STRUCTURAL STEEL

ALL STEEL SHALL CONFORM TO THE FOLLOWING:

W-SHAPES	ASTM A992, Fy=50 KSI ASTM A913, Fy=50 KSI
ALL ANGLES AND CHANNELS UNLESS NOTED OTHERWISE	ASTM A36, Fy=36 KSI
SQUARE OR RECTANGULAR STRUCTURAL TUBE (HSS)	ASTM A500, GRADE C, Fy=50 KSI
ROUND STRUCTURAL TUBE (HSS)	ASTM A500, GRADE C, Fy=46 KSI
STEEL PIPE DIAMETER LESS THAN OR EQUAL TO 12 INCHES	ASTM A53, TYPE E OR S, GRADE B, Fy=35 KSI
MATERIAL CALLED OUT ON PLANS AS (Fy=36 KSI)	ASTM A36, Fy=36 KSI
MATERIAL CALLED OUT ON PLANS AS (Fy=65 KSI)	ASTM A572, Fy=65 KSI
ALL OTHER STEEL UNLESS NOTED OTHERWISE	ASTM A572, Fy=50 KSI ASTM A588, Fy=50 KSI

GENERAL NOTES FOR STEEL CONNECTIONS SHALL APPLY TO ALL STEEL CONNECTIONS UNLESS NOTED OTHERWISE.

ALL WORK SHALL BE IN ACCORDANCE WITH THE AISC SPECIFICATION. SHOP DRAWINGS SHALL BE SUBMITTED AND REVIEWED BY THE ARCHITECT/ENGINEER BEFORE COMMENCING FABRICATION. ALL STEEL ANCHORS AND TIES AND OTHER MEMBERS EMBEDDED IN CONCRETE OR MASONRY SHALL BE LEFT UNPAINTED. DIMENSIONAL TOLERANCE FOR BUILT-UP MEMBERS SHALL BE PER AWS D1.1.

FOR ASTM A6 HOT-ROLLED SHAPES WITH A FLANGE THICKNESS OF 2 INCHES OR GREATER OR BUILT-UP SHAPES WITH A PLATE THICKNESS OF 2 INCHES OR GREATER THAT ARE SPLICED OR CONNECTED USING COMPLETE JOINT PENETRATION GROOVE WELDS, CHARPY V—NOTCH TESTING SHALL BE PROVIDED IN ACCORDANCE WITH ASTM A6 SUPPLEMENTARY REQUIREMENT S30, AS APPLICABLE, WITH A MINIMUM VALUE OF 20 FOOT—POUNDS AT 70 DEGREES FAHRENHEIT.

STEEL BEAMS ARE EQUALLY SPACED BETWEEN DIMENSION POINTS AT THE MAXIMUM DECK SPAN LOCATION, UNLESS NOTED OTHERWISE. MINIMUM CONNECTIONS SHALL BE A TWO-BOLT CONNECTION USING 7/8-INCH-DIAMETER GR A325 BOLTS IN SINGLE SHEAR.

BOLTS DESIGNATED "GR A325" IN THE DRAWINGS REFER TO ASTM F3125 GRADE A325 HEAVY HEX BOLTS OR GRADE F1852 TWIST-OFF STYLE TENSION-CONTROL BOLTS. BOLTS DESIGNATED "GR A490" IN THE DRAWINGS REFER TO ASTM F3125 GRADE A490 HEAVY HEX BOLTS OR GRADE F2280 TWIST-OFF STYLE TENSION-CONTROL BOLTS. BOLT STYLE MAY BE SELECTED AT CONTRACTOR OPTION. ALL HIGH-STRENGTH BOLTS SHALL BE INSTALLED, TIGHTENED, AND INSPECTED IN ACCORDANCE WITH THE RCSC.

BOLTS IN CONNECTIONS OF BEAM-TO-BEAM/GIRDER MAY BE SNUG-TIGHT, UNLESS SPECIFICALLY CALLED OUT PRETENSIONED OR SLIP-CRITICAL. SNUG-TIGHT CONNECTIONS SHALL BE INSTALLED PER THE CRITERIA FOR SNUG-TIGHT BOLTS.

ALL OTHER BOLTED CONNECTIONS SHALL BE PRETENSIONED. PRETENSIONED AND SLIP-CRITICAL CONNECTIONS MAY USE TURN-OF-NUT PRETENSIONING, TWIST-OFF-TYPE TENSION-CONTROL BOLT PRETENSIONING, OR DIRECT-TENSION-INDICATOR PRETENSIONING. WHERE SLIP-CRITICAL CONNECTIONS ARE NOTED, FAYING SURFACES SHALL BE CLASS A, UNLESS SPECIFICALLY CALLED OUT AS CLASS B.

ALL HIGH-STRENGTH BOLTS SHALL HAVE WASHERS INSTALLED PER THE RCSC, UNLESS NOTED OTHERWISE.

ALL ASTM A307 BOLTS SHALL BE PROVIDED WITH LOCK WASHERS UNDER NUTS OR SELF-LOCKING NUTS.

ALL BOLT HOLES SHALL BE STANDARD SIZE, UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SELECTION OF OPTIONAL DETAILS SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS THAT INCLUDE, BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES, AND OTHER AIDS.

STRUCTURAL STEEL WELDING

STRUCTURAL STEEL SHOP DRAWINGS SHALL SHOW ALL WELDING WITH AWS A2.4 SYMBOLS. ALL WELDING SHALL BE DONE BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH AWS D1.1 AND AWS D1.8. WELDS SHOWN ON THE DRAWINGS ARE THE MINIMUM SIZES. INCREASE WELD SIZE TO AWS MINIMUM SIZES, BASED ON PLATE THICKNESS. THE MINIMUM WELD SIZE SHALL BE 3/16 INCH. FIELD WELDING SYMBOLS HAVE NOT NECESSARILY BEEN INDICATED ON THE DRAWINGS. WHERE SHOWN, PROPER FIELD WELDING PER AWS D1.1 SHALL BE USED. WHERE NO FIELD WELDING SYMBOLS ARE SHOWN, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE USE OF SHOP AND FIELD WELDS. ALL PARTIAL JOINT PENETRATION GROOVE WELD SIZES SHOWN ON THE DRAWINGS REFER TO EFFECTIVE THROAT THICKNESS, UNLESS NOTED OTHERWISE. FOR BASE METALS WITH MAXIMUM YIELD STRENGTH EQUAL TO 50 KSI, ALL WELDS SHALL BE MADE USING LOW HYDROGEN ELECTRODES WITH MINIMUM TENSILE STRENGTH PER AWS D1.1 (MINIMUM 70 KSI). FOR BASE METALS WITH YIELD STRENGTH HIGHER THAN 50 KSI, ALL WELDS SHALL BE MADE USING LOW HYDROGEN ELECTRODES FROM WITHIN THE SAME GROUP PER AWS D1.1 TABLE 3.1. LOW HYDROGEN SMAW ELECTRODES SHALL BE STORED IN AN OVEN OR USED WITHIN THE ATMOSPHERIC TIME PERIODS SPECIFIED IN AWS D1.1 TABLE 5.1, OR SHALL BE REBAKED PER AWS D1.1 CLAUSE 5.3. ELECTRODES SHALL BE REBAKED NO MORE THAN ONE TIME, AND ELECTRODES THAT HAVE BEEN WET SHALL NOT BE USED.

FILLER METALS FOR ALL COMPLETE JOINT PENETRATION GROOVE WELDED T- AND CORNER JOINTS WITH BACKING LEFT IN PLACE AND COMPLETE JOINT PENETRATION GROOVE WELDED SPLICES IN HEAVY SECTIONS AS DEFINED IN AISC 360 A3.1c SHALL HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FOOT-POUNDS AT 40 DEGREES FAHRENHEIT.

ALL WELDING SHALL BE PERFORMED IN STRICT ADHERENCE TO A WRITTEN WELDING PROCEDURE SPECIFICATION (WPS) PER AWS D1.1 AND AWS D1.8. ALL WELDING PARAMETERS SHALL BE WITHIN THE ELECTRODE MANUFACTURER'S RECOMMENDATIONS. WELDING PROCEDURES SHALL BE SUBMITTED TO THE OWNER'S TESTING AGENCY FOR REVIEW PRIOR TO STARTING FABRICATION OR ERECTION. COPIES OF THE WPS SHALL BE ON SITE AND AVAILABLE TO ALL WELDERS AND THE SPECIAL INSPECTOR.

ALL COMPLETE JOINT PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED UPON COMPLETION OF THE CONNECTION, EXCEPT PLATE LESS THAN OR EQUAL TO 1/4 INCH THICK, WHICH SHALL BE MAGNETIC PARTICLE TESTED. REDUCTION IN TESTING MAY BE MADE IN ACCORDANCE WITH THE BUILDING CODE WITH APPROVAL OF THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOINT PREPARATIONS AND WELDING PROCEDURES THAT INCLUDE, BUT ARE NOT LIMITED TO: REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, COPES, SURFACE ROUGHNESS VALUES, AND TAPERS AND TRANSITIONS OF UNEQUAL PARTS.

FIREPROOFING STRUCTURAL STEEL

REFER TO ARCHITECTURAL PLANS FOR MINIMUM HOURLY VALUES OF STEEL FIRE PROTECTION FOR DETERMINING THE THICKNESS OF SPRAY APPLIED FIREPROOFING. THE STRUCTURAL FRAME CONSISTS OF COLUMNS AND GIRDERS, BEAMS, TRUSSES, AND SPANDRELS HAVING DIRECT CONNECTIONS TO THE COLUMNS AND BRACING MEMBERS DESIGNED TO CARRY GRAVITY LOADS. FLOOR OR ROOF MEMBERS THAT HAVE NO CONNECTION TO COLUMNS SHALL BE CONSIDERED SECONDARY MEMBERS.

ANCHOR RODS

ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 WITH CLASS 2A THREADS, UNLESS NOTED OTHERWISE. FURNISH ANCHOR RODS PREFABRICATED WITH MATCHING DOUBLE HEAVY HEX NUTS JAMMED AT THE END EMBEDDED IN CONCRETE. FURNISH PLATE WASHERS AND MATCHING HEAVY HEX NUTS FOR SECURING THE BASE PLATE TO THE ANCHOR RODS. HOOKED ANCHOR RODS SHALL NOT BE USED EXCEPT WHERE NOTED. A RIGID STEEL TEMPLATE SHALL BE USED TO LOCATE ANCHOR RODS WHILE PLACING CONCRETE. ANCHOR RODS SHALL HAVE SUFFICIENT LENGTH TO PROVIDE THE MINIMUM EMBEDMENT SHOWN ON THE DRAWINGS, MEASURED FROM THE FACE OF THE CONCRETE TO THE NEAR FACE OF THE DOUBLE NUT, WITH ADEQUATE EXTENSION AS REQUIRED TO RECEIVE THE BASE PLATE WITH ADEQUATE THREAD PROJECTION FOR FULL NUT ENGAGEMENT. ANCHOR ROD INSTALLATION SHALL BE COORDINATED WITH REINFORCING AND FORMWORK. LEVELING NUTS SHALL NOT BE USED EXCEPT AFTER EVALUATION BY THE CONTRACTOR'S ERECTION ENGINEER. AFTER BASE INSTALLATION, ANCHOR ROD NUTS SHALL BE INSTALLED TO A SNUG-TIGHT CONDITION. NO HEATING OR BENDING OF THE ANCHOR RODS IS PERMITTED. HOLES IN THE BASE MATERIAL SHALL NOT BE ENLARGED BY BURNING.

COMPOSITE FLOOR SYSTEM

FLOOR SLABS SHALL BE CONSTRUCTED TO THE THICKNESS SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO THE SPECIFICATIONS FOR FLOOR TOLERANCES. THE CONTRACTOR SHALL INCLUDE THE QUANTITIES OF THE ADDED CONCRETE DUE TO THE STEEL DECK DEFLECTION. DESIGN CAMBER SHOWN FOR THE STEEL BEAMS HAS BEEN CALCULATED BASED ON THE DEFLECTION OF THE BEAM DUE TO THE WEIGHT OF THE STEEL AND CONCRETE SLAB.

MINIMUM SLAB REINFORCING IS WWR 6x6-W2.9xW2.9, UNLESS NOTED OTHERWISE.

SHEAR CONNECTOR STUDS

ALL SHEAR CONNECTOR STUDS SHALL BE 3/4 INCH IN DIAMETER UNLESS NOTED OTHERWISE.

ACCEPTABLE TYPES SHALL BE "TRU-WELD" (ICC—ES ER—2577 OR IAPMO-UES EQUIVALENT)
OR "NELSON" (ICC—ES ER—2856 OR IAPMO-UES EQUIVALENT). SHEAR CONNECTOR STUDS
SHALL BE AUTOMATICALLY END WELDED IN SHOP OR FIELD WITH EQUIPMENT RECOMMENDED
BY MANUFACTURER OF STUDS. STEEL STUD MATERIAL, WELDING, AND INSPECTION SHALL BE
IN ACCORDANCE WITH AWS D1.1. SHEAR STUDS SHALL BE PLACED AT A MAXIMUM SPACING
OF 2'—0" ON CENTER FOR ALL BEAMS SUPPORTING A STEEL DECK WITH CONCRETE FILL OR A
CAST-IN-PLACE CONCRETE SLAB. THIS SPACING SHALL ALSO APPLY WHEN THE NUMBER OF
STUDS IS NOT INDICATED ON THE PLANS. SEE "SHEAR STUD PLACEMENT" FOR LAYOUT
CRITERIA. STEEL DECK SHOP DRAWINGS DETAILING THE SHEAR STUD PLACEMENT SHALL BE
SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE INSTALLATION.

LENGTHS SHOWN IN THE CONSTRUCTION DOCUMEN
SHORT IN ADDITION, THE CONSTRUCTION TOLER,
DIFFERENTIAL COLUMN SHORT END OCCURS WHE
OR ARE SUBJECT TO TRANSFER BEAM DEFLECTION.
FLOOR BEAMS, ESPECIALLY EDGE BEAMS, TRANSFE
CONTINUE TO DEFLECT WHEN ADDITIONAL LOAD IS A
CAMBERED TO COMPENSATE FOR THE THEORETICA
OCCUR UNTIL ALL THE DEAD LOAD IS APPLIED TO THE
SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE INSTALLATION.

STEEL COMPOSITE DECK

THE STEEL DECK SHALL BE OF DEPTH SHOWN ON THE STRUCTURAL DRAWINGS. GAGE OF DECK SHALL BE DETERMINED BY THE CONTRACTOR BASED ON THE SPAN CONDITIONS. SHORING REQUIREMENTS, CONSTRUCTION LOADS, DEFLECTION REQUIREMENTS, AND THE SUPERIMPOSED LOADS SHOWN ON THE DRAWINGS, LOAD DIAGRAMS, AND NOTES. MINIMUM GAGE IS 20. MAXIMUM DEAD LOAD DEFLECTION IS 3/4 INCH OR L/180. WRITTEN VERIFICATION OF CONFORMANCE FOR ALL CONDITIONS IN THE STRUCTURE SHALL BE SUBMITTED FOR ACCEPTANCE PRIOR TO FABRICATION. THE CAPACITIES OF THE DECK SHALL BE BASED ON CURRENT ICC-ES (OR IAPMO-UES EQUIVALENT) REPORTS. SHOP DRAWINGS SHALL BE SUBMITTED SHOWING DECK GAGE, LAYOUT, FASTENING, STUD LAYOUT, AND CLOSURES. II ANY SHORING IS TO BE USED, IT SHALL BE APPROVED BY THE GENERAL CONTRACTOR AND SHALL BE SHOWN ON THE SHOP DRAWINGS. UNITS SHALL SPAN OVER FOUR SUPPORTS, CONTINUOUS OVER THREE OR MORE SPANS, EXCEPT WHERE FRAMING DOES NOT PERMIT THE AISI SPECIFICATIONS SHALL GOVERN THE DESIGN OF ALL DECK UNITS. STEEL DECK AND ALL OF ITS FLASHINGS SHALL CONFORM TO ASTM A653. THE STEEL SHALL HAVE RECEIVED, BEFORE BEING FORMED, A METAL PROTECTIVE COATING OF ZINC CONFORMING TO ASTM A653—G60. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3.

CONCRETE BONDING-TYPE UNITS SHALL BE FORMED WITH DEFORMATIONS TO PROVIDE AN INTERLOCK BETWEEN THE CONCRETE AND STEEL. UNLESS SHOWN OTHERWISE, UNITS SHALL BE FASTENED TO THE STEEL SUPPORTS AT THE ENDS OF THE UNITS AND AT INTERMEDIATE SUPPORTS BY 3/4-INCH DIAMETER PUDDLE WELDS AT 1'-0" ON CENTER; WHERE TWO UNITS ABUT, EACH UNIT SHALL BE SO FASTENED TO THE STEEL SUPPORTS. THE SIDE LAPS OF ADJACENT UNITS SHALL BE FASTENED BETWEEN SUPPORTS BY 1 1/2—INCH TOP SEAM WELDS AT 2'-0" ON CENTER OR BUTTON PUNCHED AT 2'-0" ON CENTER. DECK UNITS SHALL BE FASTENED TO THE STEEL SUPPORTS AT THE SIDE BOUNDARIES BY 3/4—INCH-DIAMETER PUDDLE WELDS AT 1'-0" ON CENTER. 3/4—INCH-DIAMETER SHEAR STUDS WELDED THROUGH DECK MAY BE USED IN PLACE OF 3/4—INCH-DIAMETER PUDDLE WELDS. DESIGN AND PROVIDE FLASHING AND CLOSURE PLATES AT WALL ENDS OF ALL UNITS, AROUND COLUMNS, AND AT ALL PERIMETER LOCATIONS REQUIRING CLOSURE. COORDINATE ALL CLOSURES WITH ELEVATOR, STAIR, ESCALATOR AND OTHER ARCHITECTURAL DETAILS. THE DECK INSTALLATION, WHEN COMPLETE, SHALL BE READY TO RECEIVE CONCRETE.

STEEL DECK TYPES SHALL BE VERCO TYPE W, ASC TYPE W, OR APPROVED EQUAL.

CONTRACTOR SHALL USE THE NECESSARY CONCRETE PLACEMENT AND FINISH METHODS TO ACHIEVE THE SPECIFIED CONCRETE THICKNESS AND SHALL TAKE THE NECESSARY MEASURES DURING CONCRETE PLACEMENT SO AS NOT TO OVERLOAD THE DECK.

STEEL ROOF DECK

INSULATING CONCRETE.

THE STEEL DECK SHALL BE OF DEPTH AND GAGE SHOWN ON THE STRUCTURAL DRAWINGS. STEEL DECK AND ALL OF ITS FLASHINGS SHALL CONFORM TO ASTM A653 AND SHALL HAVE CURRENT ICC-ES (OR IAPMO-UES EQUIVALENT) REPORTS. THE STEEL DECK SHALL HAVE RECEIVED, BEFORE BEING FORMED, A METAL PROTECTIVE COATING OF ZINC CONFORMING TO ASTM A653—G60. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3. UNITS SHALL SPAN OVER FOUR SUPPORTS, CONTINUOUS OVER THREE OR MORE SPANS, EXCEPT WHERE THE FRAMING DOES NOT PERMIT.

UNLESS NOTED OTHERWISE, NONCOMPOSITE UNITS SHALL BE CONNECTED AS FOLLOWS:

CONNECT DECK TO THE STEEL SUPPORTS AT THE ENDS OF THE UNITS AND AT INTERMEDIATE SUPPORTS BY A MINIMUM OF FOUR 3/4-INCH PUDDLE WELDS PER 3'—0" OF WIDTH. WHERE TWO UNITS ABUT, EACH UNIT SHALL BE SO CONNECTED TO THE STEEL FRAMING.

THE SIDE LAPS OF ADJACENT UNITS SHALL BE CONNECTED BETWEEN SUPPORTS BY 1-1/2" TOP SEAM WELDS AT A MAXIMUM SPACING OF 2'-0" ON CENTER.

DECK UNITS SHALL BE CONNECTED TO THE STEEL SUPPORTS AT THE SIDE BOUNDARIES WITH 3/4 INCH PUDDLE WELDS AT THE SAME SPACING AS THE SIDE LAP CONNECTIONS.

WHERE STEEL MEMBERS ARE PARALLEL TO THE DECK FLUTES AND AT THE SAME ELEVATION OF THE BOTTOM OF THE DECK, ADJUST DECK LAYOUT AND CONNECT DECK TO STEEL WITH SAME WELDING AS REQUIRED FOR SIDE BOUNDARIES.

STEEL DECK THAT IS TO BE COVERED WITH INSULATING CONCRETE SHALL BE SLOTTED OR PERFORATED TO PROVIDE A MINIMUM OF 1.5 PERCENT UNIFORMLY DISTRIBUTED VENTING. PROVIDE FLASHING AND CLOSURE PLATES AT ALL PERIMETER LOCATIONS REQUIRING CLOSURE. THE DECK INSTALLATION, WHEN COMPLETE, SHALL BE READY TO RECEIVE

SHOP DRAWINGS SHALL BE SUBMITTED SHOWING DECK DEPTH, GAGE, LAYOUT, CONNECTIONS, AND CLOSURES

STEEL DECK TYPES SHALL BE VERCO TYPE N-24, ASC TYPE N, OR APPROVED EQUAL.

MASONRY

CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE BUILDING CODE. ALL HOLLOW CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT. MINIMUM REQUIRED BLOCK COMPRESSIVE STRENGTH IS 2,000 PSI. ALL CELLS CONTAINING REINFORCEMENT SHALL BE FILLED SOLID WITH CONCRETE GROUT. GROUT MIX SHALL CONTAIN PORTLAND CEMENT, AGGREGATE, AND A GROUT-ENHANCING SHRINKAGE-COMPENSATING ADDITIVE. MAXIMUM SIZE OF AGGREGATE SHALL BE 3/8 INCH. SLUMP SHALL BE 8 TO 11 INCHES. WATER-REDUCING ADMIXTURES MAY BE USED. MINIMUM GROUT COMPRESSIVE STRENGTH BASED ON 28—DAY TESTS SHALL EQUAL OR EXCEED THE SPECIFIED f'm AND BE GREATER THAN OR EQUAL TO THE SPECIFIED MINIMUM DESIGN STRENGTH. GROUT SHALL BE VIBRATED WHILE PLACING TO ENSURE THAT CELLS ARE COMPLETELY FILLED. SUBMIT GROUT MIXES TO ARCHITECT FOR REVIEW BEFORE COMMENCING MASONRY CONSTRUCTION. ALL UNITS SHALL BE LAID IN RUNNING BOND USING TYPE S MORTAR WITH HEAD JOINTS. MASONRY MINIMUM DESIGN STRENGTH IS f'm = 2,000 PSI.

REQUIRED MORTAR PROPORTIONS BY VOLUME

TYPE	PORTLAND CEMENT	HYDRATED LIME	AGGREGATE MEASURED IN A DAMP, LOOSE CONDITION
S	1	OVER 1/4 TO 1/2	NOT LESS THAN 2 1/4 AND NOT MORE THAN 3 TIMES THE SUM OF THE VOLUMES

COLUMN SHORTENING AND BEAM DEFLECTION

COLUMN SHORTENING WILL OCCUR DUE TO THE WEIGHT OF THE CONSTRUCTION ABOVE. THIS SHORTENING WILL CONTINUE UNTIL ALL OF THE DEAD LOAD IS ON THE STRUCTURE, INCLUDING THE CLADDING. THE COLUMNS SHALL BE FABRICATED LONGER THAN THE FINAL LENGTHS SHOWN IN THE CONSTRUCTION DOCUMENTS TO COMPENSATE FOR THIS SHORTENING. IN ADDITION, THE CONTRACTOR SHALL SUPPLY SHIMMING OR MILLING AS REQUIRED DUE TO NORMAL CONSTRUCTION TOLERANCES AND ERECTION PROCEDURES. DIFFERENTIAL COLUMN SHORTENING OCCURS WHEN COLUMNS STOP AT DIFFERENT LEVELS OR ARE SUBJECT TO TRANSFER BEAM DEFLECTION.

OF THE CEMENT

FLOOR BEAMS, ESPECIALLY EDGE BEAMS, TRANSFER GIRDERS, AND CANTILEVERS WILL CONTINUE TO DEFLECT WHEN ADDITIONAL LOAD IS APPLIED. THESE MEMBERS HAVE BEEN CAMBERED TO COMPENSATE FOR THE THEORETICAL DEFLECTION. HOWEVER, THIS MAY NOT OCCUR UNTIL ALL THE DEAD LOAD IS APPLIED TO THE MEMBER. THE CONTRACTOR SHALL COORDINATE THE ATTACHMENT OF ANY ITEMS TO MEMBERS WHICH WILL CONTINUE TO SHORTEN OR DEFLECT DUE TO LATER STAGES OF CONSTRUCTION.

EXTERIOR CLADDING

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE CLADDING SYSTEMS, INCLUDING THEIR STRUCTURAL INTEGRITY, WATERPROOFING SYSTEMS, AND CONNECTION TO THE PRIMARY STRUCTURE.STRUCTURAL ELEMENTS AT THE BUILDING PERIMETER HAVE BEEN DESIGNED FOR THE VERTICAL LOADS SHOWN ON THE LOAD MAPS. CLADDING ATTACHMENTS SHALL NOT APPLY MOMENTS TO SLAB EDGES OR LATERAL LOADS TO STEEL BEAMS OR INTRODUCE TORSIONAL LOADS INTO STEEL BEAMS OR COLUMNS. BRACES, ADDED REINFORCING, AND/OR TIES SHALL BE DESIGNED AND SUPPLIED BY THE CONTRACTOR FOR LOAD ECCENTRICITIES AND LATERAL LOADS. THE CONTRACTOR SHALL SUPPLY ALL CONNECTION MATERIAL, BRACES, ETC. EXPANSION BOLTING TO POSTTENSIONED SLABS IS NOT PERMITTED EXCEPT AS NOTED IN THE "POST-TENSIONED PRESTRESSED CONCRETE" NOTES. SUBMITTED DOCUMENTS SHALL INDICATE MAGNITUDE AND LOCATION OF ALL LOADS IMPOSED ON THE PRIMARY STRUCTURE.

EXTERIOR CLADDING CONNECTIONS SHALL ACCOUNT FOR STRUCTURAL DEFLECTION, COLUMN SHORTENING, AND CONSTRUCTION TOLERANCE. IN ADDITION, THE CLADDING DESIGN SHALL ACCOMMODATE A TYPICAL VERTICAL MOVEMENT AT EACH FLOOR OF 1/2 INCH DUE TO VARIABLE LIVE LOADING. THIS DISPLACEMENT WILL OCCUR AT THE FREE END OF CANTILEVER BEAMS AND AT MIDSPAN OF EDGE SLABS AND BEAMS.

INTERMEDIATE SUPPORTS BY 3/4-INCH DIAMETER PUDDLE WELDS AT 1'-0" ON CENTER; WHERE TWO UNITS ABUT, EACH UNIT SHALL BE SO FASTENED TO THE STEEL SUPPORTS. THE SIDE LAPS OF ADJACENT UNITS SHALL BE FASTENED BETWEEN SUPPORTS BY 1 1/2—INCH TOP SEAM WELDS AT 2'-0" ON CENTER OR BUTTON PUNCHED AT 2'-0" ON CENTER. DECK

THE CLADDING SHALL ACCOMMODATE LATERAL MOVEMENTS BETWEEN ADJACENT FLOORS PERPENDICULAR AND/OR PARALLEL TO THE WALL AS DEFINED IN THE STORY DRIFT SECTION OF THESE NOTES. THE CLADDING SHALL REMAIN UNDAMAGED UNDER THE SERVICE-LEVEL STORY DRIFT AND SHALL NOT FALL FROM THE BUILDING UNDER THE DESIGN STORY DRIFT.

STAIRS, ELEVATORS, AND MISCELLANEOUS METALS

UNLESS SHOWN AND DETAILED IN THE STRUCTURAL DRAWINGS, ALL STAIRS ARE TO CONSIST OF A PRE-FABRICATED AND PRE-ENGINEERED STAIR, LANDING, AND RAILING SYSTEM DESIGNED BY THE CONTRACTOR OR STAIR SUPPLIER. SEE THE ARCHITECT FOR STAIR SYSTEM LAYOUT, DIMENSIONS, AND CONFIGURATION OF RISE AND RUN. THE CONTRACTOR SHALL BE RESPONSIBLE TO DESIGN AND PROVIDE THE STAIR SYSTEM INCLUDING ALL CONNECTIONS AND SECONDARY SUPPORT FRAMING. WHERE REQUIRED BY THE BUILDING CODE, THE STAIRS SHALL ACCOMMODATE LATERAL MOVEMENTS BETWEEN ADJACENT FLOORS AS DEFINED IN THE STORY DRIFT SECTION OF THESE NOTES. UNDER THE SERVICE LEVEL STORY DRIFTS, ALL STAIRS MUST REMAIN FUNCTIONAL. UNDER THE DESIGN STORY DRIFTS ALL EGRESS STAIRS MUST REMAIN FUNCTIONAL AND ALL OTHER STAIRS MUST REMAIN CONNECTED TO THE BUILDING.

ALL ELEVATOR MACHINE BEAMS, HOIST BEAMS, SILLS, DOOR SUPPORTS, AND RAILS AND THEIR CONNECTIONS TO THE PRIMARY STRUCTURE ARE TO BE DESIGNED BY THE ELEVATOR MANUFACTURER. THE CONTRACTOR SHALL PROVIDE ADDITIONAL FRAMING AS NECESSARY FOR MACHINE ROOM FLOOR PENETRATIONS PER THE TYPICAL DETAILS. THE ELEVATOR MACHINE BEAMS SHALL BE DESIGNED FOR THE TRIBUTARY LOADS INDICATED IN THE LOAD MAPS IN ADDITION TO THE WEIGHT OF THE SUPPORTED EQUIPMENT AND SELF-WEIGHT OF THE MACHINE ROOM FLOOR/ROOF STRUCTURE. CONNECTIONS BETWEEN ELEVATOR MACHINE BEAMS AND PRIMARY STRUCTURES SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER OF RECORD. WHERE REQUIRED BY THE BUILDING CODE, THE ELEVATORS SHALL ACCOMMODATE LATERAL MOVEMENTS BETWEEN ADJACENT FLOORS AS DEFINED IN THE STORY DRIFT SECTION OF THESE NOTES.

THE CONTRACTOR SHALL DESIGN AND SUPPLY ALL ADDITIONAL MISCELLANEOUS METALS THAT ARE INDICATED IN THE ARCHITECTURAL DRAWINGS OR THOSE METALS WHICH ARE FOUND TO BE NECESSARY TO SUPPORT THE ARCHITECTURAL FINISHES OR OTHER BUILDING SYSTEMS. WHERE REQUIRED BY THE BUILDING CODE, THE MISCELLANEOUS METALS SHALL ACCOMMODATE LATERAL MOVEMENTS BETWEEN ADJACENT FLOORS AS DEFINED IN THE STORY DRIFT SECTION OF THESE NOTES.

ALL FRAMING AND CONNECTIONS DESIGNED BY THE CONTRACTOR SHALL NOT RESULT IN ECCENTRIC LOADS BEING APPLIED TO THE PRIMARY STRUCTURE NOR LATERAL LOADS BEING APPLIED TO THE BOTTOM FLANGE OF STEEL BEAMS. THE CONTRACTOR'S DESIGN SHALL VERIFY THAT THE CONNECTIONS DO NOT RESULT IN ADVERSE LOCAL CONNECTION STRESSES OCCURRING WITHIN THE PRIMARY STRUCTURE. SUBMIT CALCULATIONS STAMPED BY AN ENGINEER LICENSED TO PERFORM THE WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED AND SHOP DRAWINGS INDICATING IMPOSED LOADS ON THE PRIMARY STRUCTURE.

MECHANICAL/ELECTRICAL/PLUMBING SYSTEM SUPPORTS

THE CONTRACTOR SHALL DESIGN AND SUPPLY ALL ADDITIONAL MISCELLANEOUS METALS AND SYSTEM SUPPORT COMPONENTS THAT ARE NECESSARY TO SUPPORT ALL MECHANICAL, ELECTRICAL (TELECOM, AUDIO VISUAL, ETC), AND PLUMBING/FIRE-PROTECTION SYSTEMS. SUCH METALS AND SUPPORT COMPONENTS AND THEIR CONNECTIONS SHALL BE PROVIDED AS NECESSARY TO DIRECTLY AND CONCENTRICALLY IMPOSE LOADS ON THE PRIMARY STRUCTURE. THE CONNECTIONS TO THE PRIMARY STRUCTURE ARE SUBJECT TO THE REQUIREMENTS OF THE MISCELLANEOUS METALS SECTION ABOVE. THESE SYSTEMS MAY BE SUPPORTED DIRECTLY FROM STEEL ROOF AND COMPOSITE FLOOR/ROOF SLABS SUBJECT TO THE FOLLOWING LIMITATIONS: 250 POUNDS MAY HANG FROM COMPOSITE SLAB ON DECK, 50 POUNDS MAY HANG FROM STEEL ROOF DECK. LOADS SHALL BE LOCATED NO CLOSER THAN 5 FEET FROM ANY ADJACENT HANGING LOAD, AND THE CONTRACTOR SHALL COORDINATE THE SUPPORT AND HANGING LOADS FROM ALL BUILDING SYSTEMS. WHERE REQUIRED BY THE BUILDING CODE, THE MECHANICAL/ELECTRICAL/PLUMBING SYSTEM SUPPORTS SHALL ACCOMMODATE LATERAL MOVEMENTS BETWEEN ADJACENT FLOORS AS DEFINED IN THE STORY DRIFT SECTION OF THESE NOTES.

INTERIOR METAL STUD FRAMING

INTERIOR PARTITIONS SHALL CONSIST OF METAL STUD TYPE FRAMING THAT HAS CURRENT ICC—ES (OR IAPMO-UES EQUIVALENT) EVALUATION REPORTS. CONNECTION OF STUDS, TRACK, AND OTHER ITEMS BY MEANS OF EITHER DRILLED-IN ANCHORAGE OR POWDER DRIVEN FASTENERS SHALL OCCUR WITH FASTENERS AS INDICATED IN THE METAL STUD ICC—ES (OR IAPMO-UES EQUIVALENT) REPORTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL DESIGN OF SOFFITS, SUSPENDED WALLS, CEILINGS, OR CONDITIONS WHERE THE STUD FRAMING IS USED TO SUPPORT CASEWORK OR SIZEABLE DOOR/WINDOW HARDWARE; THE METAL STUD FRAMING; AND ANY MISCELLANEOUS STEEL FRAMING THAT IS DETERMINED TO BE NECESSARY BASED ON THE CONTRACTOR'S DESIGN.

INTERIOR METAL STUD FRAMING AND ITS CONNECTIONS TO THE STRUCTURE SHALL BE DESIGNED TO ACCOMMODATE UP TO 3/4" OF VERTICAL MOVEMENT DUE TO VARIABLE LIVE LOADING. WHERE REQUIRED BY THE BUILDING CODE, INTERIOR METAL STUD FRAMING SHALL ACCOMMODATE LATERAL MOVEMENTS BETWEEN ADJACENT FLOORS AS DEFINED IN THE STORY DRIFT SECTION OF THESE NOTES.

SUBMIT DESIGN CALCULATIONS AND SHOP DRAWINGS INDICATING IMPOSED LOADS ON THE PRIMARY STRUCTURE FOR THESE CONDITIONS. SUBMITTED DOCUMENTS SHALL BEAR THE STAMP AND SIGNATURE OF AN ENGINEER LICENSED TO PERFORM THE WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED.

BUILDING TOLERANCES

STANDARD TOLERANCES SHALL BE BASED ON THE REQUIREMENTS OF THE AISC CODE OF STANDARD PRACTICE AND ACI 117, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS".

STRENGTH AND STABILITY DURING CONSTRUCTION

DURING CONSTRUCTION, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE.

A COMPLETED STRUCTURE IS REQUIRED TO PROVIDE GLOBAL STABILITY, TO PROVIDE LOCAL STABILITY OF INDIVIDUAL STRUCTURAL COMPONENTS (SLABS, DECKS, BEAMS, COLUMNS, WALLS, ETC.), AND TO RESIST IMPOSED LOADS.

THE STRUCTURE WAS ANALYZED AND DESIGNED BY MKA CONSIDERING ITS COMPLETED STATE ONLY. THE DESIGN DID NOT EVALUATE PARTIALLY COMPLETED CONSTRUCTION STAGES

THE CONTRACTOR SHALL CONSIDER ALL ASPECTS OF CONSTRUCTION SEQUENCING.

CONSIDERATIONS SHALL INCLUDE BUT NOT BE LIMITED TO STEEL ERECTION AND CONCRETE PLACEMENT, CRANE REQUIREMENTS, TEMPORARY SHORING, BRACING/STRENGTHENING, TEMPORARY CONSTRUCTION LOADS, SAFETY PROCEDURES, TEMPERATURE CHANGE, AND MOISTURE EFFECTS.

THE CONTRACTOR SHALL EVALUATE THE NEED FOR AND RETAIN AS NECESSARY AN ENGINEER LICENSED TO PERFORM THE WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED TO REVIEW ALL STAGES OF CONSTRUCTION SEQUENCING, VALIDATE ALL TEMPORARY CONSTRUCTION LOADS, AND PREPARE A COMPREHENSIVE CONSTRUCTION/ERECTION PLAN TO ADDRESS BOTH STABILITY AND RESISTANCE TO IMPOSED LOADS UNTIL THE STRUCTURE IS COMPLETE.

TEMPORARY SUPPORTS, TEMPORARY CONNECTIONS, AND/OR CONSTRUCTION/ ERECTION AIDS SHALL BE REMOVED BY THE CONTRACTOR AFTER THEY ARE NO LONGER REQUIRED.

EXISTING STRUCTURE

EXISTING STRUCTURAL DIMENSIONS AND MEMBER SIZES ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION. THE CONTRACTOR SHALL VERIFY THE ACTUAL CONFIGURATION OF EXISTING CONSTRUCTION AN THE CONDITION OF THE STRUCTURE BEFORE BEGINNING WORK. ANY DISCREPANCIES OR UNSOUND CONDITIONS SHALL BE REPORTED TO THE ARCHITECT FOR RESOLUTION BEFORE BEGINNING WORK. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, EMBEDMENTS, AND OPENINGS NOT SHOWN. REFER TO MECHANICAL AND ELECTRICAL PLANS FOR DUCTS, PIPING, EMBEDMENTS, AND OPENINGS NOT SHOWN.

TEMPORARY SHORING AND BRACING MAY BE NECESSARY IN ORDER TO PERFORM THE NECESSARY STRUCTURAL MODIFICATIONS TO THE EXISTING STRUCTURE SHOWN ON THE STRUCTURAL AND ARCHITECTURAL PLANS AND DETAILS. THE CONTRACTOR MUST RETAIN AN ENGINEER LICENSED TO PERFORM THE WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED, WHO SHALL INVESTIGATE WHERE THIS TEMPORARY SHORING/BRACING IS REQUIRED AND SHALL DESIGN THIS TEMPORARY SHORING/BRACING.

MISCELLANEOUS

REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL, ELEVATOR, OR OTHER SPECIALTY ENGINEERING DRAWINGS FOR DIMENSIONS NOT SHOWN, INCLUDING BUT NOT LIMITED TO: SIZE AND LOCATION OF CURBS, EQUIPMENT HOUSEKEEPING PADS, WALL AND FLOOR OPENINGS, BLOCKOUTS, FLOOR DEPRESSIONS, SUMPS, DRAINS, ANCHOR BOLTS, EMBEDDED ITEMS, ARCHITECTURAL TREATMENT, ETC. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND RESOLVE DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.

WHERE SECTIONS ARE INDICATED ON THE PLAN BY A NUMBER AND A DRAWING NUMBER THUS, 1/S5.01, THE INDICATED SECTION (1) IS SHOWN ON STRUCTURAL DRAWING S5.01.

SHOP DRAWINGS

SHOP DRAWINGS FOR REINFORCING STEEL AND STRUCTURAL STEEL SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

THE CONTRACTOR SHALL SUBMIT CONCRETE WALL ELEVATION DRAWINGS OF AT LEAST 1/8" = 1'-0" SCALE INDICATING LOCATIONS OF CONNECTION EMBEDMENTS AND WALL OPENINGS FOR REVIEW PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH REINFORCEMENT DRAWINGS.

REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL CONCRETE DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP DETAILED SLAB EDGE AND CONCRETE OUTLINE DRAWINGS THAT ARE BASED ON THE ARCHITECTURAL, STRUCTURAL, AND MEP DRAWINGS. THE DETAILED EDGE AND OUTLINE DRAWINGS SHALL BE SUBMITTED FOR REVIEW. SUBMITTED DRAWINGS SHALL CONTAIN ALL CONCRETE CURBS, FORM OUTLINES, AND EMBEDDED ITEMS. DIMENSIONS AND OUTLINES DEVELOPED BY THE CONTRACTOR MAY VARY FROM THOSE SHOWN BY THE ARCHITECT AND ENGINEER AS NECESSARY BASED ON THE DEPENDENCY ON ADJACENT MATERIALS THAT ARE DETERMINED BY THE CONTRACTOR AND/OR SUPPLIER (EXTERIOR CLADDING, ELEVATOR SYSTE EQUIPMENT, FINAL MEP SHAFT SIZES, ETC.). CONCRETE OUTLINES SHALL BE ADJUSTED AS NECESSARY TO ACCOUNT FOR CONSTRUCTION METHODS AND FOR SLAB SHRINKAGE. THE CONCRETE OUTLINE DEVELOPED BY THE CONTRACTOR SHALL NOT MATERIALLY ALTER THE DESIGN INTENT SHOWN IN THE STRUCTURAL DRAWINGS.

DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD; THEREFORE, THEY SHALL BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO.

SUBMITTALS SHALL BE PROVIDED ELECTRONICALLY WHENEVER POSSIBLE AND WILL BE MARKED AND RETURNED ELECTRONICALLY. WHEN HARD COPY SUBMITTALS ARE REQUIRED, ONE ORIGINAL AND ONE COPY SHALL BE PROVIDED; THE REPRODUCIBLE COPY WILL BE MARKED AND RETURNED.

SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED, AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWINGS SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

SHOP DRAWINGS FOR DEFERRED SUBMITTALS THAT ARE DEFINED AS DESIGN-BUILD COMPONENTS IN THE CONSTRUCTION DOCUMENTS SHALL BE SEALED AND SIGNED BY AN ENGINEER LICENSED TO PERFORM WORK IN THE JURISDICTION WHERE THE PROJECT IS LOCATED AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SHOP DRAWINGS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE INCLUDED IN THE SUBMITTAL.

DEFERRED STRUCTURAL SUBMITTALS

SOME STRUCTURAL SYSTEMS ARE DEFINED AS VENDOR-DESIGNED COMPONENTS PER THE STRUCTURAL DOCUMENTS. THESE ELEMENTS OF THE DESIGN ARE DEFERRED SUBMITTAL COMPONENTS AND HAVE NOT BEEN PERMITTED UNDER THE BASE BUILDING APPLICATION. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT THE STAMPED COMPONENT SYSTEM DOCUMENTS TO THE BUILDING OFFICIAL FOR APPROVAL.

DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT, WHO SHALL REVIEW THEM FOR GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE CONTRACTOR SHALL SUBMIT THESE REVIEWED DEFERRED SUBMITTAL DOCUMENTS TO THE BUILDING OFFICIAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

THE FOLLOWING LIST INCLUDES THE ITEMS THAT ARE DEFINED AS DEFERRED STRUCTURAL SUBMITTAL COMPONENTS. REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND CIVIL DRAWINGS FOR ADDITIONAL DEFERRED SUBMITTAL COMPONENTS.

DEFERRED STRUCTURAL SUBMITTAL COMPONENTS:

ANCHORAGE FOR MECHANICAL/ELECTRICAL/PLUMBING SYSTEMS

EXTERIOR CLADDING

GUARDRAILS AND HANDRAILS

METAL STAIRS AND LANDINGS

METAL STUD SYSTEMS
POST-TENSIONING SYSTEMS

SPECIAL INSPECTION

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION AND TESTING PER IBC SECTION 1705. THIS WORK SHALL BE PERFORMED BY A SPECIAL INSPECTOR CERTIFIED BY THE CITY OF PARK CITY TO PERFORM THE TYPES OF INSPECTIONS AND TESTS SPECIFIED. THE FREQUENCY OF INSPECTIONS AND TESTING SHALL BE AS OUTLINED IN THE IBC TABLE ITEMS LISTED BELOW. DEFICIENCIES SHALL BE REPORTED DAILY TO THE CONTRACTOR. SUMMARY REPORTS SHALL BE DISTRIBUTED WEEKLY TO THE OWNER, ARCHITECT, CONTRACTOR, BUILDING OFFICIAL, AND STRUCTURAL ENGINEER. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SPECIAL INSPECTION AND TESTING.

	REQUIREMENTS FOR SPECIAL INSPECTION AND TESTING.				
Έ	ITEM	DESCRIPTION (REFER TO IBC SECTION 1705)	IBC TABLE REQUIREMENTS		
	STRUCTURAL STEEL AND WELDING	STRUCTURAL STEEL THAT IS PART OF THE STRUCTURE.	SECTION 1705.2		
S	HIGH STRENGTH BOLTING	SEE SPECIFICATIONS FOR PROCEDURES FOR INSPECTION AND TESTING.	SECTION 1705.2		
	CONCRETE	CONCRETE THAT IS PART OF THE STRUCTURE.	SECTION 1705.2, TABLE 1705.3, ITEMS 5, 6, 7, 8, 11, 12		
	SHOTCRETE		TABLE 1705.3, ITEMS 5, 6, 7, 8		
ND	ANCHORS CAST IN CONCRETE		TABLE 1705.3, ITEM 3		
Ē D	ANCHORS POST-INSTALLED IN HARDENED CONCRETE	INSTALLATION OF MECHANICAL AND ADHESIVE ANCHORS.	TABLE 1705.3, ITEM 4		
СТ	REINFORCING STEEL AND PRESTRESSING STEEL TENDONS	 A. STRESSING AND GROUTING OF TENDONS. B. PLACEMENT OF REINFORCING STEEL AND PRESTRESSING TENDONS. C. SPLICING OF REINFORCING BY WELDING OR THREADED COUPLERS. D. PRESTRESSING TENDON ANCHORAGES/STRESSING POCKETS: PERIODIC SPECIAL INSPECTION SHALL INCLUDE THE FOLLOWING: VERIFY THAT GREASE COVERS ARE SECURELY IN PLACE AND THAT THE CORROSION PROTECTION IS INTACT FOR ENCAPSULATED TENDONS. OBSERVE THAT THE STRESSING POCKET HAS BEEN CLEANED, COATED WITH APPROVED BONDING AGENT, AND FILLED 	TABLE 1705.3, ITEM 9 TABLE 1705.3, ITEM 1 TABLE 1705.3, ITEM 1, 2 N/A		
ı	STRUCTURAL MASONRY	WITH AN APPROVED NON-SHRINK GROUT. (ALL MASONRY SHOWN ON STRUCTURAL DRAWING INCLUDING MASONRY SHOWN	SECTION 1705.4		

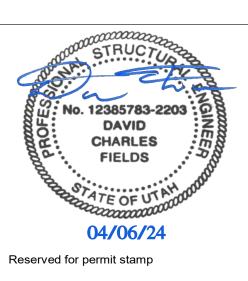
IN TYPICAL DETAILS BUT
LOCATED ON ARCHITECTURAL
DRAWINGS.

SECTION 1705.6,
TABLE 1705.6

SECTION 1705.12

STRUCTURAL OBSERVATION

THE ENGINEER OF RECORD SHALL PROVIDE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS, AT SIGNIFICANT CONSTRUCTION STAGES AND AT THE COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY IBC SECTIONS 110, 1705, OR OTHER SECTIONS OF THE INTERNATIONAL BUILDING CODE. STRUCTURAL OBSERVATION REPORTS SHALL BE ISSUED TO THE OWNER, ARCHITECT, CONTRACTOR, AND BUILDING OFFICIAL AT SIGNIFICANT CONSTRUCTION STAGES.



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GENERAL NOTES

S0.04