

WELL INFORMATION
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EXISTING CONTOURS

- - - BOUNDARY OF LICENSED AREA

— — SETBACK LIMITS EXISTING 1.2m FENCE ON BOUNDARY

o b 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

- SURFACE DRAINAGE

● ● EARTH BERM SCREEN

---- REHABILITATED AREA

INTERIM REHABILITATED AREA ——— EXTENSION LICENCE BOUNDARY

---- EXTENSION LIMIT OF EXTRACTION

---- DISCHARGE PIPE

Official Plan & Zoning Information:

As per the Niagara Escarpment Plan, which is included as part of the Halton Official Plan, 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 were updated based on July, 2020 aerial photography

Elevations shown are in metres above sea level (masl)

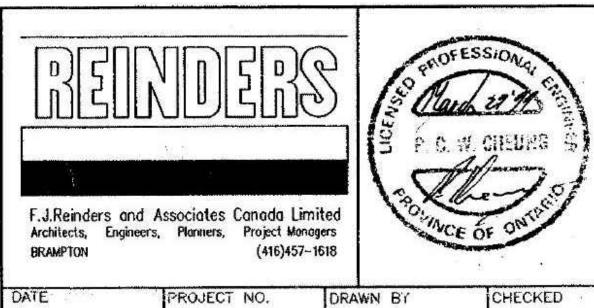
MINIOTHY OF IGNORAL RESOURCES AURORA DISTRICT SITE FLAN APPROVED Under the Aggregate Resources Act

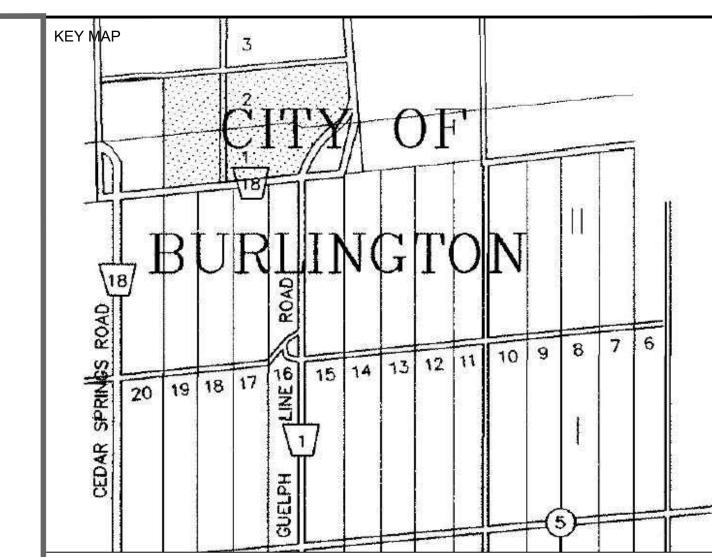
C.G./S.B.

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

LICENCE NO. 5499 LICENCE NO. 5657	LICENSED AREA (ha) 213.6 18.6
TOTAL	232.2

TOTAL AREA TO BE 213.7 ha EXTRACTED (both licenses)

BUILDINGS WITHIN QUARRY BOUNDARY

Α	OFFICE	
В	PORTABLE SCALE HOUSE	
С	FUEL PUMPS	
D	LUNCH ROOM	
Ε	ASPHALT PLANT	
F	ASPHALT CONTROL ROOM	
\sim	OTODA OF OUED #4	

G STORAGE SHED #1 STORAGE SHED #2 STORAGE SHED #3 PORTABLE OFFICE TRAILER

PORTABLE OFFICE TRAILER

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 RECREATION BUILDING i.e. GOLF CLUBHOUSE

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

Site Plan Amendments

06/11/02 06/09/18 98/10/26 97/03/05 93/06/15 92/10/16	REDUCTION OF LICENSED BOUNDARY REVISE LOCATION OF SCRAP AREA ADDITIONAL RECYCLABLE MATERIAL STORAGE REVISED AS PER MINISTRY COMMENTS REVISED AS PER MINISTRY COMMENTS REVISED AS PER CLIENT COMMENTS REVISED PLANS AS PER MNR COMMENTS	L.H. L.H. P.C. P.C. K.C. G.M. T. JOHANSE
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06/11/02		
	TEVIOL IVILIAN E BITTE	
07/12/03	REVISE INTERNAL DYKE	L.H.
12/01/20	REVISE FUEL STORAGE NOTE #8 ON PAGE 2 OF 4	L.H.
19/01/28	REMOVAL/RELOCATION OF BUILDINGS/STRUCTURES ON-SITE	L.H.
23/07/26	UPDATE AREA CALCULATIONS	C.P.
24/09/27	INTEGRATION OF BURLINGTON QUARRY EXTENSION (LICENCE # 626477)	C.P.
	23/07/26 9/01/28 2/01/20	23/07/26 UPDATE AREA CALCULATIONS 9/01/28 REMOVAL/RELOCATION OF BUILDINGS/STRUCTURES ON-SITE 2/01/20 REVISE FUEL STORAGE NOTE #8 ON PAGE 2 OF 4



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

MHBC PLANNING DRAFTED SITE PLAN AMENDMENTS NO. 6 TO 12

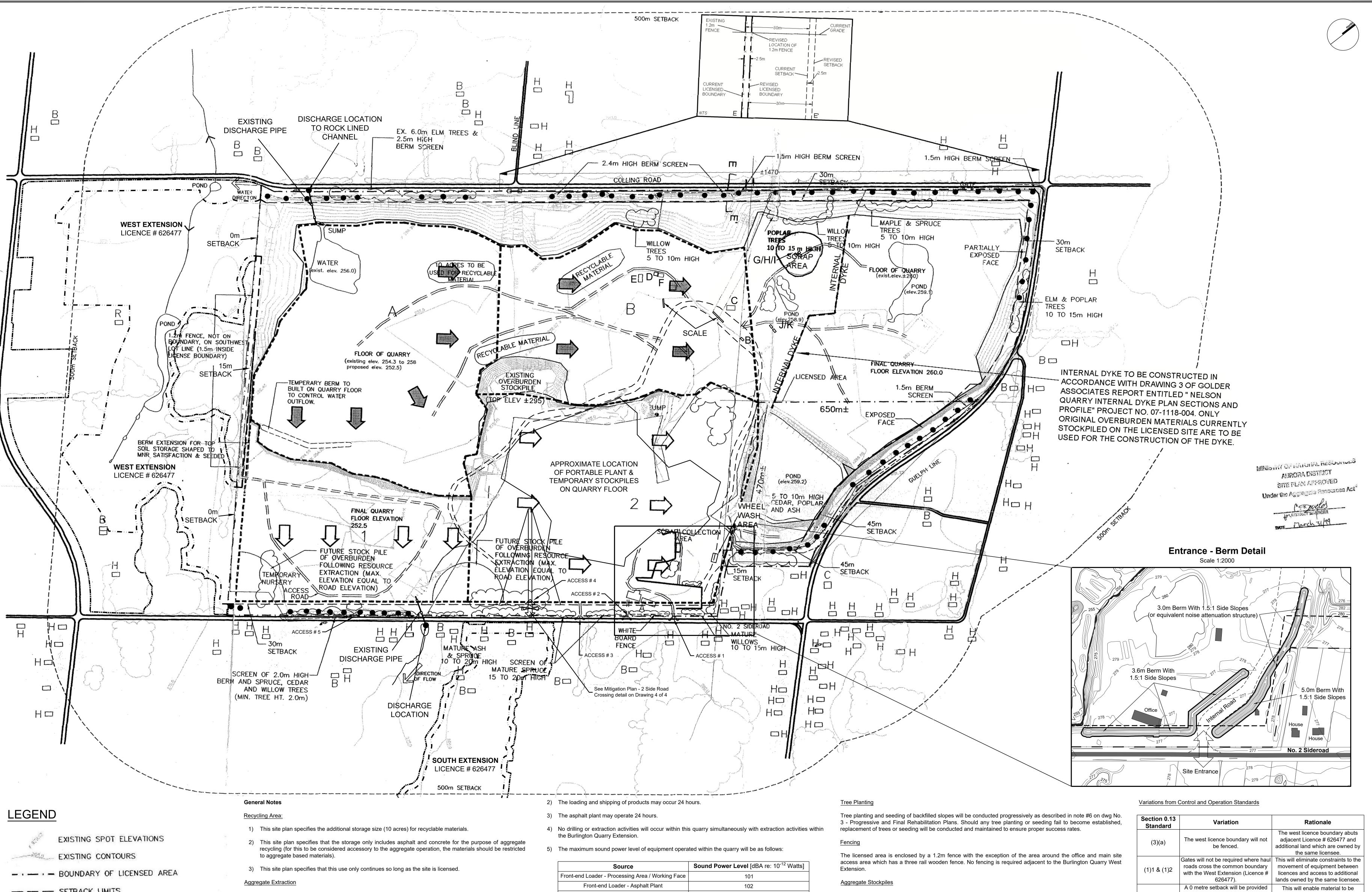
DRAFT

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

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



- SETBACK LIMITS

EXISTING 1.2m FENCE musika akin meken X ON BOUNDARY

ENTRANCE GATES

TREED AREAS/WOODLOTS/SCREENS

= = HAUL ROUTES/INTERIOR ROADWAYS

ACTIVE QUARRY FACE

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

DISCHARGE PIPE

PROPOSED ENTRANCE / EXIT WITH GATE

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

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

3) Phase 1 will be excavated in a single lift of (20-25m) down to the shale layer. A slot may be advanced southward in the centre of Phase 1. Extraction will occur simultaneously from the east, west and south faces within the slot and from the south face on either side of the slot opening.

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

5) Prior to extraction in the West Extension of Licence # 626477, the berm that encroaches from Licence # 626477 into this licence in the southwest corner (as shown on the plan view) shall be constructed. 6) As required, the existing processing plant will be removed and a new portable plant will be established on

the quarry floor (as shown). 7) A section lift (+/- 5m) in areas A and B will be extracted down to the shale layer. Extraction may being in the

undertaken at the same time as Phases 1 and 2. 8) This Plan permits aggregate extracted at the Burlington Quarry Extension to be transported on-site 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

northwest corner of the guarry floor and proceed simultaneously south and eastward. This lift will be

Burlington Quarry Extension. 9) Fuel storage tanks will be installed and maintained in accordance with the Liquid Fuels Handling Code

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 after the completion of extraction of the

Aggregate Processing Equipment

under the Technical Standards and Safety Act.

1) Existing equipment includes

 Portable crushing plant Trucks and graders

— Loaders Hydraulic shovels And general equipment required to extract and ship aggregates

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

Source	Sound Power Level [dBA re: 10 ⁻¹² Watts]
Front-end Loader - Processing Area / Working Face	101
Front-end Loader - Asphalt Plant	102
Jaw Crusher	113
Cone Crusher (a set of two)	117
Screen Plant	123
Power Generator	109
Drill	110
Mixing Tower - Asphalt Plant	109
Burner and Dryer - Asphalt Plant	111
Baghouse - Asphalt Plant	104
Moving Haul Truck	114
Moving Highway Truck	101

6) 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.

7) 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.

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

guideline NPC-115, "Noise Construction Equipment" 10) 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

9) Equipment used for site preparation and rehabilitation shall satisfy the noise emission levels of the MECP

detail on this page. The southeast corner of the site is to be the final area extracted. The berm/acoustic

barrier at the entrance/exit shall be progressively removed as the final extraction face advances in this area.

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. 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. 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.

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

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

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

The haul truck crossing approaching on No. 2 Sideroad shall be designed and constructed to provide an approach sight distance (i.e., visibility triangle) extending, at a minimum of 25 m on each crossing approach to a point 50 m east and west on No 2 Side Road. See "Mitigation Plan - 2 Side Road Crossing" detail on drawing 4 of 4.

Tree protection fencing shall be installed in accordance with the Tree Protection Fencing detail on drawing 4 of 4 in the locations shown on the "Mitigation Plan - 2 Side Road Crossing" detail on drawing 4 of 4.

Trees shall be planted as supplementary visual screening running parallel on either side of the truck crossing entrance on No. 2 Side Road behind the sight triangle in order to reduce potential views that may open up from removal of existing vegetation. This planting will run approximately 17m from the tree protection fence back to the limit of existing extraction.

The proposed vegetation shall be laid out as prescribed in the "Planting Cell Detail for 2 Side Road Crossing" on drawing 4 of 4, with attention paid to planting density and diversity of coniferous and deciduous species. All vegetation is to be selected for wind and salt tolerance, hardiness. Where appropriate, native species that complement the existing surroundings are to be utilized wherever possible.

All access points from No. 2 Sideroad are gated.

Access # 1 - Primary entrance/exit to this Licence and Licence # 626477 for highway trucks hauling material from both licences. Access will remain throughout the life of both licences.

Access # 2 - Current entrance/exit to the office. Access shall be removed once the entrance berms are constructed.

Access # 3 - For maintenance purposes only.

Access # 4 - Entrance/exit for crossing Side Road No. 2 to access the South Extension of Licence #626477. Access will remain for the life of Licence # 626477.

Access #5 - For maintenance purposes only.

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 an access point for the South Extension.	The setback shall be temporarily excavated and disturbed 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

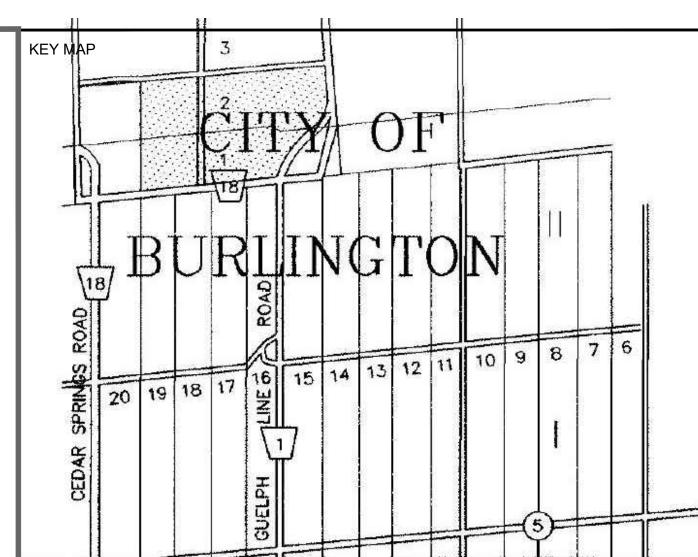
- 1990 Aerial Photography at 1:5000 Scale - 1988 Official Plan for the Halton Planning Area, Regional

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displayed in one metre intervals - Elevations shown are in metres above sea level (masl) - On-site haul roads, stockpile locations, buildings and structures were updated based on July, 2020 aerial photography



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

CITY OF BURLINGTON REGIONAL MUNICIPALITY OF HALTON

LICENSED AREA (ha) LICENCE NO. 5499 LICENCE NO. 5657 18.6

TOTAL 232.2

TOTAL AREA TO BE EXTRACTED (both licenses)

BUILDINGS WITHIN QUARRY BOUNDARY

PORTABLE OFFICE TRAILER

PORTABLE OFFICE TRAILER

OFFICE 40mX15mX5m PORTABLE SCALE HOUSE 15mX7m **FUEL PUMPS** 30mX10mX4m 5mX5mX5m **LUNCH ROOM ASPHALT PLANT** 120mX30mX15m 30mX15mX8m ASPHALT CONTROL ROOM 5mX10mX3m STORAGE SHED #1 STORAGE SHED #2 4mX5mX3m STORAGE SHED #3 7mX5mX3m

LEGEND OF BUILDINGS WITHIN 500m OF QUARRY

10mX5mX3m

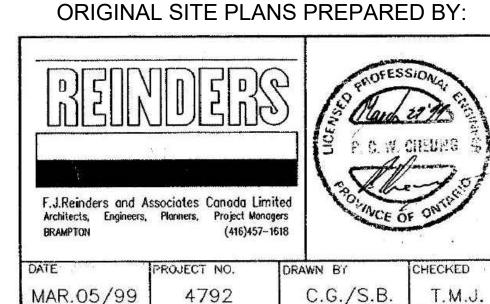
10mX5mX3m

HOUSE

BOUNDARY

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

12	24/09/27	INTEGRATION OF BURLINGTON QUARRY EXTENSION (LICENCE # 626477)	C.P.
11	23/07/26	ADD BERM DETAIL & NOISE NOTES 1-8. UPDATE OVERBURDEN/TOPSOIL NOTE & AREA CALCULATIONS	C.P.
10	19/01/28	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. JOHANSEN
No	Date	Description	By



MHBC PLANNING DRAFTED SITE PLAN AMENDMENTS NO. 6 TO 12

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

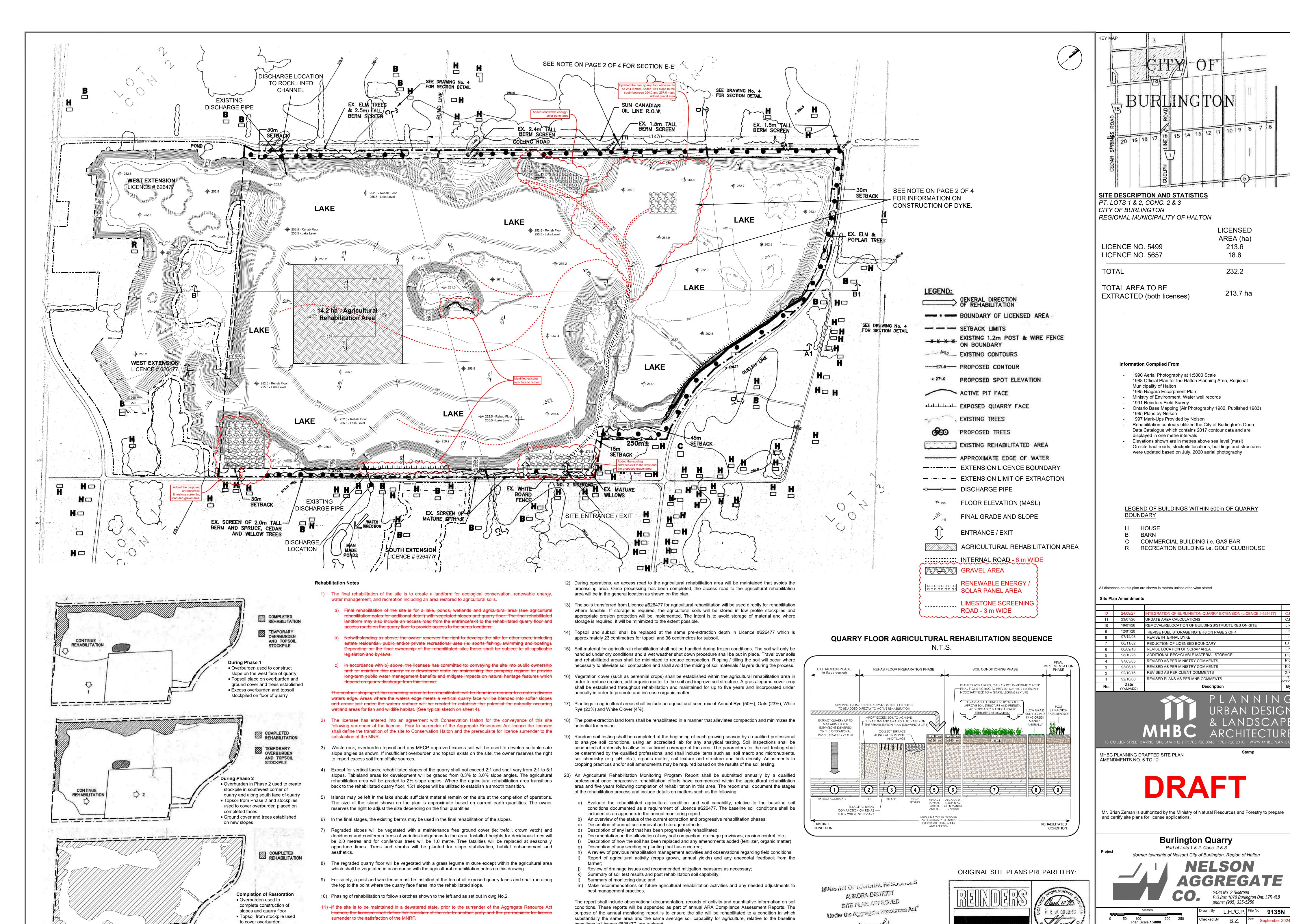
P.O.Box 1070 Burlington Ont. L7R 4L8 phone: (905) 335-5250 Drawn By L.H./C.P. File No. 9135N

OPERATIONAL PLAN

Drawing No.

2 OF 4

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



conditions in Licence #626477, are restored.

22) Best management practices are encouraged with respect to the storage and application of fertilizers and

21) No livestock operations shall be permitted.

F.J.Reinders and Associates Canada Limited

4792

(416)457-1618

PROGRESSIVE & FINAL REHABILITATION PLAN

3 OF 4

Brian\9135D- Nelson - Project Sideways\Drawings\ARA Site Plans\Existing Site Plan\CAD\9135D - Existing - 3 and 4 of 4 - Rehabilitation Plan and Cross

Drawing No.

CHECKED

C.G./S.B.

T.M.J.

Architects, Engineers, Planners, Project Monagers

Ground cover and vegetation

established on topsoil

Agricultural Rehabilitation

slightly to support agricultural uses on the site.

11) The Agricultural Rehabilitation Area identified on the plan view shall be established by importing topsoil and

subsoil from Licence #626477 and following the Quarry Floor Agricultural Rehabilitation Sequence detail on

this drawing. The configuration of the Agricultural Rehabilitation Area, as shown on the plan, may vary

