

Last revised 03/25/19

GENERAL SPECIFICATIONS

AE ZONES (CMU FND)

1. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 2018 NORTH CAROLINA STATE BUILDING CODE - RESIDENTIAL CODE (2015 IRC WITH NC AMENDMENTS).
2. WALL, FLOOR, AND CEILING/ROOF INSULATION FOR ADDITIONS OR MODIFICATIONS TO ELEVATED HOMES WHICH INVOLVE HEATED SPACE SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 NC ENERGY CODE, LATEST REVISION.
3. SPECIAL NOTE: SOME OF THE HOUSES INVOLVED IN THIS PROGRAM MAY BE MONITORED BY REMOTE VIDEO (CONNECTED/INSTALLED BY ENGINEER'S SUBCONTRACTOR). WHERE A HOUSE IS DESIGNATED TO BE MONITORED, THE CONTRACTOR SHALL PROVIDE A TEMPORARY SERVICE AT A LOCATION DESIGNATED BY ENGINEER (AT CONTRACTOR'S EXPENSE) TO ENERGIZE THE OWNER'S WIFI FOR A REMOTE CAMERA. CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PRESERVE THE LINES AND PROTECT THE CAMERA. CONTRACTOR TO ATTACH CAMERA MOUNTING BRACKET/CAMERA TO AN EXISTING TREE OR STRUCTURE DESIGNATED BY ENGINEER AND REMOVE SAID BRACKET/CAMERA UPON COMPLETION OF WORK (AND TURN OVER TO ENGINEER).
4. THE LOWEST HABITABLE FLOOR SURFACE OF THIS DWELLING MUST BE ELEVATED TO THE TARGET FREEBOARD HEIGHT SHOWN ON DETAIL S-12 ON SHEET D-2. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE LOWEST FLOOR ELEVATION IF THE HOME AND ENSURING THAT THE HOME WILL BE ELEVATED TO TARGET FREEBOARD HEIGHT DEPICTED IN DETAIL S-12. IF A CONFLICT IS DISCOVERED BETWEEN THIS REQUIREMENT AND WHAT IS SHOWN IN THE SCOPE OF WORK OR DEPICTED ON THE SITE SPECIFIC DRAWINGS, DETAIL S-12 SHALL GOVERN. VERIFY PROPOSED TARGET FFE ELEVATION WITH ENGINEER OR INSPECTOR PRIOR TO ELEVATION OF HOUSE.
5. WHEN REQUESTED BY ENGINEER, CONTRACTOR SHALL PROVIDE FIELD CURED SAMPLES OF CAST-IN-PLACE CONCRETE IN FOOTINGS, PIERS, AND WALL AND PRISMS OF MASONRY PIERS AND WALL IN ACCORDANCE WITH OSHA SECTION 1926.72 TO DETERMINE THAT CONCRETE AND MASONRY HAVE ACHIEVED A MINIMUM OF 75% OF DESIGN STRENGTH PRIOR TO THE COMMENCEMENT OF STEEL ERECTION.
6. SPECIAL INSPECTIONS: ARE NOT REQUIRED.
7. NO LOADS IN EXCESS OF DESIGN LIVE LOADS LISTED SHALL BE IMPOSED UPON ANY AREA DURING CONSTRUCTION UNLESS ADEQUATE SHORING OR OTHER MEANS IS PROVIDED TO SUPPORT THE EXCESSIVE LOADS.
8. IF ANY CHANGES ARE MADE IN WEIGHT AND/OR LOCATION OF POINTS OF SUPPORT OF FRAMING OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH DETAIL OF CHANGES TO THE ENGINEER FOR REVIEW AND NECESSARY MODIFICATIONS.
9. TEMPORARY BRACING, GUY WIRES, SHORING, ETC. SHALL BE USED AS NECESSARY TO RESIST ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED DURING CONSTRUCTION, INCLUDING EQUIPMENT AND OPERATION.
10. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. THE ERECTION PROCEDURE AND SEQUENCE INCLUDING THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
11. DRAWINGS DO NOT SHOW ALL OPENING. COORDINATE WITH MECHANICAL DRAWINGS. VERIFY SIZES AND LOCATIONS OF ALL OPENINGS WITH MECHANICAL.
12. ALL SECTIONS AND DETAILS, WHETHER EXPLICITLY CUT ON PLAN OR NOT, SHALL BE CONSIDERED TYPICAL AND SHALL APPLY AT SIMILAR CONDITIONS.
13. SHOP DRAWINGS: THE CONTRACTOR SHALL COORDINATE THE CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL REQUIREMENTS WITH THE STRUCTURAL DRAWINGS INCLUDING THE LOCATION OF MISCELLANEOUS ITEMS AFFECTING THE STRUCTURAL WORK SUCH AS OPENINGS, BENT PLATS, INSERTS, ETC. PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR OMISSIONS.
14. THE CONTRACTOR SHALL VERIFY ALL FLOOR MOUNTED MECHANICAL EQUIPMENT DIMENSIONS AND WEIGHTS AND VERIFY ALL OPENING SIZES AND LOCATIONS WITH THE EXISTING SITE CONDITIONS, AND, IF APPLICABLE, ARCHITECTURAL PLANS AND REVIEWED MECHANICAL SHOP DRAWINGS.
15. WHERE APPLICABLE, SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR AND SUBCONTRACTOR PRIOR TO BEING SUBMITTED TO THE ENGINEER FOR APPROVAL.
16. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A WATER TIGHT, LEAK-PROOF STRUCTURE. THE WALLS ARE TO BE CONSTRUCTED TO RESTRICT WIND DRIVEN RAIN BY PROPER CONSTRUCTION DETAILING, BLOCK SELECTION (PROPER DENSITY), SEALANTS, FLASHING, ETC. THE CONTRACTOR SHALL GUARANTEE THE BUILDING NEWLY CONSTRUCTED ELEMENTS; SPECIFICALLY NEW EXTERIOR FOUNDATION WALLS, DOORS, AND WINDOWS, AGAINST LEAKING.

17. RESIDENTIAL SPECIALTY NOTES:

- A. R409.8.2 FOAM PLASTIC FIRE SAFETY: FOAM PLASTIC INSULATION MAY BE INSTALLED INSIDE CRAWL SPACES WITHOUT A THERMAL COVER WHEN THE INSULATION PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH ASTM E84 TO HAVE A FLAME-SPREAD RATING OF NOT MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 450. FOAM PLASTICS THAT HAVE NOT BEEN TESTED TO MEET THESE RATINGS SHALL BE PROTECTED AGAINST IGNITION BY COVERING THEM WITH A THERMAL BARRIER. ACCEPTABLE THERMAL BARRIERS INCLUDE BUT ARE NOT LIMITED TO 1/2-INCH CEMENT BOARD, METAL FOIL SHEETS, METAL FOIL TAPE, STEEL OR ALUMINUM METAL SHEETS OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER THAT THE FOAM IS NOT EXPOSED.
- B. R409.9 FLOOR AIR LEAKAGE CONTROL: ALL PLUMBING, ELECTRICAL, DUCT, PLENUM, PHONE, CABLE, COMPUTER WIRING AND OTHER PENETRATIONS THROUGH THE SUBFLOOR SHALL BE SEALED WITH NON-POROUS MATERIALS, CAULK OR SEALANTS. THE USE OF ROCKWOOL OR FIBERGLASS INSULATION IS PROHIBITED AS AN AIR SEALER.
- C. R409.10 DUCT AIR LEAKAGE CONTROL: ALL HEATING AND COOLING DUCTWORK LOCATED IN THE CRAWL SPACE SHALL BE SEALED WITH MASTIC OR OTHER INDUSTRY APPROVED DUCT CLOSURE SYSTEM.

3/11/16

18. CONSTRUCTION TOLERANCES

- A. VARIATION FROM PLUMB: VARIATION IN THE LINES AND SURFACES OF COLUMNS, WALLS AND ARRISSES (I.E. SHARP EDGE OR RIDGE BETWEEN TWO SURFACES MEETING AT AN ANGLE [AS IN MOLDING]) SHALL NOT EXCEED 1/4 INCH IN 10 FEET, 3/8 INCH IN A STORY HEIGHT OR 20 FEET MAX NOR 1/4 INCH IN 40 FEET OR MORE. VARIATION FROM PLUMB FOR EXTERIOR CORNERS, EXPANSION JOINTS, AND OTHER CONSPICUOUS LINES SHALL NOT EXCEED 1/4 INCH IN ANY STORY OR 20 FEET MAX NOR 1/2 INCH IN 40 FEET OR MORE.
- B. VARIATION FROM LEVEL: VARIATION FROM THE LEVEL OF GRADES INDICATED ON THE DRAWING FOR EXPOSED LINTELS, SILL, PARAPETS, HORIZONTAL GROOVES, AND OTHER CONSPICUOUS LINES SHALL NOT EXCEED 1/4 INCH IN ANY BAY OR 20 FEET, NOR 1/4 INCH IN 40 FEET OR MORE.
- C. VARIATION IN LINEAR BUILDING LINE: VARIATION IN LINEAR BUILDING LINE FROM AN ESTABLISHED POSITION IN PLAN AND RELATED PORTO OF COLUMNS, WALLS AND PARTITIONS SHALL NOT EXCEED 1/4 INCH IN ANY BAY OR 20 FEET MAX, NOR 1/4 INCH IN 40 FEET OR MORE.
- D. VARIATION IN CROSS-SECTIONAL DIMENSION: VARIATION IN CROSS-SECTIONAL DIMENSION OF COLUMNS AND THICKNESS OF WALL SHALL NOT EXCEED MINUS 1/4 INCH NOR PLUS 1/4 INCH FROM THE DIMENSIONS INDICATED ON THE DRAWINGS.

FOUNDATIONS

1. SOIL DESIGN BEARING VALUE - 2000 PSF TO BE FIELD VERIFIED BY PROJECT ENGINEER, OR IF SO REQUESTED BY ENGINEER, AN INDEPENDENT GEOTECHNICAL TESTING LABORATORY.
2. SITE PREPARATION AND PLACEMENT OF ENGINEERED COMPACTED FILL SHALL BE MONITORED BY THE GEOTECHNICAL LABORATORY. ALL NECESSARY STRIPPING, CUTTING, PROOF ROLLING, AND FILLING OPERATIONS SHALL BE SO MONITORED.
3. ALL FILL INSIDE THE BUILDING AND TO 10' OUTSIDE THE BUILDING SHALL BE CLEAN SELECT MATERIAL FREE OF DELETERIOUS MATERIALS SUCH AS WOOD, ROOTS, TRASH, OR OTHER EXTRANEOUS MATERIALS. CONTROLLED COMPACTED FILL IS NOT EXPECTED DUE TO THE TYPE CONSTRUCTION UNLESS A SLAB-ON-GRADE IS PROPOSED TO BE PLACED FOR GARAGES, PATIOS, DRIVEWAYS, ETC. IN THAT CASE, PLACE FILL IN 8" LIFTS, MEASURED LOOSE, AND COMPACT EACH LIFT TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY ASTM D698. CONTRACTOR IS RESPONSIBLE FOR VERIFYING COMPLIANCE OF COMPACTION IF QUESTIONED.
4. FOUNDATIONS SHALL BE PLACED ONLY ON APPROVED NATURAL UNDISTURBED SOIL STRATA OR ON PROPERLY PLACED ENGINEERED CONTROLLED COMPACTED FILL UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER OR LABORATORY.
5. FOOTING EXCAVATIONS SHALL BE APPROVED BY THE ENGINEER, OR IF SO DIRECTED, BY A GEOTECHNICAL ENGINEER/LABORATORY PRIOR TO PLACING FOOTING CONCRETE. THE GEOTECHNICAL ENGINEER/LABORATORY SHALL PROVIDE RESULTS OF DCP TESTS TO ENGINEER FOR VERIFICATION.
6. FOOTING ELEVATIONS SHALL NOT BE RAISED OR LOWERED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.
7. FOOTINGS MAY NOT BE CARRIED TO LOWER ELEVATION THAN THOSE SHOWN ON DRAWING DETAILS NOR ADVANCED PAST THE SURFACE CRUST WITHOUT APPROVAL OF THE ENGINEER.
8. CONSTRUCTION JOINTS IN CONTINUOUS WALL FOOTING SHALL BE MADE MIDWAY BETWEEN COLUMNS AND AT LEAST 4' FROM THE INTERSECTION OF ANOTHER WALL FOOTING.
9. COLUMN FOOTINGS IN LINE OF WALL FOOTINGS SHALL BE POURED MONOLITHICALLY AND FLUSH TOP WITH WALL FOOTING.
10. ALL STEPPED FOOTINGS SHALL BE FIELD LOCATED AND SHALL START OR TERMINATE AT LEAST 4' FROM A COLUMN FOOTING, WALL CORNER, OR WALL INTERSECTIONS. STEPPED FOOTING LOCATIONS MAY REQUIRE

ADJUSTMENTS DUE TO FIELD CONDITIONS. ANY ADJUSTED LOCATIONS SHALL REQUIRE APPROVAL OF THE ENGINEER.

11. WALLS BRACING AS RETAINING WALLS SHALL NOT BE BACKFILLED WITHOUT BRACING UNTIL ALL SUPPORTING SOIL AND SLABS ARE IN PLACE AND AT ADEQUATE STRENGTH.
12. FOUNDATION PLAN DESIGN ASSUMPTIONS: WHERE A FOUNDATION PLAN HAS BEEN PROVIDED IN THIS PLAN SET, IT HAS BEEN PROVIDED BASED ON REACTIONS EITHER DEVELOPED BY THE ENGINEER OF RECORD OR PROVIDED TO THE ENGINEER DURING DESIGN BY A SPECIFIC BUILDING MANUFACTURER BASED ON THE BUILDING SHOWN IN THE PLANS, THE SITE CONDITIONS AND DESIGN PARAMETERS FOR THIS SPECIFIC LOCALE DICTATED BY THE NC STATE BUILDING CODE.
13. PRE-ENGINEERED METAL BUILDINGS:
 - A) THE ANCHOR BOLT LAYOUT/PATTERNS SHOWN AND/OR DIMENSIONED ON THE FOUNDATION PLAN IS BASED ON A SPECIFIC MANUFACTURER SELECTED BY THE OWNER OR ENGINEER OF RECORD DURING DESIGN. WHERE AN EXISTING METAL BUILDING IS BEING ELEVATED, MATCH THE EXISTING COLUMN ANCHOR BOLT PATTERN AND BOLT SIZE.

CONCRETE

1. CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:

A) FOOTINGS	- 3000 PSI
B) PEDESTALS	- 3000 PSI
C) COLUMNS	- 3000 PSI
D) SLABS ON GRADE	- 3000 PSI
E) FILL FOR MASONRY UNITS	- 3000 PSI
F) ALL OTHER CONCRETE	- 3000 PSI
2. COASTAL CONSTRUCTION
 - A. CONCRETE: WHEN EXPOSED TO SALTWATER OR SALT SPRAY, CONCRETE SHALL BE TYPE V SULFATE-RESISTING CEMENT, WITH A 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI MINIMUM AND A WATER-CEMENT RATIO NO HIGHER THAN 0.40.
 - B. REINFORCING STEEL USED IN CONCRETE OR MASONRY CONSTRUCTION IN COASTAL AREAS SHOULD NOT BE LEFT EXPOSED TO MOISTURE AND SHOULD NOT BE STORED ON BARE GROUND. THE REINFORCING STEEL SHALL BE FREE FROM RUST AND CLEARANCES SHOULD BE MAINTAINED AS SHOWN ON THE DESIGN DRAWINGS OR OTHERWISE NOTED HEREIN.
3. CONCRETE FOR FOOTINGS, SLABS-ON-GRADE, PEDESTALS, COLUMNS, SUSPENDED SLABS, AND BEAMS SHALL BE REGULAR STONE CONCRETE.
4. CONCRETE FOR FILL IN CONCRETE MASONRY BLOCK CELLS, BOND BEAMS, LINTEL BLOCKS, AND CAVITY WALL FILL BELOW FLOOR IN EXTERIOR WALLS AND OTHER MASONRY UNITS SHALL BE PEA GRAVEL CONCRETE. MORTAR MIX WILL NOT BE ALLOWED FOR ANY BLOCK MASONRY FILL REQUIREMENTS.
5. CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL HAVE 5% AIR ENTRAINMENT.
6. ALL CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318.
7. OBSERVE ALL AND STRICTLY FOLLOW ALL ACI 305 AND 306 REQUIREMENTS RESPECTIVELY FOR PROTECTION OF CONCRETE IN HOT AND COLD WEATHER. KEEP THE CONCRETE TEMPERATURE LOW AT PLACEMENT (BELOW 85°F) TO REDUCE THERMAL EFFECTS AND PLASTIC SHRINKAGE CRACKING.
8. ALL CONCRETE WORK SHALL BE PROPERLY CURED IN CONFORMANCE WITH ACI 308. EITHER WATER CURING OR SEALING MATERIALS METHOD MAY BE USED PROVIDED THAT THE METHOD CHOSEN HAS NO DETRIMENTAL EFFECT ON THE FINAL FINISH SPECIFIED FOR THE RESPECTIVE AREAS.
9. BUILDING SLABS-ON-GRADE SHALL BE 4" MINIMUM THICKNESS.
10. PLACE 1/2" PRE-FORMED PVC EXPANSION JOINT FILLER FULL DEPTH OF SLAB ON GRADE AT ABUTTING WALL SURFACES UNLESS OTHERWISE NOTED.
11. PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLABS-ON-GRADE IN LOCATIONS AS SHOWN ON FOUNDATION PLAN OR AT OTHER LOCATIONS APPROVED BY THE ENGINEER. SPACING OF CONTROL JOINTS SHALL NOT EXCEED 14 FEET IN ANY DIRECTION UNLESS NOTED OTHERWISE ON THE PLANS. THE REINFORCING STEEL IS NOT TO BE CONTINUOUS THROUGH ANY OF THE CONTRACTION OR CONSTRUCTION JOINTS. THIS HOLDS TRUE FOR BOTH WIRES AND BARS.
12. CHAMFER EXPOSED EDGES AND CORNERS OF CONCRETE 1/4" UNLESS OTHERWISE NOTED.
13. AT RE-ENTRANT CORNERS (I.E. INSIDE CORNERS), UNLESS SHOWN OTHERWISE, PLACE A MINIMUM OF 2 #3 BARS BY 30 INCHES LONG AT EACH INTERIOR CORNER. PLACE THE FIRST BAR 2 INCHES FROM THE CORNER AND THE SECOND BAR 5 INCHES FROM THE CORNER. PLACE BOTH BARS 2 INCHES DOWN FROM THE TOP OF THE SLAB.
14. WATCH OUT FOR DRY WINDY DAYS FOR SLABS-ON-GRADE! PLASTIC SHRINKAGE CRACKS ARE MUCH MORE LIKELY TO OCCUR ON WINDY DAYS WHEN THE HUMIDITY IS RELATIVELY LOW. REDUCE PLASTIC

CRACKING BY ADDITION OF FIBERS, WINDSCREENS, FOG MISTERS, OR MONOMOLECULAR FILMS.

15. IF FILM-FORMING CURING COMPOUNDS ARE PERMITTED BY ENGINEER, CURE CONCRETE BY APPLICATION OF A DISSIPATING FILM-FORMING CURING COMPOUND MEETING THE REQUIREMENTS OF ASTM C309, TYPE 1 SUCH AS W. R. MEADOWS CS-309 OR APPROVED EQUAL. APPLY AS SOON AS ALL SURFACE WATER HAS DISAPPEARED AND THE CONCRETE SURFACE WILL NOT BE MARRED BY WALKING WORKERS. SURFACE TO RECEIVE SEALER MUST BE DRY AND FREE OF CONTAMINANTS OR DISCOLORATIONS. APPLY USING A LOW-PRESSURE SPRAYER. RESTRICT FOOT TRAFFIC FOR AT LEAST 4 HOURS (PREFERABLY 12 HOURS) AFTER APPLICATION.
16. IF WATER CURING, WATER CURE CONCRETE SLABS BY PONDING/FLOODING FOR A MINIMUM OF 4 DAYS. IF SLABS ARE TO BE SPRINKLED, KEEP CONCRETE CONTINUOUSLY WET FOR A MINIMUM OF 7 DAYS.
17. JOINT SEALANT:
 - A. NON-SAG (FOR VERTICAL AND HORIZONTAL APPLICATIONS, SEALANT FOR EIFS, & SUBMERGED ENVIRONMENTS): USE A NON-SAG FLEXIBLE EXTERIOR GRADE POLYURETHANE SEALANT SUCH AS SIKAFLEX 2C NS MEETING ASTM C-920, TYPE M, GRADE NS, CLASS 25, OR APPROVED EQUAL.
 - B. TRAFFIC GRADE (FOR HORIZONTAL APPLICATIONS SUCH AS WALKWAYS, PLAZAS, AND PLATFORMS WITH EXPOSURE TO FOOT OR PNEUMATIC-TIRE TRAFFIC, TAMPER RESISTANT): USE A TRAFFIC-GRADE POLYURETHANE EXTERIOR SEALANT SUCH AS SIKAFLEX 2C TG MEETING ASTM C-920, TYPE M, GRADE NS, OR APPROVED EQUAL.
 - C. SELF-LEVELING (FOR HORIZONTAL APPLICATIONS AND SUBMERGED CONDITIONS SUCH AS RESERVOIR OR CANAL JOINTS): USE A SELF-LEVELING POLYURETHANE EXTERIOR GRADE SEALANT SUCH AS SIKAFLEX 2C SL MEETING ASTM C-920, TYPE M, GRADE P, CLASS 25, OR APPROVED EQUAL.
18. CONCRETE REPAIR:
 - A) REPAIR CONCRETE AT SPALLS AND ERODED AREAS WITH SIKA QUICK 1000 EXTENDED WITH 3/8" COARSE AGGREGATE IN ACCORDANCE WITH SIKA'S RECOMMENDATIONS OR AN APPROVED EQUAL.
 - B) PROPORTION AND MIX REPAIR CONCRETE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS.
 - C) IF THE CONCRETE IS TO BE EXTENDED WITH AGGREGATE, IF REQUIRED BY MANUFACTURER, USE AN AGGREGATE CERTIFIED TO BE NON-REACTIVE IN ACCORDANCE WITH ASTM C1260
 - D) CURE REPAIR CONCRETE AS REQUIRED BY MANUFACTURER.

REINFORCED STEEL

1. BARS SHALL BE ROLLED FROM NEW BILLET-STEEL CONFORMING TO "SPECIFICATION FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT," ASTM A615 OR A706, GRADE 60 REINFORCING BARS.
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185. WWF SHEETS ARE REQUIRED AND ARE TO BE PROPERLY POSITIONED AS SHOWN ON THE PLANS AND SUPPORTED BY CHAIRS/SAND PLATES. USE OF ROLLS IS PROHIBITED.
3. DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.
4. REINFORCING STEEL SHALL BE IN PLACE AND REVIEWED BY THE ENGINEER PRIOR TO PLACING CONCRETE.
5. WHEN CALLED FOR ON THE PLANS, PLACE ONE LAYER OF 6 X 6 - W1.4 X W1.4 WWF SHEETS AT MIDDEPTH OF SLABS-ON-GRADE. LAP ALL WWF SPLICES TWO FULL MESHES AND ALL SIDE LAPS ONE FULL MESH AND TIE OFF WITH STANDARD WIRE TIES.
6. FABRICATE BARS IN CONTINUOUS FOOTINGS AND TURNED DOWN SLABS TO LONGEST PRACTICAL LENGTHS.
7. LAP REBAR SPLICES AS INDICATED IN "CONCRETE" NOTES OR TABLE C-1 & C-2 OF "STRUCTURAL CONCRETE MASONRY" NOTES, AS APPLICABLE.
8. PLAN REBAR SPLICES TO OCCUR AT POINTS OF MINIMUM STRESS UNLESS OTHERWISE SHOWN.
9. MECHANICAL SPLICES: WHEN PERMITTED OR DIRECTED BY THE ENGINEER, MECHANICAL SPLICES MAY BE USED IN LIEU OF LAPPED SPLICES. MECHANICAL SPLICES FOR REBAR SHALL BE OF THE DOUBLE BARREL ZAP SCREWLOCK (BY BAR SPLICE PRODUCTS, INC., DAYTON, OH) OR AN APPROVED EQUAL. SUBMIT CUT SHEET FOR ENGINEER'S APPROVAL PRIOR TO ORDERING MECHANICAL SPLICES. TORQUE AND INSTALL MECHANICAL SPLICES PER MANUFACTURER'S SPECIFICATIONS. MECHANICAL SPLICES SHALL BE APPLICABLE TO BOTH ASTM A615/A706 GRADE 60 REINFORCING BARS. EQUIPMENT FOR TORQUEING SHALL BE APPROVED BY THE ENGINEER. A SUITABLE IMPACT WRENCH IS THE INGERSOL RAND IR 261.
10. WITH PERMISSION, WELD SPLICES MAY BE PERMITTED BY ENGINEER PROVIDED THE REINFORCING STEEL USED MEETS ASTM A706 AND THE BARS BUTTED AND WELDED DEVELOP AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH IN TENSION OR COMPRESSION, AS REQUIRED.

DATE	NOVEMBER, 2022	TRJ	DATE	
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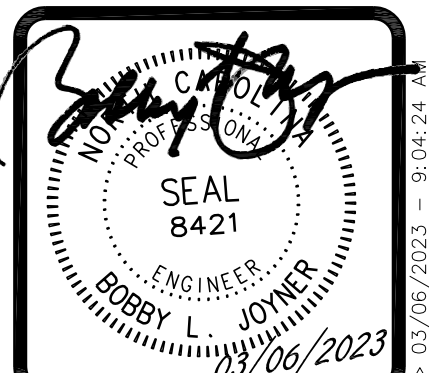


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**GENERAL SPECIFICATIONS For
Hyde County N.C. Flood
Mitigation Assistance Grant
5161-004**

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