# [CompanyName]

# Earthworks/Excavation Quality Assurance/Quality Control Plan

[ProjectName] ProjectNumber]

Management acceptance

This Construction Quality Assurance/Quality Control Plan has been reviewed and accepted.

Endorsed By: (Name / Title)	[QualityManagerName], Quality Manager			
Signature:	[QualítyManagerName]	Date:	[Date]	
Version	1.0	Notes	Initial Issue	

The documents provided by [CompanyName] disclose proprietary company information that is copyright registered. Please hold these quality documents in confidence and do not share them with other organizations, even if you do not charge a fee.

# SIGNATURE SHEET

#### **Plan Preparer**

This [CompanyName] Project Quality Control Plan was prepared in accor lance with the contract specifications and requirements of the [CompanyName] quality system and approved by:

[QualityManagerName] / [Date]

[QualityManagerName], Quality Manager /Date

#### **Approval by Company Officer**

This [CompanyName] Project Quality Control Plan is approved by.

#### [SeniorManagerName] / [Date]

[SeniorManagerName] Senior Manager /Date

#### Plan Concurrence

[CompanyName] Project Quality Control Plan concurrence by:

[ProjectManagerName] / [Date]

[ProjectManagerName], Project Manager /Date

#### [SuperintendentName] / [Date]

[SuperintendentName], Superintendent /Date

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# C. PROJECT QUALITY COORDINATION AND COMMUNICATION

[CompanyName] has regular, planned communications with customers, subcontractors, and suppliers to coordinate quality expectations, priorities, activities, and improvements.

The process begins when we hold a project startup meeting where we discuss how quality of the project will be controlled and the quality responsibilities of key personnel. We also coordinate a schedule for weekly production meetings, monthly quality management meetings, and protocols for telephone and internet communications. Project Start Up Meeting are documented on a Project Startup Meeting Form included as an exhibit in this section.

Throughout the project, [CompanyName] holds preparatory meetings prior to the start of upcoming milestones, tasks, or phases of work. Preparatory meetings are documented on the Work Task Quality Management Planning Meeting form included as an exhibit in this section.

Preparatory meetings are attended by key company, subcontractor personnel responsible for carrying out, supervising, or inspecting the work, and interested customer representatives. We review quality requirements, coordinate quality inspections, and hold points. In the process, we listen to each stakeholder to understand their concerns for critical detail . We and the critical details to inspection checklists. We also train production personnel on these details in weekly and toolbox talk meetings.

[CompanyName] weekly team meetings deploy findings of the preparatory meeting to field personnel. The venue is used to train personnel on technical requirements, reinforce critical details for heightened awareness, and institute improvements to work methods. It is also a forum for team communications and coordination.

[CompanyName] Point of Contact List						
Project ID	Project Name	Preparer	Date			
[ProjectNumber]	[ProjectName]	[ProjectManagerName]				
Company	Name	Job Position(s)	Phone Contact Numbers	Email		
[CompanyName]	[PresidentName]	President				
[CompanyName]	[SeniorManagerName]	Senior Manager				
[CompanyName]	[ProjectManagerName]	Project Manager				
[CompanyName]	[SuperintendentName]	Superintendent				
[CompanyName]	[QualityManagerName]	Quality Manager				
[CompanyName]	[SafetyManagerName]	Safety Manager				

[CompanyName] Project Quality Communications Plan						
Project ID	ID Project Name Preparer Date					
[ProjectNumber]	[ProjectName]					
Distribution of project organiz Manager, and Superintenden	zation chart and assigned respo t:	onsibility and authority of the	Project Manager, Quality			
All personnel listed on contact l	ist		X			
Points of contact list distribut	ion:	).0. ×0				
All personnel listed on contact l	list	0				
RFI response distribution:	-0,	<i>Q</i> ,				
All personnel listed on contact	list	$\overline{\mathbf{O}}$				
Project startup meeting partie	cipants, date, location:	)				
ТВД	5 0.					
Work task quality plan meeting	ng participants, nominal locatio	on:				
ТВД	X					
Weekly project communication	on meeting participants, and no	ominal day of week, time, and	location:			
ТВД						
Daily quality report distribution, frequency, and due date:						
Friday of every week for the previous 7 days						
Monthly project quality status report distribution and due date:						
Third day of every month						
Distribution of quality inspect	Distribution of quality inspection and test records, and due date:					

Friday of every week for the previous 7 days

Nonconformance report distribution and customer approval authority:

Immediately

Location of project quality records storage and point of contact for records access:

··· (

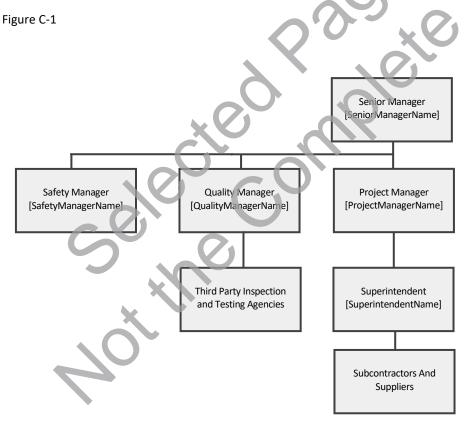
In the job office trailer. Superintendent is point of contact

#### **PROJECT QC ORGANIZATION CHART**

The Project QC Organization Chart shows the QC organizational structure. The chart includes job positions along with the name of each person appointed to that position. Figure C-1 shows the QC Organization Chart for this project.

The Senior Manager defines the organization chart for the project. The organizational chart includes job titles, names of assigned personnel, and organizational and administrative interfaces with the customer. The organization chart defines lines of authority as indicated by solid connection; dotted lines indicate lines of communication. The lines of authority preserve independence of quality control personnel from the pressures of production.

The Senior Manager assesses the qualification requirements for each position on the project organization chart, qualifications of each person, and then appoints only qualified persons to the project organization.



# **H. SUBMITTALS**

#### **SUBMITTALS**

Lists of documents and records that will be submitted to the customer appear on the Submittal Schedule and Log form. The Submittal Schedule and Log Form exhibit is included in this subsection.

#### SHOP DRAWING SUBMITTALS

The Project Manager or Purchasing and Estimating Manager prepare shop drawing submittals that supplement contract drawings. Shop drawings are required when additional details are necessary for fabrication or installation. The following information is included, as applicable:

- Dimensions established by field measurement
- Relationships to adjoining construction
- Identification of products and materials
- Fabrication and installation drawings
- Diagrams showing locations of field-installations
- Shop fabricated manufacturing instructions
- Templates and patterns
- Design calculations
- Compliance with specified standards
- Seal and signature of professional engineer if required
- Additional requirements as specified in the contract, contract technical requirements, or contract drawings.

[CompanyName] extends contract specifications to include customer approved shop drawings.

#### PRODUCT DATA SUBMITTALS

The Project Manager prepares product data submittals that consist of the manufacturer's product information. The information included in this submittal is:

- Manufacturer, trade name, model or type number
- Description
- Intended use
- Size and physical characteristics including drawings when applicable
- Finish and color characteristics
- Product manufacturer's installation instructions, when applicable
- Additional requirements as specified in the contract, contract technical requirements, or contract drawings.

#### **ALLOWANCES AND UNIT PRICES SUBMITTALS**

When customer contracts specify allowances and unit prices that the customer will select after the contract is awarded, the Project Manager prepares an allowance and unit price submittal for customer approval.

When a customer selects or approves an allowances and unit prices, the customer indicates the allowance and unit price selection on the signed submission return.

[CompanyName] extends compliance to contract specifications to customer approved allowances and unit prices.

#### **REQUEST FOR INFORMATION (RFI) SUBMITTALS**

The Project Manager submits a request for additional information to the customer when errors are found or when required information is not contained in the contract, contract technical specifications, or contract drawings.

Should any number of contract technical specifications or contract drawings result in conflicting requirements, the Quality Manager submits a request for information to the customer to select the standard that applies.

[CompanyName] extends compliance to contract specifications to customer requests for information.

#### CHANGE ORDER SUBMITTALS

Contract requirements or contract technical specifications may require a change after the contract is awarded. The Project Manager submits the change order to the customer for approval, including any contract price adjustments.

When a customer approves a change order, the customer signs the submission return.

[CompanyName] extends contract specifications to include customer approved change orders.

#### **MOCK-UP SUBMITTALS**

The Superintendent prepares mock-up submittals as required by contract. Additionally, the Quality Manager specifies mock-up requirements when they are necessary to ensures customer expectations are clearly identified.

The Quality Manager ensures that each mock-up demonstrates specific elements of form and/or function, and that they are specified in the submittal documents.

[CompanyName] extends contract specifications to include customer approved mock-up submittals.

## SUBMITTAL SCHEDULE AND LOG

The Project Manager identifies submittals that apply to a specific contract and when they should be submitted, including:

- Contract requirement reference (if applicable)
- Submittal type: Shop drawing, product data, quality inspection and test plan, request for information, or allowances and unit prices
- Description
- Due date for submission to customer by [CompanyName]
- Due date for approval by the customer. Due dates may be a number of days after a project plan milestone.
- Approval date

# SUBMITTAL REVIEW AND APPROVAL

The Quality Manager prepares submittals that provide additional details of how [CompanyName] plans to carry out quality-related aspects of the customer contract, contract technical specifications, and contract drawings and reporting of quality records to the customer.

The Quality Manager lists, schedules, and approves all quality-related submittals that are required by the project including submittals prepared by subcontractors and suppliers. The Quality Manager must review all submittals for compliance with the requirements of the [CompanyName] Quality System. The Quality Manager must sign approval of each contract submittal.

[CompanyName] extends compliance to contract specifications to all customer approved submittals. All [CompanyName] activities comply with customer approved submittals.

	[Compar Project Sub	nyName] mittal Form			
Submittal ID#	Project ID	Project Name Date			
	[ProjectNumber]	[ProjectName]			
To:		From: [CompanyName] Location:	121		
Type of Submittal:		Description of submittal			
Request for information		10 . OI			
Completed form or quality re	cord				
Quality system document					
Other:					
List of attachments:	CC CC	Remarks:			
Submittal Prepared by: [CompanyName]		Submittal Approved by [CompanyNam	e] Quality Manager:		
Name:	0	Name: Title:			
Title:		Signature / Date:			
Customer Disposition:		Customer Representative:			
Conditionally approved, result	omission not required (see	Name:			
comments)		Title:			
Disapproved, resubmission re	quired	Signature / Date:			
Other:					
Comments:					

[CompanyName] Project Submittals Schedule and Log							
Contract ID	Contract ID         Contract Name         Preparer         Date         Notes						
[ProjectNumber]	[ProjectName]	[ProjectManagerName]					

Contract Section Activity ID	Technical Specification Reference / Version Date	Type/Description of Submittal	Version Required /Date Submittal Date	Date Submitted to Customer	Required Customer Approval Date	Customer Approval Date
				customer		
	• (	2, 0				
	S°,	N°				
	JOL					

[CompanyName] List of Anticipated Mock-ups and Log						
Contract ID	Contract ID         Contract Name         Preparer         Date         Notes					
[ProjectNumber]	[ProjectName]	[ProjectManagerName]				

Contract Section Activity ID	Technical Specification Reference / Version Date	Description of Mock-up Submittal	Version Required /Date Submittal Date	Date Submitted to Customer	Required Customer Approval Date	Customer Approval Date
			<u> </u>			
	]					
	5	No.				
	•					
	2					

# J. PROJECT QUALITY SPECIFICATIONS

Inspections and tests assess conformance to project quality specifications. Clearly defined specifications are essential for an effective inspection and test plan.

[CompanyName] personnel and subcontractors and suppliers are accountable for compliance to standards-based written specifications.

To achieve expectations reliably and consistently, specifications are clearly spelled out, not only for results but also for processes. Specifications apply to materials, work steps, qualified personnel and subcontractors and suppliers, safe work rules, and environmental work conditions.

Standards ensure that results are specified rather than left to discretionary practices.

## **CONTRACT SPECIFICATIONS**

Fulfilling customer contract expectations is a primary objective of the [CompanyName] Quality System. To ensure that customer expectations will be fulfilled, [CompanyName] clearly defines the requirements for each contract before it is approved.

The Project Manager ensures that the information in customer contracts clearly defines customer expectations and that the necessary details are provided to set requirements for construction.

The Project Manager obtains contract technical specifications from the customer.

For each specific contract, The Senior Manager identifies supplemental technical specifications on the Trade-specific Quality Management Plan when they are not otherwise specified by the contract or the approved drawings. Superintendents have jobsite access to contract technical specifications for the construction activities they supervise.

All [CompanyName] activities comply with the contract technical specifications.

## **CONTRACT DRAWINGS**

The Project Manager obtains customer supplied drawings that have been approved by local government regulators. Superintendents have jobsite access to approved architectural drawings for the construction they supervise.

All [CompanyName] activities comply with the drawing details and specifications cited in the drawings.

#### AS-BUILT RED-LINE DRAWINGS

As the project progresses, the Superintendent will mark the original design drawings to indicate as-built conditions including changes to specified materials, dimensions, locations, or other features.

#### **NEEDS AND EXPECTATIONS OF INTERESTED PARTIES**

The Quality Manager identifies interested parties, their expectations, quality requirements including governmental regulators, special interest organizations, and the public.

## **REGULATORY CODES**

All [CompanyName] activities comply with the relevant regulations. The Quality Manager identifies regulatory requirements applicable to the jurisdictions served, including:

- Applicable Federal regulations
- Applicable State regulations
- Applicable building codes and local addenda to building codes
- Additional regulations specified by the purchaser contract

The Quality Manager identifies regulatory requirements that apply to a specific project. The Superintendent had jobsite access to relevant codes and government regulations.

#### **MATERIAL SPECIFICATIONS**

The Quality Manager ensures that all types of materials and equipment that affect quality are identified and controlled.

The Quality Manager evaluates the expected use of materials and equipment and identifies types of materials and equipment that may affect project quality. For each item, the Quality Manager sets specifications for their intended use, including:

- Compliance to contract requirements
- Compliance to code and industry standards and listing requirements
- Structural integrity
- Performance
- Durability
- Appearance
- Product identification for traceability.

The Quality Manager identifies controlled material and equipment that apply to the project. Only approved materials are used in the construction process.

## **EQUIPMENT SPECIFICATIONS**

The selection and use of equipment are controlled to assure the use of only correct and acceptable equipment on the project.

The Quality Manager determines specifications of required equipment that affect quality and the specifications of quality-controlled equipment.

When equipment is received, the Superintendent verifies that equipment is as specified.

## WORK PROCESS SPECIFICATIONS

The Quality Manager ensures that work processes are controlled to ensure that the specified requirements are met. When appropriate, the Quality Manager will specify project quality standards for work processes that may include:

- References to documented procedures such as manufacturer's installation instructions
- Procedures for carrying out process steps
- Methods to monitor and control processes and characteristics
- Acceptability criteria for workmanship

• Tools, techniques and methods to be used to achieve the specified requirements.

# [COMPANYNAME] QUALITY STANDARDS

All [CompanyName] activities comply with generally accepted good workmanship practices and industry standards.

The Quality Manager identifies supplemental requirements for industry standards that apply to a specific project when it is not otherwise specified by the contract, contract technical specifications, or approved drawings.

[CompanyName] quality standards supplement contract requirements when they are necessary to ensure quality.

When [CompanyName] quality standards differ from industry standards or product manufacturer instructions, the Quality Manager justifies that the standard reliably achieves quality results and then documents the justification.

All [CompanyName] activities conform to the company quality standards.

#### **COMPLIANCE WITH INDUSTRY EARTHWORKS/EXCAVATION STANDARDS**

Description	Reference Standard No.	Reference Standard Title
Bedding for buried piping	AWWA C600	Installation of Ductile-Iron Water Mains and Their Appurtenances
Welding lengths of pipe together for bore holes	AWS D1.1/D1.1M	Structural Welding Code - Steel
Geotextile storing and handling	ASTM D 4873	Identification, Storage, and Handling of Geosynthetic Rolls and Samples
Shoring installation	EM 385-1-1	Safety and Health Requirements Manual
Precast prestressed concrete pile installation	PCI JR-382	Recommended Practice for Design, Manufacture and Installation of Prestressed Concrete Piling
Drilled shaft foundation installation	ACI 336.1	Specification for the Construction of Drilled Piers

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

#### **APPLICATION OF MULTIPLE SOURCES OF SPECIFICATIONS**

Should multiple sources of specifications apply to a work task, the higher level of specification applies. When there are equal levels of specifications that conflict, the specifications are applied in this order:

- Submittals approved by the purchaser
- Contract technical specifications
- Contract drawings
- Government regulations that exceed requirements of items below
- [CompanyName] quality specifications, including subcontract specifications
- Product installation instructions
- Industry standards
- Generally accepted practices

# L. INSPECTION AND TEST PLAN

The Quality Manager prepares quality inspection and test plans for a project that identifies:

- Each required quality inspection and/or test
- Inspection and test specifications for each required quality inspection or test
- Hold points for purchaser quality inspection
- Specification requirements for each quality inspection and test

The Quality Inspection and Test Plan form lists inspections and tests (other than work task inspections) that will be performed on this project.

Results of inspections and tests will be recorded on the Inspection and Test Form. An Inspection and Test Plan and Log form exhibit is included as an exhibit in this subsection

#### INDEPENDENT MEASUREMENT AND TESTS

The Quality Manager ensures that quality tests that apply to a specific project are clearly identified. Tests for a project include:

- Purchaser required quality tests as specified by the contract, contract technical specifications, contract drawings, and approved submittals.
- Additional quality tests necessary to assure quality results.

## HOLD POINTS FOR PURCHASER INSPECTION

The Superintendent stops work when reaching a hold point specified on the inspection and test plan. The Superintendent ensures that work proceeds only with purchaser approval.

#### INSPECTION AND TESTING EARTHWORKS/EXCAVATION STANDARDS

Inspection and testing standards that may apply to this project include those listed below.

Description	Reference Standard No.	Reference Standard Title
Grout consistency for pressure grouting operations	ASTM C 939	Flow of Grout for Preplaced-Aggregate Concrete (Flow Cone Method)
Load tests of driven piles	ASTM D 1143/D 1143M	Piles Under Static Axial Compressive Load
Field in-place density of soil	ASTM D 1556	Density and Unit Weight of Soil in Place by the Sand-Cone Method
Bearing capacities of soils	ASTM D 1586	Penetration Test and Split-Barrel Sampling of Soils
Field in-place density of soil	ASTM D 2167	Density and Unit Weight of Soil in Place by the Rubber Balloon Method
Pile lateral load tests for steel H-piles	ASTM D 3966	Standard Test Methods for Deep Foundations Under Lateral Load
Field in-place density of soil	ASTM D 6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
Rock and soil anchor performance testing	PTI DC35.1	Recommendations for Prestressed Rock and Soil Anchors

	[CompanyName] Inspection and Test Plan and Log									
Proje	ct Number	Project	Name							
[ProjectNumber] [ProjectName]				(All tests verified by Superintendent and/or QC Manager)						
ltem	Spec Sec Number Title	and	Applicable Standard	Inspections & Tests Description	Test and Inspection Methods	n Number required	Time Schedule/ Frequency	Inspection/ Test By	Sample Reqd. Yes/No	Unique characteristics of QC Service
1.			]		2					
2.				0.0	×O					
3. 4.					0					
- <del>.</del> 5.										
6.				.01	$\mathbf{D}^{\mathbf{i}}$					
7.								]		
8.										
9.		•								
10.										
11.				2						
12.										
13. 14.				· · · · · · · · · · · · · · · · · · ·						
14.										
		70	)						I I	

[CompanyName] Testing & Inspection Results Log								
Project ID	Project Name		Preparer	Date				
[ProjectNumber]	[ProjectName]							
	n		1					
Report ID /Date of Issue	Description of Inspection / Test	Report Date	Results Approved Rejecte	Type of Corrective Action ed				
	X(							
	200	<u>_</u>						
(	S Xe							

# **N. CONTROL OF CORRECTIONS 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 s milar nonconformances. If 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.

# MARKING OF NONCONFORMANCES AND OBSERVATIONS

When the Quality Manager, Superintendent, inspector, or customer identifies a nonconformance or an observation, the item is quickly and clearly marked by tape, tag, or other easily observable signal to prevent inadvertent cover-up.

## **CONTROL THE CONTINUATION OF WORK**

After the item is marked, the Superintendent determines if work can continue in the affected area:

CONTINUE WORK. When continuing work does not adversely affect quality or hide the defect, work may continue in the affected area while the disposition of the item is resolved. The Superintendent may place limitations on the continuation of work.

STOP WORK ORDER: When continuing work can adversely affect quality or hide the defect, work must stop in the affected area until the disposition of the item resolved. The Superintendent identifies the limits of the affected area. The Superintendent quickly and clearly identifies the boundaries of the stop work area.

#### **RECORDING OF NONCONFORMANCES**

If nonconformances or observed items exist by the work task completion inspection, the Superintendent or inspector records the nonconformances on a nonconformance report.

The Superintendent sends the nonconformance report to the Quality Manager.

#### **QUALITY MANAGER DISPOSITION OF NONCONFORMANCE REPORTS**

When the Quality Manager receives a Nonconformance Report, he or she assesses the affect the reported nonconformance has on form, fit, and function. The Quality Manager may assign a disposition of either:

REPLACE: The nonconformance can be brought into conformance with the original specification requirements by replacing the nonconforming item with a conforming item.

REPAIR: The nonconformance can be brought into conformance with the original requirements through completion of required repair operations.

REWORK: The nonconformance can be made acceptable for its intended use, even though it is not restored to a condition that meets all specification requirements. The Quality Manager may specify standards that apply to the completion of rework. Rework nonconformances must be approved by the customer.

USE AS-IS: When the nonconforming item is satisfactory for its intended use. Any use as-is items that do not meet all specification requirements must be approved by the customer.

## **CORRECTIVE ACTIONS**

The Superintendent verifies that corrective actions eliminate the nonconformance to the requirements of the original specifications or as instructed by the disposition of the nonconformance report, and then removes, obliterates, or covers the nonconformance marker.

Furthermore, the Superintendent ensures that previously completed work is reinspected for similar nonconformances and corrective actions are taken to avert future occurrences (see section 9.3 Corrective Actions).

#### CONTROL OF CORRECTIVE ACTIONS

When a nonconformance is found, the Superintendent ensures that:

- Previously completed work is reinspected for similar nonconformances
- Corrective actions are taken to avert future occurrences

The Quality Manager identifies requirements for corrective actions with respect to frequency, severity, and detectability of quality nonconformances items found during and after completion of work activities.

When a solution requires changes to [CompanyName] quality standards, the Quality Manager makes modifications as necessary by making changes to:

- Material specifications
- Personnel qualifications
- Subcontractor and Supplier qualifications
- Company standards
- Inspection processes

#### **CORRECTIVE ACTION TRAINING**

The Superintendent initiates corrective action training to address quality nonconformances. Personnel and subcontractors and suppliers performing or inspecting work participate in the training.

[CompanyName] Nonconformance Report								
Nonconformance Report Control ID	Project ID	Project Name						
	[ProjectNumber]	[ProjectName]						
Preparer Signatu	ire/ Submit Date	Quality Manager Signature / Disposition Date						
		S						
Description of the requirement or specification								
Description of the nonconformance, location, affected area, and marking								
Disposition	Replace       Repair       Rework       Use As-is         Approval of disposition required by customer representative? Yes       No         Customer approval signature /date:							
Corrective Actions Corrective actions completed Name/Date: Customer acceptance of corrective actions required? Yes  No Name/Date:								
Preventive Actions								

[CompanyName] Nonconformance Report Control Log								
Project ID	Project Name	Р	Date					
[ProjectNumber]	[ProjectName]							
Nonconformance Report ID #	Description of Nonconformance	Report Date	Disposition Decision Date	Corrective Action Completion				
			.05/	Initial	Date			
		00						
			X					
	<u> </u>		· · ·					
	5							
	<b>∖O</b> <sup>™</sup>							

# [CompanyName]

**Inspection Checklist Forms** 

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# INSPECTION CHECKLIST TABLE OF CONTENTS

Earthwork - Bored Piles 31.63.00 Earthwork - Caissons 31.64.00 Earthwork - Driven Piles 31.62.00 Earthwork - Excavating and Fill 31.23.00 Earthwork - Grading 31.22.00 Earthwork – Clearing and Grubbing 31.11.00 Exterior Improvements - Base Courses 32.11.00 Exterior Improvements - Curbs// Gutters// Sidewalks// and Driveways 32.16.00 Exterior Improvements - Flexible Paving 32.12.00 **Exterior Improvements - Rigid Paving 32.13.00** Utilities - Culverts 33.42.00 **Utilities - Public Water Utility Distribution Piping 33.11.13** Utilities - Sanitary Utility Sewerage Force Mains 33.34.00 Utilities - Sanitary Utility Sewerage Piping 33.31.00 Utilities - Storm Drainage Structures 33.49.00 Utilities - Storm Utility Water Drains 33.44.00 Utilities - Subdrainage 33.46.00 Utilities - Water Utility Distribution Equipment 33.12.00

Earthwork - F	Excavatii	ng and Fill 31.23.00			
Project: Phase:	Contract#:	Subcontractor:	Crew:		
Compliance Verification	YES NO	Heightened Awareness Checkpoin	uts		
<ul> <li>Compliance with initial jobready requirements</li> <li>Compliance with material inspection and tests</li> <li>Compliance with work in process first article inspection requirements</li> <li>Compliance with work in process inspection requirements</li> <li>Compliance with Task completion inspection requirements</li> <li>Compliance with inspection and test plan</li> <li>Compliance with safety policies and procedures</li> <li>Reported Nonconformances and incomplete items:</li> </ul>		Prevent damage to Underground traffic areas Understand regulatory requireme excavation water Prevent utility trenches fro directi structures Trenches allow for proper utility s (horiz. +& vert.) Compaction / moisture inspection as needed Compact where utilities enter stru- settlement damage Do not backfill in excessive lifts the compacted Below grade walls are properly s backfilling	ground Facilities are located and marked nt damage to Underground Facilities in equipment areas stand regulatory requirements for disposal of ation water nt utility trenches fro directing muddy runoff into ures hes allow for proper utility separation distances . +& vert.) action / moisture inspection services are scheduled eded act where utilities enter structures to prevent ment damage t backfill in excessive lifts that cannot be adequately acted grade walls are properly supported prior to adjacen lling t appurtenances and openings from intrusion by		
Field Mgmt <u>91.45.01</u> Quality 5 4 3 2 1 <sup>Notes:</sup>	Completion	n Sign-off			
On-Time 5 4 3 2 1 Notes:					
Safety 5 4 3 2 1 Notes:					
Sign and date*: Cell # / ID #:	Signed:	Date			
Quality Score $5 = 100\%$ NO problems $4 = 1$ minor problemOn-Time Score $5 = 0n$ Time $4 = Late$ Safety Score $5 = 100\%$ NO problems $4 = 1$ minor problem	3 = Late	$\begin{array}{ll} \begin{array}{l} 2 = 6 + \ or \ major \ problems \\ 2 = Late \ by \ 2 \ days \\ ot \ or \ 2 - 3 \ minor \end{array} \\ \begin{array}{l} 2 = 6 + \ or \ major \ problems \\ 2 = Late \ by \ 2 \ days \\ 2 = 4 + \ or \ major \ problem \end{array}$	<i>I</i> = Excessive problems <i>I</i> = Late more than 2 days <i>I</i> = Injiury Copyright 2012 First Time Quality		

roject: Phase:	Contra	ct#:		Subcontractor:	Crew:	
Compliance Verification	YES	NO	Heightened	Awareness Checkpoint	<u>s                                    </u>	
<ul> <li>Compliance with initial job-ready requirements</li> <li>Compliance with material inspection and tests</li> <li>Compliance with work in process first article inspection requirements</li> <li>Compliance with work in process inspection requirements</li> <li>Compliance with Task completion inspection requirements</li> <li>Compliance with inspection and test plan</li> <li>Compliance with safety policies and procedures</li> <li>Reported Nonconformances and incomplete items:</li> </ul>	ENGINE  ENGINE ENG			rse materials from different sources and for different s stockpiles separately nage layer / piping outlets to surface or pervious area rse material free of organic material// silt// clay// or er objectionable material regate evenly graded and not segregated e Course of even thickness and true to grade minous Base Course joints offset from underlying		
Scores and C         Tield Mgmt91.45.01         Quality       5       4       3       2       1       Notes:         On-Time       5       4       3       2       1       Notes:         Gafety       5       4       3       2       1       Notes:         ign and date*:       Cell # / ID #:	 Signed			Date:		
ask has been verified complete and in compliance with contract drawings and specifications exc	ept for non-	conforma	nces and incomplete	items reported above.		

Project: Phase:	Contract#:	Subcontractor:	Crew:
Compliance Verification	<u>YES NO Heig</u>	htened Awareness Checkpoin	<u>ts</u>
<ul> <li>Compliance with initial jobready requirements</li> <li>Compliance with material inspection and test article inspection requirements</li> <li>Compliance with work in process first article inspection requirements</li> <li>Compliance with work in process inspection requirements</li> <li>Compliance with Task completion inspective requirements</li> <li>Compliance with inspection and test plan</li> <li>Compliance with safety policies and proceduse ported Nonconformances and incomplete iteration</li> </ul>	sts Piping sts Prope maint Bell e Mech Push- Conn Fitting rating Prote dama Indica	has sufficient cover for anticipated traffic laid true and even between access openings separation between water and sewer lines ined (10' horizontal// 18" vertical with water on top) ds laid facing up slope hically restrained joints tight and secure n joints fully inserted ctions to structures fully bedded and sealed and accessories compatible (material// pressure connection type) with the piping utilized ive coating/wrap is intact// uniform// and free of e or tape or tracer wire installed above piping	
	and Completion Sign	o-off	
Field Mgmt <u>91.45.01</u> Quality 5 4 3 2 1 <sup>Notes:</sup>			
Dn-Time 5 4 3 2 1 Notes:			
Safety 5 4 3 2 1 Notes:			
Sign and date*: Cell # / ID #:	Signed:	Date	:
Quality Score         5 = 100% NO problems         4 = 1 minor           Qn-Time Score         5 = 0n Time         4 = Late           Safety Score         5 = 100% NO problems         4 = 1 minor	3 = Late by 1 day	2 = Late by 2 days	I = Excessive problems I = Late more than 2 days I = Injiury Copyright 2012 First Time Quality

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