARDER SHALL NOT BE INSTALLED ON THE CEILING SIDE @ UNVENTED CEILING CONDITIONS.	
1. ATTIC ACCESS AND DOORS ARE TO BE BAFFLED, WEATHER-STRIPPED AND INSULATED.	

3 RECESSED LIGHT FIXTURES TO LIMIT AIR LEAKAGE PER WSEC 402 4 4 4. ALL PLUMBING, ELECTRICAL AND HVAC PENETRATIONS IN FLOORS, WALLS AND CEILING ARE TO BE CAULKED AND SEALED. 5. ELECTRICAL OUTLET AND LIGHT SWITCH BOXES ON EXTERIOR WALLS MUST BE SEALED AT THE BACK OF THE RECEPTACLE WITH A FACE

6. SILL PLATE TO BE CAULKED OR GLUED TO SUB-FLOOR. 7. CAULK/SEAL RIM JOISTS BETWEEN STORIES. 8. FIRE-STOP ALL PENETRATIONS AS REQUIRED BY THE CODE & BUILDING DEPARTMENT

2 EXTERIOR DOORS AND WINDOWS ARE TO BE CAULKED AND WEATHER-STRIPPED

AIR LEAKAGE AND TESTING

THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF

THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). FOR THIS TEST ONLY. THE VOLUME OF THE HOME SHALL BE THE CONDITIONED FLOOR AREA IN FT2 MULTIPLIED BY 8.5 FEFT, WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE. § R402.4.1.1 INSTALLATION. THE COMPONENTS OF THE BUILDING THERMAL ENVELOPE AS LISTED IN TABLE R402.4.1.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE CRITERIA LISTED IN TABLE R402.4.1.1. AS APPLICABLE TO THE METHOD OF CONSTRUCTION. WHERE REQUIRED BY THE CODE OFFICIAL, AN APPROVED THIRD PARTY SHALL INSPECT ALL COMPONENTS AND WINDOWS, SKYLIGHTS AND SLIDING GLASS DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.3 CFM PER SQUARE FOOT.

1. FIELD-FABRICATED FENESTRATION PRODUCTS (WINDOWS, SKYLIGHTS AND DOORS). 2. CUSTOM EXTERIOR FENESTRATION PRODUCTS MANUFACTURED BY A SMALL BUSINESS PROVIDED THEY MEET THE APPLICABLE PROVISIONS OF CHAPTER 24 OF THE INTERNATIONAL BUILDING CODE. ONCE VISUAL INSPECTION HAS CONFIRMED THE PRESENCE OF A GASKET, OPERABLE WINDOWS AND DOORS MANUFACTURED BY SMALL BUSINESS SHALL BE PERMITTED TO BE SEALED OFF AT THE FRAME PRIOR TO

101/I.S.2/A440 BY AN ACCREDITED, INDEPENDENT LABORATORY AND LISTED AND LABELED BY THE MANUFACTURER.

AND SWINGING DOORS NO MORE THAN 0.5 CEM PER SQUARE FOOT, WHEN TESTED ACCORDING TO NERC 400 OR AAMA/WDMA/CSA

RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE TYPE IC-RATED AND CERTIFIED UNDER ASTM E283 AS HAVING AN AIR LEAKAGE RATE NOT MORE THAN 2.0 CFM WHEN TESTED AT A 1.57 PSF PRESSURE DIFFERENTIAL AND SHALL HAVE A LABEL ATTACHED SHOWING COMPLIANCE WITH THIS TEST METHOD. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING. ALL DUCTS MUST BE LEAK TESTED IN ACCORDANCE W/ WSU RS-33 USING THE MAXIMUM DUCT LEAKAGE RATE SPECIFIED. TOTAL LEAKAGE ackslashMUST BE VERIFIED BY EITHER THE ROUGH-IN TEST OR POST-CONSTRUCTION TEST PER WSEC R403.3.3. TOTAL LEAKAGE MUST BE LESS THAN OR EQUAL TO 4 CFM PER 100 SF OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1" WG (25PA) ACROSS THE ENTIRE SYSTEM.

ELECTRIC POWER & LIGHTING

LIGHTING EQUIPMENT

THE TEST.

R404.1 A MINIMUM OF 90 PERCENT OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS. R404.1.1 FUEL GAS LIGHTING SYSTEMS SHALL NOT HAVE CONTINUOUSLY BURNING PILOT LIGHTS.

WA STATE ENERGY CREDITS

ADDITIONAL ENERGY EFFICIENCY REQUIREMENTS

EACH DWELLING UNIT IN ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES SHALL COMPLY WITH SUFFICIENT OPTIONS FROM TABLE R406.2 SO AS TO ACHIEVE THE REQUIRED MINIMUM NUMBER OF CREDITS:

2018 WSEC TABLE R402.1.1

CLIMATE ZONE 5 AND MARINE 4	R-VALUE	EQUIV U-FACTORS
FENESTRATION U-FACTOR	N/A	0.28*
CEILING (VAULT) R-VALUE	38	0.026
WOOD FRAMED WALL R-VALUE	21 int.	0.056
FLOOR R-VALUE	38*	0.026*
SLAB R-VALUE	10, entire slab*	N/A

2018 WSEC CREDITS SELECTED

SYSTEM	FUEL NORMALIZATION CREDIT TABLE R406.2	CREDIT
2	HEAT PUMP. EQUIPMENT LISTED IN TABLE C403.3.2(1) or C403.3.2(2).	1.0
OPTION	EFFICIENT BUILDING ENVELOPE OPTIONS	
1.3	PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE 402.1.1 WITH THE FOLLOWING MODIFICATIONS: VERTICAL FENESTRATION U = 0.28 SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB	0.5
	HIGH EFFICIENCY HVAC EQUIPMENT OPTIONS	
3.5	AIR-SOURCE, CENTRALLY DUCTED HEAT PUMP WITH MINIMUM HSPF OF 11.0	1.5
	EFFICIENT WATER HEATING OPTIONS	
5.3	WATER HEATING SYSTEM: ENERGY STAR RATED GAS OR P WATER HEATER WITH MIN. UEF OF 0.91 OR SOLAR WATER HEATING SUPPLEMENTING A MIN. STD. WATER HEATER.	1.0
	RENEWABLE ELECTRIC ENERGY (3 CREDITS MAX.)	
6.1	SUPPLY MIN 3600 kWh OF ELECTRICAL GENERATION ANNUALLY BY ON-SITE SOLAR EQUIPMENT. SOLAR DESIGN TO MEET NATIONAL RENEWABLE ENERGY LABORATORY CALC. PVWATTs	3.0
FOR FULL	TOTAL	7.0

SEATTLE, WA 98178 PROJECT ENGINEER: B.L./J.C. SURVEYOR & CIVIL ENGINEERING: PACE

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SEATTLE, WA 98104 GENERAL CONTRACTOR: JMK HOMES LLC

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PROJECT INFO

BUILDING AREA

GARAGE

5,469 SF MAIN FLOOR HEATED UPPER FLOOR HEATED 4,497 SF TOTAL LIVING 9,966 SF

DEMO EXISTING SFR HOME, CONSTRUCT NEW SFR AND SITE IMPROVEMENTS

945 SF

RELATED PERMITS: SUB21-008TYPE III - SHORT PLAT PROJECT ADDRESS: 6610 EAST MERCER WAY PARCEL NO.: 3024059153 LOT SIZE: 50,094 SF (1.15 AC) ZONE: SETBACKS:

ZONE 1 - 25'-0", NO STRUCTURES ALLOWED & 10% MAX IMPERVIOUS SHORELINE / REAR ZONE 2 - 25'-0", STRUCTURES ALLOWED & 30% MAX COVERAGE 50'-0" TOTAL FRONT 20'-0" SIDE 29'-0", 17% LOT WIDTH (170'-9") BUILDING HEIGHT: 30'-0" ABOVE AVERAGE BUILDING ELEVATION LOT COVERAGE: 40% @ LOT SLOPE LESS THAN 15%

20,0387.60 SF ALLOWED - 13,527 SF PROPOSED

GROSS FLOOR AREA: 12,000 SF or 40% OF THE LOT AREA, WHICHEVER IS LESS 10,911 SF PROPOSED TREE RETENTION: SEE ARBORIST REPORT AND CIVIL PLANS SEISMIC DESIGN: CATEGORY 'D2' WIND DESIGN: 110 MPH & EXPOSURE 'D'

FIRE SUPPRESSION: NFPA 13R FIRE SPRINKLER SYSTEM (>5,000 SF) NFPA 72 FIRE ALARM SYSTEM TYP VB CONSTRUCTION:

LEGAL DESCRIPTION

THE SOUTH HALF OF THAT PORTION OF GOVERNMENT LOT 1, SECTION 30, TOWNSHIP 24 NORTH, RANGE 5 EAST, LYING BETWEEN THE NORTH 498 FEET THEREOF AND SOUTH 471 FEET THEREOF AND EASTERLY OF A LINE PARALLEL WITH AND 1588.78 FEET EASTERLY OF (MEASURED AT RIGHT ANGELES TO) THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 30; EXCEPT THE SOUTH 9 FEET THEREOF. TOGETHER WITH SHORELANDS OF THE SECOND CLASS IN FRONT AND ABUTTING UPON SAID PORTION

TOGETHER WITH AN EASEMENT FOR UNOBSTRUCTED INGRESS AND EGRESS OVER THE EXISTING PRIVATE ROADWAY EXTENDING NORTHWESTERLY TO EAST MERCER WAY APPURTENANT TO THE PROPERTY HEREBY CONVEYED.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

DRAWING INDEX

1 OF 2 BOUNDARY AND TOPOGRAPHIC SURVEY BOUNDARY AND TOPOGRAPHIC SURVEY

C0.1 NOTES **EXISTING CONDITIONS** TESC DETAIL STORM & GRADING PLAN C4.0 UTILITY PLAN

UTILITY DETAILS

TREE RETENTION PLAN

LANDSCAPE L3.0 SHORELINE PLANTING PLAN

ARCHITECTURE

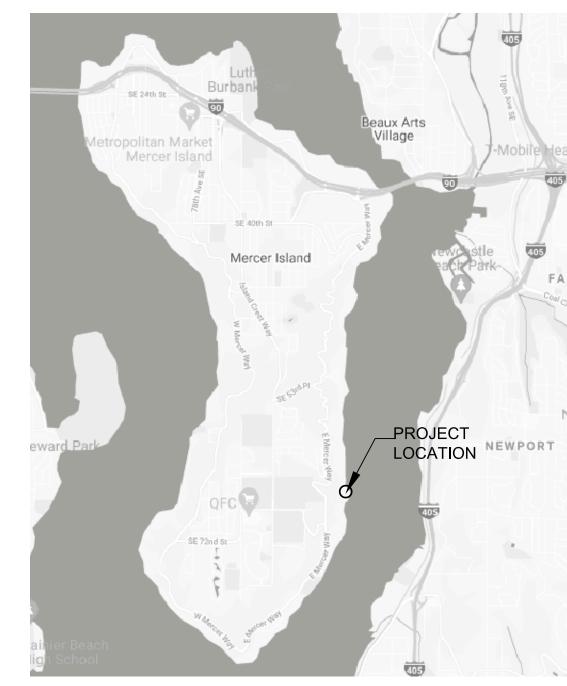
COVER SHEET & GENERAL NOTES ARCH SITE PLAN FOUNDATION PLAN MAIN FLOOR PLAN UPPER FLOOR FRAMING PLAN UPPER FLOOR PLAN LOWER ROOF FRAMING PLAN CLERESTORY PLAN UPPER ROOF FRAMING PLAN

ROOF DRAINAGE PLAN EXTERIOR ELEVATIONS EXTERIOR ELEVATIONS

BUILDING SECTIONS ARCHITECTURAL DETAILS STAIR SECTIONS & DETAILS ARCHITECTURAL DETAILS

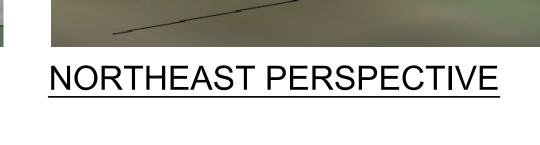
GENERAL STRUCTURAL NOTES TYPICAL CONCRETE DETAILS CONCRETE DETAILS

TYPICAL WOOD FRAMING DETAILS WOOD FRAMING DETAILS WOOD FRAMING DETAILS STEEL FRAMING DETAILS STEEL FRAMING DETAILS



OF SADI GOVERNMENT LOT 1.





NORTHWEST PERSPECTIVE

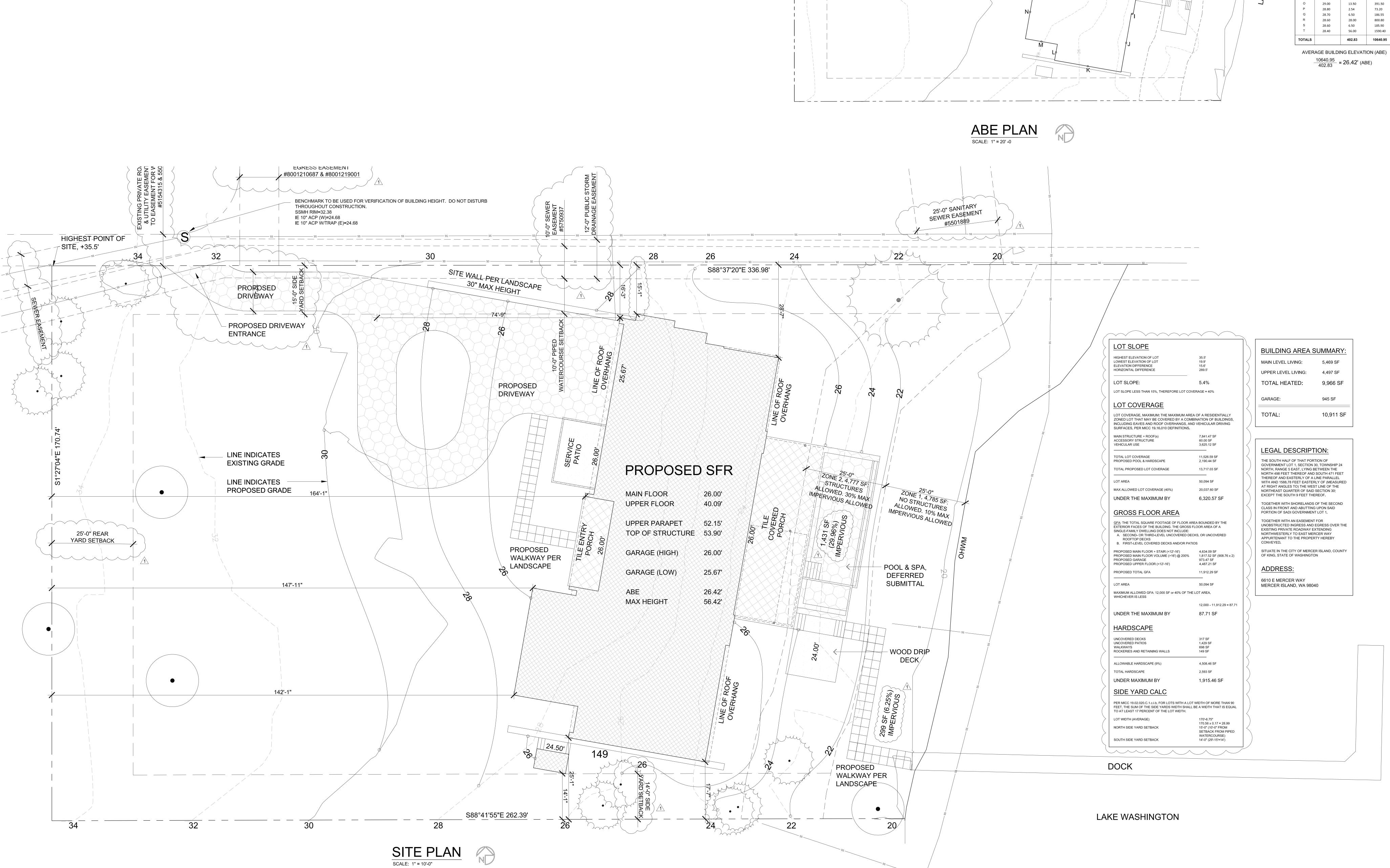
WALL MIDPOINT ELEV WALL LENGTH (in feet) TOTALS (in feet)

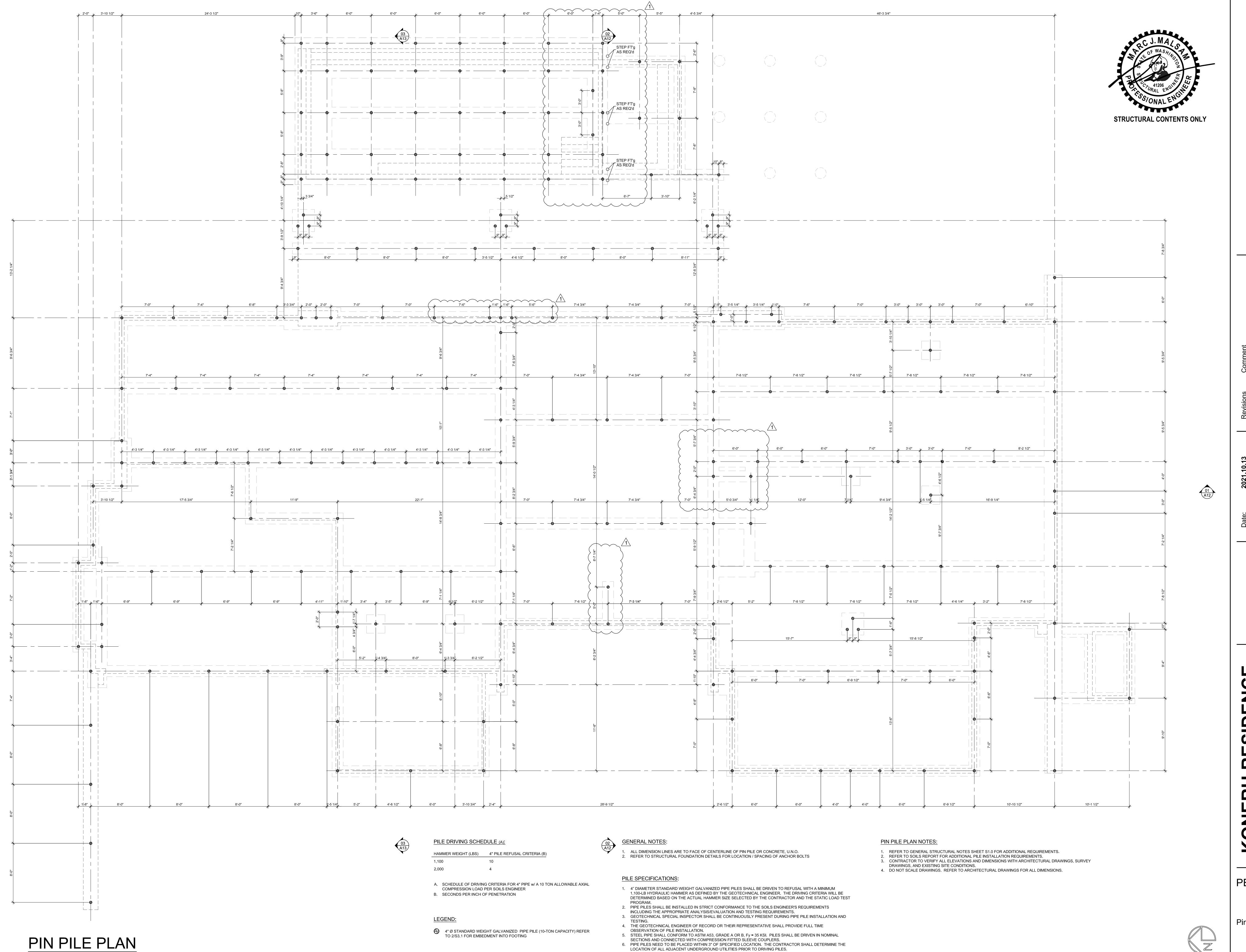
SIDENCE

6610 E Mercer Wa Mercer Island. WA

PERMIT SET

Arch Site Plan





LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRIVING PILES.

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

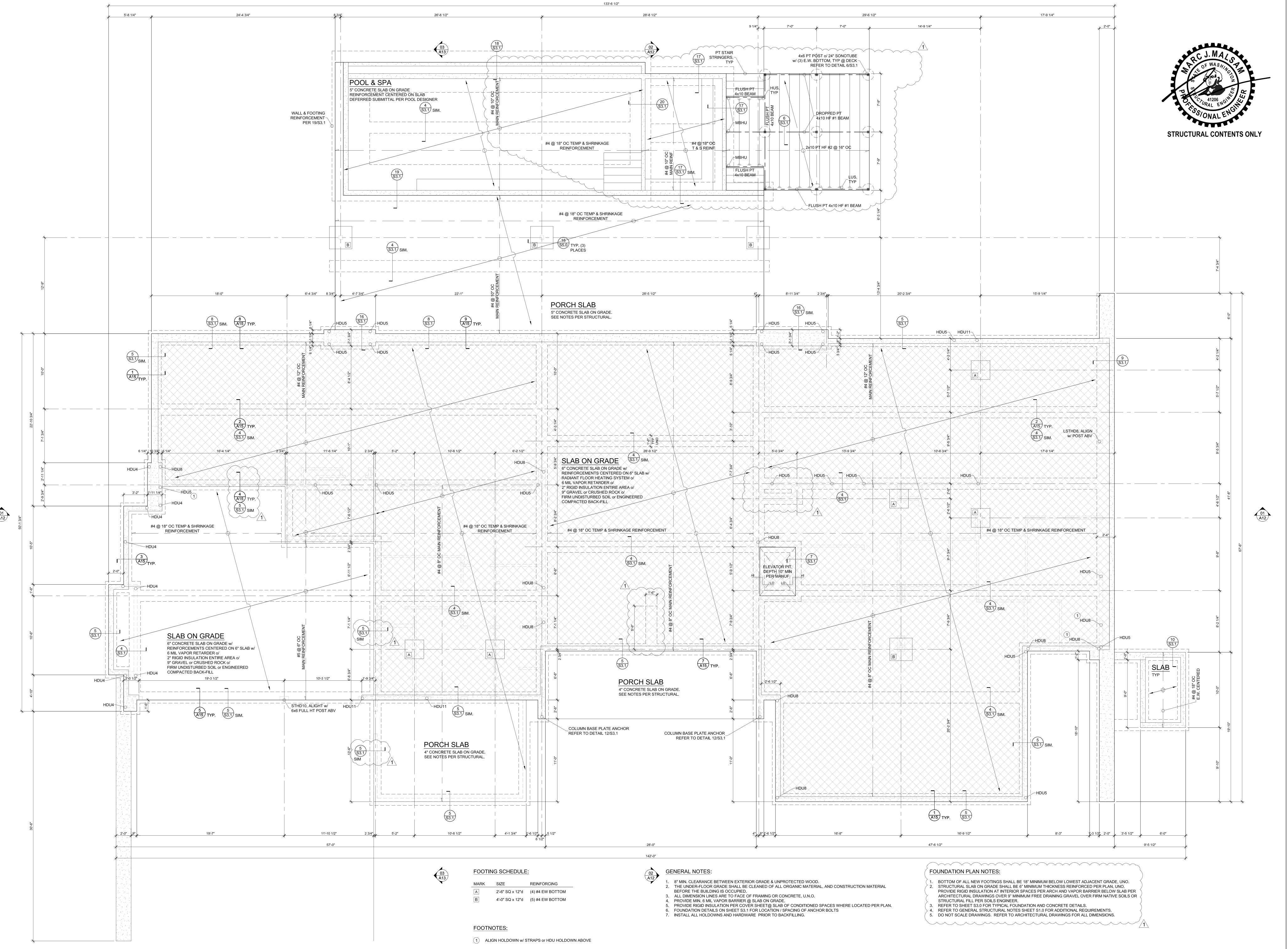


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PERMIT SET

Pin Pile Plan



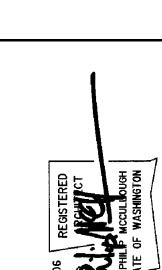


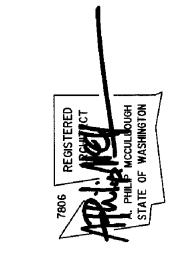
PERMIT SET

Structural SOG Reinforcing Plan

ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS.

5,469 SF // 9,966 SF TOTAL CONDITIONED // 945 GARAGE

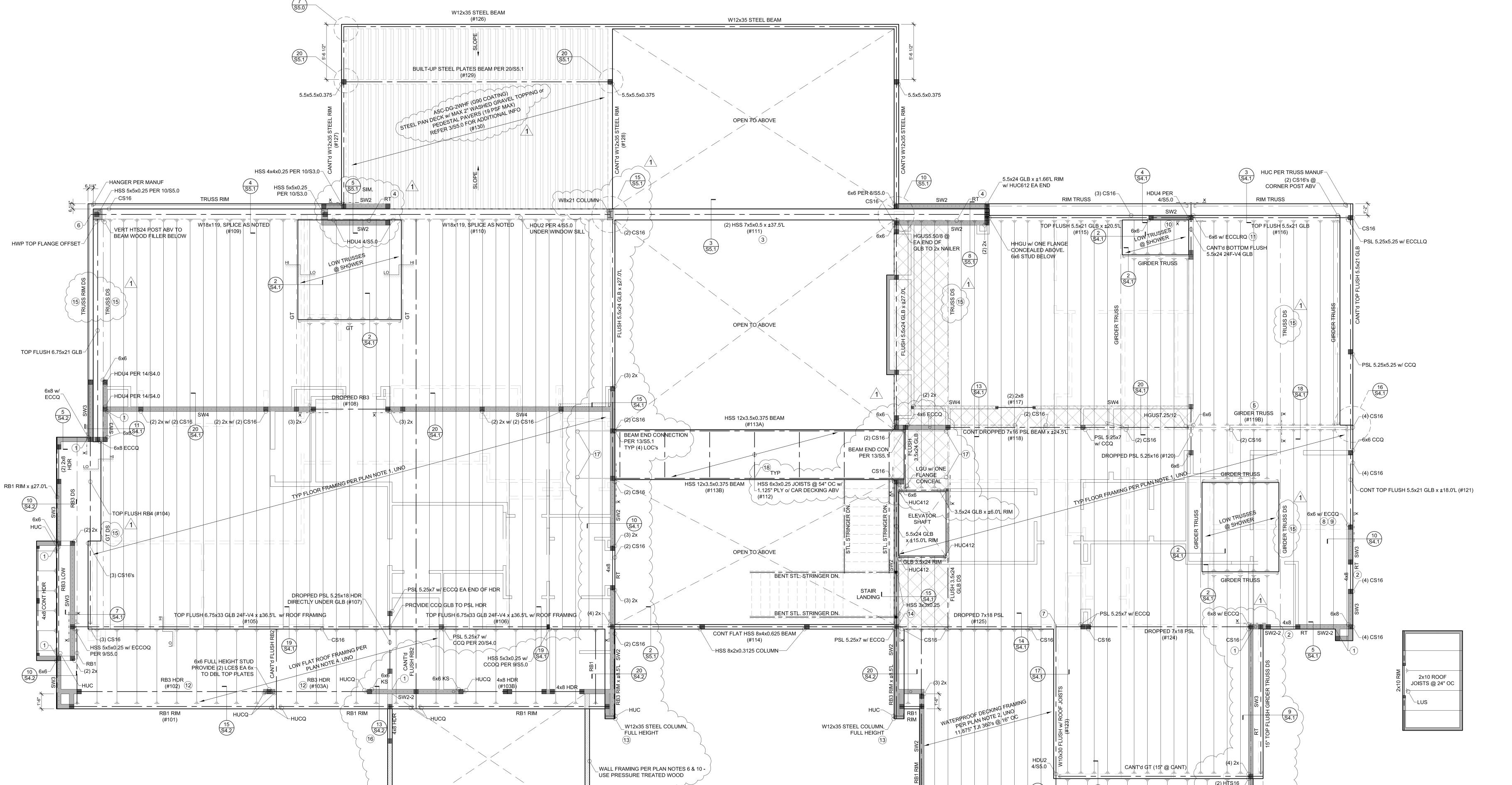




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Main Floor Plan



MARK	SIZE ①	BRG STUDS	HANGER, UN
RB1	1.75x11.875 LSL	2	HUS1.81/10
RB2	3.5x11.875 GLB or 3.5x11.875 LSL	2 2	HHUS410 HHUS410
RB3	5.5x11.875 GLB or 5.25x11.875 PSL	3 3	HGUS5.50/10 HGUS5.50/10
RB4	7x11.875 PSL	4	HGUS7.25/10

FLUSHED BEAM TO TOP PLATE or RIM TO RIM or BEAM TO BEAM or BEAM TO RT or TOP PLATES TO TOP PLATES (XX INDICATES 2-CS16 STRAPS) DS DRAG STRUT - NAIL THRU SHEATHING w/ 8d NAILS @ 4" OC INTO ENTIRE LENGTH OF MEMBER KS KING STUD

(X) NUMBER OF BUILT-UP STUDS

GT GIRDER TRUSS RT RIM TRUSS

BLOCK DIAPHRAGM - PROVIDE FLAT 2x4 BLK'g w/ 8d @ 4" OC @ ALL PANEL EDGES @ 8d @ 12" OC IN THE FIELD

HORIZ CS16 x 3'-0" LONG - TOP PLATE TO TOP PLATE (@ BREAK) or TOP

FOOTNOTES: (1) SHEARWALL SHEATHING CONTINUOUS THRU WALL INTERSECTION

PROVIDE VERTICAL MEMBER TO RECEIVE HOLDOWN NAILS

10 S4.2

- (2) SHEATHE AND NAIL ABOVE AND BELOW WINDOW AND PANEL EDGE NAIL AROUND OPENING PER SHEARWALL SCHEDULE (3) (2) HSS 7x5x1/2 BUILT-UP BEAM SHALL BE GROOVE WELD TOGETHER TOP AND BOTTOM AND PROVIDE 1/2" DIAM. WTS AT 36"oc FOR 2x NAILER CONNECTION EACH SIDE OF BUILT-UP BEAM AND USE 5/4" WOOD NAILER TOP AND BOTTOM OF
- BUILT-UP BEAM WITH TB SCREWS AT 36"oc STAGGERED INTO HSS BEAMS, PRE-DRILL AS REQUIRED (4) TRUSS MANUFACTURER TO DESIGN RIM TRUSS TO TRANSFER 600 PLF LATERALLY FROM TOP TO BOTTOM CHORD TRUSS MANUFACTURER TO DESIGN GIRDER TRUSS FOR A 4,500 LBS (WIND/SEISMIC) POINT LOAD AT HOLDOWN AND
- (6) PROVIDE (1)L90 WITH #9 x 1-1/2" SD CONNECTORS SCREWS EACH SIDE OF STEEL BEAM SNUG FIT WOOD FILLER TO TRUSS, (2)L90 TOTAL AND TRUSS MANUFACTURER TO PROVIDE VERTICAL MEMBERS TO RECEIVE L90 FASTENERS (7) PROVIDE 3-1/2" BEARING LENGTH OF STEEL BEAM TO TOP OF PSL WITH (2)1/2" DIAM. x 6" LAG BOLTS AT BEAM GAGE WITH
- 2-1/2" EDGE DISTANCE FROM FACE OF PSL BEAM (8) RAISE TOP OF POST TO BOTTOM OF GLB 21" DEPTH TOP FLUSH BEAM AND PROVIDE POST CAP PER PLAN, REFER DETAIL
- (9) PROVIDE HORIZ CS16 x 4'-6" STRAP AT TOP PLATE AND WRAP AROUND CENTERED ON POST PER PLAN, REFER DETAIL
- (10) PROVIDE SOLID WOOD SHIM BETWEEN BOTTOM OF GLB 21" DEPTH BEAM AND DBL 2x6 TOP PLATES AS REQUIRED TO BE FLUSHED WITH FLOOR FRAMING AND PROVIDE 0.22" DIAM. x 8" SDWS TIMBER SCREWS AT 16"oc MAX, THRU UNDERSIDE OF (11) PROVIDE SOLID WOOD SHIM BETWEEN BOTTOM OF GLB 21" DEPTH BEAM AND POST CAP AS REQUIRED TOP FLUSHED
- WITH FLOOR TRUSSES (12) PLACE GARAGE HEADER DIRECTLY ABOVE DOOR ROUGH OPENING

(13) PROVIDE FULL HEIGHT SOLID WOOD FILLER AS REQUIRED FOR NAILER AND BOLT WITH 5/8" WTS AT 32"oc, REFER DETAIL

(14) POCKET BEAM INTO WALL WITH BUILT-UP 2x BEARING STUDS TO MATCH BEAM WIDTH AND (1)2x FULL HEIGHT STUD EACH SIDE WITH A35 EACH TOP AND BOTTOM

(15) TRUSS MANUFACTURER TO DESIGN DRAG TRUSS FOR 300 lbs/ft OF LATERAL LOAD 6) PROVIDE LSL 3.5x11.875 BLOCKING BETWEEN TJI RAFTERS OVER SHEARWALL SW2-2, CONNECTION PER DETAIL 13/S4.2

-TYPICAL EXTERIOR WALLS SW6 PER PLAN NOTE 6, UNO

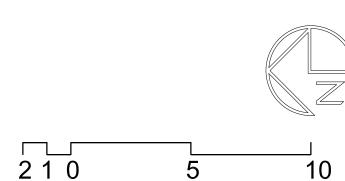
-TYPICAL) WALL FRAMING PER PLAN NOTE 10, UNO

 $7)\,$ PROVIDE DTT2Z @ THIRD FLOOR TRUSS BAY PER DETAIL 13/S5.

UPPER FLOOR & LOWER FLOOR FRAMING NOTES:

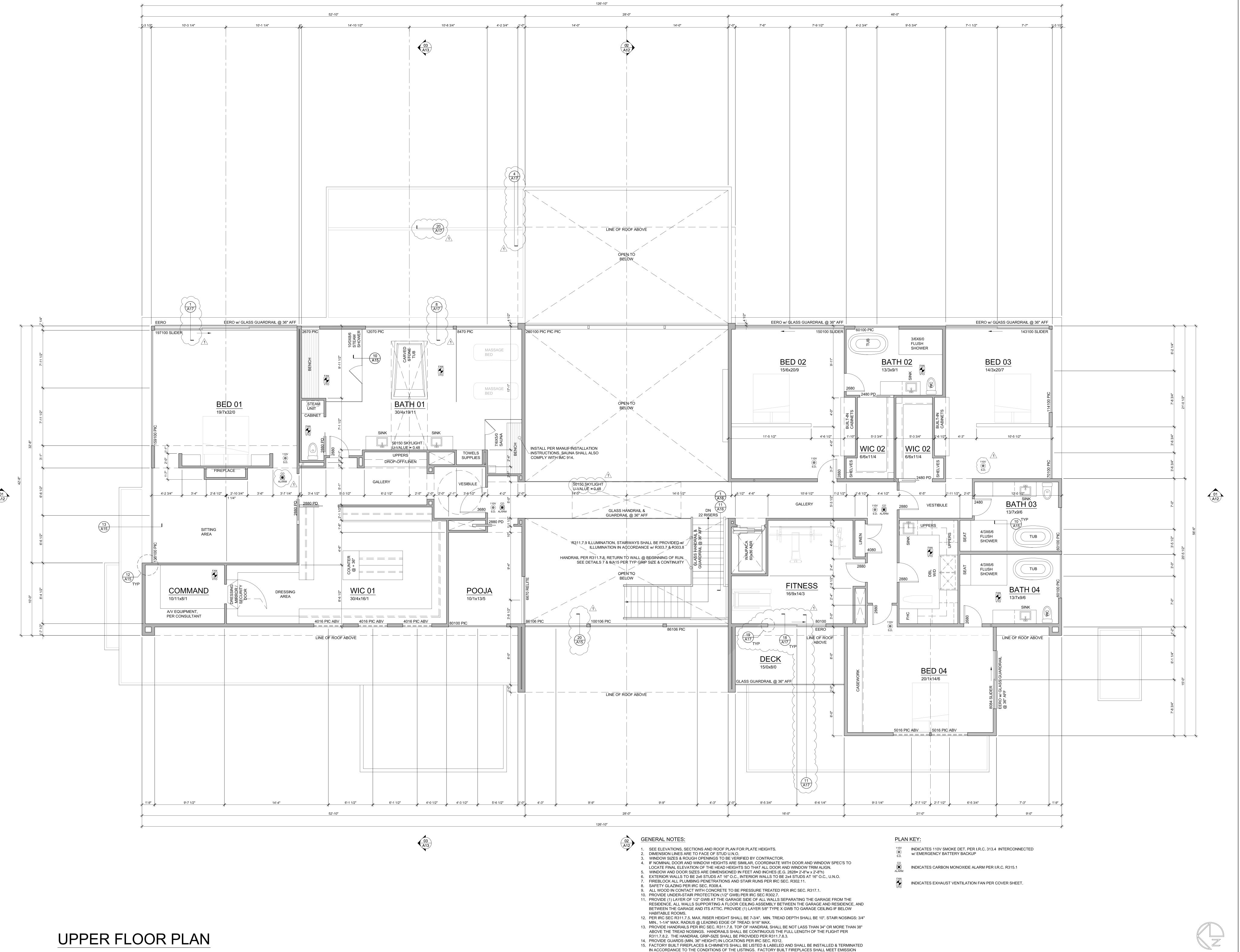
16"oc AT INTERIOR WALLS PER ARCH DRAWINGS, UNO.

- 1. TYPICAL FLOOR FRAMING CONSISTS OF 1/4" TILE o/ 1-1/8" GYPCRETE PER ARCH o/ 1-1/8" T&G APA RATED SHEATHING (SPAN RATING 48 oc) OVER PREFABRICATED TRUSSES AT 16"oc, UNO. TRUSSES TO BE A MIN 2. TYPICAL WATER PROOF DECK FRAMING CONSISTS OF CONCRETE PAVERS (18 PSF MAX) o/ TAPERED RIGID INSULATION PER ARCH o/ 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 11-7/8" TJI
- 3. GLUE AND NAIL FLOOR AND WATERPROOF DECK SHEATHING w/ 8d AT 6"oc AT FRAMED PANEL EDGES AND AT 12"oc IN THE FIELD, UNO. 4. TYPICAL LOWER ROOF FRAMING CONSISTS OF 2" THICK MAX. WASHED GRAVEL TOPPING (20 PSF MAX.) OVER TAPERED RIGID INSULATION PER ARCH OVER 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 11-7/8" TJI 210's AT 24"oc, UNO. PROVIDE H8 EACH END OF ALL RAFTERS, H8 EACH SIDE OF ALL MULTIPLE RAFTERS, UNO.
- 5. NAIL NEW ROOF SHEATHING w/ 8d AT 6"oc AT FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12"oc IN THE FIELD, UNO. 6. "SW_" INDICATES SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE ON 5/S4.0 FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS ARE SW6, UNO. 7. ALL HEADERS REQUIRED ARE SHOWN ON PLAN AND SHALL BE (2)2x8, UNO. REFER TO DETAIL 10/S4.0 FOR ADDITIONAL REQUIREMENTS. 8. PROVIDE (2) BEARING (TRIMMER) STUDS AT EACH END OF ALL HEADERS, BEAMS, AND GIRDER TRUSSES 6'-0" IN LENGTH AND OVER, UNO. 9. WHERE POSTS OCCUR PROVIDE SOLID VERTICAL GRAIN BLOCKING SOLID THRU FLOOR TO MATCHING SUPPORTS BELOW, UNO. 10. TYPICAL WALL FRAMING CONSISTS OF 2x4'S OR 2x6's AT 16"oc AT EXTERIOR WALLS AND 2x4's OR 2x6's AT
- 11. REFER TO SHEET \$4.0 FOR TYPICAL WOOD FRAMING DETAILS. 12. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS. 13. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.



Upper Floor & Lower Roof Framing Plan

PERMIT SET



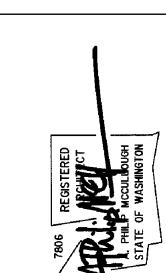
STANDARDS PER CH. 51-51 WAC R1004.1.1.

ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS.

16. ALL SHOWERHEAD AND KITCHEN SINK FAUCETS INSTALLED IN THE HOUSE SHALL BE RATED AT 1.75 GPM OR LESS.

Revisions 2021.11.17 2021.12.13 2021.12.15 2021.12.22 2022.05.02 2022.05.04 2022.06.12





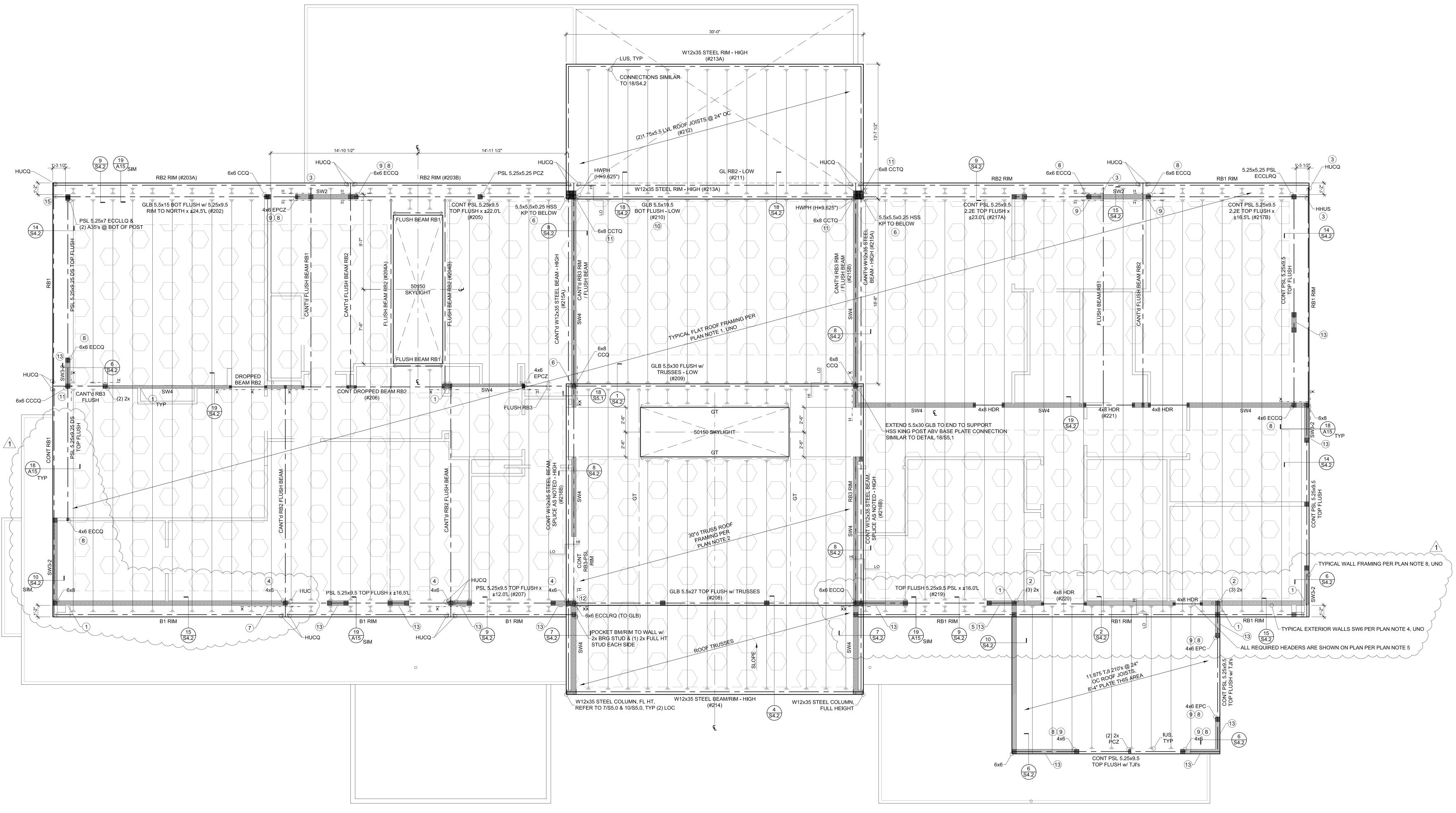


PERMIT SET

Upper Floor Plan







GENERAL NOTES:

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

1. EAVE OVERHANG PER PLAN. APPLY ROOFING IN ACCORDANCE WITH I.R.C. SEC. 905. PROVIDE DRIP EDGE PER R905.2.8.5. 2. HEADERS (HDR) TO BE PER STRUCTURAL. FILL CAVITIES WITH RIGID INSULATION WHERE POSSIBLE. 3. COLUMNS @ HEADERS, BEAMS, & GIRDERS TO BE (2) 2x STUDS (U.N.O.)

FLUSH BEAM SCHEDULE: BRG STUDS HANGER, UNO RB1 1.75x11.875 LSL HUS1.81/10 3.5x11.875 GLB or HHUS410 3.5x11.875 LSL HHUS410 5.5x11.875 GLB or HGUS5.50/10 5.25x11.875 PSL HGUS5.50/10 HGUS7.25/10

ALL GLB ARE 24F-V4, UNO

HORIZ CS16 x 3'-0" LONG - TOP PLATE TO TOP PLATE (@ BREAK) or TOP FLUSHED BEAM TO TOP PLATE or RIM TO RIM or BEAM TO BEAM (XX INDICATES 2-CS16 STRAPS)

LENGTH OF MEMBER

(X) NUMBER OF BUILT-UP STUDS

RT RIM TRUSS

LEGEND:

DS DRAG STRUT - NAIL THRU SHEATHING w/ 8d NAILS @ 4" OC INTO ENTIRE

GT GIRDER TRUSS

INDICATES EXTENT OF SHEARWALL SEGMENT BEARING WALL INDICATES EXTENT OF SOLAR PANELS ABOVE, 5 PSF MAX. SEE LAYOUT PER SOLAR DESIGNER.

FOOTNOTES:

(1) SHEARWALL SHEATHING CONTINUOUS THRU WALL INTERSECTION

(2) PROVIDE (2)A35 TOP AND BOTTOM OF POST/BUILT-UP STUDS (3) HANGER PER PLAN INSTALL UPSIDE DOWN

(10) RAISED BOTTOM OF BEAM (+/-) 2-1/4" FROM BOTTOM OF TJI RAFTERS

5) PROVIDE (5)LTP5's ORIENT UPRIGHT AND CENTERED ON 2x SHIM BETWEEN BEAM AND DOUBLE TOP PLATES FOR DRAG CONNECTION.

(4) PROVIDE VERT. HTS20 STRAP EACH BEAM END TO POST BELOW (AT EACH END OF EACH BEAM WERE HANGER NOT

6 PROVIDE HSS 3-1/2x3-1/2x1/4 MIN. KING POST (KP) AT HIGH STEEL BEAM AND SET COLUMN BASE PLATE AND CONNECTION TO TOP OF ROOF BEAM BELOW, REFER 18/s5.1

(7) PROVIDE SNUG FIT LSL 1-3/4" BLOCKING BETWEEN (3) RAFTER BAYS WITH A35 TO TOP PLATE AND PROVIDE HORIZ CS16 x 6'-0" OVER ROOF SHEATHING - LAP RIM/BEAM 1'-6" AND NAIL REMAINING LENGTH TO LSL 1-3/4" BLKG (8) RAISE TOP OF POST TO BOTTOM OF 9-1/2" DEPTH TOP FLUSH BEAM AND PROVIDE POST CAP PER PLAN, REFER DETAIL

(9) PROVIDE HORIZ CS16 x 4'-6" STRAP AT TOP PLATE AND WRAP AROUND CENTERED ON POST PER PLAN

(11) PROVIDE SOLID WOOD SHIM BETWEEN BOTTOM OF 9-1/2" DEPTH BEAM AND POST CAP AS REQUIRED TOP FLUSHED WITH TOP OF TJI RAFTERS (12) NOTCH BOTTOM OF RB3-PSL BEAM TO FIT INTO RAISED POST CAP - NO OVERCUTS

TOP PLATES CENTERED INTO BOTTOM OF BEAM, (2) SDWS SCREWS MIN. EACH WALL PANEL (14) PROVIDE SOLID WOOD SHIM BETWEEN BOTTOM OF 9-1/2" DEPTH BEAM AND DBL 2x6 TOP PLATES TO BE FLUSHED WITH TOP OF ROOF FRAMING AND PROVIDE 0.22" DIAM. x 8" SDWS TIMBER SCREWS AT 8"oc MAX, THRU UNDERSIDE OF DBL TOP PLATES CENTERED INTO BOTTOM OF BEAM

(13) PROVIDE SOLID WOOD SHIM BETWEEN BOTTOM OF 9-1/2" DEPTH BEAM AND DBL 2x6 TOP PLATES TO BE FLUSHED WITH

TOP OF ROOF FRAMING AND PROVIDE 0.22" DIAM. x 8" SDWS TIMBER SCREWS AT 16"oc MAX, THRU UNDERSIDE OF DBL

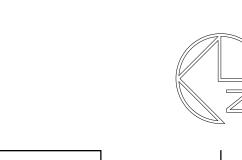
(15) PROVIDE LS70 EACH FACE, (2) TOTAL WITH #9 x 1-1/2" SD CONNECTOR SCREWS IN LIEU OF NAILS

ROOF FRAMING NOTES:

TYPICAL ROOF FRAMING CONSISTS OF SOLAR PANELS (5 PSF MAX.) OVER TAPERED RIGID INSULATION PER ARCH OVER 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 11-7/8" TJI 360's AT 24"oc, UNO. PROVIDE H8 EACH END OF ALL RAFTERS, H8 EACH SIDE OF ALL MULTIPLE RAFTERS, UNO. TRUSS ROOF FRAMING PER PLAN CONSISTS OF SOLAR PANELS (5 PSF MAX.) OVER TAPERED RIGID INSULATION PER ARCH OVER 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER PREFABRICATED TRUSSES AT 24"oc, UNO. TRUSSES TO BE A MIN DEPTH OF 24". PROVIDE H2.5A EACH END OF ALL TRUSSES, H2.5A EACH SIDE OF ALL MULTIPLE TRUSSES, UNO. REFER TO ARCHITECTURAL DRAWINGS FOR TRUSS PROFILE. 3. NAIL ROOF SHEATHING W/ 8d AT 6"oc AT FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12"oc

4. "SW_" INDICATES SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE ON 5/S4.0 FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS ARE SW6, UNO. 5. ALL HEADERS REQUIRED ARE SHOWN ON PLAN AND SHALL BE (2)2x8, UNO. REFER TO DETAIL 10/S4.0 FOR ADDITIONAL REQUIREMENTS. 6. PROVIDE (2) BEARING (TRIMMER) STUDS AT EACH END OF ALL HEADERS AND BEAMS 6'-0" IN LENGTH 7. WHERE POSTS OCCUR PROVIDE SOLID VERTICAL GRAIN BLOCKING SOLID THRU FLOOR TO MATCHING SUPPORTS BELOW. 8. TYPICAL WALL FRAMING CONSISTS OF 2x6's AT 16"oc AT EXTERIOR WALLS AND 2x4's OR 2x6's AT 16"oc AT

INTERIOR WALLS PER ARCH DRAWINGS, UNO. 9. REFER TO SHEET S4.0 FOR TYPICAL WOOD FRAMING DETAILS. 10. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS. 11. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.



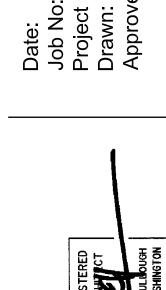
Upper Roof Framing

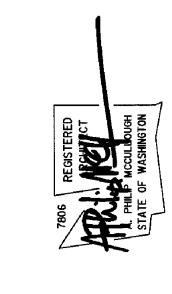
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Revisions 2021.11.17 2021.12.13 2021.12.15 2021.12.22 2022.05.04 2022.06.12





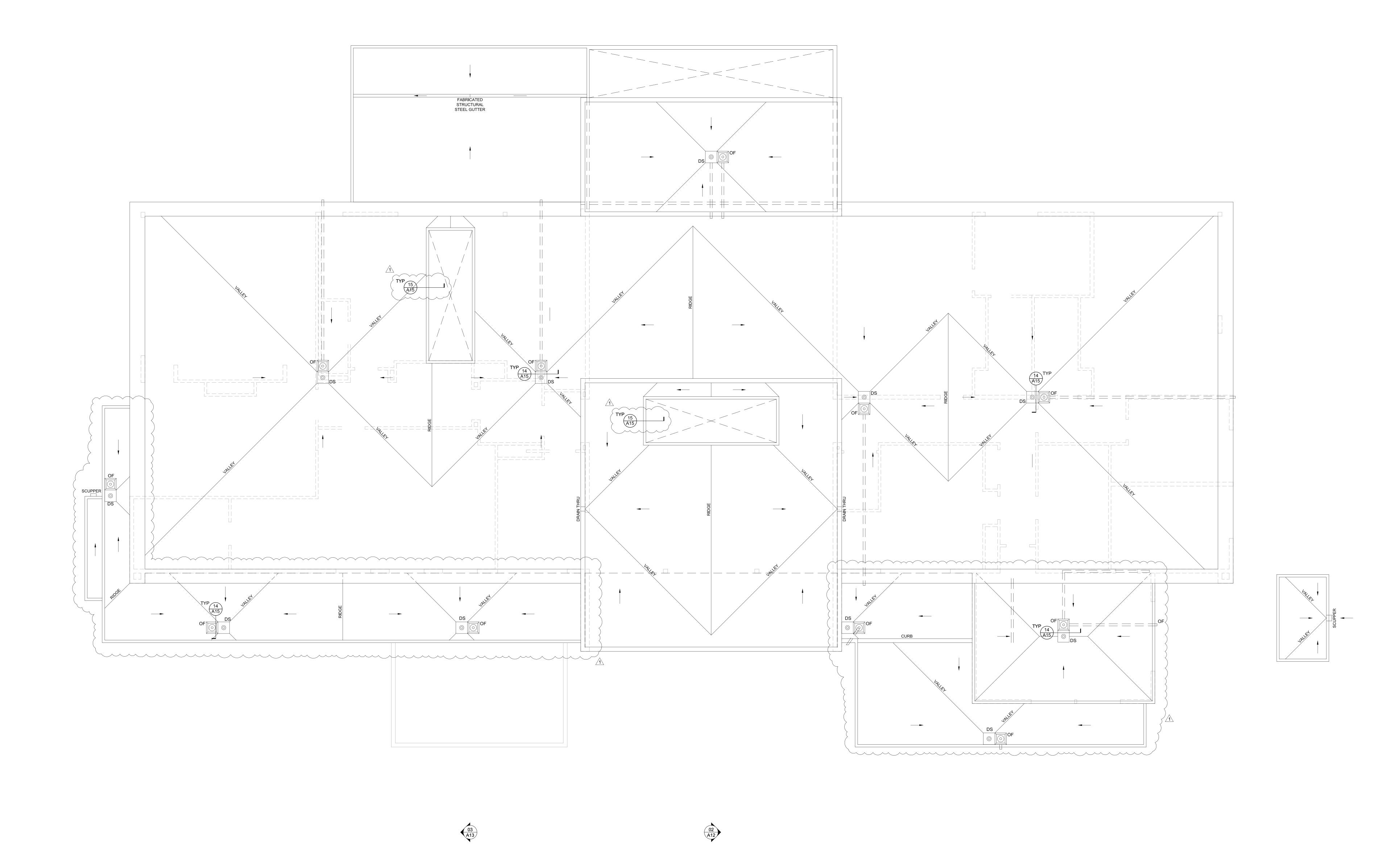


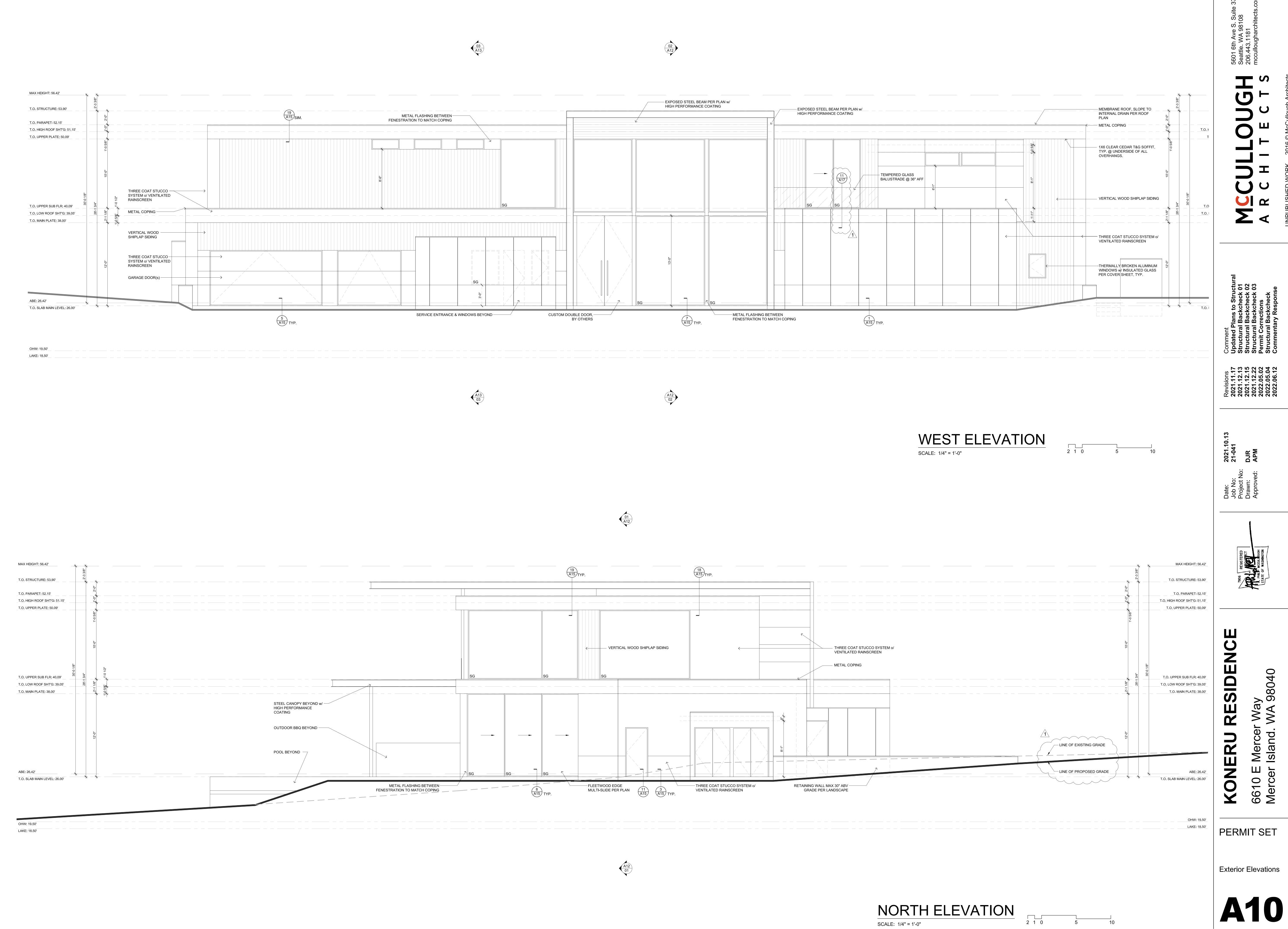


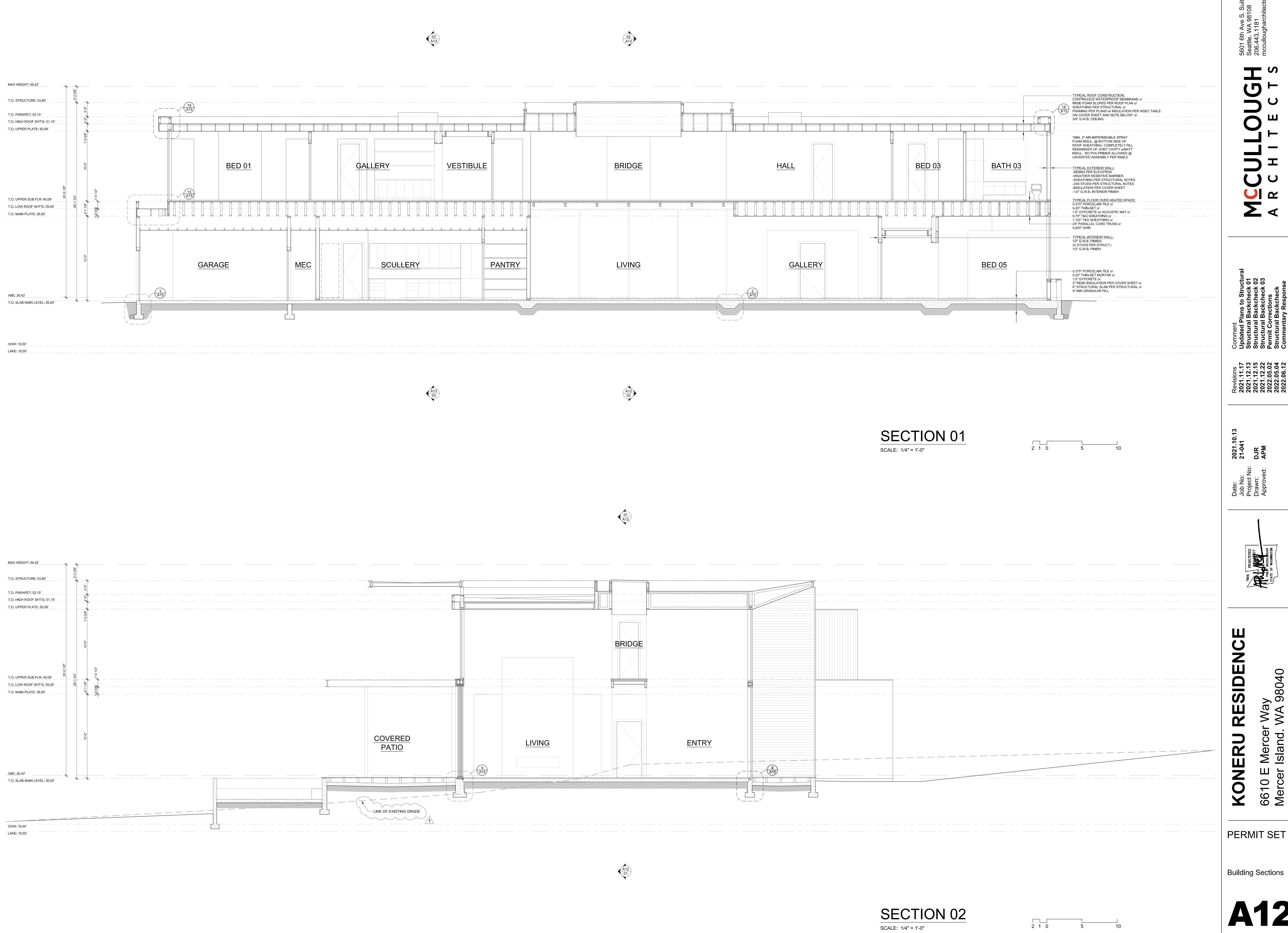


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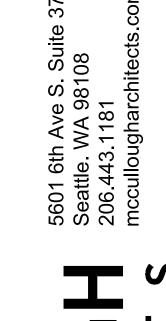
Roof Drainage Plan







Building Sections



6610 Merce

PERMIT SET

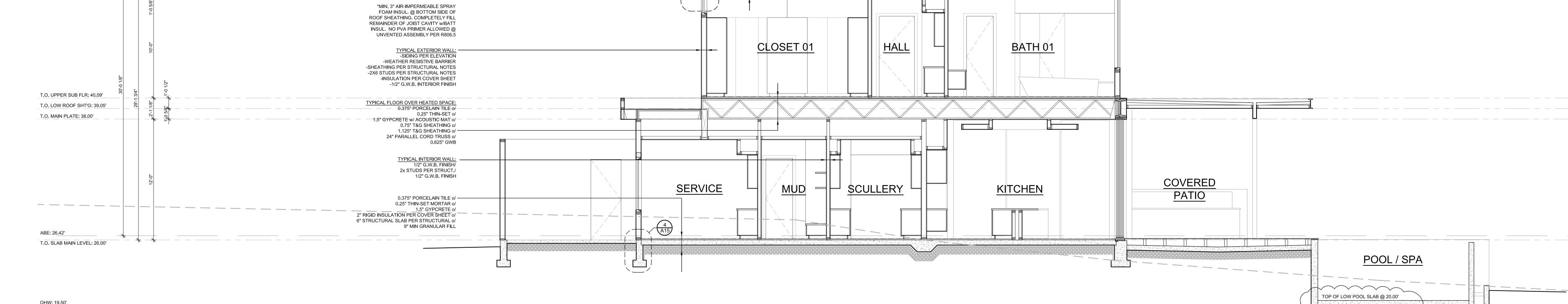
LINE OF EXISTING GRADE

Building Sections

SECTION 04

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

LAKE: 18.50' - APPROXIMATE ELEVATION OF GROUND WATER TABLE PER GEOTECH REPORT



MAX HEIGHT: 56.42'

T.O. STRUCTURE: 53.90'

T.O. PARAPET: 52.15'

T.O. HIGH ROOF SHT'G: 51.15'

T.O. UPPER PLATE: 50.09'

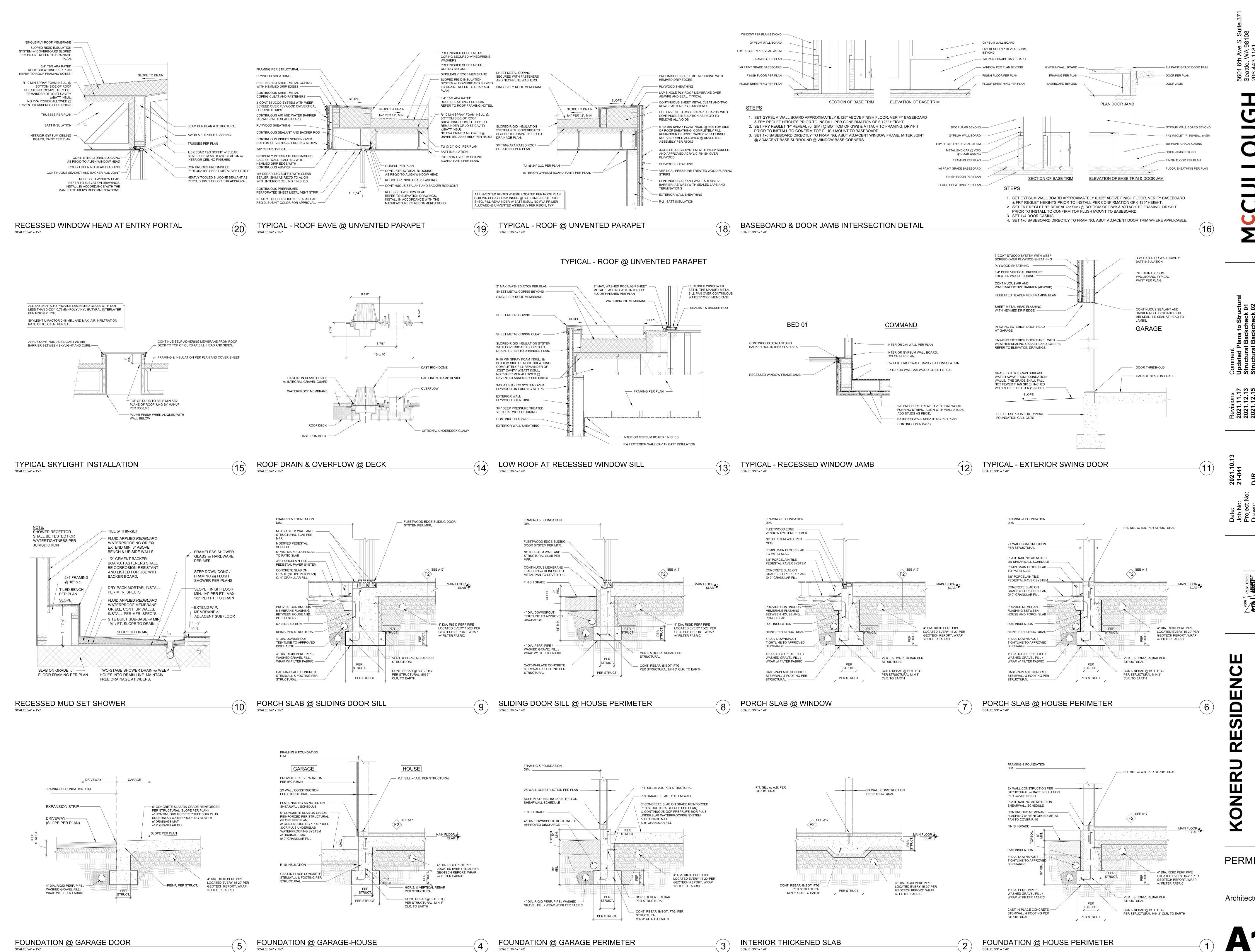
TYPICAL ROOF CONSTRUCTION: CONTINUOUS WATERPROOF

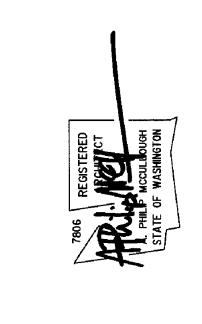
RIGID FOAM SLOPED PER ROOF PLAN/ SHEATHING PER STRUCTURAL/

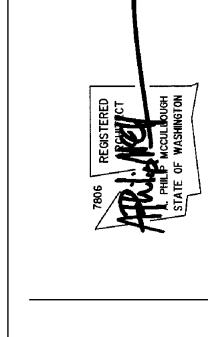
FRAMING PER PLANS W/ INSULATION PER WSEC TABLE ON COVER SHEET

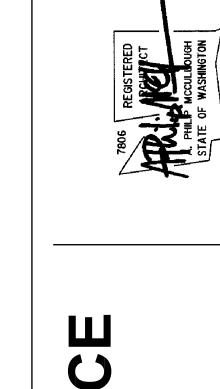
MEMBRANE/

AND NOTE BELOW*/ 5/8" G.W.B. CEILING





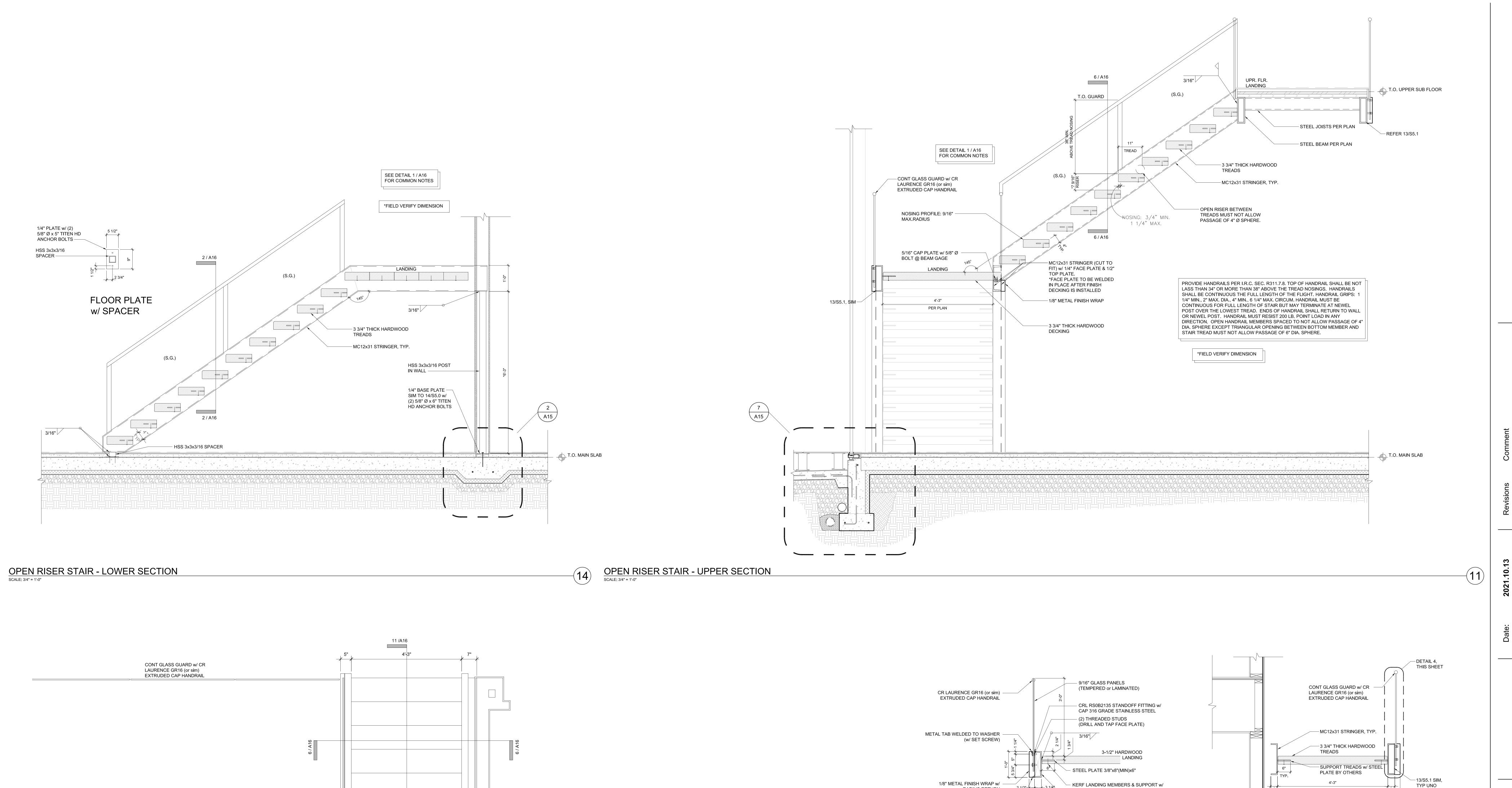


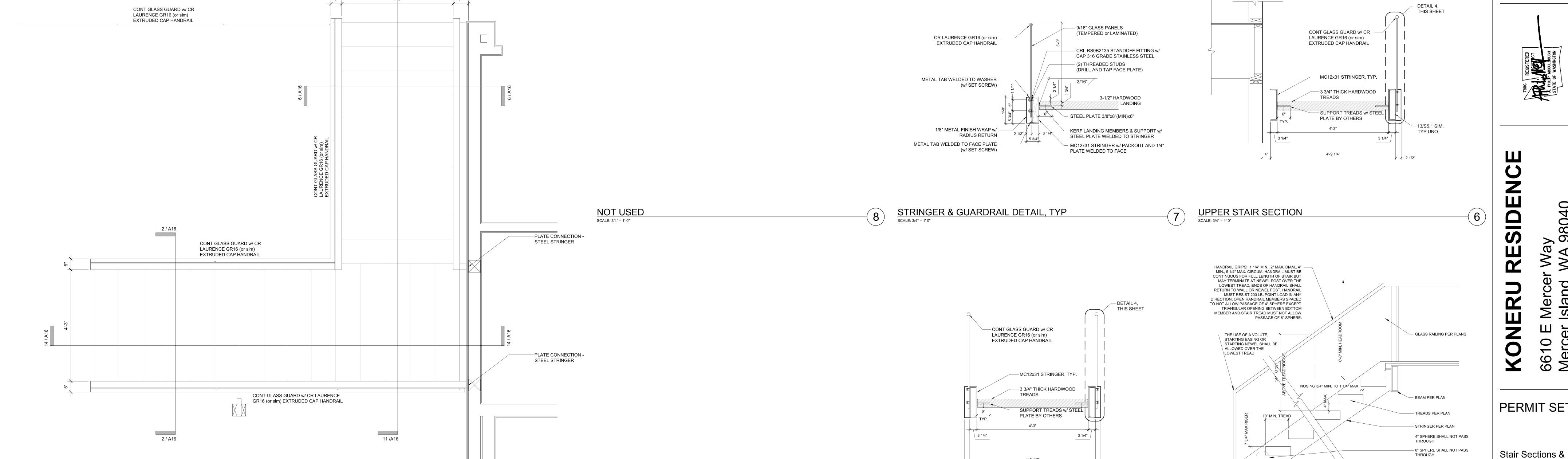


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PERMIT SET

Architectural Details





NOT USED
SCALE: 3/4" = 1'-0"

STAIR PLAN

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

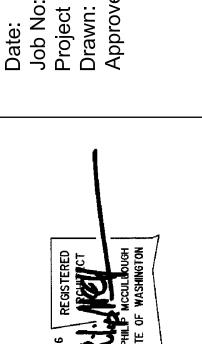
FOUNDATION @ GARAGE DOOR
SCALE: 3/4" = 1'-0"

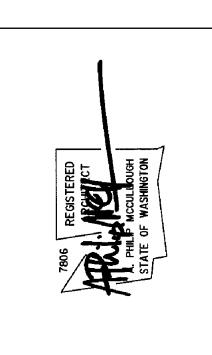
4'-9 1/2"

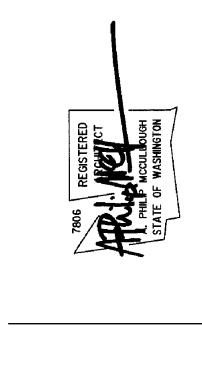
2 1/2"

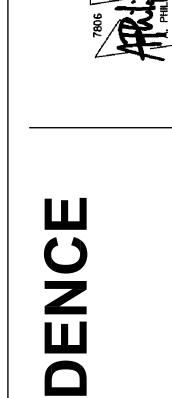
LOWER STAIR SECTION

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









RESIDE

6610 Merce PERMIT SET

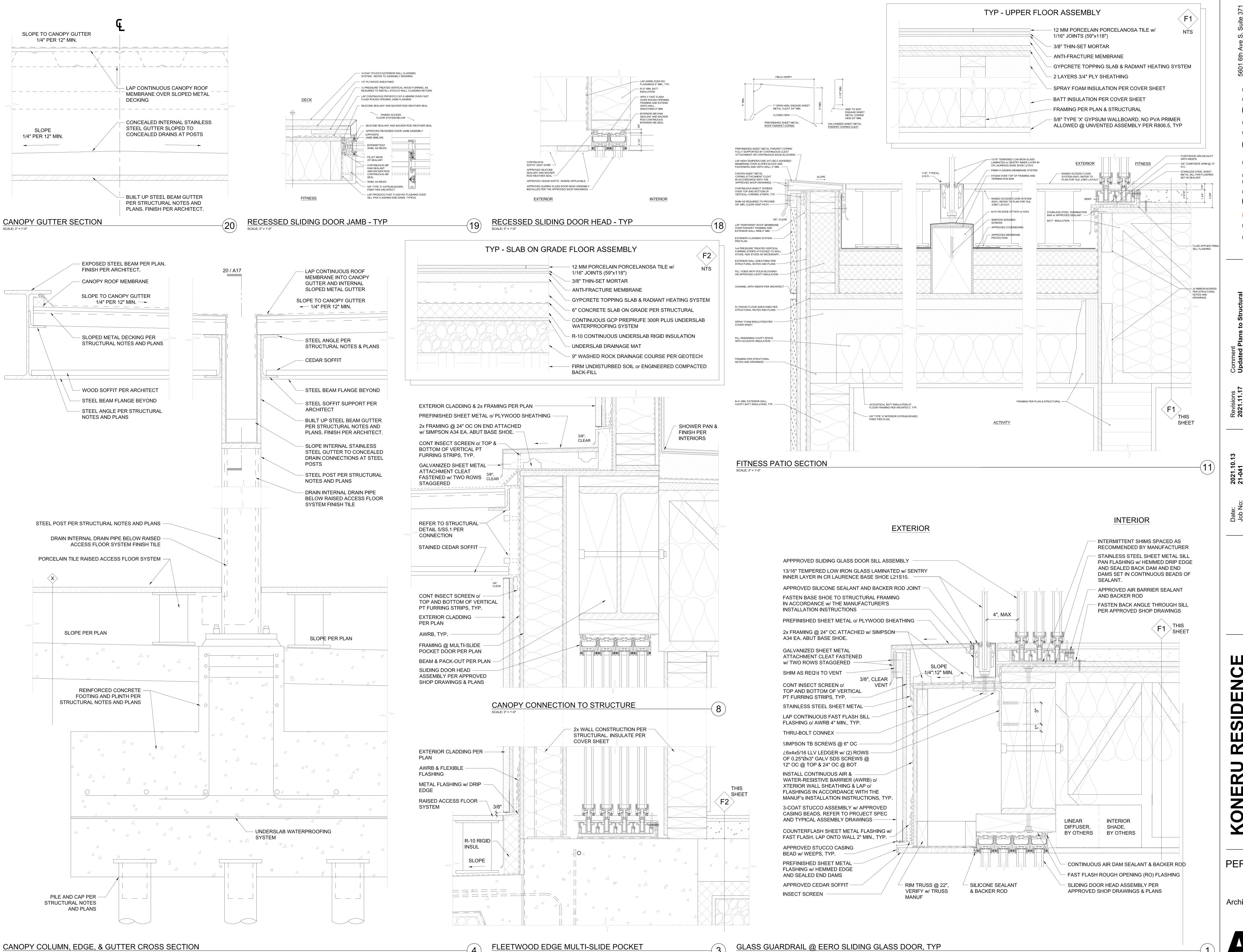
THROUGH

TYPICAL OPEN RISER INTERIOR STAIR

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

– w/ (2) 0.625"Ø x 5" TITEN HD ANCHORS EA STRINGER

Details



U

Z SID Way WA 98

10 5 7

PERMIT SET

Architectural Details

FLOOR LIVE LOAD (RESIDENTIAL DECKS AND BALCONIES)

METHOD - DIRECTIONAL PROCEDURE Kzt=1.0, GCpi=0.18, 110 MPH (RISK CATEGORY II), EXPOSURE "C" **EARTHQUAKE** ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS SDC D, SITE CLASS E, le=1.0, Ss=1.45, S1=0.50, Sds=1.059, Sd1=0.567, Cs=0.163, R=6.5,

SEISMIC DESIGN BASE SHEAR Vsx=68.0 KIPS(ULTIMATE)

3. 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.

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 SECTIONS, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.

5. 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."

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTOR'S 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.

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.

9. 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. MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION FOR THE INSPECTORS USE AND REFERENCE.

10.SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

REINFORCING STEEL STRUCTURAL STEE METAL DECKING

GLUED LAMINATED MEMBERS MANUFACTURED LUMBER (PSL'S, LSL'S, LVL'S) PLYWOOD WEB JOISTS

CONNECTOR PLATE WOOD FLOOR TRUSSES CONNECTOR PLATE WOOD ROOF TRUSSES PREFABRICATED STAIR SYSTEM

APPROVED SETS OF SHOP DRAWINGS SHALL ALSO BE SUBMITTED TO THE BUILDING DEPARTMENT AS REQUIRED BY THE JURISDICTION. IF THERE IS A DOUBT WHETHER OR NOT A POST-PERMIT SUBMITTAL IS NECESSARY OR WILL BE ACCEPTED, CONSULT THE BUILDING CODE REVIEWER FOR THE ORIGINAL PERMIT. NO DRAWING SHOULD BE SUBMITTED TO THE BUILDING OFFICIAL THAT STILL BEARS THE DISPOSITION OF "REVISE AND RESUBMIT" OR SIMILAR LANGUAGE.

11.SHOP DRAWING REVIEW OF 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 (1) COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN (2) 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 AS REQUIRED BY THE JURISDICTION.

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.

12.SHOP DRAWINGS OF DESIGN BUILD COMPONENTS INCLUDING AWNINGS, BALCONIES, BASE ISOLATORS, CANOPIES, CURTAIN WALL SYSTEMS, ELEVATORS, EXTERIOR CLADDING, FALL PROTECTION ANCHORS, HOLD-DOWN SYSTEMS (MULTI-STORY), SKYLIGHT FRAMES, STAIR SYSTEMS, STEEL STUD FRAMING, STORAGE RACKS (GREATER THAN 6 FEET IN HEIGHT), AND SUNROOMS SHALL BE STAMPED AND SIGNED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO REVIEW OF THE ARCHITECT OR ENGINEER OF RECORD FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SHOP DRAWINGS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE MADE AVAILABLE UPON WRITTEN REQUEST.

QUALITY ASSURANCE

 $\overline{\hspace{1cm}}$ 13.SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110, 1704 AND 1705 OF THE IBC BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION SHALL BE PERFORMED.

PER SOILS REPORT SOIL CONDITIONS, FILL PLACEMENT, AND DENSITY PER SOILS REPORT PILE OR PIER FOUNDATIONS EPOXY GROUTED INSTALLATIONS PER MANUFACTURER STRUCTURAL STEEL FABRICATION AND ERECTION PER AISC 360 METAL DECK INSTALLATION (INCLUDING FIELD WELDING) PER SDI QA/QC 14.STRUCTURAL OBSERVATION SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 1704.6 OF THE IBC

CONCRETE CONSTRUCTION STRUCTURAL STEEL CONSTRUCTION SHEARWALLS HOLDOWNS

FOR THE FOLLOWING BUILDING ELEMENTS:

THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD ADEQUATE NOTICE TO SCHEDULE APPROPRIATE SITE VISITS FOR STRUCTURAL OBSERVATION.

STRUCTURAL OBSERVATION MEANS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS, AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED IN SECTION 110 OR SPECIAL INSPECTIONS IN SECTION 1705 OR OTHER SECTIONS OF THE IBC.

THE OWNER SHALL EMPLOY THE STRUCTURAL ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, TO PERFORM STRUCTURAL OBSERVATION. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR, AND THE BUILDING OFFICIAL. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

GEOTECHNICAL

DATED JUNE 8, 2021.

15.SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. 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 SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

SEE SOILS REPORT / 45 PCF LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED) TRAFFIC SURCHARGE 90 PSF SEISMIC SURCHARGE PASSIVE PRESSURE 300 PCF 4" DIAMETER STANDARD WEIGHT PIPE PILE CAPACITY 10 TONS

SOILS REPORT REFERENCE: GEOTECHNICAL ENGINEERING STUDY AND CRITICAL AREA STUDY OF PROPOSED PROPERTY REDEVELOPMENT LOCATED AT 6610 EAST MERCER WAY, MERCER ISLAND, WASHINGTON, 98040, PREPARED BY GEOTECH CONSULTANTS, INC, REPORT NUMBER JN21151,

16.4" DIAMETER STANDARD WEIGHT PIPE PILES SHALL BE DRIVEN TO REFUSAL AS DEFINED BY THE SOILS ENGINEER. PIPE PILES SHALL BE INSTALLED IN STRICT CONFORMANCE TO SOILS ENGINEER'S REQUIREMENTS. TESTING OF PILES SHALL BE ACCORDANCE WITH SOILS ENGINEER'S REQUIREMENTS AND AT A MINIMUM BE TESTED IN ACCORDANCE TO ASTM STANDARD D1143-81 FOR A MINIMUM OF (1) PILE OR 3% OF 3", 4" AND 6" DIAMETER PILES UP TO (5) PILES OF EACH SIZE MAXIMUM; USE OF THE QUICK LOAD TEST METHOD IN THE STANDARD IS THE MINIMUM REQUIRED. STEEL PIPE SHALL CONFORM TO ASTM 53, GRADE A OR B, $F_V = 35$ KSI. PILES SHALL BE DRIVEN IN NOMINAL SECTIONS AND CONNECTED WITH COMPRESSION FITTED SLEEVE COUPLERS. PIPE JOINTS SHOULD NOT BE WELDED TOGETHER. PILES SHALL BE PLACED WITHIN 3" OF SPECIFIED LOCATION. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRIVING PILES.

17.SPECIAL INSPECTION OF PILES SHALL BE REQUIRED FOR INSTALLATION AND TESTING.

^^^^^ **CONCRETE**

40 PSF

60 PSF

25 PSF

18.CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318 AND ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 3000 PSI. SLUMP OF CONCRETE SHALL NOT EXCEED 6". STRUCTURAL DESIGN IS BASED ON A CONCRETE STRENGTH OF f'c = 2500 PSI, THEREFORE NO CONCRETE STRENGTH TESTING REQUIRED. CONCRETE EXPOSURE CATEGORIES ARE F1, S0, W0, AND C1.

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.

19.REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, fy = 60 KSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, fy = 40 KSI. WELDED WIRE WIRE FABRIC SHALL CONFORM TO ASTM A 1064. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, fy = 60 KSI.

20. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-99 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #6 AND SMALLER 48 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 48 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-14, CLASS B. 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.

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

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER) 1-1/2'' COLUMN TIES OR SPIRALS AND BEAM STIRRUPS 1-1/2" SLABS AND WALLS (INT FACE) GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

ANCHORAGE

22.EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-XP" EPOXY ADHESIVE AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-2508 AND IAMPO-UES REPORT ER-265. SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH CURRENT ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED. RODS SHALL BE ASTM A36, UNO.

23. HEAVY DUTY THREADED CONCRETE ANCHORS SPECIFIED ON THE DRAWINGS SHALL BE "TITEN HD SCREW ANCHOR" AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-2713 AND ESR-1056, INCLUDING MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS. SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH CURRENT ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED.

24.EXPANSION BOLTS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "STRONG-BOLT 2" ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT CONFORMANCE TO ICC-ES REPORT ESR-3037 AND IAPMO-UES REPORT ER-240, INCLUDING MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS. SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH CURRENT ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED.

25. DRIVE PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE (PDPWL-300MG, 0.145" DIAMETER, UNO) AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY OR AN APPROVED EQUIVALENT IN STRENGTH AND EMBEDMENT. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-2138. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1", UNO. MAINTAIN AT LEAST 3" TO NEAREST CONCRETE EDGE.

WOOD

TO THE FOLLOWING MINIMUM STANDARDS:

STUDS, PLATES AND MISC FRAMING

26.ALL 2x LUMBER SHALL BE KILN DRIED OR MC-19, AND ALL LUMBER SHALL BE GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING RULES FOR WEST COAST LUMBER NO 17. FURNISH

JOISTS AND BEAMS	(2x, 3x, 4x MEMBERS)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE, Fb = 900 PSI
BEAMS	(6x AND LARGER)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE, Fb = 875 PSI
POSTS	(4x MEMBERS)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE, FC = 1350 PSI
	(6x AND LARGER)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE, Fc = 600 PSI

27.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 SIMPLE SPAN GLULAM BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2400 PSI, Fv = 265 PSI, E = 1800 KSI, UNO. ALL CANTILEVER GLULAM BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI, E = 1800 KSI, UNO. GLUED LAMINATED COLUMNS SHALL BE DOUGLAS FIR COMBINATION 3, L2D GRADE, Fc = 2300 PSI, Fb = 2000 PSI, E = 1900 KSI.

DOUGLAS FIR-LARCH NO 2

28.MANUFACTURED LUMBER, PSL, LVL, AND LSL, SHALL BE MANUFACTURED UNDER A PROCESS APPROVED BY THE NATIONAL RESEARCH BOARD. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, THE NATIONAL RESEARCH BOARD NUMBER, AND THE QUALITY CONTROL AGENCY. ALL PSL, LVL, AND LSL LUMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH ICC-ES REPORT ESR-1387 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. THE MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.0E)	Fb = 2900 PSI	E = 2000 KSI	Fv = 290 PSI
LVL (2.0E)	Fb = 2600 PSI	E = 2000 KSI	Fv = 285 PSI
LSL (1.55E)	Fb = 2325 PSI	E = 1550 KSI	Fv = 310 PSI
PSL COLUMN (1.8E)	Fc = 2500 PSI	E = 1800 KSI	Fv = 190 PSI

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE TRUS-JOIST CORPORATION. ALTERNATE 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 CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

29. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE TRUS-JOIST CORPORATION. ALTERNATE PLYWOOD WEB 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 CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

30.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.

WALL SHEATHING SHALL BE 7/16" or 1/2" (NOMINAL) WITH SPAN RATING 24/0

FLOOR SHEATHING SHALL BE 3/4" T&G (NOMINAL) WITH SPAN RATING 48/24

WATERPROOF DECK SHEATHING SHALL BE 3/4" T&G (NOMINAL) WITH SPAN RATING 48/24 FLAT ROOF SHEATHING SHALL BE 3/4" T&G (NOMINAL) WITH SPAN RATING 48/24

ROOF SHEATHING SHALL BE 1/2" or 7/16" (NOMINAL) WITH SPAN RATING 32/16 FOR ROOFS WITH A PITCH GREATER THAN 2:12

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

31.ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

32.PRESSURE TREATED WOOD (INCLUDES PRESERVATIVE AND FIRE TREATED) SHALL BE TREATED PER AWPA STANDARDS. PRESSURE TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO RETENTION OF 0.25 PCF. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO A RETENTION OF 0.40 PCF. SODIUM BORATE (SBX) TREATED WOOD SHALL NOT BE USED WHERE EXPOSED TO WEATHER. FASTENERS AND TIMBER CONNECTORS WITHOUT AMMONIA IN DIRECT CONTACT WITH ACQ-A TO A RETENTION LEVEL OF 0.40 PCF), CBA-A (UP TO A RETENTION LEVEL OF 0.41 PCF), CA-B (UP TO A RETENTION LEVEL OF 0.21 PCF), SHALL BE G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653. FASTENERS AND TIMBER CONNECTORS WITH AMMONIA IN DIRECT CONTACT WITH ACQ-A (OVER A RETENTION LEVEL OF 0.40 PCF), CBA-A (OVER A RETENTION LEVEL OF 0.41 PCF), CA-B (OVER A RETENTION LEVEL OF 0.21 PCF), OR WITH ACZA TREATED WOOD SHALL BE TYPE 304 OR 316 STAINLESS STEEL.

33.TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. 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 TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "IUS" SERIES JOIST HANGERS. ALL DOUBLE-JOISTS BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIU" SERIES JOIST HANGERS. WHERE CONNECTOR STRAPS CONNECT (2) MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

34.WOOD FASTENERS

EACH MEMBER.

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

SIZE	TYPE	LENGTH	DIAMETE
8d	COMMON	2-1/2"	0.131"
10d	GUN	3"	0.131"
12d	GUN	3-1/4"	0.131"
16d	GUN	3-1/2"	0.131"

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

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

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 SCREWS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2018 EDITION) WITH A LEAD BORE HOLE OF 60-70% OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS. BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. HOLES SHALL BE ACCURATELY ALIGNED IN MAIN MEMBERS AND SIDE PLATES/MEMBERS. BOLTS SHALL NOT BE FORCIBLY DRIVEN.

C. SDS AND SDWS SCREWS CALLED OUT ON PLAN ARE TIMBER SCREWS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. SCREWS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. EQUIVALENT SCREWS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. LAG SCREWS ARE NOT AN EQUIVALENT SUBSTITUTION.

35. WOOD FRAMING NOTES - THE FOLLOWING APPLY UNLESS NOTED OTHERWISE ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC, THE AITC "TIMBER CONSTRUCTION MANUAL", AND THE AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, SHALL CONFORM TO TABLE 2304.10.1. OF THE IBC, UNO. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

B. WALL FRAMING: REFER TO ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16"oc, UNO. (2)STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. (2)2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS IN STRUCTURAL WALLS, UNO. NAIL MULTI-MEMBER HEADERS WITH (2) ROWS 10d AT 12"oc. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE AND BOTTOM PLATE TO EACH STUD WITH (3) 10d NAILS. FACE NAIL DOUBLE TOP PLATES WITH 10d AT 12"OC AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE (12) 10d NAILS AT 4"OC EACH SIDE OF JOINT. AT TOP PLATE INTERSECTIONS PROVIDE (3) 10d FACE NAILS.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH (2) ROWS OF 12d NAILS AT 16"oc, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS AT 4'-0"oc EMBEDDED 7" MINIMUM, UNO. THERE SHALL BE A MINIMUM OF (2)BOLTS PER PLATE SECTION WITH (1)BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 4-1/2" FROM EACH END OF THE PLATE SECTION. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH (2) ROWS OF 10d AT 16"oc. UNLESS NOTED OTHERWISE, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH #6 x 1-1/4" TYPE S OR W SCREWS AT 12"oc. UNLESS NOTED OTHERWISE, 7/16" OR 1/2" (NOMINAL) APA RATED SHEATHING (SPAN RATING 24/0) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS AT 6"OC AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK UN-SUPPORTED EDGES) AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS AT 12"oc. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

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, UNO. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOENAIL TIMBER JOISTS TO SUPPORTS WITH (3) 10d NAILS AND NAIL TJI JOISTS TO SUPPORTS WITH (2) 10d NAILS. ATTACH JOISTS TO BEAMS WITH SIMPSON JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH (2) ROWS 10d AT 12"oc. TOENAIL RIM JOIST TO TOP PLATE WITH 10d AT 6"oc. TOENAIL BLOCKING BETWEEN JOISTS TO TOP PLATE WITH (3) 10d NAILS.

UNLESS NOTED OTHERWISE ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS WITH END JOINTS STAGGERED. AND NAILED AT 6"OC WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND AT 12"oc TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G 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 10d AT 12"oc, UNO.

36.NOTCHES AND HOLES IN WOOD FRAMING:

A. SAWN LUMBER JOISTS AND RAFTERS: NOTCHES AT THE ENDS OF JOISTS SHALL NOT EXCEED 1/4 THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED 1/6 THE JOIST DEPTH. BE LONGER THAN 1/3 THE JOIST DEPTH, OR BE LOCATED IN THE MIDDLE 1/3 OF THE SPAN. HOLES SHALL NOT BE WITHIN 2" OF THE TOP OR BOTTOM OF THE JOIST AND THE DIAMETER SHALL NOT EXCEED 1/3 THE JOIST DEPTH. SPACING BETWEEN HOLES SHALL BE A MINIMUM OF (2)TIMES THE DIAMETER OF THE LARGEST HOLE OR 2" AND SHALL BE LOCATED A MINIMUM OF 2" FROM ANY NOTCH.

B. EXTERIOR AND BEARING WALLS: WOOD STUDS ARE PERMITTED TO BE NOTCHED TO A DEPTH NOT EXCEEDING 1/4 OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40% OF THE STUD WIDTH IS PERMITTED IN WOOD STUDS. HOLES SHALL NOT BE WITHIN 5/8" TO THE EDGE OF THE STUD. SPACING BETWEEN HOLES SHALL BE A MINIMUM OF (2)TIMES THE DIAMETER OF THE LARGEST HOLE OR 2" AND SHALL NOT BE LOCATED AT THE SAME SECTION AS A NOTCH.

C. CUTS, NOTCHES, AND HOLES IN MANUFACTURED LUMBER, PREFABRICATED PLYWOOD WEB JOISTS, AND PREFABRICATED TRUSSES ARE PROHIBITED EXCEPT WHERE NOTED ON STRUCTURAL PLANS OR PERMITTED BY MANUFACTURER'S RECOMMENDATIONS.

37.ELECTRICAL, MECHANICAL, PLUMBING, AND DRAINAGE SYSTEMS SHALL BE DESIGNED TO ACCOMMODATE THE DIFFERENTIAL SHRINKAGE OR MOVEMENT OF THE WOOD STRUCTURE (3/8" PER

38.DEFLECTION OF CANTILEVERS SHALL BE CLOSELY MONITORED BY THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR TO VERIFY AND ENSURE ALL POST CAPS AND POST BEARING CONDITIONS ARE INSTALLED IN STRICT CONFORMANCE TO THE STRUCTURAL PLANS. CANTILEVERS IN WOOD FRAMING CAN DEFLECT UP TO 1/8" PER FOOT (I.E. 4' CANTILEVER MAY DEFLECT 1/2"). IF DEFLECTION EXCEEDS 1/8" PER FOOT NOTIFY STRUCTURAL ENGINEER IMMEDIATELY. BEFORE FINISHES ARE INSTALLED, FLOORS AT OR ABOVE CANTILEVERS MAY REQUIRE LEVELING COMPOUND AND SOFFITS FURRED TO MAKE THEM LEVEL.

39.PREFABRICATED CONNECTOR PLATE WOOD FLOOR 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 40 PSF TOP CHORD DEAD LOAD 25 PSF 5 PSF BOTTOM CHORD DEAD LOAD 70 PSF TOTAL LOAD

REFER TO PLAN FOR ADDITIONAL LOADING. ALL FLOOR TRUSSES SHALL BE DESIGNED FOR A

MAXIMUM LIVE LOAD DEFLECTION OF THE SPAN DIVIDED BY 480.

ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

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 STAMPED AND SIGNED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPE BEARING POINTS, INTERSECTIONS, ETC, SHOWN ON THE DRAWINGS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR

40.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 15 PSF TOP CHORD DEAD LOAD BOTTOM CHORD DEAD LOAD 5 PSF TOTAL LOAD 45 PSF 10 PSF WIND UPLIFT (TOP CHORD) BOTTOM CHORD LIVE LOAD (BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF LIVE LOAD)

REFER TO PLAN FOR ADDITIONAL LOADING TRUSSES SHALL BE DESIGNED TO NOT ALLOW LIMITED STORAGE PER IBC TABLE 1607.1. WEBS SHALL BE

CONFIGURED SO THAT ALL OPENINGS ARE SMALLER THAN 24" WIDE x 42" HIGH.

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 STAMPED AND SIGNED 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, ROOF OVER-FRAMING, 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.

IN PARAGRAPH 3.1.

41.STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON:

A. AISC 360 AND CHAPTER 22 OF THE INTERNATIONAL BUILDING CODE. B. APRIL 14, 2010 AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AMENDED AS NOTED IN THE CONTRACT DOCUMENTS, BY THE DELETION OF PARAGRAPH 4.4.1, AND REVISE REFERENCE FROM "STRUCTURAL DESIGN DRAWINGS" TO "CONTRACT DOCUMENTS"

C. SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS.

42.STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS: TYPE OF MEMBER ASTM SPECIFICATION 50 KSI A. WIDE FLANGE SHAPES B. HP-SHAPES A572 (GRADE 50) 50 KSI C. OTHER SHAPES, PLATES, AND RODS 36 KSI D. STRUCTURAL PIPE A53 (GRADE B) 35 KSI E. HOLLOW STRUCTURAL SECTIONS:

SQUARE OR RECTANGULAR A500 (GRADEC) ROUND A500 (GRADE C) F. CONVENTIONAL HIGH-STRENGTH BOLTS F3125 (GRADE A325) (3/4"ROUND, UNO) G. COMMON BOLTS (WOOD APPLICATIONS) A307 F1554 (GRADE 36) H. ANCHOR BOLTS I. HEADED SHEAR STUDS

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

50 KSI

46 KSI

44.ALL A325 CONNECTION BOLTS NEED ONLY BE TIGHTENED TO A SNUG TIGHT CONDITION, DEFINED AS THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A PERSON USING AN ORDINARY SPUD WRENCH.

45.ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT -20 DEGREES(F) AND 40 FT-LBS AT 70 DEGREES(F), AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

A D D D E \ / | A T | O N | C

ABBREV	IATIONS				
<u>±</u>	PLUS OR MINUS	ES	EACH SIDE	OD	OUTSIDE DIAMETER
Ø	DIAMETER	EW	EACH WAY	OF	OUTSIDE FACE
AΒ	ANCHOR BOLT	EXP	EXPANSION	OPNG	OPENING
ABV	ABOVE	EXT	EXTERIOR	OPP	OPPOSITE
ADDL	ADDITIONAL	FDN	FOUNDATION	OSB	ORIENTED STRAND
AFF	ABOVE FINISHED	FF	FINISHED FLOOR		BOARD
	FLOOR	FIN	FINISH	PAF	POWDER ACTUATED
ALT	ALTERNATE	FLR	FLOOR		FASTENER
APPROX	APPROXIMATELY	FRMG	FRAMING	PEN	PENETRATION
ARCH	ARCHITECT,	FRP	FIBER REINFORCED	PERP	PERPENDICULAR
	ARCHITECTURAL		PLASTIC	PL	PLATE
BLDG	BUILDING	FS	FAR SIDE	PL	PROPERTY LINE
BLKG	BLOCKING	FT	FEET	PLF	POUNDS PER LINEAR
BLW	BELOW	FTG	FOOTING		FOOT
BM	BEAM	GA	GAGE, GAUGE	PLY	PLYWOOD
BMU	BRICK MASONRY	GALV	GALVANIZED	PREFAB	PREFABRICATED
	UNIT	GL	GLUE LAMINATED	PRELIM	PRELIMINARY
BOE	BOTTOM OF		TIMBER	PSF	POUNDS PER
	EXCAVATION	GR	GRADE		SQUARE FOOT
BOT	BOTTOM	GT	GIRDER TRUSS	PSI	POUNDS PER SQUARE
BRG	BEARING	GWB	GYPSUM WALLBOARD		INCH
BSMT	BASEMENT	HD	HOLDOWN	PSL	PARALLEL STRAND
BTWN	BETWEEN	HDR	HEADER		LUMBER
С	CAMBER	HF	HEM FIR	PT	PRESSURE TREATED
CBF	CONCENTRICALLY	HGR	HANGER		LUMBER
000	BRACED FRAME	HM	HIP MASTER	P-T	POST-TENSIONED
CGS	CENTER GRAVITY	HORIZ	HORIZONTAL	R	RADIUS
OID.	OF STEEL	HSS	HOLLOW STRUCTURAL	REF	REFERENCE
CIP	CAST IN PLACE	LIT	SECTION	REINF	REINFORCING
CJ	CONTROL JOINT	HT	HEIGHT	REQD	REQUIRED
CJP	COMPLETE JOINT	IBC	INTERNATIONAL	RET	RETAINING
	PENETRATION	ID	BUILDING CODE INSIDE DIAMETER	RO SCHED	ROUGH OPENING
Q CLC	CENTERLINE	ID IE	INVERT ELEVATION		SCHEDULE
CLG CLR	CEILING CLEAR	IF	INSIDE FACE	SECT SF	SECTION SQUARE FOOT
CLK	CONCRETE	IN	INCH	shtg	SHEATHING
CIVIO	MASONRY UNIT	INSUL	INSULATION	SIM	SIMILAR
COL	COLUMN	IRC	INTERNATIONAL	SOG	SLAB ON GRADE
CONC	CONCRETE	INC	RESIDENTIAL CODE	SPEC	SPECIFICATIONS
CONN	CONNECTION	INT	INTERIOR	SQ	SQUARE
CONST	CONSTRUCTION	JST	JOIST	SR	STUD RAIL
CONT	CONTINUOUS	K	KIPS (1000 POUNDS)	SS	STAINLESS STEEL
COORD	COORDINATE	KP	KING POST	STAGG	
CP	COMPLETE	KSF	KIPS PER SQ FT	STD	STANDARD
	PENETRATION	L	ANGLE	STIFF	STIFFENER
CTR	CENTER	L	LENGTH	STL	STEEL
CTRD	CENTERED	LBS	POUNDS	STRUCT	STRUCTURAL
CY	CUBIC YARD	LF	LINEAL FOOT	SW	SHEARWALL
DBL	DOUBLE	LL	LIVE LOAD	SYM	SYMMETRICAL
DEMO	DEMOLISH	LLH	LONG LEG	T&G	TONGUE AND GROOVE
DET	DETAIL		HORIZONTAL	TDS	TIE DOWN SYSTEM
DEV	DEVELOPMENT	LLV	LONG LEG VERTICAL	TEMP	TEMPORARY
DF	DOUGLAS FIR	LOC	LOCATE, LOCATION	THK	THICKNESS
DIA	DIAMETER	LONG	LONGITUDINAL	THKD	THICKENED
DIAG	DIAGONAL	LSH	long slotted hole	THRD	THREADED
DIM	DIMENSION	LSL	LAMINATED	THRU	THROUGH
DIST	DISTRIBUTED		STRUCTURAL LUMBER	TOW	TOP OF WALL
DL	DEAD LOAD	LVL	LAMINATED VENEER	TPL	TRIPLE
DN	DOWN	1 4 A T	LUMBER	TRANSV	TRANSVERSE
DO	DITTO	MAT	MATERIAL	TYP	TYPICAL
DP	DEEP/DEPTH	MAX	MAXIMUM	UNO	UNLESS NOTED
DS	DRAG STRUT	MB	MACHINE BOLT	\/EDT	OTHERWISE
DWGS (E)	DRAWINGS EXISTING	MECH MFR	MECHANICAL MANUFACTURE	VERT VIF	VERTICAL VERIFY IN FIELD
(E) EA	EACH		MINIMUM	W	WIDE OR WIDTH
EE	EACH END	MISC	MISCELLANEOUS	w/	WITH WITH
EF	EACH FACE	MRF	MISCELLANEOUS MOMENT RESISTANT	w/o	WITHOUT
EL	ELEVATION	IVIIXI	FRAME	W/O WD	WOOD
ELEV	ELEVATOR	MTL	METAL	WHS	WELDED HEADED STUD
EMBED	EMBEDMENT	NO	NUMBER	WP	WORKING POINT
ENGR	ENGINEER	NOM	NOMINAL	WTS	WELDED THREADED
EQ	EQUAL	NS	NEAR SIDE		STUD
EQUIP	EQUIPMENT	NTS	NOT TO SCALE	WWM	WELDED WIRE MESH
EQUIV	EQUIVALENT	OC	ON CENTER		



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PERMIT CORRECTIONS 5.5.22

JOSEPH MARQUEZ

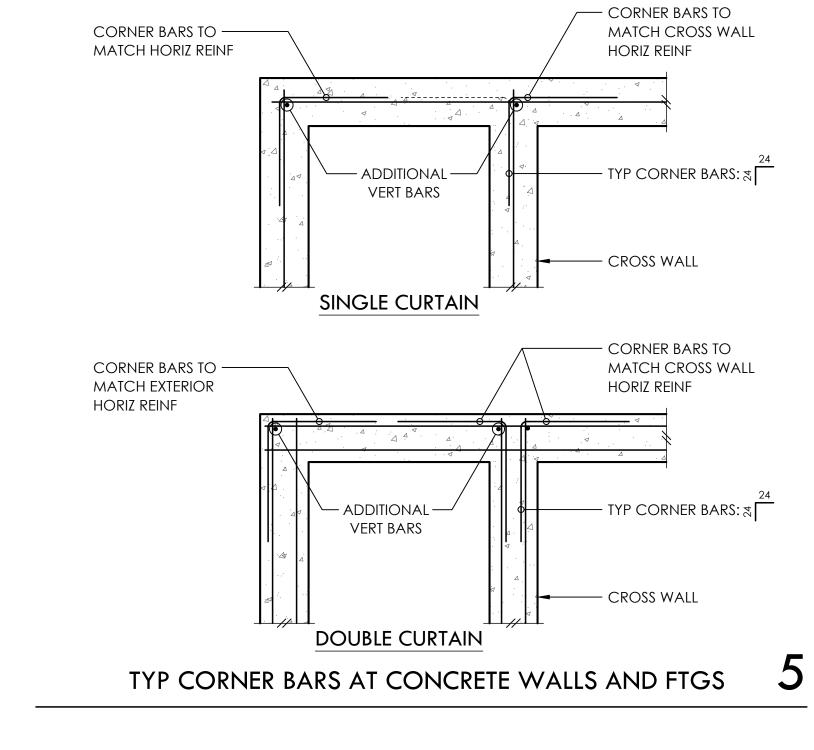
ENGINEER

REV DESCRIPTION

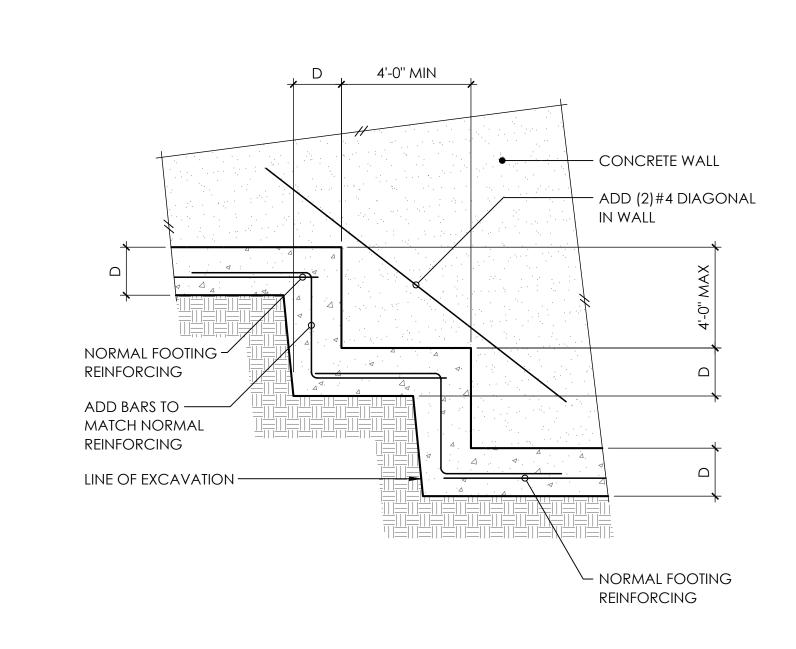
PERMIT SET

ARCH McCULLOUGH ARCHITECTS 206.443.1181

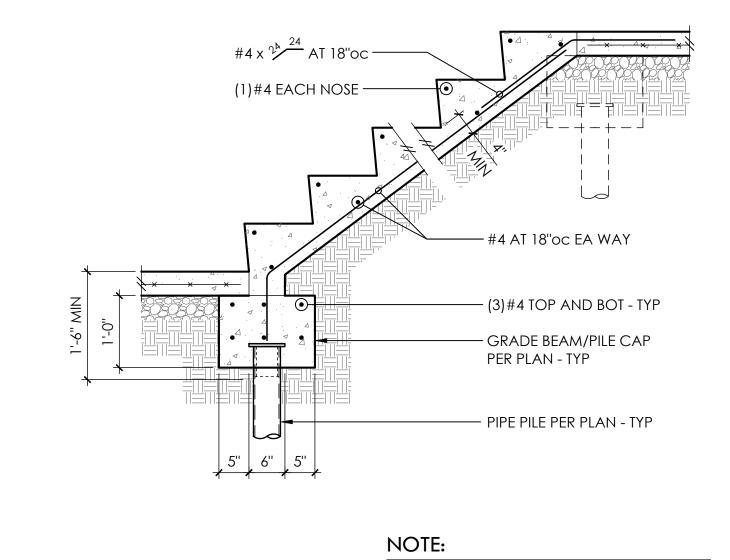
GENERAL STRUCTURAL



1 2 TYP CORNER BARS AT CONCRETE WALLS AND FTGS



5 TYPICAL STEPPED FOOTING 10



SHEARWALL PER PLAN ———

NAILING OVER ALL HOLDOWN

STUDS OR (2)ROWS AT POST

PROVIDE PANEL EDGE —

HOLDOWN STUDS —

PER SCHEDULE

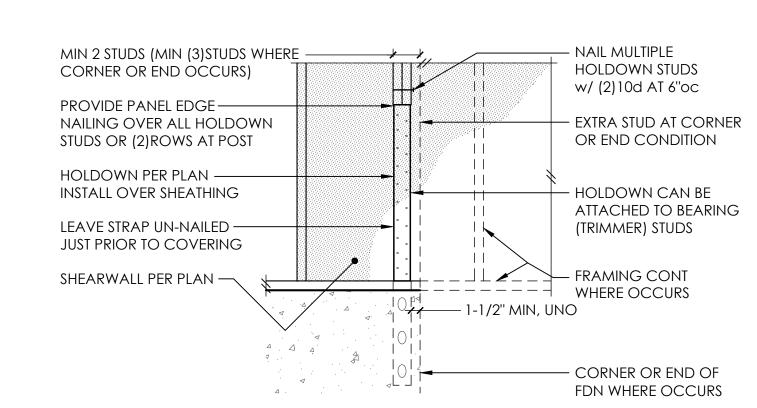


PIPE AND TRENCH LOCATIONS 15

— WHERE PIPE IS LOCATED AT OR BELOW FTG PROVIDE (3)#4 x 6'-0"

PIPE SLEEVES
AS REQD

		EXACT CONFIGURATION OF STAIR INCLUDING TREAD AND RISER DIMS PER ARCH DRAWINGS
12	13	typical stair on grade 14



PLA KINO 1/4' CO AB AS F	LDOWN POST PER— IN - NO ADDITIONAL IG STUDS REQD J HOLDOWN W/ SDS 'Ø x 2-1/2" SCREWS NT #4 x 6'-0" EA SIDE (WRAP AROUND CO REQD) AT HDU8 - HDU	OF———RNER			PR BE PE FR W SS	T HOLDOWN ROVIDE ADDI EARING (TRIM ER PLAN RAMING CON THERE OCCUR ETB PER SCHEI LL-THREAD PE	TIONAL MER) STUDS IT RS DULE R SCHEDULE
HDU H	HOLDOWN SO		ı	FOOTING®			PER SCHEDULE POST®
MARK	AB	EMBED		1	EMBED	4x WALL	6x WALL
HDU2	5/8"Ø - SSTB16(L)	12-5/8"	5/8''Ø	1-3/4"SQ x 1/2	9''	(2)2x4	(2)2x6
HDU4	5/8"Ø - SB5/8 x 24	18"	5/8''Ø	1-3/4"SQ x 1/2	9''	(2)2x4	(2)2x6
HDU5	5/8"Ø - SB5/8 x 24	18"	5/8''Ø	1-3/4"SQ x 1/2	9''	(2)2x4	(2)2x6
HDU8	7/8''Ø - SB7/8 x 24	18"	7/8''Ø	2-1/2"SQ x 1/2	12"	4x6	6x6
	1"Ø CD1 v 20 Ø	0.4"	1"0	2"CO v E /0	1.0"	4,40	/>/

NAIL MULTIPLEHOLDOWN STUDS

w/ (2)10d AT 6"oc

- HOLDOWN CAN BE

(TRIMMER) STUDS

ATTACHED TO BEARING

DOWN SCHED
HD POST ②
NKERS DBL STUD
NKERS DBL STUD
NKERS DBL STUD

HDU8 7/8"Ø - SB7/8 x 24 18" 7/8"Ø 2-1/2"SQ x 1/2 12" 4x6 6x6 HDU11 1"Ø - SB1 x 30 ② 24" 1"Ø 3"SQ x 5/8 12" 4x8 6x6 HDU14 - 1"Ø 3"SQ x 5/8 12" 4x12 6x8 ① ALL HOLDOWN ANCHOR BOLTS THAT NEED TO BE EMBEDDED INTO FOOTING ARE SPECIFICALLY SHOWN ON PLAN ② A307 ALL-THRD w/ PLATE WASHER PER SCHEDULE AND DOUBLE NUT BOT OR EQUIVALENT SIMPSON PAE 3 MINIMUM SIZE OF POST UNO ON FRAMING PLANS ④ REQUIRES MINIMUM 8" THICK CONCRETE WALL								
HDU14 - 1"Ø 3"SQ x 5/8 12" 4x12 6x8 ① ALL HOLDOWN ANCHOR BOLTS THAT NEED TO BE EMBEDDED INTO FOOTING ARE SPECIFICALLY SHOWN ON PLAN ② A307 ALL-THRD w/ PLATE WASHER PER SCHEDULE AND DOUBLE NUT BOT OR EQUIVALENT SIMPSON PAE ③ MINIMUM SIZE OF POST UNO ON FRAMING PLANS	HDU8	7/8''Ø - SB7/8 x 24	18"	7/8''Ø	2-1/2"SQ x 1/2	12"	4x6	6x6
 ALL HOLDOWN ANCHOR BOLTS THAT NEED TO BE EMBEDDED INTO FOOTING ARE SPECIFICALLY SHOWN ON PLAN A307 ALL-THRD w/ PLATE WASHER PER SCHEDULE AND DOUBLE NUT BOT OR EQUIVALENT SIMPSON PAE MINIMUM SIZE OF POST UNO ON FRAMING PLANS 	HDU11	1"Ø - SB1 x 30 ④	24"	1"Ø	3"SQ x 5/8	12"	4x8	6x6
SPECIFICALLY SHOWN ON PLAN 2 A307 ALL-THRD w/ PLATE WASHER PER SCHEDULE AND DOUBLE NUT BOT OR EQUIVALENT SIMPSON PAE 3 MINIMUM SIZE OF POST UNO ON FRAMING PLANS	HDU14	-	-	1"Ø	3"SQ x 5/8	12"	4x12	6x8
	_			AT NEED TO BE	EMBEDDED INTO I	FOOTING	ARE	

16d SINKERS = 0.148"Ø x 3-1/4"
 MINIMUM SIZE OF POST UNO ON FRAMING PLANS

PROJECT NO 0426.2021.03.01
PROJECT MANAGER WAC
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ENGINEER JOSEPH MARQUEZ
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REV DESCRIPTION DATE
PERMIT SET 12.23.21

PERMIT CORRECTIONS 5.5.22

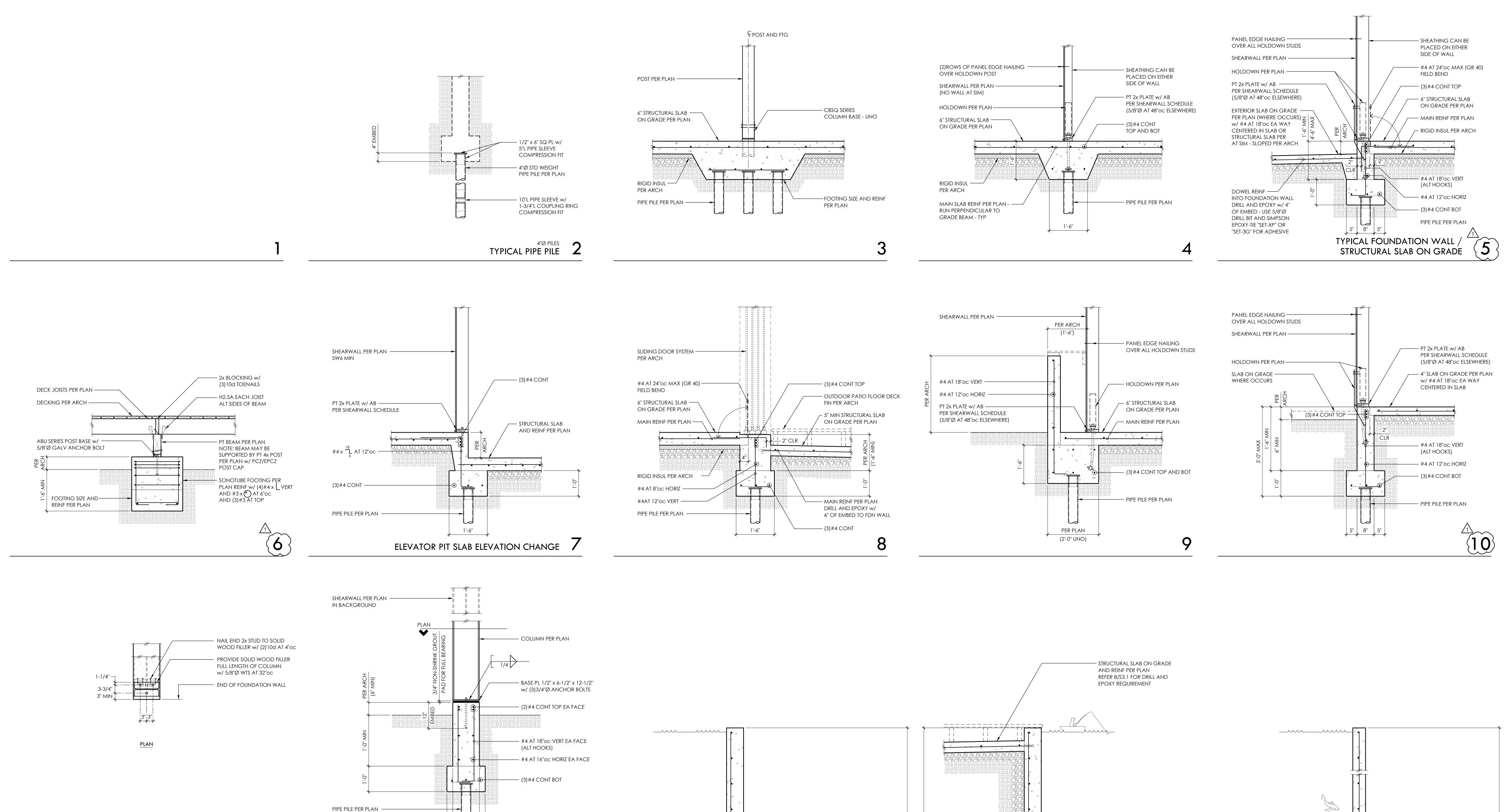
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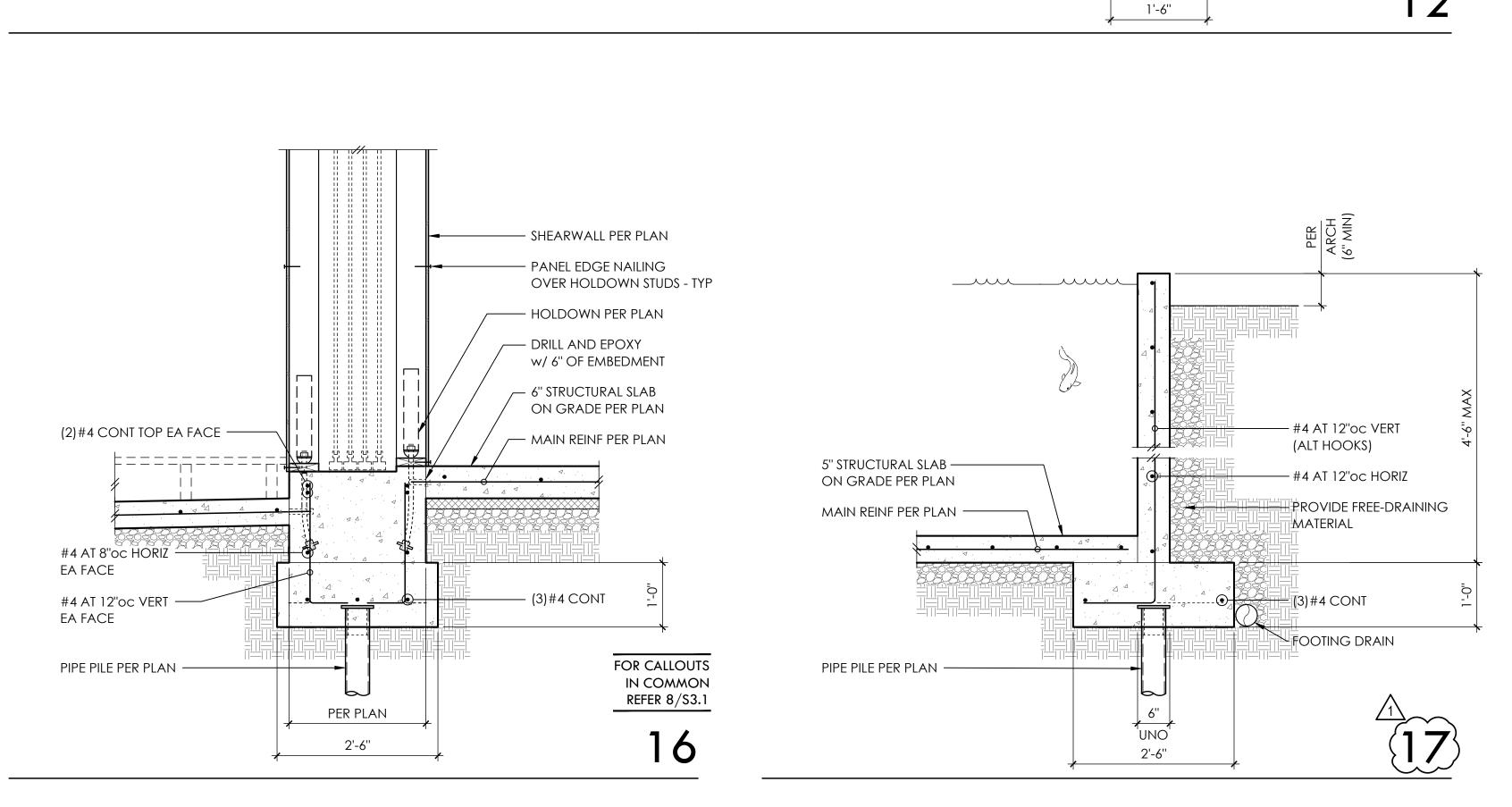
TYPICAL CONCRETE
DETAILS

<u>17</u> <u>18</u>

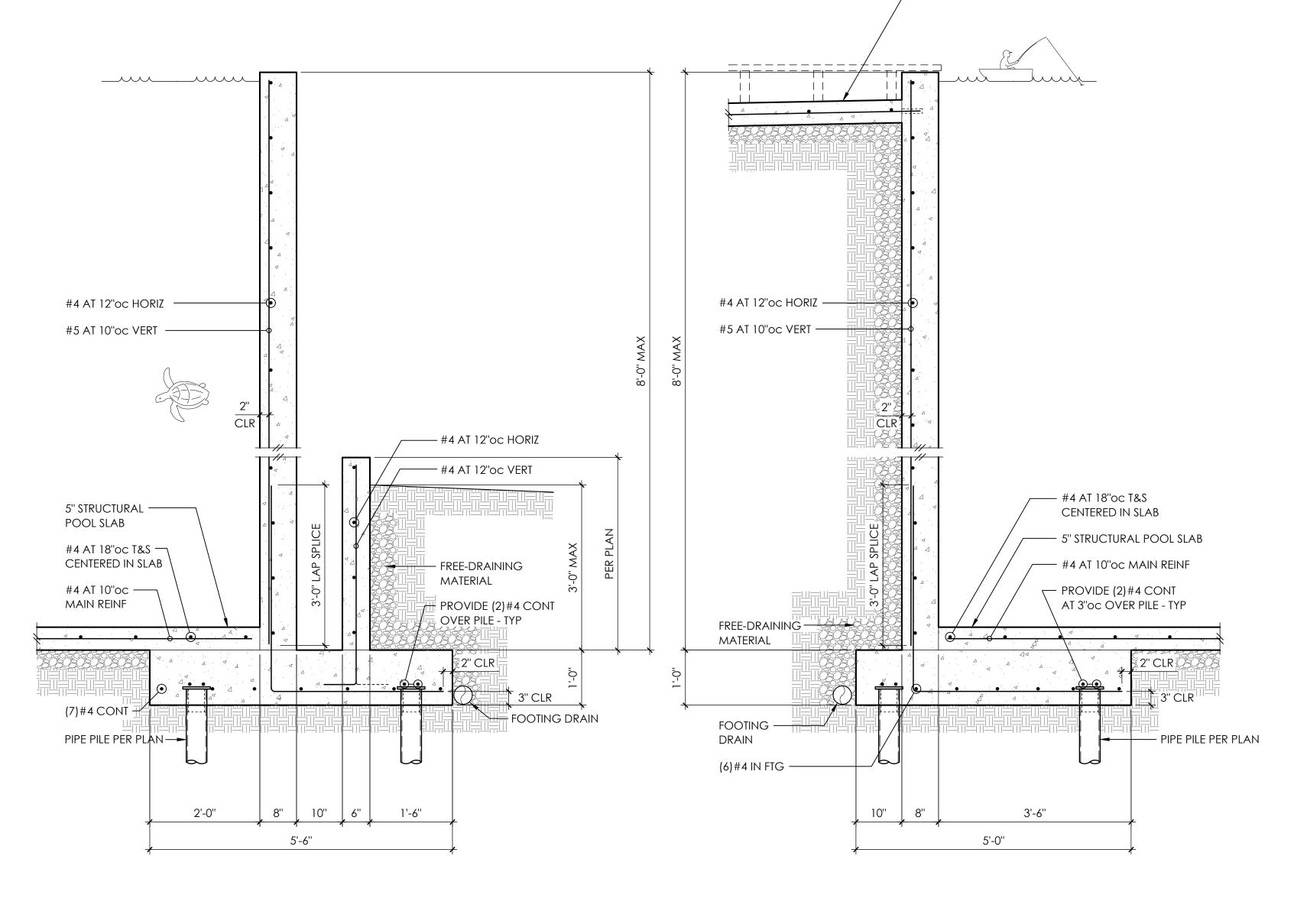
S3.0

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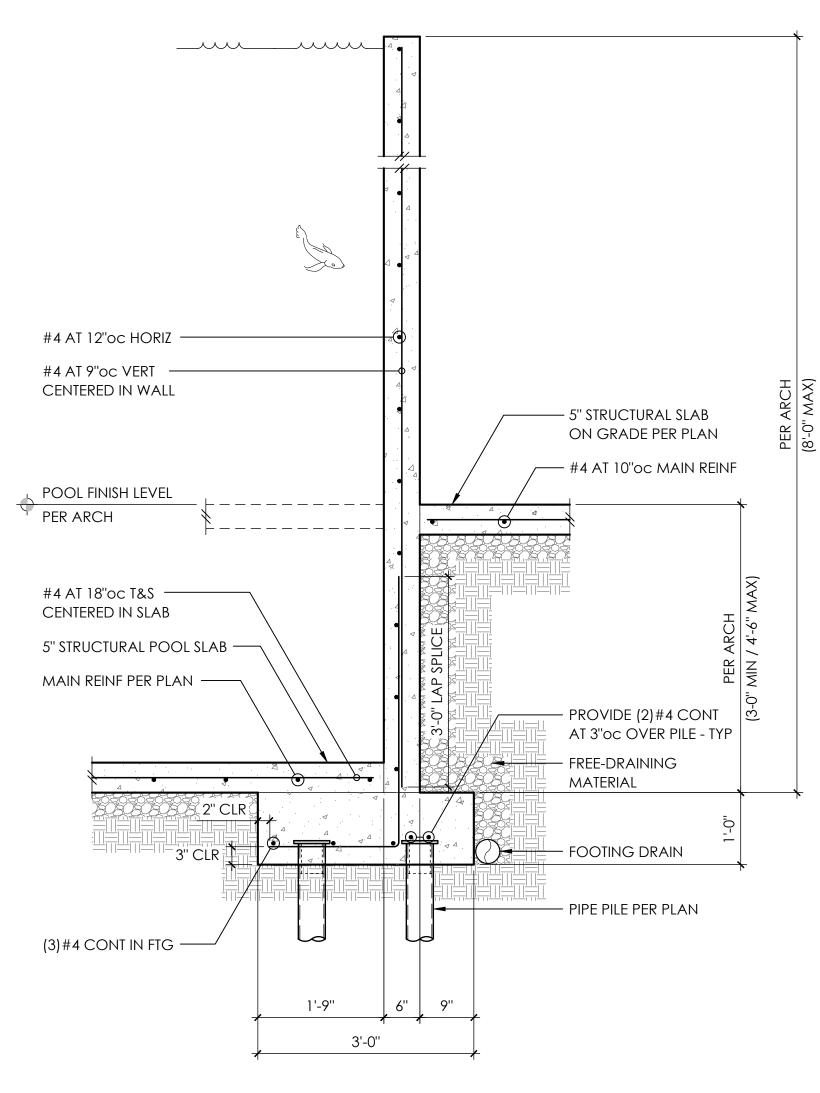




PER ARCH (12" MIN)



18





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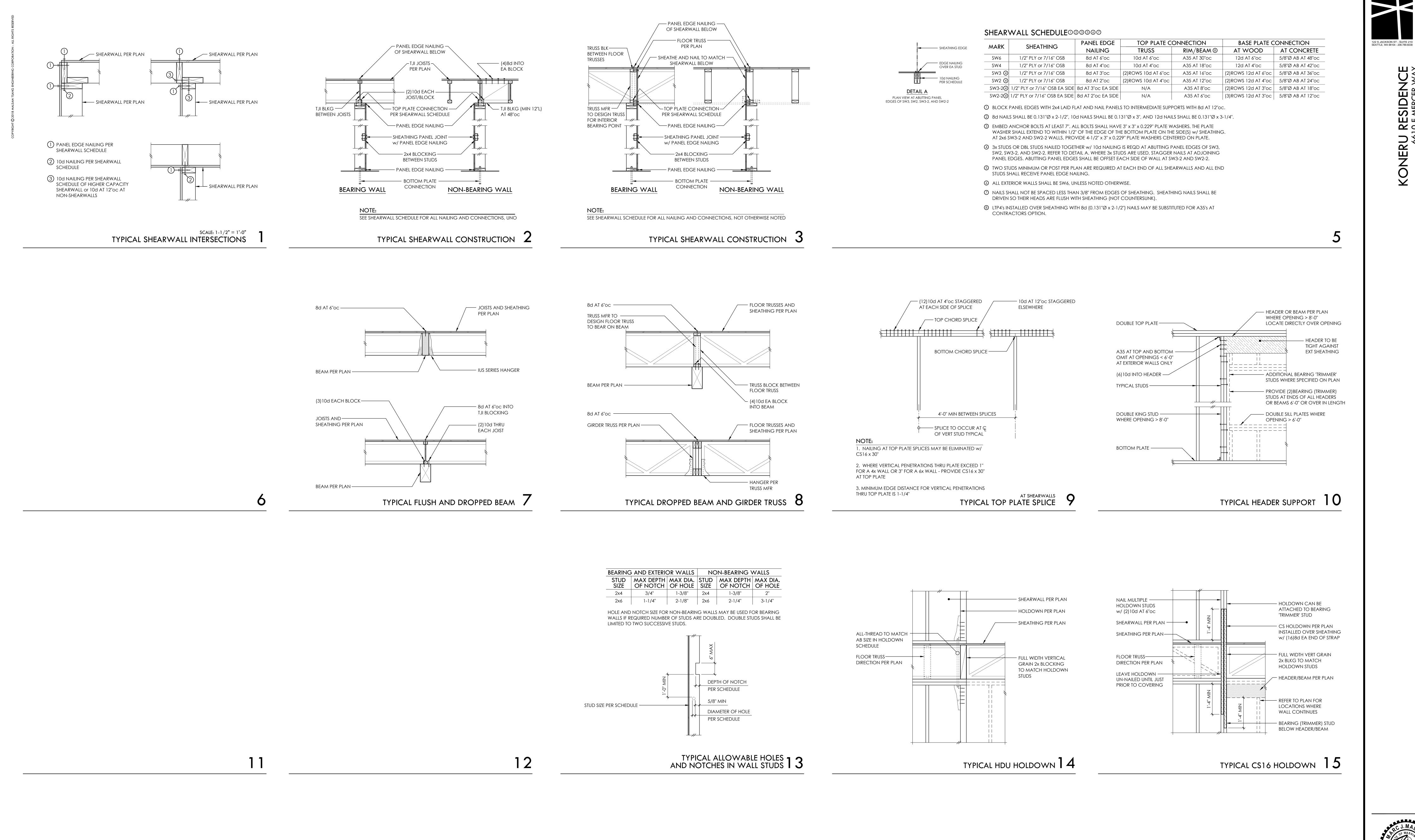
PERMIT CORRECTIONS 5.5.22

ARCH McCULLOUGH ARCHITECTS

CONCRETE DETAILS

S3.1

20





— CCQ SERIES COLUMN

FIT BEAM AND POST

CAP AS REQD TO

— ECCQ SERIES COLUMN CAP AS REQD

to fit beam and post

----- POST PER PLAN ------

ARCH McCULLOUGH ARCHITECTS 206.443.1181 TYPICAL WOOD FRAMING DETAILS

TYPICAL HEADER/BEAM 18 END CONNECTION OVER WDO/SGD

— TOP FLUSH HEADER/BEAM OVER OPENING PER PLAN

TOP PLATE LINE _

- ECCQ POST CAP PER PLAN -

ROTATED 90° STRAPS MAY BE

— CS16 STRAP TOP PLATE - WRAP

AROUND POST PER PLAN

USED AS ALTERNATE

— POST PER PLAN

19

- NOTCH BEAM 3"

TO RECEIVE BEAM

- BEAM PER PLAN

POST PER PLAN —

NO WALL PLATES ALLOWED

BETWEEN POST AND CAP

- ECCQ SERIES COLUMN CAP AS REQD TO

FIT BEAM AND POST

20

w/ 5/8"Ø MB OR WTS AT 48"oc

STAGGERED

----- BEAM PER PLAN

LSL 1-3/4" LEDGER ——— OVER WALL SHEATHING

AND (2)0.22"Ø x 4" SDWS

TIMBER SCREWS (DOUBLE

BARRIER COATING)

AT 12"oc MAX

TYPICAL GIRDER TRUSS 18

TOP FLUSH w/ TJI RAFTERS

—— CEILING SYSTEM PER ARCH

HEADER/BEAM-

SHEARWALL PER PLAN —

PER PLAN

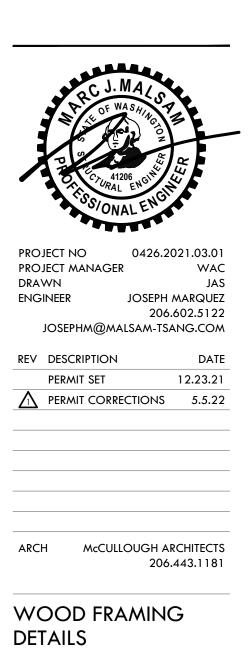
PER PLAN

PER PLAN

PER PLAN

WINDOW PER ARCH —

— HANGER PER TRUSS MFR



TOP AND BOT CHORD

— TOP PLATE CONNECTION

PER SHEARWALL SCHEDULE

(10d AT 6"oc ELSEWHERE)

(20)

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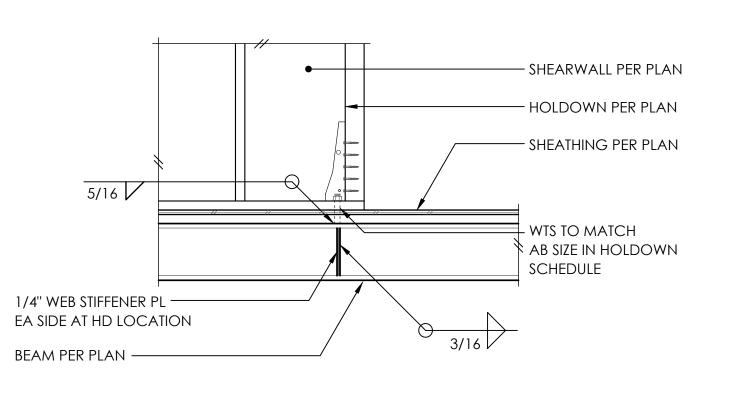
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S4.2

WOOD FRAMING

DETAILS



1. USE 16 GAUGE DECK AS NOTED AT LEFT AND ON PLAN. 2. FOLLOW SPAN LAYOUTS AS SHOWN ON PLAN. 3. CONNECT DECK SEAMS WITH BUTTON PUNCHES AT 24"oc AND ARC SPOT WELD AT 12"oc EA END - PROVIDE 2" MIN BEARING LENGTH EACH END. 1/4" WEB STIFFENER PL — 4. DECK TYPE MUST STRICTLY MEET CRITERIA LISTED AT LEFT. SUBMIT DECK INFORMATION TO ENGINEER PRIOR TO BEGINNING SHOP DRAWINGS

EA SIDE AT HD LOCATION

/--- D/3 Ø HOLES (MAX) / 1" RADIUS CORNERS 2/3 D MAX

1. CONTRACTOR SHALL COORDINATE SIZES AND LOCATIONS OF ALL BEAM PENETRATIONS W/ MECHANICAL DRAWINGS. ALL PENETRATIONS LARGER THAN 2"Ø SHALL BE SHOWN ON SHOP DRAWINGS OR SKETCHES AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. FIELD CUTTING NOT PERMITTED WITHOUT APPROVAL.

2. OPENINGS MAY OCCUR IN MIDDLE HALF OF BEAM LENGTH ONLY.

3. NO CUTTING MAY OCCUR IN TOP OR BOTTOM QUARTER OF BEAM DEPTH.

4. ADJACENT OPENINGS MUST BE SPACED AT THE GREATER OF, 12" OR 2.5 x LARGER

OPENING SIZE, EDGE TO EDGE. 5. MAXIMUM SIZES OF OPENINGS SHALL BE D/3 Ø OR D/3 x 2D/3 AS SHOWN.

6. NO OPENINGS SHALL OCCUR WITHIN 12" OF AN ADJACENT BEAM CONNECTION. 7. REQUIRED OPENINGS NOT MEETING ABOVE CRITERIA SHALL BE SUBMITTED TO ENGINEER FOR REINFORCING DESIGN.

TYPICAL STEEL BEAM PENETRATIONS 3

ASC STEEL ROOF DECK $\{3\}$

— BEAM PER PLAN

— ELEVATION

— POST PER PLAN

8

18

5. 2" THICK MAX (19.0 PSF MAX) WASHED GRAVEL TOPPING OVER STEEL

PAN DECK

----- 1/4" PLATE

<u>ELEVATION</u> SCALE: 1-1/2" = 1'-0"

— (6)1/4"Ø x 3-1/2" SDS SCREWS

BEAM TO BEAR —

DIRECTLY ON POST

DG-2WHF STEEL DECK WITH G90 COATING,

DECK I^+ $I^ S^+$ S^- GAUGE (in^4) (in^4) (in^3)

16 1.303 1.132 0.803 0.792 [PROPERTIES PER FOOT OF WIDTH]

COPE TOP AND BOT OF BEAM
- OPTIONAL FOR EXPOSED BEAMS

ELEVATION

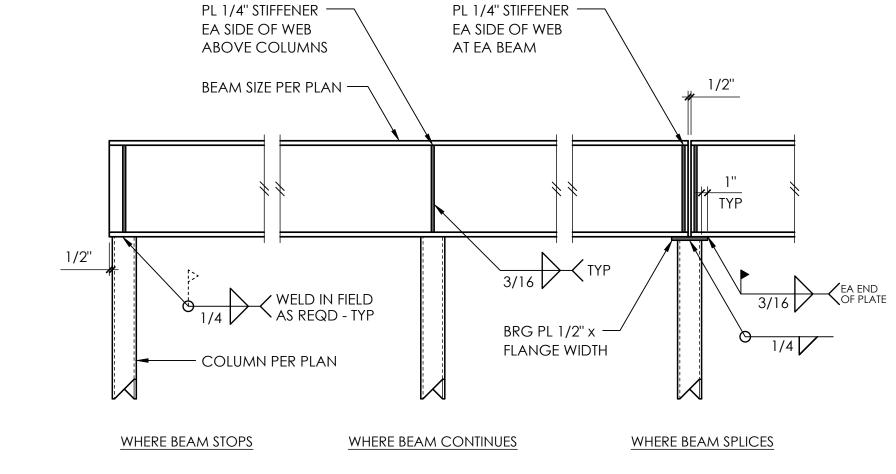
TYPICAL BEAM CORNER CONNECTION (WELD)

MINIMUM SECTION PROPERTIES:

BEAM PER PLAN ---

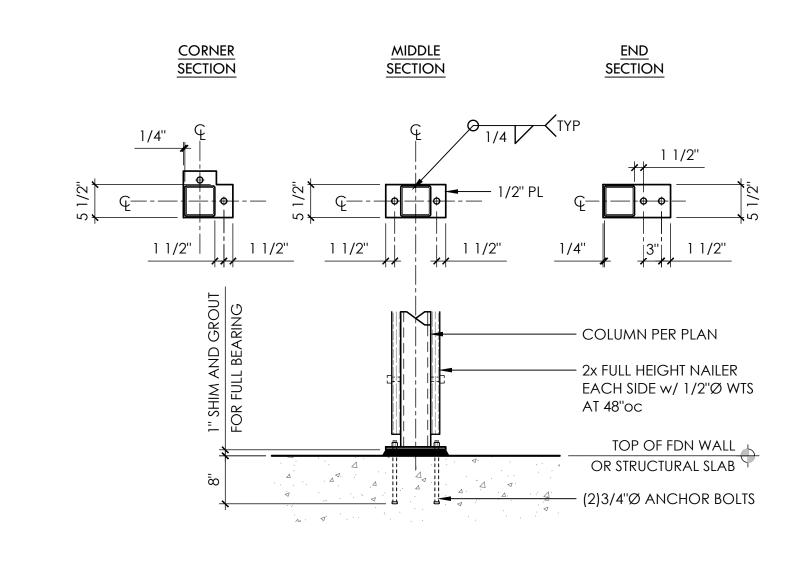
PLAN AT CORNER

ELEVATION



ECCOQ SERIES COLUMN CAP AS REQD TO FIT BEAM AND POST — Splice where Shown on plan ---- BEAM PER PLAN 3/16 3/16 — CCOQ SERIES COLUMN CAP AS REQD TO FIT BEAM AND POST COLUMN PER PLAN ----

TYPICAL CCOQ / ECCOQ COLUMN CAP 9

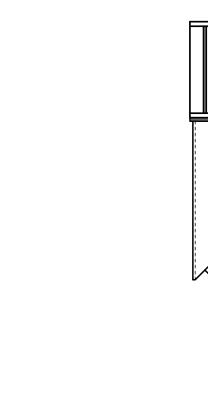


€ COLUMN, PLINTH, AND FTG COLUMN PER PLAN ----1" MIN SHIM AND GROUT ——— FOR FULL BEARING <u>BASEPLATE</u> STRUCTURAL SLAB —— ON GRADE PER PLAN — BASEPLATE W/ (4)3/4''Ø GALV ANCHOR BOLTS -EMBED 8" 12" PLINTH W/ (4) #4 x VERT AND #3 x AT 4"oc w/ (3) #3 TOP

BASEPLATE - HSS COLUMN 14

1/2" MAX

20



1-1/2" TYP BEAM SIZE PER PLAN — 3/16 TYP BEARING PL 1/2" COLUMN PER PLAN WHERE BEAM CONTINUES WHERE BEAM SPLICES WHERE BEAM STOPS

PL 1/4" STIFFENER —— EA SIDE OF WEB

ф---- (4)3/4"Ø BOLTS

AT BEAM GAGE

AT EA BEAM

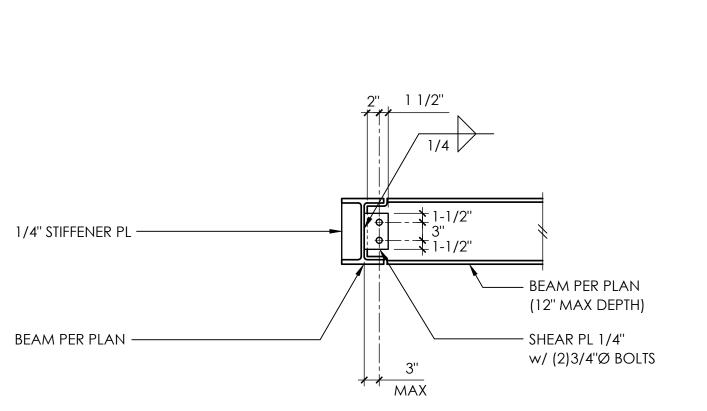
PL 1/4" STIFFENER —— EA SIDE OF WEB

ABOVE COLUMNS

AT BEAM GAGE

(2)3/4"Ø BOLTS

BEARING PLATE THICKNESS SHALL BE 3/4" WHERE DEPTH OF SUPPORTED MEMBER EXCEEDS 24"



typical beam to beam connection 19

16

STEEL FRAMING

DETAILS

PROJECT NO 0426.2021.03.01 PROJECT MANAGER WAC DRAWN JAS

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PERMIT CORRECTIONS 5.5.22

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