

**Certificate Form**

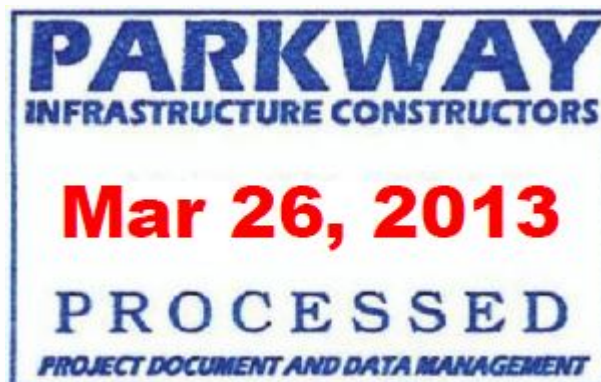
**Certificate Ref. No 285380-03-129-0017**

**INDEPENDENT STRUCTURAL DESIGN CHECK CERTIFICATE**

*Defined terms and expressions used in this Certificate have the same meanings given in the agreement between HMQ and Project Co dated December 15, 2010 ("the Project Agreement") relating to the Project.*

*Form of certificate to be used by the Checking Team for certifying the design of structures incorporated in the Parkway, in accordance with Part 2 of the Design and Construction Specifications to the Project Agreement.*

- 1) We certify that we have the requisite professional qualifications, skill and experience to perform an independent check of the Design Data referred to herein in accordance with the requirements of the Project Agreement.
- 2) We certify that we have performed an independent check (as required by the Project Agreement for significant and complex Structures) of the Design Data for **Realigned E.C. ROW EBL Malden Road Overpass (B05)** listed in the Schedule hereto and utilizing the standards of care, skill and diligence that, in accordance with the standards of our profession, are required of experienced professionals undertaking such an independent check, and that in our professional opinion:
  - i) the said Design Data meets performance expectations outlined in the Project Agreement, [including Technical Appraisal Form] No. **285380-03-127-0004** dated **8 March 2013**, as amended by the following:
    - [List, if any, the changes made and any addenda to the foregoing Technical Appraisal Form]; and
  - ii) the design, methodologies and assumptions are consistent with Good Industry Practice.



## SCHEDULE

### DOCUMENTS

Document No.	Description	Rev	Date
285380-03-127-0004	Technical Appraisal Form	0	08/03/13
285380-04-119-0115	Geotechnical Investigation and Design Report	0	18/12/12
285380-03-109-0001	Structural Design Criteria – Seismic Design Guidelines	0	19/07/11
285380-03-109-0002	Structural Design Criteria – Structures Design Criteria	2	16/04/12
285380-03-109-0003	Structural Design Criteria – Structural Design Check Process	0	19/07/11

### DRAWINGS

Document No.	Description	Rev	Date
285380-03-060-SEG3-0500	Cover Sheet, Site Plan, And Key Plan	0	08/03/13
285380-03-060-SEG3-0501	General Arrangement	0	08/03/13
285380-04-090-SEG3-0502	Borehole Locations And Soil Strata	0	08/03/13
285380-04-091-SEG3-0503	Soil Stratigraphy	0	08/03/13
285380-03-061-SEG3-0504	Foundation Layout	0	08/03/13
285380-03-061-SEG3-0505	West Abutment Layout	0	08/03/13
285380-03-061-SEG3-0506	East Abutment Layout	0	08/03/13
285380-03-061-SEG3-0507	Abutment Reinforcement	0	08/03/13
285380-03-061-SEG3-0508	West Wingwall Details	0	08/03/13
285380-03-061-SEG3-0509	East Wingwall Details	0	08/03/13
285380-03-061-SEG3-0510	RSS Wall Plan And Section	0	08/03/13
285380-03-061-SEG3-0511	RSS Wall Elevations	0	08/03/13
285380-03-063-SEG3-0512	Prestressed Girders I	0	08/03/13
285380-03-063-SEG3-0513	Prestressed Girders II	0	08/03/13
285380-03-063-SEG3-0514	Prestressed Girders III	0	08/03/13
285380-03-064-SEG3-0515	Prestressed Deck Panel	0	08/03/13

285380-03-064-SEG3-0516	Deck Layout & Screed Elevations	0	08/03/13
285380-03-064-SEG3-0517	Deck Reinforcement	0	08/03/13
285380-03-064-SEG3-0518	Abutment Diaphragm Reinforcement	0	08/03/13
285380-03-065-SEG3-0519	Barrier Wall W/O Railing North	0	08/03/13
285380-03-065-SEG3-0528	Barrier Wall W/O Railing South	0	08/03/13
285380-03-065-SEG3-0520	Barrier Wall PL3 Grassland Treatment	0	08/03/13
285380-03-065-SEG3-0521	Noise Barrier Wall	0	08/03/13
285380-03-065-SEG3-0522	6000 mm Approach Slabs	0	08/03/13
285380-03-066-SEG3-0523	Standard Details	0	08/03/13
285380-07-444-SEG3-0524	Embedded Electrical Work	0	08/03/13
285380-04-094-SEG3-0525	Abutment Excavation And Backfill Details	0	08/03/13
285380-04-094-SEG3-0526	Construction Notes – Backfill At Structures	0	08/03/13
285380-04-094-SEG3-0527	Construction Notes – Lightweight Fill	0	08/03/13

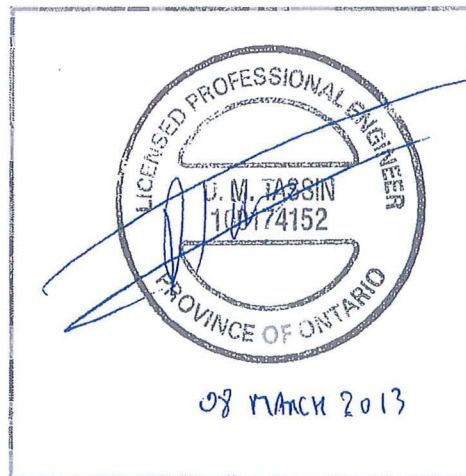
Signed: *D. Tassin*

Checking Team (Principal)

Name: Daniel Tassin

Date: 08 MARCH 2013

Professional Registration Number: 100174152



Signed: *Lanceo Cass*

Project Co Representative

Name: Lanceo Cass

Date: March 25, 2013