GRAVITY LOADS:

ROOF: ROOF LIVE LOAD = 20 PSF (REDUCIBLE)
ROOF DEAD LOAD = 20 PSF U.N.O.

LOOR: FLOOR LIVE LOAD = 40 PSF (REDUCIBLE)

FLOOR LIVE LOAD = 40 PSF (REDUCIBLE)
FLOOR DEAD LOAD = 30 PSF (INCLUDING 5 PSF PARTITION LOAD)

ROOF PATIO: FLOOR LIVE LOAD = 60 PSFFLOOR DEAD LOAD = 25 PSF

LATERAL LOADS:

WIND: ULTIMATE DESIGN WIND SPEED = 115 MPH (3s GUST).

NOMINAL DESIGN WIND SPEED = 90 MPH (3s GUST).

RISK CATEGORY: II

WIND EXPOSURE: B.

INTERNAL PRESSURE COEFFICIENT (ENCLOSED BUILDINGS): +0.18 / -0.18
COMPONENTS & CLADDING WIND PRESSURE:
25 PSF (LRFD) OR 15 PSF (ASD) - END ZONE
22 PSF (LRFD) OR 13 PSF (ASD) - TYPICAL

60 PSF (LRFD) OR 36 PSF (ASD) — PARAPET

SEISMICITY: RISK CATEGORY II SEISMIC IMPORTANCE FACTOR: IE = 1.0

MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS: (Ss = 0.183, S1 = 0.066) SOIL SITE CLASS: D

DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS: (Sps = 0.195, Sp1 = 0.106) SEISMIC DESIGN CATEGORY: B

BASIC SEISMIC FORCE RESISTING SYSTEM: A.15

SEISMIC RESPONSE COEFFICIENT, $C_S=0.030W$ (LRFD) OR 0.021 (ASD) RESPONSE MODIFICATION FACTOR R=6.5 ANALYSIS PROCEDURE USED: EQUIVALENT FORCE METHOD

FOUNDATIONS:

REFER TO SOILS REPORT AND DETAIL 1 FOR ADDITIONAL INFORMATION PRIOR TO COMMENCEMENT OF EARTHWORK. BEFORE ANY CONCRETE IS PLACED, EXCAVATION SHALL BE CHECKED AND APPROVED BY A QUALIFIED SOILS ENGINEER.

SOIL REPORT NO.

2018.

SPREAD FOOTINGS SHALL BLAR ON ENGINEERED FILL 1—6 MINIMUM BELOW ADJACENT FINISHED GRADE, PAD GRADE OR EXISTING GRADE AS STATED IN SOILS REPORT. FINISHED GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET OF PERIMETER FOOTINGS.

DESIGN SOIL BEARING VALUE:

2,500 PSF

SIMPLY STRUCTURAL INC. CAN NOT BE HELD RESPONSIBLE FOR FUTURE PROBLEMS ARISING FROM UNKNOWN SOIL CONDITIONS.

STRUCTURAL CONCRETE:

ALL CAST-IN-PLACE CONCRETE CONSTRUCTION HAS BEEN DESIGNED ACCORDING TO ACI 318-14 AND SHALL CONFORM TO THE FOLLOWING:

CEMENT SHALL CONFORM TO ASTM C-150 TYPE | OR II.
MIXING SHALL CONFORM TO ASTM C-94.
AGGREGATES (NORMAL WEIGHT CONCRETE) SHALL CONFORM TO ASTM C-33.

THE MINIMUM COMPRESSIVE STRENGTH OF CONCRETE (F'c) AT 28 DAYS SHALL BE:

- 1. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED AND THOROUGHLY CONSOLIDATED DURING PLACEMENT AND SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT AND EMBEDDED
- FIXTURES AND INTO CORNERS OF THE FORMS UNLESS NOTED OTHERWISE.

 2. SLUMP RANGE SHALL BE 4-6 INCHES PRIOR TO ADMIXTURES. ADMIXTURES MAY NOT BE USED WITHOUT THE SPECIFIC PRIOR WRITTEN APPROVAL FROM THE ARCHITECT/STRUCTURAL ENGINEER. ADMIXTURES USING ANY FORM OF CHI ORIDES SHALL NOT BE USED.
- 3. CAST CLOSURE POUR AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED.

 4. THE EMBEDMENT OF ANY CONDUITS, PIPES, SLEEVES, ETC. SHALL NOT BE PERMITTED WITHIN ANY CONCRETE STRUCTURAL ELEMENT (IE: COLUMNS, BEAMS, ELEVATED SLABS, ETC.) WITHOUT WRITTEN CONCRETE STRUCTURAL ELEMENT (IE: COLUMNS, BEAMS, ELEVATED SLABS, ETC.)
- APPROVAL FROM SIMPLY STRUCTURAL INC. UNLESS NOTED OTHERWISE ON THE DRAWINGS.

 5. FLY ASH IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS, SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR COAL FLY ASH AND RAW OR CALCINED NATURAL POZZOLAN FOR USE IN CONCRETE" (ASTM C 618). FLY ASH SHALL NOT BE USED IN ARCHITECTURALLY EXPOSED CONCRETE, ON SLABS WITH A BURNISHED OR ACID FINISH, OR WHERE IT COULD NEGATIVELY EFFECT ANY MATERIAL IN CONTACT WITH IT.
- ANT MATERIAL IN CONTACT WITH 11.

 6. TESTING OF CONCRETE SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN: ONCE A DAY, NOR LESS THAN ONCE FOR EACH 150—YD3 OF CONCRETE NOR LESS THAN ONCE FOR EACH 5,000—FT2 OF SURFACE AREA FOR SLABS OR WALLS. SAMPLES SHALL BE TAKEN IN ACCORDANCE WITH "STANDARD PRACTICE FOR MAKING AND CURING CONCRETE TEST SPECIMENS IN THE FIELD" (ASTM C 31); AND TESTED IN ACCORDANCE WITH "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS"
- (ASTM C 39).

 7. TEST DATA FOR CONCRETE SUBMITTALS TEST DATA SHALL BE SUBMITTED FOR REVIEW PER ACI 318 CHAPTER 5. REFERENCE TABLE R5.3 FOR SPECIFIC REQUIREMENTS.

CONCRETE SLABS ON GRADE:

- 1. CONCRETE SHALL BE BATCHED, MIXED, TRANSPORTED, PLACED, CONSOLIDATED AND FINISHED PER ACI 302.1R-04 FOR THE APPROPRIATE FLOOR CLASS TYPE PER TABLE 2.1. SEE TABLE 6.1 (ACI 302.1R-04) FOR RECOMMENDED STRENGTH AND MAXIMUM SLUMP AT POINT OF PLACEMENT FOR CONCRETE FLOORS. MIX DESIGN SHALL PROVIDE THE LARGEST PRACTICAL-SIZE AGGREGATE THAT DOES NOT EXCEED 3/4 OF THE MIN. CLEAR SPACING OF REINFORCING BARS OR 1/3 OF THE SLAB
- 2. CONCRETE SLABS ON GRADE REQUIRE MECHANICAL VIBRATION ONLY AT TRENCHES, FLOOR DUCTS, TURNDOWNS ETC.
 3. ALL CONCRETE SLABS ON GRADE SHALL BE BOUND BY SAW CUT CONTROL JOINTS, COLD JOINTS WITH DIAMOND PLATES PER ACI 302.1R-04 TABLE 3.2, OR KEYED JOINTS. (KEYED JOINTS ARE NOT PERMITTED IN WAREHOUSES. WHERE FORKLIFTS WILL BE USED OR WHERE STORAGE RACKING WILL BE
- PERMITTED IN WAREHOUSES, WHERE FORKLIFTS WILL BE USED OR WHERE STORAGE RACKING WILL BE INSTALLED). JOINTS MAY NOT BE MODIFIED UNLESS APPROVED IN WRITING BY SIMPLY STRUCTURAL INC. AND THE ARCHITECT, AND MUST BE LOCATED AS SHOWN ON THE FOUNDATION PLAN. FOR UNREINFORCED PLAIN CONCRETE SLABS, MAXIMUM SPACING BETWEEN JOINTS SHALL BE 36 TIMES THE SLAB THICKNESS OR 15'-0" ON CENTER MAX. MAXIMUM RATIO OF LONG SIDE TO SHORT SIDE SHALL BE 1 1/2 TO 1. COLD JOINTS OR KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING: ALL OTHER JOINTS MAY BE SAW CUT.
- 4. ALL JOINTS SHALL BE FILLED AND OR SEALED AS SPECIFIED BY THE ARCHITECT. AT A MINIMUM, JOINTS SUBJECTED TO VEHICLES WITH HARD WHEELS SUCH AS FORKLIFTS SHALL BE FILLED WITH A SEMIRIGID EPOXY RESIN OR POLYUREAS CONSISTING OF 100%% SOLIDS THAT HAS A MINIMUM SHORE HARDNESS OF 80 WHEN MEASURED IN ACCORDANCE WITH ASTM D 2240. ACI 302.1R-04 ADVISES TO DEFER JOINT FILLING AND SEALING AS LONG AS POSSIBLE (60-90 DAYS MN.) TO MINIMIZED THE EFFECTS OF SHRINKAGE-RELATED JOINT OPENING ON THE FILLER OR SEALANT. SEMIRIGID AND POLYUREA FILLERS SHOULD BE INSTALLED FULL-DEPTH IN SUITABLY CLEAN SAW-CUT JOINTS.
- 5. VAPOR BARRIERS SHALL BE USED WHEN REQUIRED BY ARCHITECTURAL SPECIFICATIONS OR THE SOILS REPORT. VAPOR BARRIER MATERIAL SHALL BE IN COMPLIANCE WITH ASTM E 1745 AND THE THICKNESS SHALL BE 15 MILS OR GREATER. THE LAPS OR SEAMS SHALL BE OVERLAPPED 6" MINIMUM OR AS INSTRUCTED BY THE MANUFACTURER. JOINTS AND PENETRATIONS SHOULD BE SEALED WITH THE MANUFACTURER'S RECOMMENDED ADHESIVE, PRESSURE—SENSITIVE TAPE, OR BOTH. THE VAPOR BARRIER SHALL BE PLACED OVER 4" OF GRANULAR FILL (NOT SAND). GRANULAR FILL SHOULD BE PROTECTED FROM TAKING ON ADDITIONAL WATER.
- 6. REINFORCING SPLICE LENGTHS IN CONCRETE U.N.O.

STRUCTURAL MASONRY:

ALL MASONRY CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF IBC SECTIONS 2104.1

THROUGH 2104.5 AND LATEST EDITION OF ACI 530, ASCE6/TMS 602. ALL MASONRY UNITS SHALL BE LAID IN RUNNING BOND. ALL CELLS AND SPACES CONTAINING REINFORCING AND ALL MASONRY BELOW FINISHED GRADE SHALL BE FILLED WITH GROUT. GROUT SHALL BE VIBRATED BY MECHANICAL CONSOLIDATION IMMEDIATELY AFTER POURING AND AGAIN 5 TO 10 MINUTES LATER. CLEANOUTS REQUIRED IF GROUT LIFT EXCEEDS 5'-0" IN HEIGHT. WHERE REQUIRED, CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE AT EVERY VERTICAL BAR BUT SHALL NOT BE SPACED MORE THAN 32" ON CENTER FOR SOLIDLY GROUTED MASONRY. BETWEEN GROUT POURS A HORIZONTAL CONSTRUCTION JOINT SHALL BE FORMED BY STOPPING ALL WYTHS AT THE SAME ELEVATION AND STOPPING GROUT POURS 1 1/2" MINIMUM BELOW A MORTAR JOINT (1/2" MINIMUM AT TOP OF WALL). PLACE VERTICAL CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUNS OF WALL EXCEEDS 24'-0" UNLESS NOTED OTHERWISE ON THE PLANS. CONTROL JOINTS SHALL NOT OCCUR WITHIN 24" OF: CONCENTRATED LOADS, WALL CORNERS, WALL INTERSECTIONS, OPENING JAMBS, WALL ENDS, OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. REINFORCING SPLICE LENGTHS IN MASONRY:

| 1 | #4 | IN | CELL | 17" |
|---|----|-----|------|---------|
| 1 | #5 | IN | CELL | 31" |
| 1 | #6 | IN | CELL | 58" |
| 2 | #4 | IN | CELL | 21" |
| 2 | #5 | IN | CELL | 49" |
| 2 | #6 | .IN | CELL | 102" |
| | | | | |

MASONRY PROPERTIES:

MASONRY WALL ASSEMBLY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'M = 1,500 PSI U.N.O. MASONRY SHALL BE LAID UP IN A RUNNING BOND U.N.O. HOLLOW CONCRETE MASONRY UNITS SHALL BE ASTM C90, MEDIUM WEIGHT GRADE N, TYPE 1 WITH MINIMUM f'm = 1,900 PSI. MORTAR SHALL BE TYPE S AND SHALL COMPLY WITH ASTM C270 WITH A MINIMUM f'm = 1,800 PSI. GROUT SHALL HAVE A MINIMUM f'c = 2,000 PSI AND SHALL COMPLY WITH ASTM C476. VERTICAL REINFORCING:

REINFORCING SHALL CENTERED IN THE CELLS UNLESS NOTED OTHERWISE AND BE CONTINUOUS FULL HEIGHT OF GROUT POUR PLUS REQUIRED LAP LENGTH. PROVIDE 1 #5 CONTINUOUS FULL HEIGHT OF WALL AT ALL CORNERS, INTERSECTIONS, WALL ENDS, BEAM BEARINGS, JAMBS, EACH SIDE OF CONTROL JOINTS AND AT SPACING PER DETAIL 21 UNLESS NOTED OTHERWISE. REINFORCING SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS OR 10 FEET.

HORIZONTAL REINFORCING:

DO NOT SPLICE REINFORCING WITHIN 8'-0" OF CONTROL JOINTS. PROVIDE 2 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT ELEVATED FRAMING ASSEMBLIES. PROVIDE 1 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT TOP OF PARAPETS. PLACE THESE BARS CONTINUOUS THRU CONTROL JOINTS PER TYPICAL DETAIL. PROVIDE STANDARD WEIGHT, 9 GAGE WIRE, LADDER TYPE JOINT REINFORCEMENT PER ASTM A951 AT 16" O.C. IN HORIZONTAL JOINTS (LAP 8" MINIMUM).

REINFORCING STEEL:

LATEST ACI 318-14 CODE AND DETAILING MANUAL APPLY. ALL REINFORCING SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES. SUPPORT OF FOUNDATION REINFORCING MUST PROVIDE ISOLATION FROM MOISTURE/CORROSION BY USE OF PLASTIC OR CONCRETE CHAIR. DUCT-TAPE COVERED REINFORCING IS NOT AN ACCEPTABLE CHAIR. ALL DIMENSIONS REFERENCED IN DRAWINGS AS "CLEAR" SHALL BE FROM FACE OF STRUCTURE TO EDGE OF REINFORCING, AND SHALL NOT BE LESS THAN STATED, NOR GREATER THAN "CLEAR" DIMENSION PLUS 3/8". ALL OTHERS SHALL BE PLUS OR MINUS 1/4" TYPICAL UNLESS NOTED OTHERWISE. ALL REINFORCING SHALL BE SECURELY TIED IN PLACE TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT. DEFORMED REINFORCING SPECIFICATIONS AS FOLLOWS:

ASTM A615, GRADE 60 (Fy = 60 KSI) FOR #4 BARS AND LARGER ASTM A615, GRADE 40 (Fy = 40 KSI) FOR #3 BARS

CLEAR CONCRETE COVERAGE'S OF ALL STEEL SHALL BE:

STRUCTURAL WOOD:

SAWN LUMBER:

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE NDS ALONG WITH GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB). ALL SAWN LUMBER SHALL BE STANDARD DRESSED (\$4\$) AND KILN DRIED WITH MOISTURE CONTENT NOT TO EXCEED 19% AND SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL MEET OR EXCEED THE FOLLOWING WOOD TYPES AND PROPERTIES:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ----- 3"

| • | MOOD THE |
|--|---|
| EX AND 4X JOISTS/BEAMS EX BEAMS EDGERS AND TOP PLATES ETUDS EX POSTS EX POSTS EX POSTS | D.F. #2 D.F. #1 D.F. #2 D.F. #2 U.N.O. 2 D.F. #2 D.F. #1 |
| | |

GENERAL:

WOOD FRAMING MEMBER SHALL NOT BE NOTCHED OR DRILLED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. ALL NAILING NOT NOTED SHALL BE PER TYPICAL DETAIL. ALL BOLTING SHALL BE PER STEEL SECTION. WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG—TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT AND EQUIVALENT I.C.C. APPROVAL. WHERE "TYPE" OF CONNECTOR IS INDICATED ON THE DRAWINGS. THE CONNECTOR AND ATTACHMENT SHALL BE PER THE MAXIMUM MODEL NUMBER BASED ON THE SIZE OF THE MEMBERS CONNECTED.

IN STUD WALLS, UNLESS NOTED OTHERWISE, INSTALL DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS AND AT ISOLATED BEARING POINTS OF FRAMING MEMBERS ABOVE. EVERY OTHER STUD OF WOOD FRAME BEARING WALL SHALL HAVE A SIMPSON H3 ANCHOR TOP AND BOTTOM. EXCEPT AT THOSE WALLS WHERE PLYWOOD SHEATHING IS NAILED DIRECTLY TO THE TOP AND BOTTOM PLATES. PROVIDE 2X SOLID BLOCKING AT MID—HEIGHT OF BEARING STUD WALLS. SILL PLATES AT ALL EXTERIOR WALLS SHALL BE EITHER PRESERVATIVELY TREATED WOOD OR FOUNDATION — GRADE REDWOOD.

PROVIDE 2" SOLID BLOCKING AT SUPPORTS OF ALL JOISTS. DOUBLE UP FLOOR JOISTS AND BLOCKING UNDER PARTITIONS. DO NOT NOTCH, DRILL OR SPLICE JOISTS, BEAMS OR STUDS WITHOUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER.

ALL WOOD CONNECTORS SHALL BE BY SIMPSON STRONG—TIE OR EQUAL BY OTHER MANUFACTURER WITH ICC OR IAPMO APPROVAL AND SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER REQUIREMENTS.

DO NOT NOTCH, DRILL OR SPLICE JOISTS, BEAMS OR STUDS WITHOUT WRITTEN APPROVAL OF STRUCTURAL

GLUE-LAMINATED BEAMS(GLULAM):

ALL GLU-LAM BEAMS SHALL BE FABRICATED USING WATERPROOF-GLUE. FABRICATION AND HANDLING PER LATEST AITC AND WCLA STANDARDS. CAMBER BEAMS AS SHOWN ON DRAWINGS. BEAM WIDTHS INDICATED MAT BE ENLARGED AT HE CONTRACTORS DISCRETION (3 1/8" MAY BE 3 1/2", 5 1/8" MAY BE 5 1/2", 6 /4" MAY BE 7 1/4" AND 8 3/4" MAY BE 9 1/4" WIDTH). BEAMS TO BEAR BOTH GRADE STAMP AND AITC STAMP AND CERTIFICATE. STANDARD CAMBER R = 2500' U.N.O.

SIMPLE SPAN BEAMS ----- 24F-V4 CANTILEVERING BEAMS ----- 24F-V8

NAILING:

ALL NAILING INDICATED THROUGHOUT THE DRAWINGS SHALL HAVE THE FOLLOWING MINIMUM DIAMETERS/LENGTHS ALONG WITH TYPICAL USE:

ENGINEERED LUMBER:

ENGINEERED LUMBER SHALL COMPLY WITH ICC REPORT NO. ESR-1387 WITH THE FOLLOWING WOOD TYPES

AND PROPERTIES:

2X STUDS WHERE INDICATED -----1.3E LSL
2X RIM JOISTS ------1.5E LSL OR 1.55E LSL
3 1/2", 5 1/4", 7" BEAMS ------ 2.0E PSL

3 1/2", 5 1/4", 7" COLUMNS ---- 1.8E PSL

PLYWOOD:

ALL PLYWOOD SHALL BE AMERICAN PLYWOOD ASSOCIATION "CDX" RATED SHEATHING OR BETTER AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY. LAY PLYWOOD WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD. ALL PLYWOOD SHALL BE LAID WITH STAGGERED JOINTS AND BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATIO AND SHALL BE ATTACHED WITH NAILS PER NAILING SECTION AS FOLLOWS UNLESS NOTED OTHERWISE:

| | THICKNESS | SPAN/INDEX RATIO | EDGE ATTACHMENT | INTERMEDIATE ATTACHMENT |
|-----------------------------|-----------|---------------------|--|---|
| ROOF TYPICAL EXTERIOR | 1/2" | 32/16 | 10d AT 6" O.C. | 10d AT 12" O.C. |
| SHEAR WALL TYPICAL INTERIOR | 1/2" | 32/16 | 10d AT 6" O.C. | 10d AT 12" O.C. |
| SHEAR WALL | 3/8" | 24/0 | 10d AT 6" O.C. MAX (SEE SHEAR WALL SCHEDULE) | 10d AT 12" O.C. |
| FLOOR | 3/4" T&G | 48/24 | GLUED AND 10d RING SHANK AT 6" O.C. U.N.O. | GLUED AND 10d RING SHANK AT 12" O.C. U.N.O. |

AMERICAN PLYWOOD ASSOCIATION PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFING CONTRACTOR. WHERE ROOF IS TO BE GUARANTEED, IT MAY NOT BE USED WITHOUT PRIOR APPROVAL FROM ROOF SYSTEM MANUFACTURER. RATED SHEATHING SHALL COMPLY WITH I.C.C. REPORT NO. ESR-2586, EXPOSURE 1, AND SHALL HAVE A SPAN RATING AND SHEAR VALUES EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN 1/32") SHALL BE THE SAME AS THE PLYWOOD IT REPLACES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

PREFABRICATED WOOD TRUSSES:

PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE REFERENCED BUILDING CODE, AND ALL OTHER APPLICABLE REPORTS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DESIGN CALCULATIONS SEALED BY A LICENSED ENGINEER IN THE STATE OF CONSTRUCTION FOR REVIEW AND APPROVAL BY SIMPLY STRUCTURAL INC. PRIOR TO FABRICATION. IN ADDITION TO LOADS SPECIFIED IN THE G.S.N., PLANS AND DETAILS, DESIGN SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

- 1. DEFLECTION/CAMBER: FLOOR LIVE LOAD MAXIMUM = L/480. ROOFS LIVE LOAD MAXIMUM = L/360. FOR ROOF SLOPES LESS THAN 1/4" PER FOOT, MEMBERS MUST BE DESIGNED FOR PONDING.
- 2. TOP CHORD MEMBER WOOD SPECIES SHALL BE DOUGLAS FIR—LARCH, OR SOUTHERN PINE. ALL OTHER SPECIES MUST BE SUBMITTED TO SIMPLY STRUCTURAL INC. FOR REVIEW AND APPROVAL PRIOR TO
- BIDDING. THE ABSOLUTE MINIMUM SPECIFIC GRAVITY THAT WILL BE CONSIDERED IS 0.42.

 3. CONNECTIONS AND BEARING MATERIAL TO BE SHOP CONNECTED, DESIGNED AND FURNISHED BY
- 4. ADDITIONAL FRAMING MEMBERS SHALL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL

PREFABRICATED WOOD TRUSSES SHALL BE CAMBERED FOR 1.5 TIMES THE DEAD LOAD DEFLECTION.
MULTIPLE FRAMING MULTIPLE FRAMING MEMBERS SHALL BE FASTENED TOGETHER TO ALLOW TRANSFER OF
SHEAR AND TENSION FORCES (MINIMUM 200 PLF) AT PLYWOOD SHEATHING JOINTS AND TO PREVENT
CROSS GRAIN BENDING OF TOP CHORDS, ATTACHMENT SHALL BE A CONTINUOUS 20 GAGE METAL PLATE
OR OTHER APPROVED MEANS. METHOD OF ATTACHMENT SHALL BE INDICATED ON SHOP DRAWINGS FOR

PREFABRICATED WOOD TRUSSES SHALL BE MANUFACTURED BY SHOPS WHICH HAVE CURRENT I.C.C. CERTIFICATION AS AN APPROVED FABRICATOR PER THE REFERENCED BUILDING CODE. TRUSS

CONSTRUCTION DOCUMENTS SHALL BE PREPARED IN ACCORDANCE WITH 2303.4.1.

STRUCTURAL STEEL:

THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND STRUCTURES SHALL BE IN ACCORDANCE WITH AISC 360. FOR ALL STEEL WHERE Fy > 36 KSI, THE ASTM OR OTHER SPECIFICATION DESIGNATION SHALL BE INCLUDED NEAR THE ERECTION MARK ON EACH SHIPPING ASSEMBLY OR IMPORTANT CONSTRUCTION COMPONENT OVER ANY SHOP COAT OF PAINT PRIOR TO SHIPMENT FROM THE FABRICATOR'S PLANT. USE THE FOLLOWING MINIMUM PROPERTIES UNLESS NOTED

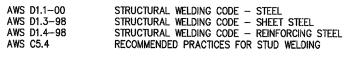
- RECTANGULAR AND SQUARE HSS SHALL BE ASTM A500 GRADE B (Fy = 46 KSI).
 WIDE FLANGE STEEL SHALL BE ASTM A992 (Fy = 50 KSI).
 STRUCTURAL PIPE SHALL BE ASTM A53, TYPE E OR S, GRADE B (Fy = 35 KSI).
 MISCELLANEOUS STEEL AND OTHER STEEL SHAPES SHALL BE ASTM A36 (Fy = 36 KSI).
- BOLTS SHALL BE F1554 GRADE 36 OR ASTM A307.
 HIGH STRENGTH BOLTS SHALL BE ASTM A325N TC AND SHALL BE INSTALLED AS BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE.

ALL REFERENCE TO HEADED STUDS SHALL BE "TRW/NELSON" HIGH STRENGTH HEADED STUDS OR APPROVED EQUAL. AT CONTRACTOR'S OPTION HEADED STUDS PER ABOVE MAY BE SUBSTITUTED FOR CONVENTIONAL ANCHORS AND MACHINE BOLTS (REVERSE SUBSTITUTION NOT ALLOWABLE). ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS. AT SHORT SLOTTED HOLES USE SNUG TIGHT INSTALLATION UNLESS NOTED OTHERWISE.

WELDING:

ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES ISSUED BY AN ACCEPTED TESTING AGENCY AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN. THESE DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP AND FIELD WELDS; THE CONTRACTOR MAY SHOP WELD OR FIELD WELD AT THEIR DISCRETION. SHOP WELDS AND FIELD WELDS SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW. UNLESS NOTED OTHERWISE.

ALL WELDS PER THE REFERENCED OR LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS)



ALL WELDING DONE BY E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. FOR GRADE 60 REINFORCING BARS, USE E90 SERIES.

POST INSTALLED ANCHORS:

THESE ANCHORS MAY ONLY BE USED WHERE SPECIFIC ANCHORS ARE NOT DENOTED ON PLANS, DETAILS OR NOTES.

USE OF OTHER ANCHOR PRODUCTS MUST BE APPROVED BY THE ENGINEER OF RECORD.

SPECIAL STRUCTURAL INSPECTION IS REQUIRED DURING PLACEMENT OF ALL ANCHORS UNLESS

| | <u> </u> | T | |
|--|---------------|---|--------------------------|
| SYSTEM | MFR | CONCRETE | MASONRY |
| | DEWALT/POWERS | PURE 110 + (ESR 3298) AC 200 + (ESR 4027) | AC100+GOLD (ESR 3200) |
| ADHON TO THE PARTY OF THE PARTY | HILTI | HY200 (ESR 3187) RE 100V3 (ESR 3829) | HY70 (ESR 2682) |
| | SIMPSON | SET-XP (ESR 2508) | SET-XP (IAPMO ER-265) |
| | DEWALT/POWERS | SCREW-BOLT + (ESR 3889) | WEDGE BOLTS + (ESR 1678) |
| No. | НІЦП | KWIK-HUS-EZ (ESR 3027) | KWIK-HUS-EZ (ESR 3056) |
| · · | SIMPSON | TITEN HD (ESR 2713) | TITEN HD (ESR 1056) |
| | DEWALT/POWERS | POWER-STUD + SD2 (ESR 2502) | N/A |
| O Co | HILTI | KWIK BOLT TZ (ESR 1917) | N/A |
| | SIMPSON | STRONG BOLT 2 (ESR 3037) | N/A |

SHOP DRAWINGS:

USE OF DRAWINGS CREATED BY SIMPLY STRUCTURAL INC. ARE NOT ACCEPTABLE FOR USE AS SHOP

- 1. SIMPLY STRUCTURAL INC. ASSUMES NO RESPONSIBILITY FOR THE FAILURE OF THE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW. SIMPLY STRUCTURAL INC. WILL REVIEW COMPLETED CONTRACTORS SHOP DRAWINGS AND OTHER APPROPRIATE SUBMITTALS THAT ARE A PROPERLY FUNCTIONING AND INTEGRAL ELEMENT OF THE OVERALL STRUCTURAL SYSTEM DESIGNED BY SIMPLY STRUCTURAL INC. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS.
- 2. SHOP DRAWINGS SUBMITTALS SHALL INCLUDE AT A MINIMUM:
- A. LAYOUT PLAN KEYED TO TRUSS/JOIST/BEAMS ETC. B. CLEARLY DEFINED DESIGN LOADS
- B. CLEARLY DEFINED DESIGN LOADS.
 C. SEAL AND SIGNATURE OF A LICENSED ENGINEER IN THE STATE OF CONSTRUCTION AFFIXED DIRECTLY TO BOUND DOCUMENTS.
- 3. BEFORE SUBMITTING SHOP DRAWINGS OR ANY RELATED MATERIAL, THE CONTRACTOR SHALL:

 A. REVIEW EACH SUBMISSION FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES.
- SEQUENCES, OPERATIONS OF CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

 B. APPROVE AND STAMP AND SIGN EACH SUBMISSION BEFORE SUBMITTING IT.
- C. ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON CONTRACTOR'S REVIEW. SIMPLY STRUCTURAL INC. SHALL ASSUME THAT NO SHOP DRAWING OR RELATED SUBMITTAL COMPRISES A VARIATION UNLESS THE CONTRACTOR ADVISES SIMPLY STRUCTURAL INC. IN WRITING.

 D. VERIFY ALL DIMENSIONS WITH ARCHITECT.
- 4. THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.
- 5. THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL ITEMS ARE CONSTRUCTED ACCORDING TO THE CONTRACT DOCUMENTS.

DEFERRED SUBMITTALS:

DEFERRED SUBMITTALS ARE DEFINED AS THOSE PORTIONS OF THE DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF APPLICATION. DEFERRAL OF ANY SUBMITTAL SHALL HAVE PRIOR APPROVAL OF THE BUILDING OFFICIAL. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO SIMPLY STRUCTURAL INC. WHO SHALL REVIEW AND NOTE THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. ALL DEFERRED SUBMITTALS SHALL BE SEALED BY A LICENSED ENGINEER IN THE STATE OF CONSTRUCTION.

THE FOLLOWING ITEMS SHALL BE SUBMITTED PER THIS SECTION PER IBC SECTION 107.3.4.1:

* PREFABRICATED WOOD TRUSSES AND TRUSS GIRDERS

GENERAL NOTES:

CONSTRUCTION SET

1. THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING AND THE CONSTRUCTION SITE. THE CONTRACTOR SHALL USE ADEQUATE SHORING, BRACING, AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE OR IMPLY INSPECTION OF THESE ITEMS).

2. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENT SHALL GOVERN.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.
 CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION, LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SOLIARE FOOT.

OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS CHOSEN, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, APPROVALS AND THE COORDINATION OF THE WORK WITH ALL RELATED TRADES AND SUPPLIERS.

INSTRUCTION TO BIDDERS AND CONTINGENCIES:

2. ALL PRELIMINARY PRICING EFFORTS SHALL BE CONSIDERED TO BE ESTIMATES ONLY AND SHALL INCLUDE THE NECESSARY CONTINGENCIES, ALLOWANCES, ALTERNATES, ETC. AS APPROPRIATE TO ACCOUNT FOR MODIFICATIONS AND ADDITIONS THAT WILL OCCUR TO THE DRAWINGS DURING THE FINALIZATION OF THE DESIGN AND PERMITTING

1. UNDER NO CIRCUMSTANCES SHALL THESE DRAWINGS BE "FINAL BID" UNTIL THE PROJECT IS FULLY

3. THE CONTRACTOR SHALL UTILIZE THE FOLLOWING MINIMUM CONTINGENCIES FOR EACH OF THE STRUCTURAL ELEMENT COSTS TO BE USED AT THE SOLE DISCRETION OF THE STRUCTURAL ENGINEER AND DESIGN TEAM:

1% MINIMUM

ALL OF THE "FINAL BID" CONTINGENCIES NOT USED BY THE STRUCTURAL ENGINEER SHALL BE REFUNDED TO THE OWNER PRIOR TO CLOSEOUT OF THE PROJECT. THE CONTINGENCY AMOUNT SHALL BE LISTED AS A SEPARATE LINE ITEM UNDER EACH DISCIPLINE.

BE LISTED AS A SEPARATE LINE ITEM UNDER EACH DISCIPLINE. 4. ANY MODIFICATIONS, DELETIONS OR ELIMINATION'S TO THE STRUCTURAL BIDDING AND CONTINGENCIES REQUIREMENTS. WITHOUT THE CONSENT OF THE STRUCTURAL ENGINEER, SHALL AUTOMATICALLY INDEMNIFY THE STRUCTURAL ENGINEER OF ANY COSTS THAT MAY ARISE DURING THE DESIGN AND CONSTRUCTION OF THE PROJECT.

STATEMENT OF SPECIAL STRUCTURAL INSPECTIONS: IN ADDITION TO THE INSPECTIONS REQUIRED BY SECTION 109 OF THE INTERNATIONAL BUILDING CODE,

SPECIAL STRUCTURAL INSPECTION IS REQUIRED FOR THE WORK LISTED BELOW AS STATED IN SECTION 1704 AND 1705 OF THE INTERNATIONAL BUILDING CODE. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK/TESTING ASSIGNED FOR CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS.

- CONCRETE CONSTRUCTION: (REFERENCE IBC TABLE 1705.3)
 CONTINUOUSLY DURING THE TAKING OF TEST SPECIMENS AND PLACING OF ALL CONCRETE.
 VERIFY USE OF REQUIRED DESIGN STRENGTH.
- BOLTS IN CONCRETE:
 PRIOR TO AND CONTINUOUSLY DURING THE PLACEMENT OF CONCRETE AROUND BOLTS.
- 3. REINFORCING STEEL: (REFERENCE IBC SECTION 1705.3 AND TABLE 1705.3) INSPECTION OF IN PLACE REINFORCING. THE SPECIAL INSPECTOR NEED NOT BE PRESENT CONTINUOUSLY DURING PLACEMENT OF REINFORCING STEEL PROVIDED THE SPECIAL INSPECTOR HAS INSPECTED FOR CONFORMANCE. PRIOR TO CLOSING FORMS OR THE DELIVERY OF CONCRETE TO THE JOBSITE.

 FOR ALL CONCRETE HAVING SPECIAL STRUCTURAL INSPECTION PER ITEM 1.

 FOR SLABS ON GRADE.
- 4. WELDING: (REFERENCE AISC 360 SECTION N; IBC TABLE 1705.2.2)
- INSPECT WELDS ACCORDING TO AWS D1.1/D1.1M.
 INSPECT FLOOR AND ROOF DECK WELDS ACCORDING TO AWS D1.3.
 INSPECT WELDING OF REINFORCING STEEL ACCORDING TO AWS D1.4 AND ACI 318: 3.5.2.
 SPECIAL INSPECTION IS REQUIRED FOR ALL WELDS NOT PERFORMED IN AN APPROVED.
- VERIFICATION OF THE QUALIFICATIONS OF WELDING PROCEDURES AND WELDERS.
 AN AWS CERTIFIED WELDING INSPECTOR FROM AN INDEPENDENT TESTING LABORATORY SHALL

FABRICATOR'S SHOP IN ACCORDANCE WITH SECTION 1704.3.1 OF THE INTERNATIONAL BUILDING

VISUALLY INSPECT ALL FIELD WELDS.

FOR CONCRETE FOOTINGS

- STRUCTURAL MASONRY: (REFERENCE ACI 530)

 CONTINUOUSLY DURING PREPARATION AND TAKING OF ANY REQUIRED PRISMS OR TEST
- SPECIMENS.

 PERIODIC INSPECTION OF ALL IN—PLACE REINFORCING AND GROUT SPACE PRIOR TO THE DELIVERY OF GROUT TO THE JOBSITE.
- CONTINUOUS INSPECTION DURING ALL GROUTING OPERATIONS.
 PRIOR TO CLOSING ALL CLEANOUTS.
- VERIFY TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.
- 6. EXPANSION AND EPOXY (ADHESIVE) ANCHORS: CONTINUOUS DURING THE PLACEMENT OF ALL ANCHORS.

 ALL HOLES MUST BE DRILLED PRIOR TO SPECIAL INSPECTORS ARRIVAL ON SITE.

 INSPECTOR TO VERIFY CORRECT DIAMETER AND DEPTH OF ALL HOLES AS WELL AS CORRECT.
- INSPECTOR TO OBSERVE BRUSHING AND CLEANING OF ALL HOLES WITH COMPRESSED AIR PER MANUFACTURERS REQUIREMENTS.
- 7. WOOD: (REFERENCE IBC TABLE 1705.5)

 INSPECT ALL PLYWOOD NAILING, STRAPS AND HOLDOWN INSTALLATIONS.

TO THE BUILDING DEPARTMENT AND SIMPLY STRUCTURAL INC

8. EXCAVATION, GRADING AND FILL BY SOILS ENGINEER (REFERENCE TABLE 1705.6).

• SOILS ENGINEER SHALL PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING AND FOUNDATION PHASE OF CONSTRUCTION. INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED.

ANCHOR TYPE, NUMBER, AND SPACING OF ALL ANCHORS AND THE EPOXY (ADHESIVE) TYPE.

SPECIAL STRUCTURAL INSPECTION NOTES:

- CONTACT SIMPLY STRUCTURAL INC. PRIOR TO THE START OF CONSTRUCTION FOR ADDITIONAL
- INFORMATION.

 SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND OTHER DESIGNATED PERSONS AT A MINIMUM OF ONCE PER WEEK.

 THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN
- CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE BUILDING CODE.

 4. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR, THEN,
- IF UNCORRECTED, THE PROPER DESIGN AUTHORITY AND THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE DESIGN DRAWINGS OR SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR SAFE ACCESS TO ALL ITEMS REQUIRING SPECIAL INSPECTION. ACCESS SHALL BE PROVIDED VIA IN-PLACE LADDERS, SCAFFOLDING, AND/OR
- CONTRACTOR OPERATED LIFTS AS REQUIRED FOR SAFE OBSERVATION.

 6. SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A STATE LICENSED STRUCTURAL ENGINEER, WHO IS FAMILIAR WITH THE STRUCTURAL DESIGN OF THIS PROJECT. THE
- SUPERVISING STRUCTURAL ENGINEER SHALL SEAL THE SPECIAL INSPECTION CERTIFICATE.

 7. CONTACT SIMPLY STRUCTURAL INC. FOR SPECIAL STRUCTURAL INSPECTIONS IN THE PHOENIX AREA AT (602) 443–0303 PRIOR TO STARTING CONSTRUCTION.

STANDARD ABBREVIATIONS

| A.B | ANCHOR BOLT | I.J | - ISOLATION JOINT |
|---------------|--------------------------|---------|--|
| | AGGREGATE BASE COURSE | INFO | |
| A/C | | INT | |
| | ABOVE FINISHED FLOOR | JT | |
| ALT | | K(KIP) | |
| APPROX | | L | |
| @ | | | |
| ARCH | | LBS (#) | |
| BLDG | | LG | |
| BM | | L.L | |
| | BELOW FINISHED FLOOR | | LONG LEG HORIZONTAL |
| B.O.B | | | LONG LEG VERTICAL |
| B.O.D | | LONG | and the second s |
| | | MFR | |
| B.O.F | | MAS | |
| BOTT | | | MASONRY CONTROL JOINT |
| BRG | | MAT'L | |
| CANT | | MAX | |
| C.I.P | | MIN | |
| C.J | | MISC | |
| CL | | N/A | |
| CLR | | N.T.S | |
| | CONCRETE MASONRY UNIT | O.C | |
| COL | | OPNG | |
| CONC | | PREFAB | PREFABRICATED |
| CONT | | PL | |
| CONTR | | plf | POUNDS PER LINEAR FOOT |
| CTR | | psf | POUNDS PER SQUARE FOOT |
| DTL | | psi | POUNDS PER SQUARE INCH |
| DIA | | P.T | POST TENSION OR PRESSURE TREATED |
| DIM | | REINF | REINFORCING |
| D.L | | REQ'D | REQUIRED |
| ø OR DIA | | REV | REVISED/ REVISION |
| DN | DOWN | SCHED | SCHEDULE |
| DWG | | SIM | SIMILAR |
| EA | EACH | S.I.P | STRUCTURAL INSULATED PANEL |
| E.E | EACH END | SLH | SHORT LEG HORIZONTAL |
| E.F | EACH FACE | SLV | SHORT LEG VERTICAL |
| E.J | EXPANSION JOINT | SQ | SQUARE |
| EL | ELEVATION | STD | STANDARD |
| EQ | EQUAL | SW | SHEARWALL |
| E.W | EACH WAY | STL | STEEL |
| EXIST | EXISTING | STRUCT | STRUCTURAL |
| EXP | EXPANSION | T.C | TOP CHORD |
| FIN | FINISH | T.O.B | |
| FLR | FLOOR | T.O.D | |
| FDN | FOUNDATION | T.O.F | |
| F.F | | T.O.L | |
| FT | FOOT | T.O.M | TOP OF MASONRY |
| FTG | | T.O.P | |
| GA | GAGE | | TOP OF STEEL |
| GALV | | T.O.W | |
| | GENERAL CONTRACTOR | TRANS | TRANSVERSE |
| | GLUE-LAMINATED BEAM | | TYPICAL |
| | GENERAL STRUCTURAL NOTES | | UNLESS NOTED OTHERWISE |
| HAS | HEADED ANCHOR STUD | VERT | |
| H.A.S. —————— | HOLLOW CODE | VEIVI. | VERTICAL |

V.S. ---- VALLEY SET

W/C ---- WATER/CEMENT RATIO

W.W.F. ---- WELDED WIRE FABRIC

WD. ---- WOOD

W/O ---- WITHOUT

WP ----- WORK POINT

W/ ---- WITH

CITY OF PHOENIX
Planning and Development Department

By:

(BEAU ADRIAN)

Z019

This set of plans has been reviewed for STRUCTURAL and ARCHITECTURAL requirements prior to issuance of Building Permit and shall be kept at the construction site. Such review shall not prevent the Building Official from requiring correction of errors in the plans where such errors are subsequently found to be in violation of any law c; ordinance.

HC ---- HOLLOW CORE

HG ----- HIP GIRDER

HORIZ. ---- HORIZONTAL

H.P. ---- HIGH POINTS

I.B.C. ---- INTERNATIONAL BUILDING CODE

I.C.C. ---- INTERNATIONAL CODE COUNSEL

I.R.C. ---- INTERNATIONAL RESIDENTIAL CODE

CONSTRUCTION DOCUMENTS

Revision Schedule

No. Date Description

2 05.21.19 CITY COMMENTS

DRAWING TITLE

G.S.N.

21 1

WOOD STUD SHEAR WALL SCHEDULE (SW_) SILL PLATE ATTACHMENT MATERIAL AND ATTACHMENT FOUNDATIONS (1) (5) 1/2" BLOCKED APA "CDX" SHEATHING WITH 10d 5/8" A.B. AT 32" O.C. NAILS AT 6" O.C. AT EDGES & 12" O.C. FIELD 1/2" BLOCKED APA "CDX" SHEATHING WITH 10d 5/8" A.B. AT 24" O.C. NAILS AT 4" O.C. AT EDGES & 12" O.C. FIELD 1/2" BLOCKED APA "CDX" SHEATHING WITH 10d 5/8" A.B. AT 16" O.C. (2)(3)NAILS AT 3" O.C. AT EDGES & 12" O.C. FIELD 1/2" BLOCKED APA "CDX" SHEATHING WITH 10d 5/8" A.B. AT 12" O.C. (2)(3)NAILS AT 2" O.C. AT EDGES & 12" O.C. FIELD 1/2" BLOCKED APA "CDX" SHEATHING WITH 10d (2)(3)(4)SW33 NAILS AT 3" O.C. AT EDGES & 12" O.C. FIELD 5/8" A.B. AT 8" O.C. - TYPICAL EACH FACE 5/8" GYPBOARD SHEATHING WITH #6 DRYWALL

FOOTNOTES:

(1) CAST-IN-PLACE ANCHOR BOLTS MAY BE REPLACED WITH SCREW ANCHORS OR EPOXY BOLTS AT SAME DIAMETER SPACING AND EMBEDMENT.

5/8" A.B. AT 32" O.C.

- (2) WHERE PLYWOOD IS APPLIED ON BOTH FACES OF WALL AND NAIL SPACING IS LESS THAN 6" O.C. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING SHALL
- BE 3x MINIMUM AND NAILS ON EACH SIDE SHALL BE STAGGERED. (3) FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL OR WIDER AND NAILS SHALL BE
- (4) STAGGER NAILS IN SILL PLATE.
- (5) SEE DETAIL 22 FOR ADDITIONAL INFORMATION.

SW8G SCREWS AT 8" O.C. AT EDGES AND 12" O.C. FIELD

(BLOCKED)

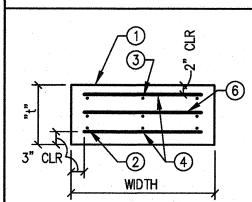
(6) SEE PLAN FOR MINIMUM SHEAR WALL LENGTH.

| | HOLDOWN SCHEDULE | | | | |
|------|------------------|----------------------------------|--------------------------|--------|---|
| MARK | HOLDOWN | POST ATTACHMENT | POST | UPLIFT | ANCHOR |
| HD1 | CS16 | 11-10d TOP AND BOTTOM | 2 - 2X POST (MINIMUM) | 1705# | |
| HD2 | CMST14 | 33-10d EACH END | 2 - 2X POST (MINIMUM) | 6475# | |
| HD3 | HDU8 | 20 - SDS 1/4" X 2 1/2" SCREWS | 6x6 | 7870# | 3/4" DIA ANCHOR BOLT WITH 10' MINIMUM EMBED INTO FOOTING |
| HD4 | HDU5 | 14 - SDS 1/4" X 2 1/2" SCREWS | 2 – 2X POST (MINIMUM) | 5645# | 5/8" DIA ANCHOR BOLT WITH 8" MINIMUM EMBED INTO FOOTING |
| HD5 | HDU14 | 36 - SDS 1/4" X 2 1/2" SCREWS | 6x6 | 14445# | 1" DIA ANCHOR BOLT WITH 12" MINIMUM EMBED INTO FOOTING |

TYPICAL HOLDOWN NOTES:

- ALL HOLDOWNS TO BE SIMPSON HOLDOWNS UNLESS APPROVED OTHERWISE IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD.
- 2. INSTALL HOLDOWNS PER MANUFACTURER'S RECOMMENDATIONS.
- 3. SEE DETAIL 10 FOR ADDITIONAL INFORMATION.

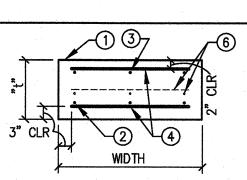
FOOTING SCHEDULE (F_)



- CONCRETE FOOTING. REINFORCING.
- TOP REINFORCING IF SPECIFIED. TRANSVERSE REINFORCING IF
- SPECIFIED 5. CENTER FOOTING UNDER WALL/COLUMN U.N.O.
- 6. REINFORCING CENTERED WHERE INDICATED.
- 7. B.O.F. = -2'-6" MIN BELOW LOWEST ADJACENT FINISHED GRADE OR FINISHED FLOOR ELEVATION. WHICHEVER IS LOWER.

| MARK | SIZE | THICKNESS | REINFORCING | NOTES |
|------|-------------|-----------|---------------|--------------------|
| F1 | 2'-0"x2'-0" | 10" | 3 #5 EACH WAY | waste salahi salah |

WALL FOOTING SCHEDULE (WF_)



- 1. CONCRETE FOOTING. REINFORCING. 3. TOP REINFORCING IF SPECIFIED. 4. TRANSVERSE REINFORCING
- IF SPECIFIED. 5. CENTER FOOTING UNDER WALL U.N.O. 6. CENTER REINFORCING IN FOOTING DEPTH WHERE

INDICATED.

| MARK | WIDTH | THICKNESS | REINFO | RCING | NOTEC |
|------|-------|-----------|-------------------------------|----------------------------------|-------|
| MANN | WIUIN | "t" | CONTINUOUS | TRANSVERSE | NOTES |
| WF1 | 1'-4" | 10" | 2 #5 | | |
| WF2 | 2'-0" | 10" | 2 #5 | | |
| WF3 | 3'-0" | 16" | 4 #5 TOPMOST AND BOTTOMOST | #5 AT 16" O.C. TOP AND BOTTOM | |
| WF4 | 4'-0" | 16" | 5 #5 TOPMOST AND BOTTOMOST | #5 AT 12" O.C. TOP AND BOTTOM | |

WOOD COLUMN SCHEDULE (WC_)

| MARK | SIZE | BASE CONNECTION | NOTES |
|------|------|-----------------|-------|
| WC1 | 6x6 | SEE DETAIL 21 | |

| STEEL COLUMN SCHEDULE (SC_) | | | | | |
|-----------------------------|--------------|---|-------|--|--|
| MARK | SIZE | BASE CONNECTION | NOTES | | |
| SC1 | HSS 3x3x3/16 | 1/2x9x0'-9" STEEL BASE PLATE WITH (4) 5/8" DIA (MIN) ANCHOR BOLTS | (4) | | |

PREFAB WOOD FLOOR TRUSS SCHEDULE (FT_)

- SLOPE PER ARCHITECTURAL DRAWINGS WHERE OCCURS.
- SEE FRAMING PLANS AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. SEE FRAMING PLANS FOR ADDLOADS. ADDLOADS SHALL BE INCORPORATED INTO GIRDER TRUSSES WITH ADDLOADS.
- SPACING = 24" O.C. -TYP U.N.O. PROVIDE 19.2" SPACING AT SPANS GREATER THAN 20'-0". FINAL DESIGN BY TRUSS MANUFACTURER.
- SEE ARCH'L DRAWINGS.
- SEE DETAIL 32 FOR TRUSS END BEARING CONDITIONS.

| MARK | PROFILE | TL/LL (PSF) | SPACING | NOTES |
|------|---------|------------------------------|---|-------|
| FT1 | | 70/40 | (4) | |
| FT2 | | 70/40 | (4) | |
| FT3 | | 70/40 | (4) | |
| FT4 | | 70/40 | (4) | |
| | | Anne zamenana arronioza anni | нични выполняния на воску по собот на посто може мого на почение на почение на почение на почение на почение н С | |

PREFAB WOOD ROOF TRUSS SCHEDULE (RT_)

NOTES: SEE ARCH'L DRAWINGS FOR TRUSS DEPTHS.

MARK

RT1

RT2

RT4

RT5

RT6

RT7

RT9

RT10

RT11

- DESIGN TRUSS FOR 7 PSF (ASD) NET WIND UPLIFT LOAD.
- DESIGN ALL FLAT ROOF TRUSSES FOR 150 LB DEAD LOAD, ADD LOAD AT ANY TOP CHORD PANEL POINT CONCURRENT WITH OTHER LOADS. ALL PARAPETS SHALL BE DESIGNED FOR A 40 PSF (ASD) HORIZONTAL COMPONENT AND
- CLADDING WIND LOAD. TRUSS DESIGNER TO USE SPECIAL LOAD CASE INDICATING THIS PROVIDE 2x4 BOTTOM CHORD BEARING AT 12'-0" O.C. MAX. PROVIDE 2x4 WEB MEMBER
- BRACING AT MIDSPAN OF ALL WEB MEMBERS GREATER THAN 8'-0" LONG. ALL FINAL BRIDGING AND BRACING SHALL BE BY TRUSS MANUFACTURER - TYPICAL. TYPICAL FLAT TRUSS DESIGN LOADS: TOP CHORD DEAD LOAD = 10 PSF, BOTTOM
- CHORD DEAD LOAD= 10 PSF, LIVE LOAD = 20 PSF. TYPICAL TILE ROOF SLOPED TRUSS DESIGN LOADS: TOP CHORD DEAD LOAD = 20 PSF, BOTTOM CHORD DEAD LOAD= 10

PROFILE

VARIES

SLOPE

DL=260 PLF DL=2.5k LL=2.0k DL=0.36k

LL=0k

DL = 0.36k

| ı | | PSF, LIVE LUAD = $20 PSF$. |
|---|----|--|
| | 7. | TRUSS SPACING = 24" O.C. MAX. FINAL SPACING BY TRUSS MANUFACTURER. |
| | | SEE FRAMING PLANS AND ARCH'L AND MECHANICAL DRAWINGS FOR ADD LOADS |
| | | INCLUDING, BUT NOT LIMITED TO FUTURE SOLAR PANEL AREAS AND MECHANICAL UI |
| | 9. | SEE DETAIL 32 FOR TRUSS END BEARING CONDITIONS. |

MAX SPACING

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CITY OF PHOENIX and Development Department

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40/20

85/60

40/20

40/20

40/20

40/20

40/20

U.N.O. 5 1/8x18 GLB (C=STD) WC1 OR (4) 2x6 -5 1/8x18 GLB (C=0") (3) 2x6 (4) $5 \frac{1}{8} \times 18 \text{ GLB } (C=0^{N})$ (3) 2x6 (1) 3 1/8x18 GLB (C=STD) (2) 2x6 (4)(5)5 1/8x18 GLB (C=STD) WC1 OR (4) 2x6 (2)(6)-----6x8 (3) 4 - 2x63 1/8x18 GLB (C=STD) 2 - 2x6----

BEAM SCHEDULE (B_)

FROVIDE SIMPSON HW BEAM HANGER AT PERPENDICULAR BEAM/GIRDER/2-2x PLATE.

6. SIMPSON HUCQ612-SDS BEAM HANGER EACH END TO WOOD COLUMN (5185# MIN) U.N.O.

BEARING STUDS

NOTES

1. AT CONTRACTOR'S OPTION, USE (2) FT2 OR FT4 TRUSS AT WALL BEARING.

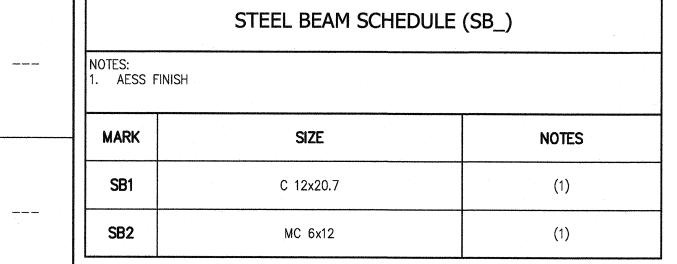
2. AT CONTRACTOR'S OPTION, USE FT1 (3-PLY MIN) TRUSS.

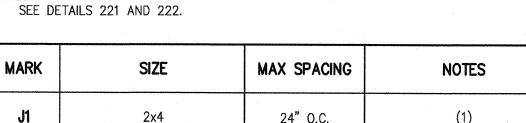
3. PROVIDE SIMPSON HUC BEAM HANGER U.N.O..

SIZE

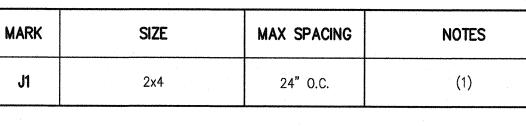
BEAM DEPTH TO MATCH TRUSS DEPTH.

| MARK | SIZE | BEARING STUDS U.N.O. | FULL HEIGHT STUDS | NOTES |
|------|-------------------------|-------------------------|----------------------|-------------|
| H1 | 6x6 | 1 - 2x6 | 2 - 2x6 | |
| H2 | 6x8 | 2 - 2x6 | 2 - 2x6 | |
| Н3 | 5 1/8x18 GLB (C=STD) | WC1 | 2 - 2x6 | |
| H4 | 5 1/8x18 GLB (C=STD) | (2) 2x6 | 2 - 2x6 | (1) |
| Н5 | 6x12 | (2) 2x6 | 2 - 2x6 | |
| Н6 | 5 1/8x10 1/2 GLB | (2) 2x6 | 2 - 2x6 | \triangle |

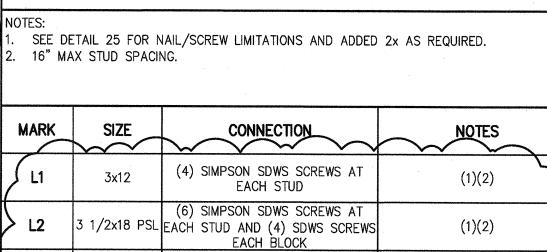




JOIST SCHEDULE (J_)



LEDGER SCHEDULE (L_)



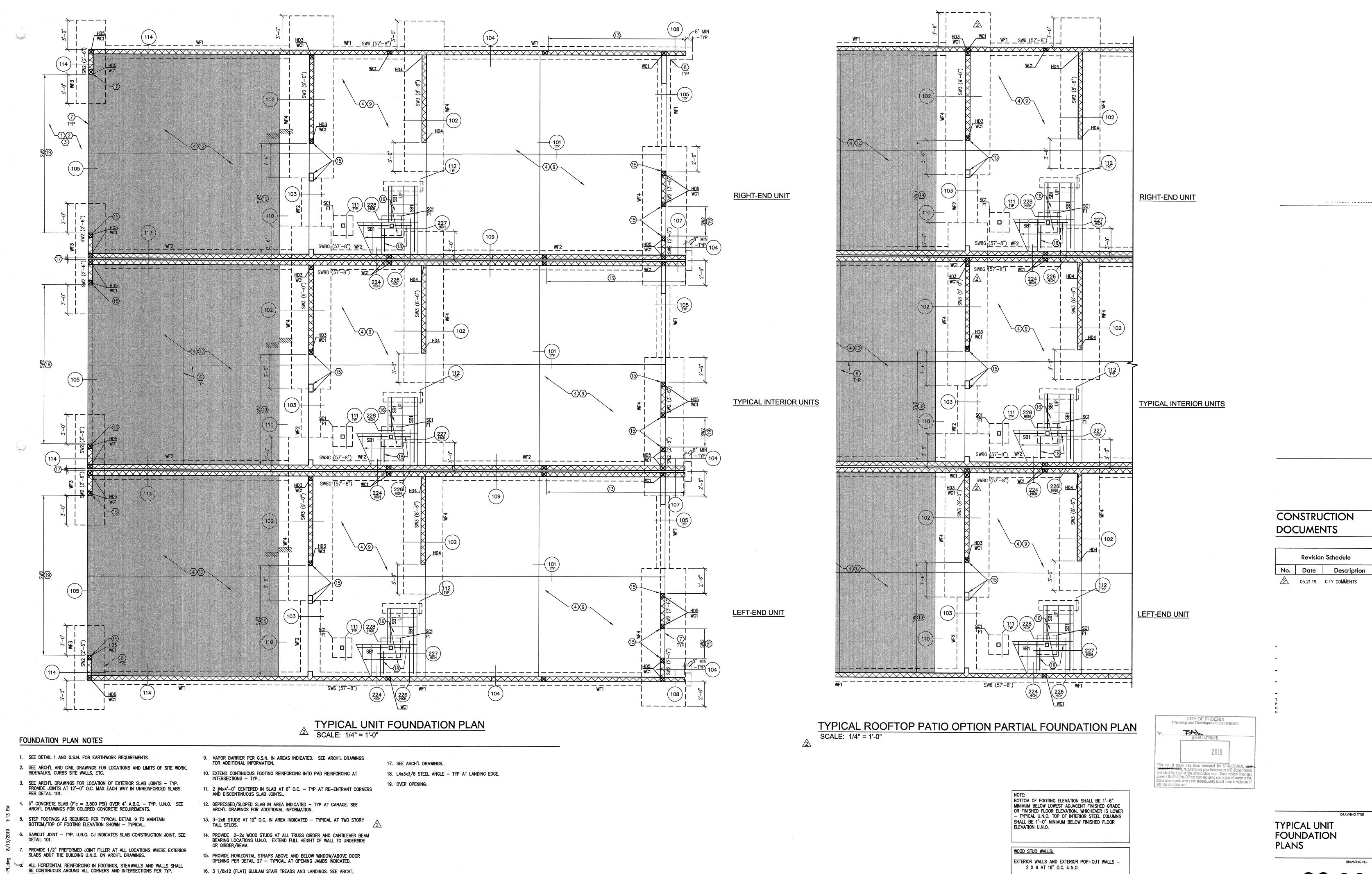
| | MARK | SIZE | CONNECTION | NOTES |
|---|------|---------------|---|------------------|
| 1 | L1 | 3x12 | (4) SIMPSON SDWS SCREWS AT EACH STUD | (1)(2) |
| | L2 | 3 1/2x18 PSL | (6) SIMPSON SDWS SCREWS AT EACH STUD AND (4) SDWS SCREWS EACH BLOCK | (1)(2) |
| | L3 | 2x8 | (2) SIMPSON SDWS SCREWS AT EACH STUD | (2) |
| \ | L4 | 2x12 | (2) SIMPSON SDWS SCREWS AT 16" O.C. TO BEAM | |
| / | 4 | $\overline{}$ | \ \ \ ^ ^ ^ | ~ <i>~</i> ~ ~ ~ |

DOCUMENTS Revision Schedule

CONSTRUCTION

No. Date Description 05.21.19 CITY COMMENTS 08.13.19 CITY COMMENTS - SECOND REVIEW

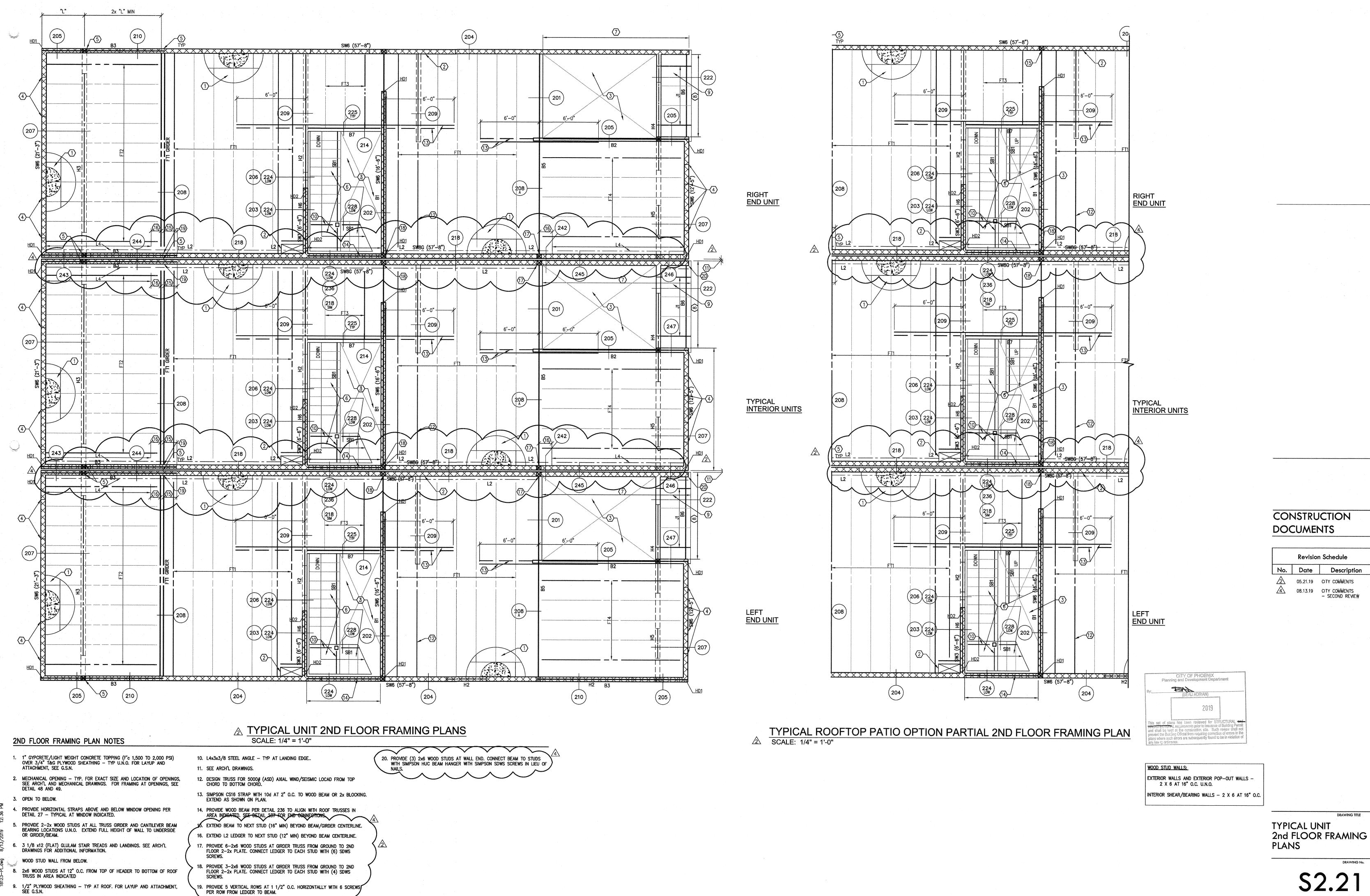
SCHEDULES

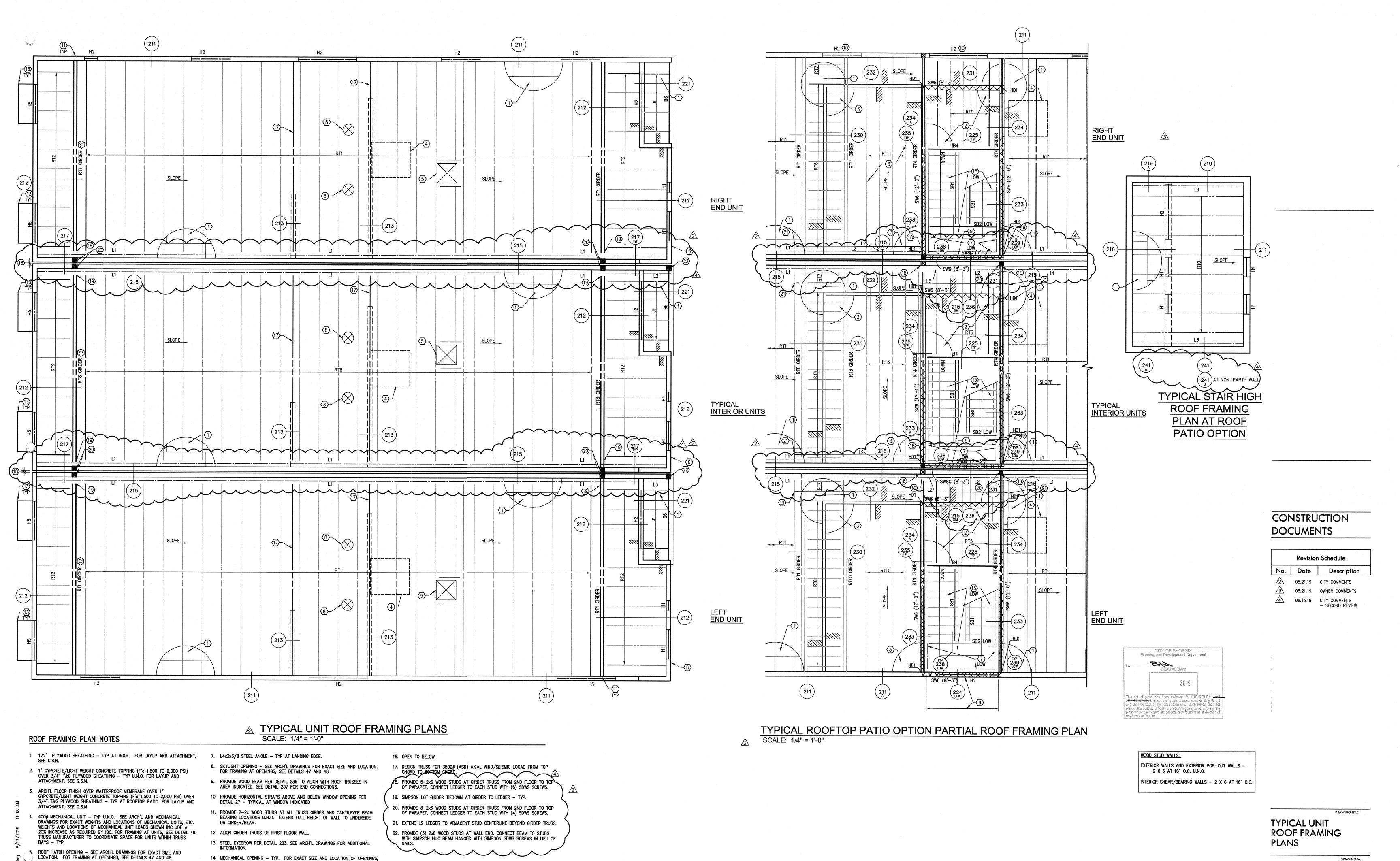


DRAWINGS FOR ADDITIONAL INFORMATION.

S2.11

INTERIOR SHEAR/BEARING WALLS - 2 X 6 AT 16" O.C.





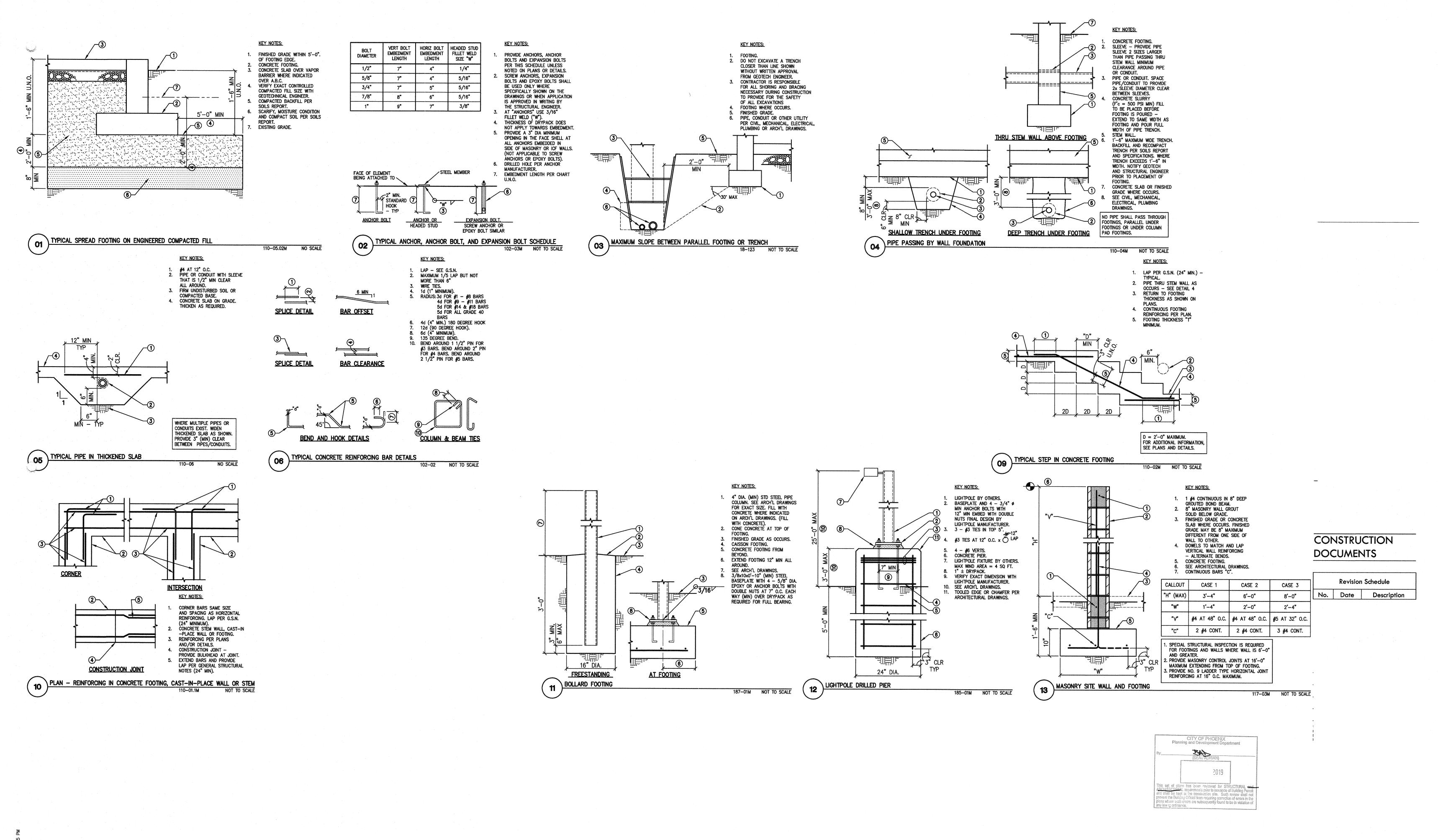
SEE ARCH'L AND MECHANICAL DRAWNGS. FOR FRAMING AT OPENINGS, SEE

15. 3 1/8x12 (FLAT) GLULAM STAIR TREADS AND LANDINGS. SEE ARCH'L

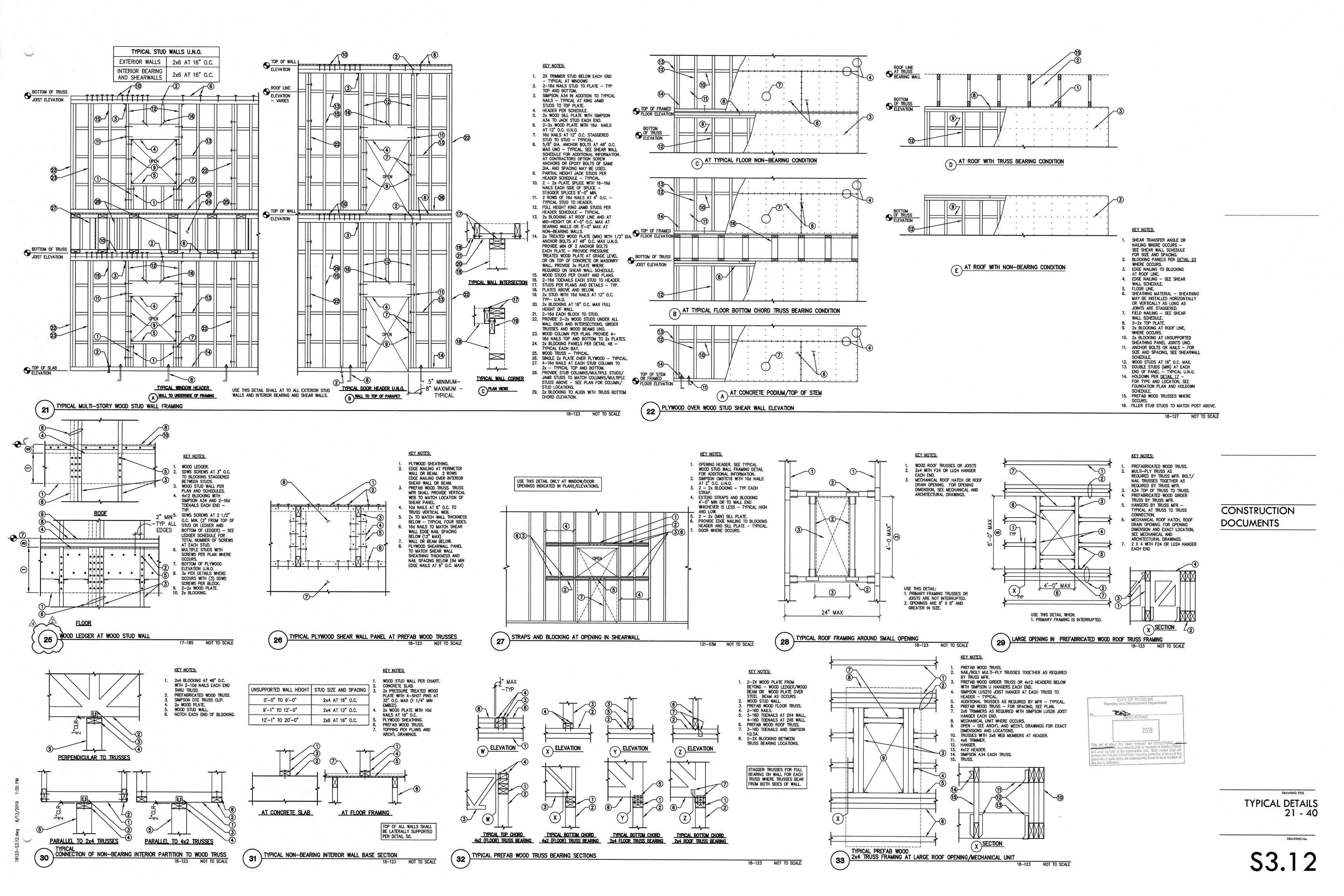
DRÁWINGS FOR ADDITIONAL INFORMATION

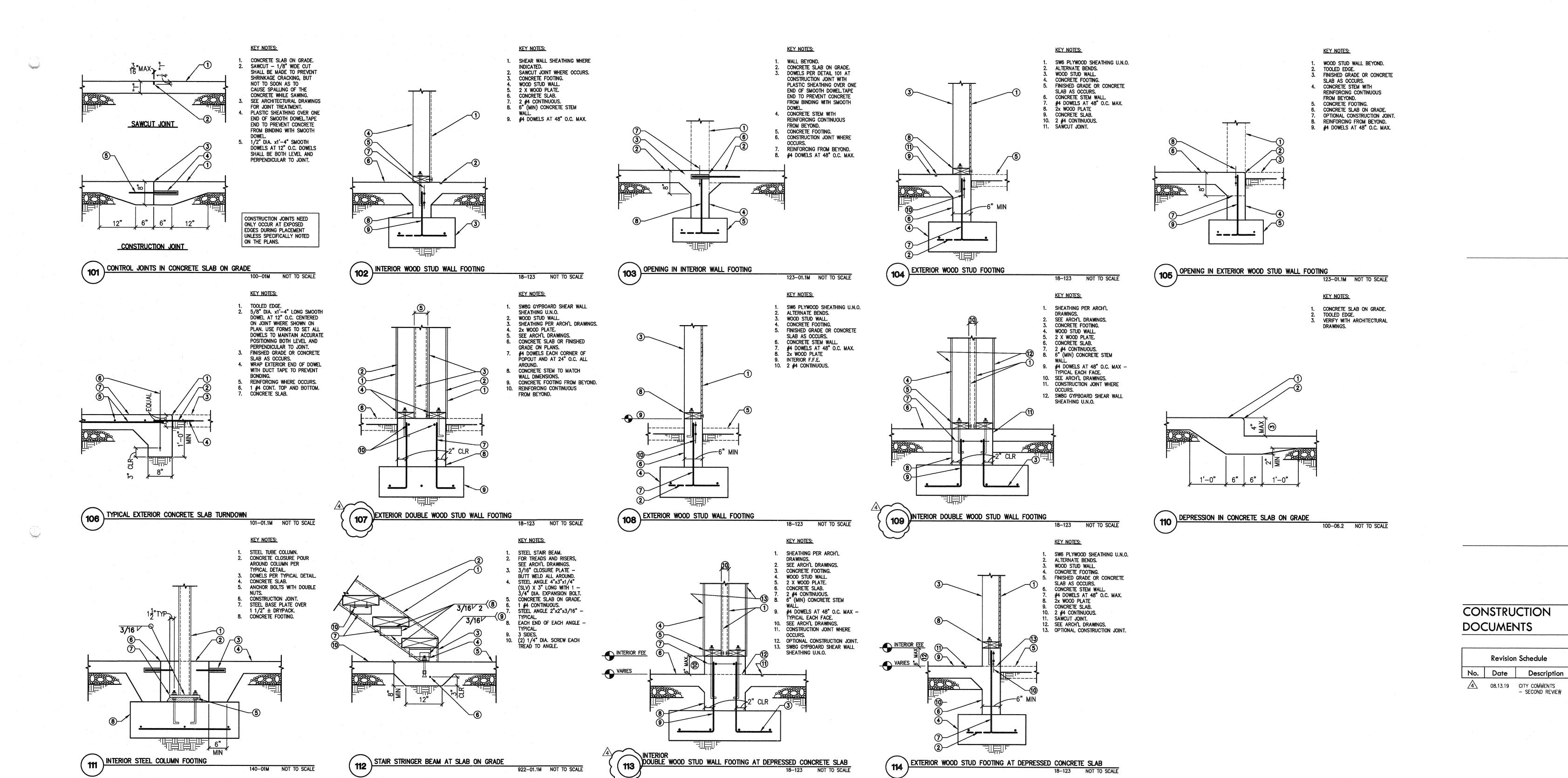
6. ROOF SCUPPER OPENING. SEE ARCH'L DRAWINGS FOR EXACT SIZE AND LOCATION OF OPENING. FOR FRAMING AT OPENINGS, SEE DETAILS 47 AND

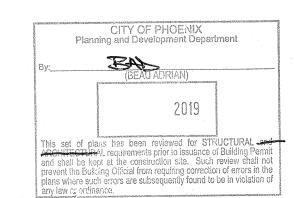
S2.31



TYPICAL DETAILS 01 - 20



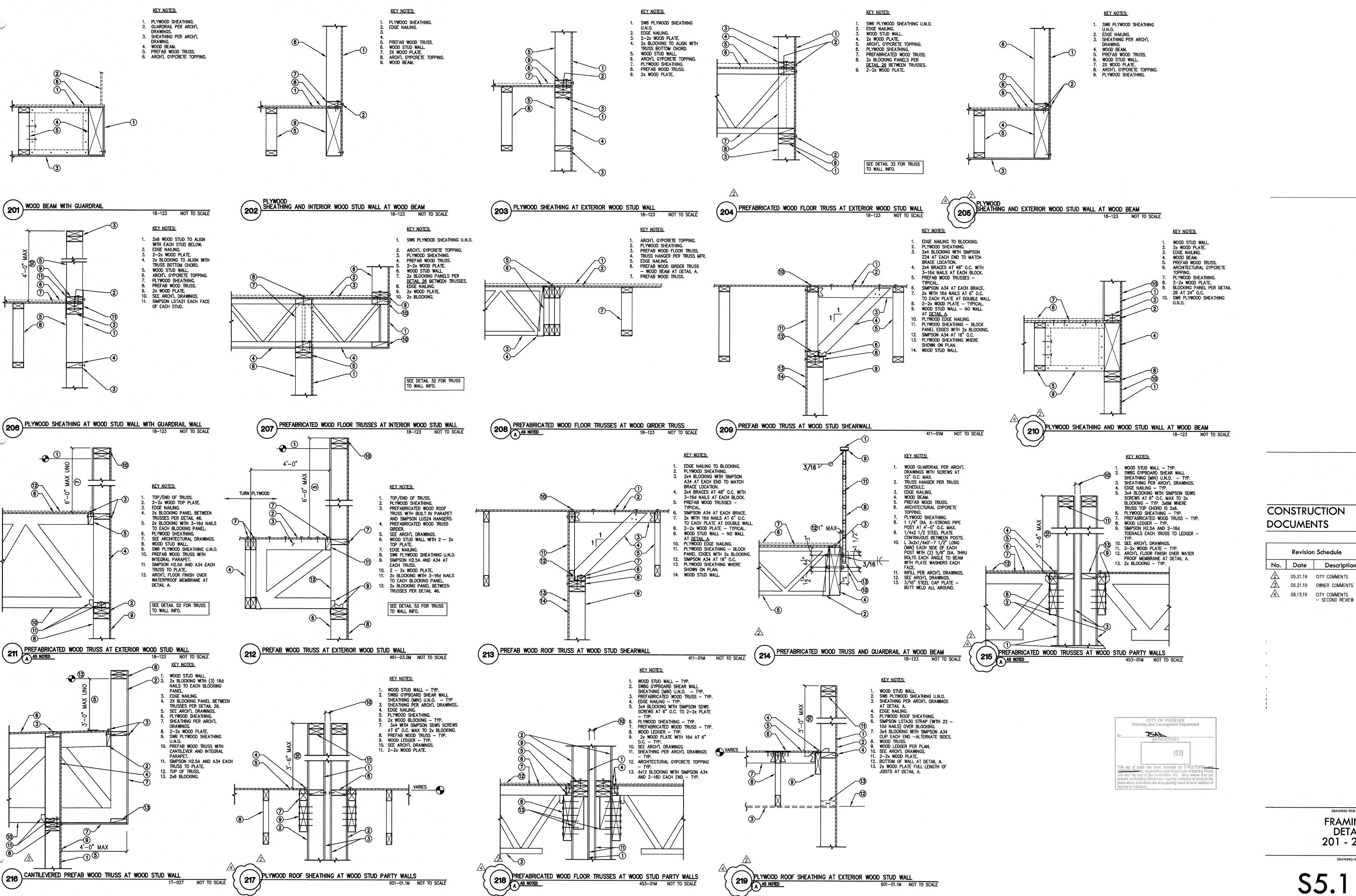




FOUNDATION **DETAILS** 101 - 120

DRAWING No.

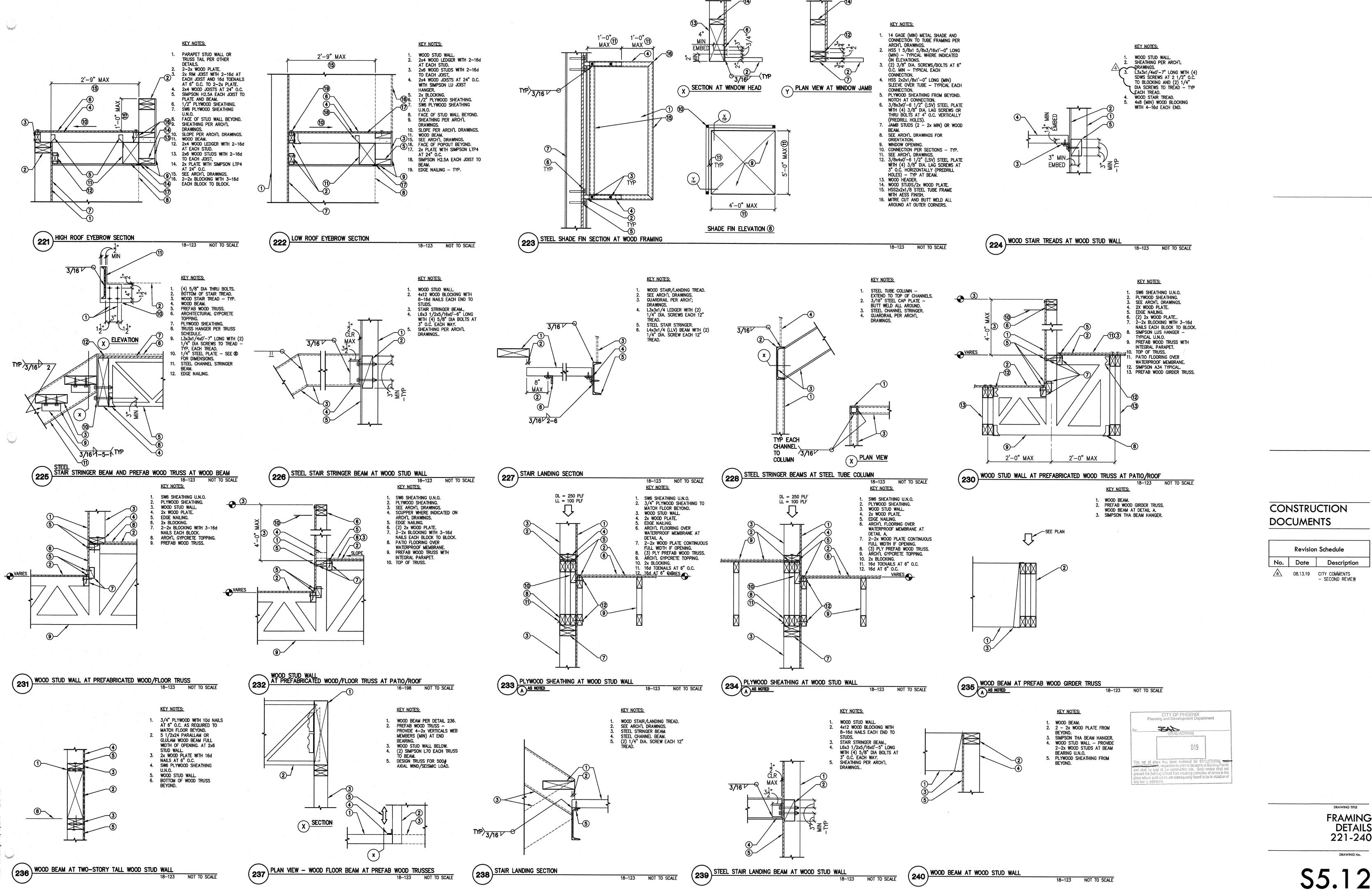
- SECOND REVIEW

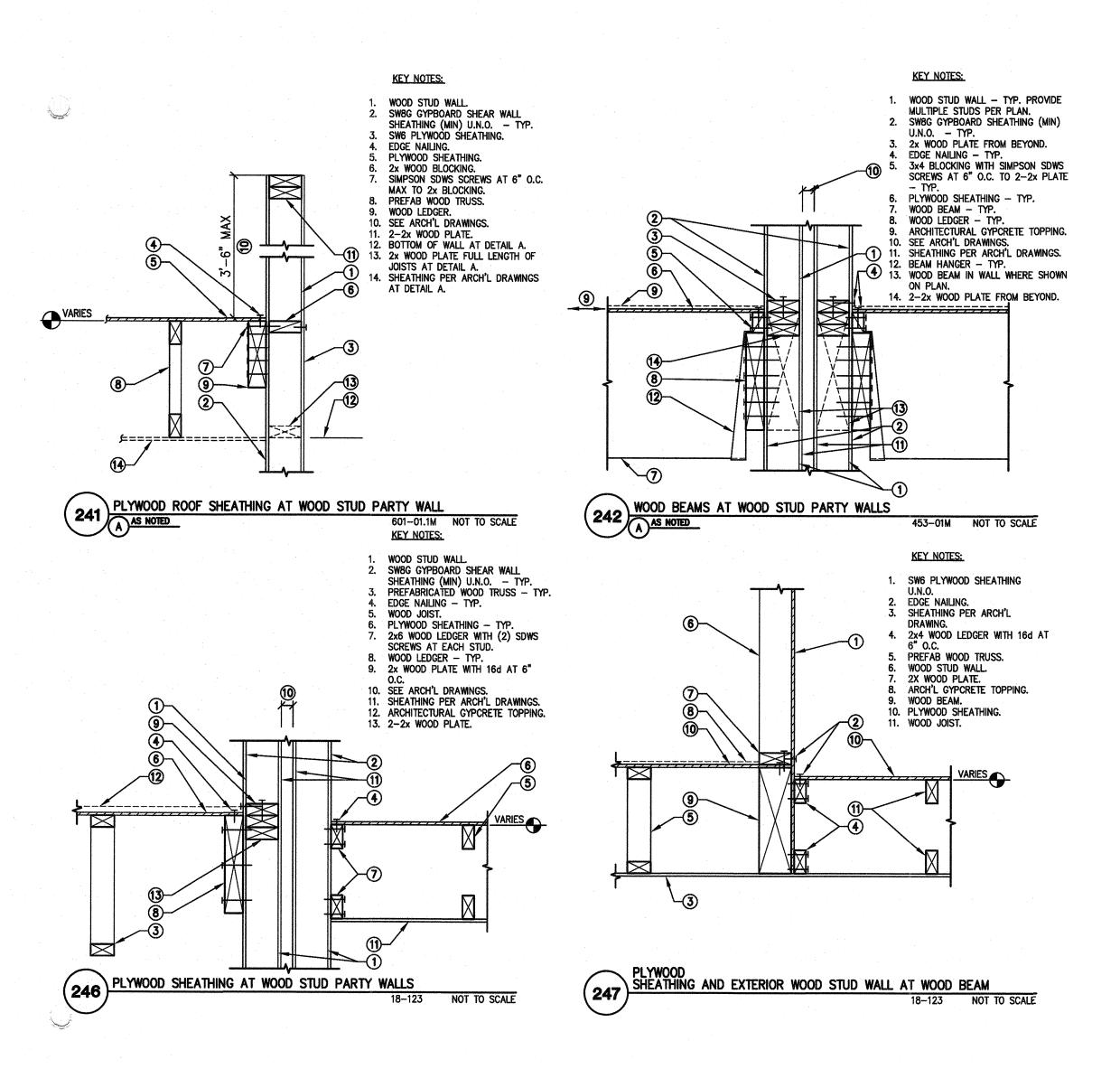


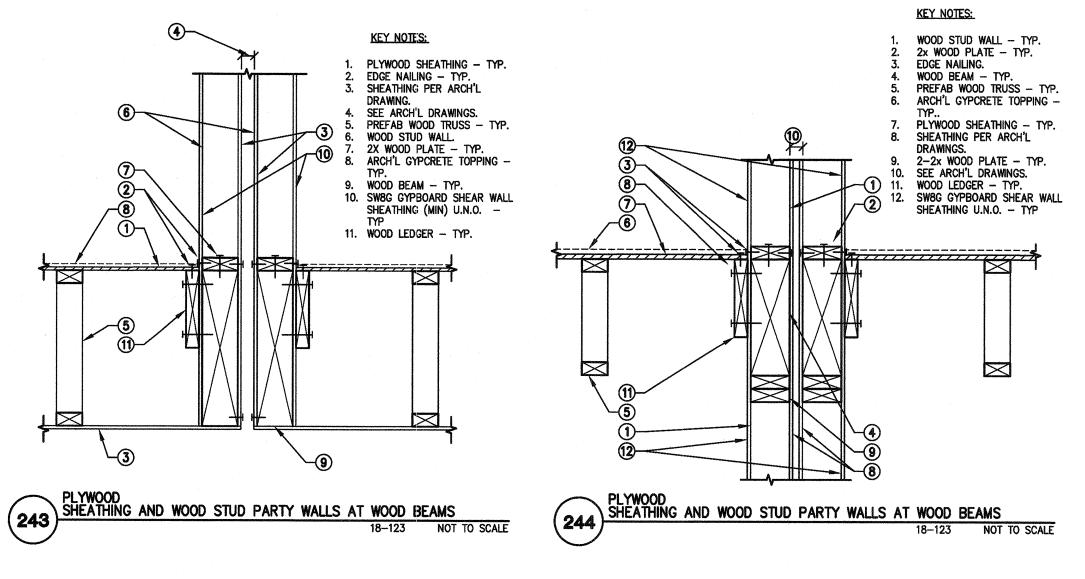
Description 05,21,19 CITY COMMENTS 05.21.19 OWNER COMMENTS 08.13.19 CITY COMMENTS

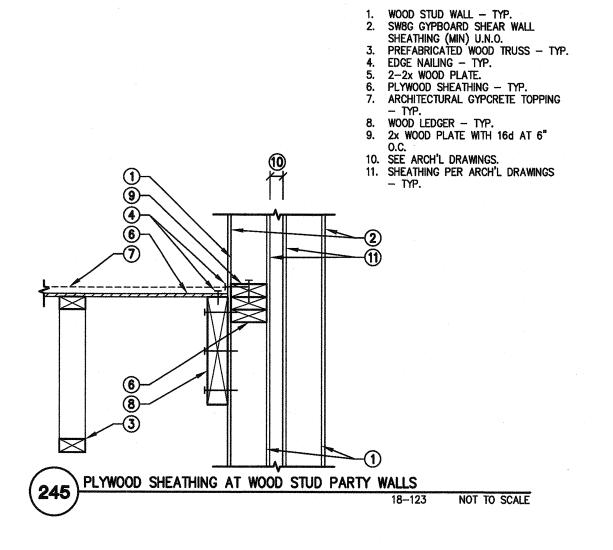
> FRAMING DETAILS 201 - 220

> > DRAWING No.









KEY NOTES:

CONSTRUCTION DOCUMENTS

Revision Schedule

No. Date Description

08.13.19 CITY COMMENTS
— SECOND REVIEW

CITY OF PHOENIX
Planning and Development Department

By:

(BEAU ADRIAN)

This set of plans has been reviewed for STRUCTURAL and ARCHTECHERIA, regularments prior to issuance of Building Permit and shall be kept at the construction site. Such review shall not prevent the Building Official from requiring correction of errors in the plans where such according to make the property and to be in violation of the property found to be in violation of the property of

FRAMING DETAILS 241-260

\$5.13