



Appendix D

SRPI.20.039

HERITAGE RICHMOND HILL

September 9, 2014

SRPRS.14.145

Planning and Regulatory Services
Heritage and Urban Design

**SUBJECT: Maintenance and Repair: Heritage Permit Process for the property
located at the David Dunlap Observatory Lands – 123 Hillview Drive
(Town File No. D12-07228)**

PURPOSE:

To seek Heritage Richmond's consideration regarding the conditions under which a heritage permit is required with respect to the maintenance, repairs, and/or restorations of the heritage attributes located at the designated David Dunlap Observatory Lands.

RECOMMENDATIONS:

That Heritage Richmond Hill recommends to Council that the conditions under which a heritage permit will be required for the designated David Dunlap Observatory Lands, as outlined in Appendix "A" of SRPRS.13.145, be endorsed.

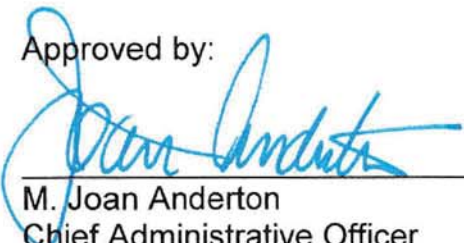
Contact: Joanne Leung, Manager of Urban Design, x.5498
Matthew Somerville, Heritage and Urban Design Planner, x.5529

Submitted by:



Ana Bassios
Commissioner of Planning and Regulatory Services

Approved by:



M. Joan Anderton
Chief Administrative Officer

169

The map displays the study area with the following features:

- Streets:** YONGE STREET (vertical, left), WELDRICK RD E (horizontal, top), KIRSTEN ST (vertical, top right), DRIVE (horizontal, top right), BAYVIEW AVE (vertical, right), 16TH AVE (horizontal, bottom), OBSERVATORY LN (horizontal, middle left), and SUNSHINE DR (diagonal, middle left).
- Subject Lands:** Indicated by a dashed line boundary, forming a large triangular area pointing towards the top right.
- Cultural Heritage Landscape:** Indicated by diagonal hatching, covering the majority of the subject lands.
- Sundial Location:** Marked with an asterisk (*) within the hatched area.
- Other Features:** A CNR (Canadian National Railway) line runs diagonally along the left side of the subject lands. A north arrow is located in the bottom right corner.

LEGEND

- SUBJECT LANDS
- SUNDIAL LOCATION
- CULTURAL HERITAGE LANDSCAPE

NOT TO SCALE

BACKGROUND:

The David Dunlap Observatory Lands located at 123 Hillview Drive are designated as a Cultural Heritage Landscape (CHL) under the Town's Designating By-law No.100-09, which identifies both built and landscape elements as heritage attributes to be protected. The 2010 Council approved DDO Conservation Management Plan (DDO CMP) provides comprehensive short and long term guidance in the conservation and management of those attributes.

According to the *Ontario Heritage Act*, no owner of a designated property shall alter the property without local Council's written consent, which is granted after a detailed review to determine how the proposed changes to the property may enhance or adversely affect the heritage resources. This review process is called the Heritage Permit process.

General maintenance and repair work on a heritage property should be performed periodically and in a timely manner. In accordance with the *Standards and Guidelines for the Conservation of Historic Places in Canada* many of these activities are exempt from heritage permit review. At its January 2014 meeting, the Heritage Richmond Hill Committee discussed the on-going maintenance of the DDO heritage resources and recognized that there should be clarity differentiating the rehabilitation projects requiring detailed heritage review and Council's approval, and typical maintenance and repair works which could be exempt.

This staff report clarifies the requirement of heritage permits with respect to the maintenance and conservation activities provided in the DDO Conservation Management Plan, and seeks Heritage Richmond Hill's endorsement.

DISCUSSION:

In accordance with the *Standards and Guidelines for the Conservation of Historic Places in Canada*, the following are examples of conservation actions that usually do not require the approval of a heritage permit:

- Any interior alterations, unless interior elements are specifically defined in the Reasons for Designation/Cultural Heritage Attributes or if interior work will affect the external appearance of the property;
- Structural repairs, unless they affect the external appearance of the building or overall structural integrity;
- Painting, unless on previously unpainted masonry;
- Continuing maintenance or small repairs with the same materials such as, repairs to soffits, weather stripping, eavestroughs, and downspouts;
- Replacement of cladding material or roof treatments with the same materials, scale and dimensions (e.g. asphalt shingles with asphalt shingles, or wood siding with wood siding);
- Repair of broken glass; Repairs to existing fence, unless specifically defined in the Reasons for Designation/Cultural Heritage Attributes;
- Planting and/or removal of minor vegetation;

- Replacement and repair of driveways and walkways with the same materials.

The DDO CMP provides long and short term management guidance to key components in the designated area: the landscape, the Administration Building, the farm house Elms Lea, and the Observatory Building. In the CMP, each of these components are presented in individual sections containing descriptions of the attributes, their routine and cyclical maintenance requirements, as well as more complex and specific rehabilitation projects in the long term.

In response to the January 2014 HRH discussion, staff have prepared a heritage resource management chart clarifying which conservation activities provided in the CMP will require Council approval, and which can be exempt from the heritage permitting process. Following the best practice principles from *Standards and Guidelines for the Conservation of Historic Places in Canada*, any upgrading or rehabilitation of the resources requiring Council consent are marked as "Yes" in the heritage permit column; while those activities that are part of a cyclical routine maintenance are marked with a "No". The chart is attached as Appendix 'A' to this report.

FINANCIAL/STAFFING/OTHER IMPLICATIONS:

There is no financial or staff resource implication at this time.

RELATIONSHIP TO THE STRATEGIC PLAN:

A careful consideration of the maintenance and rehabilitation of a designated property aligns with the direction to "steward Richmond Hill's heritage resources", and implements Outcome 2 of Goal 3 which is the promotion of a sense of identity and place through "the celebration, promotion and enhancement of the Town's unique places".

CONCLUSION:

The Heritage Permit process allows the Town to review site-specific applications to determine how proposed changes to a designated property may enhance or adversely affect the integrity of the heritage resources.

The attached resource management chart (Appendix A) clarifies the requirement of heritage permits with respect to the maintenance and conservation activities provided in the DDO Conservation Management Plan, and presents a reasonable and logical approach to the conservation needs of the heritage resources while meeting Federal Standards as provided by Parks Canada.

Appendices

"A" *DDO Heritage Resource Management Chart*

Heritage Resource Management Chart - Permit Process

DDO Conservation Plan By-law #17-11

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
LANDSCAPE				
Larch tree line along original laneway from Yonge Street	Retain former laneway alignment and existing tree line	No	Having establishing a 10m buffer to protect the root zone and growing conditions of the larches between the drip line and the area of all development on the north side adjacent to the wooded area, and a 5m buffer on the south side adjacent to former field, remove all and replace with large caliper plantings of Larch in matching alignment and layout, and remove invasive vegetation and prune trees as required	Yes
	Consult certified arborist to remove invasive vegetation and prune trees of any dead wood	No	As the tree line matures and declines, remove and replace with large caliper plantings of Larch in matching alignment and layout	Yes
	Retain existing tree lines	No	Remove invasive vegetation and prune trees as required	No
Norway spruce and maple tree line at Elms Lea	Retain existing tree lines	No	After a 30m buffer on west and a portion of the east side from drip line and all development is established, add new vegetation within buffer to block views of new development	Yes
	Consult certified arborist to prune trees of any dead wood	No	Maintain a 5m buffer on remaining sides to any new development to protect the root zone	No
	Consult certified arborist to prune trees of any dead wood	No	Prune trees as required to remove dead wood and maintain form	No
			As the trees mature and decline, remove all and replant with same species	Yes
	Retain existing fruit trees	No	After establishing a 5m buffer on the north, east, and west sides adjacent to the interior of the Cultural Heritage Precinct from all new development, add new vegetation in buffer	Yes

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
Remnant Orchard	Remove invasive vegetation	No	After establishing a 30m buffer from drip line and all development, add new vegetation within buffer to block views on the west, south, and east sides adjacent to the outlying area	Yes
	Prune of any dead wood	No	Propagate historic apple varieties with salvaged gene stock to renew orchard	Yes
			Remove trees as they decline install new trees in matching alignment and layout	Yes
Fence Rows			Prune as required	No
	Retain existing vegetation	No	After establishing a 5m buffer from drip line and all development, add new vegetation within buffer to block views	Yes
	Remove invasive vegetation and prune as required	No	Re-vegetate tree line by allowing naturalization to occur	No
Observatory backdrop plantation and wooded areas	Retain existing vegetation	No	Remove invasive vegetation and prune trees as required	No
			Retain existing plantations	No
	Remove invasive vegetation and prune as required	No	After establishing a 30m buffer along woodlot edge on outside perimeter, add additional edge species in buffer to restore understory to protect views through the plantation	Yes
Research Plots			Ensure mature vegetation at Observatory does not obstruct a sight line measured 20 degrees from base of telescope	No
	Retain vegetation and maintain 5m buffer	No	Remove and replant trees as they decline with similar species and layout	Yes
	Remove Invasive vegetation and establish open meadow between plots	No	After establishing a 5m buffer from the drip line to new development, add vegetation in buffer	Yes
	Allow Continued naturalization of woods around perimeter of plots	No	When plantings have matured and are in decline remove all and replace with same species in similar layout	Yes
			Remove invasive vegetation and prune trees as required	No

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
Ornamental Plantings at Administration Building and Observatory	Remove and replace mature barberry hedge west of the elliptical island with same variety and spacing	Yes	Monitor and replant ornamental planting beds as shrubs and trees mature	No
	Remove existing mature trees close to building foundations and replace	Yes	Remove invasive vegetation and prune trees as required	No
	Replace ornamental landscape with similar species and ensure 2m setback from foundation	Yes		
Specimen Trees	Remove invasive vegetation, prune trees only as required	No	As trees mature replace with same species, remove invasive vegetation, prune trees only as required	Yes
	As trees mature replace with same species	Yes	Add new vegetation within buffer to block views after establishing a 30m buffer on exposed sides from drip line and all development to protect tree line and add new vegetation within buffer to block views	Yes
	After establishing 30m buffer on exposed sides from drip line and all development to protect tree line and add new vegetation within buffer to block views	Yes		
Views	Retain all existing views to and from Observatory and Elms Lea and open with limbing up selected trees and removal of invasive material	No	Replant specimen plantings in same random placement and spacing	Yes
	Open view of Radio Shack from Administration Building with selective pruning and removal of invasive material	No	Replant all trees in a manner that duplicates pattern and form	Yes
	Retain view of Observatory building with backdrop of evergreen trees	No	Add new vegetation in setback area around east of the RadioShack and south of the parking lot and park like area with specimen trees to screen adjacent land	Yes
	Retain view across open park like setting of specimen trees	No		
	Ensure development on adjacent lands is not visible from within the Cultural Heritage Landscape Precinct	Yes		

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
Vehicular Circulation	Retain existing driveways and parking	No	Convert former farm lane to Yonge St into pedestrian path, and add new pedestrian linkages to surrounding areas	Yes
	Retain existing alignment of all existing and former laneways	No		
	Retain existing road profiles and grades	No		
	Repair key features of the elliptical island garden, repair sundial base under the guidance of a conservator to prevent water infiltration	Yes		
	Remove sod from flagstone paver joints, repair asphalt directional arrows with similar material and layout by removing weeds, infilling cracks and adding top coat of asphalt	No	Retain separate vehicular circulation pattern from remaining lands	No
	Ensure proposed future crossings of existing curvilinear driveway or access into Cultural Heritage Precinct are consistent with character of existing driveway, with surface drainage ditches, vegetation located close to road edge, and no curbs	Yes		
	Ensure no lighting or headlights are directed toward the Observatory	No		
	Retain and repair existing walkways and steps	No		
Pedestrian Circulation	Retain existing alignment of all walkways	No		
	Retain existing walkway profiles and grades	No	Resurface asphalt walkway to Radio Shack and Antenna	No
	Add accessible route to Observatory and to Administration Building in such a way that is sensitive to the heritage features	Yes		
	Retain all existing grades and elevations	No		

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
Topography	Integrate improved barrier free access to the buildings in a compatible fashion	Yes	Integrate surface drainage with adjacent development maintaining ditch and driveway profiles	Yes
Site Context and Associated Attributes	Repair concrete base and pedestal (if repair unsuccessful, recast to exact dimensions profile and appearance, use original for casting)	Yes	Inspect all concrete features and repair as required	Yes
	Bronze sundial would be retained as is and reset, at top of base provide flashing with drip edge (sheet metal to match sundial composition, do not use dissimilar metal)	Yes		
	Repair and re-set island curbs remake arrows to exact size, appearance and form (consider more durable materials)	Yes		
	Reset flagstones in new substrate	Yes		
	Weed and re-seed island	No		
	Prune trees and shrubs close to masonry walls	No		

ADMINISTRATION BUILDING

Domes	Renew gasketing at dome shutters	No	Repainting of all exterior elements	Yes
	Remove rust	Yes		
	Separate dissimilar metals	No		
	Protect all metal elements at dome	No		
	Prime and paint repaint domes for heat reflectance	Yes		
	Replace missing agasote panels	No		
Roofing/ Flashing	Replace existing copper counter flashings	Yes	Replace roof with traditional built-up (BUR), modified bitumen or elastomeric membrane.	Yes
			Copper counter-flashings, examine roof drains closely	No

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
Windows	Repair exterior wood windows (sand, paint epoxy, apply sealants as required)	Yes	Repainting of all exterior elements	Yes
Doors	Paint side doors	Yes	Repainting of all exterior elements	Yes
	Re-varnish main door	Yes		Yes
Ironwork	Restore iron railings	Yes	Repainting of all exterior element	Yes
Stone Walls and Details	Repoint all masonry walls, footings and parapets where open joints or Portland Cement previously used	Yes	Commence general phased repointing program.	Yes
Footing and Grading	Prune vegetation now directly in contact with masonry and at south side entrance.	No	Commence general phased repointing program.	Yes
	Repoint all masonry walls	Yes		
	Repair cracked masonry	Yes		
	Further inspection is recommended for all foundation walls.	No		
Penthouse/ Attic and Dome	Renew gasketing at dome shutters, remove rust	No	Repainting of all exterior metal dome elements	Yes
	Separate dissimilar metals protect all metal elements at dome	No	Research original color schemes for interior	No
	Prime and paint.	Yes	Repaint as required	Yes
	Repaint domes for heat reflectance.	Yes		
	Replace missing agasote panels	No		
	Repair plaster at walls and ceilings once all roof repairs complete, paint	Yes		
2nd Floor	Once exterior roof and flashing repairs are completed, the owner can commence with interior ceiling and wall repairs	No	Repair plaster ceilings at locations of poor previous repair (following sprinkler installation)	Yes
	Repair all window sash cords	Yes	Research original color schemes for interior	No
			Repaint as required	Yes

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
First Floor	Interior ceiling and wall repairs	Yes	Restore bronze finial to newel post at main stair	Yes
	Repair window sash cords.	Yes	Remove stain at guardrail	No
Basement	Shed water runoff away from building	No	Monitor signs of moisture	No
	Clean efflorescence from perimeter walls	Yes	Insulate pipes where possible	Yes

OBSERVATORY BUILDING

Dome	Remove corrosion and prime with zinc rich primer	Yes	Repaint dome for heat reflectance	Yes
	Paint w/ rust inhibitive paint system	Yes		
	Ensure dissimilar metals are not in direct contact and are appropriately protected from corrosion	No		
	Renew gasketing at dome shutters	No		
Windows, Doors and Catwalks	Repair main entrance doors and vestibule	Yes	Repair and repaint if signs of rust present at time	Yes
	Restore windows and louvered shutters	Yes		
Walls and Foundation	Repair cracks in the concrete foundation	Yes	Repair and repaint metal cladding and steel elements if signs of rust present	Yes
	Remove rust from steel	No		
	Further inspection of structural steel behind the beveled metal cladding required	No	Repair cracked concrete at foundation	Yes
	Remove corrosion, prime and paint.	Yes		
Dome	Ensure all dissimilar metals are not in direct contact	No	Replace missing and/or deteriorated agasote panels with similar	Yes
	Renew gasketing at dome shutters	No		
	Remove rust from catwalks, paint	Yes	Repaint all steel structure and cladding as required	Yes
Second Floor	Clean terrazzo from rust and other stains	Yes		
		Yes	Repaint all steel structure, cladding and catwalks as required	Yes

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
First Floor	Create control joint between perimeter wall foundation and floor slab	Yes	Repaint all steel structure, cladding and windows as required	Yes
	Repair cracked terrazzo and clean the corrosion stained terrazzo.	Yes		
	Restore windows and louvered shutters	Yes		
Vestibule Appendix	Repair base of main entrance doors, frames, threshold, and at base of interior of vestibule generally	Yes	Repaint all steel structure, cladding and windows as required	Yes
ELMS LEA HOUSE				
Roof	Repaint north chimney and north gable	Yes	Roof shingles replacement	Yes
	Replace or repair existing chimney flashings	Yes	Consider replacement in wood shingles	Yes
	Repair cornice at south gable	Yes	Gutters and rain water leaders inspection/replacement (if required)	Yes
Walls	Provide 'apron flashing' set into a reglet at the mortar joint between stone foundation and brick wall	Yes	General phased repointing program, and some brick replacement	Yes
Doors, Windows and Trim	Reputty, prime and paint quarter round windows at gables	Yes	Prep, prime and paint all exterior wood work including windows and doors	Yes
	Repair cornice return of the south gable	Yes	Repair decay and piece in sound, matching material	Yes
	Reputty, prime and paint quarter round windows at gables	Yes		
Foundation	Complete grading and drainage	Yes	If repointing of basement masonry not completed by this time, commence general phased repointing program, and some masonry replacement	Yes
	Monitor moisture problem at basement walls	No		
	Repair foundation at east glazed porch	Yes		
	Ensure RWL and all water drains away from foundation	No		

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
Roof	Complete asbestos removal by specialist and disposal at hazardous waste site	Yes	Gutters and rain water leaders inspection/replacement (if required)	Yes
	Install fiber cement roof to match pantile profile of original roofing	Yes		
	Provide new gutters and rain water leaders at existing locations	Yes		
	Repaint all exterior woodwork and replace fascia and cove moulding at eaves and verges	Yes		
Walls	Complete asbestos removal by specialist and disposal at hazardous waste site	Yes	Maintain finishes on exposed wood	No
	Install fiber cement siding to match corrugated profile of wall cladding	Yes		
	Repaint exterior woodwork, replace fascia and cove moulding	Yes		
Doors, Windows and Trims	Sand, prime and paint door, ensure existing hardware is in sound condition and repair if required	Yes	Prep, prime and paint all exterior wood work including windows and doors	Yes
	Existing windows to be repaired once assessed	Yes	Repair decay and piece in sound, matching material	Yes
Foundation	Ensure RWL and all water drains away from foundation	No	Repair foundation if repairs not completed in previous phase	Yes
	Inspect foundation and repair if required at this stage	No		
Antenna (base mounting structure only)	Remove rust and old paint, prime and paint steel structure	Yes	Repair and repaint steel elements if signs of rust present	Yes
	Remove rust from concrete foundation and repair cracks	Yes	Repair cracked concrete at foundation	Yes
TELESCOPES AND INSTRUMENTATION				
RK Young Telescope (Administration Building)	Clean and regularly maintain telescope and instruments	No	Replacement of critical telescope elements on an as needed basis	Yes
	Vacuum deposition of aluminum on reflector mirror	No	Acquisition and installation of new instrumentation	Yes
		No	Acquisition and installation of additional components	Yes

Attribute	Short Term Intervention	Heritage Permit	Long Term Intervention	Heritage Permit
Observatory Building Telescope	Clean and regularly maintain telescope	No	Replacement of critical telescope elements on an as needed basis	Yes
			Repaint replaced elements to match original finish	Yes
	Vacuum deposition of aluminum on reflector mirror	No	Acquisition and installation of new instrumentation	Yes
			Acquisition and installation of additional components	Yes

