

Stantec Consulting Ltd. 171 Queens Avenue, 6th Floor London ON N6A 5J7 Tel: (519) 645-2007 Fax: (519) 645-6575

October 29, 2013 File: 160940253

Attention: Paula Kulpa, Team Lead: Heritage Land Use Planning

Ministry of Tourism, Culture and Sport – Culture Services Unit

Dear Paula Kulpa,

Reference: Sol-Luce Kingston Solar PV Energy Project – Project Layout Modifications

Stantec Consulting Ltd. (Stantec) was retained by Kingston Solar LP (the "Proponent") to review project modifications to the Sol-luce Kingston Solar PV Energy Project ("the Project") as they pertain to heritage resources. The following letter represents review of modifications in relation to the findings of the *Cultural Heritage Assessment Report* completed by MHBC Planning, Urban Design, and Landscape Architecture (MHBC) in June, 2012.

PROJECT DESCRIPTION

Kingston Solar LP intends to design and construct a solar facility with a maximum name plate capacity of approximately 100 MW AC (megawatts of alternating current). The solar output will be collected and connected to an electrical substation capable of transforming the power from distribution voltage to a transmission voltage of 230 kV. The renewable energy facility will be rated as a Class 3 Solar Facility. The Project Area is located to the north and south of Unity Road and south of Mud Lake Road in the City of Kingston and Loyalist Township.

HERITAGE CONTEXT

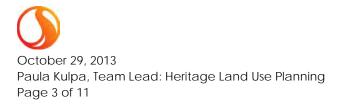
MHBC was retained by AMEC, a Division of AMEC Americas Limited, on behalf of the Proponent to undertake the heritage assessment for the Project as required by O. Reg. 359/09. The *Cultural Heritage Assessment Report* received written comments expressing satisfaction from the Ministry of Tourism, Culture, and Sport (MTCS) on June 11, 2012. There has been no further correspondence regarding cultural heritage associated with the Project.

PROPOSED MODIFICATION DESCRIPTION

The proposed modifications to the Project following the completion of the *Cultural Heritage Assessment Report* involve the relocation of project components at the Project Location and the addition of two properties to the Project Location (see Table 1). While the Study Area described within the *Cultural Heritage Assessment Report* is unchanged, the location of the project components within this area has been modified. These modifications include the addition of project components to five properties and the removal of project components from five properties.

Table 1: Summary of Proposed Modifications

Property Number	Description	Modification
Property 1	No municipal address, corner of Rock Road and Highway 38 Part Lot 1-2, Concession 6 Western Addition, former Kingston Township, now City of Kingston <i>Legal Description: PT LT 1-2 CON 6 WESTERN ADDITION</i> <i>KINGSTON AS IN FR319482 LYING N OF FORCED RD AKA ROCK</i> <i>RD; S/T DEBTS IN FR319482; KINGSTON</i>	Removal of project components
Property 2	2945 Highway 38, Lot 1, Concession 6 Western Addition, former Kingston Township, now City of Kingston Legal Description: PT LT 2-3 CON 6 WESTERN ADDITION KINGSTON PT 1, 13R11037 T/W FR750411; KINGSTON	Removal and relocation of project components
Property 6A	4006 Unity Road, Part Lot 9, Concession 6 Western Addition, former Kingston Township, now City of Kingston <i>Legal Description: PT LT 9 CON 6 WESTERN ADDITION KINGSTON</i>	Removal of project components
Property 9	4095 Unity Road, Part Lot 11, Concession 6 Western Addition, former Kingston Township, now City of Kingston Legal Description: PT LT 11 CON 6 WESTERN ADDITION KINGSTON PT 1, 13R10933; KINGSTON	Removal of project components
Property 10	 4114 Unity Road, Part Lot 11, Concession 6 Western Addition, former Kingston Township, now City of Kingston Legal Description: PT LT 11 CON 6 WESTERN ADDITION KINGSTON PT 1 & 2, 13R6247 EXCEPT PT 1, 13R10933; KINGSTON 	Removal of project components
Property 11	Adjacent to Raymond Road, Part Lot 11, Concession 6 Western Addition, former Kingston Township, now City of Kingston Legal Description: PT LT 11 CON 6 WESTERN ADDITION KINGSTON AS IN TKB414; KINGSTON	Removal of project components
Property 25A	3680 Unity Road, Lot 5, Concession 6 Western Addition, former Kingston Township, now City of KingstonLegal Description: PT LT 5 CON 6 WESTERN ADDITION KINGSTON AS IN FR544429; KINGSTON	Addition of Project Location and project components
Property 25B	3734 Unity Road, Lot 6, Concession 6 Western Addition, former Kingston Township, now City of Kingston Legal Description: E1/2 LT 6 CON 6 WESTERN ADDITION KINGSTON AS IN RP1562; KINGSTON	Addition of Project Location and project components



Where available, property descriptions were taken from the MHBC Report. Where descriptions did not include a municipal address, they have been provided and are based on the City of Kingston GIS mapping available online (https://www.cityofkingston.ca/explore/maps).

REPORT REVIEW

Stantec was provided with the *Cultural Heritage Assessment Report* prepared by MHBC. Upon review, it was determined that of these eight properties where modifications are proposed, six had been previously assessed (see Table 2). The *Cultural Heritage Assessment Report* determined that:

The properties identified as potential candidate sites for the development of solar energy all comprise generally flat agricultural land, some of which is in agricultural production but much appears to be either marginal or recolonizing in character with naturalization, succession growth.

There still remain traces of former field systems at most of these locations. The results of the brief historical overview reveal that all of the identified properties have some historical association with former land clearance and agricultural settlement.

In accordance with Ontario Regulation 9/06 which identifies a number of criteria for determining cultural heritage value, and as required by Ontario Regulation 359/09 the inventoried properties are considered to have:

- direct associations with the historical theme of land settlement and related agricultural activity [Criterion (2) 2. (i)], and
- contextual value as they are historically linked to their surroundings [Criterion (2) 3. (ii)].

Given the characteristics of fields as evidence of former historical agricultural practices and farming activity these identified resources are essentially unremarkable in their cultural heritage value.

In all cases, except Property 2, where the Project Location has been removed from the northern portion of the property and relocated southward towards Rock Road and east towards Highway 38 to accommodate for the additional proposed project components, it was determined that the assessment addressed the property parcels in their entirety (see Table 2). As a result, it was determined that additional assessment is required for the two new properties, Property 25A and Property 25B, as well as the south and east portions of Property 2.

Table 2 Summary of Property Assessment and Requirements for Additional Assessment

Property Number	Previously Assessed	Additional Assessment Required
Property 1	Yes	No
Property 2	Yes	Yes

Property Number	Previously Assessed	Additional Assessment Required
Property 6A	Yes	No
Property 9	Yes	No
Property 10	Yes	No
Property 11	Yes	No
Property 25A	No	Yes
Property 25B	No	Yes

Based on review of the *Cultural Heritage Assessment Report*, it was determined that Property 2, Property 25A, and Property 25B required assessment. As such, a windshield survey was undertaken to identify potential heritage resources at the Project Location. What follows is a summary of findings and evaluations.

PROPERTY DESCRIPTION

Property 2

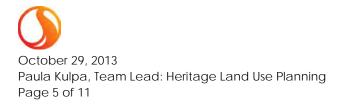
Property 2 is a mixed use site containing residential structures situated outside of the Project Location. It is largely covered with expansive grasslands and the south portion of the property contains low lying scrub due to various rock outcrops. The property contains a modern residence, a large greenhouse, sheds, workshops, and various outbuildings, all of which were determined to be less than 40 years of age. Adjacent to the residence were multiple piles of metal debris. A recently constructed barn was identified northwest of the residence with functioning solar panels situated along the south side of the structure. A log structure was identified as one of the multiple outbuildings, although it was visually identified to be less than 40 years of age.

Property 25A

Property 25A is an active mixed-use agricultural site with cultivated fields and a woodlot at the north portion of the property. Contained within the Project Location, a residence, barn, and two out buildings all in a state of abandonment were identified and determined to be older than 40 years of age.

The frame residence is a one and one half storey structure with a projecting side shed addition. The medium pitched roof is clad in metal (likely tin) and the residence is clad in asphalt insulbrick siding. Along the west wall timber planks are exposed. There are three windows in the south facing front façade, one window in the west wall, two in the north wall, and two in the east wall. The glass in all windows throughout the residence has been broken or removed. The foundation appears to be concrete.

The timber frame structures on the property, including the barn and two outbuildings, are in a visual state of disrepair. Originally an L-shaped barn, with a metal roof, timber frame, and stone foundation, the roof has collapsed over the south and west sides of the barn. The remaining structure is largely clad with plywood sheets where the timber planks are missing. Both outbuildings are clad in metal roofs, with moderate pitches, timber frame, and timber siding. Although neither is in active use, one appears to be a former chicken coup and one was used for farm equipment storage. The former chicken coup is clad in



shiplap siding with replacement timber planks visible as well while the storage shed is clad in vertical timber planks.

Property 25B

Property 25B is an active mixed-use agricultural site with cultivated fields and a woodlot at the north portion of the property. A large farmstead sits at the south portion of the property fronting Unity Road outside of the Project Location. The farmstead contains a residence, timber frame barn, and single storey agricultural building with an undetermined use. Although contained within the property boundary, these buildings are all situated outside of the Project Location.

The farmstead contains what appeared to be a single storey side gabled structure with a moderate roof pitch, red brick exterior, and undetermined foundation (not pictured). The structure was heavily obstructed by foliage which restricted photography, description and assessment.

The agricultural buildings included a front gabled timber frame barn and a single storey multi-purpose Lshaped building. The barn was clad in a metal roof, with timber siding, and an undetermined foundation. A side shed addition contained similar characteristics although was constructed of concrete along the east and north walls. At the rear of the barn was a concrete silo. The second structure was heavily obstructed by foliage but visible from the adjacent property. The building was covered with a black metal roof, modern siding and sat on an undetermined foundation. The low to moderate pitch of the roof was replicated in all visible gables. At the east side of the building a large machine door was apparent suggesting the building was used primarily for machinery storage.

EVALUATION OF CULTURAL HERITAGE VALUE OR INTEREST ACCORDING TO ONTARIO *REGULATION 9/06*:

Property 2 (Plates 1 – 3)

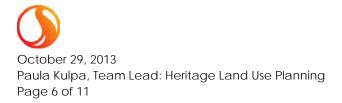
Design or Physical Value: None identified.

Historical or Associative Value: Minimal value identified associated with land settlement and agricultural usage. Satisfies criterion 2. (i).

Contextual Value: None identified.

Heritage Attributes: Land division along early survey grid pattern.

Discussion: The modern residence as well as numerous modern structures has altered the relationship of the residence with the land, thereby removing the contextual value of the property. While the land use remains loosely associated with its historical roots, when considering the parcel in its entirety, it no longer defines the character of the area due to the extensive modifications which have taken place.



Property 25A

(Plates 4 – 12)

Design or Physical Value: None identified.

Historical or Associative Value: Minimal value identified associated with land settlement and agricultural usage. Satisfies criterion 2. (i).

Contextual Value: The structures are historically linked to the property as purpose-built agricultural buildings.

Heritage Attributes: Land division along early survey grid pattern.

Discussion: The massing, size, and construction techniques, including the timber planks exposed on the west side of the residence and the concrete foundation, suggests the residential structure dates from the early to mid-20th century. The timber frame residence, barn, and outbuilding construction is common throughout the surrounding area and is not considered unique, representative, or an early example of construction, although it is characteristic of 19th to early 20th century agricultural construction. The *Historical Atlas of the Counties of Frontenac, Lennox, and Addington* indicates that Ralph Bennington owned the property in 1878 and a structure, possibly one of the agricultural buildings which survive, is situated at the front of the property. Although the position of the buildings set back from the road appears somewhat unusual within the Project Location, it is relatively common throughout the surrounding area and former Kingston Township more specifically.

Property 25B

(Plates 13 – 16)

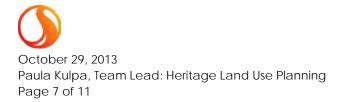
Design or Physical Value: Timber frame barn is representative of a relatively early, if common, type of construction method dating to the 19th century. Although likely constructed later, it represents a common feature of the agricultural landscape.

Historical or Associative Value: Minimal value identified associated with land settlement and agricultural usage. Satisfies criterion (2) 2. (i).

Contextual Value: The property is historically linked to its surrounding. Satisfies criterion (2) 3. (ii).

Heritage Attributes: Timber frame construction. Land division along early survey grid pattern

Discussion: Similar to surrounding properties, the land use primarily is responsible for the cultural heritage interest and value identified, although minimal. The property was owned by John Harker in 1878 according to the *Historical Atlas of the Counties of Frontenac, Lennox, and Addington* and a church is indicated on southeast side of the property, outside of the Project Location. Where structures could not be assessed, as was the case for the red brick structure, it was assumed to have cultural heritage value or interest thereby requiring the completion of an assessment of impacts of the proposed Project.



PHOTOGRAPH CATALOG

Plate 1 Property 2, looking northeast, modern barn (outside Project Location)



Plate 3 Property 2, looking east, modern log structure (outside Project Location)



Plate 2 Property 2, looking east, various outbuildings (outside Project Location)



Plate 4 Property 25A, looking northeast, barn ruins



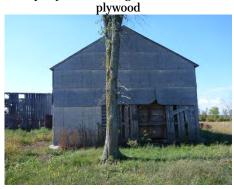


Plate 5 Property 25A, looking west, timber barn clad in



October 29, 2013 Paula Kulpa, Team Lead: Heritage Land Use Planning Page 8 of 11

Reference: Sol-Luce Kingston Solar PV Energy Project - Project Layout Modifications



Plate 7 Property 25A, looking north, outbuilding

Plate 9 Property 25A, looking east, residence



Plate 11 Property 25A, looking northeast, residence



Plate 8 Property 25A, looking east, former chicken coup



Plate 10 Property 25A, looking west, residence



Plate 12 Property 25A, looking south, residence



October 29, 2013 Paula Kulpa, Team Lead: Heritage Land Use Planning Page 9 of 11

Reference: Sol-Luce Kingston Solar PV Energy Project - Project Layout Modifications



Plate 15 Property 25B, looking southwest, barn shed addition (outside Project Location)

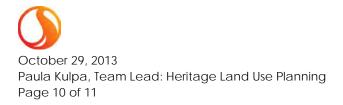


Plate 14 Property 25B, looking north, timber barn (outside Project Location)



Plate 16 Property 25B, looking west, outbuilding (outside Project Location)



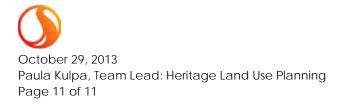


ASSESSMENT OF IMPACTS

Where cultural heritage value or interest was identified according to Ontario Regulation 9/06, the anticipated direct and indirect impacts were assessed. These impacts were identified according to InfoSheet #5 in *Heritage Resources in the Land Use Planning Process, Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* (Ministry of Tourism and Culture 2006). Table 3 outlines the anticipated impacts of the proposed additional project components in relation to the heritage attributes.

Table 3 Direct and Indirect Impacts

Potential Impact	Relevance to Properties
	Not anticipated; land division will be maintained.
Destruction of any, or part of any, significant heritage attributes or features	Note: In order to facilitate the construction of the Project, the structures identified on Property 25A require removal. Their position on the property is such that avoidance is not possible and as a result, demolition is proposed. The buildings themselves do not represent heritage resources as there was no cultural heritage value or interest identified. Therefore, a detailed analysis of impacts and subsequent mitigation is not required.
Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance	Not anticipated; alterations will occur within existing parcels thereby avoiding modification to the historic fabric.
Shadows created that alter the appearance of a <i>heritage attribute</i> or change the viability of a natural feature or plantings, such as a garden	Not anticipated; shadows will not impact land division or the relationship of any buildings.
Isolation of a <i>heritage attribute</i> from its surrounding environment, context or a <i>significant</i> relationship	Not anticipated; identified heritage attributes will remain connected with the surrounding area.
Direct or indirect obstruction of <i>significant views</i> or vistas within, from, or of built and natural features	Not anticipated; no significant views or vistas identified.
A change in land use such as rezoning a battlefield from open space to residential use, allowing new <i>development or sit alteration</i> to fill the formerly open spaces	Anticipated; open space will be modified for the duration of the Project with solar panel infill. While a change is noted, this will not negatively impact identified heritage attributes as the land use is currently mixed; a trend that will be continued through the introduction of solar panels.
Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely <i>affect an</i> <i>archaeological resource</i>	Not applicable; archaeological resources are considered in the Archaeological Assessment Reports (various stages).



Given the extensive coverage of solar panels within the Project Location, a change of land use was identified as a potential impact. Solar panels will be filling in the previously open spaces comprised of agricultural fields. As discussed in Table 3, this impact is in keeping with the current land use which is characterized as mixed use agricultural. Therefore, no further mitigation is required.

RECOMMENDATIONS

Based on these findings, it was determined that the analysis, assessment, and recommendations of the *Cultural Heritage Assessment Report* remain unchanged as a result of the proposed project layout modification.

We ask that the MTCS review the attached figures illustrating the proposed project layout modification and the proposed layout changes. Following review, if appropriate, we request confirmation of Stantec's review and MTCS comment regarding the proposed modification as related to recommendations of the *Cultural Heritage Assessment Report*.

Regards,

STANTEC CONSULTING LTD.

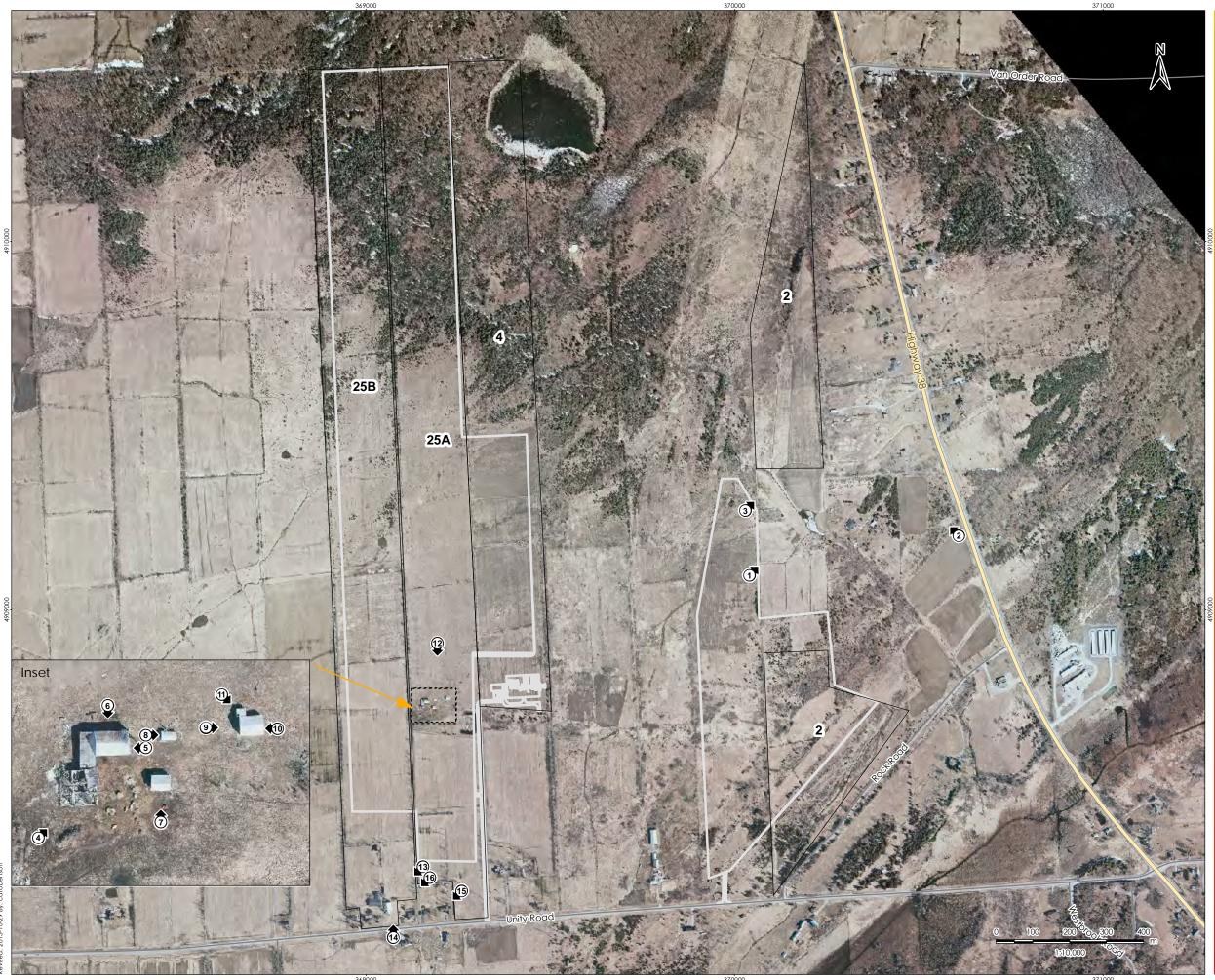
eathar Kina

Meaghan Rivard, MA, CAHP Heritage Consultant Phone: 519-645-2007 Ext. 6664 Fax: 519-645-6575 Meaghan.Rivard@stantec.com

Attachment: Figure 1

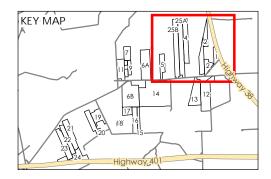
c. Jeff Muir, Project Manager, Stantec Consulting Ltd.

rm document1



S S \\cd1217-f01\1609 Revised: 2013-10-29





Notes

- 1. Coordinate System: NAD 1983 CSRS UTM Zone 18N
- 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

October 2013 160940253

Client/Project

Kingston Solar LP Sol-Iuce Kingston Solar PV Energy Project Additional Stage 2 Archaeological Assessment

Figure No.

1 Title

Built Heritage