

STRUCTURAL GENERAL NOTES :

GENERAL:

- 1. ALL CONSTRUCTION AND DESIGN SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2018 EDITION, WITH GEORGIA AMENDMENTS.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR ADDITIONAL INFORMATION AND DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS (NEW AND EXISTING) BEFORE EXECUTING ANY WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE EFFECTED PART OF THE WORK.
4. CONTRACTOR SHALL COORDINATE STRUCTURAL DRAWINGS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SITE DRAWINGS PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE ARCHITECT/ENGINEER.
5. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. CONTRACTOR SHALL DESIGN AND PROVIDE TEMPORARY SUPPORT, SHORING AND BRACING FOR ALL STRUCTURAL COMPONENTS DURING CONSTRUCTION.
6. CONTRACTOR HAS SOLE RESPONSIBILITY FOR MEANS, METHODS, SAFETY, TECHNIQUES, SEQUENCES AND PROCEDURES FOR CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION COMPLIES WITH OSHA REGULATIONS.
7. ELECTRONIC VERSIONS OF STRUCTURAL DRAWINGS ARE THE SOLE, COPYRIGHTED PROPERTY OF GOODMAN GIANNAVOLA HINES ENGINEERS (GGHE). ELECTRONIC VERSIONS OF DRAWINGS ARE NOT TO BE USED OR TRANSFERRED WITHOUT THE EXPRESS, WRITTEN PERMISSION OF GGHE.

DESIGN LOADS:

- 1. THE STRUCTURAL SYSTEM FOR THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2018 EDITION, WITH GEORGIA AMENDMENTS AND ASCE 7-16.
2. BUILDING RISK CATEGORY II
3. DEAD LOADS: a. ROOF (TYPICAL, U.N.O.) 20 PSF b. FLOOR (TYPICAL, U.N.O.) 10 PSF
4. LIVE LOADS: a. ROOF (TYPICAL, U.N.O.) 20 PSF b. TYPICAL FLOOR (U.N.O.) 81 PSF c. ASSEMBLY AREAS, LOBBIES, STAIRS 100 PSF
5. SNOW LOADS: a. GROUND SNOW LOAD, Pg 5.0 PSF
6. WIND LOADS: a. BASIC WIND SPEED: V (ULT) 106 MPH V (ASD) 82 MPH b. WIND IMPORTANCE FACTOR, I 1.0 c. WIND EXPOSURE CATEGORY B d. INTERNAL PRESSURE COEFFICIENT +/-0.18 e. COMPONENTS AND CLADDING: INTERIOR WALL (10 sf) +21.2 / -23.0 psf CORNER WALL (10 sf) +21.2 / -28.3 psf EDGE DISTANCE, a 10'-3" ROOF PRESSURES SEE 2/S-103
7. SEISMIC LOADS: a. SEISMIC IMPORTANCE FACTOR, I 1.0 b. MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss 0.170 S1 0.083 c. SITE CLASS D d. SPECTRAL RESPONSE COEFFICIENTS: SDS 0.181 SD1 0.133 e. SEISMIC DESIGN CATEGORY C f. BASIC SEISMIC-FORCE-RESISTING SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE g. RESPONSE MODIFICATION FACTOR, R 3 h. SEISMIC RESPONSE COEFFICIENT, Cs 0.080 i. DESIGN BASE SHEAR, V 109 kips j. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
8. RAIN LOADS: a. RAIN INTENSITY (INCHES/HOUR) 4.0 b. MAX DEPTH OF PONDING (Ds + Dh) 5.0

SHOP DRAWINGS:

- 1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS THAT ADEQUATELY DEPICT THE STRUCTURAL ELEMENTS AND CONNECTIONS SHOWN IN THE CONTRACT DOCUMENTS. STRUCTURAL DRAWINGS INDICATE TYPICAL AND CERTAIN CONDITIONS ONLY. SHOP DRAWINGS SHALL DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIED STANDARDS AND SPECIFIC REQUIREMENTS OF THIS PROJECT.
2. SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC.
3. REVIEW OF SUBMITTALS OR SHOP DRAWINGS BY THE ARCHITECT/ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO COMPLY WITH THE CONTRACT DOCUMENTS. CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATIONS OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. REPRODUCTION OF ANY PORTION OF THE CONTRACT DOCUMENTS FOR SUBMITTALS OR SHOP DRAWINGS IS NOT PERMITTED. ANY SUCH ACTION SHALL RESULT IN REJECTION OF THAT SUBMITTAL OR SHOP DRAWING.
4. CONTRACT DOCUMENTS WILL GOVERN OVER SUBMITTALS AND SHOP DRAWINGS UNLESS OTHERWISE SPECIFIED IN WRITING BY THE ENGINEER. BE REVIEWED.

SHOP DRAWINGS FOR SPECIALTY ENGINEERED COMPONENTS:

- 1. THE FOLLOWING SYSTEMS AND COMPONENTS AS A MINIMUM REQUIRE FABRICATION AND ERECTION DRAWINGS PREPARED BY A SPECIALTY ENGINEER: LIGHT GAUGE STEEL EXTERIOR WALL SYSTEMS; GLASS WALL SYSTEMS; ALUMINUM WALL SYSTEMS; PREFABRICATED STEEL STAIRS & RAILINGS; STRUCTURAL STEEL CONNECTIONS REQUIRING ENGINEERING, ARCHITECTURAL PRECAST CONCRETE, LIGHTWEIGHT STONE COAT SYSTEM, UNDERPINNING/SHORING AND SOIL RETENTION SYSTEMS.
2. SUBMITTALS SHALL CLEARLY IDENTIFY THE SPECIFIC PROJECT AND APPLICABLE CODES, LIST THE DESIGN CRITERIA, AND SHOW ALL DETAILS AND PLANS NECESSARY FOR PROPER FABRICATION AND INSTALLATION. CALCULATIONS AND SHOP DRAWINGS SHALL IDENTIFY SPECIFIC PRODUCTS UTILIZED. GENERIC PRODUCTS WILL NOT BE ACCEPTED.
3. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED UNDER THE DIRECT SUPERVISION AND CONTROL OF THE SPECIALTY ENGINEER.
4. SHOP DRAWINGS AND CALCULATIONS REQUIRE THE SEAL, DATE AND SIGNATURE OF THE SPECIALTY ENGINEER. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE SEAL AND SIGNATURE OF THE SPECIALTY ENGINEER AS AN INDICATION THAT HE/SHE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS. STRUCTURAL ENGINEER WILL RETAIN ONE SIGNED AND SEALED PRINT FOR RECORD.
5. CATALOG INFORMATION ON STANDARD PRODUCTS DOES NOT REQUIRE THE SEAL OF A SPECIALTY ENGINEER.
6. REVIEW BY THE STRUCTURAL ENGINEER OF RECORD OF SUBMITTALS IS LIMITED TO VERIFYING THE FOLLOWING: a. THAT THE SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN FURNISHED. b. THAT THE STRUCTURAL SUBMITTALS HAVE BEEN SIGNED AND SEALED BY THE SPECIALTY ENGINEER. c. THAT THE SPECIALTY ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND HAS USED THE SPECIFIED STRUCTURAL CRITERIA. (NO DETAILED CHECK OF CALCULATIONS WILL BE MADE.) d. THAT THE CONFIGURATION SET FORTH IN THE STRUCTURAL SUBMITTALS IS CONSISTENT WITH THE CONTRACT DOCUMENTS. (NO DETAILED CHECK OF DIMENSIONS OR QUANTITIES WILL BE MADE.)
7. SUBMITTALS NOT MEETING THE CRITERIA LISTED IN THIS SECTION WILL NOT BE REVIEWED.

FOUNDATIONS:

- 1. THE FOUNDATION DESIGN IS BASED ON MINIMUM ALLOWABLE DESIGN CRITERIA DETERMINED BY 2018 IBC.
2. THE FOUNDATION DESIGN IS BASED ON A PRESUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF FOR SHALLOW FOOTINGS, WALL FOOTINGS AND STRIP FOOTINGS.
3. SLAB-ON-GRADE SHALL BE PLACED OVER 12 MIL POLYETHYLENE VAPOR RETARDER (MIN.) WITH JOINTS LAPPED NOT LESS THAN 6" AND TAPE. PROVIDE A 4" MIN. GRADED AGGREGATE STONE SUB-BASE IN ACCORDANCE WITH GEOTECHNICAL REPORT. DESIGN OF AGGREGATE PIER SYSTEM IS BY THE CONTRACTOR.
4. REGISTERED GEOTECHNICAL ENGINEER SHALL VERIFY THE DESIGN SOIL BEARING CAPACITY AND WALL DESIGN VALUES AND SHALL VERIFY THE CONDITION AND/OR ADEQUACY OF ALL SUBGRADE, FILL AND BACKFILL PRIOR TO PLACEMENT OF FOOTINGS, SLABS OR WALLS.
5. CONCRETE FOR FOOTINGS SHALL BE PLACED IMMEDIATELY AFTER FINAL INSPECTION AND ACCEPTANCE BY THE GEOTECHNICAL ENGINEER. IN NO CASE SHALL FOOTING EXCAVATIONS BE ALLOWED TO STAND OPEN OVERNIGHT OR DURING RAIN.
6. FOUNDATION WALLS WITHOUT CANTILEVERED FOOTINGS SHALL NOT BE BACKFILLED UNTIL SHORED OR PERMANENTLY SUPPORTED AT THE TOP OF WALL.
7. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOOTINGS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS OF ALL SUCH CONDITIONS PRIOR TO CONSTRUCTION.

REINFORCEMENT:

- 1. DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCING", AND CRSI MANUAL OF STANDARD PRACTICE.
2. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 REINFORCED BARS, UNO.
3. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A1064 AND SHALL BE LAPPED A MINIMUM OF 2 SQUARES. PROVIDE ALL WWF IN FLAT SHEETS (NOT ROLLS).
4. DEFORMED BAR ANCHORS (DBA'S) SHALL CONFORM TO ASTM A496. DBA'S SHALL BE WELDED PER MANUFACTURER'S RECOMMENDED PROCEDURES, EQUIPMENT, FLUX, ETC.
5. SUBMIT SHOP DRAWINGS THAT ADEQUATELY DETAIL ALL REINFORCING BAR SIZES AND PLACEMENT. SHOP DRAWINGS SHALL INCLUDE ADEQUATE SECTIONS, ELEVATIONS AND DETAILS. WRITTEN DESCRIPTIONS ARE NOT ACCEPTABLE.
6. TIE ALL REBAR JOINTS AND EMBEDS FULLY IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN THE POSITION OF REBAR JOINTS AND EMBEDS WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES.
7. PROVIDE DOWELS FROM FOUNDATION, UNO. DOWELS SHALL MATCH SIZE AND SPACING TO VERTICAL WALL OR COLUMN REINFORCING.
8. PROVIDE CONTINUOUS REINFORCING WHERE POSSIBLE. SPLICE ONLY AS SHOWN ON DRAWINGS OR AS APPROVED BY STRUCTURAL ENGINEER. BARS MARKED AS CONTINUOUS CAN BE SPLICED AS DETERMINED BY CONTRACTOR. STAGGER SPLICES WHERE POSSIBLE. REFER TO DRAWINGS FOR SPLICE LENGTH, WHERE NOT SPECIFIED USE "CLASS B" TENSION SPLICE. DO NOT WELD OR TACK WELD REINFORCING STEEL UNLESS APPROVED OR DIRECTED BY THE STRUCTURAL ENGINEER.
9. MECHANICAL SPLICING DEVICES SHALL DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH (FY) OF THE BAR. STAGGER MECHANICAL SPLICES WHERE POSSIBLE.
11. REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE COVER UNLESS NOTED OTHERWISE:

Table with 2 columns: Description of concrete condition and required reinforcement cover. Includes rows for 'CONCRETE CAST AGAINST EARTH (NOT FORMED)' with 3" cover, 'FORMED CONCRETE EXPOSED TO EARTH OR WEATHER' with #6 bars and larger at 2" and #5 bars and smaller at 1-1/2", and 'CONCRETE NOT EXPOSED TO EARTH OR WEATHER SLABS AND WALLS' with 1" cover.

CAST-IN-PLACE CONCRETE

- 1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITIONS OF ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".
2. CONCRETE SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C94 FOR MEASURING, BATCHING, MIXING, TRANSPORTING, ECT.
3. CONCRETE SHALL MEET THE REQUIREMENTS OF ASTM C150 FOR CEMENT, ASTM C33 FOR COARSE AGGREGATE AND ASTM C330 FOR LIGHTWEIGHT AGGREGATE.
4. SUBMIT A PROPOSED MIX DESIGN FOR EACH TYPE OF CONCRETE FOR APPROVAL. MIX DESIGNS SHALL BE UNIQUELY IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION. SUBMIT TESTED, STATISTICAL BACK-UP DATA PER ACI REQUIREMENTS FOR EACH MIX DESIGN. CONCRETE MIX DESIGNS SHALL INCLUDE WRITTEN DESCRIPTIONS INDICATING WHERE EACH MIX IS TO BE PLACED WITHIN THE STRUCTURE.
5. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28-DAY COMPRESSIVE STRENGTHS: NORMAL WEIGHT UNO (MAX. WEIGHT = 150 PCF) & W/CM MAX=0.5 FOUNDATIONS, PIERS 3,000 PSI BASEMENT WALLS, RETAINING WALLS 3,000 PSI SLAB-ON-GRADE 4,000 PSI ELEVATED SLABS ON STEEL DECK 3,500 PSI
6. PROVIDE CONCRETE COVER FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE PER THE LATEST EDITION OF ACI 318. (UNLESS NOTED OTHERWISE)
7. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1 1/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE.
8. USE OF CALCIUM CHLORIDE, CHLORIDE IONS OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.
9. CONTRACTOR SHALL SUBMIT A PLAN SHOWING LOCATION OR ALL CONSTRUCTION AND CONTROL JOINTS FOR APPROVAL PRIOR TO CONSTRUCTION. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.
10. CONTRACTOR SHALL COORDINATE MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR PIPES, SLEEVES, DUCTS, PENETRATING SLABS AND WALLS. MINIMUM SLEEVE SPACING SHALL BE THREE DIAMETERS FROM CENTER TO CENTER OF THE LARGER SLEEVE OR 6" CLEAR BETWEEN SLEEVES, WHOEVER IS GREATER. PENETRATIONS LARGER THAN 6" OR GROUPS OF PENETRATIONS SHALL BE REINFORCED PER TYPICAL OPENING REINFORCING DETAILS. PRIOR TO CONSTRUCTION, SLEEVE LOCATIONS AND SIZES SHALL BE APPROVED BY ENGINEER.
11. HORIZONTAL REINFORCEMENT IN FOOTINGS-TURN-DOWN SLABS AND WALLS SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS.
12. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR THRESHOLDS, GROOMERS, FINISHES, DEPRESSIONS, EMBEDDED ITEMS, NECESSARIES, ETC.
13. CONSTRUCTION AND/OR CONTROL JOINTS FROM SLAB ON GRADE REINFORCED WITH WELDED WIRE FABRIC SHALL PROVIDE COLUMN LINES AND INTERMEDIATE LOCATIONS SO THAT THE MINIMUM AREA OF SLAB-ON-GRADE BETWEEN JOINTS SHALL NOT EXCEED 400 SQUARE FEET. ASPECT RATIO OF JOINTS SHALL NOT EXCEED 1.5. CONTROL JOINTS SHOWN ON FOUNDATION PLANS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL DEVELOP A CONTROL JOINT PLAN BASED ON THIS CRITERIA AND SUBMIT TO THE ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO PLACING CONCRETE.
14. PROVIDE TWO #4 BARS X 4" AT SLAB MID-DEPTH, 3 INCHES APART AT ALL BE-ENTRANT CORNERS AND INTERSECTIONS AND AT ALL DISCONTINUOUS CONTROL JOINTS IN SLABS-ON-GRADE.
15. AREAS WHERE WATER VAPOR TRANSMISSION THROUGH FLOOR SLAB IS A CONCERN OR DETRIMENTAL TO FLOOR FINISHES, VAPOR TRANSMISSION AND INTERMEDIATE LOCATIONS SHALL BE PERFORMED PER MANUFACTURER OF FINISH MATERIAL REQUIREMENTS. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST-IN-PLACE CONCRETE: a. SLUMP PER ASTM C143, TO BE TAKEN WHEN EACH SET OF CYLINDERS IS PREPARED. SLUMP RANGE SHALL BE 3 TO 5 INCHES. b. COMPRESSIVE STRENGTH PER ASTM C31 AND ASTM C39. A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS PLACED IN ANY DAY, FOR EVERY 100 CUBIC YARDS, OR EVERY 5,000 SQUARE FEET OF SURFACE AREA. BREAK ONE (1) CYLINDER AT SEVEN DAYS, TWO (2) CYLINDERS AT TWENTY-EIGHT DAYS, AND HOLD ONE CYLINDER IN RESERVE. RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED. c. AIR CONTENT PER ASTM C231 AND C173, TO BE TAKEN EACH TIME A SET OF CYLINDERS IS PREPARED.
17. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.45 AND SHALL BE AIR ENTRAINED 5%±1

POST-INSTALLED ANCHORS:

- 1. UNLESS NOTED OTHERWISE, POST-INSTALLED CONCRETE ANCHORS SHALL COMPLY WITH ICC-ES ACCEPTANCE CRITERIA FOR ANCHORS IN CRACKED CONCRETE AND SEISMIC APPLICATIONS.
2. PLACE POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR AND EMBEDMENTS.
3. PROPER INSTALLATION OF POST-INSTALLED ANCHORS SHALL BE VERIFIED BY A QUALIFIED TECHNICIAN IN ACCORDANCE WITH THE PROJECT REQUIREMENTS AND THE ICC-ES REPORT. THE TECHNICIAN SHALL VERIFY THE INITIAL INSTALLATION OF EACH TYPE OF ANCHOR AND PERIODICALLY VERIFY INSTALLATIONS THEREAFTER.
4. MECHANICAL ANCHORS FOR USE IN CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED IN ACCORDANCE WITH ACI 308.2 AND ICC-ES AC109.3. ACCEPTABLE MECHANICAL ANCHORS FOR USE IN CONCRETE INCLUDE THE FOLLOWING:
* SIMPSON STRONG-TIE HITE HX (ICC-ES ESR-2713)
* POWERS FASTENERS WEDGE BOLT+ (ICC-ES ESR-2526)
* HILTI KWIK HUS-EZ/WH-EZ (ICC-ES ESR-3027)
5. ADHESIVE ANCHORS, INCLUDING REBAR, FOR USE IN CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED IN ACCORDANCE WITH ACI 308.4 AND ICC-ES AC308. ADHESIVE ANCHORS SHALL BE INSTALLED INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ACCEPTABLE ADHESIVE ANCHORS FOR USE IN CONCRETE INCLUDE THE FOLLOWING:
* HILTI HY-200 (ICC-ES ESR-3187)
* SIMPSON STRONG-TIE AT-XP (APMO UES ER-263)
* DEWALT AC208+ (ICC-ES ESR-4027)

ABBREVIATIONS

Table listing abbreviations for structural components such as AB (Anchor Bolt), ALT (Alternate), APPROX (Approximately), ARCH (Architect), ARCHL (Architectural), B (Beam), BOPE (Bottom of PE), BLDG (Building), BM (Beam), BOS (Bottom of Steel), BOTT (Bottom), BRG (Bearing), C/C (Center to Center), CH (Channel), CIP (Cast in Place), CJ (Contraction Joint), CL (Centerline), CLR (Clear), CMU (Concrete Masonry Unit), COL (Column), CONC (Concrete), CONFIG (Configuration), CONT (Continuation), CONTR (Contractor), CTR (Center), DBL (Double), DTL (Detail), DIA (Diameter), DIM (Dimension), DN (Down), EA (Each), EE (Each Face), EXP (Expansion Joint), ELEV (Elevation), EDG (Edge of Deck), EOS (Edge of Slab), EQ (Equal), EW (Each Way), EXIST (Existing), EXP (Expansion), FIN (Finish), FLR (Floor), FND (Foundation), FOM (Face of Masonry), FS (Far Side), FT (Foot), FTG (Footing), GA (Gauge), GALV (Galvanized), GC (General Contractor), HC (Hollow Core), HG (Hip Girder), HORIZ (Horizontal), HP (High Point), IJ (Isolation Joint), INFO (Information), INT (Interior), JT (Joint), KJ (Construction Joint), L (Angle), LG (Long), LLH (Long Leg Horizontal), LLV (Long Leg Vertical), LP (Low Point), LW (Long Way), MFR (Manufacturer), MAS (Masonry), MO (Masonry Opening), MATL (Material), MAX (Maximum), MEP (Mechanical/Electrical/Plumbing), MIN (Minimum), MISC (Miscellaneous), NS (Near Side), NTC (Not in Contract), NTA (Not to Scale), O/C (Off Center), OP (Opposite Hand), OPEN (Opening), PART (Partition), PLT (Plate), PLF (Pounds per Linear Foot), PSF (Pounds per Square Foot), PSL (Pounds per Square Inch), PT (Post-Tensioned/Pressure Treated), REINF (Reinforcing/Reinforcement), REM (Remainder), REQD (Required), REV (Revised/Revision), RO (Rough Opening), SCHED (Schedule), SECT (Section), SIM (Similar), SQ (Square), STD (Standard), SW (Shearwall/Short Way), STL (Steel), STRUCT (Structural), TG (Truss Girder), TO (Through), TOP (Top of Concrete), TOP (Top of Temperature), TOS (Top of Steel), TRC (TRC Worldwide Engineering, Inc.), TYP (Typical), UNO (Unless Noted Otherwise), VERT (Vertical), VIF (Verify in Field), W/ (With), WD (Wood), WWF (Welded Wire Fabric).

LEGEND

Table defining symbols for concrete elements: CONCRETE (solid rectangle), EARTH (hatched rectangle), CONCRETE BLOCK (CMU) (rectangle with cross-hatch), BRICK (rectangle with diagonal lines), SECTION INDICATOR (triangle with 4 and S-5), DETAIL INDICATOR (circle with 1 and S6.0), FOOTING TYPE (rectangle with F4.5 and -2'-0"), COLUMN TYPE (rectangle with C3), TOP OF FOOTING ELEVATION (rectangle with ET-3), SPOT ELEVATION (rectangle with +1'-0"), STEP IN FTG OR GRADE BM (rectangle with -4'-0"), CENTERLINE BEAM SPLICE NUMBER (preceding) PLUS OR TENSION MINUS OR COMPRESSION POUNDS (FOLLOWING) (rectangle with #, NO., +, -, #), STEP IN STRUCTURE OR DEPRESSED SLAB (rectangle with OR (circled)), TOP OF STEEL ELEVATION OR JOIST BEARING (JBE) (rectangle with T/STL EL. +20'-8" OR (circled) -2'-0"), BOTTOM OF DECK ELEVATION (rectangle with B/DECK EL. +20'-8").



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REVISIONS table with columns NO. and DESCRIPTION.

RENEWED MEDICAL BUILDING CORE & SHELL ONLY SOUTH FULTON, GEORGIA PROJECT #19-2883



03/27/2020

MARCH 27, 2020 PERMIT SET RELEASED FOR CONSTRUCTION

GENERAL NOTES

DRAWING TITLE: S-001

Drawn By: [blank] Checked By: [blank] DATE: [blank] PROJECT #: 19-2883

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