LOADING TABLE AND CODE INFORMATION **DESIGN CODE** IBC 2018 RISK CATEGORY AISC= AMERICAN INSTITUTE OF STEEL CONSTRUCTION DEAD LOADS A. TYPICAL ROOF DEAD LOAD 15 PSF ASTM= AMERICAN SOCIETY FOR TESTING AND MATERIALS B. TYPICAL FLOOR DEAD LOAD COLLATERAL LOADS (NON-REDUCIBLE) A. ROOF COLLATERAL LOAD (INCLUDES 10 PSF SOLAR) 15 PSF B. TYPICAL FLOOR DEAD LOAD LIVE LOADS A. TYPICAL ROOF LIVE LOAD 20 PSF B. TYPICAL FLOOR LIVE LOAD 100 PSF C. STAIR AND LANDING LIVE LOAD SNOW LOAD A. GROUND SNOW LOAD (Pg) 20 PSF B. FLAT ROOF SNOW LOAD (Pf) C. SNOW EXPOSURE FACTOR (Ce) 1.0 D. THERMAL FACTOR (Ct) 1.0 E. SNOW LOAD IMPORTANCE FACTOR (Is PER CODE F. SNOW DRIFT WIND LOAD DESIGN CRITERIA A. ULTIMATE DESIGN WIND SPEED (Vult) B. RISK CATEGORY WIND IMPORTANCE FACTOR WIND EXPOSURE CATEGORY E. INTERNAL PRESSURE COEFFICIENT (GCpi) +/- 0.18 SEISMIC LOAD DESIGN CRITERIA A. SHORT PERIOD ACCELERATION (SS) 0.19 B. LONG PERIOD ACCELERATION (S1) 0.11 C. SITE CLASS D. SHORT PERIOD RESPONSE (SDS) 0.2 E. LONG PERIOR RESPONSE (SD1) 0.17 F. SEISMIC DESIGN CATEGORY G. IMPORTANCE FACTOR (Ie) 1.0 H. RISK CATEGORY ANALYSIS PROCEDURE SEISMIC FORCE RESISTING SYSTEM LFSW K. RESPONSE MODIFICATION FACTOR (R) 6 1/2 L. SYSTEM OVERSTRENGTH FACTOR  $(\Omega)$ M. DEFLECTION AMPLIFICATION FACTOR (Cd)

**ABBREVIATIONS** 

A.R.= ANCHOR ROD

A W = AFTER WELDING

B.O.A.= BACK OF ANGLE

13. B.O.S.= BOTTOM OF STEEL

B.O.F. = BOTTOM OF FOOTING

1. CMU= CONCRETE MASONRY UNIT

7. D.B.A.= DEFORMED BAR ANCHOR

DIAMETER

DEAD LOAD

DETAIL

DRAWING

FI EVATION

FINISHED FLOOR

51. G.C.= GENERAL CONTRACTOR

54 HAS = HEADED ANCHOR STUD

. I.D.= INSIDE DIAMETER

56. IBC= INTERNATIONAL BUILDING CODE

1. J.B.E.= JOIST BEARING ELEVATION

67. LGSF= LIGHT-GAGE STEEL FRAMING

3. LVL= LAMINATED VENEER LUMBER

. MEP= MECHANICAL, ELECTRICAL, PLUMBING

1000 POUNDS

63. KSI= KIPS PER SQUARE INCH

LENGTH

LIVELOAD

70. LLV= LONG LEG VERTICAL

LONG= LONGITUDINAL

L.P.= LAYOUT POINT

75. MAX= MAXIMUM

80. MIN= MINIMUM

84 NS = NEAR SIDE

85 NTS = NOTTO SCAL

82 MTI = MFTAI

MECH= MECHANICAL

78. MFR= MANUFACTURER

81. MISC= MISCELLANEOUS

83. N.I.C.= NOT IN CONTRACT

86. N.W.= NORMAL WEIGHT

O.C.= ON CENTER

88. O.D.= OUTSIDE DIAMETER

97. PT= POST TENSIONED

103. SDI= STEEL DECK INSTITUTE

105. SJI= STEEL JOIST INSTITUTE

SNOW LOAD

THICKNESS

120. U.N.O.= UNLESS NOTED OTHERWISE

22. VLD= VERTICAL LEG DOWN

WIND LOAD

126. WWF= WELDED WIRE FABRIC

112. T&B= TOP AND BOTTOM

114. T.O.F.= TOP OF FOOTING

115 TOP = TOP OF PEDESTA

116 TOS = TOP OF STEEL

117. T.O.W.= TOP OF WALL

1. VERT= VERTICAL

125. W.P.= WORK POINT

127. (#)= QUANTITY

119. UL= ULTIMATE LOAD

98. REINF= REINFORCING

99. REQ= REQUIRE 100. RTU= ROOF TOP UNIT

107. S.O.G.= SLAB ON GRAD

109. STD= STANDARD

113. T.O.= TOP OF

118. TYP= TYPICAL

108. SPECS= SPECIFICATIONS

101. S.C.= SLIP CRITICAL

102. SCH= SCHEDULE

104. SIM= SIMILAR

106. SL=

110. STL=

123. W=

124. WL=

89. OPP= OPPOSITE / OPPOSITE HAND

1. P.C.F.= POUNDS PER CUBIC FOOT

95. PSF= POUNDS PER SQUARE FOOT

96. PSI= POUNDS PER SQUARE INCH

PAF= POWDER ACTUATED FASTENER

. PEMB= PRE-ENGINEERED METAL BUILDING

POUNDS PER LINEAR FOOT

94. PPT= PRESERVATIVE PRESSURE TREATED

69. LLH= LONG LEG HORIZONTAL

LIGHTWEIGH1

79. MIL= THOUSANDS OF AN INCH

POUND

EQUAL

EXPANDED POLYSTYRENE

CONCRETE COMPRESSIVE STRENGTH

EXISTING

BAR= RFBAR

. BRG= BEARING

5. BTM= BOTTOM

22. COL= COLUMN

CONC= CONCRETE

24. CONN= CONNECTION

25. CONT= CONTINUOUS

. D.E.= DECK EDGE

34. EA= EACH 35. E.F.= EACH FACE

39. E.W.= EACH WAY

40. EXT= EXTERIOR

43. FND= FOUNDATION

44. F.O.W.= FACE OF WALL

45. F.S.= FAR SIDE

46. FTG= FOOTING

52. (H)= HIGH

47. F.V.= FIELD VERIFY

49. GALV= GALVANIZED

50. G.B.= GRADF BEAM

53. H&L= HIGH & LOW

55. HORIZ= HORIZONTAL

58. INFO= INFORMATION

60. J.B.= JOIST BEARING

LOW

59. INT= INTERIOR

2. KIP=

64. (L)=

66 IB=

68 II=

48. GA= GAGE / GAUGE

D.B.= DECK BEARING

CI R=

29. DIA= 30. DL=

33. E=

36. EL=

37. EPS=

38. EQ=

42. F.F.=

31. DTL= 32. DWG=

16. CANT= CANTILEVERED

). CL= CENTERLINE

C.I.P.= CAST-IN-PLACE

). B.O.= BOTTOM OF

ACI= AMERICAN CONCRETE INSTITUTE

ARCH= ARCHITECTURE/ARCHITECT

AWS= AMERICAN WELDING SOCIETY

18. C.J.P.= COMPLETE JOINT PENETRATION WELD

AISI= AMFRICAN IRON AND STEEL INSTITUTE

22 PSF 10 PSF 40 PSF 20 PSF 107 MPH

## SYMBOL LEGEND TAG OR SYMBOL DESCRIPTION - FOOTING TYPE (SEE SCHEDULE) COLUMN TYPE (SEE SCHEDULE) BASEPLATE TYPE (SEE COLUN SCHEDULE AND PLAN) SHEARWALL TYPE (SEE NORTH ARROW (COORDINATE **EXACT DIRECTION w/ ARCH AN** CIVIL DWGS) - MOMENT CONNECTION (SEE PLAN AND NOTES) - CENTERLINE - KEYNOTE - ELEVATION MARKER XXXXXXXXXX $\forall$ xxxxxxxxx WELD SYMBOL CMU WALL TAG PEDESTAL TAG - REINFORCING BAR REVISION TAG BRACE MEMBER SYMBOL

WALL LEGEND - HATCH INDICATES 8" CMU WALL, SEE SHEET S5.1 FOR CMU REINFORCING - HATCH INDICATES 12" CMU WALL, SEE SHEET S5.1 FOR CMU REINFORCING - HATCH INDICATES CONCRETE WALL, SEE PLAN FOR THICKNESS AND REINFORCING - HATCH INDICATES 2x6 BEARING WALL, SEE WALL PLAN FOR SCHEDULE

CONCRETE NOTES **MEANS AND METHODS** DESIGN LOADINGS AND STRUCTURAL ANALYSIS IS BASED ON CODE PRESCRIBED LOADS FOR THE

COMPLETED STRUCTURE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION. THIS STRUCTURE IS DESIGNED TO BE STABLE AS A COMPLETE WHOLE ANY AND ALL TEMPORARY BRACES AND SHORING REQUIRED TO RESIST AL LOADS DURING CONSTRUCTION SHALL BE DESIGNED AND SUPPLIED BY THE CONTRACTOR. HEAVY LOADS THAT EXCEED 75% OF ALLOWABLE LIVE LOADS SHOWN ON THE PLANS. FOR TEMPORARY EQUIPMENT. CONSTRUCTION MATERIALS, OR OTHER LOADS NOT SHOWN IN THE CONTRACT DOCUMENTS, SHALL NOT BE PLACED OR SUPPORTED FROM ELEVATED STRUCTURE WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

**DEFERRED SUBMITTAL NOTES** FOR REVIEW AT A LATER DATE:

THE FOLLOWING SUBMITTALS SHALL BE SUBMITTED PRE-ENGINEERED WOOD JOISTS STAIR FRAMING SUBMITTALS SHALL INCLUDE PLANS, DETAILS AND CALCULATIONS SEALED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.

CONCRETE FOR FOUNDATIONS, FOOTINGS AND INTERIOR SLABS ON GRADE SHALL BE AS FOLLOWS: 28-DAY COMPRESSIVE STRENGTH: 3000 PSI MAXIMUM WATER TO CEMENT RATIO: 0.52

CONCRETE FOR EXTERIOR USES, SIDEWALKS, RETAINING WALLS, BASEMENT WALLS, AND EXTERIOR SLABS ON GRADE SHALL BE AS FOLLOWS: 28-DAY COMPRESSIVE STRENGTH: MAXIMUM WATER TO CEMENT RATIO: 0.45 AIR-ENTRAINMENT

AIR-ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260 CONCRETE FOR STAIR LANDING SLABS ON METAL DECK SHALL BE AS FOLLOWS: 28-DAY COMPRESSIVE STRENGTH: 4000 PSI MAXIMUM WATER TO CEMENT RATIO: 0.45 NO LIME SAND FINE AGGREGATE MAY BE USED IN CONCRETE EXPOSED TO WEATHER, VIEW, OR IN HORIZONTAL APPLICATIONS

ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. LAP FABRIC 9" ON SIDES AND ENDS. MAINTAIN WIRE 1" TO 2" BELOW TOP SURFACE OF SLABS ON GRADE. PROVIDE CHAIRS, BOLSTERS OR OTHER APPROVED MEANS TO PROPERLY LOCATE REINFORCING IF ADDITIONAL FLOWABILITY IS REQUIRED FOR

PLACEMENT OF ANY CONCRETE MIX. A WATER-REDUCING ADDITIVE CONFORMING TO ASTM C494. TYPE A D F OR E SHALL BE USED NO ADDITIONA WATER MAY BE ADDED TO THE MIX AT THE SITE SLUMP FOR CONCRETE CONTAINING WATER-REDUCING OR HIGH-RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 8" AFTER ADMIXTURE IS ADDED TO CONCRETE WITH A 2"-4" SLUMP. INTERIOR SLABS SHALL HAVE SMOOTH TROWELED FINISH AND EXTERIOR SLABS SHALL HAVE LIGHT BROOM FINISH, UNO. ALL SLABS SHALL HAVE A CURING COMPOUND COMPLYING WITH ASTM C309 APPLIED TO SURFACE. EXCEPTIONS ARE WHERE FLOOR FINISHES REQUIRE SCRATCH FINISH AND WHERE CURING COMPOUNDS ARE NOT COMPATIBLE WITH ADHESIVES, ETC.

CONTRACTOR SHALL COORDINATE ALL CONCRETE SEALERS CURING COMPOUNDS FTC TO ENSURE COMPATIBILITY WITH FLOORING ADHESIVES FOR FLOORING INDICATED IN THE FLOOR PLANS AND FLOOR FINISH PLANS AS APPLICABLE. TESTING OF FRESH CONCRETE SHALL BE DONE BY A QUALIFIED TESTING LABORATORY RETAINED BY THE OWNER AND APPROVED BY THE ENGINEER. TESTING SHALL INCLUDE:

AIR CONTENT CONCRETE TEMPERATURE 28 DAY COMPRESSIVE STRENGTH NOTE ANY WATER OR ADMIXTURES ADDED ON-REFER TO ASTM C172 AND C94. PERFORM ONE SLUMP AND ONE AIR CONTENT TEST FOR EACH DAYS POUR AND ADDITIONAL TESTS WHEN THE CONCRETE CONSISTENCY SEEMS TO HAVE CHANGED IN THE OPINION OF THE INSPECTOR. REFER TO ASTM C143 C173 AND C231 PERFORM TEMPERATURE TESTS HOURLY WHEN THE AMBIENT AIR TEMPERATURE IS BELOW 40 DEGREES F OR ABOVE 80 DEGREES F AND

ONE TEMPERATURE TEST FOR EACH SET OF COMPRESSIVE-STRENGTH SPECIMENS. REFER TO ASTM C1064. PERFORM ONE COMPRESSIVE-STRENGTH TEST FOR EACH DAYS POUR AND AN ADDITIONAL TEST FOR EACH 50 CUBIC YARD MORE THAN THE FIRST 25 CUBIC YARD. TEST ONE SPECIMEN AT 7 DAYS AND 2 SPECIMENS AT 28 DAYS. REFER TO ASTM C31 AND C39. CONCRETE FOR GROUTING MASONRY UNITS IS SPECIFIED IN CONCRETE MASONRY UNIT NOTES. WHERE FOOTINGS, WALLS, OR OTHER STRUCTURA

FLEMENTS INTERSECT, CORNER OR TEE, PROVIDE

CORNER BARS WITH REQUIRED LAP LENGTHS TO PROVIDE CONTINUITY OF HORIZONTAL STEEL REINFORCING LINO PROVIDE A MINIMUM OF 3" COVER FOR ANCHOR **BOLTS AND LOCATE HORIZONTAL REINFORCEMENT** TO THE OUTSIDE FOR ANCHOR BOLT CONTAINMENT, PROVIDE TEMPORARY SHORING AND BRACING OF A STRUCTURAL AND MISCELLANEOUS ELEMENTS UNTIL CONCRETE HAS OBTAINED 80% OF DESIGN STRENGTH AND ALL PERMANENT BRACING ELEMENTS ARE

PROVIDE CONTROL JOINTS IN SLABS ON GRADE AT APPROXIMATELY 10 FEET ON CENTER IN EACH DIRECTION. JOINTS SHALL FORM NEARLY SQUARE SHAPES. CONTRACTOR SHALL COORDINATE JOINT LOCATIONS WITH TILE LAYOUT AS SHOWN IN THE FLOOR PLANS AND FLOOR FINISH PLANS AS APPLICABLE WHERE DOWELS, BOLTS OR INSERTS ARE CALLED TO BE ANCHORED TO CAST IN PLACE OR PRECAST

CONCRETE ELEMENTS USING EPOXY ADHESIVES, USE ANCHORAGE SYSTEM EQUAL TO "HILTI" HIT RE 500 INJECTION ADHESIVE. FOLLOW ALL MANUFACTURERS RECOMMENDATIONS. ALTERNATE ANCHORAGE SYSTEMS MAY BE USED WITH ENGINEER'S PRIOR SAWN CONTROL JOINTS SHALL BE PLACED AS SOON AS CONCRETE IS ABLE TO BE SAWN WITHOUT PULLING OUT AGGREGATE FROM FLOOR. SLABS SHALL NOT BE LEFT OVERNIGHT. OR ANY

REASONABLE AMOUNT OF TIME WITHOUT SAWING JOINTS. WEATHER IS CRITICAL TO SCHEDULE OF SAWN JOINTS. IF LARGE AREAS OF SLAB ARE POURED AT ONE TIME. SEVERAL SAWS MAY BE REQUIRED TO PROVIDE JOINTS IN TIME TO PREVENT SHRINKAGE CRACKING. PROPER JOINTING OF SLAB IS CRITICAL. REFER TO ACI MANUAL OF CONCRETE PRACTICE FOR PROPER JOINTING TECHNIQUES DETAILING, MATERIALS AND INSTALLATION OF CONCRETE REINFORCING STEEL SHALL MEET REQ. AS SET FORTH BY CRSI AND THE AMERICAN CONCRET NSTITUTE AND THE APPLICABLE BUILDING CODE. SHOP DRAWINGS SHALL BE SUBMITTED INDICATING COMPLETE INFORMATION REQUIRED FOR CONSTRUCTION OF THE REINFORCED CONCRETE ELEMENTS. SHOP DRAWINGS SHALL INCLUDE

> LAYOUT AND DIMENSIONS OF REINFORCING INCLUDING ANY OPENINGS CONVENTIONAL REINFORCEMENT DETAILS, CONNECTION DETAILS,

WHEN PLACING CONCRETE IN HOT WEATHER, REFER TO ACI 301, WHEN PLACING CONCRETE IN COLD

PROCEDURES AND SEQUENCES ETC.

WEATHER, REFER TO ACI 306.1.

GENERAL FOUNDATION & SLAB NOTES

FARRIC (WWF)

D448 FOR GRADATION

SURFACE OF SLABS ON GRADE. PROVIDE

APPROVED IN WRITING BY THE ENGINEER T

BASE SHALL BE #57 STONE OR APPROVED

EQUAL UNLESS OTHERWISE INDICATED IN

GEOTECHNICAL REPORT. REFER TO ASTM

POLYPROPYLENE FIBRILLATED FIBERS PER

SUBSTITUTED FOR THE WWF REINFORCING

CONCRETE HAS CURED SHALL BE TORCHED

OFF. THIS SUBSTITUTION IS NOT ALWAYS

ANY VISIBLE FIBERS REMAINING AFTER

APPROPRIATE AND SHALL NOT BE MADE

WITHOUT WRITTEN APPROVAL OF THE

DRAINAGE FILL: SEE GEOTECHNICAL REPORT.

**EXCAVATIONS AND BACKFILL MATERIALS AT AN** 

SOIL BEARING CAPACITY AND COMPACTION OF

CONTRACT SPECIFICATIONS AND THESE NOTES

FOUNDATION DRAINS AROUND PERIMETER OF

BUILDING AND/OR UNDER THE SLAB-ON-GRADE

SHALL BE REQUIRED AND JESO SHALL RUN TO

DAYLIGHT OR EXTENDED TO THE STORM SEWER

AT RETAINING WALLS FILTER FABRIC SHALL BE

COMPACTED SUBGRADE PERFORATED DRAINS

SHALL ALSO BE WRAPPED WITH FILTER FABRIC

PLACED AT THE INTERFACE BETWEEN THE

DRAINAGE FILL AND EITHER NATURAL OR

CONTRACTOR SHALL COORDINATE WITH THE CIVIL

BACKFILL MATERIALS WITH REGARD TO THE

REQUIREMENTS OF THE SOILS REPORT THE

SITE DRAWINGS TO DETERMINE WHETHER

APPROPRIATE MOISTURE CONTENT FOR PROPER

CONTRACTOR IS RESPONSIBLE TO MAINTAIN

IN SOME CASES 1.5 POLINDS (MIN) OF

CUBIC YARD REINFORCING MAY BE

PROPERLY LOCATE REINFORCING. GRANULAR

BOLSTERS, CHAIRS OR OTHER MEANS

A SOIL INVESTIGATION HAS BEEN DONE FOR THIS

SITE. THIS REPORT SHALL BE CONSIDERED A PART WITH ASTM C-90 WITH NET AREA COMPRESSIVE OF THESE FOUNDATION NOTES. IT IS THE STRENGTH OF 1,900 PSI. STANDARD WEIGHT CONTRACTOR'S RESPONSIBILITY TO OBTAIN, BE CONCRETE BLOCK SHALL BE USED BELOW GRADE, FAMILIAR WITH, AND ADHERE TO THE SIZES AS INDICATED ON PLANS. f'm SHALL BE 1,500 RECOMMENDATIONS IN THE REPORT. IF ANY RECOMMENDATION IN THE REPORT CONFLICTS MORTAR SHALL BE TYPE "S" WITH COMPRESSIVE WITH OTHER REQUIREMENTS IN THE CONTRAC STRENGTH EQUAL TO 1.800 PSI, EXCEPT BELOW DOCUMENTS NOTIFY THE ENGINEER FOR GRADE TYPE "M" SHALL BE USED WITH CLARIFICATION (FOR BIDDING PURPOSES UTILIZE COMPRESSIVE STRENGTH EQUAL TO 2,500 PSI, UNC THF MORE STRINGENT REQUIREMENT UNTIL MIX MORTAR FROM TYPE I PORTLAND CEMENT (TYPE FORMAL CLARIFICATION IS ISSUED). III MAY BE USED FOR COLD WEATHER IN THE AREA OF THE STRUCTURE. EXISTING CONSTRUCTION), HYDRATED LIME (ASTM C-207), AND ORGANIC MATERIAL, UNSUITABLE SOIL, AGGREGATE (ASTM C-144). ABANDONED FOOTINGS, UTILITIES AND ANY OTHER ALL CELLS BELOW GRADE AND ALL CELLS TO EXISTING UNSUITABLE MATERIALS SHALL BE RECEIVE STEEL REINFORCING SHALL BE GROUTED REMOVED IN ACCORDANCE WITH THE SOLID. ADDITIONAL CELLS TO RECEIVE GROUT ARE GEOTECHNICAL REPORT. ALL FILL AND SHOWN IN DETAILS. COMPACTION SHALL BE AS RECOMMENDED BY THE CONCRETE GROUT USED TO FILL VOIDS SHALL GEOTECHNICAL REPORT. ADEQUATE FIELD CONSIST OF CEMENT, 3/8 INCH AGGREGATE, AND DENSITY AND MOISTURE CONTENT TESTS SHALL BE FINE AGGREGATE. MASONRY MORTAR SHALL NOT PERFORMED TO ENSURE COMPLIANCE WITH BE USED WHERE GROUT IS CALLED FOR. REQUIREMENTS. ALTERNATE MIX DESIGNS WILL BE CONSIDERED IF

CONCRETE MASONRY UNIT NOTES

CONCRETE MASONRY UNITS (CMU's) SHALL COMPLY

TESTING OF CONTROLLED STRUCTURAL FILL SHALL SUBMITTED TO THE ENGINEER FOR APPROVAL. BE DONE BY A QUALIFIED TESTING LABORATORY CONCRETE GROUT USED TO FILL VOIDS SHALL BE AS RETAINED BY THE OWNER. SEE STRUCTURAL MAX. WATER/CEMENT RATIO BY WEIGHT SHALL DRAWINGS FOR REQUIRED SPECIAL INSPECTIONS AND TESTING. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK WITH INSPECTOR. WATER-REDUCING ADMIXTURE MEETING ASTM AFTER STRIPPING SITE AND PRIOR TO C-494 SHALL BE USED TO PROVIDE SUFFICIENT PLACEMENT OF ANY FILL, NOTIFY SPECIAL FLOWABILITY TO READILY FILL VOIDS W/ A INSPECTOR/TESTING AGENCY FOR INSPECTION REASONABLE AMOUNT OF RODDING. NO OF SOIL CONDITIONS. INSPECTION SHALL ADDITIONAL WATER WILL BE ALLOWED TO INCLUDE PROOF ROLLING SITE WITH HEAV IMPROVE FLOWABILITY AGGREGATE SHALL BE WELL-GRADED, 3/8" SIZE **EQUIPMENT PROVIDED BY THE CONTRACTOR** AFTER EXCAVATION FOR FOUNDATIONS AND AND SMALLER.

ALTERNATE MIX MUST SHOW SUFFICIENT PRIOR TO PLACEMENT OF STEEL REINFORCEMENT OR CONCRETE, NOTIFY FLOWABILITY CHARACTERISTICS AND A 28-DAY SPECIAL INSPECTOR/TESTING AGENCY FOR COMPRESSIVE STRENGTH OF 3000 PSI. INSPECTION OF SOIL CONDITIONS WHEN SOIL MAX HEIGHT OF GROUT POUR SHALL NOT EXCEED 4'-0" UNLESS CLEANOUT AND INSPECTION HOLE IS OF INADEQUATE STRENGTH IS NOTED CONTRACTOR SHALL FURTHER DEEPEN PROVIDED AT BOTTOM OF VOID **EXCAVATIONS UNTIL SUITABLE BEARING** WHERE VERTICAL REINFORCING INTERSECTS CONDITIONS ARE VERIFIED BY TESTING HORIZONTAL REINFORCING, BOTH SHALL BE OVEREXCAVATIONS MAY BE BACKFILLED WITH CONTINUOUS SUITABLE COMPACTED ENGINEERED FILL, HORIZONTAL REINFORCING SHALL BE CONTINUOUS SUITABLE GRANULAR BASE, OR STRUCTURAL AT CORNERS WITH BEND OR SHALL HAVE CORNER CONCRETE BACKFILL (SEE GEOTECHNICAL BARS WITH EACH LEG EQUAL TO REQUIRED LAP REPORT FOR RECOMMENDATIONS). HOOKED VERTICAL DOWEL BARS SHALL BE PLACED EXTERIOR FOOTINGS SHALL BEAR AT MIN. DEPTH INTO FOUNDATION AT ALL LOCATIONS WHERE

AS NOTED IN FOUNDATION DETAILS AND PLANS, 30 MINIMUM BELOW EXTERIOR FINISH GRADE, OR INTO VERTICAL REINFORCING IS SPECIFIED FOR WALLS APPROVED BEARING STRATA, WHICHEVER DEPTH OR COLUMNS DOWELS SHALL BE SAME SIZE AS IS GREATER. NOTE THAT FOOTING BEARING VERTICAL REINFORCING. DOWEL EMBEDMENTS AND ELEVATIONS GIVEN ON THE PLANS ARE ESTIMATED HOOK LENGTHS SHALL BE PER THE CHART ON THE DEPTHS ONLY WHERE UNSUITABLE SOIL IS THIS SHEET I ENGTH OF DOWELS SHALL BE **ENCOUNTERED FOOTING DEPTHS MAY VARY** ADEQUATE TO ALLOW SPLICE WITH VERTICAL BARS EXCAVATION FOR FOOTINGS SHALL BE CUT TO AS INDICATED HEREIN. WHERE SPLICES ARE ACCURATE SIZE AND DIMENSIONS AS SHOWN ON REQUIRED, USE 48 BAR DIAMETERS OR 1'-6" MIN. LAF PLANS. ALL SOIL BELOW SLABS AND FOOTINGS FOR ALL BARS EXCEPT JAMB REINFORCING SHALL BE PROPERLY COMPACTED AND SUBGRADI (VERTICAL REINFORCING IN END CELLS OF WALL BROUGHT TO A REASONABLE TRUE AND LEVEL AND NEXT TO OPENINGS) WHICH SHALL LAP 60 BA PLANE BEFORE PLACING CONCRETE. DIAMETERS OR 2'-0" MIN. CONTINUOUS FOOTINGS AND INDIVIDUAL FOOTINGS ARE DESIGNED FOR A NET ALLOWABLE SOIL BEARING OF:

HORIZONTAL BOND BEAMS SHALL BE PROVIDED AT WINDOW SILLS, TOP OF WALL, TOP OF WALL OPENINGS, STRUCTURALLY CONNECTED ROOF AND CONTINUOUS FOOTINGS: 2000 PSI FLOOR LEVELS, THE TOP OF PARAPETS AND AS INDIVIDUAL FOOTINGS: 2500 PSF CALLED FOR IN PLANS AND NOTES. ADDITIONAL FOR EITHER NATURALLY OCCURRING SOIL OR BOND BEAMS SHALL BE LOCATED AS REQUIRED SO SPACING DOES NOT EXCEED 8'-0" O.C. BOND BEAMS COMPACTED ENGINEERED FILL. TYPICAL SLABS ON GRADE ABOVE AND BELOW WALL OPENINGS SHALL EXTEND THICKNESS: 4" THICK NORMAL WEIGHT 2'-0" MINIMUM BEYOND THE FACE OF OPENING UNLESS NOTED OTHERWISE. REINFORCE BOND CONCRETE

REINFORCING: 6x6-W1.4xW1.4 WELDED WIRE BEAMS AS FOLLOWS: 8" CMU: (1) #5 BAR CONTINUOUS VAPOR BARRIER: 15 MIL., (ASTM E1745 CLASS A) HORIZONTAL BOND BEAMS PARALLEL WITH ROOF SLOPE SHALL STEP TO MATCH ROOF SLOPE. LAP SUBGRADE: A MINIMUM OF 4" OF FREE-DRAINING GRANULAR BASE, COMPACTED PER BOND BEAM 2'-0" AT STEP LOCATIONS AND PROVIDE RECOMMENDATIONS OF GEOTECHNICAL #5 "Z" DOWELS BETWEEN BOND BEAMS. GROUT AND REINFORCE ALL VERTICAL CORNER MAINTAIN REINFORCING 1"-2" BELOW TOP CELLS, ALL VERTICAL END CELLS, AND ONE CELI

EACH SIDE OF ALL OPENINGS UNLESS SPECIFICALLY NOTED OTHERWISE AS FOLLOWS: 8" CMU: (1) #5 BAR GROUT ALL MÀSONRY SOLID FULL-HEIGHT AT ALL ELEVATOR SHAFTS AND STAIR TOWERS. . MASONRY WALLS SHALL HAVE HORIZONTAL JOINTS REINFORCED WITH 9-GAGE TRUSS TYPE JOINT REINFORCEMENT AT 16" O.C.

 PROVIDE VERTICAL REINFORCEMENT AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS: 8" CMU: #5 BARS AT 32" O.0 . ALL MASONRY WALLS OVER 8'-0" TALL SHALL BE CONNECTED TO THE STRUCTURE ABOVE AT 4'-0" O.O. MAX. TYPICAL CONNECTION SHALL BE 3 5/8" x 18 GA. STRUCTURAL LGSF STUDS. EXTEND STUDS FROM TOP OF WALL TO STRUCTURE ABOVE AT APPROXIMATELY A 45 DEGREE ANGLE. CONNECT STUD TO BOND BEAM AT TOP OF MASONRY WALL WITH (1) 3/8" DIA. x 2 1/2" EMBEDMENT KWIK BOLT III EXPANSION ANCHOR. CONNECT STUD TO STRUCTURE ABOVE WITH 3" OF 1/8" FILLET WELD OR (2) #10 TEK SCREWS WHERE DOWELS. BOLTS OR INSERTS ARE CALLED

TO BE ANCHORED TO CMU USING EPOXY ADHESIVES USE ANCHORAGE SYSTEM EQUAL TO "HILTI" HIT-HY 270 INJECTION ADHESIVE. PROVIDE THE MANUFACTURER'S STANDARD SCREEN TUBES AT UNGROUTED CELLS. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS. ALTERNATE ANCHORAGE SYSTEMS MAY BE USED WITH ENGINEER'S PRIOR REINFORCING AT VERTICAL CONTROL JOINTS.

. REFER TO TYPICAL CMU CONTROL JOINT DETAIL FOR COORDINATE LOCATIONS AND SPACING WITH THE ARCHITECTURAL PLANS. 9. ALL LOAD BEARING MASONRY WALLS SHALL BE LAID IN A RUNNING BOND PATTERN, UNLESS OTHERWISE

STRUCTURAL STEEL NOTES

STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SECTIONS: W AND WT SHAPES - A992 OR A572 GR 50 M, HP, S, AND ST SHAPES - A36 ANGLES, CHANNELS, PLATES AND BAR STOCK -

STEEL PIPE - A53 GR.B OR A500 GR.B, Fy=42ksi STEEL TUBING - A500 GR B Ev=46ksi ANCHOR BOLTS - ASTM F1554 GRADE 36 DETAILS OUTLINE BASIC CONNECTION TYPES. BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS NO DETAILED IN DRAWINGS SHALL BE SIZED BY STEEL DETAILER AS STANDARD AISC TYPE 2 BEARING. CONNECTIONS CAPABLE OF SUPPORTING REACTIONS DEVELOPED BY MAXIMUM UNIFORM LOAD CAPACITY ON A SIMPLE SPAN FOR BEAM AND BEAM SPAN GIVEN STEEL SHALL BE DETAILED, FABRICATED AND ERECTED ACCORDING TO ALL APPLICABLE SECTIONS OF THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION, ASD. FOR BOLTED CONNECTIONS OF BEAMS AND COLUMNS USE SNUG TIGHT A325 OR A490 BOLTS

SIZE AS REQUIRED. BOLTS FOR SLIP-CRITICAL CONNECTIONS NOTED ON PLAN SHALL BE LOAD INDICATOR BOLTS (LIB) OR SHALL BE EQUIPPED WITH LOAD INDICATOR WASHERS WHICH PROVIDE AN EASY MEANS OF VISUALLY VERIFYING PROPER BOLT TENSION. WHERE LOAD INDICATOR BOLTS CANNOT BE USED DUE TO SPACE RESTRICTIONS OR FOR OTHER REASONS, BOLTS MAY BE TIGHTENED USING THE TURN OF THE NUT METHOD AS OUTLINED IN THE AISC "STEEL CONSTRUCTION MANUAL" HEAVY LOADS THAT EXCEED 75% OF ALLOWABLE LIVE LOADS SHOWN ON THE PLANS, FOR **FEMPORARY EQUIPMENT, CONSTRUCTION** MATERIALS, OR OTHER LOADS NOT SHOWN IN THE CONTRACT DOCUMENTS, SHALL NOT BE PLACED OF SUPPORTED FROM ELEVATED STRUCTURE WITHOU PRIOR WRITTEN APPROVAL OF THE STRUCTURAL FNGINFFR FOUNDATION ANCHOR BOLTS SHALL BE AS CALLED

OUT IN THE COLUMN TABLE AND IN BASEPLATE DETAILS, WITH LEVELING NUTS. IF NOT CALLED OUT JSE 3/4" DIA. x 9" EMBEDMENT WITH A HEAVY HEX NUT WELDED AT THE BOTTOM. PERFORM ALL WELDING WITH E70 XX ELECTRODE, JNLESS NOTED OTHERWISE OR UNLESS REQUIRED FOR SPECIAL CONNECTIONS. WELDING OF STRUCTURAL MEMBERS SHALL BE PERFORMED BY CERTIFIED WELDERS AND WELDING SHALL BE IN ACCORDANCE WITH "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY (AWS D1.1).

INSPECTION OF STRUCTURAL STEEL CONNECTIONS SHALL BE PERFORMED BY A QUALIFIED INSPECTOR APPROVED BY THE ENGINEER RETAINED BY THE CONTRACTOR, AND APPROVED BY THE OWNER. INSPECTOR QUALIFICATION SHALL BE BASED ON COMPLIANCE WITH APPROPRIATE PROVISIONS OF THE AWS CODE- D1.1. INSPECTION SHALL INCLUDE /ISUAL INSPECTION OF ALL COMPLETED STRUCTURAL WELDED CONNECTIONS. THE NSPECTING AGENCY SHALL BE NOTIFIED BEFORE ANY WELDING WORK BEGINS AND SHALL BE RESPONSIBLE FOR VERIFICATION OF WELDERS CERTIFICATIONS, INSPECTION OF CONNECTIONS BEFORE WELDING BEGINS, AND INSPECTION DURING WELDING UNTIL THE INSPECTOR IS SATISFIED THAT THE WELDING PROCESS IS BEING PERFORMED PER AWS REQUIREMENTS . ALL EXPOSED STEEL SHALL BE GALVANIZED OR

COATED WITH A HIGH PERFORMANCE PAINT U.N.O.

PAINTED SURFACES MAY REQUIRE FIELD PAINTING

TO TOUCH UP ABRASIONS OF THE SHOP COAT OR

FIELD CUTTING, DRILLING OR OTHER MODIFICATION

PERMITTED WITHOUT WRITTEN APPROVAL OF THE

CUTTING IS REQUIRED. CONTRACTOR SHALL SUBMI

PENETRATIONS CANNOT BE AVOIDED OR WHERE

TO THE ENGINEER ALL PERTINENT INFORMATION

INCLUDING PENETRATION SHAPE SIZE LOCATION

FINISHES ON STRUCTURAL STEEL USED IN AREAS T

RECEIVE SPRAYED ON FIRE PROCEING SHALL B

COMPATIBLE WITH THE FIREPROOFING MATERIAL

STEEL SHALL BE DELIVERED TO THE SITE CLEAN

AND FREE OF LOOSE RUST. SCALE. SLAG AND OI

BEFORE APPLICATION OF FIREPROOFING MATERIAL

FROM THE ELEVATED STRUCTURE (BEAMS, JOISTS

APPLICATION OF THE SPRAYED-ON FIREPROOFING.

PATCH ANY FIREPROOFING DAMAGED AFTER THE

INITIAL APPLICATION.

PREPARE AND CLEAN SURFACES, AS REQUIRED,

ALL HANGERS, CLIPS, INSERTS, ETC. SUSPENDED

AND DECK) SHALL BE INSTALLED PRIOR TO THE

OTHER DAMAGE TO THE PAINTED SURFACE.

OF STRUCTURAL STEEL COMPONENTS IS NOT

STRUCTURAL ENGINEER. WHERE BEAM

AND METHOD OF CUTTING THE OPENINGS

CONTRACTOR SHALL COORDINATE.

EXCEPT MASONRY SUPPORT LINTELS SHALL BE

APPROVED AS EQUAL. (Fb = 2600 PSI, E =  $1.9.10^{6}$ REFER TO BEARING WALL SCHEDULE AND PLAN FOR BLOCKING REQUIREMENTS AT BEARING WALLS. REFER TO SHEAR WALL SCHEDULE AND PLAN FOR ANY ADDITIONAL REQUIRED BLOCKING. REFER TO SHEET S4.1 FOR STANDARD FRAMING

WOOD FRAMING NOTES

WOOD FRAMING INCLUDING MISCELLANEOUS

GRADE DOUGLAS FIR-LARCH (Fb = 900 PSI).

= 875 PSI, Fc = 1150 PSI) OR BETTER.

SPLITS. OR DEFECTS IS USED

CATEGORY 2 (UC2).

CATEGORY 3B (UC3B).

BEAMS, LINTELS, HEADERS, ETC. SHALL BE #2

LIGHT FRAMING SUCH AS PLATES, SILLS, CRIPPLES

SPECIFIED SHALL BE #3 GRADE DOUGLAS FIR-LARCH

SECOND FLOOR SHALL BE TIMBERSTRAND LSL SILLS

STUDS SHALL BE #1/#2 GRADE SPRUCE-PINE-FIR (Fb

**BLOCKING AND ROOF FRAMING NOT OTHERWISE** 

(Fb = 525 PSI) OR BETTER. SILLS AT FIRST AND

ALL WOOD FRAMING SHALL BE SELECTED SUCH

THAT NO LUMBER WITH LARGE KNOTS, WARPS,

STEEL FRAMING ANCHORS EQUAL TO SIMPSON.

ALL LUMBER IN CONTACT WITH CONCRETE OR

WITH APPLICABLE REQUIREMENTS OF AWPA

STANDARD U1 TO THE REQUIREMENTS OF USE

ALL LUMBER FOR EXTERIOR USES, INCLUDING

COMPLY WITH APPLICABLE REQUIREMENTS OF

ALL "TREATED" LUMBER WITH FIELD-CUT ENDS

SHALL BE TREATED WITH PRESERVATIVES IN

MISCELLANEOUS WOOD CARPENTRY WORK SHALL

BE GOVERNED BY 2012 INTERNATIONAL BUILDING

COMPLY WITH CONSTRUCTION, CONNECTION AND

GENERAL REQUIREMENTS OF CHAPTER 23 OF THE

COPY OF THIS CHAPTER TO ALL PERTINENT PARTIES.

CODE REQUIREMENTS. ALL SUCH WORK SHALL

CODE. IT SHALL BE A REQUIREMENT OF THIS

SILL PLATE SHALL BE CONNECTED TO THE

SCHEDULE FOR REQUIRED SPACING AND

CONTRACT THAT THE CONTRACTOR PROVIDE A

FOUNDATION WALL WITH 5/8"Ø x 8" (MIN) SIMPSON

ADDITIONAL REQUIREMENTS. THERE SHALL BE A

MINIMUM OF TWO ANCHOR BOLTS PER SECTION OF

PLATE AND ANCHOR BOLTS SHALL BE PLACED 12"

EDGE OF PLATE, REFER TO IBC CHAPTER 23.

ALL BEAMS BEARING PERPENDICULAR TO WALL

STUDS SHALL BE CONTINUED TO FOUNDATION.

REFER TO NDS SECTION 15.3.3 FOR NAILING

LAMINATED VENEER LUMBER (LVL) BEAMS AS

CALLED OUT IN THE PLANS ARE SIZED AS PER

"TRUSS JOIST CORPORATION" RECOMMENDATIONS

ALTERNATE LVL BEAMS WILL BE CONSIDERED IF

PROPER DESIGN INFORMATION IS SUBMITTED AND

REQUIREMENTS FOR MULTIPLE STUDS.

FROM END OF PLATE AND NO CLOSER THAN 3" FROM

RAMING SHALL BE SUPPORTED BY MULTIPLE STUDS

FOR THE FULL WIDTH OF THE BEAM, UNO. MULTIPLE

TITEN HD @ 4'-0" O.C. (MAX)- SEE SHEAR WALL

ACCORDANCE WITH AWPA STANDARD M4.

WOOD FRAMING, ROUGH CARPENTRY, AND

DECKING, DECK JOIST, RAILINGS, OR ANY LUMBER

EXPOSED TO WEATHER SHALL BE "TREATED" AND

AWPA STANDARD U1 TO THE REQUIREMENTS OF USE

WHERE CALLED FOR ON PLANS TO USE FRAMING

ANCHORS AND HARDWARE, USE Z-MAX GALVANIZED

MASONRY SHALL BE "TREATED" AND SHALL COMPLY

TJI NOTES

ALL FLOOR AND ROOF JOIST, CALLED OUT IN THESE DRAWINGS, SHALL BE PRE-ENGINEERED, MANUFACTURED JOISTS, HEREIN DESIGNATED AS THOSE MANUFACTURED BY "TRUSS JOIST" CORPORATION. OTHER MANUFACTURERS ARE NOT EXCLUDED EXCEPT THAT OTHER JOIST MEMBERS SHALL CONFORM TO DIMENSION, SPACINGS, AND CONFIGURATIONS CALLED OUT HEREIN AND SHALL BE DESIGNATED FOR SPECIFIED LOADINGS AND AN ALLOWABLE LIVE LOAD DEFLECTION OF LESS THAN L/360. ALTERNATE PRODUCTS OR DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. SHOP DRAWINGS AND DESIGN FOR JOISTS SHALL B SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE FABRICATION. SHOP DRAWING SUBMITTAL SHALL BE SEALED BY A PROFESSIONAL ENGINEER THE STATE WHERE THE PROJECT IS LOCATED. DESIGN SHALL BE FOR LOADS GIVEN IN THE PLANS ALL LUMBER USED FOR TRUSSES SHALL HAVE NO LARGE KNOTS OR DEFECTS. BLOCKING AND BRACING FOR JOISTS SHALL BE DESIGNED AND INSTALLED PER "TRUSS JOIST" PRODUCT GUIDE AS RECOMMENDED BY THE

MANUFACTURER.

WOOD SHEATHING & DECKING NOTES TYPICAL WALL SHEATHING SHALL BE 7/16" (1/2") AP RATED 24/16 STRUCTURAL 1 EXPOSURE 1 PANÉLS NAIL TO SUPPORTS WITH 8d COMMON NAILS AT 6" .C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. PROVIDE SOLID BLOCKING AT ALL PANEL EDGES. SEE SHEAR WALL SCHEDULE FOR REQUIREMENTS AT SHEAR WALLS. ROOF DECKING SHALL BE 19/32" (5/8") STRUCTURAL I EXPOSURE I APA RATED 40/20 TONGUE AND GROOVE PANELS. "H" CLIPS MAY BE USED AT THE CONTRACTOR'S OPTION IN LIFU OF T&G NAIL TO SUPPORTS WITH 10d COMMON NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERIOR SUPPORTS REDUCE SPACING TO 4" O.C. AT EDGES AND INTERIOR SUPPORTS WITHIN 4'-0" OF BUILDING FLOOR DECKING SHALL BE 23/32" (3/4") ADVANTECH PANELS T&G. GLUE AND NAIL TO SUPPORTS WITH

10d RING-SHANK OR SPIRAL THREADED NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. GLUE SHALL MEET APA WOOD STRUCTURAL PANELS SHALL BE OSB OR PLYWOOD WITH (4) OR MORE PLIES AND SHALL COMPLY WITH DOC PS 1 OR PS 2. PANELS SHALL BE INSTALLED WITH THE STRENGTH AXIS (LONG DIRECTION) PERPENDICULAR TO SUPPORTS

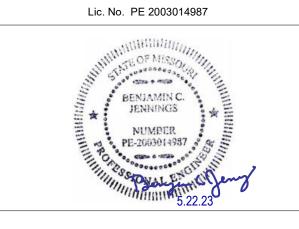
METAL PAN STAIR NOTES DESIGN OF STAIRS AND RAILS IS BY

CONTRACTOR/SUPPLIER PROVIDE DESIGNING ENGINEER'S STAMP ON SHOP DRAWINGS PER SPECIFICATIONS. CONTRACTOR TO COORDINATE TREADS, RISERS CONFIGURATIONS, STAIR WIDTHS, HANDRAILS, OPENINGS, FLOOR TO FLOOR DIMENSIONS, ETC WITH ARCHITECTURAL DRAWINGS. PROVIDE ALL NECESSARY CLIP ANGLES, BOLTS, HANDRAILS, ETC. TO COMPLETE STAIR PORTION OF ALL STRINGERS ARE TO BE SIZED AS REQUIRED FOR LOADING / SPAN HOWEVER STRINGERS TO RECEIVE GUARDRAIL ATTACHMENTS MUST HAVE MIN. 17/8" FLANGE WIDTH UNLESS NOTED OTHERWISE. LARGER CHANNELS, TUBES, ANGLES, ETC, MAY BE NOTED ON CONSTRUCTION DOCUMENTS FOR ARCHITECTURAL REASONS. HEADER CHANNELS TO BF C8x11 5 (MIN) METAL PANS SHALL BE FABRICATED FROM 12 GAUGE PROVIDE CHANNEL SIZES AS REQUIRED BY SPAN TO SUPPORT LANDINGS BUT NO LESS THAN C4x5.4 @ SIZES NOTED ABOVE AND SIZES NOTED ON DRAWINGS FOR STRINGERS, PANS, ANGLES, HANDRAILS, GUARDRAILS, ETC. ARE MINIMUMS. PROVIDE MEMBERS TO MEET DESGIN CRITERIA AS

NOTED IN SPECIFICATIONS OR GOVERNING BUILDING

CODE WHICHEVER IS MORE STRINGENT.

221 SOUTH AVE, SPRINGFIELD, MO 65806 BENJAMIN C. JENNINGS, PE



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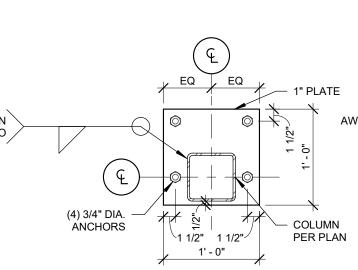
 HEAVY HEX NUT BASEPLATE PER SCHED. - NON-SHRINK GROUT T.O. CONCRETE EL= PER PLAN ANCHOR ROD **EMBEDMENT** DIAMETER ANCHOR ROD PER CO SCHED (LOCATE INSIDE TIES U.N.O.) REINFORCING PER DETAILS AS APPLICABLE TACK\ HEAVY HEX NUT WELD NUT **ANCHOR ROD** 

REFER TO STEEL COLUMN SCHEDULE FOR BASEPLATE WIDTH "W", LENGTH "L" AND THICKNESS "T SIZE WELDS PER AISC MINIMUM FILLET REQUIREMENTS (4) SIDES TYP. ALL ANCHOR RODS FOR SUPPORT OF THE STRUCTURE SHALL BE ASTM F1554 GRADE 36 U.N.O. MINIMUM YIELD STRENGTH SHALL BE 36 KSI, WITH MIN Fu=58 KSI THREADED ANCHOR ROD DIAMETER SHALL BE 3/4" U.N.O. MINIMUM ENBEDMENT SHALL BE 9" U.N.O. PROJECTION REQUIREMENTS TO BE DETERMINED BY CONTRACTOR BASED ON GROUT THICKNESS, PLATE THICKNESS, TYPE AND NUMBER OF GROUT SHALL BE NONMETALIC, NON-SHRINK, AND MEET THE REQUIREMENTS OF ASTM C 1107. MINIMUM BEARING STRENGTH SHALL BE 6000 PSI.

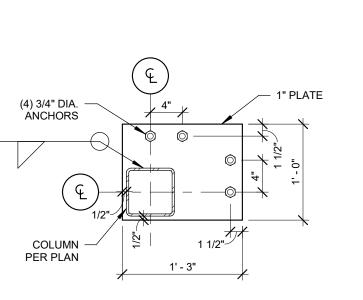
GROUT MAY BE BEVELED OR FORMED BUT SHALL EXTEND A MIN OF "T" = 1 1/2" FOR ANCHOR ROD DIA UP TO 1" AND 2 1/2" FOR 1 1/4" DIA ANCHOR ROD

AWS MIN UNO COLUMN -1 1/2" 1 1/2"<sup>-)</sup> PFR PI AN 1' - 0"

TYPE A



TYPE B



TYPE C

BASEPLATE GROUT

## ANCHOR ROD DETAIL & BASEPLATE TYPES

## A STRUCTURAL FLEMENT MINIMUM COVER (INCHES) FOOTINGS 3" ALL SURFACES SLAB ON GRADE 1.5" TOP & 3" BOTTOM **RETAINING WALLS & ELEVATOR PITS** 2" EXTERIOR, 3/4" INTERIOR PEDESTALS 1.5" 3/4" BOTTOM, 3/4" TOP (U.N.O ELEVATED SLAB 3/4" (ABOVE LEVEL 1 SHEAR WALLS RTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE 1

			TENSION	I					
BAR		OTHER BARS			TOP BARS			COMPRESSION	
SIZE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE
#3	17	15	13	22	19	17	9	8	8
#4	22	19	17	29	25	22	11	10	9
#5	28	24	22	36	31	28	14	12	12
#6	33	29	26	43	37	33	17	15	14
#7	48	42	37	63	54	49	20	17	16
#8	55	48	43	72	62	55	22	19	18
#9	62	54	48	81	70	63	25	22	21
#10	70	61	54	91	79	70	28	25	23
#11	78	67	60	101	87	78	31	27	25

LAP SPLICE LENGTHS ARE BASED ON BARS SPACED AT (2) BAR DIAMETERS OR MORE ON CENTER W/ (1) BARS DIAMATER MINIMUM ON CONCRETE

COVER. NOTIFY ENGINEER IF SPACING IS LESS THAN (2) BAR DIAMETERS.

	LAP SPLICE LENGTHS (INCHES)										
	TENSION (CLASS B SPLICE)										
BAR		OTHER BARS			TOP BARS						
SIZE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	4000 PSI 5000 PSI CONCRETE				
#3	22	19	17	28	24	22	12				
#4	29	25	22	37	32	29	15				
#5	36	31	28	47	40	36	19				
#6	43	37	33	56	48	43	23				
#7	63	54	49	81	70	63	27				
#8	72	62	55	93	80	72	30				
#9	81	70	63	105	91	81	34				
#10	91	79	70	118	102	91	38				
#11	101	87	78	131	113	101	43				

	#10	91	79	70	118	102	91	38
	#11	101	87	78	131	113	101	43
N: 1. 2.	BELOW THE LAP SPLICE	REINFORCEMEN LENGTHS ARE BA	T. ASED ON BARS S	SPACED AT (2) BA	R DIAMETERS OF	R MORE ON CEN		IN THE MEMBER
	OF CONCRE	TE COVER. NOTIF	FY ENGINEER IF	SPACING IS LESS	S THAN (2) BAR DI	IAMETERS.		

	HOUKEL	DOWEL DEVE	LOPMENT LE	NGTHS IN TEN	SION (INCHES)	
		EMBEDMENT		EXTEN	SION	
BAR SIZE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	90 DEG HOOK	180 DEG HOOK	MINIMUM RADIUS OF BEND (INCHES
#3	8	7	6	4.5	2.5	1.50
#4	11	9	8	6.0	2.5	2.00
#5	14	12	11	7.5	2.5	2.50
#6	16	14	13	9.0	3.0	3.00
#7	19	17	15	10.5	3.5	3.50
#8	22	19	17	12.0	4.0	4.00
#9	25	21	19	13.5	4.5	5.64
#10	28	24	22	15.2	5.1	6.35
#11	31	27	24	16.9	5.6	7.05

## S BRID

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Revisions							
Description	Date						

**SO.0** 

date:	5.22.20
project #:	22-1

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ISOMETRIC VIEW - CANOPY

STATEMENT OF SPECIAL INSPECTIONS SPECIAL INSPECTIONS ARE REQUIRED FOR THIS STRUCTURE IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE FOR THE ITEMS NOTED IN THE TABLE ON THIS SHEET.
 TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY RETAINED BY THE OWNER AND APPROVED BY THE ENGINEER.
 A LETTER OF SUBSTANTIAL COMPLETION SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT BY THE SPECIAL INSPECTION PROVIDER PRIOR TO THE FINAL INSPECTION.

IBC	TABLE 1705.6 REQUIRED VERIFICATION AND INSPECTION OF SOILS		
VE	RIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	_	Х
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	_	×
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	_	Х
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	х	_
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	_	Х

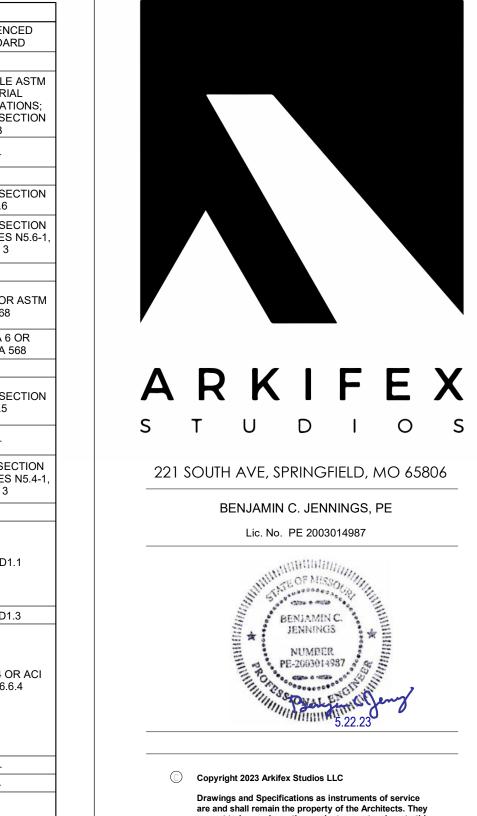
	: TABLE 1705.8 REQUIRED VERIFICATION AND INSPECTION OF CAST-IN-PL EP FOUNDATION ELEMENTS	ACE	
VE	RIFICATION AND INSPECTION TASK	CONTINUOUS	PERIOD
1.	INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	Х	_
2.	VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	х	_
3.	FOR CONCRETE ELEMENTS, PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705.3.	_	_

RE	QUIR	ED VERIFICATION AND INSPECTION OF WOOD CONS	TRUCTION		
VE	RIFIC	CATION AND INSPECTION TASK	CONTINUOUS	PERIODIC	IBC REFERENC
1.	HIC	GH LOAD DIAPHRAGMS		•	
	A.	INSPECT WOOD STRUCTURAL PANEL SHEATHING TO ASCERTAIN WHETHER IT IS OF THE GRADE AND THICKNESS SHOWN ON THE APPROVED BUILDING PLANS.	_	х	
	B.	VERIFY THE NOMINAL SIZE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES.	_	Х	1705.5.1
	C.	VERIFY THE NAIL OR STAPLE DIAMETER AND LENGTH, THE NUMBER OF FASTENER LINES, AND THAT THE SPACING BETWEEN FASTENERS IN EACH LINE AT EDGE MARGINS AGREES WITH THE APPROVED BUILDING PLANS.	_	×	
2.	ME	TAL-PLATE-CONNECTED TRUSSES SPANNING 60 FE	T OR GREATER		•
	A.	VERIFY THAT THE TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL PACKAGE.	_	×	1705.5.2

VE	RIFICATION AN	ID INSPECTION	FREQUEN	ICY	REFERENCE	FOR CRITE
			RISK CAT. II	RISK CAT. III & IV	TMS 402	TM
1.	AS MASONR	Y CONSTRUCTION BEGINS, VERIFY THAT TH	IE FOLLOWING A	ARE IN COMPLIA	ANCE:	
	A. PROPO	RTIONS OF SITE-PREPARED MORTAR.	PERIODIC	PERIODIC	_	ART. 2.1,
	- ,	TYPE AND SIZE OF REINFORCEMENT, CTORS, ANCHOR BOLTS, AND ANCHORAGES	PERIODIC	PERIODIC	_	ART. 3
	A. SAMPLE	PANEL CONSTRUCTION	PERIODIC	CONTINUOUS	_	AR <sup>-</sup>
2.	PRIOR TO GI	ROUTING, VERIFY THAT THE FOLLOWING AF	RE IN COMPLIAN	CE:		
	A. GROUT	SPACE	PERIODIC	CONTINUOUS	_	ART. 3.
		MENT OF REINFORCEMENT, CTORS, AND ANCHOR BOLTS	PERIODIC	CONTINUOUS	SEC. 6.1, 6.3.1, 6.3.6, & 6.3.7	ART. 3
	C. PROPOR	RTIONS OF SITE-PREPARED GROUT	PERIODIC	PERIODIC	_	ART. 2.6
3.	VERIFY COM	PLIANCE OF THE FOLLOWING DURING CON	STRUCTION:			
		ALS AND PROCEDURES WITH THE /ED SUBMITTALS	PERIODIC	PERIODIC	_	AF
		IENT OF MASONRY UNITS AND R JOINT CONSTRUCTION	PERIODIC	PERIODIC	_	AR
	C. SIZE AN	D LOCATION OF STRUCTURAL MEMBERS	PERIODIC	PERIODIC		AR
	INCLÚD OF MAS	IZE, AND LOCATION OF ANCHORS, NG OTHER DETAILS OF ANCHORAGE ONRY TO STRUCTURAL MEMBERS, S, OR OTHER CONSTRUCTION	PERIODIC	CONTINUOUS	SEC. 1.2.1(e), 6.2.1, & 6.3.1	
	E. WELDIN	G OF REINFORCEMENT	CONTINUOUS	CONTINUOUS	SEC. 6.1.6.1.2	
	PROTE( WEATH	RATION, CONSTRUCTION, AND CTION OF MASONRY DURING COLD ER (TEMP. BELOW 40°F) OR HOT ER (TEMP. ABOVE 90°F)	PERIODIC	PERIODIC	_	ART. 1.
	G. PLACEN	ENT OF GROUT IS IN COMPLIANCE	CONTINUOUS	CONTINUOUS	_	ART. 3
4.		REPARATION OF GROUT MORTAR SPECIMENS, AND/OR	PERIODIC	CONTINUOUS	_	ART. 1.4 B.2.b.3, 1.4 B.3

	PRISMS	PERIODIC	CONTINUOUS		1.4 B.3, & 1.4 B.
IBC	TABLE 1705.3 REQUIRED VERIFICATION AND INSPECTION O	OF CONCRETE	CONSTRUCT	TION	
ibC	VERIFICATION AND INSPECTION	CONTINUOUS		REFERENCED STANDARD	IBC REFEREN
1.	INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	_	Х	ACI 318 CH. 20, 25.2,25.3, 26.6.1-26.6	.3 1908.4
2.	REINFORCING BAR WELDING:  A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;  B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND  C. INSPECT ALL OTHER WELDS	_ x	x	AWS D1.4 ACI 318: 26.6.4	_
3.	INSPECT ANCHORS CAST IN CONCRETE.	_	Х	ACI 318: 17.8.2	_
4.	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.  A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.  B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.	x	_ x	ACI 318: 17.8.2.4 ACI 318: 17.8.2	_
5.	VERIFY USE OF REQUIRED DESIGN MIX.	_	Х	ACI 218: CH. 19, 26.4.3, 26.4.4	1904.1, 1904 1908.2, 1908
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	Х	_	ASTM C 172 ASTM C 31 ACI 318: 26.5, 26.12	1908.10
7.	INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	х	_	ACI 318: 26.5	1908.6, 1908 1908.8
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	_	Х	ACI 318: 26.5.3-26.5.5	1910.9
9.	INSPECT PRESTRESSED CONCRETE FOR:  A. APPLICATION OF PRESTRESSING FORCES; AND  B. GROUTING OF BONDED PRESTRESSING TENDONS.	X X		ACI 318: 26.10	_
10.	INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	_	Х	ACI 318: CH. 26.9	_
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.	_	х	ACI 318: 26.11.2	_
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	_	х	ACI 318: 26.11.1.2(b)	_

\/F	RIFIC	ΑΤΙΟ	N AND INSPECTION	CONTINUOUS	PERIODIC	REFERENC
1.			AL VERIFICATION OF HIGH-STRENGTH BOLT			STANDAR
1.				5, NUTS AND WA	DHERO.	
	A.	TO A	NTIFICATION MARKINGS TO CONFORM ASTM STANDARDS SPECIFIED IN THE PROVED CONSTRUCTION DOCUMENTS.	_	×	APPLICABLE A MATERIA SPECIFICATI AISC 360, SEC A3
	В.		IUFACTURER'S CERTIFICATE OF IPPLIANCE REQUIRED.	_	х	_
2.	INSI	PECT	TION OF HIGH-STRENGTH BOLTING:		•	
	Α.	BEA	RING-TYPE CONNECTIONS.	_	Х	AISC 360, SEC N5.6
	В.	SLIF	P-CRITICAL CONNECTIONS.	Х	Х	AISC 360, SEC N5.6, TABLES I 2 & 3
3.	MAT	ΓERIA	AL VERIFICATION OF STRUCTURAL STEEL:		·	
	A.	TO A	NTIFICATION MARKINGS TO CONFORM ASTM STANDARDS SPECIFIED IN THE PROVED CONSTRUCTION DOCUMENTS.	_	_	ASTM A 6 OR A 568
	B.		NUFACTURERS' CERTIFIED MILL TEST PORTS.		_	ASTM A 6 0 ASTM A 56
4.	MAT	ΓERI <i>Α</i>	AL VERIFICATION OF WELD FILLER MATERIA	ALS:		
	Α.	TO A	NTIFICATION MARKINGS TO CONFORM AWS SPECIFICATION IN THE APPROVED ISTRUCTION DOCUMENTS.	_	_	AISC 360, SEC A3.5
	В.		IUFACTURER'S CERTIFICATE OF IPPLIANCE REQUIRED.	_	_	_
5.	INSI	PECT	TION OF WELDING:			AISC 360 SEC N5.4, TABLES I 2 & 3
	Α.	STR	UCTURAL STEEL:			
		а.	COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	Х	_	
		b.	MULTIPASS FILLET WELDS.	X	_	AWS D1.
		c.	SINGLE-PASS FILLET WELDS > 5/16	X	_	
		d.	SINGLE-PASS FILLET WELDS ≤ 5/16	_	Х	
		е.	FLOOR AND ROOF DECK WELDS.	_	X	AWS D1.3
	В.	REII	NFORCING STEEL:			
		a.	VERIFICATION OF WELDABILITY OF REINF STEEL OTHER THAN ASTM A 706.	_	Х	AVAIC D4 4 OF
		b.	REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	x	_	AWS D1.4 OF 318: 26.6.
		C.	SHEAR REINFORCEMENT.	X	_	_
		d.	OTHER REINFORCING STEEL.	_	Х	_
6.	DET	AILS	TION OF STEEL FRAME JOINT FOR COMPLIANCE WITH APPROVED UCTION DOCUMENTS:			
	Α.	DET	TAILS SUCH AS BRACING AND STIFFENING.	_	Х	AISC 360 SEC
	В.	MEN	MBER LOCATIONS.	_	_	N5.8
	C.		LICATION OF JOINT DETAILS AT			1
			CH CONNECTION.	-	-	

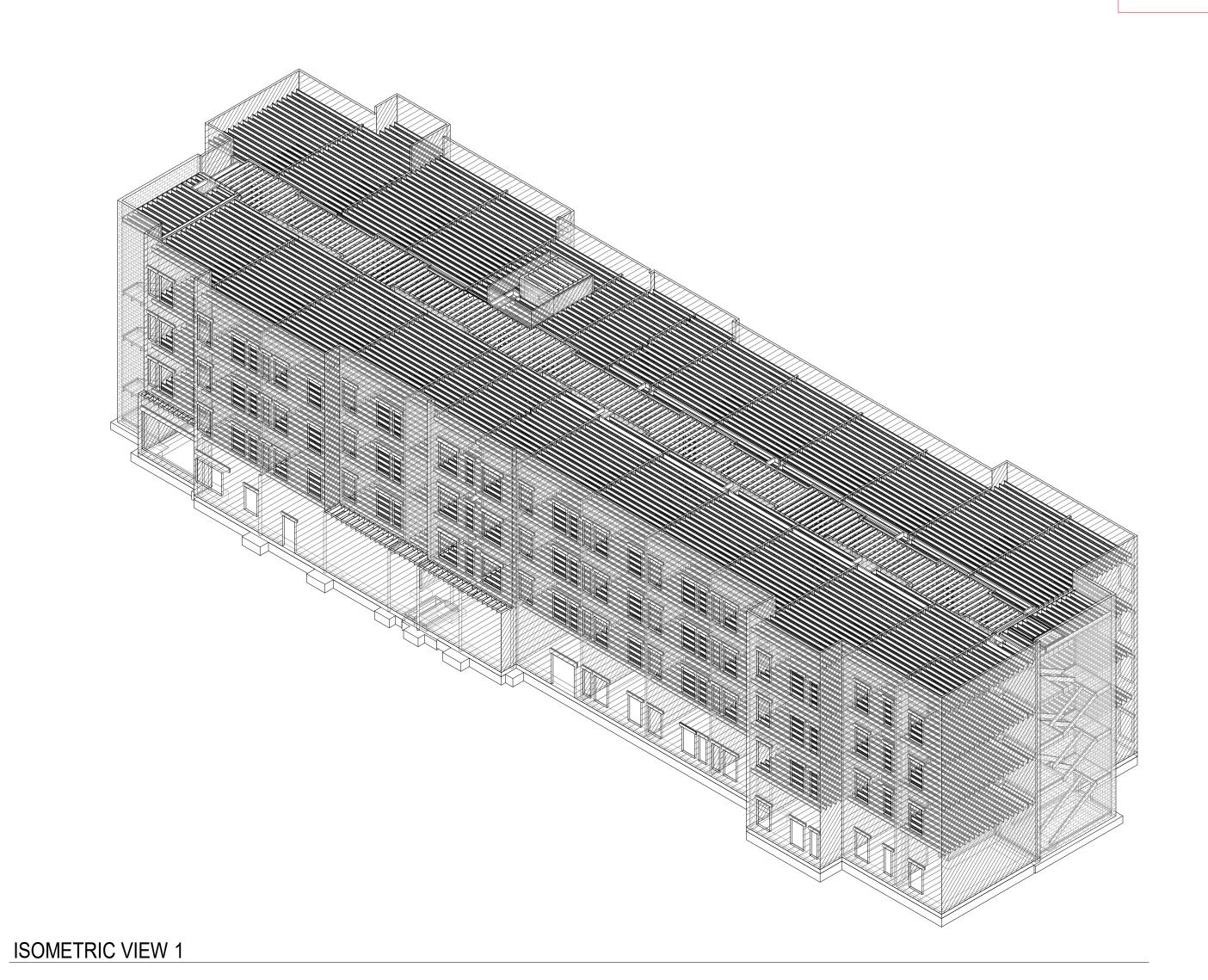


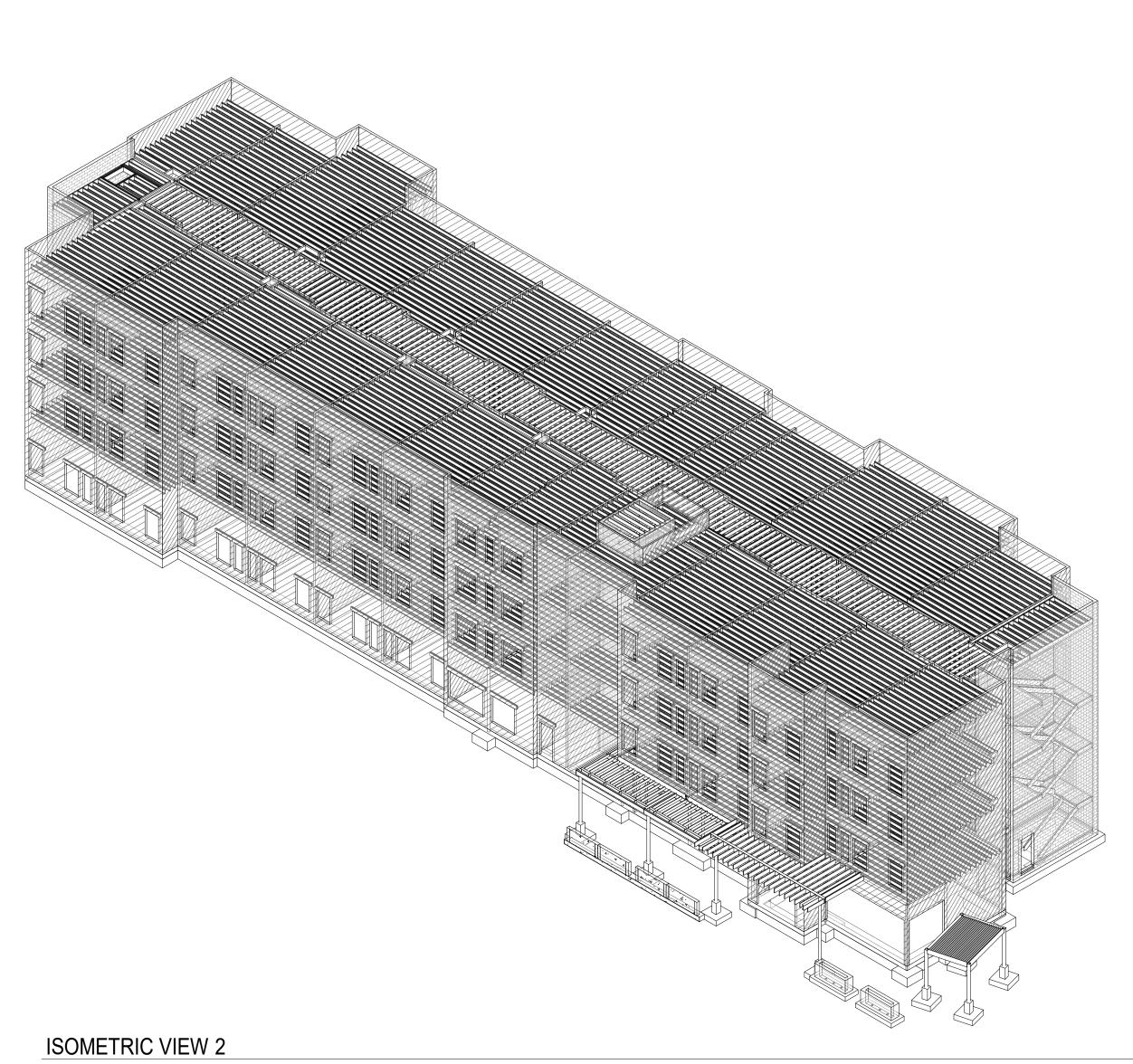
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SCHEDULE - SPECIAL INSPECTIONS 2018

ISOMETRIC VIEWS PROVIDED FOR REFERENCE ONLY

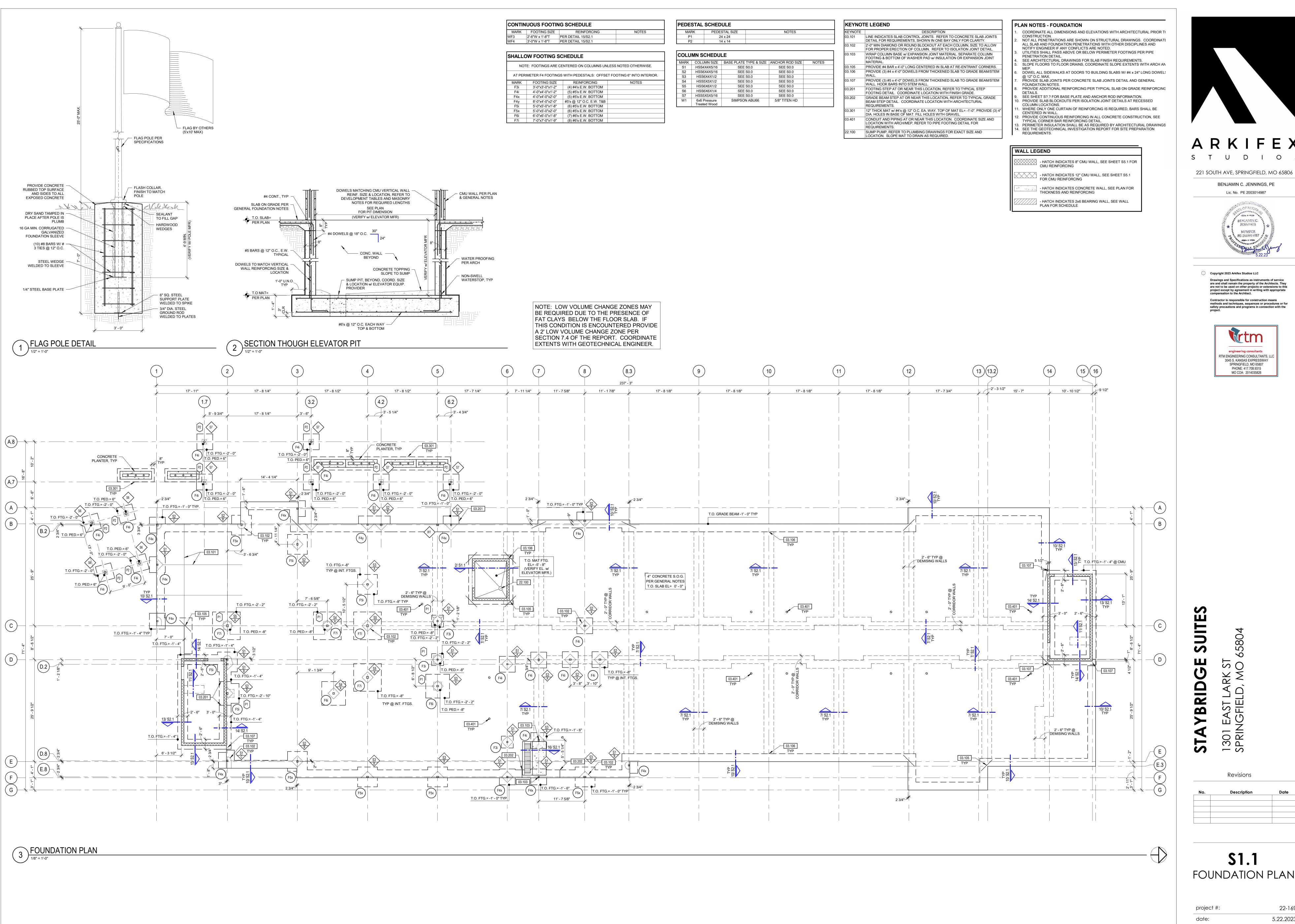




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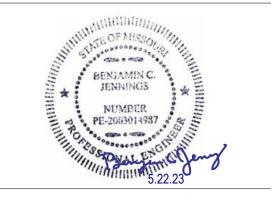
SUITES

**SO.1** SPECIAL INSPECTIONS & 3D VIEWS



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> BENJAMIN C. JENNINGS, PE Lic. No. PE 2003014987

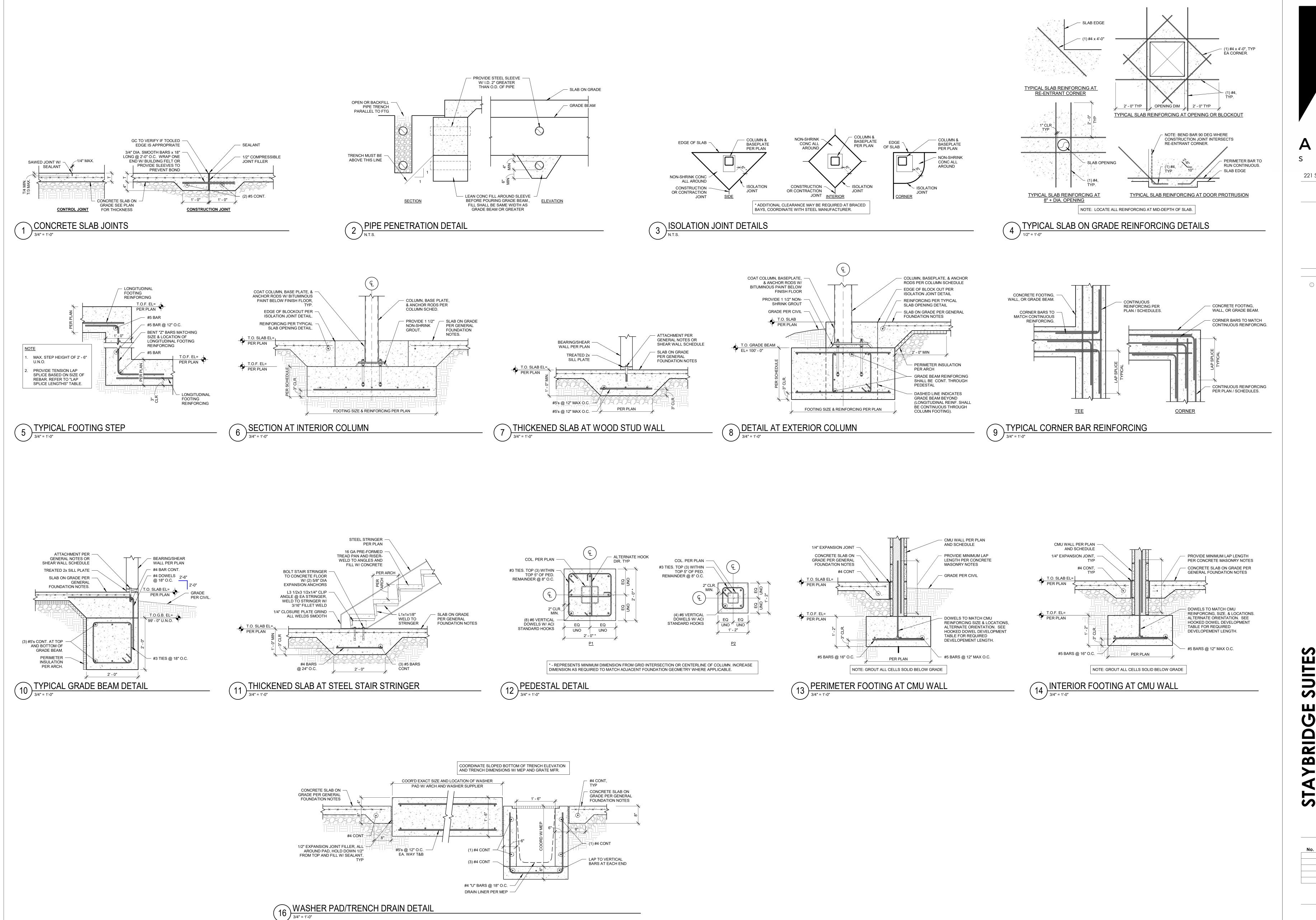


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\$1.1 FOUNDATION PLAN

5.22.2023



A R K I F E X
S T U D I O S
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BENJAMIN C. JENNINGS, PE
Lic. No. PE 2003014987

BENJAMIN C. JENNINGS, NUMBER
PE 2003014987





STAYBRIDGE SUITES
1301 EAST LARK ST
SPRINGFIELD, MO 65804

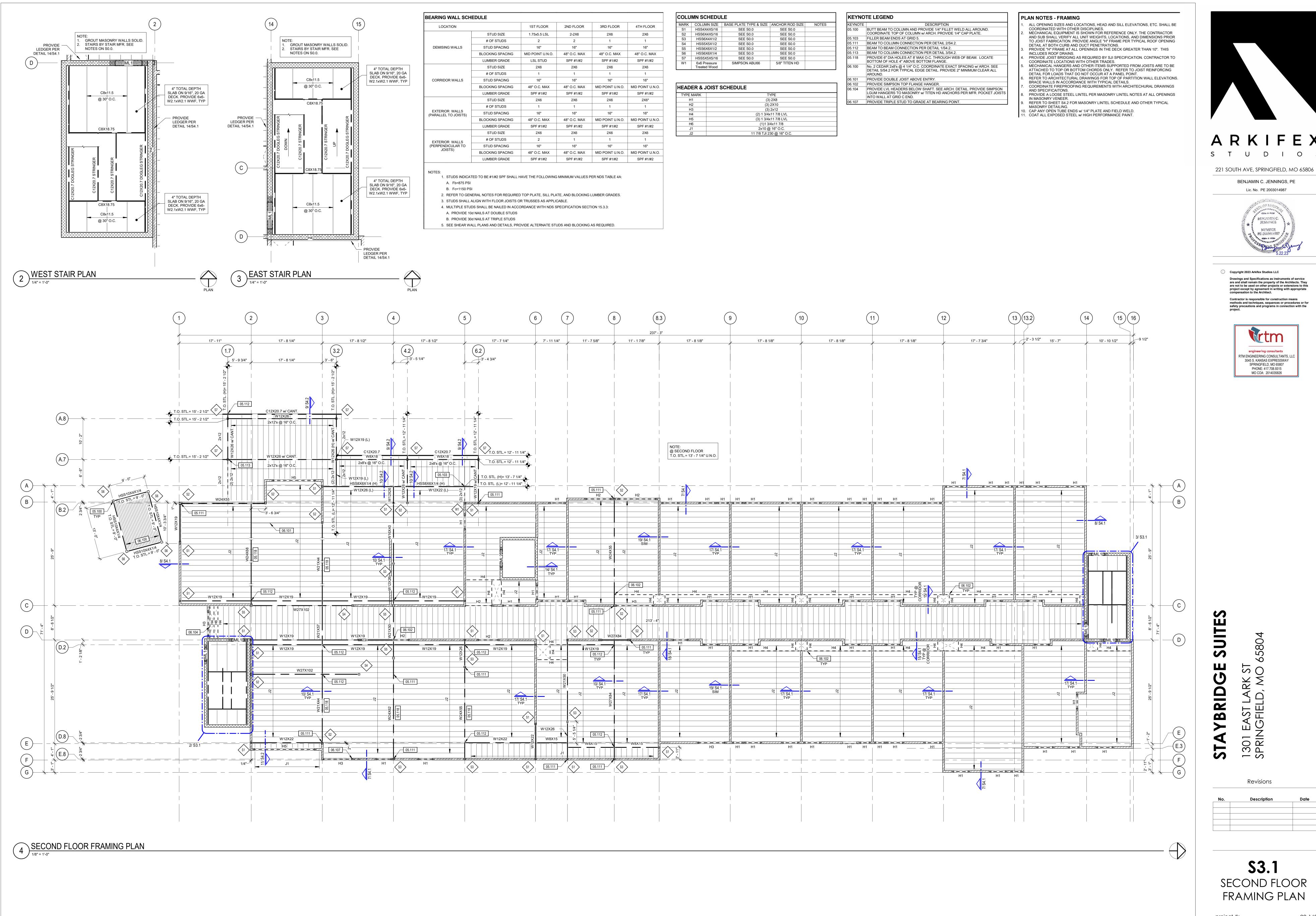
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**\$2.1**FOUNDATION DETAILS

project #: 22-169
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**S3.1** SECOND FLOOR FRAMING PLAN

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COLUMN SCHEDULE MARK | COLUMN SIZE | BASE PLATE TYPE & SIZE | ANCHOR ROD SIZE | NOTES HSS4X4X5/16 SEE S0.0 HSS6X4X5/16 SEE S0.0 HSS6X4X1/2 SEE S0.0 HSS5X5X1/2 SEE S0.0 HSS6X6X1/2 SEE S0.0 SEE S0.0 HSS6X6X1/4 SEE S0.0 SEE S0.0 HSS5X5X5/16 SEE S0.0 6x6 Pressure SIMPSON ABU66 Treated Wood

 S7
 HSS5X5X5/16
 SEE S0.0
 SEE S0.0

 W1
 6x6 Pressure Treated Wood
 SIMPSON ABU66
 5/8" TITEN HD

 HEADER & JOIST SCHEDULE

 TYPE MARK
 TYPE

 H1
 (3) 2X8

 H2
 (3) 2X10

 H3
 (3) 2x12

 H4
 (2) 1 3/4x11 7/8 LVL

 H5
 (3) 1 3/4x11 7/8 LVL

 H6
 (1)1 3/4x11 7/8

 J1
 2x10 @ 16" O.C.

11 7/8 TJI 230 @ 16" O.C.

KEYNOTE LEGEND

KEYNOTE LEGEND

KEYNOTE DESCRIPTION

06.102 PROVIDE SIMPSON TOP FLANGE HANGER.

06.107 PROVIDE TRIPLE STUD TO GRADE AT BEARING POINT.

SEE \$0.0

SEE \$0.0

SEE \$0.0

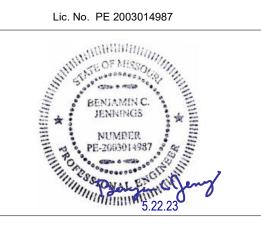
PLAN NOTES - FRAMING ALL OPENING SIZES AND LOCATIONS, HEAD AND SILL ELEVATIONS, ETC. SHALL BE COORDINATED WITH OTHER DISCIPLINES.

MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE ONLY. THE CONTRACTOR AND SUB SHALL VERIFY ALL UNIT WEIGHTS, LOCATIONS, AND DIMENSIONS PRIOR TO JOIST FABRICATION. PROVIDE ANGLE "H" FRAME PER TYPICAL ROOF OPENING DETAIL AT BOTH CURB AND DUCT PENETRATIONS. PROVIDE "H" FRAME AT ALL OPENINGS IN THE DECK GREATER THAN 10". THIS INCLUDES ROOF DRAINS. INCLUDES ROOF DRAINS.
 PROVIDE JOIST BRIDGING AS REQUIRED BY SJI SPECIFICATION. CONTRACTOR TO COORDINATE LOCATIONS WITH OTHER TRADES.
 MECHANICAL HANGERS AND OTHER ITEMS SUPPORTED FROM JOISTS ARE TO BE ATTACHED TO TOP OR BOTTOM CHORDS ONLY. REFER TO JOIST REINFORCING DETAIL FOR LOADS THAT DO NOT OCCUR AT A PANEL POINT. REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF PARTITION WALL ELEVATIONS. BRACE WALLS IN ACCORDANCE WITH TYPICAL DETAILS. COORDINATE FIREPROOFING REQUIREMENTS WITH ARCHITECHURAL DRAWINGS PROVIDE A LOOSE STEEL LINTEL PER MASONRY LINTEL NOTES AT ALL OPENINGS IN MASONRY VENEER. REFER TO SHEET S4.2 FOR MASONRY LINTEL SCHEDULE AND OTHER TYPICAL MASONRY DETAILING. O. CAP ANY OPEN TUBE ENDS w/ 1/4" PLATE AND FIELD WELD. 1. COAT ALL EXPOSED STEEL w/ HIGH PERFORMANCE PAINT.

**A R K I F E X**s T U D I O S

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BENJAMIN C. JENNINGS, PE

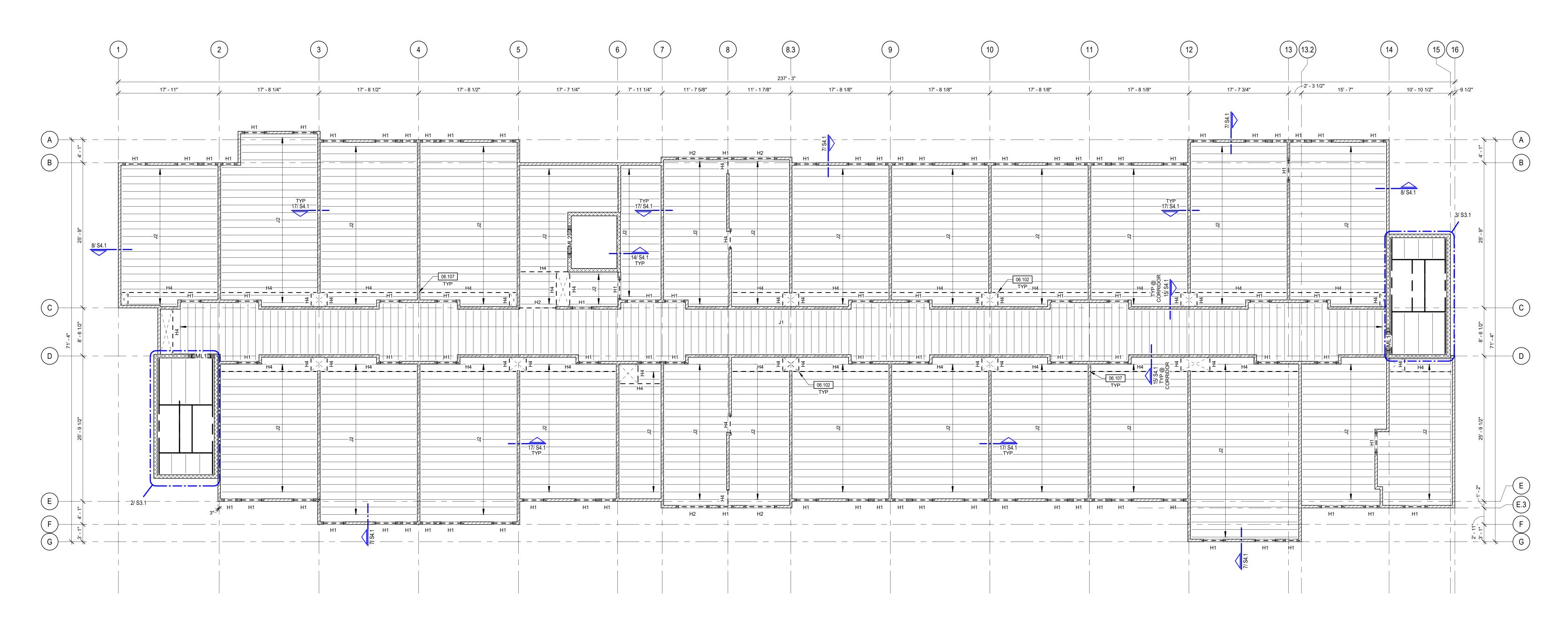


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THIRD & FOURTH FLOOR FRAMING PLAN

1/8" = 1'-0"

STAYBRIC

Description Date

S3.2
THIRD & FOURTH
FLOOR FRAMING
PLAN

date: 5.22.202

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COLUMN SCHEDULE MARK | COLUMN SIZE | BASE PLATE TYPE & SIZE | ANCHOR ROD SIZE | NOTES S1 HSS4X4X5/16 SEE S0.0 S2 HSS6X4X5/16 SEE S0.0 HSS6X4X1/2 SEE S0.0

HEADER & JOIST SCHEDULE (2) 1 3/4x11 7/8 LVL (3) 1 3/4x11 7/8 LVL (1)1 3/4x11 7/8 2x10 @ 16" O.C. 11 7/8 TJI 230 @ 16" O.C

SEE S0.0

SEE S0.0

SEE S0.0

SEE S0.0

SIMPSON ABU66

S4 HSS5X5X1/2

S5 HSS6X6X1/2

S6 HSS6X6X1/4

S7 HSS5X5X5/16

W1 6x6 Pressure Treated Wood

SEE S0.0

SEE S0.0

SEE S0.0

SEE S0.0

SEE S0.0

SEE S0.0

5/8" TITEN HD

KEYNOTE LEGEND 04.301 TOP OF CMU TO BE 3" BELOW DECK BEARING. PROVIDE (2) NAILERS w/ 1/2" x 8"
TITNE HD's @ 24" O.C. PROVIDE JOIST HANGERS WHERE HOISTS ARE
PERPENDICULAR TO WALL. 05.101 POCKET BEAM INTO WALL. SEE DETAIL 8/S4.2. 05.102 COORDINATE HOIST BEAM LOCATION AND ELEVATION w/ MFR. 06.102 PROVIDE SIMPSON TOP FLANGE HANGER. 2x4's @ 16" O.C. 06.113 PROVIDE DOUBLE JOISTS UNDER UNIT. PROVIDE (2) 2x10 BLOCKING AT PERIMETER OF UNIT.

PLAN NOTES - FRAMING ALL OPENING SIZES AND LOCATIONS, HEAD AND SILL ELEVATIONS, ETC. SHALL BE COORDINATED WITH OTHER DISCIPLINES.

MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE ONLY. THE CONTRACTOR AND SUB SHALL VERIFY ALL UNIT WEIGHTS, LOCATIONS, AND DIMENSIONS PRIOR TO JOIST FABRICATION. PROVIDE ANGLE "H" FRAME PER TYPICAL ROOF OPENING DETAIL AT BOTH CURB AND DUCT PENETRATIONS. PROVIDE "H" FRAME AT ALL OPENINGS IN THE DECK GREATER THAN 10". THIS INCLUDES ROOF DRAINS. PROVIDE JOIST BRIDGING AS REQUIRED BY SJI SPECIFICATION. CONTRACTOR TO COORDINATE LOCATIONS WITH OTHER TRADES.

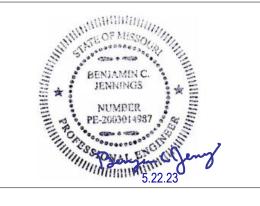
MECHANICAL HANGERS AND OTHER ITEMS SUPPORTED FROM JOISTS ARE TO BE ATTACHED TO TOP OR BOTTOM CHORDS ONLY. REFER TO JOIST REINFORCING DETAIL FOR LOADS THAT DO NOT OCCUR AT A PANEL POINT. REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF PARTITION WALL ELEVATIONS. BRACE WALLS IN ACCORDANCE WITH TYPICAL DETAILS. COORDINATE FIREPROOFING REQUIREMENTS WITH ARCHITECHURAL DRAWINGS PROVIDE A LOOSE STEEL LINTEL PER MASONRY LINTEL NOTES AT ALL OPENINGS IN MASONRY VENEER. REFER TO SHEET S4.2 FOR MASONRY LINTEL SCHEDULE AND OTHER TYPICAL MASONRY DETAILING. O. CAP ANY OPEN TUBE ENDS w/ 1/4" PLATE AND FIELD WELD. 1. COAT ALL EXPOSED STEEL w/ HIGH PERFORMANCE PAINT.



STUDIOS

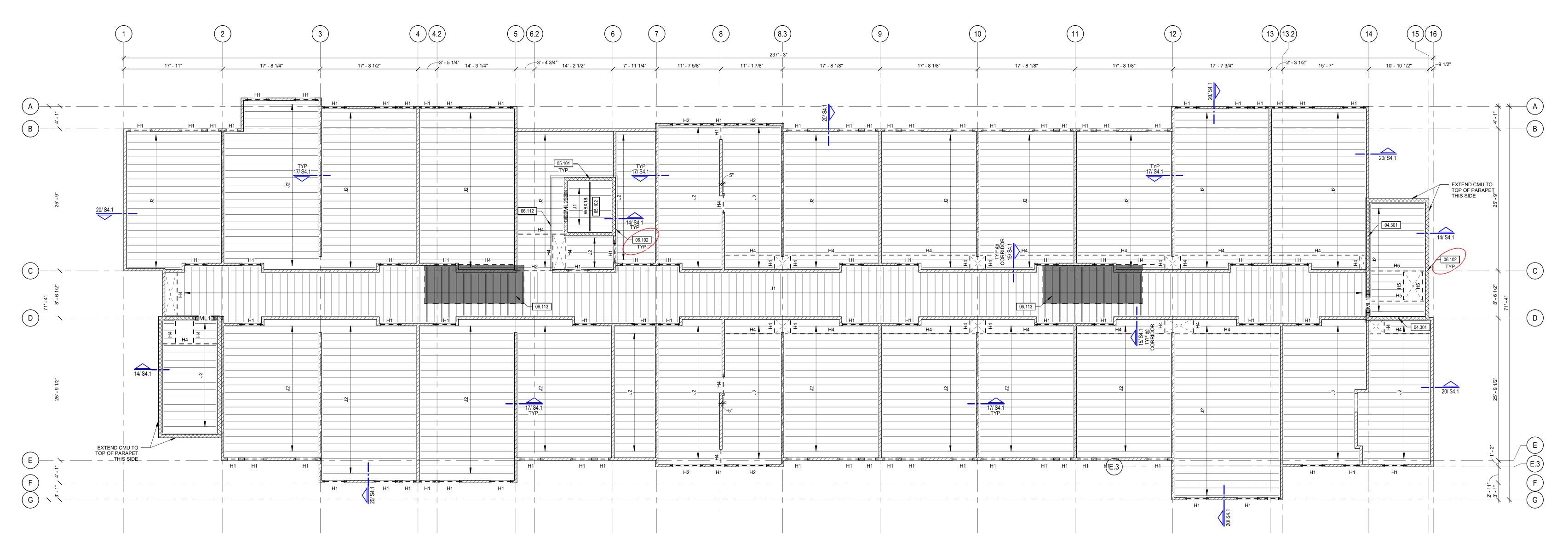
221 SOUTH AVE, SPRINGFIELD, MO 65806 BENJAMIN C. JENNINGS, PE

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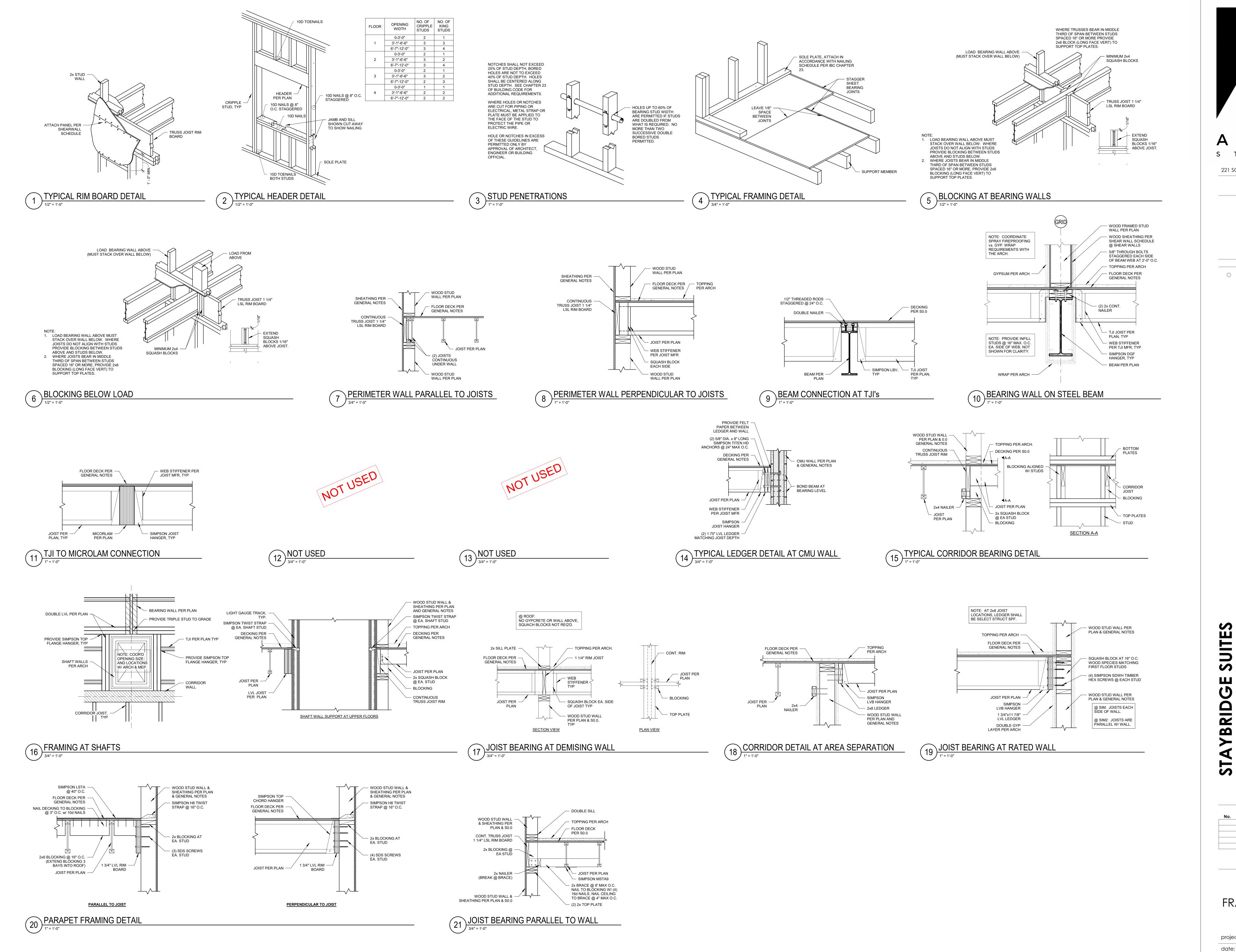




ROOF FRAMING PLAN

**S3.3** ROOF FRAMING PLAN

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BENJAMIN C. JENNINGS, PE

BENJAMIN C.
JENNINGS

NUMBER
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SPRINGFIELD, MO 65804

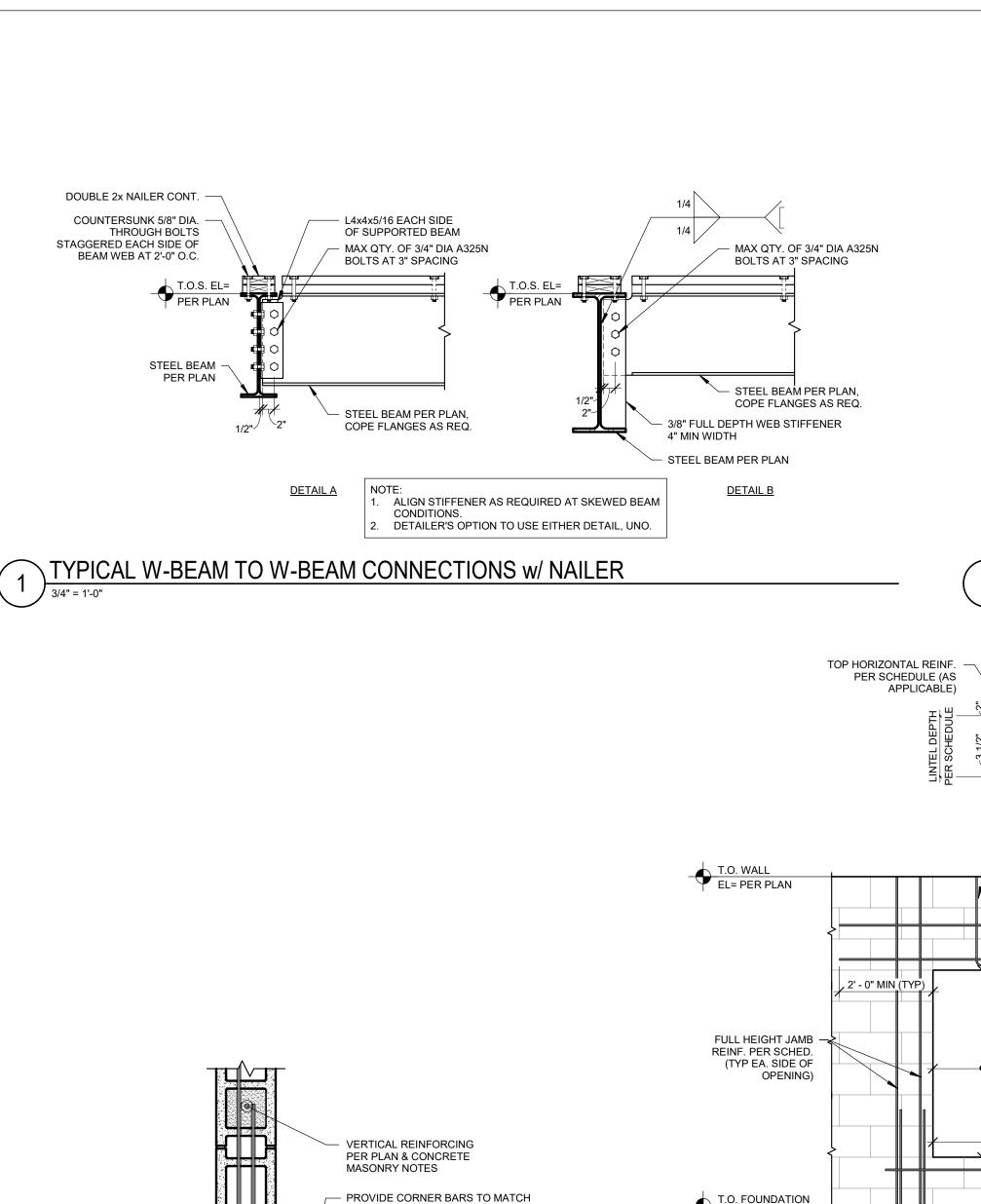
No. Description Date

**\$4.1** FRAMING DETAILS

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date: 5.22.2023

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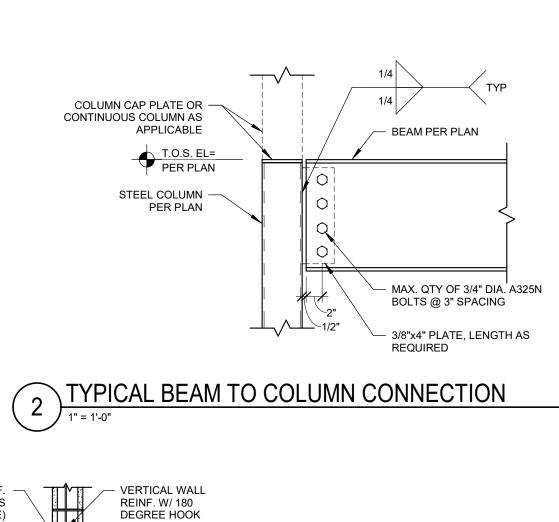
HORIZONTAL REINFORCING. SEE

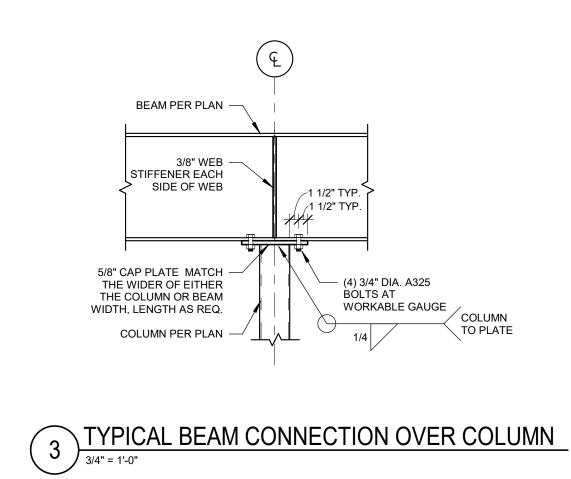
MINIMUM LAP LENGTH

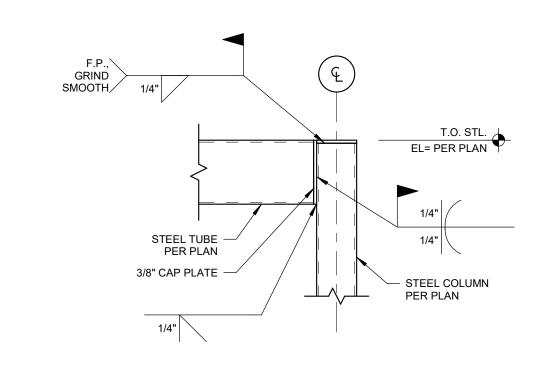
HORIZONTAL REINFORCING

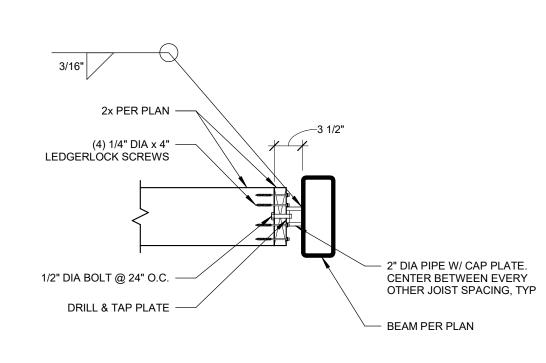
PER PLAN & CONCRETE MASONRY NOTES

CONCRETE MASONRY NOTES FOR

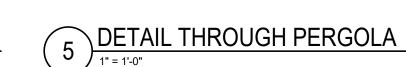


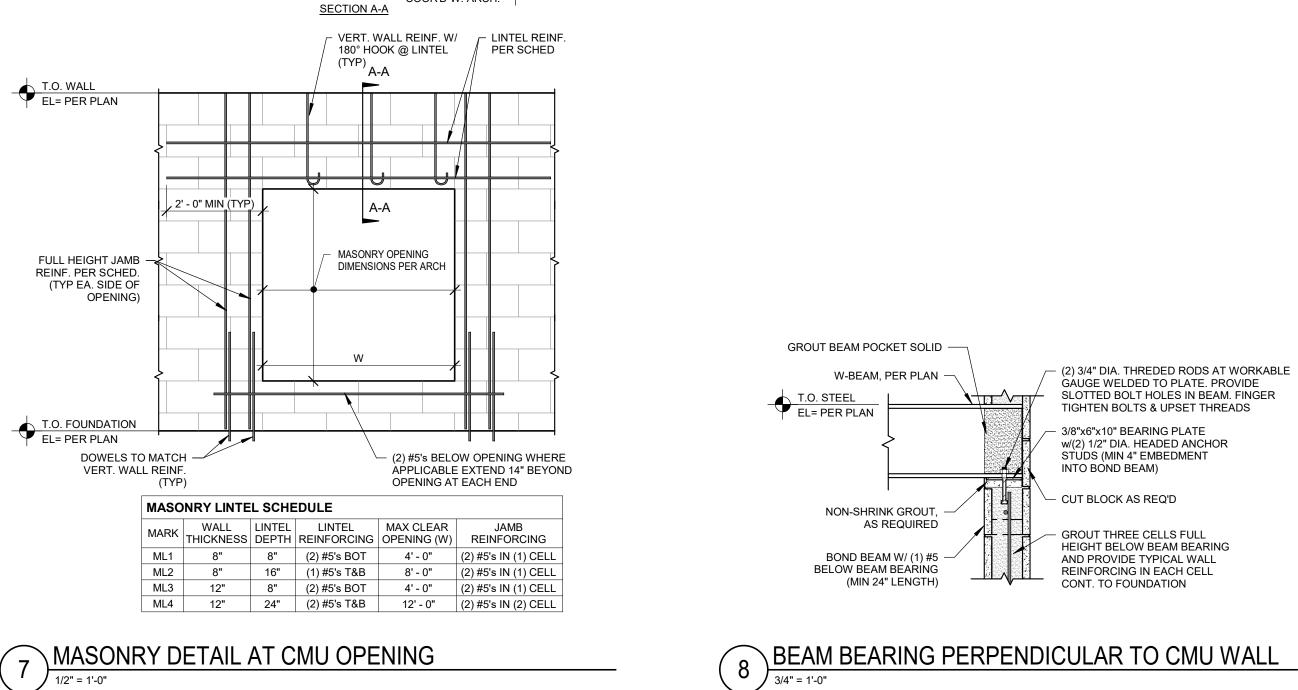






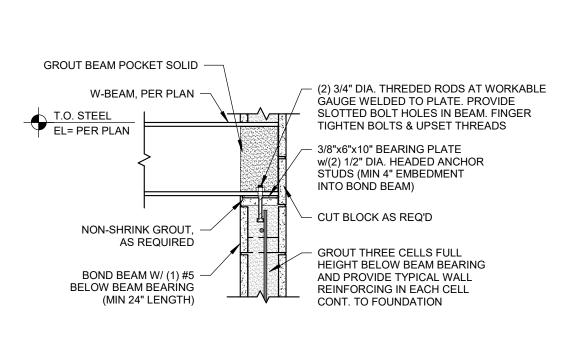
TYPICAL TUBE TO TUBE MOMENT CONNECTION

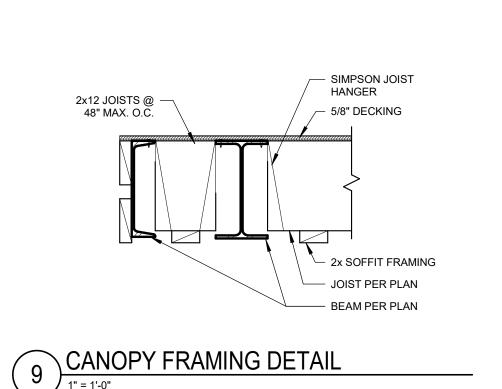


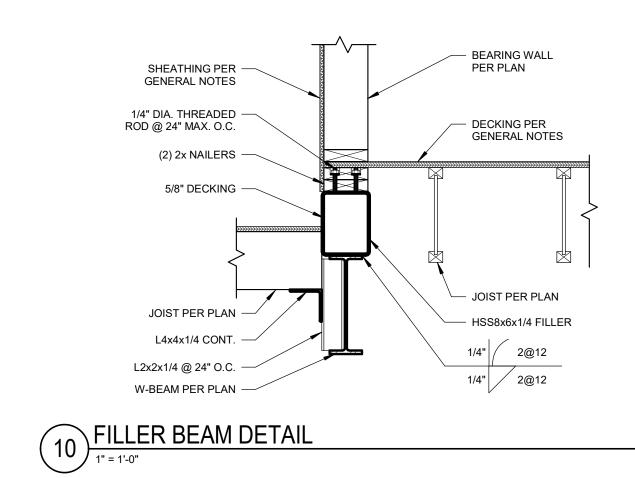


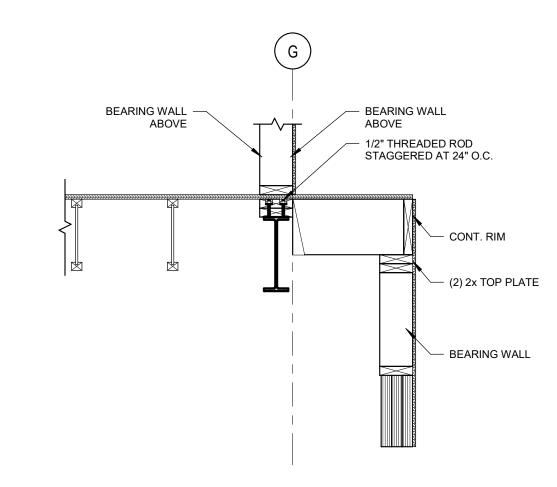
- BOTTOM HORIZONTAL REINFORCING PER SCHEDULE

B.O. OPENING EL= COOR'D W. ARCH.









SECTION AT ROOF OFFSET

3/4" = 1'-0"

PROVIDE VERTICAL REINFORCING IN

CORNER CELL AND

CELL EACH SIDE

6 TYPICAL CORNER BARS - 8" CMU

MINIMUM 1 ADJACENT

SUITES BRIDGE 1301 SPRIN

Revisions

9

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engineering consultants

RTM ENGINEERING CONSULTANTS, LLO

3045 S. KANSAS EXPRESSWAY

SPRINGFIELD, MO 65807

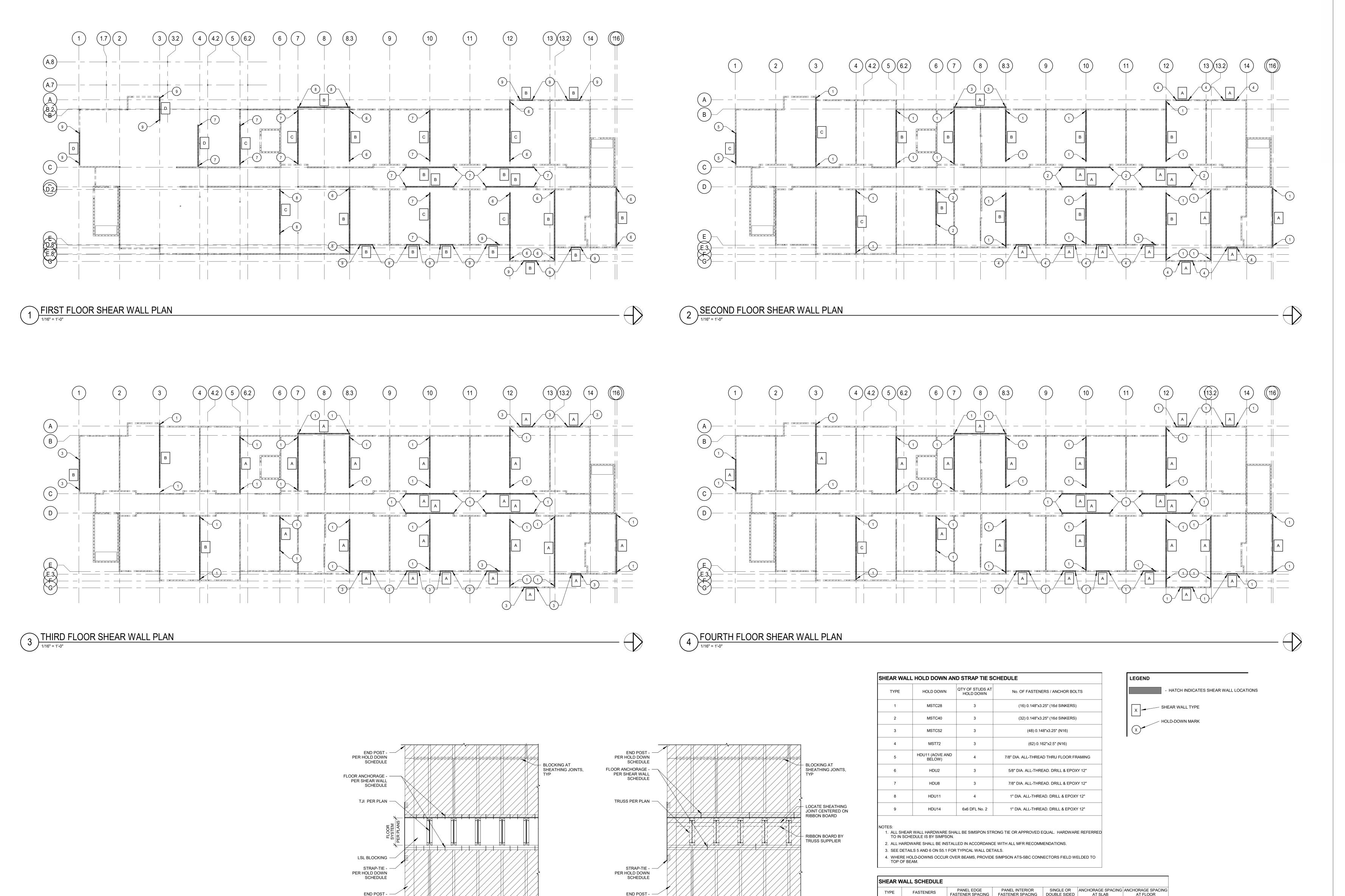
PHONE: 417.708.9315

MO COA: 2014035826

**S4.2** FRAMING DETAILS

5.22.2023

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PER HOLD DOWN SCHEDULE

SIMPSON BPS

HOLD-DOWN -PER SCHEDULE

\*- FOUNDATION

HOLD-DOWN SCHEDULE

CONCRETE FOUNDATION

EMBEDMENT PER

PER PLAN

4 SLAB ANCHORAGE PER —

SHEAR WALL SCHEDULE

PLATE WASHER,

PER HOLD DOWN SCHEDULE

SIMPSON BPS

HOLD-DOWN -

PER PLAN

SLAB ANCHORAGE PER -

SHEAR WALL SCHEDULE

PER SCHEDULE

\*- FOUNDATION

CONCRETE FOUNDATION

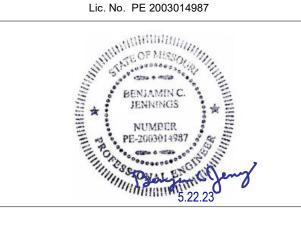
EMBEDMENT PER HOLD-DOWN SCHEDULE

PLATE WASHER,

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SHEAR WALL SCHEDULE						
TYPE	FASTENERS	PANEL EDGE FASTENER SPACING	PANEL INTERIOR FASTENER SPACING	SINGLE OR DOUBLE SIDED	ANCHORAGE SPACING AT SLAB	ANCHORAGE SPACING AT FLOOR
Α	8D COMMON NAILS	6"	12"	S	32"	16"
В	8D COMMON NAILS	4"	12"	S	22"	16"
С	8D COMMON NAILS	3"	12"	S	18"	8"
D	8D COMMON NAILS	2" *	12"	S	12"	4"

- 1. SEE DETAILS 5 AND 6 ON S5.1. 2. SHEATHING FOR SHEAR WALLS SHALL BE 7/16" APA RATED 32/16 PLYWOOD OR OSB PANELS.

6. PROVIDE SIMPSON BPS PLATE WASHERS AT ALL ANCHORS TO SLAB ON GRADE.

LAYER OF GYP. TO FLUSH OUT WALL SURFACE.

- 3. PROVIDE BLOCKING AT ALL SHEAR WALL SHEATHING PANEL EDGES. 4. FOR SINGLE SIDED SHEAR WALLS, SHEATHING SHALL BE LOCATED ON THE SIDE OF WALL NEAREST THE CALLOUT. 5. SILL ANCHORAGE TO SLAB ON GRADE SHALL BE 5/8" DIA. BY 8 INCH LONG SIMPSON TITEN HD SCREW ANCHORS AT SPACING INDICATED.
- 7. TYPICAL PLATE ANCHORAGE TO FLOOR FRAMING SHALL BE 1/4" DIA. BY 6 INCH LONG SIMPSON SDS SCREWS AT SPACING INDICATED.
- (PROVIDE 1/4" DIA. BY 8 INCH LONG SIMPSON SDS SCREWS AT DOUBLE SILL PLATE LOCATIONS)
- 8. \* PROVIDE DOUBLE STUDS AT PANEL EDGES WHEN FASTENER SPACING IS LESS THAN 3" O.C. 9. WHERE SHEAR WALLS DO NOT EXTEND THE FULL LENGTH OF A WALL. EITHER CONTINUE SHEAR WALL OR SHEATHING OR USE AN EXTRA

**S5.1** SHEAR WALL PLANS

project #: 22-169 5.22.2023 date:

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