



164-2010 ADDENDUM 1

2010 ACTIVE TRANSPORTATION / INFRASTRUCTURE STIMULUS PROGRAM WILKS AVENUE BIKE PATH, WAVERLEY STREET MULTI-USE PATH AND SEEL AVENUE MULTI-USE PATH

URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID OPPORTUNITY

ISSUED: March 29, 2010
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THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

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Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid may render your Bid non-responsive.

PART E – SPECIFICATIONS

Add:

E13 Operating Constraints for Work in Close Proximity to the Branch Aqueduct and Feedermain on Somerville Avenue

E13.1 Description

- (a) This Specification details operating constraints for all Work to be carried out in close proximity to the Aqueduct and Feedermain on Somerville Avenue. Close proximity shall be deemed to be any construction activity within a 3 m offset from the centreline of the Feedermain or Aqueduct. Typical construction methods in close proximity to the Feedermain on Wilks Avenue and Waverley Street will be permitted.

E13.2 Planning and General Execution

- (a) No work shall commence until the Water and Waste Department has been notified a minimum of 5 business days in advance of construction.
- (b) No work shall commence at the site until a Construction Method Statement (procedures, equipment and sequencing) is in place and has been reviewed by the Water and Waste Department.
- (c) The Contractor shall ensure that all work crew members understand and observe the requirements of this Specification. Prior to commencement of on-Site work, the Contractor shall jointly conduct an orientation meeting with the Contractor Administrator for all superintendents, foremen and heavy equipment operators to make sure all workers on site are fully cognizant of the limitations of altered loading on the Aqueduct and Feedermain, the ramifications of inadvertent damage to the pipelines, the constraints associated with Work in close proximity to the Aqueduct and Feedermain and the specific details of the Construction Method Statement in instances where a Construction Method Statement is in effect.
- (d) Employees of the Contractor or any Subcontractor that fail to comply with the conditions for working in close proximity to the Feedermain shall be promptly removed from the Site.
- (e) The Aqueduct and Feedermain locations shall be clearly delineated (centreline and outside limits) in the field and recommended pipeline offsets marked.
- (f) Phasing of construction to minimize time periods where the Aqueduct and Feedermain are exposed to potential risks should be considered.
- (g) The top of pipeline elevations relative to the proposed pathway pavement shall be adequately verified by the Contract Administrator. Verification will be completed at structure access points. Deviations from the

record drawing elevations shall be reported to the Water and Waste Department for review prior to construction of the subgrade.

- (h) While the Aqueduct and Feedermain will support long term loading, construction loads can be well in excess of long term conditions. Work over the Aqueduct and Feedermain shall only be carried out with equipment that has been reviewed and quantified in terms of its loading implications on the pipelines. All proposed construction equipment must be submitted to the Water and Waste Department for review prior to construction.
- (i) For transverse crossings of the Aqueduct and Feedermain, designate crossing locations and confine equipment crossing the pipe(s) to these locations. Reduce equipment speeds to levels that minimize the effect to impact loading.
- (j) The implementation of the work requires on-site inspection with an inspector cognizant of the protocol for working over the Aqueduct and Feedermain during the course of construction and the ability to ensure proper grade control and enforcement of construction protocol. This project requires stringent grade control to ensure that pipeline loading capacities are not exceeded. A failure of the Aqueduct or the Feedermain would be catastrophic in terms of consequential damage to the surrounding areas and the integrity of the water supply.

E13.3 Submittals

- (a) Submit an Equipment List at or prior to a pre-construction meeting, or at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the C4.1 for the return of the executed Contract.
- (b) shall include:
 - (i) Equipment operating weight and dimensions including wheel or track base, track length or axle spacings, track widths or wheel configurations;
 - (ii) Payload weights; and
 - (iii) Load distributions in the intended operating configuration.
- (c) Submit a Construction Method Statement with proposed construction plan including material haul route locations crossing the aqueduct/feedermain, excavation equipment locations, loading positioning and base construction sequencing to the Contract Administrator for review at least seven (7) Business Days prior to construction. Do not commence construction until the Construction Method Statement has been reviewed and accepted in writing by the Contract Administrator.

E13.4 Excavation

- (a) Excavation within 3.0 metres of the centreline of the Aqueduct or Feedermain should be completed by backhoe or excavator equipped with a smooth bucket, with the nearest edge of the excavator positioned no closer than 3.0 metres to the centreline of the pipelines. While the equipment can cross the pipelines at full cover (subject to the conditions noted herein), it shall not operate over the Aqueduct or Feedermain.
- (b) No heavy equipment operations will be allowed on the subgrade over the pipelines prior to completion of the sub-base, unless reviewed and approved.
- (c) No additional fill or stockpiles, including excavation spill, backfill, sub-base or bedding materials are permitted within a distance of 3.0 metres of the centre of either pipeline (either side).

E13.5 Subgrade Construction

- (a) There should be no subgrade compaction where there will be less than 1.2 metres of cover over the Aqueduct and Feedermain. In areas where there will be greater than 1.2 metres of cover, the use of a non-vibratory self propelled padfoot type compactor may be acceptable, subject to submission of vehicle specifications including operation weights and dimensions prior to use. Current record drawings indicate depth of cover for both the Aqueduct and Feedermain greater than 1.2 metres.
- (b) Subgrade, sub-base and base course construction shall be kept in a rut free condition at all times. Construction equipment is prohibited from crossing pipelines if the grade is insufficient to support the equipment without rutting.
- (c) Subgrade conditions should be inspected by personnel with competent geotechnical experience (e.g. ability to adequately visual classify soils and competency of subgrade, sub-base, and base course materials). In

the event of encountering unsuitable subgrade materials above the Aqueduct or Feedermain, proposed design revisions shall be submitted to the Water and Waste Department.

- (d) Construction operations should be staged in such a manner as to limit multiple construction loads on pipelines at one time. A reasonable offset distance is 5 metres between loads.
- (e) Construction operations shall be staged to minimize the time period between excavation to subgrade and placement of granular sub-base materials. Should bare subgrade be left overnight, measures shall be implemented to protect the subgrade against inadvertent travel over it and to minimize the impact of wet weather.

E13.6 Sub-base and Base Course Construction

- (a) The placement of sub-base materials should be done using an excavator positioned no closer than 3.0 metres from the centreline of the pipelines.
- (b) In general, any sub-base compaction will be limited to static rolling within 3.0 metres of the centreline of the Aqueduct and Feedermain. The use of static (non-impact loading) compaction techniques may be permitted subject to vehicle/equipment load review.
- (c) Use of light weight vibratory equipment may be permitted subject to a construction method statement submission and review by the Water and Waste Department. (e.g. 1000 pound plate compactor or walk behind vibratory roller).