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STRUCTURAL TESTING & INSPECTION REQUIREMENTS

REQUIRED INSPECTION VERIFICATION, OR TEST	VERIFICATION MONITORING FREQUENCY	TYPE AND/OR FREQUENCY OF TESTING	IBC SECTION & REFERENCE CRITERIA	INSPECTOR QUALIFICATIONS
1. SOILS				
A. SITE PREPARATION			IBC 1704.7.1	
B. DURING FILL PLACEMENT	CONTINUOUS OR PERIODIC	VISUAL OBSERVATION. DURING PLACEMENT AND COMPACTION OF FILL, SPECIAL INSPECTOR SHALL DETERMINE THAT THE MATERIAL BEING USED AND THE MAXIMUM LIFT THICKNESS COMPLY WITH THE PROJECT REQUIREMENTS. PIT RUN MATERIALS SHALL BE VISUALLY MONITORED BY THE TESTING LAB WITH ADDITIONAL SAMPLES TESTED EACH DAY, OR MORE OFTEN IF MATERIAL APPEARS TO VARY.	IBC 1704.7.2 GEOTECHNICAL REPORT; STRUCTURAL NOTES	QUALIFICATIONS BASED ON ASTM D3740
C. EVALUATION OF IN-PLACE DENSITY OF FILL	CONTINUOUS OR PERIODIC	PROVIDE (1) ONE DENSITY TEST FOR EACH 2000 SQ. FT. REFER TO NOTES ON BUILDING PAD FOR TESTING SPECIFICATIONS.	IBC 1704.7.3 GEOTECHNICAL REPORT; STRUCTURAL NOTES	QUALIFICATIONS BASED ON ASTM D3740
D. CLAY CAP	CONTINUOUS OR PERIODIC	PLACEMENT OF CLAY CAP SHALL BE MONITORED BY GEOTECHNICAL ENGINEER WITH A WRITTEN REPORT SENT TO STRUCTURAL ENGINEER.	IBC 1704.7.3 GEOTECHNICAL REPORT; STRUCTURAL NOTES	QUALIFICATIONS BASED ON ASTM D3740
2. CONCRETE CONSTRUCTION				
A. REINFORCING STEEL	PERIODIC	PROVIDE PERIODIC INSPECTION OF REINFORCING SIZES, SPACING, GRADE OF REBAR, AND PLACEMENT AT THE FOLLOWING FREQUENCY. RANDOMLY @ 20%	IBC 1704.4 ACI 318, CH. 3.5, 7.1-7.7; STRUCTURAL NOTES.	QUALIFICATIONS BASED ON ASTM E929
B. REINFORCING STEEL WELDING.		NO FIELD WELDING PERMITTED.	AWS D1.4 ACI 318: 3.5.2	CWI
C. BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO & DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED.	CONTINUOUS		IBC1704.4	TRAINED FIELD TECHNICIAN WITH ONE YEAR MIN. EXPERIENCE
D. VERIFY USE OF CONCRETE MIX DESIGN	PERIODIC	EACH CONCRETE POUR	ACI 318 - CH. 4, 5.2 - 5.4	QUALIFICATIONS BASED ON ASTM C1077
E. SAMPLING OF FRESH CONCRETE.	CONTINUOUS EACH CONCRETE POUR	1. ALL CONCRETE TESTING IS TO BE MADE AFTER WATER, IF ANY, IS ADDED AT SITE. 2. PROVIDE A SET OF (4) FOUR CYLINDERS TO BE TAKEN FOR EVERY 75 CUBIC YARDS OF CONCRETE, OR FRACTION THEREOF, BY TESTING LAB. 3. MONITOR SLUMP AND AIR CONTENT OF CONCRETE AND NOTIFY DELIVERY DRIVER IF SLUMP DEVIATES MORE THAN PERMITTED BY STRUCTURAL NOTES. CONTACT SUPPLIER FOR FURTHER DIRECTIONS.	ASTM C172 ASTM C31 ACI 318 - CH. 5.6, 5.8	QUALIFICATIONS BASED ON ASTM C1077
F. PLACEMENT OF CONCRETE	CONTINUOUS		ACI 318 - CH. 5.9, 5.10	QUALIFICATIONS BASED ON ASTM C1077
G. MAINTENANCE OF SPECIFIED CURING TEMPERATURE TECHNIQUES.	PERIODIC	EACH CONCRETE POUR	ACI 318 - CH. 5.11, 5.13.	QUALIFICATIONS BASED ON ASTM C1077
H. REMOVAL OF SHORES AND FORMS FROM STRUCTURAL SLABS.	PERIODIC	VERIFY IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL.	ACI 318: CH. 6.1.1; STRUCTURAL NOTES.	QUALIFICATIONS BASED ON ASTM E929
3. STEEL CONSTRUCTION				
A. MATERIAL VERIFICATION OF STRUCTURAL STEEL	PERIODIC	1. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	IBC 1708.4; STRUCTURAL NOTES	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
	PERIODIC	2. MANUFACTURERS' CERTIFIED MILL TEST REPORTS.	ASTM A6 OR ASTM A568	
B. MATERIAL VERIFICATION OF WELD FILLER MATERIALS	PERIODIC	1. IDENTIFICATION MARKINGS TO CONFORM TO SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	STRUCTURAL NOTES	CWI
C. WELDING OF STRUCTURAL STEEL	PERIODIC	1. SINGLE PASS FILLET WELDS 5/16" ≤	AWS D1.1	CWI
	PERIODIC	2. ROOF DECK WELDS	AWS D1.3	CWI

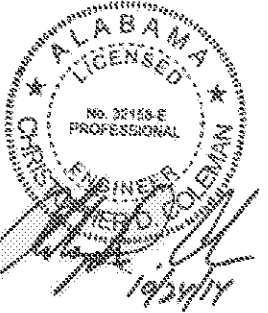
STRUCTURAL TESTING & INSPECTION REQUIREMENTS (CONT'D)

REQUIRED INSPECTION VERIFICATION, OR TEST	VERIFICATION MONITORING FREQUENCY	TYPE AND/OR FREQUENCY OF TESTING	IBC SECTION & REFERENCE CRITERIA	INSPECTOR QUALIFICATIONS
4. MASONRY CONSTRUCTION				
A. COMPLIANCE WITH CONSTRUCTION DOCUMENTS AND APPROVED SUBMITTALS	PERIODIC		ACI 530 ART 1.5	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
B. VERIFICATION OF fm	PERIODIC		ACI 530-1 ART 1.4B	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
C. VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO THE SITE FOR SELF CONSOLIDATING GROUT	CONTINUOUS		ACI 530-1 ART 1.5B.1.B3	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
D. VERIFICATION TO ENSURE COMPLIANCE	PERIODIC PERIODIC	1. PROPORTIONS OF SITE-PREPARED MORTAR CONSTRUCTION OF MORTAR JOINTS LOCATION OF REINFORCEMENT	ACI 530-1, ART 2.6A ACI 530-1, ART 3.3B ACI 530.1, ART 3.4, & 3.6A	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
E. INSPECTION PROGRAM DURING CONSTRUCTION	PERIODIC	1. TYPE, SIZE AND LOCATION OF ANCHORS	ACI 530, SEC 1.2.2(e), & 1.16.1	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
	PERIODIC	2. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT AND ANCHOR BOLTS	ACI 530, SEC 1.15, & ACI 530-1, ART 2.4, 3.4	
	PERIODIC	3. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMP. BELOW 40° F) OR HOT WEATHER (TEMP. ABOVE 90° F)	IBC SEC. 2104.3, 2104.4 & ACI 530.1 ART 1.8C, 1.8D	
F. VERIFICATION PRIOR TO GROUTING	PERIODIC	1. GROUT SPACE	ACI 530-1, ART 3.2D	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
	PERIODIC	2. PLACEMENT OF REINFORCEMENT	ACI 530, SEC 1.13 & ACI 530-1, ART 3.4	
	PERIODIC	3. PROPORTIONS OF SITE PREPARED GROUT	ACI 530-1, ART 2.6B	
	PERIODIC	4. CONSTRUCTION OF MORTAR JOINTS	ACI 530-1, ART 3.3B ACI 530-1, ART 3.5	
G. VERIFY GROUT PLACEMENT TO ENSURE COMPLIANCE	CONTINUOUS		ACI 530-1, ART 3-5	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE
H. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED	PERIODIC		IBC SECTION 2105-2.2 & 2105-3, ACI 530-1, ART 1-4	FIELD TECHNICIAN WITH ONE YEAR MINIMUM EXPERIENCE



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BID SET



MARK	DATE	DESCRIPTION

HUNTSVILLE UTILITIES
SOUTHEAST WATER TREATMENT PLANT
STRUCTURAL GENERAL NOTES

Project No.: 200-11740-10003
Designed By: JLB
Drawn By: BRF
Checked By: CDC

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