

GENERAL

- SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. COORDINATE THESE DRAWINGS WITH EXISTING CONDITIONS, AND COORDINATE ALL DIMENSIONS AND WALL LOCATIONS WITH THE ARCHITECTURAL DRAWINGS. THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES WITHIN THE CONSTRUCTION DOCUMENTS.
- THE STRUCTURAL DRAWINGS SHOULD NOT BE USED TO SIZE OR LOCATE DOORS, WINDOWS, TOILET PARTITIONS, OR NON-LOAD BEARING WALLS.
- SEE ARCHITECTURAL FOR ALL EXPANSION JOINT COVERS.
- DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE WITH GEORGIA AMENDMENTS.
- DESIGN LOADS:
 - LIVE LOAD INFORMATION
 - ROOF LIVE LOAD (REDUCED FOR TRIBUTARY AREA) + 20 PSF
 - FLOOR LIVE LOAD * STAIRS + 40 PSF (EDUCATION)
 - FLOOR LIVE LOAD + 40 PSF
 - FLOOR DEAD LOADING INFORMATION
 - 100 PSF WOOD STRUCTURAL FRAMING, DECKING AND INSULATION
 - 30 PSF 1 LAYER 5/8" GYP-BOARD CEILING
 - 60 PSF COLLATERAL LOAD (LIGHTS, HVAC, SPRINKLER, ETC.)
 - WEIGHT OF WALLS CONTRIBUTING TO DESIGN LOAD VARIES
 - SEE FRAMING PLAN FOR OTHER CONCENTRATED LOADS
 - ROOF DEAD LOADING INFORMATION
 - 100 PSF WOOD TRUSSES, DECKING, ROOFING AND INSULATION
 - 30 PSF 1 LAYER 5/8" GYP-BOARD CEILING
 - 60 PSF COLLATERAL LOAD (LIGHTS, HVAC, SPRINKLER, ETC.)
 - SEE FRAMING PLAN FOR OTHER CONCENTRATED LOADS
 - SNOW LOAD INFORMATION
 - GROUND SNOW LOAD (S_G) + 5 PSF
 - FLAT ROOF SNOW LOAD (S_F) + 9.5 PSF
 - SNOW EXPOSURE FACTOR (C_E) + 1.0
 - SNOW LOAD IMPORTANCE FACTOR (I_S) + 1.1
 - THERMAL FACTOR (T) + 1.0
 - WIND LOAD INFORMATION
 - ULT. WIND SPEED + 110 MPH
 - ASD WIND SPEED + 85 MPH
 - WIND IMPORTANCE FACTOR (I_W) + 1.1
 - RISK CATEGORY + II
 - WIND EXPOSURE + C
 - INTERNAL PRESSURE COEFFICIENT + V. 0.18
 - COMPONENTS AND CLADDING + VARIES
 - SEISMIC DESIGN INFORMATION
 - SEISMIC IMPORTANCE FACTOR (I_E) + 1.0
 - DESIGN CATEGORY + C
 - 0.2 SECOND SPECTRAL RESPONSE ACCELERATION (S_S) + 0.22
 - 1 SECOND SPECTRAL RESPONSE ACCELERATION (S₁) + 0.284
 - 0.2 DESIGN SPECTRAL RESPONSE ACCELERATION (S_{D2}) + 0.235
 - 1 DESIGN SPECTRAL RESPONSE ACCELERATION (S_{D1}) + 0.134
 - SITE CLASS + D (PER GEOTECHNICAL REPORT)
 - RESPONSE MODIFICATION COEFFICIENT (R) + 3.5
 - SYSTEM OVERSTRENGTH FACTOR + 3
 - DEFLECTION AMPLIFICATION FACTOR (C_D) + 4
 - SEISMIC RESPONSE COEFFICIENT (C_S) + 0.013
 - DESIGN BASE SHEAR (V_X) + VARIES
 - BASIC SEISMIC FORCE RESISTING SYSTEM - EXISTING WOOD SHEAR WALLS
 - ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE PROCEDURE
 - SEISMIC RISK CATEGORY + III

- RAIN INTENSITY FACTOR + 4.0 INCHES PER HOUR
- ALL THE SAFETY REGULATIONS, METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING, BRACING, AND FRAMEWORK, ETC. AS REQUIRED.
- DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THESE DRAWINGS. IF THERE IS ANY QUESTION ABOUT DETAILS OR DIMENSIONS, CONTACT THE ARCHITECT AND STRUCTURAL ENGINEER FOR CLARIFICATION.
- WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL ALSO APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE.
- ISOMETRIC VIEWS ARE FOR ILLUSTRATIVE PURPOSES ONLY. NO INFORMATION ABOUT THE STRUCTURE OR ITS COMPONENTS SHALL BE TAKEN OR ASSUMED FROM THEM.
- CONTRACTOR SHALL TAMP THE VIRGIN SOIL AFTER EXCAVATION UNTIL NO VISIBLE SOIL RUTTING OCCURS FOR THE FULL SIZE OF THE FOOTING. IF SOIL TAMPING DOES NOT COMPLY TO THIS CRITERIA, THE ENGINEER SHALL BE NOTIFIED TO DETERMINE SOIL REMEDIATION REQUIREMENTS.

- SUBMITTALS**
- THE CONTRACT DOCUMENTS ARE THE STRUCTURAL ENGINEER'S INSTRUMENTS OF SERVICE TO CONVEY DESIGN INTENT. THEY ARE NOT TO BE CONSIDERED FABRICATION OR LAYOUT DRAWINGS.
 - THE FOLLOW ARE REQUIRED SUBMITTALS
 - CONCRETE MIX DESIGN(S)
 - REINFORCING BAR DRAWINGS
 - WOOD TRUSSES
 - STRUCTURAL STEEL
 - OTHER SUBMITTALS AS NOTED ON THE DRAWINGS AND SPECIFICATIONS
 - SUBMITTALS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER AND SHALL BEAR THE CONTRACTOR'S STAMP ATTESTING TO THE DRAWINGS NOT BEING REVIEWED. SUBCONTRACTOR'S UNCHECKED SUBMITTAL DRAWINGS WILL NOT BE REVIEWED.
 - SUBMITTALS TO BE REVIEWED BY THE STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE ARCHITECT. THE STRUCTURAL ENGINEER WILL NOT ACCEPT SUBMITTALS DIRECTLY FROM CONTRACTORS WITHOUT THE STRUCTURAL ENGINEER'S PRIOR APPROVAL.
 - UPON COMPLETION OF THE STRUCTURAL ENGINEER'S REVIEW, SUBMITTALS WILL BE RETURNED TO THE ARCHITECT FOR THEIR REVIEW.
 - ANY DEVIATION IN DESIGN DETAILS, DIMENSIONS, ETC. FROM THE CONSTRUCTION DOCUMENTS SHALL BE CLOUSED ON THE SUBMITTAL AND VERIFICATION OF THE CHANGE SHALL BE REQUESTED.

STRUCTURAL LUMBER & TRUSSES

- AMERICAN SOUTHERN SPECIES PLYWOOD RATED FOR INDICATED SPANS AND LOADS BY AMERICAN PLYWOOD ASSOCIATION. INSTALL IN ACCORDANCE WITH ALL RECOMMENDATIONS BY THE AMERICAN PLYWOOD ASSOCIATION INCLUDING SIZE AND SPACING OF FASTENERS.
- ROOF TRUSS DESIGN LOADS SHALL BE AS FOLLOWS:

ROOF	
TOP CHORD LIVE LOAD	20 PSF
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD LIVE LOAD	20 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
TOP CHORD WIND UPLIFT LOAD	IN ACCORDANCE W/ ASCE7-05

SEE GENERAL NOTES FOR OTHER DESIGN LOADS. SEE PLANS FOR ADDITIONAL POINT LOADS.
- TRUSSES SHALL BE DESIGNED AND FABRICATED BY THE TRUSS MANUFACTURER. DESIGN SHALL CARRY THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF PROJECT LOCATION. CONFIGURATION AND SIZE OF WEB MEMBERS SHALL BE DETERMINED BY THE TRUSS MANUFACTURER. SHOP DRAWINGS AND CALCULATIONS FOR TRUSSES SHALL BE SUBMITTED FOR APPROVAL BEFORE FABRICATION. TRUSS SHOP DRAWINGS SHALL BE AVAILABLE AT THE SITE.
- MAXIMUM LIVE LOADS DEFLECTION FOR ROOF TRUSSES + L/240
- LOADS ABOVE SHALL BE UTILIZED IN THE DESIGN OF GIRDER TRUSSES.
- BOTTOM AND TOP CHORDS OF ALL ROOF TRUSSES SHALL BE TEMPORARILY BRACED BY 1" X 4" X 8' AT 10 FEET ON CENTER. ALL ADDITIONAL PERMANENT BRACING AS REQUIRED BY STRUCTURAL DESIGN OF THE TRUSSES AND FOR STABILITY OF THE TRUSSES SHALL BE INDICATED ON THE SHOP DRAWINGS. BRACING SHALL BE X-TYPE WITH HORIZONTAL STRUTS TOP AND BOTTOM BETWEEN NO LESS THAN 4 TRUSSES. SPACES AT 20 FEET MAXIMUM. BRACING SHALL BE ATTACHED TO EACH TRUSS.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR THE TRUSSES DURING ERECTION.
- TRUSS DESIGN SHALL ACCOUNT FOR LOAD IMPOSED UPON TRUSSES BY WEIGHT OF MECHANICAL UNITS. SEE MECHANICAL PLANS FOR UNIT LOCATION, VERIFY WEIGHT OF UNIT W/ EQUIPMENT SELECTED.

WOOD NOTES:

- WOOD CONNECTIONS SHALL FOLLOW THE MINIMUM REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE TABLE 2304.9.1 UNLESS NOTED ON THE DRAWINGS TO REQUIRE ADDITIONAL FASTENERS.
- INSTALL ALL WOOD CONSTRUCTION CONNECTORS ACCORDING TO THE REQUIREMENTS SET BY THE MANUFACTURER.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESURE TREATED.
- STRUCTURAL LUMBER SHALL BE SOUTHERN FINE GRADE #2 OR EQUAL, UNLESS NOTED AS GRADE #1.
- PROVIDE DOUBLE JOISTS UNDER ALL NON-LOAD BEARING PARTITIONS PARALLEL TO THE SPAN OF THE FLOOR JOISTS.
- PROVIDE SOLID BLOCKING BETWEEN FLOOR JOISTS UNDER WALLS THAT ARE PERPENDICULAR TO THE FLOOR TRUSSES.
- ALL STRUCTURAL WOOD USED IN THE CONSTRUCTION OF STEPS, PORCHES, AND DECKS, OR EXPOSED TO WEATHER SHALL BE PRESURE TREATED (UNO).
- ALL PRE-ENGINEERED LUMBER SPECIFIED AS LVL'S ON THESE DRAWINGS SHALL BE PRODUCED BY TRUSS JOIST BY "VEYERHAEUBER" OR APPROVED EQUAL WITH MANUFACTURER'S DETAILED DESIGN PROPERTIES FOR THE SECTIONS USED IN THIS SET OF DRAWINGS. THE MINIMUM DESIGN PROPERTIES SHALL INCLUDE:
 - 2000000 PSI
 - 24000 PSI
 - PERPENDICULAR: 150 PSI
- WALL SHEATHING SHALL BE CONTINUOUS OVER RIM JOIST TO TOP PLATE. ALL WALL AND FLOOR SHEATHING SHALL BE BLOCKED AT PANEL JOINTS AND NO MORE THAN FOUR FEET ON CENTER VERTICALLY.
- ROOF SHEATHING SHALL BE 5/8" THICK (MIN) 24/16 APA-RATED PLYWOOD WITH 0131" DIAMETER X 25" LONG (RING SHANK) NAILS AT 3" ON CENTER AT ALL PANEL EDGES AND BOUNDARIES, AND 12" ON CENTER IN THE FIELD.
- FLOOR SHEATHING SHALL BE 3/4" THICK (MIN) 24/16 APA-RATED PLYWOOD WITH 0131" DIAMETER X 25" LONG (RING SHANK) NAILS AT 3" ON CENTER AT ALL PANEL EDGES AND BOUNDARIES, AND 12" ON CENTER IN THE FIELD.
- SHEARWALL SHEATHING SHALL BE SHEATHED WITH 1/2" (MIN) 24/16 APA-RATED OSB OR PLYWOOD WITH 0131" DIAMETER X 25" LONG (RING SHANK) NAILS AT 3" ON CENTER AT ALL PANEL EDGES AND BOUNDARIES, AND 12" ON CENTER IN THE FIELD. BLOCK ALL EDGES OF PLYWOOD.

- REINFORCING STEEL**
- REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60, AND SHALL BE FREE FROM ANY FORM RELEASE AGENTS.
 - REINFORCING BENDS SHALL CONFORM TO CRSI.
 - WELDED WIRE FABRIC SHALL BE SHEETS OF NEW BILLET STEEL COLD DRAWN, CONFORMING TO ASTM SPECIFICATION A185, GRADE 60.
 - REINFORCING IS TO BE SUPPORTED AND SPACED WITH WIRE BAR SUPPORTS ACCORDING TO CRSI "PLACING REINFORCING BARS" UNLESS NOTED OTHERWISE.
 - BAR SUPPORTS DESIGN, DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318 AND "THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI 318.
 - SPICES FOR CONTINUOUS BARS SHALL BE CLASS B, UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.
 - PROVIDE BENT HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF ALL WALLS AND FOOTINGS. BENT BARS ARE TO MATCH THE SIZE AND SPACING OF HORIZONTAL BARS IN WALL OR FOOTING. USE CLASS B SPLICE EACH SIDE.
 - PROVIDE DIAGONAL BARS AT CORNERS OF OPENINGS IN SLABS AND CONCRETE WALLS. SEE DETAILS "RECTANGULAR OPENING WALL SLAB" AND "CIRCLE OPENING WALL SLAB". PROVIDE 2" CLEAR COVER BETWEEN THE OPENING AND THE CORNER REINFORCING BARS.
 - WALL FOOTING REINFORCEMENT SHALL BE CONTINUOUS THROUGH COLUMN FOOTING.
 - EXTEND ALL FOOTING REINFORCEMENT TO FAR SIDE OF FOOTING. SEE NOTE BELOW FOR CONCRETE COVERAGE.
 - PROVIDE DOWELS IN WALL FOOTING TO MATCH WALL VERTICALS UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE CLASS B SPLICE. USE STANDARD ACI 90 DEGREE HOOK WITH 3" CLEAR TO BOTTOM OF FOOTING UNLESS NOTED OTHERWISE. SEE DETAIL "CORNER BAR & SPLICE LENGTH DETAIL (IN CONCRETE)".

CLASS B SPLICE OR CORNER BAR PER ACI 318						
BAR #	3000 PSI CONCRETE		4000 PSI CONCRETE		5000 PSI CONCRETE	
	MIN. SPLICE (INCHES)	MIN. SPLICE (BAR DIAM.)	MIN. SPLICE (INCHES)	MIN. SPLICE (BAR DIAM.)	MIN. SPLICE (INCHES)	MIN. SPLICE (BAR DIAM.)
4	29		29	24		
5	36	51	31	28	45	
6	43		37	34		
7	63		54	49		
8	72		62	56		
9	81	72	70	63	56	
10	89		78	69		
11	98		85	76		

- MINIMUM CONCRETE COVERAGE SHALL BE AS FOLLOWS. IF CONSTRUCTION DOCUMENTS INDICATE A LARGER COVERAGE, IT SHALL BE USED. IF STIRRUPS, TIES, OR SPIRALS ARE USED, COVERAGE SHALL BE TO THE OUTERMOST FACE OF THESE ELEMENTS.
 - FOOTINGS, CAISSONS AND OTHER MEMBERS WHERE CONCRETE IS DEPOSITED AGAINST SOIL (EXCEPT SLABS ON GRADE) + 3"
 - CONCRETE EXPOSED TO WEATHER OR SOIL BUT IS NOT DEPOSITED AGAINST SOIL:
 - 16 BAR AND LARGER + 2"
 - 5 BAR AND SMALLER + 1 1/2"
 - CONCRETE NOT EXPOSED TO WEATHER OR SOIL:
 - SLABS, WALLS, JOISTS #4 BAR AND LARGER + 1 1/2"
 - SLABS, WALLS, JOISTS #1 BAR AND SMALLER + 3/4"
 - BEAMS AND COLUMNS + 1 1/2"

FOUNDATIONS

- THE FOUNDATION IS DESIGNED USING AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF BASED ON 2018 IBC SECTION 1806. IF THE BEARING CONDITIONS VARY FROM WHAT IS SHOWN, OR IF THE SOIL BEARING CAPACITY IS QUESTIONABLE, THE ARCHITECT AND STRUCTURAL ENGINEER ARE TO BE NOTIFIED IMMEDIATELY.
- ALL BUILDING AREAS SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY AT OPTIMUM OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM D698, CURRENT EDITION.
- A REGISTERED GEOTECHNICAL ENGINEER REPRESENTING THE OWNER SHALL BE PRESENT TO MONITOR COMPACTION AND SETTLEMENT AND VERIFY THE BEARING CAPACITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ON-SITE GEOTECHNICAL ENGINEER.
- REMOVE ALL TOPSOIL, ROOT SYSTEM OR OTHER DELETERIOUS MATERIAL UNDER PROPOSED SLAB AND COLUMN FOOTINGS AND REPLACE WITH SUITABLE COMPACTED FILL OR CRUSHED STONE. STRUCTURAL ENGINEER'S DECISION ON QUESTIONABLE MATERIAL SHALL BE FINAL.
- BACKFILLING SHALL BE PERFORMED IN EQUAL LIFTS AROUND THE BUILDING PERIMETER TO BALANCE LATERAL EARTH PRESSURE ON THE BUILDING. WALLS BEHIND COMPACTION EQUIPMENT IS REQUIRED WITHIN A DISTANCE OF TWO TIMES THE WALL HEIGHT.
- BACKFILL AGAINST STRUCTURAL WALLS SHALL NOT BE PERFORMED UNTIL WALL AND SLAB ON GRADE HAS OBTAINED SPECIFIED STRENGTH.
- IF REQUIRED BY THE GEOTECHNICAL REPORT OR THE ON-SITE GEOTECHNICAL ENGINEER, THE GROUND WATER TABLE SHALL BE LOWERED.
- ALL FOOTINGS TO BE CENTERED UNDER THE COLUMNS OR WALLS THEY SUPPORT, UNLESS NOTED OTHERWISE ON THE DRAWING.
- UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL. IN WRITING, THE CONTRACTOR SHALL LOCATE ANY EXISTING UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION.
- INSPECTIONS BY GEOTECH FIRM ARE REQUIRED FOR EXISTING SOILS CONDITIONS, FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS.
 - SITE PREPARATION: PRIOR TO PLACEMENT OF PREPARED FILL, THE INSPECTOR SHALL DETERMINE THAT THE SITE HAS BEEN PREPARED IN ACCORDANCE WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.
 - FILL PLACEMENT: DURING PLACEMENT AND COMPACTION OF FILL MATERIAL, THE INSPECTOR SHALL DETERMINE THAT THE PROPER FILL MATERIAL IS BEING USED AND THAT THE MAXIMUM LIFT THICKNESS IS FOLLOWED IN ACCORDANCE WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.
 - EVALUATION OF IN-PLACE DENSITY: THE INSPECTOR SHALL DETERMINE, AT THE FREQUENCIES DETERMINED IN THE SOILS REPORT AND PROJECT SPECIFICATIONS, THAT THE IN-PLACE DRY DENSITY OF THE COMPACTED FILL COMPLIES WITH THE ABOVE-REFERENCED GEOTECHNICAL REPORT.

CONCRETE

- ALL CONCRETE WORK TO BE DONE IN ACCORDANCE WITH THE CODE REFERENCED EDITION OF ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
 - CONCRETE MIX DESIGN REQUIREMENTS AND COMPRESSIVE STRENGTH AT 28 DAYS.
- | DESCRIPTION | 28 DAY STRENGTH (PSI) | WEIGHT PER CUBIC FOOT (PCF) | SLUMP AT POINT OF PLACEMENT | AGGREGATE | FIBER-FESH OR WUM |
|------------------------------|-----------------------|-----------------------------|-----------------------------|-----------|---|
| FOOTING AND FOUNDATION WALLS | 3000 | 145 | 4" +/- 1" | ASTM C33 | NONE |
| SLAB ON GRADE | 3000 | 145 | 4" +/- 1" | ASTM C33 | FIBER-FESH @ 15LB PER CUBIC YARD OF CONC. |
| EXTERIOR SLAB ON GRADE | 4500 | 145 | 4" +/- 1" | ASTM C33 | WUM 6X6 W4 X W4 |

FLY ASH SHALL NOT BE USED. WATER REDUCING ADMIXTURES MAY BE USED TO ACHIEVE SLUMP REQUIREMENTS.

- SEE ARCHITECTURAL DOCUMENTS FOR JOINT SIZES AND FILLER MATERIALS.
- LOCATION OF ALL CONSTRUCTION JOINTS, EXCLUDING SLABS ON GRADE, SHALL BE COORDINATED WITH STRUCTURAL ENGINEER.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER SHOWING PROPOSED LOCATIONS OF ANY MATERIAL SUCH AS BUT NOT LIMITED TO CONDUITS, EMBEDEDMENTS, OR FIXTURES TO BE PLACED INSIDE ANY STRUCTURAL CONCRETE MEMBER SUCH AS BEAMS, WALLS, SLABS, COLUMNS OR FOOTINGS. THIS IS NOT REQUIRED FOR SLABS ON GRADE OF 4" OR LESS IN THICKNESS.
- CONCRETE SLAB FLATNESS AND LEVELNESS TOLERANCES SHALL BE IN CONFORMANCE WITH ACI 111, AND SHALL BE SPECIFIED BY THE OWNER UNLESS SUPERSEDED BY THE OWNER'S CRITERIA. CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:
 - PROVIDE A FLOOR SURFACE WHICH IS TRUE AND LEVEL AND ACHIEVES "F NUMBERS" OF FF + 30 AND FL + 20 MINIMUM OVERALL COMPOSITE AND FF + 20 AND FL + 15 MINIMUM AT ANY INDIVIDUAL SECTION. WHEN TESTED IN ACCORDANCE WITH ASTM E115, REMOVE SURFACE IRREGULARITIES TO PROVIDE A CONTINUOUS SMOOTH FINISH.
 - ALL INTERIOR SLABS TO RECEIVE A SMOOTH TROWEL FINISH UNLESS NOTED.
- UNLESS SPECIFIED OTHERWISE IN THE SPECIFICATION, TESTING OF CONCRETE SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF ACI 318 SECTION 5.6 "EVALUATION AND ACCEPTANCE OF CONCRETE".
- CONSTRUCTION JOINTS (CNJT.) ARE TO BE LOCATED ON THE THRESHOLD SIDE OF A WALL.
- SEE DETAIL "TYPICAL SLAB ON GRADE JOINT LAYOUT".
- THE FOLLOWING PROCEDURES SHALL MEET THE REQUIREMENTS OF THE REFERENCED CODE SECTIONS:

PROCEDURE	REFERENCE SECTION
PREPARATION	ACI 304 - "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE"
CONVEYING	ACI 318 SECTION 5.9 - "CONVEYING"
DEPOSITING	ACI 318 SECTION 5.10 - "DEPOSITING"
CONSOLIDATION	ACI 309 - "GUIDE FOR CONSOLIDATION OF CONCRETE"
CURING	ACI 308 - "STANDARD PRACTICE FOR CURING CONCRETE"
HOT WEATHER CONCRETING	ACI 305 - "HOT WEATHER CONCRETING"
COLD WEATHER CONCRETING	ACI 306 - "COLD WEATHER CONCRETING"

PROCEDURE	REFERENCE SECTION
PREPARATION	ACI 304 - "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE"
CONVEYING	ACI 318 SECTION 5.9 - "CONVEYING"
DEPOSITING	ACI 318 SECTION 5.10 - "DEPOSITING"
CONSOLIDATION	ACI 309 - "GUIDE FOR CONSOLIDATION OF CONCRETE"
CURING	ACI 308 - "STANDARD PRACTICE FOR CURING CONCRETE"
HOT WEATHER CONCRETING	ACI 305 - "HOT WEATHER CONCRETING"
COLD WEATHER CONCRETING	ACI 306 - "COLD WEATHER CONCRETING"

STRUCTURAL STEEL

- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE CODE-REFERENCED AISC MANUAL OF STEEL CONSTRUCTION, SPECIFICATION FOR STEEL BUILDINGS AND CODE OF STANDARD PRACTICE.
- STEEL FABRICATOR SHALL BE CURRENTLY CERTIFIED BY THE AISC QUALITY CERTIFICATION PROGRAM FOR STRUCTURAL STEEL FABRICATORS AND DESIGNATED AS "AISC CERTIFIED BUILDING FABRICATOR CATEGORY BU". CONTRACTOR SHALL SUBMIT IN WRITING TO THE STRUCTURAL ENGINEER AT THE TIME OF PROOF OF CERTIFICATION FOR THE STEEL FABRICATOR(S) SUPPLYING STRUCTURAL STEEL.
- MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
 - W-SHAPES + ASTM 992
 - HOLLOW STRUCTURAL SHAPES + ASTM A500 GRADE B
 - PLATES, BARS, ANGLES, C-SHAPES, MC-SHAPES + ASTM A36
 - FIFES + ASTM A53, GRADE B
 - WELDING ELECTRODES + E70XX
- ALL ANCHOR BOLTS SHALL BE SIZE AND STRENGTH SPECIFIED ON THESE DRAWINGS.
- ALL BEAM END CONNECTIONS SHALL BE AISC DOUBLE ANGLE BOLTED-WELDED CONNECTIONS WITH 3/4" DIA. A325N BOLTS UNO. THE WELD SHALL BE 1/4" WELD FULL LENGTH OF ANGLE PLUS 1" TOP AND BOTTOM. DESIGN SHEAR SHALL BE THE GREATER OF:
 - THE SHEAR REACTION SHOWN ON DRAWINGS (IF ANY);
 - 50% OF THE VALUE FROM THE "MAXIMUM TOTAL UNIFORM LOAD IN KIIPS" TABLES OF THE AISC 13TH EDITION (BLACK BOOK) OR;
 - THE MINIMUM NUMBER OF BOLTS IN SINGLE SHEAR AS FOLLOWS:

BEAM SHAPE*	* OF 3/4" DIA. A325 BOLTS	LENGTH OF LL 3 1/2" X 3 1/2" X 5 1/6"
W8, W10	4	5 1/2
W12, W14	6	8 1/2
W16, W18	8	11 1/2
W21	10	14 1/2
W24	12	17 1/2
W27	14	20 1/2
W30	16	23 1/2

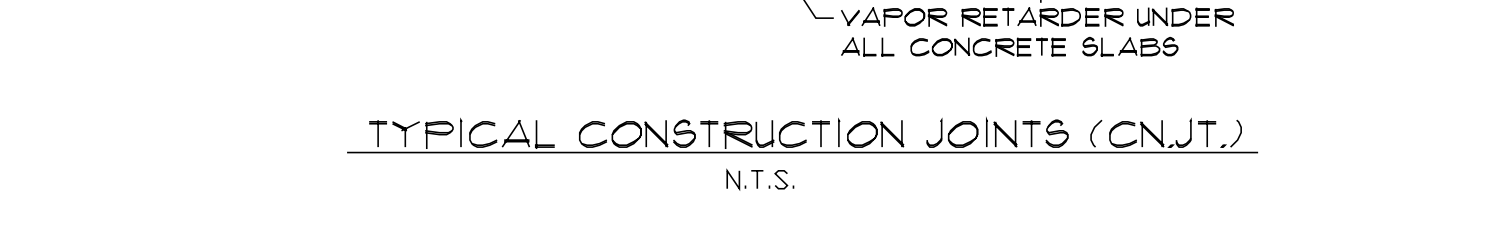
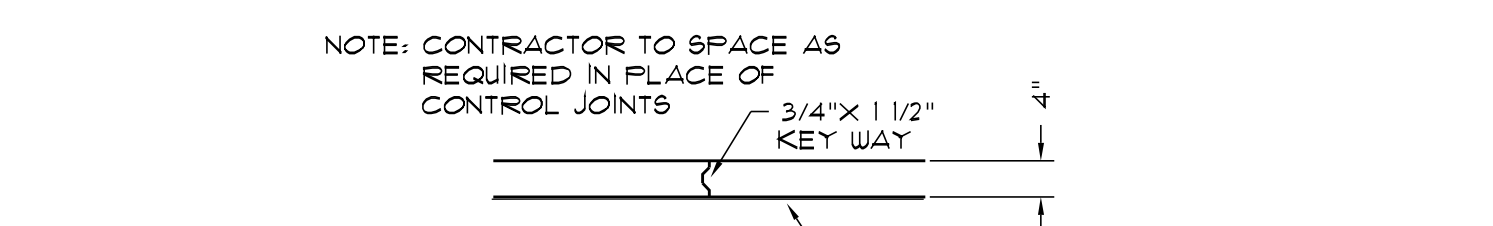
WHERE CONNECTIONS ARE SKEWED OR THE DOUBLE ANGLE CONNECTIONS ABOVE WILL NOT FIT, THE FOLLOWING CONNECTIONS SHALL BE USED:

END OF BEAM CONNECTIONS:

BEAM SHAPE*	* OF 3/4" DIA. A325 BOLTS	1/2" SHEAR TAB LENGTH**
W8, W10	2	5 1/2
W12, W14	3	8 1/2
W16, W18	4	11 1/2
W21	5	14 1/2
W24	6	17 1/2
W27	7	20 1/2
W30	8	23 1/2

*WHEN THE SHEAR TAB CONNECTION ABOVE DOES NOT FIT IN THE BEAM WEB, USE THE ADJACENT SMALLER CONNECTION AND CLOUD ON SHOP DRAWINGS.
**WELD PLATE TO SUPPORTING MEMBER WITH 5/16" WELD ALL AROUND. SHEAR TAB TO BE 1/2" THICK X 4" WIDE.

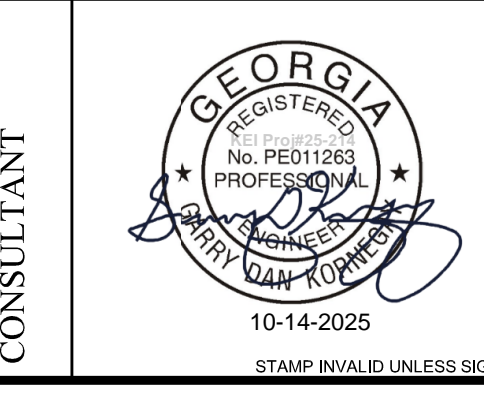
- ALL BOLTED CONNECTION SHALL BE FULLY PRETENSIONED ACCORDING TO THE REQUIREMENTS OF "AISC MANUAL OF STEEL CONSTRUCTION" UTILIZING DIRECT TENSION INDICATORS OR AN APPROVED INSTALLATION METHOD IN WRITING FROM THE ENGINEER OF RECORD.
- WELDS SHALL BE MADE ONLY BY OPERATORS CERTIFIED BY THE STANDARD QUALIFICATION PROCEDURE OF THE AMERICAN WELDING SOCIETY FOR THE TYPE OF WELD REQUIRED. WELDER CERTIFICATION SHALL BE SUBMITTED FOR REVIEW.
- WELD LENGTHS NOT NOTED SHALL BE FULL LENGTH. TERMINATE WELDS IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION AND AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE - STEEL (D11).
- HOLES LARGER THAN 1" DIA. SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER. HOLES SHALL BE FUNCHED OR DRILLED, EXCEPT AS OTHERWISE PERMITTED THE STRUCTURAL ENGINEER.
- PROTECT COLUMNS, BASE PLATES, ANCHOR BOLTS, AND ANY STEEL BELOW GRADE WITH AN APPROVED INORGANIC OR EPOXY ANTI-CORROSION COATING, FIELD APPLIED PER MANUFACTURER'S INSTRUCTIONS.
- ALL EXPOSED STRUCTURAL STEEL INCLUDING LIFELINES AND AS NOTED ON DRAWINGS SHALL BE GALVANIZED IN CONFORMANCE WITH ASTM A123/FABSTERS AND SHALL PARTS REQUIRING GALVANIZING SHALL BE IN CONFORMANCE WITH ASTM A153.
- THE CONTRACTORS SHALL DETERMINE, FURNISH AND INSTALL ALL TEMPORARY SUPPORTS SUFFICIENT TO SECURE THE STRUCTURAL STEEL FRAMING AGAINST LOADS PRESENT DURING ERECTION. TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL CONNECTIONS TO THE LATERAL LOAD RESISTING SYSTEM, INCLUDING HORIZONTAL DIAPHRAGMS, ARE COMPLETE.
- THE GENERAL CONTRACTOR SHALL VERIFY THAT THE CORRECT BEAM AND GIRDER CAMBER IS PRESENT AFTER ERECTION AND BEFORE FLOOR SLAB IS POURED.
- SPLICE CONTINUOUS STEEL ANGLES AND PLATES WITH PARTIAL-JOINT-PENETRATION SQUARE GROOVE WELDS (JOINT DESIGNATION B-P1) UNO.
- STRUCTURAL STEEL FABRICATOR AND DETAILER SHALL SEE THE ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL STEEL NOT SHOWN OR CALLED OUT IN THESE DRAWINGS. IF SIZE IS NOT SHOWN IN ARCHITECTURAL DRAWINGS, A REQUEST OR INFORMATION SHALL BE SENT TO THE STRUCTURAL ENGINEER THROUGH THE PROPER CHANNELS.
- GENERAL CONTRACTOR SHALL COORDINATE CONNECTIONS OF JOIST AND JOIST GIRDERS TO STRUCTURAL STEEL.



SAW CUTTING CONTROL JOINTS IS AN ATTEMPT TO PARTIALLY CONTROL THE SHRINKAGE CRACKS THAT NATURALLY OCCURS IN CONCRETE DURING THE CURING PROCESS. SOMETIMES THE CONCRETE WILL CRACK BETWEEN CONTROL JOINTS.



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Project No: 24-214

10-14-2025
STAMP INVALID UNLESS SIGNED

GENERAL NOTES

**Retrofit & Renovations for
Madison Methodist Church**
1091 Confederate Highway
Madison, Georgia 30650

JOB NO:
DRAWN BY: D. WHITEY
CHECKED BY: G. KORNEGAY
DESCRIPTION: SCH-REVIEW
DATE: 00/00/25
DESCRIPTION: DD-REVIEW
DATE: 00/00/25
DESCRIPTION: CD-REVIEW
DATE: 00/00/25
DESCRIPTION: BID-CONSTRUCTION
DATE: 00/00/25

REVISIONS:

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