Visual Impact Assessment Report

McCormick Property

Category 1 – Class "A" License, Pit Below Water

For Blueland Farms Limited

January 2018

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Contents

EXECUTIVE SUMMARY

The subject property is approximately 26 hectares (64 acres) in area and is located on the west side of Heart Lake Road about 2km east of Caledon Village in the Town of Caledon, Regional Municipality of Peel. This visual impact assessment report has been prepared in support of the required planning approvals to allow for a Category 1 – Class "A" license, pit below water under the *Aggregate Resources Act*. The assessment process for this report is based on the *Town of Caledon Official Plan (2016)* (Section 5.11.2.4.11) as well as the *Niagara Escarpment Commission Visual Assessment Guidelines* (See Appendix I).

The assessment was initially undertaken in 2013, and subsequently updated in 2017 to reflect: changes in the proposed operations and haul route; and changes in the planning policy framework, including the *Provincial Policy Statement (2014)* and the *Niagara Escarpment Plan (2017)*. A discussion of the current planning policies can be found in Section 9.0 of this report.

An inventory and analysis was completed to understand the context, existing conditions, existing visual character, and existing landscape evaluation of the subject property and its surroundings. Potential significant views and viewsheds were identified and assessed. Finally, potential visual impacts from the application were identified and assessed. Using the information collected, mitigation measures were recommended to minimize the visual impacts while changing the open landscape character and experience of the subject property as minimally as possible and to ensure consistency with the relevant planning policies. The following mitigation measures are recommended to be implemented before the following phases:

Phase A (See Figure 20 for Phase A - Mitigation Measures)

- Install a temporary seeded berm minimum 3m high along the northwest perimeter of Area 1 and along the northeast perimeter at the north end of Area 4.

Phase C (See Figure 22 for Phase C - Mitigation Measures)

- Install a temporary seeded berm minimum 3m high along Heart Lake Road along the northeast perimeter at the south end of Area 4.
- Install a temporary seeded berm minimum 3m high adjacent to the property line of Residence R5.

To ensure the existing viewsheds are maintained, if not increased following the proposed extraction operations and rehabilitation, the planting of vegetated visual barriers along Heart Lake Road is not recommended. Temporary seeded berms, minimum 3m high, shall be installed to screen views into the subject lands from Heart Lake Road. Once the operations are completed, the temporary seeded berms will have been removed. See Figure 38. The recommended visual mitigation measures will minimize the negative visual impacts of the proposed operations, while allowing the existing view of the escarpment environment be reinstated and unobstructed upon completion of rehabilitation of the subject property.

An evaluation of the proposed end-use was undertaken using the methodology of the *"Landscape Evaluation Study, Niagara Escarpment Planning Area"*. Our assessment found that the final score and evaluation ranking of the existing landscape unit (Star) will not be affected by the proposal.

1.0 BACKGROUND

The *Niagara Escarpment Plan (2017) (NEP)* Land Designation Map (Figure 1) and the *Town of Caledon Official Plan (2016)* Land Use Map (Figure 2) designate the proposed licensed area as "Escarpment Rural Area" and "Rural Area" respectively.

According to the *NEP*, the purpose of the plan is "to provide for the maintenance of the *Niagara Escarpment* and land in its vicinity substantially as a continuous *natural environment*, and to ensure only such development occurs as is *compatible* with that *natural environment*." The following objectives of the *NEP* are relevant to this report:

> "4. To maintain and enhance the *open landscape character* of the *Niagara Escarpment* in so far as possible, by such means as *compatible* farming or forestry and by preserving the *natural scenery*;
>
> "5. To ensure that all new development is *compatible* with the purpose of the Plan;
>
> "6. To provide for adequate public access to the *Niagara Escarpment*."

According to the *NEP*, the term "Open Landscape Character" is defined as "the system of rural features, both natural and human-made, that makes up the rural environment, including forests, slopes, *streams*, *valleylands*, hedgerows, agricultural fields, agricultural buildings and other features of similar character and scale".

The *NEP* policies for Escarpment Rural Areas include the following objectives:

> "1.5.1.1 To maintain the *scenic resources* of lands in the vicinity of the *Escarpment* and the open landscape character of the *Escarpment*
>
> "1.5.1.4 To provide for *compatible* rural land uses
>
> "1.5.1.6 To provide a buffer for ecologically sensitive areas of the *Escarpment*
>
> "1.5.1.7 To provide for the consideration of new Mineral Resource Extraction Areas which can be accommodated by an amendment to this Plan"

Section 2.9 of the *NEP* outlines the development criteria for mineral aggregate operations, and states that proposals for new mineral aggregate development shall "demonstrate how the *Escarpment's scenic resources* and *open landscape character* will be maintained and where possible enhanced during and after the extraction" (Section 2.9.3.c). The policies describe appropriate screening measures, which may include berms and vegetative plantings (Section 2.9.5 and 2.9.6) and require that the rehabilitation plans incorporate features that contribute to the open landscape character and are compatible with the surrounding landscape (Section 2.9.11.f).

In addition, Section 2.13 of the *NEP* outlines the development criteria related to scenic resources and landform conservation. The *NEP* defines a visual impact assessment as "a study in accordance with the NEC Visual Assessment Guidelines" (See Appendix I)

> "2.13.1 Development shall ensure the protection of the *scenic resources* of the *Escarpment*.
>
> "2.13.2 Where a *visual impact* on the *scenic resources* is identified as a concern by the *implementing authority*, a *visual impact assessment* shall be required.

"2.13.3 A *visual impact assessment* shall:

a) establish a baseline for the existing conditions;
b) identify the proposed physical changes; and
c) *assess* the impact of the proposed change on the *scenic resources* of the *Escarpment*; and
d) propose measures to minimize any *visual impacts*."

The relevant policies in the *Town of Caledon Official Plan (2016)* are found in Section 5.11.2.4 (Applications for Planning Act Approvals to Permit New or Expanded Aggregate Operations):

"5.11.2.4.2 The Town of Caledon will approve an application for an Official Plan Amendment to designate lands identified as Aggregate Resource Lands on Schedule L for a new extraction operation or expansion to an existing extraction operation when the following criteria have been met:

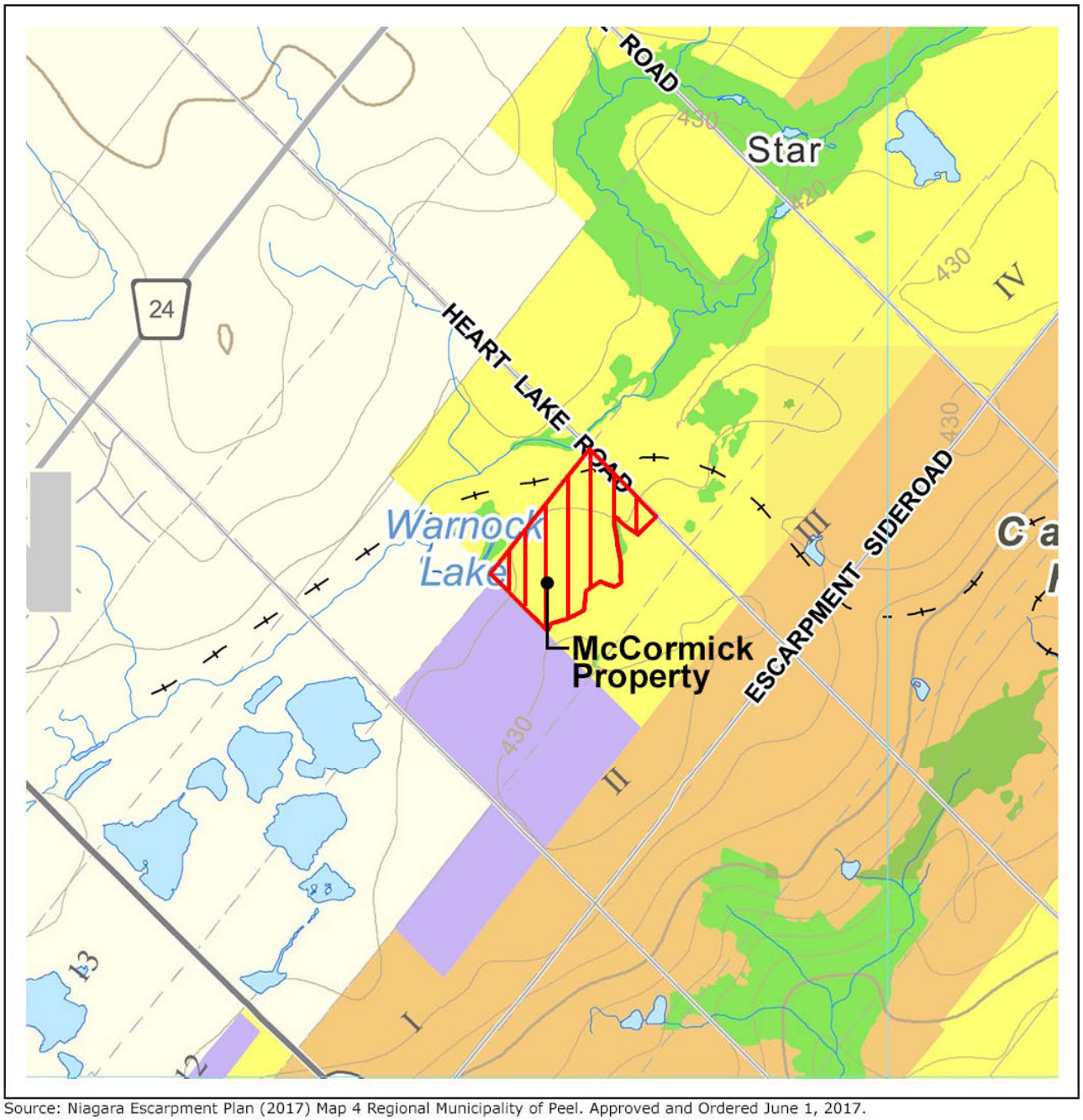
e) The Applicant has completed a Visual Impact Report as described by Section 5.11.2.4.11 and demonstrated that the proposal will not have any unacceptable impacts;

"5.11.2.4.11 The Visual Impact Report required by Section 5.11.2.4.2(e) shall address the following:

a) Assess the significant views and how they might be affected by the proposed extractive operation;
b) Assess the changes to the natural landscape and the cultural landscape that would result from the operation; and
c) Identification of any required mitigation measures, and the visual character of such measures. This may include berms, entrance designs, vegetation, landscaping, and operational matters such as small phases, screening of equipment, direction of extraction which would seek to minimize visual impacts."

The *Landscape Evaluation Study, Niagara Escarpment Planning Area* (April 1976), a cooperative project of the Southwestern Region and Land Use Coordination Branch of the Ministry of Natural Resources and the Niagara Escarpment Commission "*presents a methodology which was used to evaluate the scenic quality of landscape units in the Niagara Escarpment Planning Area and outlines the basic findings of the Study.*" The evaluation method was designed to provide a generalized classification or ranking to represent the 'average' viewer's appreciation of the scenic quality of each defined landscape unit. The ranking is accomplished through a scoring system based on five (5) landscape components considered to have a significant effect on viewer response: Landforms, Vegetative Cover, Land Use, Special Features, and Views. Impacts of the development on evaluated landscape units in the Niagara Escarpment Planning Area that surround and/ or overlap the Study Area will be assessed.

This report is prepared in the context of the current planning policy framework, in support of the McCormick Pit applications.



Source: Niagara Escarpment Plan (2017) Map 4 Regional Municipality of Peel. Approved and Ordered June 1, 2017.

LEGEND

- Escarpment Natural Area
- Escarpment Protection Area
- Escarpment Rural Area
- Mineral Resource Extraction Area
- 14 County or Regional Road
- Local Municipal Road
- Abandoned Railway

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Niagara Escarpment Land Designation Map
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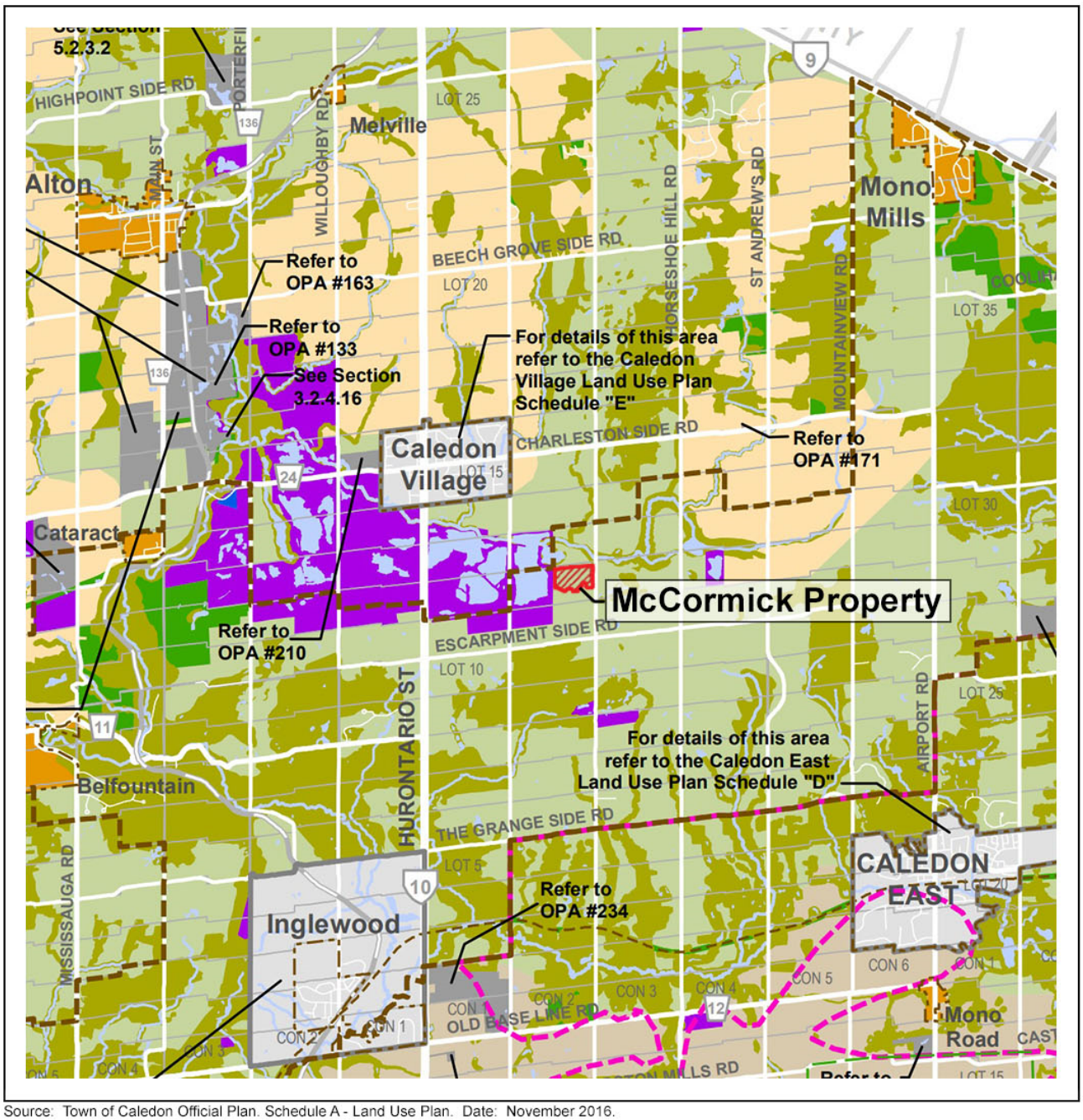
FIGURE 1



Source: Town of Caledon Official Plan. Schedule A - Land Use Plan. Date: November 2016.

LEGEND

- General Agricultural Area
- Prime Agricultural Area
- Rural Lands
- Extractive Industrial Area
- Waste Management Area
- Open Space Policy Area
- Environmental Policy Area
- Estate Residential Area
- Retirement Community Area
- Settlement Area
- Mayfield West Study Area Boundary
- Boundary of Greenbelt Plan Area
- Oak Ridges Moraine Conservation Plan Area
- Niagara Escarpment Plan Area
- Provincial Road
- Regional Road
- Local Road
- Railway
- Caledon Trailway

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Land Use Map

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FIGURE 2

2.0 LOCATION

The subject property is approximately 26 hectares (64 acres) in area and is located in the Niagara Escarpment Plan Area, on the west side of Heart Lake Road approximately 2 km east of Caledon Village. The property forms part of Lot 12, Concession 2 E.H.S., in the Town of Caledon, Regional Municipality of Peel. See Figure 3 for the Location Map.

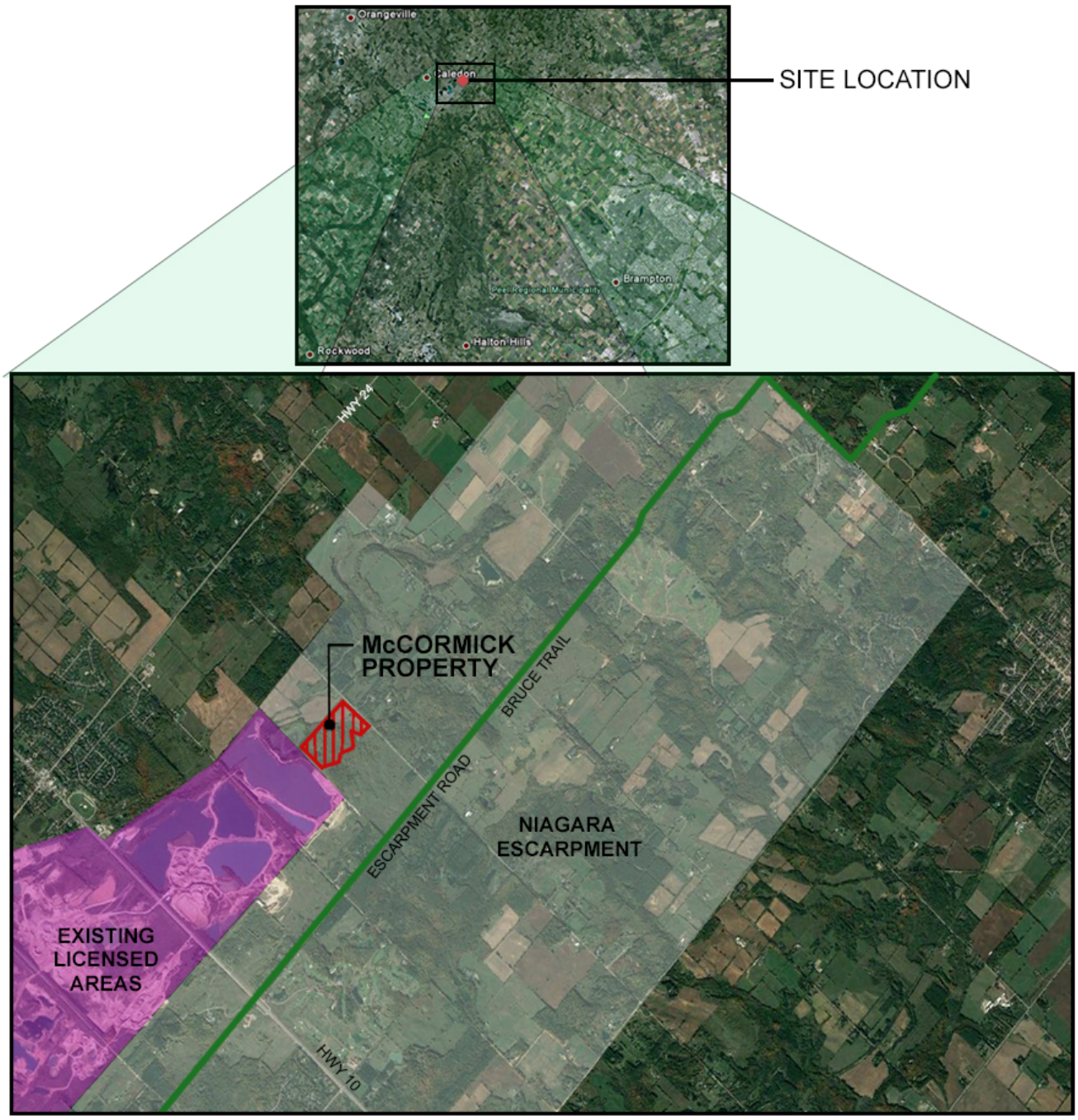

FIGURE 3. Location Map
"Caledon, Ontario" 43°51'42.62" N and 79°57'12.28" W. Google Earth. September 10, 2016. Retrieved December 14, 2017.

3.0 METHODOLOGY

The assessment process utilized for this study is guided by the planning policies outlined in the *Town of Caledon Official Plan (2016)* and the *Niagara Escarpment Plan (2017)*.

The process is also based on the *Investigative Methods to Identify Change in the Landscape* and *Assessment of the Impact of Change on the Escarpment Environment* provided in the *Niagara Escarpment Commission Visual Assessment Guidelines* (see Appendix I).

The methodology employed may be summarized into five stages:

A. An inventory and analysis of the subject property.
B. The identification, mapping, and assessment of significant views and viewsheds.
C. The identification and assessment of visual impacts.
D. The development of mitigation measures.
E. The assessment of the impact of change on the escarpment environment.

A. An inventory and analysis of the subject property.

- An inventory and analysis of the existing conditions of the site and its environs through desk review and site reconnaissance work.

- Preliminary identification and mapping of viewsheds from vantage points along roadways, the Bruce Trail, and public lands.

- Review of the existing "Evaluation Unit Scoring Sheets" for evaluated landscape units in the Niagara Escarpment Planning Area that surround and/ or overlap the subject property.

- Site reconnaissance work to confirm findings from desk review completed by walking and driving along roadways, Bruce Trail, and public lands.

- Collection of a photographic record of the existing visual conditions of the subject property.

B. The identification, mapping, and assessment of significant views and viewsheds.

- The identification, mapping, and assessment of significant views and viewsheds.

  The views are assessed according to their features. Each feature in each view is evaluated separately according to its Picture Plane and its Control Points.

  Picture Plane
  The picture plane within which a feature sits influences its dominance in the picture, as well as its impact on the viewer. Scientific perspective is the relation of the size of an object and the distance from the observer. As the distance between the object and the viewer increases, the size of the object within the picture decreases.

  Foreground is the area of a picture or photo located closest to the viewer. This area is considered to be the most prominent picture plane. Due to the distance from the viewer, the features will appear to be close to their actual size in comparison to being in another picture plane. As a result, these features appear bold and distinct and will be first to be seen in the picture.

Middleground is the area of a picture or photo located between the Foreground and the most distant part of the picture. This area is less prominent in a picture plane than the Foreground. Due to the distance from the viewer, the features will appear smaller than if it were in the Foreground. As a result, these features will appear less bold and less distinct than those in the Foreground.

Background is the area of a picture or photo located furthest from the viewer. This area is considered to be the most inconspicuous picture plane. Due to the distance from the viewer, the features will appear smaller than if they were in a different picture plane. As a result, patterns, rather than details, are seen.

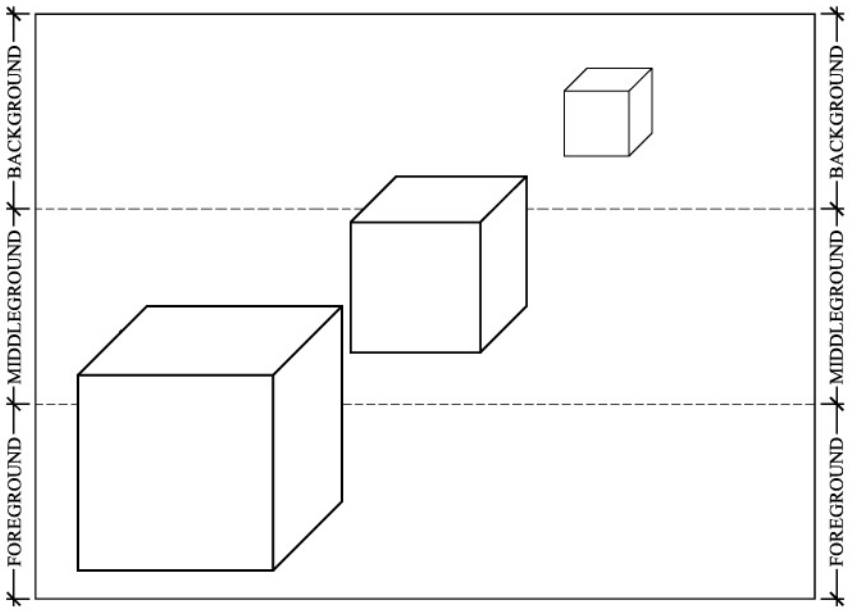

FIGURE 4. Picture Plane

Control Points

The viewer and the feature are considered to be the control points of a line-of-sight. A feature's elevation in relation to that of the viewpoint influences its impact on the viewer.

Viewer Superior defines a feature located at a lower elevation than the viewer. One would be looking down upon the feature. Features at this elevation impose no threat and their impact is least memorable.

Viewer Level defines a feature located at a similar elevation as the viewer. The feature's impact on the viewer will not be affected whatsoever.

Viewer Inferior defines a feature located at a higher elevation than the viewer. This asserts the dominance of the feature making it appear more majestic and memorable. Depending on the type of feature, its impact may cause one to experience a sense of intimidation or to experience a sense of warmth and protection.

Value

The values of the features are based on their degree of uniqueness and significance in the view where:

High – The feature provides a dominant unique and significant experience to the overall landscape of the area and escarpment environment.

Mod – The features provide a unique or significant experience to the overall landscape of the surrounding area and escarpment environment.

Low – The features provide neither a unique nor significant experience to the overall landscape of the surrounding area and escarpment environment.

C. The identification and assessment of visual impacts.

- The identification of the areas on the subject property affected by the features in each phase of the operations plan.

- The identification of significant views where the areas affected by the features in each phase of the operations plan are within or in direct proximity to the picture plane.

- The identification of any existing visual barriers in the areas affected by the features in each phase of the operations plan.

- The assessment of potential visual impacts of the feature in each phase of the operations plan on the significant views.

Visual Impact

The visual impacts of each phase of the operations plan are based on the degree and scale of which the existing landscape is affected. This will be determined taking into consideration any existing visual barriers, the feature's location in the picture plane, and the previously determined values of the views. The visual impacts in this report are assessed as follows:

High – feature will drastically modify the view and escarpment environment
Mod – feature will neither drastically nor slightly modify the view and escarpment environment
Low – feature will slightly modify the view and escarpment environment

D. The development of mitigation measures.

- The identification of the features in each phase of the operations plan which may need to be screened from the significant views.

- The development of mitigation measures for each phase of the operations plan which will minimize impact on the Escarpment Environment upon completion of rehabilitation.

E. The assessment of the impact of change on the escarpment environment.

- Review and assessment of impact on the escarpment environment and if the proposal is in conformance with the purpose and relevant objectives of the *NEP*.

- Review and assessment of impact on the existing landscape evaluation from the proposed end-use of the subject property.

4.0 EXISTING CONDITIONS

4.1 CONTEXT

The subject property is approximately 26 hectares (64 acres) in area located on the west side of Heart Lake Road in part of Lot 12, Concession 2 E.H.S., in the Town of Caledon, Regional Municipality of Peel. Caledon Village is located about 2km west of the subject property and Bruce Trail runs along Escarpment Sideroad to the south of the subject property. See Figure 3 for the Location Map.

The subject property is characterized by forested areas, rough pasture, and farm fields. A house, driveway, shed, and barn are located on the subject lands, and another house is located on the small severed lot outside the eastern boundary of the subject property.

4.2 VEGETATION

The subject property is composed of three farm fields, a pasture, deciduous woodlots and woodlot. The three agricultural fields are located in the northern, northeastern, and western ends of the property and the pasture area is in the central portion of the land. The southern and eastern portions of the subject property are covered by deciduous woodlots, which form the skyline. Other areas of the site are covered by scattered woodlot and younger trees. See Figure 5 for the Existing Conditions Map. Species present on the subject property are Hawthorne, Black Cherry, Ash, Maple, Sumac, Scots Pine, Beech, Birch, Hemlock, Hop Hornbeam, Elm, Cherry, Dogwood, Poplar, Basswood, and Aspen.

4.3 TOPOGRAPHY

The hummocky topography consisting of steep sided knolls and enclosed depressions within the southern part of the subject property are in association with the Paris Moraine, with maximum topographical relief of approximately 20 metres. The agricultural fields are smooth to gently to moderately sloping within the area identified as an outwash deposit.

4.4 DRAINAGE

Based on observations, there are three small seasonal surface water bodies found within closed depressions on the subject property. The highly permeable, granular soils on the property allow fairly rapid infiltration, and as a result, there are no developed surface water drainage courses on the subject property. Surface drainage is mainly internal and directed to the low areas or depressions within the field and wooded areas, where water will infiltrate into the soils beneath. Located southwest of the house at Residence R5 is a large kettle depression that seasonally holds water. Warnock Lake, a provincially significant wetland, and Caledon Creek are located to the northwest and north of the subject property.

4.5 LAND USE

The lands to the northwest, north, northeast, and southeast of the subject property are mainly in agricultural use and/or open space. There are several farm and non-farm residences located along Heart Lake Road northeast of the subject property. There are mineral aggregate resource operations on the lands to the west and southwest (Caledon Sand and Gravel Pit Inc.), which are characterized by active extraction areas, and rehabilitation which includes open water features as well as upland areas. The lands to the south of the property are hummocky and consist of old agricultural fields and meadows with scattered trees and shrubs. See Figure 2 for the Land Use Map and Figure 5 for the Existing Conditions Map.

4.6 CULTURAL LANDSCAPE

The structures on the subject property include a house, shed, and barn. On the small severed lot just outside the eastern corner of the subject property there is a small red brick house. Other buildings surrounding the subject property include a number of houses located on Heart Lake Road (See Figure 5).

As mentioned, the lands to the west and southwest of the subject property are designated as Extractive Industrial Area. A number of large commercial gravel pits have historically operated in the vicinity of Highways #10 and #24, near Caledon village. These pits supply high quality aggregate to the Greater Toronto Area (GTA) markets. Examples of these gravel pits include the John McCormick Pit #17 in Lot 12, Concession 4 E.H.S., the Old Conn Smythe Pit #22 (now Regan Graham) in Concession 1 W.H.S., and the Caledon Sand and Gravel Pit #11 (now James Dick Construction) southwest of the subject property (see Figure 2).

Source: "Caledon, Ontario" 43°51'47.93" N and 79°57'30.45" W. Google Earth. September 10, 2016. Retrieved December 15, 2017.

LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING CONTOUR
- EXISTING BUILDING
- + HP — HIGH POINT
- + LP — LOW POINT
- R1 — RESIDENTIAL PROPERTY

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Existing Conditions Map

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0 50 100 150 200m

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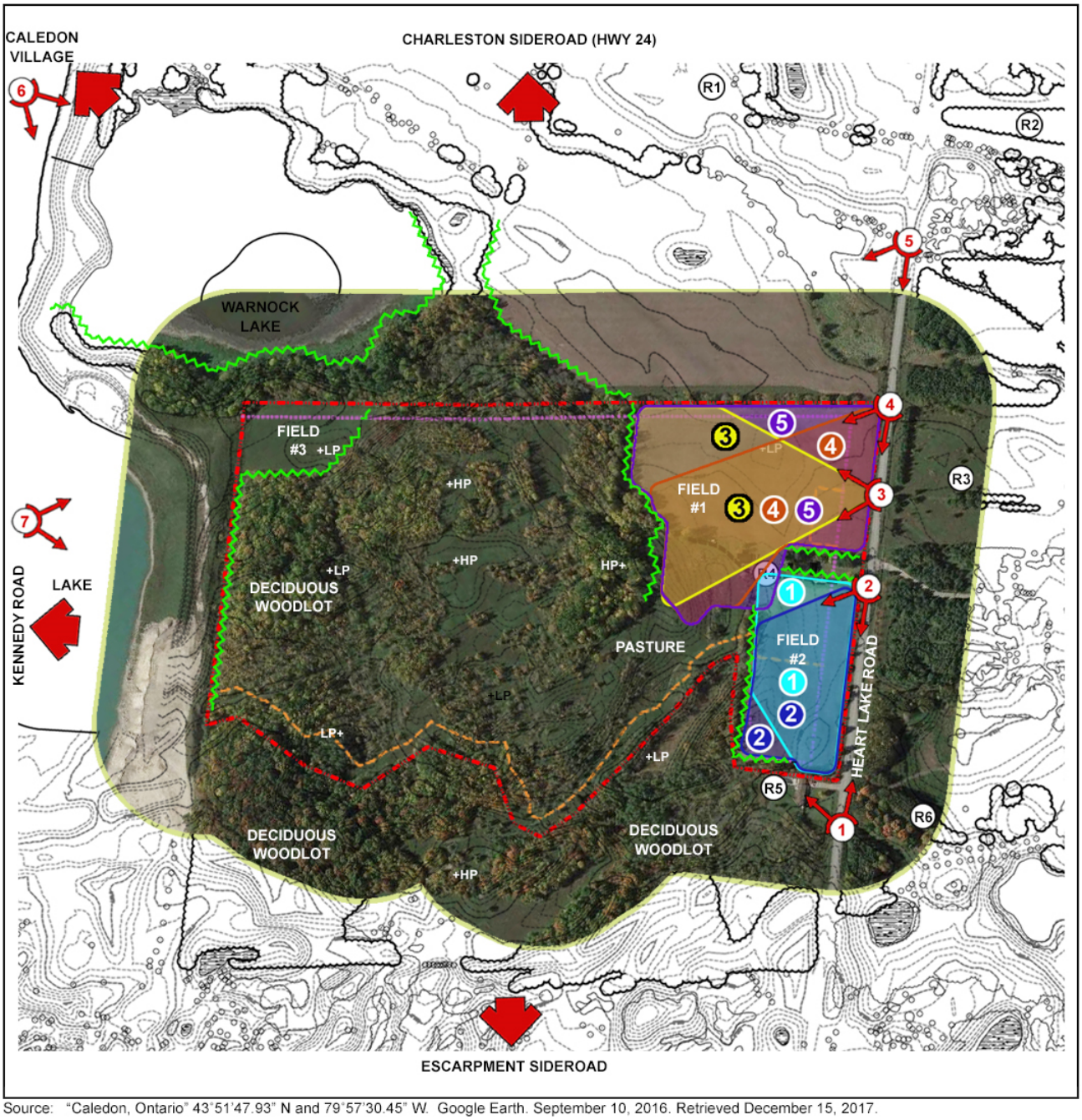
FIGURE 5



Source: "Caledon, Ontario" 43°51'47.93" N and 79°57'30.45" W. Google Earth. September 10, 2016. Retrieved December 15, 2017.

LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING CONTOUR
- EXISTING BUILDING
- + HP — HIGH POINT
- + LP — LOW POINT
- (R1) — RESIDENTIAL PROPERTY
- VIEW LOCATION
- VIEWSHED
- EXISTING VISUAL BARRIER

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View Locations and Viewshed Map

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0 50 100 150 200m

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FIGURE 6

5.0 SIGNIFICANT VIEWS AND VIEWSHEDS

Seven (7) views and viewsheds were assessed from different angles into the subject property from public roadways. See Figure 6 for the View Locations and Viewshed Map.

1. View Northwest at Residence R5

One traveling northwest on Heart Lake Road towards the entrance of Residence R5 would view agricultural field #2 on the subject property through the deciduous trees. In this view the elevation appears to be constant, Heart Lake Road is the dominant feature in the Foreground, Residence R5 is less dominant in the Middleground, Field #2 is obscured, and the characteristic open landscape character of the escarpment environment is in the Far Background.

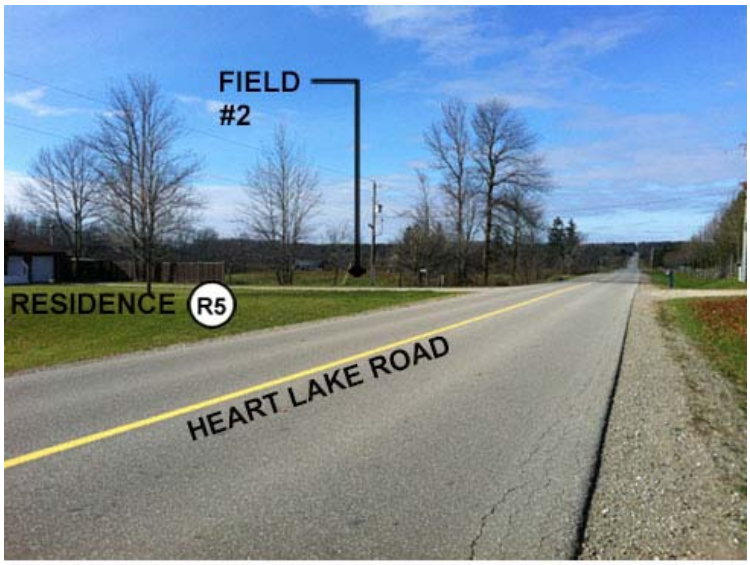


Figure 7. View #1
View Northwest at Residence R5 (November 2012)

2. Field #2

Southeast of the McCormick house and sheds is a field composed of rolling hills. This area is surrounded by Woodlot to the southwest, Residence R5 to the southeast and a post and wire fence and Heart Lake Road to the northeast. Traveling southeast on Heart Lake Road Woodlot and a post and wire fence outline the open space of rolling hills. In this view the fence and tall grasses lie within the Foreground, but are not dominating or intimidating because they are Viewer Level. In the Middleground the elevation of Field #2 fluctuates, but is relatively Viewer Level. The woodlot in the Background is at a lower elevation than the rolling hills in the Middleground, yet still screens the view further into the subject property and the escarpment environment.

Figure 8. View #2
Field #2 (November 2012)

3. Field #1

At the north end of the subject property is a flat existing field. The vegetation surrounding the open space screen the view further into the subject property and also focuses one's attention towards the field. The entrance to Residence R3 is located directly across Heart Lake Road from Field #1. Therefore, someone exiting Residence R3 will have a direct line of sight to this field. Located in the Foreground is Heart Lake Road. In the Middleground at Viewer Level lies Field #1 and the Deciduous Woodlot and scrub vegetation sits in the Background. Although the woodlot is Viewer Inferior, it is at too far a distance from the viewer to impose a sense of grandeur.

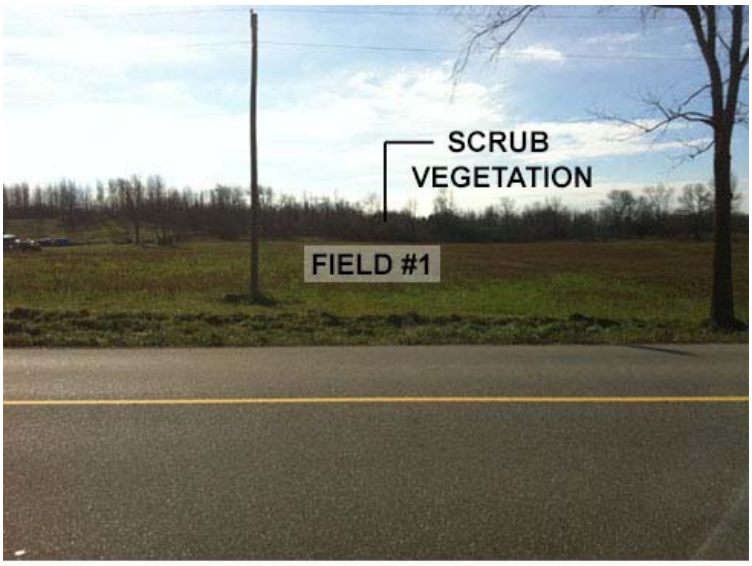


Figure 9. View #3
Field #1 (November 2012)

4. View South

A good portion of the landscape is captured in a view from the northern corner of the subject property on Heart Lake Road. Our attention is immediately focused towards Field #1 in the Foreground at Viewer Level. The Pasture sits Viewer Inferior in the Middleground. Although objects located at a higher elevation usually inflict a sense of warmth and encouraging dominance upon the viewer, the Pasture's location in the picture and distance from the viewer leaves it inferior to the vastness of the dominating field. Finally, in the Background, the Deciduous Woodlot stretches along the skyline. Similar to the Pasture, the woodlot is Viewer Inferior, however, the distance between the control points and its angle in relation to the view leave it submissive in the landscape.

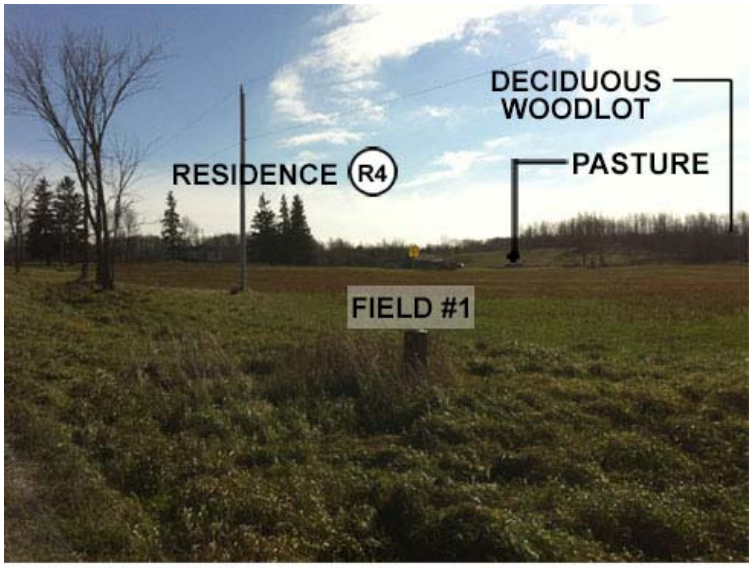


Figure 10. View #4
View South (November 2012)

5. View Southeast

Residence R1 is approximately 320m northwest of the subject property. This residence is located at a higher elevation than Field #1 on the subject property. One travelling southeast on Heart Lake Road towards the McCormick Property would view Field #1 on the subject property through the existing sparse vegetated screen at the property boundary, as well as the woodlot and escarpment environment in the Far Background. As a result, the subject property is Viewer Superior in the Background of this view.

Figure 11. View #5
View Southeast *(November 2012)*

6. View East

There is a section of Kennedy Road that is at a higher elevation. From this point there is a view east towards the subject property. There is no form of a visual barrier restricting the view to only Kennedy Road. As a result, Kennedy Road sits in the Foreground of this picture. A field lies within the Middleground and there is a skyline view of a woodlot in the Background. This woodlot is located just outside of the subject lands. Although Field #3 is located at the western corner of the subject property it will be hidden from view by the woodlot.

Figure 12. View #6
View East (November 2012)

7. View Northeast

The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. The proposed operation plan for the McCormick pit would involve transporting material, either by conveyor or by truck, from the McCormick site, to the neighbouring licensed site for processing and shipping. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location.

Figure 13. View #7
View Northeast (November 2012)

Table 1 summarizes the assessment of the Significant Views. Each feature in each view is evaluated separately according to its Picture Plane and Control Points.

Table 1. Summary of Significant Views

View	Description	Feature	Picture Plane	Control Points	Value
1	View Northwest at Residence R5	Heart Lake Road	Foreground	Viewer Level	Low
		Residence R5	Middleground	Viewer Level	Low
		Field #2	Background	Viewer Level	Moderate
		Characteristic Escarpment Environment	Far Background	Viewer Inferior	Moderate
2	Field #2	Post Wire Fence	Foreground	Viewer Level	Low
		Field #2	Middleground	Fluctuating	High
		Deciduous Woodlot	Background	Viewer Level	Moderate
3	Field #1	Heart Lake Road	Foreground	Viewer Level	Low
		Field #1	Middleground	Viewer Level	High
		Scrub Vegetation	Background	Viewer Inferior	Moderate
4	View South	Field #1	Foreground	Viewer Level	High
		Pasture	Middleground	Viewer Inferior	Moderate
		Deciduous Woodlot	Background	Viewer Inferior	Low

5	View Southeast	Subject Property	Background	Viewer Superior	Moderate
		Characteristic Escarpment Environment	Far Background	Viewer Inferior	Moderate
6	View East	Kennedy Road	Foreground	Viewer Level	Low
		Field	Middleground	Viewer Superior	Moderate
		Deciduous Woodlot	Background	Viewer Superior	Moderate
7	View Northeast	30m Setback	Foreground	Viewer Level	Low
		Seeded Berm	Middleground	Viewer Inferior	Low

6.0 VISUAL IMPACTS

The visual impacts of each phase of the operations plan are based on the degree and scale of which the existing landscape is affected by the operational features. This was determined taking into consideration existing visual barriers, the change in the picture plane due to proposed extraction operations, and the view's previously determined value. The visual impacts in this report are assessed as follows:

High – feature will drastically modify the view and escarpment environment
Mod – feature will neither drastically nor slightly modify the view and escarpment environment
Low – feature will slightly modify the view and escarpment environment

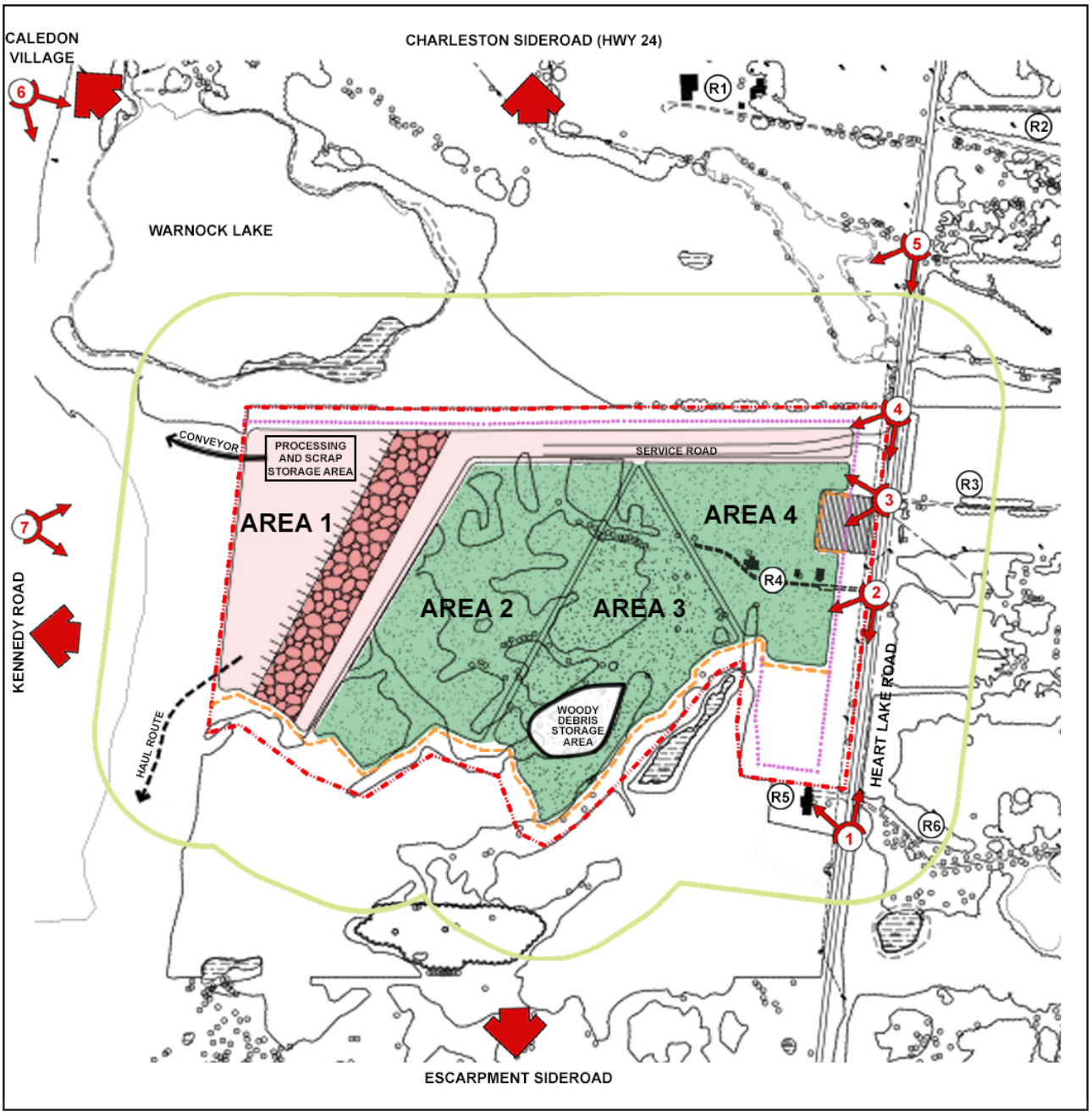
6.1 PHASE A

During Phase A Area 1 will be affected. A service entrance/exit at Heart Lake Road and an internal Haul Route from Area 1 to License 19073 on the pit floor will be established as soon as possible. The woodland area in the southeastern part of the property, outside of the licensed area will be retained and enhanced with additional planting. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction of material will begin in Area 1. Material will be transported to the adjacent existing pit for processing and shipping through conveyor. A number of views already discussed are affected by this phase. See Figure 14.

The following table summarizes the assessment of the Visual Impacts of Phase A on the significant views and viewsheds identified in this report. See Appendix II for details of the assessment.

Table 2. Summary of Phase A Visual Impacts

	Description	Feature	Area	Existing Barrier	Picture Plane	Value	Visual Impact
1	View Northwest at Residence R5	Service Road	1	Trees	Far Background	Mod	Low
3	Field #1	Service Road	1	None	Middleground	High	High
4	View South	Service Road	1	None	Foreground	High	High
5	View Southeast	Service Road	1	Trees	Background	Mod	Mod



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- R1 — RESIDENTIAL PROPERTY
- 7 — VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE

McCormick Pit

BLUELAND FARMS LIMITED

Phase A Visual Impacts

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0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 14

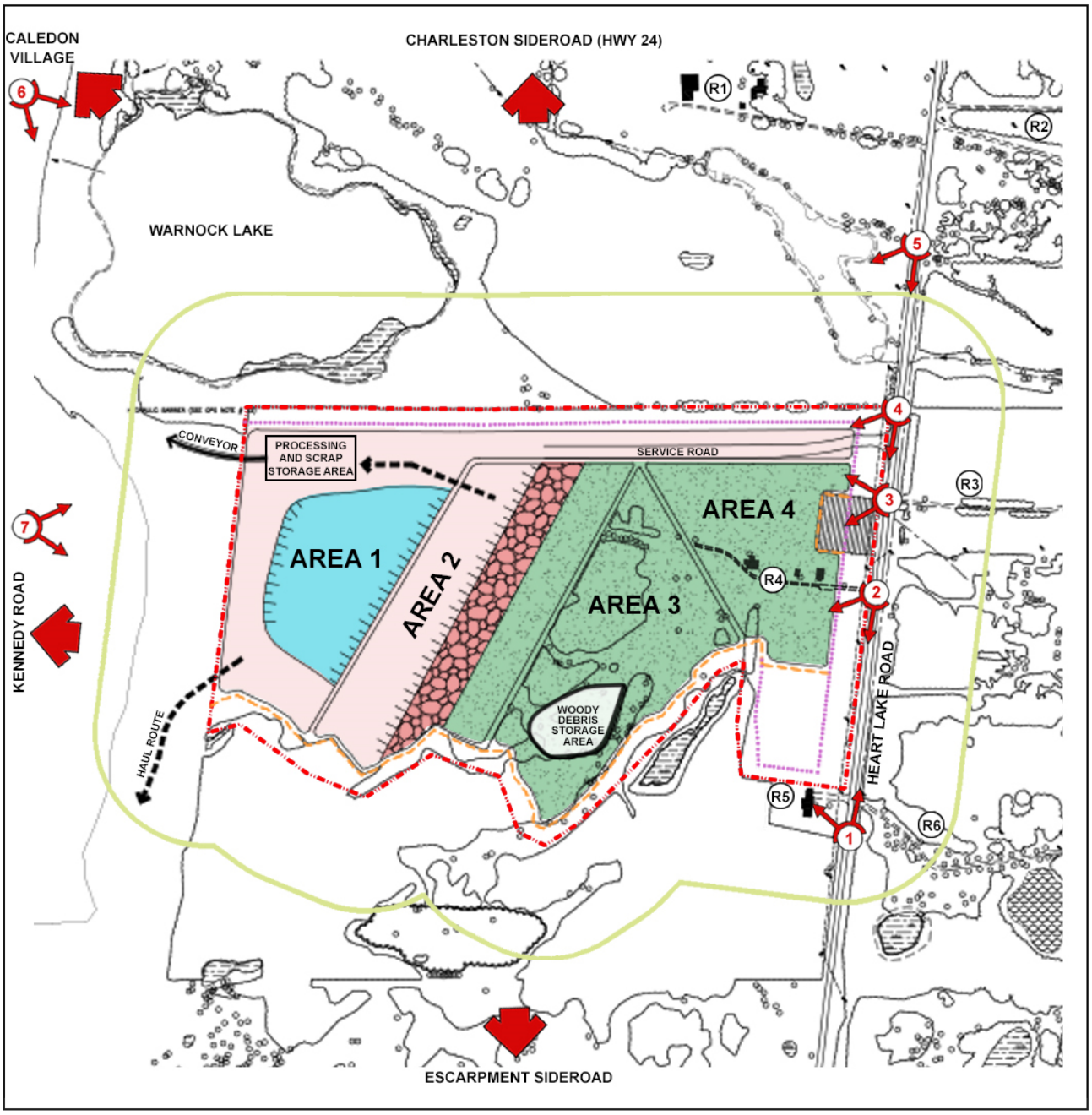
6.2 PHASE B

During Phase B Areas 1, 2, and 3 will be affected. The Service Road will be running through Area 1, where below water extraction will begin. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction will begin in Area 2 and any larger stumps and trees cleared from the extraction areas will be salvaged and stored in the Woody Debris Storage Area in Area 3 for reuse in habitat creation. A number of views already discussed are affected by this phase. See Figure 15.

The following table summarizes the assessment of the Visual Impacts of Phase B on the significant views and viewsheds identified in this report. See Appendix II for details of the assessment.

Table 3. Summary of Phase B Visual Impacts

	Description	Feature	Area	Existing Barrier	Picture Plane	Value	Visual Impact
1	View Northwest at Residence R5	Service Road	1	Trees	Far Background	Mod	Low
3	Field #1	Service Road	1	None	Middleground	High	High
		Extraction Area	1	Some Scrub Vegetation	Far Background	Low	Low
		Processing and Scrap Storage Area	1	None	Far Background	Low	Low
		Extraction Area	2	Some Scrub Vegetation	Background	Mod	Mod
4	View South	Service Road	1	None	Foreground	High	High
5	View Southeast	Service Road	1	Trees	Background	Mod	Mod
		Extraction Area	2	Trees	Background	Mod	Mod



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- R1 — RESIDENTIAL PROPERTY
- 7 — VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

McCormick Pit

BLUELAND FARMS LIMITED

Phase B Visual Impacts

Visual Impact Assessment Report

January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 15

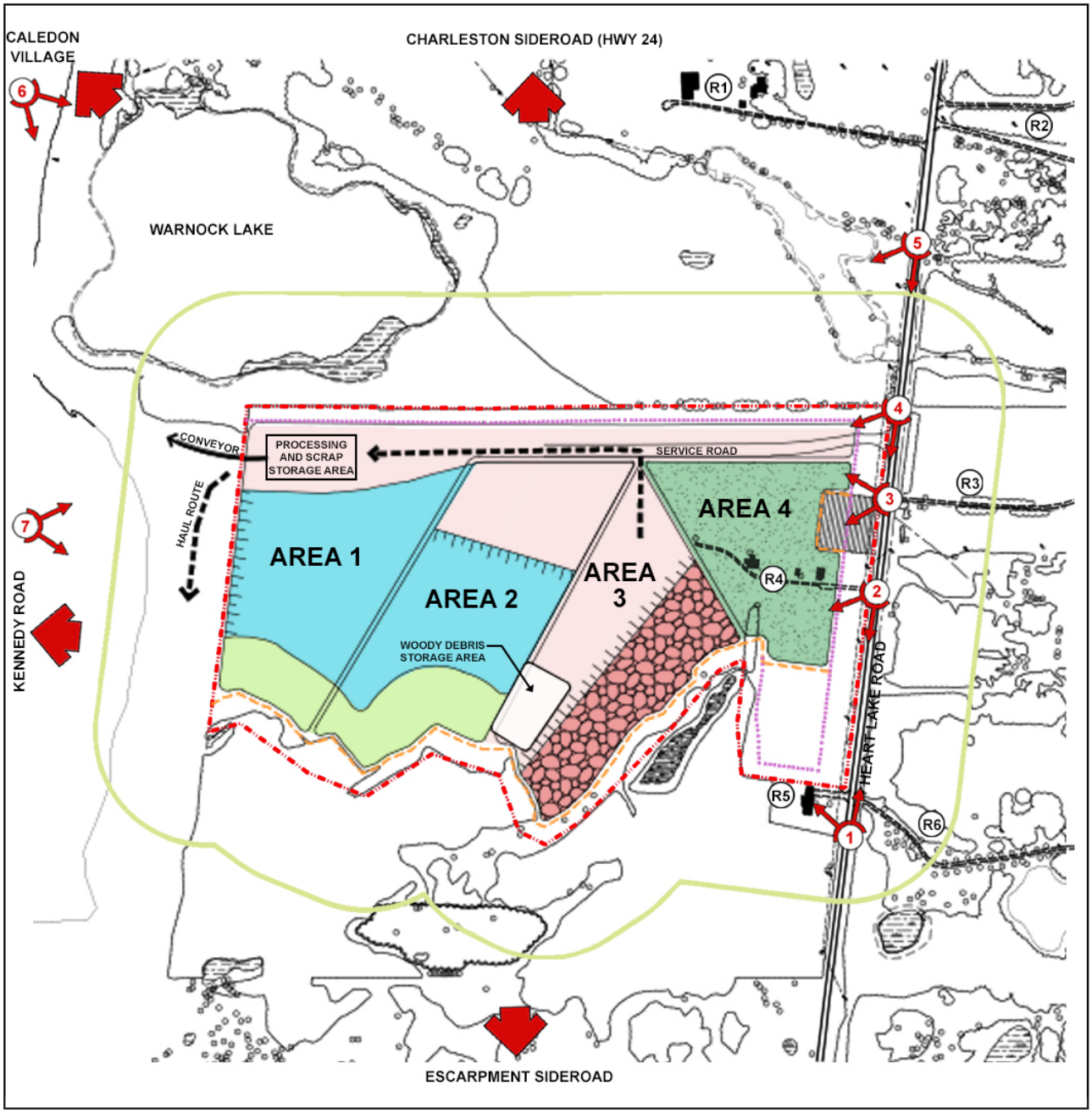
6.3 PHASE C

During Phase C Areas 1, 2, and 3 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation of the south side slopes and shoreline will begin in Area 1 and 2. Above water extraction in Area 3 will begin. Below water extraction in Area 1 will continue while that in Area 2 will begin. A number of views already discussed are affected by this phase. See Figure 16.

The following table summarizes the assessment of the Visual Impacts of Phase C on the significant views and viewsheds identified in this report. See Appendix II for details of the assessment.

Table 4. Summary of Phase C Visual Impacts

	Description	Feature	Area	Existing Barrier	Picture Plane	Value	Visual Impact
1	View Northwest at Residence R5	Service Road	1	Trees	Far Background	Mod	Mod
2	Field #2	Extraction Area	3	Trees	Background	Mod	Mod
3	Field #1	Service Road	1	None	Middleground	High	High
		Extraction Area	1	None	Far Background	Low	Mod
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Rehabilitation	1	None	Far Background	Low	Mod
		Extraction Area	2	None	Background	Mod	High
		Rehabilitation	2	None	Background	Mod	High
		Extraction Area	3	None	Background	Mod	High
4	View South	Service Road	1	None	Foreground	High	High
		Extraction Area	1	None	Far Background	Low	Mod
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Rehabilitation	1	None	Far Background	Low	Mod
		Extraction Area	2	None	Background	Mod	High
		Rehabilitation	2	None	Background	Mod	High
		Extraction Area	3	None	Middleground	Mod	High
5	View Southeast	Service Road	1	Trees	Background	Mod	Mod
		Extraction Area	1	Trees	Background	Mod	Mod
		Rehabilitation	1	Trees	Background	Mod	Mod
		Extraction Area	2	Trees	Background	Mod	Mod
		Rehabilitation	2	Trees	Background	Mod	Mod
		Extraction Area	3	Trees	Background	Mod	Mod



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- R1 — RESIDENTIAL PROPERTY
- 7 — VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

McCormick Pit
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Phase C Visual Impacts
Visual Impact Assessment Report
January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 16

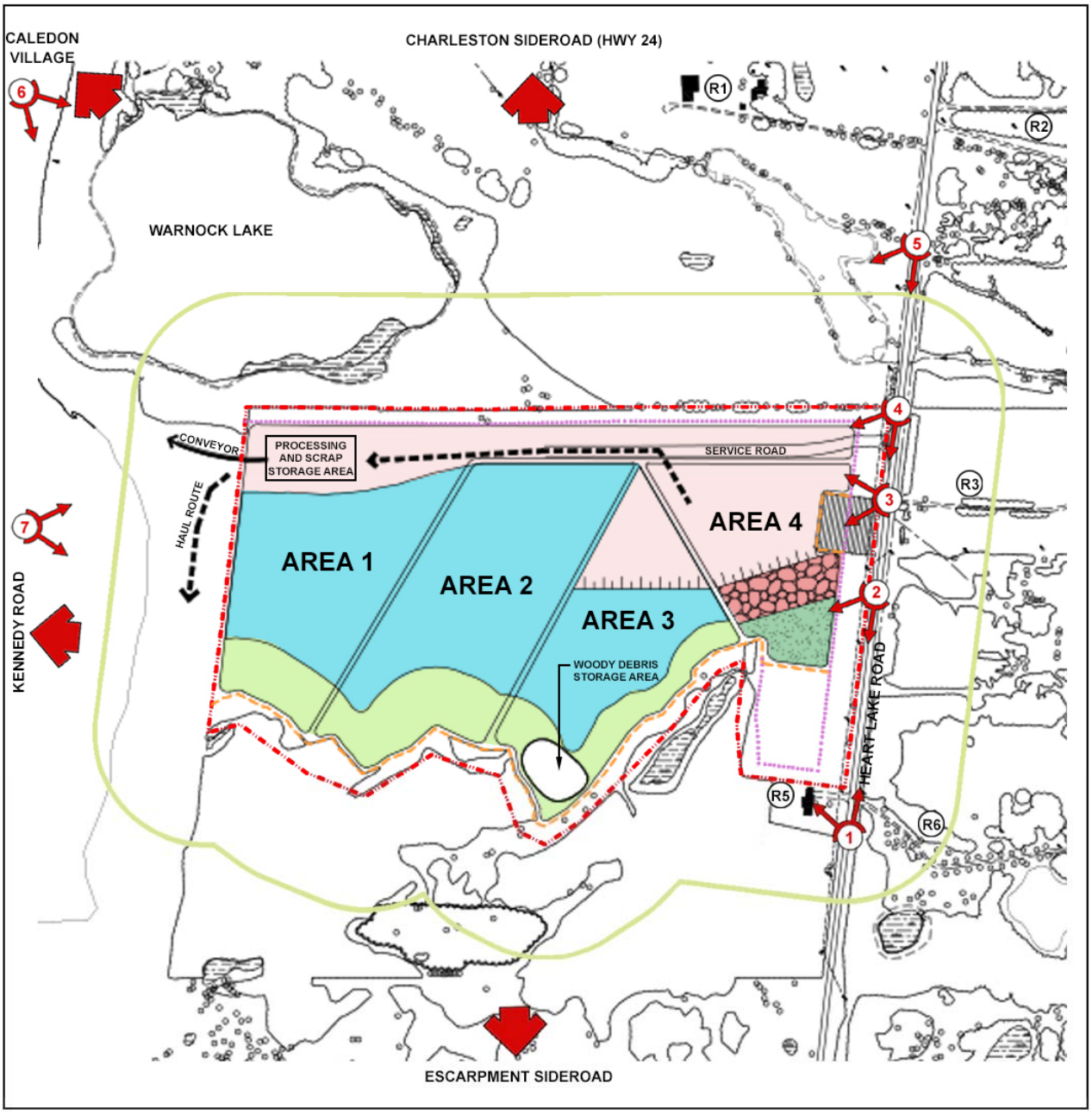
6.4 PHASE D

During Phase D Areas 1, 2, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation will continue and be completed in Area 2. Below water extraction and progressive rehabilitation will begin in Area 3 and above water extraction will begin in Area 4. A number of views already discussed are affected by this phase. See Figure 17.

The following table summarizes the assessment of the Visual Impacts of Phase D on the significant views and viewsheds identified in this report. See Appendix II for details of the assessment.

Table 5. Summary of Phase D Visual Impacts

	Description	Feature	Area	Existing Barrier	Picture Plane	Value	Visual Impact
1	View Northwest at Residence R5	Service Road	1	Trees	Far Background	Mod	Mod
		Extraction Area	4	Trees	Far Background	Mod	Mod
2	Field #2	Extraction Area	3	None	Background	Mod	Mod
		Rehabilitation	3	None	Background	Mod	Mod
		Extraction Area	4	None	Middleground	High	High
3	Field #1	Service Road	1	None	Middleground	High	High
		Extraction Area	1	None	Far Background	Low	Mod
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Rehabilitation	1	None	Far Background	Low	Mod
		Extraction Area	2	None	Background	Mod	High
		Rehabilitation	2	None	Background	Mod	High
		Extraction Area	3	None	Background	Mod	High
		Rehabilitation	3	None	Background	Mod	High
		Extraction Area	4	None	Middleground	High	High
4	View South	Service Road	1	None	Foreground	High	High
		Extraction Area	1	None	Far Background	Low	Mod
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Rehabilitation	1	None	Far Background	Low	Mod
		Extraction Area	2	None	Background	Mod	High
		Rehabilitation	2	None	Background	Mod	High
		Extraction Area	3	None	Middleground	Mod	High
		Rehabilitation	3	None	Middleground	Mod	High
		Extraction Area	4	None	Foreground	High	High
5	View Southeast	Service Road	1	Trees	Background	Mod	Mod
		Extraction Area	1	Trees	Background	Mod	Mod
		Rehabilitation	1	Trees	Background	Mod	Mod
		Extraction Area	2	Trees	Background	Mod	Mod
		Rehabilitation	2	Trees	Background	Mod	Mod
		Extraction Area	3	Trees	Background	Mod	Mod
		Rehabilitation	3	Trees	Background	Mod	Mod
		Extraction Area	4	Trees	Background	Mod	Mod



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- R1 — RESIDENTIAL PROPERTY
- 7 — VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

McCormick Pit

BLUELAND FARMS LIMITED

Phase D Visual Impacts

Visual Impact Assessment Report

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0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 17

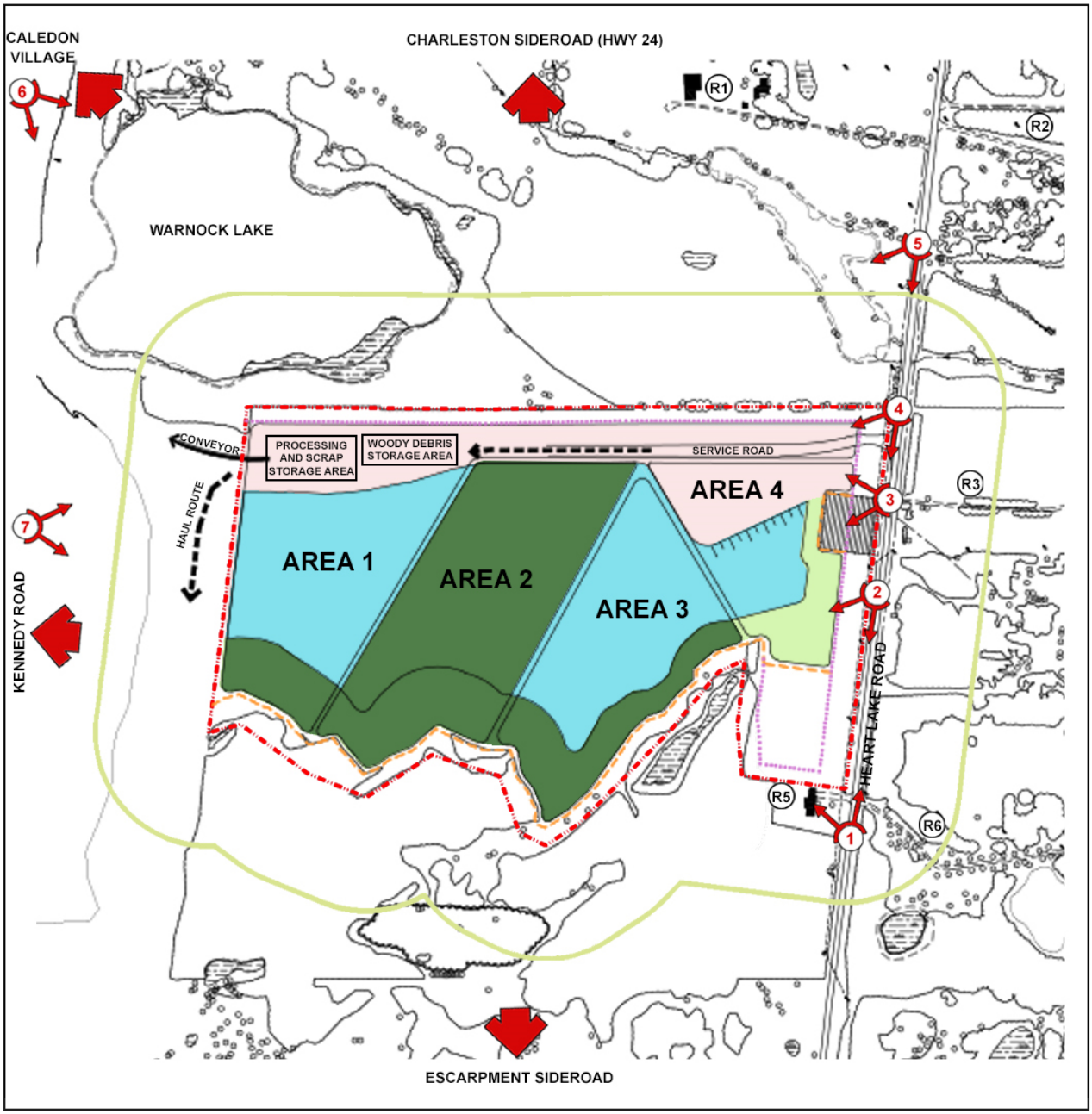
6.5 PHASE E

During Phase E Areas 1, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Below water extraction and progressive rehabilitation in Area 3 will be completed and will begin in Area 4. A number of views already discussed are affected by this phase. See Figure 18.

The following table summarizes the assessment of the Visual Impacts of Phase E on the views and viewsheds identified in this report. See Appendix II for details of the assessment.

Table 6. Summary of Phase E Visual Impacts

	Description	Feature	Area	Existing Barrier	Picture Plane	Value	Visual Impact
1	View Northwest at Residence R5	Service Road	1	Trees	Far Background	Mod	Mod
		Extraction Area	4	Trees	Far Background	Mod	Mod
2	Field #2	Extraction Area	3	None	Background	Mod	Mod
		Rehabilitation	3	None	Background	Mod	Mod
		Extraction Area	4	None	Middleground	High	High
		Rehabilitation	4	None	Middleground	High	High
3	Field #1	Service Road	1	None	Middleground	High	High
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Extraction Area	3	None	Background	Mod	High
		Rehabilitation	3	None	Background	Mod	High
		Extraction Area	4	None	Middleground	High	High
		Rehabilitation	4	None	Middleground	High	High
4	View South	Service Road	1	None	Foreground	High	High
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Extraction Area	3	None	Middleground	Mod	High
		Rehabilitation	3	None	Middleground	Mod	High
		Extraction Area	4	None	Foreground	High	High
		Rehabilitation	4	None	Foreground	High	High
5	View Southeast	Service Road	1	Trees	Background	Mod	Mod
		Extraction Area	3	Trees	Background	Mod	Mod
		Rehabilitation	3	Trees	Background	Mod	Mod
		Extraction Area	4	Trees	Background	Mod	Mod
		Rehabilitation	4	Trees	Background	Mod	Mod



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- COMPLETED EXTRACTION AND REHABILITATION
- R1 — RESIDENTIAL PROPERTY
- 7 — VIEW LOCATION
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

McCormick Pit

BLUELAND FARMS LIMITED

Phase E Visual Impacts

Visual Impact Assessment Report

January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 18

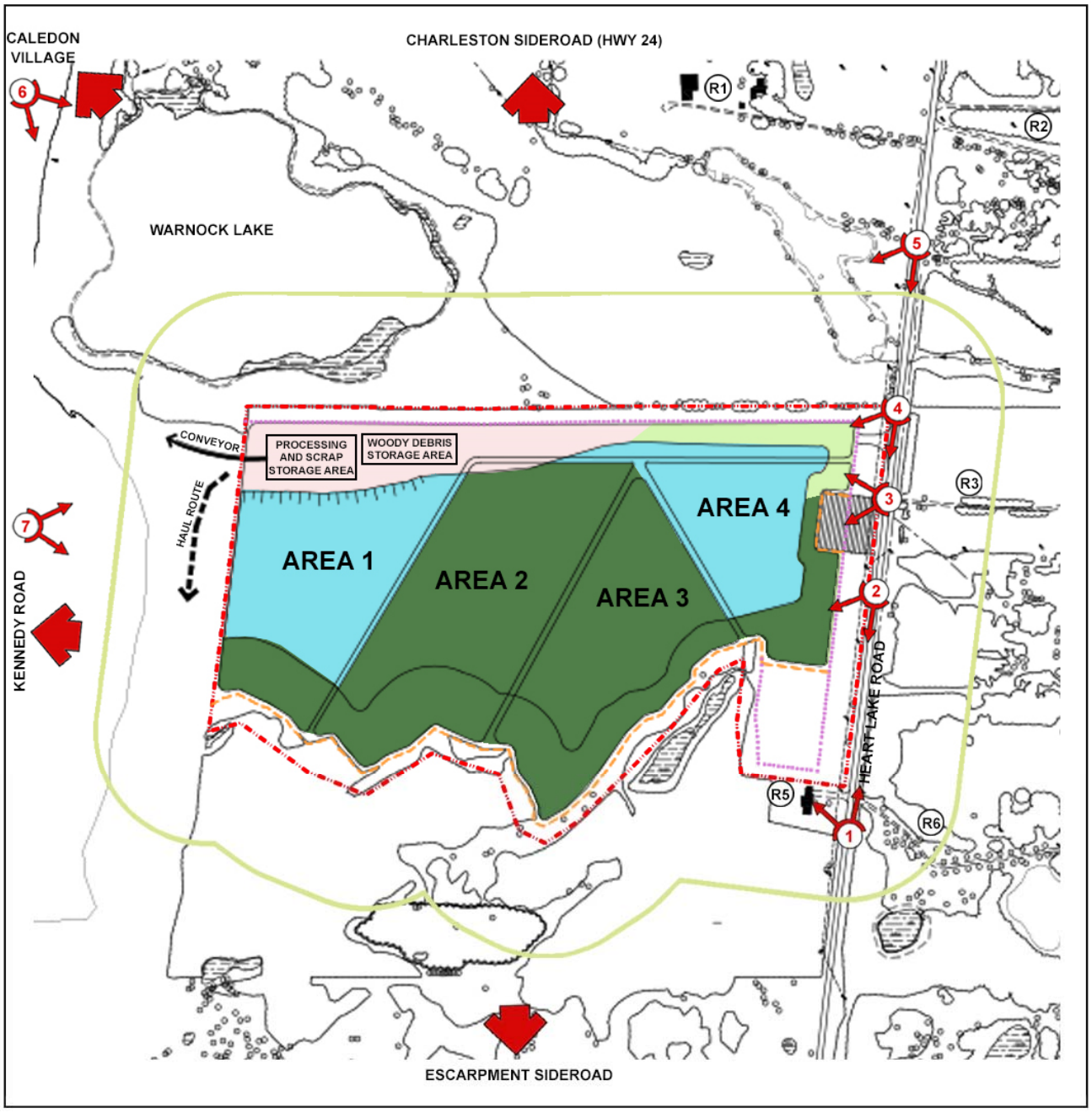
6.6 PHASE F

During Phase F Areas 1 and 4 will be affected. Below water extraction in Area 4 will be completed and will continue in the Processing Area in Area 1. Rehabilitation of Area 4 will be completed in this phase. A number of views already discussed are affected by this phase. See Figure 19.

The following table summarizes the assessment of the Visual Impacts of Phase F on the views and viewsheds identified in this report. See Appendix II for details of the assessment.

Table 7. Summary of Phase F Visual Impacts

	Description	Feature	Area	Existing Barrier	Picture Plane	Value	Visual Impact
1	View Northwest at Residence R5	Extraction Area	1	Trees	Far Background	Mod	Mod
		Rehabilitation	1	Trees	Far Background	Mod	Mod
		Extraction Area	4	Trees	Far Background	Mod	Mod
		Rehabilitation	4	Trees	Far Background	Mod	Mod
2	Field #2	Extraction Area	4	None	Middleground	High	High
		Rehabilitation	4	None	Middleground	High	High
3	Field #1	Extraction Area	1	None	Middleground	High	High
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Rehabilitation	1	None	Middleground	High	High
		Extraction Area	4	None	Middleground	High	High
		Rehabilitation	4	None	Middleground	High	High
4	View South	Extraction Area	1	None	Foreground	High	High
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Rehabilitation	1	None	Foreground	High	High
		Extraction Area	4	None	Foreground	High	High
		Rehabilitation	4	None	Foreground	High	High
5	View Southeast	Extraction Area	1	Trees	Background	Mod	Mod
		Rehabilitation	1	Trees	Background	Mod	Mod
		Extraction Area	4	Trees	Background	Mod	Mod
		Rehabilitation	4	Trees	Background	Mod	Mod



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- COMPLETED EXTRACTION AND REHABILITATION
- R1 RESIDENTIAL PROPERTY
- 7 VIEW LOCATION
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

McCormick Pit

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Phase F Visual Impacts

Visual Impact Assessment Report

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0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 19

6.7 PHASE G

During Phase G Area 1 will be affected. Below water extraction and progressive rehabilitation of side slopes and shoreline in Area 1 will be completed. All equipment, structures, scrap and machinery from the site will be removed upon completion of extraction. A number of views already discussed are affected by this phase.

The following table summarizes the assessment of the Visual Impacts of Phase G on the views and viewsheds identified in this report. See Appendix II for details of the assessment.

Table 8. Summary of Phase G Visual Impacts

	Description	Feature	Area	Existing Barrier	Picture Plane	Value	Visual Impact
3	Field #1	Extraction Area	1	None	Middleground	High	High
		Processing and Scrap Storage Area	1	None	Far Background	Low	Mod
		Rehabilitation	1	None	Middleground	High	High
5	View Southeast	Extraction Area	1	Trees	Background	Mod	Mod
		Rehabilitation	1	Trees	Background	Mod	Mod

7.0 MITIGATION MEASURES

As stated in the *Niagara Escarpment Plan (2017)*:

> "2.9 Mineral Aggregate Resources
>
> 5. The *mineral aggregate operation* shall be screened while it is in progress and, where possible, prior to extraction in a manner *compatible* with the surrounding visual environment.
>
> 6. Screening shall incorporate the following:
>
> a) overburden material in the form of a *berm* with varied heights and widths, supplemented with native tree, shrub and vegetative plantings;
> b) vegetative screen plantings are to be of *compatible* species and sizes to permit only very limited visual contact from the surrounding landscape;
> c) all plantings should be properly maintained to ensure continued survival and good growth rates; and
> d) where the existing forest is adequate to be considered as an effective screen along the perimeter of the site, no additional artificial berming or stockpiling of overburden materials will be permitted within the forested area being used as a natural screen."

Therefore, the following mitigation measures are being recommended by Harrington McAvan Ltd. for the proposed operations on the subject lands.

7.1 PHASE A

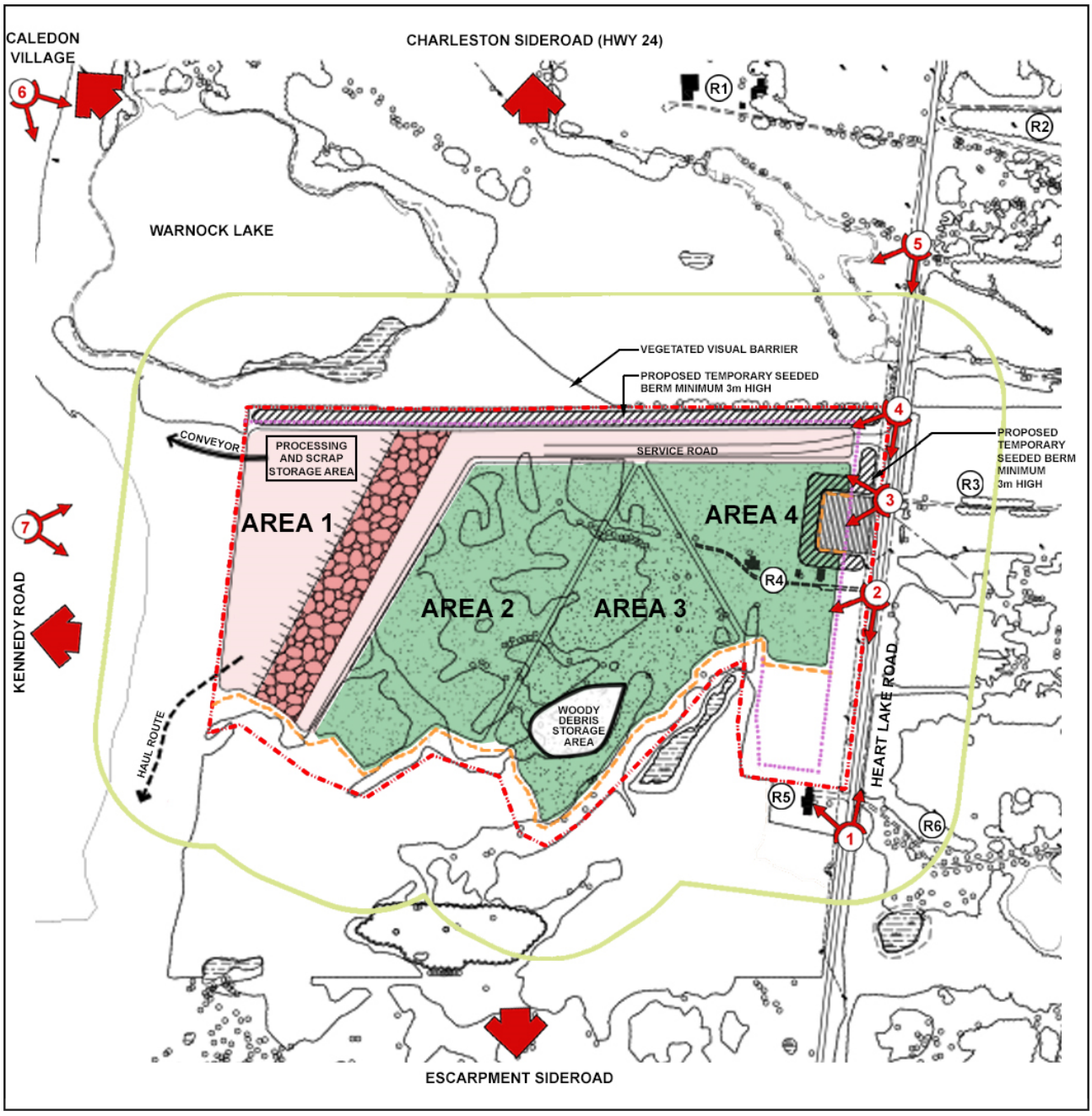
During Phase A Area 1 will be affected. A service entrance/exit at Heart Lake Road and an internal Haul Route from Area 1 to License 19073 on the pit floor will be established as soon as possible. The woodland area in the southeastern part of the property, outside of the licensed area will be retained and enhanced with additional planting. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction of material will begin in Area 1. Material will be transported to the adjacent existing pit for processing and shipping through conveyor. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 20.

The following table summarizes the views impacted by the operations of Phase A, the features affecting the views, the grounds affected in the views, the previously determined values and visual impacts, and the recommended mitigation measures for the visual impacts. See Appendix III for the development of these recommended mitigation measures.

Table 9. Summary of Phase A Mitigation Measures

	Description	Feature	Area	Picture Plane	Value	Visual Impact	Mitigation Measure
1	View Northwest at Residence R5	Service Road	1	Far Background	Mod	Low	Installation of temporary seeded berm minimum 3m high

3	Field #1	Service Road	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
4	View South	Service Road	1	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
5	View Southeast	Service Road	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- R1 — RESIDENTIAL PROPERTY
- 7 — VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- PROPOSED TEMPORARY SEEDED BERM MINIMUM 3m HIGH

McCormick Pit

BLUELAND FARMS LIMITED

Phase A Mitigation Measures

Visual Impact Assessment Report

January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 20

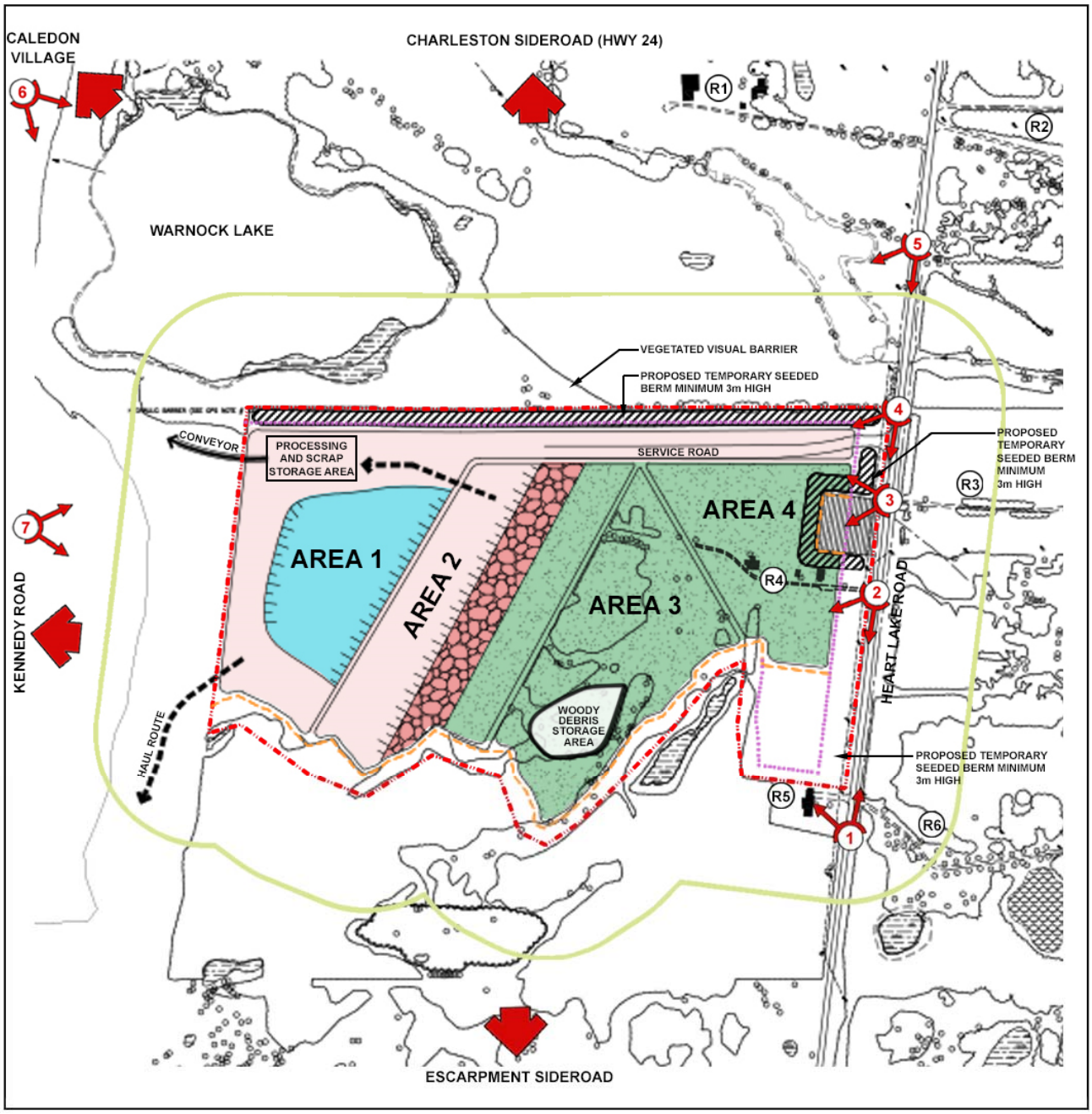
7.2 PHASE B

During Phase B Areas 1, 2, and 3 will be affected. The Service Road will be running through Area 1, where below water extraction will begin. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction will begin in Area 2 and any larger stumps and trees cleared from the extraction areas will be salvaged and stored in the Woody Debris Storage Area in Area 3 for reuse in habitat creation. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 21.

The following table summarizes the views impacted by the operations of Phase B, the features affecting the views, the grounds affected in the views, the previously determined values and visual impacts, and the recommended mitigation measures for the visual impacts. See Appendix III for the development of these recommended mitigation measures.

Table 10. Summary of Phase B Mitigation Measures

	Description	Feature	Area	Picture Plane	Value	Visual Impact	Mitigation Measure
1	View Northwest at Residence R5	Service Road	1	Far Background	Mod	Low	Installation of temporary seeded berm minimum 3m high
3	Field #1	Service Road	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	1	Far Background	Low	Low	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Low	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
4	View South	Service Road	1	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
5	View Southeast	Service Road	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- PROPOSED TEMPORARY SEEDED BERM MINIMUM 3m HIGH
- R1 RESIDENTIAL PROPERTY
- 7 VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

McCormick Pit
BLUELAND FARMS LIMITED

Phase B Mitigation Measures
Visual Impact Assessment Report
January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 21

7.3 PHASE C

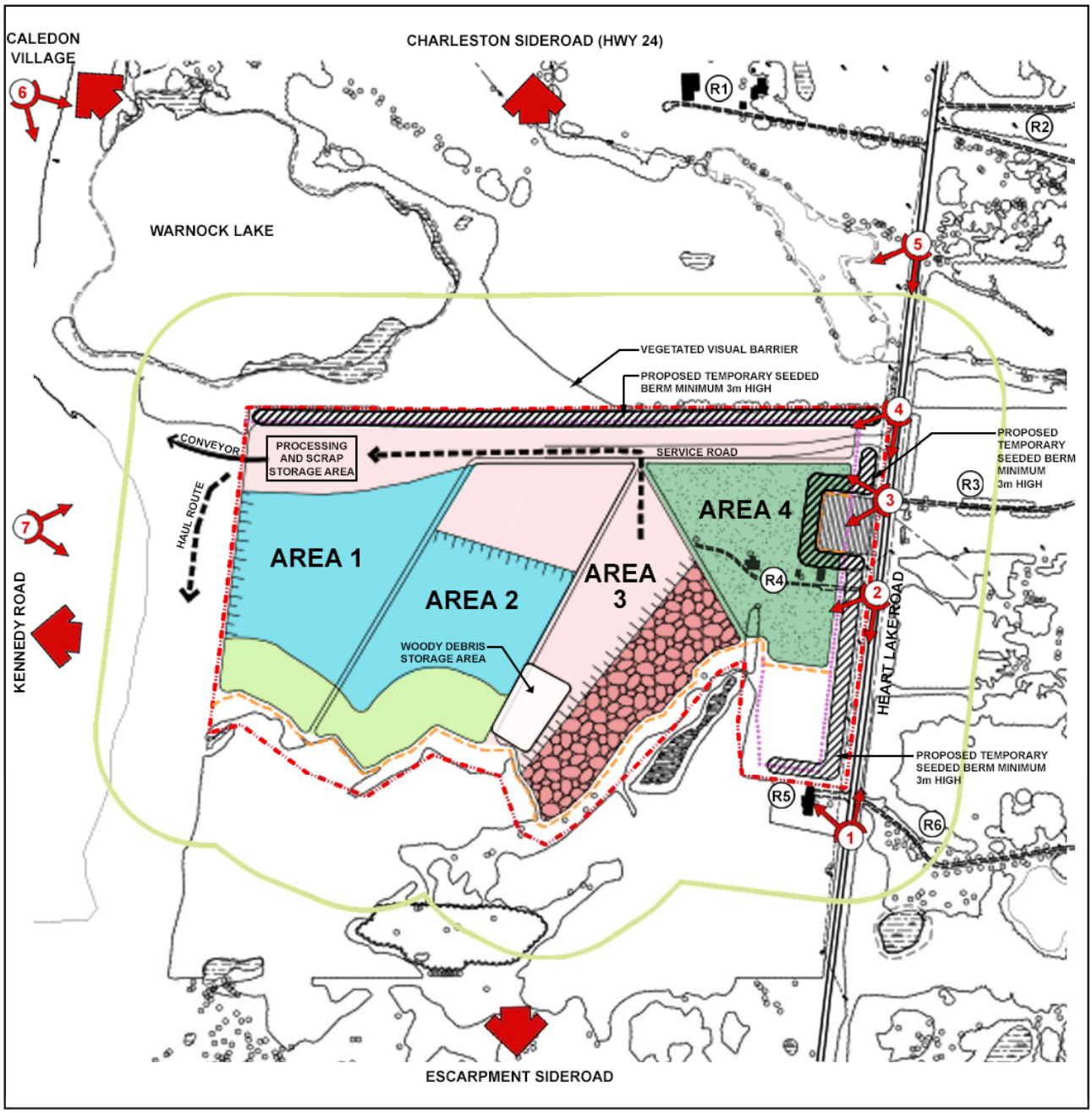
During Phase C Areas 1, 2, and 3 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation of the south side slopes and shoreline will begin in Area 1 and 2. Above water extraction in Area 3 will begin. Below water extraction in Area 1 will continue while that in Area 2 will begin. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 22.

The following table summarizes the views impacted by the operations of Phase C, the features affecting the views, the grounds affected in the views, the previously determined values and visual impacts, and the recommended mitigation measures for the visual impacts. See Appendix III for the development of these recommended mitigation measures.

Table 11. Summary of Phase C Mitigation Measures

	Description	Feature	Area	Picture Plane	Value	Visual Impact	Mitigation Measures
1	View Northwest at Residence R5	Service Road	1	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
2	Field #2	Extraction Area	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
3	Field #1	Service Road	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
4	View South	Service Road	1	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high

		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Middleground	Mod	High	Installation of temporary seeded berm minimum 3m high
5	View Southeast	Service Road	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	2	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- PROPOSED TEMPORARY SEEDED BERM MINIMUM 3m HIGH
- R1 RESIDENTIAL PROPERTY
- 7 VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

McCormick Pit

BLUELAND FARMS LIMITED

Phase C Mitigation Measures

Visual Impact Assessment Report

January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 22

7.4 PHASE D

During Phase D Areas 1, 2, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation will continue and be completed in Area 2. Below water extraction and progressive rehabilitation will begin in Area 3 and above water extraction will begin in Area 4. A number of visual impacts have been discussed. See Figure 23.

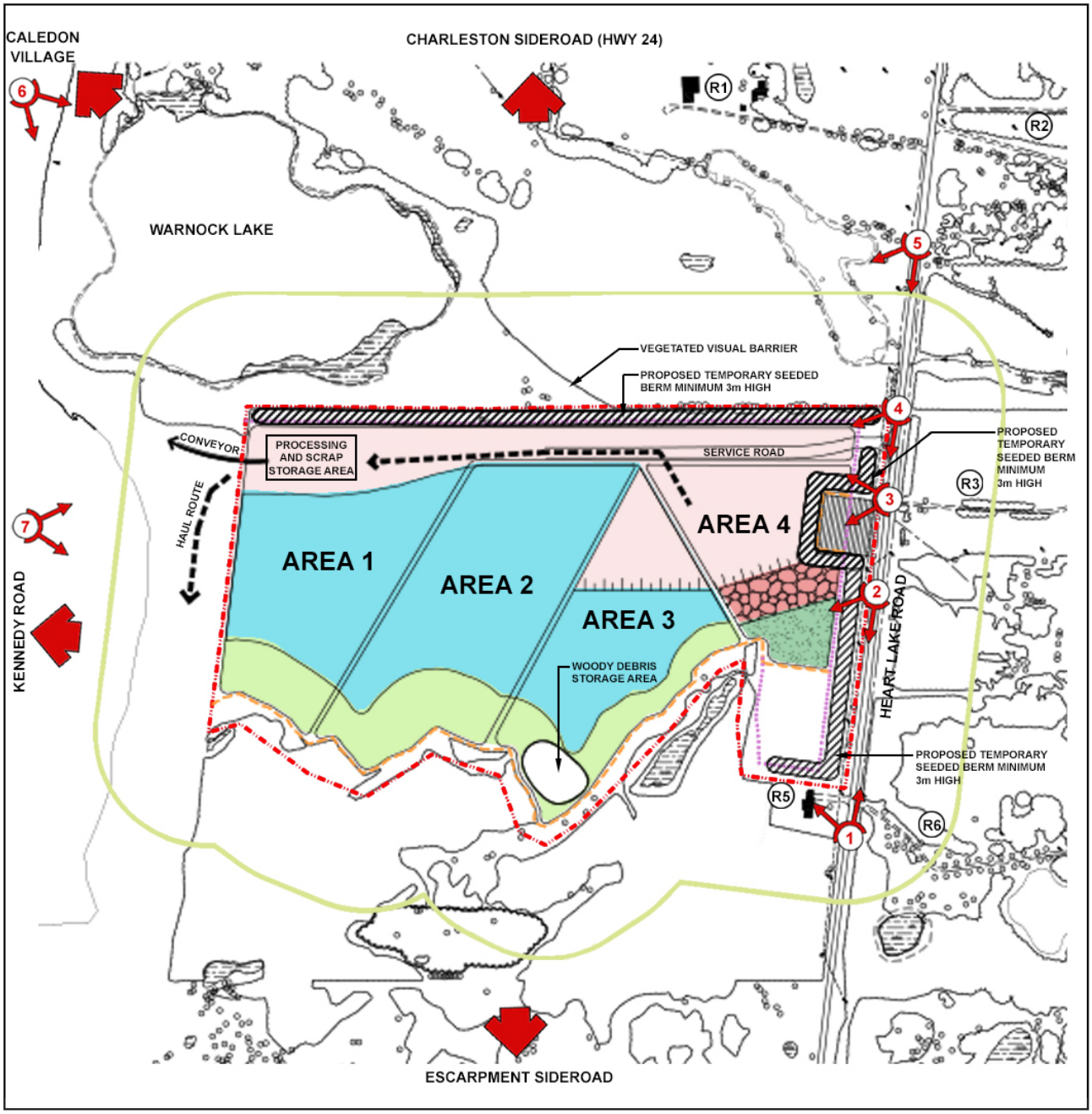
The following table summarizes the views impacted by the operations of Phase D, the features affecting the views, the grounds affected in the views, the previously determined values and visual impacts, and the recommended mitigation measures for the visual impacts. See Appendix III for the development of these recommended mitigation measures.

Table 12. Summary of Phase D Mitigation Measures

	Description	Feature	Area	Picture Plane	Value	Visual Impact	Mitigation Measures
1	View Northwest at Residence R5	Service Road	1	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
2	Field #2	Extraction Area	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
3	Field #1	Service Road	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high

		Extraction Area	3	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
4	View South	Service Road	1	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	2	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Middleground	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Middleground	Mod	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
5	View Southeast	Service Road	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	2	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high

		Rehabilitation	2	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- PROPOSED TEMPORARY SEEDED BERM MINIMUM 3m HIGH
- R1 RESIDENTIAL PROPERTY
- 7 VIEW LOCATION
- UNDISTURBED AREA
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION

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Phase D Mitigation Measures
Visual Impact Assessment Report
January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 23

7.5 PHASE E

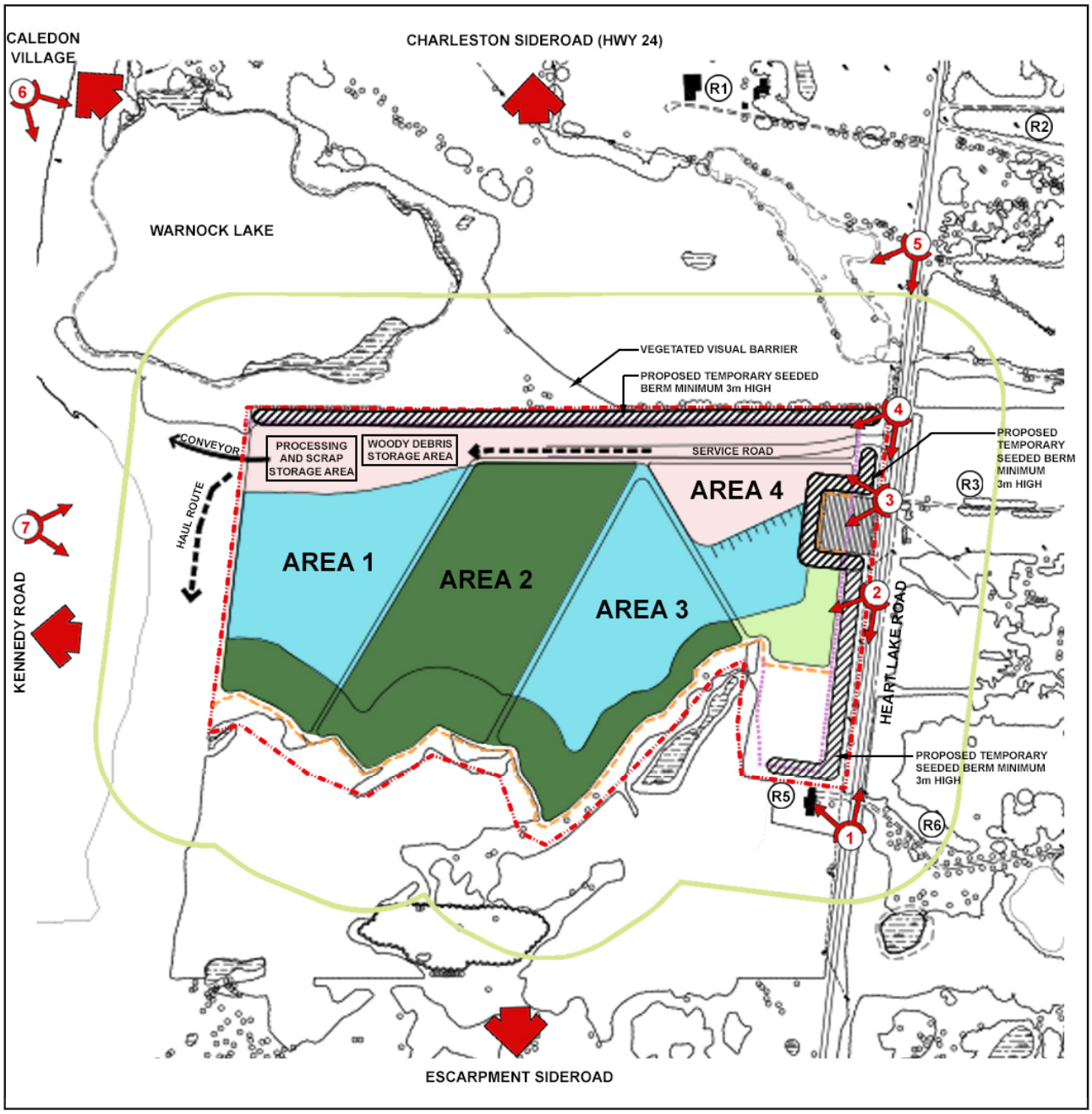
During Phase E Areas 1, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Below water extraction and progressive rehabilitation in Area 3 will be completed and will begin in Area 4. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 24.

The following table summarizes the views impacted by the operations of Phase E, the features affecting the views, the grounds affected in the views, the previously determined values and visual impacts, and the recommended mitigation measures for the visual impacts. See Appendix III for the development of these recommended mitigation measures.

Table 13. Summary of Phase E Mitigation Measures

	Description	Feature	Area	Picture Plane	Value	Visual Impact	Mitigation Measures
1	View Northwest at Residence R5	Service Road	1	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
2	Field #2	Extraction Area	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
3	Field #1	Service Road	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Background	Mod	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high

		Rehabilitation	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
4	View South	Service Road	1	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Middleground	Mod	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Middleground	Mod	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	4	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
5	View Southeast	Service Road	1	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	3	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	4	Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- COMPLETED EXTRACTION AND REHABILITATION
- R1 RESIDENTIAL PROPERTY
- 7 VIEW LOCATION
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION
- PROPOSED TEMPORARY SEEDED BERM MINIMUM 3m HIGH

McCormick Pit

BLUELAND FARMS LIMITED

Phase E Mitigation Measures

Visual Impact Assessment Report

January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 24

7.6 PHASE F

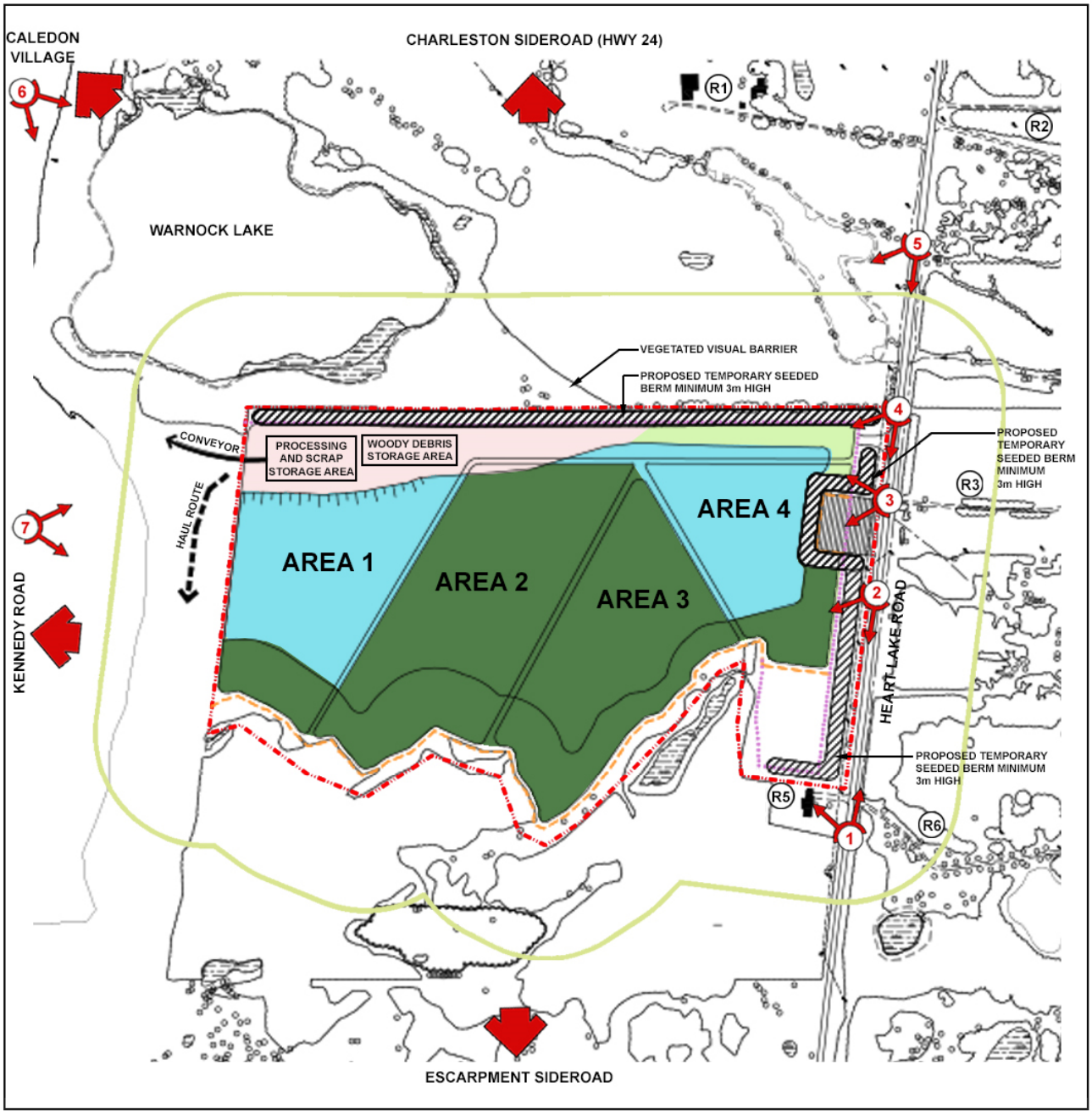
During Phase F Areas 1 and 4 will be affected. Below water extraction in Area 4 will be completed and will continue in the Processing Area in Area 1. Rehabilitation of Area 4 will be completed in this phase. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 25.

The following table summarizes the views impacted by the operations of Phase F, the features affecting the views, the grounds affected in the views, the previously determined values and visual impacts, and the recommended mitigation measures for the visual impacts. See Appendix III for the development of these recommended mitigation measures.

Table 14. Summary of Phase F Mitigation Measures

	Description	Feature	Area	Picture Plane	Value	Visual Impact	Mitigation Measures
1	View Northwest at Residence R5	Extraction Area	1	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	4	Far Background	Mod	Mod	Installation of temporary seeded berm minimum 3m high
2	Field #2	Extraction Area	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
3	Field #1	Extraction Area	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	4	Middleground	High	High	Installation of temporary seeded berm minimum 3m high

4	View South	Extraction Area	1	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
		Extraction Area	4	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	4	Foreground	High	High	Installation of temporary seeded berm minimum 3m high
5	View Southeast	Extraction Area	1	Background	Mod	Mod	No mitigation measure recommended
		Rehabilitation	1	Background	Mod	Mod	No mitigation measure recommended
		Extraction Area	4	Background	Mod	Mod	No mitigation measure recommended
		Rehabilitation	4	Background	Mod	Mod	No mitigation measure recommended



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING BUILDING
- AREA UNDER REHABILITATION
- COMPLETED EXTRACTION AND REHABILITATION
- R1 RESIDENTIAL PROPERTY
- 7 VIEW LOCATION
- AREA STRIPPED OF TOPSOIL
- EXTRACTION FACE
- BELOW WATER EXTRACTION
- PROPOSED TEMPORARY SEEDED BERM MINIMUM 3m HIGH

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Phase F Mitigation Measures
Visual Impact Assessment Report
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0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 25

7.7 PHASE G

During Phase G Area 1 will be affected. Below water extraction and progressive rehabilitation of side slopes and shoreline in Area 1 will be completed. All equipment, structures, scrap and machinery from the site will be removed upon completion of extraction. A number of visual impacts have been discussed and can be minimized with recommended mitigation measures.

The following table summarizes the views impacted by the operations of Phase G, the features affecting the views, the grounds affected in the views, the previously determined values and visual impacts, and the recommended mitigation measures for the visual impacts. See Appendix III for the development of these recommended mitigation measures.

Table 15. Summary of Phase G Mitigation Measures

	Description	Feature	Area	Picture Plane	Value	Visual Impact	Mitigation Measures
3	Field #1	Extraction Area	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
		Processing and Scrap Storage Area	1	Far Background	Low	Mod	Installation of temporary seeded berm minimum 3m high
		Rehabilitation	1	Middleground	High	High	Installation of temporary seeded berm minimum 3m high
5	View Southeast	Extraction Area	1	Background	Mod	Mod	No mitigation measure recommended
		Rehabilitation	1	Background	Mod	Mod	No mitigation measure recommended

7.8 SUMMARY

The recommended mitigation measures were developed to ensure the proposed pit operations on the subject property would not be viewed from the vantage points identified in this report and to mitigate any visual impacts on the escarpment environment. This review was enabled by line of sight cross sections and photographic simulations produced using 3DS Max. A 60° cone of vision was used for the line of sight cross sections to determine the field of vision with and without mitigation measures. See Appendix III for details about mitigation measures.

In summary, the recommended mitigation measures are proposed to be implemented prior to operations taking place in the following phases:

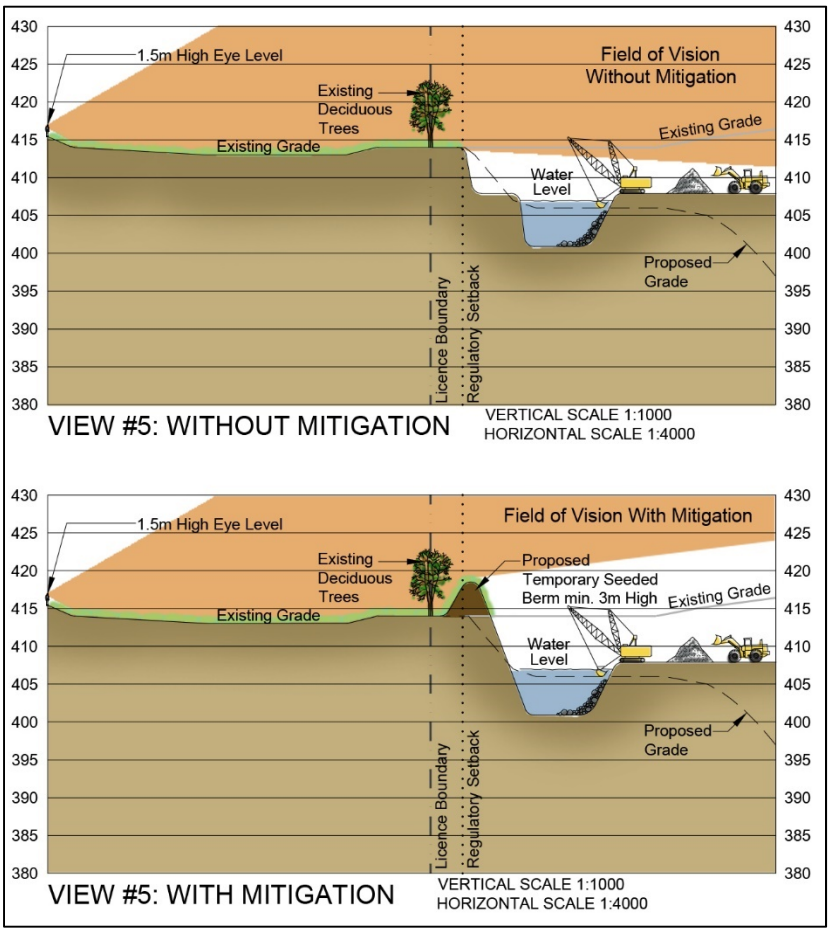
Phase A (See Figure 20 for Phase A – Mitigation Measures)

1. Install a temporary seeded berm minimum 3m high along the northwest perimeter of Area 1.

   View #5 (View Southeast) is from northwest of the subject property on Heart Lake Road towards the McCormick property. As shown in the line of sight cross section of View #5 (see Figure 26), the

recommended temporary seeded berm will be sufficient to serve as a visual barrier to screen the view of the proposed pit floor, equipment, and operations.

Figure 26. View #5: Line of Sight Cross Section



In this view the subject property sits Viewer Superior in the background of this view. As a result the proposed temporary seeded berm is not a dominant feature in the picture plane (see Figure 27 and 28).

Figure 27. Existing View Southeast (View #5)

Figure 28. View Southeast (View #5) with proposed temporary seeded berm

2. Install a temporary seeded berm minimum 3m high along the northeast perimeter at the north of Area 4.

View #3 (Field #1) is from the entrance to Residence R3 across Heart Lake Road towards Hay Field #1. As shown in the line of sight cross section of View#3 (see Figure 29), the recommended temporary seeded berm will be more than sufficient to serve as a visual barrier to screen the view of the proposed pit floor, equipment, and operations (See Figure 30 and 31).

Figure 29. View #3: Line of Sight Cross Section

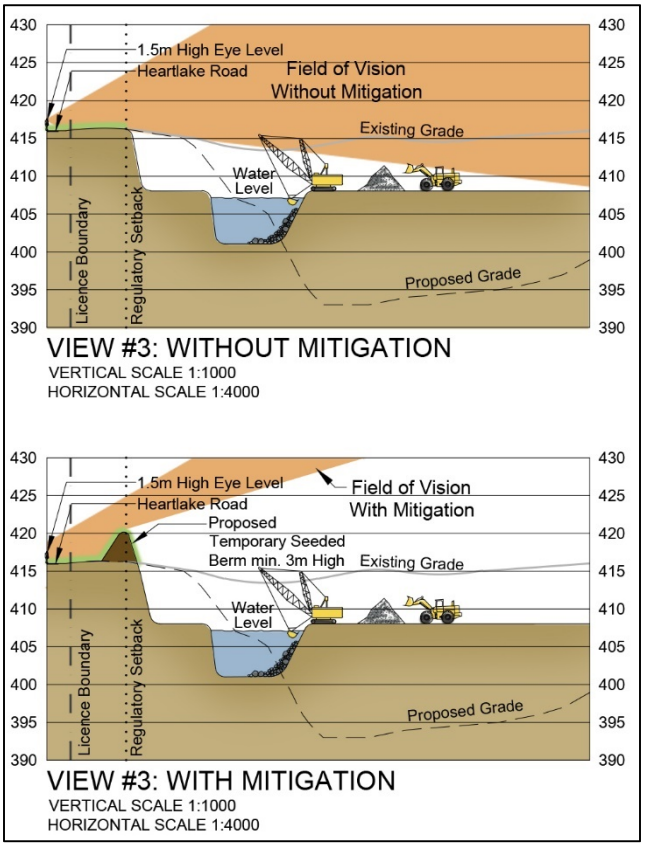


Figure 30. Existing View of Field #1 (View #3)

Figure 31. Existing View of Field #1 (View #3) with proposed temporary seeded berm

Phase C (See Figure 22 for Phase C – Mitigation Measures)

1. Install a temporary seeded berm minimum 3m high adjacent to the property line of Residence R5 to reinforce the existing sparse deciduous tree barrier.

   View #1 (View Northwest at Residence R5) is from Heart Lake Road at the entrance of Residence R5 towards Hay Field #2 on the subject property. As shown in the line of sight cross section of View #1 (see Figure 32), the recommended temporary seeded berm will be sufficient to serve as a visual barrier to screen the view of the proposed pit floor, equipment, and operations (See Figure 33 and 34).

Figure 32. View #1: Line of Sight Cross Section

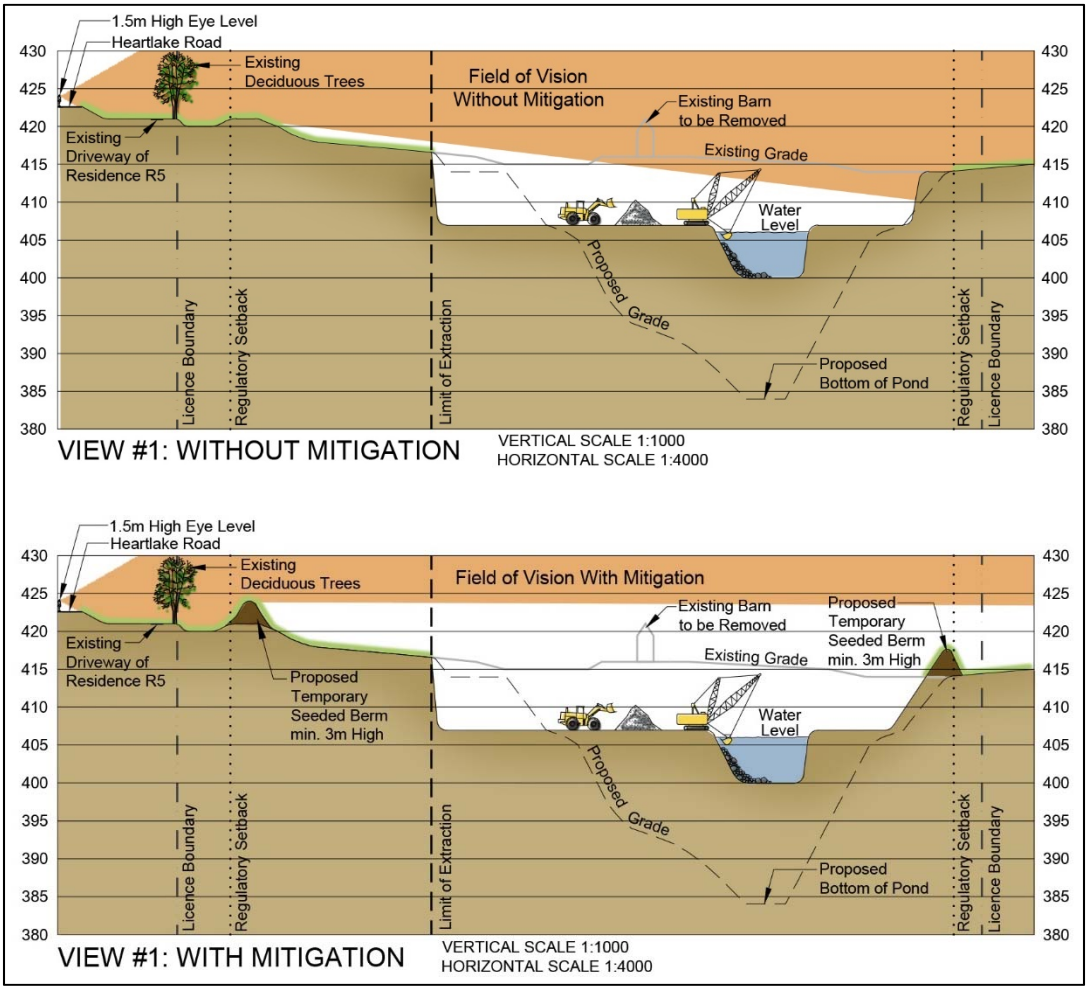


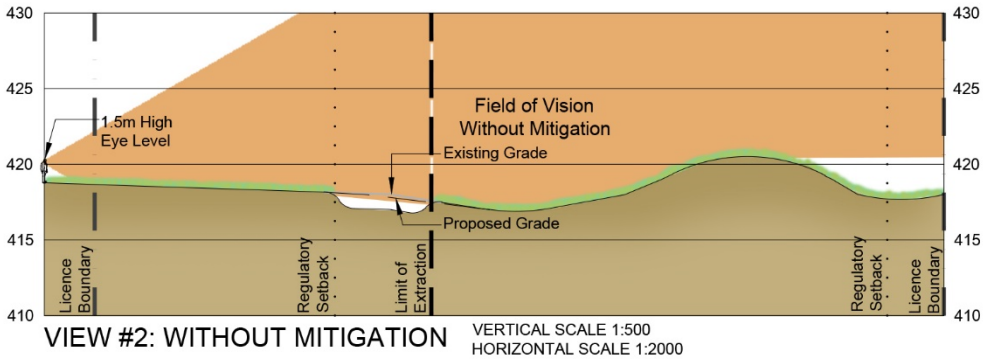
Figure 33. Existing View Northwest at Residence R5 (View #1)

Figure 34. View Northwest at Residence R5 (View #1) with proposed temporary seeded berm

2. Install a temporary seeded berm minimum 3m high along Heart Lake Road along the northeast perimeter at the southern end of Area 4.

   View #2 (View of Hay Field #2) is from the existing driveway into the subject property towards Hay Filed #2. As shown in the line of sight cross section of View #2 (see Figure 35), the recommended temporary acoustic berm will be sufficient to serve as a visual barrier to screen the view of the proposed pit floor and operations (See Figure 36 and 37).

Figure 35. View #2: Line of Sight Cross Section



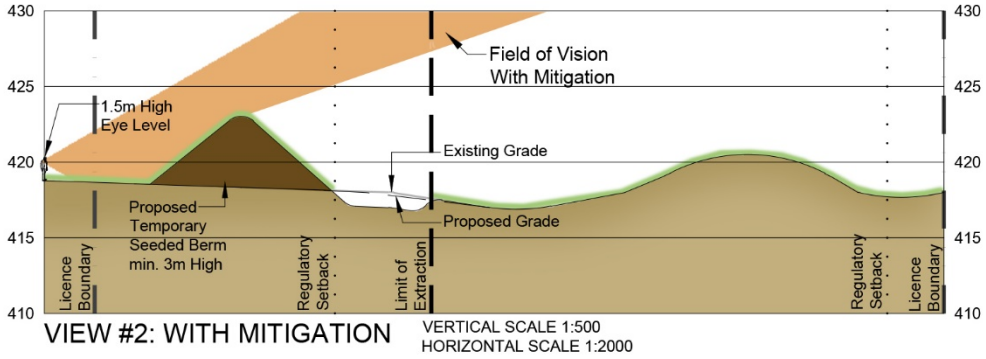
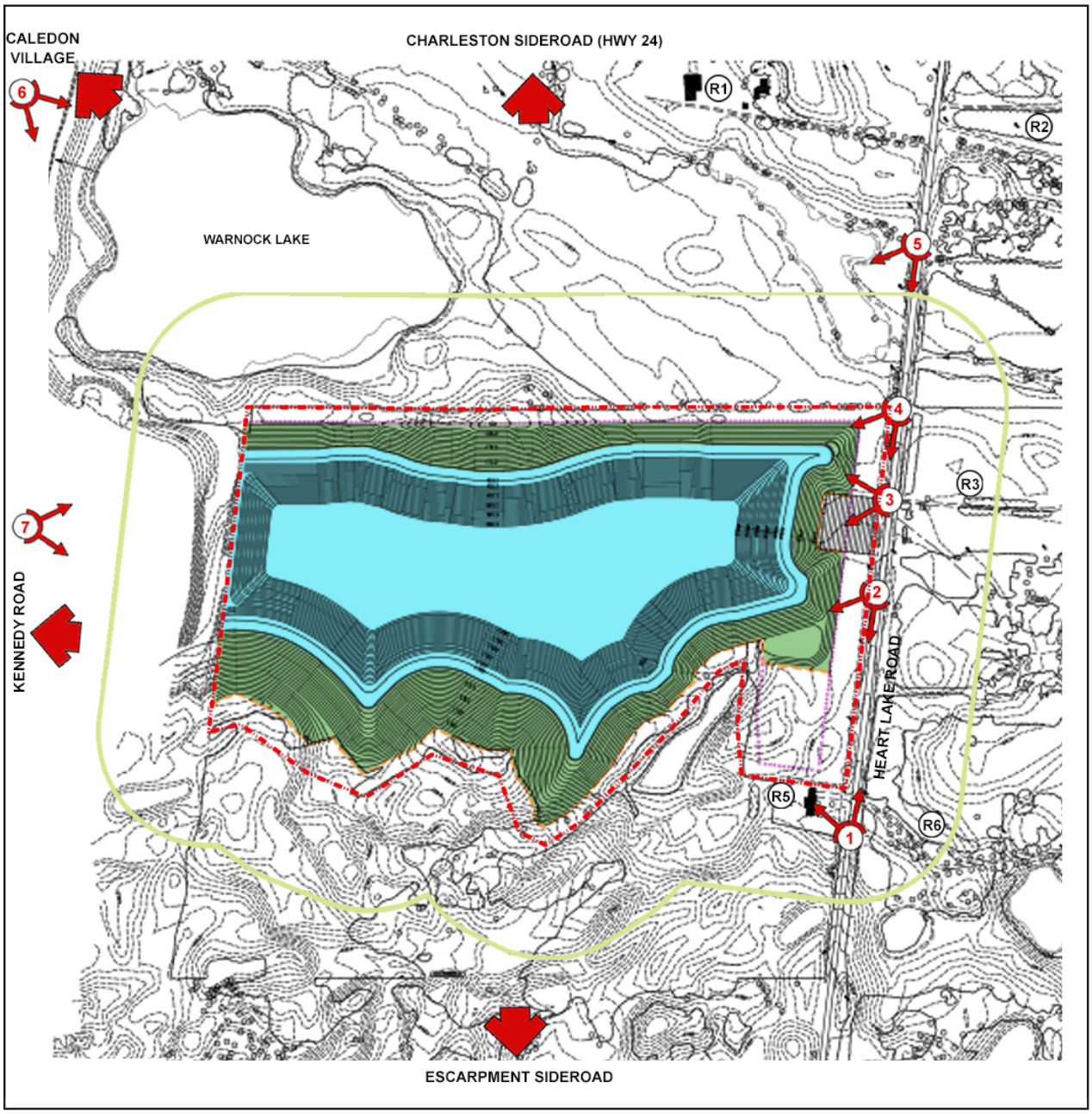


Figure 36. Existing View of Field #2 (View #2)

Figure 37. Existing View of Field #2 (View #2) with proposed temporary seeded berm

To ensure the existing viewsheds are maintained, if not increased following the proposed extraction operations and rehabilitation, the planting of vegetated visual barriers along Heart Lake Road is not recommended. Temporary seeded berms, minimum 3m high, shall be installed to screen views into the subject lands from Heart Lake Road. Once the operations are completed, the temporary seeded berms will have been removed. See Figure 38. The recommended visual mitigation measures will minimize the negative visual impacts of the proposed operations, while allowing the existing view of the escarpment environment be reinstated and unobstructed upon completion of rehabilitation of the subject property.



LEGEND

- LICENSE BOUNDARY
- REGULATORY SETBACK
- LIMIT OF EXTRACTION
- 120m BOUNDARY
- EXISTING ROAD
- EXISTING DRIVEWAY
- EXISTING CONTOUR
- EXISTING BUILDING
- R1 — RESIDENTIAL PROPERTY
- 7 — VIEW LOCATION
- PROPOSED POND
- PROPOSED NATURALIZED AREA

McCormick Pit

BLUELAND FARMS LIMITED

Rehabilitation Plan

Visual Impact Assessment Report

January 2018

0 50 100 150 200m

Harrington McAvan Ltd

FIGURE 38

Figure 39. Existing View South (View #4)

Figure 40. View South (View #4) following completion of extraction and rehabilitation

8.0 LANDSCAPE EVALUATION

The *Landscape Evaluation Study, Niagara Escarpment Planning Area (April 1976)* was a Co- operative Project of the Southwestern Region and Land Use Co-ordination Branch of the Ministry of Natural Resources and the Niagara Escarpment Commission.

"[The] report presents a methodology which was used to evaluate the scenic quality of landscape units in the Niagara Escarpment Planning Area and outlines the basic findings of the study. The results should permit a variable grading of landscapes throughout the Niagara Escarpment Planning Area so that scenic values can be appraised along with the physical resources and constraints and cultural and economic parameters in the land use planning process."

The evaluation method was designed to provide a generalized classification or ranking to represent the 'average' viewer's appreciation of the scenic quality of each defined landscape unit. The ranking is accomplished through a scoring system based on five (5) landscape components considered to have a significant effect on viewer response:

3. Landforms
4. Vegetative cover
5. Land use
6. Special features
7. Views

There are four (4) evaluated landscape units in the Niagara Escarpment Planning Area that surround and/ or overlap the subject property. See Figure 41. These landscape units are identified as:

Unit Number 111 – Sligo Slope
Unit Number 115 – Star
Unit Number 121 – Caledon Creek
Unit Number 122 – Peel Flat

A summary of the "Evaluation Unit Scoring Sheets" for these four (4) landscape units is provided below:

TABLE 16. Summary of "Evaluation Unit Scoring Sheets"

	Sligo Slope (111)	**Star (115)**	**Caledon Creek (121)**	**Peel Flat (122)**
Landforms	**+5**	**+2**	**0**	**0**
Average Relative Relief	187 ft	59 ft	36.1 ft	21 ft
Landform Type	Hilly	Hilly	Rolling	Flat & Gently Rolling
Vegetative Cover	**+5**	**+3**	**+2**	**+3**
Density %	34%	16%	8.1 %	18%
Vegetative Type	Mixed Conifers Pattern	Open Fields & Woods	Open Fields & Woods	Open Fields & Woods
Land Use	**-3**	**-1**	**0**	**+1**

Description and Analysis	Number of displeasing properties and buildings; few farm buildings left	No outstanding non-rural farm developments; some nice rural style residences; One waste disposal site; pits and quarries	Pleasing farm buildings; Some small waste disposal sites; Large pits and quarries combined with several smaller ones	Some rural farm buildings
Special Features		**+3**	**+1**	**+1**
	Small streams and ponds	Inland waters- small lakes and stream; Considerable number of small marshy areas characteristic of open area	Small lakes and small streams	Inland waters – not enough to impact on unit; Marshes and swamps
Views	**+4**	**+1**	**0**	**+2**
	Several vantage points	Probably limited views outside the unit (from top of hills, etc.)	Some potential to look beyond the unit, but not distinguished landscapes	Good potential for viewing other units; Could be good quality views of adjacent units
Total	**+11**	**+8**	**+3**	**7**
Evaluation Rank	Attractive	Average	Low	Average

The subject property is bordered by the Peel Flat Landscape Unit (Unit #122) to the northwest. This unit achieved an evaluation ranking of "Average". However, the subject property appears to be located in the Star Landscape Unit (Unit #115), which achieved an evaluation ranking of "Average".

The Star Landscape Unit (Unit #115) spans an area of 14 square kilometres. The subject property covers an area of 0.25 square kilometres, equating to approximately 1.8% of the overall landscape unit area. As a result, it is anticipated that any alterations to the subject property will not have a significant impact on the evaluation ranking of the landscape unit.

Progressive rehabilitation is included in the proposal for the subject property. The proposed end-use of the subject property following completion of all extraction operations includes:

- Open Water;
- Naturalized Area/ Meadow; and
- Reforestation.

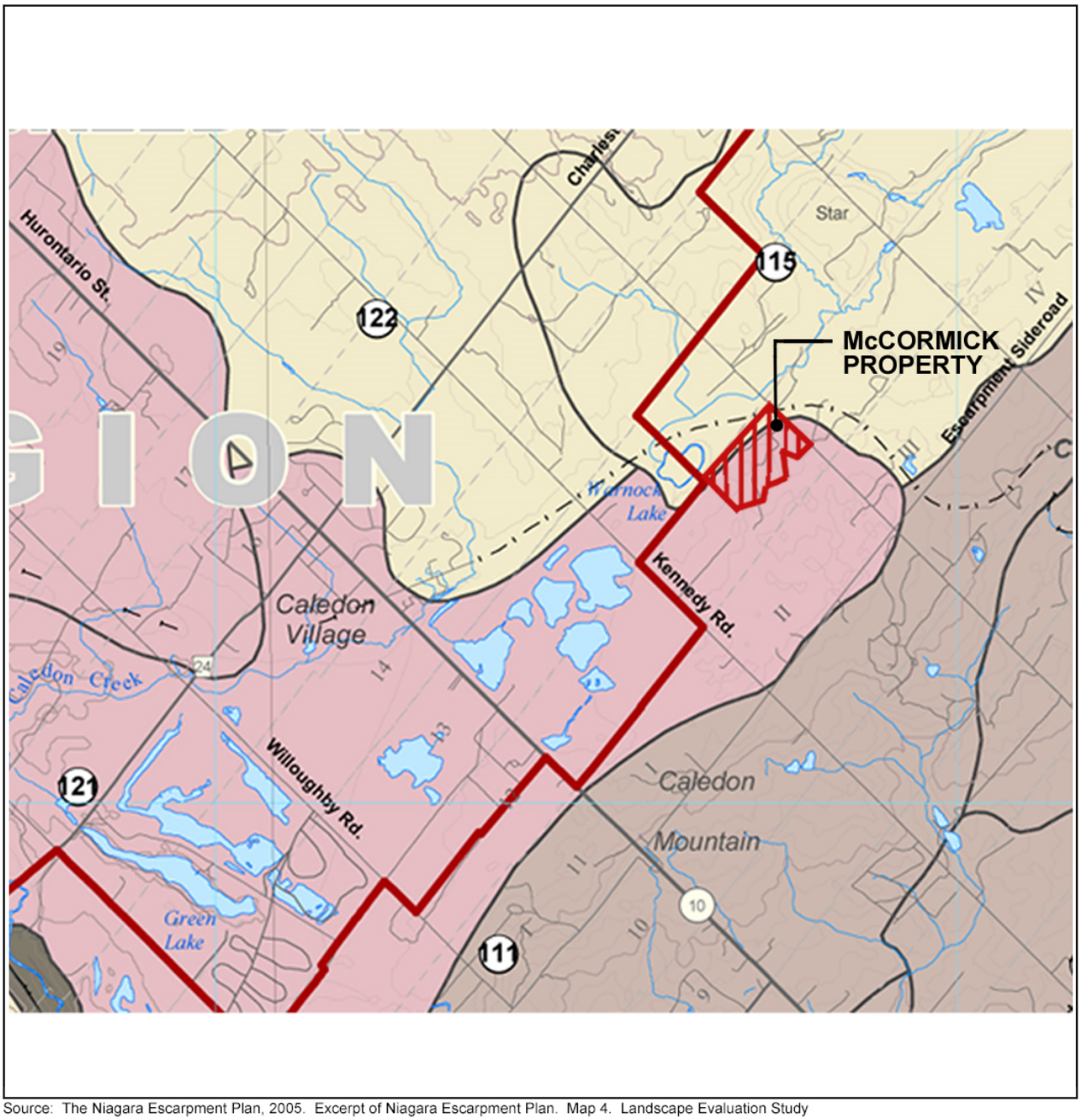
Impacts on the existing evaluation ranking for the Star Landscape Unit (Unit #115) from the proposed end-use of the subject property were reviewed and assessed. The assessment was accomplished by completing the Evaluation Unit Scoring Sheet for the landscape unit with the end-use of the subject property taken into consideration. The existing and the end-use evaluation rankings are summarized in Table 17.

TABLE 17. Evaluation Unit Scoring Sheet: Star (#115)

	Star (#115) ***- EXISTING -***	Star (#121) ***- END-USE -***
Landforms	**+2**	**+2**
Average Relative Relief	59 ft (+/-18m)	60.6 ft (+/-18.5m)
Landform Type	Hilly	Hilly
Vegetative Cover	**+3**	**+3**
Density %	16 % (+/-2.24km2)	15.3% (+/-2.14km2)
Vegetative Type	Open Fields & Woods	Open Fields & Woods
Land Use	**-1**	**-1**
Description and Analysis	No outstanding non-rural farm developments; some nice rural style residences; One waste disposal site; pits and quarries	No outstanding non-rural farm developments; some nice rural style residences; One waste disposal site; pits and quarries
Special Features	**+3**	**+3**
	Inland waters- small lakes and stream; Considerable number of small marshy areas characteristic of open area	Inland waters- small lakes and stream; Considerable number of small marshy areas characteristic of open area
Views	**+1**	**+1**
	Probably limited views outside the unit (from top of hills, etc.)	Probably limited views outside the unit (from top of hills, etc.)
Total	**+8**	**+8**
Evaluation Rank	Average	Average

The landscape components that will be altered by the proposal are: Landforms and Vegetative Cover. The relative relief of the end-use of the subject property will increase by about 9.2ft (28m) and approximately 0.1km2 of vegetative cover will have been removed. The subject property covers 1.8% of the landscape unit area, therefore, it has been estimated that the Average Relative Relief for the Star Landscape Unit (#115) will increase by 1.6 ft (0.5m) and the percent density of the vegetative cover will decrease by 0.7%.

Although changes will be made to certain landscape components as a result of the proposed extraction and rehabilitation operations, it has been determined that the final score and evaluation rank of the Star Landscape Unit (#115) will not be affected by the proposal for the subject property.



Source: The Niagara Escarpment Plan, 2005. Excerpt of Niagara Escarpment Plan. Map 4. Landscape Evaluation Study

LEGEND

- Niagara Escarpment Plan Boundary
- **Landscape Evaluation Study**
- **RATING**
  - Outstanding
  - Very Attractive
  - Attractive
  - Average
  - Low
  - Very Low
- **ROADS**
  - Private or Unclassified
  - Expressway
  - Provincial Highway
  - County or Regional
  - Local Municipal
- **OTHER**
  - Railway
  - Abandoned Railway

McCormick Pit

BLUELAND FARMS LIMITED

Landscape Evaluation Map

Visual Impact Assessment Report

January 2018

Kilometres 1 0.5 0

Harrington McAvan Ltd

FIGURE 41

9.0 CONCLUSION

In support of the application for a Category 1 – Class "A" license, pit below water by Blueland Farms Limited, the visual impact assessment report has been completed and prepared by Harrington McAvan Ltd. It has been found that the proposal will be consistent with the relevant objectives and policies of the *Niagara Escarpment Plan (2017)* and the *Town of Caledon Official Plan (2016)*. With the implementation of the recommended mitigation measures the proposal will not have any unacceptable visual impacts to its surroundings and the Escarpment's scenic resources and open landscape character will be maintained during and after the proposed extraction.

To mitigate impact on existing views from neighbouring properties and pedestrian and vehicular traffic on Heart Lake Road, temporary seeded berms shall be installed within the adjacent northwestern and northeastern regulatory setback, and within the regulatory setback adjacent to the northwestern property line of Residence R5. This installation will screen views into the subject property from Heart Lake Road during operations and restore existing views upon completion of rehabilitation.

The potential visual impacts can be minimized with the implementation of the mitigation measures included within this visual impact assessment report. After the final rehabilitation is completed the landscape, which is presently a combination of farm fields, pasture and woodland area, will consist of a pond and wetland shoreline, pasture and forest area. This landscape is compatible with and enhances the surrounding landscape which hosts similar special features and land use.

It has also been determined that the final score and evaluation rank of the Star Landscape Unit (#115) will not be greatly affected by the proposal for the subject property.

HARRINGTON McAVAN LTD.

Glenn D. Harrington, OALA, FCSLA
Principal

April Szeto, OALA, CSLA
Principal

10.0 REFERENCES

Harrington McAvan Ltd. (January 2, 2018). *Site Plans, McCormick Pit, Part of Lot 12, Concession2 EHS, Town of Caledon, Peel Region, scale 1:2000, Project No. 02-48.*

Town of Caledon. (November 2016 Consolidation). *Town of Caledon Official Plan*.

Ministry of Natural Resources & Niagara Escarpment Commission. (April 1976). *Landscape Evaluation Study Niagara Escarpment Planning Area*.

Niagara Escarpment Commission. (July 17, 2008). *Niagara Escarpment Commission Visual Assessment Guidelines.*

Niagara Escarpment Commission. *The Niagara Escarpment Plan (2017)*.

APPENDIX I

Ontario's Niagara Escarpment
l'Escarpement du Niagara de l'Ontario

Ontario

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July 17, 2008

Niagara Escarpment Commission
VISUAL ASSESSMENT GUIDELINES

Introduction:

The purpose of the Guidelines is to outline standards for the preparation of Visual Assessment Studies when required to assess a proposed development. Visual Assessment Studies assist in identifying and evaluating change in the landscape in order to ascertain whether a proposal is in keeping with the *Niagara Escarpment Planning and Development Act* (NEPDA) and the Niagara Escarpment Plan (NEP).

The Visual Assessment Study process sets out initially to establish a baseline for the existing conditions and then identify the physical changes in an accurate and objective manner. With a baseline and an accurate identification of the physical changes, an assessment of the impact of change on the Escarpment visual, landscape and scenic resources, in keeping with the NEPDA and NEP, can be conducted.

The steps and methods identified herein are intended to set out a standard protocol; where alternative methods are proposed, proponents will be advised to contact the NEC to ensure that the methodology and final product proposed will be considered acceptable to the NEC prior to commencement of the work. One of the goals for any study will be to produce a well documented process that is replicable with a sufficient level of detail and accuracy to enable the NEC to assess the impact of the proposal on the Escarpment environment.

General:

When the NEC receives a proposal for development, a determination is made, as early in the process as possible, as to whether there is concern that the potential visual impact on the Escarpment landscape and scenic resources requires that a Visual Assessment be conducted. Subsequently, the proponent is advised of the requirement and various steps or methods outlined in keeping with the type of proposed development and potential impact. Not all of the investigative methods outlined in the Guidelines would necessarily be required for a given study.

All of the investigative methods indicated are reliant on the detail and accuracy of available data such as the topography, vegetation, property and road fabric as well as the details for the proposal under review.

A higher level of detail/accuracy for the data **=** a higher level of accuracy available for identifying change.

The proposal for development, to be assessed, can take many forms such as utilities, telecommunication towers, recreational facilities, agricultural buildings, wind turbines and various types of residential buildings. The proposal may be for a single element, such as a tower, or contain multiple elements of built form. Further, the resultant effect on vegetation and landform for a proposal must also be identified as part of the physical changes. As an example, if a hedgerow will be partially eliminated as a result of the proposal, this must be included as physical change and modeled for the impact.

All of the methods are focused on investigating the visibility of the proposal when viewed from public roads, public lands and the Bruce Trail. Public lands also include public waterways such as Georgian Bay and Lake Ontario. Studies undertaken to fulfill the requirements of the NEP are not intended to address views from private property.

Investigative Methods to Identify Change in the Landscape:

As noted, not all of the investigative methods outlined herein would necessarily be required for every study. It is however intended that where deemed necessary by the NEC, all of the methods listed may be necessary for the accurate identification of change in the landscape. The NEC will advise the proponent of the requirement for a study and the various steps or methods best suited for the investigation in keeping with the type of proposed development and potential impact.

1. Viewshed Mapping: A digital viewshed analysis is the preferred method. The purpose of viewshed mapping is to objectively and accurately identify where proposed structures or built form would be visible from existing and proposed roads, public lands and from the Bruce Trail. The specifics of a proposal will dictate the distance out from the structure to be mapped. However, as a guide, for most built form, mapping should extent out from the structure a minimum of five (5) kilometres. Vertical structures such as towers would typically require this distance be extended.

    a) The viewshed mapping applications and data utilized must be identified and should be equal to or better than that utilized by the NEC; an example and details of the applications used by the NEC is as follows:

        - Digital modeling program: Environmental Systems Research Institute (ESRI) software, ArcGIS 9.1 with Spatial Analyst.

        - NEC viewsheds are produced drawing upon MNR's Natural Resources and Values Information System (NRVIS) digital base data (roads, topography, vegetation etc) as well as other digital data entitled to the NEC through the Ontario Geospatial Data Exchange (OGDE) such as orthophotography and parcel boundaries along with the physical (location, height, width) description of the item or items to be modeled.

        - See Figure # 1, which is an example attached for reference purposes. On the example, the colour green means the elements being modeled are visible, the pink colour identifies areas where the elements would not be visible.

b) The viewshed map must be field checked for accuracy and the findings/ revisions modeled into the program for a final viewshed map.

c) The methodology, base data and digital applications utilized, by the proponent, to produce the viewshed mapping must be identified within the study documentation or the submission shall be considered incomplete.

2. Subsequent to the production of the final viewshed map, viewpoints and individual viewsheds are to be selected in concert with the NEC for further study including:

- Photographic simulations;
- Line of sight cross sections;
- Detailed viewshed mapping from significant viewpoints; and,
- Detailed viewshed mapping along continuous traveled routes for public roads, waterways or the Bruce Trail.

3. Photographic Simulations: Photographs from the selected viewpoints and individual viewsheds are to be taken, when possible, during non leaf conditions (worst case scenario) for the purposes of documenting existing conditions and producing simulations. There are various acceptable methodologies and digital photographic simulation applications available. Prior to producing the photographic simulations, the proponent is to provide the NEC with a detailed outline of the methodology and applications proposed to ensure that the process will be satisfactory. Submissions shall ensure the following:

- Simulations are to be produced by accurately registering the proposed built form to fixed locations within a photograph showing existing conditions.
- Details on the methodology utilized to fix the location spatially as well as extent of the built form horizontally and vertically are to be described.
- Viewing height: 1.5 to 1.6 metres.
- Type of camera lens utilized, i.e., 50mm/52mm.
- Photo locations / viewpoints, as well as the built form location, are to be provided in plan form (to scale). All locations are at a minimum to be GPS or OLS surveyed, including the topographic elevations, to allow for field visits and to ensure accuracy of the simulations (potentially as a landscape monitoring location as well).
- Each simulation must be accompanied by the original, unaltered photograph indicating existing conditions.
- Photographs or photographic simulations where the existing vegetation is embellished by illustration or graphics are not acceptable.
- The methodology and digital applications utilized, by the proponent, to produce the photographic simulations must be identified within the study documentation or the submission shall be considered incomplete.

Where mitigation is proposed the proponent may be asked to, or may chose to, prepare simulations to demonstrate the effect of elements such as new planting. It is recommended new planting be modeled at planting height. Subsequent images identifying later conditions should be based on average projected growth rates for the specific plant species, plant character and the local environment.

4. Line of Sight Cross Sections: Line of sight cross sections are to be selected in concert with the NEC and are to include the following:

- A plan view (to scale) indicating the legal property boundaries, existing topography (elevations and contours), vegetation, other features, the location of the proposed structure(s) and the alignment of the line of sight cross section.
- A cross section (to scale) of the existing topography with the proposed structure, grade changes and vegetation. Vertical and horizontal ratio of 1:1 for all cross sections.
- A line of sight from a viewing height between 1.5 to 1.6 metres drawn from the viewer's eye level to the nearest and highest elevation of the proposed structure or natural obstruction, i.e., row of trees.
- Subsequently, on a separate drawing, the proponent may wish to demonstrate the effect of mitigation such as proposed screening; see item # 3 herein.
- Source of base data including year, resolution or contour interval.

5. Detailed viewshed mapping would be applied as an investigative method when a higher level of scrutiny is required to assess change. This process would incorporate the details associated with features, such as the topography and vegetation as well as the proposal, mapped and modeled at greater detail. Digital applications such as 3D Nature Studio incorporating photographs of the site can be utilized to demonstrate /simulate the physical changes to the landscape. This type of investigation is site and project specific as such the appropriate methodology and applications would be determined on an individual basis.

6. Detailed viewshed mapping along continuous traveled routes of public roads or the Bruce Trail. As with item 5 herein this type of investigation is applied when a higher degree of scrutiny is required. The NEC has on hand a number of studies as examples to be provided should this method be identified as a necessary component of the investigation. This type of investigation is site and project specific. As such, the appropriate methodology and applications would be determined on an individual basis.

7. Visual assessment studies within the Municipality of Northern Bruce Peninsula shall also address the impact of illumination.

- The Municipality of Northern Bruce Peninsula has been proclaimed a "Dark Sky Community". Information on the Dark Sky Proclamation is available at www.northbrucepeninsula.ca/dark-sky.htm and www.bpeg.ca/code/darksky. php. The Niagara Escarpment Commission supports this proclamation and recommends that the applicant obtain information on shielding the night sky from excessive residential lighting through the use and operation of appropriate lighting fixtures. This information is available at www.darksky.org/programs/fixture-seal-of-approval.

The NEC may expand this requirement if other municipalities adopt a Dark Sky program or if the site is unique and seems to require such an assessment.

Assessment of the Impact of Change on the Escarpment Environment:

The next step in the Study seeks to assess the impact of change on the Escarpment landscape. With a baseline and an accurate identification of the physical changes, an assessment of the impact on the visual, landscape and scenic resources of the Escarpment environment, in keeping with the NEPDA and NEP, as well approved Policy Papers, would be prepared by the proponent.

The assessment of the impact may also include evaluating whether the change has effect on the results reported in previous studies, including but not limited to:

- The Landscape Evaluation Study undertaken in 1976 by the NEC whereby all of the lands, under consideration for inclusion in the Plan area, were evaluated and ranked for scenic quality. The ranking included six categories: Outstanding, Very Attractive, Attractive, Average, Low and Very Low. The Study and Maps are available from the NEC.

- Other NEC Landscape Evaluation or Viewshed Studies where applicable.

NEC Review:

The review of a Visual Assessment Study can result in the NEC requesting that the proponent alter the proposal so that the impact is minimized or mitigated. The proponent would be requested to alter the proposal and the revisions modeled utilizing the agreed upon methodologies. Should the impact of the change to the visual and landscape conditions that results be acceptable to the NEC, the Report would be approved.

Critical details derived from the Visual Assessment Study such as building heights and locations as well as the extent of built form or screening would be identified in the approval and/or implementation process that follows. This could include the Development Permit Application review process, Conditions of Approval or Plan Amendments.

Submission Format:

The Visual Assessment Study submitted for review shall include the following:

- 2 hard copies of the study.
- 1 digital copy of all the study components compatible with NEC programs.
- All hard copy and digital drawings shall identify a standard engineering ratio scale (ie 1:1000) and include a bar scale.
- Orthophotography or aerial photography - source and date flown.
- All data sources for elements such as topography and vegetation are to be identified and the date compiled.
- Digital applications utilized to produce drawings and simulations.
- Detailed process followed per investigative method.
- Proposal title, owner, consultant and application number.
- Location map indicating the lot, concession, County/Region, street address and legal description of the subject property.
- Contact person and methods to access, i.e. telephone, email address, fax, mailing address and company name.

END

Note: The NEC will, from time to time, update the Guidelines to reflect current technology or refine the processes identified herein. The revision date will be noted at the beginning of the document and the most current version available from the Niagara Escarpment web site at www.escarpment.org. Alternatively, hard copies can be provided by contacting either the Georgetown or Thornbury offices.

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Figure #1

Niagara Escarpment Plan

Viewshed Analysis Example

- Niagara Escarpment Plan Area
- Wooded Areas
- 3 Storey Structure
- 2 Storey Structure
- Communications Tower
- Proposed Water Tower

Viewshed of Proposed Water Tower

- Not Visible
- Visible

NOTE: The Niagara Escarpment Plan designation boundaries shown on this map are approximate and subject to confirmation through site inspection and the application of the "Interpretation of Boundaries" section of the Niagara Escarpment Plan. The Niagara Escarpment Plan maps are approved at 1:50,000 scale, and that is the scale at which this data should be interpreted.

Map Features Legend

Bruce Trail

- Main Trail
- Side Trail
- Access Trail
- Other Trail

0 590 1180 1770 2360

Metres

Printed on Aug 23, 2006
Revised on Nov 3, 2006

This map is illustrative only. Do not rely on it as being a precise indicator of routes, location of features, nor as a guide to navigation. Base derived from the Ontario Digital Topographic Database, Scale 1:10,000
Map compiled and produced by the Geographic Information Systems (GIS) Department of the Niagara Escarpment Commission, Ministry of Natural Resources

Ontario

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APPENDIX II

VISUAL IMPACTS

PHASE A

During Phase A Area 1 will be affected. A service entrance/ exit at Heart Lake Road and an internal Haul route from Area 1 to License 19073 on the pit floor will be established as soon as possible. The woodland area in the southeastern part of the property, outside of the licensed area will be retained and enhanced with additional planting. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction of material will begin in Area. Material will be transported to the adjacent existing pit for processing and shipping through conveyor. A number of views already discussed are affected by this phase. See Figure 14.

View #1: View Northwest at Residence R5

One traveling northwest towards the entrance of Residence R5 and Residence R6 would view the subject property through the sparse deciduous tree barrier. The Service Road is located in Area 1, which sits in the view's Far Background. Any vehicles that may be using the Service Road may be visible in the Far Background; however, due to the distance from the viewer slight visual impact is expected. A visual barrier is recommended.

View #2: Field #2

The proposed operations of this phase do not occur within this view's field of vision. A visual barrier is not recommended.

View #3: Field #1

The existing scrub vegetation and woodlot in the Background of this view combined with existing elevations, and pit floor elevations would screen the view further into the Extraction Area and Processing and Scrap Storage Area in Area 1. The Service Road is located in Area 1 which sits in the Middleground of this view. There is currently a lack of visual barrier into this picture plane. A visual barrier is recommended.

View #4: View South

The existing woodlot in the Background of this view combined with the existing elevations, and pit floor elevations screen the view further into the Extraction Area and Processing and Scrap Storage Area in Area 1. There is a lack of a visual barrier for the Service Road in the dominant Foreground. A visual barrier is recommended.

View #5: View Southeast

The existing woodlot surrounding Warnock Lake would screen a portion of the Extraction Area and Processing and Scrap Storage Area in Area 1 within the field of vision from the view. The Service Road is located in the Background of this view and may be visible through the existing sparse vegetated screen at the property boundary. A visual barrier is recommended.

View #6: View East

The existing woodlot in the Background of this view combined with distance, existing elevations, and pit floor elevations would screen the view further into the Extraction Area and Processing and Scrap Storage Area in Area 1. Visual barriers are not recommended.

View #7: View Northeast

The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location. Additional visual barriers are not recommended.

PHASE B

During Phase B Areas 1, 2, and 3 will be affected. The Service Road will be running through Area 1, where below water extraction will begin. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction will begin in Area 2 and any larger stumps and trees cleared from the extraction areas will be salvaged and stored in the Woody Debris Storage Area in Area 3 for reuse in habitat creation. A number of views already discussed are affected by this phase. See Figure 15.

View #1: View Northwest at Residence R5

One traveling northwest towards the entrance of Residence R5 and Residence R6 would view the subject property through the sparse deciduous tree barrier. The Service Road is located in Area 1, which sits in the view's Far Background. Any vehicles that may be using the Service Road may be visible in the Far Background; however, due to the distance from the viewer slight visual impact is expected. A visual barrier is recommended. The proposed extraction operations of this phase do not occur within this view's field of vision.

View #2: Field #2

The proposed operations of this phase do not occur within this view's field of vision. A visual barrier is not recommended.

View #3: Field #1

The Service Road is located in Area 1 in the Middleground of this view where there currently is a lack of a visual barrier into this picture plane. A portion of the scrub vegetation in the Background of this view will be removed as extraction in Area 2 progresses. As a result, the extraction operations in Area 1 and Area 2 will be visible in the Background of this view. Visual barriers are recommended.

View #4: View South

The existing woodlot in the Background of this view's field of vision combined with the existing elevations, and pit floor elevations screen the view further into the Extraction Area and Processing and Scrap Storage Area in Area 1 and Area 2. There is a lack of a visual barrier for the Service Road in the dominant Foreground. A visual barrier is recommended.

View #5: View Southeast

The existing woodlot surrounding Warnock Lake would screen a portion of the Extraction Area and Processing and Scrap Storage Area in Area 1 within the field of vision from the view. The Service Road is located in the Background of this view and may be visible through the existing sparse vegetated screen at the property boundary. A visual barrier is recommended. The Extraction Area in Area 2 may be visible through the existing sparse vegetated screen at the property boundary. A visual barrier is recommended.

View #6: View East

The existing woodlot in the Background of this view combined with distance, existing elevations, and pit floor elevations would screen the view further into the Extraction Area and Processing and Scrap Storage Area in Area 1 and Extraction Area in Area 2. Visual barriers are not recommended.

View #7: View Northeast

The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location. Additional visual barriers are not recommended.

PHASE C

During Phase C Areas 1, 2, and 3 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation of the south side slopes and shoreline will begin in Area 1 and 2. Above water extraction in Area 3 will begin. Below water extraction in Area 1 will continue while that in Area 2 will begin. A number of views already discussed are affected by this phase. See Figure 16.

View #1: View Northwest at Residence R5

One traveling northwest towards the entrance of Residence R5 and Residence R6 would view the subject property through the sparse deciduous tree barrier. The Service Road is located in Area 1, which sits in the view's Far Background. Any vehicles that may be using the Service Road may be visible in the Far Background; however, due to the distance from the viewer slight visual impact is expected. A visual barrier is recommended. The proposed extraction operations of this phase do not occur within this view's field of vision.

View #2: Field #2

The Extraction Area in Area 3 sits in the Background of this view as a result of the removal of the existing vegetated visual barrier in Area 3. A visual barrier is recommended.

View #3: Field #1

The Service Road is located in Area 1 in the Middleground of this view where there is a lack of a visual barrier into this picture plane. The Extraction Area in Area 1, Area 2, and Area 3 will be visible in the Background of this view. Visual barriers are recommended.

View #4: View South

Operations, including extraction and rehabilitation, in Area 1, Area 2, and Area 3 would sit within the Middleground and Background of this view. There is a lack of a visual barrier for the Service Road in the dominant Foreground. Visual barriers are recommended.

View #5: View Southeast

The existing woodlot surrounding Warnock Lake would screen a portion of the Extraction Area and Processing and Scrap Area in Area 1 within the field of vision of this view. The Service Road and operations in Area 1, Area 2, and Area 3 are located in the Background of this view and may be visible through the existing sparse vegetated screen at the property boundary. Visual barriers are recommended.

View #6: View East

The existing woodlot in the Background of this view combined with distance, existing elevations, and pit floor elevations would screen the view further into the Processing and Scrap Storage Area in Area 1 as well as the operations occurring in Area 1, Area 2, and Area 3. Visual barriers are not recommended.

View #7: View Northeast

The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location. Additional visual barriers are not recommended.

PHASE D

During Phase D Areas 1, 2, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation will continue and be completed in Area 2. Below water extraction and progressive rehabilitation will begin in Area 3 and above water extraction will begin in Area 4. A number of views already discussed are affected by this phase. See Figure 17.

View #1: View Northwest at Residence R5

One traveling northwest towards the entrance of Residence R5 and Residence R6 would view the subject property through the sparse deciduous tree barrier. Existing vegetation would screen the view into the Extraction Area in Area 3. Extraction in Area 4 and the Service Road, however, would be visible in the Far Background. A visual barrier is recommended.

View #2: Field #2

Extraction in Area 4 would be visible in the Middleground of this view. Extraction and rehabilitation in Area 3 would also be visible in the Background as a result of the removal of vegetated visual barrier in Area 3. Visual barriers are recommended.

View #3: Field #1

The Service Road is located in Area 1 in the Middleground of this view where there is a lack of a visual barrier into this picture plane. The Extraction Area in Area 1, Area 2, and Area 3 will be visible in the Background of this view while the Extraction Area in Area 4 will be visible in the Middleground. Visual barriers are recommended.

View #4: View South

Operations, including extraction and rehabilitation, in Area 1, Area 2, and Area 3 would sit within the Middleground and Background of this view. Extraction in Area 4 would sit in the Foreground and have a dominant impact. There is a lack of a visual barrier for the Service Road in the dominant Foreground. Visual barriers are recommended.

View #5: View Southeast

The existing woodlot surrounding Warnock Lake would screen a portion of the Extraction Area and Processing and Scrap Area in Area 1 within the field of vision of this view. The Service Road and operations in Area 1, Area 2, Area 3, and Area 4 are located in the Background of this view and may be visible through the existing sparse vegetated screen at the property boundary. Visual barriers are recommended.

View #6: View East

The existing woodlot in the Background of this view combined with distance, existing elevations, and pit floor elevations would screen the view further into the Processing and Scrap Storage Area in Area 1 as well as the operations occurring in Area 1, Area 2, Area 3, and Area 4. Visual barriers are not recommended.

View #7: View Northeast

The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location. Additional visual barriers are not recommended.

PHASE E

During Phase E Areas 1, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Below water extraction and progressive rehabilitation in Area 3 will be completed and will begin in Area 4. A number of views already discussed are affected by this phase. See Figure 18.

View #1: View Northwest at Residence R5

One traveling northwest towards the entrance of Residence R5 and Residence R6 would view the subject property through the sparse deciduous tree barrier. Existing vegetation would screen the view into the extraction and rehabilitation in Area 3. Extraction in Area 4 and the Service Road, however, would be visible in the Far Background. A visual barrier is recommended.

View #2: Field #2

Extraction and rehabilitation in Area 4 would be visible in the Middleground of this view. Extraction and rehabilitation in Area 3 would also be visible in the Background as a result of the removal of vegetated visual barrier in Area 3. Visual barriers are recommended.

View #3: Field #1

The Service Road is located in Area 1 in the Middleground of this view where there is a lack of a visual barrier into this picture plane. Extraction and rehabilitation in Area 3 will be visible in the Background of this view while extraction and rehabilitation in Area 4 will be visible in the Middleground. Visual barriers are recommended.

View #4: View South

Operations, including extraction and rehabilitation, in Area 1 and Area 3 would site within the Middleground and Background of this view. Extraction and rehabilitation in Area 4 would sit in the Foreground and have a dominant impact. There is a lack of a visual barrier for the Service Road in the dominant Foreground. Visual barriers are recommended.

View #5: View Southeast

The existing woodlot surrounding Warnock Lake would screen a portion of the Processing and Scrap Area in Area 1 within the field of vision of this view. The Service Road and operations in Area 1, Area 3, and Area 4 are located in the Background of this view and may be visible through the existing sparse vegetation screen at the property boundary. Visual barriers are recommended.

View #6: View East

The existing woodlot in the Background of this view combined with distance, existing elevations, and pit floor elevations would screen the view further into the Processing and Scrap Storage Area in Area 1 as well as the operations occurring in Area 1, Area 2, Area 3, and Area 4. Visual barriers are not recommended.

View #7: View Northeast

The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location. Additional visual barriers are not recommended.

PHASE F

During Phase F Areas 1 and 4 will be affected. Below water extraction in Area 4 will be completed and will continue in the Processing Area in Area 1. Rehabilitation of Area 4 will be completed in this phase. A number of views already discussed are affected by this phase. See Figure 19.

View #1: View Northwest at Residence R5
One traveling northwest towards the entrance of Residence R5 and Residence R6 would view the subject property through the sparse deciduous tree barrier. Extraction and rehabilitation in Area 4 would be visible in the Far Background. A visual barrier is recommended.

View #2: Field #2
Extraction and rehabilitation in Area 4 would be visible in the Middleground of this view. A visual barrier is recommended.

View #3: Field #1
Extraction and rehabilitation in Area 4 in the Middleground would be visible from this viewpoint. The remaining extraction and rehabilitation in Area 1 in the Far Background would also be visible. A visual barrier is recommended.

View #4: View South
Extraction and rehabilitation in Area 4 in the Foreground would be visible from this viewpoint. The remaining extraction and rehabilitation in the Processing Area would be outside the field of vision. A visual barrier is recommended.

View #5: View Southeast
The existing woodlot surrounding Warnock Lake would screen the view into the Processing Area in Area 1. A visual barrier is not recommended.

View #6: View East
The existing woodlot in the Background of this view combined with distance, existing elevations, and pit floor elevations would screen the view further into the Processing and Scrap Storage Area in Area 1 as well as any remaining operations taking place in the subject property. Visual barriers are not recommended.

View #7: View Northeast
The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location. Additional visual barriers are not recommended.

PHASE G

During Phase G Area 1 will be affected. Below water extraction and progressive rehabilitation of side slopes and shoreline in Area 1 will be completed. All equipment, structures, scrap and machinery from the site will be removed upon completion of extraction. A number of views already discussed are affected by this phase.

View #1: View Northwest at Residence R5
The proposed operations of this phase do not occur within this view's field of vision. A visual barrier is not recommended.

View #2: Field #2
The proposed operations of this phase do not occur within this view's field of vision. A visual barrier is not recommended.

View #3: Field #1
Extraction and rehabilitation in Area 1 would be visible in the Background from this viewpoint. A visual barrier is recommended.

View #4: View South
The proposed operations of this phase do not occur within this view's field of vision. A visual barrier is not recommended.

View #5: View Southeast
The existing woodlot surrounding Warnock Lake would screen the view into the Processing Area in Area 1. A visual barrier is not recommended.

View #6: View East
The existing woodlot in the Background of this view combined with distance, existing elevations, and pit floor elevations would screen the view further into any remaining operations taking place in the subject property. Visual barriers are not recommended.

View #7: View Northeast
The existing license operated by Caledon Sand and Gravel Inc. neighbours the subject property to the southwest. Mitigation measures have already been implemented to reduce the visual impacts of this extraction site. As a result, the subject property cannot currently be viewed from this location. Additional visual barriers are not recommended.

APPENDIX III

MITIGATION MEASURES

PHASE A

During Phase A Area 1 will be affected. A service entrance/exit at Heart Lake Road and an internal Haul Route from Area 1 to License 19073 on the pit floor will be established as soon as possible. The woodland area in the southeastern part of the property, outside of the licensed area will be retained and enhanced with additional planting. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction of material will begin in Area 1. Material will be transported to the adjacent existing pit for processing and shipping through conveyor. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 20.

View #1: View Northwest at Residence R5

Service Road: The Service Road would not have a dominant impact on this view, but it might still be seen in the Far Background through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm 3m high shall be installed to screen the view of the north end of Area 4.

View #3: Field #1

Service Road: The Service Road is not hidden within the Middleground of this view. There is no existing visual barrier to screen the view of the Service Road in Field #1 from Heart Lake Road. A temporary seeded berm minimum 3m high shall be installed along the northeastern regulatory setback at the north end of Area 4.

View #4: View South

Service Road: The Service Road is situated within the Foreground, which causes it to be a dominant feature. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwest property line.

View #5: View Southeast

Service Road: The Service Road is located in the Background of this view. Currently there is the presence of deciduous trees sparsely placed between the northwestern edge of the subject property and the property line of Residence R1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

PHASE B

During Phase B Areas 1, 2, and 3 will be affected. The Service Road will be running through Area 1, where below water extraction will begin. Processing equipment, stackers, and product stockpiles will not exceed ±15 metres in height and will be located on the pit floor in the Processing Area in Area 1. Above water extraction will begin in Area 2 and any larger stumps and trees cleared from the extraction areas will be salvaged and stored in the Woody Debris Storage Area in Area 3 for reuse in habitat creation. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 21.

View #1: View Northwest at Residence R5

Service Road: The Service Road would not have a dominant impact on this view, but it might still be seen in the Far Background through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm 3m high shall be installed to screen the view of the north end of Area 4.

View #3: Field #1

Service Road: The Service Road is not hidden within the Middleground of this view. There is no existing visual barrier to screen the view of the Service Road in Field #1 from Heart Lake Road. A temporary seeded berm minimum 3m high shall be installed along the northeastern regulatory setback at the north end of Area 4.

Extraction Area: Extraction in Area 1 and 2 would be seen as a result of the removal of the existing vegetated visual barrier in Area 2. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Processing and Scrap Storage Area: The Processing and Scrap Storage Area is in the Far Background of this view and may be seen as a result of the removal of the existing vegetated visual barrier in Area 2. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

View #4: View South

Service Road: The Service Road is situated within the Foreground, which causes it to be a dominant feature. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwest property line.

View #5: View Southeast

Service Road: The Service Road is located in the Background of this view. Currently there is the presence of deciduous trees sparsely placed between the northwestern edge of the subject property and the property line of Residence R1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Extraction Area: To screen the view into the Extraction Area in Area 2, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

PHASE C

During Phase C Areas 1, 2, and 3 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation of the south side slopes and shoreline will begin in Area 1 and 2. Above water extraction in Area 3 will begin. Below water extraction in Area 1 will continue while that in Area 2 will begin. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 22.

View #1: View Northwest at Residence R5

Service Road: The Service Road would not have a dominant impact on this view, but it might still be seen in the Far Background through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm 3m high shall be installed to screen the view of the north end of Area 4.

View #2: Field #2

Extraction Area: Extraction in Area 3 would be seen through peripheral vision as a result of the removal of the existing vegetated visual barrier in Area 3. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback adjacent to Heart Lake Road.

View #3: Field #1

Service Road: The Service Road is not hidden within the Middleground of this view. There is no existing visual barrier to screen the view of the Service Road in Field #1 from Heart Lake Road. A temporary seeded berm minimum 3m high shall be installed along the northeastern regulatory setback at the north end of Area 4.

Extraction Area: Extraction in Area 1, 2, and 3 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Processing and Scrap Storage Area: The Processing and Scrap Storage Area is in the Far Background of this view and may be seen as a result of the removal of the existing vegetated visual barrier in Area 2. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Rehabilitation Area: Rehabilitation in Area 1, and 2 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

View #4: View South

Service Road: The Service Road is situated within the Foreground, which causes it to be a dominant feature. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwest property line.

Extraction Area: Extraction in Area 1, 2 and 3 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Processing and Scrap Storage Area: There is no existing visual barrier to screen the view of the Processing and Scrap Storage Area in Area 1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Rehabilitation Area: Rehabilitation in Area 1 and 2 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

View #5: View Southeast

Service Road: The Service Road is located in the Background of this view. Currently there is the presence of deciduous trees sparsely placed between the northwestern edge of the subject property and the property line of Residence R1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Extraction Area: To screen the view into the Extraction Area in Area 1, 2 and 3, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Rehabilitation Area: To screen the view into the Rehabilitation Area in Area 1, and 2, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

PHASE D

During Phase D Areas 1, 2, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Progressive rehabilitation will continue and be completed in Area 2. Below water extraction and progressive rehabilitation will begin in Area 3 and above water extraction will begin in Area 4. A number of visual impacts have been discussed. See Figure 23.

View #1: View Northwest at Residence R5

Service Road: The Service Road would not have a dominant impact on this view, but it might still be seen in the Far Background through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm 3m high shall be installed to screen the view of the north end of Area 4.

Extraction Area: Extraction in Area 4 may be seen through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback adjacent to the northwestern property line of Residence R5.

View #2: Field #2

Extraction Area: Extraction in Area 3 and 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback adjacent to Heart Lake Road.

Rehabilitation Area: Rehabilitation in Area 3 would be visible due to the lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback adjacent to Heart Lake Road.

View #3: Field #1

Service Road: The Service Road is not hidden within the Middleground of this view. There is no existing visual barrier to screen the view of the Service Road in Field #1 from Heart Lake Road. A temporary seeded berm minimum 3m high shall be installed along the northeastern regulatory setback at the north end of Area 4.

Extraction Area: Extraction in Area 1, 2, 3 and 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Processing and Scrap Storage Area: The Processing and Scrap Storage Area is in the Far Background of this view and may be seen as a result of the removal of the existing vegetated visual barrier in Area 2. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Rehabilitation Area: Rehabilitation in Area 1, 2 and 3 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

View #4: View South

Service Road: The Service Road is situated within the Foreground, which causes it to be a dominant feature. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwest property line.

Extraction Area: Extraction in Area 1, 2 3 and 4 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Processing and Scrap Storage Area: There is no existing visual barrier to screen the view of the Processing and Scrap Storage Area in Area 1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Rehabilitation Area: Rehabilitation in Area 1,2 and 3 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

View #5: View Southeast

Service Road: The Service Road is located in the Background of this view. Currently there is the presence of deciduous trees sparsely placed between the northwestern edge of the subject property and the property line of Residence R1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Extraction Area: To screen the view into the Extraction Area in Area 1, 2, 3 and 4, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Rehabilitation Area: To screen the view into the Rehabilitation Area in Area 1, 2 and 3, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

PHASE E

During Phase E Areas 1, 3, and 4 will be affected. The Service Road and Processing Area will be in Area 1. Below water extraction and progressive rehabilitation in Area 3 will be completed and will begin in Area 4. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 24.

View #1: View Northwest at Residence R5

Service Road: The Service Road would not have a dominant impact on this view, but it might still be seen in the Far Background through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm 3m high shall be installed to screen the view of the north end of Area 4.

Extraction Area: Extraction in Area 4 may be seen through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback adjacent to the northwestern property line of Residence R5.

View #2: Field #2

Extraction Area: Extraction in Area 3 and 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback adjacent to Heart Lake Road.

Rehabilitation Area: Rehabilitation in Area 3 and 4 would be visible due to the lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback adjacent to Heart Lake Road.

View #3: Field #1

Service Road: The Service Road is not hidden within the Middleground of this view. There is no existing visual barrier to screen the view of the Service Road in Field #1 from Heart Lake Road. A temporary seeded berm minimum 3m high shall be installed along the northeastern regulatory setback at the north end of Area 4.

Processing and Scrap Storage Area: The Processing and Scrap Storage Area is in the Far Background of this view and may be seen as a result of the removal of the existing vegetated visual barrier in Area 2. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Extraction Area: Extraction in Area 3 and 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Rehabilitation Area: Rehabilitation in Area 3 and 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

View #4: View South

Service Road: The Service Road is situated within the Foreground, which causes it to be a dominant feature. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwest property line.

Processing and Scrap Storage Area: There is no existing visual barrier to screen the view of the Processing and Scrap Storage Area in Area 1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Extraction Area: Extraction in Area 3 and 4 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Rehabilitation Area: Rehabilitation in Area 3 and 4 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

View #5: View Southeast

Service Road: The Service Road is located in the Background of this view. Currently there is the presence of deciduous trees sparsely placed between the northwestern edge of the subject property and the property line of Residence R1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Extraction Area: To screen the view into the Extraction Area in Area 3 and 4, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Rehabilitation Area: To screen the view into the Rehabilitation Area in Area 3 and 4, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

PHASE F

During Phase F Areas 1 and 4 will be affected. Below water extraction in Area 4 will be completed and will continue in the Processing Area in Area 1. Rehabilitation of Area 4 will be completed in this phase. A number of visual impacts have been discussed. These impacts may be minimized with the recommended mitigation measures. See Figure 25.

View #1: View Northwest at Residence R5

Extraction Area: Extraction in Area 1 and 4 may be seen through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback adjacent to the northwestern property line of Residence R5.

Rehabilitation Area: Rehabilitation in Area 1 and 4 may be seen through the sparse deciduous tree barrier along the northwest property line of Residence R5. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback adjacent to the northwestern property line of Residence R5.

View #2: Field #2

Extraction Area: Extraction in Area 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback adjacent to Heart Lake Road.

Rehabilitation Area: Rehabilitation in Area 4 would be visible due to the lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback adjacent to Heart Lake Road.

View #3: Field #1

Extraction Area: Extraction in Area 1 and 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Processing and Scrap Storage Area: The Processing and Scrap Storage Area is in the Far Background of this view and may be seen as a result of the removal of the existing vegetated visual barrier in Area 2. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Rehabilitation Area: Rehabilitation in Area 1 and 4 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

View #4: View South

Extraction Area: Extraction in Area 1 and 4 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Processing and Scrap Storage Area: There is no existing visual barrier to screen the view of the Processing and Scrap Storage Area in Area 1. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

Rehabilitation Area: Rehabilitation in Area 1 and 4 would be visible due to a lack of sufficient existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line.

View #5: View Southeast

Extraction Area: To screen the view into the Extraction Area in Area 1 and 4, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Rehabilitation Area: To screen the view into the Rehabilitation Area in Area 1 and 4, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

PHASE G

During Phase G Area 1 will be affected. Below water extraction and progressive rehabilitation of side slopes and shoreline in Area 1 will be completed. All equipment, structures, scrap and machinery from the site will be removed upon completion of extraction. A number of visual impacts have been discussed and can be minimized with recommended mitigation measures.

View #3: Field #1

Extraction Area: Extraction in Area 1 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Processing and Scrap Storage Area: The Processing and Scrap Storage Area is in the Far Background of this view and may be seen as a result of the removal of the existing vegetated visual barrier in Area 2. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

Rehabilitation Area: Rehabilitation in Area 1 would be visible due to a lack of existing visual barriers. A temporary seeded berm minimum 3m high shall be installed within the northeastern regulatory setback at the north end of Area 4.

View #5: View Southeast

Extraction Area: To screen the view into the Extraction Area in Area 1, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.

Rehabilitation Area: To screen the view into the Rehabilitation Area in Area 1, a temporary seeded berm minimum 3m high shall be installed within the regulatory setback along the northwestern property line to reinforce the existing sparse deciduous tree barrier.