

**SUPERSTRUCTURE CONCRETE
QUALITY CONTROL PLAN CHECKLIST**

DATE _____

CONTRACT NO. _____

CONTRACTOR _____

SIGNATURE PAGE

- ☐ Submitted 15 Days Prior to Concrete Placement Operations
- ☐ QCP Signed and Dated by QCP Manager

QUALITY CONTROL PERSONNEL

QCP Manager

- ☐ Name
- ☐ Qualifications
- ☐ Telephone Number
- ☐ Duties
- ☐ Employer

QCP Site Manager

- ☐ Name
- ☐ Qualifications
- ☐ Telephone Number
- ☐ Duties
- ☐ Employer
- ☐* Same Person as QCP Manager

Quality Control Technician(s)

- ☐ Name
- ☐ Qualifications (Certified Concrete Technician)
- ☐ Telephone Number
- ☐ Duties
- ☐ Employer
- ☐* Same Person as QCP Manager
- ☐* Same Person as QCP Site Manager

* Only If Applicable

TESTING FACILITY

- ☐ Location
- ☐ List of Test Equipment
- ☐ Test Methods and Frequency of Calibration/Verification

MATERIALS -- Source, Transportation, Handling, and Storage Procedures

- ☐* Admixtures - type
- ☐ Aggregates - size
- ☐ Curing Materials
- ☐* Evaporation Retardants
- ☐* Fly Ash - class
- ☐* Ground Granulated Blast Furnace Slag - grade
- ☐ Portland Cement - type
- ☐ Reinforcing Steel - size and type
- ☐ Water - if non-potable, the sampling and testing procedures

PROCESS CONTROL OF AGGREGATES

Gradation

- ☐* Control Band Tolerances on each sieve for aggregates not in accordance with 904.01(g) and 904.02(e)
- ☐* Statement that Control Charts shall be obtained from Certified Aggregate Producer for Production and Load-Out tests of each Aggregate, within 7 days of Concrete Placement Operations
- ☐* Gradation Tests
 - ☐ Sample Procedure
 - ☐ Sample Reduction Procedure
 - ☐ Test Method
 - ☐ Testing Frequency (Within 7 days of concrete placement operations)
- ☐ Procedure for Determination of Combined Aggregate Gradation

Water Absorption

- ☐ Test Methods
- ☐ Testing Frequency (Minimum of one test for each aggregate used during concrete placement operations)

SSD Bulk Specific Gravity

- ☐ Test Method
- ☐ Testing Frequency (Minimum of one test for each aggregate used during concrete placement operations)

* Only If Applicable

TRIAL BATCH DEMONSTRATION

- ☐ Location
- ☐ Type of Equipment
- ☐ Procedures

CONCRETE BATCHING

- ☐ Description of Plant, including Capacity and Intended Batch Size
- ☐ Method and Sequence of Batching
- ☐ Initial and Routine Equipment Checks (e.g., mixers, scales, water meters, admixture dispensers, mixing equipment, and agitators, if applicable)
- ☐ Material Checks and Frequency of Testing
- ☐ Methods of Monitoring Ingredients
- ☐ Method of Recording Each Batch

PROCESS CONTROL OF CONCRETE

Slump

- ☐ Sampling Procedure
- ☐ Test Method
- ☐ Testing Frequency (Minimum of one test/sublot; also first truck for each day of production)

Air Content and Unit Weight

- ☐ Sampling Procedure
- ☐ Test Method
- ☐ Testing Frequency (Minimum of one test/sublot, first truck for each day of production, and when there is a change in production, delivery, or replacement)

Water/Cementitious Ratio

- ☐ Frequency of Determination (Minimum of one for each day of concrete placement operations)

Compressive Strength

- ☐ Sampling Procedure
- ☐ Test Method
- ☐ Testing Frequency (Minimum of one set of two cylinders at 7 days and one set of two cylinders at 28 days for each sublot)

PROCESS CONTROL OF REINFORCING STEEL

- ☐ Procedure for Monitoring Depth of Concrete over Uppermost Bar of Top Mat
- ☐ Frequency of Depth Measurements
- ☐ Statement that Measurements shall be taken as soon as Concrete is Placed and Struck Off and while still Plastic

RESPONSE TO TEST RESULTS

Water Absorption

- ☐ Procedure for Corrective Action when Test Results differ from Design Mix Value by more than 0.5 percent
- ☐ Statement that Source shall be Investigated and an Absorption Percent determined

Bulk Specific Gravity (SSD)

- ☐ Procedure for Corrective Action when Test Results differ by more than 0.056 for Fine Aggregate or 0.032 for Coarse Aggregate from the Mix Design values
- ☐ Statement that source shall be Investigated and the Bulk Specific Gravity (SSD) determined

Unit Weight

- ☐ Procedure for Corrective Action when Test Results differ by more than $\pm 1 \text{ lb/ft}^3$ (16 kg/m^3) from Predicted Value for Air Content Measured (not to exceed unit weight representing w/c of 0.420)

Other Quality Control Tests

- ☐ Procedure for Corrective Action
 - ☐ Compressive Strength
 - ☐ Air Content
 - ☐ Slump

CONCRETE HAULING

- ☐ Equipment and Methods for Delivery
- ☐ Traffic Pattern to the Site of Work

CONCRETE PLACEMENT

- ☐ Placing Sequence
- ☐ Identification of Placing Equipment
- ☐ Description of Pumping Procedures

FINISHING, TEXTURING, AND CURING

- ☐ Methods for Finishing, Texturing, and Curing Concrete
- ☐ Description and Identification of Equipment

FORMS, FALSEWORK, AND CENTERING

- ☐ Procedure for determining when forms, falsework, and centering may be removed
- ☐ Frequency of samples for determination of removal (Minimum of two cylinders or two beams)

DOCUMENTATION

- ☐ Statement that Aggregate and Mixture Tests, and Depth of Cover of Concrete over Reinforcing Steel Measurements shall be maintained for a Period of Three Years after completion of Contract and that the Location shall be Readily Accessible for review by the Department.