

Middle Street Pit

1856 Snyder's Road East - Zone Change Application 06/22

Petersburg Sand Company

May 29, 2023

Introduction

Landowner & Applicant

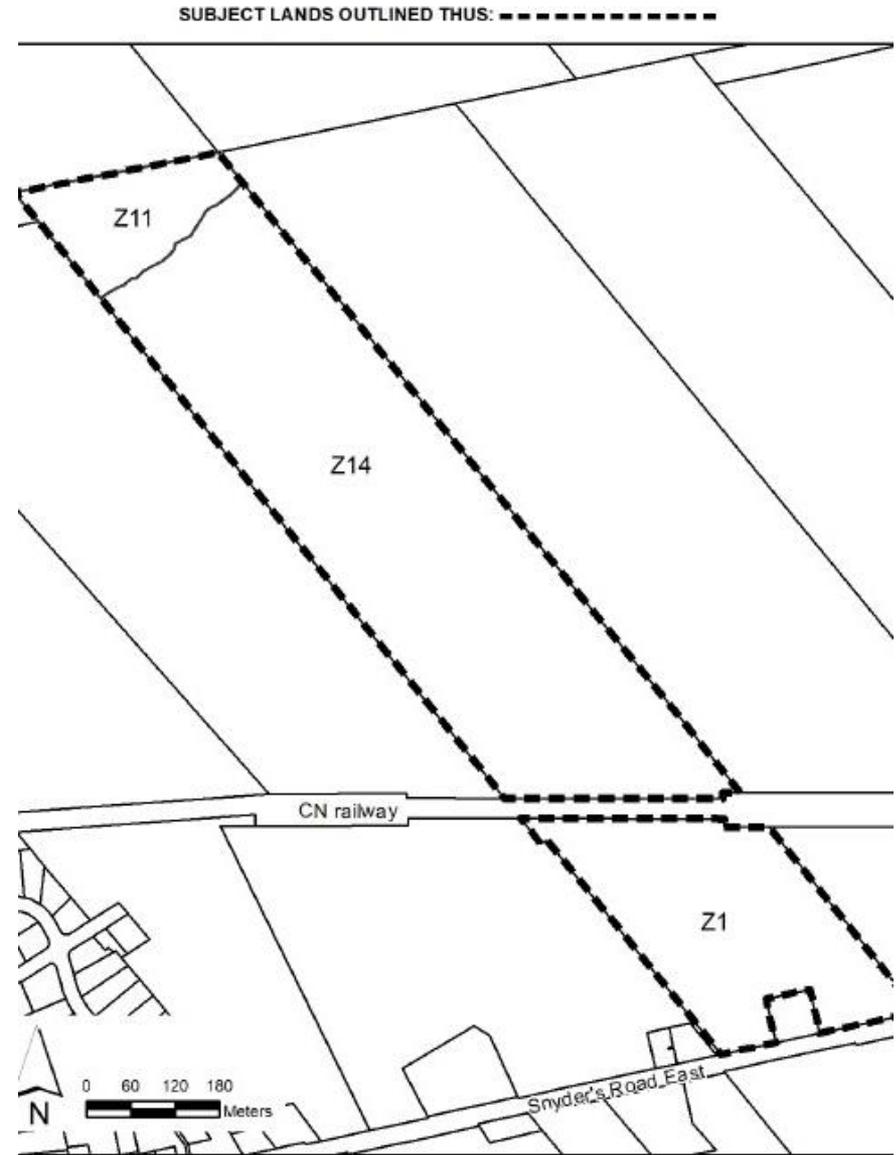
- **Petersburg Sand Company (c/o Mike Hodgkinson)**

Project Coordinator and Registered Professional Planner

- **Dave Barrett MCIP RPP (Arcadis)**

Subject Site

- **1856 Snyder's Road East, Petersburg ON**



s is Schedule "B" to By-law No. 2023-XX

The Process

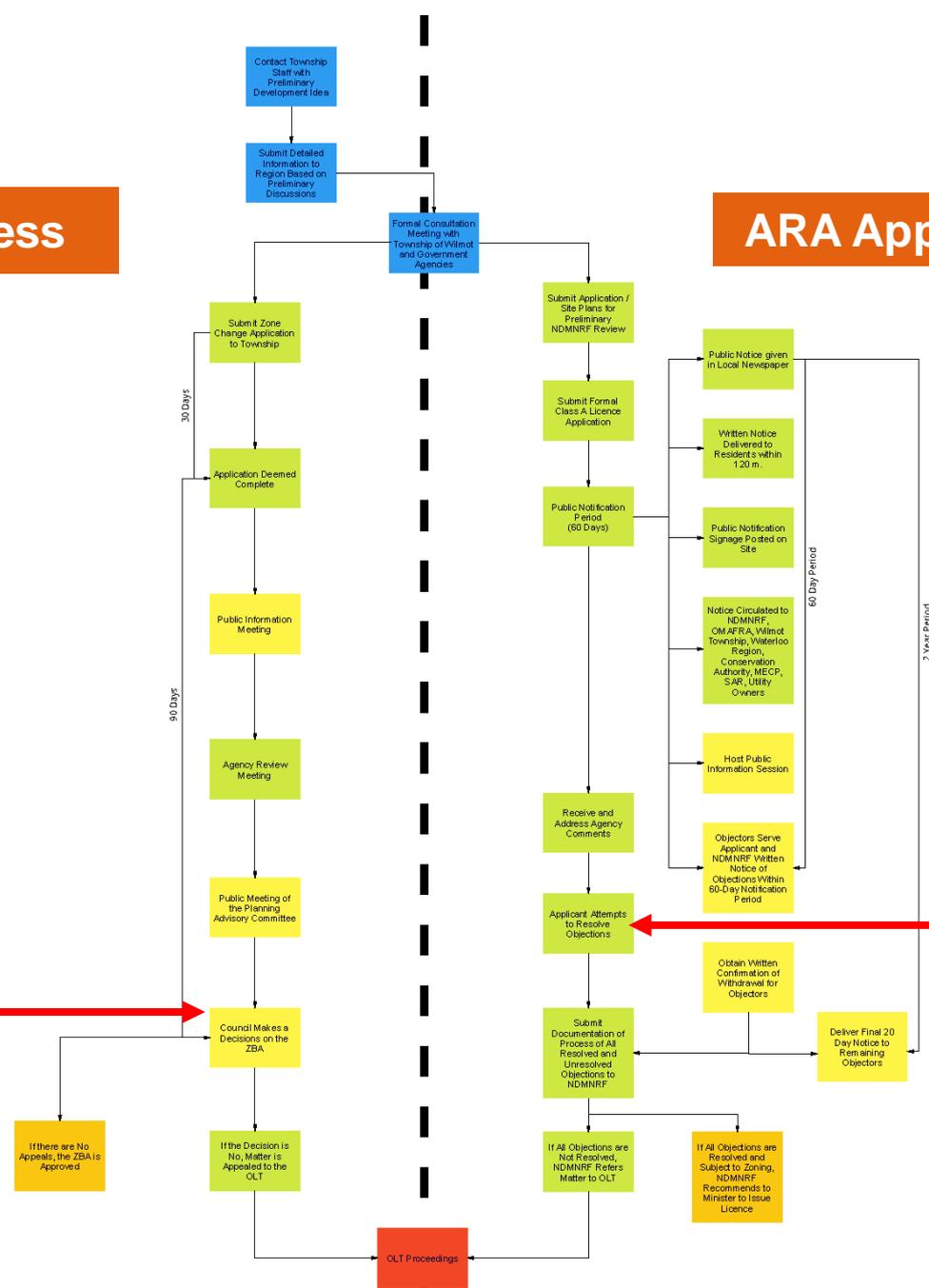
(To Date)

Zone Change Process

ARA Application Process

We are here

We are here



Staff Report

Township of Wilmot

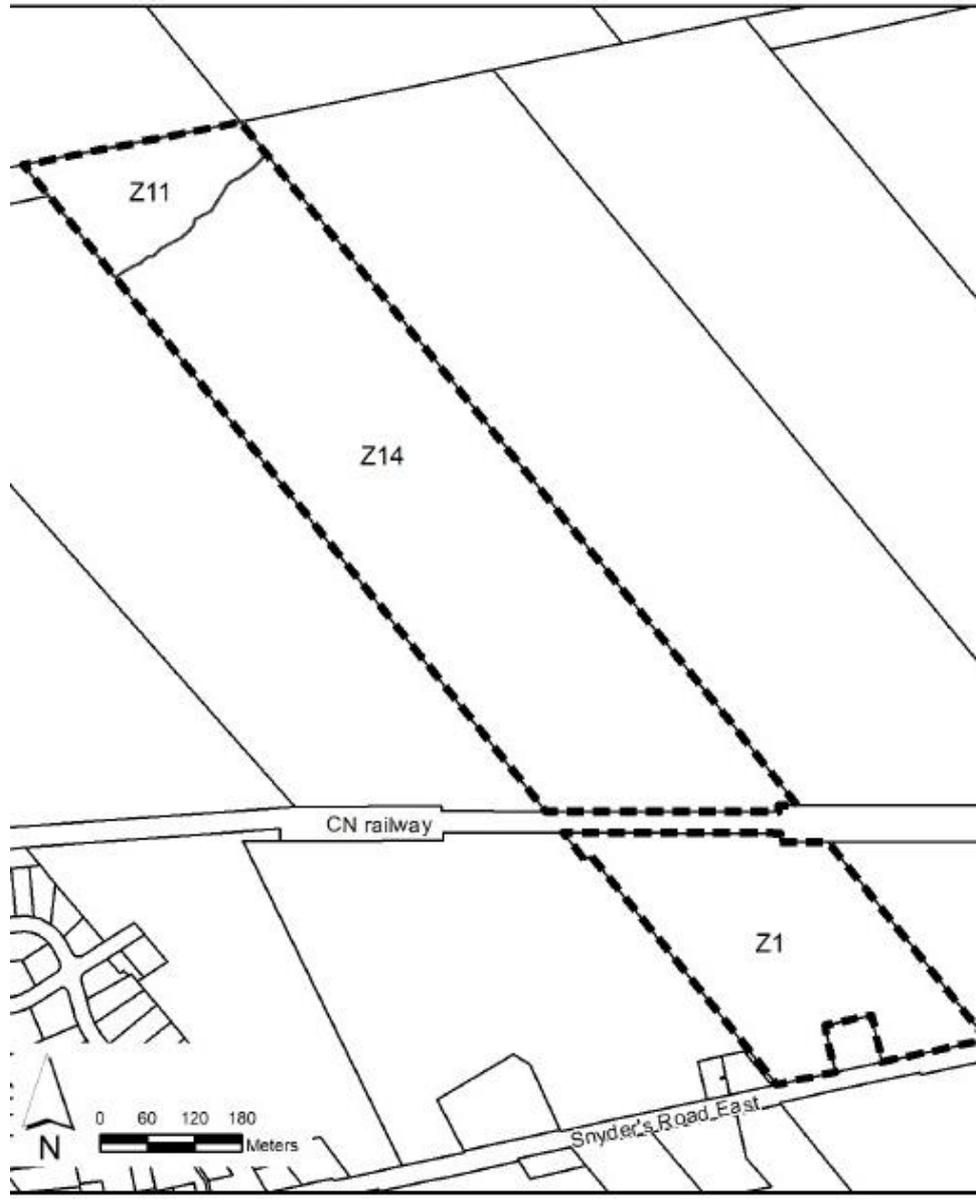
Staff Report Summary & Conclusions

- Compiled by Township Staff for Council (May 29, 2023)
 - Reviews Zone Change Application submitted by Applicant
 - Provides recommendations to Council
- Township of Wilmot recommends that Council approve Zone Change application 06/22 by PSC to rezone the subject lands as outlined in next slides

Proposed ZBA Schedule

Township of Wilmot Zoning By-Law –
Under the *Planning Act*, a site-specific amendment to Zoning By-Law 83-38 to:

- Rezone 27.54 hectares from Zone Z.1 (Agriculture) to Z.14 (Extractive Industrial),
- Extension of the Z.14 permitted uses to allow the importation of concrete and asphalt for recycling,
- Rezone 1.5 hectares from Zone Z.1 (Agriculture) to Zone Z.11 (Open Space) with the permitted uses limited to:
 - *Arboretum*
 - *Wildlife Sanctuary*
 - *Uses accessory to the foregoing permitted uses.*



This is Schedule "B" to By-law No. 2023-XX

Proposed ZBA Schedule Cont.

Township of Wilmot Zoning By-Law –
Under the *Planning Act*, a site-specific amendment to Zoning By-Law 83-38 to:

- on the lands south of the CN railway, to permit an access route to an extractive industrial operation north of the CN railway
- on the lands north of the CN railway, to permit buildings or structures, not including a dwelling unit, to be erected provided access is maintained through joint property ownership fronting on, or by way of a right-of-way to, a municipally maintained public road.



is is Schedule "B" to By-law No. 2023-XX

Review Process

Review Process

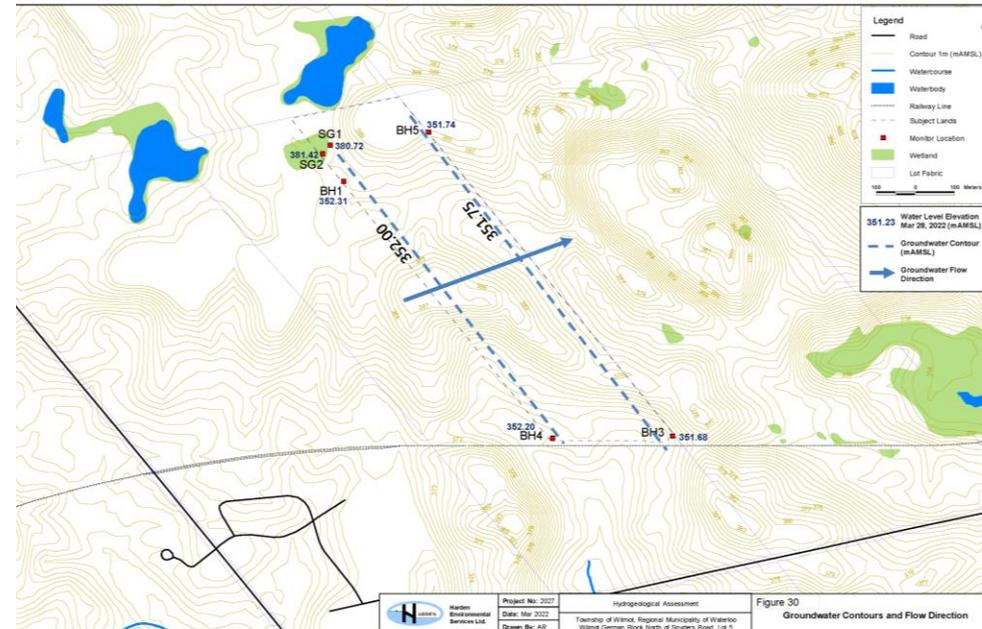
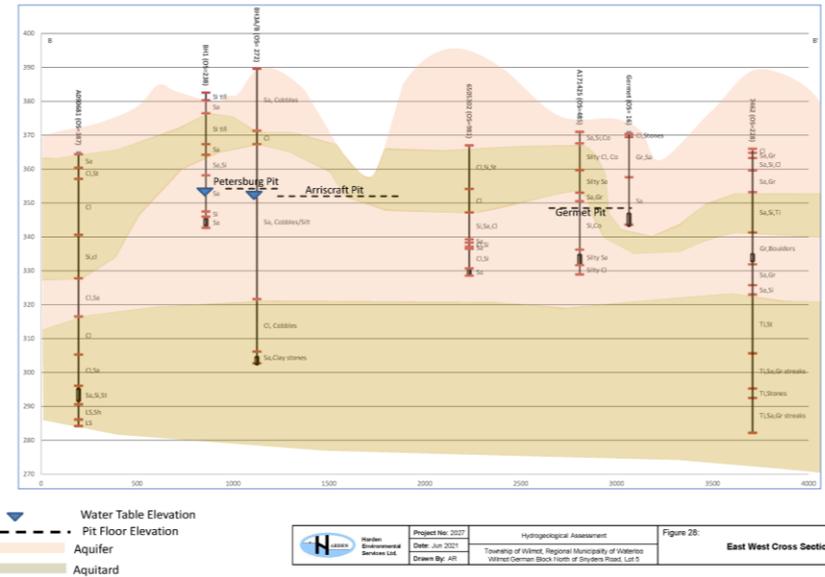
- Technical studies submitted to the Province, Region, Township, GRCA, etc. were reviewed by the agency and/or a third-party professional
- The Peer Review process is required to validate the findings / conclusions of each study
- Peer Reviewed Studies include the:
 - Hydrogeological Assessment
 - Traffic Impact Study
 - Noise Impact Study
 - Agricultural Impact Assessment
 - Archaeological Assessment
 - Natural Environment Report & EIS
 - Dust Mitigation & Air Quality Assessment

Hydrogeology

Reviewed by the Region of Waterloo, GRCA and NDMNRF

Hydrogeology Review Comments

- No impacts to operational wells and no change in surface water support to wetland
- Annual groundwater monitoring will occur for duration of pit operations
- Monitoring program updated as a result of reviews
- Spills Response Plan has been prepared and approved
- **All review agencies satisfied with Hydrogeological Assessment**



Traffic Impact Study

Reviewed by the Region of Waterloo

- No negative impacts on Regional road infrastructure

- Proposed location and design of new pit entrance has been accepted

- Region undertook speed study on Snyder's Road East

- **The Region is satisfied with the Traffic Impact Study**

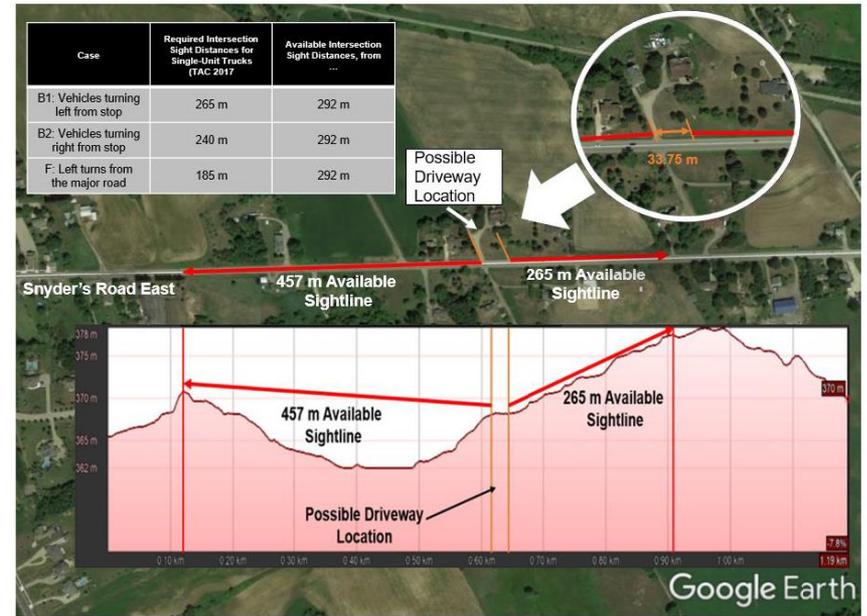


Figure 10 Available Sightlines for Potential Driveway Location (Option #1)

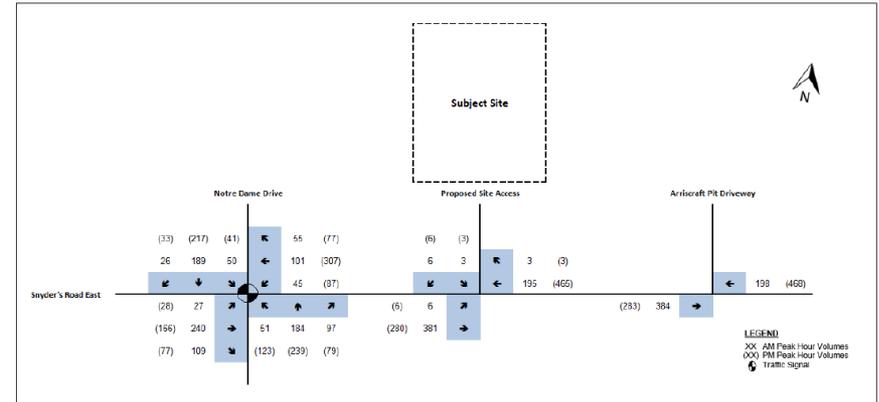
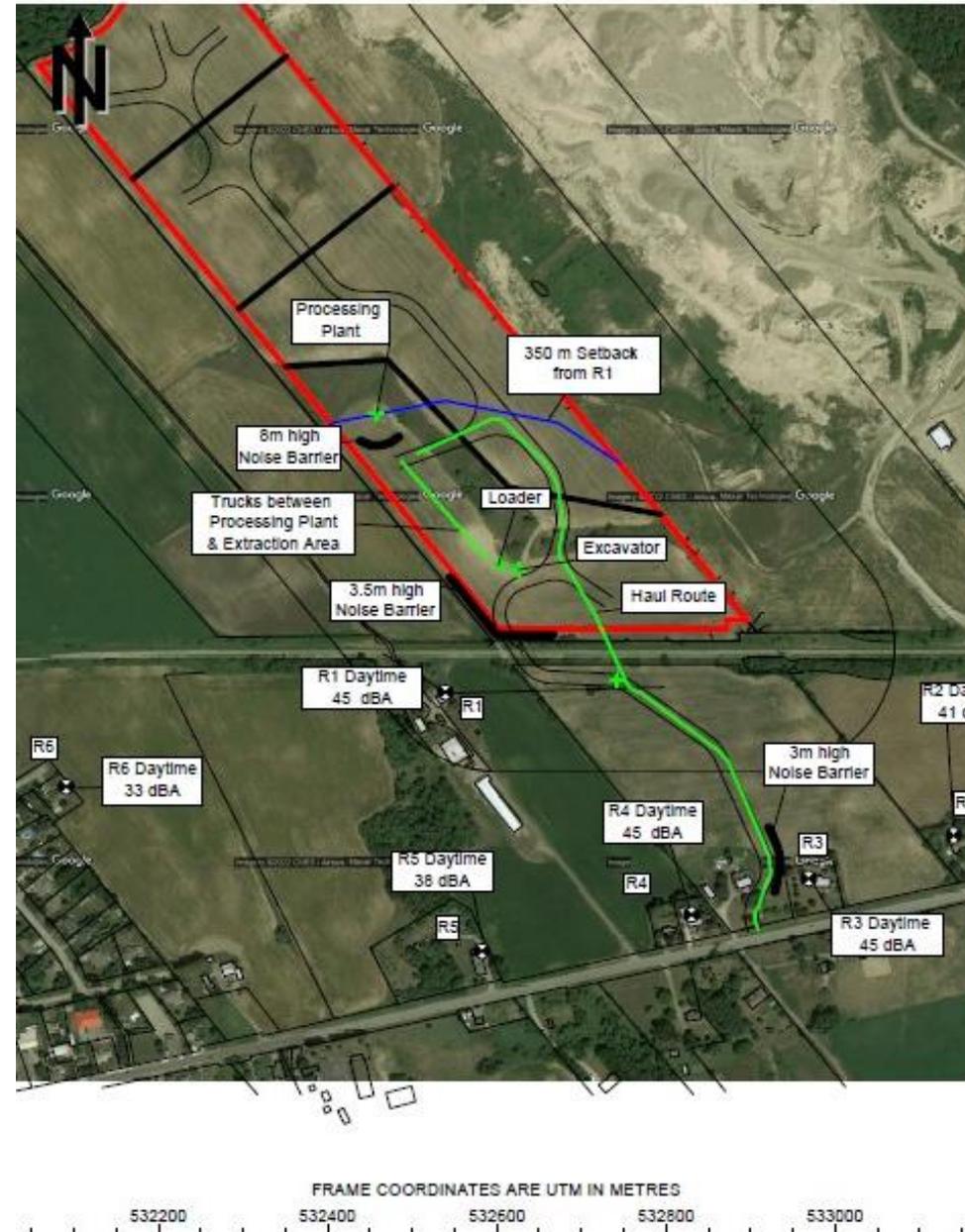


Figure 8 2026 Future Total Traffic Volumes – Option 1 (Independent Site Access)

Noise Impact Study

Reviewed by Third-Party Consultant and NDMNRF

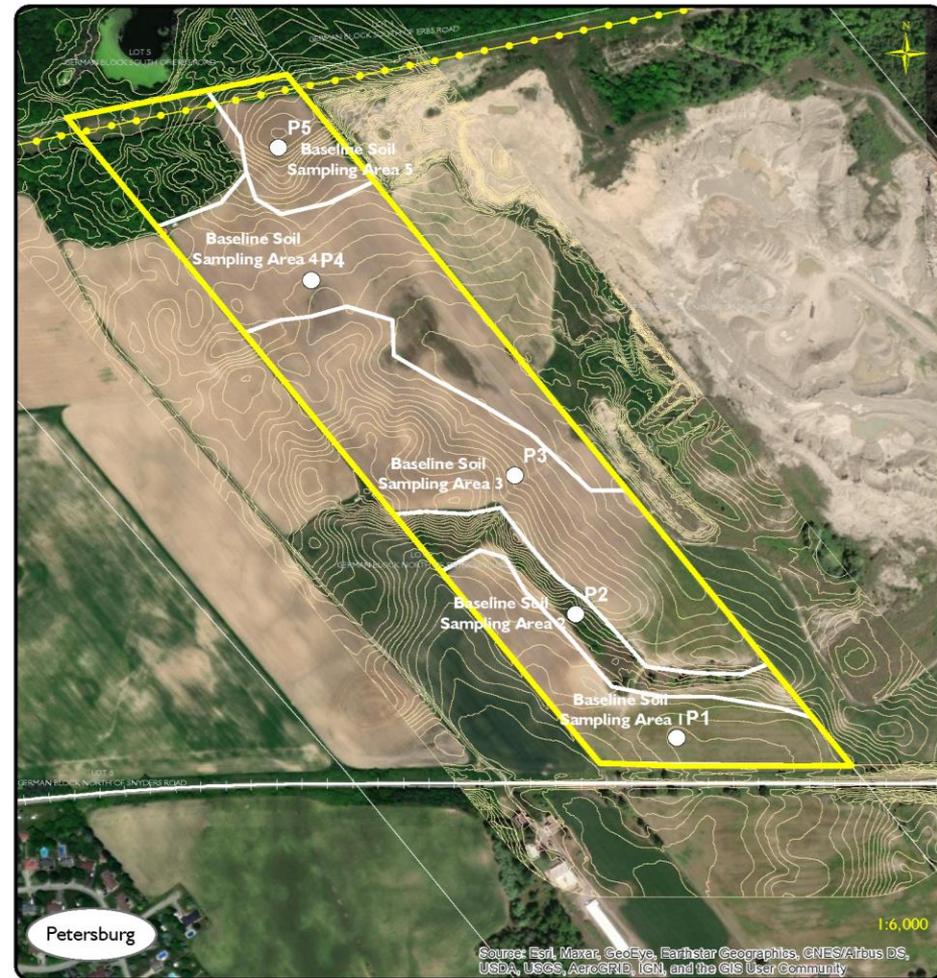
- Noise control measures are included within the updated ARA Site Plan
- Haul route at CN crossing moved to centre of property, processing setback increased and new berm at SW corner
- The Peer Review report concludes that the worst-case sound limits of the operation will comply with MECP guideline limits
- **The Region and NDMNRF are satisfied with the Noise Impact Study**



Agricultural Impact Assessment

Reviewed by Third-Party Consultant and NDMNRF

- No impacts to the subject property, surrounding area, and Township's agricultural resource potential
- The site will be rehabilitated back to agriculture
- **The Region is satisfied with the Agricultural Impact Assessment**



Legend

- Baseline Soil Sample Location
- Contour (1m interval)
- Hydro Line (MNRFP)
- Railway (MNRFP)
- Baseline Soil Sampling Area
- Lot Lines (MNRFP)
- Study Area

MNRFP - Ministry of Natural Resources and Forestry

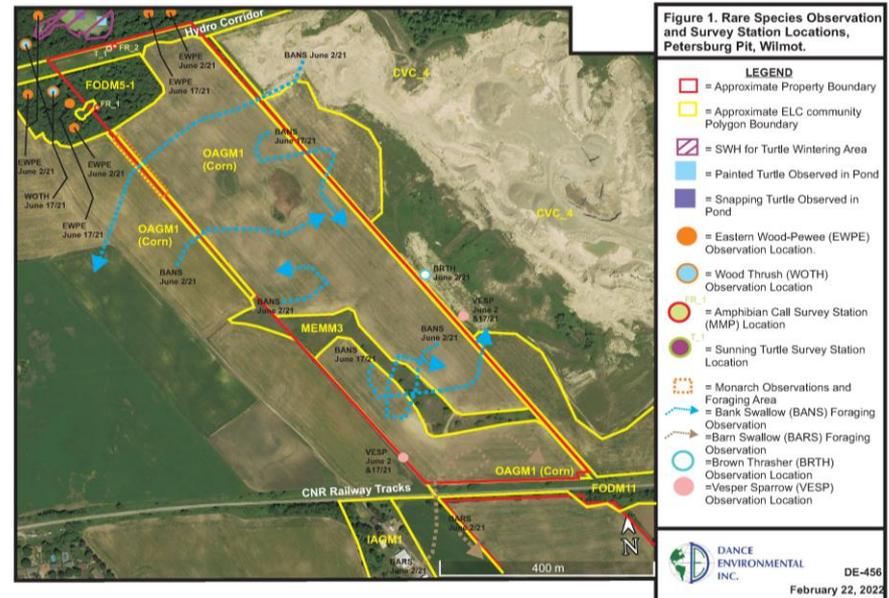
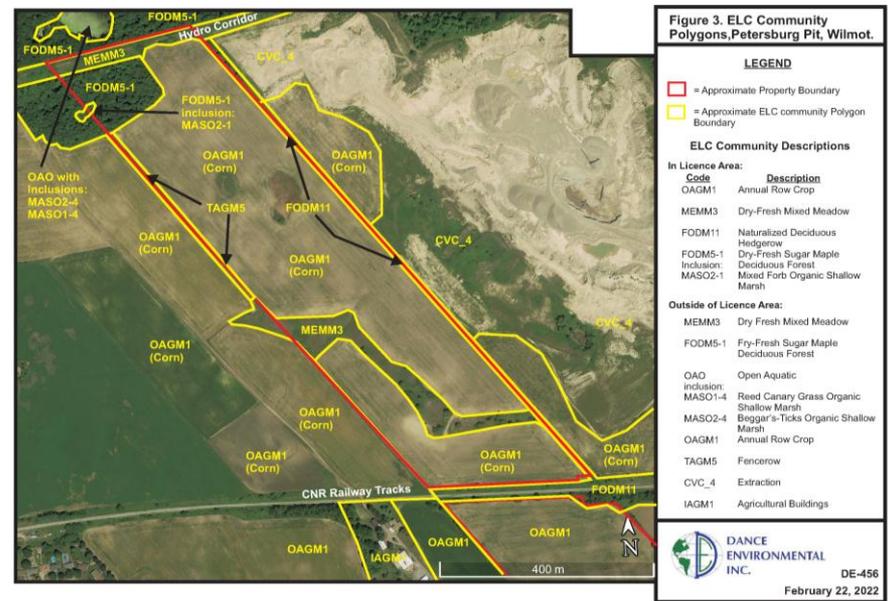
Figure 16
Baseline Soil Sampling

DBH Soil Services Inc.
May 2021

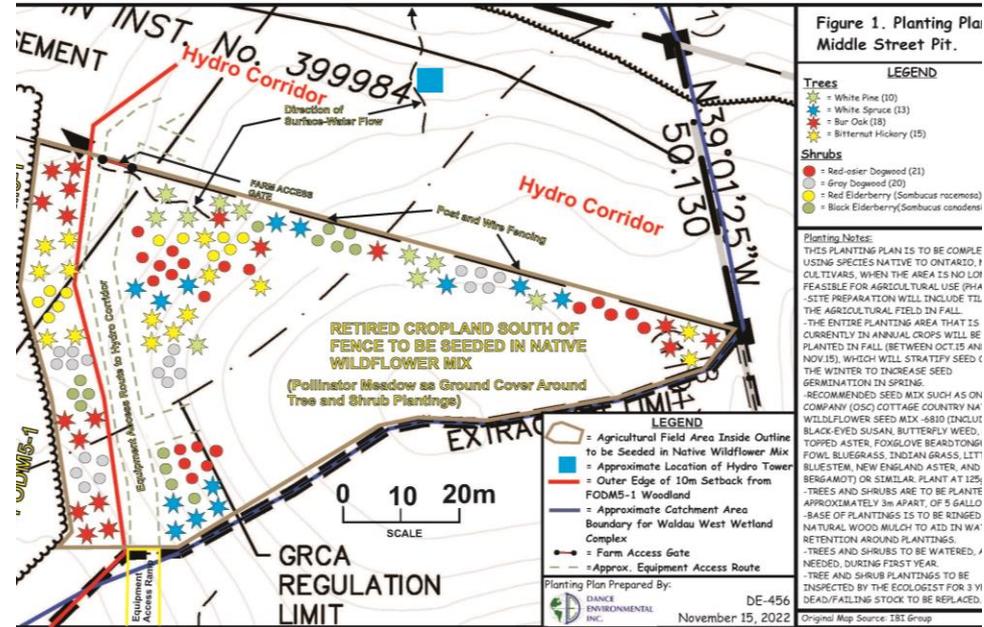
Natural Environment Report / EIS

Reviewed by Region's EEAC, GRCA and NDMNRF

- EEAC recommended a number of environmental protection measures including:
 - Ecological monitoring programs
 - Groundwater monitoring
- These recommendations have been adopted in the ARA Site Plans
- MECP (Species at Risk) has provided clearance
- GRCA has provided clearance



- EIS identified opportunity for ecological enhancement in NE corner that is currently farmed
- Planting Plan and Ecological Monitoring Plan developed, approved and implemented on Site Plans
- Results in addition of 4,445m² to ESPA



Dust Mitigation and Air Quality Assessment

Reviewed by Third-Party Consultant and GRCA

The BMP for the control of fugitive dust emissions include (but are not limited to):

- Applying water suppressant
- A Grizzly screen system
- A paved entryway
- Berms
- Cumulative Impacts assessed
- The Region via third-party consultant is satisfied with the Dust Mitigation & Air Quality Assessment

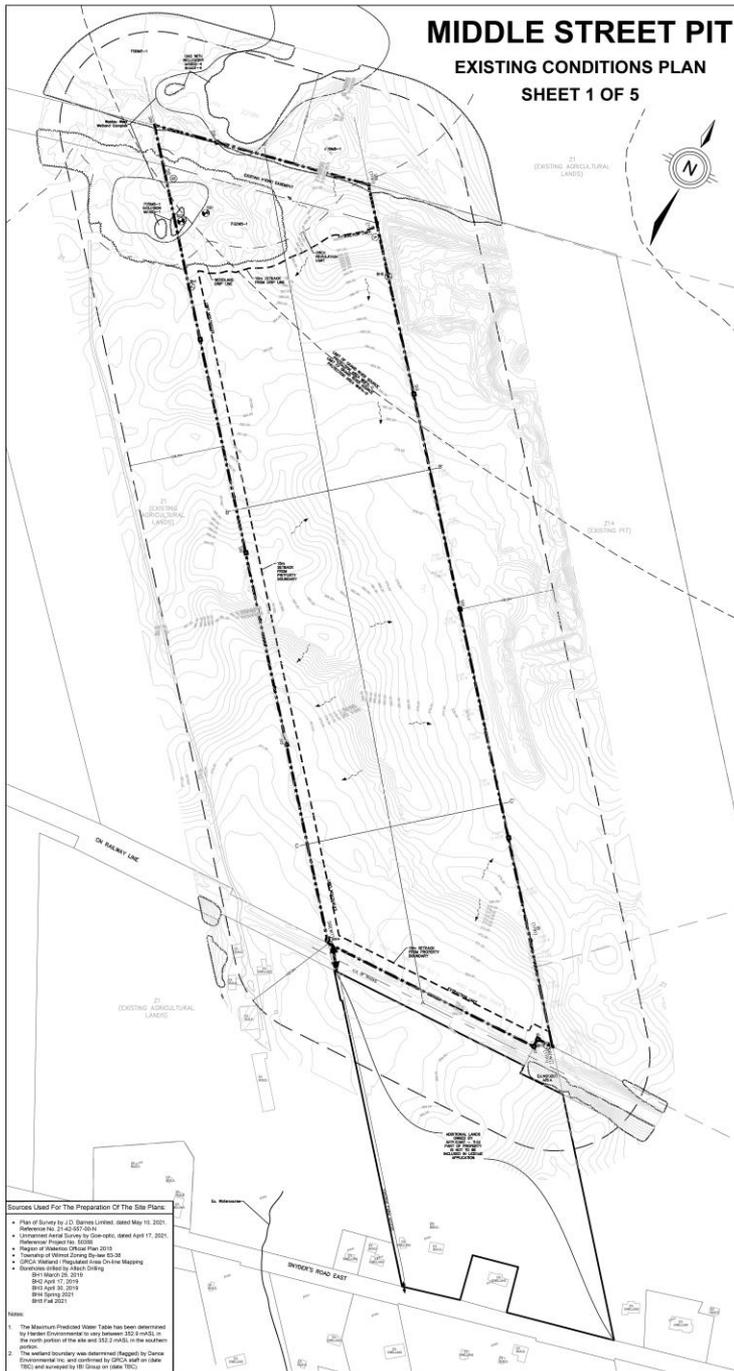


Updated ARA Site Plans

MIDDLE STREET PIT

EXISTING CONDITIONS PLAN

SHEET 1 OF 5



CLIENT: PETERSBURG SAND COMPANY INC.

PROJECT: MIDDLE STREET PIT



- LEGEND**
- SUBJECT PROPERTY BOUNDARY
 - - - EXISTING POST & WIRE FENCE
 - - - LICENSED AREA
 - - - EXTRACTION LIMIT
 - - - SURROUNDING PROPERTY BOUNDARY
 - - - ZONING BY-LAW BOUNDARY
 - - - EXISTING RESERVE
 - - - EXISTING CONTOUR (MMS) (SEE INTENT)
 - - - DRAINAGE BASIN SOUND PROTECTION BULK BOUNDARY
 - - - HYDRO CATCHMENT
 - - - C.R.C.A. REGULATION LIMIT
 - EXISTING MONITORING WELL
 - EXISTING WATER LOUVER
 - EXISTING ENTRANCE / EXIT
 - EXISTING BUILDING
 - FOAM-1 DEFLECTED SOLID WASTE (ORGANIC FIBRE)
 - MARSH-1 MATED FINE ORGANIC SHALLOW MARSH
 - MARSH-2 OPEN AQUATIC
 - MARSH-3 MATED FINE ORGANIC SHALLOW MARSH
 - MARSH-4 MATED FINE ORGANIC SHALLOW MARSH
 - DIRECTION OF SURFACE WATER FLOW

REVISIONS PRIOR TO APPROVAL

NO.	DATE	DESCRIPTION
1	11/03/20	ISSUED FOR CLIENT'S CONSIDERATION

SITE PLAN AMENDMENTS

NO.	DATE	DESCRIPTION
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SITE DATA

AREA TO BE LICENSED: 27.54 Ha
 AREA TO BE EXTRACTED: 22.52 Ha
 EX. DISTURBED AREA: 22.52 Ha
 TOTAL LAND PARCEL: 30.38 Ha

THIS SITE PLAN IS PREPARED UNDER THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT AND THE REGULATIONS THEREUNDER. THIS SITE PLAN IS CERTIFIED BY THE ENGINEER OF THE SUPPLY OF WATER AND SEWERAGE SERVICES OF THE REGIONAL MUNICIPALITY OF WATERLOO. MINISTRIAL APPROVAL AS SPECIFIED IN THE SUPPLY OF WATER AND SEWERAGE ACT SECTION 14(1) IS REQUIRED.

SCALE: 1:1000

IBI GROUP
 1856 SNYDER'S ROAD EAST
 WATERLOO, ONTARIO N2L 2G9
 TEL: 519-885-1111
 WWW.IBIGROUP.COM

PROJECT: 1856 SNYDER'S ROAD EAST
 PART OF LOT 6, NORTH OF SNYDER'S ROAD, TOWNSHIP OF WILMOT, REGIONAL MUNICIPALITY OF WATERLOO

PROJECT NO: 1856
 SCALE: 1:1000
 DRAWN BY: E.T. (E.T.)
 CHECKED BY: J.C. (J.C.)
 PROJECT MGR: D.B. (D.B.)
 APPROVED BY: D.B. (D.B.)

SHEET TITLE: EXISTING CONDITIONS

SHEET NUMBER: 1 of 5 | ISSUE: 1

- Sources Used for the Preparation of the Site Plans**
- Plan of Survey by J.D. Davies Limited, dated May 10, 2001, Reference No. 21-42-01-004
 - Unsettled Aerial Survey by Geo-optic, dated April 17, 2002, Reference Project No. 0036
 - Region of Waterloo Official Plan 2013
 - Zoning of Aerial Survey from Geo-optic
 - C.R.C.A. (Water) Regional Drainage Mapping
 - Drawings related to Adam's Creek
 - 2011 Survey 10-2919
 - 2012 April 17, 2015
 - 2015 April 17, 2015
 - 2015 Survey 10-2919
- Notes:**
1. The Maximum Permitted Water Table has been determined by Hydro Environmental Inc. on August 21, 2015, in accordance with the provisions of the Environmental Protection Act and the Regulations thereunder.
 2. The wetland boundary was determined through Hydro Environmental Inc. and confirmed by C.R.C.A. staff on June 18, 2015, and approved by IBI Group on June 18, 2015.



Existing Conditions Plan

(1 of 5)

No Changes

**MIDDLE STREET PIT
OPERATIONAL PLAN
SHEET 2 OF 5**



CLIENT: PETERSBURG SAND COMPANY INC.

CONTRACT: 1856 SNYDER'S ROAD EAST

DATE: 2023-08-15

SCALE: 1" = 100'

PROJECT: 1856 SNYDER'S ROAD EAST

PART OF LOT 5, NORTH OF SNYDER'S ROAD, TOWNSHIP OF WATERLOO, REGIONAL MUNICIPALITY OF WATERLOO

PROJECT NO: 1856 SNYDER'S ROAD EAST

SCALE: 1" = 100'

DRAWN BY: E.T. FLEMING

CHECKED BY: J.C. TAYLOR

PROJECT MOD: 018

APPROVED BY: J.C. TAYLOR

SHEET TITLE: OPERATIONAL PLAN

SHEET NUMBER: 2 of 5

SCALE: 1

IBI GROUP
1856 SNYDER'S ROAD EAST
PETERSBURG, ONT. N0B 1S0
www.ibigroup.com

LEGEND:

- PROPERTY BOUNDARY
- LICENSED AREA
- CASTING TIELINE
- HYDRO EASEMENT
- C.R.C.A. REGULATION LIMIT
- EXTRACTION LIMIT
- SURROUNDING PROPERTY BOUNDARY
- STAND BY AREA SOURCE PROTECTION AREA BOUNDARY
- CASTING FOOT & WEIR FENCE
- PROPOSED SILT FENCE
- MARKER POSTS
- DATE
- PAVING BOUNDARY
- MONITORING WELL
- CASTING WATER LOGGER
- NOISE RECEPTION
- PAVING NUMBER
- DIRECTION OF EXTRACTION
- EXISTING ELEVATION (met)
- PROPOSED ELEVATION (met)
- PROPOSED BERM
- SPILL / OIL SPILL STORAGE BERM - AS REQUIRED
- EXTRACTION / DIRT
- FUTURE HAUL ROUTE
- DIRECTION OF SURFACE-WATER FLOW

VARIATIONS TO THE OPERATIONAL STANDARDS

NO.	DESCRIPTION
1	...
2	...
3	...
4	...

REVISIONS PRIOR TO APPROVAL

NO.	DATE	DESCRIPTION
1
2

SITE PLAN AMENDMENTS

NO.	DATE	DESCRIPTION
1

SITE DATA

AREA TO BE LICENSED	27.54 ha
AREA TO BE EXTRACTED	22.50 ha
EST. DISTURBED AREA	NA
TOTAL LAND PARCELS	36 35 ha

TYPICAL BERM DESIGN
SCALE: 1:1



Operational Plan (2 of 5) Redlined

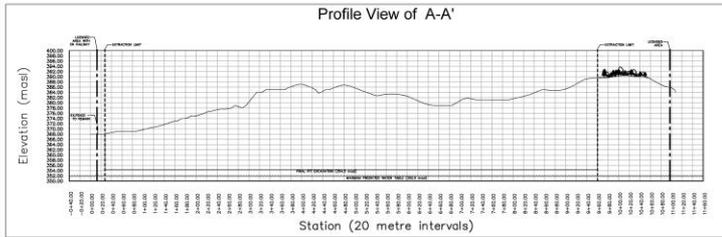
MIDDLE STREET PIT

CROSS-SECTIONS

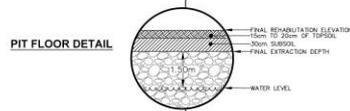
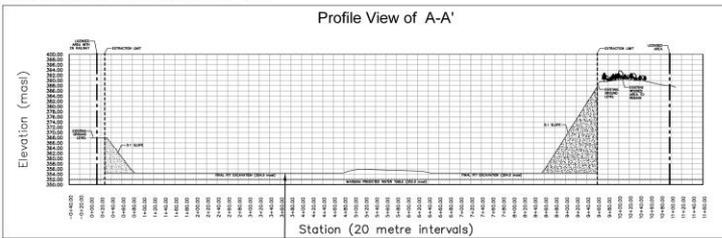
SHEET 5 OF 5



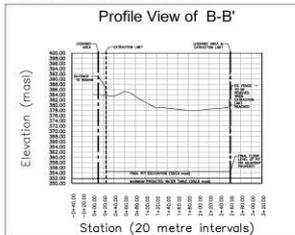
EXISTING PROFILE VIEW OF A-A'



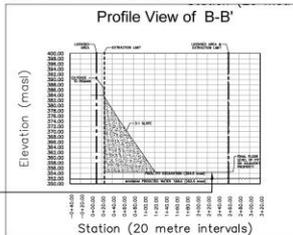
REHABILITATION PROFILE VIEW OF A-A'



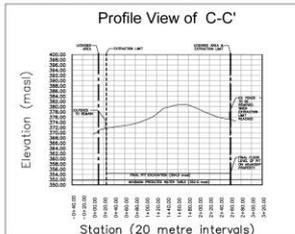
EXISTING PROFILE VIEW OF B-B'



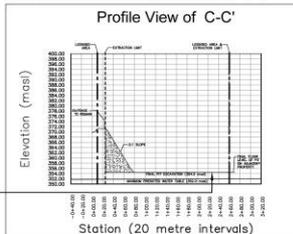
REHABILITATION PROFILE VIEW OF B-B'



EXISTING PROFILE VIEW OF C-C'



REHABILITATION PROFILE VIEW OF C-C'



CLIENT: PETERSBURG SAND COMPANY INC.

COMPANY: PETERSBURG SAND COMPANY INC.

PROJECT: 1856 SNYDER'S ROAD EAST

DATE: 2023-05-15

SCALE: 1:1000

PROJECT NO: 1856

SCALE: 1:1000

DRAWN BY: ETL

CHECKED BY: LCT

PROJECT MGR: APPROVED BY: DSR

SHEET TITLE: CROSS-SECTIONS

SHEET NUMBER: 5 of 5

ISSUE: 1

REVISIONS PRIOR TO APPROVAL:

NO.	DATE	DESCRIPTION
1	2023-05-15	ISSUED FOR PERMITTING

SITE PLAN AMENDMENTS:

NO.	DATE	DESCRIPTION
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SITE DATA:

AREA TO BE LICENSED: 27.54 ha

AREA TO BE EXTRACTED: 22.52 ha

EX. DISTURBED AREA: NI

TOTAL LAND PARCEL: 30.38 ha

THIS SITE PLAN IS PREPARED UNDER THE PROVISIONS OF THE RESOURCE PROTECTION ACT, 1997, AS AMENDED. THE ENGINEER HAS CONDUCTED A VISUAL INSPECTION OF THE SITE AND HAS FOUND THAT THE INFORMATION PROVIDED IN THIS TABLE IS CORRECT. THIS SITE PLAN IS CERTIFIED BY THE ENGINEER TO THE SATISFACTION OF THE MINISTERIAL APPROVAL AS SPECIFIED IN THE APPLICABLE RESOURCE PROTECTION ACT, 1997, AS AMENDED.

DATE: 2023-05-15

SCALE: 1:1000

IBI GROUP
1856 Snyder's Road East
Waterloo, ON N2L 2K9
www.ibigroup.com

Cross Sections (5 of 5) No Changes

Agency Clearances

Grand River Conservation Authority

- Extraction Limit is greater than 30 metres from the nearest wetland
- Applicant has provided evidence that the small wetland unit on-site (but outside the extraction area) is not sustained by groundwater
- Monitoring plan for wetland approved
- The Waldau West Wetland Complex is now included within the proposed Z.11 (Open Space) Zone
- **The GRCA has no further concerns with the proposed aggregate licence and zone change applications**

CN Rail

- A Grade Crossing Safety Compliance Assessment was completed by a third-party consultant
- CN Rail has stipulated several requirements pertaining to the railway crossing on the subject property during the operational lifetime of the Middle Street Pit
- The Applicant and CN Rail have come to an agreement based on the stipulated requirements
- **CN Rail has granted clearance for the rezoning of the subject property**

Ministry of Natural Resources (NDMNRF)

- The NDMNRF reviewed all application materials and provided comments on the Natural Environment Report/EIS, Hydrogeological Assessment, Summary Statement and ARA Site Plans.
- Response letters prepared and ARA Site Plans updated as a result.
- NDMNRF noted as of April 20, 2023, that the Zoning By-law Amendment was the only outstanding technical matter.
- ARA process for resident objections received still underway.

Conclusions & Next Steps

- All required agencies have granted clearance for the rezoning of the subject property.
- Meets all applicable regulations, standards, guidelines and policies established by the Province, Region, Township and Conservation Authority.
- The review process has resulted in enhancements to the proposal including, but not limited to additional monitoring, increased setbacks, expansion of the natural environment area, etc.
- Support the Township of Wilmot Staff Report which recommends that Council approve the rezoning application.
- The ARA Licence Application process will continue with the next step being responses to resident objections received.

Thank you