



TOWN OF RICHMOND HILL

COMMITTEE OF THE WHOLE

September 8, 2009

SRPD.09.092

Planning and Development

Planning

**SUBJECT: Designating By-law for the David Dunlap Observatory Lands (SRPD.09.092)
File No. D12-07228 – 123 Hillsvie Drive**

PURPOSE

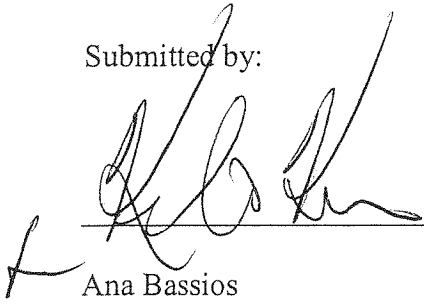
The purpose of this report is to recommend that Council pass a by-law under Part IV, Section 29 of the *Ontario Heritage Act* to designate a Cultural Heritage Landscape, as described in 'Appendix A' attached hereto, on that portion of the David Dunlap Observatory Lands referred to in this report.

RECOMMENDATIONS

- a) That the SRPD 09.092 dated September 8, 2009 be received;
- b) That By-law No. 100-09, attached as 'Appendix A' to SRPD.09.092, be approved as the designation by-law for the David Dunlap Observatory Property, 123 Hillsvie Drive, including land and buildings, as a property of cultural heritage value or interest under Part IV, Section 29, Ontario Heritage Act, R.S.O. 1990, Chapter 0.18 amended 2005;
- c) That Staff be directed to forward draft By-law No. 100-09 to the next regular meeting of Council for consideration and passage;
- d) That staff be directed to establish an archive to retain historical information and research materials regarding the David Dunlap Observatory Property for the future good of the site, and that these materials be made available to the public with required permission; and,
- e) That staff be instructed to commence a cultural heritage review of Land Parcel "B" identified as the 'Panhandle Lands' located on 350 16th Avenue

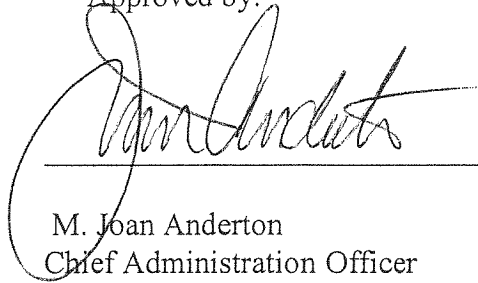
Contact: Joanne Leung, Manager of Urban Design at Extension 5498
Patrick Lee, Director of Policy at Extension 2420

Submitted by:



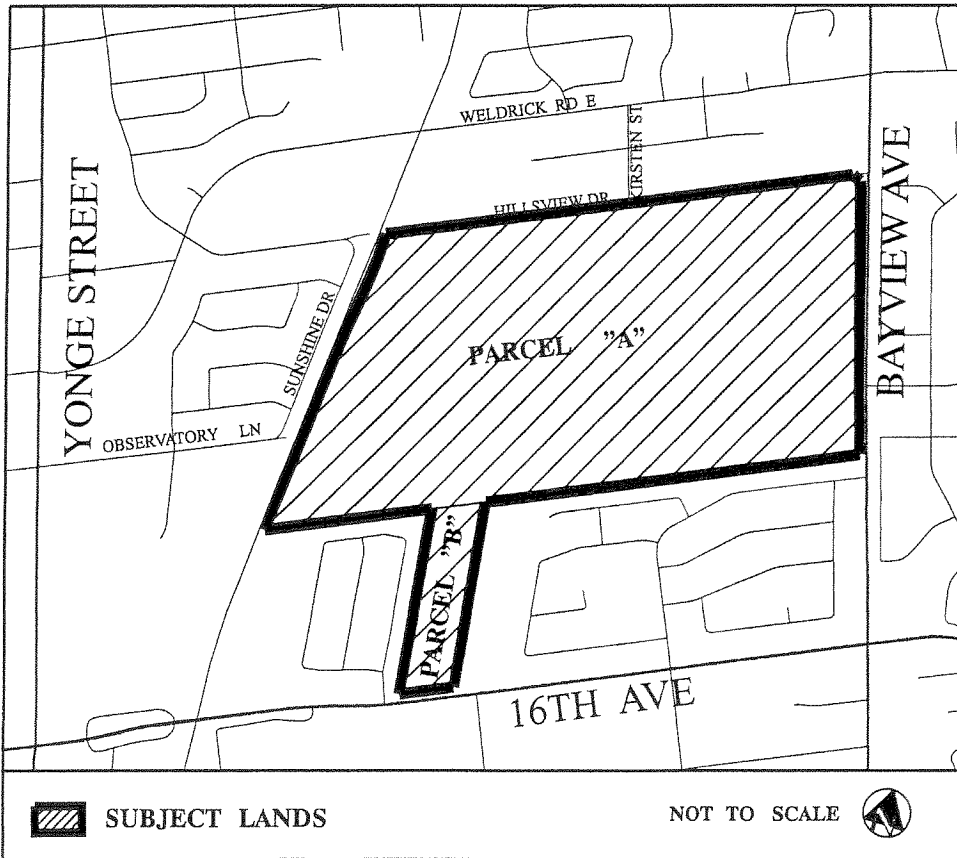
Ana Bassios
Commissioner of Planning and Development

Approved by:



M. Joan Anderton
Chief Administration Officer

Location Map



BACKGROUND

David Dunlap Observatory Property

The David Dunlap Observatory Lands are approximately 76 ha (189.78 acres) in area, located north of 16th Avenue and immediately west of Bayview Avenue in the Town of Richmond Hill. For the purpose of this staff report, the lands have been identified as Parcel "A" and Parcel "B" as shown on the Location Map. The current owner of the lands is Corsica Developments Limited who acquired the property from the University of Toronto in 2008.

The Parcel "A" lands are the majority of the land holdings and contain three main buildings that are part of the Observatory campus. Parcel "A" has a municipal address of 123 Hillsvie Drive, and for the purposes of this report is referred to as the "Observatory Lands".

The Parcel "B" Lands have the municipal address of 350 16th Avenue, and are occupied by the Elvis Stojko Arena and a park that were built by and which are under lease to the Town. Parcel "B" is referred to in this report as "the Panhandle Lands".

The current designation process concerns only the Observatory Lands. Reference is made in the Conservation Review Board Report (attached as Appendix "C") to the Panhandle Lands, as described in a separate section of this Report.

History

The Dunlap Property, originally acquired and gifted to the University of Toronto by the widow of David Dunlap in the mid 1930's, had been functioning as the University's astronomical observatory complex for over seventy years. With funding from Mrs. Dunlap, the University constructed the Observatory structure and related Administration Building, and renovated the former Marsh farm residence for use by the David Dunlap Observatory Director.

Following the official opening of the Observatory in 1935, the complex provided an important centre for astronomical research and instruction for the University. As a then state of the art astronomical research facility, the David Dunlap Observatory, which housed the largest telescope in the British Empire in 1935, is associated with one of the major astronomical discoveries of the 20th Century: the confirmation of the existence of the 'black holes'.

The Panhandle Lands were subsequently acquired on behalf of the University but were not actively used for the purposes of the operation of the astronomical observatory.

The University announced the sale of the David Dunlap Observatory Lands in September of 2007. As a response to this announcement and the uncertainty related to the future use of the Observatory Lands, Council, endorsing the recommendation by Heritage Richmond Hill, directed that the municipal designation process of the Observatory Lands located at 123 Hillsvie Drive (shown as Part "A" on the Location Map) be initiated under Part IV of the *Ontario Heritage Act*.

The first Notice of Intention to Designate the Observatory Lands was issued on October 23rd, 2007 identifying the three principal buildings: namely, the Observatory, the Administration Building and the Alexander Marsh Residence as the Heritage Attributes to be protected, based on research prepared by the historian Sue Murdoch in 1997. At the same time, Council also directed staff to initiate a study to assess and identify the cultural heritage landscape on the Observatory Lands. Mr. Andre Scheinman, a qualified heritage consultant, commenced the historical research regarding the landscape features of the Observatory Lands in November, 2007.

At the June 17th 2008 Committee of the Whole meeting, Mr. Scheinman presented the final cultural heritage landscape report, and a second report that assessed and identified the heritage value of interior architectural features and fixtures within the three principal buildings; as well, a cohesive summary of heritage significance and value associated with the property with respect to all heritage features and components identified as significant by the separate cultural heritage assessments prepared by Ms. Murdoch and Mr. Scheinman.

Town Council issued a second Notice of Intention to Designate (attached as 'Appendix B' to SRPD.09.092) on July 22, 2008, which included the Integrative Summary of Heritage Attributes for the Observatory Lands. This summary comprised an overarching statement of cultural heritage value for the property as well as the Statements of Significance and List of Key Attributes for each respective heritage category: from the broad contextual perspective (cultural landscape) to that of the individual buildings (elements within the landscape) to interior detailing.

In response to the issuance of the second Notice, an objection was filed by the Richmond Hill Naturalists as well as by the Observatory Hill Homeowners Association and Corsica Developments (Metrus), the purchaser of the property. As a result of the sale, on August 19, 2008, the University withdrew their participation as a party to the Conservation Review Board proceedings.

It should be noted that the Conservation Review Board, although it mediates and conducts a formal hearing process around heritage issues as defined by the *Ontario Heritage Act*, is not a decision-making body and acts only in an advisory capacity. It remains within the purview of Council to make appropriate and final decisions in the context of all information following receipt of the Report regarding the Designation.

The hearing respecting the David Dunlap property extended over 7 hearing days (January 15 and 16, 2009; January 19 to 23, 2009). A total of 7 expert witnesses testified during the proceedings as well as a number of concerned residents and staff (both former and current from the University of Toronto). The CRB Recommendation Report was released on June 3rd, 2009, and it recommended that the Council of the Town of Richmond Hill proceed with the protection of property known as 123 Hillsvie Drive (David Dunlap Observatory) under Section 29 of the Ontario Heritage Act.

This Staff Report aims to highlight the findings and considerations of the Conservation Review Board as a result of the hearing, and to provide a context for Council to consider the Designation By-law for the Observatory Lands. In addition, Table 1 illustrates how the content of the Notice of

Intention to Designate (July 22, 2008) is being modified in accordance with the CRB recommendations to become the final Designating By-law. Finally, the Report also addresses some additional comments provided by the CRB pertaining to the Panhandle Lands.

Conservation Review Board Report

The Conservation Review Board Recommendation Report (attached as 'Appendix C' to SRPD09.092) was released on June 3rd, 2009. The Report is 60 pages in length and comprises three main components. It is important to note at the outset that the CRB found that the Observatory Lands possessed a high level of heritage significance and in that regard the Board was generally supportive of the steps taken by the Town to protect the heritage attributes of the property through the designation process.

The first portion of the CRB report contains a comprehensive recording on the hearing proceedings and findings of facts, including case descriptions for all four parties, individual witness statements, records of cross examinations, and all summations. The second component comprises the Board's detailed and considered discussion on issues of interest. The final component of the Report presents the Board's specific guidance on the drafting of the Designation By-law, and its final recommendation to Council to proceed with the designation of the Observatory Lands under the Ontario Heritage Act.

The following section of this report outlines the recommendations of the CRB report.

Recommendations

The CRB Report includes relevant discussions on issues which form the basis of the Board's recommendations and provide guidance to the Town in moving forward. Key topics include the Town's approach to the establishment of a cultural heritage landscape, the extent of the Dunlap Lands that should be identified as forming part of the cultural heritage landscape, the treatment of the Panhandle Lands, the sharing of research materials, archaeological assessment, as well as the Province's potential involvement in the protection of this property. The foregoing topics are outlined below and specific reference to these matters can be found in the complete CRB report which is attached to this report.

1) Designation under the *Ontario Heritage Act*

The most significant recommendation coming out of the Board's report is the affirmation to proceed with the designation process. The quote found on page 57 of the CRB Report is instructive:

"Based on the evidence heard, the Board has concluded that the proposed Statement of Cultural Heritage Value and Description of Heritage Attributes for the subject property be moderately modified to capture a larger cultural heritage landscape and any other recommendation outlined in this report. In all the Board commends the municipality's proposed approach and is supportive with some recommended modifications.

For this reason, the Board recommends that the Council of the Town of Richmond Hill proceed with the protection of the property known as 123 Hillview Drive (David Dunlap Observatory) under s 29 of the Ontario Heritage Act, R.S.O. 1990, c.O. 18 as amended 2006."

2) Approach to Designation

In reviewing the establishment of the Cultural Heritage Landscape for the DDO Lands, the Board concurs with the Town's approach through the application of the criteria of Regulation 9/06 of the *Ontario Heritage Act* on the buildings and other elements on the property. Overall the Board commends the Town in its effort to initiate the designation process, and its demonstrated diligence in ensuring that the reasons given to designate the property under the Act were well researched.

It must be noted that the relatively sudden decision of U of T to sell the DDO property forced the Town to move quickly to complete the initial stages of the designation process. Given this the Town must be commended for doing an exceptional job of compiling past forms of analysis, undertake the cultural heritage study, and compiling a very detailed Notice of Intention to Designate. (p. 44 CRB Report)

3) Significance of the DDO Property

During the hearing all parties acknowledged before the Board that the David Dunlap Property merited designation under the *Ontario Heritage Act* as a property of significant cultural heritage value at a municipal, provincial and federal scale, and that the adoption of a designation by-law could be justified in accordance with the municipal designation criteria established under Part IV of the *Act*.

While all parties agreed that the three principal buildings on the property (Observatory, Administration Building and Marsh Residence) should be protected in terms of their exterior and interior elements, the major differences between the parties at the hearing had to do with the drafting of the Statement of Cultural Heritage Value and the extent of the Observatory Lands that should be identified as forming part of the cultural heritage landscape.

4) The Extent of the Cultural Heritage Landscape and Boundary

The Boards summarized the extent of the Cultural Heritage Landscape proposed by the four parties to the hearing. The position of the Town presented, as illustrated on the Notice of Intention to Designate (attached as Appendix "B" to this report), was to identify the westerly half of the Observatory Lands as comprising the cultural heritage landscape. The position of the Naturalists, supported by the Homeowners Association, was that all of the Observatory Lands should be protected as cultural heritage landscape. Finally, the case presented on behalf of the owner was that a much smaller area located adjacent to the Observatory, the Administration Building, and Elms Lea should be protected as cultural heritage landscape.

In considering the owner's proposed boundary, the Board finds it, "*too narrowly defines the area of protection, and that such a plan would lead to a dilution of the integrity of the significant cultural heritage value of the property.*" On the other hand, the Board feels that the proposal of the Naturalists and that of the Observatory Hill Homeowners Association is "*more of a blanket approach without sufficient evidence to justify the inclusion of many portions of the property.*" (p.56, CRB Report)

The Board is recommending an approach that closely matches that proposed by the Town, with a modification to increase the size of the cultural heritage landscape. In short, the Board recommends that,

"...a cultural heritage landscape be created to encompass the entire western portion of the property, with boundary lines to the lot line on the west, south, and north. With respect to the location of a boundary line to the east, the board recommends that a line be located and properly surveyed for clarity at least 150 m east of the most eastern portion of the research tree planting line, and extend from the north to south lot lines in a way that follows the north-south axial line found in the tree plantings.
(p.56 CRB Report)

With regards to the recommended surveyed boundary line, the Town retained a registered Ontario Land Surveyor to survey the line. This boundary line was surveyed with input from Town staff as well as the Town's heritage consultant. Appendix "F" to this report is an aerial photograph of the Observatory Lands that shows the eastern extent of the cultural heritage landscape that is 150 metres east of the research tree planting line. Schedule "B" attached to the draft designation by-law also shows the easterly point of the cultural heritage landscape. Prior to enactment of the By-law by Council, the draft Schedule "B" will be replaced with one that contains information provided by the surveyor.

5) Consideration of the David Dunlap Observatory Lands as a Park

In contemplating the Naturalists' assertion that the entire DDO Lands should be considered a Park, the Board, having considered the history of the DDO property and the cultural heritage evidence associated with the area outside of the DDO precinct, indicated that:

'...is not convinced that this property has ever operated as a truly public space, or that the land outside of the DDO precinct was cultivated into a park at any point in time. While the availability of open space in the middle of a heavily developed part of Richmond Hill may hold a lot of value for local residents as a park, this is not rooted in cultural heritage value or interest or associated with either the farm or observatory layers being evaluated under Ontario Regulation 9/06. (p. 48 CRB Report)

6) Real Property versus Personal Property

The issue of what constitutes real property as immovable objects and what are considered to be personal property was raised at the hearing, specifically regarding the removal of furniture, books,

and papers by the University of Toronto from the Administration Building. According to the *Act*, the elements that are fixed to the property can be protected and are considered as part of the real property. In the same sense articles such as books and furniture which are not affixed to the property would be deemed as personal property.

The Town and the owner align in principle with this interpretation. However, the Naturalist's heritage expert witness Mr. Paul Dilse considered that there is an interpretation problem with the *Act* in this regards, and requested that the Board to comment on this issue. The Board provides an extensive response in the Report and notes that,

"...the spirit of heritage conservation under the Act is to protect the cultural heritage value of a real property, and the designation by-law allows for the management and dynamic evolution of a cultural heritage property." And that, "the approach sought by the Naturalists, with respect to this issue, does not align with this intention of the Act, particularly in their more static and archival approach that more closely resembles what one would respect within an interpretative museum." (p.40 CRB Report)

However, there is one area of contention raised by the owner, which was the inclusion of the "brass andirons representing the Zodiac" in the Town's Notice. The Board is of the opinion that there was insufficient evidence provided to support the inclusion of the andirons in the Notice and the Board recommended that further investigation be undertaken by the Town if the andirons were to be listed. The Town has been unable to find sufficient evidence to confirm the consideration of the "brass andirons" as a key heritage attribute.

7) Potential Provincial Involvement

The CRB report noted that in addition to the Town's power to designate the lands as a cultural heritage landscape under Section 29 of the *Ontario Heritage Act*, the Province also has the ability to designate the lands as having provincially significant heritage value in accordance with Ontario Regulation 10/06. Town staff have kept staff with both the Ministry of Culture and the Ontario Heritage Trust apprised of the Town's efforts related to the proposed municipal designation. Ministry staff have verbally indicated that they currently have no direction to proceed with a Provincial designation at this time.

8) Sharing of information

The Board commends the Naturalists for their exhaustive undertaking to document the history and physical presence of the subject property. Acknowledging the Naturalist's request to have some of their submitted evidence archived with an appropriate body to serve this site over the long term, the Board recommends that the Town ensure that this information is retained and made available to staff and the public.

Although not critical to the topic at hand which is the development of the by-law to designate the DDO lands, The Town has contacted the Naturalists requesting their cooperation in providing

copies of the materials they collected (see attached 'Appendix D' to SRPD 09.092). The archiving of such materials by the Town would be helpful both for the municipality and the public in assisting with the ongoing management and commemoration of the lands into the future. Town staff will continue to seek the cooperation of the Naturalists in this regard and recommend to Council that an archive be established to house these materials.

9) Archaeological assessment

The issue of archaeological potential was raised by the Naturalists. The evidence at the hearing established that at this time there were no documented archaeological resources identified on the Observatory Lands that should be listed in the Designation By-law. However, the Board acknowledges that there are tools outside of the CRB's mandate, such as the Planning Act, to assess and protect archaeological resources.

Archaeological assessments are completed in a staged fashion as required by provincial government regulations, and generally two stages of initial assessment are undertaken to identify potential archaeological interest. Stage 1 assessment is to determine the potential discovery of archaeological sites by way of a detailed background study of the land use and geological history of the property. Stage 2 assessment (or field survey) consists of a pedestrian "walk over" of ploughed fields and/or shovel testing of grassed or wooded areas.

In view of the cultural heritage significance of the property, the Town has developed an archaeological assessment terms of reference which requires the owner to conduct a more detailed documentation review at Stage 1 and a more refined field work methodology at Stage 2 in the assessment process. The terms of reference (attached as 'Appendix E' to SRPD09.092) have been provided to the owner.

10) Level of Detail in the By-law

With regard to the level of detail and the language in writing the Statement of Cultural Heritage Value or Interest and the Description of Heritage Attributes for the By-law, the Naturalists argued for a highly detailed approach in order to ensure optimal protection. The Board is of the opinion that the current wording of the Notice meets the requirement of the Act. As the by-law needs an operational component as it affects a living site, it should be clear, concise and user friendly, and it should,

"...provide Council with sufficient detail in order to make decisions under other provisions of the Act, notably requests for consent to alterations under Section 33(1)."

(p. 42 CRB Report)

And the Board recommends that,

"...Council maintain their current approach to detail, but that the language of the property description, the statement explaining the cultural heritage value or interest

of the property, and a description of the heritage attributes be updated to contain accurate information specifically capturing any changes flowing from this Board meeting." (p. 42 CRB Report)

As suggested by the Board, staff have contacted Ontario Heritage Trust and obtained their feedback with regard to the level of detail and the language in writing the Statement of Cultural Heritage Value or Interest and the Description of Heritage Attributes to be included in the By-law.

Descriptions of Heritage Attributes

In addition to the recommendations noted above, the Board also noted areas of clarification regarding the identification and descriptions of heritage attributes:

- a) Clarify language to define the Observatory knoll:

Instead of general reference to site topography, the by-law should make specific reference to the topography of the knoll where the Observatory precinct is situated.

- b) Identification of special viewscales:

A visual connection to the knoll and the Observatory precinct should be established through the description of the topography to the south, southwest, and west of the Observatory precinct.

- c) Correction of a number of errors or omissions that were agreed upon by all parties during the CRB hearing have been incorporated within the By-law.

- d) The inclusion of the curving Donalda Drive:

The Board noted that the significance of this road relates to maintaining a buffer of space between entering vehicles and the telescope, and the naming of the road celebrates Mrs. Jessie Donalda Dunlap's contribution to the establishment of the DDO.

- e) Non-inclusion of the Caretaker's residence from the list:

The Board indicated that the structure is utilitarian in function, and its design does not complement other architectural styles on the property.

- f) The inclusion of the Radio Shack

The CRB decision noted that the Radio Shack has significant historical or associative value as it housed important equipment during Second World War, and that it was used for international radio astronomy research. Accordingly, it is an important attribute.

g) Non-inclusion of the Pump House:

The Board considers the Pump House as a purely utilitarian building with little cultural heritage significance.

h) Non-inclusion of the nursery planting in the east portion of the property:

The Board considers this planting area maintains little historical or contextual significance.

i) Inclusion of the line of trees identified as research plantings:

This line of trees was planted along a line that perfectly aligns with the north-south axial line that is identified in the DDO precinct area. The Board is of the opinion that this line of trees not only acts as a boundary of an important viewscape from the DDO precinct, but its alignment with the precinct axial line provided a strong associative and contextual value.

j) Extension of Eastern Cultural Heritage Boundary 150 m east of the tree planting along the North-South axis:

The Board recommends that a line be located and properly surveyed for clarity 150 m east of the most eastern portion of the research tree planting line, and extend from the north to south lot lines in a way that follows the north-south axial line found in the tree plantings (see Appendix "F" attached to this report).

DISCUSSION

Implications of the Designating By-law

A designated heritage property is recognized by the Town and the Province as having cultural heritage value. The designation of individual properties under the *Ontario Heritage Act* provides municipalities a tool to help guide future changes while protecting its cultural heritage features and attributes. Designation under the OHA applies to real property, and the designation by-law must contain a Statement of Cultural Heritage Value or Interest and the Description of Heritage Attributes. While the designation by-law applies to the whole property, it is the heritage attributes described in the by-law that are protected. Changes and alterations that impact upon these attributes require Council's written consent through the heritage permit process.

The inclusion of a substantial portion of the landscape in the designating By-law should not be seen as a prohibition or 'freezing' of any further changes, alterations, or development opportunities within the lands. Heritage designation recognizes the special heritage attributes of this site. It is a tool to provide guidance on how changes should be managed and what should be protected if the property is subject to change in the future.

The intent in designating property is to enable a process of cultural resource management and conservation of identified, valued heritage features. This is usually undertaken through the consideration of subsequent applications for alterations and additions to a property pursuant to Section 33 of the *Ontario Heritage Act* or applications for demolition or removal under Section 34. In both cases the applications must be submitted to the Town for approval and are subject to rights of appeal to the Conservation Review Board for applications under Section 33 and to the Ontario Municipal Board under Section 34.

Permission to Alter a Designated Property – “Heritage Permit”

According to Section 33 of the *Ontario Heritage Act*:

“No owner of designated property shall alter the property or permit the alteration of the property if the alteration is likely to affect the property’s heritage attributes, as set out in the description of the property’s heritage attributes unless the owner applies to Council and receives consent in writing to the alteration.”

When alteration of a designated property affects its heritage attributes, an owner must apply to Council for its consent in writing in order to undertake the alteration. This process is a mechanism that would ensure that any future development must be carefully planned, designed, and managed with regard to these heritage sensitivities.

It is important to point out that it is only the alteration of the heritage attributes as set out in the description that are within the ability of Council to control. The decision of Council in this type of application can be appealed to the Conservation Review Board. Note that the Conservation Review Board is an advisory body and does not make final decisions on heritage matters. Following the Conservation Review Board recommendation and findings on these matters, Council may refuse the application, consent to the application or consent to the application on terms and conditions.

By-law Development

In light of the detailed direction provided by the Conservation Review Board in its decision of June 3, 2009, Town staff with the assistance of legal counsel for the CRB hearing (Bruce Ketcheson) and the Town’s heritage consultant (Andre Scheinman) compiled the by-law to designate the Observatory Lands as a cultural heritage landscape. This by-law is attached as ‘Appendix A’ to this report.

The By-law comprises statutory text as well as Schedule “A” which provides: a Description of the Property; a Statement of Cultural Value; and lastly, a Description of Key Heritage Attributes. Within the Key Heritage Attributes are a number of cultural attributes that have been divided into values that are “associative” and those which are “contextual”. Also attached to the By-law is Schedule “B” which shows the geographic extent of the cultural heritage landscape.

The By-law details the historical context around which the property has developed from a farmstead in the mid 1800's through to a university centre for advanced astronomical research. Changes to the property over time and various important events that occurred on the subject lands are outlined to highlight the properties cultural heritage.

A detailed list and description of key heritage attributes is provided. In most instances, the list provides a descriptive, locational, functional and historical nature of the attributes. Particular attention is provided to the architectural details of the identified buildings as well as the nature of the landscape upon which they are situated.

As noted in the Background Section of this report, the report of the CRB provided considerable direction for the development of the By-law. The following table details the directions and attributes outlined by the Board and how the By-law responds to these directions.

Table 1

Summary of CRB directions and the Designation By-law's responses

	Summary of Pertinent CRB Recommendations	Designating By-law Response
1	Language in the drafting of the By-law: Maintain the current detailed approach to language and level of detail.	The By-law provides a detailed property description including a surveyed line that indicates the easterly boundary of the cultural heritage landscape. The By-law provides clear descriptive language and detailed lists of all attributes.
2	Clarify language to define the Observatory knoll	The By-law identifies both the natural knoll as well as major earthworks that further enhance the podium like nature of site of the telescope building. (Section 2 (b) paragraph 3, and Key Heritage Attribute (a))
3	Identification of special viewscape	The By-law notes the siting of the Observatory and Administration Buildings on a high point of land (Key Heritage Attribute (a)). Bylaw notes the traditional views from Yonge Street and along the north-south axis -- contextual values (b) and (c)
4	Amend errors or omissions that were agree upon by all parties during the hearing	During the CRB hearing, a number of factual errors and omissions had been identified by all the parties. These items included, amongst others, references to building completion date, construction material, architectural style, and the weigh of the telescope mirror (500 lbs vs. 2 tons) etc.

5	The inclusion of the curving entrance road (Donalda Drive)	Donalda Drive running south from Hillsdale Road is listed associative/historical value item (g)
6	Non-inclusion of the Caretaker's residence from the list	The By-law does not include this as an attribute.
7	The inclusion of the Radio Shack	Listed in the By-law as associative/historical value (d).
8	Non-inclusion of the Pump house	The By-law does not include this as an attribute.
9	Non-inclusion of the nursery planting located in the east portion of the property	The By-law does not include this as an attribute.
10	Inclusion of the line of trees aligning with the North-South axis	Identified in Key Heritage Attribute (c)
11	Extension of Boundary of the Cultural Heritage Landscape 150 m east of the tree planting along the North-South axis	Identified in a Reference Plan

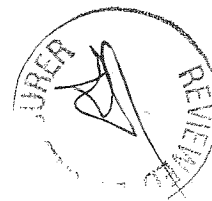
The Treatment of the Panhandle Lands (Parcel "B")

While the Panhandle Lands were not within the area subject to the proposed designation, the Board did hear some evidence at the hearing related to the history and association of this property with the Observatory Lands. This evidence was contextual in nature and was provided in support of the proposed designation of the Observatory Lands. It was demonstrated that the Panhandle Lands, purchased by Dr. Chant had possibly been established with its lot boundary made to follow the north-south axial line that had been highlighted in the sitting and design of the Observatory and Administration Building.

While the issue of the designation of the Panhandle Lands was not before the Board, the panel was persuaded based on the evidence that they received that this property possessed demonstrated cultural value and significance. As a result, the Board suggested that Council might wish in the future to take steps to properly assess the cultural heritage value of the Panhandle Lands. Staff concurs with the suggestion of the Board that a cultural heritage review of the Panhandle Lands be undertaken.

FINANCIAL/STAFFING/OTHER IMPLICATIONS

Funding for the cultural heritage review of the Panhandle Lands would be from the General Government D.C. Resource Fund. The exact quantum will be identified and funding requested when staff report back with terms of reference.



RELATIONSHIP TO THE STRATEGIC PLAN

Adoption of the by-law to designate the Observatory Lands as a cultural heritage landscape is in keeping with Goal 3 – Outcome 1 of the Strategic Plan which is to “Respect the past” through promoting the awareness of the Town’s heritage, in part by showcasing local history.” This By-law will also implement the direction to “steward Richmond Hill’s heritage resources”. Lastly, the adoption of the By-law will implement 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 Observatory Lands represent a major cultural resource for the Town of Richmond Hill. The observatory operated in the Town for many decades and was the site of several important astronomical discoveries. The legacy of the observatory within the Town must be protected.

Culminating from an original Notice of Intent to Designate the lands as a cultural heritage landscape in October of 2007 followed by a 7 day Conservation Review Board hearing in January 2009 and a decision of the Board in June 2009, a by-law has been developed to identify the lands, buildings and accouterments that should be conserved and honored into the future.

The designating By-law before Council for consideration has taken its direction from the report of the Conservation Review Board and has been crafted with the assistance of the heritage consultant and legal counsel that represented the Town at the CRB hearing. The By-law implements all of the recommendations of the CRB and identifies key heritage attributes; associative and historical values; and contextual values of the property.

Moving forward in time, the preservation and celebration of the history and presence of the Observatory Lands requires more than just a designating by-law. A Conservation Management Plan in conjunction with supportive land use policies that provide for appropriate future uses will be the operative mechanisms to secure the future of the DDO’s legacy.

To this end a consultant will be hired to undertake both a Conservation Management Plan as well as a set of recommended land use policies.

A Conservation Management Plan (CMP) will provide an integrated approach to determining the appropriate balance between the conservation of heritage value and the on-going use or adaptive re-use of the heritage buildings and property. As a planning tool, the Conservation Management Plan links conservation needs to broader planning/realty issues associated with the property. Anticipating that the property’s use, urban context, physical condition and financial value will change over time, a conservation management plan should provide a plan of action to protect heritage value for the long-term including conservation priorities, development priority and phasing, land use options, specialized conservation and design requirements, options concerning public access, and potential developments.

A CMP describes what needs to be done on the heritage property to ensure the preservation of its heritage value, when, and why, and sets out the conservation treatment category appropriate to each resource of heritage value (including the landscape) of the property. It translates and refines the conservation treatment category into an implementation strategy, and establishes baselines for the evaluating impacts of future undertakings. And finally, a sound plan should recommend policies that can address conflicting needs, objectives, and constraints for the property.

A land use and urban design vision will provide detailed principles for the lands that are consistent with the findings of the Conservation Management Plan. The land use and urban design vision will guide any future development of the property appropriately; integrate into the broader community; and also celebrate its cultural heritage resources into the future.

It is anticipated that a Conservation Management Plan as well as land use and urban design principles will be concluded by the end of 2009. This will involve a fulsome public participation process during the fall of 2009. The product will culminate in a set of recommended planning policies for the DDO lands that will be provided in a draft of the Town's new Official Plan which will be presented to Council in the spring of 2010.

In addition to the foregoing work, the Town will initiate a cultural heritage review of the Panhandle Lands. The result of this investigation may be used to inform the broader Conservation Management Plan and Land Use Policies.

APPENDIX CONTENTS

- “A” Draft By-law No. 100-09, A By-law to Authorize the Designation of 123 Hillview Drive, David Dunlop Observatory Lands, under the *Ontario Heritage Act*.
- “B” Public Notice Advertisement – Notice of Intention to Designate, dated July 22, 2008.
- “C” Conservation Review Board Recommendation Report, received on June 3, 2009.
- “D” Correspondence – Letter dated July 29, 2009 from Ritchie Ketcheson Hart & Biggart LLP.
- “E” Terms of Reference, Stage 1 and 2 Archaeological Resource Assessments of the David Dunlop Observatory Lands, Town of Richmond Hill, dated August 4, 2009.
- “F” Aerial Photograph indicating the extent of the Cultural Heritage Landscape.

Appendix	A
SRPD.	09.092
File(s)	D12-07228

THE CORPORATION OF THE TOWN OF RICHMOND HILL

DRAFT BY-LAW NO. 100-09

A By-law to Authorize the Designation of
123 Hillsvie Drive
David Dunlap Observatory Lands under the
Ontario Heritage Act

WHEREAS Section 29 of the *Ontario Heritage Act, R.S.O. 1990, c.0.18* authorizes the Council of a municipality to enact by-laws to designate real property to be of cultural heritage value or interest;

AND WHEREAS the Council of The Corporation of the Town of Richmond Hill has caused to be served on the owners of the lands and premises known as 123 Hillsvie Drive, Richmond Hill, and upon the Ontario Heritage Trust, notice of intention to so designate the aforesaid real property and has caused such notice of intention to be published in a newspaper having general circulation in the municipality;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF RICHMOND HILL ENACTS AS FOLLOWS:

1. That the real property located at 123 Hillsvie Drive, being Part of Lots 42 and 43, Concession 1, (former Township of Markham), more specifically described as Part 1, 65R-29959, Town of Richmond Hill, Regional Municipality of York is hereby designated under Part IV of the *Ontario Heritage Act, R.S.O 1990., Chapter 0.18*, as being of cultural heritage value or interest.
2. That the Clerk is hereby authorized to cause a copy of the By-law, together with a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property to be served on the owner of the property and on the Trust, and publish a notice of the By-law in a newspaper having general circulation in the municipality.
3. That the Town Solicitor is hereby authorized to cause a copy of this By-law to be registered against the property in the Land Registry Office.
4. Schedules "A" and "B" attached to By-law No. 100-09 are declared to form a part of this By-law.

READ A FIRST AND SECOND TIME THIS 14TH DAY OF SEPTEMBER, 2009

READ A THIRD TIME AND PASSED THIS 14TH DAY OF SEPTEMBER, 2009.

Mayor

Clerk

SCHEDULE "A" TO BY-LAW NO. 116-08

REASONS FOR DESIGNATION
DAVID DUNLAP OBSERVATORY LANDS
123 Hillsvie Drive

1. Description of Property

The Property comprises Parts of Lots 42 and 43, Concession 1, former Township of Markham, more specifically described as Part 1, on Plan 65R-29959, with the municipal address of 123 Hillsvie Drive in the Town of Richmond Hill. The Property is known as the David Dunlap Memorial Observatory.

The heritage designation applies to a **cultural heritage landscape (chl)** on a portion of the Property extending from Hillsvie Drive in the north to the fence line at the boundary of Lot 41 to the south and from the CNR tracks in the west to a surveyed line located 150 metres to the east of the easternmost row of the University of Toronto's former experimental tree plantation as shown on Schedule "B" to the By-law. This area encompasses a wide range of important cultural resources. Principally these include: the Observatory Building (originally known as the Great Telescope Dome) and telescope; the Administration Building; *Elms Lea* (Observatory House); the Radio Shack; the natural topographic rise and earthwork enhancements in the area of the Observatory Building; the designed landscaping associated with the Administration Building; the vestigial landscape elements and plantings associated with *Elms Lea* and the University of Toronto's Department of Forestry's experimental tree plantation.

2. Statement of Cultural Value

(a) Summary

The David Dunlap Observatory (DDO) is a place of high cultural value manifest at all currently recognized levels/categories associated with heritage significance. Its cultural heritage landscape is comprised of a 19th century farmstead overlain with the University of Toronto's remarkable astronomical research campus conceived as well as a memorial to the husband of the facility's donor and patron. The three major structures within this landscape each exhibit a particularly high quality of design and use of materials – Elms Lea as an 'architect' designed 19th century farmhouse; the Observatory Building (originally known as the Great Telescope Dome) manifesting 'leading edge' functional innovation as the envelope for the great telescope and the Administration Building profoundly combining the ceremonial and scientific in the Beaux-Arts form of the period. The building interiors each have outstanding features such as: the 74" telescope, largest in the Commonwealth when installed, within the Observatory Building, and its *raison d'être*; the first floor plan of the Administration Building with the main axis set to the cardinal points which intersect at the memorial at its core; and the main winder stair at Elms Lea which appears to be almost floating. The site has formidable historical associations ranging from the locally significant Alexander Marsh family, to the rise of astronomical research at the University of Toronto (and Canada generally) and culminating with important contributions to the world's understanding of astronomical phenomena.

(b) The Cultural Heritage Landscape

The David Dunlap Memorial Observatory Site is a complex cultural heritage landscape comprised of the overlay of a 20th century 'state of the art' astronomical observatory on a 19th century farmscape. There are two major layers/themes which are represented. The first is that associated with the farmstead of Alexander Marsh. Marsh, the grandson of area pioneer Robert Marsh, inherited Lot 42, Concession 1 Markham Township from his grandfather in 1852 and established a prosperous farm there (as well as on adjacent Lot 17 to the east) through the second half of the 19th century. His farmstead came to include

300 acres, three houses, and seven barns and/or stables. Originally occupying a frame house on the site which may have dated to the original patentee he had a new home for his family designed and built c.1864. This fine dichromatic brick house which came to be known as *Elms Lea* brought together eclectic influences in a picturesque composition. Sited on a rise deep within the property reached by a long lane from Yonge Street and screened by a stand of spruce, it later became the residence of C.A. Chant and subsequent directors of the DDO.

The second layer/theme grew out of the dream of C.A. Chant, often referred to as 'the father of Canadian astronomy', who recognized in a local high point of land, just east of the village of Richmond Hill, the potential site for a world class astronomical observatory. This dream was able to be realized through the support of Jessie Donald Dunlap, whose husband had been dedicated to Chant's vision prior to his death. Since its establishment in 1933 the David Dunlap Memorial Observatory has been the site of much important astronomical research (including several 'ground breaking' discoveries), the cornerstone of astronomical education for generations of University of Toronto students and the site of pioneering efforts in Radio Astronomy spearheaded by the late Donald MacRae, also a DDO director.

The property, encompassing Lot 42 and the south half of Lot 43, was originally selected as the Observatory site for its topography - a pronounced rise relative to the surrounding area - lack of light pollution and relative accessibility to the University. Major earthwork further enhanced the natural knoll selected for the Observatory creating a podium like plateau. The circular observatory structure was designed and prefabricated in Great Britain to house the 74" telescope, largest in the British Empire at that time. The telescope, with its 5,000 pound mirror, is supported by the 'great pier', the concrete core of the building, constructed prior to the arrival and erection of the building shell in 1933. The large copper dome is built to rotate and there is a 15' wide section (shutters) which retracts for siting the telescope. The Administration Building, designed by Mathers and Haldenby, is a particularly fine example of Beaux-Arts classicism which also incorporates three copper observatory domes. The siting of the two structures, placed at right angles to each other and at cardinal points, (the Observatory at compass north) is indicative of the formal landscape which was originally planned for the site, the key axis being the approach to the Observatory from the south. The realization of this concept was only achieved, in modified form, with the landscape improvements of 1959 which featured an elliptical island within the new driveway, designed such that symbols within the paving, the bronze sundial and the pedestrian path through the island expressed cosmological laws. Also in the 1950's the Radio Astronomy program was established with the associated construction of a 'Radio Shack', (designed as a picturesque cottage), pyramidal horn antenna and 'zig zag' antenna directly east of the Administration Building.

In the early 1960's a new approach road from Hillsview Drive was established, its curvilinear form intended to ensure that the Observatory not be affected by the headlights of approaching cars. The new road was named Donald Drive, the middle name of the site's great patron. In this period too the University of Toronto Forestry Department undertook a series of experimental plantings featuring both native and exotic species. Planted in rows formed of (approximately) square individual plots their general alignment again followed the north-south orientation seemingly so essential to all aspects of the lay-out of the property.

At its opening in May 1935, attended by Prime Minister Mackenzie King, the David Dunlap Memorial Observatory was proclaimed "a gift to science all over the world" and the Royal Train carrying King George VI and the future Queen Elizabeth II stopped in acknowledgment of the importance of the site during their visit of 1939.

Achievements directly associated with the Observatory such as Helen Hogg's work on variable stars in globular clusters and C.T. Bolton's investigation of Cygnus X-1 as a black hole as well as the determination of the absolute flux density of Cas A at 320 MHz through radio astronomy have indeed significantly contributed to our understanding of the universe.

Important internationally for the research it has produced it is also a local landmark to the suburban community which grew up around it and has been the site of many birthday celebrations and weddings.

(3) *Description of Heritage Attributes*

The following are the heritage attributes which express the physical/design value of the Property. The importance and complexity of a number of these elements, particularly the three main buildings (each worthy of Section 29 Designation in their own right) has dictated a form whereby they are included at the 'macro' level as attributes of the general site but then the features which define the heritage character of each of these main elements is also further broken down, forming, in essence, a subset of heritage attributes:

- (a) the siting of the Observatory Building and the Administration Building at the highest local elevation, enhanced and modified to a 'podium' form by significant earthworks for the placement of the buildings.
- (b) the laying out of the site to follow the cardinal points with the Observatory Building as due north and the Administration Building due east. This directional emphasis remained an essential design determinant for site layout right through the 1960's¹ and extended throughout most major elements of the site - including the interior plan of the Administration Building (see below), the siting of the Radio Shack, the location of the elliptical traffic island with north-south pedestrian walkway through its center and sun dial at its southern end, the placement of the flag pole, the orientation of the rows of the University's Department of Forestry experimental tree plantation.
- (c) *Elms Lea* c.1864, the picturesque dichromatic brick farmhouse originally designed for Alexander Marsh. While subject to several renovations and minor additions associated with its use within the DDO complex, the original exterior appearance is largely intact and the interior plan remains legible. It is an eclectic expression combining elements of Classical, Gothic Revival and Italianate derivation in a well integrated composition.

Key heritage attributes of the exterior include:

- the three bay symmetrical façade;
- the 'T' plan with original kitchen 'tail';
- the side gabled roof with relatively steeply pitched centre gable;
- the bracketed eave at the façade, eave returns and verges with distinctive pendant bracket;
- the dichromatic brickwork with buff brick accent detailing which include: quoins; stringcourses; arches; decorative 'reflecting' of brackets in brickwork and cross pattern with margins at gables. The Flemish bond coursing pattern at the façade and the complex cambered ('flat') arches in red brick.
- The treatment of openings including: the quarter round windows with quarter fanlights at the gables; the 6/6 small pane wood sash; the French doors flanking the center bay of the façade; the prominence given to the openings of the center bay including the main entrance with transom (with distinctive lancet light divisions) and sidelights and the semi-circularly arched opening containing French doors at the balcony which 'breaks' the eaves at the centre gable.
- the rear 2 storey gable roofed 'tail' with dichromatic brickwork and voussoired cambered ('flat') arches at the window openings.

Key heritage attributes of the interior include:

¹ The north-south axial emphasis continued into the 1980's reflected in the Town designed Observatory Park and Elvis Stojko Arena on what has become known as the 'Panhandle' (described as Parts 2 and 3 on Plan 65R-29959). The "Panhandle" does not form part of the Property and is not included here for designation.

- the centre hall plan;
- the grand winder stair and balustrade at main hall. The curved rail and soffit of the main stair create a spiraling, floating effect within the space.
- the plaster paterae featuring acanthus leaves in main hall and north reception room;
- the high wood bases throughout;
- the moulded door and window architraves;
- the remaining 4 panel doors;
- the original wood fireplace surrounds at the north reception room and 'tail' with c.1933 fireboxes and hearths;
- the tile floor, tiled dado and moulded tile dado cap at 'master bathroom';
- the king post truss roof structure of the main roof.

(d) the Observatory Building (originally known as the Great Telescope Dome), 61' in diameter, designed and built to house the 74" telescope, 2nd largest in the world at that time and prototype for the use of pyrex mirrors of that scale, with rotating copper dome incorporating retractable shutters for astronomical viewing. The building expresses the Machine Age aesthetic of the period, the building being an 'envelope' for the instrument and its function. The DDO 74" reflecting telescope, still the largest optical telescope in the country, is one of Canada's most significant scientific artifacts (as well as continuing to be a viable instrument for astronomical observation). A 'leading edge' technical achievement at the global level upon its fabrication, much innovative design went into its housing and support allowing for its rotation and the cleaning and re-aluminizing of its 5000 lb. primary mirror. Most of the apparatus and associated electrical system for these operations remains original (with some replacement parts) and these partake of the high level of significance of the telescope itself.

Key heritage attributes of the exterior include:

- the circular form broken only by the entrance vestibule facing due south;
- the hemispherical dome clad in flat seam copper panels;
- the galvanized metal cladding of the walls and the 'rhythm' created by the regular spacing of pilasters and louvered shutters;
- the symmetry of the façade;
- the beveled base into which the pilasters terminate;
- the network of steel stairs and 'catwalks';
- the double leaved metal clad paneled entrance doors with moulded surround and transom with tripartite geometric pattern.
- the retractable shutters.

Within this structure form, material and function are virtually indivisible. Thus all aspects of the interior are included, highlighted by, but not restricted to:

- the semi-circular corridor formed around the service core at the first floor with galvanized metal wall cladding;
- the multi-pane steel sash (louvered shutters on exterior);
- the telescope;
- the concrete support pier (formed independently from the building itself);
- the telescope tube;
- the interior stair and 'catwalk' system;
- the apparatus associated with the rotation of the telescope;
- the apparatus associated with the rotation of the dome and opening of the shutters including the cable pulley system;
- the carriage/elevator and all associated components such as the vacuum chamber, floor hatch and pulley system associated with the mirror cleaning/re-aluminizing process
- the electrical system with much original wiring.