IBC 2015 SPECIAL INSPECTIONS

MATERIAL		VERIFICATION AND INSPECTION	FREQUENCY CONTINUOUS	FREQUENCY PERIODIC	REFERENCED STANDARD	IBC REFERENCE	COMMENTS
SOILS	1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHEIVE THE DESIGN BEARING CAPACITY	-	X	ASTM D7380	-	
	2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	-	X	-	-	REFER TO GEOTECHNICAL PROFESSIONAL
	3.	PERFORM TESTING AND CLASSIFICATION OF FILL MATERIALS	-	X	ASTM D2487	-	
	4.	VERIFY PROPER USE OF MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF FILL.	X	-	ASTM 1557	-	
	5.	PRIOR TO PLACEMENT OF PREPARED FILL, ENSURE SITE PREPARATION I.A.W SOILS REPORT.	-	X	-	-	REFER TO GEOTECHNICAL PROFESSIONAL
CONCRETE	1.	INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS AND PLACEMENT.	-	X	ACI 318: 3.5, 7.1-7.7	1705.3	
	2.	INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH STEEL INSPECTIONS, ITEM 2B.	-	-	AWS D1.4; ACI 318: 3.5.2	1705.3	WELDING ONLY WHEN PERMITTED BY ENGINEER
	3.	INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO & DURING THE PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	-	X	ACI 318: 8.1.3,21.2.8	1705.3	
	4.	INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE.	-	X	ACI 318: 3.8.6, 8.1.3, 21.2.8	1705.3	
	5.	VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: CH. 4, 5.2-5.4	1705.3	
	6.	AT THE TIME OF PLACEMENT SAMPLE FRESH CONCRETE & FABRICATE TEST SPECIMENS FOR STRENGTH TESTS. PERFORM SLUMP AND AIR TEST, AND DETERMINE TEMPERATURE OF CONCRETE.	X	-	ASTM C172; ASTM C31 ACI 318: 5.6, 5.8	1705.3	
	7.	INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUE.	X	-	ACI 318: 5.9-5.10	1705.3	
	8.	INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 5.11-5.13	1705.3	
	9.	INSPECTION OF PRESTRESSED CONCRETE FOR APPLICATION OF FORCES AND GROUTING OF BONDED PRESTRESSING TENDONS.	X	-	ACI 318: 5.11-5.13	1705.3	
	10.	INPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: 5.11-5.13	1705.3	
	11.	VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDOND IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORS AND FORMS.	-	X	ACI 318: 5.11-5.13	1705.3	
	12.	INSPECTION OF FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 6.1.1	1705.3	
STEEL OTHER THAN STRUCTURAL	1.	MATERIAL VERIFICATION OF COLD FORMED STEEL DECK:					
	a.	IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	X	APPLICABLE ASTM MATERIAL SPEC.	-	
	b.	MANUFACTURER'S CERTIFIED TEST REPORTS.	-	X	-	-	
	2.	INSPECTION OF WELDING:					
	a.	COLD FORMED DECK					
	1)	FLOOR AND ROOF DECK WELDS.	-	X	AWS D1.3	1705.2.1.1	
	b.	REINFORCING STEEL					
	1)	VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	-	X			
	2)	REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	X	-	AWS D1.4; ACI 318 3.5.2	1705.2.2.1.2	
	3)	SHEAR REINFORCEMENT.	X	-			
	4)	OTHER REINFORCING STEEL.	-	X			
STEEL	INSPECTION OF HIGH-STRENGTH BOLTING:	a. INSPECTION PRIOR TO BOLTING:			AISC 360-10	1705	
		1) MANUFACTURERS CERTIFICATIONS FOR FASTENER MATERIALS	-	O			
		2) FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS		O			
		3) PROPER FASTENER SELECTED FOR JOINT DETAIL		O	TABLE N5.6-1		
		4) PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	-	O			
		5) CONNECTING ELEMENTS INCLUDING FAYING SURFACE AND HOLE PREPARATION	-				
		6) PRE-INSTALLATION VERIFICATION TESTING BY PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES	P				
		7) PROPER STORAGE OF BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS.	-	O			
		b. INSPECTION DURING BOLTING:					
		1) FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHER ARE POSITIONED AS REQ'D.	-	O			
		2) JOINT BROUGHT TO THE SNUG TIGHT CONDITION PRIOR TO THE PRE-TENSIONING OPERATION	-	O	TABLE N5.6-2		
		3) FASTENER COMPONENT NOT TURNED BY WRENCH PREVENTED FROM ROTATING	-	O			
		4) FASTENERS ARE PRE-TENSIONED I.A.W. WITH RCSC *SPECIFICATION*	-	O			
		c. INSPECTION AFTER BOLTING:					
		1) DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED MATERIALS	P	-	TABLE N5.6-3		
	INSPECTION OF WELDING (AISC 360-10, IBC 1705)	a. INSPECTION PRIOR TO WELDING:					
		1) WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	P	-			
		2) MANUFACTURER'S CERTIFICATE FOR WELDING CONSUMABLES	P	-			
		3) MATERIAL IDENTIFICATION	-	O			TYPE AND GRADE.
		4) WELDER IDENTIFICATION SYSTEM	-	O	TABLE N5.4-1 AWS D1.1		
		5) FIT UP GROOVE WELDS	-	O			
		6) CONFIGURATION AND FINISH OF ACCESS HOLES	-	O			
		7) FIT UP FILLET WELDS	-	O			
		8) CHECK WELDING EQUIPMENT	-	O			
		b. INSPECTION DURING WELDING:					
		1) USE OF QUALIFIED WELDERS	-	O			
		2) HANDLING & CONTROL OF WELDING CONSUMABLES	-	O			
		3) NO WELDING OVER CRACKED TACK WELDS	-	O	TABLE N5.4-2 AWS D1.1		
		4) ENVIRONMENTAL CONDITIONS	-	O			
		5) FOLLOW THE APPROVED WPS	-	O			
		6) WELDING TECHNIQUES	-	O			
		c. INSPECTION AFTER WELDING:					
		1) WELDS CLEANED	-	O			
		2) SIZE LENGTH AND LOCATION OF WELDS	P	-			
		3) WELDS MEET VISUAL ACCEPTANCE CRITERIA	P	-			
		4) ARC STRIKES	P	-	TABLE N5.4-3 AWS D1.1		
		5) *K* - AREA	P	-			
		6) BACKING REMOVED AND WELD TABS REMOVED (WHEN REQUIRED)	P	-			
		7) REPAIR ACTIVITIES	P	-			
		8) DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	P	-			

ABBREVIATIONS
O -OBSERVE ITEMS AT RANDOM. OPERATIONS NEED NOT BE DELAYED.

P- PERFORM THESE TASKS FOR EACH JOINT OR MEMBER.

GENERAL NOTES
1. THE STATEMENT OF SPECIAL INSPECTIONS PLAN DRAWINGS PROVIDES PROJECT COMPLIANCE WITH THE PROVISIONS OF 2015 INTERNATIONAL BUILDING CODE (IBC) CHAPTER 17 FOR SPECIAL INSPECTION, STRUCTURAL OBSERVATION AND TESTING FOR WIND AND SEISMIC RESISTANCE EXCEPT WHERE OTHERWISE NOTED. THIS INSPECTION IS OWNER FURNISHED.

2. ITEMS IDENTIFIED IN THESE TABLES ARE REQUIRED TO MEET BUILDING CODE COMPLIANCE. THESE ARE NOT THE ENTIRE INSPECTIONS REQUIRED. EACH SPECIFICATION SECTION MAY REQUIRE ADDITIONAL INSPECTIONS AND QUALITY CONTROL MEASURES THAT ARE REQUIRED TO MEET THE STANDARDS ESTABLISHED FOR THE PROJECT CONTRACT. CONTRACTOR SHALL FURNISH ELEMENTS, TESTS AND INSPECTIONS NOT INDICATED TO BE BY THE OWNER.

3. OWNER AND CONTRACTOR SHALL DECIDE IF CERTAIN ITEMS ARE ALREADY COVERED IN THE THE QUALITY CONTROL OF THE CONTRACTORS OPERATIONS AND FIELD REPORTS OF THE CONTRACTOR MAY SUFFICE FOR LESS SIGNIFICANT ITEMS ON THE LIST OF INSPECTIONS.

SPECIAL INSPECTION
1. SPECIAL INSPECTION WILL BE IN ACCORDANCE WITH IBC CHAPTER 17 TOGETHER WITH LOCAL AND STATE AMENDMENTS. REFER TO THE TABLES CONTAINED ON THESE GENERAL SHEETS FOR PROJECT SPECIFIC INSPECTION TYPES AND REFERENCES.

2. SPECIAL INSPECTIONS WILL BE PERFORMED BY A CERTIFIED OR QUALIFIED INSPECTOR AND ASSOCIATED TESTING WILL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY. THE OWNER WILL SECURE AND PAY FOR THE SERVICES OF THE AGENCY TO PERFORM ALL SPECIAL INSPECTION AND ASSOCIATED TESTS. INSPECTORS FOR EACH SYSTEM AND MATERIAL WILL BE THE INTERNATIONAL CODE COUNCIL (ICC) CERTIFIED OR OTHERWISE APPROVED BY THE BUILDING OFFICIAL. GC TO CONTACT INSPECTOR FOR EACH SYSTEM AND COORDINATE WORK WITH INSPECTION SCHEDULE. KEEP ALL INSPECTIONS AND MAINTAIN A LOG OF ALL VISITS.

3. THE SPECIAL INSPECTOR WILL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONTRACT DOCUMENTS AND SUBMIT RECORDS OF INSPECTION. ALL DISCREPANCIES WILL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.

4. SPECIAL INSPECTION AND ASSOCIATED TESTING REPORTS WILL BE SUBMITTED BY THE ENGINEER, CONTRACTOR, OR OWNER OF STATE ENGINEER (OSE), AND OWNER WITHIN ONE WEEK OF INSPECTION OR WITHIN ONE WEEK OF TEST COMPLETION. INSPECTIONS FOR WHICH REPORTING WILL BE REQUIRED ARE NOTED IN THE TABLES CONTAINED ON THIS PLAN.

5. AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES WILL BE SUBMITTED.

GEOTECHNICAL OBSERVATION
1. GEOTECHNICAL OBSERVATION SHALL BE IN ACCORDANCE WITH IBC SECTION 1704.7, 1803.5 AND 1803.6 TOGETHER WITH LOCAL AND STATE AMENDMENTS.

2. GEOTECHNICAL OBSERVATION SHALL BE PERFORMED BY A REGISTERED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS. GEOTECHNICAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY REQUIRED SPECIAL INSPECTION OR INSPECTIONS BY THE BUILDING OFFICIAL.

3. THE CONTRACTOR SHALL SCHEDULE AND FACILITATE GEOTECHNICAL OBSERVATION.

STRUCTURAL OBSERVATION
1. STRUCTURAL OBSERVATION IN ACCORDANCE WITH IBC SECTION 1709 TOGETHER WITH LOCAL AND STATE AMENDMENTS ARE NOT APPLICABLE TO PROJECT.

2. STRUCTURAL OBSERVATION IF PERFORMED WILL BE BY A REGISTERED PROJECT DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS. ANY STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY REQUIRED SPECIAL INSPECTIONS. INSPECTIONS BY THE BUILDING OFFICIAL OR SPECIFICATION REQUIRED QUALITY CONTROL.

3. STRUCTURAL OBSERVATION REPORTS, NOTING ANY DEFICIENCIES IN OBSERVED CONSTRUCTION, WILL BE DELIVERED TO THE CONTRACTOR, BUILDING OFFICIAL, AND OWNER FOLLOWING EACH OBSERVATION IF A VISIT IS PERFORMED. THE CONTRACTOR WILL BE NOTIFIED ON-SITE OR BY PHONE OR EMAIL WITHIN 24 HOURS UPON FINDING ANY DEFICIENCIES.

SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE
1. SPECIAL INSPECTION FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341. THE SPECIAL INSPECTOR SHALL EXAMINE DESIGNATED SEISMIC SYSTEMS REQUIRING SEISMIC QUALIFICATION IN ACCORDANCE WITH IBC 2012 SECTION 1705.12.3 AND VERIFY THAT THE LABEL, ANCHORAGE, OR MOUNTING CONFORMS TO THE CERTIFICATE OF COMPLIANCE.

2. TESTING FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE REQUIREMENTS OF AISC 341.

CONTRACTOR RESPONSIBILITY
1. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND OR SEISMIC RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.

2. GENERAL CONTRACTOR TO CONTACT INSPECTOR FOR ALL INSPECTIONS. GENERAL CONTRACTOR TO COORDINATE WORK WITH INSPECTION SCHEDUEL FOR ALL INSPECTIONS AND MAINTAIN A LOG OF ALL INSTPECTIONS.

coast architects
671 St. Andrews Blvd. Charleston, SC 29407
Phone: 843.763.7064 Fax: 843.763.7061
www.coastarchitects.net

SOUTH CAROLINA — JOHNSON, MIRMIRAN & THOMPSON, INC. — No. 3943 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 27731 — CHRISTOPHER E. REDDY

JMT
950 HOUSTON NORTHCUTT BLVD. SUITE 100
MOUNT PLEASANT, SC 29464
843.556.2674
WWW.JMT.COM

BOATING CENTER REDEVELOPMENT - SWAIN BOATING CENTER

11 HAMMOND AVENUE

THE CITADEL — THE MILITARY COLLEGE OF SOUTH CAROLINA

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SPECIAL INSPECTIONS & FLOOD PROOFING

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BID DOCUMENTS