

### SITE PLAN OVERRIDE (VARIANCE)

SLOPES MAY BE GENTLER THAN 2:1 FOR SHORELINE HABITAT CREATION.

THE FOLLOWING CONDITIONS ILLUSTRATED ON THESE PLANS VARY FROM THE PROVINCIAL STANDARDS MADE UNDER THE AGGREGATE

. THE ACTIVE QUARRY WILL BE ENCLOSED BY MAINTAINING A 1.2m HIGH FENCE ALONG THE NORTHERN EXTRACTION LIMIT OF AREAS 1 AND 2 (WHERE SHOWN), THE SOUTHERN ±1175m OF THE WEST LICENCED BOUNDARY, THE WESTERN ±962.5m OF THE

SOUTH LICENCED BOUNDARY IN LOTS 2 AND 3 AND THE SOUTHERN ±812m OF THE EAST LOT LINE OF LOT 2 AS SHOWN ON THE OPERATIONAL PLAN. FENCING WILL NOT BE MAINTAINED ALONG THE NORTHERN PARTS OF THE LICENCED BOUNDARIES IN LOTS 2 AND 3 AND THE EASTERN PARTS OF THE LICENCED BOUNDARIES IN LOT 1.

MARKER POSTS WILL BE INSTALLED AT THE CORNERS OF THE LICENCE BOUNDARY WHERE FENCING WILL NOT BE . THE GATE AT THE ENTRANCE MAY BE OPEN EARLY IN THE MORNING TO ALLOW TRUCK STACKING ON THE HAUL ROAD. THE

QUARRY FACES MAY REMAIN VERTICAL FOR CLIFF HABITAT CREATION AS SHOWN ON THE REHABILITATION PLAN.

WESTERN GATE WILL BE LOCKED WHENEVER THE QUARRY IS NOT IN OPERATION. THE STANDARDS WILL BE VARIED TO ALLOW FOR THE REMOVAL OF 100,090 CUBIC METRES OF TOPSOIL FROM THE SITE AS A RESULT OF EXTRACTION BELOW WATER TABLE RESULTING IN THE FORMATION OF A POND. NOTWITHSTANDING THE PRECEDING, 5.16 & IF THE POND OR ANY PART OF IT IS NOT EXTRACTED. THEN SUFFICIENT TOPSOIL MUST REMAIN ON SITE IN ORDER TO REHABILITATE ANY DISTURBED LANDS, AS AFFORDED PRIOR TO THE START OF THE QUARRY OPERATIONS.

PHASE A NOTES

1. ROOT PRUNE VEGETATION AND INSTALL PASSIVE BARRIER WALL AROUND THE PERIMETER OF THE SITE PRIOR TO INSTALLATION OF THE PERIMETER ACOUSTICAL BERMS. REFER TO TYPICAL EXTRACTION SEQUENCE DETAIL SHEET 4.

2. STRIP AND BUILD PERIMETER BERMS AROUND TEMPORARY PLANT SITE IN AREA 1 AND ESTABLISH TEMPORARY SCALE.

3. ESTABLISH QUARRY ENTRANCE/ EXIT TO MILBUROUGH LINE ACCORDING TO

4. PRIOR TO EXTRACTION COMMENCING IN AREA 1, CONSTRUCT OR UPGRADE THE FENCING ON THE PERIMETER OF THE LICENCED BOUNDARIES. PROPERTY LINE AND/ OR EXTRACTION LIMIT (SEE SITE PLAN OVERRIDE) TO THE STANDARDS OF THE AGGREGATE RESOURCES ACT, AS REQUIRED. ALL FENCING TO BE MAINTAINED.

APPROPRIATE MUNICIPAL STANDARDS (SEE PROPOSED HAUL ROAD SECTION,

5. STRIP AND EXTRACT SURFICIAL SAND AND GRAVEL IN NORTH WEST CORNER OF AREA 2, AS SHOWN, AS PART OF THE BERM CONSTRUCTION IN AREA 2. PROCESS MATERIAL IN THE TEMPORARY PLANT IN AREA 1.

6. BEGIN SITE PREPARATION IN AREA 1 BY REMOVING EXISTING TREES AND SCRUB VEGETATION IN THE AREA TO BE EXTRACTED.

7. CONTINUE STRIPPING OF AREA 1 USING TOPSOIL AND OVERBURDEN TO CONSTRUCT THE ACOUSTICAL BERMS ALONG THE NORTH AND EAST LIMITS OF AREA 1 AND THE NORTH AND WEST LIMITS OF AREA 2, AS SHOWN.

8. BEGIN EXTRACTION IN AREA 1 IN DIRECTION SHOWN, USING A SINKING CUT INTO BEDROCK AT A 10% SLOPE TO ESTABLISH THE QUARRY FLOOR AND FACE. ROCK WILL BE PROCESSED IN ORDER TO PRODUCE A VARIETY OF MATERIALS TO MEET MARKET DEMAND. PROCESS MATERIAL IN TEMPORARY PLANT SITE. 9. CONTINUE EXTRACTION IN AREA 1 IN THE DIRECTION SHOWN AND PROCESS MATERIALS ON THE QUARRY FLOOR. THE TEMPORARY HAUL ROAD WILL BE RELOCATED TO THE QUARRY FLOOR AS SOON AS THE RESOURCE HAS BEEN

10. RELOCATE PROCESSING PLANT, SCALES AND SCALEHOUSE, AND STOCKPILING AREA TO THE QUARRY FLOOR ONCE EXTRACTION AREA IS SUFFICIENT IN SIZE FOR THOSE PURPOSES.

11. ESTABLISH PERMANENT PLANT SITE ON QUARRY FLOOR. REMOVE TEMPORARY PLANT SITE AND BERMS USING OVERBURDEN TO CONTINUE PERIMETER BERM

12. AREAS 3 AND 4 REMAIN UNDISTURBED.

CONSTRUCTION.

EXTRACTED FROM THE AREA.

13. MAINTAIN ALL VEGETATION IN A HEALTHY VIGOROUS CONDITION.

### OPERATIONS NOTES (CONTINUED)

NOISE MITIGATION INFORMATION

15. HOURS OF OPERATION: DRILLING AND EXCAVATION MONDAY - FRIDAY 07:00 - 19:00 AGGREGATE PROCESSING MONDAY - FRIDAY 07:00 - 19:00 SATURDAY 07:00 - 12:00 MONDAY -FRIDAY

NOTE THE GATE AT THE LICENCE BOUNDARY MAY BE OPENED EARLIER TO ALLOW TRUCKS TO WAIT INSIDE THE LICENCED AREA RATHER THAN PARKING ON THE PUBLIC ROAD (SEE SITE PLAN OVERRIDE #2). SHIPPING FOR SPECIAL PURPOSES MAY OCCUR OUTSIDE THESE DAYTIME HOURS AND ANY SUCH EXTENSION TO THESE HOURS WILL REQUIRE PRIOR APPROVAL OF THE CITY OF HAMILTON. ONCE THE PROCESSING AND LOADING EQUIPMENT IS ON SITE AND OPERATING AT CAPACITY, NOISE LEVELS WILL BE MEASURED BY A QUALIFIED ACOUSTICAL CONSULTANT TO CONFIRM THAT THE PREDICTIONS ARE ACCURATE AND THAT THE MITIGATING MEASURE ARE APPROPRIATE. WRITTEN CONFIRMATION OF THIS WILL BE PROVIDED TO THE CITY WITHIN 30 DAYS OF THE MEASUREMENTS

16. EQUIPMENT USED FOR OVERBURDEN STRIPPING AND REHABILITATION, AS WELL AS OTHER CONSTRUCTION PROJECTS, SHALL SATISFY THE NOISE EMISSION LEVELS OF MOE NPC-115 "NOISE DUE TO CONSTRUCTION EQUIPMENT".

17. QUARRY EQUIPMENT SHALL SATISFY THE REFERENCE SOUND POWER LEVELS LISTED IN THE TABLE 1. DECEDENCE SOUND DOWED LEVELS FOR OUARRY FOLLOMENT

EQUIPMENT	REFERENCE SOUND POWER LEVEL
	(dB(A))
ROCK DRILL	117
EXTRACTION LOADER	113
SHIPMENT LOADER	107
TRUCK DUMP INTO PRIMARY CRUSHER	111
PRIMARY CRUSHER	110
TEMPORARY PROCESSING PLANT	128
PERMANENT PROCESSING PLANT	131
PORTABLE SCREENING PLANT	112
ROCK DROP - PRIMARY SURGE PILE	110
ROCK DROP - STOCKPILE	91
QUARRY TRUCKS (100T) @ 30km/hr	119
HIGHWAY TRUCKS @ 40km/hr	109
HIGHWAY TRUCKS @ 25km/hr	103 (107*)

18. THE SHIPMENT TRUCK SPEED LIMIT SHALL BE RESTRICTED TO 25 km/hr WITHIN THE PROPOSED EXTRACTION AREA OF THE QUARRY. THE POSTED SPEED LIMIT ALONG THE MAIN ON-PROPERTY HAUL ROUTE SECTION SHALL BE 40km/hr.

ACOUSTIC BARRIERS ARE REQUIRED FOR NOISE CONTROL. AN ACOUSTIC BARRIER SHALL BE SOLID WITH NO GAPS OR OPENINGS AND SATISFY A MINIMUM SURFACE DENSITY OF 20 kg/m2 (4 LB/ft2). THEY CAN TAKE THE FORM OF AN EARTH BERM, ACOUSTIC FENCE, AGGREGATE STOCKPILE, A COMBINATION OF THESE OR ANY OTHER CONSTRUCTION SATISFYING THE REQUIREMENTS OF AN

20. PORTABLE DRILL BARRIER SYSTEM FOR SOME OPERATION AREAS, A PORTABLE DRILL BARRIER SYSTEM IS REQUIRED. THIS PORTABLE DRILL BARRIER SYSTEM SHALL BE AN ACOUSTIC BARRIER, WHICH SHALL BE SOLID WITH NO GAPS OR OPENINGS AND SATISFY A MINIMUM SURFACE DENSITY OF 20 kg/m² (4 LB/ft²). THE PORTABLE BARRIER SHALL BE LOCATED WITHIN 10M OF THE DRILL UNDER OPERATION. THE SPECIFIC ORIENTATION OF THE BARRIER IS DEFINED FOR EACH PHASE OF EXTRACTION IN THE FOLLOWING NOTES WHEN A PORTABLE BARRIER IS REQUIRED. THIS BARRIER SHALL HAVE A MINIMUM HEIGHT OF 5m, AND BE AT LEAST 14M LONG.

21. PORTABLE ENCLOSURE SYSTEM FOR THE INITIAL TEMPORARY PROCESSING PLANT AND THE PORTABLE SCREENING PLANT. PORTABLE ENCLOSURE SYSTEMS ARE REQUIRED. THIS PORTABLE ENCLOSURE SYSTEM SHALL ENCLOSE THE PROCESSING PLANT COMPONENTS AND PROVIDE AN INSERTION LOSS PERFORMANCE OF 15 DB IN THE 'QUIET' ORIENTATION(S). AN EXAMPLE OF AN EFFECTIVE PORTABLE ENCLOSURE SYSTEM IS CONSTRUCTED OUT OF ISO CONTAINERS.

22. ACOUSTIC ENCLOSURE SYSTEM FOR THE PERMANENT PROCESSING PLANT, ACOUSTICS ENCLOSURES ARE RECOMMENDED FOR THE PROCESSING PLANT COMPONENTS. THE ACOUSTIC ENCLOSURE SYSTEM SHALL BE DESIGNED TO PROVIDE AN INSERTION LOSS PERFORMANCE OF 24 DB.

AIR QUALITY INFORMATION

23. WATER WILL BE APPLIED TO INTERNAL HAUL ROADS AND PROCESSING AREAS AS OFTEN AS REQUIRED TO MITIGATE DUST. OTHER PROVINCIALLY APPROVED DUST SUPPRESSANTS MAY BE USED SUBJECT TO HYDROGEOLOGICAL TECHNICAL RECOMMENDATIONS NOTE #3.

ALL PROCESSING EQUIPMENT SHALL HAVE A CERTIFICATE OF APPROVAL FROM THE MOE IF REQUIRED. NO PROCESSING EQUIPMENT SHALL BE OPERATED WITHIN 300m OF A SENSITIVE RECEPTOR WITHOUT DUST SUPPRESSION SUCH AS WATER SPRAYS.

#### SITE MANAGEMENT INFORMATION MAINTENANCE/ PROTECTION OF VEGETATION INFORMATION

TOPSOIL/SUBSOIL/OVERBURDEN STORAGE INFORMATION

24. EXISTING VEGETATION WITHIN THE LICENCED AREA SHALL BE MAINTAINED IN A HEALTHY VIGOROUS GROWING CONDITION UNTIL SEQUENTIAL STRIPPING BEGINS OR UNTIL THE REHABILITATION IS COMPLETE. ANY VEGETATION PLANTED AS PART OF SITE IMPROVEMENTS OR PROGRESSIVE AND FINAL REHABILITATION WILL ALSO BE MAINTAINED IN A HEALTHY, VIGOROUS GROWING CONDITION.

FENCING INFORMATION 25. BOUNDARIES OF THE AREA TO BE LICENCED THAT ARE PRESENTLY FENCED ARE SHOWN ON DRAWING 1 OF 5, EXISTING FEATURES. PRIOR TO ANY STRIPPING OR PREPARATION, FENCING AND GATES (AS SHOWN) ON THE LICENCED BOUNDARIES, PROPERTY LINE AND/ OR EXTRACTION LIMIT WILL BE ERECTED OR UPGRADED TO COMPLY WITH THE AGGREGATE RESOURCES ACT WHERE REQUIRED (REFER TO PHASING NOTES ON SHEET 2 AND 3 OF 5). ALL FENCING SHALL BE MAINTAINED FOR THE DURATION OF THE QUARRY.

26. TOPSOIL AND OVERBURDEN SHALL BE STRIPPED AND STORED SEPARATELY IN BERMS OR STOCKPILES. BERMS AND STOCKPILES OF TOPSOIL SHALL BE GRADED TO STABLE SLOPES AND SEEDED WITH A GRASS/LEGUME MIXTURE TO PREVENT EROSION AND MINIMIZE DUST. STOCKPILES SHALL BE AT LEAST 30m FROM LICENCE BOUNDARY OR 90m FROM LAND ZONED FOR RESIDENTIAL

OR IN RESIDENTIAL USE WHEN THE LICENCE WAS ISSUED. 27. APPROXIMATELY ±30,690m3 OF TOPSOIL IS REQUIRED FOR THE REHABILITATION OF THIS SITE. APPROXIMATELY ±130,780m3 OF TOPSOIL EXISTS WITHIN THE EXTRACTION AREA. APPROXIMATELY ±100,090m³ OF EXCESS TOPSOIL MAY BE REMOVED FROM THE SITE, REFER TO SITE PLAN OVERRIDE ON OPERATIONS PLAN (SHEET 2).

TOPSOIL WILL NOT BE REMOVED FROM THE SITE UNTIL REHABILITATION IS IN THE FINAL STAGES AND IT IS DETERMINED THAT THERE IS A SURPLUS. BERM INFORMATION

28. BERMS SHALL CREATE AN EFFECTIVE VISUAL BARRIER OR ACOUSTICAL BARRIER TO A MINIMUM OF ±3.0 METRES ABOVE THE EXISTING GRADE, OR AS SPECIFIED IN THE AERCOUSTICS ENGINEERING NOISE ASSESSMENT REPORT DATED NOVEMBER 2008. ALL BERMS SHALL BE GRADED SMOOTH TO A STABLE (2:1) SLOPE ALL BERMS SHALL BE SEEDED IMMEDIATELY UPON COMPLETION TO MINIMIZE NOISE, DUST AND EROSION. WHEREVER POSSIBLE SUITABLE PLANTS WILL BE ESTABLISHED SUCH AS CROWN VETCH (CORONILLA VARIA) OR OTHER SUITABLE SEED MIXTURES TO PROMOTE A DEEP ROOT SYSTEM AND ENHANCE SOIL STRUCTURE. SEED MIXTURE MAY BE MODIFIED DUE TO AVAILABILITY AND SOIL STRUCTURE. ALL VEGETATION SHALL BE MAINTAINED IN A HEALTHY. VIGOROUS GROWING CONDITION FOR THE LIFETIME OF THE LICENSE. REFER TO TYPICAL BERM CROSS SECTION ON DRAWING 4 OF 5. SCRAP STORAGE INFORMATION

29. ALL SCRAP, USED MACHINERY AND STUMPS GENERATED THROUGH THE OPERATIONS WITHIN THIS LICENCE WILL BE STORED IN THE PLANT AND PROCESSING AREA, A MINIMUM OF 30m FROM THE BOUNDARY OF THE SITE AND BE DISPOSED OF ON AN ONGOING BASIS. TREES TO BE REMOVED WITHIN THE EXTRACTION AREA WILL BE UTILIZED FOR FIREWOOD OR THEIR BEST USE. STUMPS, LOGS AND OVERSIZE ROCK MAY REMAIN ON SITE FOR FURTHER PROGRESSIVE AND FINAL UNDER WATER REHABILITATION AND MAY BE STORED IN AREA 1 UNTIL REQUIRED. UPON COMPLETION OF EXTRACTION, ALL SCRAP EQUIPMENT AND USED MACHINERY SHALL BE REMOVED.

PETROLEUM STORAGE INFORMATION 30. FUEL, OIL, RADIATOR AND HYDRAULIC FLUID, AND OTHER CHEMICALS NEEDED FOR THE MAINTENANCE AND FUNCTIONING OF ON-SITE EQUIPMENT SHALL BE APPROPRIATELY STORED IN ABOVE-GROUND CONTAINERS WITHIN THE TEMPORARY AND PERMANENT PLANT SITE AND SHALL MEET THE REQUIREMENTS OF THE GASOLINE HANDLING ACT, AS AMENDED, AND THE GASOLINE HANDLING CODE AND REGULATIONS, AS AMENDED BY THE TECHNICAL STANDARDS AND SAFETY ACT (TSSA) AND LIQUID FUELS HANDLING CODE, AND IN ACCORDANCE WITH THE MINISTRY OF THE ENVIRONMENT'S CHEMICAL STORAGE GUIDELINES. ALL REFUELING SHALL BE WITHIN A CONTAINMENT PAD AND ANY SPILLS SHALL BE REMOVED AND DISPOSED OF IMMEDIATELY AT AN

WASH PLANT INFORMATION 31. PRIOR TO THE OPERATION OF A WASH PLANT, THE OPERATOR WILL APPLY TO THE MOE FOR A PERMIT-TO-TAKE-WATER. THIS PERMIT APPLICATION WILL BE ACCOMPANIED BY THE APPROPRIATE SUPPORTING DOCUMENTATION.

APPROPRIATE MOE APPROVED FACILITY.

PESTICIDES/ HERBICIDES INFORMATION 32. PESTICIDES AND HERBICIDES SHALL BE USED ONLY WHEN REQUIRED TO CONTROL INFESTATIONS AND SHALL BE APPLIED BY A LICENCED PROFESSIONAL.

BENCH HEIGHT INFORMATION 33. GEOTECHNICAL MAPPING OF THE EXPOSED INTERIM BENCH FACES DURING THE INITIAL SINKING CUT WILL BE REQUIRED TO ASSESS THE LIKELIHOOD OF ENCOUNTERING JOINTS WHICH WOULD BE CONTINUOUS ENOUGH TO AFFECT THE OVERALL WALL STABILITY. IF CONTINUOUS JOINTS ARE NOTED IN THE INITIAL SINKING CUT, THEN A BENCHED FINAL FACE WILL BE REQUIRED ON SOME OR ALL OF THE FINAL WALLS TO DECREASE THE SIZE AND LIKELIHOOD OF LARGE (FULL WALL HEIGHT) FAILURES. SEE GOLDER ASSOCIATES REPORT OF 2008.

# BOUNDARY OF AREA TO BE LICENCED

— x — x — EXISTING FENCE

———— EXISTING TRAIL

==== EXISTING LANEWAY

TEST PIT#

EXISTING BUILDING

• • • • • • • • • • • • • • • • REGULATORY SETBACK LINE 120m INFORMATION BOUNDARY PROPERTY / LOT/ CONCESSION LINE ZONING / LANDUSE BOUNDARY PROVINCIALLY SIGNIFICANT WETLAND (LOWER MOUNTSBERG CREEK SWAMP COMPLEX) EXISTING VEGETATION EXISTING TRIBUTARY / RIVER EXISTING SURVEYED WETLAND XISTING POND EXISTING PRODUCT STOCKPILE AND BUILDING NUMBER AREA STRIPPED OF TOPSOIL AND OVERBURDEN- BEDROCK PREPARED BY: ZOLTON KATONA, NOV.13, 2003 AREA STRIPPED OF TOPSOIL AND OVERBURDEN- SAND AND MONITORING WELL I.D., GRAVEL EXPOSED (DRILLED BY JEGEL UNDISTURBED AREA

CONSULTING ENGINEERS AND AECOM- FORMERLY GARTNER LEE LIMITED) TW# PRODUCTION/TESTING WELL - ww WATER WELL

MINI-PIEZOMETERS DIRECTION OF SURFACE WATER DRAINAGE

DIRECTION OF EXTRACTION DIRECTION OF TOPSOIL AND OVERBURDEN MOVEMENT ■■ MOVEMENT OF EXTRACTION LOCATION OF NOISE RECEPTOR

**EXTRACTION FACE** 

PROPOSED BERM

EXISTING ENTRANCE/ EXIT

#### OPERATIONS NOTES

(355) EXISTING ELEVATION PROPOSED ELEVATION

. THIS PLAN DEPICTS A SCHEMATIC OPERATIONS AND REHABILITATION SEQUENCE FOR THIS PROPERTY BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION. PHASES SHOWN ARE SCHEMATIC AND MAY VARY WITH MATERIAL QUALITY, SITE HYDROLOGY AND HYDROGEOLOGY OR MARKET DEMAND. PHASES DO NOT REPRESENT ANY SPECIFIC OR EQUAL TIME PERIOD. EXTRACTION SHALL GENERALLY FOLLOW THE SEQUENCE SHOWN. WHEN PARTIAL REHABILITATION OF A PHASE IS POSSIBLE IT SHALL BE CARRIED OUT. NOT WITHSTANDING THE EXTRACTION AND

P. REFER TO DRAWING 1 OF 5, EXISTING FEATURES, FOR A DESCRIPTION OF EXISTING VEGETATION AND BUILDINGS WITHIN THE 120m BOUNDARY AND ON SITE. B. SITE PLAN OVERRIDES ARE LISTED IN THE SITE PLAN OVERRIDE TABLE SHOWN ON THIS PAGE.

REHABILITATION PROCESS ABOVE, DEMAND FOR CERTAIN PRODUCTS OR BLENDING OF MATERIALS MAY REQUIRE SOME DEVIATION IN THE EXTRACTION AND REHABILITATION PHASING. ANY MAJOR

DEVIATIONS FROM THE OPERATIONS SEQUENCE SHOWN WILL REQUIRED APPROVAL FROM MNR.

I. RESOURCE INFORMATION WAS OBTAINED FROM BOREHOLES DRILLED BY JEGEL ENGINEERING IN 2004 AND TEST PITS DUG BY ZOLTON KATONA, ON NOVEMBER 13, 2003.

#### EXTRACTION/PROCESSING/HAULING INFORMATION

. TOTAL AREA TO BE EXTRACTED IS 66.44 HECTARES. 6. MAXIMUM NUMBER OF TONNES OF AGGREGATE TO BE REMOVED FROM THE SITE IN ANY CALENDAR YEAR IS 3 MILLION TONNES.

EXTRACTION OF THE AMABEL FORMATION WILL TAKE PLACE IN ONE 35m (MAXIMUM) BENCH) REFER TO GOLDER ASSOCIATES LTD. REPORT AND TECHNICAL RECOMMENDATIONS. THE EXTRACTION OF THE AMABEL FORMATION WILL BE TO A MAXIMUM DEPTH OF ±249 TO 251m A.S.L. AND WILL INCLUDE DRILLING AND BLASTING OF BEDROCK, LOADING WITH FRONT END LOADERS AND TRANSPORTING BY TRUCK OR CONVEYOR TO THE PLANT FOR FURTHER PROCESSING. REFER TO SECTIONS ON DRAWING 4 OF 5, FOR FURTHER DETAILS.

PORTABLE AND STATIONARY PROCESSING EQUIPMENT (CRUSHING, SCREENING AND WASHING), WILL

BE USED ON SITE AND WILL BE LOCATED IN AREA 1, WITHIN THE TEMPORARY PLANT SITE AREA, AND FINALLY ON THE QUARRY FLOOR. OTHER EQUIPMENT TO BE USED IN THE OPERATION OF THE QUARRY MAY INCLUDE THE USE OF TRUCKS, LOADERS, BULLDOZERS, SCRAPERS, DRILL TRACTORS CONVEYORS AND OTHER RELATED EQUIPMENT. PROCESSING EQUIPMENT, STACKERS AND PRODUC STOCKPILES WILL NOT EXCEED 20 METRES IN HEIGHT AND WILL BE LOCATED IN THE PROCESSING AREA. IT IS ANTICIPATED THAT THERE WILL BE NO STORAGE OF EXPLOSIVES ON SITE. HOWEVER. SHOULD THERE BE A NEED TO STORE EXPLOSIVES ON SITE, THEY WILL BE STORED WITHIN AREA 1 AND MEET THE REQUIREMENTS OF THE APPLICABLE FEDERAL LEGISLATION.

MATERIAL FROM OTHER LICENCED PROPERTIES (EG. SAND) MAY BE IMPORTED INTO THE SITE FOR BLENDING AND CUSTOM PRODUCTS AND WILL BE STOCKPILED WITHIN AREA 1. ANY EXCESS SURFACE WATER WILL BE DISCHARGED TO THE EXISTING POND IN THE SOUTHWEST PORTION OF THE SITE OR TO A NEW CONSTRUCTED WETLAND IN THE SOUTHWEST CORNER OF THE SITE. A PERMIT TO TAKE WATER UNDER THE ONTARIO WATER RESOURCES ACT WILL BE OBTAINED FROM MOE, AS REQUIRED PRIOR TO ANY PUMPING OF WATER OCCURRING ON SITE. 3. DEMOLISH OR RELOCATE BUILDINGS LOCATED WITHIN THE EXTRACTION AREA AND WITHIN THE PROPOSED INTERNAL HAUL ROAD. NON-INERT DEBRIS FROM BUILDING DEMOLITION WILL BE MOVED OFF-SITE TO BE RECYCLED (EG. STEEL) OR TAKEN TO AN APPROVED DISPOSAL SITE. CLEAN INERT FILL (MEETING THE STANDARD MOE GUIDELINES FOR FILL), SUCH AS BRICKS, STONE OR CONCRETE WITHOUT REBAR MAY REMAIN ON-SITE TO BE USED FOR REHABILITATION OF ABOVE WATER

THERE MAY BE RECYCLING OF MATERIAL (ASPHALT AND CONCRETE) ON THIS SITE. MATERIAL IMPORTED FOR RECYCLING WILL BE STORED IN SEGREGATED STOCKPILES WITHIN THE STOCKPILING AND PROCESSING AREA RECYCLABLE ASPHALT MATERIALS WILL NOT BE STOCKPILED WITHIN 30m OF ANY WATER BODY

OR MAN-MADE POND; OR 2m OF THE SURFACE OF THE ESTABLISHED WATER TABLE. ANY REBAR AND OTHER STRUCTURAL METAL MUST BE REMOVED FROM THE RECYCLED MATERIAL DURING PROCESSING AND PLACED IN A DESIGNATED SCRAP PILE ON SITE WHICH WILL BE REMOVED ON AN ON-GOING BASIS. REMOVAL OF RECYCLED AGGREGATE IS TO BE ONGOING.

ONCE THE AGGREGATE ON SITE HAS BEEN DEPLETED THERE WILL BE NO FURTHER IMPORTATION OF RECYCLABLE MATERIALS PERMITTED. ONCE FINAL REHABILITATION HAS BEEN COMPLETED AND APPROVED IN ACCORDANCE WITH THE SITE PLAN, ALL RECYCLING OPERATIONS MUST CEASE. STOCKPILED ASPHALT WILL ONLY BE PLACED WITHIN THE PLANT SITE AREA WHERE

DEWATERING MAINTAINS A MINIMUM OF 2m BETWEEN THE GROUNDWATER AND THE BASE OF . ALL BUILDINGS, EQUIPMENT, SCRAP AND MACHINERY ASSOCIATED WITH THE EXTRACTION

### OPERATIONS WILL BE REMOVED UPON COMPLETION OF EXTRACTION.

HYDROGEOLOGICAL INFORMATION I. HYDROGEOLOGICAL INFORMATION WAS OBTAINED FROM THE REPORT PREPARED BY AECOM (FORMERLY GARTNER LEE LIMITED), DATED FEBRUARY 2009. 2. THE WATER TABLE IN THE VICINITY OF THE QUARRY FOOTPRINT VARIES BETWEEN ±278.00m ASL TO

TECHNICAL RECOMMENDATIONS - HYDROGEOLOGY, SHEET 3 OF 5, FOR MONITORING

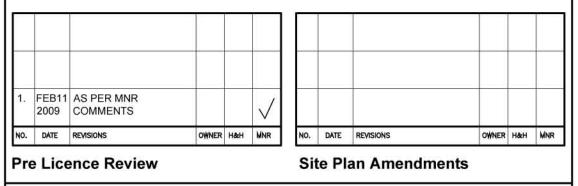
RECOMMENDATIONS. . SURFACE DRAINAGE ON THE QUARRY FLOOR WILL BE DIRECTED TO LOW AREAS (SUMP) FOR STORAGE PRIOR TO USE IN THE GROUNDWATER RECHARGE SYSTEM (GRS) OR TO THE SURFACE. SEE NOTE 7. ALL PROCESSING WATER USED IN THE WASHING PROCESS OR FOR POST CONTROL WILL BE RECYCLED THROUGH A SERIES OF SILTATION PONDS AND RE-USED. THERE SHALL BE NO OFF-SITE

±283.00m ABOVE SEA LEVEL (REFER TO HYDROGEOLOGICAL REPORT LISTED ABOVE). REFER TO

DISCHARGE OF PROCESSING WATER. NOISE MITIGATION INFORMATION 14. NOISE MITIGATION MEASURES ARE TAKEN FROM A REPORT BY AERCOUSTICS ENGINEERING LIMITED,

NOTES CONTINUED BELOW

DATED FEBRUARY 2009.



Offices in Markham and Cambridge

**Project Name** 



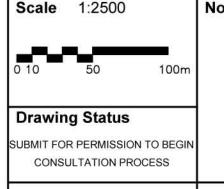
Toronto, Ontario (416) 423-1300

55 Industrial Street

t. Marys Cement Inc. (Canada)

## ST. MARYS FLAMBOROUGH QUARRY

PART OF LOT 1, LOTS 2 AND 3 - CONCESSION 11 GEOGRAPHIC TOWNSHIP OF EAST FLAMBOROUGH CITY OF HAMILTON



Drawn S.J.P.

Drawing Title

Checked G.D.H./ B.J. Issue Date FEB 2009

Project Number

**OPERATIONAL** 

**Drawing Number**