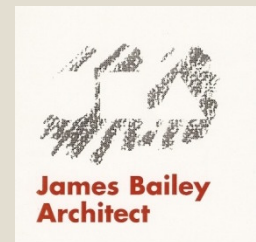


Princes' Gates: Restoration of the Central Arch and North/ South Pylons

Presentation to the Toronto Preservation
Board by James Bailey Architect



*2010/ 11 Princes' Gates
Restoration*



The maintenance and restoration of this historic monument has been addressed over several stages and projects.

- 1987 The Winged Victor Statue was replaced and flashings reinstated.
- 1994 Ventilation within the buildings was improved and the four corner statues replaced
- 2004 North Colonnade Rebuilt
- 2009/10 South Colonnade Rebuilt



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**James Bailey
Architect**

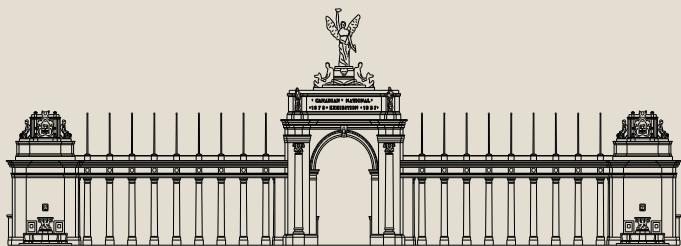
James Bailey Architect was awarded the responsibility of the restoration of the Central Arch and North/South Pylons in November, 2009



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A detailed audit of existing conditions was undertaken from grade level, beginning December 1, 2009. At that time we also began to audit the internal brickwork and existing mechanical ventilation.



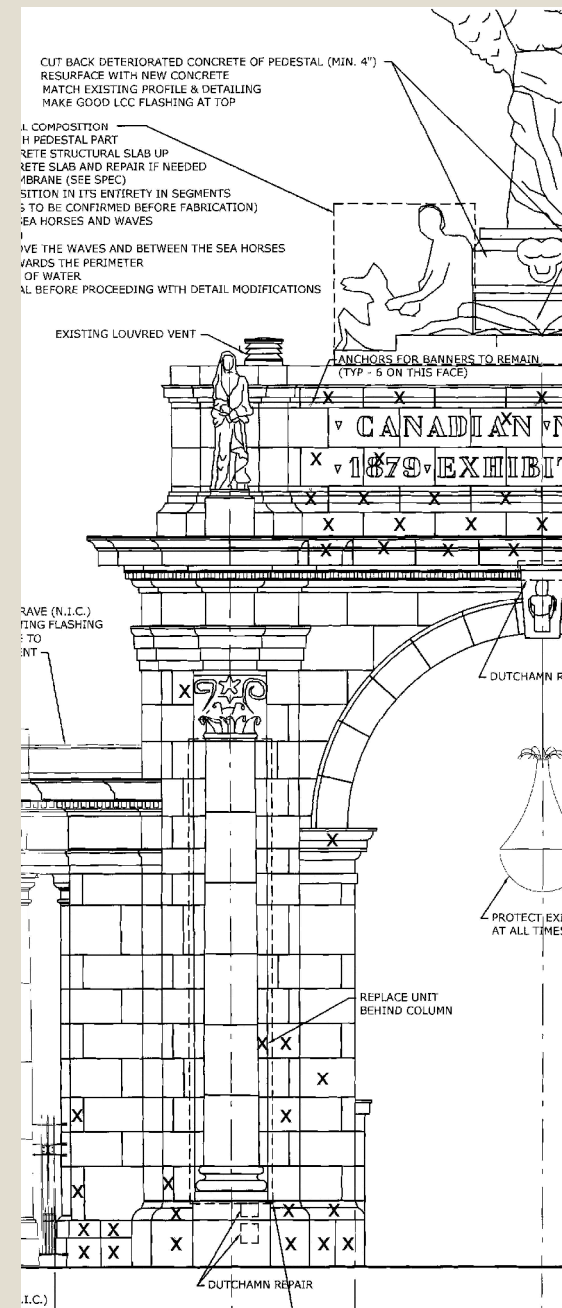
The first week of January we carried out two days of examination working from a boom-lift which provided close access to the upper wall areas and the statuary.

We worked alongside Eric Jokinen, P. Eng., who brings both structural and building science expertise.



Archival drawings—both the original and also related to successive restorations were gathered and studied.

As no drawings were accurate, we prepared as-built drawings of the specific elements of the Gate within our scope.




PROPOSED SCOPE OF WORK

Failing cast stone:

- where the stone is showing signs of disintegration due to water infiltration or delamination of face from backing: REPLACEMENT WITH LIKE.
- where stone is chipped or broken: DUTCHMAN REPAIRS are sometimes used.



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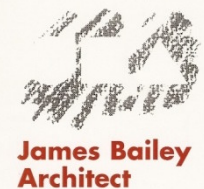

**James Bailey
Architect**

Statuary other than five pieces replaced in past restorations

- these are all due for rebuilding
- Record these using three-dimensional digital technology
- remove these to access the structural ("roof") slabs below
- install waterproofing membrane
- Fabricate replacement statues in materials identical to original



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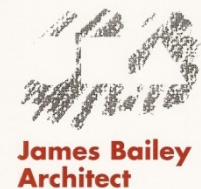


Rebuild the four prominent columns

- Confirmed by core-testing that these are failing in the same way as the two colonnades have failed.
- These are to be rebuilt in their entirety.



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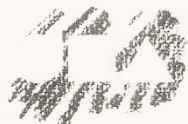


Removal of unsightly fan-units

- In the mid-1990's an attempt was made to control humidity build-ups in the pylons by installing motorized fan units. These are very visible and during this project the humidity will be exhausted through existing louvre openings through the walls of the pylons.



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Improving Internal Access for Service

- Ladders and cat-walk access to internal mechanical equipment is being improved.
- Internal service lighting is being added to facilitate maintenance.



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Full re-pointing and cleaning of all the masonry; Restoration of flashings:

- The gates are soiled, especially where sheltered from the rain.
- all the masonry will be washed with a detergent wash to remove any dirt or organic soiling.
- All masonry joints will be cut out and be re-pointed in an appropriate mortar to match the stone and original look of the Gates.



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Addressing the Lighting of the Gates:

- The existing lighting dates from the 1990's.
- A Lighting Consultant is being retained to propose a lighting system which accentuates the architectural detail of the Gates, rather than blasting it with light.



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**James Bailey
Architect**

Project Team:

James Bailey Architect

- James Bailey
- Albena Bakalov

Jokinen Engineering Services

- Eric Jokinen

Takric Engineering Services

- Tak Lau Man



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