

## **Questions? Call First Time Quality 410-451-8006**

# PROJECT-SPECIFIC CONSTRUCTION QUALITY PLAN TABLE OF CONTENTS

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# B. KEY ELEMENTS OF THE CONSTRUCTION QUALITY PLAN

Key elements of the [CompanyName] Quality Assurance/Quality Control Plan include:

**Quality Management and Responsibilities.** [CompanyName] fully integrates its quality management system into the organizational structure and performance management systems for each project. We:

- Maintain a documented quality system consisting of a quality manual with policies and procedures.
- Tightly control exceptions to the quality system so company standards are applied uniformly to every project
- Systematically maintains quality system documents and records.

**Quality Control Personnel.** [CompanyName] fully integrates its quality management system into the organizational structure and performance management systems for each project. We:

- Appoint a Quality Manager, Superintendent, and Project Manager to each project, each with well-defined quality responsibilities and the authority to carry them out.
- Have well-defined quality responsibilities for every employee with specific quality responsibilities for key job positions.
- Plan project quality records and documentation that will be maintained.
- Tightly control exceptions to the quality system so company standards are applied uniformly to every project
- Enforce policies that monitor work conditions before and during work so that quality results are assured.

**Project Quality Coordination and Communication.** [CompanyName] tightly controls the construction process to ensure quality results. We:

- Plan quality communications through meetings, reporting requirements, and points of contact.
- Have a project startup meeting to communicate project goals and expectations.
- Conduct preparatory meetings in advance of each scheduled work task to communicate requirement details and coordinate work activities.

**Quality Assurance Surveillance.** [CompanyName] audits the quality system to assure it is operating effectively. We:

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## **COMPLIANCE WITH INDUSTRY CONSTRUCTION STANDARDS**

Codes that may apply to this project include those listed below.

	Regulatory Codes and Industry Standards						
Division	Description	Reference Standard No.	Reference Standard Title				
3	Construction and placement of forms, shoring and scaffolding	ACI MCP-2	Manual of Concrete Practice Part 2				
3	Reinforcement fabrication shapes and dimensions	ACI 318M	Building Code Requirements for Structural Concrete and Commentary				
3	Reinforcement Placement	ACI 318M	Building Code Requirements for Structural Concrete and Commentary				
3	Reinforcement Splices	ACI 318M	Building Code Requirements for Structural Concrete and Commentary				
3	Reinforcement Splice Welds	AWS D1.4 D1.4M	Structural Welding Code - Reinforcing Steel				
3	Fiber Reinforcement mixing	ASTM C 1116/C 1116M	Standard Specification for Fiber-Reinforced Concrete				
3	Installation details of stressing tendons and accessories.	ACI SP-66 and ACI 318M ACI 318	ACI Detailing Manual and Building Code Requirements for Structural Concrete and Commentary				
3	Cold weather requirements	ASTM C 494/C 494M	Standard Specification for Chemical Admixtures for Concrete				

# I. CONSTRUCTION WORK TASK QUALITY INSPECTIONS

[CompanyName] identifies a list of work tasks, phases of production, which will be quality controlled.

## **WORK TASKS SERIES OF INSPECTIONS**

Each work Task is subject to a series of inspections; before, during, and after the work is complete. Each inspection verifies compliance with full scope of the relevant specifications; not limited to checkpoints for heightened awareness.

- The initial task-ready inspection occurs when crews are ready to start work and ensures that work begins only when it does not adversely impact quality results.
- Incoming material inspections verify that materials are as specified and meet all requirements necessary to assure quality results.
- Work-in-process inspections continuously verify that work conforms to project specifications and workmanship expectations. Work continues only when it does not adversely impact quality results.
- At completion of the Task an inspection verifies that work, materials, and tests have been completed in accordance with project quality requirements. When appropriate, functional tests are performed.

Inspection results are recoded and maintained as part of the project files.

#### **SPECIAL PROCESS INSPECTIONS**

The Quality Manager identifies special processes where the results cannot be verified by subsequent inspection or testing and determines if continuous work in process inspections are required. For these special processes, a qualified inspector continuously inspects the work process.

#### **M**ATERIAL QUALITY INSPECTION AND TESTS

Material quality inspections and tests ensure that purchased materials meet purchase contract quantity and quality requirements. The Superintendent inspects or ensures that a qualified inspector inspects materials prior to use for conformance to project quality requirements.

The Superintendent ensures that each work task that uses the source inspected materials proceed only after the material has been accepted by the material quality inspection or test.

## **DAILY QUALITY CONTROL REPORT**

# J. QUALITY CONTROL OF CORRECTIONS, REPAIRS, AND NONCONFORMANCES

Should a problem occur in the quality of work, we systematically contain the issue and quickly make corrections. Our first action is to clearly mark the item by tape, tag, or other easily observable signal to prevent inadvertent cover-up.

Then we expedite a corrective action that brings the workmanship or material issue into conformance by repair, replacement, or rework. Previously completed work is reinspected for similar nonconformances. In the event that we cannot correct the item to meet contract specifications, the customer will be notified and customer approval of corrective actions is required before proceeding.

Fixing problems found is not sufficient. [CompanyName] systematically prevents recurrences to improve quality. First enhanced controls and management monitoring are put into place to assure work proceeds without incident. Then using a structured problem solving process, [CompanyName] identifies root causes and initiates solutions. Solutions may involve a combination of enhanced process controls, training, upgrading of personnel qualifications, improved processes, and/or the use of higher-grade materials. Follow-up ensures that a problem is completely resolved. If problems remain, the process is repeated.

Nonconformances and their resolution are recorded on a Nonconformance Report form. A Nonconformance Report form exhibit is included in this subsection.

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[CompanyName] Nonconformance Report  Version 20140320							
Nonconformance Report	version zo	140320					
Control ID	Project ID		Project Name				
	[ProjectNumber]	[ProjectName]					
Preparer Signatu	re/ Submit Date	Quality	Manager Signature / Disposition Date				
Description of the requirement or specification							
Description of the nonconformance, location, affected area, and marking			6				
Disposition	Replace Repair Rework Use As-is						
	Approval of disposition required by customer representative? Yes \( \square\) No \( \square\)  Customer approval signature /date:						
Corrective Actions	☐ Corrective actions completed Name Customer acceptance of corrective actions Name/Date:		s				
Preventive Actions	☐ Preventive actions completed Name	N/Dato:					

## LIST OF INCLUDED INSPECTION FORMS

### **CONCRETE**

- Cast Decks and Underlayment
- Concrete Finishing
- Concrete Forming
- Concrete Reinforcing
- Grouting
- Precast Concrete
- Structural Concrete

### **EARTHWORK**

- Bored Piles
- Caissons
- Clearing and Grubbing
- Driven Piles
- Excavating and Fill
- Grading

### **METALS**

- Metal Decking
- Metal Railings
- Metal Stairs
- Structural Steel Framing

### **ELECTRICAL**

- Conduit for Electrical Systems
- Electrical and Cathodic Protection
- Enclosed Bus Assemblies
- Exterior Lighting
- Grounding and Bonding for Electrical Systems
- Identification for Electrical Systems
- Interior Lighting
- Low-Voltage Circuit Protective Devices
- Low-Voltage Controllers
- Low-Voltage Electrical Power Conductors and Cables (<600V)</li>
- Low-Voltage Electrical Service Entrance
- Low-Voltage Switchgear
- Low-Voltage Transformers
- Raceway and Boxes for Electrical Systems
- Switchboards and Panelboards

Project:	Phase:	Contra	act#:		Subcontractor:	Crew:		
Compliance Verification		FTQ	2TQ	Heightened	Awareness Checkpoints	<u> </u>		
□ Compliance with init	ial iob-			Undergroun	d Facilities are located	and marked		
ready requirements				Prevent damage to Underground Facilities in equipm traffic areas				
☐ Compliance with material inspection and tests				Understand regulatory requirements for disposal of excavation water				
<ul> <li>Compliance with wo article inspection re</li> </ul>					ty trenches fro directing	g muddy runoff into		
□ Compliance with wo inspection requirem				(horiz. +& v	•			
				Compaction as needed	/ moisture inspection	services are scheduled		
□ Compliance with Task completion inspection requirements					nere utilities enter struc damage	ctures to prevent		
☐ Compliance with ins	pection and test plan			Do not back		at cannot be adequately		
☐ Compliance with safety policies and procedures				compacted Below grade backfilling	e walls are properly sup	oported prior to adjacer		
Reported Nonconformances and incomplete items:				9/	urtenances and openin	gs from intrusion by		
			<u>}</u>	<u> </u>		_		
	FTQ Scores	and C	omp	letion Sign	-off			
Field Mgmt <u>91.45.01</u> Quality 5 4 3	2 1 Notes:							
On-Time 5 4 3	2 1 Notes:							
Safety 5 4 3	2 1 Notes:							
Sign and data*: Call # / ID #:-		C:~~-	d:		Dates			
•	and in compliance with contract drawings and specific							
Ouality Score 5 = 100				oot or 2-3 minor	2 = 6+ or major problems	1 = Excessive problems		



For More Information:

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