



Grey County Quarry Study Potential Options

A Presentation to Grey County Council

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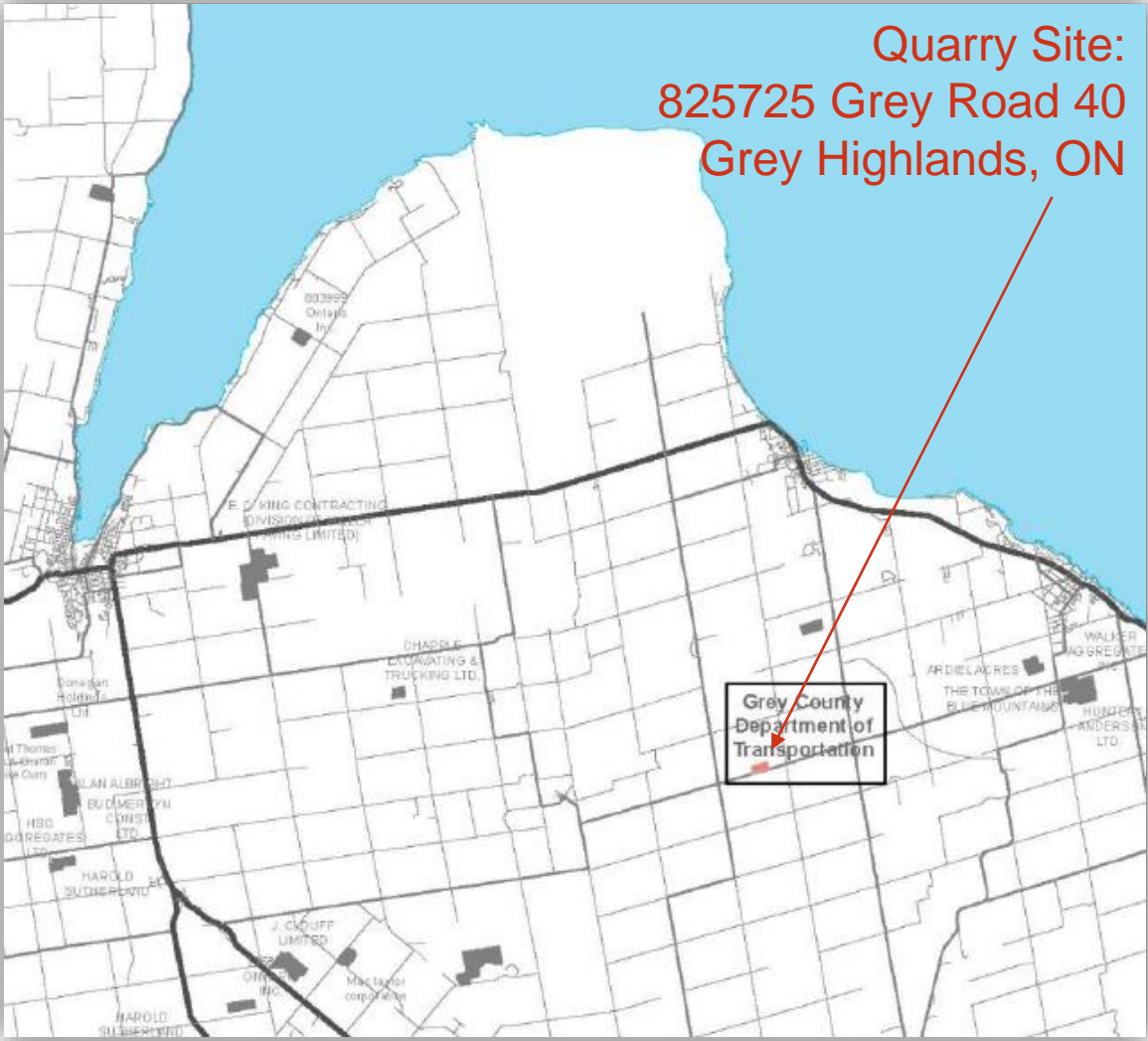
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The Grey County Quarry



- Property is approx. 100 acres. The quarry is approx. 50 acres.
- 1995-2001 Grey County operated the quarry under **Wayside Permits** (Avg. production 75k tonnes per year)
- Primary use of the aggregate had been for road maintenance and road shoulder work by the former Township of Euphrasia and the County
- 2002 Grey County obtained a **Class A Quarry licence** and operated the quarry for 11 years (Avg. production 62k tonnes)
- Quarrying operations (blasting and crushing) ceased in 2012, although stockpiled materials continued to be removed from site in subsequent years
- Primary use of the aggregate has remains largely for the County's own use
- There remains approximately 30k tonnes of material on site

To assist Grey County in evaluating several options regarding its ownership of the Grey County Quarry, including:

- Status quo **operation**;
- **Outsource** operation;
- **Expand** the operation;
- **Lease** the quarry;
- **Sell** the quarry.

The Study Team

Altus Group

- Peter Norman, Economics
- Grant Uba, Appraisal



Golder Associates

- Sean McFarland, Hydrogeology, Resource Estimates



Cuesta Planning

- Don Scott, Planning, Mapping



- Total production to date from the quarry has been 1.2 million tonnes
- Remaining aggregate resources ABOVE the water table are 1.7 million tonnes (+-10%)
- Potential aggregate BELOW the water table are 3.2 to 6.4 million tonnes
- The County's MNRF licence for the quarry required a MOE Permit to Take Water (PTTW). The County had a valid PTTW from January 1999 to March 2008. After expiry it was never renewed. The work of this report assumes it is renewed.
- Expansion potential:
 - North – Little potential due to environmentally protected lands
 - East or West – feasible based on initial findings
 - Below water table expansion – would require a category 2 licence and comprehensive environmental impacts studies
 - Approximate costs for studies and permits to expand below water table: **\$600,000**

Ontario-wide production: 160 mm tonnes / year

Midhurst district:

- 5-10 mm tonnes / year of crushed stone
- 481 total licences, but only 62 quarry licences + 5 pit&quarry
- About twice the number of quarries from 15 years ago
- Aggregate production in Grey County has been trending upward to 4.5mm tonnes in 2017
- 11 new Class A licences for pits (10) and quarries (1) issued in Grey County in the past 5 years.

#1 Status quo, Grey County Continuing Ownership, Holding as Inactive

- To make quarry Active – would require renewal of PTTW and possible reparations for years of operation without.
- Quarry can be maintained as inactive with a licensing fee of \$689 per year.
- Stockpiles can continue to be used or sold. Sales capped at 3,500 tonnes under minimal licence fee.

- **Con:** little revenue
- **Pro:** provides flexibility to revisit decision in the future

❖ **Third Most Favourable Option**

#2 Grey County Surrendering the licence, Rehabilitating the Quarry to a use permitted under the Niagara Escarpment Plan (“NEP”)

- For this option, Grey County would incur costs for
 - Amendments to the MNRF approved rehabilitation plan,
 - Amendments to the NEPDA for the rehabilitated use and an application for a NEC Development Permit to rehabilitate the former quarry.
 - Amendments to the rehabilitation plan to account for partial depletion of resources
 - Revised applications to the NEC
 - Grey County would incur the costs to rehabilitate the quarry.

- **Con:** high costs up front

- **Pro:** minimal

❖ **Least Favourable Option**

#3 Grey County Resuming Quarry Operations by Outsourcing Some or All Activities under the Existing licence

- 1) Re: own-use aggregate: the net costs with outsourced blasting and crushing – and accounting for longer haulage routes, will lead to higher costs for road aggregate than currently paying from the private sector
 - 2) Re: becoming a commercial operation: could be feasible, but raise the ire of local commercial operations.
 - 3) Current capacity is about 75k tonnes per year, but increased investment to increase capacity to 150mm tonnes per year required for commercial operations.
- **Con:** outsourcing fees may exceed value of purchasing aggregate at market
 - **Pro:** with proper scale, quarry could support insourced operation and market revenue

#4 Grey County Resuming Quarry Operations, Expanding the Quarry to Permit Below Water Table Extraction

- Significant studies and applications fees (approx. \$600k)
- Would have to apply for an increase in maximum annual extraction to 400k – 500k tonnes to support investment with commercial operations

❖ **Second Least Favourable Option**

- **Con:** high study and permit fees, no guarantee there will be demand for increased production
- **Pro:** significant increase in potential production (but with uncertainties)

#5 Grey County Leasing the Quarry to a Private Operator, Option for Below Water Table Extraction

- Option avoids major financial risks of undertaking the applications
- Existing licence could be transferred to tenant without the red tape of winding down a licence (eg remediation).
- Royalty values are hard to estimate:
 - The consultant is not aware of actual royalty rates being paid for pits and quarries in Grey County. However, the minimum royalty rate is typically set by the **minimum royalty rate of \$0.50 per tonne** paid for the removal of aggregate resources from Crown Land. The consultant has spoken with parties engaged within the aggregate industry in Ontario and anecdotal estimates of royalty rates are in the range of \$0.50 to **\$2.00 per tonne**, with the upper limited being the estimated rate for licensed properties located within an hour's drive of the GTA.
- It is recommended that the County lease by Tender thereby neutralizing the uncertainty risk over the royalties
- County would have to do drilling and more accurate resource quantity estimates before entering into a binding lease / royalty agreement – and would have to sort out PTTW issue prior to this.
- **Con:** default risk by tenant could add unexpected sudden costs.
- **Pro:** steady certain revenue stream, reduce application risk

#6 Grey County Selling the Quarry, Potential for Below Water Table Extraction

- Elimination of all risks related to the current ownership of the quarry
 - Paucity of market comparable (none recent in Grey County)
 - Tender process recommended in order to gain from the expectations of the industry.
 - Sale of property probably based on about \$1.00 per tonne extractable, discounted to Net Present Value. Based on above-water table resources that would be \$910k to \$1.45 mm depending on assumptions
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- **Con:** minimal.
 - **Pro:** eliminates ownership risks and allows for recapture of embedded investment



If you have any questions, please reach out.

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