

# Template QUALITY CONTROL PLAN

Contract Number: \_\_\_\_\_

Location of Project: \_\_\_\_\_

Title of Project: \_\_\_\_\_

Date QC Plan Was Completed: \_\_\_\_\_

SUBMITTED TO:  
US ARMY CORPS OF ENGINEERS  
AFGHANISTAN ENGINEER DISTRICT

SUBMITTED BY: \_\_\_\_\_

Email Address: \_\_\_\_\_

Website: \_\_\_\_\_

Phone: \_\_\_\_\_

# SIGNATURE SHEET

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Reviewed by (QC Manager): \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Reviewed by Alternate QC Manager): \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

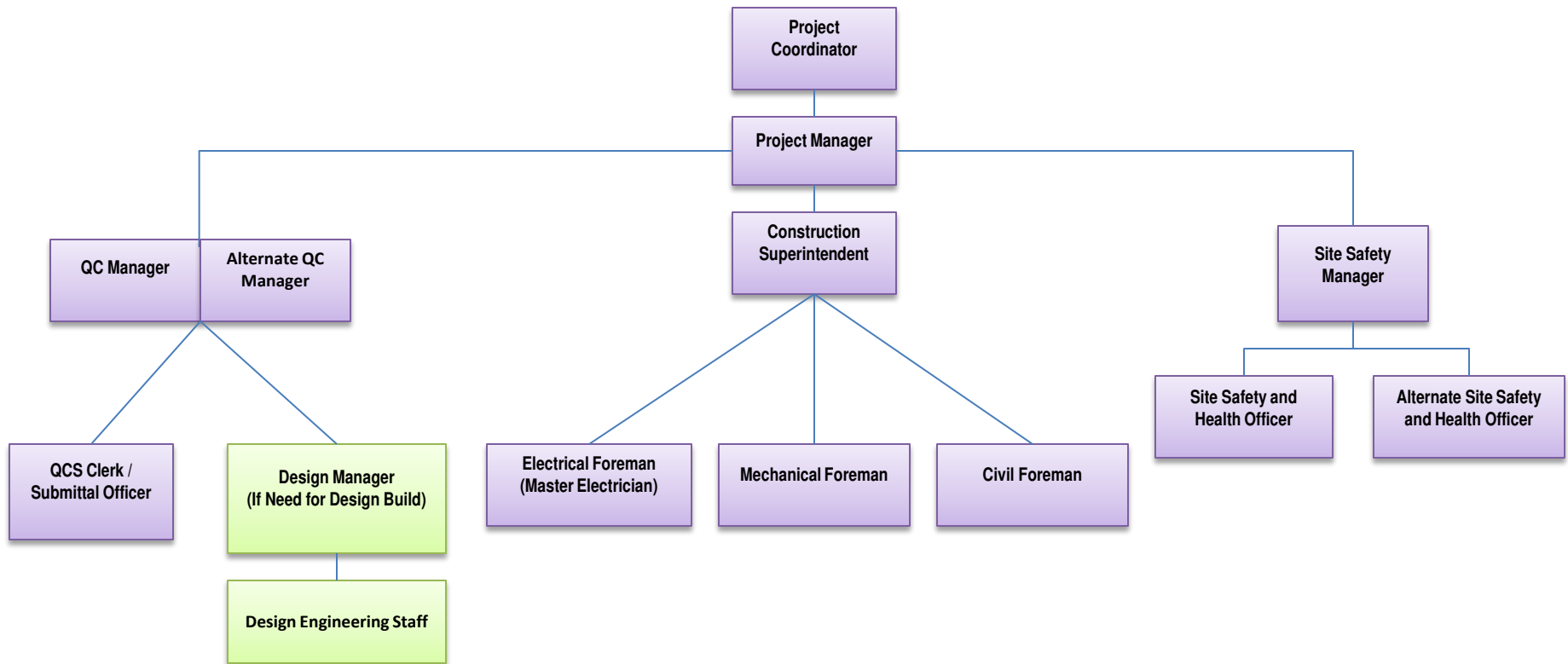
Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

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# Organizational Chart



## **Insert Resumes and Certificates of the Follow Individuals**

### **1. QC Manager**

**Note:** Certificates of completion for CQM class must be provided

**Note:** Confirm on resume either of the following: degreed graduate of engineering, architecture, or construction management with 5 years of relevant construction experience or 10 years of relevant construction experience

### **2. Alternate QC Manager**

**Note:** Certificates of completion for CQM class must be provided

**Note:** Confirm on resume either of the following: degreed graduate of engineering, architecture, or construction management with 5 years of relevant construction experience or 10 years of relevant construction experience

### **3. QC Staff Members**

### **4. Quality Control Software (QCS) Clerk**

### **5. Design Quality Manager (if the contract is design-build)**

**Project:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Contract No.:** \_\_\_\_\_

### **Safety Manager**

The Safety Manager, \_\_\_\_\_, will be responsible for overseeing overall implementation of safety plan and will coordinate all project health and safety matters directly with the Project Superintendent. The Safety Manager and all workers have the authority to intercede directly and stop work due to any unsafe work practices or site conditions.

### **Duties**

- Review, develop, and/or sign the Program APP (Accident Prevention Plan) prior to submittal;
- Develop and/or review AHAs prepared for the project on an ongoing basis;
- Approve the appointment of the Safety Officer and ensure that he/she has the appropriate training and competencies to perform the duties;
- Participate in quality control (QC) planning such as development of Quality Control Plans, safety and health checklists, and perform design and system safety analyses as appropriate;
- Provide safety and health expectations and flow down requirements for subcontractor statements of work;
- Be available on a 24-hour basis for consultation with Safety Officer during on-site emergencies or as needed;
- Provide on-site consultation as needed to ensure the APP is fully implemented;
- Coordinate any modifications to the APP with the Safety Officers;
- Provide continued support for upgrading and/or downgrading the level of personal protection;
- Conduct general safety inspections during site visits, and at least once per quarter;
- Participate in the investigation of unplanned events, high loss potential incidents, and accidents;
- Evaluate air monitoring data and recommend changes to engineering controls, work practices, and PPE; and
- Assist in development of on-site training, which will be provided by the Safety Officer or designee.

**Project:** \_\_\_\_\_  
**Location:** \_\_\_\_\_  
**Contract No.:** \_\_\_\_\_

### **Quality Control (QC) Manager**

The Quality Control (QC) Manager, \_\_\_\_\_, will be responsible for overseeing overall implementation of Quality Control Plan and will coordinate all project testing, inspections and reporting matters directly with the Project Manager. The QC Manager and all workers have the authority to intercede directly and stop work due to any unsafe work practices or site conditions.

### **Duties**

- Preparation, approval and implementation of the QA&QC Plans
- Verification of Material as per project Specifications
- Inspection of delivered materials as per Project Specs and Relevant standards
- Co-ordination with Independent labs for conducting different test such as: tensile tests, soil test, compression test, etc. according to project specifications.
- Ensure that all materials and construction are in accordance with the requirements for the completeness, accuracy, constructability in compliance to the requirement to International Building Code (IBC).
- Documentation for material and administrative approvals and backups.
- Carry out and participate in weekly progress and QC Meetings
- Manpower adequacy checking as per scheduled activities
- Supervision of Quality Inspectors for different Inspection activities.
- Inspection of Civil works executed by Sub-Contractors
- Ensure to carry out all work in a safe manner in accordance with site rules and regulations.
- Contributed to effective team works and team building by working closely with other team members.
- Execute daily operations of construction activities.
- Carry out quality control checks as defined on quality plans as directed by Project Manager.
- Witness critical installation activities as defined on contractor's quality plan.
- Ensure that works are coordinated in an effective manner so that programmed objectives are achieved.
- Estimate quantities and cost of materials, equipment, and labor to determine project feasibility.
- Provide technical advice regarding design, construction, and program modifications and structural repairs to industrial and managerial personnel.

**Project:** \_\_\_\_\_  
**Location:** \_\_\_\_\_  
**Contract No.:** \_\_\_\_\_

**Alternate Quality Control (QC) Manager**

The Alternate Quality Control (QC) Manager, \_\_\_\_\_, will be responsible for overseeing overall implementation of Quality Control Plan and will coordinate all project testing, inspections and reporting matters directly with the Project Manager. The Alternate QC Manager and all workers have the authority to intercede directly and stop work due to any unsafe work practices or site conditions.

**Duties**

- Preparation, approval and implementation of the QA&QC Plans
- Verification of Material as per project Specifications
- Inspection of delivered materials as per Project Specs and Relevant standards
- Co-ordination with Independent labs for conducting different test such as: tensile tests, soil test, compression test, etc. according to project specifications.
- Ensure that all materials and construction are in accordance with the requirements for the completeness, accuracy, constructability in compliance to the requirement to International Building Code (IBC).
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- Carry out and participate in weekly progress and QC Meetings
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- Estimate quantities and cost of materials, equipment, and labor to determine project feasibility.
- Provide technical advice regarding design, construction, and program modifications and structural repairs to industrial and managerial personnel.



**Project:** \_\_\_\_\_  
**Location:** \_\_\_\_\_  
**Contract No.:** \_\_\_\_\_

**Subject:** Letter of Authorization

**From:** Company President \_\_\_\_\_

**To:** QC Manager \_\_\_\_\_

Mr. Engineer, \_\_\_\_\_

This Letter of Authorization outlines your responsibility as our site Quality Control Manager for the project referenced above. As the site Quality Control Manager, you shall report directly to the Project Manager. You shall review the specifications, amendments, plans and drawings in their entirety and implement the Quality Control Program. The quality control program encompasses three phase Inspection: Preparatory Meetings, Initial and Follow-Up Inspections. All inspections and testing shall be recorded in the Quality Control Report and submitted to the Project Manager of the official work day. Test reports shall be submitted no later than three official work days after the test was performed. You and/or your staff shall be responsible for reviewing specifications, submittals, as-built, plans and shop drawings for Compliance to the contractual requirements.

Additionally, this all applies to all subcontractors documents. You and/or your staff shall make daily inspections to ensure that the workmanship and materials used in the construction of the project are in compliance with the plans, drawings and specifications.

**You are authorized to stop work that does not comply with the plans and specifications.** You and/or your staff shall witness all tests required by the specifications and coordinate such tests with the USACE. You and your staff must document all non-conforming conditions, items and/or workmanship noted, and will constantly monitor and alert Safety Staff Members to safety violations. If at any time you should require assistance with the implementation of the quality control program, please contact the Project Manager.

---

**Company President**

**Project:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Contract No.:** \_\_\_\_\_

**Subject:** Letter of Authorization

**From:** Company President \_\_\_\_\_

**To:** Alternate QC Manager \_\_\_\_\_

Mr. Engineer, \_\_\_\_\_

This Letter of Authorization outlines your responsibility as our site Quality Control Manager for the project referenced above. As the site Quality Control Manager, you shall report directly to the Project Manager. You shall review the specifications, amendments, plans and drawings in their entirety and implement the Quality Control Program. The quality control program encompasses three phase Inspection: Preparatory Meetings, Initial and Follow-Up Inspections. All inspections and testing shall be recorded in the Quality Control Report and submitted to the Project Manager of the official work day. Test reports shall be submitted no later than three calendar days after the test was performed. You and/or your staff shall be responsible for reviewing: specifications, submittals, as-built, plans and shop drawings for Compliance to the contractual requirements.

Additionally, this all applies to all subcontractors documents. You and/or your staff shall make daily inspections to ensure that the workmanship and materials used in the construction of the project are in compliance with the plans, drawings and specifications.

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You and/or your staff shall witness all tests required by the specifications and coordinate such tests with the USACE. You and your staff must document all non-conforming conditions, items and/or workmanship noted, and will constantly monitor and alert Safety Staff Members to safety violations. If at any time you should require assistance with the implementation of the quality control program, please contact the Project Manager.

---

**Company President**

# Major Definable Features of Work

## Instructions:

1. Circle All Definable Features of Work (DFOW) that apply for this project.
2. Describe how each circled DFOW will be accomplished.

## Mobilization and Preparation

Mobilization

Site Preparation/Demolition

## Site Technical Survey-Survey and Design

Design 65%

Design 95%

Design 100%

## Construction Site Activities:

### Trenching & Excavation

Trenching

Excavation Work

Form Work

### Force protection wall.

Stone Masonry

Concrete

### Rock boundary wall

Stone Masonry

Concrete

Scaffolding Works

Out triggers Installation

Concertina Wire Installation

### Perimeter boundary lighting

Interior Electrical Work

Exterior Electrical Work

### Slide gates Installation

Steel Works

Welding

Installation

### Drop Arm Barriers Installation

Steel Works

Welding

Excavation

Form Work

Concrete

Installation of Drop Arm Barrier

### Guard Tower Installation

Excavation for Foundation Form Work

Concrete

Erection

Mechanical Work

Painting

Doors and windows

Installation Windows

Doors Fabrication

### Gate House Installation

Doors Fabrication

Door Installation

Windows Fabrication

Windows Installation

Excavation

Form Work

Carpentry Works

Concrete

Steel Erection

Electrical Work

Mechanical Work

Painting

### Building

Doors Fabrication

Door Installation

Windows Fabrication

Windows Installation

Windows

Excavation for Foundation Form Work

Form Work

Concrete

Carpentry works

Steel Erection

Electrical Work

Mechanical Work

Plumbing

Painting

## **THREE PHASES OF INSPECTION**

### **Preparatory Meetings**

Preparatory Meetings shall be performed prior to the beginning of any major definable feature of work. A meeting shall be held for each crew performing such feature or when members of the crew change.

Preparatory Meetings shall be conducted by the Quality Control Manager and/or designee after a complete review of all applicable blueprints, specifications, shop drawings and related submittals has been made. A Preparatory Meeting Agenda (refer to Appendix C, Forms) shall be completed for each definable feature of work and distributed at the meetings. At the Preparatory Meeting, the Superintendent and Foreman (involved in this phase of construction) shall coordinate with Quality Assurance, Quality Control and Safety personnel and shall introduce their plan for accomplishing the work. The Corps shall be notified at least 48 hours in advance of the Preparatory Meeting. The following items shall be discussed at such meetings:

- d. Review of the applicable specifications.
- e. Review of applicable blueprints and shop drawings.
- f. Review of related submittals and a check that all related submittals, shop drawings and materials have been tested (if applicable), submitted and approved.
- g. Review of the detailed sequence of the execution of the work.
- h. Discuss required testing and frequency.
- i. Review provisions to ensure controlled inspection and testing.
- j. Examination of the work area to ensure that all required preliminary work has been completed and is in compliance with the contract.
- k. Examination of the related material, review of the Receiving Inspection Reports and verification that the items received are in compliance with the contract and are properly stored.
- l. Review of the Activity Hazard Analysis Report to ensure that all safety precautions are met and the required safety equipment has been purchased and is available.
- m. Review and document the workmanship expected for the definable feature of work.
- n. Meeting Minutes shall be recorded and distributed within 48 hours of the conclusion of the meeting.

### **Initial Inspections**

Initial Inspections shall be performed at the beginning of any definable feature of work and must be repeated at any time new workmen or new crews are assigned to the work or if the required standard of work is not being met. The government shall be notified at least 48 hours in advance. The same personnel who attended the Preparatory Meeting shall also attend the Initial Inspection. These should include: the Superintendent and Foreman, Safety Personnel and the Quality Assurance/Quality Control Staff. The following shall be accomplished during such meetings;

- a. Review the minutes of the Preparatory Meeting and verify that the work complies with the design documents; i.e., submittals, specifications, blueprints and/or shop drawings.
- b. Resolve all differences.
- c. Verify adequacy of inspection and testing.
- d. Establish a level of workmanship and verify that it meets the requirements.
- e. Check Safety and review the Activity Hazard Analysis Reports.
- f. Provide documentation of the previous inspection of the work area.
- g. Re-examine the work area for compliance.
- h. Meeting minutes shall be recorded and distributed within 48 hours of the conclusion of the meeting.

**Note:** Preparatory Meetings and Initial Inspections are intended to prevent non-conformances from occurring.

**Follow-Up Inspections**

Follow-Up Inspections shall be performed daily to ensure that the control established during Preparatory Meeting and Initial Inspection continues to provide a product that conforms to the contractual requirements.

- a. Construction activities shall be inspected by Quality Control in accordance with Quality Control Procedures. Forms for various activities (refer to examples in Appendix C, Forms) shall be filed and attached to the Contractor's Quality Control Report.
- b. Installation and testing activities which do not comply with the requirements shall be documented on a Non-Conformance Report (NCR), Refer to Section 8 for Non-Conforming Items.
- c. Modifications, repairs and/or replacement of materials and/or parts performed subsequent to Final Inspection shall require re-inspection and/or retest to verify acceptability. Inspection and testing documents shall be filed and maintained in accordance with Section 5, Reports and Records and shall be available for review by the Corps.

**Signatures of acknowledgement show that the Three Phases of Quality Control Inspection Program is understood and will be followed.**

**QC Manager: Print Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Alternate QC Manager: Print Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## QUALITY CONTROL TESTING AND VERIFICATIONS

### PURPOSE

To ensure that tests are adequately planned and that the necessary testing procedures are available to conduct the test in a satisfactory manner. This procedure established the methods to be used when conducting tests listed in the specifications. Test reports shall be filed and logged accordingly.

### TESTING

A list of tests required, to verify that control measures are adequate, shall be delineated in the specifications and/or determined upon the completion of the design. The list shall include the test name, specification paragraph, feature of work to be tested, the test frequency and the organization that will perform the test. **A Quality Control Representative (QCR) shall notify the Corps of the proposed test 48 hours in advance. The QCR shall witness the test with the appropriate organization and/or individual qualified to perform the designated test(s).**

The list of test will be not being limited to the following.

1. Soil Bearing Capacity Test
2. Concrete Mix Design Test
3. Field Density Test
4. Gradation MDD Test
5. Percolation Test etc

These entire tests will be taken under the supervision of the Quality Control Manager or his Assistant and the result will be submitted to the AED for the review and further action.

### FAILED TEST

Failing tests shall be cleared by one of the following methods:

- a. Retest – Retest if there is any doubt that the first test was not adequate.
- b. Rework – Re-inspect and retest.
- c. Failed Material – Remove, replace re-inspect and retest.

### PROCEDURES

- a. The Quality Control Manager and/or staff member shall review the testing requirements to insure that the planned test is in accordance with the design documents: i.e., plans, specifications, shop drawings and/or other documents.
- b. Instruments used for testing shall be calibrated in accordance with established calibration procedures. Specialists experienced in such work shall perform the calibration.
- c. Technicians performing tests shall provide copies of calibration certificates and their field notes and reports to the Quality Control Manager.
- d. Quality Control shall witness all required tests delineated in the design documents (blueprints, specifications, shop drawings, etc.).
- e. The Corps shall be notified of all scheduled tests.
- f. Test reports, when completed, shall be attached to the Contractor's Quality Control Report and submitted to the Corps.

## **TESTING LABORATORY**

The Testing Laboratory shall conduct all required tests for soil, concrete, etc in an independent testing laboratory. The testing laboratory shall work under the direction of the Quality Control Manager. The contractor must select a certified laboratory from the link below.

[http://www.aed.usace.army.mil/documents/Labs\\_AEN.pdf](http://www.aed.usace.army.mil/documents/Labs_AEN.pdf)

Where applicable, explain verification tests for electrical and mechanical commissioning.

## **TESTS AND RECORDS**

### **SCOPE**

This section establishes a system for the control of documentation and records which provide objective evidence of the quality of items and activities performed in accordance with the programmatic requirements. The Quality Control Manager is responsible for the control, review, verifications and maintenance of the documentation delineated in the specifications.

### **REPORTING AND DISTRIBUTION OF REPORTS**

1. After reviewing reports, including subcontractors', the Quality Control Manager or his representative shall submit the documentation to the Corps.
2. All inspections and testing shall be summarized and recorded in a Contractor's Quality Control Report (CQCR). A copy of the CQCR shall be sent to the Corps, Director of Quality Control and the Project Manager. "Original" reports shall be retained by the Quality Control Manager. Field notes, inspection forms, and test reports shall be filed and available for review by the Corps.
3. The Contractor's Quality Control Report shall include the following:
  - a. Contractor and subcontractor area of responsibility.
  - b. Working, idle and down time hours for equipment and batch plants (concrete and/or asphalt).
  - c. Work accomplished each day, indicating the location, activity and by whom.
  - d. Laboratory test reports, including the test results (passing or failing), location of test and specification reference.
  - e. Deficiencies and corrective actions.
  - f. Material received on site.
  - g. Offsite surveillance, including action taken.
  - h. Safety violations and corrective action implemented.
  - i. Government instructions received and/or conflicts encountered in the plans and/or specifications.
  - j. Contractor's verification statement.

### **STORAGE AND RETENTION**

1. Records shall be stored in areas which shall protect them from damage, deterioration and/or loss at the site Quality Control Field Office during the construction period. Records shall be accessible to the Corps.
  2. Records shall be stored for a period of time as determined by the contractual documents.
- Records, designated for storage, shall not be destroyed or otherwise disposed of within that period of time. Control and final disposition of subcontractor and supplier records, both onsite and offsite, shall be in accordance with the contractual documents.



## **SUBMITTALS**

### **Submittals**

All submittals shall be reviewed, certified and managed by the Quality Control Department. Copies of the manufacturer's data (material, equipment, fixtures, etc.), including catalogue cut-sheets showing dimensions, performance characteristics, capacities, wiring diagrams, schedules, operation and maintenance manuals and any other relevant information shall be submitted in the English language. Submittal quantities shall be determined by the Corps at the Pre-Construction Conference. The QC Manager will be the authorized submittal reviewer and testing lab personnel (both on site and factory). When the submittal has been disposed, one (1) copy of the submittal will remain with the Contractor and three (3) copies retained by the Government. The company will distribute copies of the disposed submittal accordingly.

The Submittal Transmittal Form (Engineering Form 4025), furnished by the Government, shall be used for submittals. "Variations" shall be noted in Block "h" of the Form (4025) and the following shall be addressed and attached to the form:

- a. Reason or purpose for the proposed variation, substitution or revision.
- b. Technical quality and cost comparison between specified and proposed item.
- c. Tabulated quality and cost comparison between specified and proposed item.
- d. Certification by a licensed engineer or architect that the revision meets or exceeds the original design.
- e. Advantage to the government, if approved, and the impact, if not approved.

### **Filing of Submittals**

Submittals (Material, Design, Data, Samples, Shop Drawings, etc.) shall be filed according to the specification section number and paragraph number in a secure place for reference and coordination. Color and mock-up samples shall be maintained in a secure place, at the job site, for comparison with the finished product. A tag or sticker identifying the submittal number and the date of approval shall be attached to the sample. When a color or mock-up sample is not approved, it will have a "Rejected" tag or sticker attached to the item and it shall be removed from the job site (if requested), and a copy of the record will be maintained along with a photograph of the disapproved item. When submittals are not approved or incomplete, they shall be returned to the supplier and/or sub-contractor with comments. They shall be corrected and re-submitted for approval (See below, Submittal Flow Chart).

### **Submittal Register**

The Submittal Register shall be maintained by the Submittal Coordinator. Revised copies of the Submittal Register shall be provided to the Corps on a monthly basis.

### **Submittal Procedure for Design-Build Project:**

The submittal procedures for design-build project are as bellow.

Design Submittal

Construction Submittal

### **Design Submittal:**

The Construction Company will furnish design submittals that are the various design documents which primarily consist of field investigations, calculations, design analysis, drawings and specifications.

In addition, for every Design Submittal, the construction company shall submit all non-administrative modifications issued for the Contract as part of the Design Submittal package to enable AED-N to validate that these modifications have been incorporated into this design submittal.

As a minimum, design submittals shall be submitted at the following intervals:

- a. Preliminary Design Submittal 10%.
- b. General Design Review (65%).
- c. Design Submittal (90%).
- d. Cleared for Construction Submittal (100%).

#### **Construction Submittal:**

##### **Contractor furnished Government Approved Construction Submittals (GA)**

Government approved construction submittals are primarily related to plans (Contractor Quality Control, Accident Prevention, Resident Management System, Area Use, etc.), schedules (Project Schedule/Network Analysis), certificates of compliance, reports and records/statements. They may also include proposed variations to approved design documents in accordance with the paragraph entitled "VARIATIONS".

In addition, GA construction submittals are required for the following:

- a. CIVIL FEATURES
- b. MECHANICAL FEATURES
- c. ELECTRICAL FEATURES
- d. ARCHITECTURAL FEATURES

##### **For Information Only Construction Submittals (FIO)**

All submittals not requiring Designer of Record or Government approval will be for information only. These construction submittals shall be checked, stamped, signed and dated by the Contractor's Quality Control Engineer, certifying that such submittal complies with the contract requirements.

##### **CQC System Manager Review and Approval**

Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager. If found to be in strict conformance with the contract requirement, each item shall be stamped, signed, and dated by the CQC System Manager. Copies of the CQC organization's review comments indicating action taken shall be included within each submittal.

##### **Stamps**

Stamps shall be used by the Contractor on all design and post design construction submittals is to certify that the submittal meets contract requirements and shall be similar to the following:

Contractor (Firm Name)

Contract Number

Contract Name

I certify that this submittal accurate, is in strict conformance with all contract requirements, has been thoroughly coordinated and cross checked against all other applicable disciplines to prevent the omission of vital information, that all conflicts have been resolved, and that repetition has been avoided and, it is complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer.

Name of CQC System Manager: \_\_\_\_\_

Signature of CQC System Manager: \_\_\_\_\_

Date: \_\_\_\_\_

**Guidelines for Preparing and Reviewing Submittals**

1. The Quality Control Inspector must be familiar with the submittal procedures: Submittal Procedure for Design/Build Projects, Specification Section 01335,
2. The Quality Control Inspector must review all of the information attached to the Submittal.
3. The Quality Control Inspector must ensure that all of the pages associated with the enclosures are attached to the submittal.
4. Important: The Quality Control Inspector must thoroughly review the applicable Design documents; i.e., the Specification, codes and standards, "Approved" drawings, etc.
5. The Quality Control Inspector must confirm design or construction "Variations" Comply with Specification 01355.
6. The Quality Control Inspector must ensure the attachments are "Legible".
7. The Quality Control Inspector must ensure the Attachments are in "English".
8. He must direct questions and concerns to either the Quality Control Manager or the Submittal Coordinator.
9. In a timely manner, the Quality Control Inspector shall submit a detailed written report pertaining to the review of the submittal and return it, with the submittal, to the Submittal Coordinator.
10. The Quality Control Inspector must ensure the sample received and/or the material installed complies with the submittal.
11. If material is installed without a submittal, the Quality Control Inspector must immediately notify the Submittal coordinator. The Submittal Coordinator shall review the matter and ensure there is no existing submittal for the material. If there is no submittal, he shall notify the Quality Control Manager and request a submittal.
12. The Quality Control Inspector must maintain and file submittals so that they can be readily retrievable.

## Submittal Variations

<b>Reference: 01335 -1.2.4.3</b>
<b>Note: Each item listed below requires a response</b>
<b>1. Reason or purpose for proposed variation, substitution or revision.</b>
Response:
<b>2. How does the quality of the variation compare with the quality of the specified item?</b>
Response:
<b>3. Provide a cost comparison. This shall include an acquisition and life cycle cost comparison.</b>
Response:
<b>4. For proprietary materials, products, systems and patented processes, a certificate signed by an official authorized to certify on behalf of the manufacturing company that the proposed substitution meets or exceeds what was originally specified.</b>
Response:
<b>5. For all other actions, a certification signed by a licensed professional engineer or architect certifying that the proposed variation or revision meets or exceeds what was originally specified.</b>
Response:
<b>6. Advantage to the Government, if the variation is approved: i.e., Operation and Maintenance considerations, better product, etc.</b>
Response:
<b>7. Ramifications and impact, if not approved.</b>
Response:
<b>Note: If the Government review detects any items not in compliance with the contractual requirements or items requiring further clarification, the Contractor will be so advised. Lack of notification by the Contracting Officer of any non-complying item does not relieve the Contractor of any contractual obligation.</b>

## Submittal Review and Comment Sheet

Date: YYYY/MM/DD

Submittal No: \_\_\_\_\_

To Engineer: \_\_\_\_\_

Attached is the cut sheet and/or data for the above mentioned submittal. Please provide the information requested below.

### Reviewer's Comments

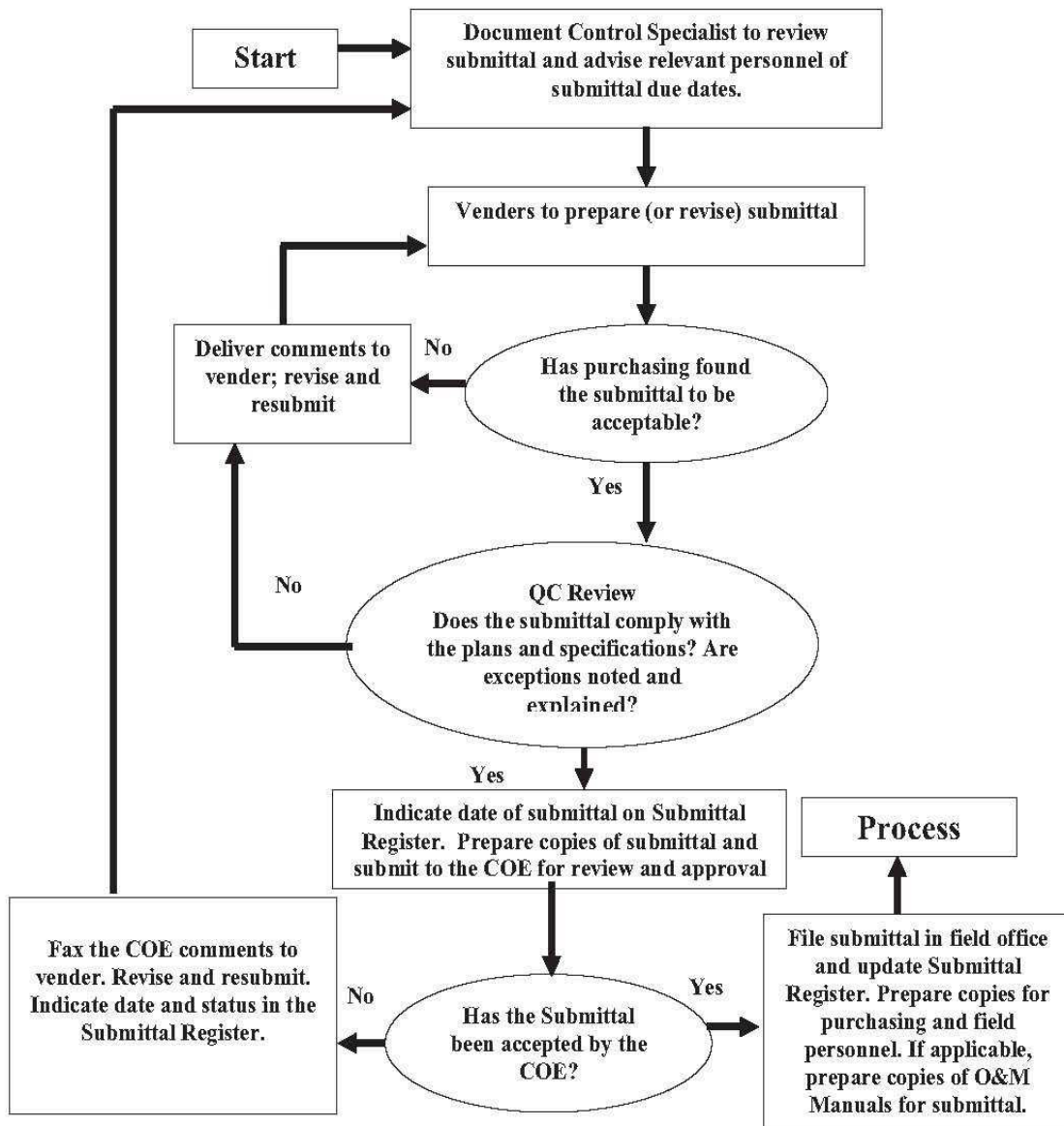
1. Approved <input type="checkbox"/> Submit as Transmittal Number:	
Specification Section:	Paragraph Number:
I certify that the above submitted item(s) has/have been reviewed by me in detail and is correct and in conformance with the contractual requirements (plans, shop drawings and specifications).	

<p><b>2. Disapproved</b> <input type="checkbox"/> List reason for disapproval below. "Variation" required: Yes <input type="checkbox"/> No <input type="checkbox"/></p>
---

### Reviewer's Recommendation

Reviewer's Recommendation	
Printed Name:	Position:
Signature:	Date:

## Submittal Flow Chart



## **TRACKING DEFICIENCIES**

### **NON-CONFORMING ITEMS**

1. Non-conforming items are those conditions which deviate from the requirements delineated in the specifications, blueprints and/or shop drawings. The Quality Control Manager shall be responsible for the control and documentation of non-conforming items.
2. The Quality Control Manager shall prevent non-conforming items from being installed.
3. Minor non-conforming items, which are corrected in the same day, shall be documented in the inspectors "Daily Report"
4. All other non-conformances shall be documented on a Non-Conformance Report prepared by a Quality Control Representative and, if applicable, entered into the Corps "Resident Management System" (RMS) shall be sequentially numbered and dated and shall include the following information, as appropriate:
  - a. Description of the non-conformance including relevant details of the occurrence.
  - b. Identification of material, component or system by part number, blueprint, shop drawing and/or specification number and intended installation location.
  - c. Source of material or item (name of supplier, owner or subcontractor).
  - d. Current status or item in shop, warehouse, lay-down yard or structure.
  - e. Individual and organization which detected the non-conformance.
  - f. Recommendation for corrective action: including sketches, test data and/or repair procedures necessary to substantiate the recommendation.
  - g. Cause of the non-conformance and steps taken to prevent reoccurrence indicating action taken, positions or titles of persons contacted, letters written and/or procedural changes proposed.
5. The Quality Control Manager and/or designee shall sign and forward the Non-Conformance Report to the Corps, Director of Quality Control and the Project manager.
6. Each Non-Conformance Report shall be entered into the Non-Conformance Report Log and, if applicable, the Corps "Records Management System" by a Quality Control Representative. The Non-Conformance Report (original) shall be filed and copies distributed accordingly.
7. Action to be taken shall be entered into the Non-Conformance Report Log. The Project Engineer, or designated representative, shall initiate the disposition necessary to clear the item
8. Verification of "Corrective Action" (e.g., completion of repairs) shall be by quality control after the work in question has been re-inspected and/or retested. Entries shall be made in the NCR Log indicating the Final Disposition of the NCR.
9. Non-Conformance Reports, logs and documents shall be filed and maintained in accordance with Section 5, Reports and Records and shall be available for review by the Corps.

### **Punch-Out Inspection**

The QC Report should report punch list (deficiencies) throughout the life of the project and demonstrate that the QC Staff is correcting the deficiency in a timely manner. We will not wait until the job is finished to develop a punch list. The Punch List shall be submitted to the Project Manager for corrective action. Corrections shall be accomplished within the time stated. The Quality Control Department shall perform Follow-Up Inspections to ensure the deficiencies have been corrected before notifying the Corps of a Pre-Final Inspection.

### **Pre-Final Inspection**

After the completion of the Punch-Out Inspection, the Quality Control Manager and COE Representatives shall perform a Pre-Final Inspection and develop a joint "Punch List" of noted deficiencies. The Punch List shall be formally documented along with the estimated date by which the deficiencies will be corrected. The Quality Control Department shall perform Follow-

Up Inspections to ensure that all deficiencies have been corrected before notifying the Corps of a request for Final Inspection.

**Final Inspection**

Upon completion of the items listed in the Pre-Final Inspection “Punch List”, Quality Control shall notify the Corps 14 days prior to the Final Inspection (or as agreed to) with the assurance that all items listed in the Pre-Final Inspection and all other remaining work has been completed and shall be acceptable by the date of the Final Inspection.



# QC DAILY REPORTS

<b>CONTRACTORS QUALITY CONTROL REPORT (QCR)</b> <b>DAILY LOG OF CONSTRUCTION - MILITARY</b>		REPORT NUMBER	Page 1 of 2
		DATE	
PROJECT		CONTRACT NUMBER	
CONTRACTOR	WEATHER		
<b>QC NARRATIVES</b>			
Were there any Delays in Work Progress today?			
Verbal Instructions given by Government:			
Did anything develop that may lead to a Change Order/Claim?			
Activities in Progress:			
General Comments:			
Safety Inspection / Safety Meetings:			
PREP/INITIAL DATES (Preparatory and initial dates held and advance notice)			

<b>CONTRACTORS QUALITY CONTROL REPORT (QCR)</b> <b>DAILY LOG OF CONSTRUCTION - MILITARY</b>		REPORT NUMBER	
		Page 2 of 2	
PROJECT		DATE	
		CONTRACT NUMBER	
ACTIVITY START/FINISH			
QC REQUIREMENTS			
<b>QA/QC PUNCH LIST</b> (Describe QC Punch List items issued, Report QC and QA Punch List items corrected)			
Item No	Location	Description	
<b>CONTRACTORS ON SITE</b> (Report first and/or last day contractors were on site)			
<b>LABOR HOURS</b> The following labor hours were Reported today:			
Employer	Labor Classification	Number of Employees	Hours Worked
Total hours worked to date:		Total	
<b>EQUIPMENT HOURS</b> Total operating hours to date 0.0			
<b>ACCIDENT REPORTING</b> (Describe accidents)			
<b>CONTRACTOR CERTIFICATION</b> On behalf of the contractor, I certify that this Report is complete and correct and all equipment and material used and work performed during this Reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.			
QC REPRESENTATIVE'S SIGNATURE	DATE	SUPERINTENDENT'S INITIALS	DATE

## Daily Activity Report

TO: Quality Control Manager

Date: YYYY/MM/DD

<p>1. List work in progress. Note discrepancies observed with action taken and/or causes for delays (weather conditions, material constraints, equipment and/or plant problems encountered, etc.)</p>
<p>2. Record verbal instructions and/or direction(s) provided by the COE (list names and remarks)</p>
<p>3. Has anything developed on the project that may lead to a Change Order and/or Finding of Fact? YES or NO (if yes, explain)</p>
<p>4. Remarks (list visitor names and titles, and/or miscellaneous remarks pertaining to the project)</p>

Prepared By:

Reviewed By:

(Construction Manager)

(Project Manager)

## Non-Conformance Report

Date: YYYY/MM/DD NCR Number: \_\_\_\_\_

Location: \_\_\_\_\_

Specification Section and Paragraph: \_\_\_\_\_

Non-Conforming Condition:

Reported By:

Quality Control Representative	Date

Disposition:


Dispositioned By:

Project Engineer	Date

Re-Inspected By:

Quality Control Representative	Date

Accepted By:

Quality Control Manager	Date

Cc     Director of Quality Control  
         Resident Engineer  
         Project Manager

## Construction Punch List

**Structural** \_\_\_\_\_ **Mechanical** \_\_\_\_\_ **Electrical** \_\_\_\_\_ **Civil** \_\_\_\_\_

Date: \_\_\_\_\_ Building No: \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

Inspected By: \_\_\_\_\_

[illegible]

## Weekly QA/QC Meeting Minutes

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Location: \_\_\_\_\_

### Attendees

USACE	Memaran-e-Parinda Construction Company	Subcontractors

No.	Description of Item Discussed	Action Date	Action By
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			

## Initial Inspection Checklist

Date: \_\_\_\_\_ Definable Feature of Work: \_\_\_\_\_

Specifications Section: \_\_\_\_\_

Plan: \_\_\_\_\_ Sheet: \_\_\_\_\_ Reference: \_\_\_\_\_

Item	Yes	No	N/A
<b>1. Was the production foreman present?</b>			
<b>2. Material</b>			
a) Were materials inspected for compliance?			
b) Were corrective actions taken for defective material?			
c) Were corrective actions appropriate?			
d) Were any deviations accepted?			
<b>3. Installation Requirements</b>			
a) Did work comply with specifications & plans?			
b) Was workmanship satisfactory?			
c) Were corrective actions appropriate?			
d) Were any deviations accepted?			
<b>4. Tests</b>			
a) Were tests being performed?			
b) Was testing frequency satisfactory?			
c) Were test samples or locations appropriate?			
d) Was test quality coordinated with M/E technicians?			
<b>5. Inspections</b>			
a) Was inspection done by QC Inspector ID in Prep Meeting?			
b) Was the inspection frequency as established in Prep Meeting?			
c) Were critical inspections satisfactory?			
d) Was the inspection satisfactory?			
<b>6. Safety</b>			
a) Was the safety officer present?			
b) Were the safety requirements followed?			
c) Were the safety requirements modified?			

(Note: if a box contains an asterisk, explain in the remarks section below)

Remarks

✓

Quality Control Inspector    Quality Control Manager    Quality Assurance Representative

## Request for Information

Contract Title:

Contract Number:

### REQUEST FOR INFORMATION

RFI SERIAL  
TO  
FROM  
DATE  
APPLICABLE SPECIFICATION SECTION  
APPLICABLE DRAWINGS  
RESPONSE NEED DATE  
LOCATION

**DESCRIPTION / SUBJECT:**

RESPONSE PRIORITY LEVEL    ☐ HIGH                      ☐ MEDIUM                      ☐ LOW

Signature: \_\_\_\_\_

COE RESPONSE:

C.O.E REP:

DATE:

DATE RECEIVED BY COE:

SIGNATURE:

DATE RECEIVED BY CII:

SIGNATURE:

COST EFFECT IN CONTRACTOR'S OPINION:

COST CHANGE                      ☐ YES                      ☐ NO                      ☐ POSSIBLE