

MASONRY WALL NOTES

1. THE STRUCTURAL PLANS ONLY SHOW THE LOAD BEARING "STRUCTURAL" MASONRY.
2. MASONRY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH PART 3 OF ACI 531 "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY CONSTRUCTION".
3. ALL CONCRETE MASONRY UNITS SHALL BE HOLLOW LOAD BEARING UNITS CONFORMING TO THE REQUIREMENTS OF ASTM C90, TYPE I AND THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION.
4. NORMAL WEIGHT CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90, TYPE II, WITH A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 3,750 PSI. CONCRETE MASONRY UNITS USED BELOW GRADE SHALL BE COMPOSED OF NORMAL WEIGHT AGGREGATE. LIGHT WEIGHT CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C331 WITH A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 3,750 PSI. CONCRETE MASONRY UNITS USED ABOVE GRADE SHALL BE COMPOSED OF LIGHTWEIGHT AGGREGATE.
5. ALL MASONRY UNITS SHALL HAVE A MINIMUM NET COMPRESSIVE STRENGTH OF 3,750 PSI AND A MINIMUM NET TENSILE STRENGTH OF NOT LESS THAN 125 PSI, WHEN TESTED IN ACCORDANCE WITH THE METHODS SET FORTH IN THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION.
6. MASONRY UNITS SHALL HAVE CURED FOR NOT LESS THAN 28 DAYS WHEN PLACED IN THE STRUCTURE.
7. ALL MASONRY UNITS SHALL HAVE A MAXIMUM LINEAR SHRINKAGE OF .065 OF 1% FROM THE SATURATED TO THE OVEN DRY CONDITION, WHEN TESTED IN ACCORDANCE WITH THE METHODS SET FORTH IN THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION.
8. MASONRY MORTAR SHALL BE FRESHLY PREPARED, UNIFORMLY MIXED AND SHALL CONFORM TO ASTM C270, TYPE 'S' WITH A MINIMUM COMPRESSIVE STRENGTH OF 1,800 PSI AT 28 DAYS. MASONRY CEMENT AND MORTAR CEMENT SHALL NOT BE USED. USE ASTM C270 TYPE 'M' MORTAR WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS IS REQUIRED IN BELOW GRADE APPLICATIONS. FOR MULTI WYTHE WALLS USE THE SAME TYPE OF MORTAR FOR EACH WYTHE.
9. BRICK MORTAR SHALL BE FRESHLY PREPARED, UNIFORMLY MIXED, AND SHALL CONFORM TO ASTM C270, TYPE 'N' WITH A MINIMUM COMPRESSIVE STRENGTH OF 750 PSI AT 28 DAYS.
10. GROUT MIXTURES SHALL CONFORM TO ASTM C476 WITH A 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI AND A MAXIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
11. CONCRETE MASONRY CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF THE MASONRY (f_m) SHALL BE 2500 PSI ON THE NET CROSS SECTIONAL AREA AT 28 DAYS.
12. ALL CELLS WITH REINFORCING BARS SHALL BE GROUTED SOLID AND CONCRETE MASONRY UNITS LOCATED BELOW GRADE SHALL HAVE ALL CELLS FULLY GROUTED. REINFORCING STEEL SHALL CONSIST OF DEFORMED GRADE 60 BARS CONFORMING TO ASTM A615. BARS SHALL BE NEW BILLET STEEL OF A DOMESTIC MANUFACTURE. ALL CELLS TO BE GROUTED SHALL BE CLEAN AND FREE OF EXCESS MORTAR AND FOREIGN MATERIALS.
13. ALL CELLS SHOWN TO HAVE DRILLED EXPANSION ANCHORS, EMBEDDED HEADED STUDS OR OTHER EMBEDDED ANCHORS SHALL BE GROUTED SOLID.
14. HORIZONTAL JOINT REINFORCEMENT SPACED AT 16 INCHES ON CENTER MAX. VERTICALLY SHALL CONFORM TO ASTM A951 WITH A MINIMUM YIELD STRENGTH OF 70,000 PSI AND A MINIMUM SIZE OF 9 GAGE FOR SIDE RODS AND 9 GAGE FOR TRUSS RODS.
15. BOND BEAM BLOCKS SHALL BE OPEN BOTTOM UNITS AND ARE TO BE USED AT THE TOPS OF WALLS AND AT THE MID-HEIGHT OF WALL OR AT 8'-0" ON CENTER VERTICALLY MAXIMUM UNLESS NOTED OTHERWISE ON THE DRAWINGS. PROVIDE (2) NO. 4 BARS IN A SOLID GROUTED BOND BEAM UNLESS NOTED OTHERWISE. LINTEL BLOCKS SHALL NOT BE USED IN PLACE OF BOND BEAM BLOCKS. BOND BEAMS TO STOP AND START AT EVERY THIRD VERTICAL CONTROL JOINT. BOND BEAM TO BE CUT AT EVERY VERTICAL CONTROL JOINT BUT REINFORCING TO REMAIN CONTINUOUS.
16. OPENINGS IN MASONRY WALLS SHALL HAVE EITHER MASONRY OR STEEL LINTELS AS DETAILED ON THE DRAWINGS. WHEN NO LINTEL IS DETAILED A MINIMUM OF (2) NO. 4 BARS IN A SOLID GROUTED LINTEL BLOCK SHALL BE INSTALLED. THE BARS SHALL EXTEND A MINIMUM OF EIGHT INCHES BEYOND THE EDGE OF THE OPENING AND THE JAMB AT EACH SIDE OF THE OPENING SHALL BE GROUTED SOLID FOR A DISTANCE OF EIGHT INCHES WITH A NO. 5 VERTICAL MINIMUM AT EACH JAMB. LAP BARS 2'-0" MIN. OR 40 BAR DIAMETERS AT SPLICES, INTERSECTIONS AND CORNERS.
17. LINTEL BLOCKS SHALL BE "U" SHAPED UNITS WITH SOLID BOTTOMS AND ARE TO BE USED OVER WINDOW AND DOOR OPENINGS. BOND BEAM BLOCKS SHALL BE OPEN BOTTOM UNITS AND ARE TO BE USED AT THE TOPS OF WALLS AND AT THE MID-HEIGHT OF WALL OR AT 8'-0" ON CENTER VERTICALLY MAXIMUM UNLESS NOTED OTHERWISE ON THE DRAWINGS. PROVIDE (2) NO. 4 BARS IN A SOLID GROUTED BOND BEAM UNLESS NOTED OTHERWISE. LINTEL BLOCKS SHALL NOT BE USED IN PLACE OF BOND BEAM BLOCKS. VERTICAL REINFORCING SHALL EXTEND THROUGH ALL BOND BEAMS. BOND BEAMS TO STOP AND START AT EVERY THIRD VERTICAL CONTROL JOINT. BOND BEAM TO BE CUT AT EVERY VERTICAL CONTROL JOINT BUT REINFORCING TO REMAIN CONTINUOUS THRU THE CONTROL JOINT.
18. STEEL LINTELS SHALL BEAR 8 INCHES MINIMUM AT EACH END ON FLASHING ABOVE AND BELOW THE ANGLE. VERTICAL CONTROL JOINTS SHALL EXTEND UP FROM THE END OF THE STEEL LINTEL, UNLESS 15# FELT OR FLASHING IS PROVIDED TOP AND BOTTOM OF LINTEL ANGLE WHERE ANGLE BEARS ON BRICK.
19. MASONRY WALLS SHALL HAVE VERTICAL CONTROL JOINTS AT APPROXIMATELY SIXTEEN (16) FEET TO TWENTY-FOUR (24) FEET ON CENTER AND FOUR (4) FEET MAXIMUM FROM CORNERS OR AT A MAXIMUM HEIGHT/LENGTH RATIO OF 1.5 FOR UNREINFORCED WALLS AND H/L OF 2 FOR REINFORCED WALLS. COORDINATE THE LOCATION OF JOINTS WITH THE ARCHITECT. PROVIDE HECKMANN NO. 351 CONTROL JOINT ANCHORS AT 16 INCHES ON CENTER VERTICALLY AT BRICK MASONRY AND HECKMANN NO. 350 CONTROL JOINT ANCHORS AT 16 INCHES ON CENTER VERTICALLY AT CONCRETE MASONRY UNITS.
20. AT FREE VERTICAL EDGES, CORNERS AND INTERSECTIONS OF WALLS PROVIDE AT LEAST (1) NO. 5 DOWEL AND VERTICAL IN GROUT FILLED END CORE, UNLESS NOTED OTHERWISE ON THE DRAWINGS. PROVIDE AT LEAST (1) NO. 5 DOWEL AND VERTICAL IN GROUT FILLED CORE AT ALL JOIST AND BEAM BEARING LOCATIONS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
21. PROVIDE A MINIMUM OF NO. 4 AT 48 INCHES ON CENTER VERTICAL WALL. REINFORCING AND DOWELS IN FULLY GROUTED CELLS AT ALL EXTERIOR AND INTERIOR WALLS UNLESS A GREATER REINFORCING IS SHOWN ON THE PLANS OR IN THE DETAILS. PROVIDE 1/2 INCH DIAMETER DEFORMED BAR ANCHORS AT 16 INCHES ON CENTER WELDED TO STEEL MEMBERS SUPPORTING MASONRY ABOVE UNLESS NOTED OTHERWISE ON THE DRAWINGS.
22. PROVIDE HOHMAN AND BARNARD RB-8 REBAR POSITIONERS OR EQUAL AT EVERY THIRD COURSE AND AT SPLICE LOCATIONS.
23. ALL MASONRY TIES TO BACKUP STRUCTURE SHALL BE HOT DIP GALVANIZED. PROVIDE A HECKMANN NO. 315 ANCHOR WITH NO. 316 TRIANGULAR TIE-ON COLUMNS AT 16 INCHES (15 INCHES AT KING SIZE BRICK) ON CENTER VERTICALLY AND A HECKMANN NO. 191 OR 192 ANCHORS ON EACH SIDE OF ALL BEAMS AT 16 INCHES ON CENTER HORIZONTALLY UNLESS NOTED OTHERWISE ON THE DRAWINGS. MASONRY TIES TO WALL STUDS SHALL BE A HECKMANN NO. 316 TRIANGULAR TIE WITH A HECKMANN NO. 315-C SCREW ON ANCHOR STRAP OR HECKMANN #77 WING NUT POS-1-TIE ANCHOR SPACED 16 INCHES (15 INCHES AT KING SIZE BRICK) ON CENTER HORIZONTALLY AND 16 INCHES ON CENTER VERTICALLY. AT TOP OF WALLS AND AT WALL CORNERS AND INTERSECTIONS PROVIDE TWO VERTICAL ROWS OF ANCHORS SPACED 16 INCHES APART AND 16 INCHES ON CENTER VERTICALLY. TRIANGULAR TIES SHALL EXTEND 3/4 INCH FROM FACE OF MASONRY. ANCHOR STRAPS SHALL BE ATTACHED TO METAL STUDS WITH TWO (2) #10-16x1-1/2 INCHES CADMIUM PLATED HEX HEAD SHEET METAL SCREWS WITH NEOPRENE WASHER.
24. ANCHOR WOOD SILLS (PRESSURE TREATED) TO CMU WITH 1/2 INCH DIA. x 9 INCHES LONG HOT-DIP GALVANIZED, HOOKED ANCHOR BOLTS WITH 9/16-INCH-WIDE TYPE 'B' HOT-DIP GALVANIZED WASHERS EMBEDDED 7 INCH MINIMUM AT 24 INCHES MAX. ON CENTER. AT CORNERS AND DOOR OPENINGS PROVIDE ONE ANCHOR BOLT AT 8 INCHES IN EACH DIRECTION FROM CORNER. PROVIDE TWO BOLTS MINIMUM PER PIECE OF SILL PLATE.
25. ALL MASONRY DESIGN IS BASED CHAPTER 21 OF INTERNATIONAL BUILDING CODE, LATEST EDITION AND ACI 530/TMS 402, LATEST EDITION.
26. TOPS OF ALL NON-LOAD BEARING INTERIOR WALLS SHALL BE BRACED ACCORDING TO THE SPECIFIC SECTION INDICATED ON PLAN OR THE TYPICAL DETAILS.

STRUCTURAL TESTING AND INSPECTIONS

EARTHWORK TESTING

1. DURING EARTHWORK OPERATIONS KEEP A COMPETENT TRAINED TECHNICIAN ASSIGNED TO THE PROJECT. SERVICES PROVIDED SHALL INCLUDE:
 - A) OBSERVE STRIPPING OPERATIONS AND EVALUATE THE REQUIRED STRIPPING DEPTH DURING THESE OPERATIONS.
 - B) OBSERVE PROOFROLLING OPERATIONS AFTER SITE STRIPPING. DETERMINE IF ANY SOFT SPOTS NEED TO BE UNDERCUT TO FIRM SOILS, REPLACED WITH SELECT FILL AND RECOMPACTED.
 - C) VERIFY THAT THE SUBGRADE SHALL THEN BE SCARIFIED AND MOISTURE CONDITIONED TO A SIX (6) INCH DEPTH AND THEN RECOMPACTED TO BETWEEN 95 AND 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR DENSITY TEST (ASTM D698). THE MOISTURE CONTENT SHALL BE BETWEEN OPTIMUM AND +3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. PROVIDE A MINIMUM OF FOUR (4) FIELD DENSITY TESTS ON THE SUBGRADE OR ONE (1) FOR EVERY 2,500 SQUARE FEET WHICHEVER IS GREATER.
 - D) STRUCTURAL SELECT FILL PAD MATERIAL SHALL BE TESTED FOR ACCEPTABILITY AND A MOISTURE DENSITY CURVE SHALL BE ESTABLISHED. SELECT FILL MATERIAL SHALL BE AN INORGANIC SANDY CLAY WITH LIQUID LIMIT BETWEEN 26 AND 40 AND PLASTICITY INDEX BETWEEN 10 AND 20.
 - E) SELECT FILL SHALL BE PLACED IN EIGHT INCH LOOSE LIFTS AND COMPACTED TO BETWEEN 95 AND 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR DENSITY TEST (ASTM D698). THE MOISTURE CONTENT SHALL BE BETWEEN OPTIMUM AND +3 PERCENT OF THE OPTIMUM MOISTURE CONTENT FOR SELECT FILL.
 - F) SELECT FILL MATERIAL SHALL BE TESTED DURING PLACEMENT OF EACH LIFT FOR THE ATTERBERG LIMITS IN ACCORDANCE WITH ASTM D4318. 98 METHOD B "STANDARD TEST METHOD FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS" TO VERIFY THAT THE SELECT FILL MATERIAL IS IN ACCORDANCE WITH THE ORIGINALLY APPROVED SELECT FILL MATERIAL. PROVIDE A MINIMUM OF ONE (1) TEST PER LIFT OR ONE (1) FOR EVERY 2,500 SQUARE FEET WHICHEVER IS GREATER WITH A MAXIMUM OF TEN (10) PER LIFT.
 - G) OBSERVE THE EXCAVATION DAILY AND ENSURE THAT THE CONTRACTOR MAINTAINS A CLEAN EXCAVATION THAT IS FREE OF WATER 100% OF THE TIME. CONTRACTOR SHALL PROVIDE PUMPS AS REQUIRED TO REMOVE ANY WATER AT ALL TIMES.
 - H) OBSERVE GRADING OPERATIONS TO ENSURE THAT PROPER DRAINAGE AWAY FROM THE BUILDING PAD IS PROVIDED.

DRILLED FOOTINGS TESTING

1. DURING DRILLED FOOTING OPERATIONS KEEP A COMPETENT TRAINED TECHNICIAN ASSIGNED TO THE PROJECT. SERVICES PROVIDED SHALL INCLUDE:
 - A) OBSERVING THE BOTTOM OF SHAFT FOR CLEANLINESS.
 - B) CHECKING SHAFT FOR CONFORMANCE TO REQUIRED TOLERANCES. FOOTINGS SHALL BE WITHIN 3" OF THEIR REQUIRED LOCATIONS AND SHAFTS SHALL NOT BE OUT OF PLUMB BY MORE THAN 2 PERCENT OF THE SHAFT LENGTH.
 - C) CHECKING SHAFT BOTTOM FOR PROPER BEARING MATERIAL.
 - D) NOTING DEPTH AND DIAMETER OF ALL FOOTINGS.
 - E) VERIFY QUANTITY, SIZE AND LOCATION OF REINFORCEMENT.
 - F) CHECK FOR CAVING OF SHAFT WALLS.
2. ENSURE THAT THE SPOILS FROM THE DRILLED FOOTING EXCAVATIONS ARE REMOVED FROM THE BUILDING PAD AND THAT THE PAD IS MOISTURE CONDITIONED AND RECOMPACTED AS SPECIFIED.

CONCRETE TESTING

1. CONCRETE MIX DESIGNS SHALL BE SUBMITTED FOR REVIEW INDICATING CONFORMANCE WITH ACI 318, LATEST EDITION, CHAPTER 5, SECTION 5.3.
2. SLUMP TESTS, CONFORMING TO ASTM C143, SHALL BE TAKEN AT THE POINT OF DISCHARGE AT THE SAME RATE AS NOTED BELOW IN NOTE NUMBER 5.
3. AIR CONTENT TESTS CONFORMING TO ASTM C173, VOLUMETRIC METHOD FOR LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE; ASTM C231 PRESSURE METHOD FOR NORMAL WEIGHT CONCRETE; SHALL BE TAKEN FOR EACH DAY'S POUR OF EACH TYPE OF AIR-ENTRAINED CONCRETE.
4. CONCRETE TEMPERATURE SHALL BE TESTED HOURLY WHEN AIR TEMPERATURE IS 40 DEG F (4 DEG C) AND BELOW, WHEN 80 DEG F (27 DEG C) AND ABOVE, AND EACH TIME A SET OF COMPRESSION TEST SPECIMENS IS MADE.
5. ONE SET OF FOUR COMPRESSION TEST SPECIMENS CONFORMING TO ASTM C31 SHALL BE MOLDED AND STORED FOR LABORATORY-CURED SPECIMENS. COMPRESSIVE STRENGTH TESTS SHALL CONFORM TO ASTM C39 AND SHALL CONSIST OF ONE SET FOR EACH DAY'S POUR EXCEEDING 5 CU. YDS. PLUS ADDITIONAL SETS FOR EACH 50 CU. YDS. MORE THAN THE FIRST 25 CU. YDS OF EACH CONCRETE CLASS PLACED IN ANY ONE DAY. ONE SPECIMEN SHALL BE TESTED AT 7 DAYS. TWO SPECIMENS SHALL BE TESTED AT 28 DAYS, AND ONE SPECIMEN SHALL BE RETAINED FOR LATER TESTING AS REQUIRED.
6. VERIFY CONCRETE IS BEING CONSOLIDATED IN ACCORDANCE WITH THE RECOMMENDATIONS OF ACI 318 AND ACI 308R, LATEST EDITION.
7. VERIFY THAT POST INSTALLED ANCHORS ARE AS SPECIFIED AND THAT THE ANCHORS ARE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.

REINFORCING STEEL INSTALLATION

1. DURING CAST-IN-PLACE CONCRETE STRUCTURAL MEMBER REINFORCING PLACEMENT OPERATIONS KEEP A COMPETENT TRAINED TECHNICIAN ASSIGNED TO THE PROJECT. INSPECT REINFORCING UTILIZING ACI 311.4R "GUIDE FOR CONCRETE INSPECTION" AS A GUIDE. SERVICES PROVIDED SHALL INCLUDE:
 - A) VERIFY TYPE AND GRADE OF ALL REINFORCING STEEL.
 - B) VERIFY REBAR IS FREE OF OIL, DIRT, EXCESSIVE RUST AND FROM DAMAGE IN SHIPMENT TO SITE.
 - C) VERIFY REINFORCING IS ADEQUATELY TIED, CHAIRED AND SUPPORTED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT.
 - D) VERIFY MINIMUM AND MAXIMUM CLEAR DISTANCES BETWEEN BARS AND MINIMUM STRUCTURAL DISTANCE TO OUTSIDE OF CONCRETE.
 - E) VERIFY QUANTITY, SIZE AND LOCATION OF REINFORCEMENT.
 - F) VERIFY MINIMUM CONCRETE COVER IS MAINTAINED BETWEEN REBAR AND SURFACE OF CONCRETE.
 - G) VERIFY SIZE AND PLACEMENT OF REBAR. VERIFY LAP LENGTHS, LOCATIONS AND STAGGERS AND VERIFY BENDS FOR MINIMUM DIAMETER, SLOPE AND LENGTH. VERIFY HOOKED BAR LENGTHS AND LOCATIONS.

MASONRY TESTING

1. MASONRY TESTING SHALL CONSIST OF A QUALIFIED TESTING LABORATORY PROVIDING THE FOLLOWING SERVICES:
 - A) VERIFY QUANTITY, SIZE AND SPACING OF REQUIRED REINFORCING SHOWN ON THE DRAWINGS.
 - B) OBSERVE THE INSTALLATION OF MASONRY UNITS.
 - C) INSPECTION OF GROUT SPACE, IMMEDIATELY PRIOR TO CLOSING OF CLEANOUTS AND PRIOR TO ALL GROUTING OPERATIONS. VERIFY THAT THE SPECIFIED CELLS HAVE BEEN FULLY GROUTED.
 - D) MONITOR THE PROPORTIONING, MIXING AND CONSISTENCY OF MORTAR AND GROUT. PROVIDE 28 DAY COMPRESSIVE STRENGTH TESTS ON EACH GROUT MIX IN ACCORDANCE WITH ASTM C1019. COMPRESSION TEST MASONRY PRISMS FOR EACH TYPE OF WALL CONSTRUCTION IN ACCORDANCE WITH ASTM C1314. CONTRACTOR SHALL PREPARE ONE SET OF PRISMS FOR TESTING AT 28 DAYS. TESTS ARE TO BE CONDUCTED FOR EACH 2000 SQUARE FEET OF WALL INSTALLED, BUT NOT LESS THAN TWO TESTS.

SPECIAL INSPECTIONS AND STRUCTURAL TESTING

SPECIAL INSPECTION WORK AND THE FINAL LETTER OF COMPLIANCE HAVE NOT BEEN INCLUDED IN THE STRUCTURAL ENGINEER OF RECORD'S SCOPE OF SERVICES. THE OWNER IS RESPONSIBLE FOR OBTAINING THE SERVICES OF THE SPECIAL INSPECTOR AND THE TESTING LABORATORY. SPECIAL INSPECTIONS CAN BE PROVIDED BY AN INDEPENDENT SPECIAL INSPECTOR APPROVED BY THE BUILDING AUTHORITY. THE SPECIAL INSPECTION WORK DOES NOT INCLUDE THE TESTING LABORATORY SERVICES AS CALLED FOR ON THE DRAWINGS. ARRANGEMENTS FOR SPECIAL INSPECTIONS SHOULD BE MADE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE TESTING LABORATORY AND SPECIAL INSPECTOR IN A TIMELY MANNER PRIOR TO PROCEEDING WITH CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK REQUIRING INSPECTIONS WITHOUT THE TESTING LABORATORY'S OR SPECIAL INSPECTOR'S PRESENCE.

STRUCTURAL STATEMENT OF SPECIAL INSPECTIONS

THE STRUCTURAL SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL STRUCTURAL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO THE OWNER AND THE STRUCTURAL REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (SRDP). DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE SRDP. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES.

A FINAL REPORT OF SPECIAL INSPECTION DOCUMENTING COMPLETION OF ALL SPECIAL INSPECTIONS, TESTING AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED TO THE OWNER AND THE SRDP PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY AND USE.

STRUCTURAL SCHEDULE OF SPECIAL INSPECTIONS

QUALIFICATIONS OF INSPECTORS AND TESTING TECHNICIANS

THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION AND TESTING ACTIVITIES ARE SUBJECT TO THE APPROVAL OF THE OWNER. THE CREDENTIALS OF ALL INSPECTORS AND TESTING TECHNICIANS SHALL BE PROVIDED TO THE SPECIAL INSPECTOR FOR THEIR RECORDS.

KEY FOR MINIMUM QUALIFICATION OF INSPECTION AGENTS

WHEN THE REGISTERED DESIGN PROFESSION IN RESPONSIBLE CHARGE OR SPECIAL INSPECTOR OF RECORD DEEMS APPROPRIATE THAT THE INDIVIDUAL PERFORMING THE STIPULATED TEST OR INSPECTION HAVE A SPECIFIC CERTIFICATION, LICENSE OR EXPERIENCE AS INDICATED BELOW. SUCH REQUIREMENT SHALL BE LISTED BELOW AND SHALL BE CLEARLY IDENTIFIED WITHIN THE SCHEDULE UNDER THE AGENT QUALIFICATION DESIGNATION.

PE/SE STRUCTURAL ENGINEER
A LICENSED SE OR PE SPECIALIZING IN THE DESIGN OF BUILDING STRUCTURES

PE/GE GEOTECHNICAL ENGINEER
A LICENSED PE SPECIALIZING IN SOIL MECHANICS AND FOUNDATIONS

EIT OR ENGINEER IN TRAINING
A GRADUATE ENGINEER WHO HAS PASSED THE FUNDAMENTALS OF ENGINEERING EXAM

EXPERIENCED TESTING TECHNICIAN

ETT OR EXPERIENCED TESTING TECHNICIAN
AN EXPERIENCED TESTING TECHNICIAN WITH A MINIMUM OF 5 YEARS EXPERIENCE WITH THE STIPULATED TEST OR INSPECTION

AMERICAN CONCRETE INSTITUTE (ACI) CERTIFICATION
ACI-CFTT CONCRETE FIELD-TESTING TECHNICIAN - GRADE I
ACI-CCI CONCRETE CONSTRUCTION INSPECTOR
ACI-LTT LABORATORY TESTING TECHNICIAN - GRADE I&2
ACI-STT STRENGTH TESTING TECHNICIAN

AMERICAN WELDING SOCIETY (AWS) CERTIFICATION
AWS-CWI CERTIFIED WELDING INSPECTOR
AWS/AISC-SSI CERTIFIED STRUCTURAL STEEL INSPECTOR

CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE IS INTERPRETED TO REQUIRE SPECIAL INSPECTION FOR THE FOLLOWING ITEMS IN THE FOLLOWING TABLES:

SCHEDULE OF SPECIAL INSPECTIONS			
VERIFICATION/INSPECTION	CAST-IN-PLACE DEEP FOUNDATIONS INSPECTION		
	EXTENT	COMMENTS	AGENT
IBC SECTION 1705.8, TABLE 1705.8	EXTENT CONTINUOUS, PERIODIC		PE/GE, EIT OR ETT
1. INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT	CONTINUOUS	IBC 1705.8	ETT
2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS IF APPLICABLE, HEIGHTS, EMBEDMENTS INTO BEDROCK IF APPLICABLE AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES	CONTINUOUS	IBC 1705.8	ETT
3. FOR CONCRETE ELEMENTS, PERFORM ADDITIONAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705.9			ETT

SCHEDULE OF SPECIAL INSPECTIONS			
VERIFICATION/INSPECTION	CONCRETE INSPECTION		
	EXTENT	COMMENTS	AGENT
IBC SECTION 1705.3, TABLE 1705.3	EXTENT CONTINUOUS, PERIODIC		PE/GE, EIT OR ETT
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT	PERIODIC	ACI 318- Cr. 20, 28.3, 28.6.1-28.6.3 IBC 1908.4	ETT
2. REINFORCING BAR WELDING: <ol style="list-style-type: none"> A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706 B. INSPECT SINGLE-PASS FLEET WELDS, MAXIMUM 5/16" C. INSPECT ALL OTHER WELDS 	PERIODIC CONTINUOUS	AWS D14 ACI 318- 26.6.4	AWS-CWI
3. INSPECT ANCHORS CAST IN CONCRETE	PERIODIC	ACI 318- 17.8.2	ETT
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS: <ol style="list-style-type: none"> A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A 	CONTINUOUS PERIODIC	ACI 318- 17.8.2.4 ACI 318- 17.8.2	ETT
5. VERIFY USE OF REQUIRED MIX DESIGN	PERIODIC	ACI 318- Cr. 19, 26.4.3, 26.4.4 IBC 1904.1, 1904.2, 1908.2, 1908.3	ETT
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	CONTINUOUS	ASTM C 172 ASTM C 31 ACI 318- 26.4, 26.12 IBC 1908.8	ACI-CFTT OR ACI-SIT
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	CONTINUOUS	ACI 318- 26.5 IBC 1908.8, 1908.7, 1908.8	ETT
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	PERIODIC	ACI 318- 26.5.3-26.5.5 IBC 1908.9	ETT
9. INSPECT PRESTRESSED CONCRETE FOR: <ol style="list-style-type: none"> A. APPLICATION OF PRESTRESSING FORCES B. GROUTING OF BONDED PRESTRESSING TENDONS 	CONTINUOUS CONTINUOUS	ACI 318- 26.10	ETT
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	PERIODIC	ACI 318- Cr. 26.8	ETT
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS	PERIODIC	ACI 318- 26.11.2	ETT
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	PERIODIC	ACI 318- 26.11.2(b)	ETT

SCHEDULE OF SPECIAL INSPECTIONS			
VERIFICATION/INSPECTION	MASONRY LEVEL 1 INSPECTION		
	EXTENT	COMMENTS	AGENT
IBC SECTION 1705.4 TMS 402/ACI 530/ASCE 5 TMS 602/ACI 530.1/ASCE 6	EXTENT CONTINUOUS, PERIODIC		PE/GE, EIT OR ETT
1. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED	PERIODIC	ART. 1.5	ETT
2. VERIFICATION OF F _{in} AND F _{ac} PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE	PERIODIC	ART. 1.4B	ETT
3. VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO THE SITE FOR SELF-CONSOLIDATING GROUT	CONTINUOUS	ART. 1.5B.1.b.3	ETT
4. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:			
A. PROPORTIONS OF SITE-PREPARED MORTAR	PERIODIC		ART. 2.6A ETT
B. CONSTRUCTION OF MORTAR JOINTS	PERIODIC		ART. 3.3B ETT
C. LOCATION OF REINFORCEMENT, CONNECTORS, PRESTRESSING TENDONS AND ANCHORAGES	PERIODIC		ART. 3.4, 3.6A ETT
D. PRESTRESSING TECHNIQUE	PERIODIC		ART. 3.6B ETT
E. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES	PERIODIC		ART. 2.4B 2.4H ETT
5. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:			
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS	PERIODIC		ART. 3.3F ETT
B. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION	PERIODIC	SEC. 12.2(a) 1.8.1	ETT
C. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT ANCHOR BOLTS, PRESTRESSING TENDONS AND ANCHORAGES	PERIODIC	SEC. 1.15 2.18.7.2 3.3.3.4(d)	ART. 2.4, 3.4 ETT
D. WELDING OF REINFORCING BARS	CONTINUOUS		AWS-CWI
E. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F)	PERIODIC	SEC. 2104.3 2104.4	ART. 1.8C 1.8D ETT
F. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	CONTINUOUS		ART. 3.6B ETT
6. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:			
A. GROUT SPACE IS CLEAN	PERIODIC		ART. 3.2D ETT
B. PLACEMENT OF REINFORCEMENT AND CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES	PERIODIC	SEC 1.13	ART. 3.4 ETT
C. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	PERIODIC		ART. 2.6B ETT
D. CONSTRUCTION OF MORTAR JOINTS	PERIODIC		ART. 3.3B ETT
7. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE:			
A. GROUTING OF PRESTRESSING BONDED TENDONS	CONTINUOUS		ART. 3.5 ETT
B. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS	PERIODIC	SEC. 2106.2.2 2106.3	ART. 1.4 ETT

SCHEDULE OF SPECIAL INSPECTIONS			
VERIFICATION/INSPECTION	SOIL/FOUNDATION INSPECTION		
	EXTENT	COMMENTS	AGENT
IBC SECTION 1705.6, TABLE 1705.6	EXTENT CONTINUOUS, PERIODIC		PE/GE, EIT OR ETT
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	PERIODIC		ETT
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	PERIODIC		ETT
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	PERIODIC		ETT
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	CONTINUOUS		ETT
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	PERIODIC		ETT

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Federal Credit Union
NECHES LUMBERTON DRIVE-THRU REMODEL
299 Country Lane at U.S. 69
Lumberton, Texas 77657
PROJECT NUMBER: _____

ISSUED FOR	DATE
ISSUED FOR CLIENT APPROVAL	
ISSUED FOR BIDDING	05/22/2026
ISSUED FOR PERMIT	05/22/2026
ISSUED FOR CONSTRUCTION	

REVISIONS		
MARK	DESCRIPTION	DATE
A	ADDENDUM B	05/22/2026

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