

January 2, 2013

11-1132-0109-1000-QC-R03

QUALITY CONTROL CHECKLIST ~ Geocres No. 41A-229
HIGHWAY 89 – MUNICIPAL DRAIN NO. 1 CULVERT REPLACEMENT (SITE 35-512/C)
GWP 3049-08-00

Number	Item	Initial and Date		Project Specific Comments
		Yes	No	
1	Submission of Foundation Investigation and Design Reports, via the TPM, to MTO's Team Leader and to the MTO Foundations Group.	Jan. 2013		Draft report submitted Dec. 6, 2012. Final report submitted January 8, 2013.
2	Report signed and sealed by two P.Eng.'s from Golder Associates, one of which is the Designated MTO Contact.	Jan. 2013		
3	Report in two sections: i) Foundation Investigation Report ii) Foundation Design Report	Jan. 2013		
4	Foundation Investigation Report presents a subsurface model under the plan limits of foundation elements and at the immediate approaches within 20 m of the structure. Reports consist of factual information only.	Jan. 2013		
5	Foundation Investigation Report includes sections on: ■ Site Description ■ Investigation Procedures ■ Description of Subsurface / Groundwater Conditions	Jan. 2013		
6	Presentation of Record of Borehole sheets to MTO format.	Jan. 2013		
7	Presentation of Borehole Location Plan and Soil Strata drawing to MTO format.	Jan. 2013		
8	Presentation of Figures (Grain Size Distribution, etc.) to MTO format.	Jan. 2013		
9	Foundation Design Report presents discussion and recommendations for design with recommendations in accordance with the Canadian Highway Bridge Design Code currently in effect at the Ministry of Transportation pertaining to both temporary and permanent conditions of the Project.	Jan. 2013		
10	Appropriate range of alternatives considered.	Jan. 2013		Recommendations provided for shallow foundations founded clayey silt till for both precast box culvert and associated wingwalls.
11	Structure foundations design addressed including axial, lateral and sliding resistances for shallow and/or deep foundations.	Jan. 2013		
12	Earth pressure design including assumptions for pressure diagrams.	Jan. 2013		
13	Embankment design addressed, including settlement analysis for the new approaches and stability of existing embankments during construction.	Jan. 2013		
14	Earth / rock excavation requirements addressed.	Jan. 2013		
15	Construction concerns addressed including any required specifications and special provisions for materials and specialized construction activities, as well as recommendations for methods of overcoming anticipated construction problems.	Jan. 2013		
16	Acknowledge and respond to MTO comments on Draft Report.	Jan. 2013		MTO comments addressed in final report, and responses to comments summarized in Golder's letter dated January 8, 2013.

Milestone Quality Review No. 2: Audit Report

(Submission of Final Report)

Designated MTO Contact

Date

Team Leader

Date

January 7, 2013