

PD-28: Construction Quality Control Plan

2-5 points

Goal: Improve quality by requiring the contractor to have a formal Quality Control Plan (QCP).

Sustainability Linkage

Implementation of a Construction Quality Control Plan promotes higher quality construction and supports the environmental and economic principles of the triple bottom line by minimizing life-cycle costs and raw material usage.



Background and Scoring Requirements

Scoring Requirements

Requirement PD-28.1

3 points. Quality Control Plan

Require the Contractor to plan and implement quality control measures throughout construction with care and for materials above and beyond what is typically required by specifications and regulations. The Owner shall require the Contractor to establish, implement, and maintain a formal QCP during roadway construction. The Contract Documents should include a requirement for a QCP that includes, at a minimum, the following information:

- Key quality control personnel, their responsibilities, and qualifications (resumes, certifications with expiration dates, etc.).
- Project location and locations of major pavement and earthwork sources.
- Procedures used to control quality during construction including (as a minimum):
 - Items to be monitored (including pavement mix designs)
 - Submittals required, approximate dates, responsible person, and submittal process
 - Testing to be done (including testing standards and frequency)
 - When corrective action is required (action limits)
 - Procedures to implement corrective action
 - Procedures to modify QCP if ineffective or when modifications are necessary
 - Critical inspection point notification plan. As an example, 48 hours before concrete delivery, 48 hours before asphalt paving operations begin, etc.
- The QCP should cover all project construction; not just the pavement.
- Subcontractors need to be included in this plan, which typically means identifying a responsible party and obtaining a quality control procedure from the subcontractor. The Prime contractor shall maintain authority to enforce the QCP for work performed by all subcontractors. Expected beginning and ending dates for the subcontractors should be included.
- The QCP should be approved by the owner before construction begins.

Some state and local owner agencies already have requirements for such plans written in to their standard specifications. Such existing requirements should be able to meet the requirements above; however, some only address construction quality for hot mix asphalt (HMA) or Portland cement concrete (PCC) paving and not

construction of the overall project. While paving needs to be covered in the QCP, all other major components of construction (e.g., structures, earthwork, drainage, traffic control items, etc.) must also be covered.

Some state highway agencies use contractor testing in their acceptance process. In these cases, the independent assurance tests must be performed on samples that are taken independently of quality control samples. QCPs are required in these cases, as defined in CFR 637, Title 23.

A large document that repeats language from the contract specifications need not be generated for this scoring requirement. Rather, the document should clearly identify the major aspects of the prime contractor's plan to control project construction quality and who is responsible for quality control for a particular item or process, when key inspections are made, when corrective actions are to be taken, and how they are to be taken.

Requirement PD-28.2

2 points. Quality Price Adjustment Clauses

Leverage the use of Quality Price Adjustment Clauses to link payment and performance of the constructed products. Quality Assurance specifications generally include statistically based acceptance plans, require contractor process control testing, and have provisions for pay adjustments based on the degree of compliance with specified requirements. Quality assurance specifications and programs may lead to better contractor control of the quality of the specified product; however, they do not diminish the need for effective construction inspection. For more information, see FHWA's [Technical Guidance on Price Adjustment Clauses for Quality](#)¹.

Resources

Above-Referenced Resources

The following resources are referenced in this criterion and consolidated here:

1. FHWA, Technical Guidance on Price Adjustment Clauses for Quality, (January 24, 1992), <https://www.fhwa.dot.gov/programadmin/contracts/coretoc.cfm?CFID=33464143&CFTOKEN=9fa197a0851235dc-B80B3D78-B1F2-8>

Scoring Sources

The project is considered to have met this criterion if the requirements above can be reasonably substantiated through the existence of one or more of the following documentation sources (or equal where not available):

1. Contract Document Specifications requiring contractor to establish and implement a project-specific QCP.
2. Contract Document Specifications requiring quality price adjustment clauses.