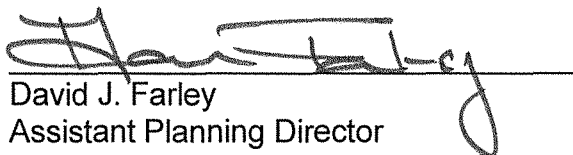


THE REGIONAL MUNICIPALITY OF NIAGARA

OFFICIAL PLAN AMENDMENT NO. 37 EXPANSIONS TO BLUE CIRCLE AGGREGATES PIT TOWN OF PELHAM

Amendment No. 37 to the Official Plan of the Town of Pelham, which was adopted by the Council of the Town of Pelham, is hereby approved under Section 17 of the Planning Act.


DATE: August 9th, 2000

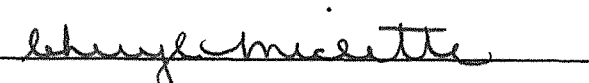

David J. Farley
Assistant Planning Director
Regional Municipality of Niagara

**AMENDMENT NO. 37
TO THE
OFFICIAL PLAN
OF THE
TOWN OF PELHAM**

TOWN OF PELHAM
CERTIFICATE
OFFICIAL PLAN OF THE
TOWN OF PELHAM
AMENDMENT NO. 37

The attached schedule constituting Amendment No. 37 to the Official Plan of the Town of Pelham, was prepared by the Pelham Planning Services Committee and was adopted by the Corporation of the Town of Pelham by By-law No. 2165 (2000) in accordance with Section 17 of the Planning Act, R.S.O. 1990, as amended, on the 15th day of May, 2000.


MAYOR


CLERK

This Amendment to the Official Plan of the Town of Pelham which has been adopted by the Council of the Corporation of the Town of Pelham, is hereby approved in accordance with Section 17 of the Planning Act, R.S.O. 1990, as amended, as Amendment No. 37 to the Official Plan for the Town of Pelham.

Date

Approval Authority

THE CORPORATION OF THE
TOWN OF PELHAM

BY-LAW NO. 2165 (2000)

Being a by-law to adopt Amendment No. 37 to the
Official Plan of the Town of Pelham.

THE COUNCIL OF THE CORPORATION OF THE TOWN OF PELHAM IN
ACCORDANCE WITH THE PROVISION OF THE PLANNING ACT, R.S.O. 1990, AS
AMENDED, HEREBY ENACTS AS FOLLOWS:

- (1) Amendment No. 37 to the Official Plan of the Town of Pelham, consisting of the attached Schedule A, is hereby adopted.
- (2) THAT the Clerk is hereby authorized and directed to make application to the Regional Municipality of Niagara for approval of the aforementioned Amendment No. 37 to the Official Plan of the Town of Pelham.
- (3) THAT this by-law shall come into force and take effect on the day of the final passing thereof.

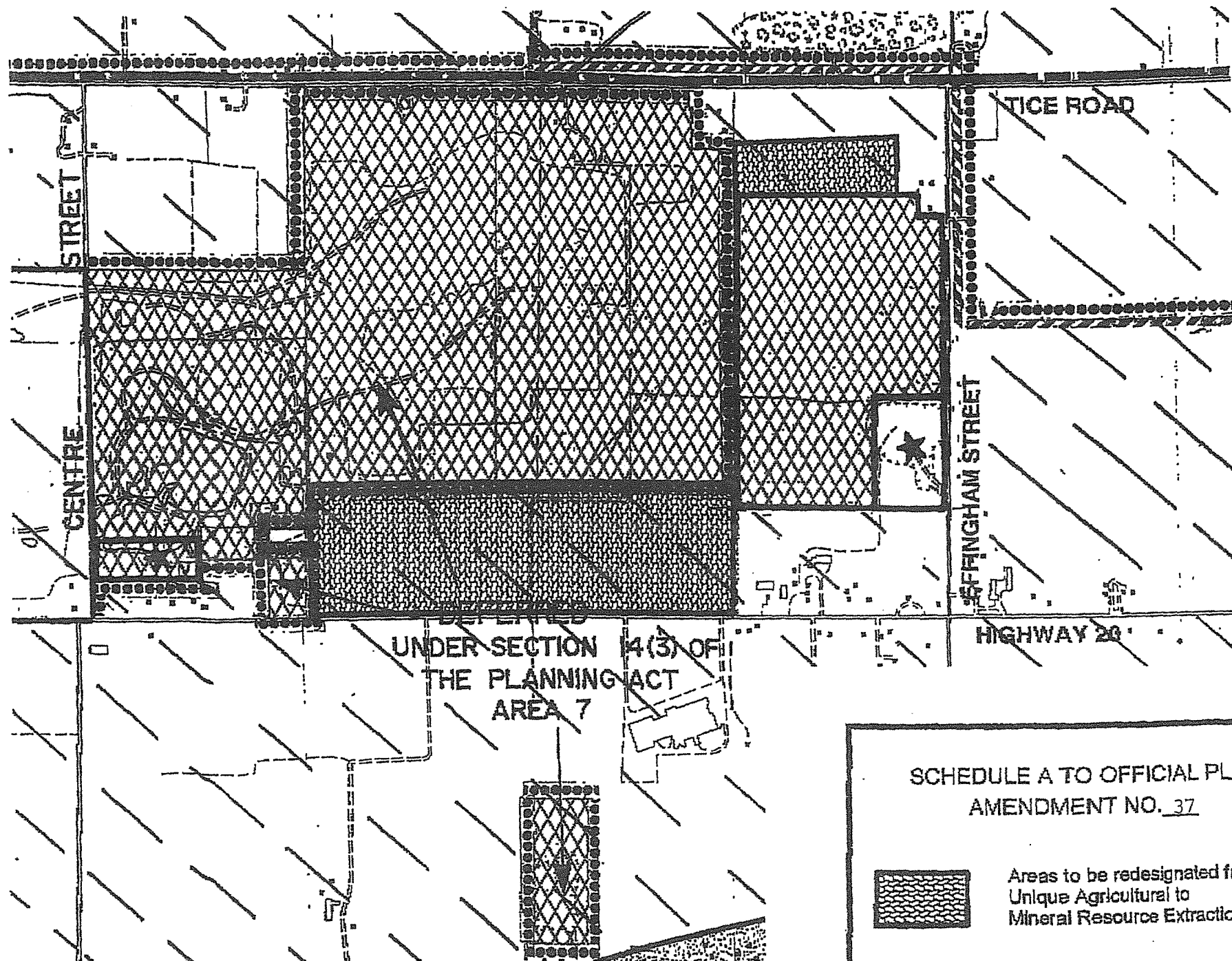
ENACTED AND PASSED THIS 15TH DAY OF MAY, 2000 A.D.

Rafael B. B. B.
MAYOR

Sheryl M. Little
CLERK

TOWN OF PELHAM
CERTIFIED A TRUE COPY

Sheryl M. Little
CLERK



AMENDMENT NO. 37

TO THE OFFICIAL PLAN

FOR THE TOWN OF PELHAM

PLANNING AREA

Blue Circle Aggregates and Daniel Haist

TABLE OF CONTENTS

PART A - PREAMBLE

Introduction to the Official Plan Amendment

- i) Purpose
- ii) Location
- iii) Basis

PART B - THE AMENDMENT

The Amendment which will be incorporated into the Town of Pelham Official Plan.

PART C - BACKGROUND

Background material relevant to the Official Plan Amendment.

NOTE:

Parts A and C are explanatory sections providing information regarding the Amendment and do not form a part of the body of the Official Plan Amendment. Only Part B constitutes the actual Amendment to the Official Plan of the Town of Pelham.

PART A

PREAMBLE

PART A

PURPOSE

The Purpose of this amendment is to:

1. Redesignate the subject lands to a "Mineral Resource Extraction" designation

LOCATION

The lands that are the subject of this amendment are located on the north side of Regional Road #20 between Effingham Street and Centre Street, and on the west side of Effingham Street south of Tice Road. The legal description of the properties is Part Lots 6, 7 and 8, Conc. 7, in the Town of Pelham.

BASIS

The basis of this amendment is to:

- ▶ Permit the expansion of the existing pit operation for the extraction of aggregate resources.
- ▶ Provide for the adoption of an implementing zoning by-law amendment which would permit the use of the expansion land for the above noted purpose and to establish minimum setbacks from areas of extraction and abutting road allowances.
- ▶ Reflect the various technical studies undertaken which demonstrated that land use compatibility can be achieved.
- ▶ Accommodate an interim land use with site after use being consistent with the agricultural character of the surrounding neighbourhood.

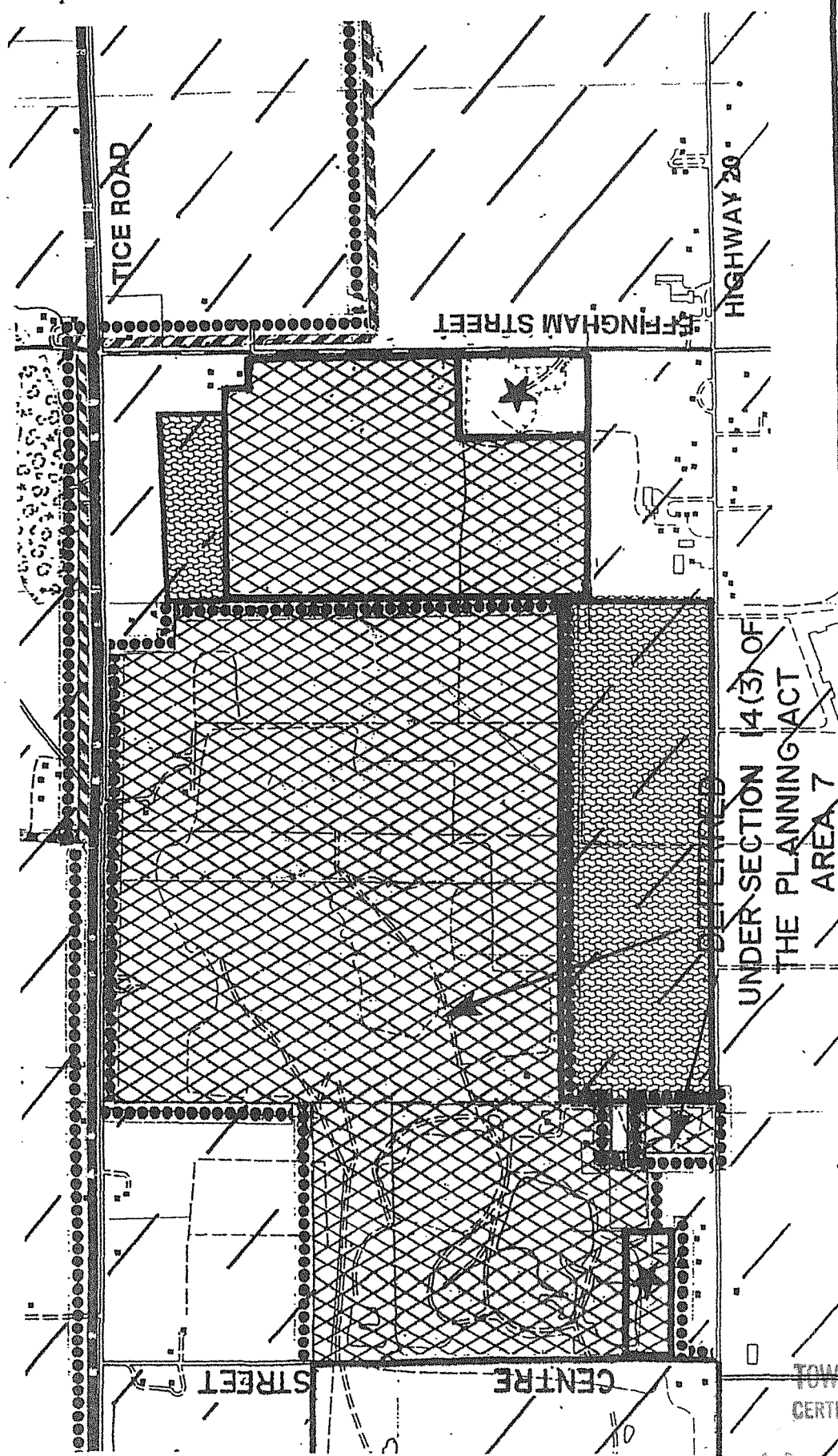
PART B

THE AMENDMENT

TCG MATERIALS LIMITED & DANIEL HAIST #AM-8/98

PART B - THE AMENDMENT

1. Schedule A, Land Use Plan to the Official Plan for the Town of Pelham is hereby amended by redesignating lands from "Unique Agricultural" to "Mineral Resource Extraction" as identified on Schedule 'A' attached hereto and forming part of this amendment.



SCHEDULE A TO OFFICIAL PLAN
AMENDMENT NO. 37

Areas to be redesignated from
Unique Agricultural to
Mineral Resource Extraction



UNDER SECTION 14(3) OF
THE PLANNING ACT
AREA 7

TOWN OF PELHAM
CERTIFIED A TRUE COPY

[Signature]
CLERK

PART C

APPENDICES

LIST OF APPENDICES

- Appendix A-1 Notice of Public Meeting
A-2 Affidavit re
- Giving Notice of Public Meeting
- Giving Notice of Adoption
- Appendix B-1 Minutes of General Committee Meeting November 30, 1998
B-2 Minutes of Special General Committee Meeting October 13, 1999
- Appendix C Written Submissions or Comments and when they were received
C-1 Frances and Roy Johnson Nov. 16, 1998
C-2 Ontario Hydro Nov. 24, 1998
C-3 TransCanada Pipelines Nov. 26, 1998
C-4 Regional Niagara Public Health Department Nov. 30, 1998
C-5 Liisa Harju Nov. 30, 1998
C-6 Douglas Johnson Nov. 30, 1998
C-7 Ministry of Transportation Dec. 2, 1998
C-8 Stephen J. Kees Dec. 10, 1998
C-9 District School Board of Niagara Jan. 11, 1999
C-10 Doug Andrey Oct. 13, 1999
C-11 V. J. Pignataro Oct. 13, 1999
C-12 Prof. Donald MacRae Oct. 13, 1999
C-13 Dr. Susan Tainsh Oct. 13, 1999
C-14 Mr. Edward Koke of Martens et al Oct. 13, 1999
- Appendix D-1 Affidavit re
- List re Oral Submissions at Public Meetings
- Appendix E-1 Planning Report dated November 6, 1998
Planning Report dated September 23, 1999
- Appendix F-1 Affidavit re
- Information under Section 6(2) of Ont. Reg. 198/96 is provided
and is true
- Appendix G-1 List of Public Bodies Given Notice Which Did Not Respond
- Appendix H-1 Information re Applicant Initiating the Amendment



NOTICE OF JOINT PUBLIC MEETING
PROPOSED AMENDMENTS TO
THE REGIONAL NIAGARA POLICY PLAN AND TO
THE TOWN OF PELHAM OFFICIAL PLAN AND ZONING BY-LAW
EXPANSION OF TCG MATERIALS LTD. SAND & GRAVEL PIT
TOWN OF PELHAM

Appendix A-1



Purpose of the Meeting

The purpose of the meeting is to receive comments and answer questions from the public regarding applications made by TCG Materials Ltd. to amend the Regional Niagara Policy Plan and the Town of Pelham Official Plan and Zoning By-Law. Prior to the formal public meeting there will be an open house to allow an opportunity to examine proposed license site plans and to pose questions to the proponent's consultants on technical matters.

Nature of the Regional Amendment

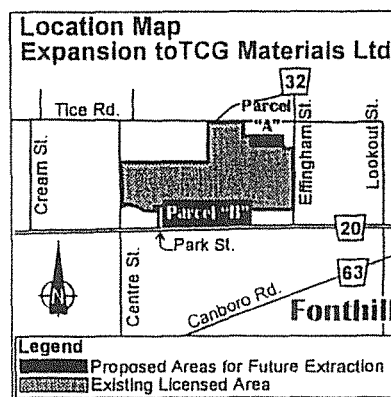
The Amendment to the Regional Niagara Policy Plan is to identify Parcel B (see Location Map below) as a "Possible Aggregate Area" for future extraction purposes. Parcel A already is shown as a "Possible Aggregate Area" in the Regional Policy Plan.

Nature of the Town of Pelham Amendments

The Amendment to the Town of Pelham Official Plan involves the redesignation of two parcels of land shown on the Location Map below (i.e. Parcels A and B) from "Unique Agriculture" to "Mineral Resource Extraction" for future extraction purposes. The Amendment to the Zoning By-law is to rezone the lands from an Agricultural "A" zone to an Extractive Industrial "M3" zone.

Location

The two parcels of land that are the subject of the local and Regional Amendments are located adjacent to the existing licensed area of TCG Materials Ltd. Parcel A, which is about 3.2 ha. in size, is located south of Tice Road and west of Effingham Street (RR 32). Parcel B, which is about 21.3 hectares in size, is located north of Regional Road 20 (formerly Provincial Highway 20) between Effingham Street and Centre Street.



This public meeting is being held under the provisions of Sections 17 and 34 of the Planning Act at the following time and place.

DATE: Monday, November 30, 1998
TIME: Open House - 4:00 p.m. - 6:30 p.m.
Formal Public Meeting - 7:00 p.m.
LOCATION: Pelham Fire Station 1, 177 Highway 20 West, Fonthill

If a person or public body that files a notice of appeal of a decision by the Regional Municipality of Niagara or the Town of Pelham in respect of the proposed Official Plan Amendments and/or Zoning By-law Amendment does not make oral submissions at a public meeting or make written submissions to the Regional Municipality of Niagara or the Town of Pelham before the proposed Amendments are adopted and/or passed, the Ontario Municipal Board may dismiss all or part of the appeal.

If you wish to be notified of the adoption of the proposed Official Plan Amendments you must make a written request to:

Mr. Thomas R. Hollick, Regional Clerk
Regional Municipality of Niagara
2201 St. David's Road, P.O. Box 1042
Thorold, ON L2V 4T7

OR

Mr. Murray Hackett, CAO/Clerk
Town of Pelham
20 Pelham Town Square, P.O. Box 400
Fonthill, ON L0S 1E0

If you wish to be notified of the passage of the Zoning By-law Amendment you must make a written request to Mr. Murray Hackett at the address noted above.

A copy of the proposed Amendments, background reports and materials related to the Amendments will be available for viewing at the Regional Niagara Planning Department and Town of Pelham Planning Services Department. This material also will be available for inspection at the open house and public meeting. For more information contact:

Mr. Ken Forgeron, MCIP, RPP
Regional Municipality of Niagara
Planning and Development Department
(905) 984-3630

OR

Mr. Jack Bernardi
Director of Planning Services
Town of Pelham
(905) 882-2227

THE CORPORATION OF THE TOWN OF PELHAM

IN THE MATTER OF SECTION 17 OF THE
PLANNING ACT, R.S.O. 1990, AS AMENDED

TOWN OF PELHAM OFFICIAL PLAN AMENDMENT NO. 37

PART OF LOTS 6, 7 AND 8, Conc. 7


A F F I D A V I T

I, JACK BERNARDI, DIRECTOR OF PLANNING SERVICES OF THE TOWN
OF PELHAM, IN THE REGIONAL MUNICIPALITY OF NIAGARA, MAKE OATH AND SAY
AS FOLLOWS:

- (1) I am the Director of Planning Services of the Corporation of the Town of Pelham and as such I have knowledge of the matters herein set forth.
- (2) On the 3rd day of November, 1998, I did cause to be sent by prepaid First Class Mail and in envelopes addressed to the respective public bodies whose names and addresses are shown on the list attached hereto and marked as Schedule "A" to this Affidavit, and to the respective persons whose names and addresses are shown on the list attached hereto and marked as Schedule "B" to this Affidavit, a notice of the public meeting.
- (3) On the 3rd day of November, 1998, I did cause to be sent by Regional Courier and in envelopes addressed to the respective public bodies whose names and addresses are shown on the list attached hereto and marked as Schedule "C" to this Affidavit, a notice of the public meeting.
- (4) On the 10th day of November, 1998, I did cause to be published in newspapers having sufficient general circulation in the area to which the proposed official plan would apply, a notice of the public meeting. The said notice appeared in the newspapers shown on the list attached hereto and marked as Schedule "D" to this Affidavit.
- (5) On the 11th day of November, 1998, I did cause to be published in a newspaper having sufficient general circulation in the area to which the proposed official plan would apply, a notice of the public meeting. The said notice appeared in the newspaper shown on the list attached hereto and marked as Schedule "E" to this Affidavit.
- (6) On the 18th day of May, 2000, I did cause to be sent by prepaid First Class Mail and in envelopes addressed to the respective persons whose names and addresses are shown on the list attached hereto and marked as Schedule "F" to this Affidavit, a copy of the Notice of Adoption of Official Plan Amendment No. 37.

SWORN BEFORE ME AT THE TOWN OF PELHAM)
IN THE REGIONAL MUNICIPALITY OF NIAGARA)
THIS 30TH DAY OF MAY, 2000 A.D.)


CHERYL MICLETTE, CLERK


) JACK BERNARDI

SCHEDULE "A"

MAILING LIST OF PUBLIC BODIES FOR NOTICE OF PUBLIC MEETING

D MANICCIA ACT MGR OF OPERATIONS
NIAGARA CATHOLIC DIST. SCHOOL BOARD
427 RICE RD
WELLAND ON L3C 7C1

ATTN MANAGER PLANNING & TRANSPORTATION
DIST SCHOOL BOARD OF NIAGARA
191 CARLTON ST
ST CATHARINES ON L2R 7P4

ATTN SECRETARY
CONSUMERS GAS
P O BOX 1051
THOROLD ON L2V 5A8

MANAGER LAND DEPARTMENT
CONSUMERS GAS
BOX 650
SCARBOROUGH ON M1K 5E3

PRES OF AGRICULTURAL LANDS SOCIETY
BOX 1090
ST CATHARINES ON L2R 7A3

SUPERVISING PLANNER
CORPORATE REAL ESTATE DIV
ONTARIO HYDRO
393 UNIVERSITY AVE ROOM D9 C5
TORONTO ON M5G 2L6

MR JOHN BLAKELY
RIGHT-OF-WAY AGENT
INTERPROVINCIAL PIPE LINE
P O BOX 128
SARNIA ON N7T 7H8

TECHNICIAN 1
RIGHT-OF-WAY DEPT
TRANSCANADA PIPELINES LTD
P O BOX 1000 STN M
CALGARY AB T2P 4K5

NIAGARA PENINSULA CONSERVATION AUTHORITY
2358 CENTRE
ALLANBURG ON L0S 1A0

SCHEDULE "B"

TCG MATERIALS LIMITED
BOX 1390
BRANTFORD ON N3T 5T6

MacNAUGHTON HERMSEN BRITTON
CLARKSON PLANNING LTD
171 VICTORIA ST N
KITCHENER ON N2H 5C5

PAUL PUPO
R R #1
RIDGEVILLE ON L0S 1M0

ROBERT & ILONA FERNANDEZ
R R #1
RIDGEVILLE ON L0S 1M0

DENNIS & FAYE McNEIL
R R #1
RIDGEVILLE ON L0S 1M0

DAVID MacKENZIE
R R #1
RIDGEVILLE ON L0S 1M0

PAUL & BETTY SAMUEL
R R #1
RIDGEVILLE ON L0S 1M0

WALTER & SUSAN PRISTANSKI
R R #1
RIDGEVILLE ON L0S 1M0

1049451 ONTARIO INC
1591 EFFINGHAM ST
R R #1
RIDGEVILLE ON L0S 1M0

DANIEL G HAIST
R R #1
RIDGEVILLE ON L0S 1M0

DAVID & MARGRIET McHENRY
BOX 942
FONTHILL ON L0S 1E0

C RODNEY DUNTON
R R #3
FENWICK ON L0S 1C0

GORDON D HAIST
R R #1
RIDGEVILLE ON L0S 1M0

ATTN MANAGER
PLANNING & TRANSPORTATION
DIST SCHOOL BOARD OF NIAGARA
191 CARLTON ST
ST CATHARINES ON L2R 7P4

425987 ONTARIO LIMITED
342 HIGHWAY #20
R R #3
FENWICK ON L0S 1C0

WILLIAM GUINN
R R #3
FENWICK ON L0S 1C0

JOANNE BLACK
R R #3
FENWICK ON L0S 1C0

RALPH HAUN
R R #1
RIDGEVILLE ON L0S 1M0

STEPHEN HAUN
R R #1
RIDGEVILLE ON L0S 1M0

TERRANCE GALLAGHER
R R #3
FENWICK ON L0S 1C0

MRS DOUGLAS JOHNSON
762 MEMORIAL DR
FENWICK ON L0S 1C0

SCHEDULE "C"

REGIONAL COURIER LIST OF PUBLIC BODIES FOR NOTICE OF PUBLIC MEETING

ATTN CLERK (PLANNING)
REGIONAL NIAGARA
BOX 1042
THOROLD ON L2V 4T7

REGIONAL NIAGARA HEALTH SERVICES
573 GLENRIDGE AVE
ST CATHARINES ON L2T 4C2

SCHEDULE "D"

The Welland Tribune
The St. Catharines Standard

The Voice of Pelham

SCHEDULE "F"

ATTN K MITCHELL

BLUE CIRCLE AGGREGATES
BOX 1390
BRANTFORD ON N3T 5T6

ROBERT & ILONA FERNANDEZ
R R #1
RIDGEVILLE ON L0S 1M0

PAUL & BETTY SAMUEL
R R #1
RIDGEVILLE ON L0S 1M0

DANIEL G HAIST
R R #1
RIDGEVILLE ON L0S 1M0

GORDON D HAIST
R R #1
RIDGEVILLE ON L0S 1M0

WILLIAM GUINN
R R #3
FENWICK ON L0S 1C0

STEPHEN HAUN
R R #1
RIDGEVILLE ON L0S 1M0

BOB CRAWFORD
DIST SCHOOL BRD OF NIAGARA
191 CARLTON ST
ST CATHARINES ON L2R 7P4

STAN THIMM
66 HWY 20 WEST
FONTHILL ON L0S 1E0

JAMES SECORD
R R #4
FENWICK ON L0S 1C0

Attn James Parkin
MacNAUGHTON HERMSEN BRITTON
CLARKSON PLANNING LTD
171 VICTORIA ST N
KITCHENER ON N2H 5C5

DENNIS & FAYE McNEIL
R R #1
RIDGEVILLE ON L0S 1M0

WALTER & SUSAN PRISTANSKI
R R #1
RIDGEVILLE ON L0S 1M0

DAVID & MARGRIET McHENRY
BOX 942
FONTHILL ON L0S 1E0

ATTN MANAGER
PLANNING & TRANSPORTATION
DIST SCHOOL BOARD OF NIAGARA
191 CARLTON ST
ST CATHARINES ON L2R 7P4

JOANNE BLACK
R R #3
FENWICK ON L0S 1C0

TERRANCE GALLAGHER
R R #3
FENWICK ON L0S 1C0

ANTHONY KRUYSSSE
200 HWY #20 W #302B
RIDGEVILLE ON L0S 1M0

DERMOT QUINN
R R #5
WELLAND ON L3B 5N8

NICK MISDORP
3488 WILEY RD
WELLANDPORT ON L0R 2J0

PAUL PUPO
R R #1
RIDGEVILLE ON L0S 1M0

DAVID MacKENZIE
R R #1
RIDGEVILLE ON L0S 1M0

1049451 ONTARIO INC
1591 EFFINGHAM ST
R R #1
RIDGEVILLE ON L0S 1M0

C RODNEY DUNTON
R R #3
FENWICK ON L0S 1C0

425987 ONTARIO LIMITED
342 HIGHWAY #20
R R #3
FENWICK ON L0S 1C0

RALPH HAUN
R R #1
RIDGEVILLE ON L0S 1M0

HELEN & DOUGLAS JOHNSON
762 MEMORIAL DR
FENWICK ON L0S 1C0

MARY & BILL LAMB
BOX 858
FONTHILL ON L0S 1E0

DOUG ANDREY
R R #1
RIDGEVILLE ON L0S 1M0

DAVID MISDORP
51238 FORKES RD
WAINFLEET ON L0S 1V0

M TUCK & D HUNT
59 BERKWOOD
FONTHILL ON LOS 1E2

BILL GAUL
R R #3
WELLANDPORT ON LOR 2J0

HARRY JANSEN
TICE ROAD
RIDGEVILLE ON LOS 1M0

BILL FLIGHT
TICE ROAD
RIDGEVILLE ON LOS 1M0

CHUCK JANSEN
461 TICE RD
RIDGEVILLE ON LOS 1M0

K POST
77 HWY 20
FONTHILL ON LOS 1E0

DON & HELGA MacRAE
327 TICE RD
R R #1
RIDGEVILLE ON LOS 1M0

A UTZ
365 TICE RD
R R #1
RIDGEVILLE ON LOS 1M0

D & M TUFTS
321 TICE RD
R R #1
RIDGEVILLE ON LOS 1M0

EVAN SAYLOR
321 TICE RD
R R #1
RIDGEVILLE ON LOS 1M0

S TAINISH M D
248 CANBORO RD
RIDGEVILLE ON LOS 1M0

WALLY & JUDY JANZEN
R R #1
RIDGEVILLE ON LOS 1M0

STEPHEN & MOLLIE KEES
26 STRATHCONA
FONTHILL ON LOS 1E0

WM SAVAGE
311 CANBORO RD
RIDGEVILLE ON LOS 1M0

EDWIN MORLEY
3 KINSMAN COURT
FONTHILL ON LOS 1E3

J HAY
ST CATHARINES STANDARD
17 QUEEN ST
ST CATHARINES ON L2R 5G5

L HARJU
1746 CREAM ST
R R #3
FENWICK ON LOS 1C0

FRED TISCHLER
809 SOUTH PELHAM ST
WELLAND ON L3C 3C9

WRAY & MILDRED TIGHE
11 VALIANT ST
FONTHILL ON LOS 1E0

RICHARD WUKASCH
190 HWY 20 WEST #401B
R R #1
RIDGEVILLE ON LOS 1M0

ROY JOHNSON
R R #1
RIDGEVILLE ON LOS 1M0

V FORBES
R R #3
PORT COLBORNE ON L3K 5V5

LORNE CARRY
8183 AINTREE
NIAGARA FALLS ON L2H 1V5

JANICE LEBLANC
1509 EFFINGHAM ST
R R #3
FENWICK ON LOS 1C0

RICHARD BALA
75 MEADOWVALE
FONTHILL ON LOS 1E4

ALAN FISHBURN
202 HWY 20 WEST
FONTHILL ON LOS 1E0

TOM WALKER
WAINFLEET
LOS 1V0

KEN & BEV BYBERG
2221 EFFINGHAM ST
R R #1
RIDGEVILLE ON LOS 1M0

A KACHU
2229 EFFINGHAM ST
R R #1
RIDGEVILLE ON LOS 1M0

NADIA & TONY MIKLAVIC
BISSELL'S HIDEAWAY
R R #1
RIDGEVILLE ON LOS 1M0

CAROLYN ALEXANDER
1705 EFFINGHAM ST
R R #1
RIDGEVILLE ON L0S 1M0

J & J PIGNATANO
415 METLER RD
R R #1
RIDGEVILLE ON L0S 1M0

KEITH & PENNY LANE
R R #3
FENWICK ON L0S 1C0

ALLAN & MARGARET MATHESON
14 OAK LANE
FONTHILL ON L0S 1E0

MRS WM RICE
190 HWY 20 WEST #A-103
R R #1
RIDGEVILLE ON L0S 1M0

MR & MRS D BLACK
345 HWY 20
R R #3
FENWICK ON L0S 1C0

ATTN EDWARD KOKE

MARTENS LINGARD ET AL
195 KING ST
ST CATHARINES ON L2R 3J6

C-232/98

GENERAL COMMITTEE

GC-20/98

November 30, 1998

Minutes of a special General Committee meeting held on Monday, November 30th, 1998 at 7:00 p.m. at Pelham Fire Station #1, 177 Highway #20 West, Fonthill. The special meeting of General Committee was called for the purpose of holding a Joint Public Meeting with the Regional Municipality of Niagara under the Planning Act with respect to the application for an Official Plan and Zoning By-law Amendment submitted by TCG Materials Limited.

ATTENDANCE: Chair, Councillor W. B. Walker;
Members of Pelham Council -
Mayor R. Beamer, Councillors U. Brand,
R. Hatt & C. Kuckyt.
Arriving during the course of the
Meeting - Councillors G. Berkhout
& S. Matthews;
Regional Councillors - L. Nelson &
J. Hughes;
Staff in attendance - (Full Time)
C.A.O./Clerk M. Hackett,
Director of Planning Services
J. Bernardi & Recording Secretary
(Deputy Clerk) C. Miclette.
Also in attendance were members
Of the media, consultants &
interested citizens.

1. CALLED TO ORDER:
The special meeting was called to order by Chair, Councillor W. B. Walker.
2. ADOPTION OF AGENDA:
RECOMMENDATION - MOVED BY COUNCILLOR R. HATT, SECONDED BY COUNCILLOR C. KUCKYT - THAT the agenda for the November 30th, 1998 special General Committee meeting, be adopted. CARRIED, CHAIR, COUNCILLOR W. B. WALKER
3. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF:
There were no disclosures of pecuniary interest noted by members of the Committee.
4. JOINT PUBLIC MEETING UNDER THE PLANNING ACT:
Proposed Official Plan & Zoning By-law Amendment Application #AM-8/98 - Proposed Expansion of Fonthill Pit TCG Materials Ltd. - Highway #20 (north side) and Effingham Street (west side):

Chair, Councillor W. B. Walker noted that this was a joint public meeting with the Regional Municipality of Niagara.

Chair Walker then recited the required form of notice.

Chair Walker then introduced Regional Councillors J. Hughes, L. Nelson and R. Beamer, as well as Town Councillors C. Kuckyt, U. Brand and R. Hatt. He indicated that Councillor S. Matthews would be joining them shortly.

Chair Walker then introduced the Director of Planning Services J. Bernardi and Planning Consultant Glen Barker of BLS Planning Services, as well as Regional Planning Staff Ken Forgeron and Vince Goldsworthy.

Chair Walker then called on Planning Consultant G. Barker, who outlined his responsibilities to the municipality.

Mr. Barker provided those in attendance with an overview of the application and the technical information contained in Report P-43/98.

He indicated that the application, for expansion, would include the two parcels denoted as Parcel A and Parcel B. He stated that it was anticipated that 6 acres from Parcel A would be extracted and that the remaining 2 acres would be used as a setback on which will be constructed a 10-15 foot berm. With respect to Parcel A, he noted that an amendment to the Town's Official Plan from Unique Agricultural to Mineral Resource Extraction would be required and that an amendment to the Town's Zoning By-law from Agricultural to Extractive Industrial was also required. With respect to the Regional Policy Plan he indicated that Parcel A was already designated as a Possible Aggregate Area and therefore did not require an amendment, but that Parcel B would require an amendment to the Regional Policy Plan to "Possible Aggregate Area."

Mr. Barker noted that 43.1 acres would be extracted from Parcel B and that the remainder of the lands would be considered a setback on which a berm will be constructed.

Mr. Barker indicated that if approvals are granted to the company, this would secure additional reserves thereby allowing for the continuation of the operation and the supply of aggregate material from this location. He also noted that in the opinion of the applicant, the subject lands are natural extensions to the existing pit operation. He further noted that extraction and rehabilitation are the primary activities proposed for the lands which are the subject of the application. Mr. Barker also stated that no changes are being proposed to the existing extraction methods, processing activity or location and shipping operation or traffic patterns.

Mr. Barker stated that Parcel A will be extracted first as reserves are depleted under the existing license and that Parcel B would be prepared for extraction to allow for a transition in extraction areas as Parcel A is depleted. He also stated that agricultural rehabilitation will continue to be progressive.

Mr. Barker stated that expansions of aggregate operations are significant undertakings which also have to be assessed relative to the Provincial Policy Statement and Regional Policy Plan. He also noted that in addition to the requisite approvals required pursuant to the Planning Act, which are amendments to the Regional Policy Plan, Pelham Official Plan and Zoning By-law, a license must be issued by the Ministry of Natural Resources pursuant to the Aggregate Resources Act.

Mr. Barker stated that since the proposed amendment to the Pelham Official Plan is to Mineral Resource Extraction, that the Resource Extraction Area Policies would apply, and that as well, the Pelham Official Plan also contains policies respecting Candidate Natural Reserves which states that of particular significance in the Town of Pelham is the Fonthill Kame-delta geological formation which is in direct conflict with the Mineral Resource Extraction designation. Mr. Barker mentioned that there are multiple resource conflicts represented on the Fonthill Kame, such as aggregate, agricultural, environmental and social/cultural, but that due to the Kame's significance Council is desirous of preserving the Kame-delta as far as is possible.

In closing, he indicated that achieving a balance has not and will not be an easy task and that the purpose of the public meeting was to obtain input from the public with respect to the application so that a recommendation report can be prepared and presented at a subsequent Committee meeting.

Chair Walker then called upon Mr. Ken Forgeron from the Regional Planning Department, who commended Mr. Glen Barker for his overview of the application. He pointed out that the need for aggregate must be balanced. He also indicated that the applications are just outside the Niagara Escarpment Commission area, but that because they abut same, comments have been requested from the Niagara Escarpment Commission. He also stated that at this point in time no decision has been made and that any comments received this evening would be taken under advisement, prior to the submission of a recommendation report to the appropriate Committees of Regional Council and the Town's General Committee.

Chair Walker then called upon Mr. Kevin Mitchell, Land Manager with TCG Materials Ltd. To make a presentation, as the applicant. Mr. Mitchell indicated that TCG Materials has been bought by a company known as "Blue Circle Aggregates". He stated that, at this point in the meeting, he would turn the presentation over to Mr. Ian McNaughton who is the planner for TCG Materials Ltd.

Mr. McNaughton indicated that the holding of a public meeting is a starting point in the process and that any applications for aggregate extraction are governed by two separate acts - the Planning Act and the Aggregate Resources Act, which will also require a public meeting. He stated that over the past 3 years various open houses have been held and that the comments received at that time we used to refine the application which had originally been considered for submission. He also stated that, in his opinion, the application, as submitted, is the best for those involved.

Mr. McNaughton stated that hopefully a meeting will be held in March, 1999 under the Aggregate Resources Act at which time the comments from other agencies will be reviewed and that staff reports will probably be submitted to the various Council's in May, 1999.

Mr. McNaughton then provided some background information with respect to the Fonthill TCG operation. He indicated that extractions from the site have been taking place since 1969 and that an additional 60 acres is required in order to increase their mineral reserve by 4 million tonnes. He also indicated that the proposed expansion would allow the operation to exist for an additional 15 years. The present operation is limited to the extraction of 750 thousand tonnes per year and that by extending the operation will allow for approximately another 8 years of operation. He also noted that the operation presently employs 19 seasonal employees.

Mr. McNaughton stated that the operation has an advantage due to the fact that the operation already exists and therefore studies with respect to noise, groundwater, environment, etc. could be carried out on the present operation and that any new applications for pit licenses would not be able to do the same.

Mr. McNaughton noted the results of the Ontario Municipal Board hearing which was held in 1986 at which time the Board decided that the operation could be operated environmentally safe and therefore the expansion was approved. He stated that the company has 12 years experience with rehabilitation of the lands which has taken place on 55 acres of the site. He noted that the specialty crops on these rehabilitated lands are well run and feasible according to the Ministry of Agriculture & Food. He also noted that agricultural rehabilitation is an obligation under the Aggregate Resources Act.

Mr. McNaughton stated that the issue of "need" for the operation was debated in 1986 and that according to an analysis carried out in 1993 for the Niagara Region, the need for additional reserves is demonstrated.

Mr. McNaughton also stated that another issue was the protection of groundwater, which has been monitored since 1981 and it has been concluded that the existing operation has not had a negative impact on the groundwater system or the headwaters of the Twelve Mile Creek.

Mr. McNaughton stated that dust control is always an issue and that, in his opinion, this is a fact of life with mineral extraction. He indicated that a plan has been developed to control dust and that this plan will be incorporated into the Site Plan Agreement.

With respect to the archaeological concerns, Mr. McNaughton noted that it was not a concern. He also noted that all provincial standards with respect to noise have been met.

Mr. McNaughton indicated that a sprinkler system had been installed on site and that the entrance to the operation had been paved in 1998 in order to provide dust control for the areas adjacent to the site.

In closing, Mr. McNaughton noted that the two key policy issues to be addressed were - demonstrated need and rehabilitation feasibility, which in his opinion have been addressed by the company.

Chair Walker then opened the meeting up to questions from the public:

Nancy Richards - with respect to rehabilitation, she questioned whether or not a fund would be established in order to carry out the necessary rehabilitation on the subject lands.

Mr. Ian McNaughton responded that the 8 cent per ton requirement has been removed, but that annual compliance reports are still required and that they will be included as a condition in the site plan agreement.

Edwin Morley - what is the impact on the business if not approved? And, if approved - how long will the rehabilitation take?

Mr. McNaughton responded by stating that, if approved, the life of the operation will be extended for another 7 years and with respect to the matter of rehabilitation, this will have to be done progressively as they have an obligation to adhere to.

Dr. Susan Tanish - requested a clarification with respect to the name on the application vs the present owner? She challenged the environmental record of the present owner (Blue Circle Aggregates) and she requested proof? She questioned the grade of sand and gravel and inquired as to the highest grade of aggregate produced? She inquired as to where the raw material was to be processed and sold? She questioned how many water trucks are used and the area they are used to cover? She questioned the comment of limited seasonal employment and would this expansion add to the employment

compliment? She stated that the company intends to make money and that, in her opinion, the removal of agricultural lands from production does not provide a benefit to the local community and therefore is a detriment to the area. She also noted the risk to children attending the local highschool due to the many environmental problems.

Mr. Steve Hollingshead, Consultant for TCG Materials Ltd. responded to the questions raised by Dr. Tainsh:

- (1) with respect to the grade of sand and gravel, he indicated that this is the only supplier of fine concrete in the Niagara area and that the specifications of the provincial government are being met
- (2) with respect to the processing and selling of the product, he indicated that the product is processed on site and that it is sold within the Niagara Region
- (3) with respect to the number of trucks and area covered, he indicated that they have one water truck which covers approximately 50 acres

Mr. Kevin Mitchell responded to the question raised by Dr. Tainsh with respect to employment and whether or not any new jobs will be created, by responding that seasonal employment is used during the months March to December and that the present job complement will be maintained.

Don MacRae - indicated that over the years many concerns have been raised by neighbours in the area to the operators at TCG Materials and that they were never addressed. He made special note of the dust problems being experienced, as well as varying annoyances such as noise, removal of trees, etc. He asked the company if they were prepared to provide a property protection value program similar to the one established for the neighbouring properties of the Regional Road 12 landfill site. He also asked Council to ensure the residents that some sort of protection is provided.

Jim Secord - noted that, in his opinion, the company has a monopoly and that others should be given the same opportunity.

Paul Samuel - questioned as to when Parcel A was designated as possible aggregate and whether or not there were any future plans to "jump" Effingham Street at a future date for expansion of the pit operation. He also questioned what the company will do once the extraction ends.

Mr. McNaughton responded by noting that he could not say what the company would do if the extraction ends in approximately 15 years.

Mr. Barker indicated that Parcel A was designated as possible aggregate under the Regional Policy Plan in 1973.

Helga MacRae - questioned whether or not the company made any contributions to the community?

Chair Walker noted that the tonnage allowance is received annually by the municipality.

Mr. McNaughton noted that the annual tonnage allowance received by the municipality on an annual basis was approximately \$20,000 and that they currently pay approximately \$63,000 in taxes.

Roy Johnson - stated that over the years his well has been lowering and he was concerned that if the expansion occurs he will have no water. He also noted the dust problem which occurred last week on Effingham Street due to the high winds.

Mr. Hollingshead indicated that, in his opinion, water is not being extracted from the water table by the TCG operations. He stated that the wells on the property have been monitored for 14 years and that no concerns are evident that they are in fact lowering the water table in the area.

Don MacRae - questioned as to how many trucks are used per day to haul sand/gravel from the operation?

Mr. Kevin Mitchell responded that each truck handles approximately 30 tonnes and that they normally used Highway #20 and not Effingham Street.

Jim Pignataro - questioned whether or not the new owner was a Canadian company?

Mr. Kevin Mitchell responded to the question by noting that Blue Circle Aggregates is a British owned company and that the previous owners were also a British owned company.

Jim Pignataro - questioned how often groundwater levels are taken; who polices the requirements under the present license? He also asked Mr. Glen Barker to take a poll as to whether or not in the opinion of the neighbours TCG has been a good neighbour.

Mr. Kevin Mitchell responded by noting that groundwater levels are taken 4 times yearly and with respect to the policing of the requirements under the license he indicated that the company must hire a consultant to do an annual report which is submitted to the Ministry of Natural Resources, as well as the local municipality.

Mr. Glen Barker stated that the reason for tonight's meeting was to provide the public the opportunity to express their opinions and concerns and he encouraged them to do so verbally or in writing.

Wally Janzen - questioned what would happen if Council does not approve the requested amendments.

Chair Walker stated that the applicant, TCG Materials Ltd., would have the right to appeal to the Ontario Municipal Board, who will make the final decision on the application.

Catherine Rice - noted that she was in attendance this evening to provide moral support and she indicated that a group of residents had fought Steed & Evans and that they had left the municipality and she indicated that possibly TCG would do the same. She also noted concerns with respect to dust, noise, etc.

Doug Andrey - asked how long does it take to rehabilitate the area once the resources are depleted? He also inquired as to why the cherry trees had been removed from the rehabilitated lands.

Mr. Kevin Mitchell responded by noting that depending on the type of agricultural rehabilitation which occurs it would take approximately 7-8 years.

Doug Andrey - inquired as to why they were going around the landfill site which is located on the property and he stated that he does not feel that the proposed berm to be constructed along Highway #20 will control the weather conditions in front of the highschool located in the area.

Mr. McNaughton responded by noting that the company was aware of the landfill site and that according to the requirements by the Ministry of the Environment, the site has been capped.

Jim Secord - questioned as to how long the operation would stay if the water disappears and would they bring water from another source?

Mr. Hollingshead stated that under the Ontario Water Resources Act any damage to water supplies would have to be rectified.

Jim Secord - questioned what the moisture content was?

Mr. Hollingshead indicated that approximately 5-10% leaves the operation in moisture content.

Don MacRae - noted that every 5 to 7 minutes a truck travels through the Fonhill Area.

Kelly Frank - questioned as to how the lands are rehabilitated?

Sean Colville, Consultant for TCG - explained the sequence which is followed to rehabilitate the lands.

Edwin Morley - commented on the use of the Walker Bros. Quarry as a landfill site and he asked what assurances do the residents have that this will not happen in Pelham.

Mr. McNaughton responded by noting that they are not licensed to use the site for landfill purposes.

Jim Pignataro - questioned whether or not the company has any other sites which have been rehabilitated.

Mr. Kevin Mitchell noted various other locations which have been rehabilitated, such as Brantford and London.

Jim Pignataro - inquired as to the ownership of the landfill site on the property.

Mr. Kevin Mitchell responded by noting that the landfill site on the property is owned by TCG Materials and he stated that the groundwater levels are constantly being monitored for seepage, etc. and he also stated that the landfill site is outside of the extraction area.

Mr. Steve Hollingshead indicated that testing was done as required by the Ministry of the Environment.

Helga MacRae - asked what proportion is this pit as part of the holdings of the present ownership?

Mr. Kevin Mitchell indicated that the Fonthill Pit is one of 51 sites presently licensed.

Paul Samuel - stated that he has grave concerns with the landfill site located on the property and that, in his opinion, the company is painting a rosy picture, which it is not.

Mr. McNaughton read, in part, a previous letter which had been submitted with respect to the rehabilitation of the lands from the Ministry of Agriculture & Food.

Roy Johnson - stated that every spring when the TCG operation start pumping, his water table goes down.

Mr. McNaughton advised Mr. Johnson that the Ministry of the Environment controls such matters and that they should be contacted.

Mr. Hollingshead indicated that the Ministry of the Environment will respond if requested.

Walter Pristanski - indicated that he has contacted the Ministry on three occasions this year and that to date no response has been received.

Chuck Jansen - noted his concern over the ice on Highway #20, but he indicated that, in his opinion, this would not result from the expansion of the operation but that it will occur because of the different standards being used by the Regional Municipality of

Niagara. With respect to the removal of the sour cherry trees from the rehabilitated lands, he indicated that it was probably due to pricing.

Chair Walker then requested comments from members of the Committee:

Councillor Uwe Brand - indicated that he has read the various reports which have been prepared with respect to the expansion of the operation and he noted the various concerns which he has. He also inquired as to whether or not the company has heard of bio-mapping which is currently being done by the Niagara Peninsula Conservation Authority.

Mr. Kevin Mitchell indicated that he was not aware of bio-mapping.

Councillor Brand then proceeded and explained what bio-mapping is and he indicated that according to the bio-mapping study done by the Niagara Peninsula Conservation Authority he feels that the operation is impacting on the Twelve Mile Creek.

Councillor Brand questioned whether or not the materials will be removed from the landfill site on the property when the operation ceases and they leave the area.

Councillor Brand questioned the consultant with respect to the controlling of silt deposits by the construction of berms in the area.

Councillor Brand indicated that, in his opinion, the company should have responded to the complaints with respect to noise and/or dust when they were received from the residents and not because of political pressures.

Councillor Brand questioned the track record of the company with respect to agricultural rehabilitation and he indicated that the municipality does not have a report from the Ministry of Agriculture & Food.

Councillor Brand inquired as to why groundwater testing was only carried out on one well and not all the wells located on the property.

Councillor Brand noted his disappointment with TCG Materials Ltd. attempting to convince him that this expansion is a good thing for the community.

Councillor Brand noted that if homes were built on the property, more revenue would be generated through taxation than is presently being generated by taxation and the tonnage allowance to the municipality.

In closing, Councillor Brand indicated that he would prepare his questions, in writing, for consideration at a future meeting of Council.

Chair Walker then declared the public meeting closed.

5. ADJOURNMENT:

RECOMMENDATION - MOVED BY COUNCILLOR C. KUCKYT, SECONDED BY COUNCILLOR R. HATT - THAT this special meeting be adjourned until the next regular meeting scheduled for Monday, December 14th, 1998, unless sooner called by the Mayor. CARRIED, CHAIR, COUNCILLOR W. B. WALKER


CHAIR


SECRETARY

C-202/99

THE CORPORATION OF THE
T O W N O F P E L H A M

Minutes of a special Council meeting held on Wednesday, October 13th, 1999 at 7:00 p.m. in the Municipal Council Chambers. The special meeting was called for the purpose of considering Report P-40/99 re Proposed Zoning By-law Amendment Application #AM-8/98 & Proposed Regional Policy Plan Amendment No. 128 - License Application - Proposed Expansion of TCG Fonthill Pit - Blue Circle Canada Inc. - Regional Road 20 (north side) and Effingham Street (west side).

ATTENDANCE: Mayor R. Beamer;
Members of Council -
Councillors G. Berkhout,
U. Brand, C. Kuckyt, R. Hatt,
W. B. Walker & S. Matthews;
Staff in attendance - (Full Time)
CAO/Director of Financial Services
G. Cherney, Director of Planning
Services J. Bernardi & Recording
Secretary (Clerk) C. Miclette.
Also in attendance were members
Of the media, delegates and
Interested citizens.

1. CALLED TO ORDER:
The special meeting was called to order by Mayor R. Beamer.
2. ADOPTION OF AGENDA:
RECOMMENDATION - MOVED BY COUNCILLOR S. MATTHEWS, SECONDED BY COUNCILLOR W. B. WALKER - THAT the agenda for the October 13th, 1999 Special General Committee meeting be adopted, as amended.
CARRIED, CHAIR, MAYOR R. BEAMER
3. DISCLOSURE OF PECUNIARY INTEREST & THE GENERAL NATURE THEREOF:
There were no disclosures of pecuniary interest noted by any member of Council.
4. BUSINESS SUBDIVISIONS:
 - (A) Planning Services:
 - (I) Hearing of Delegations -
It was agreed by the members of the Committee that this portion of the meeting would be deferred pending a short overview by Planning Consultant, Mr. Glen Barker of Report P-40/99 re Proposed Zoning By-law Amendment Application #AM-8/98 - Proposed Expansion of TCG Fonthill Pit.
 - (II) Staff Report:
Report P-40/99 re Proposed Zoning By-law Amendment Application #AM-8/98 & Proposed Regional Policy Plan Amendment No. 128 - License Application - Proposed Expansion of TCG Fonthill Pit - Blue Circle Canada Inc. - Regional Road 20 (north side) and Effingham Street (west side) - Mr. Barker provided those in attendance with a brief synopsis of the recommendations which were contained in the report.

He also noted the criteria which was used to evaluate the application - i.e. need, compatability, impact on environment and rehabilitation. He further stated that the Regional Policy Plan - Parcel A is already designated for extraction; the key government agencies had no objections and that an undertaking had been filed by Blue Circle with respect to the establishment of a Public Liaison Committee and Complaint Protocol.

(i) Hearing of Delegations:

Mrs. Lisa Harju representing PALS - Mrs. Harju, representing PALS, raised various concerns with respect to the following:

- (1) environment - use of sludge on lands which may contaminate wells in the area
- (2) Niagara Escarpment is a designated area
- (3) Fonthill Kame is designated as an ANSI
- (4) Twelve Mile Creek Headwaters - the report indicated that this expansion will have no adverse impact on this creek
- (5) Concern with the Provincial Ministries and other Agencies expressing no concerns and therefore not protecting these lands

Mr. Barker responded noting that the Niagara Escarpment Commission, a commenting agency, were in support of the application and that the Ministry of Natural Resources had assessed the matter of the ANSI designation. He also noted that the Ministry of the Environment, Ministry of Natural Resources and the Niagara Peninsula Conservation Authority were all satisfied with the report submitted by the consultant with respect to the Twelve Mile Creek. With respect to the matter of the sludge being used, he indicated that it is a soil supplement and that it is fully tested at the Donohue paper mill before it leaves the site and that it is used by many agricultural operations throughout the Niagara Region.

Mr. Doug Andrey - Mr. Andrey raised concerns with respect to the defunct landfill site located on the property owned by Blue Circle. He noted that, in his opinion, the report does not address the issue of the defunct waste disposal site and that many questions need to be answered.

Mr. Barker noted that the Ministry of the Environment had been contacted with respect to the defunct landfill site and he further indicated that the firm of Gartner Lee Ltd. does the testing of the site.

Mr. Parkin, on behalf of Blue Circle, stated that the landfill site is closed and that the site is not located within the proposed area for expansion.

Mr. Don MacRae - Mr. MacRae expressed concern with regard to various statements contained in the report. In closing, Mr. MacRae pleaded with Council to impose two conditions on Blue Circle Canada Inc. in addition to the recommendations contained in the report, as follows:

- (1) Composition of Committee - There must be a formally constituted process, binding on both sides, which will address perceived and real problems in the operation of the pit. The Committee should be comprised of representatives from Blue

Circle, the residents, a representative from the Ministry of Natural Resources and the Ministry of the Environment, a member of Town Council and perhaps a local member of the Provincial Government. He also noted that it should meet regularly.

- (2) Property Value Protection Program - That Council insist on the introduction of a guaranteed property value document, similar to the one used for the Grimsby Landfill Site.

Dr. Susan Tainsh - Dr. Tainsh was unable to attend the meeting, but Mr. MacRae, read a letter submitted by Dr. Tainsh with respect to the matter of health concerns, which in her opinion have not been addressed in the report.

Mr. Barker noted that the implementation of a Property Value Protection Plan was not a requirement and that, to date, no precedent had been set.

Mr. Paul Samuel - Mr. Samuel noted that Mr. MacRae had already highlighted the concerns of the residents and that he had nothing further to add.

Mr. Edward Koke, representing Dave & Joanne Black, 345 Highway #20 - Mr. Koke stated that the son of Mr. & Mrs. Black has recently been diagnosed with severe "asthma" and he feels that it has to do with the constant breathing in of dust from the pit. Mr. Koke then distributed pictures of the Black home (inside and outside) to show the sand and dust and the impact on their lives. He also noted the sand seeping into their cistern as well as the noise from the quarry trucks which are operating all night.

In closing, Mr. Koke suggested that Blue Circle Canada Inc. be requested to post a substantial "Letter of Credit" with the municipality which may be drawn upon by residents in the area affected by the pit operation. He also asked the Committee to deny the application, due to the lack of information respecting health affects.

Mr. Wayne Johnson - Mr. Johnson questioned what means were available to make the company accountable and to ensure that any complaints lodged would be followed up on.

Mayor Beamer stated that possibly a legal document could be formulated.

Mr. Barker indicated that the Town Solicitor would be involved in the formulation of the Public Liaison Committee and Complaint Protocol.

Mr. Wally Pristanski - Mr. Pristanski reiterated the implementation of a Property Value Protection Program for residents in the immediate area, due to the devaluing of their homes.

Mr. Barker responded by noting that he is not aware of any reductions in assessment because of proximity to a gravel pit, as gravel pits are designated as "interim uses" and therefore it was not included in the report, as it was felt that it was not warranted.

Councillor Brand - Councillor Brand, in response to Mr. Pristanski, noted that the responsibility of the planning consultant is to look at planning issues only and that possibly the political bodies could deal with the matter of the implementation of a Property Value Protection Plan.

Councillor Walker - requested staff to investigate whether or not the municipality has any authority to enter into such a program.

Mr. Jim Pignataro - Mr. Pignataro raised a concern as to why the Canada Wide Standards for Particulate Matter and Ground Level Ozone (Federal Legislation) was not addressed or mentioned in the consultant's report. Mr. Pignataro also raised other issues, such as road damage, dust problems, groundwater seepage, former waste disposal site and the lowering of the groundwater table due to pit operations.

In closing, he stated that some of the issues mentioned should be answered before the matter is dealt with by the Committee.

Mr. James Parkin - Mr. Parkin reiterated the submissions which were made at the September 27th. Meeting, as well as the Final Rehabilitation Plan which is still being reviewed with staff and the consultants with regard to the matter of specialty crops. He also noted that aggregate resources are not available easily within the Niagara Region.

Mr. Parkin also indicated that to his knowledge there is not a long list of complaints which have been registered with the Ministry of the Environment.

In closing, Mr. Parkin indicated that it was not a rosy picture and that there will be noise, dust, etc., but, in his opinion, these matters had been addressed fully in the report.

Committee Comments:

Councillor Kuckyt - inquired as to whether or not a Letter of Credit was possible, to which Mr. Barker indicated that it was not due to the fact that other legislation would apply.

Councillor Matthews - inquired as to the timeframe for the establishment of the Committee & Complaint Protocol, to which Mr. Barker noted that staff and the Municipal Solicitor would begin work immediately if the report was approved this evening.

Councillor Matthews also inquired as to whether or not it would be possible for the residents directly impacted to meet with Council, to which Mr. Barker responded that these items would be dealt with during the site plan process.

Councillor Matthews questioned the use of a dust screen in order to limit the amount of dust, to which Mr. Barker noted that the berm and landscaping has been used in place of screening.

Councillor Berkhout - noted that, in his opinion, the properties located within 120 metres of the subject site will be devalued, to which Mr. Parkin noted that the Ontario Municipal Board has dealt with this issue and he stated that if the impacts can be controlled

- then property values will remain constant.

Councillor Hatt - criticized Blue Circle Canada Inc. for their personal dealings with the residents. He also noted that the establishment of a Public Liaison Committee had been suggested previously and that, in his opinion, the Committee should meet on a quarterly basis. Councillor Hatt also stated that steps should be taken to look after the defunct landfill site on the property and that any monitoring which is carried out should be supplied to Council.

Mayor Beamer - noted that, in his opinion, the municipality can co-exist with the pit operation and that in order to do so it needs the co-operation of everyone.

Mrs. MacRae - stated that the residents in the immediate area would like a guarantee from Pelham Council that in fact the pit would not be further expanded in the future. She also noted that 1/3 of the value of their homes will be lost over the next 4-5 years and therefore the residents are paying for the profits of Blue Circle.

Mayor Beamer - reiterated that the line is Effingham Street and not beyond.

Councillor Brand - inquired as to whether or not Blue Circle knew the composition of the landfill site, to which Mr. Parkin advised that he was unable to respond to the question of composition.

In closing, Councillor Brand noted that the need for aggregates is mandated by the Province and not the municipality.

(ii) Staff Reports: (con't)

Appointment of Ratepayers to Sit on Committee - Director of Planning Services J. Bernardi suggested that the residents in attendance appoint a person or persons to sit on the Committee. It was agreed that the residents would submit names to the Planning Department within the next 2 weeks.

Report P-40/99 re Proposed Zoning By-law Amendment Application #AM-8/98 & Proposed Regional Policy Plan Amendment #128 - License Application - Proposed Expansion of TCG Fonthill Pit - Blue Circle Canada Inc. - Regional Road 20 (north side) and Effingham Street (west side) - RECOMMENDATION - MOVED BY COUNCILLOR W. B. WALKER, SECONDED BY COUNCILLOR R. HATT - THAT Report P-40/99 re Proposed Zoning By-law Amendment Application #AM-8/98 & Proposed Regional Policy Plan Amendment No. 128 - License Application - Proposed Expansion of TCG Fonthill Pit - Blue Circle Canada Inc. - Regional Road 20 (north side) and Effingham Street (west side) be received, as amended; AND THAT the recommendations contained therein be approved, as follows:

" THAT the Committee recommend to Council that Official Plan and Zoning By-law Amendment Application #AM-8/98 be approved which would:

(i) redesignate the subject lands to a "Mineral Resource Extraction" designation, and

(ii) rezone the subject lands to "Extractive Industrial (M3)"

AND THAT staff be directed to prepare the necessary amending by-laws for consideration by Council;

AND THAT Council not adopt the necessary amending by-laws until such time as the Public Liaison Committee and Complaint Protocol undertaking has been filed with and approved by the Town of Pelham;

AND THAT Regional Niagara be advised that the Town of Pelham is not opposed to Regional Policy Plan Amendment 128;

AND THAT the Town of Pelham agrees to the issuance of a pit license subject to the recommended license conditions set out in Appendix A, appended to this report and, as amended, by requiring the Final Rehabilitation Plan to include the planting of specialty crop;

AND THAT the Town of Pelham withdraw its notice of objection to the Ministry of Natural Resources respecting the Blue Circle Canada Inc. application for license;

AND THAT the Ministry of Natural Resources be requested to send notice of its final decision on the license application including the conditions and final Aggregate Resources Act plans;

AND THAT copies of this report be forwarded to Blue Circle Canada Inc., Regional Niagara, and all of the commenting agencies for their information. CARRIED, CHAIR, COUNCILLOR U. BRAND

5. ADJOURNMENT:

RECOMMENDATION - MOVED BY COUNCILLOR C. KUCKYT, SECONDED BY COUNCILLOR G. BERKHOUT - THAT this special meeting of General Committee be adjourned until the next regular meeting scheduled for MONDAY, OCTOBER 25th, 1999, unless sooner called by the Mayor. CARRIED, CHAIR, MAYOR R. BEAMER


CHAIR


SECRETARY

Mr. & Mrs. Roy Johnson
504 Kilman Road, R.R. 1
Ridgeville ON L0S 1M0

RECEIVED

NOV 16 1998

TOWN OF PELHAM
PLANNING DEPT.

Dear Sir,

We are in disagreement with any expansion of TCG Materials, Sand & Gravel Ltd. due to the amount of water used by this industry.

We in close proximity to this business have had a big drop in the level of the water table in our wells over the past few years.

This causes many problems and is of great concern to those of us who depend on our wells for water.

We wish to be on record as against any proposed expansion of TCG Materials.

Sincerely

Felices Johnson
Roy Johnson

892-2390

Nov 16 9.



7676 Woodbine Avenue, Suite 300, Markham, Ontario L3R 2N2
7676 Av Woodbine, Bureau 300, Markham, Ontario L3R 2N2

Telephone Markham (905) 948-6000 or 1-888-231-6657

November 24, 1998

Corwin Cambray, Assistant Director, Policy Planning
The Regional Municipality of Niagara
P.O. Box 1042
2201 St. David's Road
Thorold, Ontario
L2V 4T7

**Proposed amendments to the Regional policy Plan &
Town of Pelham Official Plan & Zoning By-law
Expansion of TCG Materials Ltd. Sand & Gravel Pit
File Number RE.am.128**

Thank you for the opportunity to review and comment on the subject document.

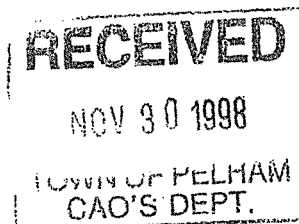
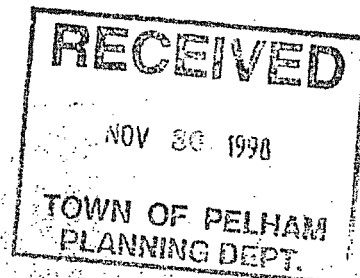
Ontario Hydro has no concerns with these proposed amendments.

Yours truly,

A handwritten signature in cursive script, appearing to read "Charles Unhola".

Charles Unhola
Senior Planner
Real Estate Services
(905) 948-6015


cc. Jack Bernardi




11/12/98 THU 16:05 FAX 905 641 5208

REG NIAGARA PLANNING

002



NOTICE OF JOINT PUBLIC MEETING PROPOSED AMENDMENTS TO THE REGIONAL NIAGARA POLICY PLAN AND TO THE TOWN OF PELHAM OFFICIAL PLAN AND ZONING BY-LAW EXPANSION OF TCG MATERIALS LTD. SAND & GRAVEL PIT, TOWN OF PELHAM



Purpose of the Meeting
The purpose of the meeting is to receive comments and answer questions from the public regarding applications made by TCG Materials Ltd. to amend the Regional Niagara Policy Plan and the Town of Pelham Official Plan and Zoning By-Law. Prior to the formal public meeting there will be an open house to allow an opportunity to examine proposed license site plans and to pose questions to the proponent's consultants on technical matters.

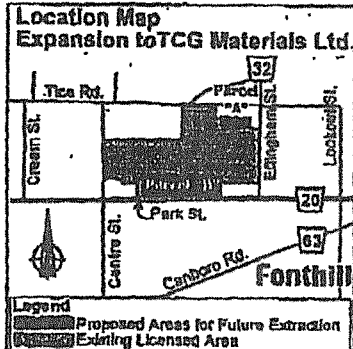
Nature of the Regional Amendment
The Amendment to the Regional Niagara Policy Plan is to identify Parcel B (see Location Map below) as a "Possible Aggregate Area" for future extraction purposes. Part of A already is shown as a "Possible Aggregate Area" in the Regional Policy Plan.

Nature of the Town of Pelham Amendments
The Amendment to the Town of Pelham Official Plan involves the redesignation of two parcels of land shown on the Location Map below (i.e. Parcels A and B) from "Unique Agriculture" to "Mineral Resource Extraction" for future extraction purposes. The Amendment to the Zoning By-law is to rezone the lands from an Agricultural "A" zone to an Extractive Industrial "M3" zone.

Location
The two parcels of land that are the subject of the local and Regional Amendments are located adjacent to the existing licensed area of TCG Materials Ltd. Parcel A, which is about 3.2 ha. in size, is located south of Tice Road and West of Effingham Street (RR 32). Parcel B, which is about 21.3 hectares in size, is located north of Regional Road 20 (formerly Provincial Highway 20) between Effingham Street and Centre Street.

This public meeting is being held under the provisions of Sections 17 and 34 of the Planning Act at the following time and place:

Location Map
Expansion to TCG Materials Ltd.



Legend
 Proposed Areas for Future Extraction
 Existing Licensed Area

DATE: Monday, November 30, 1998
TIME: OPEN HOUSE - 4:00 p.m. - 6:30 p.m.
 Formal Public Meeting - 7:00 p.m.
LOCATION: Pelham Fire Station 1
 177 Highway 20 West, Fonthill

If a person or public body that files a notice of appeal of a decision by the Regional Municipality of Niagara or the Town of Pelham in respect of the proposed Official Plan Amendments and/or Zoning By-law Amendment does not make oral submissions at a public meeting or make written submissions to the Regional Municipality of Niagara or the Town of Pelham before the proposed Amendments are adopted and/or passed, the Ontario Municipal Board may dismiss all or part of the appeal.

If you wish to be notified of the adoption of the proposed Official Plan Amendments you must make a written request to:

Mr. Thomas R. Hollick, Regional Clerk
 Regional Municipality of Niagara
 2201 St. David's Road, P.O. Box 1042
 Thorold, On L2V 4T7

OR

Mr. Murray Hackett, CAO/Clerk.
 Town of Pelham
 -20 Pelham Town Square, P.O. Box 400
 Fonthill, ON L0S 1E0

If you wish to be notified of the passage of the Zoning By-law Amendment you must make a written request to Mr. Murray Hackett at the address noted above.

A copy of the proposed Amendments, background reports and materials related to the Amendments will be available for viewing at the Regional Niagara Planning Department and Town of Pelham Planning Services Department. This material also will be available for inspection at the open house and public meeting. For more information contact:

Mr. Ken Forgeron, MCIP, RPP
 Regional Municipality of Niagara
 Planning and Development Department
 (905) 984-3630

OR

Mr. Jack Bernardi
 Director of Planning Services
 Town of Pelham
 (905) 892-2807, Ext. 16



TransCanada
 TransCanada Pipelines
 TransCanada Pipeline Tower
 111 - 5th Avenue S.W.
 Calgary, Alberta T2P 3Y6
 403-267-6100

NO OBJECTION

Janice Badgley 11/19/98
 M/D/Y

Janice Badgley, M.A.
 Urban Development Coordinator
 Right-of-Way Department

RECEIVED

NOV 26 1998

TOWN OF PELHAM
 CAO'S DEPT.

RECEIVED

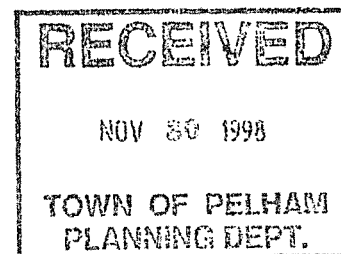
NOV 26 1998

TOWN OF PELHAM



PUBLIC HEALTH DEPARTMENT

Office of The Medical Officer of Health
573 Glenridge Avenue
St. Catharines, Ontario L2T 4C2
Telephone: (905) 688-3762
Toll Free: 1-800-263-7248 FAX (905) 682-3901
E-mail address: williams@regional.niagara.on.ca



November 25, 1998

Town of Pelham
P.O. Box 400
Fonthill, Ontario
L0S 1E0

Attention: Mr. Jack Bernardi, Planning Department

Dear Sir:

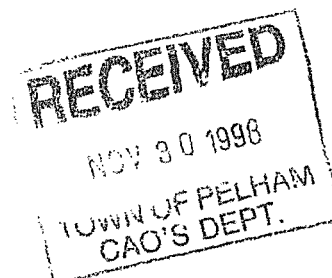
Re: Proposed Amendments to the Regional Niagara Policy Plan # 128 and the Town of Pelham Official Plan & Zoning By-law Expansion of T.C.G. Materials Ltd., Sand & Gravel Pit

This Department has reviewed the submitted documents (background info report Nov '98) regarding the above-mentioned proposal. We feel our comments would be premature at this time. We would however, welcome the opportunity to review other reports to follow and would appreciate a copy of minutes from any public meeting which pertain to this issue. Our main concern of course would be the impact on the natural environment including surface watercourses and groundwater tables as well as local wells.

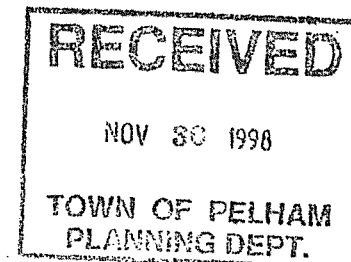
Therefore we hope to work closely with the Ministry of Environment and Energy, Hamilton Office. Should you have any questions regarding the above, kindly contact the undersigned at 735-5697.

Yours truly,

D. Pinelli, C.P.H.I.(C)
For: R.C. Williams, M.D., D.P.H., F.R.C.P.(C)
Medical Officer of Health
DP/pad



Town of Pelham Planning Board
Brian Walker, Chairman



Dear Mr. Walker

My concern is that the land is taken out of food production; the land we are keeping for food production for our children and grandchildren.

The land in question is classed as unique tender fruitland in Ontario. The other place for similar lands is in Okanagan Valley, B.C. The lands here in Niagara have the climate as well as the capacity to grow food in general.

According to Mr. N. Villeneuve, Minister of Agriculture : Agribusiness is a third largest employer in Canada.

I read a published data by Britain's Hadley Centre for Climate Chance (Toronto Star Nov. 18-98) and they predict that global food production will be severely affected in early 2000, and in U.S. alone grain yields will fall up to 10%.

What worries me is the fact that we are taking the best land out of food production and counting on importing food indefinitely in the future.

Also tourism in Niagara is a sizeable business : Blossom Tours, Peach Festivals, Grape and Wine Festival and Agricultural Fairs, we need the landbase for these. Applications for zoning changes and parcel severances are frequently requested and granted for building lots, golf courses, business developments ect. , and now for the gravel pit expansions.

As I understand M.N.R. is very short staffed and unable to review all the applications for gravel extraction, therefore, the gravel pit operators are left to do their recommendations . Similar to a fox left to guard the hen-house. And as far as the rehabilitation of the land back to it's original use - rehabilitation is now voluntary (not any longer a provincial requirement). Thus far we do not really have any long term results. Niagara Escarpment has been designated A World Biosphere Reserve by UNESCO. , another designation in Ontario is Long Point on Lake Erie. Pelham , or at least part of Pelham is on the Escarpment and I believe that we do have to stop mining and developing this unique part of Canada; it is the only escarpment we have.

Liisa Harju

Liisa Harju
905-892-7871

*To be read into the minutes,
please.*

DOUGLAS JOHNSON

762 Memorial Drive
Fenwick, Ontario

Postal Code: L0S 1C0
Phone: (416) 892-2937

Mr. Murray Hackell, CAO/Clerk
Town of Pelham,
20 Pelham Town Square, P.O Box 400
Fonthill, ON
L0S 1E0

Nov 29th 1998.

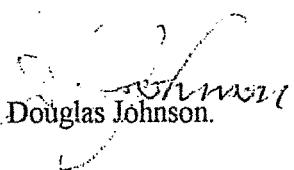
With respect to : Expansion of TCG Materials Ltd . Sand & Gravel Pit, Town of Pelham.

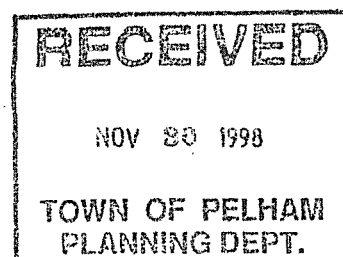
I object to this expansion in view of the fact that 2 years ago our drilled well went dry. This was the result, we were told by Dunnink Mobile Pump Service of the amount of water drawn by the pit to wash the gravel and that any expansion of the pit increasing their use of water would result in a decline in supply to our well. At that time the piping and pump had to be replaced. The pipe lengthened to 120' from 90' and the pump size increased from to a 3/4 HP from a 1/2 HP.

The Ministry of Natural Resources examined our well location and stated it was likely the water supply to the pit also supplied our well.

Thus any expansion that interferes with a decrease in our water supply I firmly oppose.

Sincerely,


Douglas Johnson.



12/02/98

09:31

1 519 576 0121

MacN HERM BRITT

12/001/001

Appendix C-7

Original

☐

WILL follow

☐

WILL NOT follow

MINISTRY OF TRANSPORTATION

CORRIDOR POLICY OFFICE

2ND FLOOR SOUTH301 ST. PAUL STREET
ST. CATHARINES, ONTARIO

L2R 7R4

FAX NO. (905) 704-2828

FACSIMILE TRANSMISSION

DATE: Dec 1 1998

TIME: 3:50

TO:

NAME

James Parker

OFFICE

CC Ken Forgeron / Jack Bernardi (via MHS)

FAX NUMBER

(519) 576-0121

FROM:

Heather Doyle

Senior Planner

Land Development Review

Telephone No. (905) 704-2913

TCG Sand & Gravel

Pit Expansion

There are ☐ pages, including this sheet.

INSTRUCTIONS/COMMENTS:

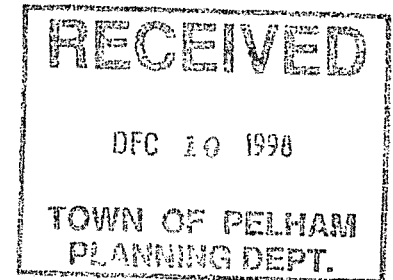
Thank you for your letter dated Nov. 20 1998. As Highway 20 has been transferred from the jurisdiction of this Ministry, we have no comments to offer.

Stephen J, Kees
P.O. box 914
26 Strathcona Drive
Fonthill, Ontario
L0S 1E0

Ph: 892- 3949

December 2, 1998

Mayor Ralph Beamer
Town of Pelham Municipal Office
Fonthill
Ontario



Dear Mayor Beamer

Having attended this weeks meeting about the proposal to expand the gravel pit I would like to raise two points for your consideration.

First, at the next public meeting on this proposal I would like the company to be asked to send a representative of sufficient status to explain the economic considerations of this proposal being rejected. Does the region have an alternative economical supply or what would be the economic effect of having these products brought in from else where? Secondly, I think it would improve the effeciency of meeting of this type if small hand held microphones could be made available to both questioners and respondents. It was often diffiicult to hear the questions and responses accurately because of the low voices of the speakers.

Yours truly

Stephen J. Kees

FROM : DSEB PURCHASING

PHONE NO. : 905 685 8511

Jan. 11 1999 02:25PM P1



District School Board of Niagara

191 Carlton Street, St. Catharines, Ontario L2R 7P4 (905) 641 1550 Fax: (905) 685-8511
 William R. McLean, Director of Education and Secretary • William T. Millar, Associate Director of Education

January 11, 1999

Mr. Jack Bernardi,
 Director of Planning Services,
 Town of Pelham,
 20 Pelham Town Square,
 P.O. Box 400,
 Fonthill, Ontario,
 L0S 1E0.

Post-It™ Fax Note	7671E	Date	Jan 11/99	# of pages	3
To	Jack Bernardi	From	B. Crawford		
Co./Dept.	T. of Pelham	Co.	Niagara Sch. Bd		
Phone #		Phone #	641-2929		
Fax #	892-5055	Fax #	685-8511		

Dear Mr. Bernardi:

RE: Proposed Amendments to the Regional Niagara Policy Plan (#128)
 And the Town of Pelham Official Plan and Zoning By-Law
 Relative to the Expansion of the TCG Materials Ltd. Sand & Gravel Pit
Town of Pelham

The Planning Committee of the District School Board of Niagara have reviewed the background information and consultant reports relative to the above noted matter. After considering this information, the Planning Committee recommended to the Board:

THAT the Board not object to the Official Plan and Zoning By-Law amendments requested by TCG Materials Ltd. to expand the Fonthill Kame pit into Parcel A and Parcel B, subject to the owners (a) conducting an annual noise and dust survey during its peak operating season and (b) ensuring that no additional truck access road be established between the pit and Highway 20, and

THAT the results of these annual surveys be forwarded to the school board for the purpose of verifying that the owners are operating the pit in conformity to the noise and dust standards identified in the consultant reports.

Since these recommendations will not be considered by the full Board until it holds its regular meeting on January 12th, they should be considered as interim recommendations. Final recommendations will be forwarded to you after the January 12th meeting.

We have attached a copy of the staff report which had been presented to the Board's Planning Committee on January 5th.

Yours truly,

R.W. Crawford
 Manager, Planning & Transportation

cc. Ken Forgeron, Regional Niagara Planning Department

REPORT TO: Education Program & Planning Committee Dec. 18, 1998
FROM: R. Crawford, Planning & Transportation
RE: PROPOSED EXPANSION OF SAND & GRAVEL PIT
OPPOSITE E.L. CROSSLEY S.S., TOWN OF PELHAM

TCG Materials has applied to the Town of Pelham and Regional Niagara for amendments to current Official Plan and Zoning By-Laws to permit the expansion of the existing sand & gravel pit on the Fonthill Kame. The existing pit and proposed expansion to the pit is located north of Hwy. 20 opposite E.L. Crossley Secondary School.

The Fonthill Kame is the most important source of unconsolidated mineral aggregate in the Niagara Peninsula. The proposed pit extension would make available approximately 4 million tonnes of high quality sand suitable for the production of a wide range of products including concrete aggregates. The expansion involves two parcels of land bordering the existing pit operation; one an 8.0 acre block shown on the map as Parcel A and the other a 52.6 acre block shown as Parcel B.

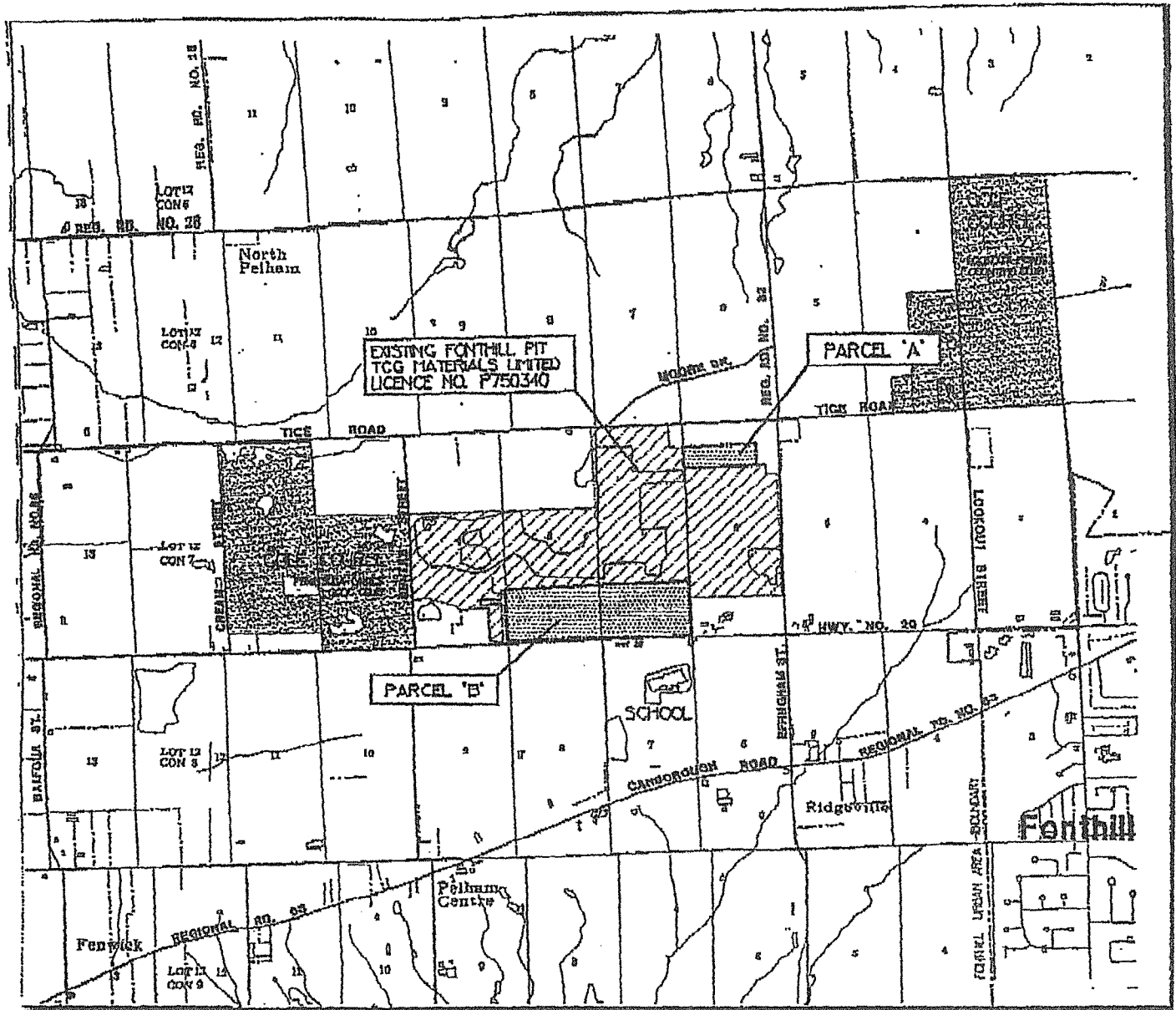
The consultants for the owners have provided a number of background studies dealing with such matters as noise levels of the operation, dust abatement measures, pit rehabilitation to agricultural use, truck traffic volumes, changes in microclimate, etc. From these studies it would appear that: (a) noise levels from the operation will be no higher than existing background traffic noise from Hwy. 20, (b) a temporary 3 meter berm of sub-soil and top soil will be placed along the Hwy. 20 frontage and flankage of Parcel B to create both a sound and visibility barrier, (c) dust from the operation will be controlled on site, (d) truck traffic to and from the site will be no higher than present since plans call for continuing the current levels of extraction (i.e. 750,000 tonnes annually), and (e) the berm soils will eventually be moved to the bottom of the excavated pit and the pit rehabilitated for agricultural use.

I attended the open house held on November 30th at the Pelham Fire Hall to view the consultant's proposal and Randy Daly, Principal of E.L. Crossley, attended the public meeting that followed in the evening. Most of the concerns expressed at this meeting came from property owners living in close proximity to Parcel A.

Mr. Daly has indicated that the existing pit operation has not had a negative impact on the school environment in terms of noise, dust or truck traffic. However, since the Board and the school community expect that the pit expansion is operated within the operational standards defined by the consultants, it is recommended:

That the Board not object to the Official Plan and Zoning By-Law amendments requested by TCG Materials to expand the Fonthill Kame pit into Parcel A and Parcel B, subject to the owners (a) conducting an annual noise and dust survey during its peak operating season and (b) ensuring that no additional truck access road be established between the pit and Highway 20, and

That the results of these annual surveys be forwarded to the school board for the purpose of verifying that the owners are operating the pit in conformity to the noise and dust standards identified in the consultant reports.



Locational Context Legend



SUBJECT SITES (PARCEL A & B)
PART LOTS 5, 7 & 8 CON. 7
TOWN OF PELHAM
REGIONAL MUNICIPALITY OF MACKENZIE



SCALE

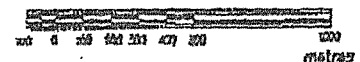


Figure
1

MacNaughton Hermesen Britton Clarkson Planning Limited
REGIONAL & URBAN PLANNING & RESOURCE DEVELOPMENT
17 Victoria Street East, Richmond Hill, Ontario, L4B 3G4
Telephone (905) 882-0888 FAX (905) 882-9151 e-mail mnaughton@planning.com

78012 TCG MAC PELM LOCATION

Received Oct. 13/99

BLUE CIRCLE - DEFUNCT LANDFILL

Purpose:

To show the importance of this site as it relates to public safety / environment and the poor practices of Blue Circle(TCG) in the past.

Background:

As recorded in documents with the MOE this site had been an old gravel quarry that was filled in with industrial waste materials from Mansfield-Demmon (a division of General Tire).

The approx. size of the landfill is 3 hectares and about 50m deep.
The former owner, a local farmer was paid per-ton by Mansfield-Demmon and two other industrial firms for use of this site.

The uncontrolled hap-hazzard dumping of this unlicensed site continued to approx. 1976.

TCG purchased the property in the late 70's for future expansion of it's sand & gravel operations.

By 1979 this site had been covered over with sand because of the many fires that had taken place over the last few years.

In the early 1980's TCG had leased the land including the landfill site back to the former owner.

Oct. 12, 1982 dense black smoke was again coming from this site. Just prior to this burning the site was inspected and found to contain pesticide bags, farm refuse, household garbage, toys, etc..

This site was issued an Action Notice to cease burning and cease deposit of waste by the MOE. TCG served notice to the MOE the next day that all dumping would cease & area to be filled in.

In June of 1984 (1 1/2 years later) the site was still being used as a waste disposal site. TCG was given 2 options;

1. license the site for waste disposal
 2. to cease use as landfill and prevent inadvertent use of this area for waste disposal.
- TCG chose option # 2.

Also in June of 1984 a monitoring program was implemented to ascertain if ground water contamination has occurred due to this site.

This site was not capped and brought up to grade with MOE approval until 1991.

In a letter dated October 15, 1991 from the MOE to TCG it was recommended that existing groundwater monitoring be expanded to a bi-annual program. The study should include, but not limited to metals and volatile organic chemicals.

The history mentioned above is based on files obtained from the MOE.

As a child living near this site we would frequently visit the dump. Fill consisted of bowling balls, battery cases, tires, automotive soft rubber moldings and drums. Open burning during the 60's & 70's was common, but often got out of control. Anyone living in this area at the time will remember the black clouds that hung over Ridgeville for days at a time. Conversations with active firefighters of that time stated that these fires would burn on and off for weeks at a time. Because of the inaccessibility, type of fire and lack of special equipment there was very little they could do to extinguish these fires. The only way to slow it down was to cover the fire with fill. Witnesses at these fires remember little rivers of oil running freely amongst the waste.

Rubber Industry

For the production of extruded rubber it must go through a vulcanizing process where chemicals are added to determine the type of rubber extrusion required (hard, soft, flexible, etc.). These chemical reactions with the rubber leave residue in the tanks and had to be changed frequently. The sludge that was collected more than likely went to landfill as solids. Also after the extrusion process salt baths were used to clean the rubber. These also would build up solids and have to be changed. During the mid 1980's General Tire which is now Known as Gencor undertook massive changes with the help of Ontario Waste Management Corp. to minimize these effluents and sludges. It is not known if any of these dried sludges are part of the landfill in question but the possibility could exist.

Conclusion:

The Planning Report P-40/99 does very little to address the status of the defunct waste landfill. Many questions still have not been answered.

1. Frequency- Blue Circle in the report state that yearly testing of groundwater are taken but are not required. MOE files show that bi-annual testing is recommended.
2. Testing & Quality- Blue Circle in the report states that full spectrum analysis of water quality is taken. What specific analysis are actually done? My requests to gain access to these analysis from Mr. Mitchell at the two prior public meetings were without success. The MOE has recommended minimal requirements for analysis. In the event that the impairment of the groundwater is determined - Does Blue Circle have a contingency plan ready for implementation?
3. Site Capping- Blue Circle states that the site was capped in accordance to Ministry standards. Capping of this landfill site was requested to remove any immediate danger to the public because of past practices. This does not mean that the site is

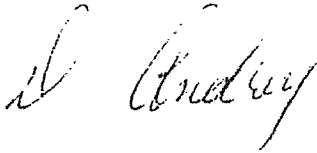
not a future risk. Does Blue Circle consider itself liable for any future adverse affects should they occur pertaining to the landfill?

4. Four Wells Around Perimeter- Are 4 wells adequate? As excavation comes closer to the site is the risk increased? How deep are the wells? Will the operation of heavy equipment and augers have an effect?

The landfill is situated on sandy soil making it a high risk for leaching. With the types of industrial waste, poor past management practices and premature breakdown of material due to fires the Town of Pelham Council should seriously look at this site as a public risk before granting approval for expansion.

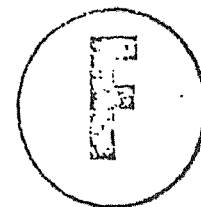
Not too long ago there was a private company operating a PCB storage facility under Ministry guidelines in the village of Smithville. The company declared bankruptcy when it was found that groundwater was contaminated. The fallout from that cost taxpayers millions and the groundwater is still not drinkable.

Thank You for your time on this matter



Doug Andrey

1524 lookout St., RR# 1
Ridgeville ON
LOS 1MO



October 15, 1991

Mr. Kevin Mitchell
TCG Material Limited
P.O. Box 1390
380 Hardy Road
Brantford, Ontario
N3T 5T6

Attention: Mr. Kevin Mitchell
Supt. Land Resources

Dear Sir:

Re: Defunct Landfill Site
Effingham Road, Lot 6, Concession 7
Our File No. 1-11-41-27

This office is in receipt of your correspondence dated September 13, 1991. It is our understanding the site restoration is in accordance with site plans submitted to and approved by the Ministry of Natural Resources. The intent of your proposal is to utilize the washed silt to fill and rehabilitate the depressed area of the defunct landfill site.

Based on the information provided, this Ministry has no objections to the proposal as outlined, provided it is carried out in a safe environmental manner and in accordance with sound engineering practices.

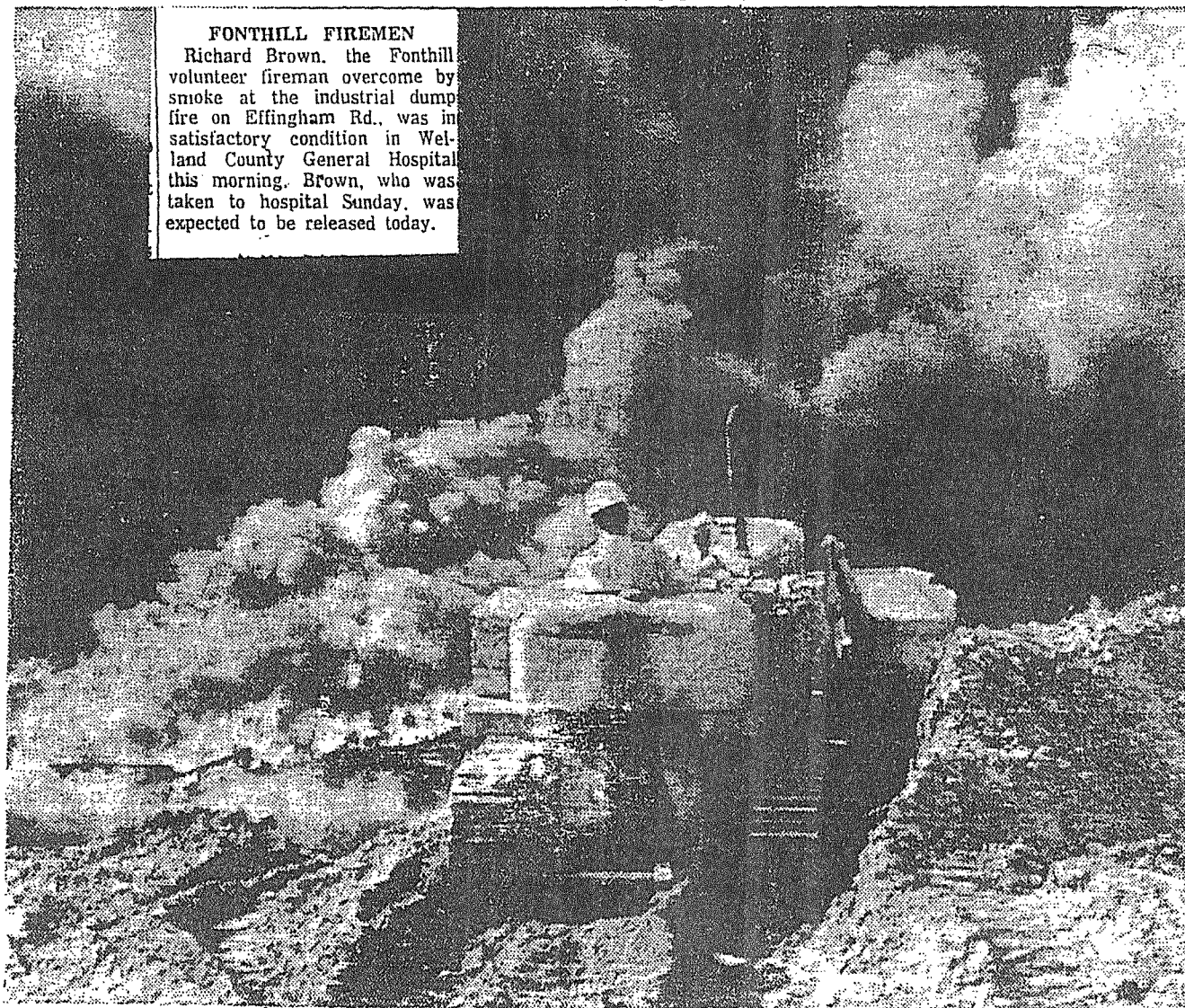
As the owners of the defunct landfill site, the responsibility of ensuring the environmental security of the site remains.

I would recommend that you continue to monitor the quality of the silt to be used. The monitoring should be in accordance with Ontario Regulation 309. In addition, the existing groundwater monitoring should be expanded to a bi-annual program. The study should include, but not be limited to metals and volatile organic chemicals.

If the impairment of the groundwater is determined, TCG Materials should have on hand, a complete and comprehensive contingency plan available for implementation.

FONTHILL FIREMEN

Richard Brown, the Fonthill volunteer fireman overcome by smoke at the industrial dump fire on Effingham Rd., was in satisfactory condition in Welland County General Hospital this morning. Brown, who was taken to hospital Sunday, was expected to be released today.





FIREMAN OVERCOME AT DUMP BLAZE

Richard Brown, a member of the Fonthill Volunteer Fire Department, is carried away from a blaze at the Mansfield-Denman General dump on Effingham Rd. near Highway 20

yesterday afternoon, after being overcome by smoke. He was taken to Welland County General Hospital. Chief Earl O'Brine said his men, along with volunteers from the St.

John's department, fought the stubborn blaze for about four hours. It was quelled when bulldozers covered it with sand. — Tribune Photos.

The Herald July 30, 1968

Firefighters battle blaze at the dump

Fonthill Firefighters under chief Earle O'Brine fought a blaze at the municipal dump on Effingham St Pelham Township for some four hours on Sunday afternoon, July 21. They were assisted by St. John's Volunteer Fire Department who sent their watertank to the scene.

Fonthill Firefighter Richard Brown was taken ill from inhaling too much smoke. He was admitted to the Welland County General Hospital. His condition was satisfactory on Monday. Chief O'Brine noted two bulldozers were called in to cover and smother the flames. Twenty men res-

ponded from the Fonthill Volunteer Department.

Received Oct. 13/99

Appendix C-11

Blue Circle Operation - Concerns & Issues

V. J. Pignataro

1. Canada Wide Standards for Particulate Matter and Ground Level Ozone (Federal Legislation) - Particulate matter has been gazetted for placement on the toxic substances list (probably in November 1999). The most harmful particulates is the fraction smaller than 2.5 microns. Due to health concerns specifics that will need to be explored will be the size and chemical speciation of the particulate. Different size particles have been associated with health impacts.

This was not mentioned in the town consultant's report.

2. Caledon Ontario- road damage estimation (not mentioned in town consultant's report) Quarry operation haulage damage to roads estimated at between .75 to 14 million dollars on an aggregate value of \$75,000,000. What is the estimate of road damage and road life reduction in Pelham due to pit operation?

750,000 tonnes per year @ 20 tonnes per truckload = 37,500 trucks per year
What will the cost be to Pelham residents for road repair?

3. Dust problems reported by neighbours - no verification in consultant's report. Are the neighbours overstating the problem? Is Blue Circle playing down the problem since the complaints are of no significant consequence? Who should answer this question?

4. Page 6 section 3.2

...aggregate operations must be appropriately designed, buffered, and or separated from sensitive land use such as residences, and educational facilities to prevent adverse effects....

5. Page 9 "...the ground water has been monitored since 1981.... the existing pit does not have any appreciable effect on the ground water". Who interpreted these results based upon what data? On what statistical evidence was the sampling frequency chosen ie 1 observation per year per well?

6. page 10 "...pit development would tend to enhance the groundwater recharge"
Common sense says that without the pit ...the water would run off the land; with the pit the water is saturated with mineral salts (from washing operation) and from percolating into the sand and stone that was previously covered by soil? The quantity of water did not change but did the quality?

7. page 16 Former waste dump.....**what is in the dump?** organics? inorganics? What tests are required to determine safety of leachate?

"Blue Circle is not required to monitor" Is that true? Is monitoring the site voluntary? What is town council's position? I strongly disagree. Blue Circle should find out what is

in the dump tell the residents what is in the dump and take the necessary steps that would be taken by a good corporate citizen who makes its bottom line in Pelham. When the aggregate is all removed will Pelham residents have to pay for the clean-up?

8. page 17 What does the paragraph "nonetheless it has been the practice to request" does that mean voluntary?

9. Page 17 " The format of the Public Liason Committeeis acceptable...." it is not clear who found it acceptable?

10. Page 18 item 6 "can assist in making the operation as compatible as possible....." See point 4 above.

11. Page 18 last item ".....a ground water monitoring program....." is the frequency of sampling based upon scientific or statistical grounds?

12 Appendix 1 - Ground water impacts ...I found confusing...who is correct?

13 Appendix 2 page 2 sentence - "Is it possible that past extraction processes have lowered the groundwater table?" This issue keeps coming upwith residents claiming to have witnessed the problem with wells drying up and loss of water flow when pit washing operations are under way. Is this fact or fiction?

14 Appendix 4 -page 3 paragraph "In summary the MOE has raised two issues..... " poor conclusion (what else did the author not address that does not affect the basic conclusion?) If it is not important why did the MOE ask in writing?

15. Will test well location and frequency of sampling alter the conclusions? refer to Appendix 4 page 4 last paragraph.

16. I would like to review the water table level and chemical analysis results ...this evening

17. There appears to be a number of issues that should still be answered before any approvals.

I appologize for all spelling mistakes

Received Oct. 13/99

Appendix C-12

Pelham Town Council,
Town Hall,
Fonthill Ontario.

I have read the report concerning the application of Blue Circle Aggregates to expand into two parcels of land adjacent to properties already owned by that company.

I must confess: I am not quite certain why I am here. As I peruse the recommendations and observations contained in that document I am struck by the rosy picture painted there. It describes a perfect world—Camelot. We are told that the Company has addressed all of the concerns which have been voiced by the residents over the past months and even years. It would seem that there is little for me as a resident and local taxpayer to worry about. And yet I wonder...

Page after page in the report outlines the measures taken by the Company to reduce and virtually eliminate problems with noise, dust, traffic, etc. The authors of this report would have us believe that we should be thankful that the Company has shouldered the burden of coming into Pelham to remove aggregate which is needed for the greater good of the residents of this area.

And yet, there is something missing here. I find myself faced with a myriad of questions which seem, as odd as that may sound, to have been left out of the mix or glossed over. There are problems here which have not been resolved but dissolved—in my view, superficially addressed and dismissed without a satisfactory solution.

I am fully aware that this report has been prepared by a number of experts: planners, geologists, hydrologists—experts who know their own field much better than I do. And I suppose the current wisdom is that we should defer to these experts and endorse their incisive examination of the situation here in Pelham. After all, this is the only in-depth study at our disposal and since it has been prepared by competent individuals we must accept it, if not without comment, at least without criticism.

I do not question the abilities of those who have presented this report; but at the same time, they must extend a similar courtesy to me. They are in no position to dismiss the concerns I am expressing here as without merit, simply because my post-graduate degrees are not in the Natural or Social Sciences, but in the Humanities. I have learned to think and to evaluate critically. And I have also learned to express my concerns when my analysis of a problem indicates that I should do so. Indeed, my background is every bit as valid as theirs—perhaps more so in those areas which deal with my real concerns: people and morality.

As I said, this report seems to imply that there are no real problems, and consequently no valid objections, to the proposal at hand. May I suggest to you, however, that this report is inherently flawed: problems allegedly addressed and ultimately solved to the satisfaction of the company have never been discussed on a one to one basis with the neighbours at any time. We have never been invited to sit down with anyone to consider these problems.

So who prepared this report? —or more to the point, who paid for it? My neighbours and I certainly did not. We do not have the kind of funds available to us to undertake studies such as this. Except for the organization and publication of the material contained it, neither did the Town of Pelham commit monies to this study to safeguard the interests of the local citizens. Let there be no mistake: this is not an issue which concerns only the residents within a few hundred metres of the pits. As I shall demonstrate in a moment, this is an issue which touches the lives of virtually all of the residents of Fonthill.

If neither government nor local residents contributed to the publication of this report, who did? The quarries. They picked up the tab because it was in their own interests to do so. Besides, it's a business expense—a tax write-off—which the residents, by the way, do not have access to.

The experts who wrote this report were paid by the quarries. Does that not strike you as odd? That there is only one report presented by just one side in the discussions? Have you ever heard of objectivity? Are you telling me that this report takes both sides equally into consideration? And just what is an expert? Salesmen with graphs and charts. I submit to you that they are selling a point of view, not a total picture. Do you know the old saying: "He who pays the piper calls the tune."?

I'm an academic and I understand the nature of research. I have done it throughout my career. Funding for research projects—grants which come from outside sources—are rarely offered for altruistic reasons. Witness the case in Toronto a few months ago when a medical researcher wanted to publish data she had gathered while working on a project funded by a large drug company. Since her findings were not what the company wanted to hear, they threatened to take her to court to prevent her from releasing her findings.

I am not suggesting to you that the report has falsified data: I am simply suggesting to you that the process leading to the publication of this report is fatally flawed. Data are lacking and processes are hidden from view. Suspicious, even cynical by nature, I ask myself if I can accept this report at face value. Is this good science carried out objectively with full disclosure of all the facts? For me, the answer is a definitive, no!

For years, the tobacco industry convinced the general public that smoking would not do any harm to the human body. To smoke was a cool thing to do, a positive life-style we should all embrace. And many did. When questions were asked, research scientists simply produced page after page of scientific "facts" which proved beyond a shadow of a doubt that their critics were mistaken. That most of these studies were funded by the tobacco companies themselves, goes without saying. These are the same companies which have recently paid billions of dollars in restitution in the United States. Strange isn't it?

How many times have you been told that this chemical or that process is completely benign—harmless, only to find out later that this was not the case? Can we afford to be so naïve at the end of the twentieth century to believe everything we read without question? Do we really believe big government and big business are looking after our interests? Do we really think that agencies like Greenpeace just love to send men and women out in rubber dingys for the fun of it? Hardly! They are calling into question the statements of the same big government and big business which affect the lives of every one of us. That is what I am doing; that is what I am asking this council to do.

Let me make three important points:

1. Blowing Sand and Dust

Why should I question the findings of this report? Let me give you one good example. But there are others: On September 23, 1999 there was a moderate wind blowing across the pits in the direction of Effingham Road. Sand flying through the air prevented me from seeing the berms surrounding the pits clearly. And I live only a couple of hundred metres from them. We were assured in our abbreviated meeting of September 20 that the company had taken measures to prevent these sandstorms: they have a water truck, we were told. When asked if that truck was in use at the time, Mr. Mitchell adeptly avoided giving a direct response and talked of other measures the Company had undertaken. To have one water truck at hand is hardly sufficient. And if other measures do not fix the problem, they too are equally useless. The Company doesn't seem to think that the empirical evidence we have; namely, sand in our cereal bowls, is valid. If the company is willing to ignore this kind of evidence which all and sundry can see, how much more willing would they be to ignore any other details which they choose not to see? Under the circumstances, it is hard for me to lend any credence at all to the sincerity of Blue Circle or to the authenticity of this report.

On the issue of blowing sand: is it not true that the Company has signs posed within its property warning of the dangers of breathing fine particles of sand? Is this not in accordance with government regulations? We have empirical evidence of blowing sand

beyond the limits of Blue Circle's property. Fields in the area are covered in grass and weeds, so it is clear that the sand is emanating from the pits. Can you tell me, with any credibility at all, why that sand would be harmful to your workers on your property and not to the neighbours in the immediate vicinity of the pits?

I recall the headlines in the Paris newspapers a week after the Chernobyl nuclear disaster in April of 1992. I was living in Germany at the time and we were all fully aware of the dangers the radioactive cloud presented to all of us. A week later, when the French government had not yet even warned its citizens, the papers asked in bold headlines what mysterious circumstances had caused the radioactive particles to stop at the Rhine. How come your sand loses its lethal properties when it crosses Effingham Road?

Has anyone ever done a health study to determine what the effects of blowing sand on the residents have been. My daughter, who suffers from asthma, has not had an attack since she left Fonthill to go to school in Ottawa three years ago. Curious isn't it? I can assure you: the first case of silicosis recorded in this area will lead to a lawsuit of significant proportions.

I said I would address the issue of sand—dust, I think is what most people call it. But we aren't talking ordinary dust. This is silica dust, sharp-edged particles of sand, which lodge in the lungs and damage them over the years. Much the way miners suffer from the inhalation of coal dust, the residents are subjected to this dust—or more correctly, sand particles. I say the "residents". Who are they? Let me make one thing very clear: they are not just the neighbours a few hundred metres from the pits.

Do you know how far the sand (i.e. dust) of this kind will carry? Here is a picture of the Kaiserstuhl, a magnificent wine growing region in southwestern Germany. The soil is sand, which has collected there over millennia. Do you know where it came from? From the Sahara which is several hundred kilometres away in the direction of the prevailing winds. That my neighbours on Effingham Road have particles of sand in their cereal is all too obvious. Less obvious is the silent damage that is being done to the health of the inhabitants of the area. Again I make my point: where are the health studies—the independent health studies—which have addressed this problem? Or did our experts forget to append them to the report?

Let us talk money for a moment. On two occasions I have officially appealed my taxes on the grounds that the quarries were devaluing my property. Twice, once prior to the recent re-assessment of all the homes in the area, and once since that time, I have won my case. In both instances the authorities saw to fit acknowledge my assertions and reduced the assessment on my home. In view of this, I suggest to you that the operations of

Telephone City and now Blue Circle have in fact, had a deleterious effect on my property.

This is the form I would have to fill out if I were to choose to list my property for sale with a local real estate company. On the bottom of the form is a series of questions:

- i. Are you aware of possible environmental problems...
- ii. Are there any existing or proposed waste dumps, disposal sites or land fills in the immediate area?
- iii. Are there...

Do you think for a moment that a prospective buyer would not shy away from the purchase of my property? Or perhaps agree to buy but only at a greatly reduced price.

This is a fact which the Company must be forced to acknowledge publicly and for which they must make restitution.

I am pleading my own case and that of my two neighbours: Paul and Betty Samuel and Wally and Susan Pristanski. Why should we who are immediately adjacent to these pits bear the brunt of the costs of this operation? Why should we pay for the operations of a foreign company to come in here, to rape the landscape and to devalue our homes, leaving nothing behind but a hole in the ground. Sure they have agreed to re-habilitate. They must by law. But there is no way that will leave the land in the state they found it. Nor will they increase the value of our property for their efforts, at least not in our lifetime. This is not a company known for its good works and community-minded spirit—not to mention philanthropy. They pay a few pennies per ton and assume they have covered all the damage they do to roads and property.

2. Cost Recovery

Does the company really cover the damage they cause? You be the judge: a recent study carried out by Cambridge University in England shows that, during its lifetime on the road, a single truck and load weighing a combined 40 tonnes, exert as much concentrated pressure on the asphalt surface of the road, as 163, 840 automobiles. The estimated weight of the automobiles for the purpose of this study was one tonne. You can extrapolate from these figures as you wish, but the bottom line remains indisputable: truck traffic to and from the quarries is costly, not to the company but to the taxpayers of this region. Neither the quarries nor the truckers are paying their share of the costs of this damage.

3. Conflicting Evidence: the Uniqueness of the Fonthill Kame

In the report we are told, on the one hand that government agencies have recognized that the area in question has been designated as one of particular unique interest—but, then, we are informed, these agencies have no objections to continue to remove a substantial portion of the kame. I think it is important to realize that the report does not indicate that government agencies “enthusiastically endorse” the recommendations. Only that they “have no objections”. Does that make sense to you? Has someone simply sat at a desk and said: “Sure, go ahead.” without understanding, or worse caring about, the implications for the future? How are we to reconcile a policy which says “preserve” on one hand and “destroy” on the other? In my view, this represents the height of irresponsibility. There are no reasons why the policy should change. Either the kame has intrinsic value or it doesn’t and that value is an integral part of the property, not something which changes as the need arises. There is no indication that the notion of “preserve” is invalid and unacceptable. We are simply told that there are “no objections”. Where does this statement come from? Who had no objections? On what grounds was it made? Was there an attempt to reconcile these two contradictory points of view? I could go on... There is no depth to this report. Potential areas of concern have been glossed over—I might even suggest buried. Statistics on environmental impact have been introduced without full disclosure of their source, what they purport to measure, or how these figures are arrived at.

I am asking council not to accept this report at face value; it is a flawed document, the blind acceptance of which would reflect badly all of us. In no way should you allow it to go forward until certain conditions have been met.

In summary, I would plead with Council that two conditions be appended to this report:

1. The report suggests that a committee should be set up as a liaison between residents and quarries. It must have teeth. As it now stands, there is nothing to stop Blue Circle from consulting with us—and then completely ignoring our suggestions. There must be a formally constituted process, binding on both sides, which will address perceived and real problems in the operations of the pits. This committee should comprise representatives from Blue Circle, the residents, someone from the Ministry of Natural Resources and of the Environment, a member from Town Council and perhaps even our local member of the provincial parliament. It must meet at regularly scheduled times.
2. That council insist on the introduction of a guaranteed property value document, similar to the one now in force at the new Regional dump in Grimsby. I have referred to this document on other occasions and Councillor Berkhout took up the

idea in a recent article attributed to him in the local paper. The provisions of that document, applied to the problems of the pits in our area, would satisfy me and the neighbours I represent, provided it were valid for a indefinite period of time.

October 12, 1999.

A handwritten signature in dark ink, appearing to read "Prof. Donald MacRae", with a long horizontal flourish extending to the right.

Prof. Donald MacRae
327 Tice Road,
Ridgevill, Ontario, L0S 1M0



Susan Tainsh, M.D., FRCPC
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Appendix C-13
Received Oct. 13/99
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October 13, 1999

Council
Township of Pelham

RE: EXPANSION OF TCG MATERIALS, SAND AND GRAVEL PIT, TOWN OF PELHAM

I am a medical doctor, specializing in Internal Medicine and a resident of the Township of Pelham. I have some concerns about the existing sand and gravel pit and also the proposal for expansion of same.

It is difficult to estimate the burden of morbidity and mortality over time that will result from chronic exposure of residents in the neighborhood of the existing and proposed quarry to airborne particulate matter (sand and dust), however, it would appear that the Applicant has not fully addressed the health issues with respect to:

1. Berms as a dust preventative
2. Seasonal dust control
3. Nonseasonal dust control

1. Berms

I have reviewed the planning application and, in particular, Appendix A Site Plan excerpts respecting construction of Berms.

It is noteworthy that the Berms are constructed only for acoustic and/or visual purposes. It would appear then that Berm construction is not intended to contain particulate matter and it may be that the shape of these Berms actually increases wind velocity at the top of the Berms and thus the volume of airborne particulate matter - as the wind hits the Berm, this wind may be compressed at the bottom and then forced over the top of the Berm carrying particulate load.

2. Seasonal Dust Control

Further reference is made to page 8 (of 19) of the BLS planning (Appendix I letter to Miss Quan), "This (dust control) program has been deemed as being an acceptable approach to minimizing dust from the subject property provided that it is properly implemented." The issue of monitoring of dust control measures is not addressed.

This program, if properly implemented, is designed for use only during the period of the year that the pit is in operation. It does not address the issue of dust particulate control when the site is in seasonal disuse.

3. Nonseasonal Dust Control

It has been suggested that there is noticeable blowing particulate matter when the velocity reaches 25 km/hr and the metrological evidence suggests that such winds are maximal (extreme hourly speed/extreme gust speed) during the season of the year where the pit is not in use and where active dust control measures are, therefore, not available.

Sustained particulate exposure, especially during the disuse season when active dust measures are not in use, would be of concern respecting the potential for the development of chronic pulmonary disease in residents exposed over time to airborne sand and dust.



Susan Tainsh, MD FRCPC
Internal and Geriatric Medicine

Canadian Climate Normals, 1961-1990

Introduction to the Climate Information

"Normals" is the term commonly used for values of climatic elements averaged over a fixed, standard period of years. In the 1930s, the 30-year period from 1901 to 1930 was selected as the first international standard period. The selection of this number of years was somewhat arbitrary, however it was considered sufficiently long to eliminate year-to-year variations. In 1960 it was agreed that countries should continue to use 30-year periods, but that normals should be up-dated every decade rather than every 30 years, beginning with the period 1931 to 1960.

In Canada in the first part of this century, there was a limited number of stations with observations over the 1901-1930 period. As a result, averages were computed based on all available data, rather than the normals period. The first set of 30-year normals was computed for the 1921-1950 period, using adding machines. Sets were produced after the end of each subsequent decade. The first computer for climate applications was installed in 1965, in part to facilitate normals production.

Climate Elements

Except where labelled "extreme", "date" or "direction", values of the climate elements are averages for the 1961-90 period, or for a portion of that period no shorter than 20 years. Extreme values are the highest or lowest occurrence for all years for which data are available. Extreme values whose corresponding means are missing should be used with caution. They are often derived from less than twenty years of observations, and may not be indicative of occurrences which could be expected over longer periods.

Starting and ending dates for station observing programs are given after station names. It should be noted that these dates are for the total period of observation, and hence refer to the period used to calculate the extreme values.

Symbols in the tables include "+" to indicate a value occurred more than once in a given period and "M" to indicate there are no data for the period. "N" or "X" indicate that some data do exist, but not enough to derive a value. See "Missing Data" below for more information. In cases where a "+" appears, dates given are for the most recent event.

In the following discussion, stations are categorized as either "ordinary" or "principal". The former are typically stations which record daily temperature and/or precipitation amounts. In contrast principal stations take hourly observations for all or parts of the day. Stations for which elements such as pressure, relative humidity and wind are included are usually principal.

Temperature

Temperatures are measured in a louvered box called a Stevenson screen, mounted 1.5 m above the ground, which is usually a level, grassy surface. At most climatological stations the maximum temperature is the highest recorded in a 24-hour period ending in the morning of the next day. The minimum values are for a period of the same length, beginning in the evening of the previous day. Mean temperature is the average of the two. At most principal stations the maximum and minimum temperatures are for a day beginning at 0600 Greenwich (or Universal) Mean Time, which is within a few hours of midnight local standard time in Canada.

Degree-Days

Degree-days for a given day represent the number of Celsius degrees that the mean temperature is above or below a given base. For example, heating degree-days are the number of degrees below 18° C. If the temperature is equal to or greater than 18, then the number will be zero. Values above or below the base of 18° C are used primarily to estimate the heating and cooling requirements of buildings. Values above 5° C are frequently called growing degree-days, and are used in agriculture as an index of crop growth. Values in the tables represent the average accumulation for a given month or year.

Precipitation

Rain, drizzle, freezing rain, freezing drizzle and hail are usually measured using the standard Canadian rain gauge, a cylindrical container 40 cm high and 11.3 cm in diameter. The precipitation is funnelled into a plastic graduate which serves as the measuring device. Snowfall is the measured depth of newly fallen snow, measured using a snow ruler. Measurements are made at several points which appear representative of the immediate area, and then averaged. "Precipitation" in the tables is the water equivalent of all types of precipitation.

At most ordinary stations the water equivalent of snowfall is computed by dividing the measured amount by ten. At principal stations it is usually determined by melting the snow that falls into Nipher gauges. These are precipitation gauges designed to minimize turbulence around the orifice, and to be high enough above the ground to prevent most blowing snow from entering. The amount of snow determined by this method normally provides a more accurate estimate of precipitation than using the "ten-to-one" rule. Even at ordinary climate stations the normals precipitation

values will not always be equal to rainfall plus one tenth of the snowfall. Missing observations is one cause of such discrepancies.

Precipitation measurements are usually made four times daily at principal stations. At ordinary sites they are usually made once or twice per day. Rainfall, snowfall and precipitation amounts given in the tables represent the average accumulation for a given month or year.

Snow Cover

Snow cover is the depth of accumulated snow on the ground, measured at several points which appear representative of the immediate area, and then averaged. End-of-month values are given in the tables.

Number of Days With Specified Parameters

These tables give the average number of days per month or year on which a specific meteorological event occurs.

In the case of rainfall and precipitation, 0.2 mm or more must occur before a "day with" is counted. The corresponding figure for snowfall is 0.2 cm.

A day with freezing precipitation is counted if there is an occurrence of 0.2 mm or more of rain or drizzle which turns to ice on contact with the underlying surface.

Fog for this purpose is defined as a suspension of very small water droplets reducing the horizontal visibility to less than 1 km.

A day with thunderstorms occurs if thunder is heard.

Sunshine

In Canada, bright sunshine observations are made using the Campbell-Stokes sunshine recorder, first developed in 1863. It consists of a 10-cm glass sphere which focuses sunlight on a card calibrated in hours. Sunlight burns a trace on the card, allowing the observer to determine to the nearest tenth of an hour the amount of sunshine that occurs on a given day. It should be noted that the recorder measures only "bright" sunshine, which is less than "visible" sunshine. For example, sunshine immediately after sunrise and just before sunset would not be bright enough to register. Values given in the tables are the average number of hours per month or year.

Station Pressure

Station pressure is the force exerted on the earth's surface by a column of air of unit cross-sectional area extending from the surface of the earth to the outer limit of the atmosphere. It is given in kilopascals: one kilopascal is equal to 10 millibars, 0.2953 inches of mercury, or 0.145 pounds per square inch. The standard instrument for the measurement of atmospheric pressure is the mercury barometer, in which the air pressure is balanced against the weight of a column of mercury in a glass tube that contains a vacuum.

Moisture

Vapour pressure is the pressure exerted by the moisture in the air. It increases with both atmospheric temperature and moisture content. It is related to relative humidity in that the latter is the ratio of the actual value of vapour pressure to its value if the air were saturated at the same temperature. For a note on the unit of measurement used, see the section on station pressure.

Both relative humidity and vapour pressure are derived from standard air temperature measurements, and directly measured moisture parameters, such as wet-bulb temperature.

Wind

The majority of wind measurements are made by anemometers installed at ten metres above the ground. A substantial minority of sites have instruments installed at other heights, usually greater than ten metres. Wind in the first ten's of metres above the ground tends to increase in speed and veer with height.

Winds are normally measured at level, open sites removed as much as possible from obstacles to wind flow such as trees, buildings, or hills.

At the majority of principal stations, wind is measured by taking a one- or (since 1985) two-minute mean at each observation, from a U2A anemometer. At other wind-measuring sites, values are usually obtained from autographic records of U2A or 45B anemometers. Averaging periods may vary from one minute to an hour. Winds measured by U2A's are recorded to the nearest ten degrees, while those from the 45B provide them to eight points of the compass. The extreme gust speed is the instantaneous peak wind observed from the anemometer dials, or abstracted from a continuous chart recording.

Where directions were measured more precisely than eight points, they have been converted to this format. The direction is defined as that from which the wind blows.

Representativeness of Data

The question of the extent to which climate elements measured at one site are representative of surrounding locations is often raised. There is no simple answer to this question, with factors such as the magnitude of the distance from the observing site, homogeneity of the terrain, and nature of the element having to be considered. For example, over rough ground or in a built-up area, wind speeds can vary dramatically over distances of a few metres. In contrast, air temperature tends to be a less variable weather element. Over flat, uniform terrain temperature measurements at a single site may be representative of conditions tens of kilometres, or even further, away.

Expert advice should be sought when using these data at locations where representativeness is in question.

Missing Data

Except for extremes, most of the values were derived from monthly averages or counts for each year in the 1961-90 period. In the case of daily temperatures (maximum, minimum and mean values) the "three-five rule" was used, i.e. a month was counted as missing if more than five observations were missing (more than three, if consecutive).

In the case of average monthly amounts of rain, snow and precipitation, months were excluded if one or more days were missing. The same method was used for elements which are accumulative, such as degree-days and "days with". In the case of extreme values, no data were excluded from the selection process. The "three-five" rule was used for most of the remaining elements.

Canadian Climate Normals 1961-1990



Environnement
Canada

Environnement
Canada

Normales climatiques au Canada 1961-1990

HAMILTON A, Ontario

43°10'-N 79°56'-W/O

237m

1959 to/à 1990

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
janv	févr	mars	avr	mai	juin	juill	août	sept	oct	nov	déc	année

Temperature

Daily Maximum (°C)	-2.6	-1.6	3.7	11.3	18.5	23.5	26.4	25.3	20.7	13.9	7.2	0.5	12.2	Maximum quotidien (°C)
Daily Minimum (°C)	-10.0	-9.8	-4.6	1.2	7.0	12.2	15.1	14.4	10.5	4.7	-0.2	-6.7	2.8	Minimum quotidien (°C)
Daily Mean (°C)	-6.2	-5.6	-0.4	6.3	12.9	17.9	20.8	19.9	15.6	9.3	3.5	-3.1	7.6	Moyenne quotidien (°C)
Extreme Maximum (°C)	13.3	14.3	23.7	29.7	32.8	35.0	37.4	35.6	34.4	28.9	24.4	20.7		Maximum extrême (°C)
Date	967/25	984/23	990/15+	990/25	962/17	988/25	988/07	973/28	973/03	971/02	961/03	982/03		Date
Extreme Minimum (°C)	-27.8	-26.1	-22.0	-12.8	-3.9	1.7	5.6	1.1	-2.2	-7.8	-12.9	-26.8		Minimum extrême (°C)
Date	976/18	976/02	980/02	972/07	966/10	972/11	961/05	965/30	974/23	965/29	987/21	980/25		Date

Température

Degree-Days

Above 18°C	0.0	0.0	0.0	1.1	10.6	44.4	94.5	76.9	24.7	1.2	0.0	0.0	253	Au-dessus 18°C
Below 18°C	749.4	670.2	574.8	353.2	174.8	45.2	8.8	17.4	93.8	274.9	436.4	654.8	4054	Au-dessous 18°C
Above 5°C	0.7	0.8	16.1	76.6	240.4	389.3	488.7	462.5	320.9	140.1	36.0	4.9	2177	Au-dessus 5°C
Below 0°C	203.4	173.5	75.3	5.9	0.0	0.0	0.0	0.0	0.0	0.4	17.3	122.7	598	Au-dessous 0°C

Degrés-jours

Precipitation

Rainfall (mm)	22.2	24.6	50.5	66.5	70.1	78.4	81.0	84.7	83.5	65.8	69.6	46.4	743.3	Chutes de pluie (mm)
Snowfall (cm)	41.8	32.0	22.3	7.3	0.5	0.0	0.0	0.0	0.0	1.1	9.8	37.6	152.4	Chutes de neige (cm)
Precipitation (mm)	61.3	53.5	73.7	74.3	70.7	78.4	81.0	84.7	83.5	66.3	80.2	82.8	890.4	Précipitations (mm)
Extreme Daily Rainfall (mm)	27.9	54.1	31.1	42.7	39.9	66.6	107.0	90.8	55.5	54.9	53.6	56.8		Extrême quotidien de pluie (mm)
Date	965/24	990/22	980/21	976/25	969/18	984/17	989/26	981/08	984/13	973/29	962/09	990/29		Date
Extreme Daily Snowfall (cm)	43.2	27.4	24.2	29.2	11.0	0.0	0.0	0.0	0.0	23.6	16.4	35.6		Extrême quotidien de neige (cm)
Date	966/22	984/28	987/31	979/09	989/07	990/30+	990/31+	990/31+	990/30+	962/25	986/20	969/23		Date
Extreme Daily Pcpn. (mm)	44.6	54.1	41.4	44.7	39.9	66.6	107.0	90.8	55.5	54.9	53.6	56.8		Extrême quotidien de préc. (mm)
Date	982/31	990/22	985/04	976/25	969/18	984/17	989/26	981/08	984/13	973/29	962/09	990/29		Date
Month-end Snow Cover (cm)	10	6	1	0	0	0	0	0	0	0	1	6		Couver. de neige, fin de mois (cm)

Précipitation

Days With

Maximum Temperature > 0°C	11	11	22	29	31	30	31	31	30	31	28	17	303	Température maximale > 0°C
---------------------------	----	----	----	----	----	----	----	----	----	----	----	----	-----	----------------------------

Journées avec

Measurable Rainfall	4	4	8	11	11	10	9	9	11	12	11	7	107	Hauteur de pluie mesurable
Measurable Snowfall	13	10	7	3	*	0	0	0	0	*	4	11	49	Hauteur de neige mesurable
Measurable Precipitation	16	13	14	12	11	10	9	9	11	12	14	15	146	Hauteur de précipitation mesurable

Moisture

Rel. Humidity - 0600L (%)	N	N	N	N	82	85	88	92	92	89	N	N	
Rel. Humidity - 1500L (%)	74	72	68	58	57	57	57	60	63	67	73	77	

Humidité

Humidité relative - 0600L (%)	
Humidité relative - 1500L (%)	

Wind

Speed (km/h)	X	X	X	X	X	X	X	X	X	16	X	20	X
Most Frequent Direction	X	X	X	X	X	X	X	X	X	SW	X	SW	X
Extreme Hourly Speed (km/h)	89	74	97	89	70	69	56	50	50	67	72	81	
Direction	SW	W	SW	W	W	SW	SW	NE	W	SW	SW	SW	
Extreme Gust Speed (km/h)	133	109	126	119	105	93	106	96	80	96	102	109	
Direction	SW	W	W	W	SW	SW	W	W	W	SW	SW	W	

Vent

Vitesse (km/h)	
Direction la plus fréquente	
Vitesse horaire extrême (km/h)	
Direction	
Vitesse extrême du coup de vent (km/h)	
Direction	

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Canadian Climate Normals 1961-1990



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Canada

Normales climatiques au Canada 1961-1990

ST CATHARINES A, Ontario

43°12'-N 79°10'-W/O

98m

1971 to/à 1990

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
janv	févr	mars	avr	mai	juin	juill	août	sept	oct	nov	déc	année

Temperature

Daily Maximum (°C)	N	N	N	N	N	N	27.3	25.9	21.4	14.6	8.4	2.1	N	Maximum quotidien (°C)
Daily Minimum (°C)	N	N	N	N	N	N	16.5	15.7	11.6	5.6	0.9	-4.7	N	Minimum quotidien (°C)
Daily Mean (°C)	N	N	N	N	N	N	21.9	20.8	16.5	10.1	4.7	-1.2	N	Moyenne quotidien (°C)
Extreme Maximum (°C)	15.4	15.6	25.3	30.3	32.4	34.6	37.4	35.6	33.3	28.9	22.2	21.9		Maximum extrême (°C)
Date	988/31	976/25	990/15	990/25	987/29	988/25	988/07	973/28	983/10+	971/02	977/03	982/03		Date
Extreme Minimum (°C)	-23.6	-25.7	-17.7	-9.1	-1.7	1.7	8.0	2.6	0.6	-5.0	-10.6	-22.5		Minimum extrême (°C)
Date	982/17	979/18	978/02	982/07	974/02	972/11	984/08	982/29	974/23	975/31	976/30	980/25		Date

Température

Degree-Days

Above 18°C	N	N	N	N	N	N	125.4	97.9	32.2	1.9	0.0	0.0	N	Au-dessus 18°C
Below 18°C	N	N	N	N	N	N	3.4	10.7	76.3	246.5	398.7	598.4	N	Au-dessous 18°C
Above 5°C	N	N	N	N	N	N	525.0	490.2	345.9	164.1	51.6	9.0	N	Au-dessus 5°C
Below 0°C	N	N	N	N	N	N	0.0	0.0	0.0	0.0	8.9	84.2	N	Au-dessous 0°C

Degrés-jours

Precipitation

Rainfall (mm)	N	N	N	N	N	N	64.6	75.5	91.6	69.5	67.6	50.3	N	Chutes de pluie (mm)
Snowfall (cm)	N	N	N	N	N	N	0.0	0.0	0.0	0.0	8.7	33.0	N	Chutes de neige (cm)
Precipitation (mm)	N	N	N	N	N	N	64.6	75.5	91.6	69.6	76.4	80.0	N	Précipitations (mm)
Extreme Daily Rainfall (mm)	30.0	40.4	35.8	49.3	44.2	65.2	66.0	51.4	67.0	36.8	48.0	34.4		Extrême quotidien de pluie (mm)
Date	979/24	990/22	985/31	976/25	986/19	981/22	971/13	987/09	979/14	980/25	973/15	990/29		Date
Extreme Daily Snowfall (cm)	28.2	46.8	18.8	19.6	8.0	0.0	0.0	0.0	0.0	0.8	13.6	20.0		Extrême quotidien de neige (cm)
Date	978/20	984/28	987/31	979/09	989/07	990/30+	990/31+	990/31+	990/30+	972/18	989/17	977/05		Date
Extreme Daily Pcpn. (mm)	30.0	40.4	42.4	49.3	44.2	65.2	66.0	51.4	67.0	36.8	48.0	34.4		Extrême quotidien de préc. (mm)
Date	979/24	990/22	973/17	976/25	986/19	981/22	971/13	987/09	979/14	980/25	973/15	990/29		Date
Month-end Snow Cover (cm)	N	N	N	N	N	0	0	0	0	0	0	3		Couvr. de neige, fin de mois (cm)

Précipitations

Days With

Maximum Temperature > 0°C	N	N	N	N	N	N	31	31	30	31	29	21	N	Température maximale > 0°C
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Journées

avec

Measurable Rainfall	N	N	N	N	N	N	8	10	11	12	11	8	N	Hauteur de pluie mesurable
Measurable Snowfall	N	N	N	N	N	N	0	0	0	*	3	11	N	Hauteur de neige mesurable
Measurable Precipitation	N	N	N	N	N	N	8	10	11	12	14	16	N	Hauteur de précipitation mesurable

Wind													Vent	
Speed (km/h)	X	X	X	X	X	X	X	X	X	X	19	20	X	Vitesse (km/h)
Most Frequent Direction	X	X	X	X	X	X	X	X	X	X	SW	X	X	Direction la plus fréquente
Extreme Hourly Speed (km/h)	89	63	74	74	61	65	63	59	53	63	70	70		Vitesse horaire extrême (km/h)
Direction	SW	E	SW	W	SW	SW	SW	NW	W	SW	SW	SW		Direction
Extreme Gust Speed (km/h)	137	87	104	137	96	115	93	92	133	94	111	106		Vitesse extrême du coup de vent (km/h)
Direction	SW	E	W	SW	SW	SW	SW	SE	W	SW	SW	W		Direction

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Canadian Climate Normals 1961-1990



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Normales climatiques au Canada 1961-1990

TORONTO PEARSON INT'L A, Ontario

43°40'-N 79°38'-W/O

173m

1937 to 1990

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
janv	févr	mars	avr	mai	juin	juill	août	sept	oct	nov	déc	année

Temperature

Daily Maximum (°C)	-2.5	-1.6	3.7	11.5	18.4	23.6	26.8	25.5	20.9	14.1	7.2	0.4	12.3	Maximum quotidien (°C)
Daily Minimum (°C)	-11.1	-10.6	-5.3	0.6	6.1	11.1	14.2	13.4	9.4	3.6	-0.8	-7.4	1.9	Minimum quotidien (°C)
Daily Mean (°C)	-6.7	-6.1	-0.8	6.0	12.3	17.4	20.5	19.5	15.2	8.9	3.2	-3.5	7.2	Moyenne quotidien (°C)
Extreme Maximum (°C)	16.7	14.9	25.6	31.1	34.4	36.7	37.6	38.3	36.7	30.6	25.0	20.0		Maximum extrême (°C)
Date	950/25	984/23	946/28+	990/25	962/17+	952/25	988/07	948/25	953/02	951/05	961/03+	982/03		Date
Extreme Minimum (°C)	-31.3	-31.1	-28.9	-17.2	-5.6	0.6	3.9	1.1	-3.9	-8.3	-18.3	-31.1		Minimum extrême (°C)
Date	981/04	943/15	950/04	972/07	966/07	972/11+	968/30	965/30	965/27	969/23	949/26	942/20		Date

Température

Degree-Days

Above 18 °C	0.0	0.0	0.0	1.1	10.3	39.0	90.1	68.2	21.2	1.1	0.0	0.0	231	Au-dessus 18 °C
Below 18 °C	769.6	681.9	583.4	359.9	187.2	57.1	12.3	22.6	105.6	283.1	444.5	667.2	4174	Au-dessous 18 °C
Above 5 °C	0.6	0.6	12.5	72.3	227.9	371.9	480.8	448.5	305.7	134.1	31.3	4.0	2090	Au-dessus 5 °C
Below 0 °C	221.3	184.4	80.4	6.5	0.0	0.0	0.0	0.0	0.0	0.8	18.4	134.1	646	Au-dessous 0 °C

Degrés-jour

Precipitation

Rainfall (mm)	18.5	20.8	35.1	56.0	65.8	68.9	76.6	84.2	74.2	62.0	64.3	38.3	664.7	Chutes de pluie (mm)
Snowfall (cm)	32.3	25.9	19.9	7.3	0.1	0.0	0.0	0.0	0.0	1.1	6.4	31.1	124.2	Chutes de neige (cm)
Precipitation (mm)	45.6	45.5	56.9	64.0	66.0	68.9	76.6	84.2	74.2	63.0	70.3	65.5	780.8	Précipitations (mm)
Extreme Daily Rainfall (mm)	58.7	31.8	41.7	41.7	92.7	43.9	118.5	80.8	108.0	121.4	86.1	40.9		Extrême quotidien de pluie (mm)
Date	946/09	975/24	942/16	951/12	944/31	957/28	980/28	970/30	948/18	954/15	962/10	962/06		Date
Extreme Daily Snowfall (cm)	36.8	39.9	32.3	26.7	2.3	0.0	0.0	0.0	0.0	7.4	33.5	28.2		Extrême quotidien de neige (cm)
Date	966/23	965/25	964/10	939/10	976/07	990/30+	990/31+	990/31+	990/30+	962/25	940/30	944/11		Date
Extreme Daily Pcpn. (mm)	58.7	55.9	41.7	41.7	92.7	43.9	118.5	80.8	108.0	121.4	86.1	40.9		Extrême quotidien de préc. (mm)
Date	946/09	965/25	942/16	951/12	944/31	957/28	980/28	970/30	948/18	954/15	962/10	962/06		Date
Month-end Snow Cover (cm)	8	6	0	0	0	0	0	0	0	0	1	6		Couvr. de neige, fin de mois (cm)

Précipitation

Days With

Maximum Temperature > 0 °C	11	12	23	29	31	30	31	31	30	31	28	17	304	Température maximum > 0 °C
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Journées avec

Measurable Rainfall	4	4	8	10	11	11	10	11	10	11	11	7	107	Hauteur de pluie mesurable
Measurable Snowfall	12	10	7	3	*	0	0	0	0	*	4	11	47	Hauteur de neige mesurable
Measurable Precipitation	14	12	13	12	11	11	10	11	10	12	13	15	141	Hauteur de précipitation mesurable
Freezing Precipitation	2	2	2	*	0	0	0	0	0	0	*	3	10	Précipitation verglaçante
Fog	2	3	3	2	3	2	2	3	3	4	3	4	34	Brouillard
Thunderstorms	*	*	*	2	3	5	6	5	3	1	*	*	28	Orages

Station Pressure (kPa)	99.48	99.54	99.45	99.34	99.38	99.34	99.42	99.52	99.64	99.64	99.49	99.52	99.48	Pression à station (kPa)
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Moisture														Humidité
Vapour pressure (kPa)	0.33	0.35	0.47	0.66	0.99	1.41	1.68	1.67	1.36	0.92	0.66	0.43	0.91	Pression de vapeur (kPa)
Rel. Humidity - 0600L (%)	82	82	83	81	81	84	86	90	90	88	86	85		Humidité relative - 0600L (%)
Rel. Humidity - 1500L (%)	75	72	68	57	54	55	53	56	60	63	73	77		Humidité relative - 1500L (%)

Wind														Vent
Speed (km/h)	18	17	17	17	15	13	12	11	12	13	16	16	15	Vitesse (km/h)
Most Frequent Direction	SW	W	NW	NW	NW	NW	NW	NW	W	W	W	W	W	Direction la plus fréquente
Extreme Hourly Speed (km/h)	77	77	97	81	71	63	61	71	77	92	80	70		Vitesse horaire extrême (km/h)
Direction	SW	NW	SW	W	SW	NW	W	W	W	SW	SW	SW		Direction
Extreme Gust Speed (km/h)	115	105	124	111	109	107	135	93	92	104	122	104		Vitesse extrême du coup de vent (km/h)
Direction	E	W	SW	W	W	W	NW	W	SW	NW	SW	SW		Direction

Revised 1998-06-11

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for additional / pour information supplémentaire

Martens Lingard Maddalena Robinson & Koke

Rec'd Oct. 13/99

Barristers & Solicitors

PETER J. LINGARD, B.Sc. (Eng.), LL.B.*
RONALD E. MARTENS, B.COMM., LL.B.
THERESA MADDALENA, B.A., LL.B.
PETER B. ROBINSON, B.A., LL.B.
EDWARD J. KOKE, B.A., LL.B.
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195 KING STREET
ST. CATHARINES, ONTARIO
L2R 3J6

TELEPHONE (905) 687-6551
FAX (905) 687-6553

COUNSEL:

WILLIAM H. ROBINS, Q.C.

Fax: 892-5055

Town of Pelham
20 Town Square
Box 400
Fonthill, Ontario
L0S 1E0

Attention: Jack Bernardi, Director of Planning Services

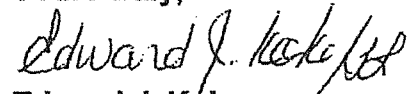
Dear Sir:

**Re: Black v. Blue Circle
Our File No.: 8042**

We are the solicitors for Mr. and Mrs. David Black who reside 345 Highway 20, Fenwick, Ontario. I refer you to a copy of a letter I forwarded on their behalf to T.C.G. Materials dated August 19, 1999 a copy of which I forwarded to you.

I confirm that we subsequently spoke after I forwarded the above letter to you and I indicated that I would remain involved on behalf of the Blacks. I understand a meeting is scheduled for this evening concerning the proposal to expand the Fonthill pit and I would ask that you accept this letter as notice of my intentions to make some brief representations on their behalf.

Yours truly,



Edward J. Koke

EJK/tl

Encl.

**c.c. Attention: Deputy Clerk
Town of Pelham
Fax: 892-5055**

August 19, 1999

TCG Materials
P.O. Box 1390
Brantford, Ontario N3T 5T6

Attention: J. Kevin Mitchell
Property Manager

Dear Sir:

Re: Black, David and Joanne
Property Concerns at 345 Highway 20, Fenwick, Ontario (TCG expansion)

We are the solicitors for Mr. and Mrs. David Black who reside at 345 Highway 20, Fenwick, Ontario which is in the municipality of the Town of Pelham.

The Blacks' property is adjacent to the two parcels (parcel A and B) in relation to which TCG (now Blue Circle) has recently submitted an application for permission to expand its extraction operations.

The Blacks informed me that they have previously spoken to you and other TCG representatives concerning problems they have encountered with respect to TCG's present extraction operations. With the expansion of TCG's operations and in particular with respect to the expansion of its operations on parcel B, the Blacks can reasonably expect that these problems will increase dramatically.

The problems I am referring to include the following:

- a) sand and dust constantly coating the outside of their house, particularly on horizontal surfaces such as window sills and seeping to the inside of the house;
- b) metal eaves troughs on the exterior of their house having a "sandblasted" look;
- c) a constant sense that they are breathing in dust when they are at home

- (recently Mr. Black has been diagnosed with asthma);
- d) sand seeping into their water cistern resulting in frequent cleaning of the cistern and sand deposits in their plumbing system;
 - e) noise - during the last week they were awakened several times at 3:00 a.m. by the sound of quarry trucks.

We understand that if the official plans are amended and the Application by TCG is approved the operations adjacent to our client's house will continue for approximately 5-7 years. The Blacks are not interested in embarking in a course of action which will involve a litany of complaints or possibly legal action during this time period but would prefer to resolve the expected problems in advance of the expansion.

I expect that you are in a better position than myself or the Blacks to propose a solution to the above noted dust, dirt and noise problems. I would ask that you communicate directly with me and provide me with some realistic and practical proposals to resolve future problems.

In the interim, I have advised my clients to continue to maintain a record of the existing problems by way of photographs and videos. They also intend to be present at the meeting of the General Committee of the Planning Services Division of the Town of Pelham when the recommendation report is presented which we expect will take place sometime next month. Hopefully their concerns can be alleviated prior to that meeting.

I look forward to hearing from you.

Yours truly,

Edward J. Koke
EJK:ks

c.c. Town of Pelham
20 Pelham Town Square
P.O. Box 400
Fonthill, Ontario L0S 1E0

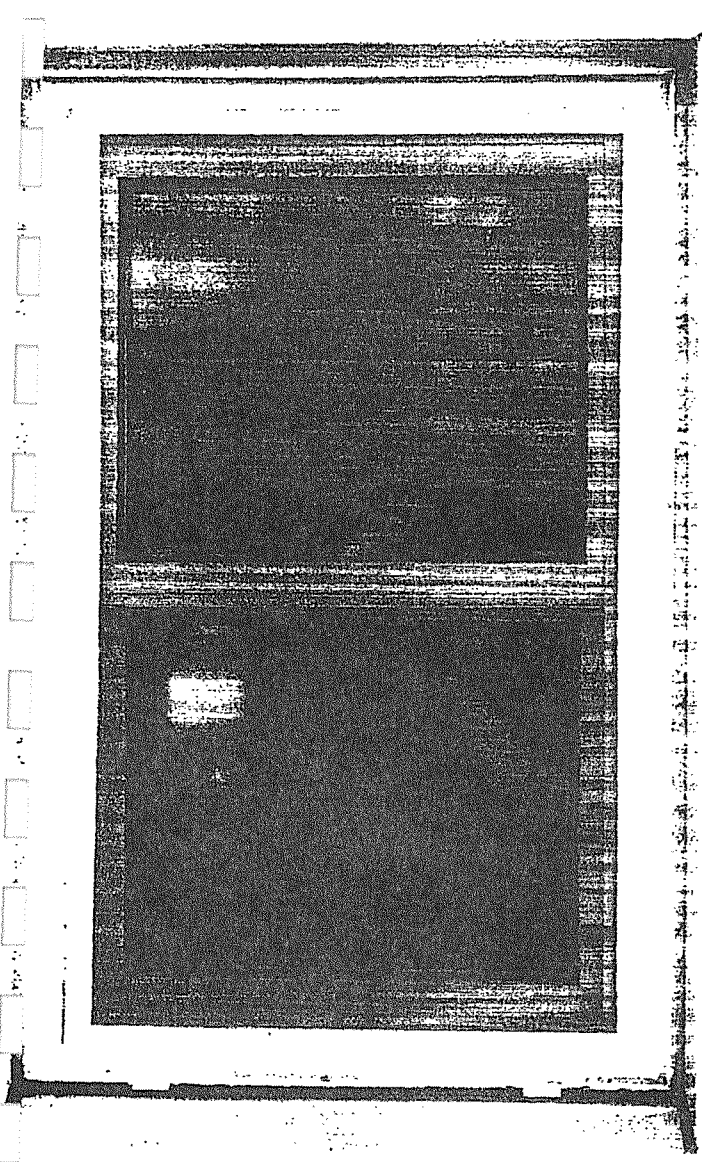
Attention: Mr. Jack Bernardi
Director of Planning Services

Regional Municipality of Niagara
2201 St. David's Road
P.O. Box 1042
Thorold, Ontario L2V 4T7

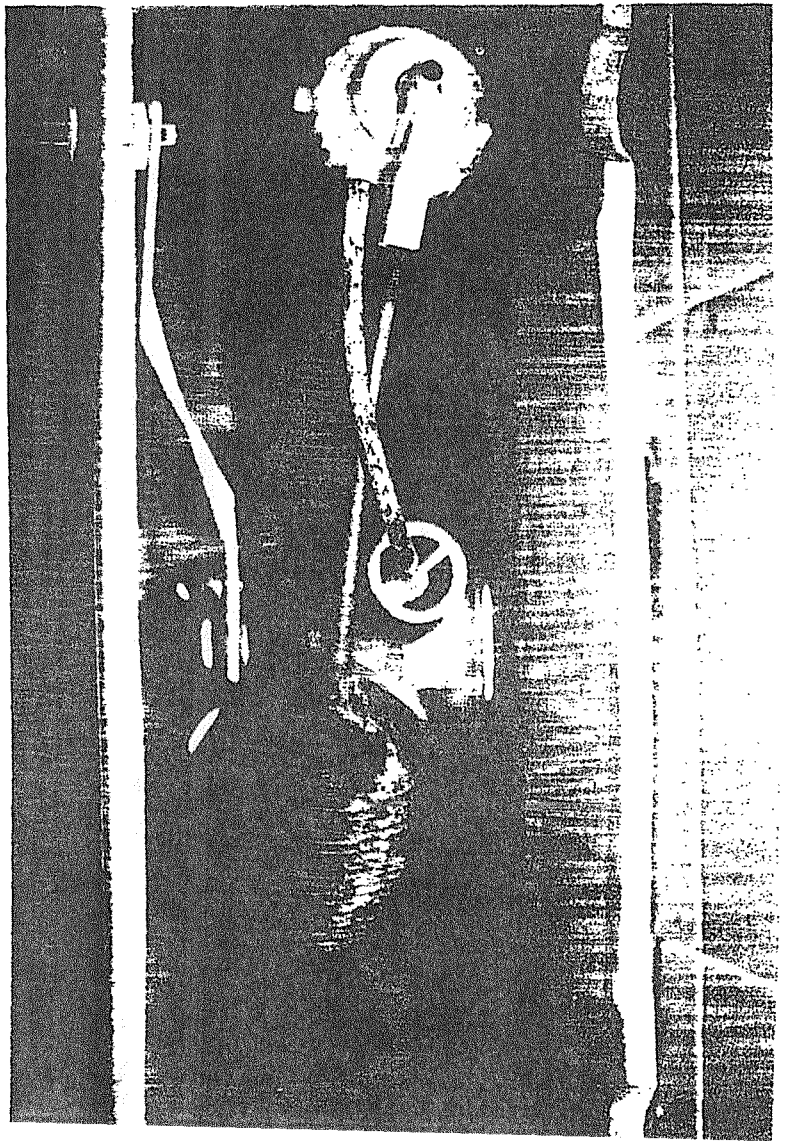
Attention: Mr. Drew Semple
Planning and Development Department

Ministry of Natural Resources
Box 5000, 4890 Victoria Avenue N.
Vineland Station, Ontario L0R 2E0

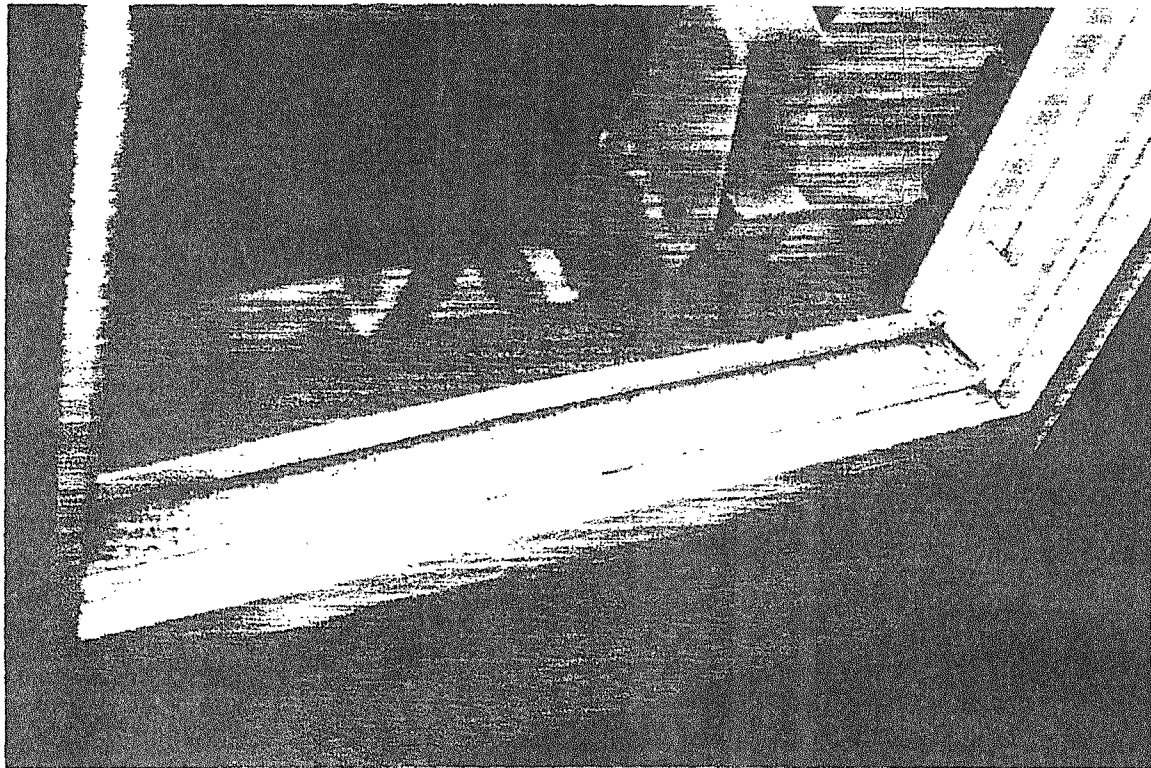
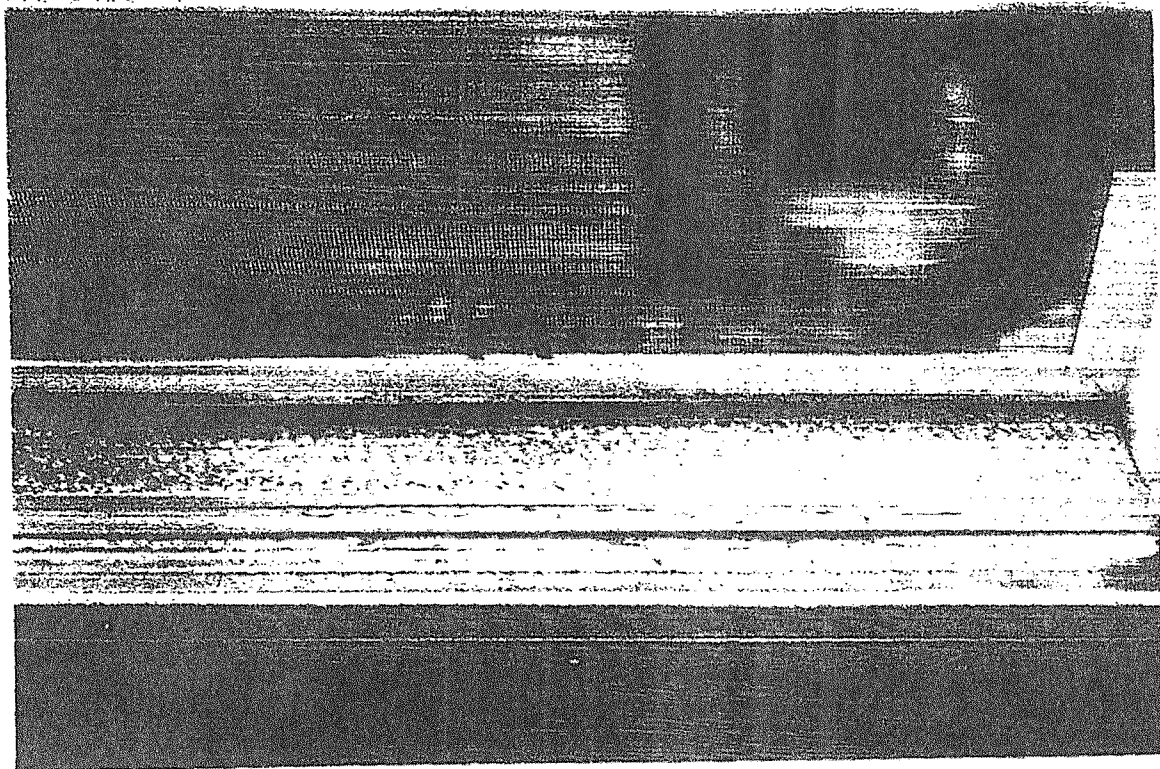
Ministry of Natural Resources
Guelph District
1 Stone Road West
Guelph, Ontario N1G 4Z2



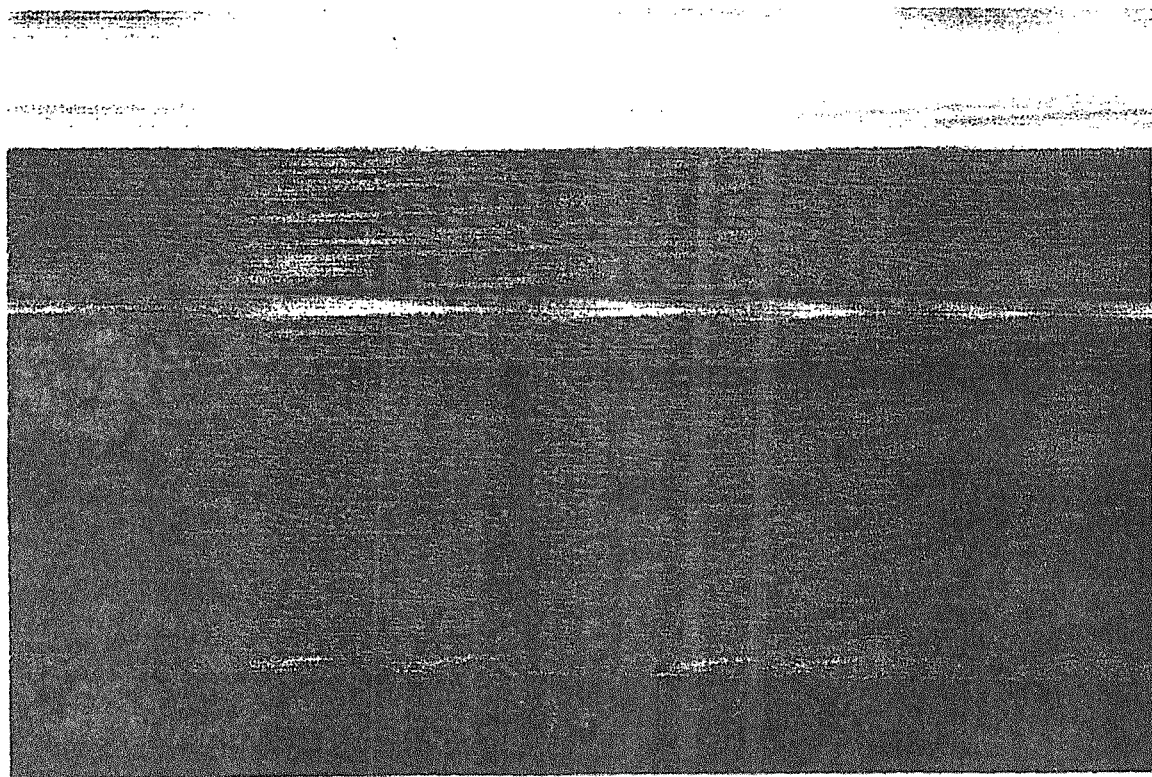
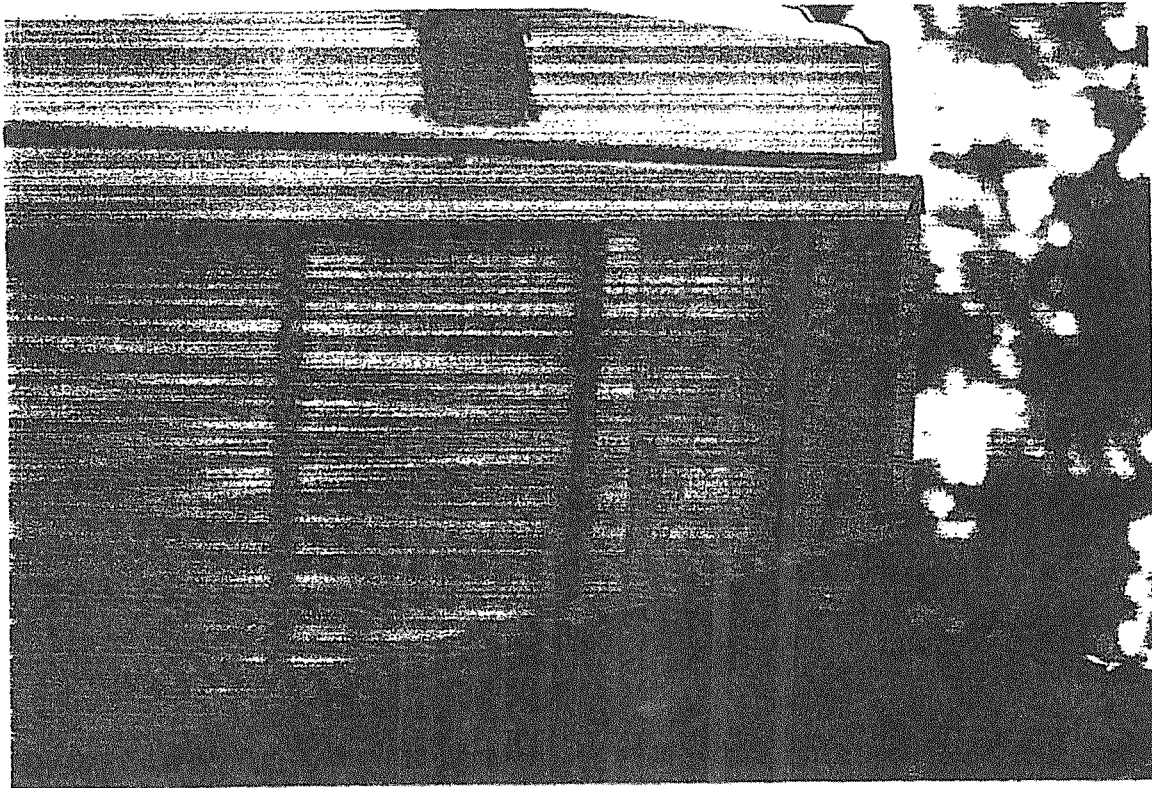
**Sand Embedded in
Window Caulking
(Windows 2 years old)**



**Sand Residue in
Toilet Tank**



**Interior Window Sills
(2 weeks after cleaning)**



Pitting of Soffits

THE CORPORATION OF THE TOWN OF PELHAM

IN THE MATTER OF SECTION 17 OF THE
PLANNING ACT, R.S.O. 1990, AS AMENDED

TOWN OF PELHAM OFFICIAL PLAN AMENDMENT NO. 37

PART OF LOTS 6, 7 AND 8, Conc. 7

AFFIDAVIT

I, **JACK BERNARDI**, DIRECTOR OF PLANNING SERVICES OF THE TOWN
OF PELHAM, IN THE REGIONAL MUNICIPALITY OF NIAGARA, MAKE OATH AND
SAY AS FOLLOWS:

- (1) I am the Director of Planning Services of the Corporation of the Town of Pelham
and as such I have knowledge of the matters herein set forth.
- (2) The following persons or public body made oral submissions at the public meeting
held on November 30, 1998:

Nancy Richards
Edwin Morley
Dr. Susan Tanish
Don MacRae
Jim Secord
Paul Samuel
Helga MacRae
Jim Pignataro
Wally Janzen
Catherine Rice
Doug Andrey
Kelly Frank
Roy Johnson
Walter Pristanski
Chuck Jansen

SWORN BEFORE ME AT THE
TOWN OF PELHAM IN THE
REGIONAL MUNICIPALITY OF NIAGARA
THIS 30TH DAY OF MAY, 2000 A.D.

)
)
)
)
)
)
)


JACK BERNARDI


CHERYL MICLETTE, CLERK

PLANNING REPORT

Appendix E-1

P-43/98

TO: Chair, Councilor Brian Walker and Members of the
General Committee, Planning Services Division

DATE OF REPORT: November 6, 1998

DATE OF MEETING: November 9, 1998

FROM: G. Barker, BLS Planning Associates

SUBJECT: Technical Information Report
Proposed Official Plan and Zoning By-law Amendment
Application #AM-8/98 - Proposed Expansion of Fonthill
Pit TCG Materials Limited – Highway No. 20 (north side)
and Effingham Street (west side).

RECOMMENDATION

THAT the General Committee, Planning Services Division, receive Planning Report P-43/98 re: Technical Information Report – proposed Official Plan and Zoning By-law Amendment Application # AM-8/98 – Proposed Expansion of Fonthill Pit TCG Materials Limited – Highway No. 20 (north side) and Effingham Street (west side).

BACKGROUND

The Town is in receipt of an application to amend the Town's Official Plan and Zoning By-law for the purpose of expanding the TCG Materials Limited, Fonthill Pit, onto those lands described as Parcel A and B on the attached Figures 1 and 2. The applicant will also be required to amend the Regional Policy Plan for the lands described as Parcel B. Also attached is Figure 3 which provides Committee with the location of the parcels relative to the broader surrounding area and land use designations based upon the Pelham Official Plan.

The applicant has submitted, in support of their application, the following reports and material:

- Aggregate Resources Act Summary Statement,
- Archaeological Assessment – Stage 1, 2, 3 and 4,
- Agricultural Assessment of Expansion Area,
- Aggregate Resources and Groundwater/Surface Water Impact Assessment,
- Level 1 and 2 Natural Environment Technical Report,
- Noise Impact and Control Report,
- Aggregate Resources Act Site Plans.

An Open House and Public Meeting has been scheduled for November 30, 1998.

PROPOSAL

TCG Materials Limited proposes to:

- a) Amend the Regional Policy Plan to designate Parcel B as a "Possible Aggregate Area" (it is noted that Parcel A is currently designated as a "Possible Aggregate Area");
- b) Amend the Pelham Official Plan to designate Parcel A and B as "Mineral Resource Extraction";
- c) Amend Zoning By-law No. 1136 to zone Parcel A and B as "Extractive Industrial"; and
- d) License Parcel A and B pursuant to the Aggregate Resources Act.

If approvals are granted additional reserves for the company would be secured thereby allowing for the continuation of TCG's long-standing operations and supply of aggregate material from this location. The total area of Parcel A and B is 60.6 acres (25.5 hectares) of which it is intended that 49 acres (19.8 hectares) would be extracted.

Details of Parcel A and B are:

Parcel	Property Description	Proposed Licensed Area	Proposed Extraction Area	Tenure	Existing Conditions	Yield (based on June 1997 Site Plans)
A	Part Lot 6 Part of road allowance between Lots 6 & 7, Concession 7	8.0 ac (3.2 ha)	Proposed Extraction Area 5.9 ac (2.4 ha)	Owned	<ul style="list-style-type: none"> Mature cherry orchard Shelter belt of Carolina poplar along western boundary 	±0.6 million tonnes
B	Part Lots 7 & 8 Concession 7	52.6 ac (21.3 ha)	Proposed Extraction Area 43.1 ac (17.4 ha)	Option to Purchase	<ul style="list-style-type: none"> Predominantly cherry orchards Pears, grapes and soybeans are also grown on property House and garage at southwest corner – currently rented 	±3.25 million tonnes

The applicant has indicated that the subject lands are natural extensions to the existing pit operation. Extraction and rehabilitation are the primary activities proposed for these lands. There will be no change to the existing extraction methods, processing activity or location and shipping operation or traffic patterns. Material will be moved from the extraction areas to the main processing plant, which will remain in its current location in the existing pit. Aggregate product will continue to be shipped to market through the existing pit entrance on Park Street to Regional Road 20.

Parcel A will be extracted first as the reserves in the existing license are depleted. At the same time, Parcel B will be prepared for extraction to allow for a transition in extraction areas as Parcel A is depleted. Agricultural rehabilitation will continue to be progressive, as sufficient areas become available.

UPPER-TIER POLICY FRAMEWORK

Expansions of aggregate operations are significant undertakings, which also have to be assessed relative to the Provincial Policy Statement and Regional Policy Plan. Appended to this report is the Background Information Report of Regional Niagara, which highlights applicable Provincial and Regional Policy. It is noted that Pelham staff assisted the Region in their report preparation.

PELHAM OFFICIAL PLAN

The Town of Pelham Official Plan designates Parcel A and B Unique Agricultural. The predominant use of the land in this category shall be all types of agriculture, which shall include the raising of livestock. Compatible uses such as forestry and conservation shall also be permitted. Residential uses relating to agriculture are also permitted subject to other policies in this Plan.

Since the proposed amendment is to "Mineral Resource Extraction" the Resource Extraction Area policies will apply in the review of said application. Particularly:

"The Fonthill Kame is a source of gravel and sand which is being actively extracted at the present time. The intent of the Plan is to reserve the necessary area for this purpose and to provide for protection to adjacent uses and a restoration of the land when extraction operations cease.

1.27 *The major uses permitted in the Resources Extraction Area are the extraction and processing of sand and gravel.*

1.28 *The operations for extraction shall be carried on with a minimum of disturbance to surrounding uses and ample buffering provisions shall be made.*

- 1.29 *When extraction operations are terminated all land affected shall be restored to a safe, sightly and acceptable condition, open workings shall be graded and filled to achieve this and all abandoned structures shall be removed."*

The Pelham Official Plan also contains policies respecting Candidate Natural Reserves. Specifically, Policy 1.51.2 states:

"1.51.2 Of particular significance in the Town of Pelham is the Fonthill Kame-delta geological formation. As can be determined from Schedule "A" and Schedule "B" hereto, and other policies of this Plan, preservation of this formation is in direct conflict with the "Mineral Resource Extraction" designation and the desires of the sand and gravel industry. Keeping this conflict in mind, Council is desirous of preserving the Kame-delta as far as is possible by encouraging the development of alternative sources of sand and gravel and the rehabilitation of existing pits to agricultural uses.

Council also recognizes that certain portions of the Fonthill Kame-delta have distinctive heritage attributes, which have been deemed to be of provincial significance and interest. Such areas will be protected and the Ministry of Citizenship and Culture and the Ontario Heritage Foundation may be consulted for advice in this regard."

It is obvious that the Council of the day acknowledged that there are multiple resource conflicts represented on the Fonthill Kame – aggregate, agricultural, environmental and social/cultural – but due to the Kame's significance "... *Council is desirous of preserving the Kame-delta as far as is possible...*". Achieving a balance has not and will not be an easy task.

Appended to this copy is a "Draft" Official Plan Amendment for the subject proposal.

PELHAM ZONING BY-LAW NO. 1136(1987)

Parcel A and B are zoned Agricultural "A" which permits the following:

- Agricultural uses including greenhouses;
- Seasonal or permanent farm help houses on farms larger than 10 hectares;
- One single detached dwelling on one lot;
- Home occupations;
- Kennels;

- Animal Hospitals;
- Uses, buildings and structures accessory to the foregoing permitted uses;
- Forestry and conservation uses.

Resource extraction uses are not permitted within the Agricultural "A" Zone. The subject parcels are proposed to be zoned Extractive Industrial "M3". This zone permits extraction activities as well as agriculture and establishes the following yard requirements.

- a) No building or structure other than a fence shall be located within 30 metres of any lot line or within 90 metres of any occupied dwelling or residential zone.
- b) No Pit, quarry or excavation shall be made or established within 15 metres of any lot line which does not abut a public street, or 20 metres of any lot line which abuts a provincial highway, or 30 metres of any lot line which abuts any other public street.

AGGREGATE RESOURCES ACT

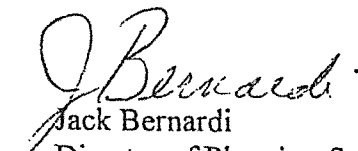
In addition to the requisite approvals required pursuant to the Planning Act – amendments to the Regional Policy Plan, Pelham Official Plan, and Pelham Zoning By-law No. 1136 – a license must be issued by the Ministry of Natural Resources pursuant to the Aggregate Resources Act.

CONCLUSION


This report is for information only and serves to make the Committee aware of the submission and relevant policy matters. A recommendation report will be prepared and presented to this Committee at a subsequent meeting following the public meeting. It is not intended to discuss or debate the merits of this proposal at tonight's meeting as such discussion must occur during a public meeting.

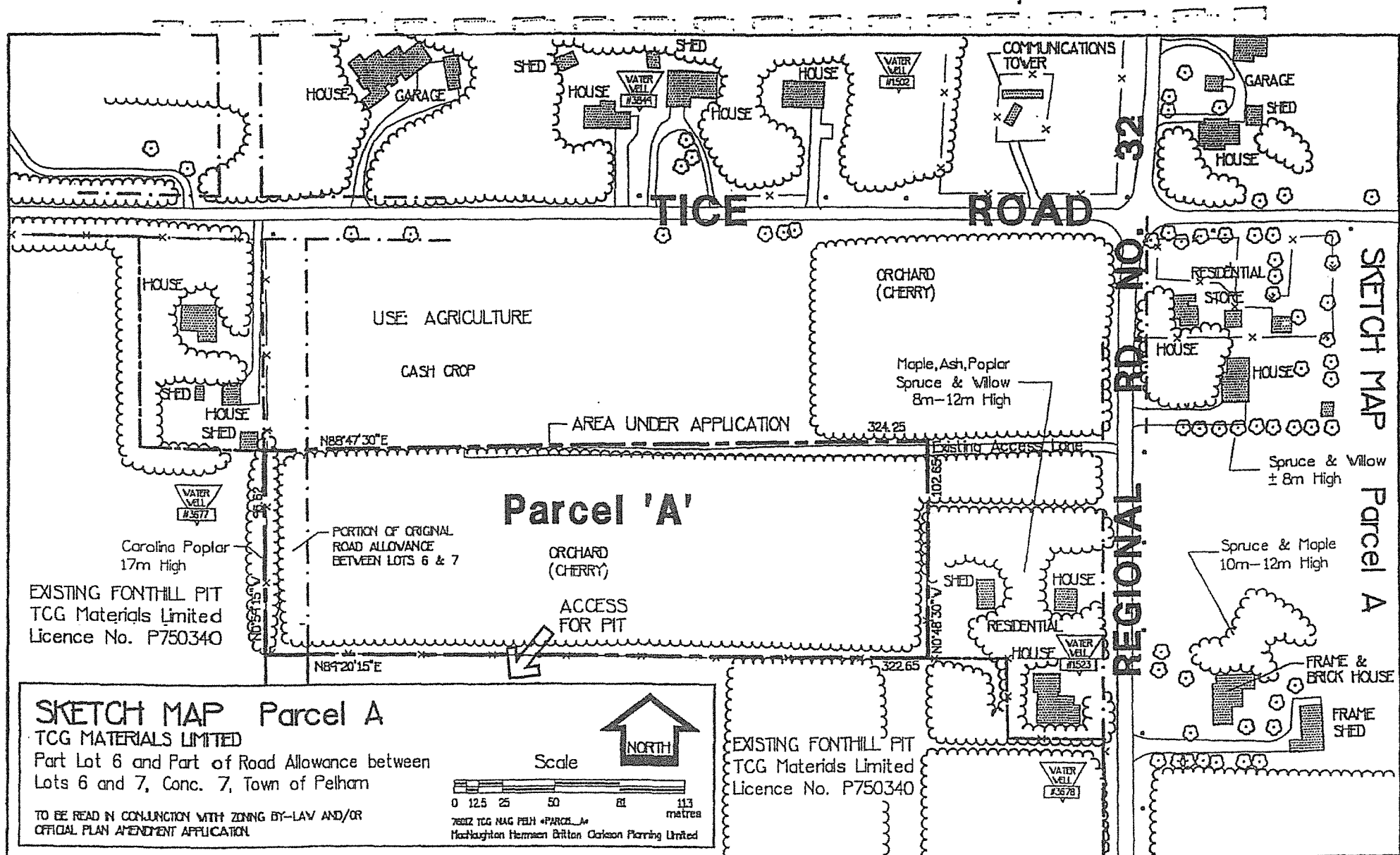
Reviewed and Prepared by

Respectfully Submitted by


Jack Bernardi
Director of Planning Services

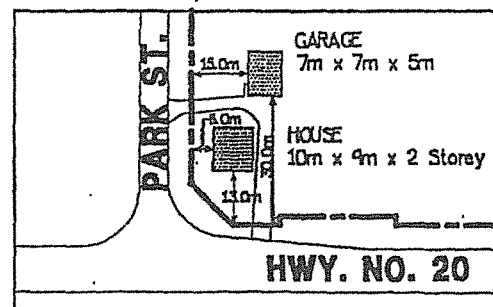
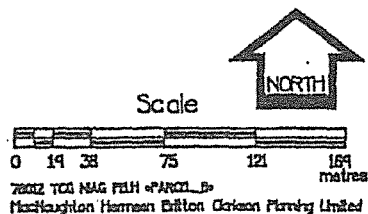
Murray Hackett
C.A.O./Clerk


Glen Barker, Director
BLS Planning Associates



TCG MATERIALS LIMITED
Part Lots 7 and 8, Conc. 7
Town of Pelham

TO BE READ IN CONJUNCTION WITH ZONING BY-LAW AND/OR
OFFICIAL PLAN AMENDMENT APPLICATION.



EXISTING FONTHILL PIT
TCG Materials Limited
Licence No. F750340

Building Location Detail

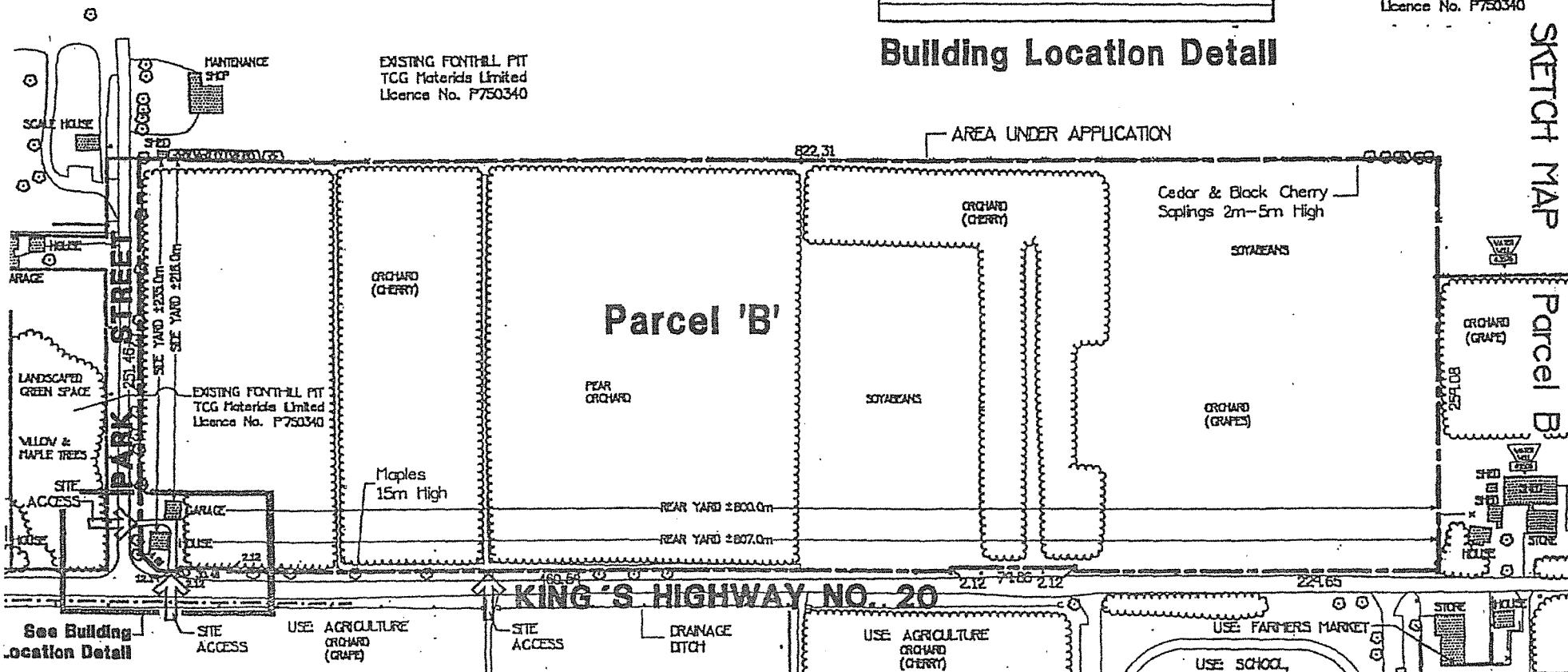
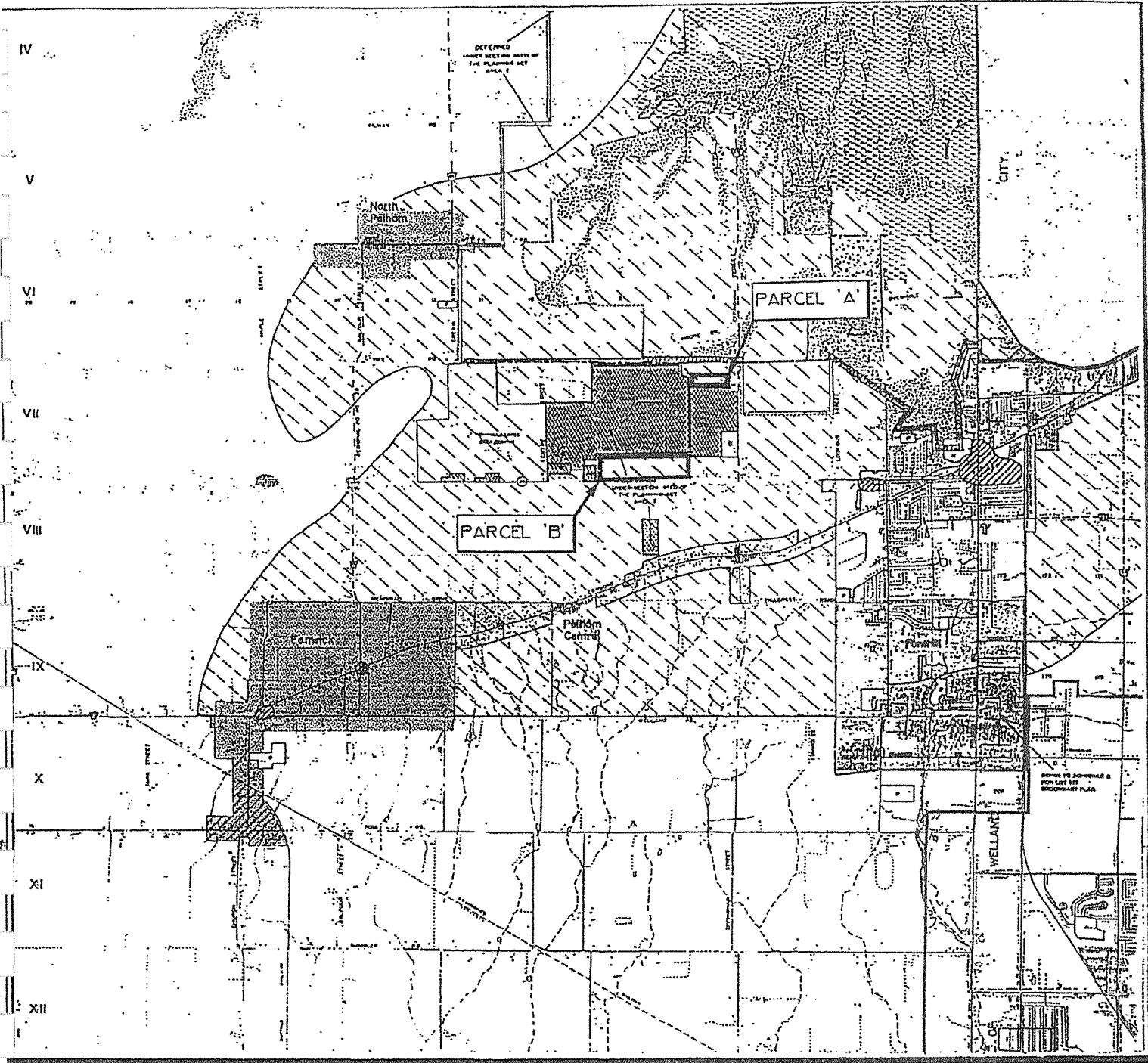



FIGURE 2
























Official Plan - Land Use

SOURCE: SCHEDULE 'A' OFFICIAL PLAN OF THE PELHAM PLANNING AREA CONSOLIDATED DATE JAN. 04,1994

Legend

 SUBJECT SITES (PARCEL A & B)
PART LOTS 6,7 & 8 CONC. 7
TOWN OF PELHAM, REGION OF NIAGARA

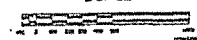
-  UNIQUE AGRICULTURAL
-  GOOD GENERAL AGRICULTURAL
-  SPECIAL RURAL
-  URBAN RESIDENTIAL
-  VILLAGE RESIDENTIAL
-  COMMERCIAL
-  RURAL COMMERCIAL
-  INDUSTRIAL
-  MINERAL RESOURCE EXTRACTION
-  FLOODWAY
-  FLOODFRINGE

-  PIT AND QUARRY RESTRICTIVE AREA
-  N.E.C. PROPOSED PLAN AREA
-  WELLAND - PORT COLBORNE AIRPORT
-  OPEN SPACE
-  HAZARD LAND
-  URBAN AREA BOUNDARY
-  FENWICK SANITARY SEWER AREA
-  ENVIRONMENTAL CONSTRAINT AREA
-  SPECIAL VILLAGE RESIDENTIAL
-  PUBLIC PARK

NOTE: THIS SCHEDULE FORMS PART OF THE OFFICIAL PLAN OF THE PELHAM PLANNING AREA AND MUST BE READ IN CONJUNCTION WITH THE TEXT



SCALE



Figure

3

76017, ICC NAG PELH -SCH-04-CP-

MacNaughton Hermesen Britton Clarkson Planning Limited
REGIONAL & URBAN PLANNING & RESOURCE DEVELOPMENT

DRAFT OFFICIAL PLAN AMENDMENT

TCG Materials Limited

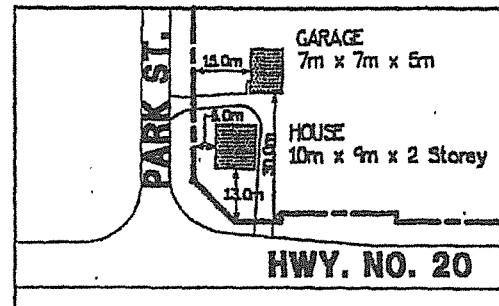
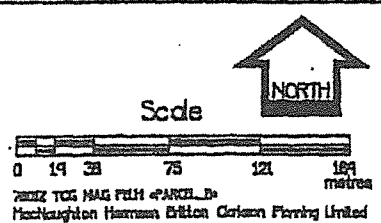
Schedule A, LAND USE PLAN, to the Official Plan for the Town of Pelham is hereby modified by redesignating the lands from "Unique Agricultural" to "Mineral Resource Extraction" as illustrated on the attached Schedules "A" and "B".



Lands to be redesignated from "Unique Agricultural" to "Mineral Resource Extraction"

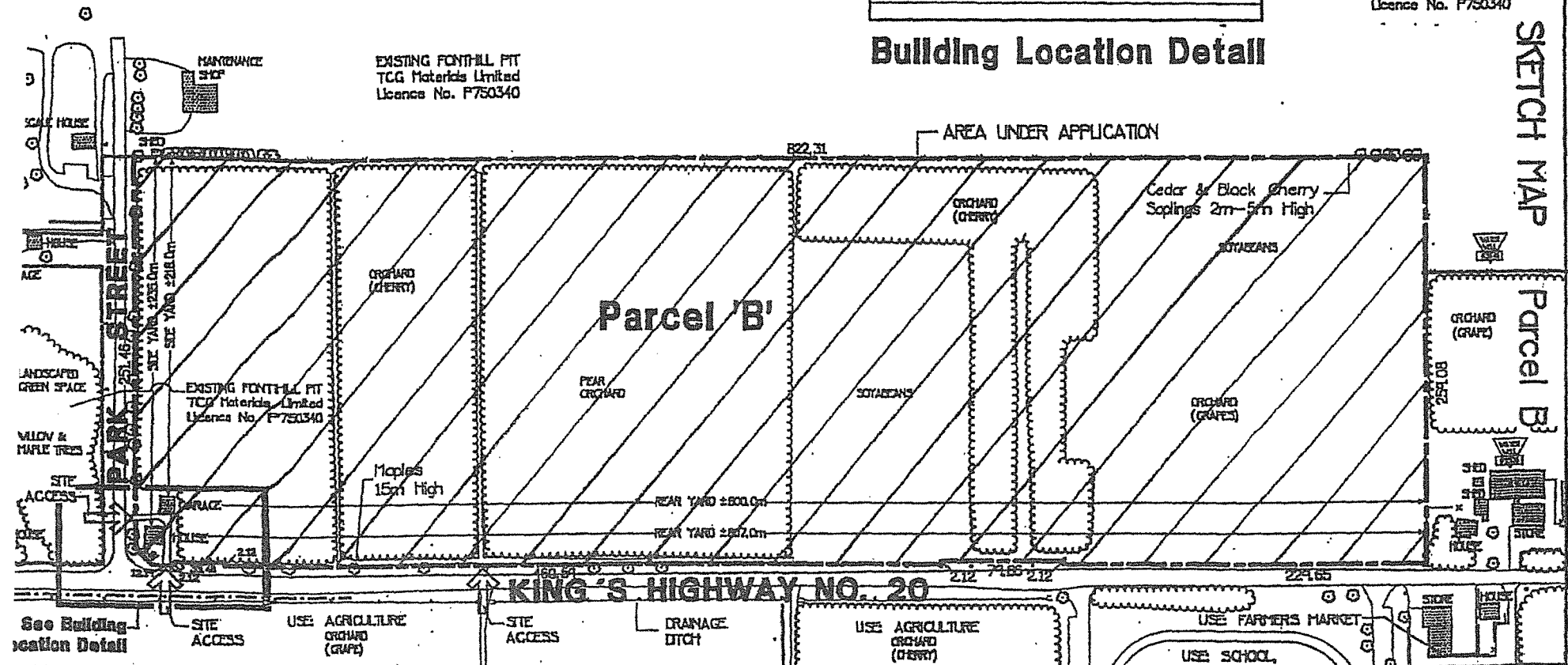
CG MATERIALS LIMITED
Part Lots 7 and 8, Conc. 7
Town of Pelham

TO BE READ IN CONJUNCTION WITH ZONING BY-LAW AND/OR
OFFICIAL PLAN AMENDMENT APPLICATION.



EXISTING FONTHILL PIT
TCG Materials Limited
Licence No. P750340

Building Location Detail



Lands to be redesignated from "Unique Agricultural" to "Mineral Resource Extraction"

SCHEDULE B

PLANNING REPORT

P-40/99

TO: Chair, Councillor Uwe Brand, and
Members of the General Committee,
Planning Services Division

DATE OF REPORT: September 23, 1999

DATE OF MEETING: September 27, 1999

FROM: G. Barker, BLS Planning Associates

SUBJECT: Proposed Zoning By-law Amendment Application AM-8/98
Proposed Regional Policy Plan Amendment No. 128
License Application
Proposed Expansion of TCG Fonthill Pit
Blue Circle Canada Inc.
Regional Road 20 (North Side) and Effingham Street (West Side)

1 RECOMMENDATION

a) THAT the General Committee, Planning Services Division, receive Planning Report P-40/99 regarding Official Plan and Zoning By-law Amendment Application AM-8/98, Blue Circle Canada Inc., TCG Fonthill Pit.

b) THAT Official Plan and Zoning By-law Amendment Application AM-8/98 be approved which would:

- i) Redesignate the subject lands to a "Mineral Resource Extraction" designation, and
- ii) Rezone the subject lands to "Extractive Industrial (M3)"

c) THAT staff be directed to prepare the necessary amending by-laws for consideration by Council.

d) THAT Council not adopt the necessary amending by-laws until such time as the Public Liaison Committee and Complaint Protocol undertaking has been filed with and approved by the Town of Pelham.

e) THAT Regional Niagara be advised that the Town of Pelham is not opposed to Regional Policy Plan Amendment 128.

- f) THAT the Town of Pelham agrees to the issuance of a pit license subject to the recommended license conditions set out in Appendix A, appended to this report, and as amended, by requiring the Final Rehabilitation Plan to include the planting of specialty crop (i.e. tree fruits).
- g) THAT the Town of Pelham withdraw its notice of objection to the Ministry of Natural Resources respecting the Blue Circle Canada Inc. application for license.
- h) THAT the Ministry of Natural Resources be requested to send notice of its final decision on the license application including the conditions and final Aggregate Resources Act plans.
- i) THAT copies of this report be forwarded to Blue Circle Canada Inc., Regional Niagara, and all of the commenting agencies for their information.

2 BACKGROUND

2.1 Summary

This report evaluates the appropriateness of official plan and zoning by-law amendment application AM-8/98 and license application for a proposed pit expansion by Blue Circle Canada Inc.

Blue Circle Canada Inc. proposes to expand their existing pit operation in a north easterly and southerly direction. Particularly:

- Parcel A located to the west of Effingham Street and south of Tice Road involves approximately 3.2 hectares of land (8.0 acres) of which the proposed extraction area encompasses 2.4 hectares (5.9 acres).
- Parcel B located on the north side of Regional Road 20 and between Centre Street and Effingham Street comprises an area of 21.3 hectares (52.6 acres) of which the 17.4 hectares (43.1 acres) is proposed to be extracted.

The combined parcels A and B encompassing some 24.5 hectares (60.6 acres) will produce approximately 3.85 million tonnes of additional aggregate reserves.

The proposal has been evaluated in relation to the policy requirements of the Provincial Policy Statement, Regional Policy Plan, and the Pelham Official Plan. The principal assessment criteria being:

- a) Demonstrated need;
- b) Compatibility with surrounding land uses;
 - Noise
 - Dust
 - Ground water interference
 - Buffering and setback provisions
- c) Impact on the Natural Environment
 - Area of Natural and Scientific Interest
 - Natural Environment
 - Surface water
 - Archaeological resources
- d) Operation, Site Plan and Rehabilitation

2.2 Public Comments

As required under the Planning Act a public meeting was held to receive comments and to answer questions from the public on the Amendment application.

In addition to comments received at the public meeting, the Town of Pelham has received several other written submissions from affected area residents. The following is a summary list of issues and concerns raised by the public:

- Negative impacts of sand and dust on person and property.
- Sand infiltrating cisterns and plumbing systems.
- Noise from pit trucks.
- Lack of agency response to complaints.
- Destruction of roads due to truck haulage.
- No comprehensive analysis undertaken to show the deleterious effect of the pit operations on the environment.
- The waste disposal area has not been cleaned up.

- No guarantees have been provided by the operator that permission will not be sought to expand east of Effingham Street.
- Loss of the right of enjoyment of their homes and properties.
- Lowering of property values.
- The need for financial compensation to nearby residents.
- Safety.
- Loss of well water quality and quantity.
- The quality of the aggregate.
- The need for additional water trucks.
- Removal of agricultural lands from production does not provide a benefit to the local community and therefore is a detriment to the area.
- Possible future use of extracted site for landfill purposes, and associated environmental impacts.
- Compatibility with long established rural residential development.
- Impact on the natural environment, including Twelve Mile Creek.

All public comments received have been considered in the preparation of this report. Moreover, the concerns and issues raised above have been discussed with both Blue Circle and the commenting agencies in an attempt to resolve them or to incorporate appropriate mitigation measures through changes to the site plans and proposed license conditions.

3 ANALYSIS

3.1 Demonstrated Need

The Preamble to the Resource Extraction Area Policy of the Pelham Official Plan states:

"The Fonthill Kame is a source of gravel and sand which is being actively extracted at the present time. The intent of the Plan is to reserve the necessary area for this purpose and to provide for protection to adjacent uses and a restoration of the lands when extraction operations cease."

Blue Circle Canada Inc., formerly TCG Materials Limited has been extracting aggregates from the Fonthill Kame since 1969. The original TCG license is one of a series of pit operations on the Kame dating back to the 1950's. Blue Circle is the only remaining aggregate producer on the Fonthill Kame. The remainder of the extraction sites are depleted and have been returned to a variety of post-extraction uses including a golf course and fruit orchards.

The significance of the Kame deposit as a source of unconsolidated mineral aggregate is attributable to three circumstances:

- (i) the lack of any other comparable deposit in the Niagara Region;
- (ii) the quality/quantity of aggregate within the Kame; and
- (iii) it's central location within the Region and highway access.

Information provided by the applicant and the Provincial Ministry of Natural Resources indicates that over the past 15 years, the Kame has provided 80 to 90% of Niagara Region's production of sand and gravel. The most valuable aggregate being produced from the existing Blue Circle pit (and thereby the Kame), is natural concrete and asphalt fine aggregate which is in short supply in the Niagara Peninsula. The proposed expansion areas contains similar high quality materials to those being extracted in the existing licensed area.

Within the existing licensed area an approximate 6-year reserve exists. Parcel A contains an approximate 1-year reserve and Parcel B an approximate 4.5-year reserve. It is noted that these estimates of reserve are based upon an annual tonnage limit of 750,000 tonnes (license condition) but will vary depending on market conditions.

Based upon the above, acknowledging that manufactured sand for concrete and asphalt products is not yet a Regionally viable alternative and the Ministry of Natural Resources in their February 26, 1999 correspondence stating:

"Because of the limited availability of aggregate material in the Niagara area, the MNR considers the aggregate deposit on subject lands to be of primary significance."

"need" has been demonstrated.

This "need" for additional licensed reserves was also documented in a Provincially commissioned study entitled "Aggregate Resources of Southern Ontario: A State of the Resource Study, December 1992" which stated in part:

"Decreasing sand and gravel resources in the Niagara Area are an important issue. Within the Niagara Region, there remains only one major sand and gravel

pit to supply all of the area.... The scarcity of sand and gravel remaining in the licensed areas within Niagara is becoming a major concern...."

3.2 Compatibility with Surrounding Land Uses

The area surrounding the subject Parcels is primarily rural in character with agriculture being the predominant land use. The main uses that could be affected by the proposed expansion is the residential cluster to the north and east of Parcel A and the residential clusters to the east and west of Parcel B, including E.L. Crossley High School.

Based upon the nature of the aggregate operation and contiguous land uses, Provincial Policy requires that aggregate operations must be appropriately designed, buffered and/or separated from sensitive land uses such as residences and educational facilities, to prevent adverse effects from dust, noise and other contaminants. The Town of Pelham Official Plan and Regional Niagara Policy Plan contain similar policies. These policies were considered in the design of Blue Circle's proposal.

3.2.1 Noise

Potential noise impacts and control options were assessed and recommendations advanced as contained in Aercoustics July 1998 report entitled "The Potential Impact and Control of Noise From Aggregate Extraction in Proposed Extensions of the TCG Fonthill Pit". These recommendations were incorporated in the site plans, which regulate preparation, extraction and rehabilitation operations on the subject lands. The total noise levels are not changing as compared to the existing operation since the method of operating and processing will be unchanged. There is no additive effect, as noise from the existing extraction and in pit transportation will move from one location in the pit to another.

The following mitigation measures have been incorporated into the site plans to ensure the "worst-case" noise impact at the closest receptors is within the limits as prescribed by the Ministry of Environment:

- Direction of excavation;
- Imposition of excavation setback limits;
- Construction of acoustic berms;
- Limitations on equipment type, location and numbers;
- Limitations on operating times for various facets of the operation;
- Requirements to maintain equipment such that noise emission levels are within prescribed criteria.

The issue of potential noise impacts and remedial measures was discussed at two agency round table meetings which resulted in the Ministry of Environment on March 17, 1999 requiring modifications to the noise study and from which the Ministry concluded:

"A review of the Aeroustics Engineering Report #95207 along with a required supplementary report recently submitted, has been conducted. The methodology and procedures used in the analysis of the potential noise impacts were found to comply with those recommended by the Ministry. Furthermore, the documents have adequately demonstrated that the noise levels which will be generated during the construction, operation and rehabilitation of the extensions to the facility could be reduced to within the limits recommended by the Ministry."

The Ministry's March 17, 1999 correspondence is attached as Appendix 1.

Specific license conditions respecting noise are found as either site plan illustrations and/or as site plan notes. Particularly:

- The Operational Plan is requiring an acoustic berm 4.5 metres in height be erected along the easterly property line of Parcel A and a "limit of extraction" setback of 40 metres be provided (see page 1 of Appendix A).
- The Operational Plan is requiring an acoustic berm of 5.0 metres in height be erected at the south east corner of Parcel B contiguous to 345 Regional Road 20 and a "limit of extraction" setback of between 15 and 70 metres be provided (see page 1 of Appendix A).
- Note 17, Page 5, Appendix A establishes hours of operation and places restrictions on hoe ram utilization.
- Acoustic berm details, page 6, Appendix A sets out typical standards for required berms.
- Noise control details and notes, and equipment limitation notes are found on pages 10 and 11 of Appendix A which are very exacting in order to minimize occurrences of off-site noise impact.

3.2.2 Dust

The primary objective of the dust control program is to ensure that dust emissions from the subject lands are mitigated and controlled on site. Provincial requirements stipulate:

- i. Dust will be mitigated on site.
- ii. Water or another provincially approved dust suppressant will be applied to internal haul roads and processing areas as often as required to mitigate dust.
- iii. Processing equipment will be equipped with dust suppressing or collecting devices, where the equipment creates dust and is being operated within 300 metres of a sensitive receptor.

The Blue Circle dust control program focuses on haul routes and open pit areas. These are the main potential dust sources on the expansion sites. It is noted that there is no processing equipment proposed on Parcel A and B as the processing plant is to remain in its current location.

The dust mitigation program employed at the Fonthill pit can be summarized as:

Haul Routes

The main internal haul route is equipped with a timer activated sprinkler system that applies water to the haul route at regular intervals in order to dampen the road surface. Portions of the haul roads not covered by this permanent sprinkler system are treated by a water truck that is permanently assigned to the Fonthill pit. This truck also works in conjunction with a sweeper (also dedicated to the Fonthill pit) to flush and clean paved roads at the pit entrance and around the scale house.

Open Areas

A water cannon mounted on the back of the water truck is used to respond to dry conditions by wetting active stockpiles, pit faces or other open areas with water or Provincially approved dust suppressants.

In particular, one of the dust control initiatives at the existing Fonthill operation is to spray sand product stockpiles and exposed faces with a dust suppressant that creates a crust on the surface thereby preventing material from becoming air borne. The product used is "Entac", which is an MOE approved product.

Another technique used at the operation as an important component of the dust control program is minimizing exposed soils and disturbed areas. This is achieved through the removal of topsoil and overburden just prior to the commencement of extraction and the amount of disturbed area is further minimized by progressively rehabilitating depleted areas. As noted above, temporarily disturbed areas can also be treated with dampening agents until permanently vegetated.

The issue of potential dust impacts and remedial measures was discussed at two agency round table meetings which resulted in the Ministry of Environment on March 17, 1999 concluding:

"This program has been deemed as being an acceptable approach to minimizing dust from the subject property provided that it is properly implemented."

The Ministry's March 17, 1999 correspondence is attached as Appendix 1.

Note 7, page 3, Appendix A details the license condition respecting dust.

3.2.3 Ground Water

Potential hydrogeologic impacts of pit expansion were assessed and recommendations advanced in Gartner Lee's July 1998 report entitled "TCG Fonthill Pit Proposed Expansion Aggregate Resources and Groundwater and Surface Water Impact Assessment". Included in this report was also an analysis of Town and Regional concerns regarding hydrogeology issues relating to:

- a) groundwater and surface water;
- b) water quality/quantity/temperature;
- c) turbidity;
- d) Twelve Mile Creek; and
- e) Drawdown in local wells.

The report concluded:

- In the existing pit, extraction is limited to above the water table. This will continue to be the case in the extension parcels. The major ground water aquifer in the area of the Fonthill Kame is located more than 20 metres (65 feet) below the existing pit. The ground water regime has been monitored since 1981. This monitoring program has demonstrated that the existing pit does not have any appreciable effect on the ground water system.
- An assessment of the potential hydrogeological impacts associated with the extraction proposal has concluded that there will be no impact on ground water levels or local

water wells. The pit floor will continue to remain more than 20 metres (65 feet) above the water table.

- The Kame deposit does form a major ground water recharge area. However, the subject lands constitute only a small portion of the overall recharge area and if anything, pit development would tend to enhance ground water recharge.

The issue of hydrogeologic impacts was discussed at two agency round table meetings, which resulted in the following comments:

Ministry of Environment

The Ministry, on March 17, 1999 advised:

"Staff generally agree with the conclusions of the report in that the risk of contamination to groundwater resources is low, and that the expansion generally will not impact local wells and groundwater levels. However, there is some concern with the interpretation of groundwater flow direction and the potential for reduction in discharge to off-site springs. And while these concerns should not affect the overall conclusions, it is recommended that additional concerns (noted in their correspondence) be addressed to confirm whether the extraction of aggregates in Parcel A will result in an impact on the quantity of groundwater discharging to the springs north of the site, and if so, what the impact of this change will be."

A copy of the Ministry's correspondence is attached as Appendix 1.

Ministry of Natural Resources

February 26, 1999 correspondence from the Ministry expressed several concerns with respect to the impact of the proposed expansion on groundwater resources within the Twelve Mile Creek watershed and recommended:

".... that approval of the Regional Policy Plan Amendment No. 128 be deferred pending the resolution of the following issue:

- a) *The application should provide additional information documenting the relationship of the groundwater recharge on the subject lands to the total available area contributing groundwater recharge to Twelve Mile Creek. This additional documentation should include an assessment of the significance of the groundwater recharge on the subject lands to the remaining undeveloped areas of the Twelve Mile Creek watershed."*

The Ministry's February 26, 1999 correspondence is attached as Appendix 2.

Niagara Peninsula Conservation Authority

The Authority, in correspondence dated March 12, 1999, requested additional information to facilitate concluding their review process. Particularly:

1. That the proposed changes to the groundwater and surface water flows be evaluated by means of a water balance model developed for both the pre and post development conditions, and;
2. That modification to the surface water drainage be substantiated by hydrologic analysis. Such an analysis will assist the Conservation Authority in accurately updating our hydrologic database for this area.

The Authority's correspondence is attached as Appendix 3.

As a result of agency comments Gartner Lee on April 13, 1999 prepared a detailed response addressing same. This response also addressed well water complaints. Gartner Lee's correspondence is attached as Appendix 4.

The April 13, 1999 Gartner Lee response was reviewed by the technical agencies and on May 3, 1999 the Ministry of Natural Resources advised that:

".... all of MNR's technical concerns have now been addressed." (See Appendix 5).

The Niagara Peninsula Conservation Authority on May 13, 1999 advised that:

"It is our understanding that issues relating to groundwater recharge and discharge are being finalized with the Ministries of Natural Resources and Environment. Accordingly, the Conservation Authority does not have any further technical concerns relating to the expansion of the Blue Circle (TCG) Pit operation." (See Appendix 6).

The Ministry of Environment have advised that their concerns have been addressed and written confirmation is forthcoming.

The operator's obligations respecting ground water is Condition 4, page 2, Appendix A.

3.2.4 Buffering and Setback Provisions

Due to the proximity of residences next to the proposed expansion areas and scenic values associated with Regional Road 20 along Pelham's westerly gateway, appropriate buffering and setback provisions are required. As previously noted, in addition to the typical acoustic/visual berming that is required along external boundaries increased berm heights and setbacks are required along the easterly interface of Parcel A and Parcel B.

The most critical need for visual screening will be for Parcel B along its 800 metre (2,600 feet) long common boundary with Regional Road 20, and at the southeast corner in the area of the commercial/residential development.

In these areas, a combined tree screen and earth berm will be in place during the extraction phase. These features, in combination with a specified sequence of extraction and rehabilitation, have been designed to minimize visual exposure of the operation from Regional Road 20 and other land uses at the southeast corner. Upon rehabilitation, the earth berm will be removed but the tree screen will remain. Screening at these locations will also serve to limit views of the existing pit operation from Regional Road 20 and the surrounding lands.

The western perimeter of Parcel B fronts on Park Street, which is the main point of access for the pit operations. There is one residence with frontage on the west side of Park Street. A tree screen will be installed along this perimeter of Parcel B and as much existing vegetation as possible will be retained. Berming along this perimeter is optional and would only be installed if additional topsoil and overburden storage capacity was required.

Visual exposure of operations in Parcel A will be reduced by the construction of a berm along the north and east limit. This berm would be removed during the rehabilitation phase. It is noted that the operator has already planted a tree screen along the northern setback limit of Parcel A. The effectiveness of this tree screen will be reviewed once the berm has been constructed and improved, if required, in accordance with Condition 13, page 4, Appendix A.

Berms will be vegetated and maintained in good condition at all times. Trees used in the tree screen have been chosen for effective screening ability, growth rate, tolerance to soil conditions, and tolerance to "road salt".

The location of, timing of planting, maintenance, and density of tree screens is detailed in Condition 13, page 4; Acoustic/Visual Berm Cross Sections, page 6; and Regional Road 20 Tree Screen Planing Detail, page 8; of Appendix A.

3.3 Impact on the Natural Environment

The proposed expansion areas are located on the Kame, in close proximity to the Niagara Escarpment and related features, and the Twelve Mile Creek Watershed. As a result, detailed scrutiny of natural heritage issues is required.

3.3.1 Area of Natural and Scientific Interest

A portion of the Fonthill Kame is mapped and classified as a provincially significant Earth Science Area of Natural and Scientific Interest (ANSI) by the Ministry of Natural Resources (MNR). Parcel A is inside the ANSI and Parcel B is outside to the south. Figure 1 illustrates the ANSI area relative to the Kame and Parcels A and B.

Geological interest in the Kame led to its identification as a Candidate Nature Reserve Area in a 1976 study prepared by the Park Planning Branch of MNR. This recognition was also included in the Town of Pelham Official Plan policies and Schedule B – Natural Resources, at the request of the senior levels of government. The Candidate Reserve Program has been superseded by the ANSI program and the 1996 Provincial Policy Statement.

The boundary of the Candidate Nature Reserve has evolved from the original 1976 Study and Pelham Official Plan. The current ANSI boundary was remapped by the MNR in the late 1980's and is shown on Figure 1.

The natural heritage significance of the Kame is a result of the six landform components, which represent various stages of its development and contribute to the area's geological interest. Due to the Kame's ANSI designation, the Provincial Policy Statement provides direction for development proposals within and adjacent to these ANSI's. The policy allows for development and site alteration if it is demonstrated that there will be no loss of the natural features or the ecological functions for which the area is identified.

Parcel A of the subject lands is currently within the ANSI boundary. The extraction of Parcel A would not significantly alter the natural heritage value of the ANSI feature. The area to be extracted within Parcel A involves less than 1% of the ANSI area (5.9 acres (2.4 hectares) of a total 940 acres (380 hectares)). Parcel A is a small portion of the "upper terrace" landform component of the ANSI. The bulk of this component including the well developed storm beaches is well represented in the area east of Effingham Road. An additional consideration is that Parcel A is shown as a "Possible Aggregate Area" in the Regional Policy Plan. This permits pit operations and it may be reasonable to accept that this recognition of the aggregate resource would take priority over the small portion of the ANSI that would be affected.

Parcel B is not within the ANSI boundary but is adjacent and within 120 metres. It is part of the main terrace landform that includes portions of the existing Fonthill pit and extends south of Regional Road 20 to the area around Canboro Road. This parcel does not contain unique or distinctive morphological features and this component of the ANSI is also well represented in other portions of the Kame.

As a result, it is concluded that there will not be a "negative impact" as defined in the Provincial Policy Statement. The important natural heritage features associated with the Earth Science ANSI will not be lost as a result of the Blue Circle proposal.

To confirm that there will not be a "negative impact" an agency round table meeting was convened and the Ministry of Natural Resources, on February 26, 1999 advised:

"MNR staff have concluded that the expansion of the pit onto Parcel "A" would not result in a significant reduction in the interpretative value of the Fonthill Kame - delta ANSI. Parcel "A" is located immediately adjacent to currently licensed lands and within an area of traditional extractive development. Parcel "B" is located outside of the current ANSI boundary. Hence, expansion of the pit onto Parcel "B" would not impact the interpretative value of the ANSI."

The Ministry's February correspondence is appended hereto as Appendix 2.

3.3.2 Natural Environment

An inventory and evaluation of the natural features found on the subject lands did not identify any significant natural environmental features. The majority of Parcel A was characterized by a mature cherry orchard (now removed). Hedgerow vegetation at the west end is predominantly Carolina Poplar with some maple and pine saplings in the understorey. Parcel B is also predominantly orchard (cherry, pears, grapes) and soybeans. Scattered trees and shrubs along the periphery of the property include cottonwood, maple, black cherry and cedar. There are not natural or man-made drainage ways or watercourses on either Parcel. Precipitation infiltrates into the ground water flow system some 34 - 45 metres (115 - 148 feet) below the existing surface.

Off-site environmental features, particularly to the north, include tributaries of Twelve Mile Creek and associated wetlands. These features will remain unaffected by the proposed aggregate extraction, which will continue to remain many metres above the ground water table.

Similarly, woodlots in the area, some of which are outlying components of the Short Hills/St. Johns Environmentally Sensitive Areas (ESA) Complex, will not be affected because of their distance (more than 700 metres) from the subject lands.

The Niagara Escarpment Commission, on January 26, 1999 advised that they had no objection to the subject proposal (see Appendix 12)

3.3.3 Surface Water

There are no surface watercourses (natural or man-made) on the subject lands as all drainage is subsurface through the unconsolidated sands and gravels.

No water diversion, storage or drainage facilities are proposed for the subject lands and there are no points of discharge to surface waters.

Surface water features surrounding the subject lands consist of several man-made ponds. These ponds are necessary for the operation of the processing facilities located in the existing pit. Several artificial ponds are also located to the west of the subject lands at the Peninsula Lakes Golf Course.

The closest natural surface water course/features are located to the north of Tice Road at the northern slope of the Kame, some 750 metres north of Parcel A. These consist of the tributaries of Twelve Mile Creek and their associated wetlands. Similarly, several tributaries and watercourses are located along the southern margin of the Kame, approximately 900 metres from Parcel B. These features will remain unaffected.

The issue of surface water impacts was discussed at two agency round table meetings which resulted in the Niagara Peninsula Conservation Authority requesting additional information respecting:

- the proposed changes to surface water flows be evaluated by means of a water balance model developed for both the pre and post development conditions, and
- modification to the surface water drainage be substantiated by hydrologic analysis.

The Authority comments are contained in correspondence dated March 12, 1999 and appended hereto as Appendix 3.

In response to the Authority's request, Gartner Lee on April 13, 1999 prepared a detailed response, which was further supplemented on April 30, 1999. Appendix 4 and 7 appended hereto is the subject correspondence, which responds to the Authority.

On May 13, 1999 the Niagara Peninsula Conservation Authority advised:

"...it would appear that the surface drainage component of the expansion would not be significantly altered...Accordingly, the Conservation Authority does not have any further technical concerns relating to the expansion of the Blue Circle (TCG) Pit operation."

The Authority's correspondence is appended hereto as Appendix 6.

3.3.4 Archaeological Resources

Four stages of archaeological investigations were undertaken. Surveys of Parcels A and B led to the discovery of nine archaeological sites. The necessary survey, excavation and documentation of these sites is complete and the Ministry of Citizenship, Culture and Recreation is satisfied that concerns for cultural heritage resources have been properly addressed.

The Ministry of Citizenship, Culture and Recreation on November 24, 1997 advised:

"....this Ministry is satisfied that concerns for cultural heritage resources have been met. Consequently, this letter should serve to confirm that heritage concerns have been addressed for the subject property and our office would have no further concerns or objections with the expansion application submitted."

Appendix 8 is a copy of the Ministry's correspondence.

3.3.5 Former Waste Site

Concern has been expressed about the state of the former waste site located on the west side of Effingham Street and north of Regional Road 20. Based upon meetings with representatives from Regional Niagara, Ministry of Environment and Blue Circle the following is noted:

- Site was capped by TCG in accordance with Provincial requirements.
- Provincial files on the subject site are dormant.
- Well water quality is monitored from 4 wells that perimeter the site.
- TCG has been monitoring the site for the past 12 to 14 years.
- Full spectrum analysis of water quality parameters is undertaken.
- Well water quality reporting protocol is that once analysis is undertaken the results are reported to Blue Circle, and Blue Circle advises the Ministry of Environment.
- Blue Circle not required to monitor but does monitor.

3.4 Operation, Site Plan and Rehabilitation

The Operational Plan and Progressive Rehabilitation and Final Rehabilitation Plan have been prepared in accordance with the Aggregate Resources Act, and Provincial, Regional and Municipal Policy requirements. Additionally, the various technical reports including agency review with recommended mitigative measures has shaped the ARA Plans in such a manner that sensitive land uses will not be adversely affected by the continuation and expansion of the extraction operations as the pit activities will be operating within acceptable levels.

One issue that has arisen deals with the form of "final rehabilitation". Although the proposed expansion areas are to be rehabilitated in such a manner so as to provide landform, soil capability and microclimatic conditions that would permit the re-establishment of the same speciality crops as are currently grown on these sites, the rehabilitation programme does not result in the "planting" of the subject parcels with speciality crops.

It is acknowledged that no policy basis exists which would require the "planting" of speciality crops. This is evidenced by the December 23, 1998 correspondence from the Ministry of Agriculture, Food and Rural Affairs, which stated in part:

"....TCG Materials intends to progressively rehabilitate the site back to agricultural land uses, capable of supporting tree fruit production....After our review of the information provided, we are satisfied that this proposal has had regard to the policies of the PPS, especially Section 2.2.3.6." (see Appendix 9)

Nonetheless, it has been the practice of not only the Town, but also Regional Niagara to request a higher level of rehabilitation when dealing with quarry applications in speciality crop areas. This was the case with Steed and Evans and was indeed an integral component in the former pit expansion approval process of TCG.

3.5 Reporting System

During the public participation process considerable concern was expressed about the lack of response on behalf of the pit operator and Provincial Ministries when a complaint was filed. After a number of meetings, Blue Circle has agreed to institute a Public Liaison Committee and Complaint Protocol.

The format of the Public Liaison Committee (see Appendix 10) and Complaint Protocol (see Appendix 11) proposed by Blue Circle is acceptable. The Ministry of Natural Resources has advised that the PLC and CP formats can not be a license condition and therefore an undertaking is required from Blue Circle committing that they (the PLS and CP formats) will be adhered to and implemented.

4 CONCLUSION

After evaluating the above criteria and Provincial, Regional and Municipal policy requirements the subject amendment applications (Pelham Official Plan, Pelham Zoning By-law, Regional Policy Plan) and license application can be supported. This support can be summarized as:

- Parcel A has already been identified in the Regional Policy Plan for possible future extraction, which gives some priority to the long-term development of the resource.
- It is not a new quarry but an expansion of a long-standing existing quarry. The disruption from new quarries generally is thought to be greater than from expansions to existing ones.
- Regional need for additional, local sand and gravel supplies to serve the Niagara Region has been demonstrated.
- Current processing operations, as well as haulage access points are not to be moved.
- The annual tonnage limit condition of 750,000 tonnes is to remain unchanged.
- In order to reduce possible operational impacts such as noise and dust special measures like berms, tree screens, dust control measures, plant and access points, timing of activities, on-going formalized monitoring programs, compliance with the Provincial limits and appropriate license conditions all can assist in making the operation as compatible as possible with nearby residents, and businesses.
- Parcel A is located within an area designated as "Area of Natural and Scientific Interest" by the Ministry of Natural Resources. The Ministry does not object to the removal of this area from the ANSI designation.
- The site should not be prominent visually due to the proposed berms and tree plantings.
- The proposal does not appear to have any adverse impacts on the Niagara Escarpment, area woodlots, surrounding watercourses and wetlands, or the Twelve Mile Creek Watershed.
- A groundwater-monitoring program and related license conditions have been established to protect local water supplies if affected by quarry drawdown.

- The proposal was assessed by a large number of review agencies who either have expressed support for, or no objections to, the amendment and license applications.
- The applicant will be providing an undertaking to implement a program of Complaint Protocol and Public Liaison Committee Meetings.

Reviewed by,

Jack Bernardi

Jack Bernardi
Director of Planning Services

Submitted by,

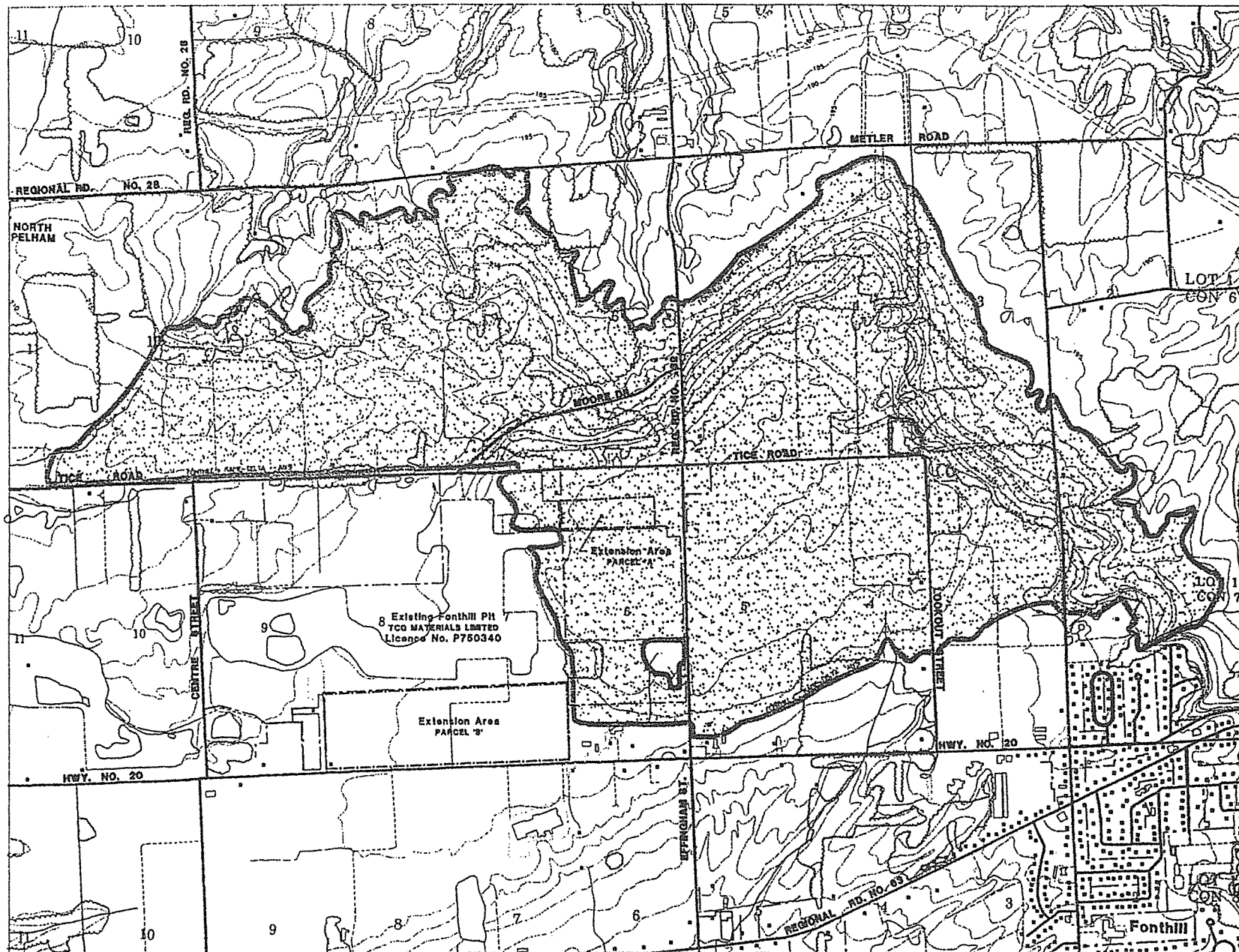
Gordon Cherney
Acting C.A.O.

Prepared by,

BLS PLANNING ASSOCIATES

Glen Barker

Glen Barker
Director



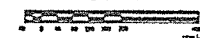
Fonthill Kame-Delta Earth Science ANSI

Legend

- SUBJECT SITES (PARCEL A & B)
PART LOTS 6, 7, & 8 CON. 7
TOWN OF PELHAM
REGIONAL MUNICIPALITY OF NAGARA
- EXISTING LICENSED PIT
TCG MATERIALS LIMITED
TOTAL AREA 86.28 ha (213.2 ac.)
- FONTHILL KAME-DELTA
EARTH SCIENCE ANSI
SOURCE: MNR, CATAPROGE DISTRICT FEB. 1997



SCALE



MacNaughton Hermen Britton Clarkson Planning Limited
REGIONAL & URBAN PLANNING & RESOURCE DEVELOPMENT
2100 Highway 20, Suite 200, Fonthill, Ontario, M9H 5H5
Telephone: (905) 526-2600 Fax: (905) 526-2611 E-mail: info@macnaughton.com

SOURCE: DTM, TOPOGRAPHIC
DATE: MAPS OBTAINED
FROM THE OFFICE OF NATURAL
RESOURCES, ONTARIO. DATE: MAP
SERIES: DATE: MAP FEATURES
CHANGED AND SUPPLEMENTAL
INFORMATION ADDED BY TCG
PLANNING LIMITED

2002 TCG HAS BEEN RE-ENGINEERED

Figure
1



APPENDIX 1

March 17, 1999

Ms Somei Quan, Area Planner
Ministry of Municipal Affairs and Housing
14-777 Bay Street
Toronto, Ontario
M5G 2E5

Dear Ms Quan:

Re: Request for Comments
Proposed Amendments to the Regional Niagara Policy Plan (#128)
and the Town of Pelham Official Plan and Zoning By-law
Expansion of TCG Materials Ltd. Sand and Gravel Pit
Town of Pelham

Further to my letter of January 11, 1999, please be advised that reviews of the technical reports that were prepared in support of the above-noted planning applications have now been completed by staff of the Ministry of the Environment. The following summarizes the results of these technical reviews.

Air Quality

The MHBC Ltd. report entitled *TCG Fonthill Pit Extension Aggregate Resources Act: Summary Statement* indicates that a dust control program focuses on the addressing dust impacts arising from the proposed haul routes and open pit areas as they are deemed the primary potential dust sources on the expansion sites.

The program consists of regular road cleaning, and wetting of the road surfaces to minimize the possibility of dust becoming airborne and leaving the site. The report also indicates that MOE-approved dust-suppressants will be applied where required. In terms of dust resulting from the extractive operation, the program indicates that as extraction occurs, exposure of disturbed soil will be minimized, revegetation will occur as soon as possible and if required, dust suppressants will also be applied.

This program has been deemed as being an acceptable approach to minimizing dust from the subject property provided that it is properly implemented.



Surface Water Impacts

A review was conducted of the document entitled *TCG Fonthill Pit Proposed Expansion Aggregate Resources and Groundwater and Surface Water Impact Assessment*, prepared by Garner Lee in July, 1998.

The extraction in the proposed expansion areas will be limited to a final depth of extraction in excess of 20 metres above the seasonally high local water table. Furthermore, no additional groundwater supplies are required for the proposed expansion. Aggregate washing facilities will remain in their current location at the west end of the site and wash water will continue to be recirculated through a settling pond. The soils underlying the site are highly permeable sands and gravels. These soils have a high infiltration rate which results in the area being a significant groundwater recharge area. This recharge migrates radially from the northeast portion of the site. Due to the topography of the site, infiltrated water rapidly migrates off-site and is expressed as springs and seepage areas on the flanks of the hill on which the site is situated. This groundwater discharge forms headwater streams beyond the property boundary.

Because the proposed expansion is to remain well above the seasonally high water table, infiltration should not be adversely affected. Thus, groundwater recharge should be maintained and should continue along its current migration pathways to provide off-site groundwater discharge to the baseflow for the off-site headwaters. Thermal (temperature) impacts to the receiving streams should not be affected. Any potential increase in sedimentation rates arising from the initial land clearing and excavation can be mitigated with the proposed Best Management Practices.

Groundwater Impacts

A review has been conducted of the July, 1998 Gartner Lee report entitled *TCG Fonthill Pit Proposed Expansion, Aggregate Resources and Groundwater Impact Assessment*. Staff generally agree with the conclusions of the report in that the risk of contamination to groundwater resources is low, and that the expansion generally will not impact local wells and groundwater levels. However, there is some concern with the interpretation of groundwater flow direction and the potential for reduction in discharge to off-site springs. And while these concerns should not affect the overall conclusions, it is recommended that the concerns expressed below be addressed to confirm whether the extraction of aggregates in Parcel A will result in an impact on the quantity of groundwater discharging to the springs north of the site, and if so, what the impact of this change will be.

For your information, our concerns regarding groundwater flow direction are as follows:

- The interpretation of the radial groundwater flow (as shown in Figure 5 of the Report) is not supported by the data. In particular, BH-7 was dry on every occasion that it was monitored and yet the interpretation of groundwater flow treats the bottom elevation of the monitoring well as if it was the static level elevation. The BH-7 data should not be

used in the interpretation except to indicate that the static level is less than the bottom of well elevation. It appears that the remaining data points would indicate a north to northeast direction of flow consistent with major topographic trends.

- The Report refers to springs along the flanks of the hill on which the pit located. However, the Report fails to provide any map which identifies the location of the springs. Topographic mapping shows streams originating to the north and south of the site within about one kilometre of the site which may be the location of these springs. The specific streams referred to in the report should be identified.
- The Report states that elevation of the springs to the north of the site is about 208 m. In contrast, the static level elevation in BH-A1 and BH-8 in the north part of the site ranges from 201 to 204 m. Thus, the regional groundwater table beneath the site cannot be contributing to the discharge at the springs in these locations as there would be no hydraulic connection. The springs may therefore, be being fed by a shallower flow system, perhaps a perched aquifer. It is not clear how far south this shallow/perched flow system extends. If it extends into Parcel A, then the expansion of the pit into Parcel A has the potential to decrease the discharge at these springs.
- The presence of low permeability layers within the granular material would provide an opportunity for the development of a shallow flow system above the regional water table. The borehole log for BH-A1 indicates the presence of a silt layer that could act in this manner.
- It should be noted that any reduction in discharge at the springs would likely be compensated by increased discharge further downgradient. If the upper reaches of the streams are fed by the springs do not represent significant habitat, then any reduction in spring discharge may not be significant. However, neither the potential reduction in discharge to the springs nor the significance of any reduction has been addressed by the Report.
- With respect to the springs to the south of the site, the stated elevation of the springs (about 205 m) is lower than the groundwater elevations in the south part of the site (BH-6 and BH-5) suggesting that the regional flow system does discharge at these springs. So the effect of extraction in Parcel B is not a concern in the same way that it is in Parcel A.

Potential Noise Impacts

A review of the Aeroacoustics Engineering Report #95207 along with a required supplementary report recently submitted, has been conducted. The methodology and procedures used in the analysis of the potential noise impacts were found to comply with those recommended by the Ministry. Furthermore, the documents have adequately demonstrated that the noise levels which will be generated during the construction, operation and rehabilitation of the extensions to the facility could be reduced to within the limits recommended by the Ministry.

However, the following sections of the report should be modified as follows:

1. Point 7 of the "Noise Control Notes and Equipment Limitations" as contained in the Cross Section Drawing (sheet 4 of 4) of the Site Plans prepared by MHBC Ltd. dated August 13, 1998 be revised to read:

"All operations shall comply with the recommended noise control measures as per Noise Report No. 95270 prepared by Aeroustics Engineering Ltd., dated July 20, 1998 as revised through Supplement 1 of the Report, dated February 25, 1999. Proposed changes to....."

2. That the following modifications shall be made to Supplement 1 of the Report:

- (A) On page 11, the following additional item shall be inserted replacing paragraph 6.4.3 of the original Report:

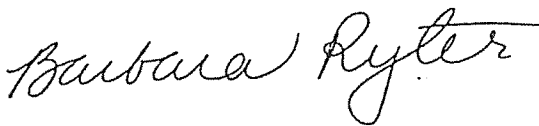
"A hoe ram may not be used in Zone 2 of Extension "A" or within 100 metres of the eastern extraction limit of Extension "B" at any time."

- (B) On page 11, the following statement shall be added to Section 6.5 of the original Report:

"The noise emission limits of the equipment used in the construction/ rehabilitation stages shall not exceed the limits contained in Publications NPC-115 and NPC-118 of MOE's Model Municipal Noise Control By-law."

This concludes our comments regarding the Ministry's review of the technical reports submitted to date, in support of these applications. Should you have any questions, please feel free to contact me at (905) 521-7864.

Yours truly,



Barbara Ryter
Environmental Planning Officer
Air, Pesticides & Environmental Planning

Guelph District Office

Direct Telephone No.: (519) 826-4912

February 26, 1999

Ms. SoMei Quan
Ministry of Municipal Affairs and Housing
Provincial Planning Services Branch
777 Bay Street, 14th. Floor
Toronto, ON M5G 2E5

APPENDIX 2

Dear Ms. Quan:

**SUBJECT: Proposed Region of Niagara Policy Plan Amendment No. 128 and
TCG / Blue Circle Pit Expansion
Town of Pelham, Regional Municipality of Niagara**

Ministry of Natural Resources' staff have completed their review of the above-noted application. We offer the following comments based on our review of the following reports:

1. TCG Fonthill Pit Extension - Aggregate Resources Act: Summary Statement, (Aug. 18, 1998) MacNaughton Hermesen Britton Clarkson Planning Limited.
2. Level 1 and 2 Natural Environment Technical Report, (June 1998) ESG International.
3. TCG Fonthill Pit Proposed Expansion - Aggregate Resources and Groundwater and Surface Water Impact Assessment (July 1998), Gartner Lee Limited.

RESOURCE CONCERNS

The subject lands straddle two watersheds - Twelve Mile Creek and the Welland River. Twelve Mile Creek is a coldwater stream supporting self sustaining populations of brook trout. The Welland River supports warmwater fish species.

A portion of the subject lands are located within the Fonthill Kame - Delta Area of Natural Scientific Interest (ANSI). This ANSI is a provincially significant earth science feature that was formed during the last period of glaciation.

Because of the limited availability of aggregate material in the Niagara area, the MNR considers the aggregate deposit on subject lands to be of primary significance.

SPECIFIC COMMENTS

Fonthill Kame - Delta ANSI

District staff have relied on the expertise of our Regional Geoscientist in assessing the impact of the proposed TCG / Blue Circle expansion proposal on the values associated with the Fonthill Kame -

Delta ANSI. Parcel "A" of the proposed expansion is located within the ANSI boundary while Parcel "B" is located adjacent to the ANSI boundary.

MNR staff have concluded that the expansion of the pit onto Parcel "A" would not result in a significant reduction in the interpretive value of the Fonthill Karne - Delta ANSI. Parcel "A" is located immediately adjacent to currently licensed lands and within an area of traditional extractive development. Parcel "B" is located outside of the current ANSI boundary. Hence, expansion of the pit onto Parcel "B" would not impact the interpretive value of the ANSI.

Fisheries Resources / Groundwater Recharge

District staff have several concerns with respect to the impact of the proposed expansion on groundwater resources within the Twelve Mile Creek watershed. As mentioned above, Twelve Mile Creek supports self-sustaining populations of brook trout. These species are highly dependent on groundwater inputs to support their life stages. Consequently, a reduction in groundwater recharge capacity within the Twelve Mile Creek watershed could have serious implications for the fishery resources.

District staff have the following concerns and questions regarding the information presented in the Gartner Lee Ltd. Report.

- The report states that the extraction proposal is located in an important recharge area for Twelve Mile and Welland River Watersheds. (Note error in report page 8, section 3.3, drainage basins are Twelve Mile Creek not Fifteen Mile Creek and the Welland River). However, the report fails to discuss how groundwater recharge on the subject site relates to the total available recharge area. The report also fails to relate the significance of groundwater recharge on this site to the remaining undeveloped areas of the Fonthill Karne (e.g., how does this parcel fit into the overall groundwater recharge picture?). The applicant should supply data confirming that current groundwater recharge capacity on the site will remain essentially unaltered (or be enhanced) both during extraction and after rehabilitation.
- The proposed expansion will reduce the overburden layer above the groundwater table. This area represents a buffer between ambient temperatures and groundwater temperatures. There was no data presented in the report that discussed the existing thermal properties of the groundwater. We do not know which groundwater table supplies the seeps and springs in Twelve Mile Creek. The applicants should clarify the following questions. Are the seeps and springs supported by the deep groundwater, which exhibits no thermal flux or are they supported by a shallower system that may have cold temperatures but has thermal flux under the influence of ambient air temperatures? What is the zone of thermal neutrality in the groundwater table?
- The report provides opinion information suggesting that the groundwater table (208 mASL) is the source for the springs and seeps on Twelve Mile Creek. It is interesting that the groundwater table and seep elevation for Twelve Mile Creek is exactly the same measure - resulting in a flat gradient profile. The greater gradient profile is to the south where significantly less groundwater flow is seen in streams (OMNR files). The applicant should clarify this phenomenon. Is it possible that the past extraction practices have lowered the groundwater table? Are the measurements of discharge elevations and groundwater levels accurate? Are there any ponds

located in the existing quarry? What are their elevations? What maintains the water levels here? Is the groundwater flow more toward the existing pit?

- Data showing the locations of springs and seeps (north and south) should have been presented in the report. Incidentally, Twelve Mile Creek groundwater discharges begin one half concession north of the parcel and virtually ends at Kilman Rd. (i.e., there is virtually no increase in flow amounts after Kilman Rd.). These are large quantities of cold water, which provide for the critical life stages of brook trout.

Restoration Concerns

The restoration plan suggests the replacement of "cement sand" back on top of the extraction site. The use of this material is inappropriate because it will limit infiltration rates on the sites. The restoration plan should seek to maximize groundwater infiltration rates. f

RECOMMENDATIONS

1. This Ministry recommends that approval of the Regional Policy Plan Amendment No. 128 be deferred pending the resolution of the following issue:
 - a) The applicant should provide additional information documenting the relationship of the groundwater recharge on the subject lands to the total available area contributing groundwater recharge to Twelve Mile Creek. This additional documentation should include an assessment of the significance of the groundwater recharge on the subject lands to the remaining undeveloped areas of the Twelve Mile Creek watershed.
- 2) Provided that recommendation 1 a) can be addressed to our satisfaction, we would be prepared to support the approval of this Region Policy Plan Amendment. This Ministry can address the remaining issues identified in this letter through our review of the aggregate licence under the Aggregate Resources Act.

Please contact me should you have any questions or concerns regarding these comments.

Yours sincerely,



David N. Cooper
District Planner
Guelph District

cc: Mr. Joad Durst, MNR Niagara Area Office
Mr. Jim Scharlach, MNR Guelph District Office
Mr. John Fraser, MNR Peterborough
Mr. James Parkin, MHBC Planning Limited

APPENDIX 3

March 12, 1999

Our File No. 4.30.50.

Regional Niagara
Planning and Development Department
2201 St. Davids Road
P.O.Box 1042
Thorold, ON L2V 4T7

Attention: Mr. Ken Forgeron, Planner

Niagara
Peninsula
Conservation
Authority

2358 Centre Street
Allanburg, Ontario
L0S 1A0
(905) 227 1013
1 800 263 4760
fax. (905) 227 2998
npca@conservation-niagara.on.ca

Dear Mr. Forgeron,

Subject: Regional Policy Plan Amendment 128
TCG Materials Limited
Town of Pelham

Further to your circulation pertaining to the above noted proposal, we offer the following comments for your consideration.

As noted amendments to the Region's Policy Plan and the Town of Pelham's Local Official Plan and Zoning Bylaw have been requested to permit the expansion of the TCG Materials Sand and Gravel Pit. This pit is partially located within the Fonthill Karne Delta, and the Twelve Mile Creek Watershed. Accordingly, Authority objectives in this regard would pertain to minimizing soil erosion and stability problems and ensuring that the natural integrity of the Twelve Mile Creek system is maintained over the long term.

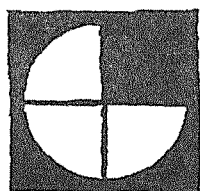
From our review of the submitted background information, it was noted that the expansion of the existing pit may will have an impact on surface water drainage and may result in the increase of groundwater recharge. As you may know Twelve Mile Creek is the Regions only substantial coldwater fishery, and is greatly influenced by groundwater discharge. Although the submitted documentation does indicate that groundwater recharge rates will increase through the expansion of the existing extraction areas, these statements are not supported by detailed calculation.

Accordingly, prior to our final approval of this proposal, Authority technical staff have requested that the following additional information be provided for our review and approval:

1. That the proposed changes to the groundwater and surface water flows be evaluated by means of a water balance model developed for both the pre and post development conditions, and;
2. That modification to the surface water drainage be substantiated by hydrologic analysis. Such an analysis will assist the Conservation Authority in accurately updating our hydrologic database for this area.

We trust the above will be of assistance. Should you have any questions pertaining to our technical review, please do not hesitate to contact Lucy Shaw P.Eng. at ext. 231.

Sincerely,
Michael G. Benner
Watershed Planner (ext.235)



**Gartner
Lee
Limited**

140 Renfrew Drive
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L3R 6B3

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*Environmental Services
for
Industry & Government*

Office Locations

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- Vancouver
- St. Catharines
- Whitehorse
- Yellowknife
- Kuala Lumpur



April 13, 1999

Mr. Kevin Mitchell
Blue Circle Aggregates
380 Hardy Road
P.O. Box 1390
Brantford, Ontario
N3T 5T6

Post-it™ Fax Note		7671E	Date: <u>Apr 13</u>	# of pages: <u>8</u>
To: <u>Allen</u>			From: <u>Jack</u>	
Co./Dept.			Co.	
Phone #				
Fax #				

Dear Mr. Mitchell:

Re: Fonthill Pit Expansion - Responses to Agency Review Comments on Groundwater and Surface Water Issues

Background

Gartner Lee Limited prepared and submitted a report dated July 21, 1998 entitled "TCG Fonthill Pit Proposed Expansion - Aggregate Resources and Groundwater and Surface Water Impact Assessment" in support of TCG Material Limited's (now Blue Circle Aggregates) application to expand their current sand and gravel pit west of Fonthill.

Our report was reviewed by several agencies and a number of comments were received. A meeting was convened with these agencies on March 17, 1999 at the Region of Niagara offices to discuss their issues. In addition to the meeting, telephone conversations between ourselves and the commenting agencies were also held both before and after the meeting. Based on these discussions, we believe that most of the issues and concerns raised regarding the groundwater and surface water aspects of the pit expansion have been satisfactorily resolved. This letter is intended to provide a formal record of the responses to the agency issues, and it reflects the earlier discussions.

Ministry of the Environment

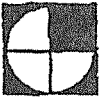
Comments were received through Barbara Ryter in a letter dated March 17, 1999. Among other matters, the MOE reviewers provided separate comments on the surface water and groundwater aspects of the report, as follows.

Surface Water

The Ministry's surface water reviewer generally agreed with the conclusions and recommendations of our report that the pit expansion would not affect existing surface water resources, and no additional issues or concerns were raised.

Groundwater

The Ministry's groundwater reviewer noted that "Staff generally agree with the conclusions of the report in that the risk of contamination to groundwater resources is



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Blue Circle Aggregates
April 13, 1999

low, and that the expansion generally will not impact local water wells and groundwater levels. However, there is some concern regarding with the interpretation of groundwater flow direction and the potential for reduction in discharge to off-site springs. And while these concerns should not affect the overall conclusions, it is recommended that the concerns expressed below be addressed ..". The MOE goes on to identify the concerns that can be summarized as follows:

- a) the use of BH7 to interpret the radial groundwater flow pattern presented in the report, given that groundwater monitor has been dry for a number of years; and
- b) the possibility that some of the seeps and springs north of the pit are connected to locally perched water tables, since their elevations appear to be above the regional water table, and the potential for these perched water tables to be affected by the pit excavation.

We have continued to use the bottom of monitor BH7 in our groundwater flow mapping for a number of years for two reasons: because at the time of drilling there were indications that a zone of saturation had been reached, even though the monitor installation into this zone proved difficult; and because the monitor is located on the high point of land topographically, which may support a radial flow pattern. However, we agree with the reviewer's assessment that this is not conclusive evidence and that it is equally reasonable to delete this value from the groundwater flow mapping. Thus, an alternative groundwater map is attached to this letter which shows a consistent flow direction to the north across the site and places the groundwater divide south of the site. Regardless of which interpretation is used, the important finding is that the groundwater levels have remained consistent during the past 15 years while the easterly end of the current pit has been excavated; therefore, the groundwater flow system is unaffected.

The Ministry reviewer is also correct that several of the seeps and springs to the north of the pit do appear to originate at a higher elevation than the regional water table that we have monitored beneath the pit. Based on topographic mapping, we have estimated the elevations of the stream headwaters in this area to range between 176 to 213 mASL (see the map attached to this letter for locations and estimated elevations), while the regional water table below the north edge of the pit at Parcel A is about 201 mASL. Therefore, we also conclude that some of these are connected to the main water table, while others are connected to locally perched water table(s). The geology of the north flank of the kame delta is likely complex given its location at the ice margin, and the deposits slumping off of the melting ice front could include layers of finer materials that would create perched water table conditions. These could be very localized. In any event, the excavation of the pit will not affect these perched water table conditions since:

- a) the base elevation of the pit is set at about 227 mASL, well above the highest elevation of the stream headwaters; and



Page 3
Blue Circle Aggregates
April 13, 1999

- b) there is no evidence of any distinct and continuous finer layers that could contribute to perched conditions within the proposed the pit excavation, based on our boreholes and investigations.

One potential source of perched water table conditions north of the pit is a finer-grained silty layer found at about 212 mASL below the area of Parcel A, and seems to correlate with the elevation of some of the upper discharge points north of the site. However, this layer lies well below the base of the pit excavation, and therefore it will not be affected.

In summary, the MOE groundwater review has raised two issues that were not addressed in our report, but based on our analysis detailed above, we concur with the reviewer's position that they do not affect the basic conclusions of the report.

Niagara Peninsula Conservation Authority

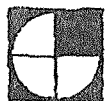
The NPCA's comments were summarized in a letter from Michael Benner to dated March 12, 1999, and through discussion with Lucy Shaw. Their recommendations are:

1. *that the proposed changes to the groundwater and surface water flows be evaluated by means of a water balance model developed for both pre and post development conditions, and*
2. *that modification to the surface water drainage be substantiated by hydrologic analysis. Such an analysis will assist the Conservation Authority in accurately updating our hydrologic database for the area.*

In response to the first comment, we have in our report 15 years of actual monitoring records from the site showing that there has been no change in water levels beneath the existing pit during its excavation. This clearly confirms our original 1981 prediction that the pit has no effect on groundwater or surface water. In our opinion, a water budget based on theoretical calculations is unnecessary given the long-term field evidence that is available in this particular case. The water balance would simply be calibrated to the existing field data to show no change, and it would likewise show no change for the extraction of the two expansion parcels as well.

With regard to the second point, there are three points that should be considered:

1. there are no permanent surface water features on the two proposed expansion parcels;
2. given the sandy surface soils and relatively flat grades, the actual surface water drainage from the two parcels is minimal to none; and



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Blue Circle Aggregates
April 13, 1999

3. the topographic contours shown in the current Site Plans, indicate that any drainage which does develop on the two expansion parcels is currently directed back into Blue Circle's pit (where it infiltrates), and the same situation will occur when the pit is expanded.

Since there is no drainage from the pit expansion properties into the regional drainage system in either the pre- and post-development cases, hydraulic modelling is not necessary for this site.

Subsequent to the March 17 meeting, Lucy Shaw indicated that she had sub-watershed boundary mapping which appeared to show a surface water divide crossing Parcel A and B. Copies were faxed to Gartner Lee's office. Lucy commented that the NPCA would require a more detailed assessment if there was diversion of surface water drainage from one basin into another. Notwithstanding that the surface drainage is minimal to none from these parcels in any event (see point 2 above), we noted that the sub-watershed boundaries in the NPCA maps appeared to be based on regional scale topographic data (likely 1:10,000 scale or more), whereas our interpretation based on a more accurate 1:2,500 site plan prepared by air photo contouring tied to field survey indicated that these boundaries do *not* cross the expansion parcels (i.e., both Parcel A and Parcel B are within the Twelve Mile Creek sub-watershed and will remain so after extraction). We are currently preparing a map to confirm our interpretation showing the revised sub-watershed boundaries based on the Site Plans, to be forwarded to the NPCA.

Ministry of Natural Resources

The MNR's comments were provided in a letter from David Cooper dated February 26, 1999. In summary, their comments relate to the following issues:

- a) the relationship between recharge at the pit and the surrounding watershed, and data to confirm that recharge will be unaltered;
- b) the potential for thermal effects on groundwater due to the removal of overburden at the pit;
- c) the location and relative elevation of the seeps and springs north of the pit versus the water table below the pit suggesting a flat or depressed water table; and
- d) the use of cemented sand as a rehabilitation backfill material.

Appendix E of our report contained water level data collected since 1981 at four groundwater monitors installed just prior to the expansion of the Fonthill Pit into its eastern end. The data show that the water table below the pit has been steady throughout the subsequent period of extraction, which conclusively supports our contention that the excavation of the pit above the water table has no effect on recharge, groundwater levels or groundwater flow. These data reflect the monitoring



Page 5
Blue Circle Aggregates
April 13, 1999

experience at other above-water pits and quarries in Ontario, to the extent that the new Provincial Standards for Aggregate Resource Act applications prepared by MNR (Version 1, 1997, Category 3) only require establishment of the water table elevation, and not a hydrogeological impact assessment, for pits that remain at least 1.5m above the water table.

The potential for thermal effects is typically only raised in conjunction with applications for below water extraction, where the water table exposed in ponds may be subject to warming during the summer. Copies of a recent modelling study on the subject (*Impact of Aggregate Extraction Activities on Cold Water Discharge and Water Table Drawdown*; Ostrander, Blackport, Martin and Picotti; in publication) were supplied at the meeting on March 17, showing that even the thermal effects from open ponds subject to extremes of temperature are almost negligible within the groundwater system and fully dissipate within a relatively short distance down gradient. Other similar findings are referenced in the paper as well. In the case of the Ponthill Pit, with the base of the completed pit more than 20 m above the water table, there is no potential for thermal impacts on the seeps and springs to Twelve Mile Creek.

The point raised by MNR regarding the seep/spring elevations and the water table has been addressed in the response to the MOE comments, above. There are no ponds in the pit, and the main water table lies more than 20 m below the base of the pit. The groundwater table has not been lowered due to extraction activities, as demonstrated by the steady water levels measured over the past 14 years. Rather, some of the seeps and springs are sourced from locally perched water tables north of the pit, as discussed above. Neither the main water table nor the perched water tables have been, or will be, affected by the pit extraction.

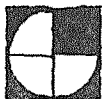
The use of cemented sand as slope backfill will not limit infiltration at the site. These are naturally occurring blocks that can be thought of as boulders, not as layers. Returning them into the pit slopes as backfill during rehabilitation will have no groundwater or surface water implications, and it is a good use of on-site material that otherwise has little or no commercial aggregate value. Furthermore, the proposed Site Plans indicate that the surface of the pit will be deep ripped to alleviate compaction during the rehabilitation phase, which will improve the infiltration capacity at surface.

Other Comments

During the meeting at the Region of Niagara offices on March 17, several other issues were discussed arising from comments made at the Public Meeting held on December 8, 1998. These are addressed below.

Water Well Complaints

Some concerns were raised by residents at the Public Meeting regarding water well problems, and allegations that they were related to the pit operations. There is one letter of complaint to this effect on file with the Town and the MOE from a Mr. D. Johnson dated July 8, 1997. During the open



Page 6
Blue Circle Aggregates
April 13, 1999

house portion of the meeting, I discussed the particulars with a number of the residents. Briefly, I explained to them that the extraction of the sand and gravel does not interfere in any way with the recharge to the groundwater below the pit, as explained in our report and evidenced in the long period of groundwater monitoring records beneath the east end of the pit. I also noted that there were many reasons why water wells can deteriorate over time including sedimentation, precipitation, wear on the pumping system, and interference from other private and industrial/commercial wells.

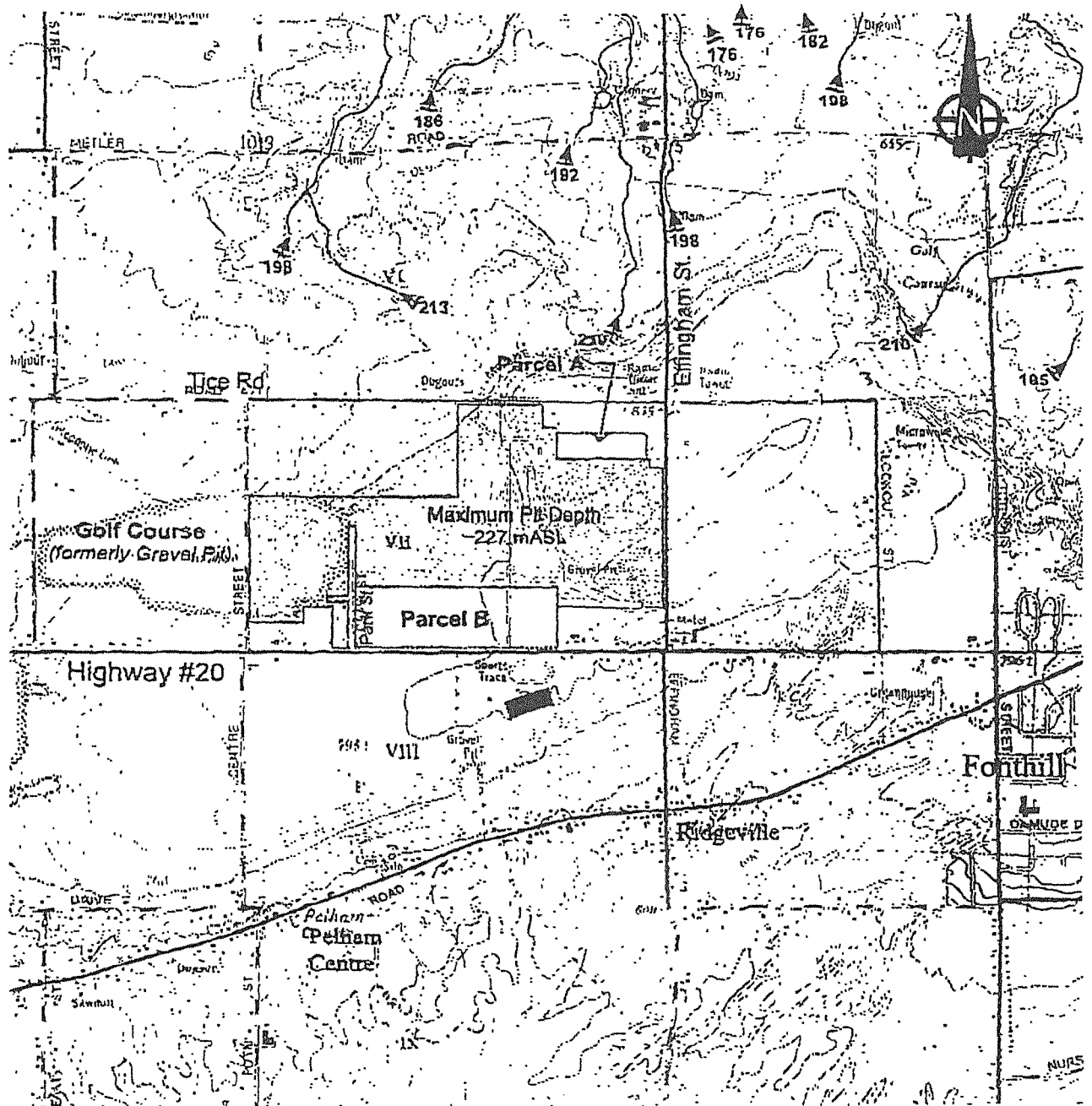
Gartner Lee Limited also reviewed the MOE's water well complaint records for the area. Only two complaints were filed against TCG's pit (1988 and 1990), but in both cases the MOE's review concluded that the pit operations were not responsible.

We trust that the foregoing is useful. Please don't hesitate to call me at any time at (905) 477-8400 ext. 347 if there are any further questions or comments.

Yours very truly,
GARTNER-LEE LIMITED

Stephen C. Hollingshead, M.Sc.(Eng.), P.Eng.
Senior Geological Engineer
Principal

SCH:mm
cc: Barb Ryer, MOE Hamilton; Fax (905) 521-7820
Lucy Shaw/Michael Benner, NPCA; Fax (905) 227-2998
David Cooper, MNR Guelph (519) 826-4929
Somai Quan, MMAH Toronto; Fax (416) 585-4245
Ken Ferguson, Region of Niagara; Fax (905) 641-5208
Jack Bernardi, Town of Pelham; Fax (905) 892-5055
James Parkin, MHBC; Fax (519) 576-0121
Jonathan Kahn, Blake Cassels & Graydon; Fax (416) 863-2653



Legend

195 Approximate Spring Elevation (mASL)

NOTE: Figure prepared using Energy, Mines and Resources Topographic map, (30M/3c).



Gartner
Lee

Scale 1 : 25,000

LOCATION PLAN AND SPRING LOCATIONS

TCG Materials Limited Fonthill Pit Expansion

FIGURE

1

Project 95-317
(95131731702.cdr)

Ministry of
Natural ResourcesMinistère des
Richesses naturelles1 Stone Road West
Guelph, Ontario
N1G 4Y2Telephone: (519) 826-4955
Facsimile: (519) 826-4929

APPENDIX 5

Guelph District Office

Direct Telephone No.: (519) 826-4912

May 3, 1999

Mr. James Parkin
MHBC Planning Consultants Limited
171 Victoria Street North
Kitchener, ON N2H 5C5

Dear Mr. Parkin:

**SUBJECT: Aggregate Resources Act Application (Category 9) and
Region of Niagara Policy Plan Amendment No. 128
Blue Circle Fonthill Pt Expansion
Town of Pelham, Regional Municipality of Niagara**

Ministry of Natural Resources' staff have completed their review of the above noted application. We offer the following comments for your consideration.

In a letter dated February 26, 1999, the MNR provided comments to the Ministry of Municipal Affairs and Housing on the proposed Region of Niagara Policy Plan Amendment No. 128. MNR identified several issues of concern related to possible groundwater impacts and site rehabilitation. A meeting was held in March to discuss the concerns raised by MNR and the other review agencies.

Additional information and further explanation was provided at this meeting by the applicant's consultants. MNR staff were also provided with a copy of the hydrogeological review conducted by staff from the Ministry of Environment. The supplemental information provided by the consultants was confirmed in an April 13, 1999 letter prepared by Gartner Lee Limited. Based on the above information, all of MNR's technical concerns have now been addressed.

Please contact me should you have any questions regarding these comments.

Yours sincerely,

David N. Cooper
District Planner

Post-it™ Fax Note

7671E

Date <u>May 5</u>		# of pages <u>3</u>
To <u>Velen</u>	From <u>Gack</u>	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

cc: Ms. SoMei Quan, Ministry of Municipal Affairs and Housing
Mr. Craig Selby, District Manager, MNR Guelph District
Mr. Joad Durst, MNR Niagara Area Office
Glen Barker

APPENDIX 6

Niagara Peninsula Conservation Authority

May 13, 1999

Our File No. MPR 4.30.50

MacNaughton, Hermesen, Britton, Clarkson Planning Limited
171 Victoria St. N.
Kitchener ON N2H 5C5

250 Thorold Road West
Welland, ON L3C 3W2

ph. (905) 788 3135

fax. (905) 788 1121

npca@conservation-niagara.on.ca.

Attention: Mr. James Parkin, B.E.S.

Dear Mr. Parkin.

Subject: Blue Circle (TCG) Fonthill Pit Expansion
File No. 7601 Z
Town of Pelham

Further to our review of additional information received from Gartner Lee Ltd. regarding surface drainage across the site, we offer the following comments for your consideration.

As you are aware, this pit is partially located within the Fonthill Karne Delta, and the Twelve Mile Creek Watershed. Accordingly, when reviewing the expansion proposal, Authority objectives pertained to minimizing soil erosion and stability problems and ensuring that the natural integrity of the Twelve Mile Creek system is maintained over the long term. As you may know Twelve Mile Creek is the Regions only substantial coldwater fishery, and is greatly influenced by groundwater discharge. Although the originally submitted documentation did indicate that the expansion would not have an impact on surface water drainage and groundwater recharge/discharge rates, these statements were not supported by detailed calculation.

From our review of additional information supplied by Gartner Lee Limited, it would appear that the surface drainage component of the expansion would not be significantly altered. It is our understanding that issues relating to groundwater recharge and discharge are being finalized with the Ministries of Natural Resources and Environment. Accordingly, the Conservation Authority does not have any further technical concerns relating to the expansion of the Blue Circle (TCG) Pit operation

By copy of this correspondence to the Region of Niagara and the Town of Pelham, we are also advising Planning staff of the above.

We trust the above will be of assistance. Should you have any questions pertaining to our technical review, please do not hesitate to contact Lucy Shaw P.Eng. at ext. 231.

Sincerely,

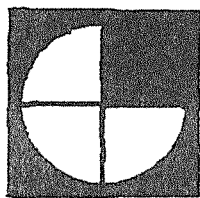
Michael G. Benner
Watershed Planner (ext.235)
MGB

Cc: Town of Pelham,
Regional Niagara, Planning Dept
Glen Barker

APPENDIX 7

April 30, 1999

GLL 95-317



**Gartner
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- Yellowknife
- Kuala Lumpur



Mr. Kevin Mitchell
Blue Circle Aggregates
380 Hardy Road,
P.O. Box 1390
Brantford, Ontario
N3T 5T6

Dear Mr. Mitchell:

Re: Fonthill Pit Expansion - Review of Sub-Watershed Boundaries

Further to our letter dated April 13, 1999, we have now prepared the map confirming that the sub-watershed boundary between Twelve Mile Creek and Coyle Creek does not cross Parcel "A" or "B", and that their development will not result in surface water drainage diversion between the two sub-watersheds. Our 1:2,500 scale map based on air photo contouring tied to field survey is a refinement on the NPCA's current sub-watershed boundary mapping based on 1:10,000 scale topographic mapping. A draft of the map was reviewed with Lucy Shaw of the Niagara Peninsula Conservation Authority (NPCA) prior to its finalization.

To the best of my knowledge this completes the responses to all of the issues raised by the review agencies to-date.

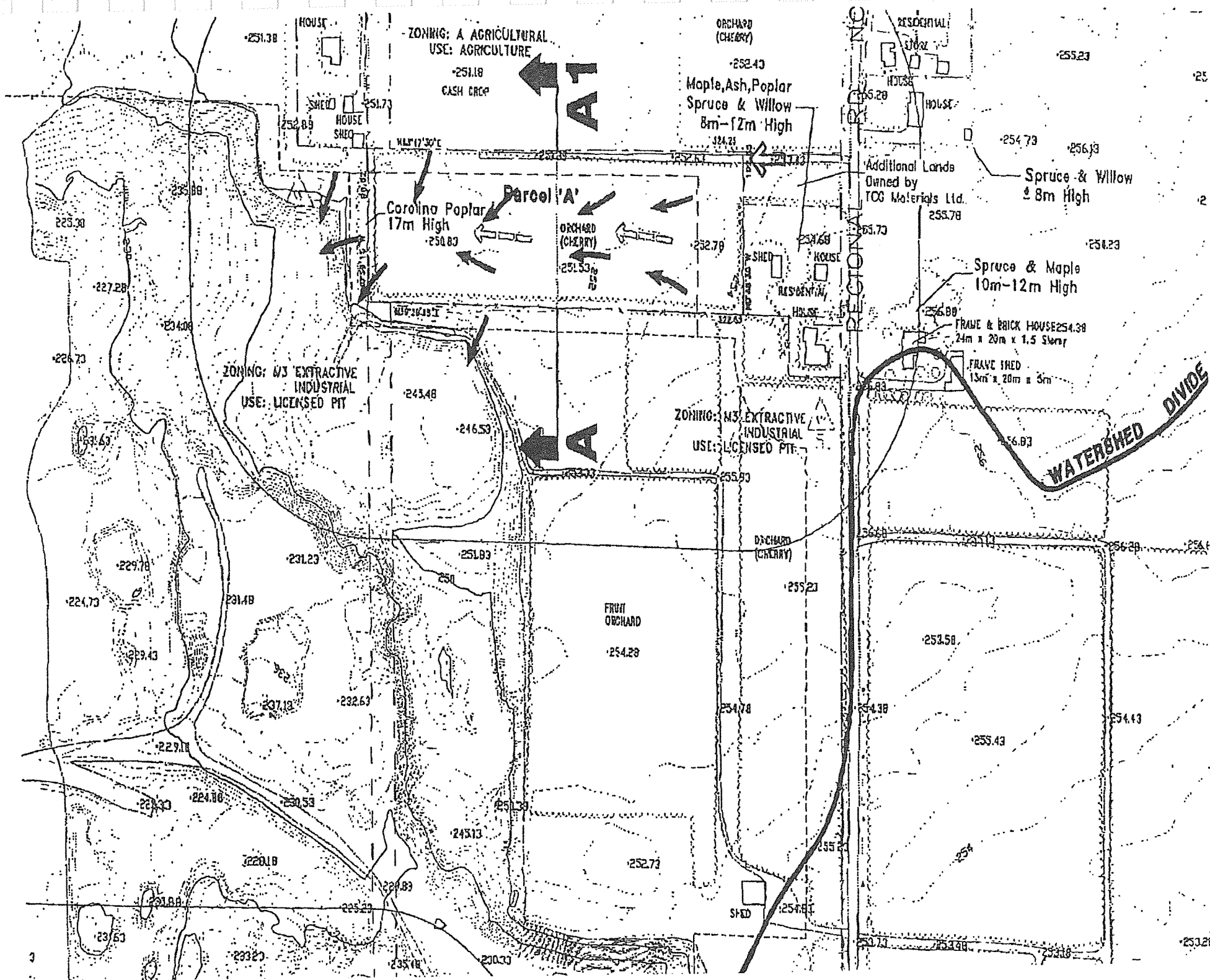
I am forwarding NPCA a full-size copy of the map by courier. The balance of the copies of this letter will be accompanied by photocopies of the two critical sections of the map (i.e., Parcels "A" and "B") to permit transmission by fax. Please contact the undersigned at (905) 477-8400 ext. 347 if additional full-size copies are required.

Yours very truly,
GARTNER LEE LIMITED

Stephen C. Hollingshead, M.Sc.(Eng.), P.Eng.
Senior Geological Engineer
Principal

SCL:dys

cc: Barb Ryter, MOB Hamilton; Fax (905) 521-7820
Lucy Shaw/Michael Benner, NPCA; Fax (905) 788-1121
David Cooper, MNR Guilph; Fax (519) 826-4929
Somei Quan, MMAH Toronto; Fax (416) 585-4245
Ken Forgeron, Region of Niagara; Fax (905) 641-5208
Jack Bernardi, Town of Pelham; Fax (905) 892-5055
James Parkin, MHBC; Fax (519) 576-0121
Jonathan Kahn, Blake Cassels & Graydon; Fax (416) 863-2653



Ministry of Citizenship,
Culture and Recreation

Ministère des Affaires civiques,
de la Culture et des Loisirs



Cultural Programs Branch
Archaeology & Heritage Planning
55 Centre Street, London, Ontario N6J 1T4
(519) 675-7742; Fax: 675-7777

November 24, 1997

To: Mr. Kevin Mitchell
TCG Materials
380 Hardy Road, P.O. Box 1390
Brantford, Ontario N3T 5T6

RE: Proposed Fonthill Plt Expansion, Town of Pelham, Niagara

I have reviewed both a Stage 1-3 archaeological assessment report (License # 96-001; File #: 96-063), and a Stage 4 mitigation report (License #: 96-001; File #: 97-039), submitted by Robert Mayer of Mayer Heritage Consultants, for the above-mentioned development. Mr. Mayer reports survey of the subject property led to the discovery of 9 archaeological sites, one of which (AgGt-91) was eventually submitted to full-scale excavations, and proved to document a very significant, 9,000 year old Aboriginal occupation. The Stage 4 report indicates that all documentation has now been completed for this locale.

Given the above, this Ministry is satisfied that concerns for cultural heritage resources have been met. Consequently, this letter should serve to confirm that heritage concerns have been addressed for the subject property, and our office would have no further concerns or objections with the expansion application submitted.

I trust that this information is of assistance. Should you wish to discuss this further, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Neal Ferris", written over a horizontal line.

Neal Ferris
Regional Archaeologist/Heritage Planner
Southwestern Ontario Region

cc. R. Mayer, Mayer Heritage Consultants
MCzCR Archaeological Licensing Office

Ministry of
Agriculture, Food
and Rural Affairs

Ministère de
l'Agriculture, de l'Alimentation
et des Affaires rurales

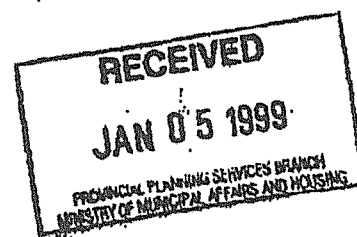


667 Exeter Road
London, Ontario.
N6E 1L3
Tel: (519) 873 - 4085
1-800-265-4750
Fax: (519) 873 - 4082

LAND USE PLANNING PROGRAM

December 23, 1998

So-Mei Quan
Area Planner
Ministry of Municipal Affairs and Housing
777 Bay Street, 14th Floor,
Toronto, Ontario.
M5G 2E5



Dear Ms. Quan:

Re: Regional Policy Plan Amendment #128
Expansion of TCG Materials Ltd. Sand and Gravel Pit
Pt. Lots 6, 7 & 8, Con. VII, Geographic Township of Pelham
Town of Pelham, Region of Niagara

In response to your recent request, staff have reviewed the above-noted matter according to the provincial policies regarding agricultural land as found in the Provincial Policy Statement (PPS) and offer the following technical comments.

It is understood that the purpose of this application is to permit the expansion of TCG Materials' existing Fonthill aggregate operation at the above-noted site from 66 hectares to 90.5 hectares. The proposed expansion is made up of two parcels of land. Parcel A is located to the north-east of the existing licensed pit area and is approximately 3.2 hectares in size. Of the 3.2 hectare area to be licensed, an area of approximately 2.4 hectares will be extracted. Parcel A has already been identified as a 'Possible Aggregate Area' in the Regional Policy Plan and therefore does not require an amendment to that plan. Parcel B is located to the south of the existing licensed pit area and is approximately 21.3 hectares in size. An area of approximately 17.4 hectares will be extracted from Parcel B. Presently, Parcel B has not been identified in the Regional Policy Plan for 'Potential Aggregate Extraction', and is shown as a



Ontario, there's no taste like home
Un bon goût de chez nous



'Good Tender Fruit Area'. Therefore, an amendment to the Regional Policy Plan is required to allow aggregate extraction within Parcel B.

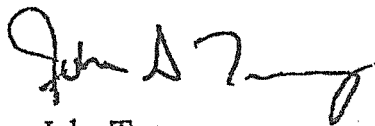
Both Parcel A and Parcel B are considered class 1 to 3 soils according to the Canada Land Inventory, and are rated as Fair to Good for the production of tree fruits. Parcel A and B would therefore be considered prime agricultural land under the Provincial Policy Statement (PPS). Section 2.2.3.6 of the PPS provides direction for aggregate extraction on prime agricultural lands. *In prime agricultural areas, on prime agricultural land, extraction of mineral aggregates is permitted as an interim use provided that rehabilitation of the site will be carried out whereby substantially the same areas and same average soil quality for agriculture are restored.*

A review of the information provided by TCG Materials, including the Aggregate Resources Act Summary Statement, and the Agricultural Assessment indicates that TCG Materials intends to progressively rehabilitate the site back to agricultural land uses, capable of supporting tree fruit production. Parcel A and Parcel B combined are approximately 24.5 hectares, of which extraction is proposed for 19.8 hectares of land. When rehabilitation is completed, 15 hectares of the 19.8 hectares disturbed by extraction will be rehabilitated to agricultural use. An additional area of 6.2 hectares of land within the existing licensed pit will also be rehabilitated back to agricultural use. Presently these lands are scheduled to be rehabilitated as side slopes and setback areas. The inclusion of Parcel A and B will allow these lands to be rehabilitated to agriculture. After our review of the information provided, we are satisfied that this proposal has had regard to the policies of the PPS, especially Section 2.2.3.6.

Please be advised that the above-noted comments do not represent an overall provincial position on this matter and that there may be comments or concerns of other ministries or agencies that should be considered.

If you have any questions about these comments, please feel free to call me at the above-noted number.

Sincerely,



John Turvey
Rural Planner

cc: Mike Toombs, OMAFRA, Guelph
Donna Sharp Mundie, OMAFRA, Guelph

BLUE CIRCLE CANADA - FONTHILL PIT
PUBLIC LIAISON COMMITTEE

Blue Circle Canada Inc., owner/operator of the Fonthill Pit, propose to establish a Public Liaison Committee (PLC) as a forum for property owners to meet with Blue Circle staff/representatives to exchange information on:

- Blue Circle's plans for site preparation, extraction and rehabilitation activities;
- status of ongoing operational issues (e.g. extraction, processing, rehabilitation, etc.) at the pit;
- concerns of residents.

Subject to receiving your feedback, Blue Circle intends to hold PLC meetings twice a year. Meetings will be held at the pit site. Registrants to the PLC will be notified by telephone of meeting dates.

Our hope is that landowners closest to the pit site would appoint representatives to the PLC (a list of landowners within 120 metres of the licensed site is attached). It is also hoped that a staff or Council representative from the Town of Pelham would attend PLC meetings.

If you are interested in participating in the PLC, please contact Mr. Kevin Mitchell, Regional Lands Manager, at 1-800-374-7126. Alternatively, you may complete and return the following Slip to:

Blue Circle Canada Inc. (Attention: Kevin Mitchell)
380 Hardy Road, P.O. Box 1390, Brantford, Ontario N3T 5T6
Fax: (519) 753-0006

*Yes - I am interested in participating in the Public Liaison Committee (PLC)
for Blue Circle's Fonthill Pit.*

Name: _____

Address: _____

Telephone - Res. _____ Bus. _____

phen Lawrence Haun
591 Effingham Street, R. R. #1
Ridgeville, Ontario
LOS 1M0

ne Elizabeth Black
Hwy 20, R. R. #5
Fenwick, Ontario
LOS 1C0

aniel Haist
Canboro Road, R. R. #1
Ridgeville, Ontario
LOS 1M0

Mr. R. Crawford
District School Board of Niagara
1 Carlton Street
St. Catharines, Ontario L2R 7P4

5987 Ontario Limited
42 Hwy 20, R. R. #3
Fenwick, Ontario
LOS 1C0

ul Pupo
45 Tice Road, R. R. #1
Ridgeville, Ontario
LOS 1M0

ail & Betty Samuel
19 Effingham Street, R. R. #1
Ridgeville, Ontario
LOS 1M0

1049451 Ontario Inc.
Hwy 20 NS Roll #13-12-1
1591 Effingham Street, R. R. #1
Ridgeville, Ontario LOS 1M0

David & Margriet McHenry
1524 Park Street, P.O. Box 942
Fonthill, Ontario
LOS 1E0

Marion Stewart
465 Canboro Road, R. R. #3
Fenwick, Ontario
LOS 1C0

Terrance Gallagher
346 Hwy 20, R. R. #3
Fenwick, Ontario
LOS 1C0

William Bowie
1590 Effingham Street #1
Ridgeville, Ontario
LOS 1M0

David MacKenzie
352 Tice Road, R. R. #1
Ridgeville, Ontario
LOS 1M0

Walter & Susan Pristanski
1617 Effingham Street, R. R. #1
Ridgeville, Ontario
LOS 1M0

Ralph Samuel Haun
325 Tice Road, R. R. #1
Ridgeville, Ontario
LOS 1M0

Clifford Duntou
459 Hwy 20 W, R. R. #3
Fenwick, Ontario
LOS 1C0

1049451 Ontario Inc.
Hwy 20 SS Roll #13-102
1591 Effingham Street, R. R. #1
Ridgeville, Ontario LOS 1M0

Wm Edward Guinn
336 Hwy 20, R. R. #3
Fenwick, Ontario
LOS 1C0

Owner/Resident
1596 Effingham Street, R. R. #1
Ridgeville, Ontario
LOS 1M0

1049451 Ontario Inc.
Effingham Street Roll #10-36
1591 Effingham Street, R. R. #1
Ridgeville, Ontario LOS 1M0

BLUE CIRCLE CANADA - FONTHILL PIT

COMPLAINT NOTIFICATION & RESOLUTION PROTOCOL

Who To Contact: Kevin Mitchell (Regional Lands Manager)
Tel. 1-800-374-7126 ; Fax. (519) 753-2912

OR

Bill Gaul (Operations Supervisor)
Tel. (905) 892-2686 ; Fax (905) 892-2654

When To Call: As Soon as Possible After the Incident

What Information to Provide: Your Name, Address and Telephone Number
Time and Date of Incident
Details of Incident

You may be requested to provide additional information. Your cooperation is appreciated.

Blue Circle Canada realizes that some complaints can be resolved quickly whereas others may take longer depending on the type of issue. We are committed to attempting resolution of all complaints as expeditiously as possible. Therefore, the time frames indicated below represent what we consider to be the maximum probable timing for implementation of the Complaint Resolution Protocol.

Blue Circle Canada undertakes to:

- 1) Whenever possible, you will be contacted on the same business day to discuss means of resolving the issue. When this is not possible, you will be contacted before the end of the following business day.
- 2) Advise MNR (Guelph District Office) and the Town of Pelham of the complaint before the end of following business day;
- 3) Maintain a log of all complaints received and actions taken. This log is to be available to members of the public, MNR and the Town of Pelham for review.

If, after implementation of the Complaint Resolution Protocol, you are not satisfied, you may contact the following agencies to pursue your complaint through normal channels:

- | | |
|-------------------------------------|---|
| 1) MNR Guelph District Office: | Tel. (519) 826-4955 ; Fax. (519) 826-4929 |
| 2) MOE Niagara District Office: | Tel. (905) 704-3900 ; Fax. (905) 704-4015 |
| 3) Town of Pelham Municipal Office: | Tel. (905) 892-2607 ; Fax. (905) 892-5055 |

07/26/99 17:03 01 519 576 0121

519-753-0006 BLUE CIRCLE BTFD

MacN HERM BRITT

559 P02

JUL 21 '99

003/008 16:09



**Blue Circle
Aggregates**

**Contact
Record Form**

☐ Quality Control

☐ Dispatch/Trucking

☐ Public Relations Issue

Bill Burkart
Richard Erdmann
Roger Taylor
John Moroz

Bill Burkart
Dan O'Hara
Alan Nixon
Roger Taylor
John Moroz

Richard Olsen
Malcolm Barr
Kevin Mitchell
Roger Taylor
John Moroz

Date: _____ Time: _____ Pit or Quarry: _____ Product: _____

Company and/or person who complained: _____

Individual's address and phone number: _____

Explanation of the Complaint: _____

Action taken to correct problem: _____

Results of corrective action plan and follow up: _____

Form completed by: _____

Classified as a KPI

Yes ☐

No: ☐

If it is a KPI what is the value: _____

Cc: Blue Circle Aggregates Head Office (Administration Department)

APPENDIX 12



Post-it™ Fax Note		7671E	Date <i>Feb. 1</i>	# of pages <i>1</i>
To <i>Mr. Corwin</i>	From <i>Jack</i>			
Co./Dept.	Co.			
Phone #	Phone #			
Fax #	Fax #			

Ontario

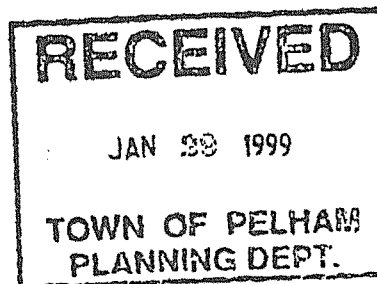
Niagara Escarpment Commission
232 Guelph Street
Georgetown ON L7G 4B1
Vo. (805) 877-5181 - Fax No. (805) 873-7452
Commission de l'escarpement du Niagara
232, rue Guelph
Georgetown ON L7G 4B1
N° de tel. (805) 877-5181 - Télécopieur (805) 873-7452

January 26, 1999

Mr. Corwin Cambray
Assistant Director, Planning Policy
The Regional Municipality of Niagara
2201 St. David's Road, P.O. Box 1042
Thorold, On
L2V 4T7

Dear Mr. Cambray:

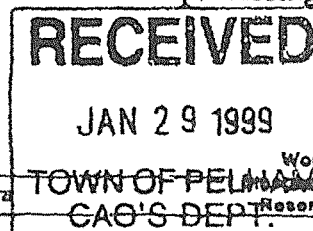
RE: Proposed Amendments to the Region of Niagara Policy Plan (#128)
and Town of Pelham Official Plan and Zoning By-Law
TCG Ltd. Sand & Gravel Pit
Highway 20, Effingham Road
Town of Pelham



Please replace our letter dated January 21, 1999, with this letter.

The Niagara Escarpment Commission, at its meeting of January 21, 1999, confirmed the staff recommendation on the above proposed amendment and advises the Region of Niagara and Town of Pelham that it has no objection to the proposal by TCG Limited for the following reasons:

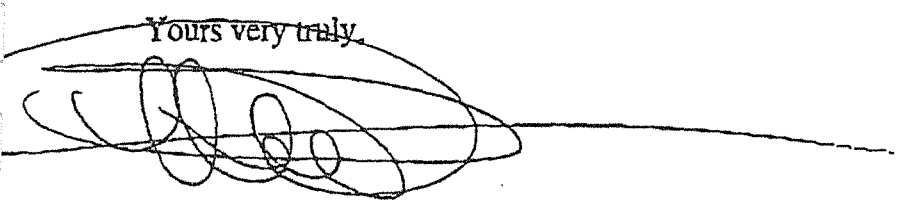
1. Both Parcel A and B are located outside of the Niagara Escarpment Plan boundary, and would not result in encroachment closer to the Plan than occurs under the present licenses.
2. While Parcel A is in relatively close proximity to the Plan, the principle of extraction has been established through the Region of Niagara Policy Plan.
3. The reports submitted by the applicant confirm that extraction will be well above the water table, and no downstream environmental concerns have been identified.
4. The proposed extraction areas will utilize existing haul routes and processing areas on the site.



Attached is a copy of the related staff report which, among other information, was considered by the Commission in making its recommendations.

If you need further information, please call me at extension 252.

Yours very truly,



Marion Plaunt
Supervisor
Plan Administration

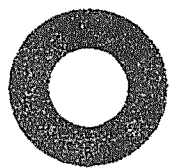
cc: J. Bernardi, Town of Pelham
J. Parkin, MHBC Consultants

MP/ON 128/GC:\OPA\niagara\Notic of Recom Let Reg Pol Plan (#128)-TCG.doc

APPENDIX – A

SITE PLAN EXCERPTS

for the



**Blue Circle
AGGREGATES**

**FONTHILL PIT
EXTENSION**

prepared by



**MacNaughton Hermesen Britton Clarkson Planning Limited
REGIONAL & URBAN PLANNING & RESOURCE DEVELOPMENT**

SITE PLAN EXCERPTS

Sequence of Operations	Page 1
General Notes	Pages 2 to 5
Site Plan Override Notes	Page 5
Acoustic Berm Details	Page 6
Resource Mgmt. Sequence for Progressive Rehabilitation	Page 7
Tree Screen Planting Detail	Page 8
Side Slope Detail	Page 9
Noise Control Notes and Equipment Limitations	Page 10
Noise Control Detail	Page 11

SEPTEMBER 9, 1999

THIS BOOKLET IS PREPARED FOR REFERENCE ONLY. ALTHOUGH
ALL INFORMATION CONTAINED WITHIN HAS BEEN TAKEN DIRECTLY
FROM THE A.R.A. SITE PLANS ON FILE WITH THE MINISTRY OF
NATURAL RESOURCES REFERENCE TO THE ACTUAL SITE PLANS IS
ENCOURAGED FOR ACCURACY AND LEGAL PURPOSES.

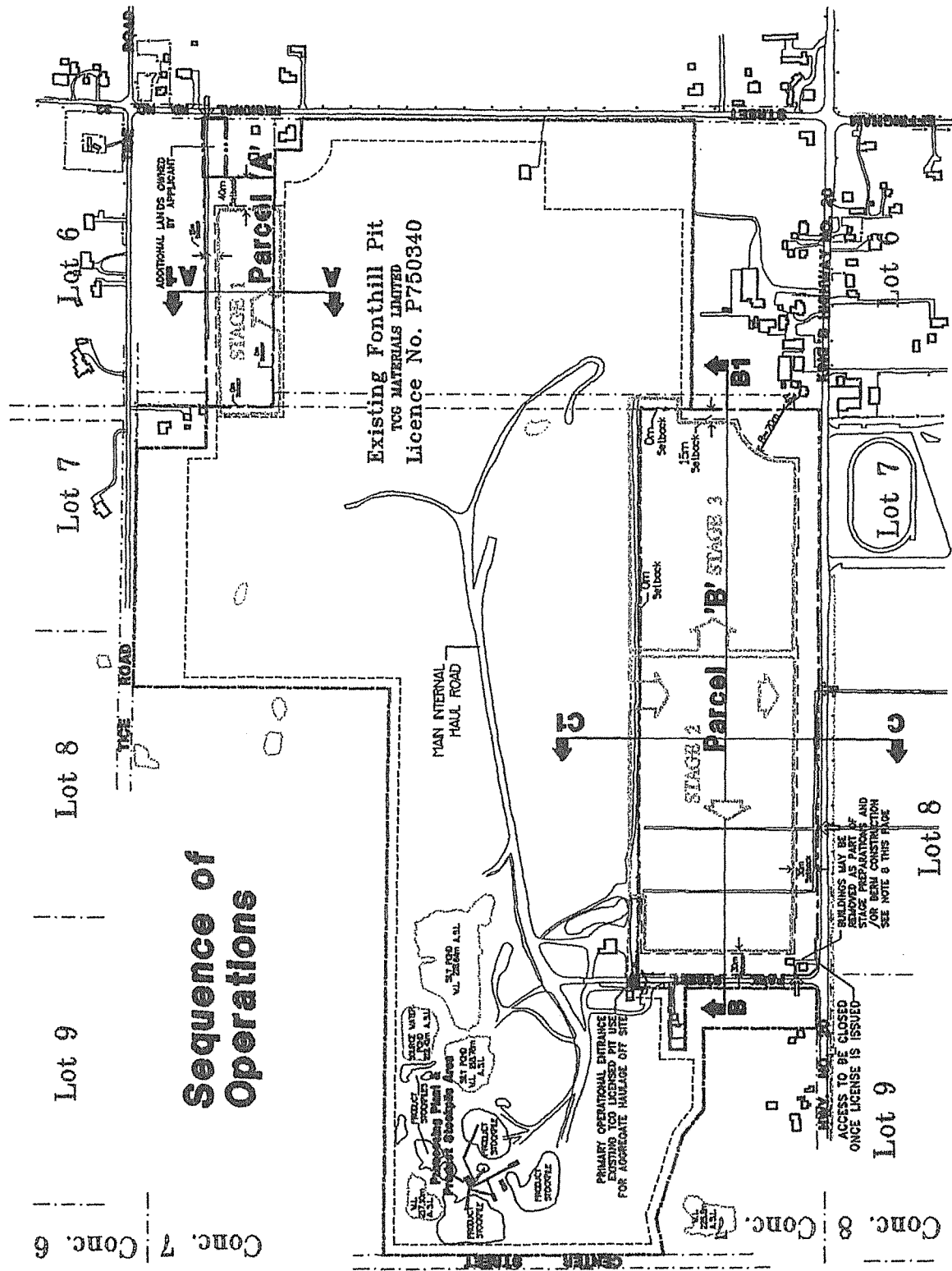


FONTHILL PIT EXTENSION



Part of Lots 6, 7 & 8 and Part of Road Allowance
Between Lots 6 & 7, Concession 7
Town of Pelham, Region Municipality of Niagara

Excerpts from A.R.A. Site Plans
Dated: September 9, 1999



SITE PLAN PG. 2 OF 4



**Blue Circle
AGGREGATES**

**FONTHILL PIT
EXTENSION**



Part of Lots 6, 7 & 8 and Part of Road Allowance
Between Lots 6 & 7, Concession 7
Town of Pelham, Region Municipality of Niagara

Excerpts from A.R.A. Site Plans
Dated: September 9, 1999

GENERAL NOTES:

1. THIS PLAN DEPICTS A SCHEMATIC SEQUENCE FOR THE PROPERTIES BASED UPON THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION. THIS DEPOSIT IS RELATIVELY DEEP AND GRAIN SIZE OF MATERIAL VARIES CONSIDERABLY BOTH VERTICALLY AND BY AREAS. THE OPERATION, THEREFORE, WILL CONTINUE TO WORK AT MULTIPLE LEVELS AND AT VARIOUS AREAS TO PROVIDE THE PROPER BLEND OF MATERIAL TO THE PLANT FOR EFFICIENT RESOURCE UTILIZATION AND TO SATISFY VARYING MARKET DEMAND. EXTRACTION OF STAGE 2a MAY COMMENCE PRIOR TO COMPLETING STAGE 1 TO FACILITATE EFFICIENT RESOURCE UTILIZATION.

PHASES AND AREAS SHOWN ARE SCHEMATIC AND MAY VARY SLIGHTLY. STAGES DO NOT REPRESENT ANY SPECIFIC OR EQUAL TIME

2. TOPSOIL AND SUBSOIL A AND B SOIL HORIZONS NOT DIRECTLY USED IN PROGRESSIVE REHABILITATION OF THIS SITE OR THE ADJACENT LICENCE WILL BE STRIPPED AND STORED SEPARATELY IN BERMS OR STOCKPILES. BERMS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE ACOUSTIC/VISUAL BERM DETAILS THIS PAGE. BERM LOCATIONS AND PHASING ARE SHOWN ON THE RESPECTIVE STAGE DIAGRAMS. STOCKPILES WILL BE LOCATED ON THE PIT FLOOR ADJACENT TO FUTURE REHABILITATION AREAS. BERMS AND STOCKPILES OF TOPSOIL SHALL BE GRADED TO STABLE SLOPES AND SEEDED TO CONTROL EROSION AND MINIMIZE DUST (SEE ACOUSTIC/VISUAL BERM DETAILS THIS PAGE).

3. AGGREGATE PROCESSING FACILITIES AND ENTRANCE/EXIT FOR PURPOSES OF AGGREGATE HAULAGE WILL REMAIN IN THE PRESENT LOCATION IN THE ADJACENT EXISTING LICENSE. NO PRODUCT WILL BE SHIPPED DIRECTLY ONTO EFFINGHAM STREET OR HIGHWAY NO.20.

AGGREGATE WILL BE EXTRACTED BY FRONT-END LOADER IN UP TO 4 LIFTS (MAXIMUM LIFT HEIGHT +/- 10 M) OR BY SLOPING HIGHER FACES WITH A DOZER TO MIX THE BANK AND PROVIDE THE PROPER BLEND OF MATERIALS. THE DOZER MAY USER RIPPER TEETH TO BREAK UP CEMENTATION WHERE NECESSARY. MATERIAL IS THEN LOADED BY FRONT END LOADERS ONTO PIT TRUCKS AND HAULED BACK TO THE EXISTING PERMANENT PLANT FOR PROCESSING AND STOCKPILING. RAW MATERIAL MAY BE STOCKPILED AT OR NEAR PIT FACE FOR BLENDING. SEE NOISE CONTROL NOTES PAGE 4 OF 4 FOR DETAILS ON EQUIPMENT AND OPERATIONS FOR PARCEL A.

4. EXTRACTION WILL NOT TAKE PLACE BELOW THE GROUNDWATER TABLE LOCATED AT +/- 205m A.S.L. . MAXIMUM DEPTH OF EXTRACTION IN THE EXTENSION AREAS IS +/- 226.3m A.S.L. GROUNDWATER MONITORING WILL CONTINUE AND INCLUDE ANNUAL MEASUREMENT OF GROUNDWATER LEVELS AND ANNUAL TESTING OF GROUNDWATER SAMPLES FOR BASIC GROUNDWATER CHEMISTRY PLUS FUEL AND OIL INDICATORS FROM ALL EXISTING MONITORS.
5. NO FUEL STORAGE WILL TAKE PLACE ONSITE. MACHINERY WILL BE REFUELLED AT THE DESIGNATED AREA ADJACENT TO THE MAINTENANCE SHOP IN THE ADJACENT LICENSED PIT WHEREVER POSSIBLE. ON OCCASION FUEL TRUCKS MAY BE USED TO TRANSFER FUEL TO ONSITE EQUIPMENT.



**FONTHILL PIT
EXTENSION**



Part of Lots 6, 7 & 8 and Part of Road Allowance
Between Lots 6 & 7, Concession 7
Town of Pelham, Region Municipality of Niagara

Excerpts from A.R.A. Site Plans
Dated: September 9, 1999

GENERAL NOTES CONT'D:

6. NO SCRAP WILL BE STORED ONSITE.
7. DUST WILL BE MITIGATED ON SITE. CONTROL MEASURES WILL INCLUDE:
 - i. REGULAR WATERING OF ACTIVE INTERNAL HAUL ROUTES BY AUTOMATED SPRINKLER SYSTEM OR WATER TRUCK.
 - ii. SUPPLEMENTAL APPLICATION OF OTHER MOEE APPROVED DUST SUPPRESSANTS ON THE HAUL ROUTES, OPEN AREAS, AND STOCKPILES WHERE NECESSARY.
 - iii. DAMPENING OF ACTIVE PIT FACES AND STOCKPILES DURING DRY CONDITIONS.
 - iv. PAVED ROADS WILL BE REGULARLY CLEANED TO REDUCE THE ACCUMULATION OF LOOSE MATERIAL THAT MAY GENERATE DUST.
 - v. DISTURBED AREAS WILL BE MINIMIZED BY REDUCING THE AREA THAT HAS BEEN STRIPPED IN PREPARATION FOR EXTRACTION AND INCREASING THE RATE OF PROGRESSIVE REHABILITATION IN ACCORDANCE WITH THE SITE PLANS.
 - vi. MAINTENANCE OF VEGETATION ON PERIMETER BERMS AND RETAINING EXISTING VEGETATION ALONG THE PROPERTY PERIMETER.
8. DRAINAGE FROM ANY AREAS DISTURBED DUE TO STRIPPING WILL BE DIRECTED INTO THE PIT TO PREVENT OFFSITE SEDIMENTATION. THIS IS TO BE ACCOMPLISHED USING TEMPORARY DITCHES AND BERMS AND ESTABLISHING VEGETATION ON CLEARED AREAS AS QUICKLY AS POSSIBLE, AND IF NECESSARY, APPROPRIATE SEDIMENT CONTROL MEASURES.
9. NO PERMANENT BUILDINGS/STRUCTURES ARE PROPOSED FOR THE SITE.
10. ONSITE RESIDENCE (PARCEL B) MAY CONTINUE TO BE OCCUPIED WHILE OPERATIONS AND REHABILITATION PROGRESS. A PORTION OF THE BERM SHOWN ALONG THE PARK STREET FRONTAGE (SEE STAGE DIAGRAMS PG. 2 OF 4) MAY BE OMITTED IF APPROVED BY OWNERS OF RESIDENCE R8 (as shown) IT IS THE APPLICANT'S PREFERENCE NOT TO BUILD THIS BERM UNLESS THE SETBACK IS REQUIRED FOR THE STORAGE OF TOPSOIL AND OR OVERBURDEN MATERIAL THE EXISTING BUILDINGS WITHIN THE SETBACK AT THE CORNER OF PARK ST. AND HIGHWAY NO. 20 MAY BE REMOVED PRIOR TO THE CONSTRUCTION OF THE BERM IN THIS LOCATION OR ALTERNATIVELY THE BERM MAY BE REALIGNED TO THE EAST TO RETAIN THE BUILDING(S).
11. SITE PREPARATION WILL INCLUDE FENCING INSTALLATION AND REMOVAL, VEGETATION REMOVAL/RELOCATION, BUILDING/STRUCTURE REMOVAL AND STRIPPING AND BERM CONSTRUCTION. ALL PROPOSED FENCING WILL BE INSTALLED PRIOR TO EXTRACTION OF THE APPLICABLE STAGES FOR THE EXTENSION PARCELS A AND B. ALL ACTIVE EXTRACTION AREAS WILL BE COMPLETELY ENCLOSED BY FENCING AT ALL TIMES.
12. FIELD/SERVICE ENTRANCES TO THE SITES FROM HIGHWAY 20 AND EFFINGHAM STREET WILL ONLY BE USED FOR SERVICE, MONITORING AND AGRICULTURAL VEHICLE ACCESS. ALL OPERATIONAL ACCESS FOR AGGREGATE HAULAGE OFFSITE WILL UTILIZED THE EXISTING ENTRANCE ONTO PARK ST. FROM THE ADJACENT LICENSED PIT.



**Blue Circle
AGGREGATES**

**FONTHILL PIT
EXTENSION**



Part of Lots 6, 7 & 8 and Part of Road Allowance
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Town of Pelham, Region Municipality of Niagara

Excerpts from A.R.A. Site Plans
Dated: September 9, 1999

GENERAL NOTES CONT'D:

13. TREE SCREEN PLANTINGS ALONG PARK STREET AND HIGHWAY 20 WILL BE PLANTED PRIOR TO COMMENCEMENT OF EXTRACTION AND SITE PREPARATION OF PARCEL B (STAGE 2A). THESE PLANTINGS WILL BE MAINTAINED DURING THE PIT OPERATION AND WILL REMAIN AS PART OF THE FUTURE REHABILITATED AFTERUSE. THESE PLANTINGS ALONG WITH THE EXISTING POPLAR, CEDAR AND SPRUCE TREE SCREEN AROUND PARCEL 'A' WILL BE MONITORED ON AN ONGOING BASIS AND ADDITIONAL INFILLING AND MAINTENANCE WILL BE IMPLEMENTED AS REQUIRED. PARCEL 'B' TREE SCREEN PLANTINGS WILL CONSIST OF TYPICAL CELL UNITS (SEE TREE SCREEN PLANTINGS DETAIL PG. 4 OF 4 FOR SPECIFIC DETAILS ON SPECIES, NUMBERS AND DESIGN). STAGGERED ROWS OF IRREGULAR SPACING WILL BE EMPLOYED TO PROVIDE A MORE NATURAL LOOKING PLANTING CELL DESIGN. SPACING OF ALL TREES AND SHRUBS WILL VARY. ULTIMATE SPECIES SELECTION WILL DEPEND ON AVAILABILITY AND FURTHER CONSIDERATION OF SITE CONDITIONS AT TIME OF PLANTING.
14. PROGRESSIVE REHABILITATION OF THE SITE WILL INVOLVE BACKFILLING AND REGRADING PIT FACES TO A 2:1 SLOPE. SIDE SLOPES WILL BE CREATED BY A BACKFILLING OR CUT/FILL METHOD (SEE SIDE SLOPE DETAIL PAGE 4 OF 4) SILT FINES FROM EXISTING SILT PONDS IN THE ADJACENT LICENSE OR OTHER UNMARKETABLE MATERIALS FROM THIS SITE OR THE ADJACENT SITE MAY ALSO BE USED IN THE CREATION OF SIDE SLOPES. REGRADED SIDE SLOPES WILL BE COVERED WITH A TOTAL THICKNESS OF APPROXIMATELY 150MM-300MM OF TOPSOIL AND SUBSOIL. REHABILITATED SIDE SLOPES WILL BE SEEDED WITH AN APPROPRIATE LEGUME AND GRASS MIXTURE. PIT FLOOR AREAS WILL BE REHABILITATED IN ACCORDANCE WITH THE DETAILED "RESOURCE MANAGEMENT SEQUENCE FOR PROGRESSIVE REHABILITATION" AND NOTES SHOWN ON PAGE 3 OF 4 IN ORDER TO SUBSTANTIALLY RESTORE PRE-EXTRACTIVE AGRICULTURAL AREA AND AVERAGE SOIL QUALITY. THESE MEASURES WILL ENSURE THE RESTORATION OF SOIL SUITABILITY FOR SPECIALTY CROPS. PAPER SLUDGE WILL BE BROUGHT ON SITE AND MIXED WITH TOPSOIL AS A SOIL AMENDMENT TO INCREASE ORGANIC CONTENT OF THE SOIL.
15. TIMBER RESOURCES WILL BE SALVAGED FOR USE AS SAW LOGS, FENCE POSTS, AND FUEL WOOD WHERE APPROPRIATE STUMPS AND BRUSH CLEARED DURING SITE PREPARATION WILL BE BURNED (SUBJECT TO NECESSARY LOCAL PERMITS), BURIED ON SITE OR MULCHED FOR USE IN THE REHABILITATION PROGRAM.
16. IN THE EVENT THAT DEEPLY BURIED ARCHAEOLOGICAL MATERIAL IS FOUND DURING EXTRACTION OR SITE PREPARATION, THE MCZCR IN LONDON (519) 675-7742 AND MAYER HERITAGE CONSULTANTS INC. IN LONDON (519) 645-8100 OR 1-800-465-9990 SHOULD BE IMMEDIATELY NOTIFIED.

IN THE EVENT THAT HUMAN REMAINS ARE ENCOUNTERED DURING EXTRACTION OR SITE PREPARATION, THE PROPONENT SHOULD IMMEDIATELY CONTACT BOTH THE MCZCR, AND THE REGISTRAR OR THE DEPUTY REGISTRAR OF THE CEMETERIES REGULATION UNIT OF THE ONTARIO MINISTRY OF CONSUMER AND COMMERCIAL RELATIONS (416) 326-8392 AS WELL AS THE APPROPRIATE MUNICIPAL POLICE, THE LOCAL MEDICAL OFFICER OF HEALTH AND MAYER HERITAGE CONSULTANTS INC.



**FONTHILL PIT
EXTENSION**



Part of Lots 6, 7 & 8 and Part of Road Allowance
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Town of Pelham, Region Municipality of Niagara

Excerpts from A.R.A. Site Plans
Dated: September 9, 1999

GENERAL NOTES CONT'D:

17. HOURS OF OPERATIONS:

ALL OPERATIONS.....WEEKDAYS ONLY
 EXCAVATION.....07:00 - 19:00
 TRANSPORTATION, FACE TO PLANT.....07:00 - 19:00
 SITE PREPARATION & REHABILITATION.....07:00 - 19:00
 HOE RAM OPERATION.....07:00 - 17:00

PROCESSING AND SHIPPING HOURS AT ADJACENT LICENSED OPERATION WILL REMAIN UNCHANGED.

IF A HOE RAM IS REQUIRED FOR BREAKING COMPACTED MATERIAL AT THE FACE, ITS USE SHALL BE LIMITED TO A MAXIMUM PERIOD OF TWO WEEKS PER YEAR.

18. THE TOTAL TONNAGE TO BE EXCAVATED ANNUALLY FROM THIS SITE IN COMBINATION WITH THE ADJACENT LICENCE P750340 WILL NOT EXCEED 750,000 METRIC TONNES.

SITE PLAN OVERRIDES

AS PROVIDED FOR BY REGULATION 15 (1) MADE UNDER THE AGGREGATE RESOURCES ACT, THE FOLLOWING REGULATIONS ARE VARIED BY THIS SITE PLAN:

1. FENCING REGULATION 16 (1) (a) WILL NOT BE REQUIRED ALONG THE COMMON LICENSED BOUNDARY OF PARCEL A AND B AND TCG MATERIALS LIMITED LICENSE P750340.
2. GATE REGULATION 16 (1) (b) WILL NOT BE REQUIRED WHERE THE INTERNAL HAUL ROADS CROSS BETWEEN THE EXISTING LICENSED PIT AND PARCELS A AND B. THE HAUL ROAD MAY VARY IN LOCATION ALONG COMMON BOUNDARY LENGTH.
3. SET BACK REGULATIONS 18 (2) & 23 (f) SHALL BE WAIVED TO ALLOW EXCAVATION OF THE SETBACKS WITH THE COMMON LICENSED BOUNDARIES BETWEEN PARCELS A AND B AND TCG MATERIALS LIMITED LICENSE P750340.
4. SETBACK REGULATION 20 (1) (a) SHALL BE WAIVED FOR THE COMMON LICENSED BOUNDARIES BETWEEN PARCELS A AND B AND TCG MATERIALS LIMITED LICENSE P750340.
5. REHABILITATION REGULATIONS 23 (a) AND (b) SHALL BE WAIVED TO ALLOW TOPSOIL AND OVERBURDEN MATERIALS TO BE SHARED BETWEEN THE EXISTING LICENSE AND THIS SITE FOR REHABILITATION PURPOSES. THERE WILL BE NO NET LOSS OF TOTAL VOLUME OF MATERIAL AVAILABLE ONSITE FOR REHABILITATION.
6. REHABILITATION REGULATION 23 (d) SHALL BE VARIED TO ALLOW PIT SIDE SLOPES TO BE GRADED TO 2:1 TO MAXIMIZE THE PIT FLOOR AREA AVAILABLE FOR AGRICULTURAL AFTERUSE AND FACILITATE COLD AIR DRAINAGE.
7. REHABILITATION REGULATION 23 (a) WILL BE VARIED TO ALLOW PAPER SLUDGE (A SOIL AMENDMENT TO INCREASE ORGANIC CONTENT) TO BE IMPORTED TO THE SITE.

FONTHILL PIT EXTENSION

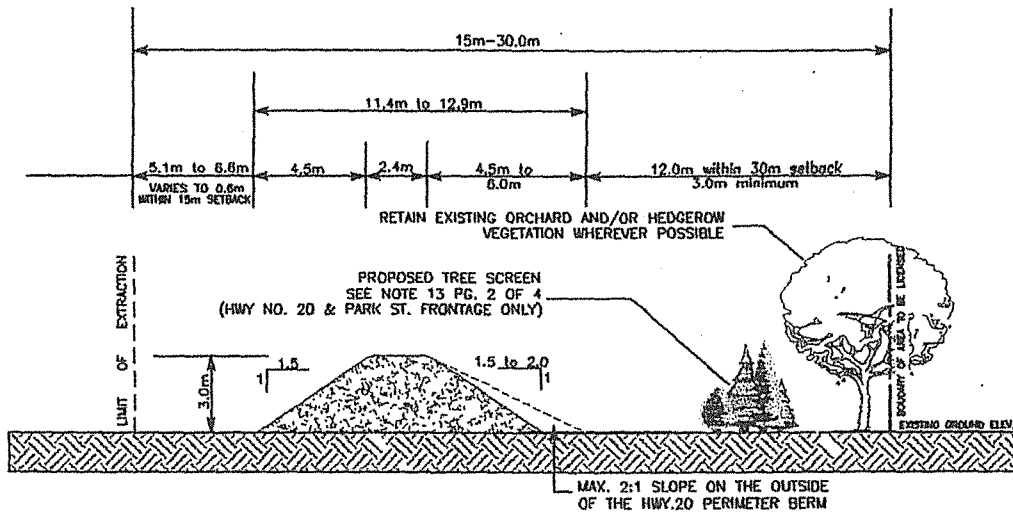


**FONTHILL PIT
EXTENSION**



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 Between Lots 6 & 7, Concession 7
 Town of Pelham, Region Municipality of Niagara

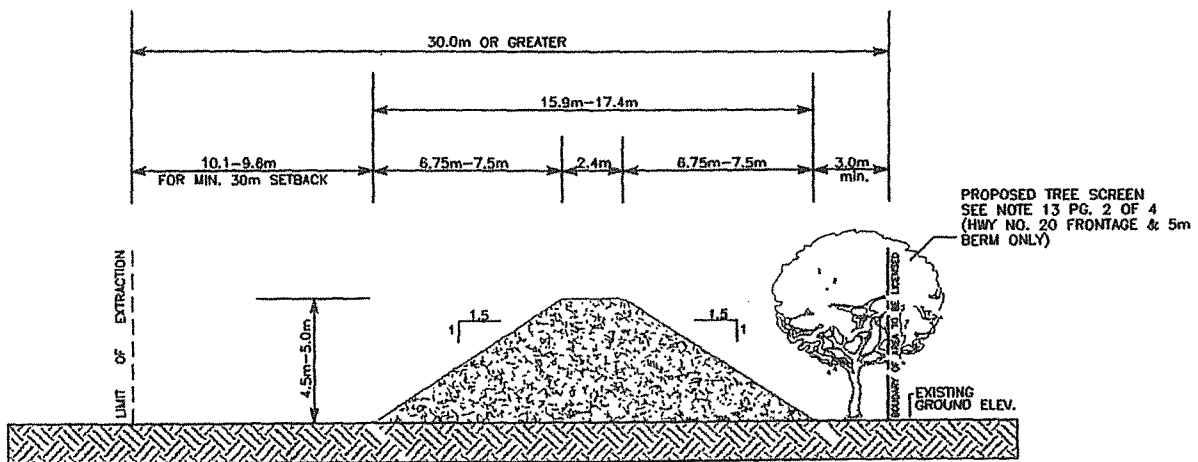
Excerpts from A.R.A. Site Plans
 Dated: September 9, 1999



TYPICAL 3.0m ACOUSTIC/VISUAL BERM DETAIL

ALL PERIMETER BERMS WILL BE VEGETATED AND MAINTAINED TO CONTROL EROSION
TEMPORARY EROSION CONTROL WILL IMPLEMENTED AS REQUIRED

Scale 1:300



TYPICAL 4.5 - 5.0m ACOUSTIC BERM DETAIL

ALL PERIMETER BERMS WILL BE VEGETATED AND MAINTAINED TO CONTROL EROSION
TEMPORARY EROSION CONTROL WILL IMPLEMENTED AS REQUIRED

Scale 1:300



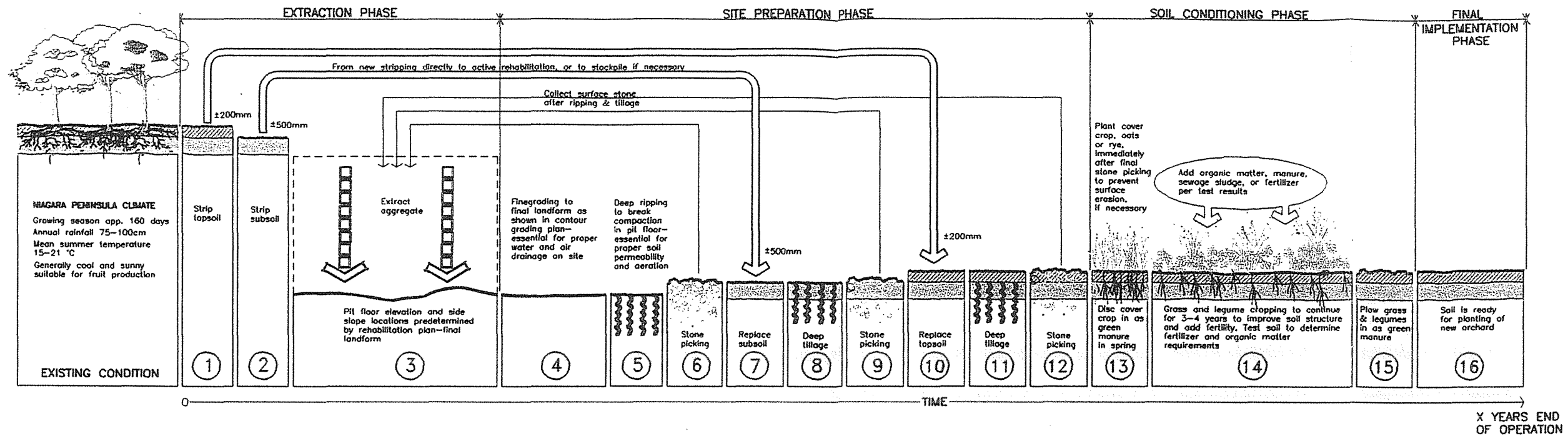
**FONTHILL PIT
EXTENSION**



Part of Lots 6, 7 & 8 and Part of Road Allowance
Between Lots 6 & 7, Concession 7
Town of Pelham, Region Municipality of Niagara

Excerpts from A.R.A. Site Plans
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RESOURCE MANAGEMENT SEQUENCE FOR PROGRESSIVE REHABILITATION



NOTES:

1. TOPOGRAPHIC INFORMATION PROVIDED BY NORTHWAY MAP TECHNOLOGY LIMITED DERIVED FROM APRIL 18, 1994 AERIAL PHOTOGRAPHY. CONTROL PREVIOUSLY ESTABLISHED BY FIELD SURVEY AND TRANSFERRED TO THIS SITE. CONTOUR INTERVAL 1.0m. ALL ELEVATIONS ARE GEODETIC.
2. PROPERTY BOUNDARY BEARING AND DIMENSIONS WERE COMPILED FROM (i) REFERENCE PLAN 59R-9306 DATED SEPT. 07, 1995 PREPARED BY P.D. REITSMA SURVEYING LTD. & (ii) ASSESSMENT MAPPING DATED SEPT. 1980 PREPARED BY MINISTRY OF REVENUE, REGIONAL OFFICE NO. 18.
3. ALL MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES.
4. AREAS TO BE REHABILITATED: PARCEL 'A' 2.39 ha. (5.91 ac.)
 PARCEL 'B' 17.44 ha. (43.09 ac.)
5. ADDITIONAL NOTES ON PROGRESSIVE REHABILITATION CAN BE FOUND ON "OPERATIONAL PLAN" PAGE 2 OF 4.
6. EXISTING FENCES AND GATES WILL REMAIN UPON COMPLETION OF EXTRACTION AND REHABILITATION.

7. FORMER PIT FLOOR AREAS SHALL BE REHABILITATED IN ACCORDANCE WITH THE "RESOURCE MANAGEMENT SEQUENCE FOR PROGRESSIVE REHABILITATION" DETAIL THIS PAGE. ALL AVAILABLE TOPSOIL AND SUBSOIL WILL BE RETAINED AND USED IN PROGRESSIVE REHABILITATION. THE INDICATED THICKNESS TO BE REPLACED ARE ESTIMATES AND WILL BE ADJUSTED BASED ON SITE CONDITIONS AND AVAILABILITY. TOPSOIL AND SUBSOIL MAY BE MOVED BACK AND FORTH BETWEEN THE ADJACENT PITS. SIDE SLOPES WILL COVERED WITH AVAILABLE ON SITE TOPSOIL AND SUBSOIL (APPROXIMATELY 15cm-30cm TOTAL THICKNESS) AND STABILIZED THROUGH THE ESTABLISHMENT OF A GRASS/LEGUME MIXTURE.

SELECTIVE AREAS MAY BE PLANTED WITH TREES AND/OR SHRUBS. PLANTING LOCATIONS WILL BE DESIGNED TO SO THEY DON'T INTERFERE WITH COLD AIR DRAINAGE. TREE AND SHRUB PLANTINGS WILL BE CLOSELY MONITORED TO CONTROL PROPAGATION.

8. FINAL SURFACE DRAINAGE (IF ANY) WILL REMAIN ON SITE OR FLOW IN TO THE EXISTING LICENCE AREA AND EVENTUALLY INTO THE ROADSIDE DITCH ALONG CENTRE STREET. THE MAJORITY OF THE PRECIPITATION WILL PERCOLATE VERTICALLY INTO THE SOIL.
9. COLD AIR DRAINAGE FROM BOTH PARCELS WILL BE DIRECTLY INTO THE ADJACENT LICENSED PIT AND THEN IN AN EAST TO WEST DIRECTION TOWARDS THE COLD AIR DRAINAGE OUTLET IN THE NORTHWEST CORNER OF THE EXISTING LICENCE ADJACENT TO CENTRE STREET.



**Blue Circle
AGGREGATES**

FONTHILL PIT EXTENSION

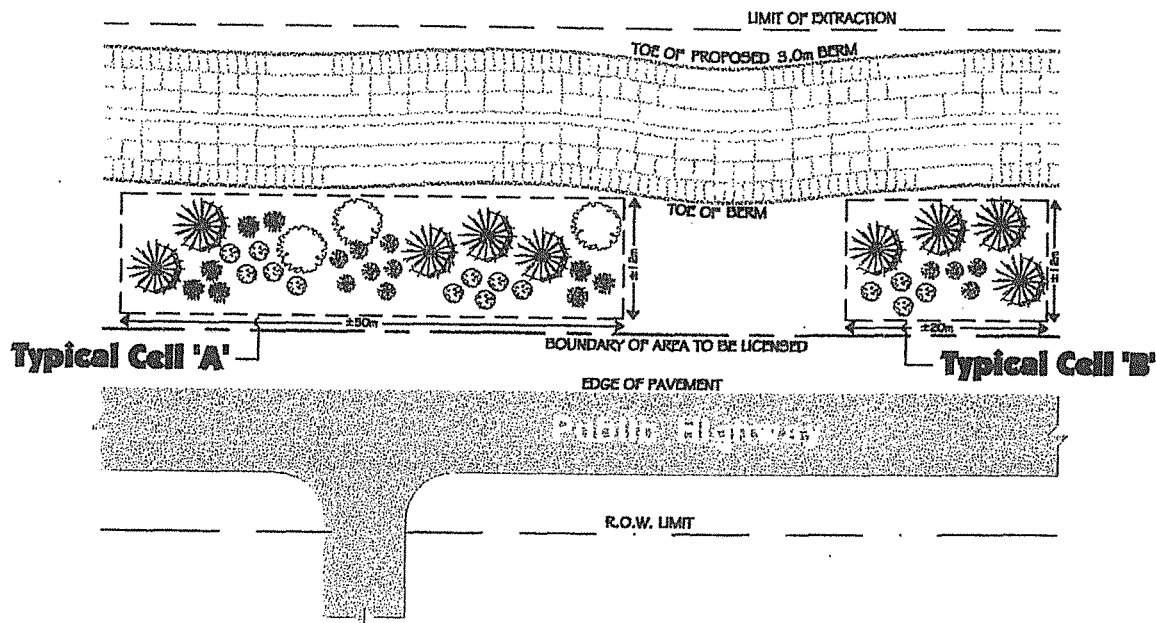
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Tree Screen Planting Detail

Scale 1:750



Notes

- SEE STAGE DIAGRAMS PAGE 2 OF 4 FOR APPROXIMATE CELL LOCATIONS.
- SEE NOTE 13 PAGE 2 OF 4 FOR ADDITIONAL DETAILS ON TREE SCREEN PLANTINGS ie TIMING, MAINTENANCE AND MONITORING.

Cell 'A'

- APPROXIMATE SIZE $\pm 50m \times \pm 12m$
- 30 - 35 TREES AND SHRUBS
- CELL 'A' WILL CONTAIN A MIXTURE OF CONIFEROUS AND DECIDUOUS TREES (MIN. OF 8) @ MIN. $\pm 6.0m$ CENTRES. SPECIES MAY INCLUDE; AUSTRIAN PINE (250cm B&B), COLORADO SPRUCE (200cm B&B), TREMBLING ASPEN, HORSE CHESTNUT, RUSSIAN OLIVE AND MOUNTAIN ASH (150cm B&B) AND CONIFEROUS AND DECIDUOUS SHRUBS @ VARIABLE (1m - 3m) CENTRES. SPECIES MAY INCLUDE; EASTERN RED AND/OR WHITE CEDAR (150cm B&B), BURNING BUSH, COMMON LILAC (100cm B&B), AND STAGHORN SUMAC (60cm B.R.)

Cell 'B'

- APPROXIMATE SIZE $\pm 20m \times \pm 12m$
- 10 - 15 TREES AND SHRUBS
- CELL 'B' WILL CONTAIN A MIXTURE OF CONIFEROUS TREES (MIN. OF 4) @ MIN. $\pm 6.0m$ CENTRES. SPECIES MAY INCLUDE; AUSTRIAN PINE (250cm B&B), COLORADO SPRUCE (200cm B&B), AND DECIDUOUS SHRUBS @ VARIABLE (1m - 3m) CENTRES. SPECIES MAY INCLUDE; BURNING BUSH, COMMON LILAC (100cm B&B), AND STAGHORN SUMAC (60cm B.R.)



**FONTHILL PIT
EXTENSION**



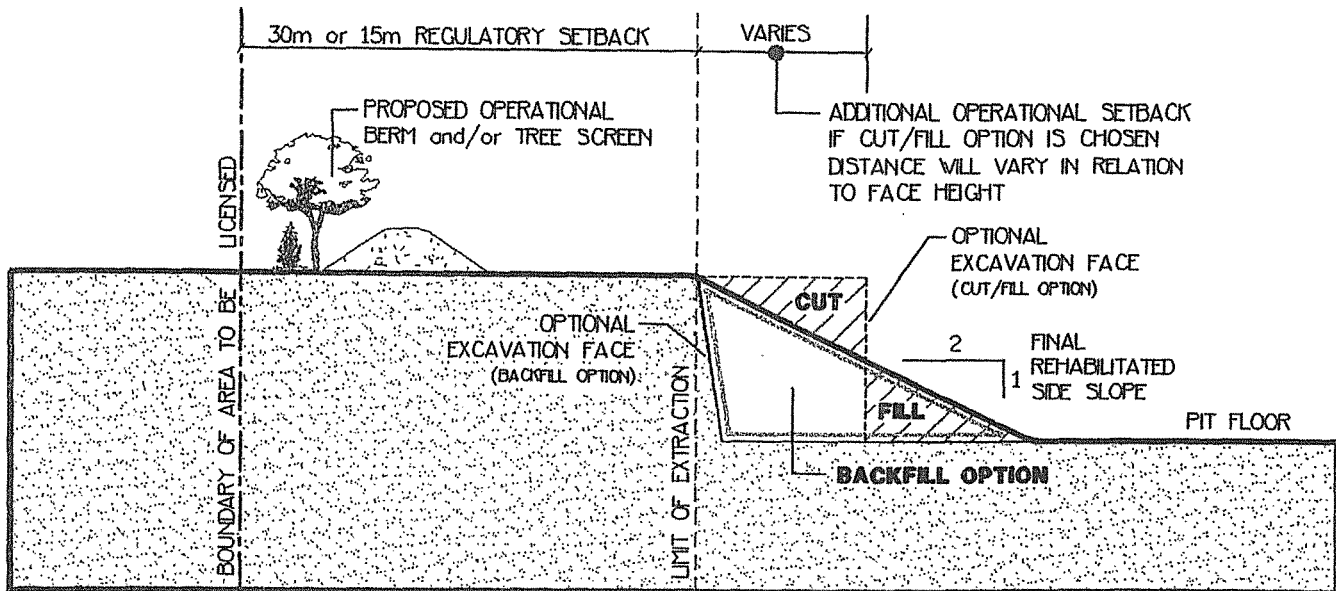
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Side Slope Detail

Scale 1:500

SEE NOTE 14 PAGE 2
OF 4 AND NOTE 7
PAGE 3 OF 4



**Blue Circle
AGGREGATES**

**FONTHILL PIT
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Noise Control Notes and Equipment Limitations

1. HOURS OF OPERATIONS:

ALL OPERATIONS	WEEKDAYS ONLY
EXCAVATION	07:00 - 19:00
TRANSPORTATION, FACE TO PLANT	07:00 - 19:00
SITE PREPARATION AND REHABILITATION	07:00 - 19:00
HOE RAM OPERATION	07:00 - 17:00

PROCESSING AND SHIPPING HOURS AT ADJACENT LICENSED OPERATION WILL REMAIN UNCHANGED.

IF A HOE RAM IS REQUIRED FOR BREAKING COMPACTED MATERIAL AT THE FACE, ITS USE SHALL BE LIMITED TO A MAXIMUM PERIOD OF TWO WEEKS PER YEAR.

2. CRUSHING, SCREENING AND WASHING OF AGGREGATE EXTRACTED FROM THE PROPOSED EXTENSION AREAS SHALL BE DONE ONLY IN THE FIXED PLANT IN THE EXISTING LICENSED AREA OPERATED BY TCG MATERIALS LIMITED.
3. WHEN A DOZER IS WORKING IN ZONE 2 A SUPPLEMENTARY 3.5m BARRIER SHALL BE LOCATED AT THE EXCAVATION LIMIT. IT SHALL BE EXTENDED A MINIMUM OF 10m EITHER SIDE OF A LINE DRAWN FROM THE DOZER TO THE CLOSEST NOISE RECEPTOR. NO OTHER MACHINERY OR TRUCKS SHALL WORK CONCURRENTLY WITHIN ZONE 1 OR ZONE 2. HOE RAM OPERATION IS PROHIBITED IN ZONE 2 AT ANY TIME. HOE RAM OPERATIONS ARE PROHIBITED WITHIN 100 METRES OF THE EASTERN LIMIT OF PARCEL B.
4. AN EXCAVATION LOADER MAY WORK IN ZONE 2 PROVIDED THAT ONLY ONE IS WORKING AT A TIME; AND THERE IS ACOUSTICAL SHIELDING (E.G. PIT FACE) BETWEEN THE LOADER AND RECEPTORS R4 & R5 NOT LESS THAN 8 METRES HIGH AND NOT MORE THAN 30 METRES FROM THE CENTRE OF THE LOADING POSITION.

5. MACHINERY EMISSION LIMITS		MAX PASS BY SPL	AT REFERENCE DISTANCE
SOURCE	MAX 1 HOUR LEQ		
EXCAVATION LOADERS	76	--	30m
DOZER	77	--	15m
PLANT	75	--	POS. M5, SK6 page 12 noise report
PIT TRUCK	--	84	15m

6. ALL EQUIPMENT USED ON THE SITE SHOULD BE PROPERLY MAINTAINED AND INSPECTED WITH RESPECT TO FUEL AND OIL LEAKS AND TO ENSURE THAT NOISE LEVELS REMAIN WITHIN THE ACCEPTABLE LIMITS
7. ALL OPERATIONS SHALL COMPLY WITH THE RECOMMENDED NOISE CONTROLS AS PER THE NOISE REPORT NO. 95270 PREPARED BY AERCOUSTICS ENGINEERING LIMITED JUNE 1997. PROPOSED CHANGES TO ANY NOISE CONTROL SHOULD BE SUBJECT TO CERTIFICATION BY A QUALIFIED ACOUSTIC ENGINEER THAT THE CHANGES WILL PROVIDE EQUAL OR BETTER NOISE ATTENUATION. EQUIPMENT LISTED MAY BE SUBSTITUTED WITH ACOUSTICALLY COMPARIBLE TYPES OR COMBINATIONS.



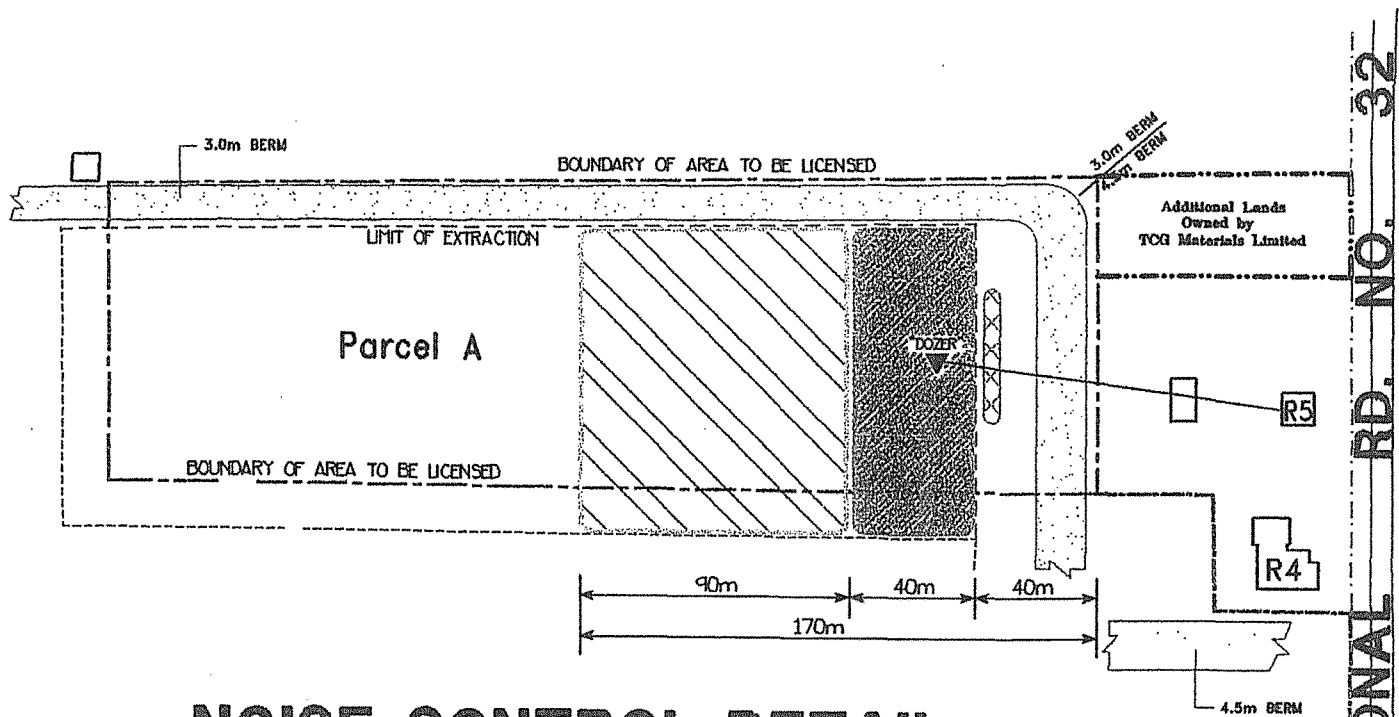
**Blue Circle
AGGREGATES**

**FONTHILL PIT
EXTENSION**



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NOISE CONTROL DETAIL

SCALE 1:2500



Zone 1



Zone 2



Supplementary Noise Barrier



Noise Receptor (residence)



**Blue Circle
AGGREGATES**

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SITE PLAN PG. 4 OF 4

CHERYL MICLETTE, CLERK

SCHEDULE "A"

1. Pelham Council is submitting an Official Plan Amendment.
2. The lands are described as Part of Lots 6, 7 & 8, Conc. 7, in the Town of Pelham.
3. The approximate area covered by the amendment is approximately 24.53 hectares (60.6 acres).
4. The proposed amendment redesignates the subject lands to Mineral Resource Extraction.
5. The current designation of the subject land is Unique Agricultural.
6. The purpose of the amendment is to redesignate the subject lands to permit the expansion of the existing pit operation for the extraction of aggregate resources.
7. The subject lands are the subject of a rezoning application under application number AM-8/98. The Town recently approved By-law No. 2166 (2000) rezoning the lands from an Agricultural A Zone to an Extractive Industrial M3. The by-law implements the intent of the Official Plan Amendment and it is currently proceeding through the appeal period.

LIST OF PUBLIC BODIES GIVEN NOTICE OF PROPOSED PLAN OR
AMENDMENT BUT WHICH DID NOT RESPOND

Niagara Catholic District School Board

Consumers Gas, Thorold

Consumers Gas, Scarborough

Preservation of Agricultural Lands Society

Interprovincial Pipe Line

Niagara Peninsula Conservation Authority

Appendix H-1

AMENDMENT BEING INITIATED BY:

APPLICANTS - TCG Materials Limited
P. O. Box 1390, 380 Hardy Rd.
Brantford ON N3T 5T6

and

Daniel Haist
429 Canboro Road
Ridgeville ON L0S 1M0

REGIONAL PROCESSING FEE TO BE PAID BY
APPLICANTS

