

April 28, 2016

Mr. Larry Pevato
President
Tri-County Aggregates Ltd.
95 Kenhar Drive
North York, Ontario
M9L 1N2

Dear Mr. Pevato:

**RE: Tri-County Aggregates Proposed Tri-County Pit
Memorandum from R.J. Burnside & Associates Ltd., February 29, 2016.**

This letter provides a technical response to comments provided in the above referenced memo provided by Burnside on behalf of the Township of East Garafraxa. The primary issue relates to the interpreted high water table at the eastern corner of the site, near monitoring well MW7-14. Attached to this letter is an updated hydrograph of datalogger data collected at the site for reference.

Burnside has referenced certain monitoring data and elevation data for the adjacent Greenwood site, which is unavailable to us at this time. It would be helpful if the Township or Burnside would have provided this data in support of their interpretation. As we believe the Greenwood data should have been provided to the Township (and Burnside) as part of a public application process, we are unaware of a reason why this data could not be shared with us.

1) Integrity of monitor MW7-14

Monitor MW7-14 is not “physically compromised” as asserted by Burnside and does not need to be replaced. The well was installed using routine and typical hollow stem auger drilling methods by a fully Licensed and experienced drilling contractor under the supervision of a Professional Geoscientist. This include the placement of well pipe and monitoring screen into the hollow stem augers, gradual removal of the augers from the ground, and, simultaneous placement of a silica sand pack over the screen interval. The sand pack is constructed by pouring the sand into the augers while the augers are removed. As part of this process it is natural for the surrounding native material at the depth corresponding to the screened interval to “collapse” into the hole and mix with the sand pack. Sufficient sand was emplaced to ensure an adequate sand pack. This is noted on several of the borehole logs.

As noted in our previous correspondence, this does not represent any physical compromise of the well; it simply acknowledges the facts surrounding a normal well construction. The mixing of some natural aquifer material with the sand pack in no way interferes with the ability of the well to represent normal static water levels within that aquifer. Although the hydraulic conductivity estimate may be lower than expected, this is likely due to the composition of the sand and gravel unit (perhaps having a higher silt content) at this location. Again, this does not interfere with the ability of the well to represent natural static water levels within the aquifer.

Further, the well responds as expected on a short-term basis to pumping (e.g. during development or sampling), and as shown on the attached hydrograph exhibits a seasonal trend and variation in

water levels entirely consistent with other monitors on-site. This also indicates that the well is responding normally and providing representative measurements of the water table level at this location.

2) Established water table

Site Plan notes (e.g. Page 1, note #6) include the following: *THE WATER TABLE HAS BEEN ESTABLISHED FROM MONITORING OF ON AND OFFSITE MONITOR WELLS AND VARIES ACROSS THE SITE FROM 475.5 masl IN THE SOUTH TO 472 masl IN THE NORTH. EXCAVATION WILL REMAIN 1.5m ABOVE THE SEASONALLY HIGH WATER TABLE.*

The south end of the site is represented by location MW5-14. The December 2014 Hydrogeologic Assessment report (page 18) states “The established water table varies across the proposed extraction area from approximately 476.5 m at MW5-14 to 471.7 m at MW8-14”. The elevation listed for the southern end of the property (475.5 masl) on the existing Site Plan note appears to be a typographical error and should be revised to 476.5 masl.

We note that during the highest water table conditions observed at the site to date, the water table at MW5-14 and MW7-14 are similar in elevation, however over much of that period MW5-14 was slightly higher. Burnside has mistaken the Site Plan note as referencing specifically the MW7-14 location (only).

3) Water table contours

Burnside references some ponds on the adjacent Greenwood site when discussing the water table elevation contours presented in the December 2014 Hydrogeologic Assessment report. One pond referenced by Burnside at an elevation of 473 (Tri-County Pit drawing 3) appears to be from the Greenwood rehabilitation plan. That “pond” does not exist, further the pond elevation as shown is not supported by reported monitoring data collected at the Greenwood site and should in no way be used by Burnside to assess the accuracy of water table contours at the Tri-County Pit site.

The actual Greenwood site pond shown on the existing conditions diagram is over 2 m higher. In addition, the elevation estimate is based on air photo taken in April 2013 – which may not represent actual high water table conditions. This pond elevation could be affected by a number of factors and should in no way be used to project water table contours for the purposes of extraction planning at the Tri-County Pit site. Water table levels and divides in the surrounding landscape are of interest, and may affect the maximum extraction depths or rehabilitation pond levels on other sites, however have no direct bearing on the Tri-County Pit Site Plan.

We note that data presented for the adjacent existing Greenwood pit would indicate a water table slope from south to north, however as noted by Burnside at a much lower elevation. We are confident in the accuracy of the data collected at the Tri-County Pit site and cannot comment on the Greenwood data. We do however note that the monitoring network at the Greenwood sites is quite limited (e.g. only 2 wells on the existing adjacent pit and only 4 wells over the entire “East Pit”, with 3 of those wells within the southern portion of that site) and does not provide the special distribution that would allow for a detailed assessment of water table slope and/or divide locations.

4) Depth of excavation

Burnside has stated: *We would be satisfied to recognize that Greenwood's longer monitoring period has established a range of 1.56 m. Adding this to the low water level measured by Tri-*

County produces a high water level of 476.9. Accordingly, the maximum depth of excavation in this area should be to 478.4 and the final grade after restoration of topsoil should be 478.9.

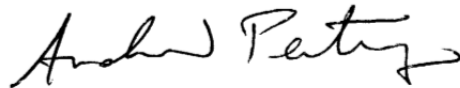
No actual extraction is currently proposed at MW7-14. To the west of MW7-14 a current extraction or pit floor elevation of 477.5 was shown, with rehabilitation to between 478 and 479. In addition, as shown on the rehabilitation plan, it appears that the Greenwood site proposes a rehabilitation contour of 478 just south of this area, which would imply extraction to 477.5. Some consistency of rehabilitation should be expected between the two sites in this area.

We suggest that in order to resolve the concern the extraction depth shown near MW7-14 be revised to 478.5, and the corresponding rehabilitation contour be revised to 479.

Burnside also states *Site monitoring should continue as planned and adjustment made if necessary based on a longer term results.* This was proposed by Tri-County from the beginning, and should be recognized in Burnside's review.

If you have any questions, or require further information, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew Pentney". The signature is fluid and cursive, with a long horizontal stroke at the end.

Andrew Pentney, P.Ge.
Hydrogeologist

Attached: Hydrograph