DEVELOPMENT CONSTRUCTION SPECIFICATION

CQC

QUALITY CONTROL REQUIREMENT

Amendment Record for this Specification Part

This Specification is Council's edition of the AUS-SPEC generic specification part and includes Council's primary amendments.

Details are provided below outlining the clauses amended from the Council edition of this AUS-SPEC Specification Part. The clause numbering and context of each clause are preserved. New clauses are added towards the rear of the specification part as special requirements clauses. Project specific additional script is shown in the specification as italic font.

The amendment code indicated below is 'A' for additional script 'M' for modification to script and 'O' for omission of script. An additional code 'P' is included when the amendment is project specific.

Amendment Sequence No.	Key Topic addressed in amendment	Clause No.	Amendment Code	Author Initials	Amendment Date
EXAMPLE 1	*Provision for acceptance of nonconformance with deduction in Payment*	*XYZ.00*	*AP*	*KP*	*2/6/97*

SPECIFICATION CQC - QUALITY CONTROL REQUIREMENTS

SPECIFICATION CQC
QUALITY CONTROL REQUIREMENTS

GENERAL

CQC1 SCOPE

1. This Specification covers the contractual requirements for the quality control testing and survey by the Contractor; including the minimum test frequencies to be employed to demonstrate conformance to the requirements of the technical specifications.

Testing and Survey

CQC2 LOTS

1. All items of work shall be subdivided into lots. Each lot shall be given a unique lot number.

2. Lots shall be chosen by Council's Development Engineer but shall be within the limits given in Annexure CQS-C. In general, the size of the lot shall not exceed one day's output for each work process designated for lot testing.

Lot Size

3. The lot numbers shall be used as identifiers on all surveys and test results.

Lot Numbers

4. Council's Development Engineer shall determine the bounds of each lot before sampling and shall identify each lot clearly.

Lot Identification

5. The boundaries of a lot may be changed if subsequent events cause the original lot to be no longer essentially homogeneous.

Lot Boundaries

6. The lot identification system and sample numbering system shall allow test results to be positively identified with material incorporated in the works.

Test Results

CQC3 SAMPLING AND TESTING

1. All compliance inspections and tests shall be based on lots.

Lots

2. The maximum lot sizes and minimum testing frequencies are listed in the Annexures to the relevant Specifications and/or in Annexure CQS-C to Specification CQS. Where no minimum frequency of testing, or maximum lot size is stated in the Specification, the Contractor shall nominate appropriate frequencies for the approval of Council's Development Engineer.

Lot Sizes Frequency of Testing

3. Sampling shall not be restricted to locations dimensioned or otherwise defined for setting out the Works in the Drawings or Specification, but shall be undertaken in a random or unbiased manner, as approved by Council's Development Engineer, at any location within the Works to demonstrate its compliance with the Specification.

Sampling Locations

4. Where Test Methods are nominated in the Technical Specifications, sampling and testing shall be carried out by a NATA registered laboratory that holds accreditation for those sampling procedures and test methods. Sampling shall be conducted by personnel from the NATA registered laboratory that has been accredited for that sampling procedure and shall be supervised by the approved signatory from that laboratory. Test results shall be reported on NATA endorsed test documentation, which shall include a statement by the approved signatory certifying that the correct sampling procedures have been followed.

Sampling and Testing

5. In special circumstances the Council's Development Engineer may accredit a laboratory that is not NATA registered for specific tests or inspection procedures.

Special Accreditation

6. The Contractor shall reinstate all core holes, test holes, excavations and any other disturbance resulting from any testing activity. The reinstatement shall be to a standard that is at least equal to the specified requirements for the particular work. ***Reinstatement***

7. Random sampling techniques shall be used for each lot for the control of compaction of each continuous layer of earthworks, flexible pavement and asphalt. Annexure CQS-A defines the method to be used for determining test locations of random sampling in each lot. ***Random Sampling***

8. For quality control of processes other than compaction of layers of earthworks, flexible pavement and asphalt, the sampling locations will be proposed by the Contractor and will require the approval of Council's Development Engineer. ***Sampling Locations***

9. In all cases the samples shall each considered to be representative of the lot and all test results will be required to meet the appropriate tolerances for the lot. ***All Test Results to Meet Tolerances***

CQC4 SURVEYING

1. Surveying Control shall include all measurement, calculation and record procedures necessary to: ***Requirements***

   (a) Set out the Works

   (b) Verify conformance to the Drawings and Specification in relation to dimensions, tolerances and three dimensional position

   (c) Determine lengths, areas or volumes of materials or products, where required for measurement of work.

2. The Contractor shall appoint qualified surveyors who are eligible for membership of the Institution of Surveyors, Australia or the Institution of Engineering and Mining Surveyors, Australia to supervise and take responsibility for all Surveying Control. ***Surveyor Qualifications***

3. The procedures and equipment used must be capable of attaining the tolerances nominated in the Specification. ***Equipment***

4. Sampling for conformance verification purposes shall not be restricted to the locations used to set out the Works. ***Sampling Locations***

5. The Contractor shall submit a Survey Conformance Report to Council's Development Engineer for each lot or component where design levels, position and/or tolerances have been specified. The Survey Conformance Report shall show 'specified vs actual' for position (defined by co-ordinates or chainage and offset), level and tolerance as appropriate and shall be certified by the qualified surveyor responsible for the verification survey. ***Conformance Report***

CQC5 RECORDS

1. Conformance records shall be stored and maintained such that they are readily retrievable and in facilities that provide a suitable environment to minimise deterioration or damage and to prevent loss. ***Storage***

2. The Contractor shall submit all conformance records to Council's Development Engineer for inspection and approval. If requested by Council's Development Engineer, the Contractor shall provide copies of the records or test results at no cost to the Principal. ***Copies of Records Contractor's Cost***