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### **Theme: Rural Areas and Rural Lands**

Plan	Policy References	Rationale for Compliance
Provincial Policy Statement,	1.1.4.1 Healthy, integrated and viable <i>rural areas</i> should be supported by:	The PPS differentiates between Rural Areas, Rural Lands and Prime Agricultural Areas. Rural Areas are the lands outside of the urban boundary which incorporate
2014	<ul> <li>a) building upon rural character, and leveraging rural amenities and assets;</li> </ul>	Rural Lands (non-prime) and Prime Agricultural Lands. Different levels of protection apply depending on whether the lands are Prime or non-prime (Rural). Vinemount
	<ul> <li>f) promoting diversification of the economic base and employment opportunities through goods and services, including value-added</li> </ul>	Quarry is located in a Prime Agricultural Area.
	products and the sustainable management or use of resources;	The policies identify that a variety of land uses shall be permitted on rural (non-prime) lands, including
	<ul> <li>h) conserving biodiversity and considering the ecological benefits provided by nature;</li> </ul>	agriculture, rural residential, management or use of resources, and other rural uses. The proposed quarry extension is a permitted use, expanding the economic
	<ul> <li>i) providing opportunities for economic activities in prime agricultural areas, in accordance with policy 2.3.</li> </ul>	base and employment opportunities of the rural area.
	1.1.5.2 On <i>rural lands</i> located in municipalities, permitted uses are:	The proposed quarry extension is estimated to have 22 million tons of bedrock material that will be available to supply the local Hamilton market over the next 25 years
	<ul><li>a) the management or use of resources;</li><li>c) limited residential development;</li><li>e) cemeteries; and</li></ul>	and therefore provide economic opportunities in the local and provincial economy through employment. It will provide construction material close to market source and
	f) other rural land uses	thereby reduce transportation costs.
		Appropriate studies (summarized in Appendix "E" to Report PED18029) have been completed to ensure that surrounding land uses and the natural environment are protected and any impacts are mitigated.
Greenbelt Plan, 2017	3.1.4 For lands falling within <i>rural lands</i> of the Protected Countryside, the following policies shall apply:	The subject lands are designated "Specialty Crop" in the RHOP. The plan acknowledges that non-agricultural uses, including mineral aggregate operations (section
	1. Rural lands support and provide the primary locations for a range of recreational, tourism, institutional (including cemetery) and resource-based commercial / industrial uses. They also	4.3) may be permitted.
	contain many historic highway commercial, non-farm residential and other uses which, in more recent times, would	

	be generally directed to settlement areas but which are recognized as existing uses by this Plan and allowed to continue and expand subject to the policies of section 4.5. Notwithstanding this policy, official plans may be more restrictive than this Plan with respect to the types of uses permitted on rural lands, subject to the policies of section 5.3.  4. Other uses may be permitted subject to the policies of sections 4.1 to 4.6. Where non-agricultural uses are proposed, with the exception of a mineral aggregate operation, the completion of an agricultural impact assessment should be considered.	
RHOP	C.3.1.1 The following uses shall be permitted in all land use designations as set out in the policies below:	The subject lands are designated "Specialty Crop" in the RHOP. An Official Plan Amendment is required to permit the mineral aggregate use on the subject lands.
	d) Mineral aggregate resource operations shall be permitted by amendment to this Plan provided the proposed mineral aggregate extraction use complies with Section D.6.0, Mineral Aggregate Resource Extraction Areas and Section C.2.6-Natural Heritage System - Mineral Aggregate Operations policies of this Plan.	

# **Theme: Prime Agricultural Lands**

Plan	Policy References	Rationale for Compliance
Provincial Policy Statement	2.3.1 Prime agricultural areas shall be protected for long-term use for agriculture. Prime agricultural areas are areas where prime agricultural lands predominate. Specialty crop areas shall be given the highest priority for protection, followed by Canada Land Inventory Class 1, 2, and 3 lands, and any associated Class 4 through 7 lands within the prime agricultural area, in this order of priority.	Prime agricultural areas are afforded the highest degree of protection in planning policy. Lands cannot be redesignated from Prime Agriculture to another designation. However, policy 2.3.6.1 does allow for certain non-agricultural uses to be permitted in Prime Agricultural areas, including mineral aggregate extraction, subject to policies in section 2.5, discussed below.
	<ul> <li>2.3.3.1 In <i>prime agricultural areas</i>, permitted uses and activities are: agricultural uses, agriculture-related uses and on-farm diversified uses.</li> <li>2.3.5.1 Planning authorities may only exclude land from <i>prime agricultural areas</i> for expansions of or identification of <i>settlement areas</i> in accordance with policy 1.1.3.8.</li> </ul>	It is noted that the policies do not allow for the re- designation of Prime Agricultural lands to a Mineral Aggregate designation. Rather, the policy direction requires that the mineral aggregate use be added to the Prime Agriculture designation so that the lands do not lose the Prime Agriculture designation.
	2.3.6.1 Planning authorities may only permit non-agricultural uses in prime agricultural areas for:  a) extraction of minerals, petroleum resources and mineral aggregate resources, in accordance with policies 2.4 and 2.5;	As such, and because the subject lands are designated Specialty Crop and are considered Prime agricultural lands, a Site Specific Policy will be added to the subject lands in the RHOP to permit the mineral aggregate use.  Notwithstanding that the lands are designated Specialty Crop Area, the soil survey study by DBH Soil Services concluded that the site soils have a predominately "Poor, Very Poor and Unsuitable' rating for the production of specialty crops.
		Approximately 7.3 hectares (about 18%) of the subject lands were classified as Prime Agricultural Lands (Class 2), but it is fragmented into three separate and discontinuous pockets of land. An additional 15.2 hectares (38%) contain soils being Class 4 through 7.
Greenbelt Plan	<ul><li>3.1.3 For lands falling within <i>prime agricultural areas</i> of the Protected Countryside, the following policies shall apply:</li><li>1. All types, sizes and intensities of <i>agricultural uses</i> and <i>normal</i></li></ul>	The subject lands are designated "Specialty Crop – Prime Agricultural" in accordance with the City's RHOP designations. Prime agricultural areas are to be protected for agricultural uses. However, the Plan allows

farm practices shall be promoted and protected and a full range of agricultural uses, agriculture-related uses and on-farm diversified uses are permitted based on provincial Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas. Proposed agriculture-related uses and on-farm diversified uses shall be compatible with and shall not hinder surrounding agricultural operations.

- Non-agricultural uses may be permitted subject to the policies of sections 4.2 to 4.6. These uses are generally discouraged in prime agricultural areas and may only be permitted after the completion of an agricultural impact assessment.
- 5. Where agricultural uses and non-agricultural uses interface, land use compatibility shall be achieved by avoiding or, where avoidance is not possible, minimizing and mitigating adverse impacts on the Agricultural System, based on provincial guidance. Where mitigation is required, measures should be incorporated as part of the non-agricultural uses, as appropriate, within the area being developed.
- 4.1.1 For non-agricultural uses, the following policies apply:
  - 1. Non-agricultural uses are not permitted in the *specialty crop* areas as shown on Schedule 2 and Schedule 3 of this Plan or within *prime agricultural areas* in the Protected Countryside, with the exception of those uses permitted under sections 4.2 to 4.6 of this Plan.
  - 2. Proposals for non-agricultural uses must demonstrate that:
    - a) The use is appropriate for location on *rural lands*;
    - b) The type of water and sewer servicing proposed is appropriate for the type of use;
    - c) There are no *negative impacts* on *key natural heritage* features or *key hydrologic features* or their functions; and
    - d) There are no negative impacts on the biodiversity or

for certain non-agricultural uses, including mineral aggregate uses, subject to the policies of Section 4.3 (see below). Further, an Agricultural Impact Assessment is required in order to permit a non-agricultural uses, including mineral aggregate extraction, on prime agricultural lands. The applicant has submitted an Agricultural Impact Assessment which concluded that the the proposed Vinemount Quarry Extension would have minimal impact on the surrounding agricultural activities in the surrounding area.

The Greenbelt Plan permits certain non-agricultural uses in prime agricultural areas, including mineral aggregate extraction (section 4.3). It is staff's opinion that the application has demonstrated conformity with policy 4.1.1.2. The use is appropriate for rural lands, which have been identified as a Stone Aggregate Resource Area in the City's Rural Hamilton Official Plan. There is no servicing required for the use. Impacts on key natural heritage features and key hydrologic features have been examined, and appropriate mitigation recommended to ensure their functions will not be impacted.

	connectivity of the Natural Heritage System.	
RHOP	C.3.1.1 The following uses shall be permitted in all land use designations as set out in the policies below:	e As noted above, an Official Plan Amendment is required to permit the mineral aggregate use on the subject lands.
	d) Mineral aggregate resource operations shall be permitted amendment to this Plan provided the proposed mineral aggregate extraction use complies with Section D.6. Mineral Aggregate Resource Extraction Areas and Section C.2.6- Natural Heritage System - Mineral Aggregate Operations policies of this Plan.	al ), n

# **Theme: Mineral Aggregate Resources**

Plan	Policy References		Rationale for Compliance		
Provincial	2.5.1	Mineral aggregate resources shall be protected for long-term use	Provincial planning policy affords a high degree of		
Policy		and, where provincial information is available, deposits of mineral	protection to mineral aggregate resources, and		
Statement		aggregate resources shall be identified.	encourages mineral aggregate resources to be made		
			available as close to market as possible. Map 5 of the		
	2.5.2.1	As much of the <i>mineral aggregate resources</i> as is realistically	former Region of Hamilton-Wentworth Official Plan		
		possible shall be made available as close to markets as possible.	"Mineral Aggregate Resource Areas" identifies the		
		Demonstration of need for <i>mineral aggregate resources</i> ,	subject lands as being within an isolated "Stone		
		including any type of supply / demand analysis, shall not be	Aggregates" area (Note: Map 5 still applies because Schedule C of the RHOP which identifies Potential		
		required, notwithstanding the availability, designation or licensing for extraction of <i>mineral aggregate resources</i> locally or	Mineral Aggregate Resource Area remains under		
		elsewhere.	appeal).		
		disconicio.	appear).		
	2.5.2.2	Extraction shall be undertaken in a manner which minimizes	The submitted Planning Justification Report notes that		
		social, economic and environmental impacts.	the extracted material will be used in the local		
			construction and road building markets of east Hamilton		
			and other markets within the Niagara Peninsula.		
			Accessing the bedrock resources underlying the subject lands will continue to provide quality aggregate		
			resources to the local market.		
			resources to the local market.		
			The policies require that extraction be undertaken in a		
			responsible manner, minimizing social, economic and		
			environmental impacts. Waterford has undertaken a		
			significant number of studies to demonstrate that		
			potential impacts from the quarry will be mitigated to the		
			greatest extent possible and provided specific		
			recommendations with respect to potential social and environmental impacts.		
			environmental impacts.		
			To protect the residents in the vicinity of the quarry,		
			Noise, Blasting, and Air Quality studies were completed.		
			From a noise perspective, the study found that with		
			proper berming and operational restrictions on certain		
			equipment, it is possible to mitigate noise impacts to		
			acceptable levels.		

With regard to blasting and vibration impacts, the proposed restrictions on blasting procedures in proximity to residential dwellings will result in vibration levels being below provincial standards.

With regard to air quality, the study reviewed levels of several potential contaminants resulting from the blasting, and found that all contaminant levels would be below provincial criterion (with berming in place) and that there would be no health impacts from the proposed quarry extension.

Waterford also has a Best Management Practices Plan for Dust Control which is in use at its existing quarry.

Finally to protect the Natural Environment, mitigation measures include rehabilitation plans on the floor of the existing quarry (soil replacement, vegetation planting, habitat creation) as an interim measure until dewatering ceases and the quarry fills with water to form a 20-25 metre deep lake and fish will be introduced to provide a food base for water birds: long term ecological habitat enhancement on lands they own abutting the subject lands by partnering with the Hamilton Naturalist Club to develop the Vinemount Meadows Sanctuary to provide long-term birding habitat; creating two small shallow ponds on the floor of the existing Quarry to mitigate the loss of two on-site ponds; and wooden nesting boxes will be installed to attract Peregrine Falcons and Common Ravens away from the west quarry wall. Bat roost and bat maternity / nursery structures will be installed at the Vinemount Meadows Sanctuary, vegetating grass and herb covering the berms shall be maintained to provide grassland bird and winter raptor habitat, and creating a snake hibernaculum at 991 Green Mountain Road to compensate for an existing snake hibernaculum on the subject lands.

			The above studies were peer reviewed, and the recommendations from the studies are included as notes on the ARA Operational Plan.
Greenbelt Plan		For lands within the Protected Countryside, the following policies shall apply:  1. Non-renewable resources are those non-agriculture-based natural resources that have a finite supply, including mineral aggregate resources. Aggregates, in particular, provide significant building materials for our communities and infrastructure, and the availability of aggregates close to market is important for both economic and environmental reasons.  2. Activities related to the use of non-renewable resources are permitted in the Protected Countryside, subject to all other applicable legislation, regulations and official plan policies and by-laws. The availability of mineral aggregate resources for long-term use shall be determined in accordance with the PPS, except as provided below.	Mineral aggregate resource extraction is subject to the policies of section 4.3 (Non-Renewable Resources). As noted above, the subject lands are not located within the Greenbelt Natural Heritage System, and therefore policies relating specifically to lands within the Natural Heritage System do not apply.  The Greenbelt Plan permits mineral aggregate extraction within the Protected Countryside, subject to compliance with all other policies and legislation.
RHOP	D.6.1	Mineral Aggregate Resource Areas where there is a high potential for resource extraction are identified as Potential Mineral Aggregate Resource Areas on (Appendix / Schedule C – Non renewable Resources – deferred – until the deferral is resolved, Map No. 5 of the Region of Hamilton-Wentworth Official Plan shall apply), to this Plan.  Applications for new or expanded aggregate operations are	The subject lands are identified as Potential Stone Aggregates on Appendix "C" to the RHOP. However, this Appendix remains under appeal, and until the appeal is resolved, Map No. 5 of the Region of Hamilton-Wentworth Official Plan continues to apply. In this regard, the subject lands are identified as Stone Aggregates area on Map No. 5 to the Region of Hamilton-Wentworth Plan.
	D.6.13	subject to the requirements of the <u>Aggregate Resources Act</u> .  The establishment of a new <i>mineral aggregate operation</i> or extensions to existing operations requiring license approval under the <u>Aggregate Resources Act</u> will require an amendment to this Plan and the Zoning By-law and the Niagara Escarpment Plan, where applicable.	Section D.6 identifies the requirements that must accompany an application for the extension of an existing mineral aggregate operation, including an environmental impact study, hydrogeological study, transportation study and noise, vibration and air quality studies. As previously noted, the applicant has submitted all of the above studies for review by staff and
	D.6.16	The City shall consider an amendment to this Plan to redesignate lands for a new <i>mineral aggregate operation</i> or the expansion to an existing operation when the applicant has	CART (and peer review where required). Results of these studies are reviewed in detail in Appendix "E" to Report PED18029 and highlighted in the Analysis and

a) All Environmental Impact Studies required by this Plan in accordance with Section F.3.2.1, Environmental Impact Statements and Section C.2.6, Natural Heritage System - Mineral Aggregate Operations. In the event of a conflict Section C.2.6 shall prevail;

worked with the Province, other agencies and the applicant to determine the best operational practices for the proposed extension, with all recommendations being reflected on the ARA Operational Site Plan.

- b) A hydrogeological study;
- c) A transportation and haul route study; and
- d) Noise, vibration, and air quality studies.
- D.6.17 The City shall work with adjacent municipalities, agencies, the Province, the aggregate industry and other stakeholders to encourage the best design and operational practices in licensed aggregate extraction operations.
- D.6.20 The City shall coordinate with the Province, the Niagara Escarpment Commission and Conservation Authorities, to ensure that all appropriate conditions resulting from the review of studies required under the <u>Aggregate Resources Act</u> are imposed and enforced as:
  - a) Conditions of the license or notes on the Site Plan in accordance with the <u>Aggregate Resources Act;</u>

### Theme: Rehabilitation

**Policy References** 

2.5.3.1 Progressive and final rehabilitation

shall

accommodate subsequent land uses to promote land use

be required to

Plan

Policy

Provincial

Statement		accommodate subsequent land uses, to promote land use compatibility, to recognize the interim nature of extraction, and to mitigate negative impacts to the extent possible. Final rehabilitation shall take surrounding land use and approved land use designations into consideration.
	2.5.3.2	Comprehensive rehabilitation planning is encouraged where there is a concentration of mineral aggregate operations.
	2.5.4.1	In prime agricultural areas, on prime agricultural land, extraction of mineral aggregate resources is permitted as an interim use provided that the site will be rehabilitated back to an agricultural condition. Complete rehabilitation to an agricultural condition is not required if:
		a) outside of a <i>specialty crop area</i> , there is a substantial quantity of <i>mineral aggregate resources</i> below the water table warranting extraction, or the depth of planned extraction in a quarry makes restoration of pre-extraction agricultural capability unfeasible;
		b) in a <i>specialty crop area</i> , there is a substantial quantity of <i>high</i> quality mineral aggregate resources below the water table warranting extraction, and the depth of planned extraction makes restoration of pre-extraction agricultural capability unfeasible;
		c) other alternatives have been considered by the applicant and found unsuitable. The consideration of other alternatives shall include resources in areas of Canada Land Inventory Class 4 through 7 lands, resources on lands identified as designated growth areas, and resources on prime agricultural lands where rehabilitation is feasible. Where no other alternatives are found, prime agricultural lands shall be protected in this order of priority: specialty crop areas, Canada Land Inventory

### Rationale for Compliance

Additional considerations apply to rehabilitation of mineral aggregate operations in Prime Agricultural Areas. The policies promote rehabilitation of Prime Agricultural lands back to an agricultural use. However, subject to certain criteria outlined in policy 2.5.4.1, complete agricultural rehabilitation is not required if significant extraction below the water table is required, other alternatives have been considered, and agricultural rehabilitation is maximized where possible. The Hydrogeological Study confirmed that the groundwater elevation of the subject lands is approximately 2.0 metres below grade, and the bedrock material extends 25.0 metres lower and therefore, below water table extraction is necessary and the depth of planned extraction makes restoration of pre-extraction agricultural capability unfeasible.

Any progressive rehabilitation (e.g., soil replacement, vegetation planting, habitat creation), that occurs during the life of the Vinemount Quarry Extension will be temporary since once the quarry is completed and dewatering stopped, those rehabilitation efforts will eventually be flooded and remain at the bottom of a 25 m deep lake. However, since the proposed quarry will be operating for at least 25 years, temporary rehabilitation efforts will be undertaken at the bottom of the existing adjacent quarry floor to the east. The final land use of a lake is in keeping with the existing water features within the City of Hamilton 87-Acre pond to the east which was the result of past quarrying activity there.

As for b), the Hydrological Study confirms that quality of the insitu bedrock for commercial use and the Planning Justification Report details calculations related to the substantial volume of the aggregate underlying the site – 22 MT.

Class 1, 2 and 3 lands; and d) agricultural rehabilitation in remaining areas is maximized. this Report. infrastructure.

Discussion of the site Rehabilitation can be found in the Analysis and Rationale for Recommendation Section of

Further to policy 2.5.4.1(c) above, the applicant has reviewed alternative locations for the proposed quarry extension. Limiting the search for alternative sites to those in proximity to the existing quarry operations is justified and acceptable given the benefits in using existing entrance, existing haul routes, processing area (crushing, screening, loading, scale house) and other

The applicant notes in the Planning Justification Report that lands to the east are the existing Vinemount Quarry (License 5463 and License 103139) which are currently being extracted with an estimated 4 years of reserves remaining. Further to the east are lands owned by the City of Hamilton, "87-Acre Park" of which a large portion is designated Core (Environmental) Area and Greenbelt Natural Heritage System. Further to the east are a block of eight separate parcels that are mostly rural residences and are designated as Core (Environmental) and Greenbelt Natural Heritage System and do not have potential because of the sensitive ecological features. and fragmented nature of the lands.

Lands to the north of the subject lands are owned by Waterford and are located north of the Dofasco Trail and are designated Greenbelt Natural Heritage. They do not have road access from Tenth Road East. Any access would involve the relocation of the Dofasco Trail. The parcel is considered too small to warrant the up-front cost of planning and licensing. Lands to the north west are owned by others and designated Core (Environmental and Greenbelt Natural Heritage), do not have legal road access from Eighth or Tenth Road and would necessitate the relocation of the Dofasco Trail.

Lands to the west are owned by Waterford and considered high quality but would involve skipping over the subject lands which would not be a logical progression in terms of the required infrastructure to operate the quarry and to continue to use the existing Tenth Road East entrance / exit. As well, the western portion contains Core (Environmental) Area Greenbelt Natural Heritage System. Another parcel to the south of the one noted above is owned by Waterford and is isolated by the Forty Mile Creek (South Branch) on the northern boundary and by a 20 metre wide City of Hamilton unopened road allowance. As a single parcel, the site is too small to warrant extraction as the maximum extraction depth could not be achieved.

As such, staff are satisfied that alternative locations were examined and not deemed to be preferred alternatives. Finally, in relation to 2.5.4.1(d), as noted above, the majority of the extraction will take place below the water table. The perimeter surrounding the extraction site will not be extracted below the water table. However, agricultural lands outside the extraction area would be limited to the narrow setbacks between the property line and the extraction limit and using these lands for agricultural production would not be practical. Instead, the existing berms that are situated in these setbacks have been determined to be existing habitat for grassland birds.

There is a benefit to rehabilitating these lands to natural features which will promote connectivity and biodiversity for the lake feature. Further, the Soil study determined that the subject lands do not meet the minimum quality characteristics to support the growing of specialty crops. The lands will not be returned to an agricultural use but rather become part of an 80 hectare lake in conjunction with existing Vinemount quarry lands to the east.

Detailed discussion of the Rehabilitation Plan is provided

Greenbelt | 4.3.2.5 New and existing mineral aggregate operations and wayside

		<ul> <li>b) Progressive and final rehabilitation efforts will contribute to the goals of the Greenbelt Plan;</li> <li>c) Any excess disturbed area above the maximum allowable disturbed area, as determined by the Ministry of Natural Resources and Forestry, will be rehabilitated. For new operations, the total disturbed area shall not exceed an established maximum allowable disturbed area; and</li> <li>d) The applicant demonstrates that the quantity and quality of groundwater and surface water will be maintained as per Provincial Standards under the Aggregate Resources Act.</li> </ul>	agricultural standard is not possible or desirable due to the extensive below water table extraction which will occur. The proposed lake and associated natural features (wetlands, woodlands, grasslands and other vegetated area) will contribute to the ecological function of the area, and has been planned in consideration of the surrounding area, including future rehabilitation plans of adjacent aggregate operations.	
RHOP	D.6.21	Rehabilitation of all <i>mineral aggregate operations</i> , including wayside pits and quarries shall be undertaken in accordance with the site plans approved under the <u>Aggregate Resources Act</u> and be compatible with and have minimal impact upon the surrounding natural and visual environment and <i>existing</i> uses.	The subject lands are designated "Specialty Crop", which represents prime agricultural lands. Please refer to the discussion above under the Provincial Policy Statement, policy 2.5.4.1 regarding consideration of Rehabilitation in Prime Agricultural lands.	
	D.6.23	In the Agriculture designation, on <i>prime agricultural land</i> , extraction of <i>mineral aggregate resources</i> is permitted as an interim use provided the rehabilitation of the site will be carried out to substantially the same area and average soil quality for agriculture.  On <i>prime agricultural lands</i> , complete agricultural rehabilitation is not required if:  a) A substantial quantity of <i>mineral aggregate resources</i> below the water table warranting extraction, or the depth of planned extraction in a quarry makes restoration of pre-extraction agricultural capability unfeasible;		Appendix "D" to Report PED18029 Page 13 of 29

pits and quarries within the Protected Countryside shall ensure

a) The rehabilitated area will be maximized and disturbed area

minimized on an ongoing basis during the life cycle of an

Plan

that:

operation;

in the Analysis and Rationale for Recommendation Section. It is noted that the rehabilitation plan has been

reviewed by the MNRF and determined to be in

compliance with provincial policy related to total

disturbed area and the Provincial Standards under the

Aggregate Resources Act. As previously noted, the proposed end land use is a lake, as rehabilitation to an

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- b) Alternative locations have been considered by the applicant and found unsuitable. The consideration of other alternatives shall include resources in areas of Canada Land Inventory Class 4 to 7 soils, resources identified in *designated growth areas*, and resources on *prime agricultural land* where rehabilitation is feasible. Where no other alternatives are found, prime agricultural lands shall be protected in this order of priority: Specialty Crop Areas, and Canada Land Inventory Class 1, 2 and 3 lands; and
- c) Agricultural rehabilitation in remaining areas is maximized.
- D.6.24 Applications for Official Plan or Zoning By-law amendments for establishment or expansion of a *mineral aggregate operation* within the Protected Countryside shall be accompanied by information which demonstrates that rehabilitation will be carried out as follows:
  - a) The disturbed area of a site shall be rehabilitated to a state of equal or greater ecological value, and the long-term ecological integrity of the entire site will be maintained or restored, and to the extent possible improved;
  - b) If there are *key natural heritage features* or *key hydrologic features* or if such features existed on the site at the time of application:
    - i) The health, diversity and size of these key natural heritage features and key hydrologic features will be maintained or restored and, to the extent possible, improved so as to promote a net gain of ecological health; and
    - ii) Any permitted extraction of mineral aggregates that occurs in a feature will be completed, and the area will be rehabilitated, as early as possible in the life of the operation; and
  - c) Aquatic areas remaining after extraction are to be

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## **Theme: Natural Heritage**

Plan			Rationale for Compliance	
Provincial Policy	2.1.1	Natural features and areas shall be protected for the long term.	The applicant submitted an Environmental Impact Statement (EIS) and Level 1 & 2 Natural Environment	
Statement	2.1.2	The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.	Technical Reports prepared by Dance Environmental, in support of the proposed quarry extension. The report also addresses the conclusions of on-site snake monitoring by North-South Environmental and two other supplementary environmentally related reports including, Aquatic Resources Inventory by WSP and a Tree Preservation Plan by IBI.	
	2.1.3	Natural heritage systems shall be identified in Ecoregions 6E & 7E1, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.	In regards to Policy 2.1.2, the north, west and south boundary of the subject lands will be bermed which have been identified for use by grass-land birds. These berm profiles will remain after the guarry is completed and the	
	2.1.4	Development and site alteration shall not be permitted in: a) significant wetlands in Ecoregions 5E, 6E and 7E1; and b) significant coastal wetlands.	buffer lands returned to grass-land bird habitat. Within the west and north setbacks is the realigned (1949) Forty Mile Creek. Several species of fish within the west and north setbacks were identified and no activity will occur within or	
	2.1.5	<ul> <li>Development and site alteration shall not be permitted in:</li> <li>b) significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)1;</li> <li>c) significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)1;</li> <li>d) significant wildlife habitat;</li> <li>e) significant areas of natural and scientific interest; and unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.</li> </ul>	near the creek which will also be supported by 5.0 m vegetated buffers where no activity including berm construction will occur. Erosion Control measures such as siltation fencing will also be instituted. A 40 m setback will be established between the Creek and quarry blasting. Waterford has also partnered with the Hamilton Naturalist Club in the development of a site for ecological habitat enhancement on a 26.3 hectare parcel that Waterford owns to the north of the proposed extension. These lands, called the "Vinemount Meadows Sanctuary" will provide	
	2.1.6	Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.	long-term public access to habitat for grassland bird habitat and pollinators.	
	2.1.7	Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.	In regards to Policy 2.1.3, the EIS and Natural Environment Report identified that several ecological functions exist on the site and / or within 120 m of the site and assessed against the future quarry operations. The EIS provided several recommendations to address	

2.1.8 Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

potential impacts.

In regard to Policy 2.1.4, a provincially significant wetland (Vinemount South Swamp) exists within 120m of the subject site. Potential impacts have been investigated and will be mitigated. A Monitoring Plan will be implemented.

In regard to Policy 2.1.5, woodlands (Deciduous woodland) and significant wildlife habitat (Milksnake, Monarch Butterfly, Peregrine Falcon, Short-Eared Owl etc.) exist on the site and / or within 120 m. The EIS assessed these features against the proposed quarry operation and potential impacts to the significant woodlands and wildlife habitat have been addressed or mitigated, subject to their recommendations.

The study confirmed that an ANSI has been identified which is the underlying Vinemount bedrock formation in the existing Vinemount quarry. The proposed quarrying activity will provide an opportunity for additional exposure of this bedrock feature. However, once dewatering ceases and the quarry fills with water, this ANSI will be submerged. This is acceptable to the MNRF.

In regard to Policy 2.1.6, several species of fish were identified in the realigned Forty Mile Creek and, as discussed above, no activity will occur in the creek and suitable berms and vegetated buffers will be put in place. As well, there is a small .02 hectare man-made pond located along the western boundary (the West Pond) with Brassy Minnow being observed. This pond will be removed and existing fish will be relocated to the Forty Mile Creek, subject to consultation with Department of Fisheries and Oceans (DFO).

In regard to Policy 2.1.7, habitat of endangered and threatened species exist on the site and subject to the Recommendations provided in the EIS and Technical Reports, potential impacts to the habitat of endangered

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			and threatened species have been addressed and / or mitigated.
			In regard to Policy 2.1.8, natural heritage features exist on the site and / or within 120 m, and subject to the recommendations provided in the Report, potential negative impacts to the natural features and their ecological functions have been addressed and / or mitigated.
			The applicant has consulted with the Ministry of Natural Resources and Fisheries, and confirmed that the habitat may be removed, provided that suitable replacement habitat is created off-site, in accordance with the <i>Endangered Species Act</i> . The applicant has initiated a Notice of Activity with the MNRF to initiate this process. Suitable notes have been placed on the Operational Plan in this regard.
Greenbelt Plan	N/A		The subject lands are not located within the Greenbelt Natural Heritage System, as defined. While the subject lands do contain a key natural heritage feature (habitat of endangered species and threatened species) and a key hydrologic feature (wetland – not provincially significant), the policies of section 3.2.5 indicate that aggregate operations shall be governed by section 4 (Natural Resources) regarding key natural heritage and key hydrologic features.
RHOP	C.2.6.1	Tables C.2.6-1 and C.2.6-2 in conjunction with Sections C.2.6.1 to C.2.6.5 shall apply to a new <i>mineral aggregate operation</i> , an expansion to an existing <i>mineral aggregate operation</i> , a new wayside pit and quarry located in the Greenbelt Plan Protected Countryside, both inside and outside the Greenbelt Natural Heritage System, or outside the Greenbelt Plan Protected Countryside.	Section C.2.6 identifies restrictions on the location of new or expanding mineral aggregate operations depending on the type of feature(s) on or in the vicinity of the subject lands. In the case of the subject applications, Table C.2.6.2 is applicable as the applications are for an extension to an existing quarry, outside of the Greenbelt Natural Heritage System. The table indicates that an expansion to an existing operation is not permitted within
	C.2.6.2	Tables C.2.6-1 and C.2.6-2 cross reference the type of <i>mineral</i> aggregate operation use, with natural heritage features, areas	significant habitat of threatened or endangered species or within significant wetlands (both denoted by 'C' in the

and systems. The policies applicable to each use and feature, area or system combination are identified by a capital letter (A, B, C or D).

- C.2.6.5 An expansion to an existing *mineral aggregate operation* within the Greenbelt Plan Natural Heritage System and a new *mineral aggregate operation* or the expansion to an existing *mineral aggregate operation* outside the Greenbelt Plan Natural Heritage System, listed in Table C.2.6-2:
  - a) shall not be permitted in the natural features and areas listed in Table C.2.6-2 and identified by the letter C.
  - b) shall not be permitted in the natural features and areas listed in Table C.2.6-2 and identified by the letter D, unless it has been demonstrated through an Environmental Impact Statement that there will be no negative impacts on the natural features or their ecological functions.
  - c) shall not be permitted in adjacent lands to the natural features and areas listed in Table C.2.6-2 identified by the letters C and D, unless it has been demonstrated through an Environmental Impact Statement that there will be no negative impacts on the natural features or their ecological functions.
  - d) shall demonstrate through an Environmental Impact Statement how the diversity and connectivity of natural features in an area, and the long term ecological function and biodiversity of the natural heritage system should be maintained, restored or, where possible, improved recognizing the linkages between and among natural heritage features and areas, surface water features and ground water features.
- C.2.3.4 New *development* or *site alteration* shall not be permitted within provincially significant wetlands, *significant coastal wetlands*, or *significant habitat of threatened or endangered species*, except in accordance with applicable provincial and federal regulations

table). With regard to the subject lands, it is noted that there are no significant wetlands present on the lands. However, significant habitat of threatened or endangered species has been identified on the lands. Significant Wildlife such as Peregrine Falcon, Common Raven and Bank Swallows were found nesting on the west quarry wall. In this regard, the table above refers to Policies C.2.6.5 and C.2.3.4. Mitigation measures by the applicant included providing a nesting platform on the east quarry wall to encourage Peregrine Falcons to nest there. A soil structure will be piled on the existing quarry floor to create temporary nesting habitat for Bank Swallows until the quarry fills with water post-extraction. The applicant has committed to continuing the ecological habitat enhancement on lands they own to the north of the site. Waterford has partnered with the Hamilton Naturalists' Club (HNC) to develop the "Vinemount Meadows Sanctuary", a 26 hectare former agricultural field which is being restored to meadow (grassland bird and pollinator habitat). These lands include important existing grassland bird habitat. Throughout the life of the guarry, efforts will be undertaken by the applicant to implement mitigation plans to avoid impacts on cliff nesting birds species including the Bank Swallow, Peregrine Falcon and Common Raven. Through the mitigation and monitoring measures provided in the Site Plan notes, the City of Hamilton believes that Policies C.2.6.5 and C.2.3.4 have been complied with.

Policy C.2.3.4 confirms that development is not permitted in significant habitat of threatened or endangered species, except in accordance with applicable provincial and federal regulations. In this regard, the applicant has consulted with the Ministry of Natural Resources and Fisheries, and confirmed that the habitat may be removed, provided that suitable replacement habitat is created offsite, in accordance with the *Endangered Species Act*.

with respect to significant habitat of threatened or endangered species.
species.

Plan	Policy F	Refe	rences	R
Provincial Policy Statement	2.2.1		nning authorities shall protect, improve or restore the <i>quality I quantity of water</i> by:	T Ir
		a)	using the <i>watershed</i> as the ecologically meaningful scale for integrated and long-term planning, which can be a foundation for considering cumulative impacts of development;	T fo
		b)	minimizing potential <i>negative impacts</i> , including cross-jurisdictional and cross- <i>watershed</i> impacts;	fi
		c)	identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed;	A g a th
		d)	maintaining linkages and related functions among ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas;	q p p b H
		e)	<ul> <li>implementing necessary restrictions on development and site alteration to:</li> <li>1. protect all municipal drinking water supplies and designated vulnerable areas; and</li> <li>2. protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions;</li> </ul>	
		f)	planning for efficient and sustainable use of water resources, through practices for water conservation and sustaining water quality;	
		g)	ensuring consideration of environmental lake capacity,	

### Rationale for Compliance

The applicant has submitted a Level 2 Hydrogeological Investigations Study by WSP which was peer reviewed by Cambium Inc. and reviewed by members of CART.

The WSP report reviewed the proposed quarry extension for impacts on groundwater, including neighbouring wells, and surface water. A detailed summary of these reports, including the peer review by Cambium, is included in Appendix "E" to Report PED18029, and discussion of the findings of the reports is addressed in the Analysis and Rationale for Recommendation Section of this report.

At a high level, the studies have concluded that impacts to ground and surface water in the region can be mitigated, and notes have been included on the Operational Plan in this regard. Impacts to neighbouring wells are not expected to be greater than impacts from the existing quarry, but should they occur, Waterford has a complaint protocol in place to respond to the issue. The complaint protocol has been expanded based on recommendations by Cambium. Source Protection Planning and Public Health Services are satisfied with this proposal.

	h) ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.  2.2.2 Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored.  Mitigative measures and / or alternative development approaches may be required in order to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions.	
Greenbelt Plan	<ul> <li>3.2.3 The following Water Resource System policies apply throughout the Protected Countryside:</li> <li>1. All planning authorities shall provide for a comprehensive, integrated and long-term approach for the protection, improvement or restoration of the quality and quantity of water. Such an approach shall consider all hydrologic features, areas and functions and include a systems approach to the interrelationships between and / or among key hydrologic features and key hydrologic areas.</li> <li>2. Watersheds are the most meaningful scale for hydrological planning. Municipalities, partnering with conservation authorities as appropriate, shall ensure that watershed planning is undertaken to support a comprehensive, integrated and long-term approach to the protection, enhancement or restoration of the quality and quantity of water within a watershed.</li> </ul>	Please refer to the discussion above regarding the Level 2 Hydrogeological Investigations Study, prepared by WSP, which was submitted by the proponent and peer reviewed by Cambium Inc. and reviewed by members of CART.  At a high level, the studies have concluded that impacts to ground and surface water in the region can be mitigated, and notes have been included on the Operational Plan in this regard.  The City and the Niagara Peninsula Conservation Authority have worked co-operatively to review the applications at the watershed level.
RHOP	C.2.12.3 Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved, or restored. Mitigative measures and / or alternative development approaches may	Please refer to the discussion above regarding the Level 2 Hydrogeological Investigations Study undertaken by WSP, which was submitted by the proponent and peer reviewed by Cambium Inc. and reviewed by members of CART.

where applicable; and

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be required in order to protect, improve, or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions.

- C.5.1.1 No draft, conditional, or final approval of *development* proposals shall be granted by the City for any *development* in the *rural area* that could impact existing *private services* or involves proposed *private services* until the *development* proposal has complied with the all of the following:
  - a) Prior to or at the time of application for a proposal that could impact existing *private services* or involves proposed *private services*, *development* proponents shall submit complete information regarding existing or proposed private water and wastewater services. This information shall be completed to the satisfaction of the City. Where sufficient information is not available to enable a full assessment of on-site and off-site water supply and / or sewage disposal impacts or if the proponent does not agree with the City's calculations, the proponent shall be required to submit a hydrogeological study report completed in accordance with Section F.3.2.2 Hydrogeological Studies of this Plan and Hydrogeological Study Guidelines as may be approved or amended from time to time.
  - b) Any information submitted or study required in Policy C.5.1.1 a) shall be completed to the satisfaction of the City in accordance with Section F.3.2.2 of this Plan and Hydrogeological Study Guidelines as may be amended from time to time. The City may request or conduct a peer review of the study or servicing information, which shall be completed by an agency or professional consultant acceptable to the City and retained by the City at the applicant's expense.

At a high level, the studies have concluded that impacts to ground and surface water in the region can be mitigated, and notes have been included on the Operation Plan in this regard.

The City and Conservation Authority have worked cooperatively to review the applications at the watershed level.

# Theme: Land Use Compatibility (Noise, Air, Blasting)

Plan	Policy R	eferences	Rationale for Compliance
Provincial Policy		Healthy liveable and safe communities are sustained by:	The applicant has completed Noise, Air Quality, and Blasting Impact studies to identify mitigation requirements
Statement		(c) avoiding development and land use patterns which may cause environmental or public health and safety concerns.	for the protection of adjacent uses. These studies have been peer reviewed, and all recommendations from the studies are implemented through the ARA License on the
		Major facilities and sensitive land uses should be planned to ensure they are appropriately designed, buffered and / or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term viability of major facilities.	Operational Plan. These studies demonstrate that the proposed quarry extension will not cause environmental or public health or safety concerns.
Greenbelt Plan	N/A		
RHOP	B.3.6.3.1	9 The City shall ensure that all <i>development</i> or <i>redevelopment</i> with the potential to create conflicts between <i>sensitive land uses</i> and point source or fugitive air emissions such as noise, vibration, odour, dust, and other emissions complies with all applicable provincial legislation, provincial and municipal standards, and provincial guidelines, and shall have regard to municipal guidelines. The City may require proponents of such proposals to submit studies prior to or at the time of application submission, including the following: <i>noise feasibility study</i> ; <i>detailed noise study</i> ; air quality study; odour, dust and light assessment; and any other information and materials identified in Section F.1.9 – Complete Application Requirements and Formal Consultation.	· · · · · · · · · · · · · · · · · · ·

## **Theme: Cultural Heritage**

Plan	Policy References	Rationale for Compliance
Provincial Policy Statement	2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.	A Stage 1 & 2 Archaeological Assessment (PO89-0034-2013) was submitted to City staff and the Ministry of Tourism, Culture and Sport. The report recommended that
	2.6.2 Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.	Findspot 1 be subjected to a Stage 3 site-specific assessment. The report recommended no further work for the remainder of the assessed lands and provides an avoidance and protection strategy for Findspot 1. The report recommends that the subject property be
	2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.	considered partially cleared for the purposes of development except Findspot 1 and the recommended buffer. The Stage 1 & 2 Archaeological Assessment lays
	attinuation of the protection nominage property mill be contactived.	- That a temporary barrier be installed around Findspot 1 and its 20 m protective buffer prior to and maintained during construction / site alteration; - That all construction and site alteration activities within 50 m of the protected area be monitored by a licensed archaeologist; - That all employees working on the construction site be informed that the protected area is not to be disturbed; and, - That the area be inspected by a licensed archaeologist after the completion of the grading and other soil disturbance activities and that the effectiveness of the avoidance and protection strategy is reported to the Ministry of Tourism, Culture and Sport (MTSC).  The applicant confirms that the terms of the avoidance strategy have or will be complied with, including photographic documentation of the temporary fence around the Findspot 1 and its 20 m protective buffer, and confirmation of a commitment that the area will be inspected after the completion of the soil disturbance and that any further information provided to the MTSC is also

submitted to municipal staff.

ARA has made a recommendation for partial clearance for the project and Waterford has committed to implementing the strategy and confirmation that ground alterations (e.g., servicing, landscaping) will avoid archaeological sites with outstanding concerns and their protective buffer area and confirmed that a licensed consultant archaeologist will monitor construction in areas within the 50 m monitoring buffer zone, and that they are empowered to stop construction if there is a concern for impact to an archaeological site. An avoidance strategy has been implemented for Findspot 1, and the strategy will be followed until such time as the appropriate Stage 3 report (and Stage 4 mitigation report, if required) has been accepted into the Ontario Public Register of Archaeological Reports.

In response to comments by Planning staff when the application was initially submitted to the City in September 2015, the applicant submitted an assessment by Archaeological Research Associates Ltd. (ARA). Questions had been raised concerning the archaeological recommendation for partial clearance of Findspot 1 (Vinemount 1; AhGw-293 - please note that Findspot 2 became incorporated into Findspot 1 as a part of a report revision required by the Ministry of Tourism, Culture and Sport (MTSC). Findspot 1 comprised a barn in the east and Findspot 2 comprised a house in the west. In the revised report, they became part of the same site (Findspot 1). MTSC has approved the recommendation for partial clearance.

The assessments have received clearance from the Ministry of Tourism, Culture and Sport, and signed off by City staff. Details are provided in Appendix "E" to Report PED18029.

Greenbelt 4.4 For lands within the Protected Countryside, the following policies shall apply:

As noted above, the applicant has completed a Stage 1, 2 Archaeological Assessment which was submitted to and

	1.	. Cultural heritage resources shall be conserved in order to foster a sense of place and benefit communities.	accepted by City staff and the Ministry of Tourism, Culture and Sport. An Avoidance and Protection Strategy for Findspot 1 has been approved.
RHOP	B.3.4.2.1	<ul> <li>a) Protect and conserve the tangible cultural heritage resources of the City, including archaeological resources, built heritage resources, and cultural heritage landscapes for present and future generations.</li> </ul>	As noted above, the applicant has completed a Cultural Heritage Impact Assessment which has been reviewed and accepted by Planning staff. Further, Archaeological Assessments of the subject lands have been reviewed and accepted by staff and received clearance from the Ministry of Tourism and Culture. An Avoidance and Protection Strategy for Findspot 1 has been approved.
		<ul> <li>d) Avoid harmful disruption or disturbance of known archaeological sites or areas of archaeological potential.</li> <li>e) Encourage the ongoing care of individual cultural heritage resources and the properties on which they are situated together with associated features and structures by property owners, and provide guidance on sound conservation practices.</li> </ul>	
		g) Ensure the conservation and protection of <i>cultural</i> heritage resources in planning and development matters subject to the Planning Act either through appropriate planning and design measures or as conditions of development approvals.	
	D.6.29	The development of Mineral Aggregate Resource Extraction Areas shall not adversely impact <i>significant cultural heritage resources</i> either directly or indirectly unless suitably <i>conserved</i> or mitigated by the proponent to the satisfaction of the City and in accordance with studies required under the <u>Aggregate Resources Act</u> . (OPA(R)-5)	Page
	D.6.30	The rehabilitation of areas impacted by mineral aggregate resource extraction operations shall reflect and conserve elements of the pre-extraction character of the significant	Page 27 of 29

	cultural heritage resources where possible. (OPA(R)-5)	
D.6.31	Where possible, public or private rehabilitation of lands impacted by <i>mineral aggregate resource</i> extraction shall reflect and represent the pre-extraction land uses and character of the <i>significant cultural heritage resources</i> . The reflection and representation of these <i>significant</i> cultural heritage elements shall not preclude the rehabilitation of natural heritage features and ecological function, but shall ensure that the cultural history of the lands is appropriately represented in the rehabilitated site. (OPA(R)-5)	