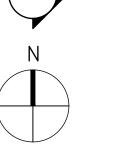
S2.1 ROOF FRAMING PLAN S4.0 TYPICAL CONCRETE DETAILS S4.1 TYPICAL CONCRETE DETAILS S5.0 TYPICAL WOOD DETAILS S5.1 TYPICAL WOOD DETAILS S5.2 WOOD SECTIONS & DETAILS

SECTION REFERENCE BUBBLE DETAIL REFERENCE BUBBLE WITH ARROW DETAIL REFERENCE BUBBLE

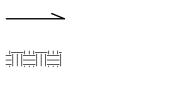
ELEVATION OF WALL OR FRAME

FULL HEIGHT SECTION INDICATOR



NORTH ARROW

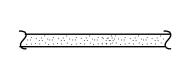
SLOPE



EARTH LAYER



STEPPED SURFACE; FLOOR DEPRESSION

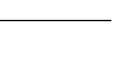


INDICATES SAND OR GROUT



INDICATES GRAVEL

SLOPPED SURFACE

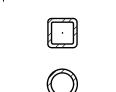


TOP OF SLAB ELEVATION

WELDED WIRE FABRIC (WWF LAYER)



FOOTING TYPE

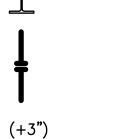


INDICATES MASONRY WALLS



STEEL PIPE COLUMN WIDE FLANGE STEEL COLUMN

STEEL TUBE COLUMN



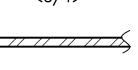
MEMBER SPLICE

TOP OF STEEL ± ELEVATION NUMBER OF EVENLY SPACED SHEAR STUDS

[X-Y-Z]<3/4>

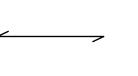
[X]

SPECIAL STUD SPACING SEE TYPICAL STEEL DETAILS

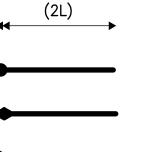


STEEL IN CROSS SECTION

BEAM CAMBER AT MID-SPAN



DIRECTION OF SPAN



ANGLE BRACE

DOUBLE ANGLE BRACE DRAG STRUT CONNECTION

FULL HEIGHT STIFFENER CONNECTION

MOMENT CONNECTION STEPPED FOOTING

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SHEET INDEX, SYMBOLS, AND **ABBREVIATIONS**

TIE BEAM TB HDR TOP AND BOTTOM T & B HGR TONGUE & GROOVE T & G HGT TO TOP OF HOSP TOC TOP OF CURB; TOP OF CONCRETE HP TOF TOP OF FOOTING HS TEMP TEMPERATURE; TEMPORARY HSH **THRU** THROUGH HT THK THICKNESS/THICK HR THR THREADED TOP or T TOS TOP OF STEEL/TOP OF SLAB I-JST TOW TOP OF WALL TSG TAPPERED STEEL GIRDER INCL TYP INFO UBC UNIFORM BUILDING CODE INSP INT UNO UNLESS NOTED OTHERWISE ULTRA-SONIC TEST JST **VERT** VERTICAL VSH VERTICAL SLOTTED HOLES W SHAPE KSI WITH LAB WITHOUT W/0 WOOD WORK POINT; WATERPROOF LIN WEIGHT; STRUCTURAL TEE SHAPE LLBB WWF WELDED WIRE FABRIC LLH LLV STRUCTURAL STEEL SHAPES LP W SHAPE LSL AMERICAN STD CHANNEL SHAPE LT WT MISC CHANNEL SHAPE LVL ANGLE SHAPE WT, ST, MT STRUCT TEE SHAPE MAS STANDARD PIPE SHAPE PIPE MATL PIPE-X EXTRA STRONG PIPE SHAPE MAX PIPE-XX DBL EXTRA STRONG PIPE SHAPE MB STRUCT TUBING SHAPE MECH MFR MISC NO or NTS ОН OPNG OPP ORIG OSB PC PERP PLCS PLY PROP PW PJP PREFAB PSF PSI PVC PVMT REF REINF REQD RW

H or HORIZ HORIZONTAL HEADER ACI HANGER ADDL HEIGHT ADJ HOSPITAL **AESS** HIGH POINT AGGR HIGH STRENGTH AISC HORIZONTALLY SLOTTED HOLES ALT HEIGHT ALUM HARD ROCK ANCH INSIDE DIAMETER ANSI INSIDE FACE APA I-JOIST APPVD INCH **APPROX** INCLUDE ARCH INFORMATION ASTM **INSPECTION** AWPA INTERIOR AWS JOIST AITC JOINT ASTM KIPS PER SQUARE INCH LABORATORY BLDG LB(S) OR POUND(S) BLK LINEAL FOOT BLKG LINEAL; LINEAR LONG LEGS BACK-TO-BACK LONG LEG HORIZONTAL **BNDRY** LONG LEG VERTICAL LOW POINT LONG SLOTTED HOLES LIGHTWEIGHT LEVEL MASONRY MATERIAL MAXIMUM CC MACHINE BOLT CG MISCELLANEOUS CHANNEL SHAPE MECHANICAL MANUFACTURER MINIMUM; MINUTE MISCELLANEOUS NEW NORTH NEAR FACE NOT IN CONTRACT NORMAL NUMBER NEAR SIDE NOT TO SCALE ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OPPOSITE HAND OPENING OPPOSITE ORIGINAL DET ORIENTED STRAND BOARD PARA OR // PARALLEL PRECAST; PIECE PERPENDICULAR PLYWOOD INDEX PLATE PROPERTY LINE PONDS PER LINEAL FOOT PLACES PLYWOOD PROPERTY POST TENSIONED PLATE WASHER PARTIAL JOINT PENETRATION WELD PREFABRICATED POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POLYVINYL CHLORIDE PAVEMENT POUND; NUMBER REFERENCE REINFORCE; REINFORCING REQUIRED

ROOF

RETAINING WALL

ROUND; DIAMETER

SCHED SCHEDULE SECT SECTION SEP SEPERATION SHT SHEET SHTG SHEATHING SIM SIMILAR SLBB SHORT LEGS BACK-TO-BACK SOG SLAB ON GRADE SN SHEAR NAIL SPCG SPACING SPECS SPECIFICATIONS SPCL SPECIAL SQ SQUARE SS SELECT STRUCTURAL SSL SHORT SLOTTED HOLES STAGG STAGGER STD STANDARD STGR STAGGER STIFF STIFFENERS STIRR STIRRUP STL STEEL STRUCT STRUCTURAL STRUCT STRUCTURAL SW SHEAR WALL SYM **SYMMETRICAL**

AGGREGATE AMERICAN INSTITUTE OF STEEL CONSTRUCTION ALTERNATE ALUMINUM ANCHOR AMERICAN NATIONAL STANDARDS INSTITUTE AMERICIAN PLYWOOD ASSOCIATION APPROVED **APPROXIMATE** ARCHITECTURAL; ARCHITECT AMERICAN SOCIETY FOR TESTING AND MATERIALS AMERICAN WOOD PRESERVERS ASSOCIATION AMERICAN WELDING SOCIETY AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AMERICAN SOCIETY FOR TESTING MATERIALS **BUILDING** BLOCK BLOCKING **BOUNDARY NAIL BOUNDARY**

BOT OR B BOTTOM BRC BRACE BRG **BEARING** BENT BTWN BETWEEN CANT CANTILEVER CAM OR C CAMBER CENTER TO CENTER CENTER OF GRAVITY CAST-IN-PLACE CONSTRUCTION JOINT; CONTROL JOINT CENTER LINE CLEARANCE; CLEAR CONCRETE MASONRY UNIT

ANCHOR BOLT

ADDITIONAL

ADJACENT

AND

ΑT

BEAM

AMERICAN CONCRETE INSTITUTE

ARCHITECTURAL EXPOSED STRUCTURAL STEEL

CLR CMU COL COLUMN COMPRESSION COMP CONC CONCRETE CONN CONNECTION; CONNECT CONSTR CONSTRUCTION CONT CONTINUE; CONTINUOUS CONTR CONTRACTOR CJP COMPLETE JOINT PENETRATION WELD CTR CENTER CTSK COUNTERSINK; COUNTERSUNK CU FT CUBIC FOOT PENNY (NAIL OR BAR DIA) DBL DOUBLE DEPARTMENT DEPT

DETAIL DF DOUGLAS FIR/LARCH DIA OR 9 DIAMETER DIAG DIAGONAL DIAPH DIAPHRAGM DIM DIMENSION DOWN DN DITTO (REPEAT) DRAWING DWL DOWEL EACH EACH FACE EXPANSION JOINT ELEVATION ELECTRICAL ELEC ELEV **ELEVATOR EMBED EMBEDMENT** EDGE NAIL **ENGR ENGINEER** EQ EQUAL OR EQUIVALENT

EQUIP EQUIPMENT ES EACH SIDE ETC ET CETERA EACH WAY EXIST or (E) **EXISTING** EXT **EXTERIOR** FDN FOUNDATION FAR FACE FINISHED FLOOR FINISH FLOOR JOIST FLOOR LINE FLG FLANGE FLR

FLOOR FIELD NAIL FOC FACE OF CONCRETE FACE OF MASONARY FOM FOS FACE OF STUD FOW FACE OF WALL FP FULL PENETRATION; FIRE PROOFING FRMG FRAMING FS FT FOOT; FEET FTG FOOTING GAUGE

GALV GALVANIZED GRADE BEAM GLUED LAMINATED BEAM GLB GR GRADE

GRND

FULL SIZE; FAR SIDE

GROUND

REINFORCING STEEL

- 1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 19 OF THE CODE, ASTM A615 UNO.
- 2. BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
- 3. REINFORCING BAR SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE AS PER THE CODE SECTION 1912. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS. STAGGER ALL SPLICES UNLESS NOTED OTHERWISE ON PLANS.
- 4. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.
- WHERE WELDING OF REINFORCING IS APPROVED BY THE STRUCTURAL ENGINEER, IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING E70XX OR APPROVED ELECTRODES. WELDING PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF "STRUCTURAL WELDING CODE—REINFORCING STEEL", AWS—D1.4, LATEST REVISION AND "STRUCTURAL
- 6. WELDING CODE— STEEL", AWS 1.4, LATEST REVISION. WHERE A CONFLICT OCCURS IN THE CODES THE MORE STRINGENT PROVISION SHALL CONTROL. REINFORCING BARS TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-706.
- 7. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE "A.C.I. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.
- BARS IN SLABS SHALL BE SECURELY SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS, PRIOR TO PLACING CONCRETE.
- 9. CONCRETE PROTECTION FOR REINFORCEMENT:

<u>CAST-IN-PLACE NON PT CONCRETE.</u> THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

<u>L0</u>	CATION OF REINFORCED CONCRETE	MINIMUM COVER, IN.	TOLERANCE, IN	<u> .</u>
a.	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3	±3/8	
b.	CONCRETE EXPOSED TO EARTH OR WEATHER:			
	NO. 6 THROUGH NO. 18 BAR	2	±3/8	
	NO 5 BAR, W31 OR D31 WIRE & SMALLER	1 1/2	±3/8	
c.	CONCRETE NOT EXPOSED TO WEATHE OR IN CONTACT WITH GROUND:	ER		
	SLABS, WALLS, JOISTS	3/4	±1/4	
	BEAMS, COLUMNS	1 1/2	±1/4	

ONSTRUCTION JOINTS, MECHANICAL BAR SPLICE DEVICES MAY BE USED. MECHANICAL BAR SPLICE DEVICES MAY ALSO BE USED IN LIEU OF LAP SPLICES. SIZES AND TYPES SHOULD BE SELECTED AS INDICATED IN THIS NOTE. TYPE "1" MECHANICAL SPLICE DEVICES MUST DEVELOP AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR. SPLICES SHALL BE STAGGERED A MINIMUM OF 2'-0" O.C. TYPE "2" MECHANICAL SPLICES MUST DEVELOP THE LESSER OF 95% OF THE ULTIMATE TENSILE STRENGTH OR 160% OF THE SPECIFIED YIELD STRENGTH OF THE BAR. TYPE "2" SPLICES MUST BE USED FOR SHEAR WALLS AND MOMENT FRAMES, UNLESS NOTED OTHERWISE DEVICE SPECIFICATIONS SHALL BE SUBMITTED FOR APPROVAL BY KPFF.

CONCRETE

- 1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19
 OF THE CODE AND WITH THE PROVISIONS OF ACI 318, LATEST EDITION.
- REINFORCED CONCRETE IS DESIGNED BY THE "ULTIMATE STRENGTH DESIGN METHOD"
- CONCRETE MIXES SHALL BE DESIGNED BY AN APPROVED TESTING LABORATORY AND THE COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE PROPORTIONED BASED ON SECTION 1905 OF THE CODE. CONCRETE MIXES SHALL BE STAMPED AND SIGNED BY A CALIFORNIA REGISTERED CIVIL ENGINEER.
- 4. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II/V.
- 5. AGGREGATE FOR HARDROCK CONCRETE SHALL CONFORM TO ALL REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS. EXCEPTIONS MAY BE USED ONLY WITH PERMISSION OF THE STRUCTURAL ENGINEER.
- 6. SCHEDULE OF STRUCTURAL CONCRETE 28-DAY STRENGTH AND TYPES:

LOCATION IN STRUCTURE	STRENGTH (PSI)	DENSITY (PCF)	W/C RATIO	SLUMF (in.)
ALL CONC	3000	150	0.50	4

- 7. CONCRETE MIXING OPERATION, ETC. SHALL CONFORM TO ASTM C-94.
- PLACEMENT OF CONCRETE SHALL CONFORM TO CODE SECTION 1905 AND PROJECT SPECIFICATIONS. CLEAN AND ROUGHEN TO 1/4" AMPLITUDE ALL CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED.
- 9. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- 10. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS. SEE THESE DRAWINGS FOR ADDITIONAL RESTRICTIONS ON THE PLACEMENT OF OPENINGS IN SLABS AND WALLS.
- 11. ALL ANCHOR BOLTS INSTALLED IN CONCRETE SHALL CONFORM TO THE ASTM DESIGNATION F-1554, GRADE 36. ALL ANCHOR BOLTS SHALL BE EITHER BENT BAR ANCHOR BOLTS OR HEADED ANCHOR BOLTS. BENT BAR ANCHOR BOLTS SHALL HAVE A HOOK WITH A 90-DEGREE BEND WITH AN INSIDE DIAMETER OF 3 BOLT DIAMETERS, PLUS AN EXTENSION OF ONE AND A HALF BOLT DIAMETERS AT THE FREE END. EMBEDMENT SPECIFIED FOR BENT BAR ANCHOR BOLTS SHALL BE MEASURED PERPENDICULAR FROM THE CONCRETE SURFACE TO THE BEARING SURFACE OF THE BENT BAR MINUS ONE BAR DIAMETER. HEADED ANCHOR BOLTS SHALL HAVE A STANDARD BOLT HEAD. EMBEDMENT SPECIFIED FOR HEADED ANCHOR BOLTS SHALL BE MEASURED PERPENDICULAR FROM THE CONCRETE SURFACE TO THE BEARING SURFACE OF THE BOLT HEAD.
- 12. ALL DRILLED AND EPOXY ANCHOR BOLTS INSTALLED IN CONCRETE SHALL BE THREADED ROD CONFORMING TO THE ASTM DESIGNATION A—36 UNLESS OTHERWISE NOTED.
- 13. CEMENT USED IN THE FOUNDATION OF MIX DESIGN SHALL BE REDUCED BY NOT LESS THAN 20% (MAXIMUM 30%) THROUGH USE OF FLY ASH OR OTHER ACCEPTABLE CEMENT REPLACEMENT PRODUCTS (4.403.2)

STRUCTURAL OBSERVATION

- 1. STRUCTURAL OBSERVATION IS REQUIRED FOR STRUCTURAL SYSTEM IN ACCORDANCE WITH SECTION 1704 OF THE CODE. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES AND THE COMPLETED STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATION. STRUCTURAL OBSERVATION DOES NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED OF THE BUILDING INSPECTOR OR THE DEPUTY INSPECTOR.
- 2. THE STRUCTURAL OBSERVER SHALL PERFORM SITE VISITS AT THOSE STEPS IN THE PROGRESS OF THE WORK THAT ALLOW FOR CORRECTION OF DEFICIENCIES WITHOUT SUBSTANTIAL EFFORT OR UNCOVERING OF THE WORK INVOLVED. AT A MINIMUM, THE FOLLOWING SIGNIFICANT CONSTRUCTION STAGES REQUIRE A SITE VISIT AND AN OBSERVATION REPORT FROM THE STRUCTURAL OBSERVER.

		TION REPORT FROM THE STRUCTURAL OBSERVER
	CONSTRUCTION STAGES	ELEMENTS/CONNECTIONS TO BE OBSERVED
a)	FOUNDATIONS	REINF/CONC/AB

NAILING/HOLDOWNS

ESR-2266

ESR-2685

ESR-3445

ICC RESEARCH REPORTS

1. ADHESIVE (EPOXY) ANCHORS:

b. USP, MITEK

SHEAR WALL PANELS

ADITESIVE (EL OXT) AROHORS.	
a. HILTI HIT RE-500 V3 ADHESIVE ANCHORS	ESR-3814
b. CIA INJECTION ADHESIVE ADHESIVE	ESR-1702
c. SIMPSON SET XP ADHESIVE	ESR-2508
EXPANSION ANCHORS:	
a. POWERS WEDGE ANCHORS	ESR-2502
b. HILTI KB-TZ CONCRETE ANCHORS	ESR-1917
c. SIMPSON WEDGE-ALL ANCHORS	ESR-1396
WOOD FRAMING METAL STRAPS, HANGERS AND HOLD DOWNS:	
a. SIMPSON	ESR-2330 ESR-2105 ESR-2549

FOUNDATION

- 1. FOUNDATION DESIGN BASED ON PRESUMPTIVE VALUES OF TABLE 1806.2 IN THE CODE.
- 2. CONTINUOUS AND/OR SPREAD FOOTINGS ARE DESIGNED BASED AN ALLOWABLE VERTICAL BEARING CAPACITY* OF 1,500 PSF AND A PASSIVE EARTH PRESSURE OF 100 PCF.

*ALLOWABLE BEARING MAY BE INCREASED BY 1/3 FOR WIND AND SEISMIC LOAD CASES.

- 3. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE, IF REQUIRED.
- 4. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.
- . CONTRACTOR TO PROVIDE SURVEY STAKES PRIOR TO FOUNDATION INSPECTION TO VERIFY LOT LINES.
- EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE SOILS ENGINEER PRIOR TO PLACING THE CONCRETE AND REINFORCING CONTRACTOR TO NOTIFY THE INSPECTOR WHEN INSPECTION OF EXCAVATION IS READY. INSPECTOR TO SUBMIT LETTER OF COMPLIANCE.
- FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN ACCORDANCE WITH THE SOILS REPORT AND APPROVED BY THE SOILS ENGINEER. FLOODING WILL NOT BE PERMITTED. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE SOILS ENGINEER REPRESENTATIVE PER CODE SECTION 3317, VOLUME I.
- 8. ALL ABANDONED FOOTINGS, UTILITIES, ETC. SHALL BE REMOVED UNLESS NOTED OTHERWISE. NEW FOOTINGS MUST EXTEND INTO UNDISTURBED SOILS.

<u>GENERAL</u>

- 1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- 2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
- 3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- 4. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES:

 2017 COUNTY OF LOS ANGELES BUILDING (LACC) CODE BASED ON THE 2016 CALIFORNIA
 BUILDING CODE, TITLE 24 C.C.R. AND LATEST REVISIONS REFERED TO HEAR AS "THE CODE",
 AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE
 WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE
 CODES & STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS.
- 5. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
 - a. SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED.
 - b. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS.
 - c. SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
 - d. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN.
 - e. FLOOR AND ROOF FINISHES.
 - f. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
- 6. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
 - a. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
 - b. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
 - c. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
- 7. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- OPENINGS, POCKETS, ETC., LARGER THAN 6" SHALL NOT BE PLACED IN CONCRETE SLABS, WALLS, UNLESS SPECIALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., LARGER THAN 6" NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS. FOR ANY FURTHER RESTRICTIONS ON OPENINGS IN STRUCTURAL ELEMENTS, SEE APPLICABLE SECTIONS BELOW.
- 9. CONDUITS LARGER THAN 1-1/2" DIAMETER SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED. NO PIPES SHALL BE EMBEDDED IN STRUCTURAL CONCRETE.
- 10. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE LATEST REVISION.
- 11. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 12. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
- 13. CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTIONS" SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LA COUNTY INSPECTORS AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT PER SEC. 1709.1.
- 14. DESIGN LOADS:

a. <u>LIVE LOADS:</u>

ROOF AREA
FLOOR
CORRIDOR

PARTITIONS

15 PSF (REDUCIBLE) 50 PSF (REDUCIBLE) 100 PSF (NON-REDUCIBLE) 15 PSF

14. WIND ANALYSIS PER CHAPTER 16 DIVISION III OF THE CODE

BASIC WIND SPEED, V_{III} = 110 MPH

WIND EXPOSURE CATEGORY = B

WIND IMPORTANCE FACTOR = 1.0

COMPONENTS AND CLADDING DESIGN WIND PRESSURE FOR LOW RISE BUILDINGS, H < 60 FT PER ASCE 7-10 SECTION 6.5.12.4.1

EXTERNAL PRESSURE COEFFICIENTS, GCP GIVEN IN ASCE 7-10, FIGURES 6-11 THRU 6-16

INTERNAL PRESSURE COEFFICIENTS, GCPI GIVEN IN ASCE 7-10, FIGURES 6-5

15. SEISMIC ANALYSIS PER CHAPTER 16 OF 2016 LOS CALIFORNIA BUILDING CODE & ASCE 7-10. UTILIZING THE EQUIVALENT LATERAL FORCE PROCEDURE.

SEISMIC LOADS:

SEISMIC CATEGORY = D WOOD BEARING SHEAR WALL SYSTEM $S_S = 1.688$ $S_{DS} = 1.126$ R = 6.5 $C_d = 4.0$ $R_0 = 3.0$

 $F_V = 1.5$ $S_{MS} = 1.688$

 $S_{MI} = 0.932$

integrated design construction management sustainability



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AN CHECK SUBMITTAL

GENERAL NOTES

SO.1

REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONTRUCTION

FROM TABLE 1705.3 OF THE CODE

FROM TABLE 1705.3 OF THE CODE		
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	ı	X
2. REINFORCING BAR WELDING: a. VERIFY WELD ABILITY OF REINFORCING BARS OTHER THAN ASTM A706; b. INSPECT SINGLE—PASS FILLET WELDS, MAXIMUM 5/16";	I	X X
and c. INSPECT ALL OTHER WELDS.	Х	
3. INSPECT ANCHORS CAST IN CONCRETE.	-	Х
4. INSPECT ANCHORS POST—INSTALLED IN HARDENED CONCRETE MEMBERS. b a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. b. MECHANICAL ANCHORS AND ADHESIVE	X	X
ANCHORS NOT DEFINED IN 4.a. 5. VERIFY USE OF REQUIRED DESIGN MIX.		
5. VERIFT USE OF REQUIRED DESIGN MIX.	_	X
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	Х	_
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	х
9. INSPECT PRESTRESSED CONCRETE FOR: a. APPLICATION OF PRESTRESSING FORCES; AND	X	_
b. GROUTING OF BONDED PRESTRESSING TENDONS.	Х	-
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	Х
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	_	X
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	Х

SPECIAL INSPECTIONS

- 1. THE ITEMS CHECKED WITH A "X" SHALL BE INSPECTED IN ACCORDANCE WITH CBC CHAPTER 17 BY A CERTIFIED INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO THE PROJECT SPECIFICATIONS, THE SPECIFIC GENERAL NOTES SECTIONS AND THE CODE SECTIONS REFERENCED THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS.
- CONTINUOUS SPECIAL INSPECTION MEANS THAT THE SPECIAL INSPECTOR IS ON THE SITE AT ALL TIMES OBSERVING THE WORK REQUIRING SPECIAL INSPECTION CBC SECTION 1702. PERIODIC SPECIAL INSPECTION MEANS THAT THE SPECIAL INSPECTOR IS ON SITE AT TIME INTERVALS NECESSARY TO CONFIRM THAT ALL WORK REQUIRING INSPECTION IS IN COMPLIANCE.
- 3. THE STEEL FRAMING SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE APPROVED CONSTRUCTION DOCUMENTS, SUCH AS BRACING, STIFFENING, MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.
- 4. ALL WELDS SHALL BE VISUALLY INSPECTED.
- 5. ALL COMPLETE PENETRATION WELDS SHALL BE TESTED ULTRASONICALLY OR BY USE OF A COMPARABLE APPROVED METHOD.
- 6. CONTINUOUS INSPECTION IS REQUIRED FOR WELDING OF REINFORCING THAT RESISTS FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, REINFORCEMENT. PERIODIC INSPECTION MAY BE USED FOR OTHER WELDED REINFORCING.
- 7. INSPECTION FOR PREFABRICATED CONSTRUCTION SHALL BE THE SAME AS IF THE MATERIAL USED IN THE CONSTRUCTION TOOK PLACE ON SITE. CONTINUOUS INSPECTION WILL NOT BE REQUIRED DURING PREFABRICATION IF THE APPROVED AGENCY CERTIFIES THE CONSTRUCTION AND FURNISHES EVIDENCE OF COMPLIANCE.
- 8. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED FOR FIELD WELDING, CONCRETE STRENGTH f'c > 2500 psi, HIGH STRENGTH BOLTING, SPRAYED—ON FIREPROOFING, ENGINEERED MASONRY, HIGH—LIFT GROUTING, PRE—STRESSED CONCRETE, HIGH LOAD DIAPHRAGMS AND SPECIAL MOMENT—RESISTING CONCRETE FRAMES.

REQUIRED VERIFICATION AND INSPECTION FOR SOILS

FROM TABLE 1705.6 OF THE CODE

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	ı	×
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	_	X
3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.	_	Х
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	X	-
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	_	Х

WOOD (CONTINUED)

2. ALL STRUCTURAL LUMBER SHALL BE DOUGLAS FIR, VISUALLY GRADED OR MACHINE GRADED UNDER THE 1970 LUMBER GRADING RULES OF WEST COAST LUMBER INSPECTION BUREAU. ALL LUMBER SHALL BEAR LEGIBLE IDENTIFICATION STAMP. ALL FRAMING MEMBERS SHALL BE AS FOLLOWS:

THICKNESS GRADE

2" NOM. AND SMALLER GRADE NO. 2

LARGER THAN 2" NOM. GRADE NO. 1

(EXCEPT AS SHOWN ON PLANS)

- 3. LUMBER SHALL BE DRY AND WELL SEASONED, AND THE MOISTURE CONTENT SHALL NOT EXCEED 19%.
- 4. ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE NATURALLY DURABLE OR PRESERVATIVE—TREADED. FIELD—CUT ENDS, NOTCHES AND DRILLED HOLES OF PRESERVATIVE TREADED WOOD SHALL BE FIELD—TREATED PER AWPA M4.
- 5. ALL STRUCTURAL PLYWOOD SHEATHING SHALL BE DOUGLAS FIR STANDARD GRADE STRUCTURAL I WITH EXTERIOR GLUE CONFORMING TO THE LATEST EDITION OF PS 1, U.N.O. ALL PANELS SHALL BEAR LEGIBLE DFPA STAMPS.
- 6. ALL SHEARWALL SHEATHING AND NAILING SHALL BE APPROVED BY THE BUILDING INSPECTOR BEFORE COVERING.
- 7. ALL SHEATHING SHALL BE LAID FACE GRAIN PERPENDICULAR TO FRAMING UNLESS OTHERWISE NOTED ON THE PLANS.
- 8. ALL BOLTS FOR WOOD MEMBERS EXCLUDING ANCHOR BOLTS (A.B.) CALLED OUT ON DRAWINGS SHALL CONFORM TO THE ASTM DESIGNATION A-307.
- ALL ANCHOR BOLTS (A.B.) CALLED OUT ON DRAWINGS, INCLUDING HOLDOWN STUD/POST THRU BOLTS SHALL HAVE STEEL SQUARE PLATE WASHERS AS LISTED BELOW UNDER THE HEAD AND/OR NUT BEARING ON WOOD.

BOLT DIAMETER	1/2"	5/8"	3/4"	7/8"	1"
WASHER THICKNESS	3/16"	1/4"	5/16"	5/16"	3/8"
WASHER WIDTH	2"	2 1/2"	2 3/4"	3"	3 1/2"

- 10. ALL BOLTS CALLED OUT ON DRAWINGS, EXCEPT AS SPECIFIED IN NOTE 9 SHALL HAVE STANDARD STEEL WASHERS UNDER THE HEAD AND/OR NUT WHERE THE HEAD AND/OR NUT IS BEARING ON WOOD.
- 11. ALL HOLDOWN BOLTS SHALL BE RETIGHTENED BEFORE CLOSING-IN.
- 12. ALL WALLS SHALL HAVE BRACING PROVIDED BY ONE OF THE METHODS REQUIRED BY CODE SECTION 2320.11.3.
- 13. PROVIDE DOUBLE JOISTS UNDER PARTITIONS WHICH ARE PARALLEL TO THE JOISTS.
- 14. PROVIDE SOLID, FULL BLOCKING UNDER PARTITIONS WHICH ARE PERPENDICULAR TO THE JOISTS.
- 15. ALL POSTS TO TOP OR BOTTOM PLATE CONNECTION SHALL BE SIMP A34 EA. SIDE (U.N.O.) IF POST IS AT END OF PLATE (2) 16d TOE NAILS MAY BE SUBSTITUTED AT THAT POST EDGE ONLY.
- 16. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.
- 17. FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG—TIE (OR ENGINEER APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. HARDWARE SHALL BE FULLY NAILED FOR MAXIMUM CAPACITY, UNLESS NOTED OTHERWISE. HANGERS NOT SHOWN SHALL BE SIMPSON HU OR HW OF SIZE RECOMMENDED FOR MEMBER.
- 18. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/2 WRENCH TURN JUST PRIOR TO COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS ON THEMANUFACTURED BY SIMPSON STRONG-TIE (OR ENGINEER APPROVED POST ON THE OPPOSITE SIDE OF THE ANCHORAGE DEVICE. PLATE SIZE SHALL BE A MINIMUM OF 0.299 INCH BY 3 INCHES BY 3 INCHES.
- 19. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7.
- 20. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX.
- 21. ALL BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED. NAILS OR GALVANIZED BOX.
- 22. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.
- 23. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND FLOOR FRAMING SHALL BE TESTED AND SHALL NOT BE ENCLOSED UNTIL IT IS INSPECTED AND FOUND TO BE SATISFACTORY BY THE BUILDING INSPECTOR. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19% MOISTURE CONTENT. MOISTURE TESTING SHALL BE CONDUCTED BASED ON THE PROBE—TYPE OR CONTACT—TYPE TESTING METHODS. MOISTURE READINGS SHALL BE TAKEN AT A POINT 2—FEET AND 4—FEET FROM THE GRADE STAMPED END OF EACH PIECE TO BE VERIFIED. AT LEAST THREE RANDOM MOISTURE READINGS SHALL BE PERFORMED ON WALL AND WOOD FRAMING WITH DOCUMENTATION ACCEPTABLE TO THE CITY PROVIDED AT THE TIME OF APPROVAL TO ENCLOSURE WALL AND FLOOR FRAMING (4.505.3)

<u>WOOD</u>

1. UNLESS OTHERWISE DETAILED OR SPECIFIED ON THE PLANS ALL NAILING SHALL CONFORM TO THE FOLLOWING TABLE :

CONNIC	TOTION	NIAII	INIC 1
CONNE		NAIL 7	
1.	JOIST TO SILL OR GIRDER, TOENAIL (T.N.)		-8d
2.	BRIDGING TO JOIST, T.N. EA. END		-8d
3.	1"x6" SUBFLOOR OR LESS TO EA. JOIST, FACE NAIL (F.N.)		-8d
4.	WIDER THAN 1"x6" SUBFLOOR TO EA. JOIST, F.N.		-8d
5.	2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND F.N.	2-1	l 6d
6.	SOLE PL TO JOIST OR BLK'G, TYP F.N. 16d SOLE PL TO JOIST OR BLK'G, AT BRACED 3-16d WALL PANELS	@16 [*] PER	
7.	TOP PL TO STUD, END NAIL (E.N.)	2-1	l 6d
8.	STUD TO SOLE PL 4-8d, T.N. OR 2-	16d, E	E.N.
9.	DOUBLE STUDS, F.N. 16d	@ 24'	'oc
10.	DOUBLE TOP PLs, TYPICAL F.N. 16d DOUBLE TOP PLs LAP SPLICE	@ 16' 8–1	
11.	BLK'G BETWEEN JOISTS OR RAFTERS TO TOP PL, T.N.	3-	-8d
12.	RIM JOIST TO TOP PL, T.N. 8d	AT 6'	'0C
13.	TOP PLs, LAPS AND INTERSECTIONS, F.N.	2-1	l6d
14.	CONTINUOUS HEADER, TWO PIECES 16d @16"OC ALONG I	EA. EC	GE
15.	CEILING JOISTS TO PL, T.N.	3-	-8d
16.	CONTINUOUS HEADER TO STUD, T.N.	4-	-8d
17.	CEILING JOIST, LAPS OVER PARTITIONS, F.N.	3-1	l 6d
18.	CEILING JOISTS TO PARALLEL RAFTERS, F.N.	3-1	l 6d
19.	RAFTER TO PL, T.N.	3-	-8d
20.	1" BRACE TO EA. STUD AND PL, F.N.	2-	-8d
21.	1"x8" SHT'G OR LESS TO EA. BEARING, F.N.	2-	-8d
22.	WIDER THAN 1"x8" SHT'G TO EA. BEARING, F.N.	3-	-8d
23.	BUILT-UP CORNER STUDS 16d	9 24"	oc.
24.	BUILT-UP GIRDER AND BEAMS 20d @2"OC @ T&B AND ST 2-20d @ ENDS AND @ EA		
25.	2" PLANKS 2-16d @ EA.	BEAR	ING
26.	7/8" TO 1" ' 1 1/8" TO 1 1/4" 10 COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING 3/4" AND LESS 7/8" TO 1"	d ⁴ OR d ⁴ OR): d ⁴ OR	6d 6d 8d 6d 6d
27.	1 1/8" TO 1 1/4" 10 PANEL SIDING (TO FRAMING): 2	d ⁴ OR	
	1/2" OR LESS 5/8"		6d ⁶ 8d ⁶
28.		No.11	ga [§] 6d
	25/32"	No.16 No.11	6d ga ga 8d ga
	· ·	No.16	ga`
29.	INTERIOR PANELING		

- ¹ THIS NAILING SCHEDULE SHALL ONLY BE USED IF CONDITION IS NOT OTHERWISE DETAILED OR SPECIFIED ON THE CONSTRUCTION DOCUMENTS. COMMON NAILS SHALL BE USED EXCEPT WHERE OTHERWISE STATED.
- NAILS SPACED AT 6" ON CENTER AT EDGES, 12" AT INTERMEDIATE SUPPORTS EXCEPT 6" AT ALL SUPPORTS WHERE SPANS ARE 48" OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTIONS OF THE CODE.
- ³ COMMON OR DEFORMED SHANK.
- ⁴ COMMON.
- ⁵ DEFORMED SHANK.
- 6 CORROSION—RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OF THE CODE.
- ⁷ FASTENERS SPACED 3 INCHES ON CENTER AT EXTERIOR EDGES AND 6" ON CENTER AT INTERMEDIATE SUPPORTS.
- 8 CORRISION-RESISTANT ROOFING NAILS WITH 7/16"Ø HEAD AND 1 1/4" LENGTH FOR 1/2" SHT'G AND 1 1/2" LENGTH FOR 25/32" SHT'G CONFORMING TO THE REQUIREMENTS OF THE CODE.
- ORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1 1/8" LENGTH FOR 1/2" SHEATHING AND 1 1/2" LENGTH FOR 25/32" SHT'G CONFORMING TO THE REQUIREMENTS OF THE CODE.
- PANEL SUPPORTS AT 16" [20" IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED]. CASING OR FINISH NAILS SPACED ON 6" PANEL EDGES, 12" AT INTERMEDIATE SUPPORTS.
- ¹¹ PANEL SUPPORTS AT 24". CASING OR FINISH NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE SUPPORTS.



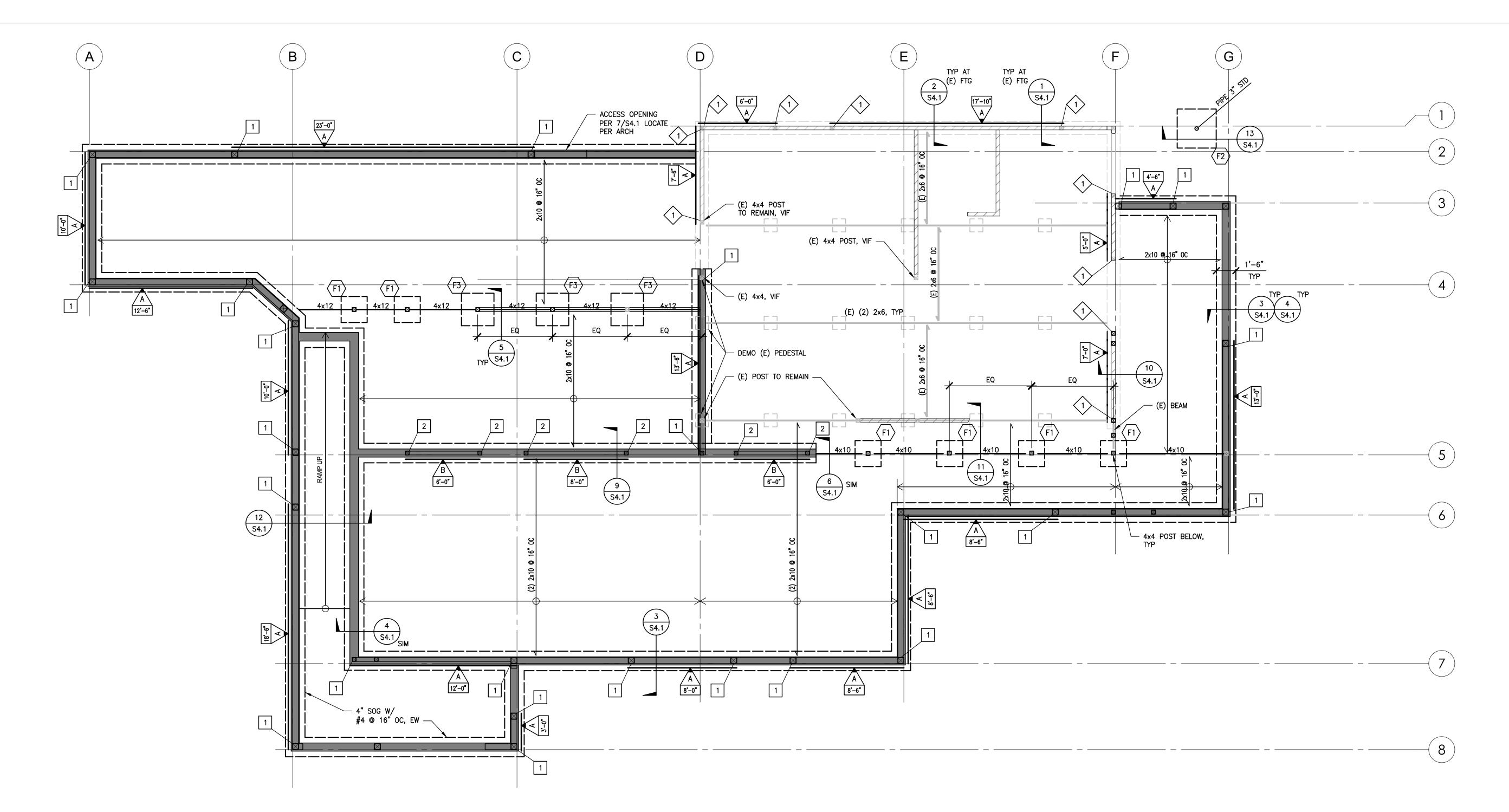
integrated design construction management sustainability



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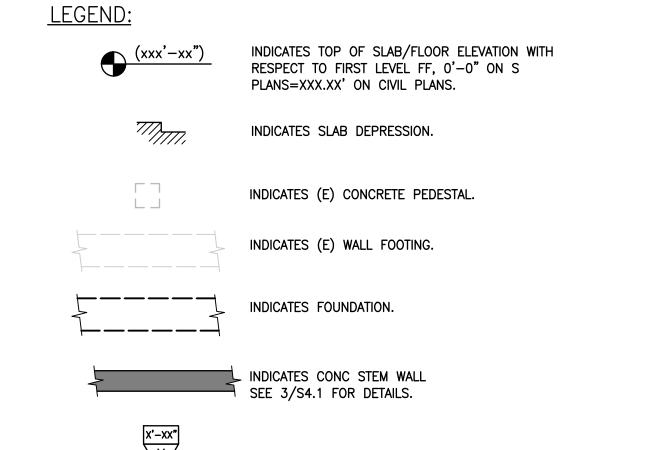
PLAN CHECK SUBMITTAL

SO.2



PLAN NOTES:

- 1. SEE SHEET SO.1 & SO.2 FOR GENERAL NOTES.
- 2. SEE SHEET S4.0, 4.1 FOR TYPICAL CONCRETE DETAILS.
- 3 SEE SHEET S5.0, & S5.1 FOR TYPICAL WOOD DETAILS.
- 4. ALL SLAB OPENINGS AND DEPRESSIONS SHALL BE LOCATED AND COORDINATED PER ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING
- 5. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CURB HEIGHTS, SLAB LEVEL, MEP EQUIPMENT PADS, SHAFT OPENING LOCATIONS AND DIMENSIONS NOT SHOWN.
- 6. FLOOR SHEATHING: 3/4" T&G CDX PLY WITH 10d @ 6/6/12, PROVIDE FLAT 2x4 BLKG AT ALL SHEATHING EDGES NOT SUPPORTED BY FRAMING, SEE 5/S5.0 FOR DETAILS.



INDICATES NEW SHEARWALL TYPE AND LENGTH

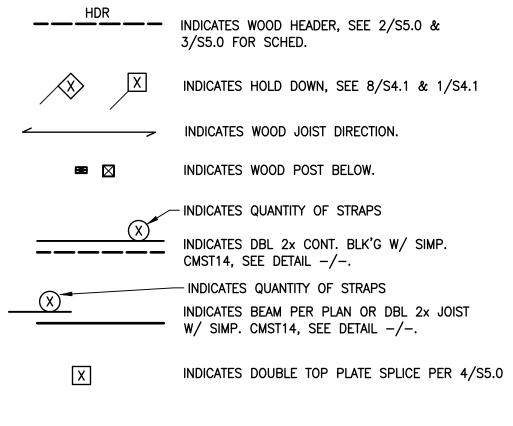
ABOVE SEE 1/S5.0 FOR DETAILS.

INDICATES SHEAR/BEARING WALL SEE 3/S5.0 FOR DETAILS.

→ INDICATES NON-BEARING WALL, SEE 2/S5.0 FOR DETAILS.

INDICATES EXISTING WALL FRAMING TO

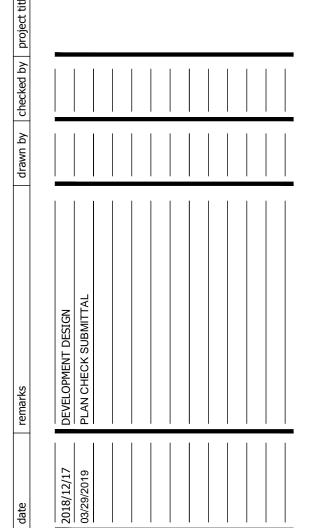
REMAIN, SEE ARCH.







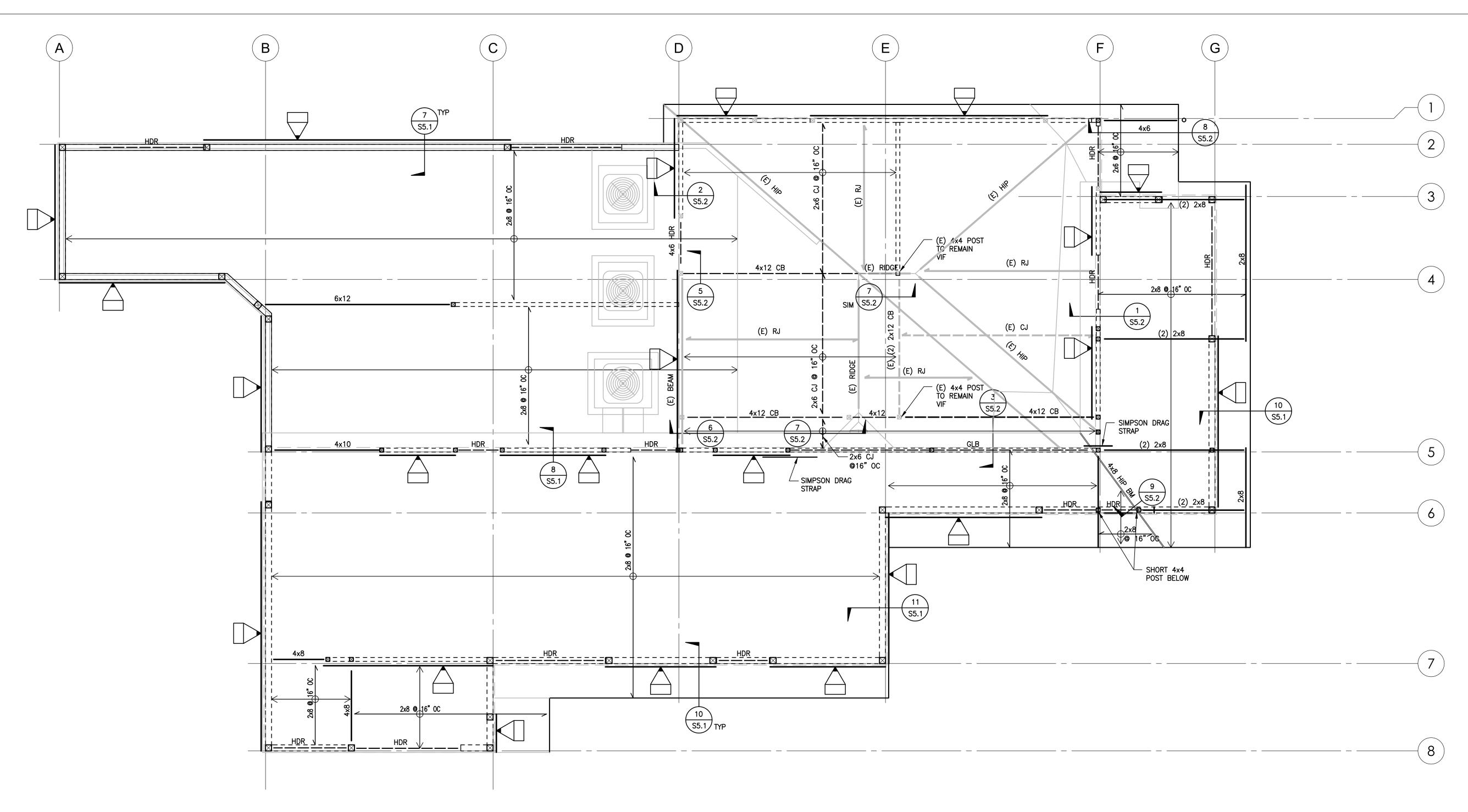
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FOUNDATION AND FIRST FLOOR FRAMING PLAN

FOUNDATION AND FIRST FLOOR FRAMING PLAN

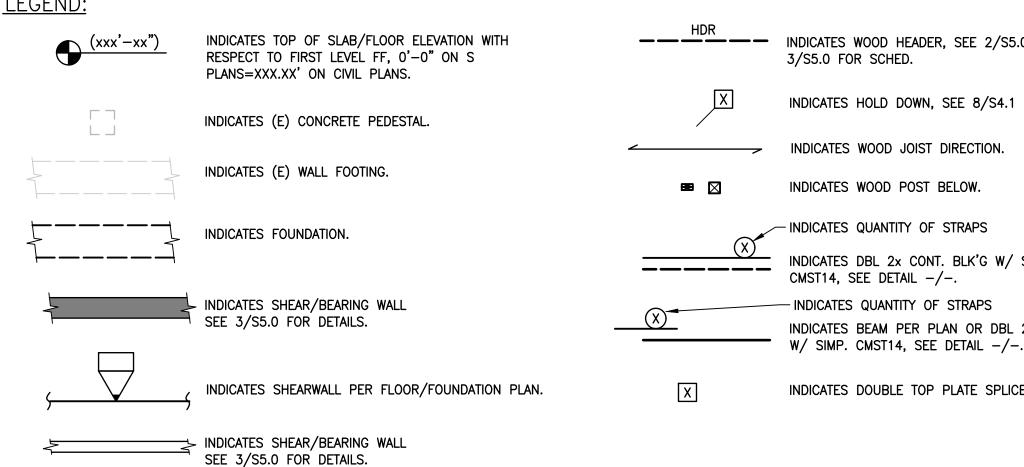
SCALE: 1/4"=1'-0"



PLAN NOTES:

- 1. SEE SHEET SO.1 & SO.2 FOR GENERAL NOTES.
- 2. SEE SHEET S4.0, 4.1 FOR TYPICAL CONCRETE DETAILS.
- 3 SEE SHEET S5.0, & S5.1 FOR TYPICAL WOOD DETAILS.
- 4. ALL SLAB OPENINGS AND DEPRESSIONS SHALL BE LOCATED AND COORDINATED PER ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING
- 5. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CURB HEIGHTS, SLAB LEVEL, MEP EQUIPMENT PADS, SHAFT OPENING LOCATIONS AND DIMENSIONS NOT SHOWN.
- 6. ROOF SHEATHING: 3/4" T&G CDX PLY WITH 8d @ 6/6/12, PROVIDE FLAT 2x4 BLKG AT ALL SHEATHING EDGES NOT SUPPORTED BY FRAMING, SEE 5/S5.0 FOR DETAILS.

<u>LEGEND:</u>



→ INDICATES NON-BEARING WALL, SEE 2/S5.0 FOR DETAILS.

INDICATES EXISTING WALL FRAMING TO REMAIN, SEE ARCH.

/ INDICATES WOOD JOIST DIRECTION. INDICATES WOOD POST BELOW. - INDICATES QUANTITY OF STRAPS CMST14, SEE DETAIL -/-. INDICATES DBL 2x CONT. BLK'G W/ SIMP. - INDICATES QUANTITY OF STRAPS INDICATES BEAM PER PLAN OR DBL 2x JOIST W/ SIMP. CMST14, SEE DETAIL -/-.

INDICATES DOUBLE TOP PLATE SPLICE PER 4/S5.0

ROOF FRAMING PLAN

integrated

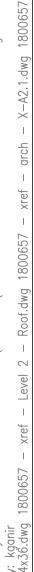
construction

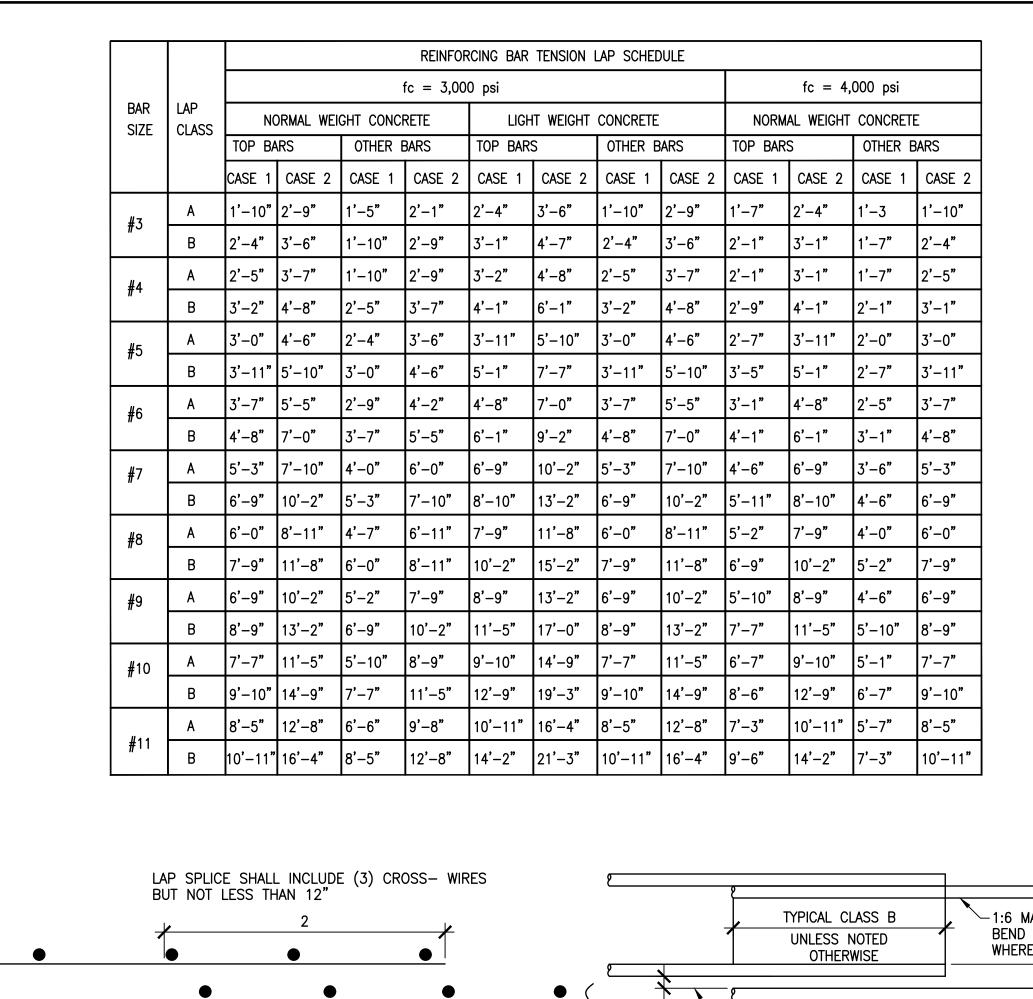
management

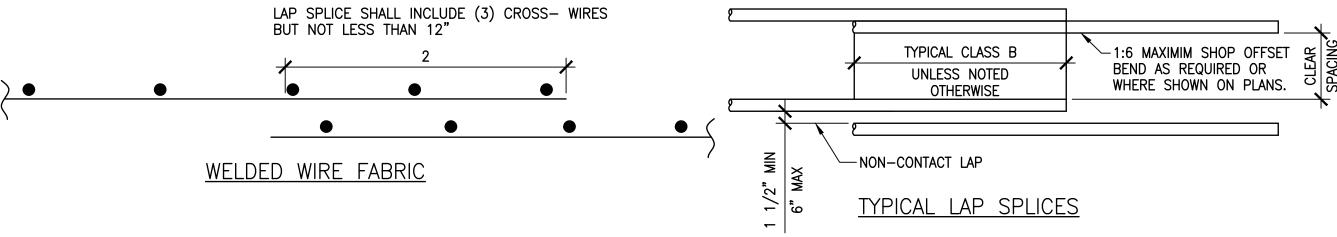
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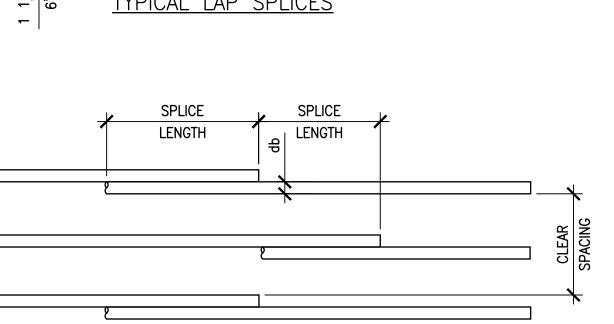
ROOF FRAMING PLAN SCALE: 1/4"=1'-0"



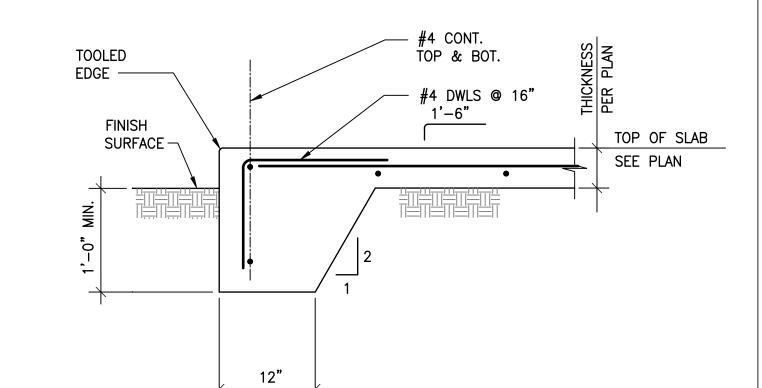


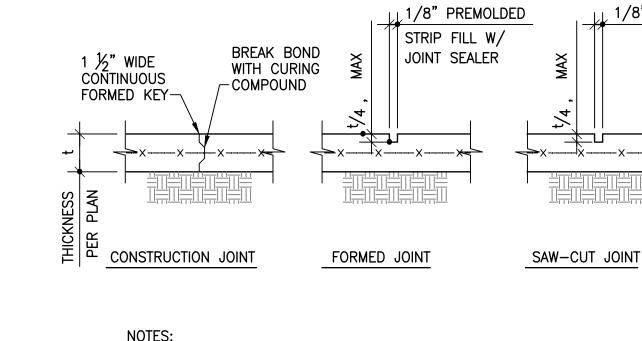


- 1. CASES 1 AND 2 WHICH DEPEND ON CLEAR CONCRETE COVER AND THE CENTER-TO-CENTER SPACING OF THE BARS ARE DEFINED AS:
 - CASE 1: COVER AT LEAST 1db AND c-c SPACING AT LEAST 2db
 - CASE 2: COVER LESS THAN 1db OR c-c SPACING LESS THAN 2db
- 2. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS. 3. OTHER BARS INCLUDE VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE CAST. BELOW HORIZONTAL BARS.
- 4. BAR SPLICES NOT COVERED BY THIS SCHEDULE ARE SPECIFICALLY DETAILED AND DIMENSIONED ON PLANS.
- 5. ALL SPLICES SHALL BE CLASS "B" UNLESS NOTED OTHERWISE ON PLANS.
- 6. FOR DEVELOPMENT LENGTH, Ld, USE CLASS A LAP SPLICE LENGTH.
- 7. FOR SHEAR WALL REINFORCING MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.25.

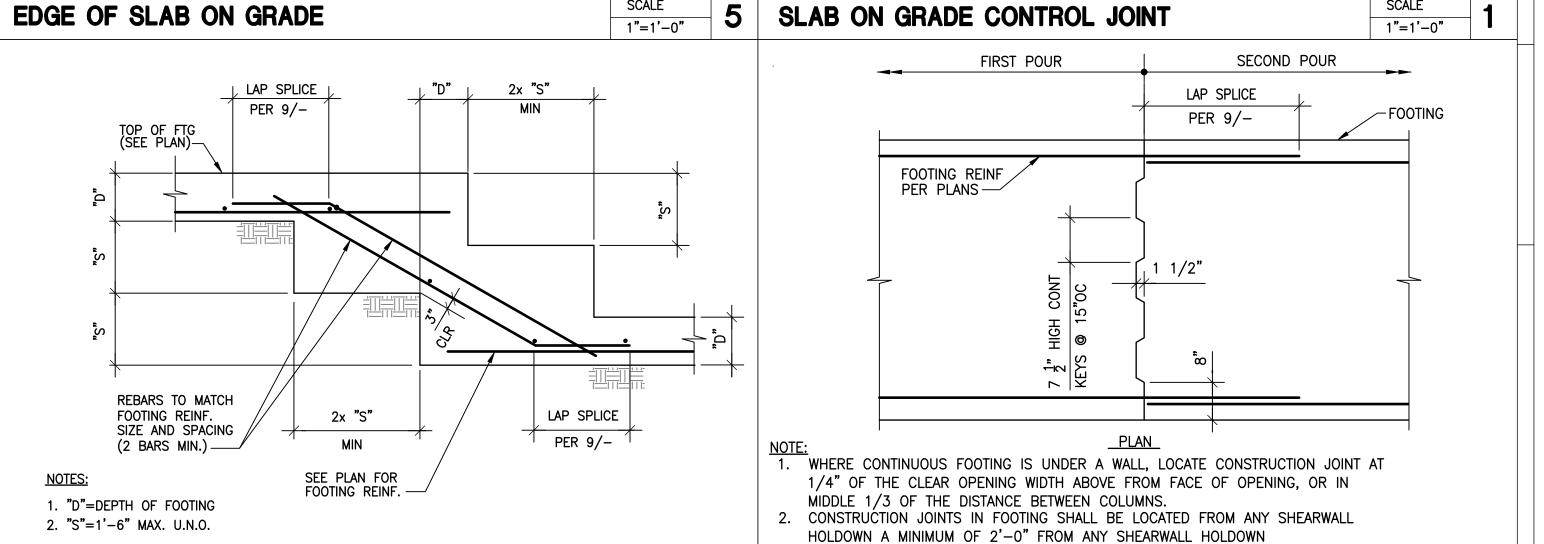


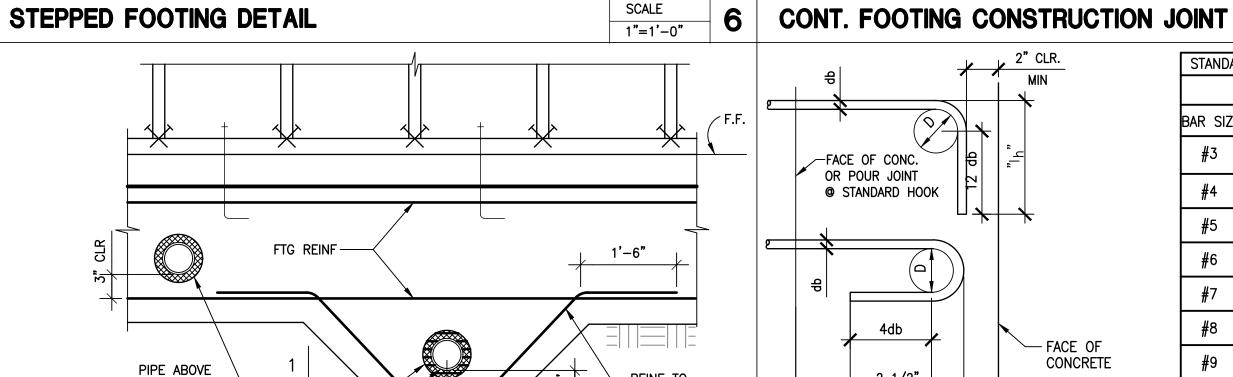
STAGGERED SPLICING



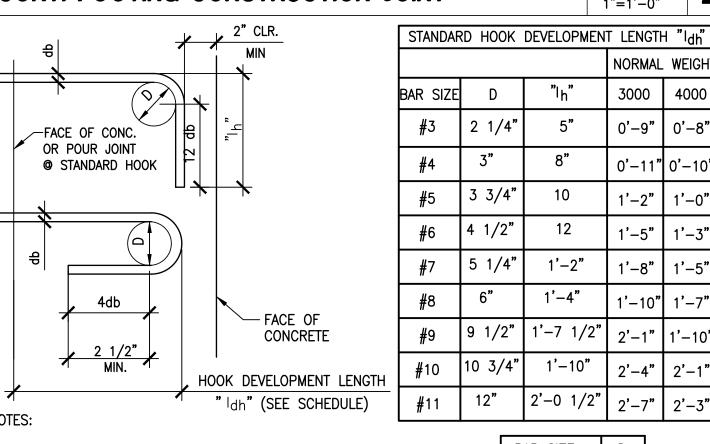


- AND AT 20'-0" O.C. MAX. AND EVERY 400 SQUARE FEET. 2. IF SAW-CUT CONTROL JOINT TO BE USED, SAW-CUT
- WITHIN 24 HOURS OF POUR.
- 3. CONSTRUCTION JOINT TO BE LOCATED AS PER NOTES
- #1 AND #2 UNLESS SPECIFICALLY INDICATED ON PLANS.





MATCH BOTTOM REINF



				NORMAL	WEIGHT
	BAR SIZE	D	"l _h "	3000	4000
	#3	2 1/4"	5 "	0'-9"	0'-8"
	#4	3"	8"	0'-11"	0'-10"
	#5	3 3/4"	10	1'-2"	1'-0"
	#6	4 1/2"	12	1'-5"	1'-3"
	# 7	5 1/4"	1'-2"	1'-8"	1'-5"
	#8	6"	1'-4"	1'-10"	1'-7"
	#9	9 1/2"	1'-7 1/2"	2'-1"	1'-10"
TH	#10	10 3/4"	1'-10"	2'-4"	2'-1"
<u>`</u>	#11	12"	2'-0 1/2"	2'-7"	2'-3"

1"=1'-0"

L 1/8" SAW-CUT

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1. ALL HOOKED BARS SHALL EXTEND AS FAR AS POSSIBLE WITH A MINIMUM 2" END COVER AND WITH EMBEDMENT NOT LESS THAN SHOWN ON THE SCHEDULE. UNO ON PLANS 2. MINIMUM SIDE COVER = $2 \frac{1}{2}$

BAR SIZE D #3 THRU #8 6d #9 THRU #11 8d

DEVELOPMENT AND SPLICES OF CONCRETE REINFORCING BARS

9 FOUNDATION PIPE PENETRATION 1"=1'-0" INTERSECTION END CONDITION └─DOWEL C DOWELS DOWELS **INTERSECTION** END CONDITION ALTERNATE ALTERNATE **ALTERNATE** 1. ALL DOWELS TO MATCH HORZONTAL REINFORCING SIZE AND SPACING.

ELEVATION

1'-0"

MIN

STANDARD HOOK DEVELOPMENT LENGTH BENDING 1"=1'-0" RECTANGULAR OR ROUND OPNG 6'-0"MAX ELIMINATE BARS AND KEYED JOINT IF OPENING IS LESS KEYED JOINT SECTION "A"

TYPICAL CONCRETE DETAILS

2. X' = LAP SPLICE PER 9/S4.0. 3. 90° HOOKS TO BE PER DETAIL 3/S4.0.

MAIN REINF-

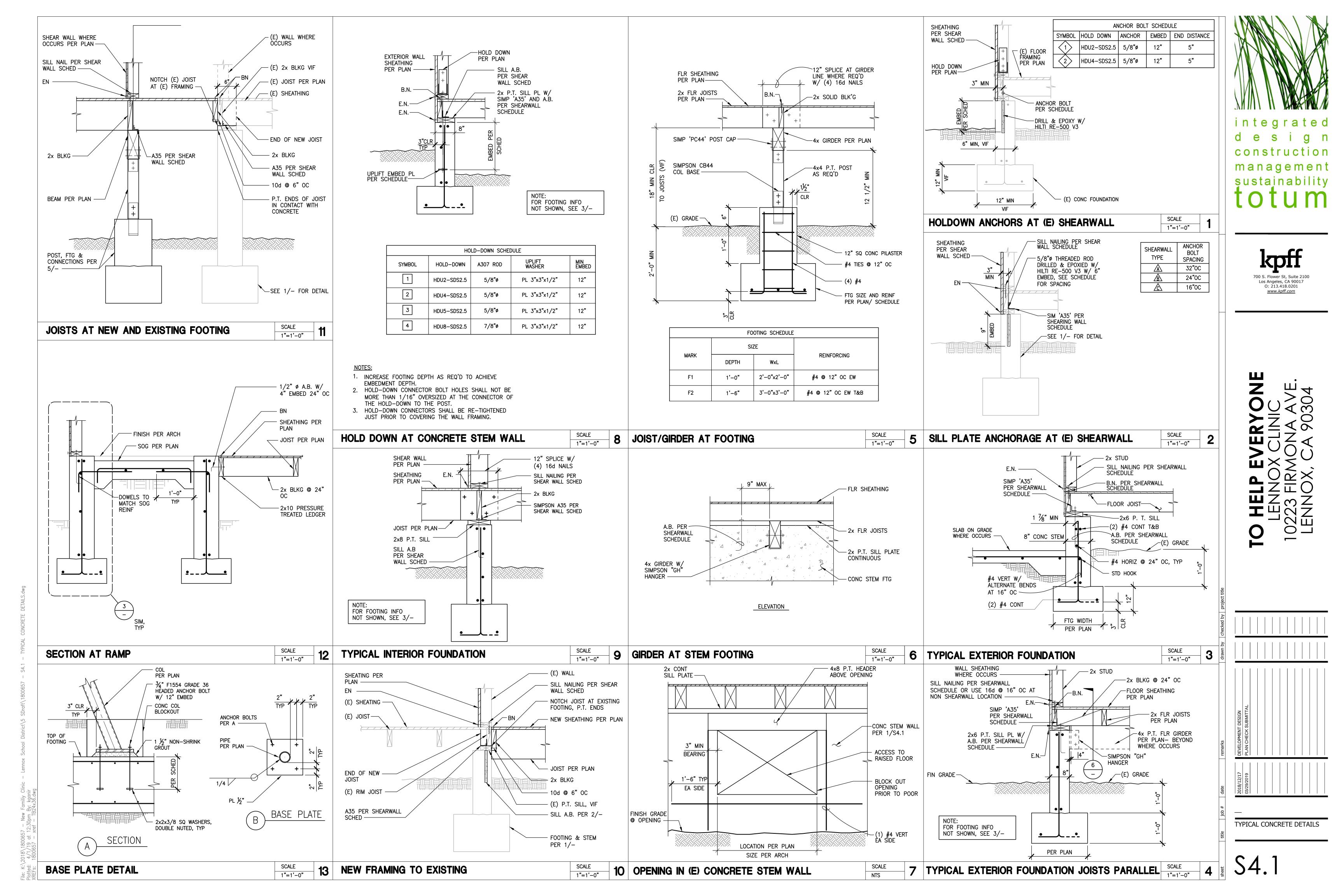
PIPE AT/OR BELOW MAIN REINF

1" PIPE WRAP OR SPACE AROUND PIPE

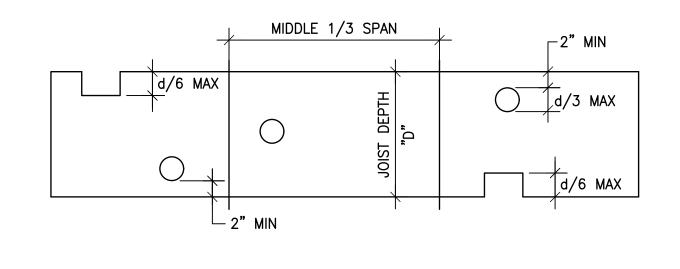
TYPICAL CONC FOOTING REINFORCING DETAIL 1"=1'-0"

OPENING IN SLAB ON GRADE

1/2"=1'-0"

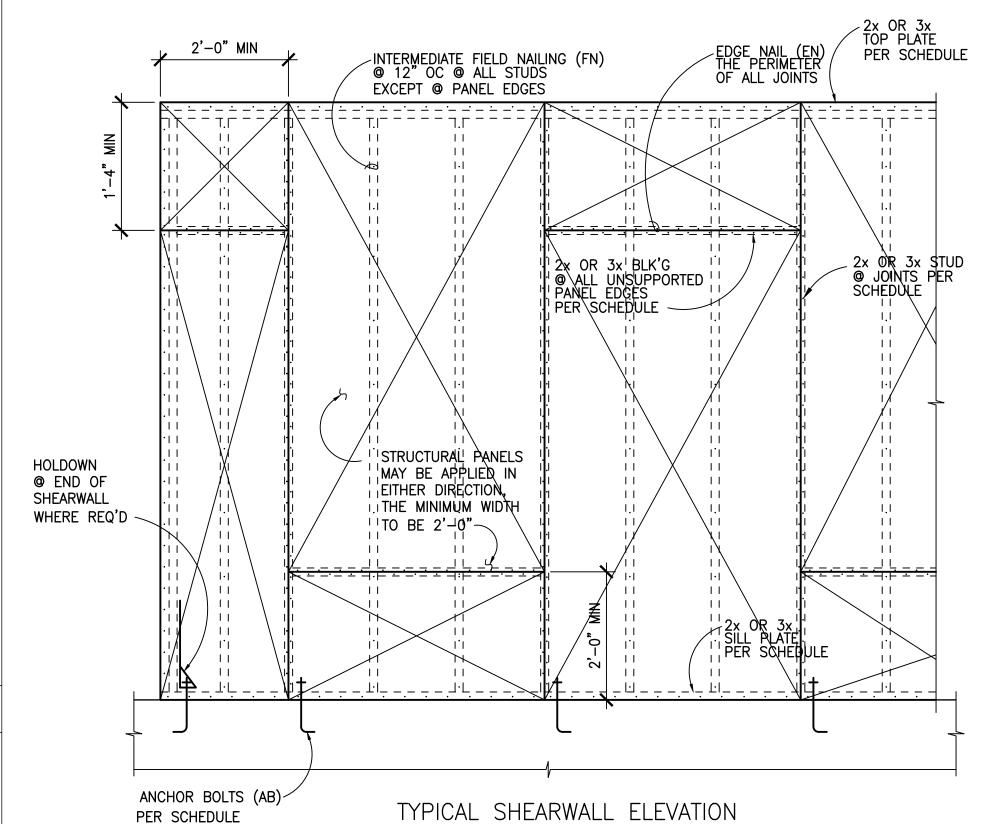


SHEARWALL INTERSECTION FRAMING 1"=1'-0"



JOIST SIZE	MAX. BORE DIA. "d"	MAX NOTCH DEPTH x WIDTH
2x6	1 3/4"	1" x 2"
2x8	2 3/8"	1" x 2 ½"
2x10	3 3/4"	1 ½" × 3"
2x12	4 3/8"	2" x 4"

- 1. NOTCHING AND BORING NOT PERMITTED IN THE SAME JOIST SECTION WITHOUT STRUCTURAL ENGINEERS APPROVAL.
- 2. NOTCHES NOT PERMITTED IN MIDDLE-THIRD OF JOIST SPAN.
- 3. NOTCH WIDTHS GREATER THAN SHOWN ABOVE NOT PERMITTED WITHOUT STRUCTURAL ENGINEERS APPROVAL.



NOTES (CONTINUED):

- 11. ANCHOR BOLTS SHALL BE 5/8" WITH A 9" MIN EMBEDMENT INTO CONCRETE OR MASONRY AND A MINIMUM EDGE DISTANCE OF 1 7/8". THERE SHALL BE A MINIMUM OF TWO ANCHOR BOLTS PER SILL PLATE WITH ANCHOR BOLTS LOCATED WITHIN 6" TO 12" FROM EACH END OF THE SILL PLATE.
- 12. ORIENTED STRAND BOARD (OSB) MAY BE SUBSTITUTED FOR PLYWOOD NOTED ABOVE PROVIDED IT IS RATED BY APA'S PERFORMANCE STANDARD RATING AND IS OF THE SAME NUMBER OF LAYERS AS PLYWOOD PLY SPECIFIED.
- 13. USE MIN 4x END POSTS AT ALL SHEARWALLS UNLESS OTHERWISE NOTED.
- 14. WHERE PLYWOOD IS APPLIED ON BOTH FACES OF A WALL (DOUBLE SIDED). PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, AND NAILS ON EACH SIDE SHALL BE STAGGERED.
- 15. INDIVIDUAL PIECES OF PLYWOOD SHALL NOT BE LESS THAN 16" IN LEAST DIMENSION NOR LESS THAN 5 SQFT IN TOTAL AREA.

NOTES:

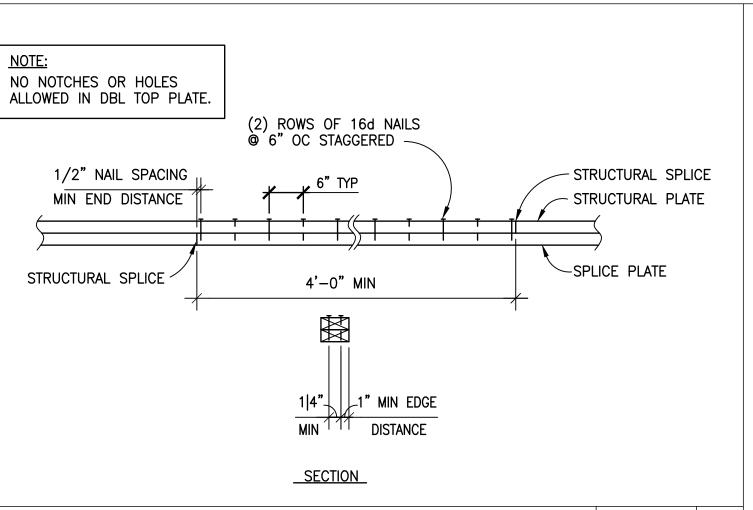
- 1. ALL PLYWOOD SHALL BE 4 PLY MINIMUM AND ALL PANEL EDGES SHALL BE BLOCKED.
- 2. ALL NAILS SHALL BE COMMON NAILS. 3. PROVIDE EDGE NAILING AT ALL EDGES OF SHEATHING, END
- STUDS, SILL PLATES AND TOP PLATES. 4. FRAMING SIZE REFERS TO THE MINIMUM WIDTH OF ALL FRAMING MEMBERS RECEIVING EDGE NAILING AND INDICATED
- ON SCHEDULE. 3x FRAMING REFERS TO A SINGLE 3" NOMINAL MEMBER. 5. NAILS SHALL BE STAGGERED IN TWO LINES ALONG PANEL
- EDGES WHEN NAILS ARE SPACED 3" O.C. OR CLOSER. 6. NAILS SHALL BE 1/2" MINIMUM FROM PLYWOOD PANEL EDGE. NAILS SHALL BE 3/8" MINIMUM FROM CONNECTING

MEMBER EDGE WHERE SHEAR EXCEEDS 300 PLF.

- 7. SILL NAILS OR LAGS APPLY TO SILL PLATE ATTACHMENTS WHERE THE SHEAR WALL IS LOCATED ABOVE A CRIPPLE WALL, ANOTHER SHEARWALL OR OTHER WOOD FRAMING. WHERE SILL PLATE IS ON TOP OF CONCRETE OR MASONRY SEE ANCHOR BOLTING COLUMN FOR REQUIRED ATTACHMENT.
- 8. NAILS ARE NOT PERMITTED WITH 3x OR GREATER SILL PLATES. LAG BOLTS SHALL BE 3/8" UNLESS NOTED OTHERWISE WITH A PENETRATION (NOT INCLUDING LENGTH OF TAPERED TIP) INTO BASE FRAMING OF 3" MINIMUM. BASE FRAMING SHALL BE DOUBLE 2x TOP PLATE OR 3x BLOCKING
- 9. CUT WASHERS ARE TO BE USED AT LAGS AT SILL PLATE CONNECTIONS
- 10. APPROVED 2 1/2"x2 1/2'x1/4" PLATE WASHERS SHALL BE USED AT SILL PLATES (MUDSILL) RESTING ON CONCRETE OR MASONRY ONLY.

	SHEAR WALL SHEATHING / NAILING SCHEDULE 13							
	1,12,14,15		NAIL	ING 2,6	TOP PLATE	SILL ATTAC	CHMENT	SHEAR CAPACITY
WALL YMBOL	SHEATHING	FRAMING SIZE	3,5 EDGE		LTP4/A35	7,8,9 NAILS /LAG SCREWS	ANCHOR BOLTING 10,11 MUDSILL	PER SDPWS-15 TABLE 4.3A
Â	15/32" STRUCT 1 SINGLE SIDED	2x	10d @ 6" OC	10d @ 12" OC	12" OC	1/2"ø LAG @ 12" OC	5/8"ø @ 36" OC	340 plf
B	15/32" STRUCT 1 SINGLE SIDED	3x	10d @ 4" OC	10d @ 12" OC	8" OC	1/2"ø LAG @ 9" OC	5/8"ø @ 24" OC	510 plf
C	15/32" STRUCT 1 SINGLE SIDED	3x	10d @ 3" OC	10d @ 12" OC	8" OC	1/2"ø LAG @ 6" OC	5/8"ø @ 24" OC	665 plf

SHEARWALL SCHEDULE



SEE NON-BEARING **HEADER** (2)16 d FACENAIL PER SCHED PARTITION ANCHORAGE MIN PLATE SPLICE THRU ONE PLATE DETAIL FOR CONNECTION TO STUD -4'-0" W/(8) 16d TO FRAMING U.N.O. ON PLAN 2x STUDS **@** 16" 0.C. SEE PLAN ~ 2x BLOCKING @ 4'-0" O.C. W/ FACENAIL (2) 16d TOENAIL STUD TO EACH END -HEADER 2X TRIMMER AND KING STUD ----(2)16d FACENAIL OR (2) 8d TOENAIL EA. SIDE OF STUD — **PRESSURE** TREATED 9" MAX SILL PLATE TOP OF SHEATHING

- 1. HEADERS, KINGSTUDS AND OTHER REFERENCES ON PLAN GOVERN OVER TYPICAL DETAIL.
- 2. PROVIDE BRACES ON WALLS PRIOR TO WALLS RECEIVING PLYWOOD SHEATHING.
- 3. NAIL SILL PLATE TO WOOD FRAMED FLOORS WITH 16d @ 12" O.C. TO
- 4. WHERE RAISED FLOOR DOES NOT OCCUR PROVIDE 0.145" POWER DRIVEN ANCHORS W/ 1 $\frac{3}{6}$ " SQ. WASHER AND 1" EMBEDMENT AT 24" OC AND 6" FROM END OF PL (ICBO #1639)

SCALE

NTS

HEADER SCHEDULE (S	EE NOTE 1)
OPN'G WIDTH	HEADER
UP TO 4'-0"	4x4
4'-0" TO 6'-0"	4x6
6'-0" TO 8'-0"	4x8
8'-0" TO 10'-0"	4x10

SCALE

1"=1'-0"

BORING AND NOTCHING OF JOISTS

SCALE	7	ſ
1"=1'-0"		L

2x BLKG OR 3x BLKG

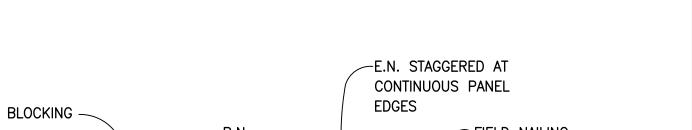
WHERE REQUIRED PER

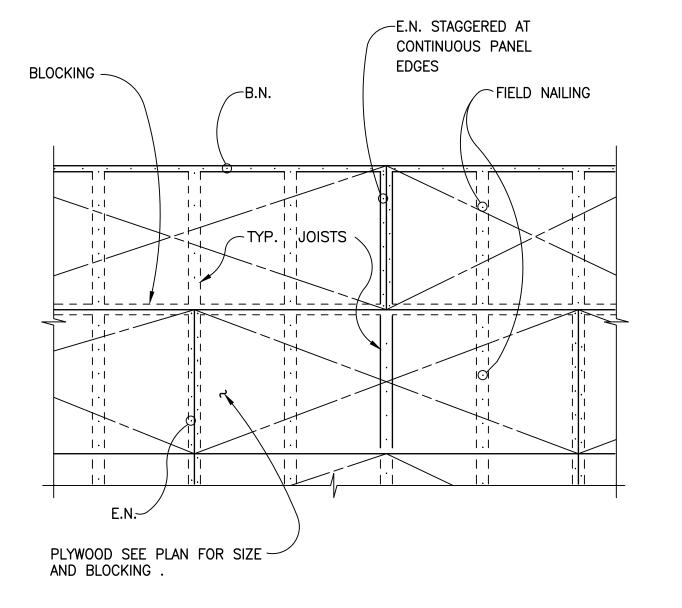
SHEARWALL SCHEDULE

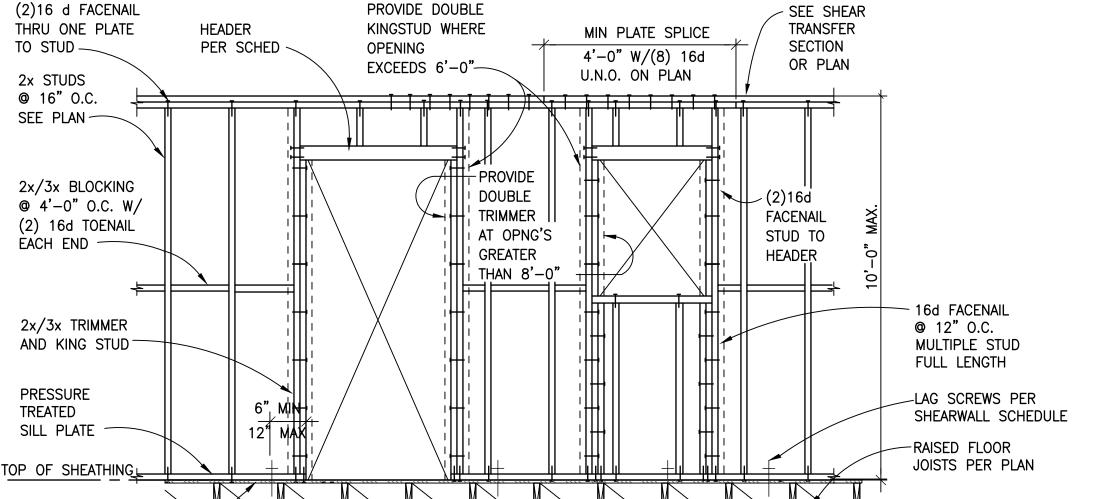
(2) 10d TOE NAILS TYP



1"=1'-0"







16d FACENAIL

MULTIPLE STUD

-16d NAILS AT 4" OC MIN

RAISED FLOOR JOISTS PER PLAN

FULL LENGTH

@ 18" O.C.

- 1. HEADERS, KINGSTUDS AND OTHER REFERENCES ON
- ADDITIONAL INFORMATION
- 3. AT WOOD FRAMED WALLS USE SILL CONNECTION PER
- 4. WHERE RAISED FLOOR DOES NOT OCCUR PROVIDE ANCHOR BOLTS PER SHEARWALL SCHEDULE FROM

SCHEDULE - ROOF				
OPENING WIDTH	HEADER	SILL AT WINDOW	POST/ TRIMMER	KING 3 STUDS ³
UP TO 4'-0"	4x6	2x	2x4	(2) 2x4
4'-0" TO 6'-0"	4x10	2x	3x4	(3) 2x4
6'-0" TO 8'-0"	4x12	(2) 2x	4x4	(4) 2x4
4-INCH THICK WALLS				

4-INCH THICK WALLS

SCHEDULE - ROOF				date	
OPENING WIDTH	HEADER	SILL AT WINDOW	POST/ TRIMMER	KING 2 STUDS ²	# doi
UP TO 4'-0"	6x4	2x	2x6	(2) 2x6	
4'-0" TO 6'-0"	6x8	2x	3x6	(3) 2x6	title
6'-0" TO 8'-0"	6x12	(2) 2x	3x6	(4) 2x6	

TYPICAL WOOD DETAILS

integrated

construction

management

sustainability

700 S. Flower St, Suite 2100 Los Angeles, CA 90017 0: 213.418.0201

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ONX

WZmZ

TYPICAL BLOCKING AT WALL

1"=1'-0"

DIAPHRAGM DETAIL

1"=1'-0"

TOP OF CONC WALL

(2)16d FACENAIL OR (2) 8d TOENAIL EA.

SIDE OF STUD-

EXTERIOR AND INTERIOR BEARING / SHEARWALL FRAMING

INTERIOR NON-BEARING STUD WALL FRAMING

A.B. SIZE AND SPACING

USE AB PER SHEARWALL

SCHED

PER SHEARWALL SCHEDULE

PLAN GOVERN OVER TYPICAL DETAIL 2. SEE SHEARWALL PLYWOOD NAILING DETAIL FOR

SHEARWALL SCHEDULE

ILL PL TO FOU	NDATION				
SCHEDULE - ROOF					
PENING WIDTH	HEADER	SILL AT WINDOW	POST/ TRIMMER	KING STUDS	
JP TO 4'-0"	4x6	2x	2x4	(2) 2x	

SCHEDULE - ROOF				
OPENING WIDTH	HEADER	SILL AT WINDOW	POST/ TRIMMER	KING 2 STUDS ²
UP TO 4'-0"	6x4	2x	2x6	(2) 2x6
4'-0" TO 6'-0"	6x8	2x	3x6	(3) 2x6
6'-0" TO 8'-0"	6x12	(2) 2x	3x6	(4) 2x6

6-INCH THICK WALLS

1"=1'-0"

