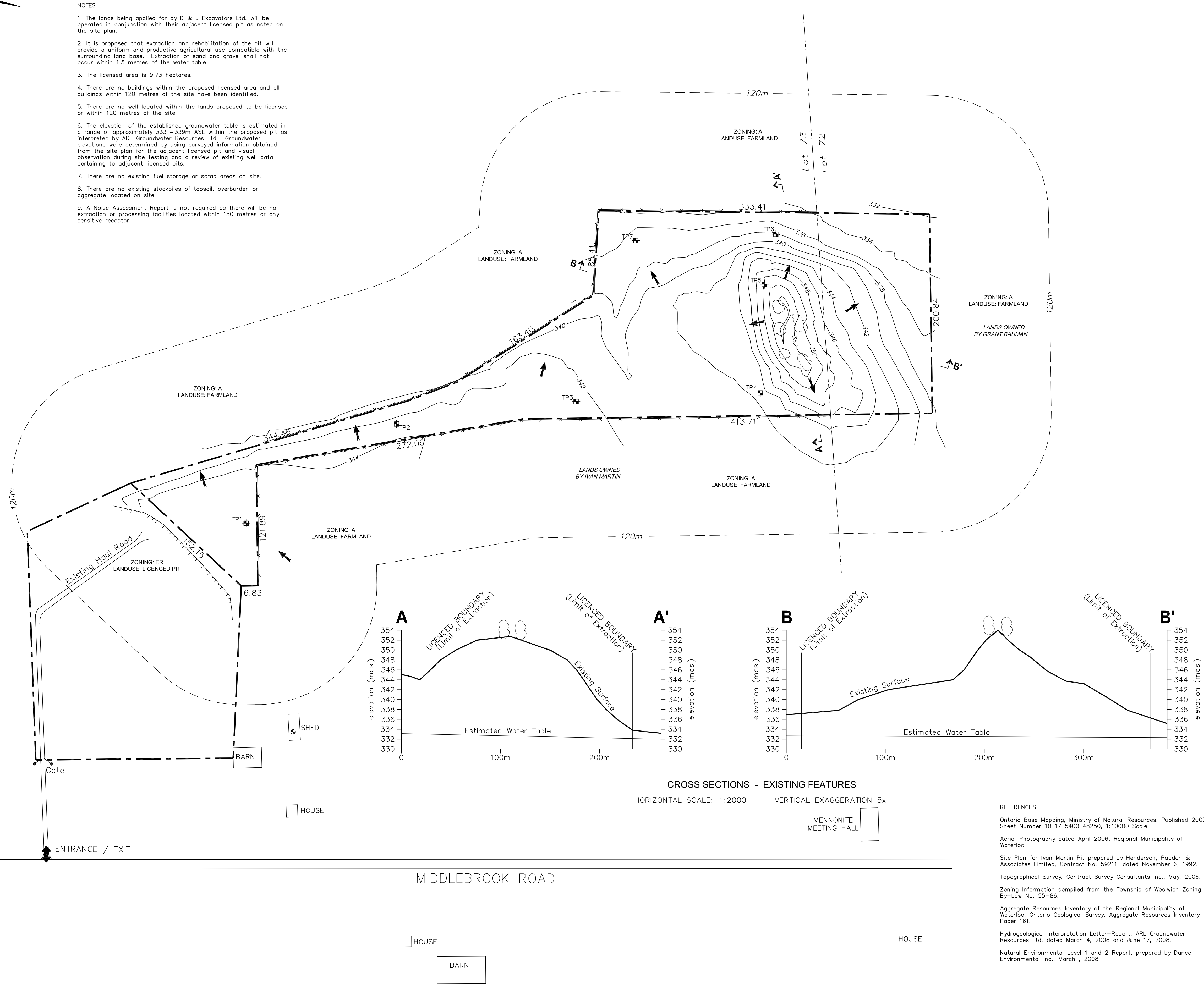


**NOTES**

1. The lands being applied for by D & J Excavators Ltd. will be operated in conjunction with their adjacent licensed pit as noted on the site plan.
2. It is proposed that extraction and rehabilitation of the pit will provide a uniform and productive agricultural use compatible with the surrounding land base. Extraction of sand and gravel shall not occur within 1.5 metres of the water table.
3. The licensed area is 9.73 hectares.
4. There are no buildings within the proposed licensed area and all buildings within 120 metres of the site have been identified.
5. There are no well located within the lands proposed to be licensed or within 120 metres of the site.
6. The elevation of the established groundwater table is estimated in a range of approximately 333 - 339m ASL within the proposed pit as interpreted by ARL Groundwater Resources Ltd. Groundwater elevations were determined by using surveyed information obtained from the site plan for the adjacent licensed pit and visual observation during site testing and a review of existing well data pertaining to adjacent licensed pits.
7. There are no existing fuel storage or scrap areas on site.
8. There are no existing stockpiles of topsoil, overburden or aggregate located on site.
9. A Noise Assessment Report is not required as there will be no extraction or processing facilities located within 150 metres of any sensitive receptor.



**CROSS SECTIONS - EXISTING FEATURES**

HORIZONTAL SCALE: 1:2000 VERTICAL EXAGGERATION 5x

**REFERENCES**

- Ontario Base Mapping, Ministry of Natural Resources, Published 2003, Sheet Number 10 17 5400 48250, 1:10000 Scale.
- Aerial Photography dated April 2006, Regional Municipality of Waterloo.
- Site Plan for Ivan Martin Pit prepared by Henderson, Paddon & Associates Limited, Contract No. 59211, dated November 6, 1992.
- Topographical Survey, Contract Survey Consultants Inc., May, 2006.
- Zoning Information compiled from the Township of Woolwich Zoning By-Law No. 55-86.
- Aggregate Resources Inventory of the Regional Municipality of Waterloo, Ontario Geological Survey, Aggregate Resources Inventory Paper 161.
- Hydrogeological Interpretation Letter-Report, ARL Groundwater Resources Ltd. dated March 4, 2008 and June 17, 2008.
- Natural Environmental Level 1 and 2 Report, prepared by Dance Environmental Inc., March , 2008

**MARTIN PIT EXPANSION**

PART LOTS 72 & 73 G.C.T.  
TOWNSHIP OF WOOLWICH  
REGIONAL MUNICIPALITY OF WATERLOO

**EXISTING FEATURES**



**LEGEND**

- LICENCED BOUNDARY
- LOT LINE
- EXISTING P&W FENCE
- EXISTING CONTOURS
- EXISTING PIT FACE
- STRUCTURE, RESIDENCE, FARM BUILDINGS
- ENTRANCE / EXIT
- DIRECTION OF SURFACE DRAINAGE
- CROSS SECTION LOCATION
- EXISTING TREE COVER
- TEST PIT
- WATER WELL



7169 ARRIS VALLEY ROAD  
R.R.# 1 ARRIS, ONTARIO  
N0B 1B0

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SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

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AGGREGATE RESOURCES ACT LICENCE No.

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Project No. 05-24-03		
Date July 16, 2008		
Scale 1:2000		

**SHEET 1 of 3**

VARIATION OF OPERATIONAL STANDARDS TABLE

THE FOLLOWING CONDITIONS ILLUSTRATED ON THIS PLAN VARY FROM THE REQUIREMENTS OF THE PROVINCIAL STANDARDS THAT APPLY TO LICENSED PITS AND QUARRIES IN ONTARIO.

VARIANCE	STANDARD
Fencing of all licensed boundaries is not required as the adjacent lands are owned by the landowners with agreements with the licensee requesting that no fencing be erected as it would interfere with their farming operations. Agreements are on file with the MNR.	5.1
No gate is proposed as the entrance/exit is located off-site and movement of aggregate material is controlled through the adjacent licensed pit.	5.2
Elimination of 15m setback along the southerly, westerly and easterly boundaries as per agreement with the adjacent landowners.	5.11 & 5.20
The common setback with the licensee adjacent pit along the northerly boundary is eliminated in order to extract the aggregate material and rehabilitate the setback area to a common grade.	5.11 & 5.20
Aggregate, topsoil and overburden stockpiles may be located within 30 metres of the northerly licensed boundary adjacent to the licensee's existing licensed pit.	5.13.1
Aggregate, topsoil and overburden stockpiles may be located within 30 metres of the southerly, westerly and easterly licensed boundaries as per agreement with the adjacent landowners.	5.13.1

Note: Unfenced licensed boundaries will be staked with 1.2m marker posts for identification purposes in areas where staking will not interfere with the adjacent agricultural activities.

Should the MNR determine that any conditions in or around the property require additional fencing or gating, the variance may be rescinded.

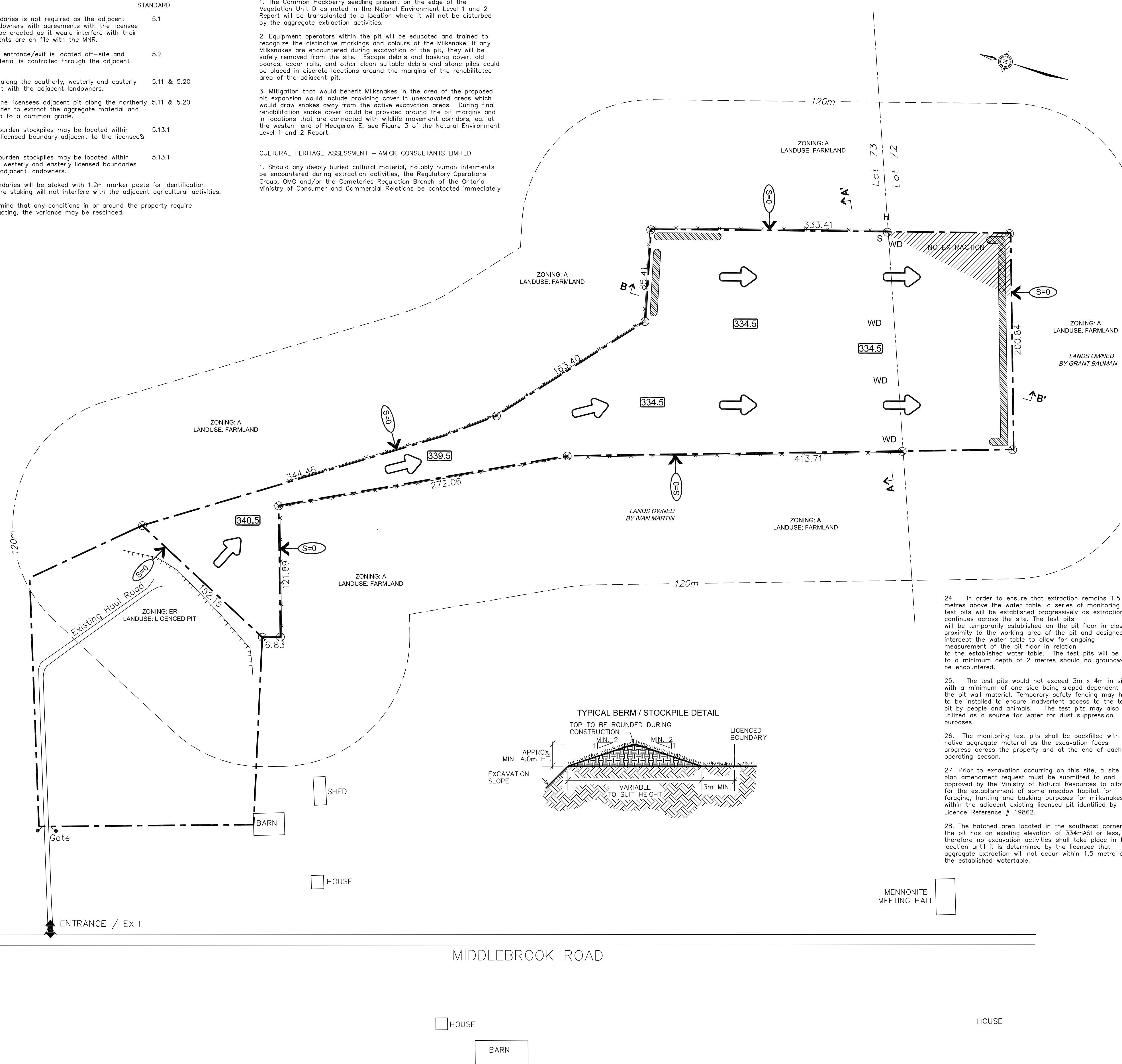
RECOMMENDATIONS FROM TECHNICAL REPORTS

NATURAL ENVIRONMENT REPORT - DANCE ENVIRONMENTAL INC.

- The Common Hackberry seedling present on the edge of the Vegetation Unit D as noted in the Natural Environment Level 1 and 2 Report will be transplanted to a location where it will not be disturbed by the aggregate extraction activities.
- Equipment operators within the pit will be educated and trained to recognize the distinctive markings and colours of the Milksnake. If any Milksnakes are encountered during excavation of the pit, they will be safely removed from the site. Escape debris and basking cover, old boards, cedar rails, and other clean suitable debris and stone piles could be placed in discrete locations around the margins of the rehabilitated area of the adjacent pit.
- Mitigation that would benefit Milksnakes in the area of the proposed pit expansion would include providing cover in unexcavated areas which would draw snakes away from the active excavation areas. During final rehabilitation snake cover could be provided around the pit margins and in locations that are connected with wildlife movement corridors, eg. at the western end of Hedgerow E, see Figure 3 of the Natural Environment Level 1 and 2 Report.

CULTURAL HERITAGE ASSESSMENT - AMICK CONSULTANTS LIMITED

- Should any deeply buried cultural material, notably human interments be encountered during extraction activities, the Regulatory Operations Group, OMC and/or the Cemeteries Regulation Branch of the Ontario Ministry of Consumer and Commercial Relations be contacted immediately.

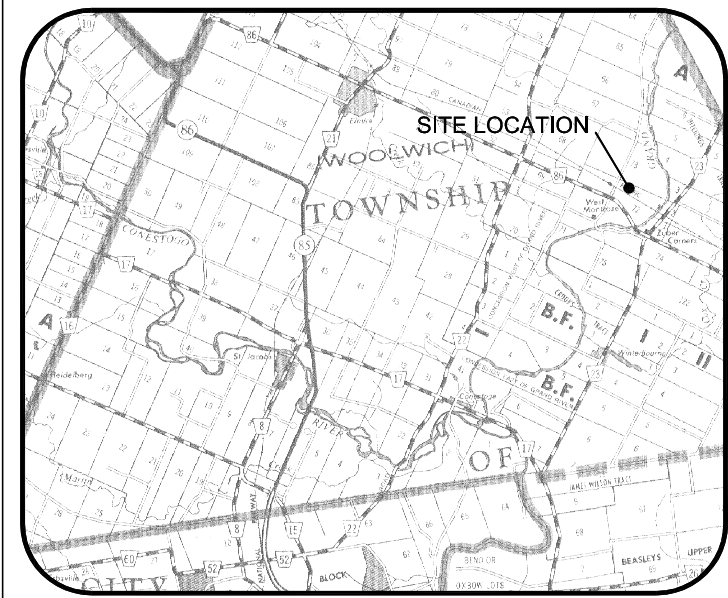


- NOTES
- It is proposed that extraction and rehabilitation of the pit will provide for a uniform and productive agricultural after use.
  - The pit will be operated in one Phase due to its relatively small size and irregular shape and topography. Excavation of the aggregate will occur in the direction of the arrows as shown within limits of extraction are reached. Initially, extraction operations will proceed in a southerly direction extending from the existing licensed pit north of the pit. As extraction proceeds southwards the internal haul road will be developed below grade. Multiple pit faces may be operated simultaneously as the pit area widens and the pit floor allows for the stockpiling of aggregate products. A maximum disturbed area of 3.5 hectares will be allowed within the site prior to progressive rehabilitation occurring.
  - Equipment to be used on site varies dependent on the operations. Equipment used for stripping and rehabilitation operations includes but is not limited to excavators, loaders, dozers, motor scrapers and trucks. Processing operations will use portable crushing and screening plants with conveyors. Farm equipment may be used for progressive and final rehabilitation purposes.
  - In order to attenuate noise and provide visual screening, crushing and processing of aggregate including the stockpiling of aggregate will be maintained as close to the operating pit face as possible.
  - Extraction may be conducted in one or more lifts and will be conducted in compliance with the Ministry of Labour (MOL) requirements (maximum height of 1.5m above the maximum reach of equipment used for removal of aggregate).
  - Aggregate will be transported by rubber tire trucks from the active pit face or processed stockpiles using an internal haul road to be established on the pit floor. The internal haul road is temporary and the actual location may vary slightly from the location as shown.
  - Aggregate will leave the site and travel through the licensee's adjacent pit and utilize the existing approved entrance/exit. Trucks will transport the aggregate south on Middlebrook Road until it intersects with Regional Road 86.
  - The proposed depth of extraction shall range to elevations of 334.5 - 340.5 m ASL as noted on the plan and shall not occur within 1.5 metres of the established water table. Should the water table elevation occur at different levels than anticipated, the depth of extraction will be adjusted to ensure a minimum of 1.5 metres is maintained above the water table.
  - All available topsoil and overburden will be stripped separately in advance of the extraction operations and used for progressive rehabilitation of the pit floor and side slopes. Initially, a sufficient area may not be available to conduct progressive rehabilitation because of the necessity to keep an area of the pit floor open for processing and stockpiling of aggregate.
  - Topsoil and overburden will be stockpiled separately around the perimeter of the area to be extracted in order to be available for use in the rehabilitation of the pit. During the initial start up of the pit, topsoil and overburden may be temporarily stockpiled separately off site within the licensee's adjacent licensed pit until a sufficient area of the pit floor is established.
  - Perimeter slopes will be rehabilitated as the limits of extraction are reached. The maximum slope from the setback line will be no steeper than 3:1. Slopes will be established by backfilling with overburden and then graded prior to the placement of the topsoil. Side slopes will be seeded with a grass/legume seed mixture compatible for the soil conditions to control erosion.
  - Topsoil and overburden stockpiles and berms will be constructed and graded to a minimum 2:1 slope and seeded with an appropriate grass seed mixture. Vegetation shall be maintained to control erosion.
  - Topsoil may be imported for resale and rehabilitation purposes. Any imported topsoil will be stockpiled separately from native topsoil if not used directly in progressive rehabilitation of the pit. The licensee must ensure that the material is tested at source, before it is deposited on site, to ensure that the material meets the Ministry of the Environment's parameters under Table "1" of the MDE's Soils, Ground Water and Sediment Standards for use under Part XVI of the Environmental Protection Act. Sampling results will be provided to the MNR upon request.
  - During the progressive rehabilitation operations, topsoil will be spread in a sufficient depth to grow and maintain a grass/legume seed mixture suitable for the soil conditions. Additional topsoil may be brought in from off site locations to enhance the agricultural capability of the rehabilitated land.
  - All vegetation planted during the pit operation will be maintained in a healthy growing condition. Should any planted vegetation die, it will be replaced within one growing season or until it becomes self sustaining.
  - There will be no proposed water diversions or points of discharge to surface water on or off this site as a result of this proposed pit. Post extraction surface drainage will be allowed to percolate through the rehabilitated pit floor and will generally reflect the existing surface drainage as much as possible.
  - Due to the remote location of the site and all of the surrounding agricultural lands are under ownership of the landowners, it is not proposed to install any additional fencing around the licensed limits. Staking of the unfenced licensed boundaries with 1.2m marker posts for identification purposes will be completed prior to any extraction occurring on site (see Variation of Operational Standards Table).
  - Dust will be mitigated on site. Water or another provincially approved dust suppressant will be applied to internal haul roads as often as required to mitigate dust.
  - There are no buildings or structures proposed to be erected on the site.
  - No scrap or permanent fuel storage facilities will be located on site. Any scrap resulting from the pit operations will be removed from the site on an ongoing basis. No temporary scrap will be located within 30 metres of any licensed boundary.
  - The hatched area located in the southeast corner of the pit has an existing elevation of 334mASL or less, therefore no excavation activities shall take place in this location until it is determined by the licensee that aggregate extraction will not occur within 1.5 metre of the established water table.
  - The maximum area to be extracted is 9.73 ha.
  - Extraction activities will occur between the hours of 7:00 a.m. to 6:00 p.m. Monday to Saturday.
  - The amount of aggregate extracted from this licensed property must be 150,000 tonnes or less in any calendar year.

# MARTIN PIT EXPANSION

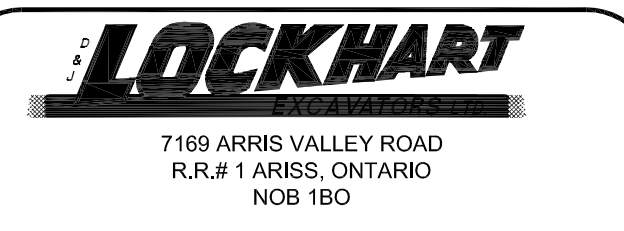
PART LOTS 72 & 73 G.C.T.  
TOWNSHIP OF WOOLWICH  
REGIONAL MUNICIPALITY OF WATERLOO

## OPERATIONAL PLAN



LEGEND

- LICENSED BOUNDARY
- LIMIT OF EXCAVATION
- LOT LINE
- DIRECTION OF OPERATIONS AND PROGRESSIVE REHABILITATION
- ENTRANCE / EXIT
- ESTIMATED DEPTH OF EXCAVATION
- BERM/STOCKPILE
- WATER WELL
- BOUNDARY MARKER
- HACKBERRY TRANSPLANT SITE
- WOODY DEBRIS (DURING EXTRACTION)
- STONE PILES (DURING EXTRACTION)



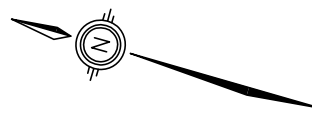
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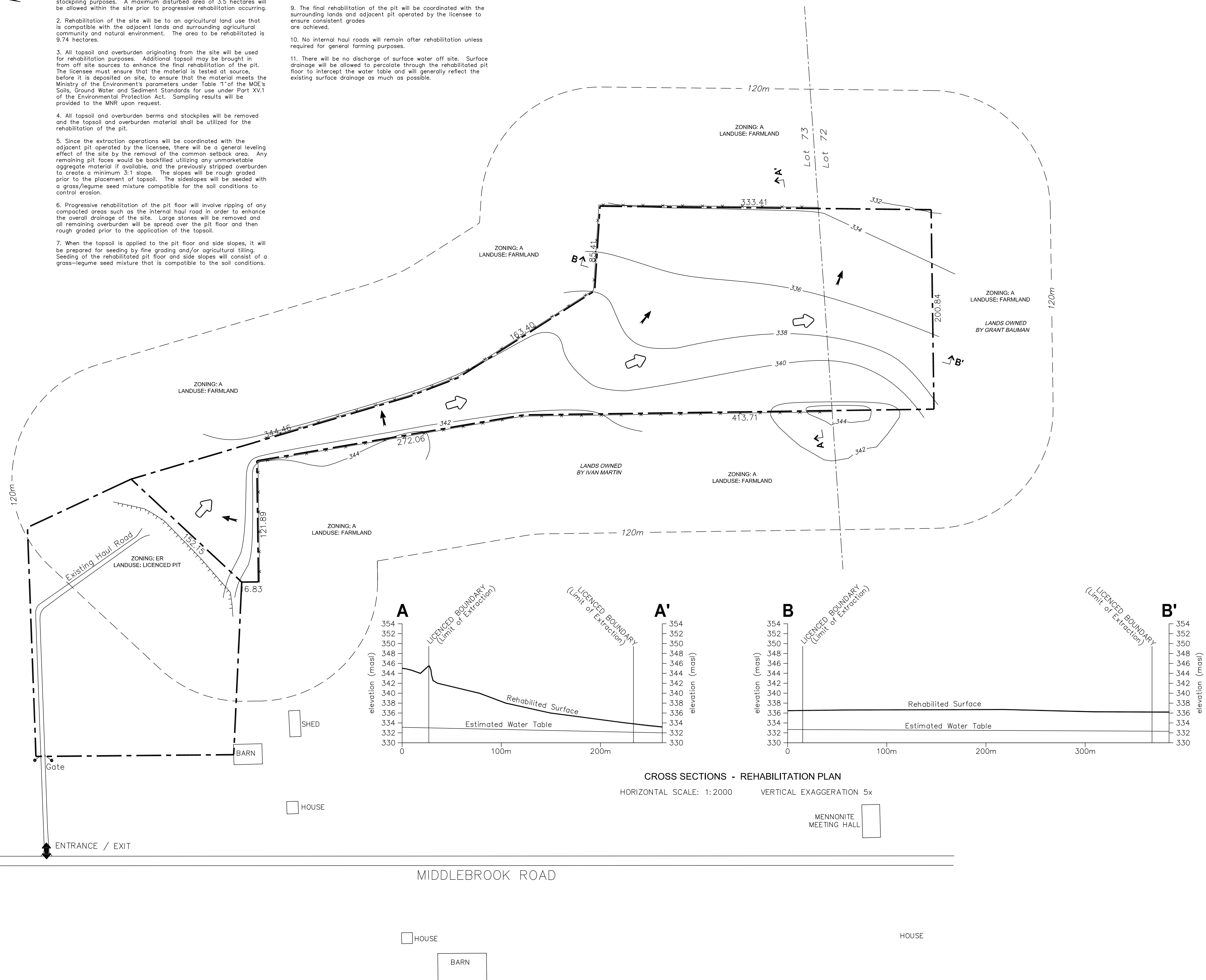
**GIBSON CONSULTING SERVICES**  
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PHONE (519) 894-0273 FAX (519) 894-9526  
AGGREGATE RESOURCES ACT LICENCE NO.

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Date May 25, 2009			
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1. Rehabilitation shall occur on a progressive basis as the aggregate is extracted and aggregate stockpiles are removed from the pit floor. The rehabilitation of the pit will be conducted in a manner that will not restrict the area required for aggregate processing and stockpiling purposes. A maximum disturbed area of 3.5 hectares will be allowed within the site prior to progressive rehabilitation occurring.
2. Rehabilitation of the site will be to an agricultural land use that is compatible with the adjacent lands and surrounding agricultural community and natural environment. The area to be rehabilitated is 9.74 hectares.
3. All topsoil and overburden originating from the site will be used for rehabilitation purposes. Additional topsoil may be brought in from off site sources to enhance the final rehabilitation of the pit. The licensee must ensure that the material is tested at source, before it is deposited on site, to ensure that the material meets the Ministry of the Environment's parameters under Table 1 of the MOE's Soils, Ground Water and Sediment Standards for use under Part XX.1 of the Environmental Protection Act. Sampling results will be provided to the MNR upon request.
4. All topsoil and overburden berms and stockpiles will be removed and the topsoil and overburden material shall be utilized for the rehabilitation of the pit.
5. Since the extraction operations will be coordinated with the adjacent pit operated by the licensee, there will be a general leveling effect of the site by the removal of the common setback area. Any remaining pit faces would be backfilled utilizing any unmarketable aggregate material if available, and the previously stripped overburden to create a minimum 3:1 slope. The slopes will be rough graded prior to the placement of topsoil. The sideslopes will be seeded with a grass/legume seed mixture compatible for the soil conditions to control erosion.
6. Progressive rehabilitation of the pit floor will involve ripping of any compacted areas such as the internal haul road in order to enhance the overall drainage of the site. Large stones will be removed and all remaining overburden will be spread over the pit floor and then rough graded prior to the application of the topsoil.
7. When the topsoil is applied to the pit floor and side slopes, it will be prepared for seeding by fine grading and/or agricultural tilling. Seeding of the rehabilitated pit floor and side slopes will consist of a grass-legume seed mixture that is compatible to the soil conditions.

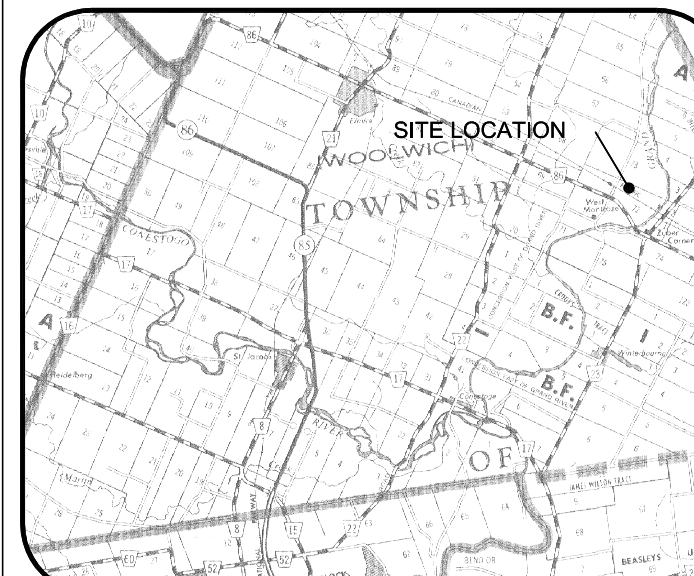
8. All vegetation planted during the pit operation will be maintained in a healthy growing condition. Should any planted vegetation die, it will be replaced within one growing season or until it becomes self sustaining.
9. The final rehabilitation of the pit will be coordinated with the surrounding lands and adjacent pit operated by the licensee to ensure consistent grades are achieved.
10. No internal haul roads will remain after rehabilitation unless required for general farming purposes.
11. There will be no discharge of surface water off site. Surface drainage will be allowed to percolate through the rehabilitated pit floor to intercept the water table and will generally reflect the existing surface drainage as much as possible.



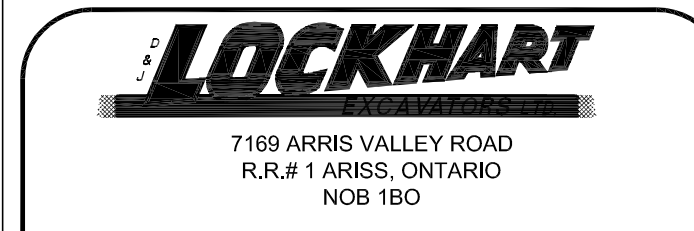
# MARTIN PIT EXPANSION

PART LOTS 72 & 73 G.C.T.  
TOWNSHIP OF WOOLWICH  
REGIONAL MUNICIPALITY OF WATERLOO

## PROGRESSIVE & FINAL REHABILITATION PLAN



- LEGEND**
- LICENSED BOUNDARY
  - - - LOT LINE
  - DIRECTION OF PROGRESSIVE REHABILITATION
  - ↔ ENTRANCE / EXIT
  - DIRECTION OF SURFACE DRAINAGE
  - REHABILITATED CONTOUR
  - ⊕ WATER WELL



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