THE CORPORATION OF THE TOWNSHIP OF EAST GARAFRAXA BY-LAW NUMBER 3-2020

Being a By-Law to Number Zoning By-Law Amendment for the lands described as West 1/2 Lot 2, Concession 17 and East 1/2 Lot 1, Concession 18 Township of East Garafraxa.

WHEREAS The Local Planning Appeal Tribunal (Case Numbers PL15410451 & PL15410453) by its Decision and Partial Order dated February 8, 2019 approved the site specific Zoning By-Law with respect to West ½ Lot 2, Concession 17 and East ½ Lot 1, Concession 18, Township of East Garafraxa;

AND WHEREAS The Local Planning Appeal Tribunal by its Order dated January 2, 2020 authorizes that the Township Clerk may assign a By-Law number to the Zoning By-Law approved by the Tribunal in its partial order for the subject lands;

NOW THEREFORE Council of the Corporation of the Township of East Garafraxa enacts as follows:

- 1. That Zoning By-Law Amendment attached as Schedule "A" be numbered 3-2020 pursuant to The Local Planning Appeal Tribunal Order dated January 2, 2020 attached as Schedule "B"
- 2. This by-law shall take effect from the date of passing thereof.

BY-LAW READ A FIRST AND SECOND TIME THIS 28th DAY OF JANUARY 2020
BY-LAW READ A THIRD TIME AND PASSED THIS 28th DAY OF JANUARY 2020

Clark

isan MStone

Head of Council

THE CORPORATION OF THE TOWNSHIP OF EAST GARAFRAXA

BY-LAW NUMBER

BEING A BY-LAW TO AMEND ZONING BY-LAW NUMBER 60-2004, AS AMENDED

WHEREAS the Council of the Corporation of the Township of East Garafraxa is empowered to pass By-laws to regulate the use of land pursuant to Sections 34 and 36 of the *Planning Act*, R.S.O. 1990, c. P. 13, as amended;

AND WHEREAS the owner of the East Half of Lot 1, Concession 18 (East Pit) and the West Half of Lot 2, Concession 17, (West Pit) Township of East Garafraxa, County of Dufferin has filed two applications to amend the Zoning Bylaw Number 60-2004, as amended (Township File Nos.: Z2-12 and Z3-12 Greenwood East and West Pits):

AND WHEREAS it is deemed appropriate to amend By-law 60-2004 as amended to rezone the subject lands to permit an extractive industrial use (i.e. pits 1.5 m above the established groundwater table) together with rezoning small portion of the East Pit agricultural and environmental lands;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWNSHIP OF EAST GARAFRAXA ENACTS AS FOLLOWS:

1. That Schedule 'A" to By-law 60-2004, as amended, is further amended by rezoning the lands described as the East Half of Lot 1, Concession 18 and the West Half of Lot 2, Concession 17, identified on Schedule 'A' to this By-law as follows:

From Agricultural to the following zones:

Extractive Industrial Exception Three(H) (MX-3 (H)) Zone Environmental Protection (EP) Zone;

And from Environmental Protection to the following zone:

Extractive Industrial Exception Three(H) (MX-3 (H)) Zone

- 2. Section 4.12.3 of Zoning By-law 60-2004 (Extractive Industrial Exceptions) is hereby amended by adding the following new sub-section as 4.12.3.3:
 - a) Extractive Industrial Exception Three(H) (MX-3 (H))

Notwithstanding the provisions of the Extractive Industrial (MX) Zone to the contrary, on lands zoned Extractive Industrial Exception Three(H) (MX-3 (H)) the following shall apply:

Only the following uses shall be permitted:

- farm which shall be restricted to the cultivation of field crops together with any associated farm storage buildings;
- ii) East Pit with extraction permitted to a maximum depth of 1.5m above the established groundwater table;
- iii) West Pit with extraction permitted to a maximum depth of 1.5m above the established groundwater table:

- iv) notwithstanding section 4.12.1 of the Extractive Industrial (MX) Zone and section 5.110 definition of pit, a pit is defined for the purposes of this By-law as the extraction of aggregate 1.5 m above the established groundwater table; together with primary crushing/processing and stockpiling of extracted aggregate along with staged stripping progressive rehabilitation, but not including the crushing, processing and stockpiling to occur subsequent to the conveyance of aggregate production from the East Pit to the abutting licenced Pit (Licence No. #10606) and the conveyance of aggregate production from the West Pit to the abutting licenced Pit (Licence No. #80956) for processing at the respective existing licenced processing;
- v) the accessory use of the importation of sand and gravel, concrete and asphalt is prohibited;
- vi) the accessory use of the existing farmhouse as a dwelling occupied by manager and/or staff and related persons employed by the extractive industrial operation is permitted;
- vii) the importation of soil, topsoil and fill is not permitted unless specifically authorized in the Development Agreement;
- viii) hours of operation as per the Development Agreement;
- ix) Notwithstanding section 4.12.1 of the Extractive Industrial (MX) Zone and section 5.110 definition of pit, the following uses shall not be permitted: a pit (1) with extraction permitted 1.5 m below the established groundwater table, a wash plant, peat extraction, recycling, portable and/or permanent asphalt/concrete production and/or batching plant, quarries, resource management activities save and except as set out in sections ii, iii), iv), v), and vi) above;
- x) Notwithstanding section 5.48 definition of farm, the only permitted farm use is as set out in 2 a) i) for the time period that the pit remains licenced; and subsequently all farm uses are permitted.
- b) Notwithstanding section 4.12.2 of the Extractive Industrial (MX) Zone, the following regulations shall apply to the permitted uses:

i) Minimum Lot Area 8 ha
 ii) Minimum Lot Frontage 200 m
 iii) Minimum Front Yard 30 m
 iv) All Other Interior Side Yards 15 m

Notwithstanding this regulation b) v), should there be an abutting licenced aggregate operation and should a Common Boundary Agreement be entered into as per the Development Agreement the applicable interior side yard shall be reduced to 0 m for extraction only (and for any other uses including the erection of buildings and/or structures shall remain at 15 m)

v) Minimum Rear Yard

15 m

Notwithstanding this regulation b) vi), the rear yard regulation is further reduced as follows:

i) for the lands zoned for extractive industrial use under this By-law for the lands between the East and West Half of Lot 1, Concession 18 and between the East and West Half of Lot 2, Concession 17 the yard setback is reduced to 0 m for extraction only (and for any other uses including the erection of buildings and/or structures shall remain at 15 m) and ii) should there be an abutting licenced aggregate operation and should a Common Boundary Agreement be entered into as per the Development Agreement the applicable rear yard shall be reduced to 0 m for extraction only (and for any other uses including the erection of buildings and/or structures shall remain at 15 m)

vi) Maximum Lot Coverage

1 %

vii) Minimum Setback of Extraction to a Rural Residential Lot

30 m

viii) Maximum Area that can be
Disturbed by Extraction including
the establishment of berms,
planting strips, internal haul roads, at any
one time, in the East Pit

20 ha

and

Maximum Area that can be Disturbed by Extraction including the establishment of berms, planting strips, internal haul roads, at any one time, in the West Pit

20 ha

ix) Maximum Lot Coverage for Buildings and Structures Related to the Operation of the Pit

1 %

x) Minimum Landscaped Open Space

10%

xi) Maximum Height of Buildings

12 m

xii) In the yards abutting the 16th Line, the 18th Line and the Erin-East Garafraxa Townline a planting strip of at least 30 m or grassed berming shall be required to be established and maintained to the satisfaction of the

Township. Notwithstanding this regulation and section 5.113 definition of the planting strip, the planting strip of at least 30 m along the frontage of the 16th Line, the 18th Line and the Erin-East Garafraxa Townline may be cultivated for common field crops or grassed or otherwise planted without achieving a minimum height of 1.5 metres, which plantings are to be established and maintained to the satisfaction of the Township as per the Development Agreement.

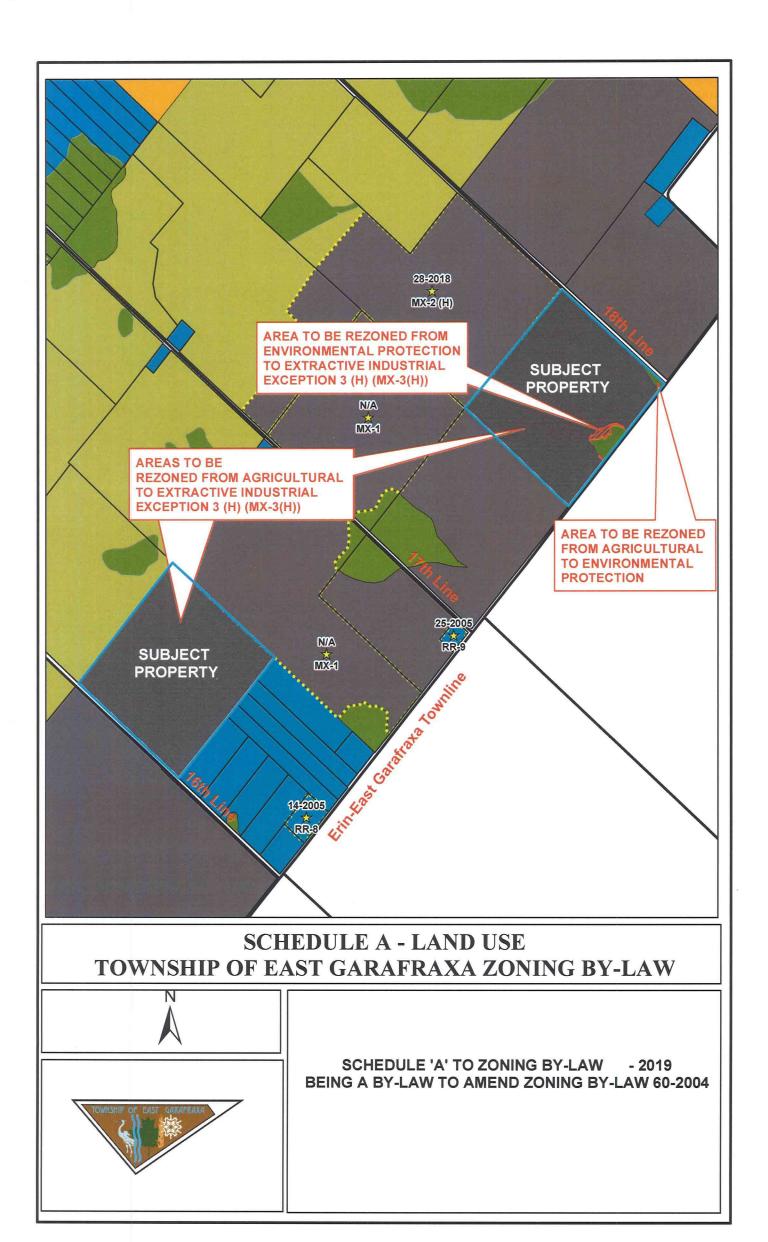
3. Notwithstanding anything else to the contrary in Zoning By-law No. 60-2004 as amended, the following Holding Provision applies to the Extractive Industrial Exception Three (H) (MX-3 (H)) Zone in this By-law:

HOLDING PROVISION

- i) A Holding (H) Provision is hereby established and identified on Schedule 'A' attached hereto, by the letter "H" in parentheses following a zoning symbol established in this By-law.
- ii) Where a zoning symbol is followed by the letter "H" in parentheses, the provisions of the By-law applicable to the zone symbol shall only apply upon the removal of the letter "H" by an Amendment By-law as approved by Council in accordance with the provisions of Section 36 of the Planning Act.
- iii) Until the removal of the letter "H":
 - a) No land, building or structure shall be used for any purpose other than that for which it was lawfully used prior to the passing of this By-law with the exception of a use by a public authority or existing agricultural use or for use of the lands for site preparation (excluding aggregate extraction and production) once the specific items listed in section iv) (a), (b) and (c) have been satisfied;
- iv) The (H) Holding Provision shall only be lifted for all other uses when the Township of East Garafraxa is satisfied that the following items have been addressed:
 - A development agreement(s) between the Owner, the Township of East Garafraxa and the County of Dufferin has been executed and registered on title in accordance with the terms of the development agreement(s);
 - b) The Owner's developer account is in good standing;
 - c) The Ministry of Natural Resources and Forestry has confirmed that the Category 3 – Class A Pits Above Water Licence being issued shall include the agreed to Site Plan with applicable notes and conditions; and,
 - d) That the haul route improvements have been designed, approved and secured, all to the satisfaction of the Township of East Garafraxa and the County of Dufferin in accordance with the terms of a development agreement(s).
- 4. For the lands zoned Environmental Protection (EP), the provisions of section 4.15 shall apply.

- 5. Notwithstanding any other provisions of this by-law, to the contrary, public uses in accordance with section 3.18 of Zoning By-law No. 60-2004 shall be permitted in all zones under this By-law.
- 6. In all other respects, the provisions of Zoning By-law 60-2004, as amended shall apply.
- 7. Upon approval of Official Plan Amendment No. 6 by the County of Dufferin, this by-law shall take effect from date of passing thereof, providing no appeal has been filed. Where objections to the by-law are received in accordance with provisions of the Planning Act, the by-law shall come into effect upon approval of the Local Planning Appeal Tribunal.

Susan M. Stone, CAO/Clerk Gu	uy Gardhouse, Ma	ayor
BY-LAW READ A THIRD TIME AND PASSED TH	IIS OF	, 2019
DV I AVAI DEAD A THIRD TIME AND DASSED TH	IIS OF	2010
BY-LAW READ A FIRST AND SECOND TIME TH	IIS OF	, 2019



Local Planning Appeal Tribunal

Tribunal d'appel de l'aménagement local



ISSUE DATE: January 2, 2020 **CASE NO**.: PL151041 & PL151043

The Ontario Municipal Board (the "OMB") is continued under the name Local Planning Appeal Tribunal (the "Tribunal"), and any reference to the Ontario Municipal Board or Board in any publication of the Tribunal is deemed to be a reference to the Tribunal.

PROCEEDING COMMENCED UNDER subsection 22(7) of the *Planning Act*, R.S.O.

1990, c. P.13, as amended

Applicant and Appellant: Greenwood Construction Company Limited

Subject: Request to amend the Official Plan

- Failure of the Township of East Garafraxa to

adopt the requested amendment

Existing Designation: Agricultural

Proposed Designated: Extractive Industrial

Purpose: To permit the expansion of two existing

aggregate operations

Property Address/Description: Concession 17 West 1/2 Lot 2 (West Pit)

Municipality: Township of East Garafraxa

Approval Authority File No.: OPA2/12
OMB Case No.: PL151041
OMB File No.: PL151041

OMB Case Name: Greenwood Construction Company Limited v.

East Garafraxa (Township)

PROCEEDING COMMENCED UNDER subsection 34(11) of the *Planning Act*, R.S.O.

1990, c. P.13, as amended

Applicant and Appellant: Greenwood Construction Company Limited

Subject: Application to amend Zoning By-law No. 69-

2004

- Refusal or neglect of the Township of East

Garafraxa to make a decision

Existing Zoning: Agricultural (A) Zone

Proposed Zoning: Extractive Industrial (MX) Zone

Purpose: To permit the expansion of two existing

aggregate operations

Concession 17 West 1/2 Lot 2 (West Pit) Property Address/Description:

Municipality: Township of East Garafraxa

Municipality File No.: Z2/12OMB Case No.: PL151041 OMB File No.: PL151042

PROCEEDING COMMENCED UNDER subsection 11(5) of the *Aggregate Resources Act*,

R.S.O. 1990, c. A.8, as amended

Referred by: **Greenwood Construction Company Limited**

Objector: Township of East Garafraxa

Applicant: **Greenwood Construction Company Limited** Application for a Class A licence for the Subject:

removal of aggregate

Property Address/Description: West 1/2 Lot 2, Concession 17 Municipality: Township of East Garafraxa

OMB Case No.: PL151041 OMB File No.: MM160077

PROCEEDING COMMENCED UNDER subsection 22(7) of the Planning Act, R.S.O.

1990, c. P.13, as amended

Applicant and Appellant: **Greenwood Construction Company Limited**

Request to amend the Official Plan Subject:

- Failure of the Township of East Garafraxa to

adopt the requested amendment

Agricultural Existing Designation:

Proposed Designated: **Extractive Industrial**

Purpose: To permit the expansion of two existing

aggregate operations

Property Address/Description: Concession 18 East 1/2 Lot 1 (East Pit)

Municipality: Township of East Garafraxa

Approval Authority File No.: OPA3/12 OMB Case No.: PL151043 OMB File No.: PL151043

OMB Case Name: Greenwood Construction Company Limited v.

East Garafraxa (Township)

PROCEEDING COMMENCED UNDER subsection 34(11) of the *Planning Act*, R.S.O.

1990, c. P.13, as amended

Applicant and Appellant: **Greenwood Construction Company Limited** Subject:

Application to amend Zoning By-law No. 69-

2004

- Refusal or neglect of the Township of East

Garafraxa to make a decision

Existing Zoning: Agricultural (A) Zone

Proposed Zoning: Extractive Industrial (MX) Zone

Purpose: To permit the expansion of two existing

aggregate operations

Property Address/Description: Concession 18 East 1/2 Lot 1 (East Pit)

Municipality: Township of East Garafraxa

Municipality File No.: Z3/12
OMB Case No.: PL151043
OMB File No.: PL151044

PROCEEDING COMMENCED UNDER subsection 11(5) of the *Aggregate Resources Act*, R.S.O. 1990, c. A.8, as amended

Referred by: Greenwood Construction Company Limited

Objector: Township of East Garafraxa

Applicant: Greenwood Construction Company Limited
Subject: Application for a Class A licence for the

removal of aggregate

Property Address/Description: East 1/2 Lot 1, Concession 18 Municipality: Township of East Garafraxa

OMB Case No.: PL151043 OMB File No.: MM160076

PROCEEDING COMMENCED UNDER subsection 11(5) of the Aggregate Resources

Act, R.S.O. 1990, c. A.8, as amended

Referred by: Greenwood Construction Company Limited

Objector: Township of East Garafraxa

Applicant: Greenwood Construction Company Limited
Subject: Application for a Class A licence for the

removal of aggregate

Property Address/Description: West 1/2 Lot 2, Concession 17
Municipality: Township of East Garafraxa

OMB Case No.: PL151041 OMB File No.: MM160077 **BEFORE:**

GERALD S. SWINKIN) Thursday, the 2nd MEMBER) day of January, 2020

THESE APPEALS having come on for a Public Hearing on January 14, 2019;

AFTER THE HEARING, the Tribunal in its Decision/Partial Order issued February 8, 2019 granted the appeals in part and approved the Site Specific Official Plan Amendment No.6 to the Official Plan of the Township of East Garafraxa and approved the Township of East Garafraxa site specific zoning by-law;

AND THE TRIBUNAL in its Decision/Partial Order directed the parties to file the final site plans for the respective proposed aggregate operations;

AND WHEREAS the Parties have agreed to the site plans for the proposed aggregate operations for the properties, subject to the agreed revisions of the existing site plans for the two existing licences between the parties, and which revisions the Ministry of Natural Resources and Forestry has advised will be implemented;

AND UPON CONSENT of the Parties to the issuance of this Order:

AND UPON the jurisdiction of this Tribunal as set out in section 11(8)(1) of the *Aggregate Resources Act*, as amended:

THE TRIBUNAL FURTHER ORDERS and directs the Minister of Natural Resources and Forestry to issue the Class A aggregate licence to Greenwood Construction Company Limited for the lands legally described as the West 1/2 Lot 2, Concession 17 subject to the prescribed conditions and in accordance with the

site plan (4 pages) dated October 6, 2019 as prepared by Rollins Hyland Consulting and as attached as Schedule "A" to this Order (and with Note 12 of page 2 of the site plan to include reference to the new licence numbers as assigned), and further as the foregoing licence is for an expansion, the foregoing licence shall only be released to Greenwood Construction Limited upon the Minister of Natural Resources and Forestry amending existing licence nos. 10606 and 80956, including revision to the site plan(s) to those existing licences, in the content and form as agreed to by the municipalities and as submitted to the Ministry of Natural Resources and Forestry;

THE TRIBUNAL FURTHER ORDERS and directs the Minister of Natural Resources and Forestry to issue the Class A aggregate licence to Greenwood Construction Company Limited for the lands legally described as the East 1/2 Lot 1, Concession 18 subject to the prescribed conditions and in accordance with the site plan (4 pages) dated October 6, 2019 as prepared by Rollins Hyland Consulting and as attached as Schedule "B" to this Order (and with Note 12 of page 2 of the site plan to include reference to the new licence numbers as assigned), and further as the foregoing licence is for an expansion, the foregoing licence shall only be released to Greenwood Construction Limited upon the Minister of Natural Resources and Forestry amending existing licence nos. 10606 and 80956, including revision to the site plan(s) to those existing licences, in the content and form as agreed to by the municipalities and as submitted to the Ministry of Natural Resources and Forestry;

THE TRIBUNAL FURTHER ORDERS that the Appellant/Applicant to provide a copy of this Order to the Ministry of Natural Resources and Forestry;

THE TRIBUNAL FURTHER ORDERS and authorizes as a housekeeping matter that the Township Clerk may assign a by-law number to the Zoning By-law approved by the Tribunal in its prior partial order;

AND THE TRIBUNAL FURTHER ORDERS that it may be spoken to in the event any matter or matters should arise in the connection with the implementation of this Order.

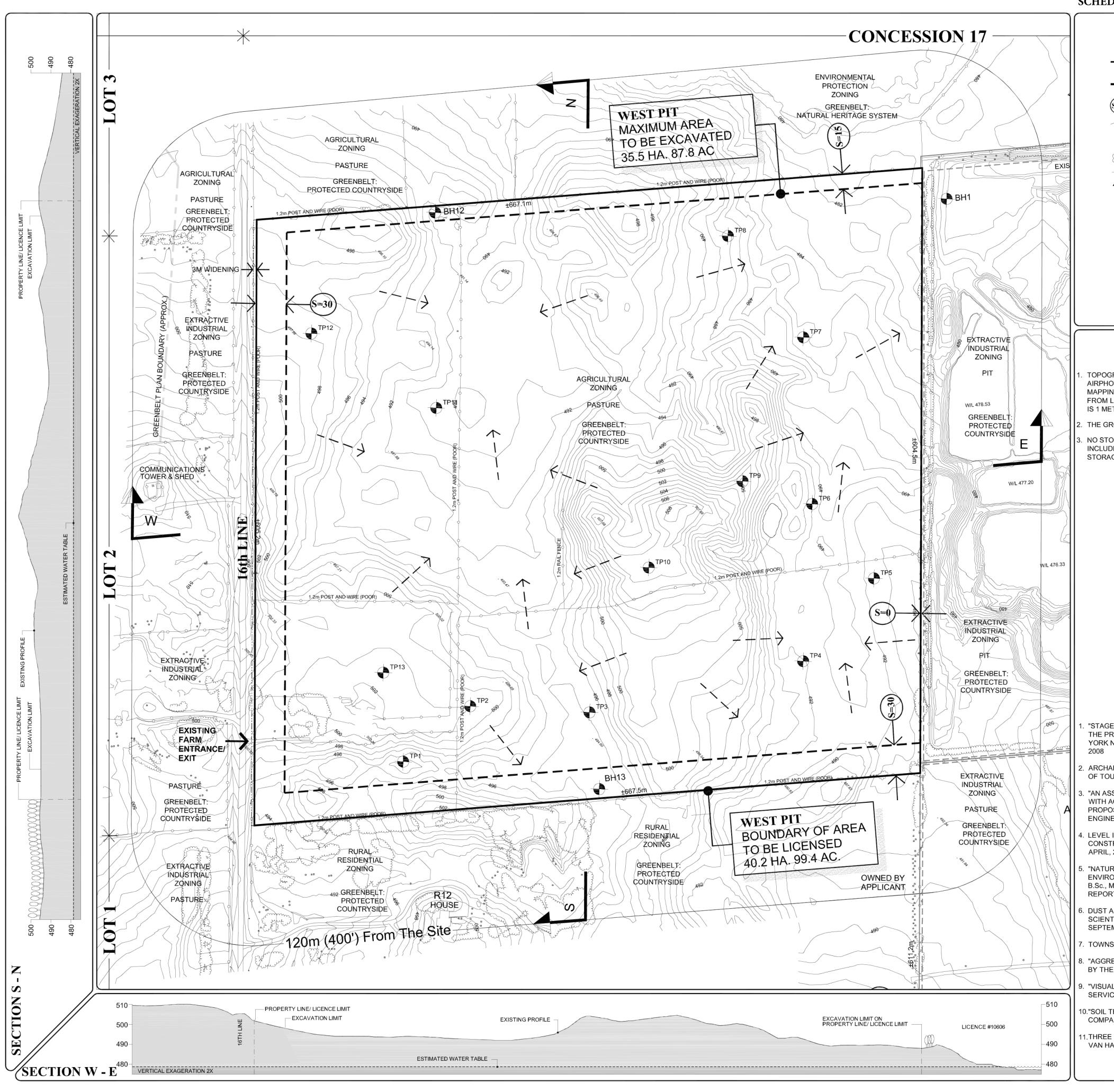
"Evelyn Dawes"

EVELYN DAWES DEPUTY REGISTRAR

If there is an attachment referred to in this document, please visit www.elto.gov.on.ca to view the attachment in PDF format.

Local Planning Appeal Tribunal

A constituent tribunal of Tribunals Ontario – Environment and Land Division Website: www.elto.gov.on.ca Telephone: 416-212-6349 Toll Free: 1-866-448-2248



BOUNDARY OF AREA TO BE LICENSED

AREA TO BE EXCAVATED

SETBACKS, METRES

EXISTING CONTOURS
EXISTING SPOT ELEVATIONS

EXISTING TREE COVER

EXISTING FENCES

TYPICAL SECTION

LOCATIONS

SEPTEMBER
TEST PIT LOC
MONITORING
LOCATION &

SEPTEMBER 2004 TEST PIT LOCATION & NUMBER MONITORING WELL / BOREHOLE LOCATION & NUMBER

SURFACE DRAINAGE DIRECTION

ROAD WIDENING

Greenwood Construction R.R. 2 Orangeville, Ontario L9W 2Y9

WEST PIT

W 1/2 LOT 2, CONCESSION 17 TOWNSHIP OF EAST GARAFRAXA DUFFERIN COUNTY

Page 1 of 4

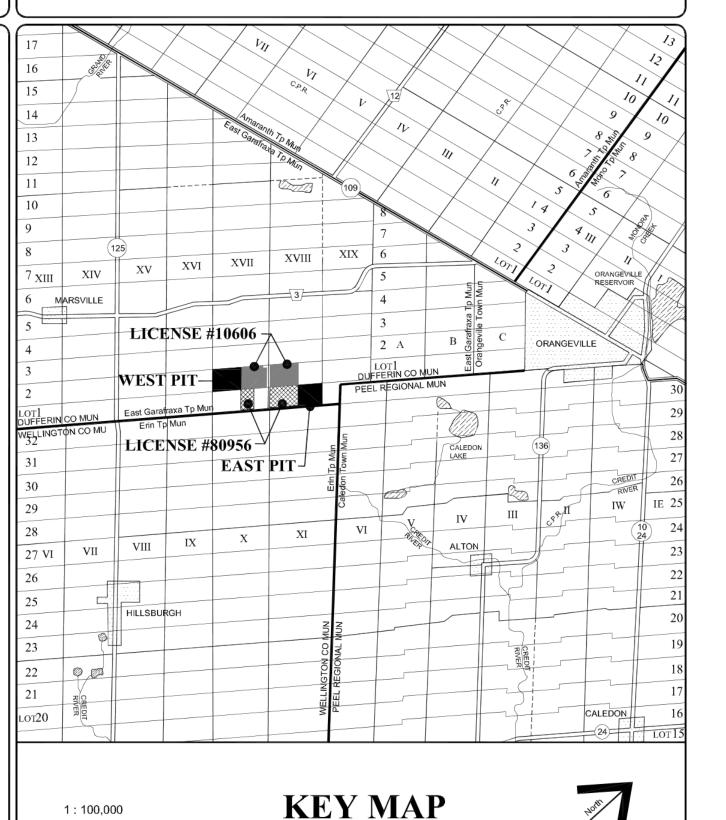
EXISTING FEATURES

NOTES

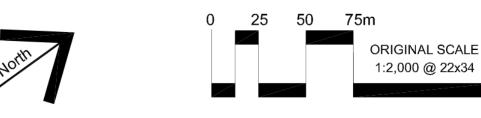
- TOPOGRAPHIC BASE MAPPING DERIVED FROM 2006
 AIRPHOTO AS PREPARED BY FIRST BASE SOLUTIONS INC.
 MAPPING SUPPLEMENTED WITH ADDITIONAL INFORMATION
 FROM LOCAL PLANNING DOCUMENTS. CONTOUR INTERVAL
 IS 1 METRE.
- 2. THE GROUNDWATER TABLE IS ESTABLISHED AT ELEVATION 478.7.
- NO STOCKPILES OF TOPSOIL/OVERBURDEN, OR AGGREGATE INCLUDING RECYCLABLE MATERIALS, NO SCRAP AND NO FUEL STORAGE AREA EXIST ONSITE.

REFERENCES

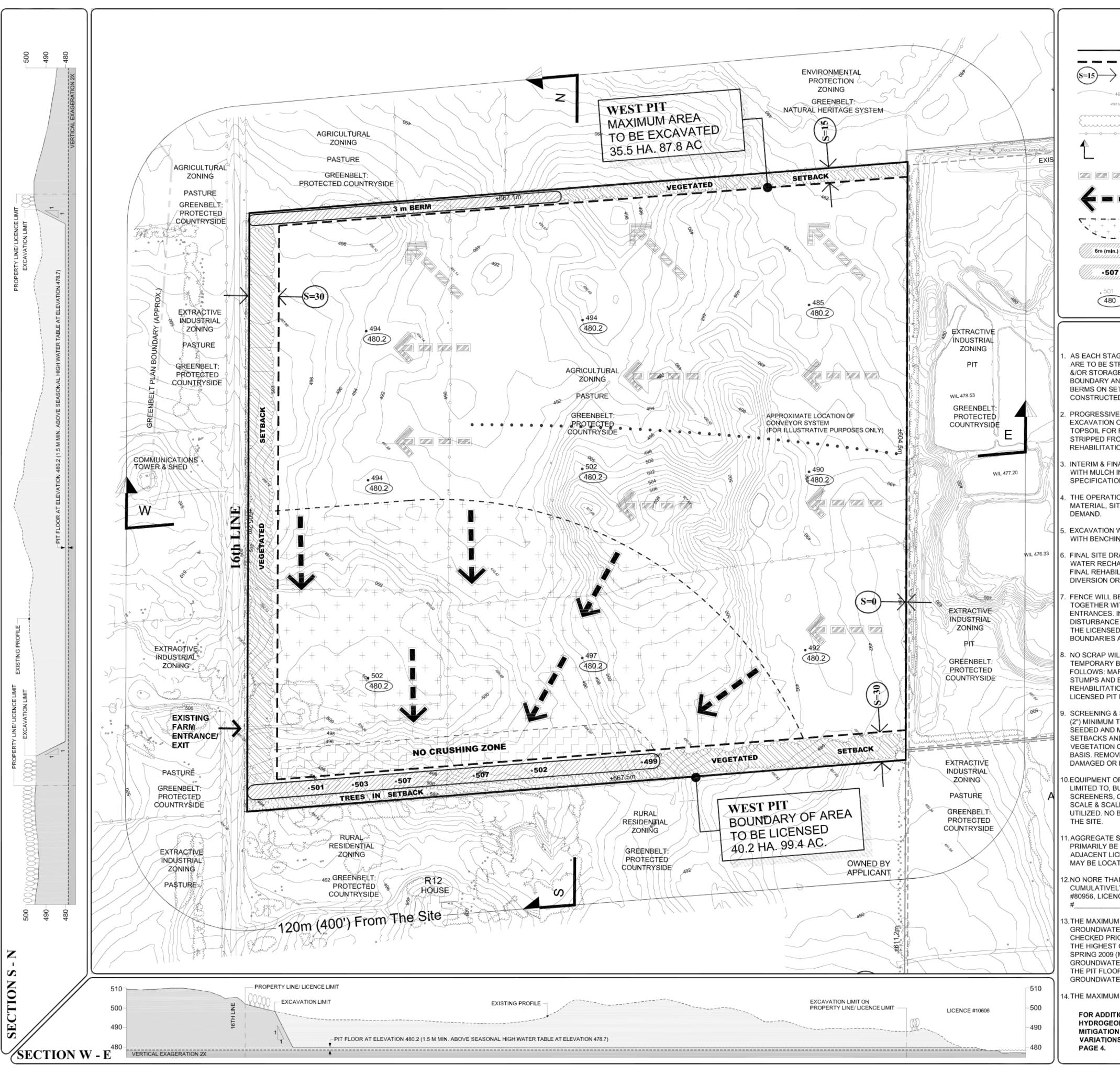
- 1. "STAGE I-II ARCHAEOLOGICAL/HERITAGE ASSESSMENT OF THE PROPOSED GREENWOOD CONSTRUCTION WEST PIT" BY YORK NORTH ARCHAEOLOGICAL SERVICES INC., DECEMBER
- 2. ARCHAEOLOGICAL CLEARANCE LETTER, ONTARIO MINISTRY OF TOURISM AND CULTURE, MARCH 2010
- . "AN ASSESSMENT OF THE POTENTIAL NOISE ASSOCIATED WITH AGGREGATE EXTRACTION AND PROCESSING AT THE PROPOSED EAST AND WEST PITS" BY AERCOUSTICS ENGINEERING LTD., MARCH, 2012 AND UPDATE 08 JULY 2014.
- LEVEL I HYDROGEOLOGICAL INVESTIGATION GREENWOOD CONSTRUCTION WEST PIT" BY MTE CONSULTANTS INC., APRIL, 2010
- 5. "NATURAL ENVIRONMENT LEVELS 1 AND 2 REPORT AND ENVIRONMENTAL IMPACT STATEMENT" BY ROBIN E. CRAIG, B.Sc., M.Sc., MARCH 2011. AMENDMENT AND BOBLINK REPORT, JULY 22 and NOVEMBER 18, 2014.
- 5. DUST ASSESSMENT BY RWDI CONSULTING ENGINEERS AND SCIENTISTS, 28 MAY 2014 AND CORRESPONDENCE 05 SEPTEMBER 2014.
- 7. TOWNSHIP OF EAST GARAFRAXA ZONING BY-LAW 60-2004.
- 8. "AGGREGATE RESOURCES INVENTORY PAPER 163 REVISED" BY THE ONTARIO GEOLOGICAL SURVEY, 2009
- . "VISUAL IMPACT ASSESSMENT" BY ECOVUE CONSULTING SERVICES INC., JULY 2012
- 10."SOIL TEST REPORT" BY GREENWOOD CONSTRUCTION COMPANY LIMITED, MAY 2007
- 1.THREE METRE ROAD WIDENING FROM PLAN OF SURVEY BY VAN HARTEN SURVEYING INC. JANUARY 21, 2019.



DRAWN: J.A.R. I ACKNOWLEDGE AND SHALL CARRY ON MY OPERATION IN ACCORDANCE WITH THE SITE PLAN PPROVED: S.G. THIS SITE PLAN IS PREPARED UNDER UPON WHICH MY LICENCE IS BASED. THE AGGREGATE RESOURCES ACT GREENWOOD CONSTRUCTION COMPANY LIMITED FOR A CLASS A LICENCE, CATEGORY 3 East West Pits October 2019.dwo PLOTTED: OCT. 06 2019 SITE PLANS APPROVED BY: **AMENDMENT** JEFFREY A. ROLLINGS NO. MINISTRY OF NATURAL RESOURCES & FORESTRY No. DATE **DESCRIPTION** APP'D **AMENDMENTS**



ROLLINGS HYLAND CONSULTING
Orangeville, Ontario info@rollingshyland.com 519.942.1961



BOUNDARY OF AREA TO BE LICENSED

AREA TO BE EXCAVATED

SETBACKS, METRES

EXISTING CONTOURS

EXISTING SPOT ELEVATIONS

EXISTING TREE COVER

EXISTING FENCES

TYPICAL SECTION LOCATIONS

DIRECTION OF EXCAVATION, SPECIFIC

DIRECTION OF EXCAVATION, GENERAL

+ + + + * NOISE CONTROL ENVELOPE

PROPOSED SCREENING BERM MIN. HEIGHT (m) ABOVE GRADE

•507 PROPOSED SCREENING BERM WHERE MIN. TOP ELEVATION (masl) REQUIRED

EXISTING ELEVATION
PROPOSED ELEVATION

NOTES

- AS EACH STAGE OF EXCAVATION IS OPENED, TOPSOIL & SUBSOIL ARE TO BE STRIPPED & STOCKPILED IN SEPARATE SCREENING &/OR STORAGE BERMS ON SETBACK OR ALONG EXCAVATION BOUNDARY AND PRESERVED FOR USE DURING REHABILITATION. BERMS ON SETBACKS ALONG EXTERNAL ROADWAYS WILL BE CONSTRUCTED AS FAR FROM ROADWAYS AS POSSIBLE.
 - PROGRESSIVELY GRADE PIT SLOPES, TOPSOIL & SEED AS EXCAVATION OF EACH STAGE IS COMPLETED. WHERE POSSIBLE, TOPSOIL FOR REHABILITATING EACH STAGE SHOULD BE STRIPPED FROM SUCCEEDING STAGE AS PER THE AGRICULTURAL REHABILITATION SEQUENCE SCHEMATIC SHOWN ON PAGE 4.
- . INTERIM & FINAL SEEDING WILL BE IN A LEGUME-GRASS MIXTURE WITH MULCH IN ACCORDANCE WITH ONTARIO STANDARD SPECIFICATION OPSS 804 OR EQUAL.
- THE OPERATION SEQUENCE MAY VARY DUE TO QUALITY OF MATERIAL, SITE HYDROLOGY/HYDROGEOLOGY OR MARKET DEMAND.
- EXCAVATION WILL PROCEED IN LIFTS OF 10 M (33 FT.) OR LESS, WITH BENCHING IF REQUIRED.
- 6. FINAL SITE DRAINAGE WILL BE BY INFILTRATION, IN SURFACE WATER RECHARGE AREAS. REFER TO PAGE 3, PROGRESSIVE AND FINAL REHABILITATION PLAN. THERE WILL BE NO WATER DIVERSION OR POINTS OF DISCHARGE FROM THE SITE.
- 7. FENCE WILL BE 1.2m HT., HEAVY DUTY POST & WIRE FARM TYPE, TOGETHER WITH LOCKING HEAVY DUTY FARM TYPE GATES AT ALL ENTRANCES. INSTALLATION TO OCCUR PRIOR TO ANY SITE DISTURBANCE. FENCE WILL BE ERECTED ON THE BOUNDARY OF THE LICENSED AREA. NO FENCES ARE REQUIRED ALONG BOUNDARIES ADJACENT TO LICENSED PITS.
- 8. NO SCRAP WILL BE STORED WITHIN THE SITE EXCEPT ON A TEMPORARY BASIS. TREES AND STUMPS SHALL BE UTILIZED AS FOLLOWS: MARKETABLE WOOD SHALL BE SALVAGED FOR SALE, STUMPS AND BRUSH SHALL BE USED FOR SHORELINE REHABILITATION ENHANCEMENT ON THE ADJACENT, EXISTING LICENSED PIT PONDS.
- 9. SCREENING & STORAGE BERMS ARE TO BE COVERED WITH 50 MM
 (2") MINIMUM TOPSOIL, GRADED TO SLOPES OF 3:1 OR FLATTER,
 SEEDED AND MAINTAINED. BERMS MAY BE LOCATED ON
 SETBACKS AND WITHIN EXCAVATION AREA. MAINTAIN
 VEGETATION ON BERMS, SETBACKS & SLOPES ON A REGULAR
 BASIS. REMOVE AND REPLACE ANY AREAS WHICH BECOME
 DAMAGED OR DISEASED, BY NEXT GROWING SEASON.
- 10.EQUIPMENT OPERATING IN THE PIT MAY INCLUDE, BUT IS NOT LIMITED TO, BULLDOZERS, LOADERS, TRUCKS, CRUSHERS, SCREENERS, CONVEYORS & POWER PLANTS, ETC. THE EXISTING SCALE & SCALE HOUSE FOR THE EXISTING LICENSED PIT WILL BE UTILIZED. NO BUILDINGS OR STRUCTURES WILL BE ERECTED ON THE SITE.
- 11. AGGREGATE STOCKPLES (MAX. HEIGHT 10 METRES) WILL PRIMARILY BE LOCATED IN THE PROCESSING AREA ON THE ADJACENT LICENSED SITE, HOWEVER TEMPORARY STOCKPILES MAY BE LOCATED WITHIN THE EXCAVATION AREA AS REQUIRED.
- 2.NO NORE THAN 2,000,000 TONNES OF AGGREGATE SHALL BE CUMULATIVELY REMOVED FROM LICENCE #10606, LICENCE #80956, LICENCE # WEST PIT, AND LICENCE # EAST PIT IN ANY CALENDAR YEAR.
- 13. THE MAXIMUM DEPTH OF EXTRACTION WILL BE 1.5M ABOVE THE GROUNDWATER TABLE. GROUNDWATER ELEVATIONS ARE TO BE CHECKED PRIOR TO REACHING THE PROPOSED PIT FLOOR LEVEL. THE HIGHEST GROUNDWATER ELEVATION RECORDED WAS IN SPRING 2009 (MTE, 2010). IF FOR ANY REASON IN THE FUTURE THE GROUNDWATER ELEVATION RISES, THE OPERATOR WILL ENSURE THE PIT FLOOR REMAINS AT LEAST 1.5M ABOVE THE GROUNDWATER TABLE.
- 14.THE MAXIMUM DISTURBED AREA SHALL BE 20.0 HA. (49.4 AC.)

FOR ADDITIONAL GENERAL OPERATIONAL NOTES, HYDROGEOLOGY NOTES, NATURAL ENVIRONMENT MITIGATION NOTES, SPILL CONTINGENCY PLAN AND VARIATIONS FROM THE OPERATIONAL STANDARDS, SEE PAGE 4



WEST PIT

W 1/2 LOT 2, CONCESSION 17 TOWNSHIP OF EAST GARAFRAXA DUFFERIN COUNTY

Page 2 of 4 **OPERATIONS**

NOISE CONTROL MEASURES

LIMITED TO ONE LOADER AND ONE PRIMARY CRUSHING PLANT. THE REFERENCE SOUND LEVELS OF THE EQUIPMENT SHALL NOT EXCEED THE LEVELS SPECIFIED IN THE TABLE BELOW. THE CRUSHER SHALL BE MAINTAINED IN THE QUIET ORIENTATION WITH RESPECT TO RECEPTOR R12. THE CRUSHER IS CONSIDERED TO BE IN A QUIET ORIENTATION WHEN THE RECEPTOR HAS NO DIRECT EXPOSURE TO THE SIDE OF THE CRUSHER CONTAINING THE ENGINE COOLING FAN.

THE EXTRACTION AND PROCESSING EQUIPMENT OPERATING IN THE WEST PIT SHALL BE

EQUIPMENT

LOADER

PRIMARY CRUSHER (PORTABLE) - LOUD ORIENTATION

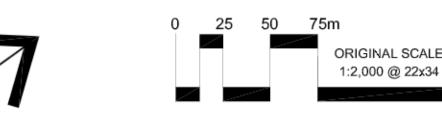
SOUND LEVEL LIMIT (dBA)
ONE HOUR LEQ @ 20 METRES
76
83

OPERATIONS IN THE PIT SHALL BE RESTRICTED TO WEEKDAY DAYTIME HOURS (07:00-19:00). THERE WILL BE NO OPERATIONS ON WEEKENDS OR HOLIDAYS.

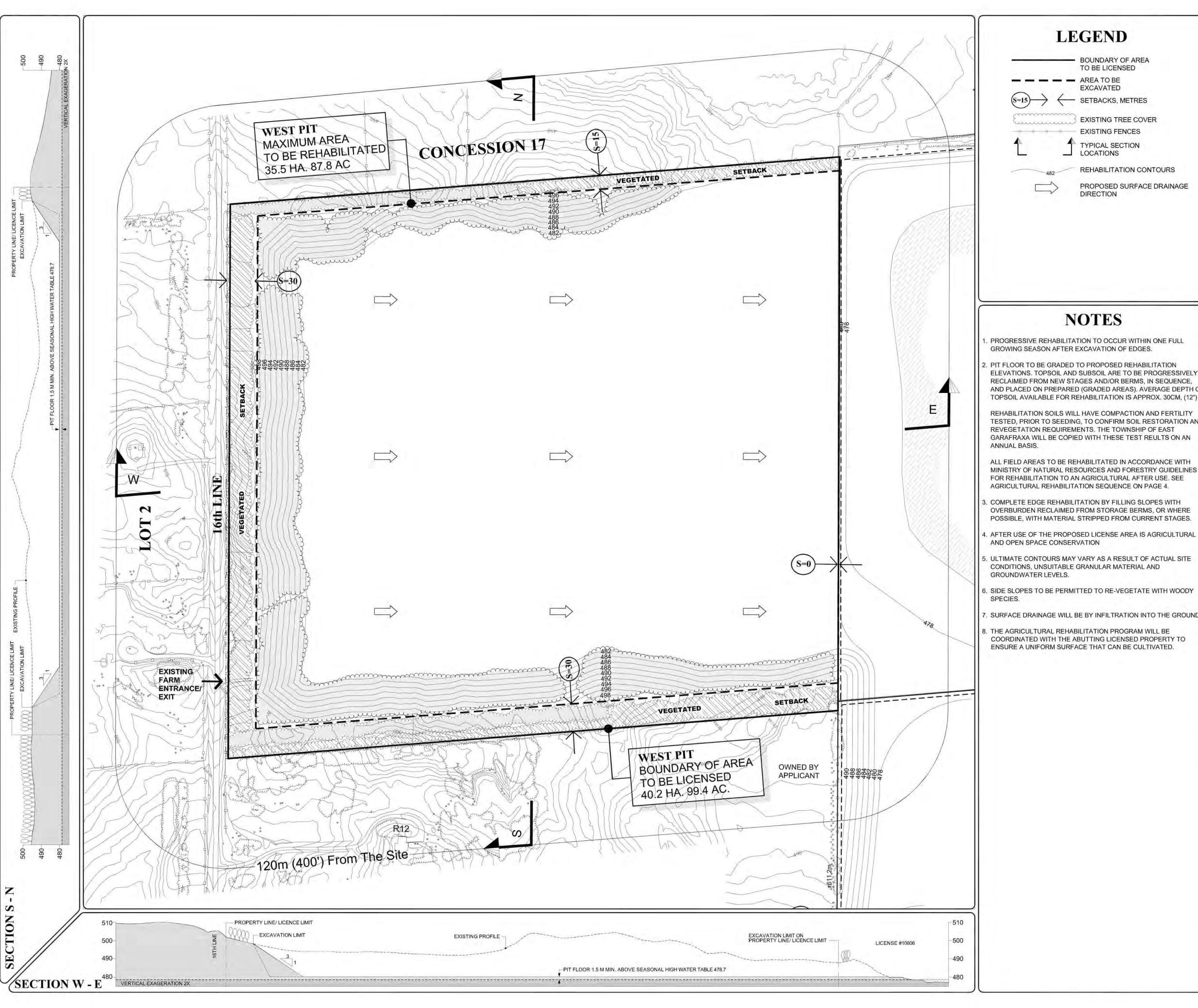
PRIMARY CRUSHER (PORTABLE) - QUIET ORIENTATION

- PERIMETER BERMING SHALL BE CONSTRUCTED AS INDICATED ON THIS DRAWING. THE MINIMUM BERM HEIGHTS OR THE MINIMUM TOP-OF-BERM ELEVATIONS ARE SPECIFIED. THE BERMS SHALL BE CONSTRUCTED PRIOR TO EXTRACTION WITHIN 400 M OF THE WEST PERIMETER OF THE SITE (16TH LINE).
- THE 1ST AND SUBSEQUENT LIFTS SHALL BE OF A MINIMUM DEPTH OF 7 METRES WHERE THE DEPTH OF THE RESOURCE MAKES THIS POSSIBLE. WHERE THERE IS NOT SUFFICIENT DEPOSIT TO MEET THE MINIMUM 7 M FACE HEIGHT REQUIREMENT, THE LIFTS SHALL BE EXTRACTED IN CLOSE SUCCESSION SUCH THAT THE TOTAL (COMBINED) FACE HEIGHT IS AT LEAST 7 METRES.
- 5. IN THE AREAS WHERE THE DIRECTION OF EXTRACTION IS SPECIFIED, THE CRUSHER SHALL REMAIN WITHIN 30 METRES OF THE WORKING FACE IN ORDER TO ENSURE THAT THE WORKING FACE WILL PROVIDE ACOUSTICAL SHIELDING OF THE EQUIPMENT FOR RECEPTOR PAGE
- 6. THE CRUSHER IS PROHIBITED FROM OPERATING IN THE AREA INDICATED.
- THE SOUND EMISSIONS OF ALL CONSTRUCTION EQUIPMENT INVOLVED IN SITE PREPARATION AND REHABILITATION ACTIVITIES SHALL COMPLY WITH THE SOUND LEVEL LIMITS SPECIFIED IN MOE PUBLICATION NPC-115 "CONSTRUCTION EQUIPMENT".
- . ANY PROPOSED CHANGES TO THE ASPECTS OF THE EXTRACTION AND PROCESSING OPERATIONS DEALT WITH ABOVE AS RELATING TO NOISE CONTROL SHALL BE REVIEWED BY A QUALIFIED ACOUSTICAL CONSULTANT FOR COMPLIANCE WITH THE RELEVANT NOISE CRITERIA.
- 9. THE LICENSEE WILL INSTITUTE A COMPLAINT PROCEDURE. AS PART OF THIS PROCEDURE, COMPLAINANTS WILL BE REQUESTED TO IDENTIFY THE LOCATION OF THE INCIDENT, AS WELL AS THE TIME OF DAY THAT THE INCIDENT OCCURRED AND ANY OTHER INFORMATION THAT THEY FEEL IS RELEVANT. THE LICENSEE WILL KEEP A COMPLAINTS LOG BOOK CONTAINING A RECORD OF ALL COMPLAINTS AS WELL AS ALL COMPLAINT RESPONSES, WHICH LOG BOOK SHALL BE ACCESSIBLE TO THE MNRF AND TOWNSHIP ON REQUEST.

		AMENDMEN'	TS	
lo.	DATE	DESCRIPTION		
	\bigcirc	DATE:	DATE:	
MEN O	NDMENT	SITE PLANS APPROVED BY: MINISTRY OF NATURAL RESOURCES & FORESTRY	JEFFREY A. ROLLINGS	
OTTED:	OCT. 06 2019	PER: DATE:		
PROVED: S.G. E: E Gara Updates / st West Pits October 2019.dwg		UPON WHICH MY LICENCE IS BASED. GREENWOOD CONSTRUCTION COMPANY LIMITED	THIS SITE PLAN IS PREPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS A LICENCE, CATEGORY 3	
		I ACKNOWLEDGE AND SHALL CARRY ON MY OPERATION IN ACCORDANCE WITH THE SITE PLAN		







BOUNDARY OF AREA TO BE LICENSED **EXCAVATED** SETBACKS, METRES **EXISTING TREE COVER EXISTING FENCES** TYPICAL SECTION LOCATIONS REHABILITATION CONTOURS

PROPOSED SURFACE DRAINAGE



WEST PIT

W 1/2 LOT 2, CONCESSION 17 TOWNSHIP OF EAST GARAFRAXA **DUFFERIN COUNTY**

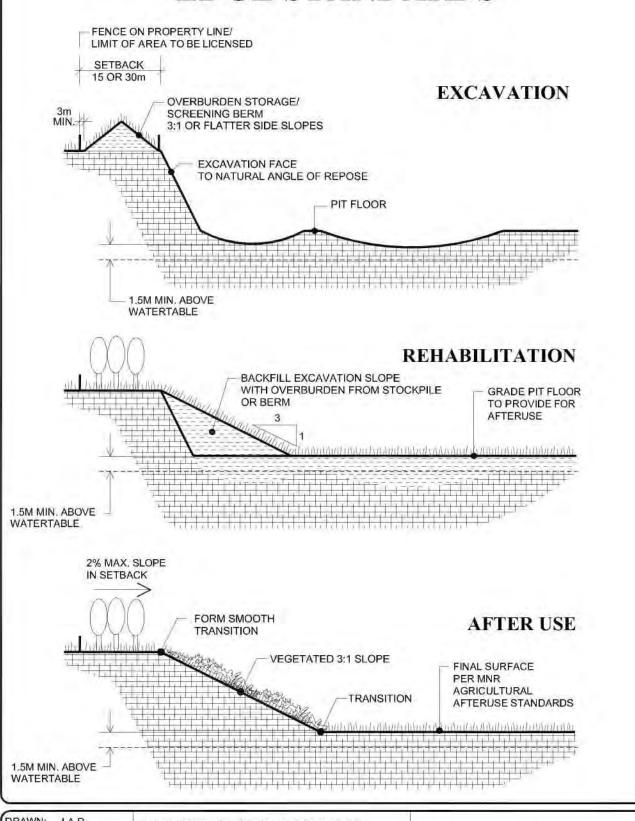
Page 3 of 4

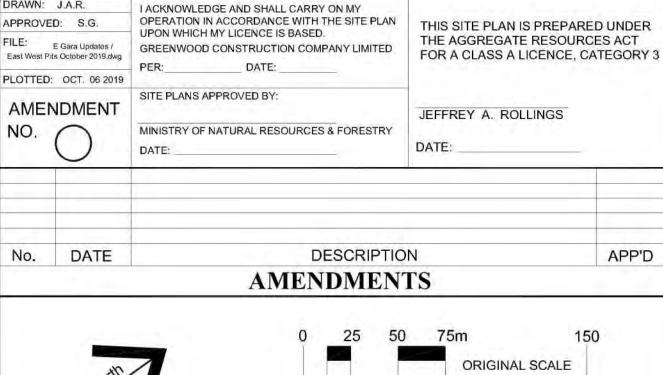
PROGRESSIVE AND FINAL REHABILITATION

NOTES

- PROGRESSIVE REHABILITATION TO OCCUR WITHIN ONE FULL GROWING SEASON AFTER EXCAVATION OF EDGES.
- AND PLACED ON PREPARED (GRADED AREAS). AVERAGE DEPTH OF TOPSOIL AVAILABLE FOR REHABILITATION IS APPROX. 30CM, (12")
- REHABILITATION SOILS WILL HAVE COMPACTION AND FERTILITY TESTED, PRIOR TO SEEDING, TO CONFIRM SOIL RESTORATION AND REVEGETATION REQUIREMENTS. THE TOWNSHIP OF EAST GARAFRAXA WILL BE COPIED WITH THESE TEST REULTS ON AN
- ALL FIELD AREAS TO BE REHABILITATED IN ACCORDANCE WITH MINISTRY OF NATURAL RESOURCES AND FORESTRY GUIDELINES FOR REHABILITATION TO AN AGRICULTURAL AFTER USE. SEE AGRICULTURAL REHABILITATION SEQUENCE ON PAGE 4.
- AND OPEN SPACE CONSERVATION 5. ULTIMATE CONTOURS MAY VARY AS A RESULT OF ACTUAL SITE
- CONDITIONS, UNSUITABLE GRANULAR MATERIAL AND
- 6. SIDE SLOPES TO BE PERMITTED TO RE-VEGETATE WITH WOODY
- . SURFACE DRAINAGE WILL BE BY INFILTRATION INTO THE GROUND.
- THE AGRICULTURAL REHABILITATION PROGRAM WILL BE COORDINATED WITH THE ABUTTING LICENSED PROPERTY TO ENSURE A UNIFORM SURFACE THAT CAN BE CULTIVATED.

EDGE STANDARDS





ROLLINGS HYLAND CONSULTING
Orangeville, Ontario info@rollingshyland.com 519.942.1961 CERTIFIED TO PREPARE SITE PLANS UNDER SECTION 8(4) OF THE AGGREGATE RESOURCES ACT

GENERAL OPERATIONAL NOTES, CONTINUED FROM PAGE 2

- 15. NO IMPORTATION OF CONCRETE OR ASPHALT FOR REPROCESSING
- 16. THE CONVEYOR AS SHOWN IS SCHEMATIC. THE ACTUAL LOCATION WILL BE DETERMINED DEPENDING ON MATERIAL REQUIREMENTS AND WILL FOLLOW THE OPERATION SEQUENCE. WHILE CONVEYORS WILL BE THE MEANS OF INTERNAL MATERIAL TRANSPORT, THERE MAY BE UPSET OR REPAIR CONDITIONS OF THE CONVEYOR SYSTEM WHERE TEMPORARY USE OF TRUCKS FOR CONVEYANCE ON SAME GENERAL ROUTE MAY
- 17. REMOVAL OF OVERBURDEN TYPICALLY OCCURS TWICE PER YEAR: ONCE DURING LATE FALL OR EARLY SPRING, AND A SECOND TIME DURING LATE SUMMER. THE DURATION OF THE ACTIVITY IS 1-2 WEEKS. THE ACTUAL TIMING AND DURATION MAY VARY SOMEWHAT.
- 18. PRIOR TO ANY LAND CLEARING:

A) FIELD SURVEYS WILL BE UNDERTAKEN BY A QUALIFIED PROFESSIONAL TO INVENTORY FOR SPECIES AT RISK IN AREAS TO BE CLEARED.

B) THE RESULTS OF THE SURVEY(S) WILL BE FORWARDED TO THE MNRF AND THE TOWNSHIP AS PART OF THE ANNUAL COMPLIANCE ASSESSMENT REPORT.

C) APPROVALS SHALL BE OBTAINED UNDER THE ENDANGERED SPECIES ACT AND/OR AMENDMENTS MADE TO THE SITE PLAN AS NECESSARY.

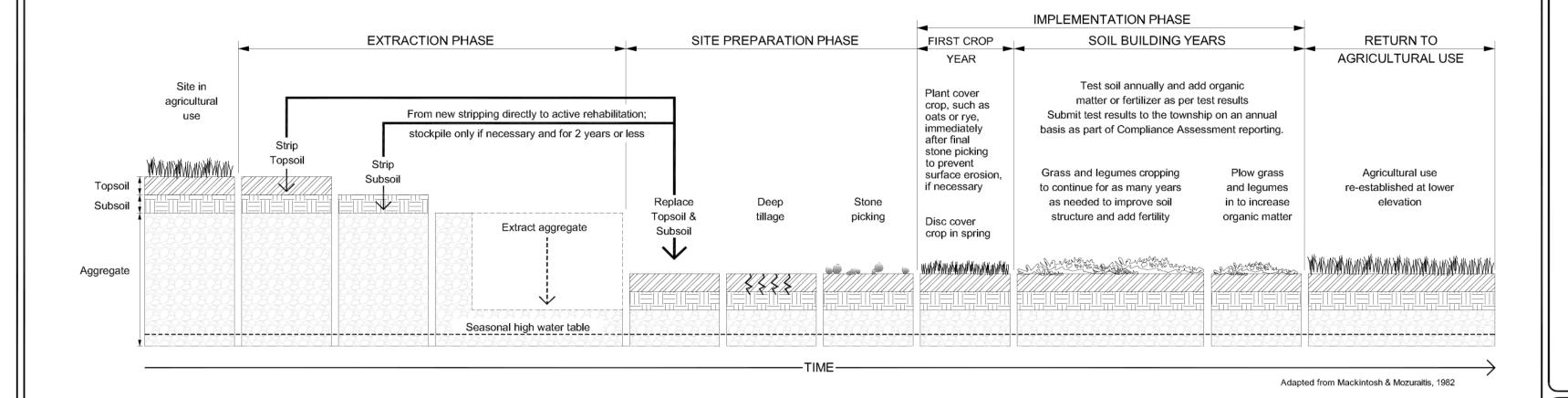
D) NO LAND CLEARING WILL OCCUR ON NATURALLY REGENERATING AREAS EXCLUDING ACTIVELY CULTIVATED LANDS BETWEEN APRIL 1 AND JULY 15 IN ANY GIVEN YEAR.

- 19. IMPLEMENT TECHNICAL RECOMMENDATIONS OF THE BEST MANAGEMENT PLAN FOR DUST CONTROL BY RWDI, JULY 7, 2016. A LOG OF DAILY SITE INSPECTIONS SHALL BE MAINTAINED AS PER THE BMP AND A COPY OF THE LOG SHALL BE PROVIDED TO THE TOWNSHIP ON REQUEST.
- 20. NO PERMANENT FUEL STORAGE AREA IS PERMITTED.
- 21. NO IMPORTATION OF FILL WILL BE PERMITTED WITHOUT TOWNSHIP APPROVAL
- 22. THE LICENSEE SHALL USE BROADBAND BACKUP ALARM SYSTEMS OR SIMILAR TECHNOLOGY AS OPPOSED TO BACK UP BEEPERS SUBJECT TO MINISTRY OF LABOUR APPROVAL, FOR ALL LOADERS AND ANY OTHER EQUIPMENT WITHIN LICENSES #10606, #80956, EAST PIT AND WEST PIT.
- 23. A WASH PLANT IS PROHIBITED WITHOUT TOWNSHIP APPROVAL AND REQUIRED PERMITS.
- 24. NATIVE CONIFEROUS TREES WILL BE PLANTED ALONG THE 16TH LINE TO THE SATISFACTION OF THE TOWNSHIP.

ARCHAEOLOGY

1. SHOULD DEEPLY BURIED ARCHAEOLOGICAL/HERITAGE REMAINS BE FOUND ON THE PROPERTY DURING SITE PREPARATION AND/OR EXTRACTION ACTIVITIES, MOC SHOULD BE NOTIFIED IMMEDIATELY. IN THE EVENT THAT HUMAN REMAINS ARE ENCOUNTERED DURING SITE PREPARATION AND/OR EXTRACTION ACTIVITIES ASSOCIATED WITH THE PROPOSED DEVELOPMENT OF THE STUDY AREA, THE PROJECT PROPONENT, GREENWOOD CONSTRUCTION COMPANY LIMITED, SHOULD IMMEDIATELY CONTACT BOTH MOC AND THE REGISTRAR OR DEPUTY REGISTRAR OF THE CEMETERIES REGULATION UNIT OF THE MINISTRY OF CONSUMER AND COMMERCIAL RELATIONS AT 416-326-9382.

AGRICULTURAL REHABILITATION SEQUENCE



DUST CONTROL MEASURES

- 1. OPERATIONS WITHIN THE NOISE CONTROL ENVELOPES SHOWN ON THE SITE PLANS SHOULD BE SUSPENDED WHEN MOISTURE LEVELS IN THE MATERIAL BEING HANDLED ARE LOW (I.E., WHEN MATERIAL HANDLING GENERATES VISIBLE DUST OR IS EXPECTED TO GENERATE VISIBLE DUST) AND THE WIND IS DIRECTED TOWARD THE RELEVANT RESIDENCE AT SPEEDS ABOVE 30 KM/HR (REFERENCED TO 10M HEIGHT). FOR CLARITY, WIND SPEED MEASUREMENTS WILL NOT BE TAKEN ON SITE BUT CAN BE OBTAINED FROM LOCAL WEATHER REPORTING. THIS APPLIES TO EXTRACTION, OVERBURDEN STRIPPING, BERM CONSTRUCTION AND REHABILITATION ACTIVITY.
- 2. DIESEL ENGINES ON THE CRUSHER, LOADER AND SCRAPERS USED WITHIN THE PROPOSED NOISE CONTROL ENVELOPES SHOULD CONFORM TO EMISSION LIMITS FOR 2012 AND LATER MODEL YEARS.
- 3. VISUAL INSPECTION FOR DUSTY CONDITIONS SHOULD OCCUR AT A MINIMUM OF TWICE DAILY DURING DRY WEATHER AND ONCE PER DAY OTHERWISE. DURING DRY WEATHER THE OPERATOR SHALL APPLY WATER AS REQUIRED TO ENSURE THE SURFACE REMAINS WET.
- 4. TRAVEL SPEEDS FOR SCRAPERS, LOADERS AND ANY OTHER EQUIPMENT OPERATING WITHIN THE EAST OR WEST PIT SHOULD BE KEPT AS LOW AS POSSIBLE, BUT AT NO TIME SHALL EXCEED A MAXIMUM SPEED OF 35 KM/HR.
- 5. WEATHER FORECASTS SHOULD BE CHECKED DAILY, PARTICULARLY WHEN OPERATING IN THE NOISE CONTROL ENVELOPES, TO PLAN FOR NEXT-DAY OPERATIONS AND WATERING NEEDS.
- THERE SHOULD BE A MAINTENANCE/INSPECTION SCHEDULE FOR THE WATER TRUCK AND WATER SPRAY SYSTEM ON THE CRUSHING PLANT, TO ENSURE THAT THE DUST SUPPRESSION EQUIPMENT ARE FULLY OPERATIONAL WHEN NEEDED.
- 7. THE FACILITY SHOULD KEEP A RECORD OF HOW AND WHEN DUST CONTROL MEASURES ARE IMPLEMENTED.
- 8. DOCUMENT COMPLAINTS, INCLUDING OPERATIONS IN THE PIT AND WEATHER CONDITIONS, AS PER COMPLAINTS PROCEDURE IN NOISE NOTE 8, PAGE 2. INSPECT TO IDENTIFY THE SOURCE OF THE PROBLEM, IF POSSIBLE. IF ANY DEFICIENCY IS FOUND WITH THE IMPLEMENTATION OF THESE DUST RECOMMENDATIONS, IT SHOULD BE CORRECTED IMMEDIATELY. A COPY OF THE LOG OF COMPLAINTS SHALL BE PROVIDED TO THE TOWNSHIP AND/OR COUNTY UPON REQUEST.
- 9. DUST RECOMMENDATIONS LISTED HERE SERVE AS A STANDARD OPERATING PROCEDURE OR AIR QUALITY MANAGEMENT PLAN FOR THE SITE. THEY SHOULD BE KEPT ON FILE AND USED FOR STAFF TRAINING AND GUIDANCE.

SPILL CONTINGENCY PLAN

(APPLIES UNIFORMLY TO ALL GREENWOOD OPERATIONS)

- 1. IN CASE OF ACCIDENTAL SPILL OF PETROLEUM PRODUCTS, THE FOLLOWING CONTINGENCY PLAN WILL BE
- A) THE MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE AND SURROUNDING LANDOWNERS WILL BE NOTIFIED.
- B) FOR A LEAKAGE, IMMEDIATE ACTION WILL BE TAKEN TO STOP IT. AT THE SAME TIME, MEASURES WILL BE TAKEN TO PREVENT THE SPREAD OF THE LEAK (I.E., CONSTRUCTION OF A BERM, DIGGING OF A DITCH). IF IT IS A SPILL, SIMILAR MEASURES AS MENTIONED FOR PREVENTING THE SPREAD OF A LEAK WILL BE TAKEN.
- C) GREENWOOD CONSTRUCTION CO LTD. WILL COMMENCE RECOVERY PROCEDURE BY PUMPING THE SPILLED LIQUID INTO CONTAINERS. THE SPILLED LIQUID MAY HAVE TO BE RECOVERED FROM AN OPEN WATER BODY OR LAND OR FROM BOTH. FOR A SPILL CONTAINED IN AN OPEN WATER BODY, RECOVERY MAY REQUIRE PUMPING OR SKIMMING OR BOTH.
- D) THE SOIL IN THE AREA AFFECTED BY THE SPILL OR LEAK WILL BE REMOVED.
- E) THE CONTAMINATED SOIL, THE RECOVERED SPILL AND WATER WILL BE DISPOSED OF BY GREENWOOD CONSTRUCTION CO. LTD. AT LOCATIONS PRESCRIBED BY THE MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE.
- 2. THE FOLLOWING WILL BE AVAILABLE AT THE SITE:
- i) A SKIMMING DEVICE (WHERE OPEN WATER EXISTS)
- ii) A DIESEL PUMP iii) PORTABLE CONTAINERS
- 3. LIQUID PETROLEUM PRODUCTS WILL NOT BE STORED ONSITE.

- 4. TEMPORARY FUEL STORAGE WILL BE INSPECTED FOR LEAKS ON A WEEKLY BASIS.
- 5. DURING THE FUELING OF EQUIPMENT, THE AREA IN QUESTION WILL BE INSPECTED FOR LEAKS AND SPILLS.
- 6. IF A SPILL VOLUME OF 5 LITRES OR MORE, THE SPILLS ACTION CENTRE ESTABLISHED BY THE M.O.E.C.C. 1-800-268-6060 WILL BE CONTACTED IMMEDIATELY.
- 7. THE LICENSEE SHALL TAKE REASONABLE MEASURES TO STOP OR CONTROL THE SPILL.
- 8. A QUALIFIED PERSON SHALL INSPECT THE SPILL SITE AND COMPLETE A GENERAL ASSESSMENT OF THE AREA AFFECTED.
- 9. THE LICENSEE SHALL IMPLEMENT REMEDIAL MEASURES RECOMMENDED BY THE QUALIFIED PERSON AND/OR THE M.O.E.C.C.
- 10. A WRITTEN REPORT OF THE INCIDENT WILL BE PREPARED AND SUBMITTED TO THE M.O.E.C.C., TOWNSHIP AND

NATURAL ENVIRONMENT MITIGATION

THE FOLLOWING MITIGATION WILL PROTECT NATURAL FEATURES ON AND OFF SITE OF THE GREENWOOD WEST PIT;

- 1. ESTABLISH A 15 M VEGETATED SETBACK FROM THE ACTIVE EXTRACTION AREA ALONG THE NORTH PROPERTY BOUNDARY TO INCREASE THE SEPARATION FROM THE NEAREST WETLAND TO 65 M.
- 2. THE NORTH BOUNDARY SETBACK WILL BE SEEDED WITH A NATIVE GRASS MIX AND PERMITTED TO FURTHER RE-VEGETATE NATURALLY.
- 3. THE WEST SETBACK WILL BE PLANTED WITH CREEPING RED FESCUE 55 %, PERENNIAL RYE 15% KENTUCKY BLUE GRASS 27% AND WHITE CLOVER 3%.
- 4. A VARIETY OF LOCALLY SOURCED, APPROPRIATE TO THE PLANTING ZONE, NATIVE TREES AND SHRUBS WILL BE PLANTED ALONG THE SOUTHERLY SETBACK IN THE AREA INDICATED ON PAGE 2, UPON LICENSE APPROVAL TO ENHANCE VALUE FOR WILDLIFE. SPECIES TO BE PLANTED WILL INCLUDE BUT NOT BE LIMITED TO EASTERN WHITE PINE, WHITE SPRUCE, SUGAR MAPLE, SERVICEBERRY AND RED-OSIER DOGWOOD, DEPENDING UPON AVAILABILITY AND SITE SUITABILITY.
- ALL PLANTING WILL BE PLANNED AND IMPLEMENTED BY QUALIFIED PROFESSIONALS. WATER TREES AFTER PLANTING.
- 6. ALL PLANTINGS WILL BE MONITORED BY A QUALIFIED PROFESSIONAL FOR 5 YEARS AND TREES AND/OR SHURBS THAT DIE WILL BE REPLACED WITHIN 1 GROWING SEASON. DOCUMENT RESULTS OF MONITORING IN ANNUAL COMPLIANCE ASSESSMENT REPORT.
- 7. RETAIN ALL SURFACE WATER ON THE SITE TO PREVENT IMPACTS TO SURFACE WATER QUALITY FLOWING FROM THE SITE
- 8. MAINTAIN EQUIPMENT AND STORE FUEL OFFSITE.
- 9. RE-FUEL EQUIPMENT FROM A MOBILE SOURCE BROUGHT TO THE SITE WHEN REQUIRED.
- 10. PREPARE, IMPLEMENT AND ENFORCE A SPILLS RESPONSE PLAN TO PROTECT GROUND WATER QUALITY.
- 11. IF GROUNDWATER IS ENCOUNTERED AT AN UNEXPECTED LEVEL (NOT PERCHED WATER), EXTRACTION WILL CEASE UNTIL A REVISED PIT FLOOR ELEVATION IS ESTABLISHED.
- 12. WHEN THE PROPOSED PIT FLOOR IS REACHED, TEST PITTING TO PROBE FOR THE WATER TABLE WILL ENSURE 1.5 M SEPARATION IS MAINTAINED BETWEEN THE WATER TABLE AND THE EXTRACTION OPERATION.
- 13. PRIOR TO ANY LAND CLEARING:
 - A) FIELD SURVEYS WILL BE UNDERTAKEN BY A QUALIFIED PROFESSIONAL TO INVENTORY FOR
 - SPECIES AT RISK (ENDANGERED AND THREATENED) IN AREAS TO BE CLEARED.

 B) THE RESULTS OF THE SURVEY(S) WILL BE MADE AVAILABLE TO THE OMNRF AND THE TOWNSHIP.
- C) APPROVALS SHALL BE OBTAINED UNDER THE ENDANGERED SPECIES ACT AND/OR AMENDMENTS MADE TO THE SITE PLANS AS NECESSARY.
- 14. NO LAND CLEARING WILL OCCUR ON NATURALLY REGENERATING AREAS EXCLUDING ACTIVELY CULTIVATED LANDS BETWEEN APRIL 1 AND JULY 15 IN ANY GIVEN YEAR.
- 15. TO COMPENSATE FOR THE IMPACT TO GRASSLAND WILDLIFE DURING THE CLEARING OF THE SITE AN AREA EAST OF THE SITE IN LOT 1, CON. 17 OF THE THE MCFEE PIT LICENSE #80956 WILL BE MANAGED FOR

GRASSLAND SPECIES AND WILL BE IMPLEMENTED PRIOR TO LAND CLEARING ON THE WEST SITE.

- 16. THE GRASSLAND AREA WILL BE GREATER THAN 200 M WIDE AND WILL CONSIST OF ABOUT 16 HA.
- 17. THREE SPECIES OF GRASSES WITH AT LEAST ONE SPECIES GROWING TALLER THAN 50 CM WILL BE PLANTED ON 60 80 % OF THE NEW GRASSLAND. THE GRASS SPECIES SUGGESTED ARE AWNLESS BROME (BROMUS INERMIS), COMMON TIMOTHY (PHELUM PRETENSE) AND ORCHARD GRASS (DACTYLIS GLOMERATA). THE REMAINING AREA WILL BE PLANTED IN LEGUMES SUCH AS ALFALFA (MEDICAGO SATIVA) AND/OR RED CLOVER (TRIFOLIUM PRETENSE). THE SPECIES PLANTED MAY VARY SUBJECT TO SITE CONDITIONS AT THE TIME OF PLANTING. THIS WILL CREATE HABITAT WITH THE HIGH GRASS TO FORB RATIO PREFERRED BY
- 18. NO MORE THAN HALF THE NEW GRASSLAND WILL BE HARVESTED, CUT, MOWED OR GRAZED BETWEEN APRIL 1 AND JULY 31 IN ANY YEAR.
- 19. THE NEW GRASSLAND WILL BE MONITORED BY A QUALIFIED PROFESSIONAL AND WOODY VEGETATION AND INVASIVE SPECIES WILL BE REMOVED IF REQUIRED TO MAINTAIN THE SITE. REPORT RESULTS OF MONITORING IN ANNUAL COMPLIANCE ASSESSMENT REPORT.
- THE NEW GRASSLAND WILL BE MANAGED AND REMAIN FUNCTIONAL FOR AT LEAST 5 YEARS AFTER FULL SITE REHABILITATION.
- 21. THE SITE PLANS OF THE MCFEE PIT LICENSE #80956 WILL BE AMENDED TO INCORPORATE THE DETAILS OF THIS NEW GRASSLAND PLAN.



WEST PIT

W 1/2 LOT 2, CONCESSION 17 TOWNSHIP OF EAST GARAFRAXA DUFFERIN COUNTY

Page 4 of 4
NOTES &
DETAILS

HYDROGEOLOGY

THE GRAVEL PIT EXTRACTION MUST REMAIN 1.5 METRES ABOVE THE ESTABLISHED WATER TABLE AND WILL HAVE NO INTERACTION WITH WATER TABLE, SO THERE IS NO RISK OF AN INTERFERENCE WITH ANY EXISTING PRIVATE WELLS, OR ANY NATURAL FEATURES.

PIT FLOO

THE PIT MUST REMAIN A MINIMUM 1.5 METRES ABOVE THE WATER TABLE. IT IS RECOMMENDED THAT THE FLOOR OF THE PIT BE SET AT 480.2 METRES. SHOULD GROUNDWATER BE ENCOUNTERED AT AN UNEXPECTED DEPTH, EXTRACTION SHOULD CEASE UNTIL A REVISED PIT FLOOR ELEVATION IS ESTABLISHED.

GROUNDWATER ELEVATIONS SHOULD BE CHECKED PRIOR TO REACHING PROPOSED PIT FLOOR LEVELS. ONCE THE CURRENTLY RECOMMENDED PIT FLOOR ELEVATION IS REACHED, FURTHER EXTRACTION SHOULD BE PRECEDED BY TEST PITTING TO PROBE FOR WATER TABLE TO ENSURE THAT THE 1.5 METRE SEPARATION DISTANCE IS MAINTAINED. INDICATIONS OF THE WATER TABLE WILL INCLUDE SATURATED CONDITIONS AND/OR A CHANGE IN THE COLOUR OF THE AGGREGATE FROM BROWN TO GREY. THE ELEVATION FOR A REVISED PIT FLOOR CAN BE DETERMINED FROM THIS TEST PITTING INVESTIGATION.

PROVIDE MONITORING RESULTS TO TOWNSHIP ON AN ANNUAL BASIS AS PART OF COMPLIANCE ASSESSMENT REPORTING.

VARIATIONS FROM THE OPERATIONAL STANDARDS

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

- 5.1 FENCING OF ENTIRE LICENSED BOUNDARY NOT REQUIRED THROUGH AGREEMENT WITH LANDOWNER (PROPERTY OWNED BY LICENSEE).
- 5.11 ELIMINATION OF A PORTION OF THE SETBACK IS PERMITTED THROUGH AGREEMENT WITH LANDOWNER (PROPERTY OWNED BY LICENSEE)

INTERFERE WITH THE ADJACENT LAND USES.

NOTE: UNFENCED LICENSED BOUNDARIES WILL BE STAKED FOR IDENTIFICATION PURPOSES IN LOCATIONS WHERE STAKING WILL NOT

		AMENDMEN	TS	
No.	DATE	DESCRIPTIO	N	APP'E
AMEN NO.	NDMENT	MINISTRY OF NATURAL RESOURCES & FORESTRY DATE:	JEFFREY A. ROLLINGS DATE:	
East West Pi	E Gara Updates / ts October 2019.dwg	UPON WHICH MY LICENCE IS BASED. GREENWOOD CONSTRUCTION COMPANY LIMITED PER: DATE:	THE AGGREGATE RESOURCES ACT FOR A CLASS A LICENCE, CATEGORY	
DRAWN: APPROVE		I ACKNOWLEDGE AND SHALL CARRY ON MY OPERATION IN ACCORDANCE WITH THE SITE PLAN	THIS SITE PLAN IS PREPARED	LINDER



ROLLINGS HYLAND CONSULTING
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SCHEDULE B

LEGEND

BOUNDARY OF AREA TO BE LICENSED AREA TO BE

EXCAVATED SETBACKS, METRES **EXISTING CONTOURS EXISTING SPOT**

ELEVATIONS EXISTING TREE COVER EXISTING FENCES

TYPICAL SECTION

LOCATIONS

MAY 2007 **TEST PIT LOCATION & NUMBER** MONITORING WELL / BOREHOLE LOCATION & NUMBER

SURFACE DRAINAGE DIRECTION ROAD WIDENING AND

Page 1 of 4

EXISTING FEATURES

Greenwood

EAST PIT

E 1/2 LOT 1, CONCESSION 18

TOWNSHIP OF EAST GARAFRAXA

DUFFERIN COUNTY

SIGHT TRIANGLE

1:100,000

TOPOGRAPHIC BASE MAPPING DERIVED FROM 2006 AIRPHOTO AS PREPARED BY FIRST BASE SOLUTIONS INC. MAPPING SUPPLEMENTED WITH ADDITIONAL INFORMATION FROM LOCAL PLANNING DOCUMENTS. CONTOUR INTERVAL

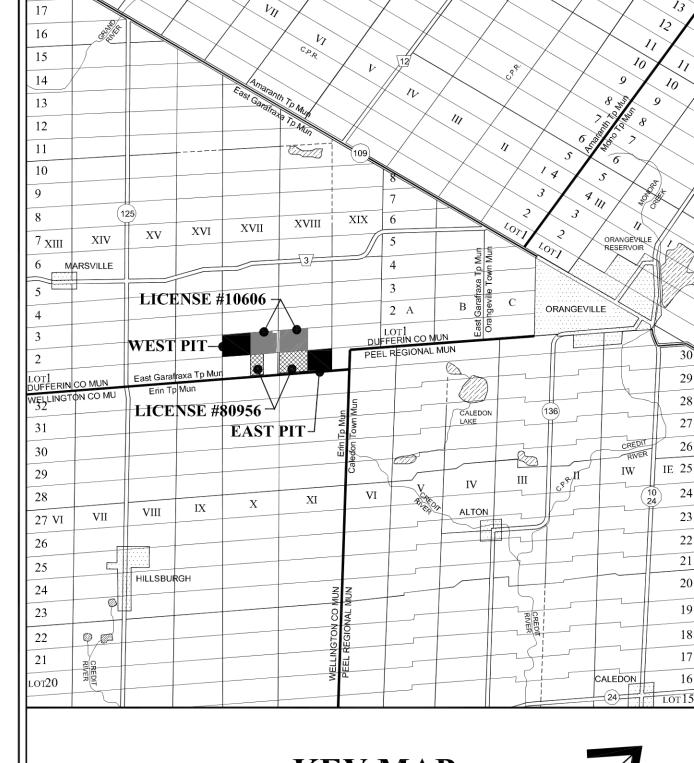
NOTES

- THE GROUNDWATER TABLE VARIES FROM ELEVATION 477.2 IN THE NORTHEAST TO ELEVATION 472.2 IN THE SOUTHWEST
- NO STOCKPILES OF TOPSOIL/OVERBURDEN, OR AGGREGATE INCLUDING RECYCLABLE MATERIALS, NO SCRAP AND NO FUEL STORAGE AREA EXIST ONSITE.

REFERENCES

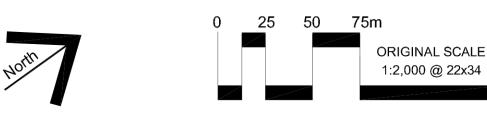
- "STAGE I-II ARCHAEOLOGICAL/HERITAGE ASSESSMENT OF THE PROPOSED GREENWOOD CONSTRUCTION EAST PIT" BY YORK NORTH ARCHAEOLOGICAL SERVICES INC., DECEMBER
- ARCHAEOLOGICAL CLEARANCE LETTER, ONTARIO MINISTRY OF TOURISM AND CULTURE, MARCH 2010
- "AN ASSESSMENT OF THE POTENTIAL NOISE ASSOCIATED WITH AGGREGATE EXTRACTION AND PROCESSING AT THE PROPOSED EAST AND WEST PITS" BY AERCOUSTICS ENGINEERING LTD., MARCH, 2012 AND UPDATE 08 JULY 2014.
- LEVEL I HYDROGEOLOGICAL INVESTIGATION GREENWOOD CONSTRUCTION EAST PIT" BY MTE CONSULTANTS INC., APRIL, 2010
- "NATURAL ENVIRONMENT LEVELS 1 AND 2 REPORT AND ENVIRONMENTAL IMPACT STATEMENT" BY ROBIN E. CRAIG, B.Sc., M.Sc., MARCH 2011, AMENDMENT AND BOBLINK REPORT, JULY 22 and NOVEMBER 18, 2014.
- DUST ASSESSMENT BY RWDI CONSULTING ENGINEERS AND SCIENTISTS, 28 MAY 2014 AND CORRESPONDENCE 05 SEPTEMBER 2014.
- TOWNSHIP OF EAST GARAFRAXA ZONING BY-LAW 60-2004.
- "AGGREGATE RESOURCES INVENTORY PAPER 163 REVISED" BY THE ONTARIO GEOLOGICAL SURVEY, 2009
- "VISUAL IMPACT ASSESSMENT" BY ECOVUE CONSULTING SERVICES INC., JULY 2012
- 0. "SOIL TEST REPORT" BY GREENWOOD CONSTRUCTION COMPANY LIMITED, MAY 2007
- 1. LICENSE BOUNDARY AT WETLAND AND WATERCOURSE AS STAKED BY CREDIT VALLEY CONSERVATION AND SURVEYED BY VAN HARTEN SURVEYING INC.
- . THREE METRE ROAD WIDENING FROM PLAN OF SURVEY BY VAN HARTEN SURVEYING INC. JANUARY 21, 2019.

VERTICAL EXAGERATION 2X

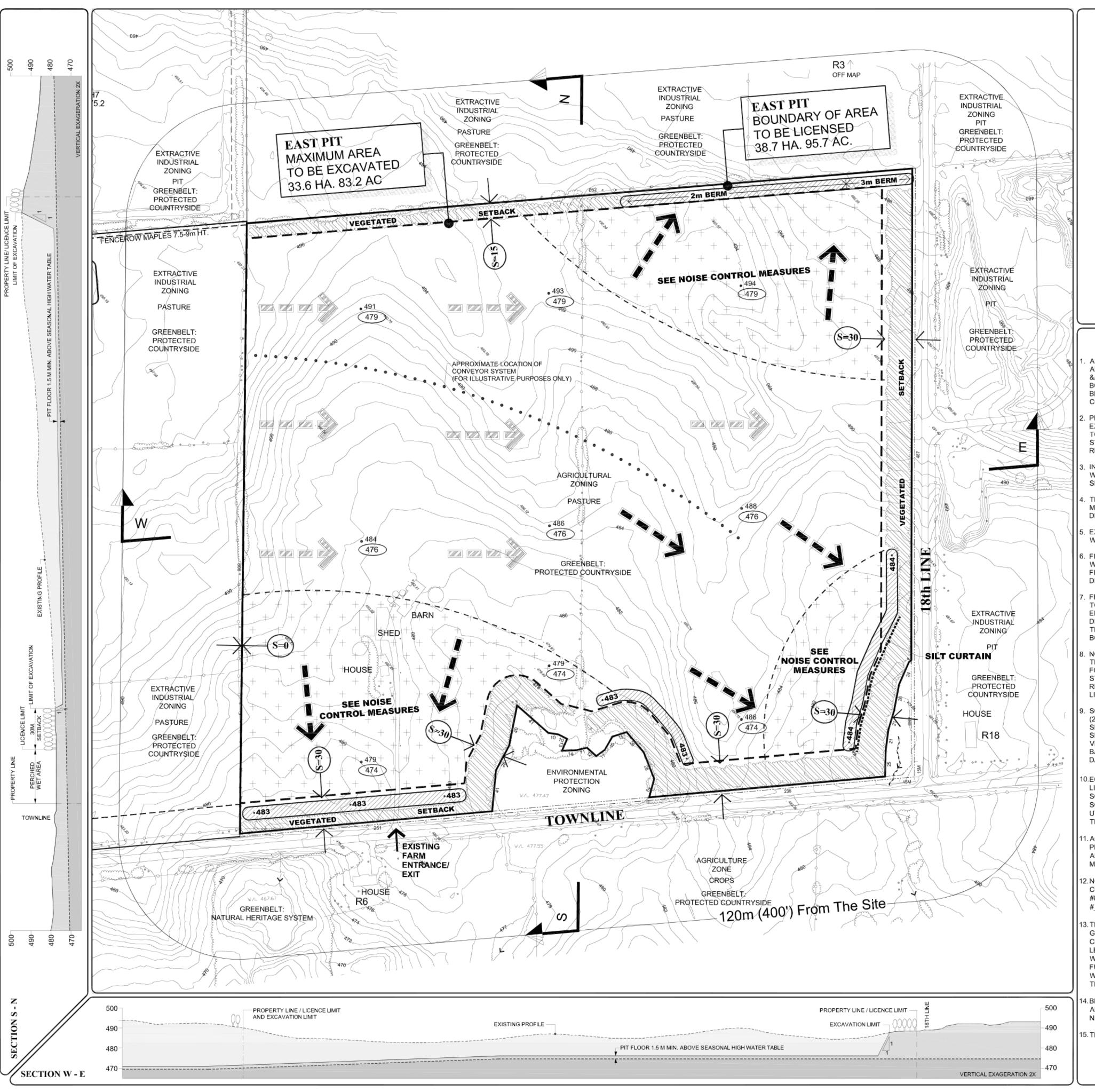


KEY MAP

DRAWN: J.A.R. I ACKNOWLEDGE AND SHALL CARRY ON MY APPROVED: S.G. OPERATION IN ACCORDANCE WITH THE SITE PLAN THIS SITE PLAN IS PREPARED UNDER UPON WHICH MY LICENCE IS BASED. THE AGGREGATE RESOURCES ACT GREENWOOD CONSTRUCTION COMPANY LIMITED FOR A CLASS A LICENCE, CATEGORY 3 East West Pits October 2019.dwg PLOTTED: OCT. 06 2019 SITE PLANS APPROVED BY: AMENDMEN³ JEFFREY A. ROLLINGS MINISTRY OF NATURAL RESOURCES & FORESTRY DESCRIPTION APP'D No. DATE **AMENDMENTS**



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BOUNDARY OF AREA TO BE LICENSED

AREA TO BE EXCAVATED SETBACKS, METRES

EXISTING CONTOURS

EXISTING SPOT ELEVATIONS

EXISTING TREE COVER

TYPICAL SECTION LOCATIONS

DIRECTION OF EXCAVATION, GENERAL

DIRECTION OF EXCAVATION, SPECIFIC

NOISE CONTROL ENVELOPE

PROPOSED SCREENING BERM •507

MIN. HEIGHT (m) ABOVE GRADE PROPOSED SCREENING BERM WHERE MIN. TOP ELEVATION (masl) REQUIRED

480

EXISTING ELEVATION

PROPOSED ELEVATION

NOTES

- AS EACH STAGE OF EXCAVATION IS OPENED, TOPSOIL & SUBSOIL &/OR STORAGE BERMS ON SETBACK OR ALONG EXCAVATION BOUNDARY AND PRESERVED FOR USE DURING REHABILITATION BERMS ON SETBACKS ALONG EXTERNAL ROADWAYS WILL BE CONSTRUCTED AS FAR FROM ROADWAYS AS POSSIBLE.
- EXCAVATION OF EACH STAGE IS COMPLETED. WHERE POSSIBLE, TOPSOIL FOR REHABILITATING EACH STAGE SHOULD BE STRIPPED FROM SUCCEEDING STAGE AS PER THE AGRICULTURAL REHABILITATION SCHEMATIC
- INTERIM & FINAL SEEDING WILL BE IN A LEGUME-GRASS MIXTURE WITH MULCH IN ACCORDANCE WITH ONTARIO STANDARD SPECIFICATION OPSS 804 OR EQUAL.
- THE OPERATION SEQUENCE MAY VARY DUE TO QUALITY OF MATERIAL, SITE HYDROLOGY/HYDROGEOLOGY OR MARKET
- EXCAVATION WILL PROCEED IN LIFTS OF 10 M (33 FT.) OR LESS. WITH BENCHING IF REQUIRED.
- FINAL SITE DRAINAGE WILL BE BY INFILTRATION. IN SURFACE WATER RECHARGE AREAS. REFER TO PAGE 3, PROGRESSIVE AND FINAL REHABILITATION PLAN. THERE WILL BE NO WATER DIVERSION OR POINTS OF DISCHARGE FROM THE SITE.
- TOGETHER WITH LOCKING HEAVY DUTY FARM TYPE GATES AT ALL ENTRANCES. INSTALLATION TO OCCUR PRIOR TO ANY SITE DISTURBANCE, FENCE WILL BE ERECTED ON THE BOUNDARY OF THE LICENSED AREA. NO FENCES ARE REQUIRED ALONG BOUNDARIES ADJACENT TO LICENSED PITS.
- . NO SCRAP WILL BE STORED WITHIN THE SITE EXCEPT ON A TEMPORARY BASIS. TREES AND STUMPS SHALL BE UTILIZED AS FOLLOWS: MARKETABLE WOOD SHALL BE SALVAGED FOR SALE. STUMPS AND BRUSH SHALL BE USED FOR SHORELINE REHABILITATION ENHANCEMENT ON THE ADJACENT, EXISTING LICENSED PIT PONDS.
- SCREENING & STORAGE BERMS ARE TO BE COVERED WITH 50 MM (2") MINIMUM TOPSOIL, GRADED TO SLOPES OF 3:1 OR FLATTER, SEEDED AND MAINTAINED. BERMS MAY BE LOCATED ON SETBACKS AND WITHIN EXCAVATION AREA. MAINTAIN VEGETATION ON BERMS, SETBACKS & SLOPES ON A REGULAR BASIS. REMOVE AND REPLACE ANY AREAS WHICH BECOME DAMAGED OR DISEASED AS SOON AS FEASIBLE.
- DEQUIPMENT OPERATING IN THE PIT MAY INCLUDE, BUT IS NOT LIMITED TO, BULLDOZERS, LOADERS, TRUCKS, CRUSHERS, SCREENERS, CONVEYORS & POWER PLANTS, ETC. THE EXISTING SCALE & SCALE HOUSE FOR THE EXISTING LICENSED PIT WILL BE UTILIZED. NO BUILDINGS OR STRUCTURES WILL BE ERECTED ON
- AGGREGATE STOCKPLES (MAX. HEIGHT 10 METRES) WILL PRIMARILY BE LOCATED IN THE PROCESSING AREA ON THE ADJACENT LICENSED SITE, HOWEVER TEMPORARY STOCKPILES MAY BE LOCATED WITHIN THE EXCAVATION AREA AS REQUIRED.
- 2.NO NORE THAN 2,000,000 TONNES OF AGGREGATE SHALL BE CUMULATIVELY REMOVED FROM LICENCE #10606, LICENCE #80956, LICENCE # WEST PIT, AND LICENCE EAST PIT IN ANY CALENDAR YEAR.
- B. THE MAXIMUM DEPTH OF EXTRACTION WILL BE 1.5M ABOVE THE GROUNDWATER TABLE. GROUNDWATER ELEVATIONS ARE TO BE CHECKED PRIOR TO REACHING THE PROPOSED PIT FLOOR LEVEL. THE HIGHEST GROUNDWATER ELEVATION RECORDED WAS IN SPRING 2009 (MTE, 2010). IF FOR ANY REASON IN THE FUTURE THE GROUNDWATER ELEVATION RISES, THE OPERATOR WILL ENSURE THE PIT FLOOR REMAINS AT LEAST 1.5M ABOVE THE GROUNDWATER TABLE.
- BEFORE ANY BUILDINGS OR STRUCTURES ON THE PROPERTY ARE REMOVED, A SURVEY FOR THE PRESENCE/ABSENCE OF NESTING OF THREATENED SPECIES WILL BE DONE.
- 5. THE MAXIMUM DISTURBED AREA SHALL BE 20.0 HA (49.4 AC.)

FOR ADDITIONAL GENERAL OPERATIONAL NOTES, HYDROGEOLOGY NOTES, NATURAL ENVIRONMENT MITIGATION NOTES, SPILL CONTINGENCY PLAN AND VARIATIONS FROM THE OPERATIONAL STANDARDS, SEE PAGE 4.



EAST PIT

E 1/2 LOT 1, CONCESSION 18 TOWNSHIP OF EAST GARAFRAXA **DUFFERIN COUNTY**

Page 2 of 4 **OPERATIONS**

NOISE CONTROL MEASURES

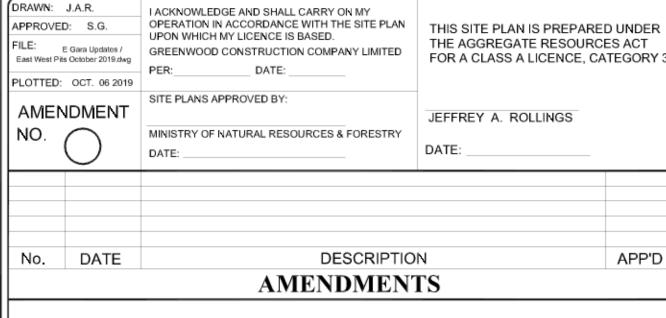
THE EXTRACTION AND PROCESSING EQUIPMENT OPERATING IN THE EAST PIT SHALL BE LIMITED RECEPTORS R6 AND R18 AS INDICATED ON THE FIGURE. THE QUIET CRUSHER ORIENTATION SHALL BE MAINTAINED WITH RESPECT TO THESE RECEPTORS. THE CRUSHER IS CONSIDERED TO BE IN A QUIET ORIENTATION WHEN THE RECEPTOR HAS NO DIRECT EXPOSURE TO THE SIDE OF THE CRUSHER CONTAINING THE ENGINE COOLING FAN.

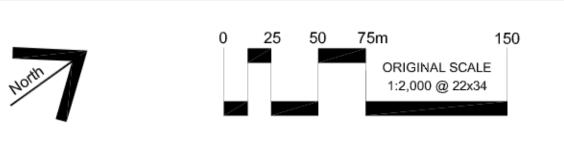
EQUIPMENT

PRIMARY CRUSHER (PORTABLE) - LOUD ORIENTATION PRIMARY CRUSHER (PORTABLE) - QUIET ORIENTATION ONE HOUR LEQ @ 20 METRES

OPERATIONS IN THE PIT SHALL BE RESTRICTED TO WEEKDAY DAYTIME HOURS (07:00-19:00)

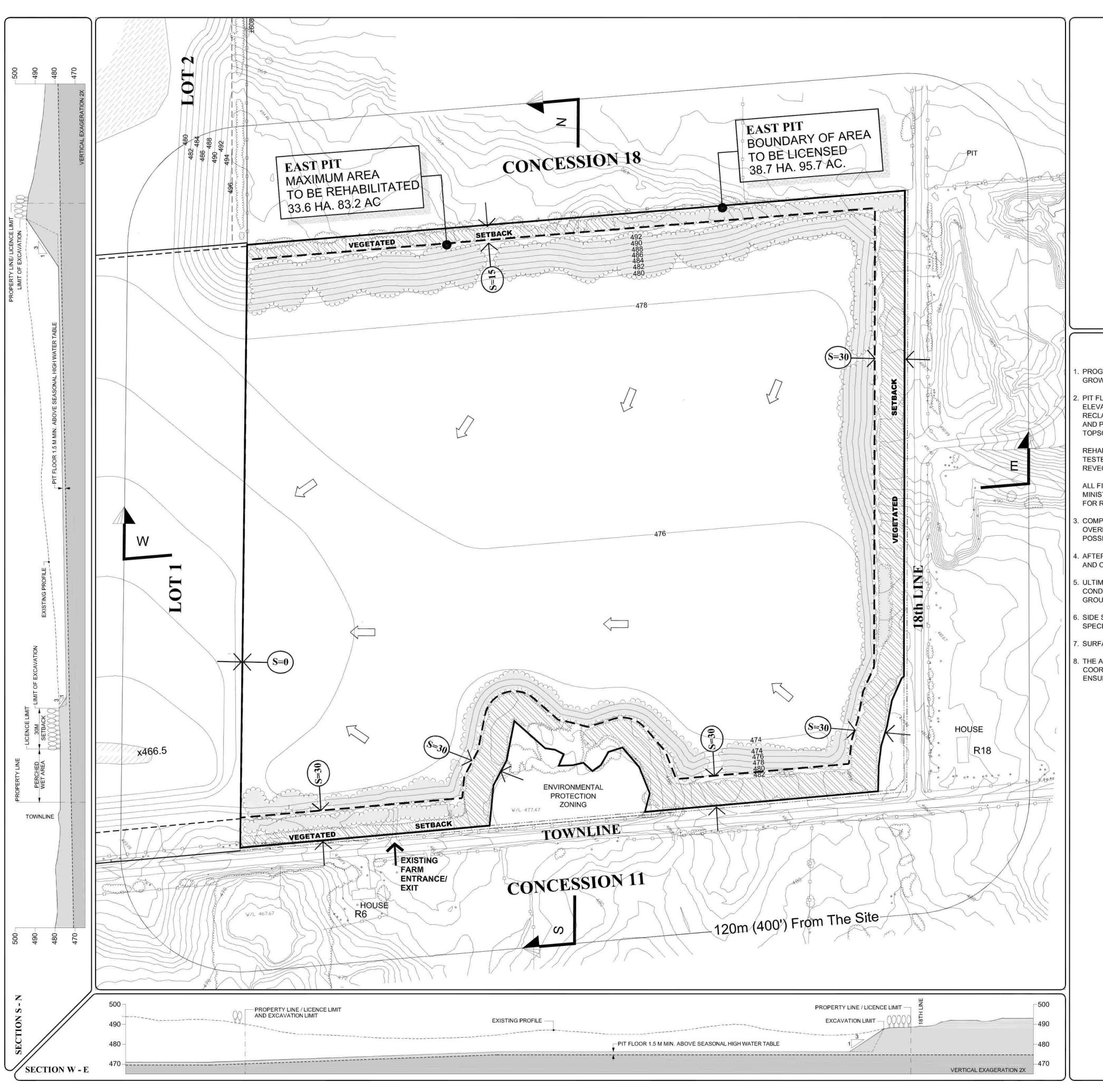
- DEPTH OF THE RESOURCE MAKES THIS POSSIBLE. WHERE THERE IS NOT SUFFICIENT DEPOSIT TO MEET THE MINIMUM 7 M FACE HEIGHT REQUIREMENT, THE LIFTS SHALL BE EXTRACTED IN CLOSE
- PIT, EXTRACTION TOWARDS RECEPTOR R3 IS NOT REQUIRED IF THE RESIDENCE IS VACANT. IF EXTRACTION TOWARDS RECEPTOR R3 IS REQUIRED IN THIS AREA, THIS AREA SHALL BE EXTRACTED PRIOR TO EXTRACTION IN THE EAST CORNER OF THE PIT WITHIN 300 M OF RECEPTOR R18.
- THE SOUND EMISSIONS OF ALL CONSTRUCTION EQUIPMENT INVOLVED IN SITE PREPARATION AND REHABILITATION ACTIVITIES SHALL COMPLY WITH THE SOUND LEVEL LIMITS SPECIFIED IN MOE PUBLICATION NPC-115 "CONSTRUCTION EQUIPMENT".
- ANY PROPOSED CHANGES TO THE ASPECTS OF THE EXTRACTION AND PROCESSING OPERATIONS DEALT WITH ABOVE AS RELATING TO NOISE CONTROL SHALL BE REVIEWED BY A QUALIFIED ACOUSTICAL CONSULTANT FOR COMPLIANCE WITH THE RELEVANT NOISE CRITERIA.
- THE LICENSEE WILL INSTITUTE A COMPLAINT PROCEDURE. AS PART OF THIS PROCEDURE COMPLAINANTS WILL BE REQUESTED TO IDENTIFY THE LOCATION OF THE INCIDENT, AS WELL AS THE TIME OF DAY THAT THE INCIDENT OCCURRED AND ANY OTHER INFORMATION THAT THEY FEEL IS RELEVANT. THE LICENSEE WILL KEEP A COMPLAINTS LOG BOOK CONTAINING A RECORD OF ALL COMPLAINTS AS WELL AS ALL COMPLAINT RESPONSES, WHICH LOG BOOK SHALL BE ACCESSIBLE TO THE MNR AND TOWNSHIP ON REQUEST.







ROLLINGS HYLAND CONSULTING Orangeville, Ontario info@rollingshyland.com 519.942.1961



BOUNDARY OF AREA TO BE LICENSED AREA TO BE **EXCAVATED EXISTING FENCES**

SETBACKS, METRES **EXISTING TREE COVER** TYPICAL SECTION LOCATIONS

REHABILITATION CONTOURS

PROPOSED SURFACE DRAINAGE



EAST PIT

E 1/2 LOT 1, CONCESSION 18 TOWNSHIP OF EAST GARAFRAXA **DUFFERIN COUNTY**

Page 3 of 4

PROGRESSIVE AND FINAL REHABILITATION

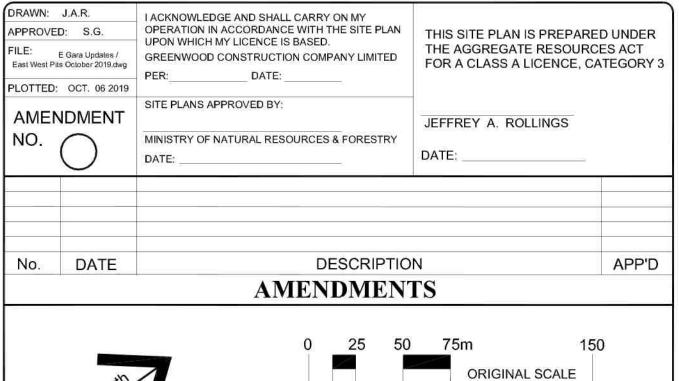
NOTES

- PROGRESSIVE REHABILITATION TO OCCUR WITHIN ONE FULL

REVEGETATION REQUIREMENTS.

- ALL FIELD AREAS TO BE REHABILITATED IN ACCORDANCE WITH MINISTRY OF NATURAL RESOURCES AND FORESTRY GUIDELINES FOR REHABILITATION TO AN AGRICULTURAL AFTER USE.
- AFTER USE OF THE PROPOSED LICENSE AREA IS AGRICULTURAL AND OPEN SPACE CONSERVATION
- ULTIMATE CONTOURS MAY VARY AS A RESULT OF ACTUAL SITE CONDITIONS, UNSUITABLE GRANULAR MATERIAL AND GROUNDWATER LEVELS.
- S. SIDE SLOPES TO BE PERMITTED TO RE-VEGETATE WITH WOODY
- SURFACE DRAINAGE WILL BE BY INFILTRATION INTO THE GROUND.
- . THE AGRICULTURAL REHABILITATION PROGRAM WILL BE COORDINATED WITH THE ABUTTING LICENSED PROPERTY TO ENSURE A UNIFORM SURFACE THAT CAN BE CULTIVATED.

EDGE STANDARDS FENCE ON PROPERTY LINE/ **EXCAVATION** OVERBURDEN STORAGE/ SCREENING BERM 3:1 OR FLATTER SIDE SLOPES **EXCAVATION FACE** REHABILITATION BACKFILL EXCAVATION SLOPE WITH OVERBURDEN FROM STOCKPILE IN SETBACK FORM SMOOTH AFTER USE TRANSITION VEGETATED 3:1 SLOPE FINAL SURFACE AGRICULTURAL WATERTABLE





1:2,000 @ 22x34

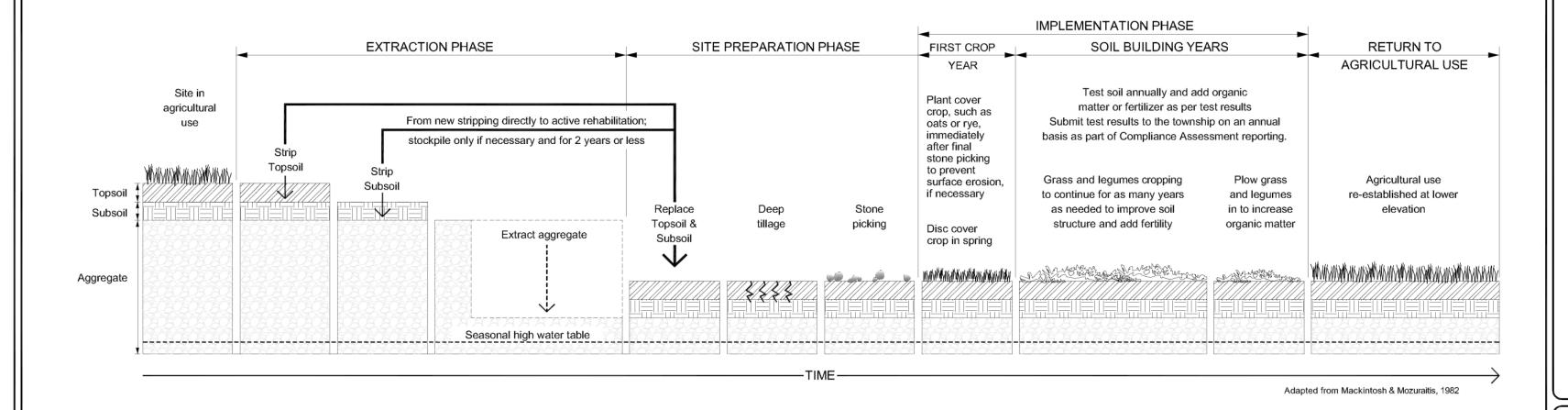
GENERAL OPERATIONAL NOTES, **CONTINUED FROM PAGE 2**

- 16. NO IMPORTATION OF CONCRETE OR ASPHALT FOR RE-PROCESSING.
- 17. THE CONVEYOR AS SHOWN IS SCHEMATIC. THE ACTUAL LOCATION WILL BE DETERMINED DEPENDING ON THE MATERIAL REQUIREMENTS AND WILL FOLLOW THE OPERATION SEQUENCE. WHILE CONVEYORS WILL BE THE MEANS OF INTERNAL MATERIAL TRANSPORT, THERE MAY BE UPSET OR REPAIR CONDITIONS OF THE CONVEYOR SYSTEM WHERE TEMPORARY USE OF TRUCKS FOR CONVEYANCE ON SAME GENERAL ROUTE MAY
- 18. REMOVAL OF OVERBURDEN TYPICALLY OCCURS TWICE PER YEAR: ONCE DURING LATE FALL OR EARLY SPRING, AND A SECOND TIME DURING LATE SUMMER. THE DURATION OF THE ACTIVITY IS 1-2 WEEKS. THE ACTUAL TIMING AND DURATION MAY VARY SOMEWHAT.
- 19. PRIOR TO ANY LAND CLEARING:
- A) FIELD SURVEYS WILL BE UNDERTAKEN BY A QUALIFIED PROFESSIONAL TO INVENTORY FOR SPECIES AT RISK IN AREAS TO BE CLEARED
- B) THE RESULTS OF THE SURVEY(S) WILL BE FORWARDED TO THE MNRF AND THE TOWNSHIP AS PART OF THE ANNUAL COMPLIANCE ASSESSMENT REPORT
- C) APPROVALS SHALL BE OBTAINED UNDER THE ENDANGERED SPECIES ACT AND/OR AMENDMENTS MADE TO THE SITE PLAN AS NECESSARY.
- D) NO LAND CLEARING WILL OCCUR ON NATURALLY REGENERATING AREAS EXCLUDING ACTIVELY CULTIVATED LANDS BETWEEN APRIL 1 AND JULY 15 IN ANY GIVEN YEAR.
- 20. IMPLEMENT TECHNICAL RECOMMENDATIONS OF THE BEST MANAGEMENT PLAN FOR DUST CONTROL BY RWDI, JULY 7, 2016. A LOG OF DAILY SITE INSPECTIONS SHALL BE MAINTAINED AS PER THE BMP AND A COPY OF THE LOG SHALL BE PROVIDED TO THE TOWNSHIP ON REQUEST.
- 21. NO PERMANENT FUEL STORAGE AREA IS PERMITTED.
- 22. NO IMPORTATION OF FILL WILL BE PERMITTED WITHOUT TOWNSHIP APPROVAL
- 23. THE LICENSEE SHALL USE BROADBAND BACKUP ALARM SYSTEMS OR SIMILAR TECHNOLOGY AS OPPOSED TO BACK UP BEEPERS - SUBJECT TO MINISTRY OF LABOUR APPROVAL, FOR ALL LOADERS AND ANY OTHER EQUIPMENT WITHIN LICENSES #10606, #80956, EAST PIT AND WEST PIT.
- 24. A WASH PLANT IS PROHIBITED WITHOUT TOWNSHIP APPROVAL AND REQUIRED PERMITS.
- 25. NATIVE CONIFEROUS TREES WILL BE PLANTED ALONG THE 18TH LINE TO THE SATISFACTION OF THE TOWNSHIP.

ARCHAEOLOGY

I. SHOULD DEEPLY BURIED ARCHAEOLOGICAL/HERITAGE REMAINS BE FOUND ON THE PROPERTY DURING SITE PREPARATION AND/OR EXTRACTION ACTIVITIES, MOC SHOULD BE NOTIFIED IMMEDIATELY. IN THE EVENT THAT HUMAN REMAINS ARE ENCOUNTERED DURING SITE PREPARATION AND/OR EXTRACTION ACTIVITIES ASSOCIATED WITH THE PROPOSED DEVELOPMENT OF THE STUDY AREA, THE PROJECT PROPONENT, GREENWOOD CONSTRUCTION COMPANY LIMITED, SHOULD IMMEDIATELY CONTACT BOTH MOC AND THE REGISTRAR OR DEPUTY REGISTRAR OF THE CEMETERIES REGULATION UNIT OF THE MINISTRY OF CONSUMER AND COMMERCIAL RELATIONS AT 416-326-9382.

AGRICULTURAL REHABILITATION SEQUENCE



DUST CONTROL MEASURES

- . OPERATIONS WITHIN THE NOISE CONTROL ENVELOPES SHOWN ON THE SITE PLANS SHOULD BE SUSPENDED WHEN MOISTURE LEVELS IN THE MATERIAL BEING HANDLED ARE LOW (I.E., WHEN MATERIAL HANDLING GENERATES VISIBLE DUST OR IS EXPECTED TO GENERATE VISIBLE DUST) AND THE WIND IS DIRECTED TOWARD THE RELEVANT RESIDENCE AT SPEEDS ABOVE 30 KM/HR (REFERENCED TO 10M HEIGHT). FOR CLARITY, WIND SPEED MEASUREMENTS WILL NOT BE TAKEN ON SITE BUT CAN BE OBTAINED FROM LOCAL WEATHER REPORTING. THIS APPLIES TO EXTRACTION, OVERBURDEN STRIPPING, BERM CONSTRUCTION AND REHABILITATION ACTIVITY
- 2. DIESEL ENGINES ON THE CRUSHER, LOADER AND SCRAPERS USED WITHIN THE PROPOSED NOISE CONTROL ENVELOPES SHOULD CONFORM TO EMISSION LIMITS FOR 2012 AND LATER MODEL YEARS.
- 3. VISUAL INSPECTION FOR DUSTY CONDITIONS SHOULD OCCUR AT A MINIMUM OF TWICE DAILY DURING DRY WEATHER AND ONCE PER DAY OTHERWISE. DURING DRY WEATHER THE OPERATOR SHALL APPLY WATER AS REQUIRED TO ENSURE THE SURFACE REMAINS WET
- TRAVEL SPEEDS FOR SCRAPERS, LOADERS AND ANY OTHER EQUIPMENT OPERATING WITHIN THE EAST OR WEST PIT SHOULD BE KEPT AS LOW AS POSSIBLE, BUT AT NO TIME SHALL EXCEED A MAXIMUM SPEED OF 35 KM/HR.
- WEATHER FORECASTS SHOULD BE CHECKED DAILY, PARTICULARLY WHEN OPERATING IN THE NOISE CONTROL ENVELOPES. TO PLAN FOR NEXT-DAY OPERATIONS AND WATERING NEEDS.
- THERE SHOULD BE A MAINTENANCE/INSPECTION SCHEDULE FOR THE WATER TRUCK AND WATER SPRAY SYSTEM ON THE CRUSHING PLANT, TO ENSURE THAT THE DUST SUPPRESSION EQUIPMENT ARE FULLY OPERATIONAL WHEN NEEDED.
- 7. THE FACILITY SHOULD KEEP A RECORD OF HOW AND WHEN DUST CONTROL MEASURES ARE IMPLEMENTED.
- 8. DOCUMENT COMPLAINTS, INCLUDING OPERATIONS IN THE PIT AND WEATHER CONDITIONS, AS PER COMPLAINTS PROCEDURE IN NOISE NOTE 8. PAGE 2. INSPECT TO IDENTIFY THE SOURCE OF THE PROBLEM. IF POSSIBLE. IF ANY DEFICIENCY IS FOUND WITH THE IMPLEMENTATION OF THESE DUST RECOMMENDATIONS, IT SHOULD BE CORRECTED IMMEDIATELY. A COPY OF THE LOG OF COMPLAINTS SHALL BE PROVIDED TO THE TOWNSHIP AND/OR COUNTY UPON REQUEST.
- 9. DUST RECOMMENDATIONS LISTED HERE SERVE AS A STANDARD OPERATING PROCEDURE OR AIR QUALITY MANAGEMENT PLAN FOR THE SITE. THEY SHOULD BE KEPT ON FILE AND USED FOR STAFF TRAINING AND GUIDANCE.

SPILL CONTINGENCY PLAN

(APPLIES UNIFORMLY TO ALL GREENWOOD OPERATIONS)

- 1. IN CASE OF ACCIDENTAL SPILL OF PETROLEUM PRODUCTS, THE FOLLOWING CONTINGENCY PLAN WILL BE
- A) THE MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE AND SURROUNDING LANDOWNERS WILL BE NOTIFIED.
- B) FOR A LEAKAGE, IMMEDIATE ACTION WILL BE TAKEN TO STOP IT. AT THE SAME TIME, MEASURES WILL BE TAKEN TO PREVENT THE SPREAD OF THE LEAK (I.E., CONSTRUCTION OF A BERM, DIGGING OF A DITCH). IF IT IS A SPILL, SIMILAR MEASURES AS MENTIONED FOR PREVENTING THE SPREAD OF A LEAK WILL BE TAKEN.
- C) GREENWOOD CONSTRUCTION CO LTD. WILL COMMENCE RECOVERY PROCEDURE BY PUMPING THE SPILLED LIQUID INTO CONTAINERS. THE SPILLED LIQUID MAY HAVE TO BE RECOVERED FROM AN OPEN WATER BODY OR LAND OR FROM BOTH. FOR A SPILL CONTAINED IN AN OPEN WATER BODY, RECOVERY MAY REQUIRE PUMPING OR SKIMMING OR BOTH.
- D) THE SOIL IN THE AREA AFFECTED BY THE SPILL OR LEAK WILL BE REMOVED.
- E) THE CONTAMINATED SOIL, THE RECOVERED SPILL AND WATER WILL BE DISPOSED OF BY GREENWOOD CONSTRUCTION CO. LTD. AT LOCATIONS PRESCRIBED BY THE MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE.
- 2. THE FOLLOWING WILL BE AVAILABLE AT THE SITE:
- i) A SKIMMING DEVICE (WHERE OPEN WATER EXISTS)
- ii) A DIESEL PUMP
- iii) PORTABLE CONTAINERS
- 3. LIQUID PETROLEUM PRODUCTS WILL NOT BE STORED ONSITE.

- 4. TEMPORARY FUEL STORAGE WILL BE INSPECTED FOR LEAKS ON A WEEKLY BASIS.
- 5. DURING THE FUELING OF EQUIPMENT, THE AREA IN QUESTION WILL BE INSPECTED FOR LEAKS AND SPILLS.
- 6. IF A SPILL VOLUME OF 5 LITRES OR MORE, THE SPILLS ACTION CENTRE ESTABLISHED BY THE M.O.E.C.C. 1-800-268-6060 WILL BE CONTACTED IMMEDIATELY.
- 7. THE LICENSEE SHALL TAKE REASONABLE MEASURES TO STOP OR CONTROL THE SPILL.
- 8. A QUALIFIED PERSON SHALL INSPECT THE SPILL SITE AND COMPLETE A GENERAL ASSESSMENT OF THE AREA AFFECTED.
- 9. THE LICENSEE SHALL IMPLEMENT REMEDIAL MEASURES RECOMMENDED BY THE QUALIFIED PERSON AND/OR THE
- 10. A WRITTEN REPORT OF THE INCIDENT WILL BE PREPARED AND SUBMITTED TO THE M.O.E.C.C., TOWNSHIP AND M.N.R.F.

NATURAL ENVIRONMENT **MITIGATION**

THE FOLLOWING MITIGATION WILL PROTECT NATURAL FEATURES ON AND OFF SITE OF THE GREENWOOD EAST PIT;

- HAVE BEEN ESTABLISHED AND CLEARLY MARKED.
- CREDIT VALLEY CONSERVATION, AND SURVEYED BY VAN HARTEN SURVEYORS.
- GRASS/LEGUME MIX TO STABILIZE SOILS. (SEE EXAMPLE THIS PAGE)
- BY REMOVING AGRICULTURAL DISTURBANCE FROM THE 30 M SETBACK LANDS. THE SETBACK WILL ALSO BE ALLOWED TO RE-VEGETATE NATURALLY WITH NATIVE SPECIES FROM THE ADJACENT WETLANDS.
- PLANT THE CENTRAL WETLAND SETBACK LANDS WITH NATIVE TREES SUCH AS EASTERN WHITE CEDAR.
- THE BERM LOCATED NEXT TO THE WETLAND IN THE SOUTH EAST CORNER OF THE SITE WILL BE SLOPED TO NO MORE THAN 3:1 ADJACENT TO THE WETLAND SIDE. THE BERM WILL BE SEEDED TO PREVENT EROSION. NO TREE PLANTING WILL TAKE PLACE ON THE BERM OR IN THE WETLAND TO KEEP SIGHT LINES OPEN AT THE INTERSECTION. A SILT CURTAIN WILL BE PLACED AT THE TOE OF THE BERM TO PREVENT UNDESIRABLE MATERIAL FROM ENTERING THE WETLAND. THE SILT CURTAIN WILL BE CHECKED AND MAINTAINED AS REQUIRED.
- PLANT THE NORTH, EAST AND SOUTH BOUNDARY SETBACKS WITH GRASSES/LEGUME MIX ONLY. DO NOT PLANT TREES IN THESE SETBACK AREAS. SEED MIX: CREEPING RED FESCUE 55 %, PERENNIAL RYE, 15% KENTUCKY BLUE
- NO TREES WILL BE PLANTED ON THE BERMS OR WITHIN THE 3 METRE SETBACK BETWEEN THE BERMS AND THE PROPERTY LINE ALONG ROADWAYS.
- 9. ALL PLANTING WILL BE PLANNED AND IMPLEMENTED BY QUALIFIED PROFESSIONALS.
- 10. ALL PLANTINGS WILL BE MONITORED BY A QUALIFIED PROFESSIONAL FOR 5 YEARS AND PLANTINGS THAT DIE WILL
- 13. PREPARE, IMPLEMENT AND ENFORCE A SPILLS RESPONSE PLAN TO PROTECT WATER QUALITY (SEE NOTE ON
- 1.5 M SEPARATION IS MAINTAINED BETWEEN THE WATER TABLE AND THE EXTRACTION OPERATION.

- THE WETLANDS HAVE BEEN EXCLUDED FROM THE LICENCE AREA AND 30 M SETBACKS FROM THEIR BOUNDARIES
- THE LICENSE BOUNDARIES AS SHOWN IN THE VICINITY OF THE WETLAND AREAS WERE STAKED IN THE FIELD BY
- INITIALLY WETLAND SETBACK LANDS WILL BE VEGETATED WITH A NATIVE MEADOW MIXTURE (IF AVAILABLE) OR

- GRASS 27%, WHITE CLOVER 3%.
- BE REPLACED WITHIN 1 GROWING SEASON.
- 11. MAINTAIN ALL EQUIPMENT AND STORE FUEL OFFSITE.
- RE-FUEL EQUIPMENT FROM A MOBILE SOURCE BROUGHT TO THE SITE WHEN REQUIRED.
- PAGE 4)
- 14. CEASE EXTRACTION IF GROUNDWATER IS ENCOUNTERED AT AN UNEXPECTED LEVEL (NOT PERCHED WATER), AND ESTABLISH A REVISED PIT FLOOR ELEVATION.
- 15. BEGIN TEST PITTING TO PROBE FOR THE WATER TABLE WHEN THE PROPOSED PIT FLOOR IS REACHED TO ENSURE

NATIVE SEED MEADOW MIX

ONTARIO MEADOW MIX (MESIC) ANAPHALIS MARGARITACEA ANEMONE CANADENSIS ASCLEPIAS TUBEROSE ASTER ERICOIDES ASTER LAEVIS ASTER NOVAE-ANGLIAE ASTER PILOSUS BOUTELOUA CURTIPENDULA DESMODIUM CANADENSE ELYMUS CANADENSIS

HELANTHUM AUTUMNAL

LESPEDEZA CAPITATA

MONARDA FISTULOSA

PEARLY EVERLASTING TALL ANEMONE BUTTERFLY MILKWEED HEATH ASTER SMOOTH ASTER **NEW ENGLAND ASTER** HAIRY ASTER SIDE-OATS GRAMA SHOWY TICK-TREFOIL CANADA WILD RYE MARSH SNEEZEWEED ROUNDHEADED BUSHCLOVER

WILD BERGAMOT

OENOTHERA BIENNIS PANICUM VIRIGATUM PENSTEMON HIRSUTUS PYCNANTHEMUM VIRGINIANUM RITIBIDA PINNATA RUDBECKIA SEROTINA SCHIZACHYRIUM SCOPARIUM SOLIDAGO GRAMINIFOLIA SOLIDAGO NEMORALIS SOLIDAGO RIGIDA

EVENING PRIMROSE

HAIRY BEARDTONGUE

GREY CONEFLOWER

BLACK-EYED SUSAN

GREY GOLDENROD

STIFF GOLDENROD

LITTLE BLUESTEM

VIRGINIA MOUNTAIN MINT

LANCE-LEAVED GOLDENROD

SWITCH GRASS

SEEDING RATE: 8 KG/HA

Greenwood

EAST PIT

E 1/2 LOT 1, CONCESSION 18 TOWNSHIP OF EAST GARAFRAXA **DUFFERIN COUNTY**

Page 4 of 4 NOTES & **DETAILS**

HYDROGEOLOGY

THE GRAVEL PIT EXTRACTION MUST REMAIN 1.5 METRES ABOVE THE ESTABLISHED WATER TABLE AND WILL HAVE NO INTERACTION WITH WATER TABLE. SO THERE IS NO RISK OF AN INTERFERENCE WITH ANY EXISTING PRIVATE WELLS.

THE RIDGE THAT BISECTS THE SITE DIVIDES THE SITE INTO NORTH AND SOUTH HALVES. THE GROUNDWATER ELEVATION IN THE NORTHERN HALF IS ESTABLISHED THROUGH GROUNDWATER ELEVATIONS AT WELL MW9-09 AT 477.2MAMSL. THE GROUNDWATER ELEVATION IN THE SOUTHERN HALF IS ESTABLISHED AT WELL MW10-09 AT 472.2MAMSL. IT IS RECOMMENDED THAT THE PROPOSED PIT FLOOR BE GRADED BETWEEN 478.7MAMSL IN THE NORTH TO 473.7MAMSL IN THE SOUTH SO THAT THE PIT FLOOR IS SLOPED FROM NORTH TO SOUTH. SHOULD GROUNDWATER (OTHER THAN PERCHED WATER) BE ENCOUNTERED AT AN UNEXPECTED ELEVATION, THEN EXCAVATION ACTIVITIES SHOULD CEASE UNTIL A REVISED PIT FLOOR ELEVATION IS ESTABLISHED.

GROUNDWATER ELEVATIONS SHOULD BE CHECKED PRIOR TO REACHING PROPOSED PIT FLOOR LEVELS. ONCE THE CURRENTLY RECOMMENDED PIT FLOOR ELEVATION IS REACHED. FURTHER EXTRACTION SHOULD BE PRECEDED BY TEST PITTING TO PROBE FOR WATER TABLE TO ENSURE THAT THE 1.5 METRE SEPARATION DISTANCE IS MAINTAINED. INDICATIONS OF THE WATER TABLE WILL INCLUDE SATURATED CONDITIONS AND/OR A CHANGE IN THE COLOUR OF THE AGGREGATE FROM BROWN TO GREY. THE ELEVATION FOR A REVISED PIT FLOOR CAN BE DETERMINED FROM THIS TEST PITTING INVESTIGATION.

PROVIDE MONITORING RESULTS TO TOWNSHIP ON AN ANNUAL BASIS AS PART OF COMPLIANCE ASSESSMENT REPORTING.

A MINIMUM 30 METRE BUFFER WILL BE ESTABLISHED BETWEEN THE LIMIT OF EXTRACTION AND THE ON-SITE WETLAND BOUNDARY. THIS IS INTENDED TO ALLOW THE ON-SITE WETLAND TO MAINTAIN ITS EXISTING FUNCTIONS.

VARIATIONS FROM THE **OPERATIONAL STANDARDS**

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

FENCING OF ENTIRE LICENSED BOUNDARY NOT REQUIRED THROUGH AGREEMENT WITH LANDOWNER (PROPERTY OWNED BY LICENSEE).

ELIMINATION OF A PORTION OF THE SETBACK IS PERMITTED THROUGH AGREEMENT WITH LANDOWNER (PROPERTY OWNED BY LICENSEE)

> NOTE: UNFENCED LICENSED BOUNDARIES WILL BE STAKED FOR IDENTIFICATION PURPOSES IN LOCATIONS WHERE STAKING WILL NOT INTERFERE WITH THE ADJACENT LAND USES.

PRAWN: J.A.R.	I ACKNOWLEDGE AND SHALL CARRY ON MY		
APPROVED: S.G.	OPERATION IN ACCORDANCE WITH THE SITE PLAN UPON WHICH MY LICENCE IS BASED. GREENWOOD CONSTRUCTION COMPANY LIMITED PER: DATE:	THIS SITE PLAN IS PREPARED UNDER THE AGGREGATE RESOURCES ACT FOR A CLASS A LICENCE, CATEGORY 3	
East West Pits October 2019.dwg			
PLOTTED: OCT. 06 2019			
AMENDMENT NO.	MINISTRY OF NATURAL RESOURCES & FORESTRY DATE:	JEFFREY A. ROLLINGS DATE:	
No. DATE	DESCRIPTIO	N APP'D	
	AMENDMEN'	TS	



ROLLINGS HYLAND CONSULTING Orangeville, Ontario info@rollingshyland.com 519.942.1961