

WELL INFORMATION M.O.E. Static
No.(28-) Elev.(m) Elev.(m)

488 277.4 276.5
496 277.4 277.4
493 283.5 275.5
5392 280.4 273.7
5566 280.4 267.9
5463 280.4 272.8
4299 283.5 266.7
5460 283.5 274.3
491 281.9 277.7
 Key
 No.(28-) Elev.(n) Elev.(m)
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 No.(28-) Elev.(m) Elev.(m)
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 494
 283.5
 278.9

 495
 283.5
 278.9

 492
 283.5
 274.6

 3552
 289.6
 281.6

 5738
 286.5
 274.3

 5432
 280.4
 268.5
 286.5 286.5 5433 4735 4859 283.5 281.3 280.4 272.2 278.9 268.8 279.8 270.4 5109 278.9 268.8 497 279.8 270.4 2820 278.9 267.3 277.4 265.2 280.4 275.2 277.4 259.1 277.4 275.2 45 281.9 5861 277.4 260.3 3516 277.4 260.6 4229 280.4 263.7 5311 278.9 263.3 4744 278.0 263.7 280.4 272.2 280.4 278.0 283.5 276.5 283.5 279.8 280.4 276.8 281.0 279.8 280.4 277.4 486 281.0 275.5 5589 280.4 268.5 5713 280.4 269.1 4281 279.8 273.7 489 277.4 276.5 5550 280.4 272.8 50 51 52 53 54 276.5 279.8 78 79 80 3545 280.4 271.3

- - - BOUNDARY OF LICENSED AREA

— — SETBACK LIMITS

EXISTING 1.2m FENCE ON BOUNDARY

e ENTRANCE GATES ACTIVE QUARRY FACE

TREED AREAS/WOODLOTS/SCREENS = = HAUL ROUTES/INTERIOR ROADWAYS

EXISTING WATER WELL(WITH KEY No.) MONITORING WELL(WITH KEY No. M6 (10.5m) and DEPTH TO WATER AS OF

MARCH 30,1992) AREA STRIPPED OF TOPSOIL/OVERBURDEN

● ● EARTH BERM SCREEN

- SURFACE DRAINAGE

---- REHABILITATED AREA

INTERIM REHABILITATED AREA

—--- EXTENSION LICENCE BOUNDARY

---- EXTENSION LIMIT OF EXTRACTION

FLOW DIVERSION / DISCHARGE PIPE

Quarry Site is designated as a Mineral Resource Extraction Area. The designation of areas adjacent to the quarry is Escarpment Rural. The Official Plan for Halton Region designates the site as Mineral Resource Extraction Area.

Watertable Information:

The watertable is located approximately ±4.9m (269.0m ASL) below undisturbed grade. De-watering takes place continuously, and has been in place for approximately 50 years.

Fencing:

The licensed area is enclosed by a 1.2m fence with the exception of the area around the office which has a three rail wooden fence.

Site Description:

Part of Lots 1 and 2, Concessions 2 and 3, City of Burlington, Regional Municipality of Halton.

Information Compiled From

Municipality of Halton

1985 Plans by Nelson

1985 Niagara Escarpment Plan

1997 Mark-Ups Provided by Nelson

displayed in one metre intervals

1991 Reinders Field Survey

1990 Aerial Photography at 1:5000 Scale

Ministry of Environment, Water well records

1988 Official Plan for the Halton Planning Area, Regional

Ontario Base Mapping (Air Photography 1982, Published 1983)

Rehabilitation contours utilized the City of Burlington's Open

Data Catalogue which contains 2017 contour data and are

- On-site haul roads, stockpile locations, buildings and structures

Elevations shown are in metres above sea level (masl)

were updated based on July, 2020 aerial photography

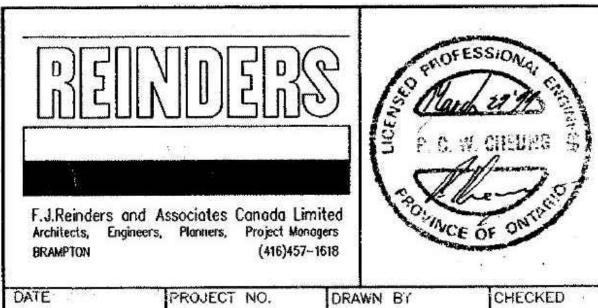
MINIOTHY OF IGNORAL RESOURCES AURORA DISTRICT SITE FLAN APPROVED Under the Aggregate Resources Act

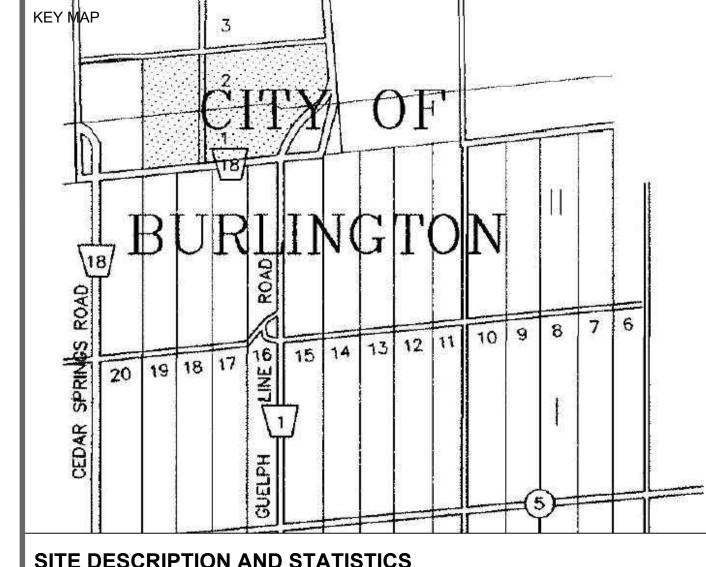
C.G./S.B.

T.M.J.

ORIGINAL SITE PLANS PREPARED BY:

MAR.05/99





SITE DESCRIPTION AND STATISTICS PT. LOTS 1 & 2, CONC. 2 & 3 CITY OF BURLINGTON REGIONAL MUNICIPALITY OF HALTON

LICENSED AREA (ha) 202.1 LICENCE NO. 5499 LICENCE NO. 5657 16.2

218.3 TOTAL

TOTAL AREA TO BE EXTRACTED (both licenses)

215 211 ha

40mX15mX5m

30mX10mX4m

120mX30mX15m

5mX5mX5m

15mX7m

BUILDINGS WITHIN QUARRY BOUNDARY

OFFICE PORTABLE SCALE HOUSE **FUEL PUMPS**

LUNCH ROOM ASPHALT PLANT ASPHALT CONTROL ROOM

STORAGE SHED #1 STORAGE SHED #2 STORAGE SHED #3

30mX15mX8m 5mX10mX3m 4mX5mX3m 7mX5mX3m 10mX5mX3m PORTABLE OFFICE TRAILER 10mX5mX3m PORTABLE OFFICE TRAILER

LEGEND OF BUILDINGS WITHIN 500m OF QUARRY BOUNDARY

- HOUSE
- COMMERCIAL BUILDING i.e. GAS BAR RECREATION BUILDING i.e. GOLF CLUBHOUSE

All distances on this plan are shown in metres unless otherwise stated.

Site Plan Amendments

10	19/07/14	REMOVAL/RELOCATION OF BUILDINGS/STRUCTURES ON-SITE	L.H.
9	12/01/20	REVISE FUEL STORAGE NOTE #8 ON PAGE 2 OF 4	L.H.
8	07/12/03	REVISE INTERNAL DYKE	L.H.
7	06/11/02	REDUCTION OF LICENSED BOUNDARY	L.H.
6	06/09/18	REVISE LOCATION OF SCRAP AREA	L.H.
5	98/10/26	ADDITIONAL RECYCLABLE MATERIAL STORAGE	P.C.
4	97/03/05	REVISED AS PER MINISTRY COMMENTS	P.C.
3	93/06/15	REVISED AS PER MINISTRY COMMENTS	K.C.
2	92/10/16	REVISED AS PER CLIENT COMMENTS	G.M.
1	92/10/08	REVISED PLANS AS PER MNR COMMENTS	T. JOHANSE
	Date		



Stamp

MHBC PLANNING DRAFTED SITE PLAN AMENDMENTS NO. 6 TO 10

DRAFT

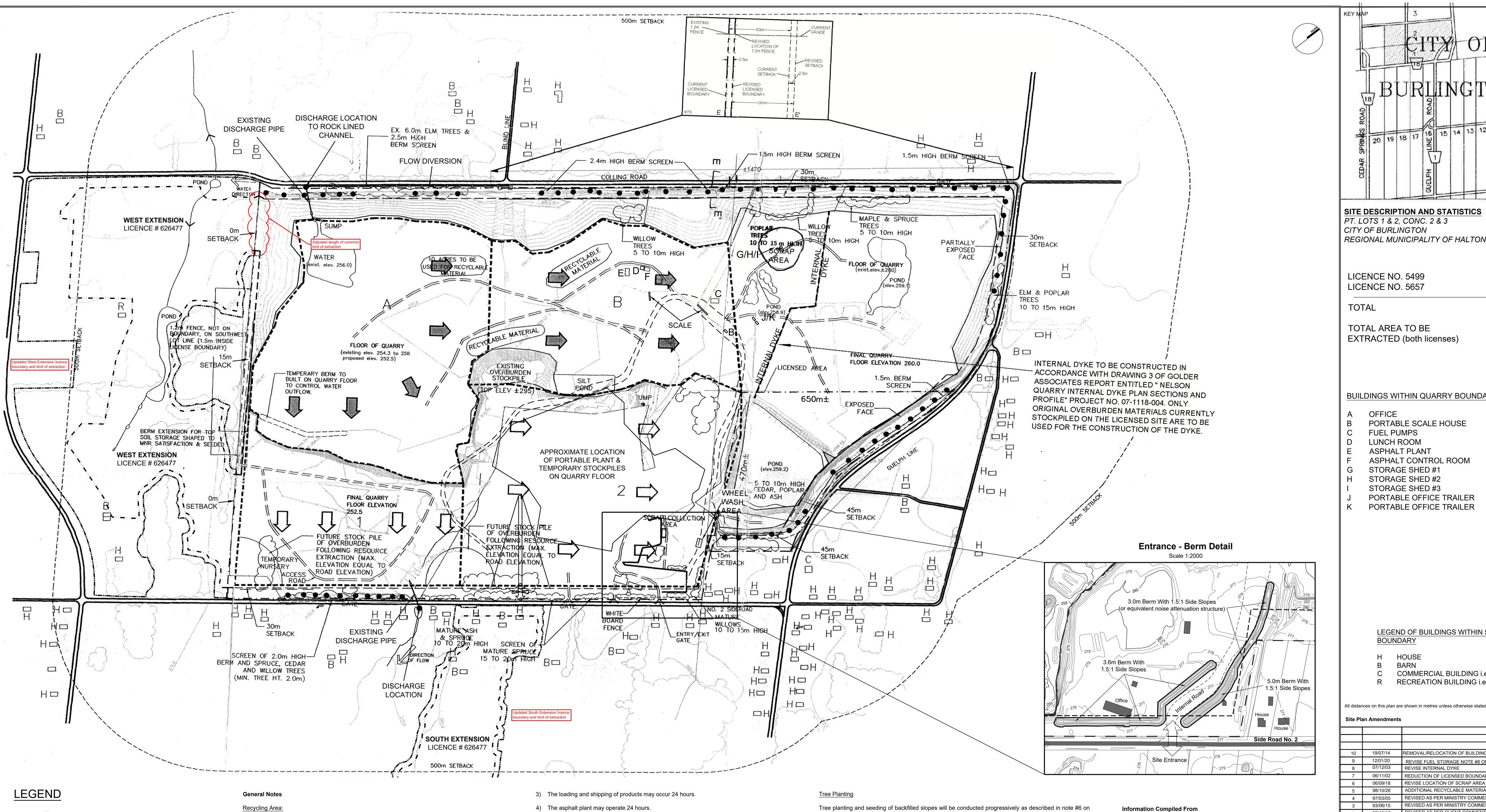
Mr. Brian Zeman is authorized by the Ministry of Natural Resources and Forestry to prepare and certify site plans for license applications.

Burlington Quarry Part of Lots 1 & 2, Conc. 2 & 3 (former township of Nelson) City of Burlington, Region of Halton NELSON 2433 No. 2 Sideroad P.O.Box 1070 Burlington Ont. L7R 4L8 phone: (905) 335-5250

Drawn By L.H./C.P. File No. 9135N

EXISTING FEATURES

Drawing No. 1 OF 4 N:\Brian\9135D- Nelson - Project Sideways\Drawings\ARA Site Plans\Existing Site Plan\CAD\9135D - Existing - 1 of 4 - Existing Features.dwg



EXISTING SPOT ELEVATIONS

EXISTING CONTOURS

- · - BOUNDARY OF LICENSED AREA

EXISTING 1.2m FENCE - wide about March

ON BOUNDARY ENTRANCE GATES

- - SETBACK LIMITS

ACTIVE QUARRY FACE

TREED AREAS/WOODLOTS/SCREENS

= = HAUL ROUTES/INTERIOR ROADWAYS

AREA STRIPPED OF TOPSOIL/OVERBURDEN

● ● EARTH BERM SCREEN

AGGREGATE STOCKPILE

MAXIMUM HT, 20.0m APPROXIMATE SECUENCE OF EXTRACTION (UPPER LIFTS)

APPROXIMATE SEQUENCE OF EXTRACTION (LOWER LIFTS)

APPROXIMATE BOUNDARY BETWEEN STAGES

DIRECTION OF EXTRACTION DIRECTION OF EXTRACTION

———— EXTENSION LICENCE BOUNDARY

————— EXTENSION LIMIT OF EXTRACTION

FLOW DIVERSION / DISCHARGE PIPE

PROPOSED ENTRANCE / EXIT WITH GATE

1) Existing equipment includes:

Portable crushing plant

Trucks and graders

On-site Operations

 Hydraulic shovels And general equipment required to extract and ship aggregates

Code under the Technical Standards and Safety Act.

2) The processing of extracted materials shall occur between 7:00 and 19:00 only.

1) This site plan specifies the additional storage size (10 acres) for recyclable materials,

3) This site plan specifies that this use only continues so long as the site is licensed.

should be restricted to aggregate based materials),

will require approval of the MNRF.

established on the quarry floor (as shown).

this lift will be undertaken at the same time as phases 1 and 2.

after the completion of extraction of the Burlington Quarry Extension.

Aggregate Extraction

2) This site plan specifies that the storage only includes asphalt and concrete for the purpose of

1) This plan depicts an operation plan for this property based upon the best information available at

2) Topsoil and overburden will be removed approximately 100 to 200 metres in advance of aggregate

3) Phase 1 will be excavated in a single lift of (20-25m) down to the shale layer. A slot may be

west and south faces within the slot and from the south face on either side of the slot opening.

5) As required, the existing processing plant will be removed and a new portable plant will be

6) A section lift (+/- 5m) in areas A and B will be extracted down to the shale layer. Extraction may

7) This Plan permits aggregate extracted at the Burlington Quarry Extension to be transported on-site

being in the northwest corner of the quarry floor and proceed simultaneously south and eastward

for processing and shipping. The Burlington Quarry South Extension will transport aggregate from

an at-grade crossing on No. 2 Sideroad in the location shown on this Plan. The Burlington Quarry

West Extension will transport aggregate on the quarry floor within the extraction area connecting

the two sites. The final area to be extracted on-site is the southeast corner of Licence No. 5499

8) Fuel storage tanks will be installed and maintained in accordance with the Liquid Fuels Handling

4) Phase 2 will be extracted in an easterly direction in a single lift (20-25m) down to the shale layer.

advanced southward in the centre of Phase 1. Extraction will occur simultaneously from the east,

the time of preparation. Phases are schematic and may vary slightly with demand. Phases do not

represent any specific or equal time period. Any major deviations from the operational sequence

aggregate recycling (for this to be considered accessory to the aggregate operation. The materials

4) The asphalt plant may operate 24 hours.

5) No drilling or extraction activities will occur within this quarry simultaneously with extraction activities within the Burlington Quarry Extension.

6) The maximum sound power level of equipment operated within the quarry will be as follows:

Source	Sound Power Level [dBA re: 10 ⁻¹² Watts]
Front-end Loader - Processing Area	101
Jaw Crusher	113
Cone Crusher (a set of two)	117
Screen Plant	123
Power Generator	109
Moving Haul Truck	114
Moving Highway Truck	101

7) Up to three haul trucks will be used to transport material from the Burlington Quarry Extension to the processing area, with a posted speed limit of 35 km/hr along this route.

8) Up to 30 highway trucks can arrive and depart the site per hour, travelling between the No. 2 Side Road access and the processing area, with a posted speed limit of 20 km/hr along this route.

9) The asphalt plant will be equipped with noise control measures and operate within the conditions stipulated in the ECA issued by the MECP.

10) Equipment used for site preparation and rehabilitation shall satisfy the noise emission levels of the MECP guideline NPC-115, "Noise Construction Equipment".

11) Existing perimeter berms along the north, east and south property lines shall be retained and a new berm/acoustic barrier shall be constructed at the entrance/exit in the southeast corner of the site. See berm detail on this page.

Overburden and Topsoil

The existing terrain features along the north, east, and south property lines, including perimeter berms, will be maintained. Overburden and topsoil will be stripped prior to extraction and will be used for backfilling of selected slopes to affect the rehabilitation measures outlined on dwg No. 3 - Progressive and Final Rehabilitation Plans. Overburden stockpiles along No. 2 sideroad shall not be any higher than the existing road grade.

Water Discharge

Water discharge points are to remain as shown on dwg No.1 and may also include the flow diversion in the northwest corner of this Plan. Dewatering will occur to maintain a dry quarry floor while the quarry is in operation. The northwest discharge is to a rock lined ditch adjacent to Colling Road where it drains westward and to the southeast if the flow diversion is installed. The south discharge is to a ditch which crosses No.2 Sideroad and proceeds southward. Discharge of water will be in accordance with permits issued by the MECP.

Tree planting and seeding of backfilled slopes will be conducted progressively as described in note #6 on dwg No. 3 - Progressive and Final Rehabilitation Plans. Should any tree planting or seeding fail to become established, replacement of trees or seeding will be conducted and maintained to ensure proper

The licensed area is enclosed by a 1.2m fence with the exception of the area around the office and main site access area which has a three rail wooden fence. No fencing is required adjacent to the Burlington

Aggregate Stockpiles

Quarry West Extension.

Existing aggregate stockpiles will remain in the locations as shown on this plan during the extraction of areas 1, A and B. These stockpiles will be removed as required as the operation enters into these areas. The proposed stockpiles associated with the portable processing plant will be located on the quarry floor within the processing area. (as shown on the plan)

Temporary aggregate stockpiles may be located on the quarry floor as required.

<u>Provision</u>

Internal roads on quarry floor are temporary and can be relocated as required.

Variations from Control and Operation Standards

Section 0.13 Standard	Variation	Rationale
(3)(a)	The west licence boundary will not be fenced.	The west licence boundary abuts adjacent Licence # 626477 and additional land which are owned by the same licensee.
(1)1 & (1)2	Gates will not be required where haul roads cross the common boundary with the West Extension (Licence # 626477).	This will eliminate constraints to the movement of equipment between licences and access to additional lands owned by the same licensee.
(1)10.i	A 0 metre setback will be provided where the licence boundary abuts the West Extension (Licence # 626477).	This will enable material to be extracted along the common boundary and for rehabilitation to transition between licences.
(1)9 & (1)11	Excavation within the setback will occur to construct hydrological features and an access point for the South Extension.	Setbacks shall be temporarily excavated and disturbed to install diversion and discharge pipes as well as to construct an at grade roadway crossing on Side Road No. 2.
(1)13.i	Topsoil and overburden may be temporarily located within 30m of the West Extension (Licence # 626477).	The adjacent Licence # 626477 is owned by the same licensee.
(1)17 & (1)18	Topsoil and/or overburden may be transferred between this licence and the West and East Extensions (Licence # 626477).	This will allow stripped material from site preparation to be used immediately for progressive rehabilitation in other parts of this licence or the extensions.
(1)19.ii	Portions of the quarry face shall remain vertical.	Vertical faces above and below the final lake level will create a more diverse habitat and visually appealing rehabilitated landform.

Information Compiled From

- 1990 Aerial Photography at 1:5000 Scale - 1988 Official Plan for the Halton Planning Area, Regional Municipality of Halton

- 1985 Niagara Escarpment Plan - Ministry of Environment, Water well records

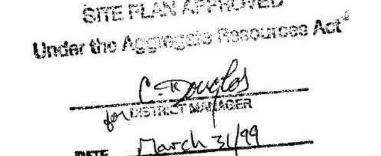
- 1991 Reinders Field Survey - Ontario Base Mapping (Air Photography 1982, Published 1983) - 1985 Plans by Nelson

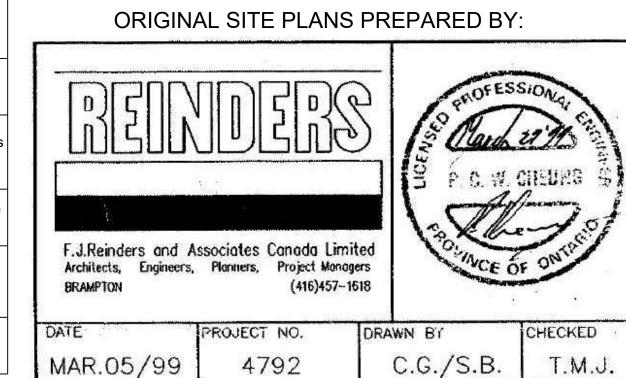
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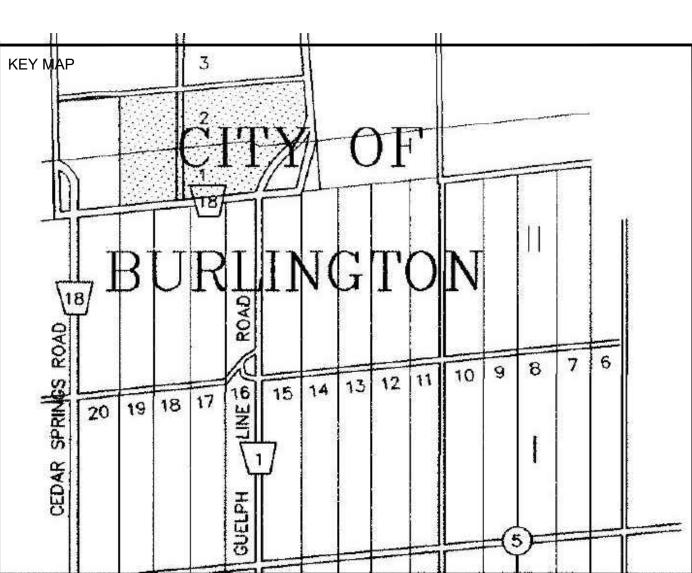
- On-site haul roads, stockpile locations, buildings and structures

- Elevations shown are in metres above sea level (masl)

were updated based on July, 2020 aerial photography MINISTRY OF IGNIVIAL RESOURCES ALIRORA DISTRICT SITE FLAN AFFROWED







SITE DESCRIPTION AND STATISTICS PT. LOTS 1 & 2, CONC. 2 & 3 CITY OF BURLINGTON

	LICENSED
	AREA (ha)
LICENCE NO. 5499	202.1
LICENCE NO. 5657	16.2
TOTAL	218.3

TOTAL AREA TO BE 215 211 ha

BUILDINGS WITHIN QUARRY BOUNDARY

PORTABLE OFFICE TRAILER

PORTABLE OFFICE TRAILER

OFFICE PORTABLE SCALE HOUSE **FUEL PUMPS**

EXTRACTED (both licenses)

LUNCH ROOM ASPHALT PLANT ASPHALT CONTROL ROOM

STORAGE SHED #1 STORAGE SHED #2 STORAGE SHED #3

40mX15mX5m 15mX7m 30mX10mX4m 5mX5mX5m 120mX30mX15m 30mX15mX8m 5mX10mX3m 4mX5mX3m 7mX5mX3m

10mX5mX3m

10mX5mX3m

LEGEND OF BUILDINGS WITHIN 500m OF QUARRY

HOUSE

BOUNDARY

COMMERCIAL BUILDING i.e. GAS BAR

All distances on this plan are shown in metres unless otherwise stated.

Site Plan Amendments

No	Date	Description	By
1	92/10/08	REVISED PLANS AS PER MNR COMMENTS	T. JOHANSEN
2	92/10/16	REVISED AS PER CLIENT COMMENTS	G.M.
3	93/06/15	REVISED AS PER MINISTRY COMMENTS	K.C.
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RECREATION BUILDING i.e. GOLF CLUBHOUSE



Stamp

MHBC PLANNING DRAFTED SITE PLAN AMENDMENTS NO. 6 TO 10

DRAFT

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Burlington Quarry Part of Lots 1 & 2, Conc. 2 & 3 Project (former township of Nelson) City of Burlington, Region of Halton

2433 No. 2 Sideroad P.O.Box 1070 Burlington Ont. L7R 4L8 phone: (905) 335-5250 Drawn By L.H./C.P. File No. 9135N

OPERATIONAL PLAN

N:\Brian\9135D- Nelson - Project Sideways\Drawings\ARA Site Plans\Existing Site Plan\CAD\9135D - Existing - 2 of 4 - Operational Plan.dwg

Drawing No. 2 OF 4

