PIT LOCATION

PART OF LOT 80, CONCESSION 1 W.P.R. AND PART OF THE ORIGINAL ROAD ALLOWANCE BETWEEN LOTS 80 & 81 CONCESSION W.P.R.

(GEOGRAPHIC TOWNSHIP OF TINY) (TOWNSHIP OF TINY)

COUNTY OF SIMCOE

50 0 25 50 100 150 200 250 METRES

1 : 2500

C.T. STRONGMAN O.L.S.

PIT LICENSED TO:

CEDARHURST QUARRIES & CRUSHING LIMITED
P.O. BOX 250
KING CITY, ONTARIO
L7B 1B2

CEDARHURST QUARRIES & CRUSHING LIMITED (SIBTHORPE PIT)

OPERATIONAL PLAN

NOTES:

SITE AREA CALCULATIONS
1. Licensed area = 42.6 hectares
2. Area to be extracted = 30.0 hectares

LICENSED AREA BOUNDARIES - FENCING / GATING
The south licensed area boundary, adjacent to lands owned by Cedarhurst Quarries & Crushing Limited and licensed under Aggregate Licence #3670 (Teedon pit), will not be fenced. The west, north and east licensed area boundaries will be fenced with 1.2 meter high post and page wire fencing prior to pit operations commencing. All unfenced boundaries will be clearly marked with steel t-bar painted orange and where possible placed at 30 meter intervals.

Access to the pit will be through the Teedon pit (Aggregate Licence #3670) from the gated entrance onto Darby Road. The entrance to the Darby Road shall be gated and locked when the Teedon / Sibthorpe pit properties are not in use.

TREE REMOVAL / FOREST MANAGEMENT
Tree cutting will only occur between September 1st and April 15th. In any year that cutting is to occur between February 1st and April 15th, a qualified biologist will first conduct site visits to screen for active nests of early nesting bird species. For any nests found, the standards, guidelines and best management practices in 'Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales' (OMNR, 2010), or its successors, will be followed.

All trees within the extractive area will be gradually cut / cleared no more than 90 meters ahead of extractive operations (pit faces) and no less than 5 meters at any given time. Suitable trees will be harvested for saw logs and or fuel wood. Stumps and other wood refuse (waste wood, limbs & brush) may be removed from the site or piled on the site to be burnt and / or chipped. Appropriate permits shall be obtained for burning of stumps and other wood refuse.

Prior to pit operations commencing, a tree planting agreement shall be finalized with the Township of Tiny. This agreement shall apply to the planting of trees on Blocks 1-5, to be identified on the site plans of the Teedon pit, Aggregate Licence #3670. Establishment of the planting blocks will be subject to a site plan amendment on the Teedon pit site plans. No pit operations are to take place on this licensed property (Sibthorpe pit) until such time that the site plan amendment for the Teedon pit is approved.

STRIPPING OF TOPSOIL / OVERBURDEN

Top soil and overburden will be stripped in advance of aggregate extraction and stockpiled at various locations on the licensed property, to be used for on site rehabilitation. Top soil and overburden will also be placed in berms (see locations on site plan) along portions of the north, east and south limits of extraction. Completed portions of the berms will be seeded with a mix that allows for natural succession. Secondary growth generated through natural succession shall be maintained on the berms until such time removal of the berm is required for site rehabilitation. Thereafter these areas shall be reseeded and reforested.

EXTRACTION / MAXIMUM NUMBER OF LIFTS AND MAXIMUM HEIGHT

Based on the letter of opinion / hydrogeological assessment undertaken by Alpha Environmental Services Inc. (April 12, 2011), the maximum depth of extraction will vary across the site with an final pit floor elevation varying from 240.5 meters in the west portion to 256.3 meters in central portion and to 253.7 meters in the east portion of the site. Following each lift, a minimum of 3 test holes will be dug prior to commencement of the next lift, to probe for the water table and ensure that ground water will not be encountered at an unexpected upper elevation. Should the water table vary upwards no extraction shall occur within 1.5 meters of the water table.

There will be a maximum of 5 lifts.

Excavation may be undertaken with front end loaders and / or excavators.

Pit faces shall be in compliance with the regulations administered by the Ministry of Labour.

EQUIPMENT TO BE USED ON SITE

General types of equipment to be used in the operation of the pit will include (but not be limited to) bulldozers, excavators, front-end loaders, dump trucks and portable crushing / screening plants (crushing / screening equipment and conveyors). The licensee shall ensure that, if required, processing equipment used has the appropriate Environmental Compliance Approval / Certificate of Approval (under regulations governed by the Ministry of the Environment).

Any construction equipment used to prepare the site, such as bulldozers, excavators, etc. must comply with MOE publication NPC-115.

MAXIMUM TONNAGE OF MATERIAL TO BE REMOVED FROM THE LICENSED PROPERTY

A maximum of 600,000 tonnes of aggregate may be removed from the site in any given year.

Upon issuance of the Aggregate Licence for this pit site a note / condition shall be added onto the Operational Site Plan for the Teedon Pit (Aggregate Licence #3670) placing a maximum of 600,000 tonnes of aggregate that can be transported from the Teedon Pit property onto Darby Road. This tonnage condition includes all aggregate being removed from this pit property (Sibthorpe Pit) and the Teedon Pit property (Aggregate Licence #3670). This condition will also be added to the licence.

FUEL HANDLING / STORAGE AND SERVICING

Depending on area contracts / projects, portable fuel tanks may be placed on site (on the pit floor) from time to time, to be used for fueling of equipment on site. Fuel and lubricants may be stored on site. Fuel storage shall be in compliance with the appropriate regulations.

Equipment used on site may be serviced on site. Servicing of equipment may take place at any time with no restricted hours.

BUILDINGS / STRUCTURES

No buildings or other structures (i.e. weigh scales) will be placed on the licensed property.

SCRAP

No scrap shall be placed on the licensed property.

STOCKPILING OF ONSITE TOPSOIL / OVERBURDEN

Topsoil and overburden will be stripped in advance of aggregate extraction, placed in stockpiles within the area of extraction (temporarily or until used for direct site rehabilitation) and placed in berm locations as identified on this site plan. The earth berms will be a maximum of 15 meters in height and sloped at 2:1, placed 3 meters back from the licensed area boundary. Stockpiles of topsoil / overburden may be placed up to 3 meters from the north and east licensed area boundaries, up to the south licensed area boundary and up to the west limit of extraction. All top soil and overburden will be used on site for progressive / final rehabilitation.

PROCESSING / STOCKPILING OF AGGREGATE

Portable crushing and screening plants (processing operations) will be operated on the licensed property periodically. The plants will be equipped with dust suppressing devices (water spray bars) and have appropriate Certificates of Approval as required under Provincial regulations. Processing operations will be located as close as possible to active pit faces. Stockpiles of aggregate will follow extractive / processing operations and be placed on the active pit floor as close as possible to active faces. Some aggregate may be removed from the pit faces and trucked off site directly to job sites or market.

HOURS OF OPERATION

Hours of operation are limited to 6:00 A.M. to 7:00 P.M. (Monday to Friday) and 7:00 A.M. to 12:00 P.M. on Saturdays. Crushing and screening (processing) is limited to Monday to Friday (7:00 A.M. To 7:00 P.M.). No pit operations will occur on Sundays.

EROSION / SEDIMENT CONTROL

Erosion and sediment control (silt fencing, stone silt control barriers etc.) will be undertaken at the time pit operations require implementation to ensure that any surface water runoff from disturbed area does not carry silt off of the disturbed area on the seasonal surface water drainage course identified on this site plan.

ARCHAEOLOGICAL

1. The licensee shall hold the archaeological collections, including copies of study material and original notes generated during the course of research, in trust, unless it is transferred to an appropriate public institution as per the terms and conditions of holding a professional license.
2. Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the Ontario Heritage Act.
3. The Cemeteries Act requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries, Ministry of Small Business and Consumer Services.

IMPORTED MATERIALS

A) Reclaimed asphalt, reclaimed concrete, processed aggregate and topsoil / fill may be imported onto the Licensed property for transfer or processing. Storage of these materials will be temporary as the material will be sold and / or used for construction projects.

Recycling of asphalt and reclaimed concrete is permitted on this site.

Recyclable asphalt materials will not be stockpiled within 30 meters of any water body or man made pond and must be at least 2 meters above 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 and other imported materials as mentioned above is to be on-goining.

Once the aggregate on site has been depleted there will be no further importation of material not used for rehabilitation.

Once final rehabilitation has been completed and approved in accordance with the site plan, all importation and recycling operations must cease.

Clean topsoil / fill brought onto the site for transfer or processing shall be tested at the source before it is deposited on site, to ensure that the material meets the Ministry of the Environment's criteria under Table 1 of the Ministry of the Environment's Soils, Ground Water and Sediment Standards for use under Part XV.1 of the Environmental Protection Act. Sampling results will be provided to The Ministry of Natural Resources and / or The Ministry of the Environment upon request.

Notwithstanding Condition 1, where the imported material is not being placed within 1.5 meters of the surface, the criteria under Table 1 for Sodium Absorption Ratio and Electrical Conductivity do not have to be met.

B) Pit run and / or processed aggregate may be imported onto the licensed property, stockpiled and used for blending, processing or transfer purposes.

C) Clean inert fill may be imported to facilitate the establishment of 3:1 (horizontal:vertical) slopes on the final pit faces. The Licensee must ensure that the material is tested at the source, before it is deposited on site, to ensure that the material meets the Ministry of the Environment's criteria under Table 1 of the Ministry of the Environment's Soils, Ground Water and Sediment Standards for use under Part XV.1 of the Environmental Protection Act. Sampling results will be provided to The Ministry of Natural Resources and / or The Ministry of the Environment upon request.

Notwithstanding the above (B), where the imported material is not being placed within 1.5 meters of the surface, the criteria under Table 1 for Sodium Absorption Ratio and Electrical Conductivity do not have to be met.

SCREENING OF SITE

The residents to the east will be screened with a natural forested area located on unlicensed property owned by the licensee. The area to the west of the licensed property will be screened by a natural forested area. The area to the north of the quarry is well forested with no nearby residences.

NOISE MITIGATION MEASURES

1. As extraction proceeds westward and eastward in Phases 1 and 2, face ridges on each lift (approximately 10 meters in height) shall be maintained at the east and west natural limits until total extraction is completed to the required face ridges at these limits. Detail on face ridging is illustrated on Extraction Procedures cross sections on Sheet 5 of these site plans.

2. During crushing operations in the Phase 3 area, 5 meter high earth berms are to be constructed along the north and south boundaries (see locations on this site plan) of the licensed property (3 meter setback from boundaries adjacent to land not owned by licensee), extending 50 meters ahead of the working face, and remaining in place for 50 meters behind the working face, such that the line between the portable crushing plant and any nearby points of reception is obstructed by a 100 meter length of earth berm.

3. Prior to mining of the final 150 meters from the eastern licensed area boundary in Phase 3, a 10 meter high earth berm is to be constructed along the length of the eastern licensed area boundary (see location on this site plan). The berm will taper off at 2:1 slopes to match the aforementioned 5 meter high berms (see note #2 above), along the north and south licensed area boundaries.

4. The crushing plant is to be situated within 30 meters of the working pit face in the Phase 3 area, in order to maximize sound attenuation.

5. A maximum of three (3) loaders will be permitted to operate in conjunction with crushing operations being undertaken within the Phase 3 area.

6. If berm construction in the Phase 3 area is not viable, a single screening plant could operate along with a maximum of two (2) loaders, provided the plant is situated a minimum of 170 meters from the east limit of extraction (licensed area boundary).

7. Given the close proximity of Phase 3 to controlling receptors, equipment sound levels must be measured and confirmed within acceptable limits prior to the extraction of the Phase 3 area.

8. It is the obligation of the licensee to maintain noise levels to within allowable and acceptable limits.

9. The licensee must respond to objections / concerns from the residents or the Ministry of the Environment relating to noise. If deemed appropriate by the Ministry of the Environment further mitigation measures and monitoring of noise shall be implemented.

10. Should it be determined that noise violations under the Environmental Protection Act are occurring from pit operations, pit operations relating to the noise impact shall cease and the operator shall implement further mitigation measures to be determined by a noise study. Operations relating to the noise impact may again commence upon written clearance from the Ministry of the Environment.

MINING / EXTRACTION SEQUENCE (phasing of extraction / progressive rehabilitation)

The pit will be excavated, operated and rehabilitated using a 3 phase concept. Phases 1 and 2 may be operated on concurrently and Phases 1 and 3 may be operated on concurrently after complete rehabilitation of the Phase 2 area. Phase boundaries will be clearly marked with steel t-bar painted orange. No more than 50% of total extractive area (15 hectares) will be disturbed at any given time.

PHASE 1 (12.7 hectares)
Aggregate extraction will commence along the south licensed area boundary adjacent to the Teedon pit property (see location on site plan) and proceed northward, westward and eastward. Aggregate may be extracted concurrently in multiple lifts with lift heights and direction of extraction varying based on quality and location of aggregate required.

As limits of extraction are reached on each lift minimum 3:1 sloping will be undertaken through cut and fill and / or infilling with on site unmarketable materials. Progressive slope rehabilitation on each lift will be completed dependent on the area of pit floor required for extraction, processing, stockpiling and haulage access. Slopes will be graded, topsoil applied, seeded and planted with tree species as identified in the Tree Planting Agreement made with the Township of Tiny.

As the final pit floor is reached progressive rehabilitation of the pit floor will be undertaken dependent on the area of pit floor required for extraction, processing, stockpiling and haulage access. The final pit floor will be graded, topsoil applied, seeded and planted with trees as noted above.

Site rehabilitation will be monitored and measures undertaken as required (e.g. grading of eroded areas, additional seeding and replacement tree planting)

PHASE 2 (10.6 hectares)
Aggregate extraction will commence along the east phase boundary and proceed westward to the limit of extraction. Extraction and progressive rehabilitation will be undertaken as identified in Phase 1.

PHASE 3 (6.7 hectares)
Prior to extraction proceeding into Phase 3, all of the Phase 2 area (10.6 hectares) shall be rehabilitated. Aggregate extraction and progressive rehabilitation will be undertaken as identified in Phase 1. Upon complete extraction of the Phase 3 area the total disturbed area within the licensed property will be completely rehabilitated within 2 years thereafter.

SPILLS RESPONSE PLAN

All employees and contractors must obey the following instructions when handling potential contaminants on the licensed property. Failure to comply with the following may result in the immediate dismissal of such employee.

All employees and contractors handling fuel and / or potential contaminants will be instructed as to the proper, safe handling of such fuels / contaminants.

Potential contaminants, i.e. fuel, will be stored and handled as required by Provincial legislation.

All spills or release of contaminants must be cleaned up immediately and transported to an approved waste disposal site by a licensed hauler. Any spill must be immediately contained to prevent further spread, i.e. excavate and contain oil soaked material in a loader bucket until disposal can be arranged.

All spills or release of contaminants must be immediately reported to the Ministry of the Environment Spills Action Centre by telephone at 1-800-268-6060.

Employees and contractors working on site will be informed and required to comply with this plan.

OVERRIDE OF REGULATIONS

The following conditions / notes vary from the Provincial Standards that apply to aggregate licenses - 5.1, 5.2, 5.10.1 & 5.13.1

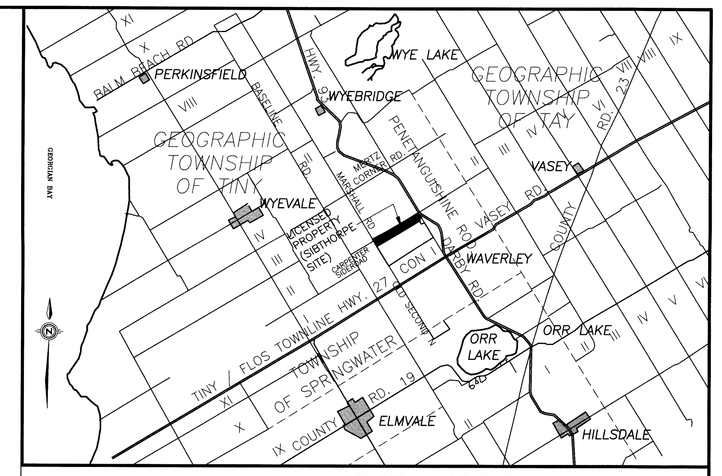
5.1 (fencing) - The south licensed area boundary will not be fenced as the lands to the south are owned and licensed (Lic. # 3670 - Teedon Pit) under the Aggregate Resources Act to Cedarhurst Quarries & Crushing Limited. The north and west licensed area boundaries will not be fenced due to the large forested area which abuts the licensed area boundaries. All unfenced licensed area boundaries will be clearly marked as per site notes on this site plan.

5.2 (gate) - The entrance onto the licensed property from the Teedon Pit property will not be gated as the entrance onto the Teedon pit property (owned by Cedarhurst Quarries & Crushing Limited) from Darby Road is gated.

5.10.1(excavation setback) - No excavation setback will exist along the south licensed area boundary as the property to the south is owned and licensed (Lic. #3670 Teedon Pit) under the Aggregate Resources Act to Cedarhurst Quarries & Crushing Limited. The final pit floor elevation along the common boundary of the two licensed properties will be the same.

No excavation setback will exist along the east licensed area boundary as the adjacent property is under the same ownership as the licensed property (K.J. Beamish Construction Co. Limited).

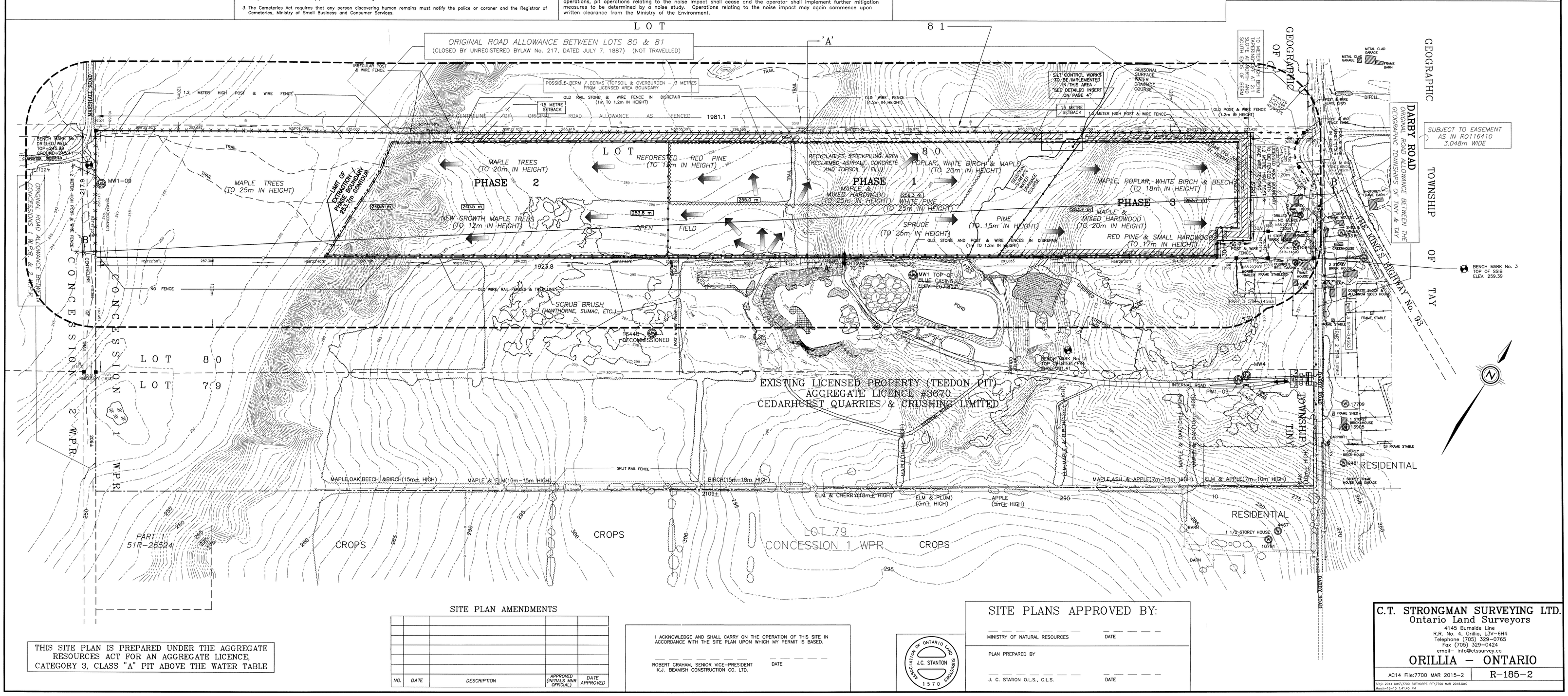
5. 13.1(stockpiles) - No setback will exist along the south licensed area boundary for stockpiling as the property to the south is owned and licensed (Lic. #3670 - Teedon Pit) under the Aggregate Resources Act to Cedarhurst Quarries & Crushing Limited.



KEY PLAN - SCALE 1:125,000

LEGEND

- LICENSED AREA BOUNDARY (SIBTHORPE PIT PROPERTY)
- LIMIT OF EXTRACTION
- LICENSED AREA BOUNDARY (AGGREGATE LICENCE #3670 - TEEDON PIT)
- INTERNAL ROAD
- BM BENCH MARK
- FENCE
- LOT LINE
- BOUNDARY OF OTHER LAND OWNED BY LICENSEE
- EXISTING FENCE
- LIMIT OF 120m INFORMATION ZONE
- BOUNDARY OF RECYCLABLES STOCKPILING AREA
- W DRILLED WELL
- ENTRANCE / EXIT EXISTING ENTRANCE / EXIT
- EXISTING ENTRANCE/EXIT TO EXISTING PIT
- 239.0 m FINAL PIT FLOOR ELEVATION
- PHASE LIMIT
- INTERNAL ROAD
- 'A' 'A' CROSS-SECTION
- 328 CONTOUR LINES
- BUSH LINE
- GATE
- FACE OF PIT
- LIMIT OF EXTRACTION
- POSSIBLE BERM / BERMS (TOPSOIL & OVERBURDEN) 3 METRES FROM LICENSED AREA BOUNDARY
- EXISTING BUILDING
- GENERAL DIRECTION OF EXTRACTION
- HYDRO POLE
- HYDRO POLE LINE
- MW MONITORING WELL


LOT
81
'A'
ORIGINAL ROAD ALLOWANCE BETWEEN LOTS 80 & 81
(CLOSED BY UNREGISTERED BYLAW No. 217, DATED JULY 7, 1887) (NOT TRAVELLED)
1.2 METER HIGH POST & WIRE FENCE
POSSIBLE BERM / BERMS (TOPSOIL & OVERBURDEN) - 3 METRES FROM LICENSED AREA BOUNDARY
15 METRE SETBACK
OLD RAIL STONE & WIRE FENCE IN DISREPAIR (1m to 1.2m IN HEIGHT)
CENTERLINE (OF) ORIGINAL ROAD allowance AS FENCED 1981.1
SILT CONTROL WORKS TO BE IMPLEMENTED IN THIS AREA - SEE DETAILED INSERT ON PAGE 4"
SEASONAL SURFACE WATER DRAINAGE COURSE
10 METER HIGH BERM SLOPE AT 3:1 SOUTH EDGE OF BERM
OLD WIRE FENCE (1.2m IN HEIGHT)
OLD POST & WIRE FENCE (1.2m IN HEIGHT)
SUBJECT TO EASEMENT AS IN RO116410 3.048m WIDE
DARBY ROAD
GEOGRAPHIC TOWNSHIP OF TINY
GEOGRAPHIC TOWNSHIP OF TAY
ORIGINAL ROAD ALLOWANCE BETWEEN THE GEOGRAPHIC TOWNSHIPS OF TINY & TAY
THE KING'S HIGHWAY No. 93
BENCH MARK No. 3 TOP OF SSIB ELEV. 259.39
BENCH MARK No. 1 DRILLED WELL TOP=245.98 GROUND=244.41
MW1-09
MW1 TOP OF BLUE CASING ELEV. 267.822
MW4
PW1-09
ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 1 W.P.R. & E.W.P.R.
CONCESSION 2 W.P.R.
CONCESSION 1 W.P.R.
LOT 80
LOT 79
LOT
REFORESTED - RED PINE (TO 12m IN HEIGHT)
MAPLE TREES (TO 20m IN HEIGHT)
MAPLE TREES (TO 25m IN HEIGHT)
NEW GROWTH MAPLE TREES (TO 12m IN HEIGHT)
OPEN FIELD
LIMIT OF EXTRACTION PHASE BOUNDARY 243.7m CONTOUR
PHASE 2
PHASE 1
PHASE 3
RECYCLABLES STOCKPILING AREA (RECLAIMED ASPHALT, CONCRETE AND TOPSOIL / FILL)
POPLAR, WHITE BIRCH & MAPLE (TO 20m IN HEIGHT)
MAPLE & MIXED HARDWOOD (TO 25m IN HEIGHT)
WHITE PINE (TO 25m IN HEIGHT)
SPRUCE (TO 25m IN HEIGHT)
PINE (TO 1.5m IN HEIGHT)
MAPLE, POPLAR, WHITE BIRCH & BEECH (TO 18m IN HEIGHT)
MAPLE & MIXED HARDWOOD (TO 20m IN HEIGHT)
RED PINE & SMALL HARDWOOD (TO 17m IN HEIGHT)
OLD STONE AND POST & WIRE FENCES IN DISREPAIR (1m TO 1.2m IN HEIGHT)
240.5 m
253.8 m
255.0 m
256.3 m
253.7 m
NO FENCE
OLD WIRE, RAIL FENCES & TREE LINE
SCRUB BRUSH (HAWTHORNE, SUMAC, ETC.)
POND
STEEPED LIMIT
TOP OF STEEP SLOPE
BENCH MARK No. 2 TOP OF STEEL PIN ELEV. 261.41
6440 DECOMMISSIONED
ENTRANCE TO PIT
SPLIT RAIL FENCE
MAPLE,OAK,BEECH &BIRCH(15m± HIGH)
MAPLE & ELM(10m-15m HIGH)
BIRCH(15m-18m HIGH)
ELM & CHERRY(18m± HIGH)
ELM & PLUM (5m± HIGH)
APPLE (5m± HIGH)
MAPLE ASH & APPLE(7m-15m HIGH)
ELM & APPLE(7m-10m HIGH)
MAPLE & OAK(10m± HIGH)
MAPLE & OAK(10m± HIGH)
MAPLE & BIRCH(10m± HIGH)
OAK(10m± HIGH)
2109±
EXISTING LICENSED PROPERTY (TEEDON PIT)
AGGREGATE LICENCE #3670
CEDARHURST QUARRIES & CRUSHING LIMITED
INTERNAL ROAD
PART 1 51R-26524
CROPS
LOT 79
CONCESSION 1 WPR
RESIDENTIAL
1 1/2-STOREY HOUSE W 10791
BARN
1 STOREY FRAME HOUSE W/ GARAGE
1 STOREY BRICK HOUSE W 13905
1 STOREY BRICK HOUSE W 9481
W 17709
FRAME SHED
FRAME STABLE
CONCRETE BLOCK & ALUMINUM SIDED HOUSE
METAL CLAD GARAGE
FRAME BARN
DITCH
POST & WIRE FENCE ENDS
GREENHOUSE
AIRPORT
JUNKIE
TRAILER
TRAILER STABLES
2 STOREY BRICK HOUSE
1 STOREY FRAME HOUSE
DRILLED WELL NO #REF!
DRILLED WELL CASING
SEPTIC BED
PART 1 51R-14563
PART 2 51R-14563
PART 3 51R-14563
PART 4 51R-14563
PART 5 51R-14563
PART 6 51R-14563
PART 7 51R-14563
PART 8 51R-14563
PART 9 51R-14563
PART 10 51R-14563
PART 11 51R-14563
PART 12 51R-14563
PART 13 51R-14563
PART