SHEET INDEX

PROJECT DATA

OWNER: CHEEMA ASEEM

PROPERTY ADDRESS: 3606 81ST AVE SE,

MERCER ISLAND, WA 98040

LOT SIZE: 10,768 SQ FT. ACRES: 0.25

PARCEL NUMBER: 445770-0070

ZONING: R-9.6

LEGAL DESCRIPTION: LUCAS HILL ADD

PLAT BLOCK: 1 PLAT LOT: 7

CONSTRUCTION TYPE: SINGLE FAMILY

PROJECT TYPE: CARPORT/GARAGE CONVERSION

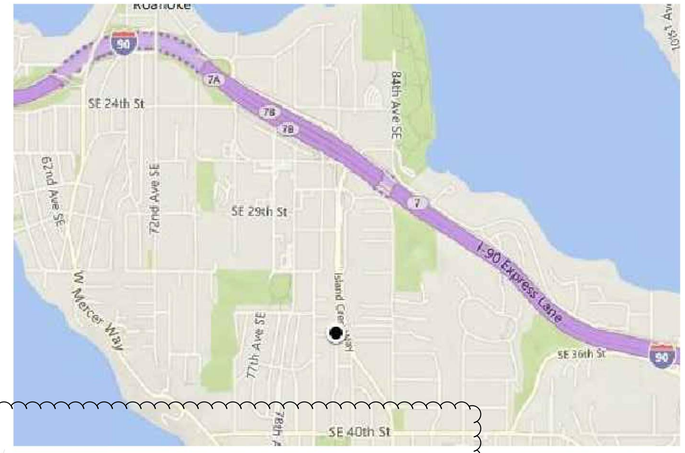
TOTAL SQ FT : EXISTING	
1ST FLOOR	1,540
FINISHED BASEMENT	460
TOTAL FINISHED AREA	2,000
TOTAL BASEMENT	1,250
BASEMENT GARAGE	340

Total Gross SQ FT: proposed	
1st Floor	1,540
Finished Basement	1,540
Total Finished Area	2,080
Garage	340
Total gross sqft:	2,420 sf

max gross floor area (PER 19.02.020.D): 40% OF LOT AREA: 10,768 x .4 = 4,307.2 SF

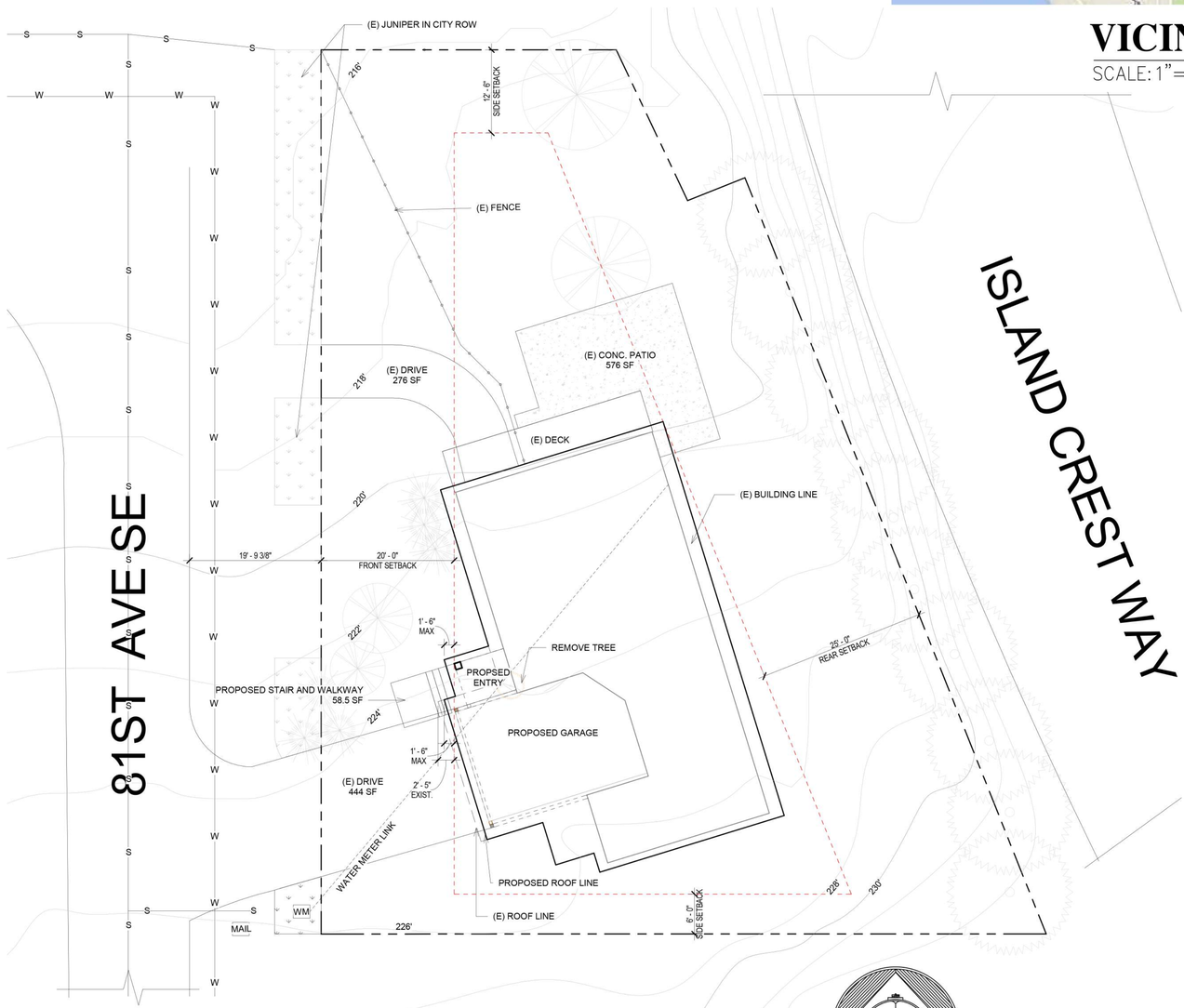
Setbacks (per 19.02.020.C):
Front: 20'
Rear: 25'
Side: 17% of 109' = 18.5'- 6' = 12.5'

Energy credit:
EFFICIENT WATER HEATING 5a:
All showerhead and kitchen sink faucets installed in the house shall be rated at 1.75 GPM or less. All other lavatory faucets shall be rated at 1.0 GPM or less.



VICINITY MAP

SCALE: 1"=20'



SITE PLAN

SCALE: 1"=10'

NORTH

REVISIONS:

CHEEM RES

3606 81ST AVE SE MERCER ISLAND 98040

SCALE: AS NOTED

DATE: 9/5/17

DRAWN BY: D.C

CHECKED BY: D.C

PROJECT NO. A-82317

DC-DESIGNS

DOUGLAS CROWELL DESIGN
544 ESTATE PLACE
FIRCREST, WA 98466

TEL: **253 363-0030**
EMAIL: crowell.douglas@yahoo.com

SHEET NO: 1 OF: 5

FILE: Res FILE LOCATION:

SHEET INDEX

NOTE: existing appliances are direct vented to the exterior for both exhaust and combustion air.

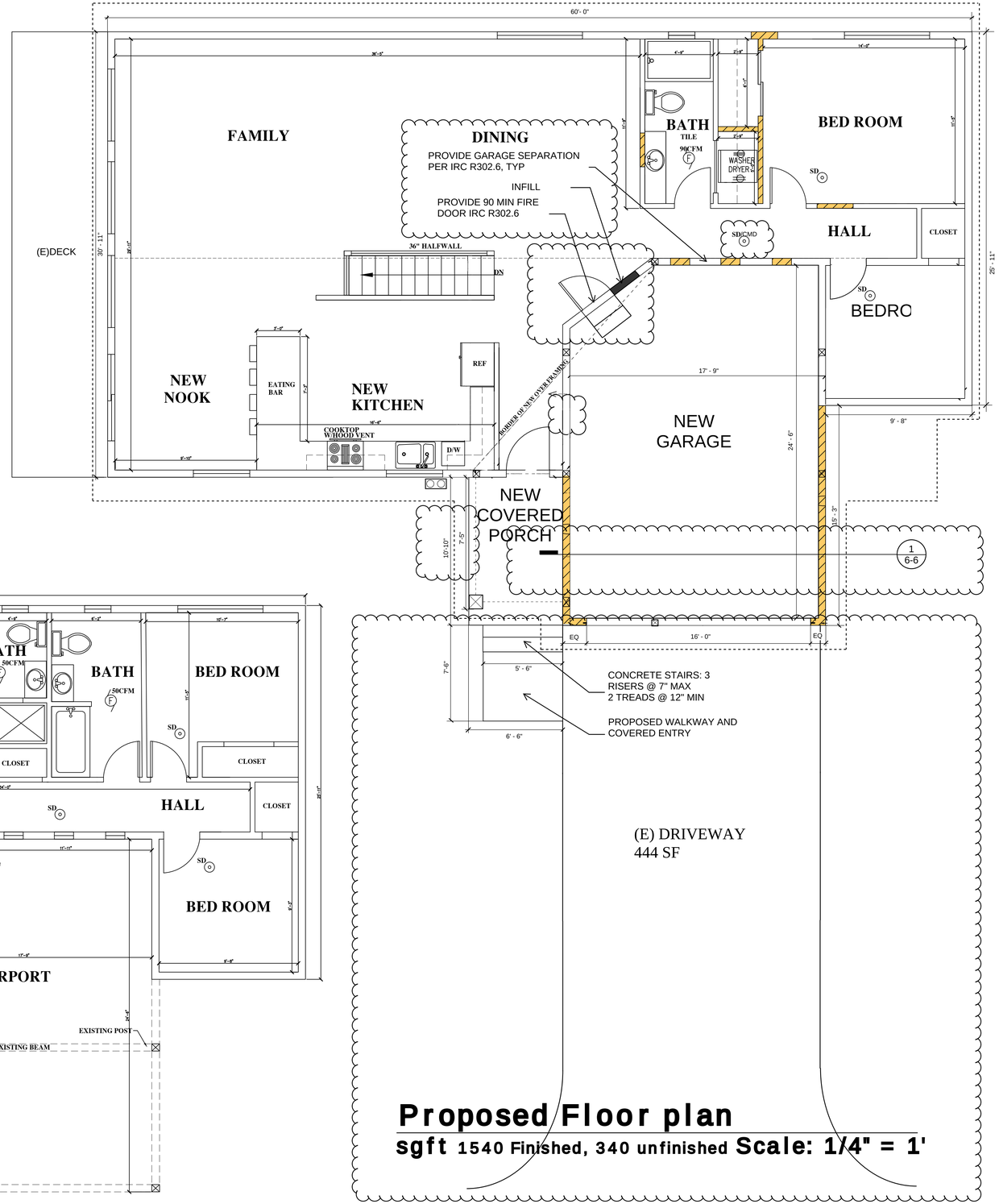
3 / 4-6

NEW

EXISTING

EXISTING FLOOR PLAN

SQFT. 1,540 SCALE: 1 / 4"=1'



Proposed Floor plan

sgft 1540 Finished, 340 unfinished Scale: 1/4" = 1'

REVISIONS:

CHEM RES

8606 81ST AVE SE MERCER ISLAND 98040

SCALE: AS NOTED

DATE: 5/10/18

DRAWN BY: D.C

CHECKED BY: D.C

PROJECT NO. A-82317

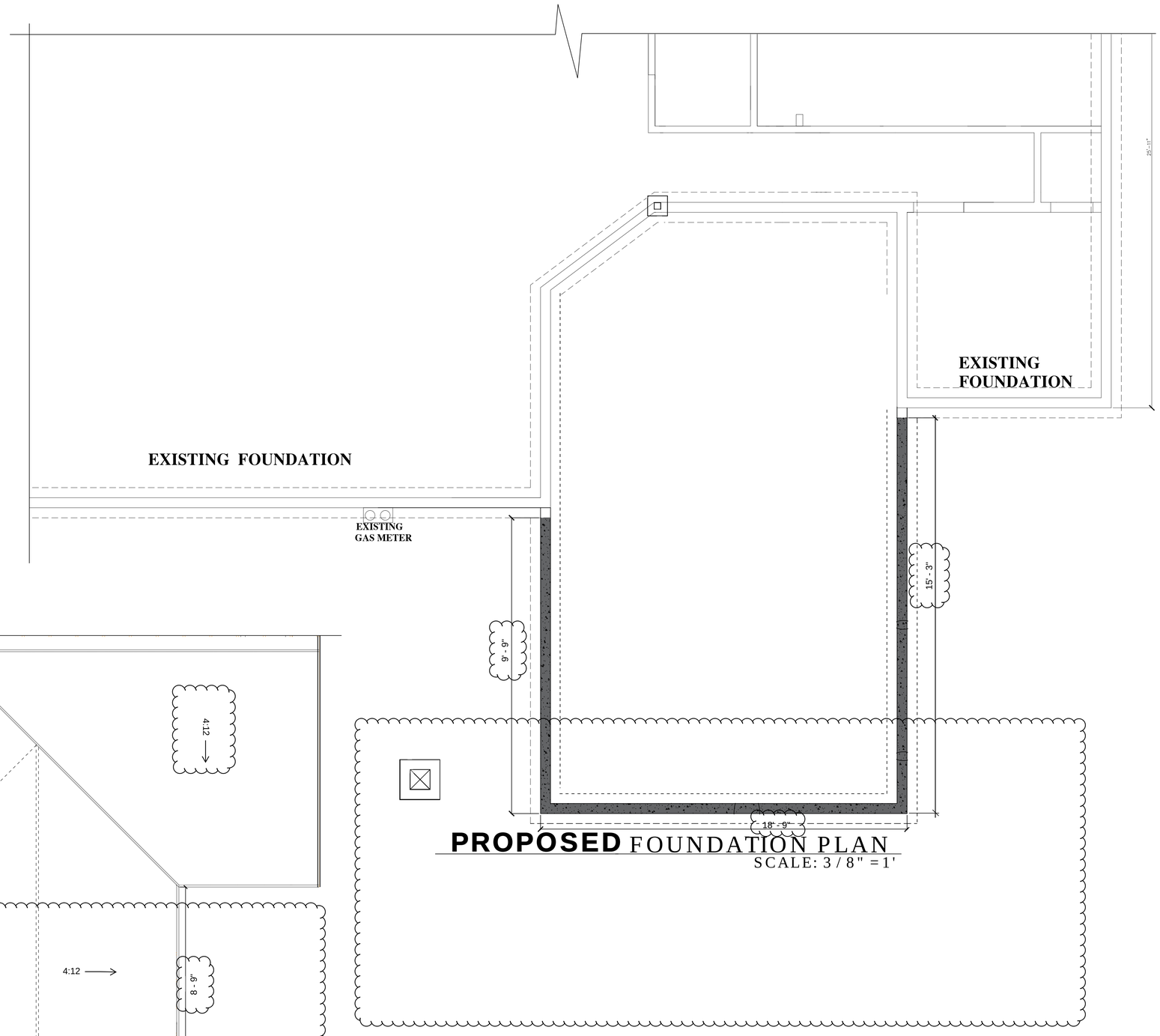
DC-DESIGNS

DOUGLAS CROWELL DESIGN
1544 ESTATE PLACE
FIRCREST, WA 98466

TEL: 253 363-0030
EMAIL: crowell.douglas@yahoo.com

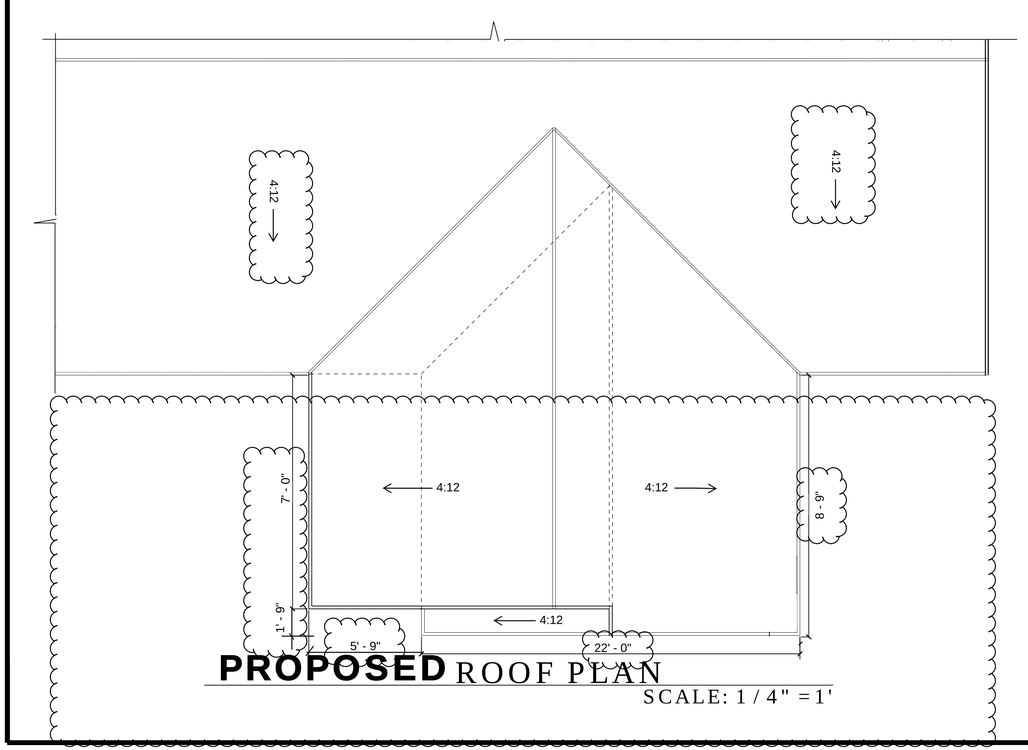
SHEET NO: 2 OF: 6

SHEET INDEX



PROPOSED FOUNDATION PLAN

SCALE: 3 / 8" =1'



PROPOSED ROOF PLAN

SCALE: 1 / 4" =1'

REVISIONS:

CHEM RES

8606 81ST AVE SE MERCER ISLAND 98040

SCALE: AS NOTED

DATE: 4/20/18

DRAWN BY: D.C

CHECKED BY: D.C

PROJECT NO. A-82317

DC-DESIGNS

DOUGLAS CROWELL DESIGN
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FIRCREST, WA 98466

TEL: 253 363-0030
EMAIL: crowell.douglas@yahoo.com

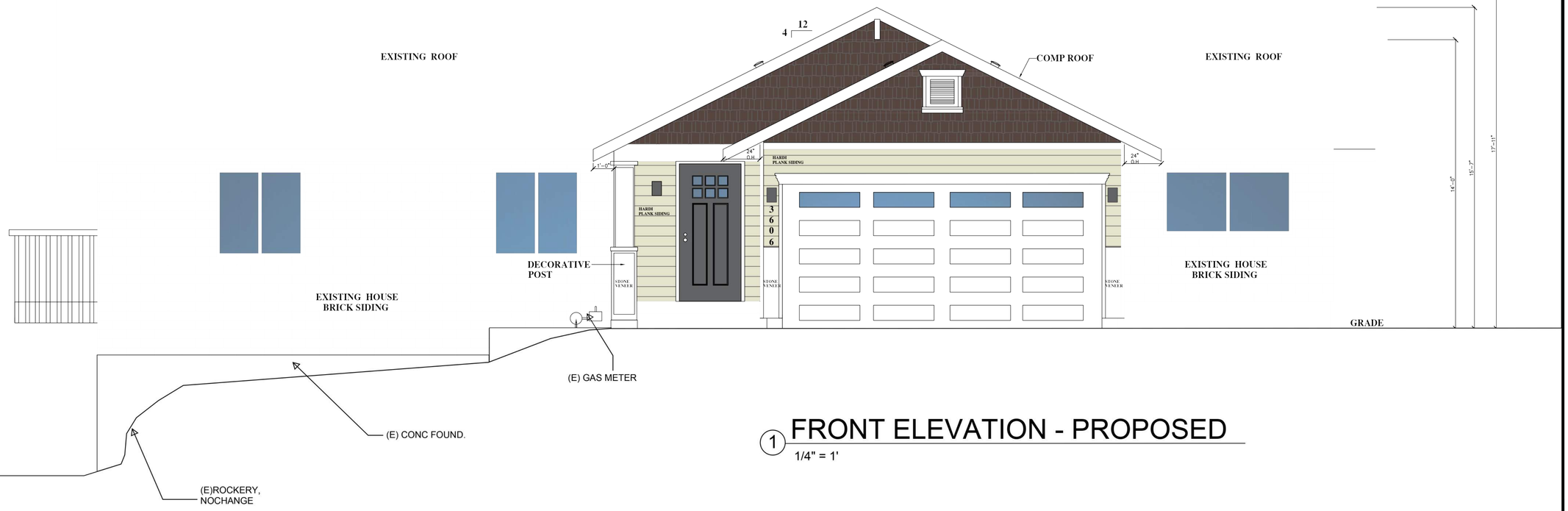
SHEET NO: 3

OF: 6

SHEET INDEX

2 **FRONT ELEVATION-EXISTING**
NTS

3 SIDE ELEVATION - PROPOSED
1/4" = 1'



1 FRONT ELEVATION - PROPOSED
1/4" = 1'

REVISIONS:

CHEEM RES

9606 81ST AVE SE MERCER ISLAND 98040

SCALE: AS NOTED

DATE: 4/20/18

DRAWN BY: D.C

CHECKED BY: D.C

PROJECT NO. A-82317

DC-DESIGNS
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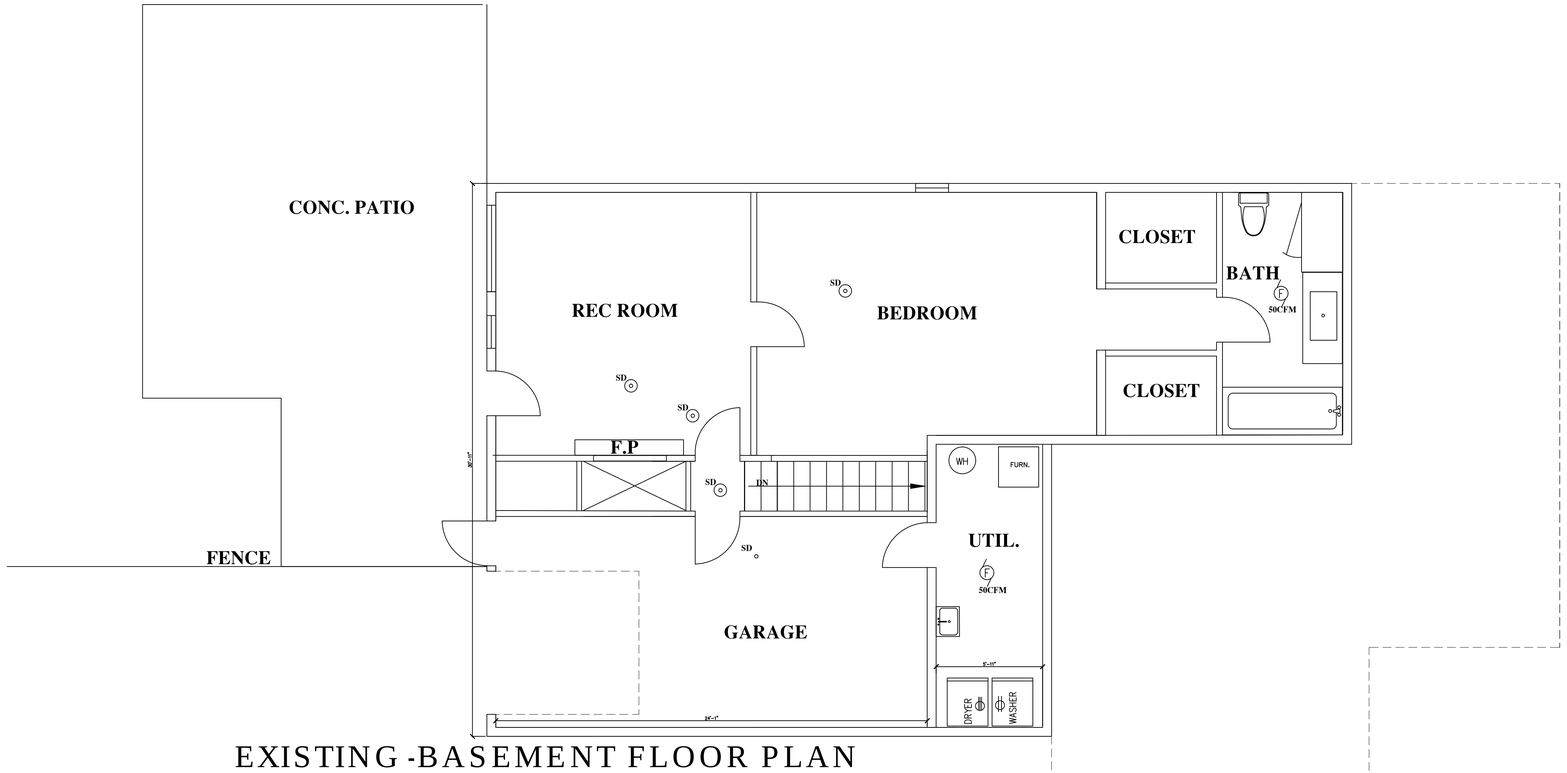
1544 ESTATE PLACE
FIRCREST, WA 98466
TEL: 253 363-0030
EMAIL: crowell.douglas@yahoo.com

SHEET NO: 4

OF: 6

SHEET INDEX

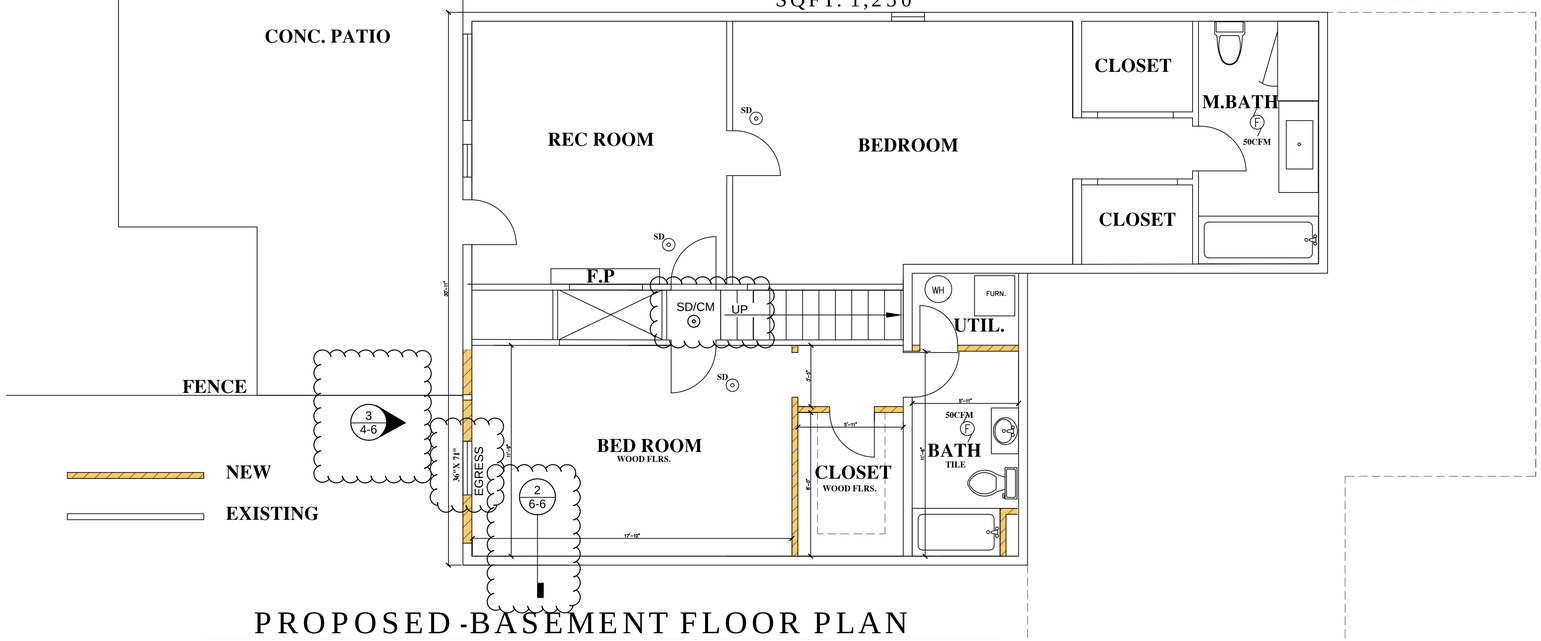
NOTE: existing appliances are direct vented to the exterior for both exhaust and combustion air.



EXISTING -BASEMENT FLOOR PLAN

SQFT. 1,250

SCALE: 1/4"=1'



PROPOSED -BASEMENT FLOOR PLAN

SQFT. 1,590

SCALE: 1/4"=1'

REVISIONS:

CHEM RES

8606 81ST AVE SE MERCER ISLAND 98040

SCALE: AS NOTED

DATE: 10/7/17

DRAWN BY: D.C

CHECKED BY: D.C

PROJECT NO. A-82317

DC-DESIGNS

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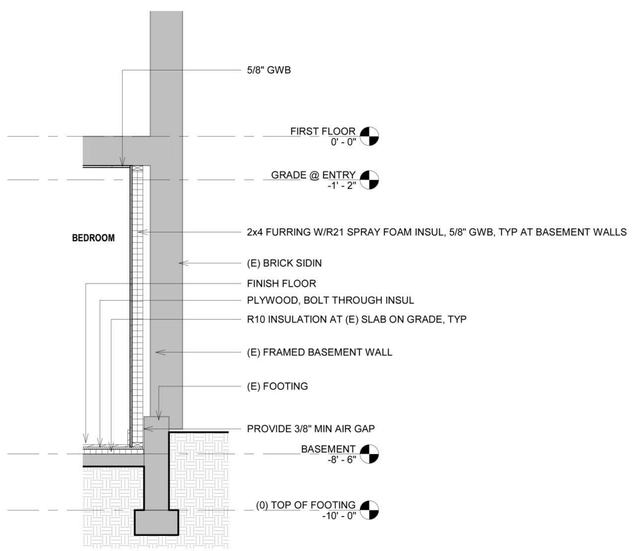
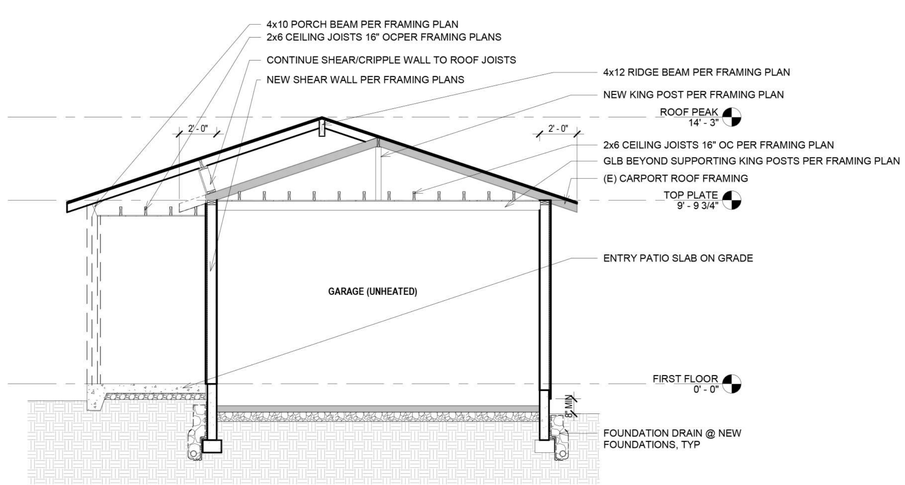
SHEET NO: 5

OF: 6



2 WALL SECTION

1/2" = 1'



3 GARAGE SECTION

1/4" = 1'

REVISIONS:

CHEM RES

8616 81ST AVE SE MERCER ISLAND 98040

SCALE: AS NOTED

DATE: 9/5/17

DRAWN BY: D.C

CHECKED BY: D.C

PROJECT NO. A-82317

D.C—DESIGNS
DOUGLAS CROWELL DESIGN
544 ESTATE PLACE
FIRCREST, WA 98466

TEL: 253 363-0030
EMAIL: crowell.douglas@yahoo.com

SHEET NO: 6

OF: 6

STRUCTURAL NOTES

CODE
ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE LOCAL JURISDICTION. SPECIFICATIONS AND STANDARDS WHERE REFERENCED ON THE DRAWINGS ARE TO BE THE LATEST EDITION.

DESIGN LOADS
LIVE LOADS:

RESIDENTIAL	40 PSF
SNOW	25 PSF

EARTHQUAKE LOADS:

SITE CLASS	D
SHORT PERIOD SPECTRAL RESPONSE (S_{DS})	0.928
ONE SECOND SPECTRAL RESPONSE (S_{D1})	0.536
OCCUPANCY CATEGORY	II
SEISMIC IMPORTANCE FACTOR (I_E)	1.00
SEISMIC DESIGN CATEGORY	D
BASIC SEISMIC FORCE-RESISTING-SYSTEM	WOOD S.W.
RESPONSE MODIFICATION FACTOR, (R)	6.5
SEISMIC RESPONSE COEFFICIENT (C_S)	0.143

WIND LOADS:

ULT. BASIC WIND SPEED (3 SECOND GUST)	110 MPH
EXPOSURE	B
WIND IMPORTANCE FACTOR (I_W)	1.00
K_{ZT}	1.00

SPECIAL INSPECTION
SPECIAL INSPECTION SHALL BE PERFORMED PER CHAPTER 17 OF THE IBC FOR THE FOLLOWING ITEMS:

- SOILS (SECTION/TABLE 1705.6)
- CONCRETE (SECTION/TABLE1705.3)
- WOOD (SECTION 1705.5)

REFER TO IBC SECTION 1705.10 AND 1705.11 FOR ADDITIONAL INSPECTION REQUIREMENTS FOR THE STRUCTURAL COMPONENTS OF THE LATERAL FORCE RESISTING SYSTEM.

ALL INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER. THE ARCHITECT, ENGINEER, AND BUILDING OFFICIAL SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION REPORTS. IF ANY INSPECTION FAILS TO MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, IT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGN TEAM.

STRUCTURAL OBSERVATION
STRUCTURAL OBSERVATION SHALL BE PERFORMED PER CHAPTER 17 OF THE IBC ONLY WHERE REQUIRED BY THE LOCAL JURISDITION. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY SPECIAL INSPECTIONS REQUIRED. NOTIFY THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE OBSERVATION.

FOUNDATIONS:
THE FOLLOWING SOIL DESIGN PARAMETERS HAVE BEEN ASSUMED. IF EXCAVATION SHOWS THAT SOIL CONDITIONS DO NOT MATCH THE LISTED DESIGN VALUES, A GEOTECHNICAL ENGINEER SHALL BE RETAINED TO EVALUATE THE SOIL CONDITIONS. NOTIFY THE ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

- 1,500 PSF (ALLOWABLE BEARING PRESSURE)
- 35 PCF + SURCHARGE (ACTIVE LATERAL PRESSURE)
- 200 PCF (PASSIVE PRESSURE)
- 0.35 (COEFFICIENT OF FRICTION)

FOOTINGS SHALL BEAR ON FIRM UNDISTURBED EARTH OR COMPACTED STRUCTURAL FILL AS REQUIRED BY THE GEOTECHNICAL ENGINEER. FOOTINGS SHALL BE PLACED AT A MINIMUM OF THE FROST DEPTH REQUIRED BY THE LOCAL JURISDICTION. FOOTING ELEVATIONS SHOWN IN THE DRAWINGS REPRESENT MINIMUM DEPTHS AND ARE FOR BIDDING ONLY. FINAL FOUNDATION ELEVATIONS ARE SUBJECT TO SITE CONDITIONS AND SHALL BE ESTABLISHED BY THE CONTRACTOR. FOOTINGS SHALL BE CENTERED BENEATH THE STRUCTURE ABOVE, UNLESS DIMENSIONED OTHERWISE.

THE CONTRACTOR SHALL LOCATE AND PROTECT ALL UTILITIES DURING EXCAVATION, PILE INSTALLATION, AND ANY OTHER CONSTRUCTION EARTHWORK. NOTIFY THE UNDERGROUND UTILITIES LOCATION SERVICE AT LEAST 1 WEEK PRIOR TO CONSTRUCTION AND INDEPENDENTLY VERIFY ALL UTILITIES WHICH MAY BE AFFECTED BY THIS PROJECT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DAMAGE DAMAGE TO UNDERGROUND UTILITIES RESULTING FROM THEIR WORK.

IMPORTED STRUCTURAL FILL AND BACKFILL MATERIAL SHOULD CONSIST OF CLEAN, WELL GRADED GRANULAR MATERIAL FREE OF DEBRIS OR ORGANICS WITH A MAXIMUM PARTICLE DIAMETER OF THREE INCHES AND NO MORE THAN 10% FINES (PASSING THE #200 SIEVE). FILL AND BACKFILL MATERIAL SHOULD BE PLACED IN LEVEL LIFTS NOT EXCEEDING TWELVE INCHES IN LOOSE THICKNESS AND COMPACTED TO A MINIMUM OF 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.

BACKFILL BEHIND ALL RETAINING WALLS WITH WELL-DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE. PROVIDE WATER PROOFING SYSTEM AT EXTERIOR FACE OF ALL FOUNDATION WALLS EXPOSED TO EARTH PER ARCHITECTURAL SPECIFICATIONS.

CONCRETE
ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE". THE CONCRETE SHALL HAVE A UNIT WEIGHT OF APPROXIMATELY 150 PCF. CONCRETE STRENGTHS AT 28 DAYS (f'c) AND MIX CRITERIA SHALL BE AS FOLLOWS:

- SLAB-ON-GRADE: f'c = 2,500 PSI 0.55 W/C RATIO
- FOUNDATION & WALLS: f'c = 2,500 PSI 0.55 W/C RATIO

A CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IF REQUIRED IN THE SUBMITTAL SPECIFICATIONS. THE MIX DESIGN SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER, AND ADMIXTURES AS WELL AS THE WATER-CEMENT RATIO, SLUMP, CONCRETE YIELD, AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI REQUIREMENTS.

ALL CONCRETE EXPOSED TO WEATHER OR TO FREEZING TEMPERATURES SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI TABLE 4.2.1 FOR MODERATE EXPOSURE CONDITION.

MINIMUM CONCRETE COVER ON REINFORCING STEEL SHALL BE AS FOLLOWS:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
- CONCRETE EXPOSED TO EARTH AND WEATHER:
  - #6 BARS AND LARGER 2"
  - #5 BARS AND SMALLER 1 1/2"
- CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
  - SLABS, WALLS, AND JOISTS 3/4"
  - BEAM/COLUMN TIES AND STIRRUPS 1 1/2"

REINFORCING STEEL
REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615 GRADE 60. REINFORCING BARS INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. WELDED WIRE REINFORCING SHALL CONFORM TO ASTM A185. PROVIDE WELDED WIRE FABRIC IN SHEETS WITH 12" LAPS AT SIDES AND ENDS.

REINFORCING STEEL SHALL BE DETAILED TO INCLUDE HOOKS AND BENDS IN ACCORDANCE WITH ACI SP-66 AND ACI 318. DEVELOPMENT LENGTHS AND LAP SPLICES SHALL BE PER THE SCHEDULE.

MECHANICAL SPLICING OF REINFORCING BARS, IF REQUIRED, SHALL BE BY AN ICBO APPROVED SYSTEM, AND SHALL DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR. ALL SPLICE DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

REINFORCING SHALL BE PLACED AND ADEQUATELY SUPPORTED PRIOR TO PLACING CONCRETE. WET-SETTING ITEMS IS NOT ALLOWED WITHOUT PRIOR ENGINEER APPROVAL. BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL NOT BE FIELD BENT UNLESS APPROVED BY THE ENGINEER. REFER TO ACI FOR PLACING TOLERANCES AND OTHER REINFORCING STEEL REQUIREMENTS.

DEVELOPMENT LENGTH AND LAP SPLICE
REINFORCING DEVELOPMENT LENGTHS AND LAP SPLICES SHALL BE AS FOLLOWS. ALL LENGTHS ARE IN INCHES BASED ON GRADE 60 REINFORCING. CONSULT ENGINEER FOR OTHER GRADES OF STEEL. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BAR.

BAR SIZE	f'c = 2500 PSI				f'c = 3000 PSI			
	DEVELOPMENT LENGTH		LAP SPLICE		DEVELOPMENT LENGTH		LAP SPLICE	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	23	18	30	23	22	17	28	22
#4	31	24	41	31	29	22	37	29
#5	39	30	51	39	36	28	47	36
#6	47	36	61	47	43	33	56	43

CONCRETE GENERAL NOTES
WALL AND COLUMN VERTICAL BARS SHALL START FROM THE TOP OF FOOTING. HORIZONTAL BARS SHALL START A DISTANCE OF 1/2 THE NORMAL BAR SPACING FROM TOP OF FOOTING AND/OR TOP OF FRAMED SLABS. THERE SHALL BE AN ADDITIONAL HORIZONTAL BAR AT A MAXIMUM OF 3" FROM EVERY TOP OF WALL AND BOTTOM OF FRAMED SLABS.

PROVIDE CORNER BARS TO MATCH AND LAP ALL HORIZONTAL REINFORCING ON EACH SIDE OF THE CORNER PER SCHEDULE OR BEND ONE SIDE OF HORIZONTAL AROUND CORNER TO PROVIDE LAP SPLICE.

PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP EACH SLAB INTO RECTANGULAR AREAS OF NOT MORE THAN 400 SQUARE FEET. AREAS SHALL BE AS SQUARE AS PRACTICAL AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO PLACEMENT.

ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED AND PROPERLY PREPARED IMMEDIATELY PRIOR TO POURING OF CONCRETE. DOWEL STEEL SHALL BE THE SAME SIZE AND SPACING AS MAIN REINFORCING DETAILED BEYOND JOINT UNLESS NOTED OTHERWISE IN PLAN.

SEE ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR EXACT SIZE AND LOCATION OF OPENINGS IN CONCRETE WALLS, FLOORS, AND ROOF. UNLESS INDICATED OTHERWISE, REINFORCE AROUND OPENINGS GREATER THAN 12" IN ANY DIRECTION WITH (1) #5 EACH SIDE AND (1) #5 x 4'-0" DIAGONAL AT EACH CORNER. EXTEND BARS 2'-0" BEYOND EDGE OF OPENING. IF 2'-0" IS UNAVAILABLE, EXTEND AS FAR AS POSSIBLE AND HOOK. HOOK ALL REINFORCING INTERRUPTED BY OPENINGS.

SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, STRIPS, TEXTURE, AND OTHER FINISH DETAILS AT EXPOSED CONCRETE SURFACES. PROVIDE 3/4" CHAMFER AT ALL CORNERS UNO.

STRUCTURAL STEEL
ALL STRUCTURAL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AWS D1.1 "STRUCTURAL WELDING CODE - STEEL". STEEL SHALL BE FABRICATED AND ERECTED WITHIN THE TOLERANCES DEFINED BY AISC. STRUCTURAL STEEL MATERIALS SHALL BE AS FOLLOWS:

- SHAPES SHALL CONFORM TO ASTM A992, Fy = 50 KSI.
- PLATES, ANGLES, AND RODS SHALL CONFORM TO ASTM A36, Fy = 36 KSI.
- STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B, Fy = 46 KSI.
- STRUCTURAL PIPE SHALL CONFORM TO ASTM A53 GRADE B, Fy = 35 KSI.
- BOLTS SHALL CONFORM TO ASTM A325-N (USE 5/8"Ø MINIMUM UNO)
- ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36, Fy = 36 KSI.

ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS AND WABO REQUIREMENTS. USE 70 KSI LOW HYDROGEN ELECTRODES APPROPRIATE FOR THE MATERIALS BEING WELDED. IF NOT SPECIFIED, MINIMUM WELD SIZE SHALL BE PER AWS D1.1. WELDING OF REINFORCING BARS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY CALLED OUT ON DRAWINGS.

ALL STEEL EXPOSED TO WEATHER SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A385 AND HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. FASTENERS AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153. ALL DAMAGED GALVANIZED COATINGS SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780 WITH AN APPLIED COATING THICKNESS DETERMINED BY THE ENGINEER.

WOOD FRAMING
ALL WOOD FRAMING SHALL BE PERFORMED IN ACCORDANCE WITH IBC CHAPTER 23, ANSI/AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", AND AITC "TIMBER CONSTRUCTION MANUAL".

SAWN LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF AN AGENCY APPROVED BY AN ACCREDITATION BODY COMPLIANT WITH DOC PS 20. ALL GRADES SPECIFIED IN THE STRUCTURAL DRAWINGS ARE MINIMUM STANDARDS AND SHALL BE AS FOLLOWS:

- STUDS, PLATES, AND BLOCKING HEM-FIR STUD GRADE
- JOISTS DOUG-FIR #2
- 4x OR SMALLER BEAMS AND HEADERS DOUG-FIR #2
- 6x OR LARGER BEAMS AND HEADERS DOUG-FIR #1
- POSTS AND TIMBERS DOUG-FIR #2

WOOD FRAMING SHALL BE KILN-DRIED TO A MAXIMUM MOISTURE CONTENT OF 19%. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY, OR EXPOSED TO EARTH OR WEATHER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD U1 AND M4 FOR THE SPECIES, PRODUCT, PRESERVATIVE, AND END USE REQUIRED.

GLUED LAMINATED TIMBER SHALL BE MANUFACTURED AND IDENTIFIED IN CONFORMANCE WITH ANSI/AITC A190.1 AND ASTM D3737. UNLESS OTHERWISE SPECIFIED, ALL GLUED LAMINATED TIMBERS SHALL BE DOUGLAS FIR SPECIES. SINGLE SPAN BEAMS SHALL BE COMBINATION 24F-V4 AND MULTI-SPAN BEAMS OR BEAMS THAT CANTILEVER SHALL BE COMBINATION 24F-V8. ALL EXPOSED GLULAMS SHALL HAVE AN ADDITIONAL TENSION LAMINATION SUBSTITUTED FOR A CORE LAMINATION ON THE TENSION SIDE OF UNBALANCED 24F-V4 BEAMS AND ON BOTH SIDES OF BALANCED 24F-V8 BEAMS.

STRUCTURAL WOOD PANEL SHEATHING USED ON WALLS, FLOORS, OR ROOFS SHALL CONFORM TO THEIR SPECIFIC REQUIREMENTS IN DOC PS 1, DOC PS 2, OR ANSI/APA PRP 210. PLYWOOD SHALL BE GRADE C-D WITH EXTERIOR GLUE. REFER TO IBC SECTIONS 2303.1.4, 2304.6, AND 2304.7 FOR ADDITIONAL COMPLIANCE REQUIREMENTS.

PRE-MANUFACTURED JOISTS, BEAMS, AND TRUSSES
PRE-MANUFACTURED JOISTS, BEAMS, AND TRUSSES SHALL BE SIZED, SPACED, AND DETAILED TO MATCH THE LOADING AND DIMENSIONAL REQUIREMENTS INDICATED ON THE STRUCTURAL DRAWINGS. TRUSSES SHALL COMPLY WITH IBC 2303.4, I-JOISTS SHALL COMPLY WITH IBC 2303.1.2, AND COMPOSITE BEAMS SHALL COMPLY WITH 2303.1.9. THE MANUFACTURER'S DESIGNER IS RESPONSIBLE FOR CODE COMPLIANCE AND SHALL PROVIDE SHOP DRAWING AND CALCULATION SUBMITTALS AS SPECIFIED. ENGINEER AND BUILDING OFFICIAL APPROVAL IS REQUIRED PRIOR TO FABRICATION OF PRE-MANUFACTURED COMPONENTS.

REFER TO THE DESIGN LOADS FOR BASIC STRUCTURAL LOADING REQUIREMENTS. REFER TO THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR ADDITIONAL LOADING AND OPENING REQUIREMENTS NOT SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. DEFLECTIONS SHALL NOT EXCEED L/480 FOR LIVE LOADS OR L/360 FOR TOTAL LOADS UNLESS APPROVED IN WRITING BY THE ENGINEER. ALL TRUSSES WITH A DEPTH EQUAL TO OR GREATER THAN 24" SHALL BE DESIGNED FOR A BOTTOM CHORD LIVE LOAD OF 10PSF, NOT APPLIED CONCURRENT WITH THE TOP CHORD LIVE LOAD.

PROVIDE TEMPORARY BRACING UNTIL SHEATHING AND PERMANENT BRACING IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE MANUFACTURER SHALL PROVIDE ALL SPECIALTY ITEMS REQUIRED FOR A COMPLETE INSTALLATION OF THE SYSTEM (INCLUDING BUT NOT LIMITED TO FULL DEPTH BRIDGING, BLOCKING, WEB STIFFENERS, AND PRODUCT SPECIFIC CONNECTORS.

NAILS, SCREWS, BOLTS, AND CONNECTORS
REFER TO THE PLANS, NOTES, SCHEDULES, AND DETAILS FOR ALL NAILING REQUIREMENTS. NAILING NOT SPECIFIED SHALL BE PER IBC TABLE 2304.9.1. ALL NAILS SHALL CONFORM TO THE STANDARD DIMENSIONS OF COMMON NAILS AS DEFINED BY THE NDS AND SHALL MEET THE FOLLOWING MINIMUM GUIDELINES:

- 8d = 0.131"Ø x 2 1/2"
- 10d = 0.148"Ø X 3"
- 16d = 0.162"Ø x 3 1/2"

10d BOX NAILS (0.128"Ø x 3") MAY BE SUBSTITUTED FOR 8d COMMON NAILS WITH NO CHANGE IN NAIL SPACING. FRAMING MEMBERS MAY BE NAILED WITH 16d SINKERS (0.148"Ø x 3 1/4"), BUT ONLY 16d COMMON NAILS SHALL BE USED WHERE 16d NAILS ARE INDICATED IN THE DRAWINGS. OTHER NAILS MAY BE SUBSTITUTED ONLY WITH THE ENGINEER'S APPROVAL PRIOR TO START OF CONSTRUCTION.

ALL LAG SCREWS AND BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE STANDARD CUT WASHERS UNDER THE HEADS AND NUTS OF ALL LAG SCREWS AND BOLTS BEARING ON WOOD. LEAD HOLES FOR BOLTS SHALL BE PROVIDED AND SHALL BE A MINIMUM OF 1/32" AND A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. LEAD HOLES FOR LAG SCREW SHANK AND THREADS SHALL BE PER NDS 11.1.4.2.

ALL WOOD CONNECTORS SHALL BE SIMPSON STRONG-TIE OR ENGINEER APPROVED EQUIVALENT. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS USING THEIR SPECIFIED NUMBER AND SIZE OF FASTENERS. IF STRAPS CONNECT TWO MEMBERS, PLACE 1/2 OF THE NAILS, SCREWS, OR BOLTS INTO EACH MEMBER.

ALL NAILS, SCREWS, BOLTS, AND METAL CONNECTORS IN CONTACT WITH PRESSURE TREATED OR FIRE RETARDANT TREATED WOOD SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.

WOOD FRAMING GENERAL NOTES
SILL PLATES BEARING ON CONCRETE FOUNDATIONS SHALL BE PRESSURE TREATED AND SHALL ATTACH TO THE CONCRETE WITH 1/2"Ø ANCHOR BOLTS EMBEDDED 7" MINIMUM. PLACE ANCHORS AT 4'-0" OC MAXIMUM FOR SHEAR WALLS AND AT 6'-0" OC FOR BEARING AND PARTITION WALLS. USE A MINIMUM OF (2) ANCHOR BOLTS PER SILL PLATE AND PLACE ONE WITHIN 12" OF EACH END OF EACH PIECE. REFER TO THE SHEAR WALL SCHEDULE FOR MORE STRINGENT ANCHORAGE SIZE AND SPACING REQUIREMENTS. CONTRACTOR SHALL INSTALL 3 GAUGE PLATE WASHERS BENEATH EACH NUT AT EACH ANCHOR BOLT IN A SHEAR WALL THAT EXTEND TO WITHIN 1/2" OF SHEATHED EDGE.

ALL SHEAR AND/OR BEARING WALLS SHALL BE FRAMED WITH 2x STUDS @ 16" OC. REFER TO PLAN NOTES FOR TYPICAL HEADER SIZES NOT SPECIFICALLY CALLED OUT. ALL HEADERS SHALL BE SUPPORTED BY A MINIMUM OF (1) CRIPPLE AND (1) FULL HEIGHT STUD. COLUMNS BELOW FLUSH FRAMED MULTIPLE JOIST BEAMS SHALL BE EQUAL IN WIDTH TO THE BEAM. ALL COLUMNS NOT CALLED OUT SHALL BE (2) STUDS. BEAMS SHALL HAVE FULL BEARING ON COLUMNS AND POSITIVE CONNECTION SHALL BE PROVIDED.

PROVIDE SOLID BLOCKING BETWEEN JOISTS AND RAFTERS AT ALL SUPPORTS, AT 8'-0" OC MAXIMUM SPACING BETWEEN SUPPORTS, AND BENEATH PARTITIONS PERPENDICULAR TO THE DIRECTION OF FRAMING. INSTALL DOUBLE JOISTS UNDER PARTITIONS EXTENDING ONE HALF OR MORE OF THE JOIST SPAN.

MINIMUM NAILING REQUIREMENTS SHALL BE PER IBC TABLE 2304.9.1. THE USE OF NAIL GUNS IS APPROVED IF NAILING INTO THE DIAPHRAGMS IS FLUSH WITH FACE OF SHEATHING. NAIL PENETRATIONS GREATER THAN 1/16" ARE NOT ACCEPTABLE.

NOTCHES AND HOLES IN WALL STUDS ARE ALLOWED WITHIN THE PARAMETERS OF IBC SECTIONS 2308.9.10 AND 2308.9.11. NOTCHES AND HOLES IN JOISTS AND RAFTERS ARE ALLOWED WITHIN THE PARAMETERS OF IBC SECTIONS 2308.8.2 AND 2308.10.4.2.

VERTICAL SHRINKAGE WILL OCCUR AND ACCUMULATE AT EACH LEVEL FROM THE WOOD DRYING OVER TIME. THIS IS ESTIMATED TO BE APPROXIMATELY 0.15" PER FLOOR AND ASSUMES THE WOOD HAS AN INITIAL MOISTURE CONTENT OF 19% OR LESS. ADDITIONAL SHRINKAGE WILL OCCUR IF THE MOISTURE CONTENT IS HIGHER. THE CONTRACTOR SHALL ALLOW FOR THIS MOVEMENT IN THEIR INSTALLATION OF ALL VERTICAL ASSEMBLIES INCLUDING BUT NOT LIMITED TO PLUMBING, ELECTRICAL, MECHANICAL, AND ARCHITECTURAL SYSTEMS.

GENERAL NOTES
STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR BIDDING AND CONSTRUCTION. REFER TO THE ARCHITECTURAL DRAWINGS FOR ELEVATIONS, SLOPES, NON-BEARING WALLS, STAIRS, CURBS, DRAINS, RAILINGS, WATERPROOFING, FINISHES, ETC. REFER TO THE ARCHITECTURAL, CIVIL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPES, VENTS, DUCTS, AND OTHER OPENINGS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND FIELD CONDITIONS FOR COMPATIBILITY WITH THE PLANS, SPECIFICATIONS, AND REFERENCED STANDARDS BEFORE PROCEEDING WITH ANY WORK. THE MOST STRINGENT REQUIREMENT SHALL GOVERN ANY CONFLICT UNLESS APPROVED IN WRITING OTHERWISE. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM BEFORE PROCEEDING.

CONTRACTOR SHALL BE RESPONSIBLE FOR STRENGTH AND STABILITY OF ANY PARTLY COMPLETED STRUCTURE. CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND SHALL PROVIDE TEMPORARY SHORING AND SUPPORT AS REQUIRED UNTIL THE STRUCTURE HAS BEEN COMPLETED.

CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE DESIGN TEAM FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES ON SHOP DRAWINGS DO NOT SATISFY THIS REQUIREMENT. REVIEW OF ALTERNATE SYSTEMS MAY BE AN ADDITIONAL SERVICE BY THE ENGINEER.

DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF A SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE DESIGN TEAM.

LEGEND

DEFINITION	SYMBOL	DEFINITION	SYMBOL
DIRECTION OF FRAMING		NATIVE SOIL	
EXTENT OF FRAMING		GRANULAR FILL	
COLUMNS		STRUCTURAL STEEL	
COLUMN BEARING ON BEAM	(A) (B)	RATED SHEATHING	
BEAM CONTINUOUS OVER SUPPORT	(A) (B)	SHEAR WALL (SEE SCHEDULE)	SWX
CONCRETE WALL		COLUMN MARK (SEE SCHEDULE)	C1
BEARING STUD WALL		FOOTING MARK (SEE SCHEDULE)	FX
NON-BEARING STUD WALL		HOLDOWN MARK (SEE SCHEDULE)	HX
BEARING STUD SHEAR WALL		HANGER MARK (SEE SCHEDULE)	X
NON-BEARING STUD SHEAR WALL		FLAG NOTE (SEE PLAN NOTES)	X
CMU WALL		STEEL MOMENT FRAME CONN.	

ABBREVIATIONS

(A)	ABOVE	GLB	GLUE-LAMINATED BEAM
AB	ANCHOR BOLT	HORIZ	HORIZONTAL
ALT	ALTERNATE	KP	KING POST
ARCH	ARCHITECT	KSI	KIPS PER SQUARE INCH
(B)	BELOW	L	ANGLE
BD	BAR DIAMETER	MECH	MECHANICAL
BLKG	BLOCKING	MF	MOMENT FRAME
BM	BEAM	MTL	METAL
BOT	BOTTOM	NS	NEAR SIDE
BRNG	BEARING	OC	ON CENTER
BTWN	BETWEEN	OPP	OPPOSITE
CJP	COMPLETE JOINT PENETRATION	PL	PLATE
CLR	CLEAR	PLCS	PLACES
CMU	CONCRETE MASONRY UNIT	PSI	POUNDS PER SQUARE INCH
COL	COLUMN	PSF	POUNDS PER SQUARE FOOT
CONC	CONCRETE	P/T	POST TENSIONED
CONN	CONNECTION	PT	PRESSURE TREATED
CONT	CONTINUOUS	REINF	REINFORCING
COORD	COORDINATE	REQ'D	REQUIRED
DBL	DOUBLE	SCHED	SCHEDULE
DET	DETAIL	SIM	SIMILAR
DIA	DIAMETER	SOG	SLAB ON GRADE
DIM	DIMENSION	STD	STANDARD
DIR	DIRECTION	STIFF	STIFFENER
EA	EACH	STL	STEEL
ELEV	ELEVATION	SYMM	SYMMETRICAL
ES	EACH SIDE	SW	SHEARWALL
EX	EXISTING	TOC	TOP OF CONCRETE
EXP	EXPANSION	TOS	TOP OF STEEL
FLR	FLOOR	TOW	TOP OF WALL
FDN	FOUNDATION	TYP	TYPICAL
FTG	FOOTING	UNO	UNLESS NOTED OTHERWISE
FS	FAR SIDE	VERT	VERTICAL
GC	GENERAL CONTRACTOR	WF	WIDE FLANGE

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09/02/2020

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SHEET NO.:
S1.1

SHEAR WALL SCHEDULE

TYPE	APA-RATED SHEATHING	MIN FRAMING AT ADJOINING PANEL EDGES	NAILING AT PANEL EDGES	RIM JOIST OR BLOCK CONN TO TOP PLATE	SILL PLATE NAILING TO RIM/BLKG BELOW	SILL PLATE ANCHOR BOLT TO SLAB OR FOUNDATION	FOUNDATION SILL PLATE SIZE	SHEAR CAPACITY (PLF)
SW6	15/32" ONE SIDE	2x STUD AND BLKG	0.131"D x 2 1/2" @ 6" OC	LTP4 OR A35 @ 26" OC	0.131"D x 3 1/4" @ 6.5" OC	5/8"Ø AB @ 5'-8" OC OR 1/2"Ø AB @ 3'-10" OC	2x	242

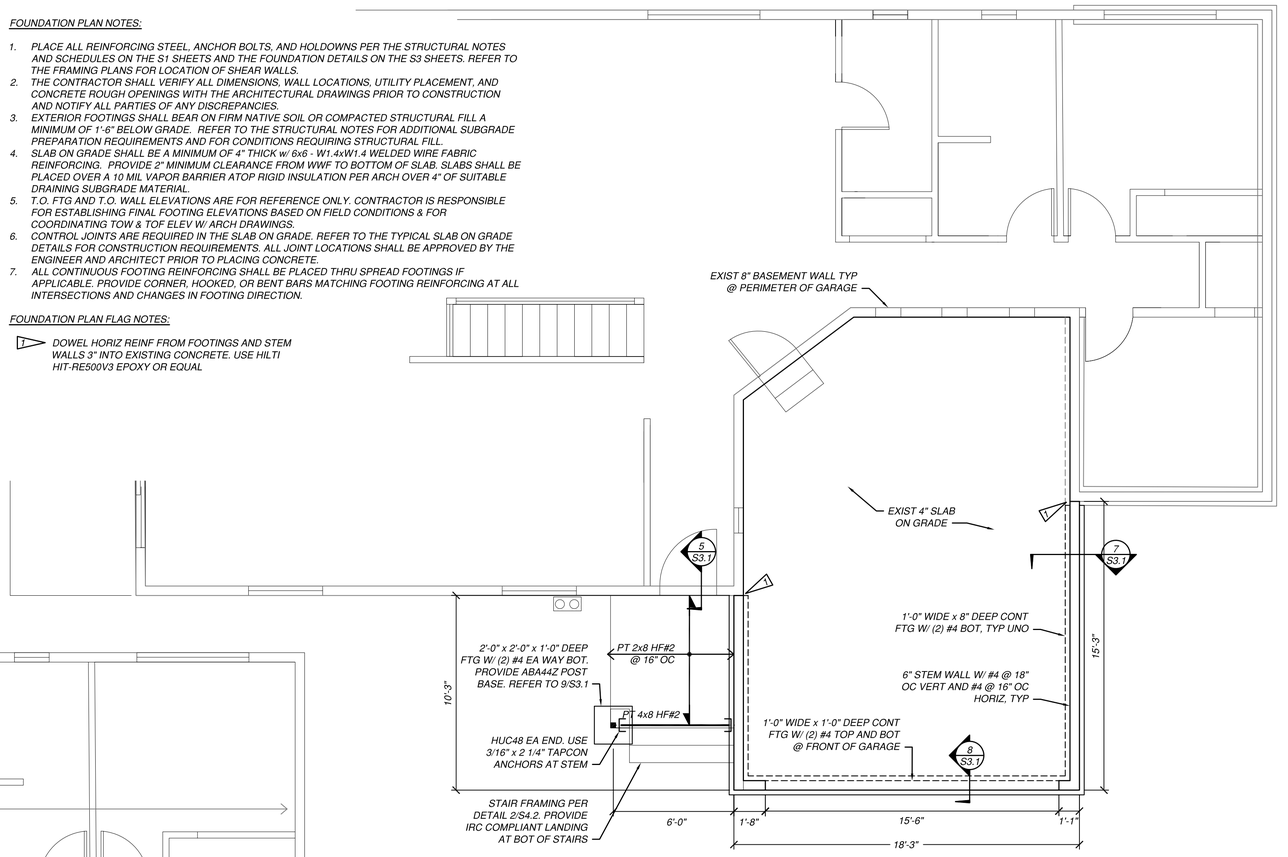
NOTES:
1. REFER TO THE SHEAR WALL DETAIL IN THE TYPICAL WOOD FRAMING DETAILS.
2. THE VALUES IN THIS TABLE ARE BASED ON HF GRADE STUDS AND HF GRADE PLATES & RIM/BLOCKING.
3. NAILS AT ADJOINING PANEL EDGES SHALL BE STAGGERED EACH SIDE OF THE COMMON JOINT.
4. INTERMEDIATE FRAMING TO BE WITH 2x MINIMUM MEMBERS. FIELD NAILING 12" OC MAXIMUM.
5. AT ALL SILL PLATE ANCHOR BOLTS IN 2x6 WALLS, INSTALL 3 GA x 3" x 4 1/2" PLATE WASHERS WITH THE EDGE OF PLATE WASHER WITHIN 1/2" OF SHEATHED EDGE. FOR 2x4 STUD WALLS, INSTALL 3 GA. x 3" x 3" PLATE WASHERS.
6. PROVIDE A MINIMUM OF 7" EMBEDMENT FOR AB INTO FOUNDATION OR STEM WALL.
7. 7/16" SHEATHING MAY BE USED IN PLACE OF 15/32" SHEATHING PROVIDED ALL STUDS ARE SPACED 16" OC OR PANELS ARE APPLIED WITH LONG DIMENSION ACROSS STUDS.

FOUNDATION PLAN NOTES:

1. PLACE ALL REINFORCING STEEL, ANCHOR BOLTS, AND HOLDOWNS PER THE STRUCTURAL NOTES AND SCHEDULES ON THE S1 SHEETS AND THE FOUNDATION DETAILS ON THE S3 SHEETS. REFER TO THE FRAMING PLANS FOR LOCATION OF SHEAR WALLS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, WALL LOCATIONS, UTILITY PLACEMENT, AND CONCRETE ROUGH OPENINGS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION AND NOTIFY ALL PARTIES OF ANY DISCREPANCIES.
3. EXTERIOR FOOTINGS SHALL BEAR ON FIRM NATIVE SOIL OR COMPACTED STRUCTURAL FILL A MINIMUM OF 1'-6" BELOW GRADE. REFER TO THE STRUCTURAL NOTES FOR ADDITIONAL SUBGRADE PREPARATION REQUIREMENTS AND FOR CONDITIONS REQUIRING STRUCTURAL FILL.
4. SLAB ON GRADE SHALL BE A MINIMUM OF 4" THICK w/ 6x6 - W1.4xW1.4 WELDED WIRE FABRIC REINFORCING. PROVIDE 2" MINIMUM CLEARANCE FROM WWF TO BOTTOM OF SLAB. SLABS SHALL BE PLACED OVER A 10 MIL VAPOR BARRIER ATOP RIGID INSULATION PER ARCH OVER 4" OF SUITABLE DRAINING SUBGRADE MATERIAL.
5. T.O. FTG AND T.O. WALL ELEVATIONS ARE FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING FINAL FOOTING ELEVATIONS BASED ON FIELD CONDITIONS & FOR COORDINATING TOW & TOF ELEV W/ ARCH DRAWINGS.
6. CONTROL JOINTS ARE REQUIRED IN THE SLAB ON GRADE. REFER TO THE TYPICAL SLAB ON GRADE DETAILS FOR CONSTRUCTION REQUIREMENTS. ALL JOINT LOCATIONS SHALL BE APPROVED BY THE ENGINEER AND ARCHITECT PRIOR TO PLACING CONCRETE.
7. ALL CONTINUOUS FOOTING REINFORCING SHALL BE PLACED THRU SPREAD FOOTINGS IF APPLICABLE. PROVIDE CORNER, HOOKED, OR BENT BARS MATCHING FOOTING REINFORCING AT ALL INTERSECTIONS AND CHANGES IN FOOTING DIRECTION.

FOUNDATION PLAN FLAG NOTES:

1 DOWEL HORIZ REINF FROM FOOTINGS AND STEM WALLS 3" INTO EXISTING CONCRETE. USE HILTI HIT-RE500V3 EPOXY OR EQUAL



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

ROOF FRAMING PLAN NOTES:

1. REFER TO THE STRUCTURAL NOTES AND SCHEDULES ON THE S1 SHEETS AND TO THE TYPICAL WOOD FRAMING DETAILS ON THE S4 SHEETS FOR FRAMING REQUIREMENTS NOT SPECIFICALLY SHOWN ON THE ROOF FRAMING PLAN OR IN THESE PLAN NOTES.
2. ROOF SHEATHING SHALL BE 1/2" MINIMUM WITH A 32/16 SPAN RATING. ATTACH TO FRAMING BELOW WITH 8d NAILS SPACED AT 6" OC AT ALL DIAPHRAGM BOUNDARIES, PANEL EDGES, SHEAR WALLS, AND COLLECTOR ELEMENTS INDICATED ON PLANS. NAILING AT INTERMEDIATE FRAMING SHALL BE 8d NAILS SPACED AT 12" OC. REFER TO TYPICAL FRAMING DETAILS FOR SHEATHING LAYOUT. ROOF SHEATHING IS UNBLOCKED UNO ON PLAN.
3. WALL STUD FRAMING SHALL BE AS FOLLOWS:
   - 2x6 HF STUD @ 16" OC FOR EXTERIOR WALLS AND INTERIOR 6" BEARING WALLS.
   - 2x4 HF STUD @ 16" OC FOR INTERIOR 4" BEARING WALLS.
   - 2x4 OR 2x6 HF STUDS @16" OC FOR INTERIOR NON-BEARING WALLS

   REFER TO ARCHITECTURAL DRAWINGS FOR DETERMINATION OF WALL TYPE. ALL SILL AND TOP PLATES SHALL BE HF STUD GRADE.
4. ALL COLUMNS, TRIMMER STUDS, AND BEARING WALLS SHALL BE CONTINUED DOWN TO THE FOUNDATION UNLESS SUPPORTED BY A BEAM BELOW. SOLID BLOCKING SHALL BE PROVIDED WITHIN JOIST SPACES AT THESE LOCATIONS.
5. PROVIDE CS16 STRAP AT LOCATIONS WHERE COLUMN OR BEAM CUTS DOUBLE TOP PLATE. EXTEND STRAP 1'-0" BEYOND THE CUT IN EACH DIRECTION AND PROVIDE (12) 8d EACH SIDE.

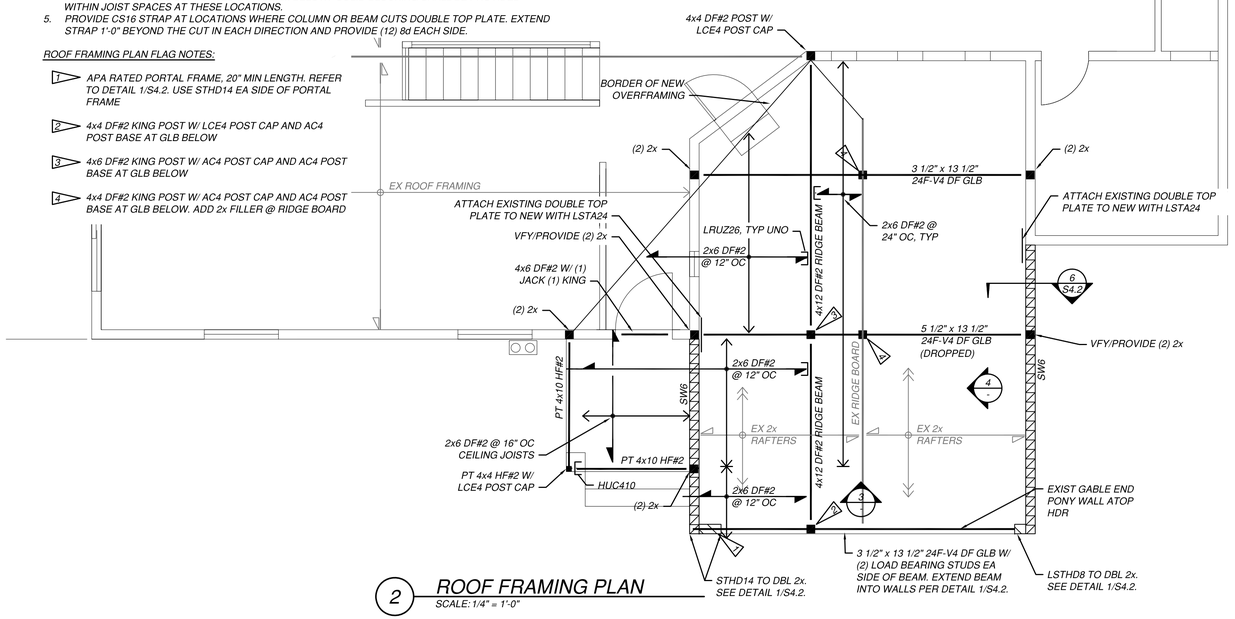
ROOF FRAMING PLAN FLAG NOTES:

1 APA RATED PORTAL FRAME, 20" MIN LENGTH. REFER TO DETAIL 1/S4.2. USE STHD14 EA SIDE OF PORTAL FRAME

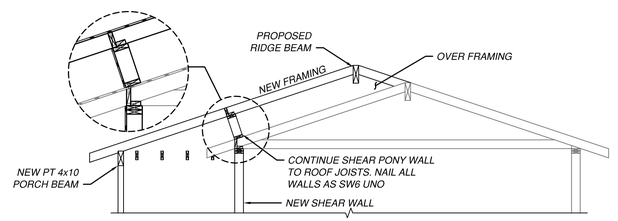
2 4x4 DF#2 KING POST W/ LCE4 POST CAP AND AC4 POST BASE AT GLB BELOW

3 4x6 DF#2 KING POST W/ AC4 POST CAP AND AC4 POST BASE AT GLB BELOW

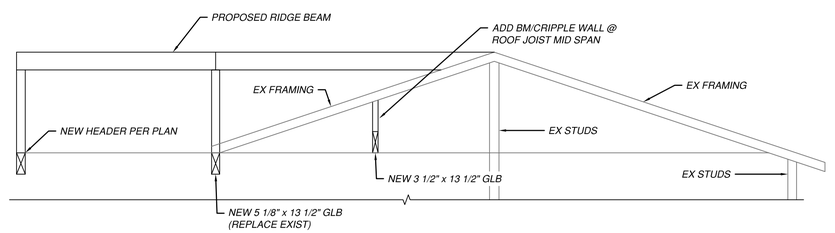
4 4x4 DF#2 KING POST W/ AC4 POST CAP AND AC4 POST BASE AT GLB BELOW. ADD 2x FILLER @ RIDGE BOARD



2 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"



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



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

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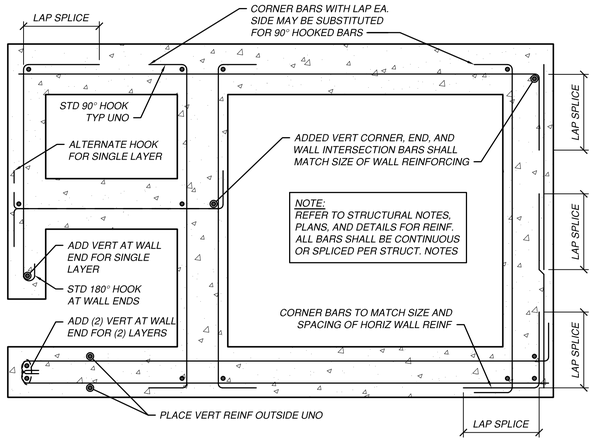
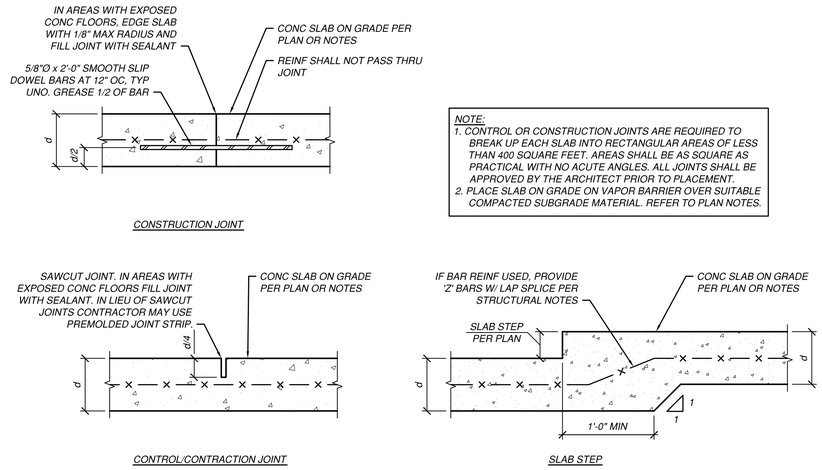
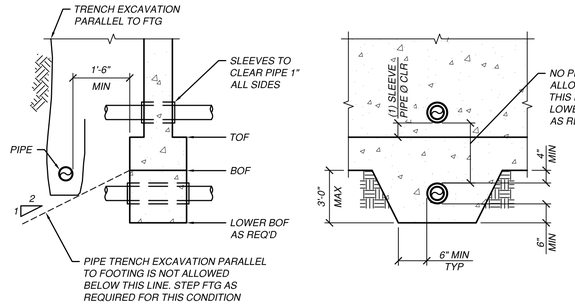


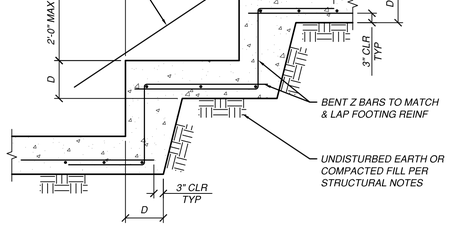
1 TYPICAL CONCRETE WALL REINFORCING DETAIL
SCALE: NTS



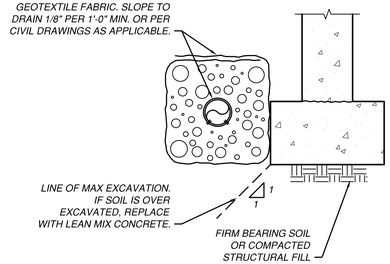
2 TYPICAL SLAB ON GRADE DETAILS
SCALE: 1" = 1'-0"



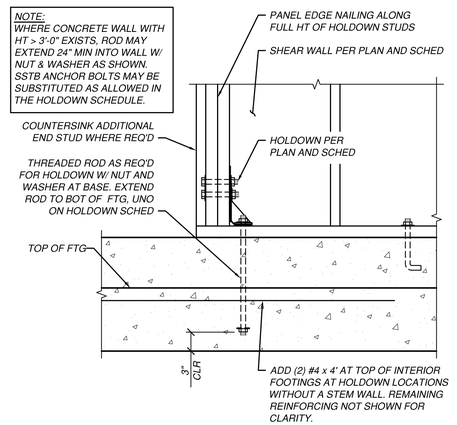
3 TYPICAL PIPE PENETRATION AT FOUNDATION/WALLS
SCALE: 1/2" = 1'-0"



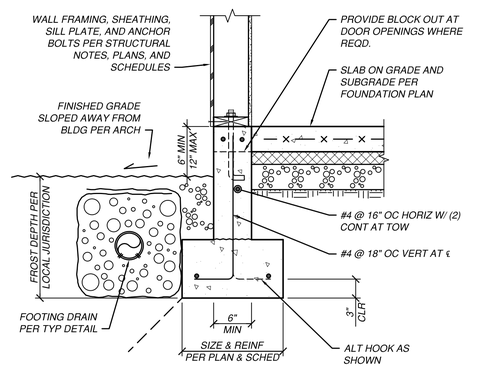
4 TYPICAL FOOTING STEP
SCALE: 1/2" = 1'-0"



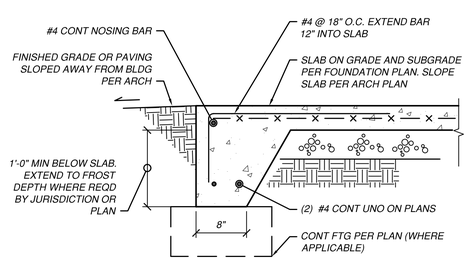
5 TYPICAL FOOTING DRAIN
SCALE: 1" = 1'-0"



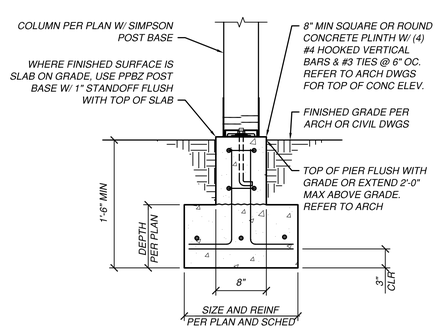
6 HOLDOWN DETAIL
SCALE: 1" = 1'-0"



7 TYPICAL STEM WALL DETAIL
SCALE: 1" = 1'-0"



8 THICKENED SLAB EDGE
SCALE: 1" = 1'-0"



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

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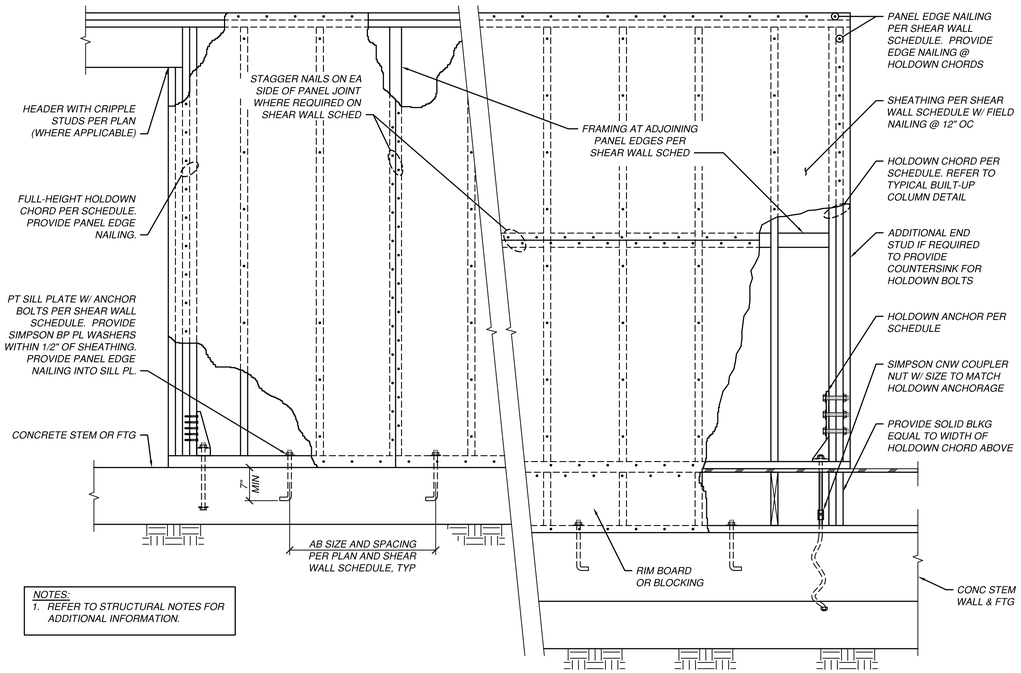
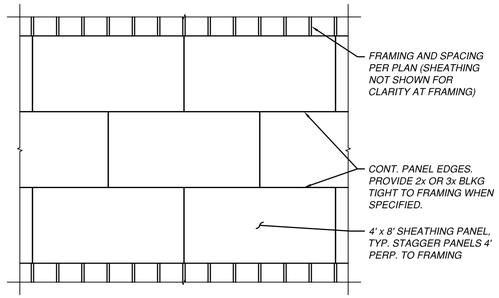


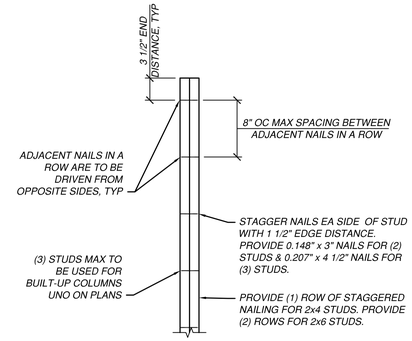
NOTES:
1. REFER TO STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

1 TYPICAL SHEAR WALL DETAIL
SCALE: 3/4" = 1'-0"

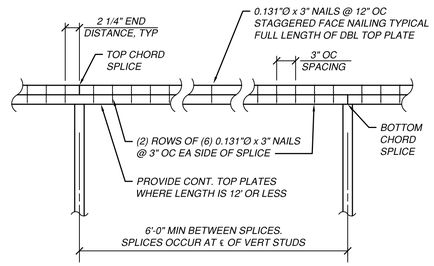
NOTES:
1. PANELS SHALL BE 4' x 8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING WHERE THE MINIMUM PANEL DIMENSION SHALL BE 24".
2. FASTENER PATTERN SHALL BE PER PLAN AND NOTES. MINIMUM SPACING IS 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE FRAMING, UNO.



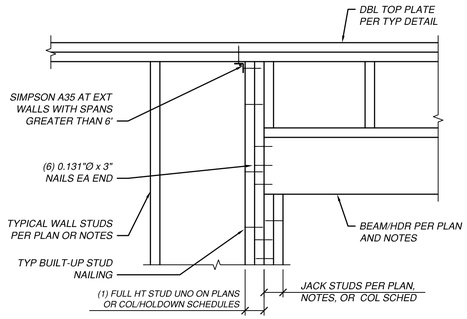
2 TYPICAL FLOOR/ ROOF SHEATHING DETAIL
SCALE: NTS



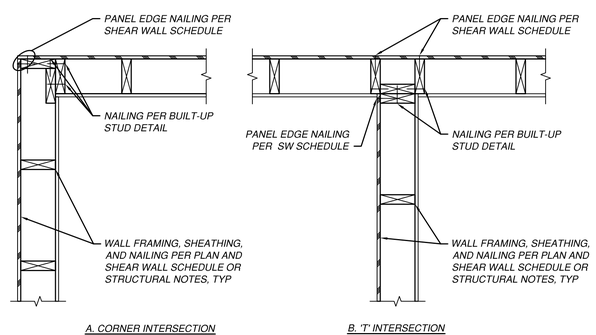
3 TYPICAL BUILT-UP STUD COLUMN DETAIL
SCALE: 1" = 1'-0"



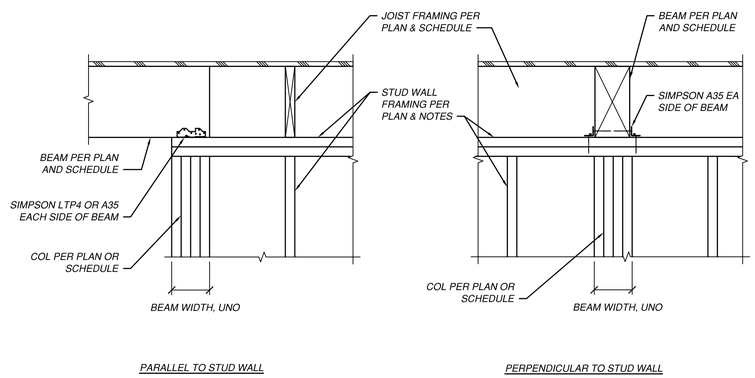
4 TYPICAL TOP PLATE SPLICE DETAIL
SCALE: 1" = 1'-0"



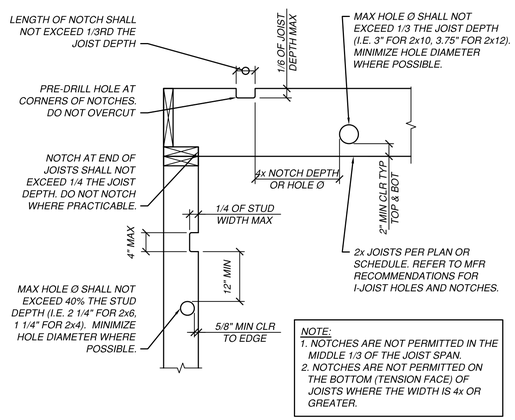
5 TYPICAL HEADER DETAIL
SCALE: 1" = 1'-0"



6 TYPICAL SHEAR WALL INTERSECTION DETAIL
SCALE: 1" = 1'-0"



7 TYPICAL FLUSH BEAM SUPPORT DETAILS
SCALE: 1" = 1'-0"



NOTE:
1. NOTCHES ARE NOT PERMITTED IN THE MIDDLE 1/3 OF THE JOIST SPAN.
2. NOTCHES ARE NOT PERMITTED ON THE BOTTOM (TENSION FACE) OF JOISTS WHERE THE WIDTH IS 4x OR GREATER.

8 ALLOWABLE HOLES & NOTCHES
SCALE: 1" = 1'-0"

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PROJECT:

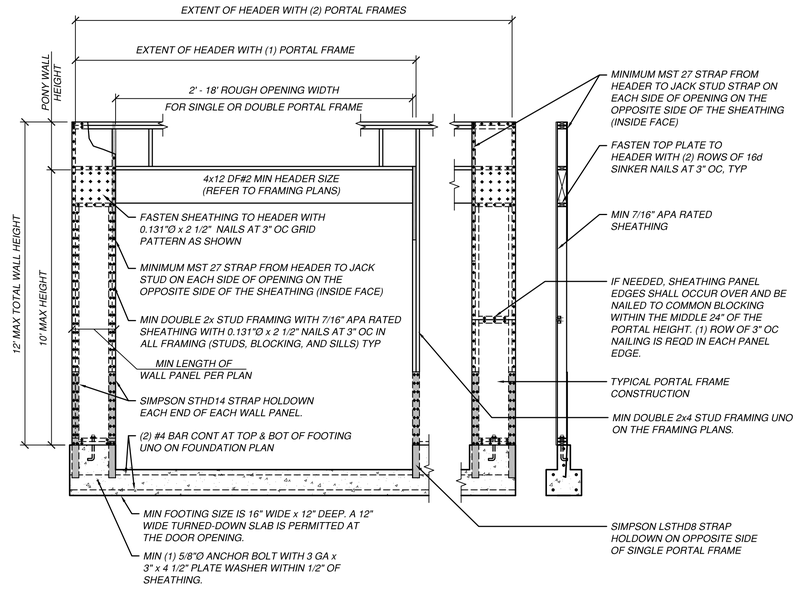
CHRISTOPHER A. BERNARDS — STATE OF WASHINGTON — 40705 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER
09/02/2020

REV.	DATE	DESCRIPTION
0	09/02/20	PERMIT RESUBMITTAL

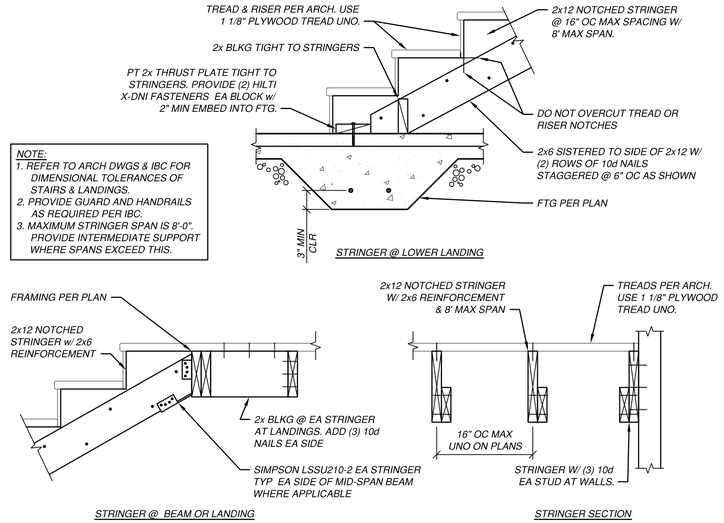
PROJECT NO.:	18041.02
DESIGNED BY:	JMD
DRAWN BY:	JMD
CHECKED BY:	CAB

SHEET TITLE:
WOOD FRAMING DETAILS

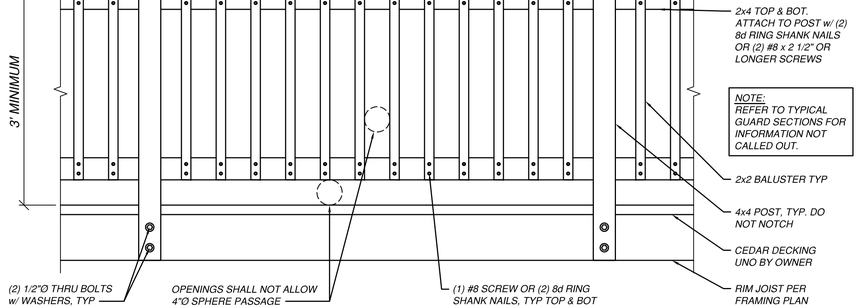
SHEET NO.:
S4.1



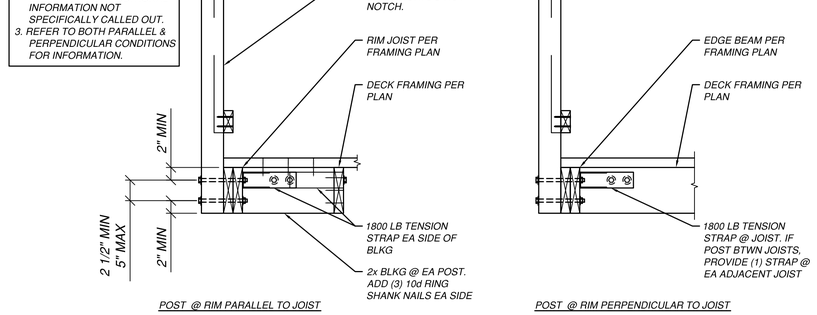
1 PORTAL FRAME DETAIL
SCALE: NTS



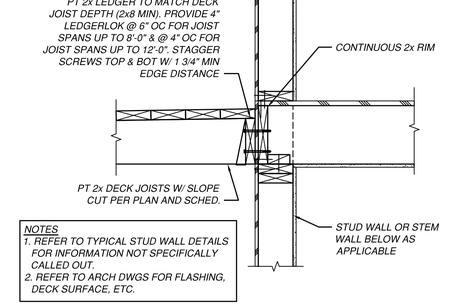
2 TYPICAL STAIR DETAILS
SCALE: 1" = 1'-0"



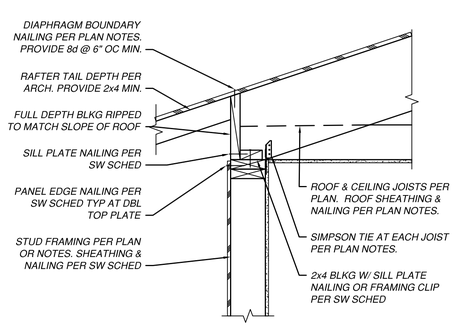
3 TYPICAL GUARD ELEVATION
SCALE: 1" = 1'-0"



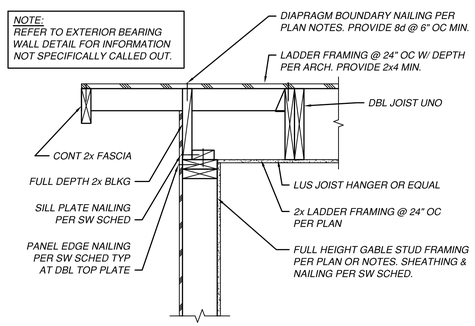
4 TYPICAL GUARD SECTIONS
SCALE: 1" = 1'-0"



5 DECK/PORCH DETAIL
SCALE: 1" = 1'-0"



6 ROOF BEARING WALL DETAIL
SCALE: 1" = 1'-0"



7 ROOF NON-BEARING WALL DETAIL
SCALE: 1" = 1'-0"

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S4.2