

PLANNING REPORT #2

BUMSTEAD PIT

**Applications to Amend the County of Grey
Official Plan and Township of Chatsworth Zoning
By-law to facilitate an Application for a Class 'A',
Category 1 License for Mineral Resource
Extraction**

Part Lot 27, Concession 7
Geographic Township of Holland
Township of Chatsworth
County of Grey

Prepared for:
Brian & Pearl Bumstead
584015 Sideroad 60
Holland Centre, ON N0H 1R0

Prepared by:
Cuesta Planning Consultants Inc.
978 First Avenue West
Owen Sound, ON N4K 4K5
Tel: 519-372-9790
Fax: 519-372-9953
cuesta@cuestaplanning.com

File No. 21105

September 24, 2015



PLANNING REPORT



To: Council of the County of Grey
Council of the Township of Chatsworth

From: Genevieve Scott
Cuesta Planning Consultants Inc.

Date: September 24th, 2015.

Subject: Planning Report #2
Proposed Bumstead Pit, Class "A", Category 1 application
Part Lot 27, Concession 7, former Township of Holland
Township of Chatsworth, County of Grey
Applications for County of Grey Official Plan Amendment
& Township of Chatsworth Comprehensive Zoning By-law amendment

1.0 Background

This is the second Planning Report prepared in conjunction with the subject applications and is intended to provide an update to members of County and Township planning staff and Councils in regard to the status of the proposal and the progress of the application(s) since the County of Grey deemed the application complete (November, 2013).

Around the time of deeming the application complete, it was agreed among the proponents and their project team, County of Grey (County) planning staff and the Township of Chatsworth (Township) planning consultant that, that it would be beneficial to have agency feedback in regard to the Aggregate Resources Act (ARA) license application prior to moving any further with the Planning Act applications. In addition, the Township planning consultant requested a peer review be completed of reports prepared by Gamsby & Mannerow Limited (Gamsby & Mannerow) and Paradigm Transportation Solutions Limited (Paradigm) with respect to the adequacy of the road and potential traffic impacts along the haul route. Over the past several months, a significant amount of additional work has been completed for this proposal which has also resulted in a number of agency clearance letters.

The following Table 1 provides a brief summary of the activity and approvals associated with the subject proposal, up to the tabling of this report with the County of Grey and Township of Chatsworth.

Table 1 – Chronology of Application(s)

	Date	Activity
1.	January 2013	Pre-submission Consultation with Township staff with respect to the Road Assessment
2.	August 2013	Pre-submission Consultation with staff of the Ministry of Natural

		Resources & Forestry (MNRF) in regard to the draft technical reports and draft ARA site plans
3.	August 28, 2013	Pre-submission Consultation Meeting with Community members to review the Bumstead pit proposal
4.	September 26, 2013	<u>Planning Act</u> applications submitted to the County of Grey and Township of Chatsworth
5.	September 26, 2013	<u>Aggregate Resources Act</u> (ARA) license application submitted to the MNRF
6.	November 27, 2013	<u>Planning Act</u> Application deemed complete by County of Grey
7.	December 6, 2013	ARA Application deemed complete by the MNRF
8.	December 20, 2013	ARA Public Notice published in local paper
9.	January 10, 2014	Objection under the ARA received from Saugeen Ojibway Nation (SON)
10.	January 13, 2014	Saugeen Valley Conservation Authority (SVCA) clearance letter under the ARA process received
11.	January 16, 2014	Public Information Meeting under ARA held in Williamsford
12.	February 3 2014	Ministry of Environment & Climate Change (MOECC) objection under the ARA process received
13.	February 18, 2014	MNRF objection under the ARA process received
14.	March 18, 2014	Door to Door Well Survey completed by Gamsby & Mannerow as per MOECC request. On-site water levels recorded.
15.	March 19, 2014	Ministry of Transportation (MTO) request for Scoped Traffic Impact Study of Sideroad 60 and Highway # 10 intersection
16.	April 11, 2014	Courtesy letter sent to all public objectors under the ARA indicating time needed to address all concerns
17.	Spring & Summer 2014	Road Geometrics Evaluation field work completed (Gamsby & Mannerow); On-site monitoring well water levels recorded (Gamsby & Mannerow)
18.	Spring & Summer 2014	Additional field work completed including bird surveys, amphibian survey, butternut survey and woodlands review (AET Group Inc. (AET))
19.	June 16, 2014	Addendum to the Level 1 Hydrogeological Assessment completed and sent to the MNRF and MOECC for review on June 20, 2014 (Gamsby & Mannerow via Cuesta Planning Consultants Inc. (Cuesta))
20.	September 2014	Road Geometrics Evaluation completed (Gamsby & Mannerow) and forwarded to planning staff at County and Township
21.	September 2014	Scoped Traffic Impact Study completed (Paradigm) and forwarded to MTO for review
22.	September 19, 2014	Meeting held among County, Township, MNRF and project team to review proposal. Township Planning staff request for a peer review of the Gamsby & Mannerow and Paradigm reports.
23.	September 19, 2014	MOECC concludes no off-site impacts to wells to be expected from proposal. MOECC requests karst study be completed in study area
24.	October 10, 2014	Response to MNRF Review comments finalized and forwarded to MNRF for review (AET)
25.	October 29, 2014	MNRF opinion letter received indicating Bumstead application will have no adverse impacts on Aboriginal & Treaty rights of SON
26.	November 25, 2014	Karst Investigative Study completed by GM BluePlan Engineering

		(GM BluePlan)*
27.	December 11, 2014	MTO indicates no further concerns in regard to Highway 10 intersection. No required improvements identified as part of the proposal.
28.	January 27, 2015	MNRF withdraws objection to the ARA license application.
29.	February 20, 2015	MOECC requests 3 rd party review of Karst Investigative Study be completed in study area
30.	May 7 th , 2015	Third Party Karst Peer Review completed and sent to MOECC for review
31.	May 20, 2015	MOECC withdraws objections under the ARA
32.	May 2015	Requested Revisions of Cultural Heritage Assessment sent to the Ministry of Tourism, Culture and Sport (MTCS)
33.	June 2015	Township peer reviewer LEA completes peer review; additional work requested of GM BluePlan and Paradigm
34.	Summer 2015	Additional field work completed by GM BluePlan and Paradigm in regard to road suitability and traffic impact along haul route
35.	August 6, 2015	Meeting among project team, MNRF & SON held
36.	August 7, 2015	MTCS letter of acceptance of revised report received
37.	September 22, 2015	Supplementary Road Assessment by GM BluePlan and Scoped Traffic Impact Study Addendum submitted to County, Township and peer reviewer for review and comment
38.	September 22, 2015	Notice of Objector Responses mailed to public objectors under the ARA

*Gamsby & Mannerow Limited now operating as GM BluePlan Engineering

1.1 Summary of Supporting Materials

The following is a list of the supporting materials which have been previously distributed to and reviewed by provincial agencies, County and Township staff and consultants.

- **“Natural Environment Level I & II Technical Reports and Environmental Impact Assessment”** prepared by AET Consultants, April 24, 2013.
- **“Ministry of Tourism, Culture & Sport Stage I and Stage II Archaeological Assessment”** prepared by Dr. William Fitzgerald, June 21, 2012.
- **“Level I Hydrogeological Study”** prepared by Gamsby & Mannerow, September 2013.
- **“Road Assessment”** prepared by Gamsby & Mannerow, May 2013.
- **“Summary Statement”** prepared by Gamsby & Mannerow, September 2013, revised November 2013.
- **“Aggregate Resources Act Site Plans”** prepared by Gamsby & Mannerow, September 2013, revised November 2013, May 2013 and September 2015
- **Planning Report**, Cuesta Planning Consultants Inc., November 2013.

- **Addendum to Hydrogeological Study**, Proposed Bumstead Aggregate Pit, Inventory of Private Water Supply Wells, Gamsby and Mannerow, June 2014.
- **Scoped Traffic Impact Study**, Bumstead Pit, Chatsworth ON, Paradigm Transportation Solutions Ltd., September 2014.
- **Road Geometrics Evaluation**, 60 Sideroad (Between Highway # 10 and Veterans Road South), Gamsby & Mannerow, September 2014.
- **Response to OMNR Review Comments**, October 10th, 2014, AET Group Inc.
- **Karst Investigative Study**, GM BluePlan, November 25th, 2014.
- **Third Party Karst Review**, Daryl Cowell & Associates Inc., May 7, 2015.
- **Supplementary Road Assessment**, GM BluePlan, September 2015.
- **Bumstead Pit Scoped Traffic Impact Study Addendum Letter**, Paradigm, September 2015.

2.0 Purpose of This Report

The intent of this report is as follows:

1. To provide a brief review of the elements of the proposal as outlined within our original planning report;
2. To provide a brief overview of the relevant provincial resources and characteristics. This section also considers any relevant public and agency comments in this regard;
3. To provide a brief review of additional land use considerations which have been taken into account by this proposal which also includes any relevant public and agency comments in this regard;
4. To provide a summary of Aggregate Resources Act (ARA) Site Plan amendments which incorporate public and agency comments to date;
5. To outline any outstanding matters related to the subject application(s).

2.1 Geographic Setting & Surrounding Land Use

As described in the original planning report, the Bumstead holding forms a 39.6 ha (97.85 ac.) property and is legally described as Part of Lot 27, Concession 7 in the Geographic Township of Holland, now part of the Township of Chatsworth, in the County of Grey. The lands are municipally described as 584015 Sideroad 60 in the Township of Chatsworth. The site is located at the northeast corner of the intersection of Sideroad 60 and Veterans Road South, approximately 4.5km southwest of the Hamlet of Berkeley. Provincial Highway 10 bisects the Berkeley Hamlet Area and provides the closest connection to the provincial highway system from the proposed pit.

In general, surrounding properties are rural in nature and are comprised of a mixture of farms and non-farm residential uses.

The Bumstead lands include an existing farm residence, barn and outbuildings located in the southwest portion of the property, with access to Sideroad 60. The majority of the lands are currently used for mixed crop production with the balance of the remainder of the property being comprised of woodlands and the farm buildings noted above.

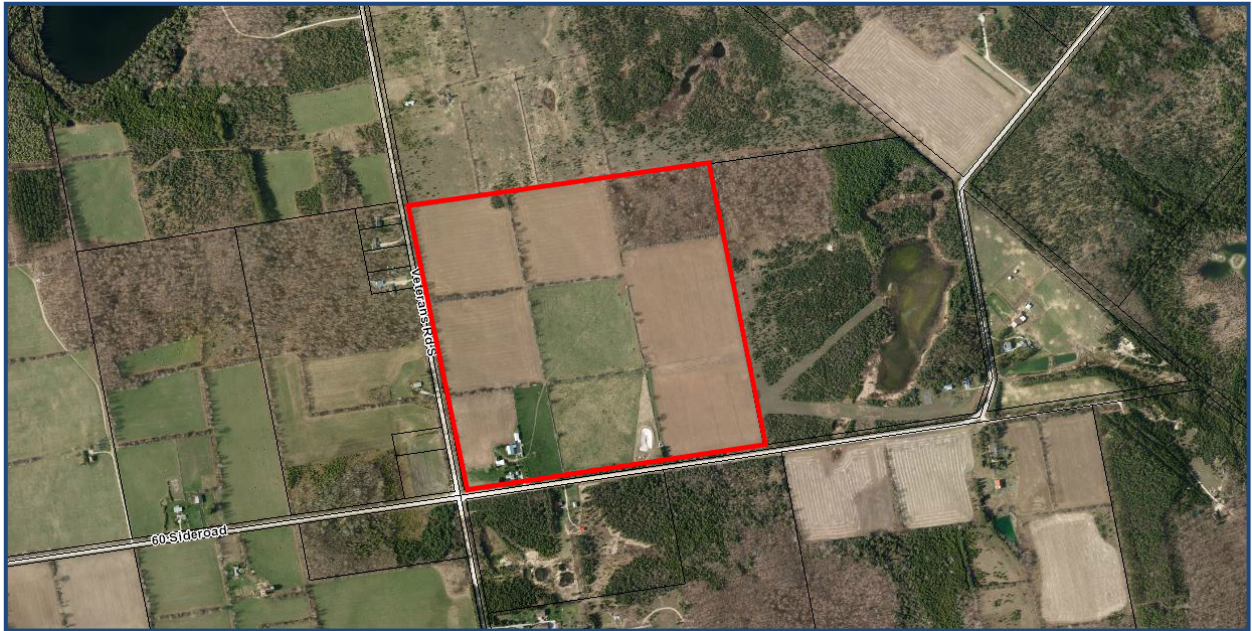


Figure 1 – Site & Surrounding Land Use

2.2 Description of Proposal

(Figure 2 Operational Plan)

The Bumsteads intend to license the entirety of their 39.6 hectare property in order to permit a Class 'A' Category 1 mineral resource extraction operation with extraction to the established high watertable. In total, a surface area of approximately 18.9 hectares is proposed for extraction. The remaining 20.7 hectares, included in the proposed licensed area, will be comprised of buffer lands, visual screening and environmental setbacks designed to minimize the impact of the proposed pit operation on surrounding land uses. The farmstead will be used by the proponents or the operator and maintained to the present standard.

It should be noted that licensing the entire property has required a larger study area in regard to the natural heritage assessments, as well as the hydrogeological assessment, which was to the benefit of the surrounding property owners and the surrounding natural environment.

The 18.9 hectares proposed for extraction are expected to yield approximately 1,675,000 tonnes of sand and gravel material. The proposed Class 'A' Category 1 license will permit the extraction of up to 150,000 tonnes annually to the depth of the established high watertable. The average depth of aggregate above the watertable is 4m. It is difficult to anticipate if the operation would realize the annual extraction limit, however this limit will provide flexibility for the future operator of the proposed pit in the event of large public contracts. Based on the maximum

rate of annual extraction, the proposed pit would have a lifespan of approximately 11.1 years. The lifespan of extraction however, will ultimately hinge on the demand for aggregate material.

It is the intent of the proponent and the current land lease operator, Sharedon Farms Limited, to continue to work together during the lifespan of this project. The owner of Sharedon Farms Limited, Mr. Don Curry, will continue his agricultural operation in conjunction with the aggregate operation.

2.2.1 Phasing & Operations

The Bumstead Pit is to be developed in three (3) phases with extraction commencing at the easterly portion of the licensed area and continuing westerly across the site. Each phase of the proposed extraction operation will include approximately one third of the total area designated for extraction. It is the intent of the phasing scheme is to permit a progressive rehabilitation process. Following is a brief description of the sequence of material movement and extraction operations within each extraction phase.

Phase 1: Stripping of topsoil and extraction of overburden down to the top of the aggregate will be completed with those materials placed at the south end of Phase 1 and/or used to create the on-site treed berms

Extraction of Aggregate. Once sufficient storage is established, stockpiling of product will occur on the pit floor.

Stockpiled and stripped soils will be used for progressive rehabilitation as operations proceed from Phase 1 to Phase 2 with a limited portion of Phase 1 remaining for stockpiling and the working area necessary for the initiation of Phase 2.

Phase 2: Stripping of topsoil and extraction of overburden down to the top of the aggregate will be completed with those materials placed at the west end of Phase 2.

Extraction of Aggregate. Once sufficient room is established, stockpiling will remain on the floor of the pit in Phase 2.

Stockpiled and stripped soils will be used for progressive rehabilitation as operations proceed from Phase 2 to Phase 3. A limited portion of Phase 2 may remain for stockpiling and the working area necessary for the initiation of Phase 3.

Phase 3: Stripping of topsoil and extraction of overburden down to the top of the aggregate will be completed with those materials placed at the west end of Phase 3.

Extraction of Aggregate. Once sufficient room is established, stockpiling will remain on the floor of the pit in Phase 3.

Stockpiled soils will be used for progressive rehabilitation as operations proceed from east to west with a limited portion of Phase 3 remaining for stockpiling and working area.

Upon completion of Phase 3, the remainder of the pit will be rehabilitated.

It should be noted that the proponent has also chosen to phase the operation so that smaller sections of the property are actively extracted and large portions of the lands outside the area of active extraction will continue to be cropped. The phasing has been established so that the extraction of Phase 1 is furthest away from most of the nearby residences for the longest amount of time.

Following comments from members of the public and planning staff, the proponent has agreed to establish treed berms along both Veterans Road South and Sideroad 60. The treed berms will be constructed at the outset of Phase 1 and should be fully matured by the time the third and possibly even the second phase have started.

Additionally, noise and processing setbacks will be employed throughout the lifespan of the pit, mitigating noise and dust. No permanent crushing or washing will occur on site, however, a portable crusher may be used once or twice an operating season to crush any over-sized material. Given the high quality of the product on site, a significant amount of over-sized material is not anticipated.

Quieter beepers will be used in order to reduce any disturbance from back-up beeper noise for nearby residents.

Hours of operation have been amended since the original submission. Operating hours will be limited to 7 am to 6 pm, Monday to Friday, with Saturday hours of operation being limited to 7 am to 12 pm. No operations shall occur on Sundays or holidays and no operation is to occur on Saturdays of any holiday weekend. Altered hours of operation would be for emergency purposes only, and in such cases, both the MNRF and the Township of Chatsworth will be notified.

For additional details in regard to phasing and operations, please refer to the associated ARA Summary Statement and ARA Site Plans prepared by Gamsby & Mannerow (now GM BluePlan).

2.2.2 Rehabilitation

In accordance with the requirements of the latest Provincial Policy Statement (PPS) and the Aggregate Resources Act Provincial Standards, the proposed Bumstead Pit will be progressively rehabilitated back to an agricultural use thereby ensuring this portion of the Township remains in agriculture over the long term. The rehabilitation of the extracted lands will occur in a progressive manner, with the rehabilitation following the removal of the aggregate material as closely as is feasible. It is intended that each phase will be rehabilitated prior to the subsequent phase being extracted.

As mentioned above, the rehabilitation will be completed progressively, on a Phased basis. As part of rehabilitation of each phase, approximately 0.5 m of soil will be placed above the bottom grade (i.e., pit floor). The type of soil/fill used is required to meet the Background Condition (Table 1) of the Ministry of Environment and Climate Change's (MOECC) *Soil, Ground Water, and Sediment Standards* for Use under Part XV.1 of the Environmental Protection Act (April,

2011), as may be amended from time to time. The Table 1 set of criteria is the most stringent set of criteria set out within *Soil, Ground Water, and Sediment Standards*. Due to the proximity of the proposed extraction to the groundwater table, the additional fill is intended to ensure that proper drainage remains to support agricultural activities on the rehabilitated pit.

After placement of the fill material, the topsoil, originally present at the property, will be replaced upon the fill soils to complete the rehabilitation. Consequently, the overall thickness of replaced fill and topsoil will be approximately 0.9 m. The restoration will include grading and sloping of the perimeter of the extraction area to a grade no steeper than a 3:1 (horizontal:vertical) slope.

After restoration, the ground surface will be relatively even and allow agricultural re-use of the property, which could include cropping or pasture.

A detailed overview of the rehabilitation scheme is provided in the Rehabilitation Plan and summarized in the ARA Summary Statement prepared by Gamsby & Mannerow.

3.0 Summary of Relevant Provincial Resources: Potential Impacts & Mitigation Measures

2014 Provincial Policy Statement (PPS) Section 2.0 Wise Use and Management of Resources

Ontario's long-term prosperity, environmental health, and social well-being depend on conserving biodiversity, protecting the health of the Great Lakes, and protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits.

The following is a brief summary of the key provincial resources generally relevant to this type of aggregate proposal. This section outlines those resources which specifically occur in the context of the subject proposal and identifies how each resource may be affected by the subject application. When making any land use planning decision, it is necessary to review provincial interests and determine how they may be impacted through development. In the case of aggregate development, often more than one provincial interest exists and it is the goal of sound land use planning to balance and protect these competing interests in the most effective manner, keeping in mind the long term planning horizon.

3.1 Mineral Aggregate Resources (Figure 3)

2014 PPS Section 2.5 Mineral Aggregate Resources

2.5.1 Mineral aggregate resources shall be protected for long-term use and, where provincial information is available, deposits of mineral aggregate resources shall be identified.

The proposed pit is located in the Horseshoe Moraines physiographic region identified by Chapman and Putman in the *Physiography of Southern Ontario*, 1984. The geographic Township of Holland is generally covered by a complex mix of till ridges, kame moraines, outwash plains, and spillways, interspersed with more smoothly moulded till plains and

drumlinized areas. The farmhouse and out buildings are located on a portion of a drumlin while the balance of the farm is on a portion of outwash plain.

As shown below in Figure 3, the County of Grey has also identified a Primary and Tertiary deposit on the site. It should be noted that Schedule "B" of the County of Grey Official Plan, which identifies High Potential Aggregate Resource Areas, is at a scale of 1:95000 and while an excellent indicator of the presence of resources, it is essential that on-site testing of the resource occurs to determine quantity, quality and limits of the resource. In this particular instance, on-site testing confirmed the primary deposit to be greater than shown in Figure 3.

Gamsby and Mannerow conducted a number of testholes on the subject property in order to determine the quality and quantity of the on-site aggregate resource.

The volume of aggregate is estimated to be 761,000 m³. The quality of aggregate on-site was confirmed to meet the requirements for Type 1, Granular "B" with quality, hardness and absorption qualifiers meeting the Ontario Provincial Standard Specifications (OPSS) for concrete aggregate.

To summarize, the on-site deposit was tested and determined to be a very high quality resource suitable for the construction industry, particularly within the Grey-Bruce region. Additional details in this regard can be found within the associated ARA Summary Statement.

It has been confirmed, therefore, through document review and on-site analysis, that a provincially significant aggregate resource occurs on this site. The development of this resource has been carefully balanced with the remainder of relevant provincial resources.

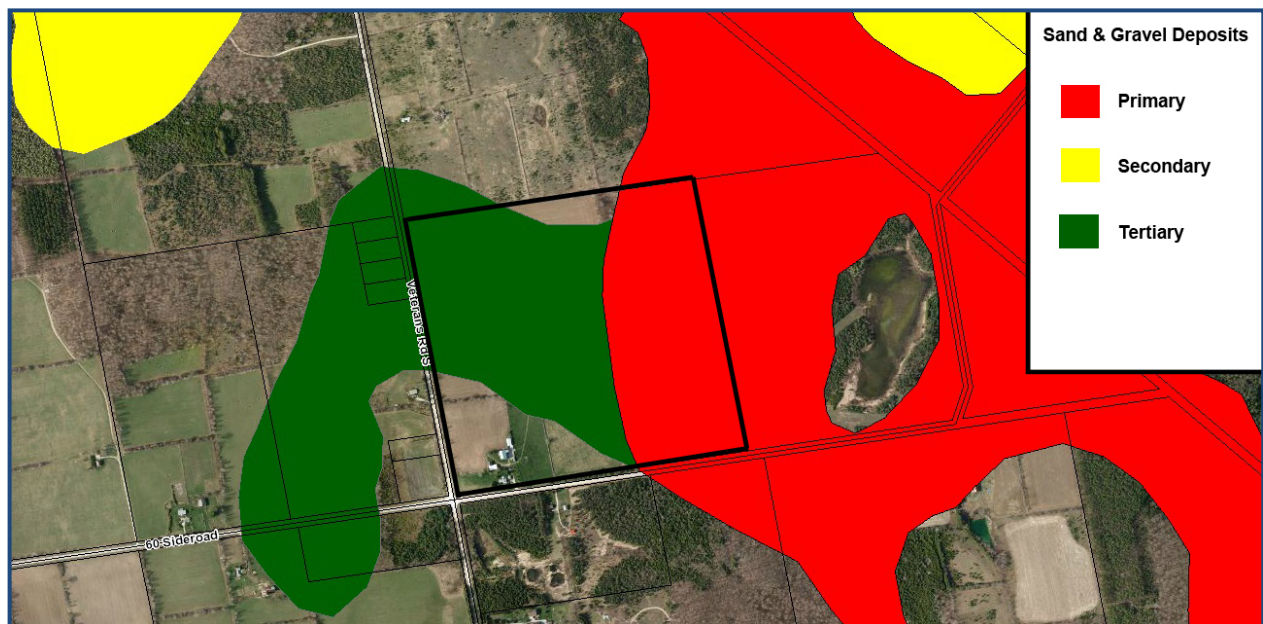


Figure 3 - Sand & Gravel Deposits (sourced from County of Grey GIS site; Planning-Aggregates)

3.2 Agrarian Resources

2014 PPS 2.3 Agriculture

2.3.1 Prime agricultural areas shall be protected for long-term use for agriculture

2.3.6 Non-Agricultural Uses in Prime Agricultural Areas

2.3.6.1 (in part) 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;

Prime agricultural lands are a key provincial interest which is required to be identified in planning documents. The County of Grey Official Plan (GCOP) has designated the subject lands as Agricultural along with noting the High Potential Aggregate Resource that is on the site. Therefore, achieving a balance between the two provincial interests has been considered by this proposal.

It is the intent of the proponents and the land lease operator, Sharedon Farms Limited, to continue to work together during the lifespan of this project. The owner of Sharedon Farms Limited, Mr. Don Curry will continue his agricultural operation in conjunction with the aggregate operation.

While there will be an interim loss of agricultural land, the pit will be rehabilitated to an agricultural use upon completion of extraction. Rehabilitation will be progressive throughout the lifespan of the pit. For additional details in regard to rehabilitation, please refer to Section 2.2.2 of this report.

The majority of the subject property has been identified as containing soils classified as 3FM under the Canadian Land Inventory Index (CLI). A classification of 3FM would indicate soils which have moderate to severe limitations due to low natural fertility of the soil and a moisture deficiency in the soil. It is likely that, once rehabilitated, soil quality on the site may be an improvement of what currently exists which should benefit any future agricultural operation.

As noted above, agricultural and mineral resources are both key provincial interests. In order to achieve this balance, the PPS permits mineral resource extraction within prime agricultural lands in the following manner;

2014 PPS 2.5.4 Extraction in Prime Agricultural Areas

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.

It has been confirmed that the above noted PPS requirement will be met by this proposal.

3.3 Natural Heritage Resources

2014 PPS 2.1 Natural Heritage

2.1.1 Natural features and areas shall be protected for the long term.

The Aggregate Resources Act (ARA) and the PPS require applications to conduct one or more Natural Environment Technical Reports to determine if any of the seven natural heritage features, specified in the PPS are located on, or within 120 metres of the site being licenced. Should the preliminary report (Level 1) identify one or more of these natural heritage features, an additional report (Level 2) is required in order to assess what degree of impact the aggregate operation may have on the ecological function of these features and propose any mitigation measures that would be required in order to protect these natural heritage features.

Due to the presence of Significant Woodlands in an area northwest of the proposed Bumstead Pit, a further Level 2 Natural Environment Technical Study was completed by AET with the Natural Environment Level 1 & 2 Technical Reports & Environmental Impact Assessment dated April 24, 2013. The Level 2 study concluded that;

“No significant, long term natural environment impacts affecting significant features or functions are expected. This is because the significant woodlands found in polygons 1, 9 and 10 will remain intact and will be protected by the separation from gravel pit activity by road allowances and operational setbacks with vegetated buffers.” As well, the extraction will not actually go below the watertable.

During the Notification and Consultation process under the ARA, the MNRF submitted a written objection dated February 18th, 2014. Within this correspondence MNRF identified additional natural heritage information required from the proponent in order for MNRF to complete its review. Additional work included the following:

- Further details in regard to grassland breeding bird survey methodology in order to determine if significant habitat of endangered and threatened species occurs within the study area
- Confirmation of presence/absence of Butternut within the study area
- Further information and rationale to prove no negative impacts to adjacent Significant Woodlands
- Further review of potential amphibian breeding habitat in the study area

A Response to the MNRF from AET was submitted October 10th, 2014. The Response included the findings of additional field work which was completed in the spring and summer of 2014. Additional field work included breeding bird surveys, butternut survey, a more comprehensive review of the features and functions of the adjacent Significant Woodlands, and an amphibian survey.

The Response concluded that the proposed pit will have no net negative impacts on natural features within the proposed licensed area or on adjacent lands within 120 metres of the proposed licensed boundary. The MNRF completed its review of this Response and withdrew its objection on January 27th, 2015.

Through appropriate operational requirements and site rehabilitation to an agricultural landscape, the end result of this development will achieve a balance of provincial interests with adequate protection of natural heritage features and functions.

3.4 Cultural Heritage Resources

2014 PPS 2.6 Cultural Heritage and Archaeology

2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

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.

Dr. William Fitzgerald was retained by Cuesta Planning Consultants Inc. (Cuesta) on behalf of the applicants, to complete an Archaeological Assessment on the subject lands as required by the PPS and ARA. Stage 1 (Evaluation of Archaeological Potential) of the assessment revealed that certain criteria were met for the potential of archaeological resources to be found on the site. The criteria included proximity to a secondary water source, elevated topography, an area of early Euro-Canadian settlement and an area of early historic transportation routes. The existence of such potential automatically advances the assessment forward to a Stage 2 Assessment (Property Assessment) which includes field work. The on-site field investigation is intended to discover any cultural sites which may be deemed significant. Dr. Fitzgerald's site visit determined that the area intended for extraction did not contain any item of historical or archaeological significance and that the area with the most potential for Native and Euro-Canadian cultural activity includes only the existing homestead which is well away from the proposed extraction area.

As part of the agency review under the ARA Notification and Consultation process, staff of the Ministry of Tourism, Culture and Sport (MTCS) requested some minor amendments to the above noted report which were submitted to MTCS in May of 2015. A letter of acceptance from MTSC of the revised report was received August 7th, 2015.

Site plan notes have been added to the ARA Operations Plan to ensure future compliance with the Ontario Heritage Act, the Cemeteries Act and the Funeral, Burial and Cremation Services Act. These notes serve to maintain the provincial interest in regard to protection of cultural and archaeological resources.

3.5 Surface & Groundwater Resources

2014 PPS 2.2 Water

2.2.1 (in part) Planning authorities shall protect, improve or restore the quality and quantity of water by: b) minimizing potential negative impacts, including cross-jurisdictional and cross-watershed impacts;

A Level 1 Hydrogeological Study was conducted by Gamsby and Mannerow for the proposed Bumstead Pit in accordance with the requirements of the ARA. The Hydrogeological Study was completed to support the proposed extraction to the depth of the water table.

As indicated previously, an application has been made for a pit “below the water table”, since the ARA considers only two options: pits above the water table (with a separation of 1.5 m from the water table), or pits below the water table. However, no extraction below the water table is proposed, or permitted, under the ARA site plans.

The study included a review of the background data, including but not limited to Ministry of the Environment and Climate Change (MOECC) well records, relevant mapping and the Grey and Bruce Counties Groundwater Study, as well as field investigations.

The field investigations included reviewing the on-site and surrounding land uses, natural features, surface water features and topography of the area in addition to determining any connections to the groundwater regime. Monitoring wells were installed on the site to define water table elevations and the groundwater flow. As well, a survey was conducted on the site in order to provide the most accurate elevation and spatial data for the site prior to the determination of appropriate extraction depths and limits.

The study determined that the operation will not impact the local water supply, surrounding wells, or any surface water features, as no dewatering or water diversion is planned as part of the operation. A number of recommendations were added to the Operational Plan of the Bumstead pit in order to provide additional levels of safety and mitigation with respect to potential surface and groundwater impacts.

As part of the Notification and Consultation process under the ARA, staff of the Ministry of Natural Resources and Forestry (MNRF) and staff of the Ministry of the Environment and Climate Change (MOECC) reviewed the proposal and in particular, the Level 1 Hydrogeological Study.

In correspondence dated, February 18th 2014, staff of the MNRF noted additional details would be required by the MNRF with respect to the water table depth monitoring program. Additionally, a site plan note outlining operator training requirements was to be added to the Operational Plan. A June 20th, 2014 submission to the MNRF, which included an Addendum to the associated Hydrogeological Study and June 16, 2014 correspondence from Gamsby and Mannerow, formed a response to these concerns. Site plan notes (added to Note # 23) were proposed by the project hydrogeologist in order to address the MNRF concerns. On January 27th, 2015 MNRF formally withdrew its objection to the subject proposal.

In correspondence dated February 3rd, 2014, staff of the MOECC requested further work be carried out in order to ascertain if any shallow domestic water supplies existed within a 500 metre radius of the site. A June 20th, 2014 submission to the MOECC formed a response to this request with the findings of the Well Inventory provided in the Addendum to the Hydrogeological Study.

In correspondence dated September 19th, 2014 staff of the MOECC noted that, upon review of the Addendum to the Hydrogeological Study, no additional shallow groundwater monitoring wells would be required by the Ministry at this time. Final withdrawal of the MOECC objection was received on May 20th, 2015.

To protect water quality and ensure extraction is not completed below the water table, the following mitigation measures have been recommended as part of the Hydrogeological Studies, and provided as operational requirements under Note # 23 of the Operational Plan (Drawing 2 of 4):

- Refueling and maintenance of machinery (if any) should not be conducted in areas of the excavation which are within 1.5 m of the watertable, i.e., where excavations are completed to the watertable.
- Excavation and/or the operation of vehicles shall not be conducted in areas of standing or ponded water.
- Excavation shall not proceed past the depth where water enters the excavation. Once water enters an excavation area, the water level elevation should be noted and adjacent excavations stopped approximately 0.3 m above the water level elevation.
- No chemical spraying (pesticide/herbicide) shall be conducted within areas of the excavation. Any spraying associated with on-site agricultural operations adjacent to areas of extraction is to be conducted by operators with current Pesticide Safety Course Certification and adherence to required set-backs.
- An access/egress route/road shall be maintained greater than 1.0 m above the maximum proposed depth in the excavation areas (to prevent vehicle operation in areas of standing water).
- Areas shall maintain vegetative cover as long as possible prior to excavation.
- No dewatering or re-direction of surface water outside of the pit shall be conducted to augment aggregate extraction.
- During operations, areas of standing water shall be noted and recorded on a weekly basis. Where areas of standing water are noted to remain for a period of greater than one-month during operational periods and are associated with the groundwater elevation (as opposed to surface pooling), remediation by filling with suitable soils is to be conducted.

- Yearly water level monitoring at monitoring wells MW-1, MW-2 and MW-3 shall be conducted in the spring by a qualified professional. Water levels will be compared to the proposed bottom contours, which will then be adjusted to the maximum expected water table, as necessary.
- Staff shall be trained by a qualified professional on how to implement the preventative measures under this note.
- Excavation operations in the proposed gravel pit shall not disturb the underlying till deposit.
- Groundwater monitoring wells shall be maintained and monitored monthly during periods of operation throughout the duration of extraction. Any significant lowering of levels and/or the appearance of groundwater depression shall be reported to the MOECC and MNRF immediately and confirmed. "Significant" is to be defined by a qualified hydrogeologist but would involve levels below those previously recorded during the driest year of record and not attributable to ambient factors such as drier than normal climactic conditions. In order to accommodate this monitoring condition, well MW-2 shall be deepened approximately 1.0 metre prior to commencing operations.

As well, as per Note # 18 of the Operational Plan states

"Any standing water shall be noted and recorded on a weekly basis during pit operations. These inspection reports are to be compiled and provided with the Annual Compliance Assessment Report for submission to the MNR and Clerk of the upper and lower tier municipalities."

To reiterate, the Hydrogeological Study was completed to meet the requirements for a Hydrogeological Study under the Aggregate Resources Act Provincial Standards for a Category 1 license application. It was completed by a professional engineer and geologist based on generally accepted methodology and with regard to the specific proposal. An Addendum to the Hydrogeological Study was also completed as part of this proposal and the combined work deemed satisfactory by staff of the MNRF and the MOECC.

3.6 Potential For Karst

Following receipt of public concerns, in correspondence dated September 19th, 2014, the MOECC requested that additional work be completed in the study area in the form of a Karst Investigative Study to determine if karst is present within the study area and any hazards which may result if karst features were found to be present.

On November 25th, 2014, a response to this information request was completed by GM BluePlan and submitted to the MOECC via Cuesta. The GM BluePlan Karst Investigative Study (KIS) confirmed that no karst features were evident on the adjacent property.

At the request of the MOECC a peer review was conducted by Mr. Daryl Cowell (May 7th, 2015) which also confirmed no karst features are evident on the adjacent site and that there is no evidence of significant karst processes or features that would restrict or limit approval of the

application. Precautionary site plan notes have been added to the ARA Operational Plan (Note # 23).

The protection of groundwater and surface water resources, both on and off the site, has been considered thoroughly during preparation of this application. Appropriate protective measures have been placed on the license to ensure the quantity and quality of this provincial resource will not be impacted by development of the on-site mineral resource.

In summary, under the ARA licensing process, the Natural Environmental Level 1 and 2 Technical Reports and Supplementary Response, Level 1 Hydrogeological Study and Addendum, Karst Investigative Study and Peer Review and ARA site plans have been reviewed by provincial staff biologists and hydrogeologists (MNRF & MOECC) to ensure the necessary provincial requirements have been met. The Ministry of Tourism, Culture and Sport (MTCS) has reviewed the Archaeological/Heritage Assessment and cleared the property of concerns in this regard.

In conclusion, it has been demonstrated that all relevant provincial resources have been considered through this proposal. The proposed development meets all provincial requirements and ensures these provincial interests are developed and protected in a balanced manner.

4.0 Additional Land Use Considerations

Since the time of writing the original reports, concerns related to haul route adequacy and potential traffic impacts have been identified by the Township peer review LEA Consulting Ltd. (LEA). In addition, public comments in regard to potential noise, dust and visual impacts have also been received.

Following is an analysis of the additional local land use considerations and potential impacts that are required to be addressed through this proposal.

4.1 Potential Noise Impacts

The Provincial Standards for a Class 'A' Category 1 pit license requires a noise study to be conducted if extraction is proposed to occur within 150 metres of a sensitive receptor.

In this regard, the limit of extraction has been reduced so as to provide a 150 metre noise buffer from all residential dwellings located along Veterans Road South and minimize any potential noise impacts in accordance with Provincial Standards. No processing of aggregate material will occur within 300 metres of any sensitive receptor.

Additionally, the proponent has reviewed options, since the time of writing the original report, in regard to back-up beepers and feels a quieter type of beeper system would be very beneficial to this operation. A site plan note has been added to the Operational Plan which states quieter back-up beeper options, deemed acceptable by the Ministry of Labour, will be used during the lifespan of the pit.

The pit has also been designed to minimize the need for haulage trucks to back-up. Under operations, pits typically have large open, and accessible areas to maneuver vehicles. In particular, with aggregate extraction, the active extraction areas and pit floor provide significant

room for entry and turning without back-up. To further promote sufficient turning room, an additional by-pass and turning road has been shown in the vicinity of the pit entrance and at the scale-house area (i.e. southeast portion of site).

Further to achieving the operational setbacks, a treed soil berm is now proposed along Veterans Road South and a portion of Sideroad 60 (390 metres long and 130 metres long respectively). These berms have been added to the Operational Plan based on comments received during the consultation process.

The berms will be effective at further reducing potential noise levels at nearby sensitive receptors and will supplement the existing vegetated tree row along Veterans Road South, to provide further mitigation. Consequently, the combined factors of meeting the minimum setbacks under the ARA, the installation of a treed berm, along with the existing vegetated tree row, would indicate that Provincial requirements in regard to noise attenuation have been met and exceeded by the subject proposal.

4.2 Potential Dust Impacts

In accordance with provincial standards for a Category 1 license, dust will be controlled on site.

The Aggregate Resources Act (ARA) and its associated Provincial Standards of Ontario for pits and quarries were developed by the Ministry of Natural Resources and Forestry (MNRF) in collaboration with sister ministries such as the Ministries of Agriculture Food and Rural Affairs, Environment & Climate Change and Municipal Affairs and Housing. Operating practices and requirements were developed by expert provincial staff in order to provide adequate protection from potential impacts for both members of the public and the natural environment. The owner will adhere to a 300 metre processing setback from any sensitive receptor (residence) and will mitigate dust on site by the use of water or another MOECC approved dust suppressant on the internal laneway and stock piled materials as necessary (Operational Note 20).

On-site treed berming, tree and bush retention and cropped fields will also add to the mitigation of on-site dust.

In regard to potential off-site air quality impacts, the proponent would be prepared to use late model trucks as these trucks have diesel emission reduction units installed by the manufacturer which would significantly reduce potential impacts related to diesel fumes. As Sideroad 60 is hard surfaced from the pit entrance and along the entire haul route, dust impacts, such as those generated from traffic along a gravel road, are not anticipated.

That being said, should there be any need for the mitigation of dust along Sideroad 60, this would be determined by the municipal authority, the Township of Chatsworth. Dust mitigation requirements could be incorporated into a development agreement between the Township and the proponent should this be deemed necessary.

As part of the agency circulation, this proposal and its supporting materials was circulated to the MOECC and no concerns in regard to dust and diesel fume off-site impacts were noted in its review.

4.3 Potential Traffic & Haul Route Impacts

The proposed operation is well situated within 5 kilometres of the provincial highway system. The proposed haul route for the operation is Sideroad 60 to Provincial Highway 10.

As part of the subject proposal, a Road Assessment was finalized in May, 2013, in order to review the adequacy of the proposed haul route.

This report summarized that, upon approvals for both re-zoning and pit licence, the proposed haul route may require some improvements, however, regardless of the proposed pit operation, the road in its current condition meets the basic Ministry of Transportation (MTO) design guidelines for a Class IV road (i.e., average daily vehicle use up to 1,000 counts). Including the proposed use, the average daily traffic along Sideroad 60 is expected to be in the range of 500 vehicles.

Following the January 16th, 2014 Public Consultation Session under the ARA, a number of additional road and traffic safety concerns were identified by members of the public. Additionally, staff at the Ministry of Transportation (MTO) were notified of public concern in regard to the proposed haul route and requested a Scoped Traffic Impact Study to review intersection operations at Sideroad 60 and Highway # 10 (March 19, 2014). The following work was completed in order to address public and agency concerns.

- Road Geometrics Evaluation, Gamsby and Mannerow, September 2014.
- Scoped Traffic Impact Study, Paradigm Transportation Solutions Ltd. (Paradigm), September 2014 (intersection of Highway 10 and Sideroad 60).

The additional reports concluded the following:

- The S-bends should be posted at a speed limit of 40 km/hour;
- Safe stopping distances exist for both east bound and west bound traffic from the proposed site access location;
- Some sections of the haul route on Sideroad 60 (between the proposed pit entrance/exit and the West Back Line) are below MTO design standard and should be considered by the Township for improvements;
- General maintenance should be considered by the Township;
- Guide rails are not warranted along sections of the haul route adjacent to wetlands;
- The proposed development is recommended to be approved with no conditions related to off-site remedial transportation measures (as related to the intersection of Highway 10 and Sideroad 60).

The Ministry of Transportation (MTO) reviewed the September 2014 Paradigm Scoped Traffic Impact Study. Comments received December 11th, 2014 from the MTO concluded that it was not expected that the additional traffic stemming from the pit would result in traffic operational

issues at the intersection of Highway 10 and Sideroad 60 at Berkeley. MTO identified no required improvements as a result of this development.

Following review of the above noted documents, a peer review of the supporting Road Assessment, Road Geometrics and Scoped Traffic Impact Study was requested by the Township which was completed in June 2015 (LEA).

Additional work conducted in the summer of 2015 included a supplementary review of the haul route road structure, traffic counts, review of truck movements to identify any possible areas for improvement along the haul route, stopping and turning distances and a review of collision and traffic data.

The following additional reports have now been completed and form a response to the Township peer review dated June 2015. These reports were submitted to the County and Township planning staff on September 22nd, 2015. County staff also forwarded the reports to MTO for their review.

- Bumstead Pit Scoped Traffic Impact Study Addendum Letter, Paradigm, September, 2015.
- Bumstead – Proposed Category 1 Pit Supplemental Road Assessment, Sideroad 60, Berkeley, ON, GM BluePlan, September 2015.

The above noted supplementary reports conclude and recommend the following:

- The percentage of trucks related to the design standard AADT (1000 vehicles) for this type of road construction is 10% which is considered not to be significant in terms of road structure design for the surface pavement, the granular base and the sub-base.
- The underlying peat layer between boreholes BH#7 and BH#15 may present road performance issues under both existing and proposed future conditions.
- GM BluePlan recommends a program of increased monitoring and maintenance along this section of road.
- Northbound left turn movement at the intersection of Highway 10 and Sideroad 60 should be monitored to assess the future need (2026) for an exclusive left turn lane, should conditions warrant.
- Bumstead Pit gravel truck drivers should be educated on the protocol regarding the presence of horse and rider using Sideroad 60 and be trained in the required approach to safely overtake the horse and riders.

We anticipate receiving a response from LEA in the near future and will continue to work with the Township to ensure haul route issues are addressed adequately. The approval authority for the implementation of any of these safety measures is the Township of Chatsworth. At the discretion of the Township, additional work may be requested in regard to road safety and maintenance concerns, at which time the proponent will work with the municipality to address any outstanding issues.

4.4 Potential Visual Impacts

Following the Public Notification and Consultation process under the ARA, public concerns were identified with respect to visual impact.

As mentioned previously, treed berms have been added to the Operational Plan. A 390 metre long berm, approximately 2-4 metres high and treed with evergreens will be placed along Veterans Road South, slightly longer than the length of the limit of extraction across from the existing residences. This berm, in addition to the existing tree and bush cover presently on the road side and along Veterans Road South, will serve as a visual and noise barrier for the residents across the road and the travelling public along Veterans Road South. Similarly, a treed berm, approximately 130 metres long will be placed along Sideroad 60 to act as a visual and noise barrier for the residence across the road. The berms will be placed and planted at the outset of Phase 1 of extraction, using on-site soils and should be fully matured prior to the Third phase, and possibly the Second Phase, commencing. Should any additional fill be required for the berms, it would be subject to the environmental quality requirements of MOECC for receipt of fill at the site.

As indicated in Section 2.1 of this report, the proponent has also chosen to phase the operation so that smaller sections of the property are actively extracted and large portions of the lands outside the area of active extraction will continue to be cropped. The phasing has been established so that the extraction of Phase 1 is furthest away from most of the nearby residences for the longest amount of time.

The attractive homestead with eleven surrounding acres will also remain on the site and will be maintained throughout the lifetime of the pit.

All of these elements help to address noise and visual impact of the pit operation.

5.0 Site Plan Amendments to Date

Following is Table 2 which summarizes additional ARA Site Plan Notes which have been added or amended, since receipt of public and agency comments under the ARA process. It should also be noted that additional spring monitoring was conducted in 2014 with the bottom elevation of the ARA Site Plans adjusted accordingly. The farm access from Veterans Road South is now shown on the Operational Plan.

TABLE 2

Note 5	The “high” groundwater elevation descends from 400.5 metres in the westerly portion of the site to 398.2 metres in the easterly portion of the site, as recorded May, 2014.
Note 8	Quieter back up beeper options (such as growlers), deemed acceptable by the Ministry of Labour will be used during the lifespan of the pit.
Note 11	Treed berms to be added adjacent to Sideroad 60 and Veterans Road South as shown.
Note 12	Existing fencing is to be maintained in good working order along south and east side of property. Wire fencing is to be erected along the westerly and northerly portion of the site to restrict access to the area of extraction and tie

	in to existing fencing with signage posted around the perimeter prior to extraction.
Note 13	Hours of Operation shall be limited to 7am to 6pm, Monday to Friday. Saturday hours of operation shall be limited to 7am to 12pm, with no operation to occur on Sundays or holidays. No operation is to occur on Saturdays of any holiday weekend. Altered hours of operation shall be for emergency purposes only and in such cases, notification shall be given to the MNRF and the Township of Chatsworth.
Note 20	Dust shall be mitigated on-site. The internal laneway and on-site stockpiles of excavated material will be regularly monitored during periods of operation. Water or another MOECC approved dust suppressant will be applied to the internal laneway and stockpiled materials as required to mitigate dust. Operational setbacks of processing equipment from any sensitive receptor shall be 300 metres or greater.
Note 23	No chemical spraying (pesticide/herbicide) shall be conducted within areas of the excavation. Any spraying associated with on-site agricultural operations adjacent to areas of extraction is to be conducted by operators with current Pesticide Safety Course Certification and adherence to required set-backs
Note 23	Yearly water level monitoring at monitoring wells MW-1, MW-2 and MW-3 shall be conducted in the spring by a qualified professional. Water levels will be compared to the proposed bottom contours, which will then be adjusted to the maximum expected water table, as necessary.
Note 23	Staff shall be trained by a qualified professional on how to implement the preventative measures under this note.
Note 23	Excavation operations in the proposed gravel pit shall not disturb the underlying till deposit.
Note 23	Groundwater monitoring wells shall be maintained and monitored monthly during periods of operation throughout the duration of extraction. Any significant lowering of levels and/or the appearance of groundwater depression shall be reported to the MOECC and MNRF immediately and confirmed. "Significant" is to be defined by a qualified hydrogeologist but would involve levels below those previously recorded during the driest year of record and not attributable to ambient factors such as drier than normal climactic conditions. In order to accommodate this monitoring condition, well MW-2 shall be deepened approximately 1.0 metre prior to commencing operations.
Note 28	<p>Barn Swallow Habitat</p> <p>No extraction or site preparation shall occur within the area shown in Phase 2 of the Operational Plan as Category 3 Barn Swallow Habitat during Barn Swallow breeding season from May 1-Aug 31.</p> <p>Rehabilitation of the area shown in Phase 2 of the Operational Plan as Category 3 Barn Swallow Habitat, will be completed immediately upon depletion of the aggregate resource in this area. Rehabilitation will be to an agricultural use, similar to current conditions on the site.</p> <p>Should the on-site barn or other buildings determined to be habitat for Barn Swallow be significantly altered or removed from the site, the operator must</p>

	ensure that activities are carried out in keeping with the provisions of the Endangered Species Act and/or any other applicable legislation.
Note 3 (Rehab)	Mined Aggregate Materials not suitable for sale or imported fill shall be used to grade slopes in the rehabilitation of the site.
Note 12 (Rehab)	<p>Barn Swallow Habitat</p> <p>No extraction or site preparation shall occur within the area shown in Phase 2 of the Operational Plan as Category 3 Barn Swallow Habitat during Barn Swallow breeding season from May 1-Aug 31.</p> <p>Rehabilitation of the area shown in Phase 2 of the Operational Plan as Category 3 Barn Swallow Habitat, will be completed immediately upon depletion of the aggregate resource in this area. Rehabilitation will be to an agricultural use, similar to current conditions on the site.</p> <p>Should the on-site barn or other buildings determined to be habitat for Barn Swallow be significantly altered or removed from the site, the operator must ensure that activities are carried out in keeping with the provisions of the Endangered Species Act and/or any other applicable legislation.</p>

Additionally, the proponents have also agreed to the following:

- Mandatory tarping of loaded trucks departing from site;
- Written notification to the applicable School Bus Consortiums with respect to the opening of the pit and hours of operation;
- Signage on-site indicating school buses will be using the haul route;
- Driver training in regard to safety protocol for overtaking horses and riders.

6.0 Outstanding Issues

A development agreement between the proponent and the Township in regard to haul route use and potential upgrades and maintenance will be required as part of the re-zoning process. It is anticipated that a holding provision would be placed on the associated zoning by-law amendment and lifted once the development agreement is in place.

Additionally, consultation between the SON and proponent remains on-going.

7.0 Summary and Conclusions

As indicated in the original planning report, in order to establish the proposed aggregate extraction operation on the Bumstead lands, amendments to the Grey County Official Plan and Township of Chatsworth Zoning By-law are required. The proposed pit will also require a Category 1 license under the provisions of the Aggregate Resources Act. The Official Plan amendment, Zoning By-law amendment and ARA license applications have been supported by the original planning analysis and information provided herein, the Summary Statement, the ARA Site Plans and the associated technical reports referenced in Section 2.0 of this report. Based on these submissions it is concluded that:

- 1) The site contains an aggregate deposit identified as a High Potential Aggregate Resource Area on Schedule 'B' of the Grey County Official Plan;
- 2) The deposit can be extracted in a manner such that potential impacts on surrounding land uses are within provincial guidelines;
- 3) The proposed pit will be progressively rehabilitated to substantially the same soil quality as presently exists;
- 4) The interim nature of the proposed extraction, coupled with the rehabilitation plan, will ensure that the Bumstead property remains compatible with the rural/agricultural nature of the area over the long-term;
- 5) The operational measures and monitoring program provided through the hydrogeological and karst investigations ensure the protection and conservation of groundwater quantity and quality;
- 6) Operational setbacks combined with physical buffers such as vegetation, berms and an existing road allowance will ensure that significant woodlands on adjacent lands will not be impacted by the proposed pit;
- 7) No significant cultural heritage resources were identified on the Bumstead lands;
- 8) The proposed pit operation, implemented by the Site Plans and supported by the various technical investigations, is consistent with the Provincial Policy Statement;
- 9) The PPS contains specific policies to guide the management of mineral aggregate resources and provides that as much of the resource as possible should be made available as close to markets as possible;
- 10) The proposed pit operation conforms to the policies relating to mineral aggregate extraction outlined in the Grey County Official Plan;
- 11) The proposed pit will not affect the County's ability to achieve other goals and objectives outlined in the County Official Plan;
- 12) The proposed M3 zoning is appropriate in order to facilitate the proposed pit operation and the progressive rehabilitation plan;

- 13) The ARA Site Plans have been prepared taking into account the various technical studies and the nature of surrounding land uses and will negate any potential social and environmental impacts through appropriate mitigation measures;
- 14) The Aggregate Resources Provincial Report Standards will be achieved by this submission and the conclusions of the required reports support approval of the required applications.

In consideration of the foregoing, it is concluded that the ARA license application and proposed amendments to County and local planning documents represent an appropriate land use for this area of the Township of Chatsworth and should be considered favourably by the applicable approval authorities.

Prepared by,


Genevieve Scott
Cuesta Planning Consultants Inc.

Approved by,


Don Scott
Cuesta Planning Consultants Inc.