April 13, 2026

RE: R.W. Tomlinson Ltd. Brechin Quarry Site Plan Amendment Application
Aggregate Resources Act Licence #624846
Response to Public Comments
MHBC FILE 9137C
WSP FILE 20449322

On behalf of our client, R.W. Tomlinson Limited. ("Tomlinson"), we offer the following responses to your comments submitted on the Brechin Quarry Site Plan Amendment Application received during the 30-day consultation period.

The ARA licence for the below water quarry was approved in 2009. The Tomlinson Brechin Quarry has been operating below the water table for approximately 15 years. Tomlinson monitors groundwater levels monthly in monitoring wells on and around the quarry to assess impact from quarry dewatering in conjunction with groundwater level drawdown around the quarry. In addition, monthly surface water monitoring is conducted to assess quantity and quality of water discharged from the site. Both groundwater and surface water monitoring reports are submitted to the Ministry of Environment, Conservation and Parks annually for review and acceptance.

The purpose of the amendment is to permit a 6-metre deepening of the approved Brechin Quarry floor; remove a municipal road allowance which has been closed by the City of Kawartha Lakes and sold to Tomlinson; and update the licencee's address. Application materials for the amendment include a Level 1 and Level 2 Water Report (WSP, 2025) to assess the potential impacts of the proposed deepening; and redline updates to the *Aggregate Resources Act* ("ARA") Site Plan (MHBC, 2025) to reflect the proposed changes. The proposed amendment does not change the approved maximum annual tonnage limit; sequence of operations; or limits of extraction area.

Tomlinson has created a project website to provide access to the redlined Site Plan and the technical documents of the amendment application; and to outline the frequently asked questions for the proposal as outlined below. The link to the website is as follows: https://tomlinsongroup.com/brechin-quarry-technical-documents/.

Table 1: Summary of Responses to Community Comments

	General Commentary	Response to Community Comments
1.	Have cumulative impacts of the amendment application been assessed?	A cumulative impacts assessment of the deepened Brechin Quarry has been conducted, and findings are included in Section 7.2 of the Level 1 and 2 Water Report (WSP, 2025). The deepened Brechin Quarry has been specifically

		designed to limit the potential contribution to cumulative impacts on water supply wells in the vicinity of the quarry. This results in the area where the deepened Brechin Quarry is contributing 10% or greater of the cumulative drawdown not extending to any private water supply wells in the vicinity of the Brechin Quarry. As such, the modelling results indicate that the deepened Brechin Quarry will not significantly contribute to cumulative groundwater level drawdown at private wells when all of the quarries in the vicinity of the site are fully extracted. Site-specific data for the Tomlinson Brechin Quarry as well as publicly available information was used in the development of the Level 1 and 2 Water Report (WSP, 2025).
2.	What are the impacts on adjacent properties? How will they be protected?	The impact assessment related to private water supply wells on adjacent properties is presented in Section 7.1 of the Level 1 and 2 Water Report (WSP, 2025). The potential impacts as a result of the deepening of the Brechin Quarry during the operational phase of the quarry life were assessed separately from the rehabilitated conditions. Based on the results of the groundwater modelling, during operations, there are no water supply wells located within the one-metre incremental drawdown contour associated with the deepened Brechin Quarry. As such, negative impacts to water supply wells are not predicted as a result of the proposed deepening. Following rehabilitation of the Brechin Quarry, groundwater levels rise in the Bobcaygeon Formation and Gull River Formation compared to current conditions. As such, impacts to water supply wells as a result of the rehabilitation of the Brechin Quarry are not predicted. The proposed quarry deepening of the Brechin Quarry does not result in additional land use changes or surface water drainage alterations

		(i.e., there are no additional changes beyond those assessed as part of the impact assessment completed for the currently licensed Brechin Quarry). In addition, the proposed Brechin Quarry deepening will not affect the drawdown in the weathered bedrock beyond that which can be expected by the currently approved quarry development plan, Thus, the surface water impact assessment from the original hydrogeological/hydrological study for Brechin Quarry (Golder 2007) remains valid. Therefore, no additional surface water impact assessment is required at this time as it relates to the proposed deepening of the Brechin Quarry. An annual monitoring program and performance report will continue to be a requirement. This annual performance report will provide an assessment and interpretation of the surface water monitoring data and the groundwater level data that is collected in accordance with the monitoring program. The ongoing review of these monitoring data would ensure that quarry development is undertaken in a manner that does not negatively impact surface water and groundwater receptors in the area of the site. Since the Brechin Quarry became operational in 2011, 15 years of monitoring data have been collected and reported annually to the MECP and MNR. Based on the results of the groundwater modelling and the review of local water supply wells, it is concluded that water well interference complaints attributable to the proposed deepened Brechin Quarry are unlikely. Water well interference complaints will be responded to in light of the collected monitoring data and under the Complaints Response Program presented in Section 8.0 of the Level 1 and 2 Water Report (WSP, 2025). There are no anticipated impacts on adjacent properties based on the results of the Water Report which includes actual water level data

		collected monthly over 15 years. A complaints response program has been developed for the purpose of responding to well interference complaints from local water supply well users. A water supply restoration program consists of activities such as well system rehabilitation, well replacement or additional wells, and water treatment considerations.
3.	Monitoring is inherently reactive and may only identify impacts after irreversible changes to groundwater levels, wetlands, or sensitive ecosystems have already occurred. The site plan should include enforceable measures to prevent harm rather than respond after the fact.	The objectives of the monitoring program are to measure and evaluate the actual effects on water resources associated with long-term development of the deepened quarry, and to allow comparison between the actual effects and those predicted as part of the impact assessment. The long-term collection of monitoring data allows for the assessment of potential impacts in advance of the actual impact occurring, thus allowing time for the implementation of mitigative actions, as warranted. The monitoring wells at the Brechin Quarry have been strategically placed to assess the progression of the groundwater drawdown towards the Cranberry Lake Wetland to identifying changes in water levels before there are impacts to the wetland. Available groundwater level data from off-site monitoring wells and on-site monitoring wells along the western side of the Brechin Quarry are used to identify changes in groundwater level trends and complete ongoing impact assessments for the closest private wells located to the west of the site. The focus of the assessments is to identify potential impacts to off-site private wells before they occur. As such, the current operational plan of the quarry provides enforceable measures along with monitoring to confirm results of the operation are as expected and address any concerns in a timely manner.

4.	The Cranberry Lake Provincially Significant Wetland and associated drainage features depend on stable groundwater contributions. Even modest, long-term changes to groundwater flow or pressure may alter wetland hydroperiods, vegetation communities, or baseflows in ways that are difficult or impossible to reverse.	The Brechin Quarry is currently extracting below the groundwater table and has been for many years. Extraction is progressing towards the Cranberry Lake Wetland and monitoring has been in place for 15 years on a monthly basis to ensure negative impacts to the wetland do not occur. Annual reports are prepared and submitted to the MECP and MNR. At this time, there have been no effects on the wetland as a result of the development and operation of the Brechin Quarry over the last 15 years. The proposed quarry deepening of the Brechin Quarry does not result in additional land use changes or surface water drainage alterations (i.e., there are no additional changes beyond those assessed as part of the impact assessment completed for the currently licensed Brechin Quarry). In addition, the proposed Brechin Quarry deepening will not affect the drawdown in the weathered bedrock beyond that which can be expected by the currently approved quarry development plan, Thus, the surface water impact assessment from the original hydrogeological/hydrological study for Brechin Quarry (Golder 2007) remains valid. Therefore, no additional surface water impact assessment for the wetland is required at this time as it relates to the proposed deepening of the Brechin Quarry.
5.	The modelling and conclusions presented appear to rely on historical conditions. Extended drought periods, which are increasingly likely, could amplify quarry-related drawdown effects beyond those predicted in steady-state models.	An ongoing monitoring program is in place in the current Brechin Quarry Site Plan which was utilized in the assessments in the Level 1 and Level 2 Water Report (WSP, 2025). The assessment considers monitoring data up to 2024. In the future, if climate change leads to the increased frequency of drought conditions, less pumping would be required to maintain the quarry in an adequately dewatered state. Conversely, climate change could lead to increased precipitation in the future, thus resulting in a need for more frequent quarry

		dewatering to maintain the quarry in an adequately dewatered state. To account for potential future climate change, sensitivity analyses were undertaken by varying the recharge rate applied in the groundwater model by 20% (refer to Section 6.5 of the Level 1 and Level 2 Water Report (WSP, 2025)). The results showed a negligible incremental change to the drawdown in the weathered bedrock compared to the base case model.
6.	Independent Review should be completed, with more robust assessment of cumulative impacts under worst-case scenarios, and review of long-term regional groundwater sustainability.	The Ministry of Natural Resources, and Ministry of Environment, Conservation and Parks, have reviewed the application materials and amended site plans. Tomlinson is working with the ministries to address any comments received. Furthermore, since this site has been active for 15 years, with ongoing water monitoring activities, both the MNR and MECP are familiar with the site including groundwater and surface water conditions through annal monitoring and reporting. Both ministries have qualified persons to evaluate impacts from quarry activities.
7.	Anthropogenic noise significantly affects various behaviours and the physiology of birds, and has strong negative effects on reproductive responses. Effects on habitat use, stress, communication and fitness have all been well-documented across bird species and as a result of various industrial noises. Startle behaviour can be expected in migratory birds using habitat adjacent to quarry property, which is of particular concern for birds confined to pens nearby and breeding birds which are quick to abandon nesting attempts.	There are no additional noise impacts anticipated as a result of the proposed deepening of the quarry. The quarry is currently operating in accordance with noise mitigation measures and provincial standards reviewed by approval agencies. Notably, acoustic berms are in place to minimize and mitigate noise impacts from the operation and processing plant. In addition, noise levels should decrease as the extraction activities will be lower in the quarry. With the processing plant operating deeper in the quarry, the higher quarry walls will add to the mitigation of noise impacts. There is no proposed change to hours of operation. In addition, mitigation measures for blasting activities are incorporated on the Site Plan and no changes are proposed. Blasting mitigation measures include timing restrictions, blasts to occur in accordance with provincially approved

		blast design/limits and weather conditions to minimize pressure impacts.
8.	Many negative effects of quarry dust production are well-documented, including health hazards and environmental impacts. Alvar plants are incredibly sensitive to changes in their environment, including groundwater flow and drainage. Particulate matter settling on plants can prevent photosynthesis and inhibit growth, as well as contaminate water sources. Though the direct effects of quarry dust on loggerhead shrikes are unknown, there are concerns about the impacts on this endangered species. Quarrying below the water table causes significant hydrological disruption, which can lower groundwater levels over a wide area. Furthermore, hydrological changes may play a role in increasing wildfires in the area, which the alvar habitat, endangered birds and the wooden release pens are all vulnerable to.	The Brechin Quarry is already permitted to extract below the groundwater table. The site holds an Environmental Compliance Approval for air emissions; dust is managed on site as part of that approval. A Best Management Practices Plan for the control fugitive dust is in place for the site. As referenced in the Water Report, alvar plant communities are characterized by species that can tolerate extremeness in the moisture regime, high soil calcium levels and limited nutrient availability (Reschke et al., 1999(1)). The approved rehabilitation plan of the quarry includes the creation of alvar habitats, additional details are on the Site Plan. There is no change in operations that would impact natural heritage features or endangered species as part of the proposed deepening. See Response to Comment #2 relating to potential impact to groundwater levels. (1) Reschke, Carol, Ron Reid, Judith Jones, Tom Feeney and Heather Potter, 1999. *Conserving Great Lakes Alvars: Final Technical Report of the International Alvar Conservation Initiative*. The Nature Conservancy. Chicago, IL. 241 pp.
9.	Last year the water level fluctuated 4', a phenomenon never seen before on this lake. Whether this was due to quarry pumping, drought, snow melt; it caused severe damage to cottages on lower Dalrymple. How will existing water or drainage issues will be addressed before changes proceed?	The proposed quarry deepening of the Brechin Quarry does not result in additional land use changes or surface water drainage alterations (i.e., there are no additional changes beyond those assessed as part of the impact assessment completed for the currently licensed Brechin Quarry). Thus, the surface water impact assessment from the original hydrogeological/hydrological study for Brechin Quarry (Golder 2007) remains valid. The existing quarry sump dewatering system in the north extraction area is presently operating at below 100 Litres per second. This is below the maximum permissible discharge rate under the

		current sump configuration of 119 Litres per second and well below the final sump configuration which allows offsite discharge at a rate of 211 Litres per second.
10.	Why weren't all the residents of Lake Dalrymple notified of this request?	Notification of the proposed quarry deepening was conducted in accordance with the requirements of the ARA. In addition, the proposed deepening was posted on the Environmental Registry of Ontario ("ERO") for public comment. We understand that the residents of Lake Dalrymple have questions and concerns and we are committed to respond to those questions through this letter.
11.	How do the proposed amendments alter water-taking, pumping or discharge practices?	There are no changes proposed in the pumping or discharge practices of the quarry. The proposed deepening of the Brechin Quarry by 6 metres does not result in an increase in water taking on-site or discharge off-site beyond that currently approved for the site. In addition, the deepening does not alter current discharge practices.
12.	How will the additional pumping of quarry water change the character of the water system?	The proposed deepening of the Brechin Quarry by 6 metres does not result in an increase in water taking on-site or discharge off-site beyond that currently approved for the site. As discussed, the proposed quarry deepening does not result in land use changes or surface water drainage alterations. See response to comment #5.
13.	In 2017 the Buckle took place in the Brechin Quarry which resulted in a rapid loss of the level of the water in the Green Beds. The water stabilized but did not recover. There is concern that taking the top layer off the aquifer may cause a buckle or dewatering event.	The buckle at the Brechin Quarry resulted in a decrease in the pressure within the green-beds of the Gull River Formation beneath the Brechin Quarry, but this depressurization was localized and did not extend to off-site private wells. The green-beds beneath the Brechin Quarry are highly transmissive but have very low storage. As such, when the buckle occurred at the site there was a limited amount of water released.

		The groundwater modelling and impact assessment presented in the Level 1 and Level 2 Water Report (WSP, 2025) considered the potential effects of the 6-metre quarry deepening and its effect on water levels in the underlying Gull River Formation based on the 2017 post-buckling water levels. As noted in the Water Report negative impacts to private wells as a result of the proposed 6-metre quarry deepening are not predicted.
14.	When Tomlinson talks about rehabilitation from their water drawdown only contributing 10% to the final lake scenario, what about the other quarries contributing the rest of the 90%? Will a giant lake be created?	A cumulative impacts assessment of the deepened Brechin Quarry has been conducted, and findings are included in Section 7.2 of the Level 1 and 2 Water Report (WSP, 2025). The deepened Brechin Quarry has been specifically designed to limit the potential contribution to cumulative impacts on water supply wells in the vicinity of the quarry. This results in the area where the deepened Brechin Quarry is contributing 10% or greater of the cumulative drawdown that does not extend to any private water supply wells in the vicinity of the site. As such, the modelling results indicate that the deepened Brechin Quarry will not significantly contribute to cumulative groundwater level drawdown at private wells when all of the quarries in the area are fully extracted. Rehabilitation of all the quarries in the area is not designed to create one large lake. Each quarry has its own rehabilitation plan, with varying differences.
15.	Based on the results of the impact assessment presented in the Golder report (data 20 years old) that it would be expected that mitigation measures would be required during the later part of the operational period. What part of the operational period is it currently? What mitigation measures are currently in place?	The Brechin Quarry is currently operating in phases 1 and 2 below the groundwater level within the Northern Extraction Area. There are no mitigation measures required at this time relate to water resources. However, as part of the groundwater and surface water monitoring program, a trigger level program has been implemented to ensure water level changes are observed before impacts occur. The trigger program spells out the mitigation measures

		required based on the ongoing assessment of the monitoring data.
16.	Concern over lifting the Bobcaygeon lower layers and the top layer of the Gull River Formation from the aquifer. The WSP report states that there may be "cells" within the green beds making effect from the dewatering more isolated, but they are not sure. There is question regarding taking these beds off, without public discussion to address residents worries about this serious undertaking.	The groundwater modelling and impact assessment presented in the Level 1 and Level 2 Water Report (WSP, 2025) considered the potential effects of the 6-metre quarry deepening (to the top of the Gull River Formation) and its effect on water levels in the underlying Gull River Formation. This deepening application does not involve extraction of the green beds of the Gull River Formation.
17.	Why is there such a need to go below the water table? Why not expand the site vertically leaving the gull river out of the equation? Is the quality of the stone at the level of the green beds that much better, denser, more profitable to cause issues with the water supplies of the wetlands?	The existing Brechin Quarry is approved to extract bedrock resources from below the water table. The proposed depth of the quarry is limited to the bottom of the Bobcaygeon Formation/top of the Gull River Formation (i.e., the green beds of the Gull River Formation will not be extracted). The purpose of the amendment is to access additional high-quality bedrock resources. With respect to wetland, see responses to Comment #2 as it relates to the surface water impact assessment.
18.	Recommendation that operations are minimized between April 15th-August 30th, with expanded extraction depth lowering occurring outside of this window when the impacts to the alvar habitat, loggerhead shrike are least disruptive.	The proposed deepening of the Brechin Quarry has no influence on the near surface groundwater or surface water environment and thus no impact on alvar or loggerhead shrike habitat.
19.	What are the long-term impacts of the amendment application?	The impact assessment related to private water supply wells on adjacent properties is presented in Section 7.1 of the Level 1 and 2 Water Report (WSP, 2025). The potential impacts as a result of the deepening of the Brechin Quarry during the operational phase of the quarry life were assessed separately from the rehabilitated

		conditions. Based on the results of the groundwater modelling, during operations, there are no water supply wells located within the one-metre incremental drawdown contour associated with the deepened Brechin Quarry. As such, negative impacts to water supply wells are not predicted as a result of the proposed deepening. Following rehabilitation of the Brechin Quarry, groundwater levels rise in the Bobcaygeon Formation and Gull River Formation compared to current conditions. As such, impacts to water supply wells as a result of the rehabilitation of the Brechin Quarry are not predicted. The proposed quarry deepening of the Brechin Quarry does not result in additional land use changes or surface water drainage alterations (i.e., there are no additional changes beyond those assessed as part of the impact assessment completed for the currently licensed Brechin Quarry). In addition, the proposed Brechin Quarry deepening will not affect the drawdown in the weathered bedrock beyond that which can be expected by the currently approved quarry development plan.

Closing

Thank you for submitting comments on the Brechin Quarry Site Plan Amendment application and for your interest in this application. If you have any questions, please let us know.

Yours truly,

MHBC

Yara Elmahdy, BES
Planner

Neal DeRuyter, BES, MCIP, RPP
Partner

WSP Canada Inc.

Jaime Oxtobee, M. Sc., P. Geo.
Senior Hydrogeologist

cc. *Craig Bellinger / Nick Mariani, Tomlinson*
Kris Marentette, WSP
Sonya Zuber, Ministry of Natural Resources