GEOLOGICAL INVESTIGATIONS

Aggregate Investigation
Corporation of the Town of Grand Valley Pit
Part Lot 32 Concession 2
Township of Southgate
Formerly Township of Proton
County of Grey

Box #122, 38 Alpine Drive, Moonstone, Ontario, L0K 1N0 Bus/Fax (705) 835-5636
E-mail: geologicalinvestigations@sympatico.ca

GEOLOGICAL INVESTIGATIONS

INTRODUCTION

Geological Investigations was retained by the Corporation of the Town of Grand Valley to evaluate the remaining aggregate resource on the subject property (see Figure 1).

The site is licensed (#4875) under the Aggregate Resources Act (ARA) by the Ontario Ministry of Natural Resources & Forestry.

The license covers 7.84 hectares and permits the extraction of no more than 100,000 tonnes of aggregate in any calendar year. The site plan approved under the ARA is included in Appendix 1

Extraction of aggregate within of the water table is permitted.

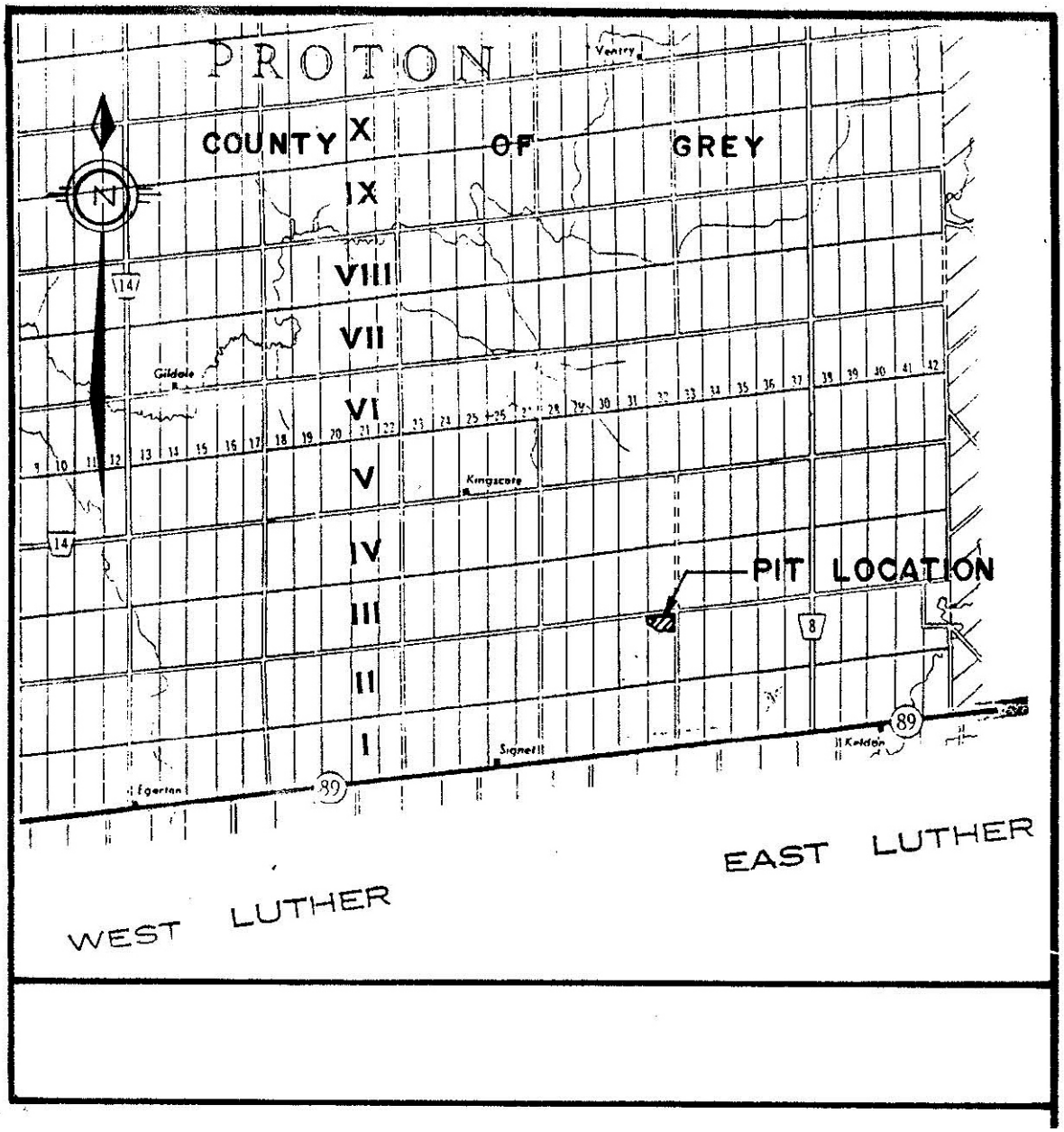

FIGURE 1

Town of Grand Valley
Pt Lot 32
Concession 2 EPR
Geographic Township of Proton
Township of Southgate
County of Grey

Scale ± 1: 103,000

0 .103 .21 .31km

N
W E
S

GEOLOGICAL INVESTIGATIONS

FIELD WORK

On December 5th, 2023, 6 test holes (see Figure 2) were dug, using an excavator, to a maximum depth of 5 metres. The holes were logged, measured, (see Appendix 2), and photographed (see Appendix 3).

The water table was encountered in every hole.

Geological Investigation attended the property a total of 3 times.

ASSUMPTIONS

Geological Investigations has assumed the following:

1/ The area extracted and now covered with water is depleted of usable aggregate.

2/ The areas to the south and east of the pond contain no accessible aggregate, except those indicated.

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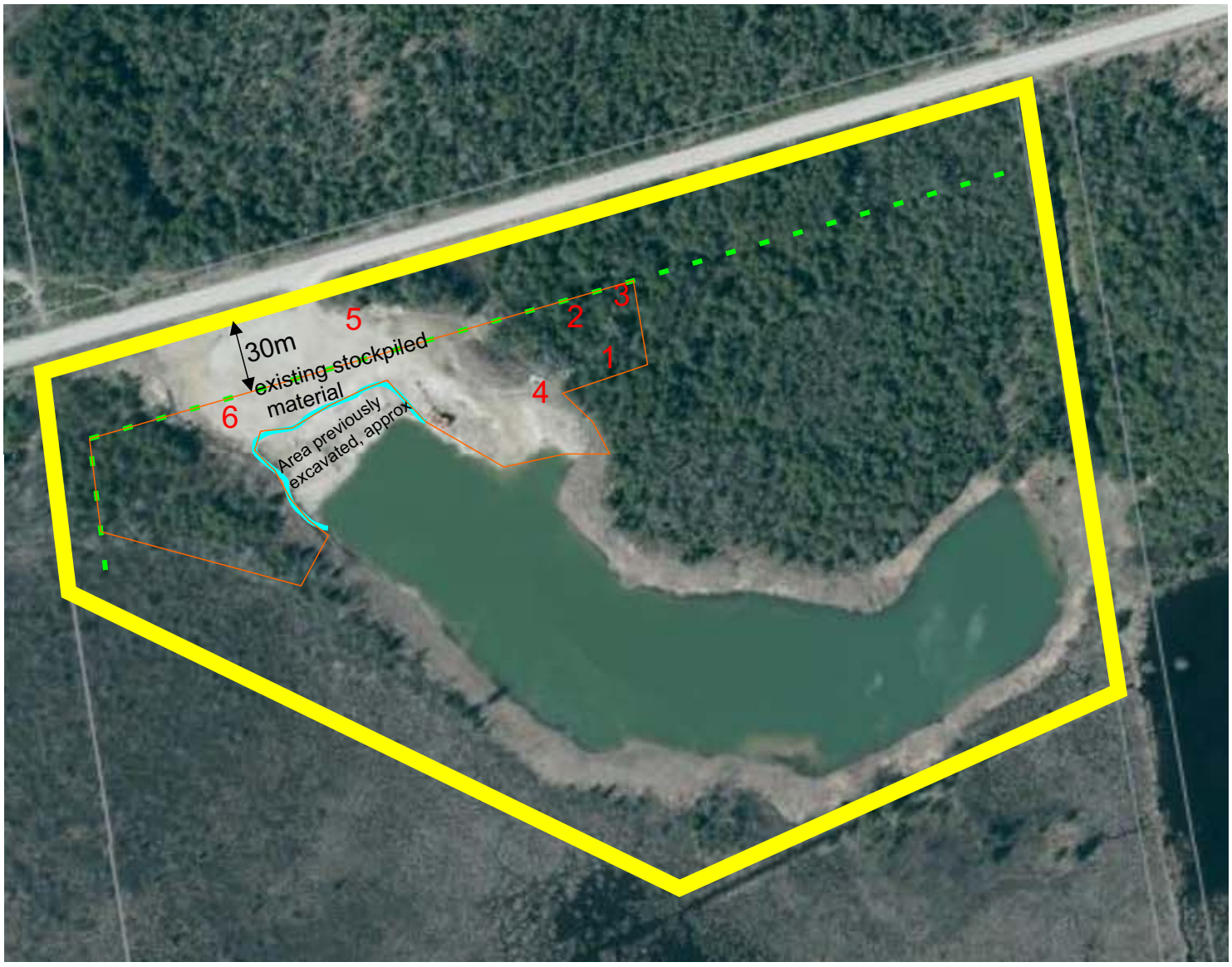


FIGURE 2
Test Pit Locations

Town of Grand Valley
Pt Lot 32
Concession 2 EPR
Geographic Township of Proton
Township of Southgate
County of Grey

Reference Grey County maps

Scale ± 1: 2,482

0 24.8 49.6 74.4m

N
W E
S

Licensed Boundary

Excavation Setback

Area previously excavated, approx

Area of potential aggregate resource approx. 1.0 ha

1 Test Pit Location, approx

GEOLOGICAL INVESTIGATIONS

DISCUSSION

The test holes constructed on site (see Figure 2, Appendix 2&3), encounter sand and stone aggregate to a maximum depth of 5 metres.

The site generally consists of deposits of medium to fine sand with various percentages of stone with the potential to produce stone (Granular “A” & “B”) and sand products.

The operation of the site as an aggregate source is authorized by the Ministry of Natural Resources under the Aggregate Resources Act. The site plan and license approved under the Aggregate Resources Act dictates how the pit is to operate and what is allowed to occur on site. This investigation has taken into consideration the requirements of the Aggregate Resources Act, the license conditions, and the site plan.

The estimated volume of proven aggregate has been calculated by multiplying the area (hectares) by the depth (metres). The tonnage of aggregate can be calculated by multiplying the volume by 17,700.

Area 1 (outline in orange) see Figure 2

Area in metres squared x average depth in metres = volume

10,000 metres squared x average 5 metres = 50,000 metres squared

Tonnage = area in metres squared x density of material = tonnage

50,000 metres squared x 1,77 tonnes / metres squared = **88,500 tonnes**

During my 30 years of experience with the aggregate industry in this part of Southern Ontario I believe a reasonable royalty per tonne of in situ sand with stone is $0.75. In situ sand deposits without significant stone content is $0.50 per tonne.

A range of value is given since there is no one correct or fair price which can be applied to all deposits in all regions of the Province of Ontario.

GEOLOGICAL INVESTIGATIONS

The value of aggregate remaining from this site, as permitted under the site plan approved by the Ontario Ministry of Natural resources is:

Tonnage x in situ value per tonne = Royalty value of aggregate available

88,500 tonnes x $0.50 to $0.75 /tonne = $44,250 to $66,375

CONCLUSIONS

The power equipment investigation has proven that **88,500 tonnes** of sand & stone at an average depth of 5.00 metres remains on the licensed property.

An additional resource may be added to these results if extraction of all or part of the setbacks was to be considered. This is not considered to be a significant additional resource. The stockpiled material has not been included in this investigation.

The royalty value of the remaining aggregate on site has been estimated to be between **$44,250** and **$66,375**.

The 1972 mapping of the Quaternary Geology of the area, see Appendix 4, Illustrates that the feature is an Esker (aggregate deposit) and generally by the existing pond. Our test holes located east of the pond confirms the aggregate (esker) does not extent to the east more than 100 metres on average.

The 2009 aggregate compilation mapping, see Appendix 5, illustrates the aggregate deposit (Esker) extends to the east boundary of the licensed pit. Our test holes located east of the pond confirms the aggregate (esker) does not extend to the east more than 100 metres on average.

All requirements of the Aggregate Resources Act, license and site plan have been taken into consideration which making this determination.

The results and conclusions of this investigation are based on the available information at the time. Should additional information become available, i.e. additional testing, the results and conclusions may change.

GEOLOGICAL INVESTIGATIONS

Aggregate Investigation
Town of Grand Valley Pit
Part Lot 32 Concession 2
Township of Southgate
Formerly Township of Proton
County of Grey

Geological Investigations Reference #GI-23-14

William D Fitzgerald MSc., P.Geo.

Digitally signed by William D Fitzgerald MSc., P.Geo.
DN: cn=William D Fitzgerald MSc., P.Geo., o, ou, email=geologicalinvestigations@sympatico.ca, c=CA
Date: 2024.04.30 14:35:42 -04'00'

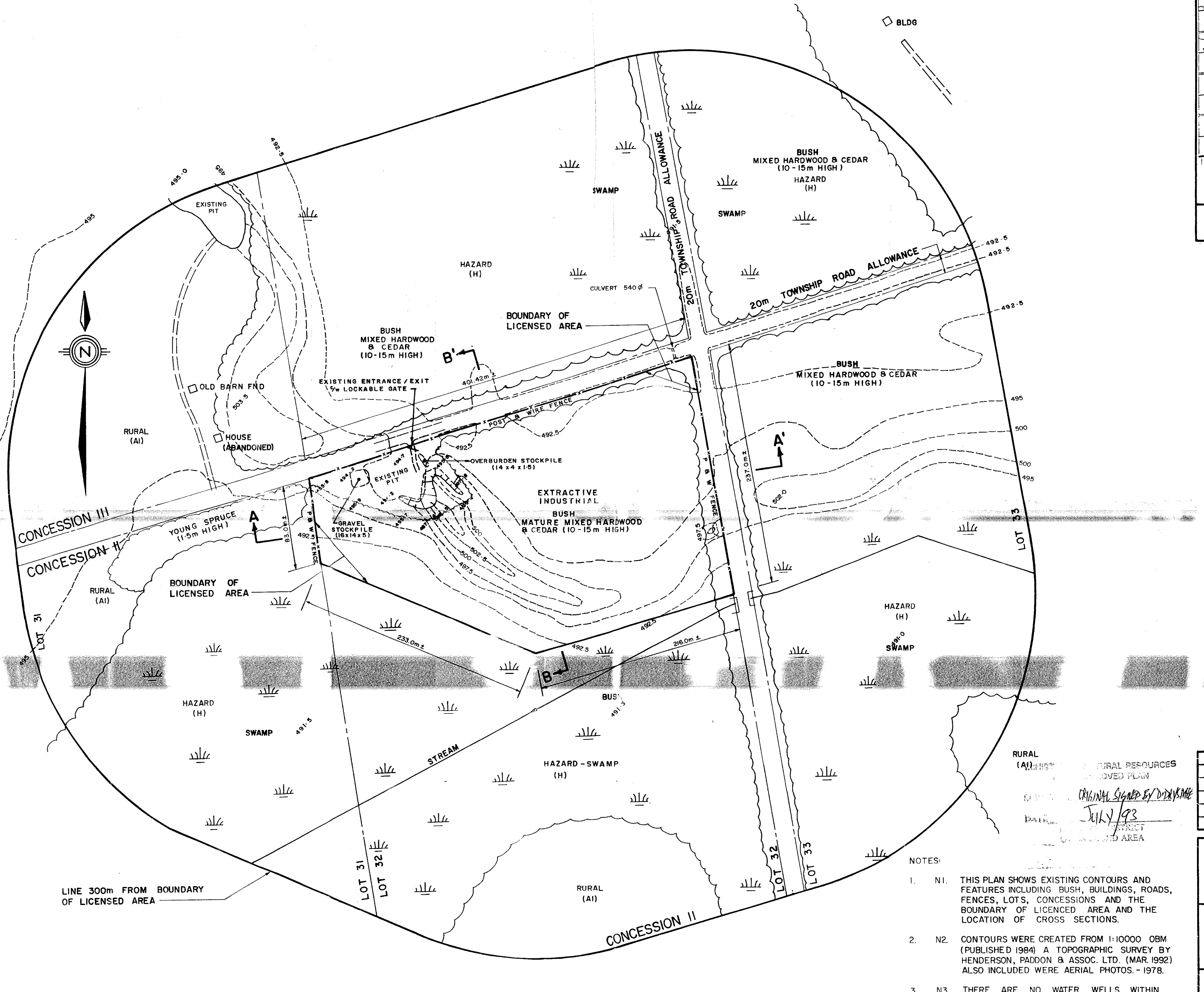
William D. Fitzgerald MSc., P.Geo.
February 26, 2024

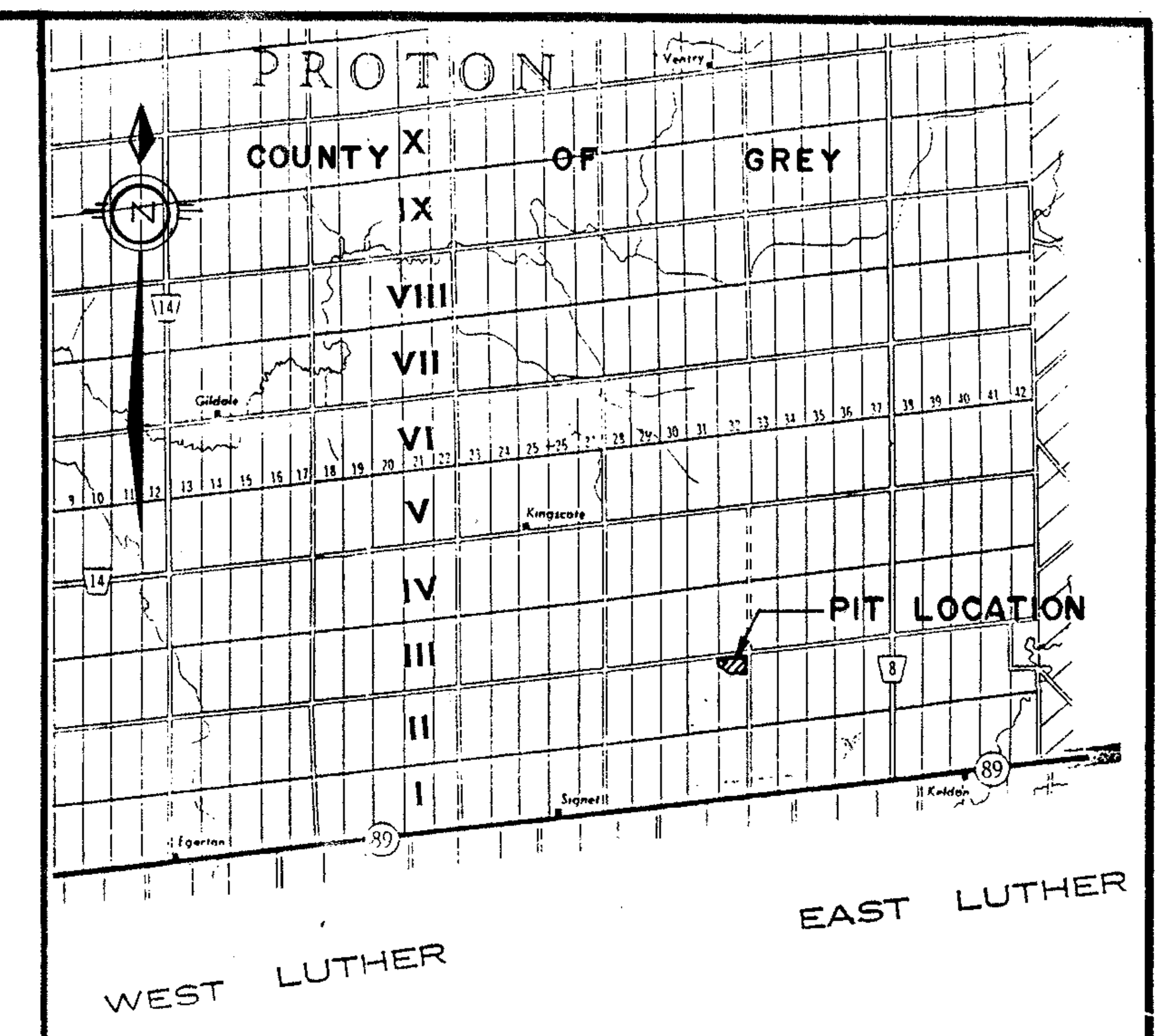
GEOLOGICAL INVESTIGATIONS

APPENDIX 1

ARA APPROVED SITE PLAN

THIS SITE PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF SECTION 69 OF THE AGGREGATE RESOURCES ACT AND REPLACES THE SITE PLAN ORIGINALLY SUBMITTED AS PART OF A LICENCE APPLICATION UNDER THE PITS AND QUARRIES CONTROL ACT AND REGULATIONS.





KEY PLAN
SCALE 1:100,000

THIS SITE PLAN IS PREPARED FOR SUBMISSION TO THE MINISTRY OF NATURAL RESOURCES IN CONJUNCTION WITH AN APPLICATION FOR A CLASS A LICENCE UNDER THE AGGREGATE RESOURCES ACT AND REGULATIONS.

I, THE APPLICANT, HAVE REVIEWED AND AUTHORIZE FINAL DRAWING NUMBERS 9218, PAGES 1 TO 4 FOR CIRCULATION BY THE MINISTRY OF NATURAL RESOURCES.
Gordon Townsend

LEGEND

- x——x——x — EXISTING FENCES
- 500 — SPOT ELEVATIONS
- - - 495 - - - — CONTOURS
- TOP OF FACE — EXCAVATION FACES
- = = = = — OTHER ROADS
- ☐ — BUILDINGS & STRUCTURES

APPLICANT : MR. GORDON TOWNSEND
RR # 5
DUNDALK, ONT.
N0C 1B0

— TWP OF E LUTHER GRAND VALLEY —

MINISTRY OF NATURAL RESOURCES APPROVED PLAN
ORIGINAL SIGNED BY D.DYSDALE
DATE JULY/93
DISTRICT AREA

REVISIONS		
Date	Description	By

HENDERSON, PADDON & ASSOCIATES LIMITED
CIVIL ENGINEERING CONSULTANTS & PLANNERS
OWEN SOUND ◆ GUELPH ◆ BLIND RIVER ◆ PORT ELGIN

COUNTY OF GREY
GRAVEL PIT DEVELOPMENT
PART LOT 32, CONC II
TOWNSHIP OF PROTON

CLIENT: MR. GORDON TOWNSEND

Design:		Scale:	1:2000
Drawn:	P S B	Date:	MARCH 9, 1992
Traced:		Approved:	Glenn McConkey CET, CST Design Engineer
Checked:	G R M		

DRAWING No. 9218 — PAGE 1 OF 4

NOTES:

1. N1. THIS PLAN SHOWS EXISTING CONTOURS AND FEATURES INCLUDING BUSH, BUILDINGS, ROADS, FENCES, LOTS, CONCESSIONS AND THE BOUNDARY OF LICENCED AREA AND THE LOCATION OF CROSS SECTIONS.
2. N2. CONTOURS WERE CREATED FROM 1:10000 OBM (PUBLISHED 1984) A TOPOGRAPHIC SURVEY BY HENDERSON, PADDON & ASSOC. LTD. (MAR. 1992) ALSO INCLUDED WERE AERIAL PHOTOS.- 1978.
3. N3. THERE ARE NO WATER WELLS WITHIN THE LICENSED BOUNDARY OR WITHIN 300m OF THAT BOUNDARY.
4. N4 WATER TABLE = 491.5± BASED ON SWAMP ELEVATION.
5. N5 AREA LICENSED = 7.84 ha
AREA TO BE EXTRACTED = 5.31 ha
EXISTING DISTURBED AREAS = 0.38 ha

EXISTING FEATURES

50m 0 50 100 150
SCALE (1:2000)

4875

NOTES:

1 NO PETROLEUM PRODUCTS OR ANY HAZARDOUS MATERIALS SHOULD BE STORED ON-SITE.

2 IN CASE OF ACCIDENTAL SPILL OF PETROLEUM PRODUCTS THE FOLLOWING CONTINGENCY PLAN WILL BE ACTIVATED:

1) THE MINISTRY OF THE ENVIRONMENT AND SURROUNDING LANDOWNERS WILL BE NOTIFIED.

2) 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.

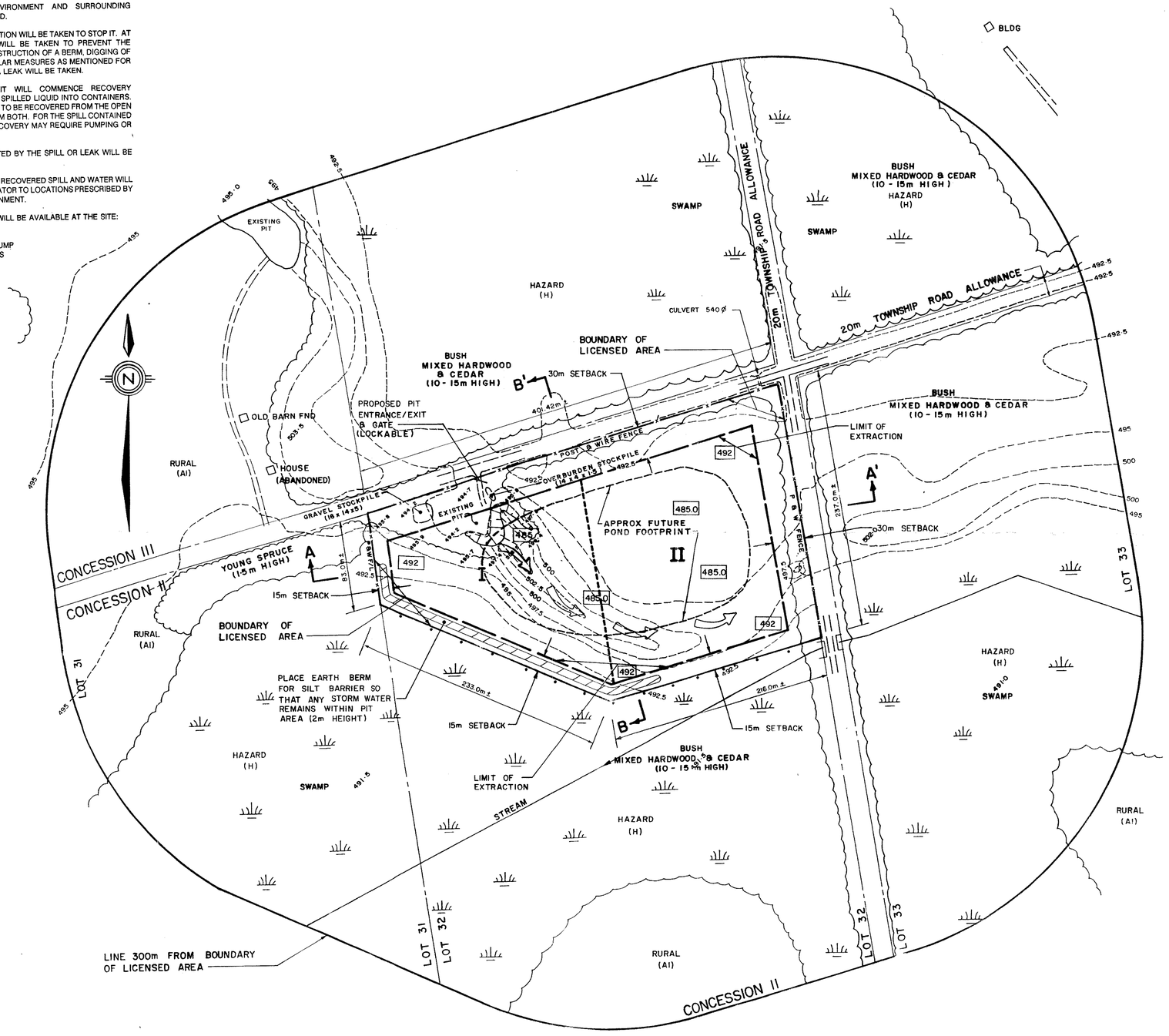
3) THE OPERATOR OF THE PIT WILL COMMENCE RECOVERY PROCEDURE BY PUMPING THE SPILLED LIQUID INTO CONTAINERS. THIS SPILLED LIQUID MAY HAVE TO BE RECOVERED FROM THE OPEN WATER BODY OR LAND OR FROM BOTH. FOR THE SPILL CONTAINED IN THE OPEN WATER BODY, RECOVERY MAY REQUIRE PUMPING OR SKIMMING OR BOTH.

4) THE SOIL IN THE AREA AFFECTED BY THE SPILL OR LEAK WILL BE REMOVED.

5) THE CONTAMINATED SOIL, THE RECOVERED SPILL AND WATER WILL BE DISPOSED OF BY THE OPERATOR TO LOCATIONS PRESCRIBED BY THE MINISTRY OF THE ENVIRONMENT.

THE FOLLOWING EQUIPMENT WILL BE AVAILABLE AT THE SITE:

i) A SKIMMING DEVICE
ii) A DIESEL OPERATED PUMP
iii) PORTABLE CONTAINERS



NOTES:

1. M7 TOPSOIL AND OVERBURDEN WILL BE PLACED SEPARATELY IN BERMS WITHIN SETBACKS NO CLOSER THAN 3 METRES FROM THE LICENSED BOUNDARY, CONVENIENT TO THE STRIPPING OPERATION.
2. M8 STOCKPILES TO A MAXIMUM HEIGHT OF 12 METRES WILL BE LOCATED IN EACH PHASE ADJACENT TO THE EXTRACTION FACE, NO CLOSER THAN 30 METRES FROM THE LICENSED BOUNDARY. STOCKPILING WILL FOLLOW THE ORDER OF OPERATIONS.
3. M12(B) THERE WILL BE NO DISCHARGE OF SURFACE WATER OFFSITE. STORMWATER WILL EVAPORATE OR INFILTRATE THE PIT FLOOR.
4. M13 A PORTABLE CRUSHER WILL BE USED ON A TEMPORARY BASIS AND WILL BE LOCATED ON THE PIT FLOOR CLOSE TO THE WORKING FACE.
5. M14 BERMS WILL BE A MAXIMUM OF 2.0 METRES HIGH WITH A 3 METRE FLAT TOP, 2:1 SIDESLOPES, AND ARE TO BE SEEDED TO PREVENT EROSION. TOPSOIL AND OVERBURDEN ARE TO BE PILED SEPARATELY FOR LATER USE IN REHABILITATION.
6. M15 STRIPPING WILL PROCEED FAR ENOUGH AHEAD OF THE EXTRACTION OPERATION TO PREVENT CONTAMINATION OF THE AGGREGATE, AND STOCKPILED WITHIN SETBACKS AS PER NOTE 1 (M7). EXCAVATION AND PROGRESSIVE REHABILITATION WILL FOLLOW THE ORDER AND DIRECTION OF OPERATIONS SHOWN ON THIS OPERATIONAL PLAN.
7. N1 CONTOURS WERE CREATED FROM 1:10000 OBM (PUBLISHED 1984), A TOPOGRAPHIC SURVEY OF THE EXISTING PIT AREAS BY HENDERSON, PADDON & ASSOCIATES LTD (MAR 1992) AND AERIAL PHOTOGRAPHS DATED 1978.
8. N2 (A) EXCAVATION PHASES SHALL FOLLOW THE SEQUENCE SHOWN ON THIS DRAWING.
   (B) A FRONT END LOADER WILL BE USED TO FEED THE CRUSHER HOPPER, TO FILL TRUCK BOXES, AND IN THE STRIPPING OPERATION.
   (C) OPERATING LIFTS AND BENCHES WILL BE IN ACCORDANCE WITH GOVERNMENT REGULATIONS.
   (D) REHABILITATION WILL BE PROGRESSIVE FOLLOWING THE ORDER OF EXTRACTION OPERATIONS. REHABILITATE PHASE I PRIOR TO EXCAVATING PHASE II, ETC.
   (E) FINAL 3:1 SIDESLOPES WILL BE UNIFORMLY GRADED USING A SMALL DOZER AND ONSITE MATERIAL. THE SLOPES WILL BE TOPSOILED AND SEEDED.
9. N3 EQUIPMENT TO BE USED ON THE SITE INCLUDES THE PORTABLE CRUSHER, TRUCKS, FRONT END LOADERS, DOZER AND THE REQUIRED PETROLEUM SPILL CLEAN-UP EQUIPMENT, ALSO A BACKHOE OR DRAGLINE TO EXCAVATE FOR POND.
10. N4 NO STORMWATER WILL BE DIVERTED OFFSITE, NOR WILL IT BE STORED ONSITE AS IT WILL DISAPPEAR THROUGH EVAPORATION AND INFILTRATION. THERE WILL BE NO WASH PONDS OR DRAINAGE FACILITIES REQUIRED.
11. N5 EXCAVATION BELOW THE WATER TABLE WILL OCCUR, WITH NO DEWATERING.
12. N6 ADDITIONAL 1.2 METRE HIGH PAGE WIRE FENCING MAY BE REQUESTED AT ANY TIME BY THE MINISTRY OF NATURAL RESOURCES.
13. N8 (A) PLANT GRASS SEED ON TOPSOIL AND OVERBURDEN BERMS. REPLANT AS IS NECESSARY TO MAINTAIN A GOOD AND CONTINUOUS GROWTH.
14. N9
15. N10 DUST SUPPRESSANTS SHALL BE AS APPROVED BY THE MNR AND MOE, AND SHALL BE PLACED WHEN REQUESTED BY EITHER OF THESE MINISTRIES. THE EXTRACTION IS TO OCCUR BEHIND PIT FACES AS MUCH AS IS PRACTICAL TO LESSEN NOISE LEVELS TO OUTSIDE RESIDENTS. A PETROLEUM SPILL CONTINGENCY PLAN IS INCLUDED ON THIS PLAN.
16. N14 DESPITE APPROVALS PROVIDED BY THIS SITE PLAN, COMPLIANCE WITH OTHER PROVINCIAL AND FEDERAL LEGISLATION IS REQUIRED.

LEGEND

II — ORDER OF OPERATIONS (MINING AND REHABILITATION)
— DIRECTION OF OPERATIONS
— EXISTING FENCE
— PROPOSED FENCE
— DIVISION OF ORDER OF OPERATIONS
— LIMIT OF EXTRACTION
485 — FINAL ELEVATION (ANTICIPATED) - THESE ELEVATIONS INDICATE ULTIMATE DEPTH OF EXCAVATION IN PIT AREA

APPLICANT : MR. GORDON TOWNSEND
RR # 5
DUNDALK, ONT.
NOC 1B0

GRAVEL PIT DEVELOPMENT
PART LOT 32, CONC II
TOWNSHIP OF PROTON
COUNTY OF GREY

"GORDON TOWNSEND PIT"

REVISIONS		
Date	Description	By

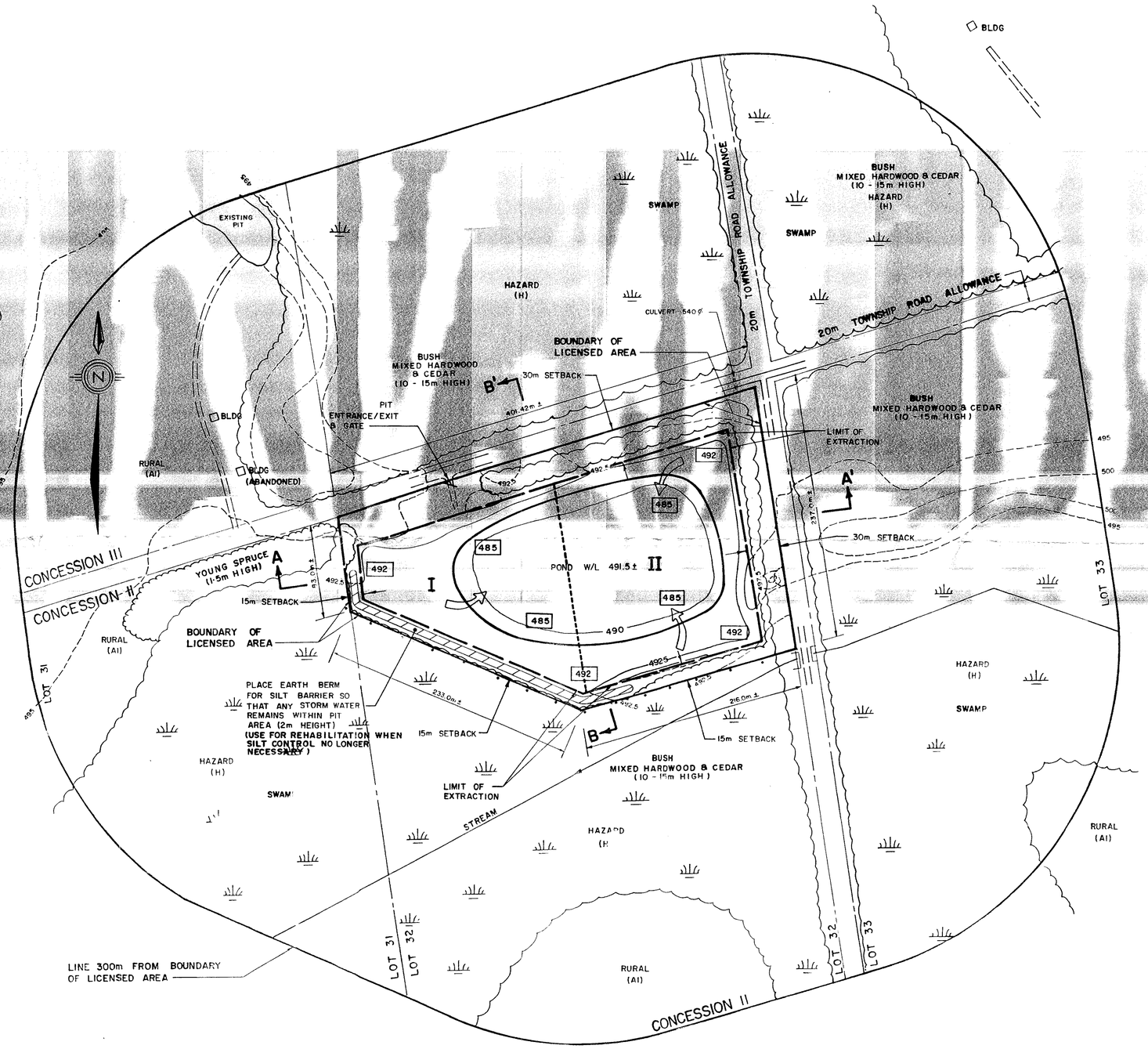
HENDERSON, PADDON & ASSOCIATES LIMITED
CIVIL ENGINEERING CONSULTANTS & PLANNERS
OWEN SOUND ◆ GUELPH ◆ BLIND RIVER ◆ PORT ELGIN

OPERATIONAL PLAN

CLIENT: MR. GORDON TOWNSEND

Design:	Scale: 1:2000
Drawn: P S B	Date: MARCH 9, 1992
Traced:	Approved: Eleanor McConkey CET, CST Design Engineer
Checked: G R M	

DRAWING No. 9218 – PAGE 2 OF 4



NOTES:

1. N1 FINAL DEPTHS OF EXCAVATION ARE BASED ON PLANS APPROVED UNDER THE PITS AND QUARRIES ACT FOR THIS PIT. ORIGINAL ELEVATIONS WERE CREATED FROM 1:10,000 OBM (PUBLISHED 1984) AND A TOPOGRAPHIC SURVEY BY HENDERSON, PADDON & ASSOC. LTD. DETAIL WAS TAKEN FROM 1978 AERIAL PHOTOS.
2. N2 NO STORMWATER WILL BE DIVERTED OFF SITE, NOR WILL IT BE STORED ON SITE AS IT WILL DISAPPEAR THROUGH EVAPORATION AND INFILTRATION, UNTIL THE POND IS EXCAVATED.
3. N3 REHABILITATION IS TO BE PROGRESSIVE FOLLOWING THE ORDER OF OPERATIONS, WITH ONE PHASE TO BE COMPLETED PRIOR TO PROCEEDING WITH THE SUBSEQUENT PHASE.
4. N4 AREA TO BE REHABILITATED = 5-31 HECTARES.
5. N5 FINAL 3:1 SLOPES ARE TO BE ESTABLISHED USING ON SITE MATERIAL. WHEN EXCAVATING, DO SO IN STEPS FROM THE LIMIT OF EXTRACTION TO THE PIT FLOOR SO THAT SUFFICIENT MATERIAL REMAINS TO ENABLE THE DOZER OPERATOR TO UNIFORMLY GRADE THE RESOURCE TO THE REQUIRED 3:1 SLOPES.
6. N6 DEEP RIP THE PIT FLOOR TO LOOSEN THE SOIL FOR PROPER PERMEABILITY. MAKE THE FLOOR AND SIDESLOPES REASONABLY SMOOTH. PLACE 100mm MIN. TOPSOIL. THEN PLANT GRASSES AND LEGUMES, EXCEPT IN THE POND AREA.
7. N7 AFTER DEPLETION, THE PIT WILL BE DIRECTED TOWARDS NATURAL REVEGETATION RESULTING IN A WILDLIFE HABITAT SURROUNDING & INCLUDING THE POND.

LEGEND

- II — ORDER OF OPERATIONS (MINING AND REHABILITATION)
- — DIRECTION OF DRAINAGE
- — PROPOSED FENCE
- — DIVISION OF ORDER OF OPERATIONS
- — LIMIT OF EXTRACTION
- 485 — FINAL ELEVATION (ANTICIPATED) - THESE ELEVATIONS INDICATE ULTIMATE DEPTH OF EXCAVATION IN PIT AREA
- 490 — FINAL CONTOUR

GRAVEL PIT DEVELOPMENT
PART LOT 32, CONC II
TOWNSHIP OF PROTON
COUNTY OF GREY

"GORDON TOWNSEND PIT"

REVISIONS		
Date	Description	By

APPLICANT : MR. GORDON TOWNSEND
RR # 5
DUNDALK, ONT.
NOC 1B0

HENDERSON, PADDON & ASSOCIATES LIMITED
CIVIL ENGINEERING CONSULTANTS & PLANNERS
OWEN SOUND ◆ GUELPH ◆ BLIND RIVER ◆ PORT ELGIN

PROGRESSIVE REHABILITATION AND FINAL REHABILITATION PLANS

CLIENT: MR. GORDON TOWNSEND

Design:	Scale: 1:2000
Drawn: P S B	Date: MARCH 9, 1992
Traced:	Approved: Glenn Tuckey CET, CST Design Engineer
Checked: G R M	

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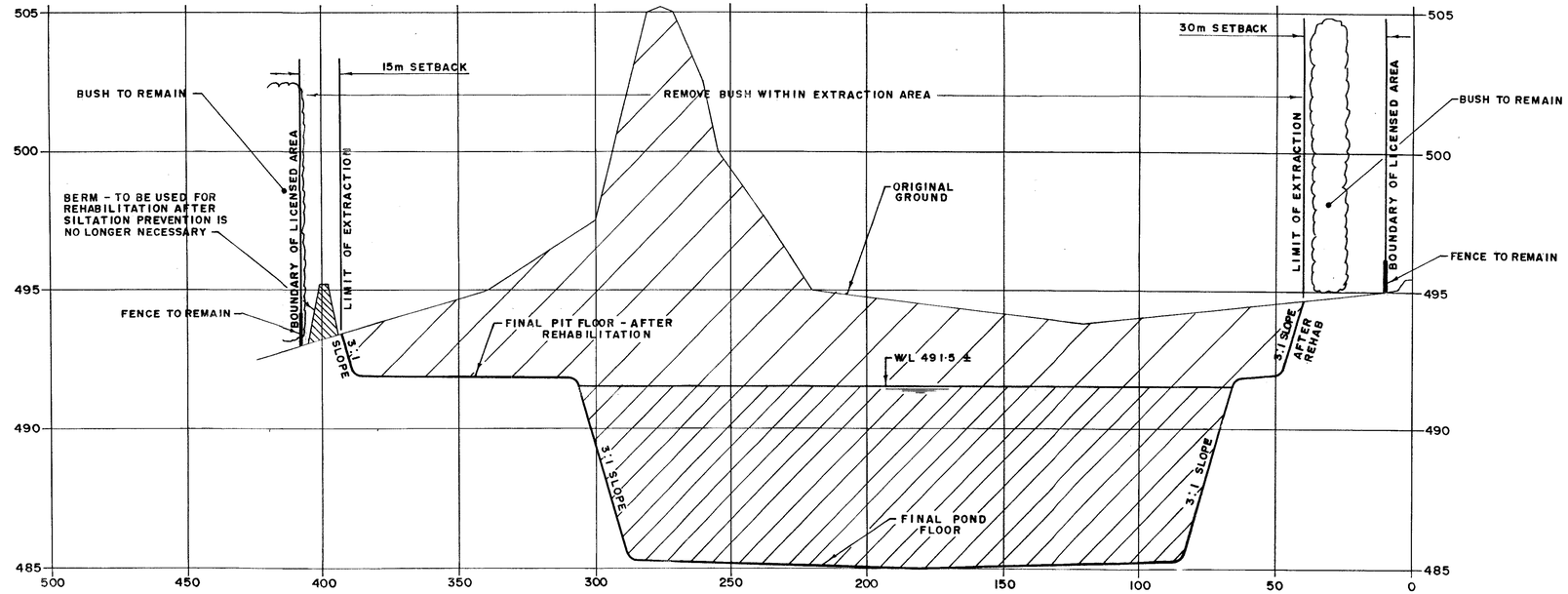
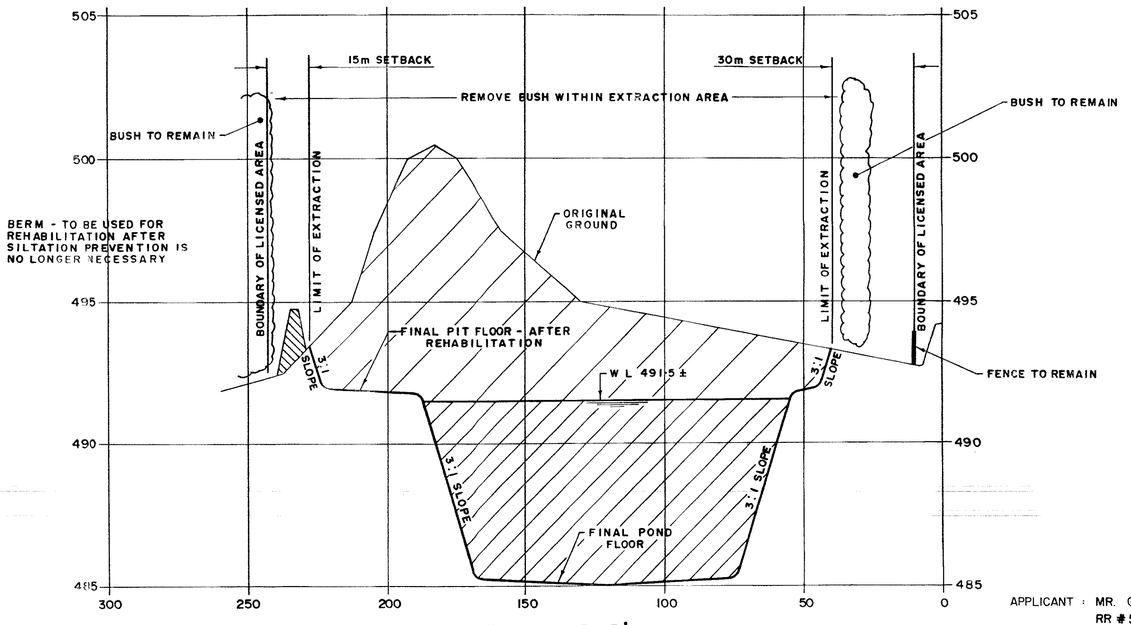


SECTION A-A'



SECTION B-B'

APPLICANT : MR. GORDON TOWNSEND
RR # 5
DUNDALK, ONT.
N0C 1B0

GRAVEL PIT DEVELOPMENT
PART LOT 32, CONC II
TOWNSHIP OF PROTON
COUNTY OF GREY

"GORDON TOWNSEND PIT"

REVISIONS		
Date	Description	By

HENDERSON, PADDON & ASSOCIATES LIMITED
CIVIL ENGINEERING CONSULTANTS & PLANNERS
OWEN SOUND ◆ GUELPH ◆ BLIND RIVER ◆ PORT ELGIN

CROSS-SECTIONS

CLIENT:	MR GORDON TOWNSEND
Design:	Scale: HOR - 1:1000, VER - 1:100
Drawn: G R M	Date: MARCH 9, 1992
Traced: -	Approved: Graeme MacConkey C.E.T., C.S.T. Design Engineer
Checked: G R M	
DRAWING No.	9218 - PAGE 4 OF 4

GEOLOGICAL INVESTIGATIONS

APPENDIX 2
TEST HOLE LOGS

Town of Grand Valley (License 4875) Pit

Part Lot 32, Concession 2
Township of Southgate
Formerly Township of Proton
County of Grey

Aggregate Investigation GI-23-14
December 5, 2023

GI-23 - 14-01	Depth of hole 5.00 metres, water at 3.0 metres, 2 Photos
0.00 - 0.60 m	Forest litter
0.60 - 1.50 m	Medium , 20% medium stone, max 7 cm, dirty
1.50 - 3.00 m	Medium sand and some silt, minor stone
3.00 - 5.00 m	Medium sand, 30% medium stone, max 10 cm. no bottom
GI-23 - 14-02	Depth of hole 4.80 metres, water at 2.75 metres, 2 Photos
0.00 - 0.30 m	Forest litter
0.30 - 2.75 m	Medium to fine silty sand, occasional boulder
2.75 - 4.80 m	Clayey silty sand, stony till
GI-23 - 14-03	Depth of hole 5.00 metres, water at 3.00 metres, 2 Photos
0.00 - 0.30 m	Forest litter
0.30 - 2.44 m	Medium to fine silty sand, occasional boulder, dirty
2.44 - 4.27 m	Medium to fine sand, 15% fine stone, max 5 cm
4.27 - 5.00 m	Clayey silty sand, stony till

GEOLOGICAL INVESTIGATIONS

GI-23 - 14-04	Depth of hole 5.00 metres, water at 2.75 metres, 2 Photos
0.00 - 5.0 m	Medium to fine sand, 10 to 15% medium stone, higher stone content below water
GI-23 - 14-05	Depth of hole 5.00 metres, water at 2.75 metres, 2 Photos
0.00 - 5.00 m	Medium to fine sand, 10 – 15% fine to medium stone
GI-23 - 14-06	Depth of hole 3.66 metres, water at 2.65 metres, 3 Photos
0.00 - 3.66 m	Medium to fine sand, 50% medium stone, refusal at base of hole, likely till

GEOLOGICAL INVESTIGATIONS

APPENDIX 3
TEST HOLE PHOTOGRAPHY

GI-23-14-1A

GI-23-14-1B

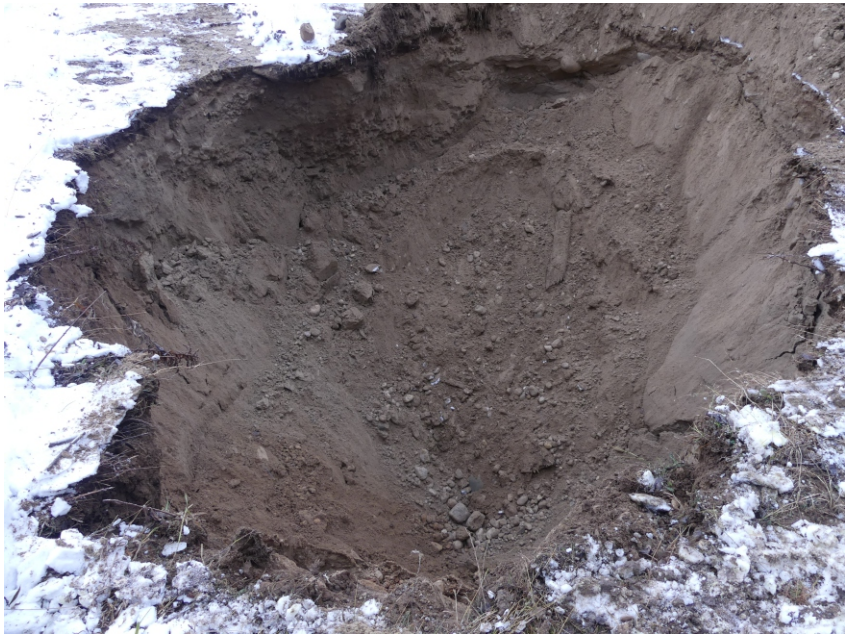
GI-23-14-2A

GI-23-14-2B

GI-23-14-3A

GI-23-14-3B

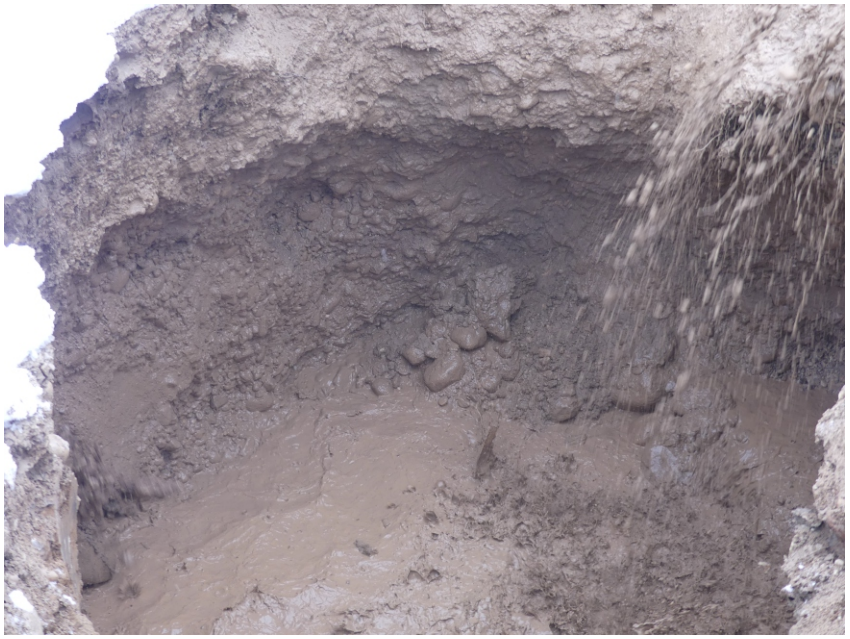
GI-23-14-4A



GI-23-14-4B

GI-23-14-5A

GI-23-14-5B



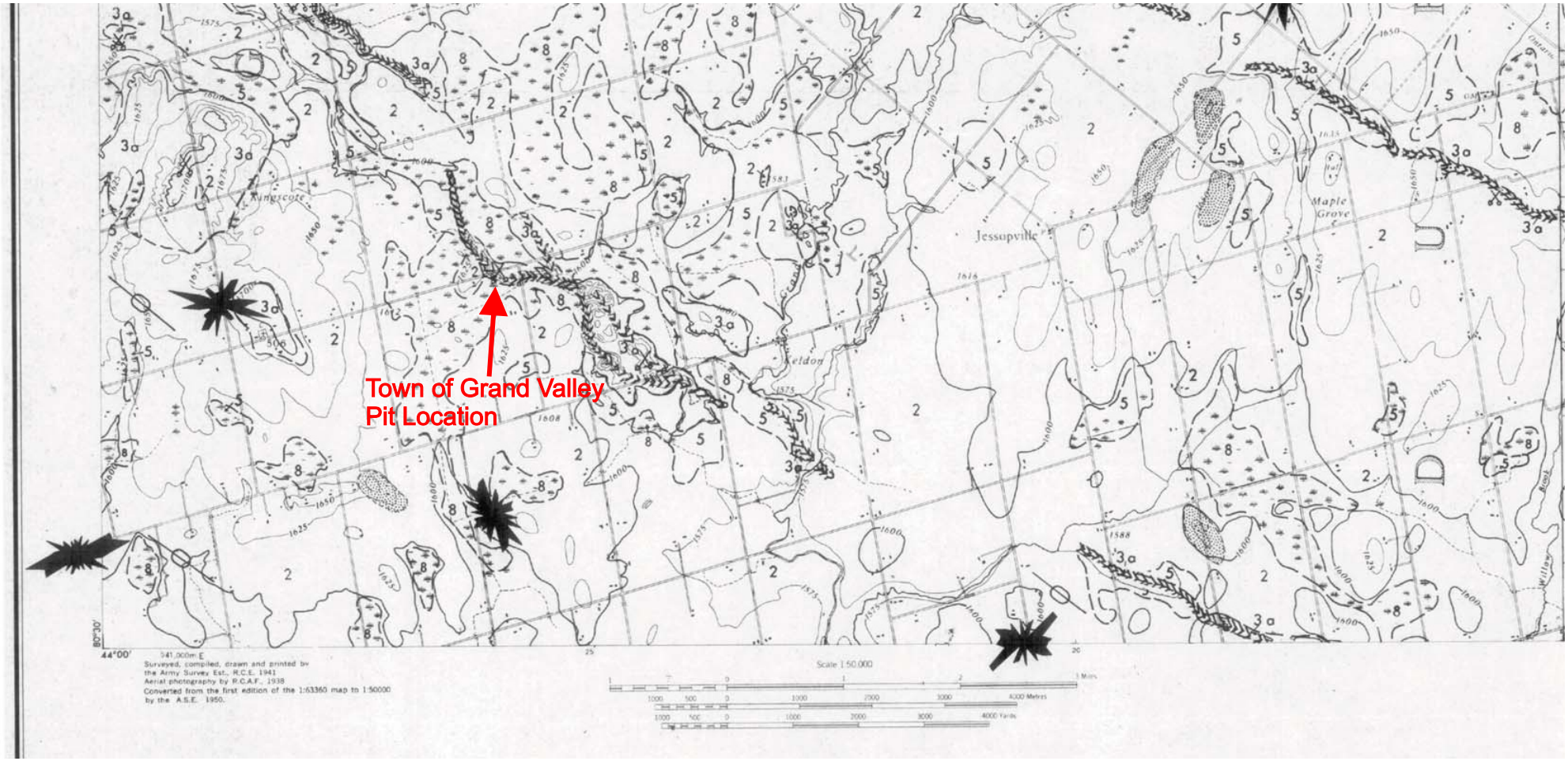
GI-23-14-6A

GI-23-14-6B

GI-23-14-6A

APPENDIX 4

Quaternary Map 1972



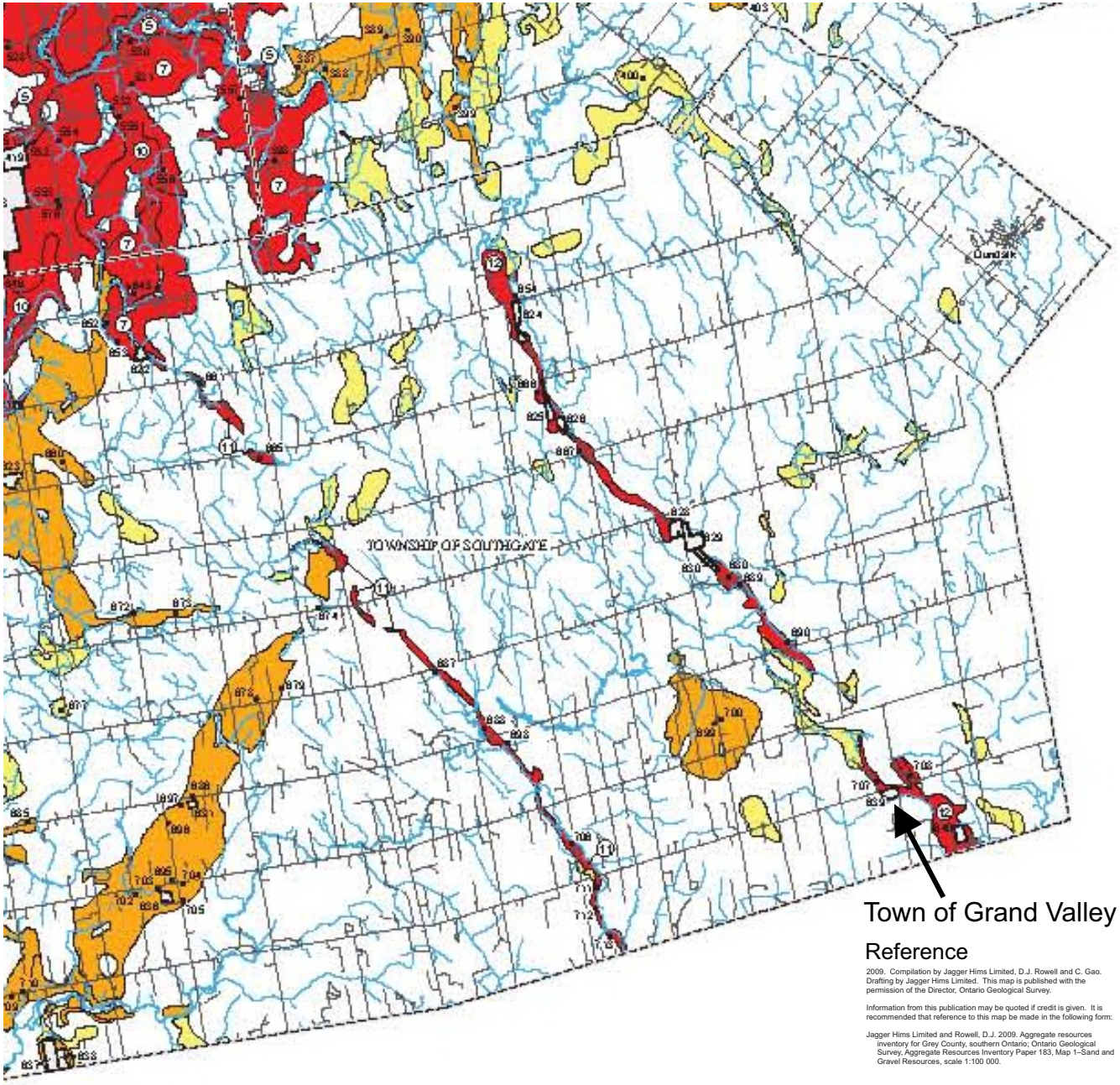
Reference

Qwyn, Q.H.J.
1972: The Quaternary geology of the Dundalk Area, Southern Ontario, Dept. Mines and Northern Affairs, Prelim, Map P.727,
Geol. Ser. scale 1;59,000. Geology 1971

GEOLOGICAL INVESTIGATIONS

APPENDIX 5

Aggregate Map 2009



SAND AND GRAVEL RESOURCES

- Selected Sand and Gravel Resource Area, primary significance, deposit number (see Table 3)
- Selected sand and gravel resource area, secondary significance
- Sand and gravel deposit, tertiary significance
- Other surficial deposits or exposed bedrock

SYMBOLS

- Licenced property boundary, property number (see Table 2)
- Unlicenced sand or gravel pit (i.e., abandoned pit or wayside pit operating on demand under authority of a permit). Property number (see Table 2).
- Geological and aggregate thickness boundary of sand and gravel deposits
- Administrative boundary

Town of Grand Valley Pit

Reference

2009. Compilation by Jagger Hims Limited, D.J. Rowell and C. Gao. Drafting by Jagger Hims Limited. This map is published with the permission of the Director, Ontario Geological Survey.

Information from this publication may be quoted if credit is given. It is recommended that reference to this map be made in the following form:

Jagger Hims Limited and Rowell, D.J. 2009. Aggregate resources inventory for Grey County, southern Ontario; Ontario Geological Survey, Aggregate Resources Inventory Paper 183, Map 1-Sand and Gravel Resources, scale 1:100 000.