

**SCHEDULE 6  
QUALITY MANAGEMENT**

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**Part 1**

**DEFINITIONS**

**Part 1.1 Definitions**

In this Schedule, in addition to the definitions set out in Schedule 1 [Definitions and Interpretation], and unless otherwise specified or the context otherwise requires, the following words and expressions have the following meanings:

“**Certified Quality Auditor**” means a quality auditor certified by the American Society for Quality in the “Certified Quality Auditor (CQA)” grade of certification.

“**External Quality Audit**” means a second party Quality Audit conducted by parties having an interest in the relevant organization, such as customers.

“**Hold Point**” means a mandatory verification point beyond which certain Work performed by the Primary Contractor and its Subcontractors and suppliers of any tier cannot proceed without authorization by the entity that establishes the hold point pursuant to this Agreement or otherwise.

“**Internal Quality Audit**” means a first party Quality Audit of an organization’s own processes conducted by or on behalf of the relevant organization.

“**ISO 9000:2005 Standard**” means the ISO 9000:2005 International Standard for “Quality management systems – Fundamentals and vocabulary”, as revised and updated from time to time, or, if such standard ceases to be available for any reason, such other replacement standard as the Province may designate.

“**ISO 9004:2009 Standard**” means the ISO 9004:2009 International Standard for “Managing for the sustained success of an organization – A quality management approach”, as revised and updated from time to time, or, if such standard ceases to be available for any reason, such other replacement standard as the Province may designate.

“**ISO 19011:2002 Standard**” means the ISO 19011:2002 International Standard for “Guidelines for quality and/or environmental management systems auditing”, as revised and updated from time to time, or, if such standard ceases to be available for any reason, such other replacement standard as the Province may designate.

“**ISO/IEC 17025**” means the ISO/IEC 17025 International Standard for “General requirements for the competence of testing and calibration laboratories”, as revised and updated from time to time, or, if such standard ceases to be available for any reason, such other replacement standard as the Province may designate.

“**ISO 9001 Lead Auditor Course**” means an accredited ISO 9001 course for lead auditors that meets the training portion of the requirements for current certification of individual quality system auditors with the International Register of Certificated Auditors.

“**Nonconformity Tracking System**” means a system to track Nonconformity Reports issued by the Province’s Representative or the Primary Contractor as set out in Section 7.2 [Nonconformity Report Tracking System] of this Schedule.

“**QMS Auditor**” means a quality auditor certified by RABQSA International, Inc in the “QMS Auditor” grade of certification.

“**QMS 2008 Auditor**” means a quality auditor certified by the International Register of Certificated Auditors in the “QMS 2008 Auditor” grade of certification.

“**Quality Audit**” means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

“**Quality Audit Plan**” means a plan describing the scope and schedule of a Quality Audit.

“**Quality Audit Programmes**” means the Primary Contractor’s plans defining the Internal Quality Audits and External Quality Audits that the Primary Contractor shall perform or cause to be performed on its own processes and the processes of Subcontractors.

“**Quality Management Plan**” or “**QMP**” means each detailed quality management plan of the Primary Contractor detailing which procedures and associated resources shall be applied by whom and when for each aspect of the Work required in accordance with this Agreement, including the Design Quality Management Plan, the Construction Quality Management Plan, the Traffic Quality Management Plan and the Environmental Quality Management Plan.

“**Quality Management System Audit**” means a Quality Audit conducted by or on behalf of the Province as contemplated in Section 5.3(b)(ii) of this Schedule.

“**Quality Manager**” means an individual that is employed by the Primary Contractor as a quality manager for a Quality Management Plan.

“**Quality Manual**” means the Primary Contractor’s quality manual meeting the requirements set out in Appendix A [Quality Manual] of this Schedule and:

- (a) outlining the Quality Management System for all aspects of the Work, and for the complete organization (including the Primary Contractor and Subcontractors) involved in performing the Work;
- (b) establishing Quality Policy and Quality Objectives; and
- (c) outlining the means by which the Primary Contractor shall establish, implement, control and continually improve processes to achieve that Quality Policy and those Quality Objectives.

“**Quality Objectives**” means the objectives related to quality that are specific, measurable, achievable, results focussed, timely and consistent with the Quality Policy and which are to be formally expressed and recorded in the Quality Manual in accordance with this Schedule, provided that, alternatively, each Quality Management Plan may have its own Quality Objectives which are directly related to applicable Quality Policy expressed or recorded in the Quality Manual.

“**Quality Policy**” means the overall intentions and direction of the Primary Contractor related to quality applicable to the overall organization (including the Primary Contractor and Subcontractors) involved in performing the Work which are to be formally expressed and recorded in the Quality Manual in accordance with this Schedule, provided that, alternatively, each Quality Management Plan may have its own Quality Policies which are directly related to applicable Quality Objectives expressed or recorded in the Quality Manual.

“**Surveillance Quality Audit**” means a Quality Audit conducted by or on behalf of the Province as contemplated in Section 5.3(b)(i) of this Schedule.

“**Traffic Management Audit Programme**” means the programme that is developed and implemented by the Primary Contractor pursuant to Section 5.8 [Traffic and Transit Facilities Management Auditing] of this Schedule for the purposes of facilitating the conduct of Internal Quality Audits and External Quality Audits relating to traffic management.

“**Transit Facilities Management Audit Programme**” means the programme that is developed and implemented by the Primary Contractor pursuant to Section 5.8 [Traffic and Transit Facilities Management Auditing] of this Schedule for the purposes of facilitating the conduct of Internal Quality Audits and External Quality Audits relating to transit facilities management.

“**Witness Point**” means certain Work performed by the Primary Contractor and its Subcontractors and suppliers of any tier where the Primary Contractor must provide the entity that establishes the witness point pursuant to this Agreement or otherwise with reasonable advance notice of the pending Work.

**Part 2**

**QUALITY MANAGEMENT SYSTEM**

**Part 2.1 Quality Management System Requirements**

The Primary Contractor shall ensure that the Quality Management System, at a minimum, includes the Quality Documentation described in Part 6 [Quality documentation] of this Schedule and complies with:

- (a) the requirements and principles of the ISO 9001:2008 Standard and any other applicable standards specified in this Schedule;
- (b) the Design-Build Requirements;
- (c) Good Industry Practice; and
- (d) all other requirements set out in this Schedule and this Agreement.

**Part 2.2 ISO Compliance**

(a) Performance Measures

**PQ2.2(a)-1** The Quality Management System must be compliant with the ISO 9001:2008 Standard.

(b) Specific Requirements

The Primary Contractor shall update its Quality Management System and all Quality Documentation as required to ensure that the Quality Management System and all Quality Documentation is and at all times remains in full compliance with the ISO 9001:2008 Standard and the requirements of this Schedule.

**Part 2.3 Quality Manual and Quality Management Plan Deliverables**

Without limiting the generality of Section 2.1 [Quality Management System Requirements] of this Schedule, the Primary Contractor shall prepare and submit the documents referred to in Table 2.3 to the Province's Representative pursuant to the Consent Procedure for acceptance by the Province's Representative acting reasonably by the dates shown in Table 2.3.

**Table 2.3 Schedule of Plans and Reports (Response Time Measures)**

<b>Performance Measure</b>	<b>Document</b>	<b>Submission Due Date</b>	<b>Reference in this Schedule</b>
<b>PQ2.3-1</b>	Quality Manual	Not later than 20 Business Days from the Effective Date	Appendix A [Quality Manual] to this Schedule
<b>PQ2.3-2</b>	Design Quality Management Plan	Not later than 20 Business Days from the Effective Date	Appendix B [Design Quality Management Plan] to this Schedule
<b>PQ2.3-3</b>	Construction Quality Management Plan	Not later than 40 Business Days from the Effective Date	Appendix C [Construction Quality Management Plan] to this Schedule

<b>Performance Measure</b>	<b>Document</b>	<b>Submission Due Date</b>	<b>Reference in this Schedule</b>
<b>PQ2.3-4</b>	Traffic Quality Management Plan	Not later than 40 Business Days from the Effective Date	Appendix D [Traffic Quality Management Plan] to this Schedule
<b>PQ2.3-5</b>	Environmental Quality Management Plan	Not later than 20 Business Days from the Effective Date	Appendix E [Environmental Quality Management Plan] to this Schedule
<b>PQ2.3-6</b>	Other Quality Management Plans	Not later than 40 Business Days from the Effective Date	Section 2.4 [Other Quality Management Plans]

**Part 2.4 Other Quality Management Plans**

The Primary Contractor shall prepare and submit, or cause to be prepared and submitted, to the Province’s Representative pursuant to the Consent Procedure, a Quality Management Plan for any other party contracting with the Primary Contractor or any Subcontractor for the purposes of undertaking any material aspect of the Work (but excluding legal and financial advisors) in each case for undertaking the activities covered by that party’s contract with the Primary Contractor or Subcontractor (as the case may be) and meeting the requirements of the Quality Manual.

**Part 2.5 Timing of Implementation**

(a) Performance Measures

**PQ2.6(a)-1** The Quality Manual and all Quality Management Plans must be fully implemented within 180 days from the Effective Date.

(b) Specific Requirements

The Primary Contractor shall not commence or permit the commencement of any aspect of the Work before those parts of the Quality Documentation that concern such aspect of the Work have been submitted to the Province’s Representative in accordance with this Schedule under the Consent Procedure or the Review Procedure, and have been accepted or reviewed without objection, as the case may be.

**Part 2.6 Compliance with Quality Management System**

The Primary Contractor shall ensure that:

- (a) the Primary Contractor complies with the Quality Management System detailed in the Quality Manual;
- (b) the Designer complies with the Design Quality Management Plan in connection with its design activities;
- (c) the Primary Contractor complies with the Design Quality Management Plan, the Construction Quality Management Plan, the Traffic Quality Management Plan and the Environmental Quality Management Plan in connection with all activities under this Agreement;

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- (d) any other party contracting with the Primary Contractor or any Subcontractor complies with the relevant Quality Management Plan prepared and implemented pursuant to Section 2.4 [Other Quality Management Plans] of this Schedule in connection with the activities covered by that party's contract with the Primary Contractor or Subcontractor (as the case may be); and
- (e) any person who performs any portion of the Work shall comply with the Quality Management System as it relates to that portion of the Work.

**Part 2.7 Continuous Improvement in Quality Management System**

- (a) The Primary Contractor shall implement a program and shall have mechanisms in place, such as management reviews and Quality Audit Programmes, to allow all identified opportunities for improvement to be recorded, tracked, implemented, closed out and followed up on to verify effectiveness of action taken.
- (b) The program shall be used to continually improve the effectiveness and efficiency of the Quality Management System.
- (c) The Primary Contractor shall ensure that all of the Primary Contractor's employees and Subcontractors and their employees are aware of the importance of continuous improvement and are actively engaged in its implementation in connection with the performance of the Work.

**Part 2.8 Performance Measures**

The Primary Contractor shall perform, comply with and satisfy the performance measures set out in this Schedule (indicated by the reference "PQ[XXX]") and, without limiting any other provision of this Agreement, the provisions of Part 5 [NCE Points and Default Points] of Schedule 9 [Performance Mechanism] shall apply if the Primary Contractor fails to perform, comply with and satisfy any such performance measure.

**Part 3**

**QUALITY DIRECTOR AND QUALITY MANAGERS**

**Part 3.1 Appointment of Quality Director and General Responsibilities**

- (a) The Primary Contractor shall employ a Quality Director who shall, irrespective of such person's other responsibilities, have defined authority for ensuring the establishment and maintenance of the Quality Management System and auditing and reporting on the performance of the Quality Management System, but in no case shall the Quality Director act as one or more of the Quality Managers appointed pursuant to Sections 3.3 [Appointment of Quality Managers and General Responsibilities] of this Schedule.
- (b) The Quality Director shall have successfully completed an ISO 9001 Lead Auditor Course, and shall either:
  - (i) hold certification as one of the following:
    - (A) QMS 2008 Auditor;

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- (B) QMS Auditor; or
- (C) Certified Quality Auditor; or
- (ii) demonstrate equivalent experience in a similar quality management representative role for a similar successful project as would otherwise be required for certification referred to in Section 3.1(b)(i) of this Schedule.
- (c) The identity of the Quality Director (and any replacement) and his job specification and responsibilities shall be subject to the approval of the Province's Representative (such approval not to be unreasonably withheld), and the Quality Director shall be a Key Individual subject to the requirements of Section 3.3 of Schedule 2 [Representatives, Review Procedure and Consent Procedure].

### **Part 3.2 Specific Responsibilities of Quality Director**

Without limiting the generality of the foregoing, the job specification and responsibilities of the Quality Director shall include the following:

- (a) developing, implementing and maintaining, and ensuring the effective operation of the Quality Management System;
- (b) initiating management reviews, not less frequently than annually, and taking other actions necessary to ensure the effective operation and continuous improvement of the Quality Management System;
- (c) preparing Quality Audit Programmes and scheduling and coordinating Internal Quality Audits and External Quality Audits of key processes with the Primary Contractor's personnel and with its Subcontractors (including the Designer);
- (d) ensuring that all Quality Audits required under Section 5.2 [Primary Contractor's Quality Audits] of this Schedule and under the Quality Documentation are conducted, and reporting the findings of such audits to the Province's Representative;
- (e) having the authority to immediately stop any work or activity which is not being performed or carried out in accordance with this Agreement;
- (f) liaising with the Province's Representative and acting as the primary representative for the Primary Contractor on all matters relating to quality management;
- (g) coordinating all matters and issues relating to the compliance of the Quality Management System with the ISO 9001:2008 Standard;
- (h) preparing and submitting to the Province's Representative monthly Quality Management System reports;
- (i) ensuring that relevant records are maintained and retained in accordance with the Quality Management System and the Records Management Protocol;
- (j) developing and implementing a program for Correction and, when applicable, Corrective Action in respect of Nonconformities;

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- (k) developing and implementing a program for Preventive Action in respect of potential Nonconformities; and
- (l) carrying out any other matters which, in accordance with this Agreement or Good Industry Practice, are the responsibility of the Quality Director.

**Part 3.3 Appointment of Quality Managers and General Responsibilities**

- (a) The Primary Contractor shall employ Quality Managers who shall, irrespective of such persons' other responsibilities, have defined responsibilities for ensuring the establishment and maintenance of each Quality Management Plan.
- (b) Unless the Province's Representative otherwise agrees, the Primary Contractor shall employ a different Quality Manager for each Quality Management Plan and each Quality Manager shall report information to the Quality Director.
- (c) The Quality Managers shall have experience in similar quality management representative roles for similar successful projects and shall have successfully completed an ISO 9001 Lead Auditor Course.

**Part 3.4 Specific Responsibilities of Quality Managers**

Without limiting the generality of the foregoing and without limiting the responsibilities of the Quality Director under Section 3.1 [Appointment of Quality Director and General Responsibilities] and Section 3.2 [Specific Responsibilities of Quality Director] of this Schedule, the job specification and responsibilities of the Quality Managers shall include the following:

- (a) developing, implementing and maintaining, and ensuring the effective operation of their respective Quality Management Plans;
- (b) taking actions necessary to ensure the effective operation and continuous improvement of their respective Quality Management Plans;
- (c) preparing Quality Audit Programmes and scheduling and coordinating Internal Quality Audits and External Quality Audits of key processes identified in their respective Quality Management Plans;
- (d) ensuring that all Quality Audits required under Section 5.2 [Primary Contractor's Quality Audits] of this Schedule and under the Quality Documentation are conducted, and reporting the findings of such audits to the Quality Director and the Province's Representative;
- (e) having the authority to immediately stop any work or activity, related to their respective Quality Management Plans, which is not being performed or carried out in accordance with this Agreement;
- (f) liaising with the Quality Director and the Province's Representative and acting as the representative to the Quality Director on all matters relating to their respective Quality Management Plans;
- (g) coordinating all matters and issues relating to the compliance of their respective Quality Management Plans with the ISO 9001:2008 Standard;

- (h) ensuring that relevant records are maintained and retained in accordance with their respective Quality Management Plans and the Records Management Protocol;
- (i) developing and implementing a program for Correction and, when applicable, Corrective Action in respect of Nonconformities applicable to their respective Quality Management Plans;
- (j) developing and implementing a program for Preventive Action in respect of potential Nonconformities applicable to their respective Quality Management Plans;
- (k) reporting information to the Quality Director; and
- (l) carrying out any other matters which, in accordance with this Agreement or Good Industry Practice, are the responsibility of the Quality Managers.

**Part 4**

**INSPECTION AND TESTING**

**Part 4.1 Inspection and Testing Requirements**

Where the Primary Contractor is required by this Agreement, any of the Design-Build Requirements, the Design and Construction Certification Procedures or any Quality Documentation to carry out any inspection, calibration, sample, test or trial, such inspection, calibration, sample, test or trial shall be carried out in accordance with the following provisions of this Part and the provisions of the relevant Quality Documentation.

**Part 4.2 Accreditation Standards**

- (a) All on and off Site inspections, calibrations, samples, tests and trials shall be carried out by testing facilities, laboratories and organizations that are duly accredited for the carrying out of such inspections, calibrations, samples, tests and trials.
- (b) Laboratory accreditation shall be in accordance with ISO/IEC 17025, provided that, for specific activities, the Province's Representative may accept other industry-recognized accreditation in lieu of ISO/IEC 17025, including:
  - (i) concrete and concrete materials: CSA A283-06, "Qualification Code for Concrete Testing Laboratories", to the appropriate category for the tests being done;
  - (ii) structural steel and welding: CSA W178.1-08, "Certification of Welding Inspection Organizations", to the level appropriate for the inspection being carried out;
  - (iii) aggregates, bituminous paving mixtures: "Canadian Council of Independent Laboratories", as appropriate to the Work being carried out; and
  - (iv) protective coatings: "NACE International", as appropriate to the work being carried out.
- (c) The Primary Contractor may request the approval of the Province's Representative to use other industry-recognized accreditations, which approval shall not be unreasonably

withheld, if such other accreditation is applicable to the Work for which it is proposed and meets the intent of ISO/IEC 17025.

**Part 4.3 Inspection and Test Plan**

(a) Performance Measures

PQ4.3(a)-1

The Primary Contractor shall prepare and submit each Inspection and Test Plan in respect of the Work to the Province's Representative pursuant to the Consent Procedure for acceptance by the Province's Representative acting reasonably at least 45 days prior to performing the relevant Work and, in any event, the Primary Contractor shall not perform the relevant Work until the Province's Representative has accepted the Inspection and Test Plan.

(b) Specific Requirements

Each Inspection and Test Plan shall detail, to the satisfaction of the Province's Representative, all major on and off Site inspection, calibration, sample, test or trial activities for Work performed by the Primary Contractor and its Subcontractors and suppliers of any tier. The Inspection and Test Plan shall, at a minimum, include:

- (i) description of the inspection, calibration, sample, test or trial activity;
- (ii) reference to inspection, calibration, sample, test or trial method;
- (iii) frequency and number and time schedule of inspections, calibration, sample, test or trial;
- (iv) reference to standards, codes, specifications, and acceptance criteria;
- (v) reports and checklists required;
- (vi) personnel or agency responsible for inspection, calibration, sample, test or trial activity;
- (vii) quality assurance review, all Hold Points and all Witness Points;
- (viii) when applicable, description and frequency of geotechnical instrumentation monitoring and adherence to acceptance criteria; and
- (ix) other records generated as evidence of the inspection, calibration, sample, test or trial activity.

**Part 4.4 Notice of Inspection and Testing**

- (a) The Primary Contractor shall provide the Province's Representative with written notice at least 2 Business Days in advance of all inspections, calibrations, samples, tests or trials referred to in this Schedule, except for categories of inspections, calibrations, samples, tests or trials in respect of which the Province's Representative gives written notice to the Primary Contractor that it does not require such advance notice. Notwithstanding the foregoing, where, in the Primary Contractor's opinion, acting reasonably, it is impractical for the Primary Contractor to provide at least 2 Business Days' written notice for a

specific inspection, calibration, sample, test or trial, the Primary Contractor may request a variation to the notice requirements of this Section 4.4(a) by submitting such request to the Province's Representative for acceptance, acting reasonably, in accordance with the Consent Procedure.

- (b) The Province's Representative shall be entitled to attend any inspections, calibrations, samples, tests or trials referred to in this Schedule.

#### **Part 4.5 Recording and Reporting**

- (a) The Primary Contractor shall develop an inspection and test recording system which shall permit ready retrieval of all inspection, calibration, sample, test or trial results and readings and the Primary Contractor shall provide such results and readings to the Province's Representative upon request.
- (b) With respect to continuous inspection and testing operations, including the inspection and testing of concrete quality, structural concrete strengths, aggregate quality, compaction tests and bituminous material quality, the Primary Contractor shall provide the Province's Representative with inspection and test summary sheets and statistical analyses indicating strength and quality trends, on a weekly or more regular basis unless otherwise agreed to by the Province.

#### **Part 4.6 Remedial Work**

The Primary Contractor shall be responsible at its own expense for any remedial work required as a result of any failure to pass any inspection, calibration, sample, test or trial required in accordance with this Agreement, any of the Design-Build Requirements, the Design and Construction Certification Procedures or any Quality Documentation or as a result of any testing facility, laboratory or organization not being duly accredited as required by Section 4.2 [Accreditation Standards] of this Schedule.

### **Part 5**

## **QUALITY AUDITS AND MONITORING**

### **Part 5.1 Quality Audit Programmes**

#### **(a) Performance Measures**

##### **PQ5.1(a)-1**

The Primary Contractor shall prepare and submit the Quality Audit Programmes in respect of the Work to the Province's Representative pursuant to the Review Procedure for review by the Province's Representative acting reasonably not later than 90 days from the Effective Date.

##### **PQ5.1(a)-2**

The Primary Contractor shall prepare and submit updated Quality Audit Programmes in respect of the Work to the Province's Representative pursuant to the Review Procedure for review by the Province's Representative acting reasonably at twelve month intervals thereafter.

#### **(b) Specific Requirements**

Quality Audit Programmes shall detail, to the satisfaction of the Province's Representative, the Internal Quality Audits and the External Quality Audits that shall be

conducted by the Primary Contractor on its own processes and those of its Subcontractors, and the planned dates of such Quality Audits, in upcoming 12 month intervals.

**Part 5.2 Primary Contractor's Quality Audits**

(a) General

The Primary Contractor shall conduct Internal Quality Audits and External Quality Audits of its own processes and those of its Subcontractors (including the Designer) in accordance with the ISO 19011:2002 Standard and the requirements of this Schedule, the Quality Documentation and the Quality Audit Programmes referred to therein. The Primary Contractor shall prepare a Quality Audit Plan for each audit and shall provide the Quality Audit Plan in advance to the Primary Contractor's personnel (with respect to an Internal Quality Audit) and to its Subcontractors (with respect to an External Quality Audit) to confirm the scope and schedule of an audit. The purpose of the Primary Contractor's quality auditing process is to confirm that all activities comprising the Work are in compliance with those documented in the Quality Manual and Quality Management Plans, and to identify all opportunities for improvement and all Nonconformities and the necessary Correction, Corrective Actions and Preventive Actions.

(b) Performance Measures

PQ5.2(b)-1

The Primary Contractor shall schedule Internal Quality Audits and External Quality Audits to ensure that all key processes and elements of the Quality Management System are reviewed regularly (at least annually).

PQ5.2(b)-2

The Primary Contractor shall prepare a Quality Audit Plan of Internal Quality Audits and External Quality Audits to confirm the scope and schedule in advance of an audit.

PQ5.2(b)-3

Within 14 days of completion of any Quality Audit, the Primary Contractor shall document, or cause to be documented, the results of such Quality Audit in an audit report and make such report available to the Province's Representative.

(c) Specific Requirements

- (i) Where necessary, follow-up audits shall be scheduled to ensure that identified Correction, Corrective Actions and Preventive Actions are carried out in a timely and effective fashion.
- (ii) Internal Quality Audits and External Quality Audits shall be scheduled taking into account the status and importance of the processes being audited as well as the results of previous audits.

**Part 5.3 Province's Quality Audits**

(a) General

The Province's Representative shall, pursuant to the submission of the Quality Documentation in accordance with this Schedule, review the Quality Documentation and

any other documentation to identify the activities and processes on which the Province's auditing efforts and resources should be focussed. The Province shall determine the frequency of auditing through regular and ongoing review of the Primary Contractor's performance and management systems. Work procedures and activities that show good audit performance may have the frequency of auditing decreased, while those that show poor performance or increased risk may have the frequency of auditing increased. The Primary Contractor shall provide, and shall ensure its Subcontractors provide, the Province's auditors with all documentation, records, on and off site access, facilities and assistance for the safety and convenience of the Province's Representative and the Province's auditors.

(b) Types of Quality Audits

The following two types of Quality Audits may be conducted by, or on behalf of, the Province in its discretion for the purposes of this Schedule, including in respect of the Quality Manual and each of the Quality Management Plans:

- (i) Surveillance Quality Audits – Scheduled or unscheduled on and off-site audits conducted on a random basis or on specific areas of interest as determined by the Province's Representative from time to time or as otherwise required by any other provision of this Agreement. The objective of these surveillance audits is to monitor the Primary Contractor's activities involving the Work, including its work practices, workmanship, performance measures, general quality of materials, and compliance with the Quality Manual and the Quality Management Plans and other requirements of this Agreement. The Province's Representative shall, during the performance by the Province of Surveillance Quality Audits, record any observations and inform the Primary Contractor of any apparent Nonconformity that requires further evaluation. Any apparent Nonconformity noted shall be resolved to the satisfaction of the Province's Representative through evidence of the Primary Contractor's evaluation findings or the Nonconformity process.
- (ii) Quality Management System Audits – Scheduled audits conducted at specific times to assess the performance of and compliance with the Quality Management System. The Province's lead auditor shall provide the Quality Director with a Quality Audit Plan in advance of an audit to confirm the scope and schedule of the audit. At the opening meeting with the Primary Contractor, the Province's lead auditor shall review the audit scope and objectives. The Province's auditors shall conduct audit interviews, document any observations, evaluate the observations, and identify observed procedural or performance Nonconformities that require Correction and, if applicable, Corrective Action. At the closing meeting with the Primary Contractor, the Province's lead auditor shall discuss the observations and inform the Primary Contractor of any observed Nonconformities and audit recommendations.

(c) Additional Information

Additional information relating to the Province's Quality Audits with respect to the Quality Manual or particular Quality Management Plans is identified in the Appendices to this Schedule.

**Part 5.4 Nonconformities**

- (a) In respect of any Nonconformity noted or observed during Quality Audits referred to in Section 5.3(b) of this Schedule or noted or observed at any other time, that is not resolved to the satisfaction of the Province's Representative, the Province reserves the right to issue a Nonconformity Report to the Primary Contractor.
  
- (b) Performance Measure  
PQ5.3(c)(ii)-1 The Primary Contractor shall propose a Correction and, if applicable, shall prepare a Corrective Action plan for submission to the Province's Representative within 10 Business Days of completion of a Quality Audit referred to in Section 5.3(b) of this Schedule and the detection of a Nonconformity.
  
- (c) The Province reserves the right to conduct follow up reviews, on reasonable notice to the Primary Contractor, to determine if the Primary Contractor's Correction and, if applicable, Corrective Action plan has been implemented, completed and found to be effective.

**Part 5.5 Province Monitoring**

In addition to carrying out any scheduled and unscheduled External Quality Audits of the Quality Management System (including compliance with all Quality Documentation) as provided in Section 5.3 [Province's Quality Audits] of this Schedule, the Province's Representative may, at its discretion, monitor and verify the operation of the Quality Management System by, among other things, carrying out spot checks and making independent inspections and tests of any plant or material including any plant or material which fails any test or is suspected by the Province's Representative of not complying with the requirements of this Agreement. Such monitoring and verification of the Quality Management System by the Province's Representative shall not relieve the Primary Contractor of its responsibility to comply with the requirements of this Schedule, and the Primary Contractor shall not rely on such monitoring and verification for its own quality control and quality assurances.

**Part 5.6 Deficient Quality Audits**

If either:

- (i) the Province's Representative believes that the Primary Contractor is failing to conduct Quality Audits of its Quality Management System as required by this Agreement in any material respect or if such Quality Audits are not conducted in accordance with the ISO 9001:2008 Standard or the ISO 19011:2002 Standard by personnel competent to conduct such Quality Audits; or
  
- (ii) any auditing, monitoring or spot checks of the Quality Management Systems reveal deficiencies in the Quality Management System or the implementation thereof,

the Province's Representative may carry out increased levels of External Quality Audits (whether in number, duration or detail) of all or any aspect of the Quality Management System until such time as the Province's Representative is satisfied that none of the circumstances described in this Section continue to exist.



**Part 5.7 Costs of Audits**

If the Province's Representative carries out any audit pursuant to Section 5.3 [Province's Quality Audits], Section 5.5 [Province Monitoring] or Section 5.6 [Deficient Quality Audits] of this Schedule and the results of such audit shows any Nonconformity in respect of the Work, then, without limiting any other rights and remedies of the Province, the Province may require the Primary Contractor to compensate the Province for all costs incurred in carrying out such audit (including the relevant administrative expenses of the Province, including an appropriate sum in respect of general staff costs and overheads). All other audits carried out by the Province's Representative pursuant to Section 5.3 [Province's Quality Audits], Section 5.5 [Province Monitoring] or Section 5.6 [Deficient Quality Audits] of this Schedule shall be at the cost of the Province.

**Part 5.8 Traffic and Transit Facilities Management Auditing**

(a) General

- (i) In addition to the requirements of Section 5.1 [Quality Audit Programmes] of this Schedule and without limiting any other provisions of this Agreement, the Primary Contractor shall develop and implement a Traffic Management Audit Programme and Transit Facilities Management Audit Programmes in accordance with this Schedule.
- (ii) The Traffic Management Audit Programme shall provide the framework for auditing the safety, conformance, and overall management of traffic within the Site against the requirements contained in the Traffic Management Plan, the Traffic Control Manual and Part 4 [Traffic Management] of Schedule 4.
- (iii) The Transit Facilities Management Audit Programme shall provide the framework for auditing the safety, conformance, and overall management of transit facilities within the Site against the requirements contained in each of the Transit Facility Construction Integration Plans and the requirements of Article 18 [Integration of Transit Facilities] of Part 2 of Schedule 4.
- (iv) The requirements relating to the development and implementation of the Traffic Management Audit Programme and the Transit Facilities Management Audit Programme are in addition to, and do not limit any other provision of this Agreement, including Part 7 [Nonconformities] of this Schedule and Schedule 9 [Performance Mechanism], or any other right or remedy available to the Province under this Agreement.

(b) Performance Measures

PQ5.7(b)-1

The Primary Contractor shall prepare and submit the Traffic Management Audit Programme in respect of the Work to the Province's Representative pursuant to the Consent Procedure for acceptance by the Province's Representative acting reasonably not later than 10 Business Days from the submittal and approval of the Traffic Management Plan.

PQ5.7(b)-2

The Primary Contractor shall prepare and submit the Transit Facilities Management Audit Programme (and any update to the Transit Facilities Management Audit Programme, as applicable) in respect of the Work to the Province's Representative pursuant to the Consent Procedure for acceptance by

the Province's Representative acting reasonably not later than 10 Business Days from the submittal and approval of each Transit Facility Construction Integration Plan.

**Part 6**

**QUALITY DOCUMENTATION**

**Part 6.1 Principles**

The minimum requirements and principles which apply to the Quality Documentation are set out in Appendices A to E inclusive to this Schedule. The Primary Contractor's Quality Management System shall also comply with the requirements and principles of the ISO 9001:2008 Standard, the ISO 19011:2002 Standard, the ISO 9004:2009 Standard, this Schedule, and the ISO 9000:2005 Standard principles, including:

- (a) customer focus;
- (b) leadership;
- (c) involvement of people;
- (d) process approach;
- (e) system approach to management;
- (f) continual improvement;
- (g) factual approach to decision making; and
- (h) mutually beneficial supplier relationships.

**Part 6.2 ISO Reference Documents**

Without limiting the requirement of the Quality Management System to comply with the ISO 9001:2008 Standard or any other requirement in this Schedule, the Primary Contractor's Quality Management System shall also incorporate the requirements of the following reference documents:

- (a) ISO 9001:2008 Standard;
- (b) ISO 9004:2009 Standard;
- (c) ISO 9000:2005 Standard; and
- (d) ISO 19011:2002 Standard.

**Part 6.3 Quality Documentation Requirements**

The minimum documentation requirements for the Quality Management System are:

- (a) the Quality Manual as required pursuant to Section 2.3 [Quality Manual and Quality Management Plan Deliverables] of this Schedule;

- (b) Quality Management Plans for all aspects of the Work as required pursuant to Section 2.3 [Quality Manual and Quality Management Plan Deliverables] of this Schedule;
- (c) that the following are included in each Quality Management Plan:
  - (i) quality system procedures and process flow charts documenting who does the work, what they do, and what evidence shall be generated that they have done the work correctly on quality related activities;
  - (ii) the Quality Audit Programmes required pursuant to Section 5.1 [Quality Audit] of this Schedule;
- (d) the Work Method Statements;
- (e) Inspection and Test Plans; and
- (f) the Records required pursuant to Section 6.8 [Records] of this Schedule.

**Part 6.4 Submission of other Documents with Quality Documentation**

If any Quality Documentation relies on or incorporates any quality manual, plan, procedure, external reference document or like document then such quality manual, plan, procedure, external reference document or other document or the relevant parts thereof shall (unless the Province's Representative otherwise agrees) be submitted to the Province's Representative at the time that the relevant Quality Documentation or part thereof or change, addition or revision to the Quality Documentation is submitted in accordance with the Consent Procedure or the Review Procedure or otherwise, as the case may be, and the contents of such quality manual, plan, procedure, external reference document or other document shall be taken into account in the consideration of the relevant Quality Documentation or part thereof or change, addition or revision to the Quality Documentation in accordance with the Consent Procedure or the Review Procedure or otherwise, as the case may be. The Province's Representative may require the amendment of any such quality manual, plan, procedure, external reference document or other document to the extent necessary to enable the relevant Quality Documentation to satisfy the requirements of this Schedule.

**Part 6.5 Primary Contractor Obligation to Update**

The Primary Contractor shall be responsible for updating its Quality Management System and all Quality Documentation from time to time, in accordance with the procedures set forth in this Agreement, to ensure that the Quality Management System and all Quality Documentation are, and at all times remain, in full compliance with the ISO 9001:2008 Standard and the requirements of this Agreement.

**Part 6.6 Changes to Quality Documentation**

- (a) The Primary Contractor may submit to the Province's Representative in accordance with the Review Procedure for review by the Province's Representative acting reasonably any proposed changes or additions to or revisions of any of the Quality Documentation.
- (b) Without limiting the generality of Section 6.6(a) of this Schedule, the Primary Contractor shall from time to time submit to the Province's Representative in accordance with the Review Procedure for review by the Province's Representative acting reasonably any changes to any of the Quality Documentation required for such Quality Documentation to

continue to be relevant and effective and to reflect and comply with the requirements set out in this Schedule.

- (c) If the Primary Contractor does not propose a change that the Province considers is required pursuant to Section 6.6(b) of this Schedule and the Primary Contractor does not agree that the change proposed by the Province is required, the requirement for such change shall be resolved in accordance with the Dispute Resolution Procedure.

**Part 6.7 Amendment of Quality Documentation**

If there is no unresolved objection by the Province's Representative under the Review Procedure to a change, addition or revision proposed pursuant to Section 6.6 [Changes to Quality Documentation] of this Schedule, then the Quality Documentation shall be amended to incorporate such part, change, addition or revision.

**Part 6.8 Records**

- (a) The Primary Contractor shall establish and maintain complete and accurate quality management records, which shall form part of the Records.
- (b) The Records shall provide objective evidence of conformance with all requirements of this Agreement, compliance with the ISO 9001:2008 Standard and the effective operation of the Quality Management System.

**Part 6.9 Quality Management System Reports**

(a) Performance Measures

PQ6.9(a)-1

For each month until the Total Completion Date, the Primary Contractor shall prepare and submit to the Province's Representative within 15 Business Days of the start of the following month a comprehensive Quality Management System report.

(b) Specific Requirements

- (i) The monthly Quality Management System reports provided by the Primary Contractor pursuant to Section 6.9(a) [Performance Measures] of this Schedule shall address all quality management activities under each of the Quality Management Plans for that month and any outstanding quality issues from prior months.
- (ii) The monthly Quality Management System reports provided by the Primary Contractor pursuant to Section 6.9(a) [Performance Measures] of this Schedule shall, as a minimum, include the following information separately identified for the Quality Manual and for each Quality Management Plan:
  - (A) a Nonconformity Report log summarizing the Nonconformity Tracking System and providing the following in respect of each Nonconformity Report: "description of Nonconformity", "date open", "date closed", "status" (open, pending, closed), "description of Correction" (i.e., Repair, Rework, Reject, Use As Is) and "description of status" which describes

the current status of the Nonconformity Report, when closed and how it was closed;

- (B) Corrective Action log providing details of the Corrective Actions performed to date and their close-out status;
- (C) Preventive Action documentation providing details of each Preventive Action performed and the close-out status;
- (D) a summary of any inspection and testing activities conducted during the month;
- (E) Internal Quality Audits and External Quality Audits performed during the month and any proposed changes to the four month look-ahead schedule for planned future Quality Audits;
- (F) any continual improvement initiatives taken during the month including those implemented as a result of Preventive Actions;
- (G) any other information required to be included in the monthly Quality Management System reports pursuant to any of the Appendices to this Schedule or the terms of the relevant Quality Management Plan; and
- (H) any changes made to the Quality Management System or the Quality Documentation in compliance with the provisions of this Agreement.

#### **Part 6.10 Additional Information**

Notwithstanding any other provision of this Agreement including this Schedule, the Primary Contractor shall provide the Province's Representative with such information as the Province's Representative may request from time to time to demonstrate compliance with this Schedule.

#### **Part 7**

### **NONCONFORMITIES**

#### **Part 7.1 Nonconformity Reporting Process**

The Nonconformity Report process, from initial creation through to closeout, shall follow the process outlined in this Section 7.1 and such process shall apply until the expiry of the General Work Defect Warranty Period.

- (a) If the Primary Contractor or the Province discovers a Nonconformity at any time, it shall initiate a Nonconformity Report in accordance with the ISO 9001:2008 Standard and as follows:
  - (i) Primary Contractor initiated Nonconformity Reports - Upon discovery of a Nonconformity, the Primary Contractor shall, within two Business Days of discovering the Nonconformity, issue a Nonconformity Report identifying the problem and provide a copy to the Province's Representative; or

- (ii) Province initiated Nonconformity Reports - If at any time the Province is notified, or otherwise becomes aware, of any Nonconformity, or if the Province is not satisfied with the Nonconformity Report issued by the Primary Contractor in accordance with Section 7.1(a)(i) of this Schedule, the Province’s Representative may, without prejudice to any other right or remedy available to the Province, including the assignment of NCE Points and/or Default Points pursuant to Schedule 9 [Performance Mechanism], issue a Nonconformity Report.
- (b) The Nonconformity Report shall be issued to the Quality Director, thereby activating the Nonconformity Report. The date and time of issue shall be recorded denoting the commencement of the time period for which the Nonconformity Report has an ‘open’ status.
- (c) The Quality Director shall in response to the Nonconformity Report describe a Correction of the Nonconformity and, if applicable, a Corrective Action, in accordance with the ISO 9001:2008 Standard. Acceptable responses are set out in Table 7.1(c) for various scenarios. The Quality Director shall also specify a response time by when the Correction of the Nonconformity shall have been implemented.

**Table 7.1(c) Acceptable Responses to Nonconformity Reports**

<b>Status of Nonconformity</b>	<b>Correction</b>	<b>Corrective Action (if applicable)</b>
Correction has been undertaken	Describe nature of the Correction (i.e., Rework, Repair, Reject, Use As Is). Provide confirmation that the Correction has remedied (if applicable) the Nonconformity.	Describe any improvements to process to prevent reoccurrence. Provide a plan committing to scope and timing of the Corrective Action.
Correction is proposed	Describe nature of the Correction (i.e., Rework, Repair, Reject, Use As Is). Provide a plan committing to scope and timing of Correction.	Describe any improvements to process to prevent reoccurrence. Provide a plan committing to scope and timing of the Corrective Action.
Objection to NCR and no Correction is proposed	N/A	N/A

- (d) The Primary Contractor shall investigate and respond to all Nonconformity Reports.
- (e) The Primary Contractor shall rectify each Nonconformity in accordance with the Correction and, if applicable, the Corrective Action described by the Quality Director pursuant to Section 7.1(c) of this Schedule. The Nonconformity shall be rectified within the timeline described in the Nonconformity Report by the response time specified by the Quality Director.
- (f) The Primary Contractor may object to the issuance of any Nonconformity Report by the Province’s Representative. If such objection has not been resolved by mutual agreement between the Province’s Representative and the Primary Contractor within 5 Business Days of delivery by the Primary Contractor to the Province’s Representative of notice of

the objection, then either party may refer the matter to the Dispute Resolution Procedure for determination.

- (g) If the Primary Contractor fails to object to the issue by the Province's Representative of a Nonconformity Report within 5 Business Days, the Primary Contractor is deemed to have accepted that Nonconformity Report.
- (h) The Primary Contractor shall, after rectifying the Nonconformity in accordance with Section 7.1(e) of this Schedule, return the Nonconformity Report to the Quality Director for verification and acceptance, at which time the Quality Director shall record the date of return denoting the end of the time period for which the Nonconformity Report has an 'open' status.
- (i) The Quality Director shall then change the Nonconformity Report status to 'closed' and shall provide a copy of the Nonconformity Report to the Province's Representative within 2 Business Days thereafter.

### **Part 7.2 Nonconformity Report Tracking System**

The Primary Contractor shall implement and maintain a Nonconformity Tracking System satisfactory to the Province to monitor the status of all Nonconformity Reports initiated by the Province and the Primary Contractor.

(a) Performance Measure

**PQ7.2(a)-1**

The Nonconformity Tracking System shall be fully operating, with the following minimum requirements, within 90 days from the Effective Date:

- (i) comprise a single repository containing both Primary Contractor and Province initiated Nonconformity Reports;
- (ii) have the ability to attach supporting material such as photos and documents;
- (iii) provide live access to the current Nonconformity Report status to both the Primary Contractor and Province;
- (iv) apply NCE Points to each Nonconformity in accordance with Schedule 9 [Performance Mechanism]; and
- (v) produce monthly summary Reports for delivery to the Province's Representative of outstanding Nonconformity Reports, NCE Points and Default Points accrued within each performance threshold category in any given month, and the total NCE Points and Default Points accrued across all performance threshold categories in any given month.

### **Part 7.3 Unremedied Nonconformity**

The Province's Representative may issue further Nonconformity Reports if a Nonconformity identified in a Nonconformity Report continues unremedied and, whether or not a further Nonconformity Report is issued, NCE Points and Default Points shall be assigned in respect of such unremedied Nonconformity in accordance with Part 5 [NCE Points and Default Points] of Schedule 9 [Performance Mechanism].

**Part 7.4 Nonconformity Records**

In addition to the maintenance of the Nonconformity Tracking System under Section 7.2 [Nonconformity Report Tracking System] of this Schedule, the Primary Contractor shall maintain records of:

- (a) each Nonconformity;
- (b) the reference numbers of all Nonconformity Reports;
- (c) a description of all Nonconformity Reports;
- (d) the proposed Correction by the Primary Contractor to rectify each Nonconformity and, if applicable, the proposed Corrective Action;
- (e) the date and time at which Nonconformities were identified; and
- (f) the date and time at which a Nonconformity specified in a Nonconformity Report was rectified.



**APPENDIX A  
QUALITY MANUAL**

1. The Primary Contractor shall provide a comprehensive Quality Manual that describes the Quality Management System for all aspects of the Work including the Design and Construction. The Quality Manual shall establish the Quality Policy and Quality Objectives for all aspects of the Work and, in accordance with the requirements of the ISO 9001:2008 Standard, shall describe the processes that shall be established, implemented, controlled and continually improved to achieve the established Quality Objectives.
2. The Quality Objectives shall be specific, measurable, achievable, results focussed, timely, and consistent with the Quality Policy and linked to meeting the needs and performance expectations of the Province in respect of the Work. The Quality Management System described in the Quality Manual shall include all the activities required to achieve these Quality Objectives, including project controls such as scope, cost, schedule and general document control management activities. All of these activities shall be subject to Internal Quality Audits and External Quality Audits.
3. The Quality Manual shall describe the nature of the Primary Contractor's organization involved in performing the Work and how key management activities (such as project controls; Design; Construction; Traffic Management; and environmental) shall interface with each other. The Quality Manual shall also provide the organization chart, authority and responsibilities of all key personnel. The Quality Manual shall also show how the various levels of Quality Management System documentation are linked together.
4. The Quality Manual shall clearly define the reporting function and authority of the Primary Contractor's Quality Director, who shall liaise with the Province's Representative and act as the single point representative of the Primary Contractor for all matters relating to quality management.

**APPENDIX B  
DESIGN QUALITY MANAGEMENT PLAN**

1. The Primary Contractor shall provide a comprehensive Design Quality Management Plan that describes how it intends to manage the design processes for the Work in accordance with the ISO 9001:2008 Standard, the Quality Management System requirements stated in the Quality Manual and the provisions of this Agreement.
2. The Design Quality Management Plan shall contain an organizational chart identifying key design management personnel and the linkage with the Quality Director for the Primary Contractor's overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications and authority of the above personnel and the organizational interfaces between other engineering groups and construction disciplines. The Design Quality Management Plan shall address all phases and aspects of the Work, including Design and Construction.
3. The Design Quality Management Plan shall, at a minimum, include or reference detailed quality system procedures and process flow charts for the following processes:
  - (a) design input and output review;
  - (b) design verification to ensure that design input requirements have been met;
  - (c) design validation to ensure that the final product is capable of meeting its intended use;
  - (d) design changes;
  - (e) control of nonconforming product;
  - (f) compliance with design and construction certification requirements;
  - (g) design subcontractor quality assessment and procurement;
  - (h) External Quality Audits of design subcontractor(s);
  - (i) Internal Quality Audits;
  - (j) Corrective Actions and Preventive Actions;
  - (k) document management;
  - (l) control of Records; and
  - (m) any mandatory documented procedures in addition to the foregoing in accordance with the ISO 9001:2008 Standard.

The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

**APPENDIX C  
CONSTRUCTION QUALITY MANAGEMENT PLAN**

1. The Primary Contractor shall provide a comprehensive Construction Quality Management Plan that describes how it intends to manage the Construction processes in connection with the Work in accordance with the ISO 9001:2008 Standard, the Quality Management System requirements stated in the Quality Manual and the provisions of this Agreement.
2. The Construction Quality Management Plan shall contain an organizational chart identifying key Construction management personnel and the linkage with the Quality Director for the Primary Contractor's overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications and authority of the above personnel and the organizational interfaces between the Construction and other disciplines such as design, environmental management and Traffic Management. The Construction Quality Management Plan shall address all phases and aspects of the Work, including Design and Construction.
3. The Construction Quality Management Plan shall, at a minimum, include or reference detailed quality system procedures and process flow charts for the following processes:
  - (a) construction safety audits;
  - (b) inspection, testing and monitoring;
  - (c) materials identification and traceability;
  - (d) Subcontractors' quality assessment and procurement;
  - (e) External Quality Audits of Subcontractors;
  - (f) Internal Quality Audits;
  - (g) control of nonconforming product;
  - (h) Corrective Actions and Preventive Actions;
  - (i) document management;
  - (j) control of Records; and
  - (k) any mandatory documented procedures in addition to the foregoing in accordance with the ISO 9001:2008 Standard.

The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

**APPENDIX D  
TRAFFIC QUALITY MANAGEMENT PLAN**

1. The Primary Contractor shall provide a comprehensive Traffic Quality Management Plan that describes how it intends to administer the Traffic Management processes in connection with the Work in accordance with the ISO 9001:2008 Standard, the Quality Management System requirements stated in the Quality Manual and the provisions of this Agreement.
2. The Traffic Quality Management Plan shall contain an organizational chart identifying key Traffic Management personnel and the linkage with the Quality Director for the Primary Contractor's overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications and authority of the above personnel and the organizational interfaces between the Traffic Management and other disciplines such as design, construction, and environmental management. The Traffic Quality Management Plan shall address all phases and aspects of the Work, including Design and Construction.
3. The Traffic Quality Management Plan shall, at a minimum, include or reference detailed quality system procedures and process flow charts for the following processes:
  - (a) Traffic Control Plan design input and output review;
  - (b) Traffic Control Plan design verification to ensure that design input requirements have been met;
  - (c) Traffic Control Plan design validation to ensure that the final product is capable of meeting its intended use;
  - (d) Traffic Control Plan design changes;
  - (e) Implementation Plan;
  - (f) Advisory Signing Plan;
  - (g) risk assessment plan;
  - (h) Subcontractors' quality assessment and procurement;
  - (i) External Quality Audits of Subcontractors;
  - (j) Internal Quality Audits;
  - (k) control of nonconforming activities and/or product;
  - (l) Corrective Actions and Preventive Actions;
  - (m) document management;
  - (n) control of Records; and
  - (o) any mandatory documented procedures in addition to the foregoing in accordance with the ISO 9001:2008 Standard.

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The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

4. When the above processes are already covered as part of another Quality Management Plan, the process heading shall still be identified as part of the Traffic Quality Management Plan; however the details may be minimized to a reference to the other Quality Management Plan and section or paragraph where the relevant details are provided. The referenced Quality Management Plan and section or paragraph must indicate specific requirements with regards to the above processes as it relates to traffic quality management. Notwithstanding the foregoing, processes that fall within the specific requirements of the Traffic Management Plan must include detailed quality system procedures and process flow charts under the Traffic Quality Management Plan.

**APPENDIX E  
ENVIRONMENTAL QUALITY MANAGEMENT PLAN**

1. The Primary Contractor shall provide a comprehensive Environmental Quality Management Plan that describes how it intends to manage the environmental components of the Work in accordance with the ISO 9001:2008 Standard, the Quality Management System requirements stated in the Quality Manual and the provisions of this Agreement. The Environmental Quality Management Plan shall address all phases and aspects of the Work, including Design and Construction, and shall generally follow ISO 9001:2008 Standard formatting.
2. The Environmental Quality Management Plan shall contain an organizational chart identifying key environmental management personnel and the linkage with the Quality Director for the Primary Contractor's overall Quality Management System as documented in the Quality Manual. It shall also contain a description of the responsibilities, qualifications and authority of the above personnel and the organizational interfaces between the design and other disciplines.
3. The Environmental Quality Management Plan shall include or reference detailed quality system procedures and process flow charts for the following processes:
  - (a) satisfying and ensuring compliance with the Primary Contractor's Environmental Obligations, including the preparation and implementation of an Environmental Management Plan and specific plans as detailed elsewhere in this Agreement;
  - (b) obtaining and maintaining Permits;
  - (c) environmental monitoring and reporting;
  - (d) environmental incident reporting and tracking;
  - (e) External Quality Audits of Subcontractors;
  - (f) Internal Quality Audits;
  - (g) control of nonconforming services or products;
  - (h) Corrective Actions and Preventive Actions;
  - (i) document management;
  - (j) control and retention of Records; and
  - (k) any mandatory documented procedures in addition to the foregoing in accordance with the ISO 9001:2008 Standard.

The above procedures and flow charts shall document who does the work, what they do, and what evidence is generated that they have done the work correctly.

4. The Province's Representative, in the course of its Quality Documentation review, shall pay particular attention to the Primary Contractor's Environmental Quality Management Plan to verify that the Primary Contractor has taken full responsibility for all of the environmental requirements as specified in the Primary Contractor's Environmental Obligations and elsewhere

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in this Agreement, including obtaining approvals from relevant Governmental Authorities and other environmental requirements as provided in this Agreement.

5. In addition to the specific requirements set out in Section 6.9(b) of this Schedule, the Primary Contractor's monthly Quality Management System reports shall include a summary of all environmental quality management activities during each month and:
  - (a) environmental monitoring reports;
  - (b) copies of any and all environmental Permits obtained since the previous reporting period, as well as steps taken to obtain any outstanding required environmental permits, approvals and licenses and the results thereof; and
  - (c) steps taken to implement, comply with and satisfy the Primary Contractor's Environmental Obligations including compliance with Environmental Laws and the other environmental requirements contained in this Agreement.