Washington County

PUBLIC WORKS
Wayne Sandberg, P.E., Director, County Engineer
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Holcim Larson Quarry Expansion EAW Findings of Fact

February 19, 2025

Background

Holcim—MWR, Inc. (formerly Aggregate Industries) proposes expanding its limestone quarry, the Larson Quarry, to the east onto an adjacent 148-acre property located east of County Road 75. The current quarry, which has a conditional use permit from the County, has been in operation since the 1950s in its current location.

An EAW is a state process used to assess the potential environmental impacts of a proposed project. It is required for projects that meet certain criteria or are deemed potentially impactful. The project proposed by Holcim requires that an EAW must be prepared as it exceeds thresholds identified below from the Minnesota Administrative Rules (Minnesota Rules): 4410.4300, Subpart 12B. - For development of a facility for the extraction or mining of sand, gravel, stone, or other nonmetallic minerals, other than peat, which will excavate 40 or more acres of land to a mean depth of ten feet or more during its existence, the local governmental unit is the Responsible Government Unit (RGU). Washington County is the RGU for the EAW.

In 2005, Aggregate Industries, the name the mine was operating under at that time, submitted an EAW which went through the state process. That process resulted in five comments (one resident, Washington Conservation District, Metropolitan Council, South Washington Watershed District, and Natural Resources Group, Inc). None of those comments noted the potential for significant impact and therefore, the Board passed a resolution for a negative declaration on the project. Since 2005, Holcim (the new name they operate under) never expanded into the area east of CR 75. Due to the age of the EAW data, the County determined that the 2005 document and process is no longer valid. Therefore, Holcim and the County began preparing and reviewing a new EAW in 2023.

EAW Process Overview

Staff began working with Holcim in 2023 to prepare and review an EAW. The EAW was reviewed and deemed complete by county staff in November 2024. A 45-day comment period was held from December 3, 2024, to January 17, 2025. Additionally, while not required, a public meeting was held at Grey Cloud Island Township Hall on January 9, 2025. Thirty-six individual comments were received by members of the public, agencies, and one tribal nation. Most of the individual comments are multi-part comments. Responses to comments are attached to this memo.

The outcome of an EAW is either a positive declaration, a need for further environmental review through an Environmental Impact Statement (EIS) or a negative declaration. The EAW and Findings of Fact does not approve the project, it establishes the environmental impacts and mitigation measures. The required permit processes will come after the environmental process and will provide agencies official approval actions.

Decision on the Need for an EIS

MN Rule 4410.1700, subpart 7 establishes the criteria for determining the potential for significant impact. This includes:

a. The type, extent, and reversibility of the environmental effects have been considered and they do contain the potential for significant environmental effects.

b. The cumulative potential of environmental effects has been considered and the project does contain the potential for significant environmental effects.
c. The extent to which the environmental effects are subject to mitigation by ongoing public regulator authority indicates that this proposed project does have the potential for significant effects.
d. The extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by public agencies and the project proposed has been considered and it indicates that this project does have the potential for significant environmental effects.

The EAW document and public comments received do indicate the potential for significant environmental impact as outlined in the above criteria. Specifically, there is the potential for significant impact, as noted by the DNR and National Park Service, related to the removal of significant vegetative stands. The comment letter from the Prairie Island Indian Community and subsequent correspondence with the Minnesota Indian Affairs Council demonstrate the need for additional archeology coordination and data collection that cannot be done until frost levels decrease. The response to comment process also highlighted multiple items that need to be updated in the EAW document. While those items don't raise to the level of significant impact, they will take time for Holcim to update. The county would also like Holcim to incorporate any new data or regulations (example: PFAS data) into their analysis. The recommendation is for an EIS to be performed to evaluate and resolve the scope items mentioned above. While there were multiple other issues noted in the comment process, those items will be coordinated and resolved through agency permitting processes.

The Washington County Board of Commissioners reviewed the EAW documentation, including responses to comments, at their February 18, 2025 Board Meeting. They adopted a resolution making a positive declaration requiring an EIS for the Holcim Larson Quarry Expansion pursuant to Minnesota Rules, part 4410.1700 subpart 3. That resolution is attached to this memo.

Attachments:

1. Attachment A Agency Comments and Responses
2. Attachment B Public Comments and Responses
3. Washington County Board Resolution on decision for need for an EIS

Attachment A - Agency Comments

A1 Minnesota Pollution Control Agency

A2 Metropolitan Council

A3 Prairie Island Indian Community

A4 Minnesota Department of Natural Resources

A5 Grey Cloud Island Township

A6 National Park Service

A7 Washington County Public Works

All comments received during the comment period can be found here:
https://www.washingtoncountymn.gov/CivicAlerts.aspx?AID=4147

Attachment A-1 MPCA Comment Letter

MPCA Comment A1

MPCA The Minnesota Pollution Control Agency (MPCA) staff has reviewed the EAW and have no comments at this time.

Response A1

Thank you for your comment.

Attachment A2 Metropolitan Council Comment Letter

Metropolitan Council Comment A2.1

Item #7- Climate (Mackenzie Young-Walters, 651-602-1373)
The discussion of climate trends and proposed mitigation measures are adequate given the limited impact that the identified climate trends will have on mining operations. However, the "Use of native vegetation in reclamation of upland areas" adaptation listed under Land Use in 7.b should also be listed as an adaptation under Project Design as it helps offset the identified impact of "Warmer temperatures may create more difficulty in establishing vegetation during reclamation" from that section.

Metropolitan Council staff would also encourage the project proposer to identify opportunities for tree replacement as part of the reclamation of upland areas to mitigating [sic] the significant tree loss associated with the project.

Response A2.1

We agree that use of native vegetation in reclamation of upland areas is also a Project Design Adaptation, and the addition is incorporated by reference in this response to comments. Holcim is committed to using native vegetation as an adaptation on all future screening berms and in areas like the entrance to the facility where a pollinator garden was established in 2016. When the screening berms are removed as part

of final reclamation grading, native vegetation will be used on upland areas that are to be graded and vegetated. Trees will be planted around the graded upland areas as part of final reclamation. Reclamation Plan Option 1 and Reclamation Plan Option 2 have been updated to reflect the use of native vegetation and planting of trees as part of final reclamation.

Holcim implemented an oak savanna restoration program in 2014 in the wooded setback area of the existing quarry along the Mississippi River through a partnership with Great River Greening. For the past decade, the proposer has been removing invasive species in this area such as buckthorn and honey suckle and replacing areas with native vegetation including planting trees. Similar to this program, Holcim will develop and execute a restoration workplan for the wooded corridor that will remain along Grey Cloud Channel and setback areas of the quarry. The management effort will include invasive species removal, practices to control the spread of diseases and infestation (Oak Wilt, Emerald Ash Borer, etc.), and new tree planting elements aimed at improving the overall health and quality of the existing woodlands. Additional information regarding mitigation of anticipated tree loss can be found in Response A-3.

RGU Comment Response:

See RGU response to comment A4.1.

Metropolitan Council Comment A2.2

Item #10- Land Use *(Emma Dvorak, 651-602-1399)*
The EAW accurately states that the Reclamation Plan is subject to the ongoing regulatory authority of Grey Cloud Island Township and Washington County and the standards contained within their land use ordinances and is subject to a reclamation bond. The plan should also indicate that the future land use of the expansion site after reclamation is medium-density, rural residential development.

Response A2.2

Comment noted. Section 10.iv.b in the EAW states “Post-reclamation, the planned future land use of the project area is a mixture of open space, lake, and residential homes which is consistent with Grey Cloud Township’s proposed future land use of expansion area.” Reclamation Plan Option 1 and Reclamation Plan Option 2 have been updated to reflect the future land use of the expansion site after reclamation is medium density, rural residential.

Attachment A3 Prairie Island Indian Community (PIIC) Comment Letter

PIIC Comment A3.1

The Community has concerns about this project, including the lack of consultation and its potential impact on cultural and natural resources. One of the most troubling issues is the statements made by Holcim, the proponent of the project, that the Community’s Tribal Historic Preservation Office (“THPO”) was consulted and worked in “coordination” with Holcim. This is not true. THPO has had no input and provided no “coordination” in the archaeological surveys at this site, nor has THPO been consulted with or provided “cooperation” in any survey to identify cultural properties at this site. The Community also is not aware of any consultation with the Minnesota Indian Affairs Council (“MIAC”) beyond a general presentation about the project less than two weeks before the comment deadline. This lack of consultation is particularly alarming to the Community due to the potential for burial sites at the project location.

Response A3.1

Thank you for your comment. The table below highlights Holcim's touch points with the Prairie Island Indian Community. PIIC has shared its position with Holcim that "notification" and "consultation" are not equivalent. Since the EAW comment period closed, Holcim has received advice from PIIC as to how communication with the Tribe should be handled moving forward.

Date	Record of Holcim Contacts with PIIC
10/12/2023	Tom Schmit (Holcim) emails Melissa Cerda (MIAC) a proposed scope of work for phase 1 archaeological investigation accompanied by a letter from In-Situ Archaeological Consulting
10/12/2023	Tom Schmit (Holcim) emails Noah White (PIIC) a proposed scope of work for phase 1 archaeological investigation accompanied by a letter from In-Situ Archaeological Consulting
10/12/2023	Tom Schmit (Holcim) emails Amanda Gronhovd (OSA) a proposed scope of work for phase 1 archaeological investigation accompanied by a letter from In-Situ Archaeological Consulting
10/19/2023	Ward Einess (Holcim) emails Noah White (PIIC), Blake Johnson (PIIC) a proposed scope of work for phase 1 archaeological investigation
Nov - Dec 2023	Phase 1 Archaeological Investigation is conducted by In-Situ
July 2024	Phase 1 archaeological investigation report is completed by In Situ
8/23/2024	John Reich (PIIC) and Blake Johnson (PIIC) tour the Larson operation and are briefed on the project area and project objectives.
8/29/2024	Ward Einess (Holcim) sends email to Blake Johnson (PIIC), John Reich (PIIC) and Noah White (PIIC) with phase 1 archaeological investigation report and letters from SHPO with no findings discussion
1/8/2025	Tom Schmit (Holcim) presents Larson and Nelson projects to MIAC Executive Committee
1/10/2025	Tom Schmit (Holcim) emails Franky Jackson (PIIC) the level 1 archaeological investigation report and letter from SHPO with no findings discussion
1/22/2025	Tom Schmit (Holcim) is an invited guest to the PIIC Tribal Council and presents details on the proposed project to Council members
1/28/2025	Tom Schmit (Holcim), Abraham Ledezma (In Situ), Craig Picka (In Situ) hold virtual working session with members of PIIC to discuss the phase I archaeological investigation and to answer PIIC's questions about the investigation
1/29/2025	Tom Schmit (Holcim), Abraham Ledezma (In Situ), Craig Picka (In Situ) attend virtual meeting with Lilly Geraghty (MIAC) and Isaac Weston (MIAC) to discuss the proposed project, the Phase 1 archaeological investigation findings and next steps
2/4/2025	Tom Schmit (Holcim) emails revised phase 1 archaeological investigation report to PIIC. The report was revised based on discussions with PIIC during the 1/28/2025 virtual working session

RGU Comment Response:

The PIIC sent an additional letter dated February 10, 2025 that clarifies that they were contacted by Holcim but they do not consider that consultation or coordination. While there was some communication, MIAC process was not followed. See RGU response in comment A3.3

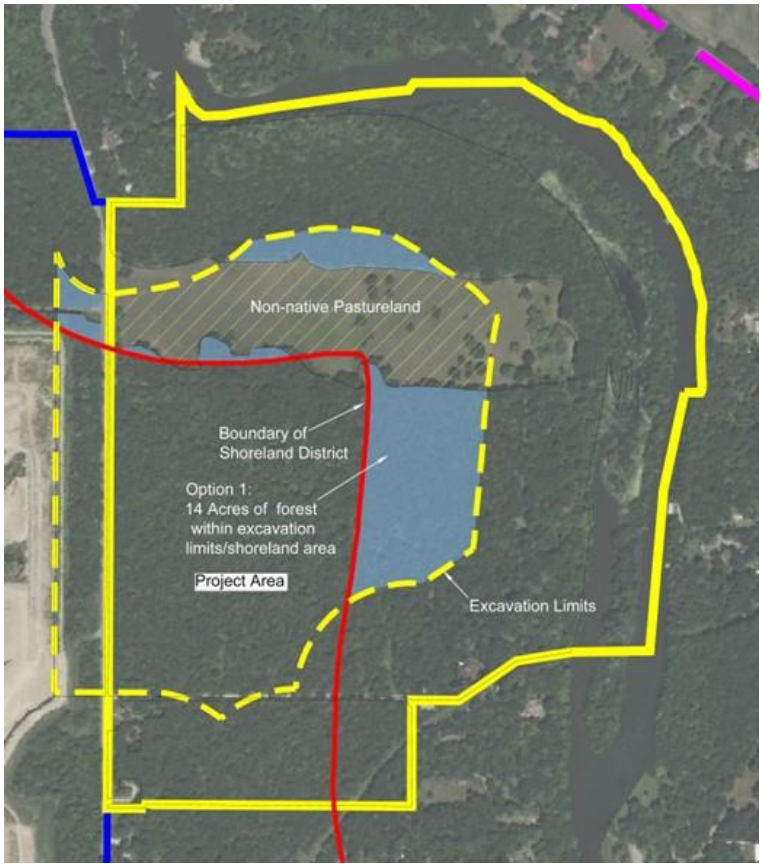
PIIC Comment A3.2

This project is estimated to involve an area that is within one acre of the threshold for a mandatory Environmental Impact Statement ("EIS") to be completed. When making the decision whether an EIS should be performed that estimate should be viewed with skepticism and the proximity to the mandatory threshold should factor heavily in favor of ordering an EIS be completed.

Response A3.2

The Project is approximately 66 acres below the threshold for a mandatory EIS for removal of forested or naturally vegetated land in a nonsensitive shoreland. Minn. Rules 4410.4400 subp. 9 establish mandatory EIS thresholds for nonmetallic mineral mining facilities. Item C is specifically related to the area of proposed excavation within a shoreland area and reads as follows:

> "C. For development of a facility for the extraction or mining of sand, gravel, stone, or other nonmetallic minerals, other than peat, which will excavate 40 or more acres of forested or other naturally vegetated land in a sensitive shoreland area or 80 or more acres of forested or other naturally vegetated land in a nonsensitive shoreland area, the local governmental unit is the RGU."



Minn. Rules 4410.4400 subp. 9. The project proposes to excavate up to 14 acres of forested or other naturally occurring vegetation within the Shoreland District (area north and east of red line) as illustrated by the shaded blue area shown on the figure to the left. The project falls well short of meeting the mandatory threshold for an EIS based on excavation limits and associated vegetation removal within a shoreland area as established in Minn. Rule 4410.4400 Sub. 9 item C.

The pasture area that is located within the shoreline area (14.3 acres) is not considered to have a native plant community or even a remnant native plant community because native species have been replaced by non-native or invasive species and is an area where extensive human activities have taken place such as farming or grazing. Even if it were, the project proposes to excavate no more than 28.3 acres of forested or other naturally occurring shoreland area. **See also Response A4.1 – A4.7** for additional information regarding impacts and mitigation for the proposed loss of woodlands and natural vegetation within the Shoreland District.

RGU Response to Comment:

Washington County concurs that the proposed project does not meet the **"**80 or more acres of forested or other naturally vegetated land in a nonsensitive shoreland" to require a mandatory EIS. We do not agree with Holcim's assessment of the types of plant communities that exist in the impacted area. See RGU response to comment A4.1.

PIIC Comment A3.3

1. Did not demonstrate consultation with MIAC.

In a letter to Holcim's engineer, Tyler Dahm of Sunde Engineering, dated July 3, 2023, Sarah Beimers, Environmental Program Review Manager for the Minnesota State Historic Preservation Office, recommended Holcim consult with MIAC pursuant to MN Stat 307.08 due to known burial sites reported "in the vicinity" of the proposed project. At this time, the Community has seen no evidence that this consultation ever took place.

Response A3.3

A letter was sent to Melissa Cerda of MIAC on October 12, 2023, from In Situ indicating that a Phase 1 Cultural Resource Study was being prepared as recommended by SHPO as part of the EAW process and a copy of the workplan was submitted to MIAC. No response was received from MIAC from the October 12, 2023 letter. As a result of this EAW comment, Tom Schmit (Holcim), Abraham Ledezma (In Situ), Craig Picka (In Situ) attended a virtual meeting with Lilly Geraghty (MIAC) and Isaac Weston (MIAC) to discuss the proposed project, the phase 1 archaeological investigation findings and next steps on 1/29/2025. Per MIAC's guidance, Holcim has formally submitted a Project Review Form to MIAC on February 4 , 2025. MIAC has suggested site visits be performed in the spring of 2025 when frost and snow are melted. In the meantime, Holcim will contact THPO representatives from the list of MN tribes as well as the tribes listed by the Tribal Directory Assessment Tool (TDAT) tool for Washington County. Holcim is also drafting an inadvertent discovery plan with the input of MIAC and will ensure this plan is approved by MIAC and then implemented at the Larson facility.

RGU Response to Comment:

Collection of the additional required data and timeline to review the appropriate MIAC forms fall outside the timeline that state statute allows for a declaration decision on the EAW.

PIIC Comment A3.4

2. Did not adequately consult with THPO.

Despite the claim of Holcim, THPO has not provided "cooperation" in cultural property surveys. THPO Officer Noah White has advised the Community Council that he has not been consulted, has not participated in, nor provided "cooperation" with these surveys. It is appalling that the Tribal peoples closest in physical proximity to this project, and within whose traditional homelands it is taking place, have not been heard or even been contacted regarding the identification of their relatives' burial sites and the cultural properties that are part of the history and, indeed, the very identity of the Community.

Response A3.4

See Response A3.1

PIIC Comment A3.5 - THPO Comments on Archeological Assessment are restated and responses provided in the following letter from In Situ Archeological Consulting.

Response A3.5: See following In Situ Archeological Consulting Letter

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February 3, 2025

Tom Schmit
Aggregates, General Manager
Holcim - MWR, Inc.
tom.schmit@holcim.com

RE: Comments on the Proposed Larson Quarry Expansion

Dear Mr. Schmit:

Thank you for providing the letter from the Prairie Island Indian Community (PIIC) Tribal Historic Preservation Office (THPO) dated January 16, 2025, regarding the Larson Quarry Expansion Project that In Situ Archaeological Consulting, LLC (In Situ) completed on behalf of Sunde Engineering (Sunde) and Holcim MWR, Inc. (Holcim). This letter will address and discuss comments provided by the PIIC THPO pertaining to the archaeological survey detailed in said January 16, 2025 comment letter. Please see the responses below regarding the comments provided.

THPO Comment

"The archaeological assessment has discounted possible burial mounds, previously identified on the site, as merely "waste piles" from previous construction. MIAC has been empowered to authenticate burial sites and there has been no indication that MIAC has been consulted and performed the necessary investigation to determine the veracity of these claims. Until that determination is made, the assumptions of Holcim regarding potential burial sites are premature."

Response

The soil pile anomalies were recorded in the field and were treated as if they were potential mounds. In Situ consulted with OSA about the potential mounds and after these conversations, based on the evidence, it was concluded that these soil pile anomalies were not cultural, with the discussion as to why the conclusion was made detailed in the report. However, after consultation with MIAC and PIIC, a site visit will be scheduled this spring to assess the soil pile anomalies and to determine if these are or are not cultural mounds. Invitations will be sent to various tribes to attend this site visit. Upon completion of the site visit, discussions with MIAC and various tribes will take place to establish if additional work or avoidances are needed. In addition, In Situ recommends the development and approval of an Inadvertent Discovery Plan prior to project construction and, after further tribal consultation, archaeological and/or tribal monitoring may be necessary during construction of the project.

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THPO Comment

Incorrect site number: *"A site number used in the Figure 4 is incorrect. It is surprising that such a basic bit of information was incorrect in the archaeological final report."*

Response

In Situ has reviewed the report and through discussions with PIIC THPO, the incorrect site number was identified and the error (32DK0098 vs. 21DK0098) was likely due to a typo during completion of the maps. This will be corrected in an updated report.

THPO Comment

Inaccurately describes Dakota as being "Nomadic": *"Describing the Dakota people as "nomadic" has been used to undermine their claims to their homelands and portray them as uncivilized wanderers lacking a true "home." This is insulting. The Dakota have been here for millennia and our homeland was not limited to the European concept of what is a community or what is a home. To the Dakota, this is akin to saying that, when a person travels to the grocery store or butcher to get food or spends time at their summer cabin to fish, that they are "nomadic" and have no home to claim as their property. This is disrespectful to Indigenous peoples, is dismissive of our culture and history, and is an attempt to diminish and marginalize our people and our culture."*

Response

After the completion of this report, In Situ was made aware of the incorrect use of the term "nomadic" during a review for another project. Since then, In Situ has since incorporated a change to a corrected Cultural History in our reports. This change had not yet taken place at the time of the report. There was no intent for misinformation or disrespect in the prior iteration of the report. The corrected Cultural History will be used in the updated report for the project.

THPO Comment

Did not include Paul Durand in the literary review: *"Paul Durand's extensive ethnographic data and map, Where the Waters Gather and the Rivers Meet: An Atlas of the Eastern Sioux, is considered an essential reference for understanding known locations of Dakota sites of various types. It is deeply concerning that the literature review ignores this irreplaceable resource, especially considering that it contains information of direct relevance to the area where archaeological survey was conducted. This lack of inclusion of a premiant voice calls into question the thoroughness of the review."*

Response

There is a section in the report about the history of Grey Cloud Island Township and how the location received its name. The information in the section was gathered from multiple sources, including the Washington County Historical Society and histories focused on Grey Cloud Island,

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with the Durand publication containing information that was already within the report. However, In Situ was not aware of the Durand publication but will now make sure to utilize this resource for future projects, as this publication will serve as an excellent primary source to use for the updated report and for future reports. Additional information from the Durand publication regarding Grey Cloud Island has been added to the revised report.

THPO Comment

Did not utilize MNModel to aid in survey planning: *"MNModel is a critical tool in Minnesota archaeology and provides guidance for the planning and conduct of archaeological surveys. The manner in which the surveys were conducted in this case does not appear to be consistent with site presence predictions in that model; MNModel 4 predicts high likelihood of unknown/unreported sites in that location, which should dictate a tighter survey interval than 15 meters."*

Response

MNModel is a tool that can help identify areas of cultural resource potential that may require cultural resource surveys and assessments. However, for this project, it was already known from initial research that the project location was of a higher resource potential and therefore the entire project area was subject to a Phase I archaeological survey. Since the whole project area was surveyed, the reference to MNModel was not included in the report. The updated report will include a discussion of cultural resource potential and the use of MNModel.

The majority of the project area was subjected to shovel testing using the guidelines set forth by the Minnesota SHPO and the State Archaeologist's Manual for Archaeological Projects in Minnesota. Based on these guidelines and due to the larger size of the project area, a shovel test spacing of 15 m was used for the archaeological assessment for the project. In addition, previous documentation found that the project area consists mostly of shallow soils with limestone bedrock present at or near the ground surface. Based on these factors, the principal investigator found that the use of 15 m shovel test spacing would be sufficient for the discovery and identification of any potentially significant archaeological sites within the project area.

THPO Comment

Inadequate shovel testing at the site: *"The EAW Did not describe the reasoning of the survey methodology of shovel testing interval of 15 meters. The wide intervals between shovel test locations seems arbitrary and unsupported given the known historic and cultural sites close to the project location. The Community believes more closely spaced testing locations are needed to adequately survey the project location.*

Based on the information presented in the archaeological survey report, it appears that we are to believe six or seven people conducted 2,016 shovel tests in a highly wooded area in six days. To conduct 2,016 shovel tests in six days is 336 a day. If a shovel test takes 20 minutes each that is 6,720 minutes, divided by 60 minutes in an hour, equals 112 man hours per day to accomplish this. That is seven people working at that pace for 16 hours every day without a break to set up

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equipment, sift material, examine for artifacts, document the result, move to next location 15 meters away, and set up for another test. We do not believe that the claimed shovel tests could have been performed in a reasonable manner in that timeframe, especially considering winter soil conditions and that there are only nine hours of daylight at the specified time of survey in late November and early December."

Response

The majority of the project area was subjected to shovel testing using the guidelines set forth by the Minnesota SHPO and the State Archaeologist's Manual for Archaeological Projects in Minnesota. Based on these guidelines and due to the larger size of the project area, a shovel test spacing of 15 m was used for the archaeological assessment for the project. In addition, previous documentation found that the project area consists mostly of shallow soils with limestone bedrock present at or near the ground surface. Based on these factors, the principal investigator found that the use of 15 m shovel test spacing would be sufficient for the discovery and identification of any potentially significant archaeological sites within the project area.

Regarding the timeframe, there were two field survey dates (November 8, 2023 and November 10, 2023) that were erroneously omitted from the list of dates in the report. These dates will be added to the updated report. With this, there were nine field days for this project: November 8, 10, 20, and 30, December 2, December 4-6, and December 8, 2023. At the time of the survey, while November and December are typically cold, snow covered, and frozen, the winter at the time of the survey was quite warmer and not typical, with average temperatures in the 40s and 50s (F). Because of this, there was no snow cover, and the soils were not frozen within the project area, making the completion of the survey possible. In addition, the archaeological investigation verified that the soils in the project area were quite shallow, with limestone bedrock at or near the ground surface (bedrock depths ranging from ground surface to 50 cmbs). With the shallow soils and bedrock present, these shovel tests were completed in less time than an average shovel test, as there were less soil to excavate and to screen per shovel test. Also, while the project area is located within a wooded area, the wooded area was not dense, and the trees were somewhat sparsely spaced, making it easier for staff to navigate and complete shovel testing through the area. Based on these factors, the completion of 2,016 shovel tests within the corrected timeframe were performed in a reasonable manner, as the average shovel tests for this project would range from three to five shovel tests per person per hour. These numbers are accurate for what In Situ considers a reasonable pace for the completion of shovel tests for an average project. Based on these factors, the shovel testing was completed in a reasonable manner within the fieldwork timeframe for the project.

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For this project, In Situ believes that the fieldwork and reporting completed for the project was completed to the standards and guidelines provided by the Minnesota SHPO and that In Situ completed a reasonable and good faith effort to identify historic properties.

Please contact me at (952) 658-8891 or at aledezma@insitucrm.com should you have any further questions or concerns regarding this project.

Sincerely,

Abraham Ledezma, M.S., RPA
Principal Investigator, Archaeology

PIIC Comment A3.6

MN Administrative Rule 4410.4400, titled "Mandatory EIS Categories," defines projects that require an EIS based on location and acreage of the proposed project. Subp 9(C) of the rule covers Non-Metallic Mining and states "for development of a facility for the extraction or mining of sand, gravel, and stone, or other non-metallic minerals other than peat, which will excavate more than 40 or more acres of forested or other naturally vegetated land in a sensitive shoreland area or 80 or more acres of forested or other naturally vegetates land in a nonsensitive shoreland area" an EIS is required.

The Larson Expansion EAW estimates the wooded/forested acres as 133 before and 34 acres after the project, meaning the plan is to excavate 79 acres. It seems all too convenient that the proposal estimates the acreage as one single acre below the mandatory EIS threshold. These figures are estimates and mineral mining is not a precise endeavor, so it is quite possible the final project will exceed the 80 acre threshold for an EIS. On a project this close to a mandatory threshold the scales should tip heavily in favor of requiring the completion of an EIS.

PIIC Comment A3.9

See response A3.2. **See also Response A4.1 – A4.7** for additional information regarding impacts and mitigation for the proposed loss of woodlands and natural vegetation within the Shoreland District

Attachment A4 Minnesota Department of Natural Resources (DNR) Comment Letter

DNR Comment A4.1

1. Page 8, Reclamation: This section states that post-reclamation, a shallow bay wetland area will be created at the south end of the quarry lake with a deeper bay providing boat access to the east. Most of the lake perimeter will be left as vertical limestone bluffs, and the entire quarry expansion area that is quarried will become a lake once dewatering operations have ceased and will not require reclamation grading or establishment of vegetation.

As part of the reclamation plan, DNR recommends establishment of a shallow aquatic bench to provide a littoral zone for the future lake. Without a littoral zone, the lake is unlikely to support a healthy ecosystem. The creation of this lake is not replacing the ecosystem value that will be lost through the removal of 79-acres of forest that is mapped a DNR Native Plant Community (NPC) - FDs37a - Oak - (Red Maple) Woodland and a Mississippi River Critical Corridor Area (MRCCA) Significant Existing Vegetative Stand. The proposed vegetation removal within the MRCCS, the Mississippi River Twin Cities Important Bird Area, and the Mississippi Flyway, a major migratory corridor, would be a significant impact. We recommend that restoration plans include native seed mixes and vegetation as much as possible.

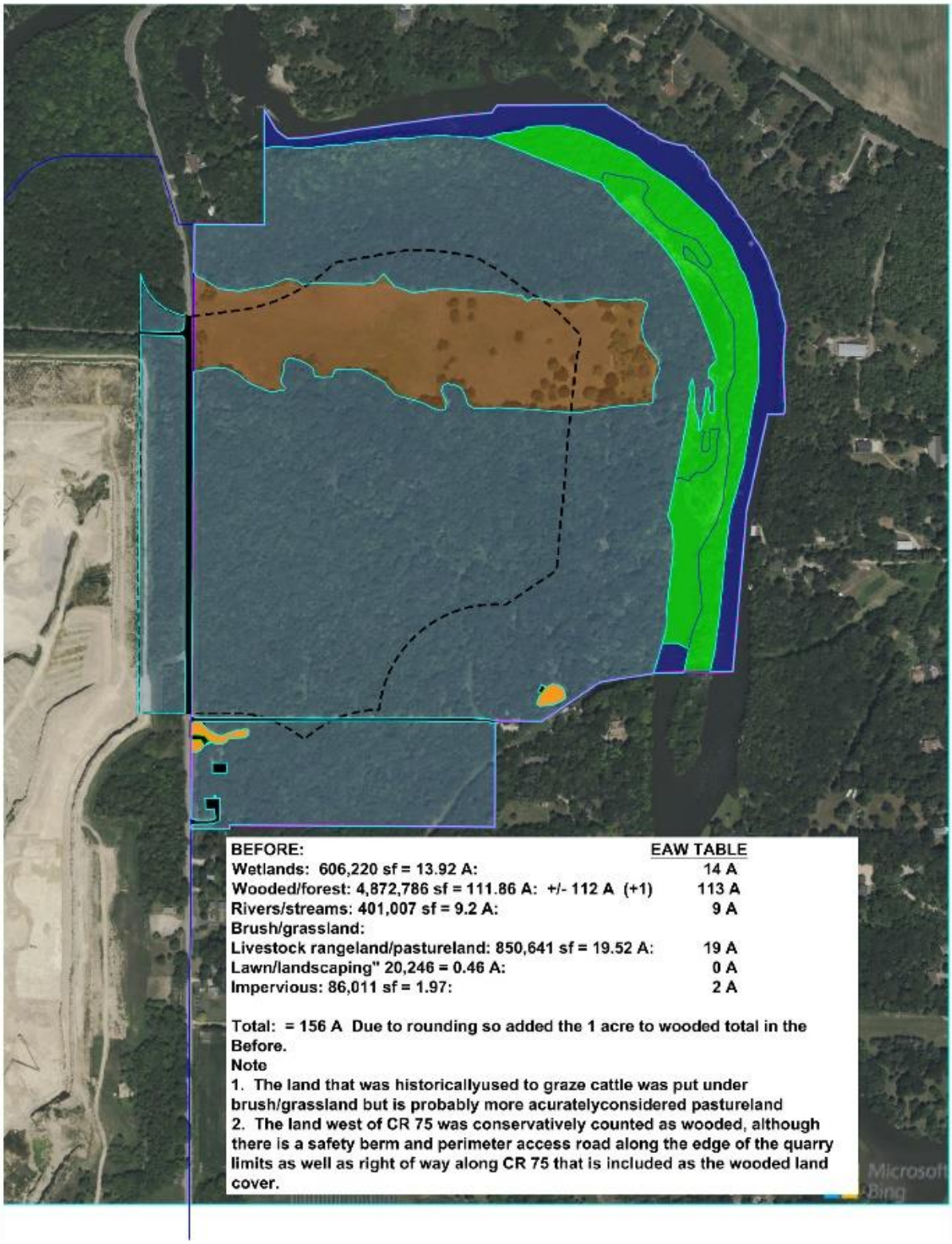
Response A4.1

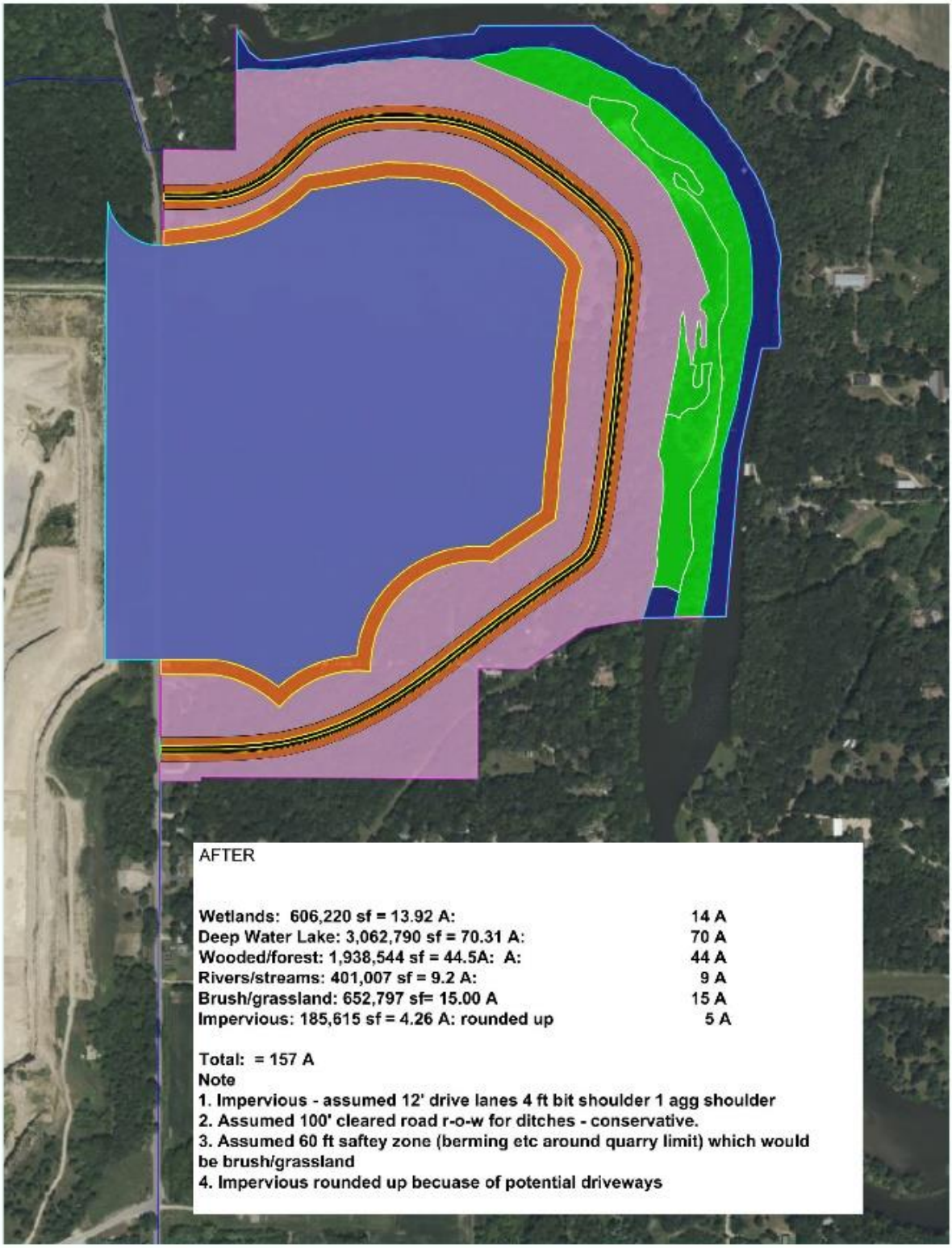
Reclamation-Establishment of a Littoral Zone: The Reclamation Plan for the final configuration of the Lake within the eastern expansion area will incorporate a shallow aquatic bench around the perimeter of the entire eastern expansion area to provide a littoral zone for the future lake. A shallow bay wetland area will be established in the southern portion of the existing quarry as illustrated on the reclamation plan. As the existing quarry was mined, a bench, typically at least 50 feet wide was established at an elevation of approximately 685 feet above mean sea level (msl). The future water level of the lake is anticipated to be approximately 690 feet msl, creating a littoral zone. The lake level, which is a surface expression of the

groundwater table, is expected to fluctuate with the normal fluctuation of the water table aquifer. The water over the bench will be 0-15 feet deep and will provide a transition zone between terrestrial and aquatic environment. Prior to the lake recovering to pre pumping levels, the bench can be surfaced with soils to provide a stratum for aquatic plants. Based upon the comment received, the Reclamation Plan submitted for permitting will be updated to note construction of littoral zones in the existing quarry as well as the eastern expansion area.

Conversion of woodlands to deep water lake: Based upon other comments received, the approximate land cover of the before and after condition was further evaluated. Area counted as woods in the Option 1 "before" was conservative and included woodland located west of County Rd 75 that is within the existing 200 foot mine setback area. There is perimeter berming, internal perimeter access road, and safety zone established within this setback area immediately adjacent to the quarry excavation limits which was conservatively counted as wooded in the existing condition.

Option 1 "after" condition was further evaluated in response to other comments received and the anticipated maximum loss of wooded habitat was determined to be 69 acres. This assumes that an average width of 100 feet of tree clearing would be required for the County Road 75 realignment, and that a 60 foot area of tree clearing beyond the proposed quarry limits would be required to establish perimeter berming, internal perimeter access road, and safety zone as shown in the before and after cover type maps below.


BEFORE:
EAW TABLE
Wetlands: 606,220 sf = 13.92 A:
14 A
Wooded/forest: 4,872,786 sf = 111.86 A: +/- 112 A (+1)
113 A
Rivers/streams: 401,007 sf = 9.2 A:
9 A
Brush/grassland:
Livestock rangeland/pastureland: 850,641 sf = 19.52 A:
19 A
Lawn/landscaping" 20,246 = 0.46 A:
0 A
Impervious: 86,011 sf = 1.97:
2 A
Total: = 156 A Due to rounding so added the 1 acre to wooded total in the Before.
Note
1. The land that was historicallyused to graze cattle was put under brush/grassland but is probably more acuratelyconsidered pastureland
2. The land west of CR 75 was conservatively counted as wooded, although there is a safety berm and perimeter access road along the edge of the quarry limits as well as right of way along CR 75 that is included as the wooded land cover.


AFTER
Wetlands: 606,220 sf = 13.92 A: 14 A
Deep Water Lake: 3,062,790 sf = 70.31 A: 70 A
Wooded/forest: 1,938,544 sf = 44.5A: A: 44 A
Rivers/streams: 401,007 sf = 9.2 A: 9 A
Brush/grassland: 652,797 sf= 15.00 A 15 A
Impervious: 185,615 sf = 4.26 A: rounded up 5 A
Total: = 157 A
Note
1. Impervious - assumed 12' drive lanes 4 ft bit shoulder 1 agg shoulder
2. Assumed 100' cleared road r-o-w for ditches - conservative.
3. Assumed 60 ft saftey zone (berming etc around quarry limit) which would be brush/grassland
4. Impervious rounded up becuase of potential driveways

In general, the more accurate estimate of anticipated woodland loss under Option 1 can be described as 69 acres or less. Option 1 is expected to leave just over 40% of the wooded area east of CR 75 intact. The portion of wooded area that will remain is located all along the bluff and length of the Grey Cloud Channel running through the Site. This project design adaptation preserves a continuous wooded corridor for wildlife and migratory birds along Grey Cloud Channel. Impacts to woodlands or wetlands along the shoreline of the channel are not proposed. Creating a deep-water habitat does not equally replace the ecosystem value associated with the removal of 69 acres of woodland, the resulting habitat will still have high ecological value. The created open water body combined with the establishment of a littoral zone, and the shallow bay wetland area within the existing quarry will provide a variety of food and habitat for wildlife and migratory birds. According to the Guide to Urban Bird Conservation: for the Twin Cities and Surrounding Area[1] (Bird Conservation Guide) there are several species of birds that thrive in open water habitats including several species of conservation concern and that open water and the associated shoreline habitat is also critical to the many migrants that utilize the Mississippi River flyway in spring and fall.

The Bird Conservation Guide also discusses conservation measures which Holcim has adopted at the Larson Quarry and will continue to implement in the eastern expansion area including enhancing areas of degraded habitat, restoration efforts in priority habitats including deciduous upland forests, and identification and management of habitat threats including invasive plant species. Holcim will also work with the Township and County to implement a roadside management program (like MDNR's Roadsides for Wildlife).

Holcim is committed to improving the health of the existing wooded area that would remain to minimize the impact of woodland loss and to improve the habitat and ecosystems of the remaining woods for wildlife and migratory birds. Beginning in 2014, Holcim initiated a partnership with Great River Greening to restore oak savanna habitat on the bluffs of the Mississippi River within the 500-foot setback area from the existing quarry. The broad goal of the project was to restore the site to pre-European settlement vegetation conditions, consistent with historic land surveys, determined to be ecologically appropriate for the promotion of habitat value. The Great River Greening partnership was voluntarily initiated by Holcim; it is not a permit condition. The company has spent tens of thousands of dollars executing the plan. Work has included prescribed burns, mechanical woody invasive removal, woody invasive follow up control, buckthorn treatments and herbaceous invasives control, seeding and planting native species, and dividing and planting established native species over the past 10 years.

With the significant investments Holcim has made to maintenance and revegetation of the managed area, Great River Greening reported in 2023 that they are seeing abundant pockets of native vegetation returning, massive reductions in the density of buckthorn, as well as opportunities for additional revegetation. The current management goals include protecting the restored woodlands from invasive species existing outside of the savanna restoration project area. The current workplan involves continued control of invasive species and additional introduction of a diverse seed mix of native ground layer vegetation, especially forbs and planting of pockets of native trees and shrubs for wildlife value and regeneration. The current workplan was initiated in the fall of 2023 and work continues on an annual basis.

[1] Audubon Minnesota, 2012. The Guide to Urban Bird Conservation: For the Twin Cities and Surrounding Area. Minnesota Audubon, 3/20/2012.

Holcim has begun developing a management plan for the woods that would remain in the eastern expansion area, beginning with a forest assessment of the existing woodlands in the eastern expansion area. A portion of the woodlands are identified in the Minnesota County Biological Survey (MBS) as a DNR Native Plant Community (NPC) - FDs37a - Oak - (Red Maple) Woodland. This community is a fire dependent woodland system. The site name is Grey Cloud Island 24 (MCBS site number 46). It is mapped as a single site, although bisected by the pastureland that has been used for grazing cattle.

All native plant community types in Minnesota are given one of the five following classifications:

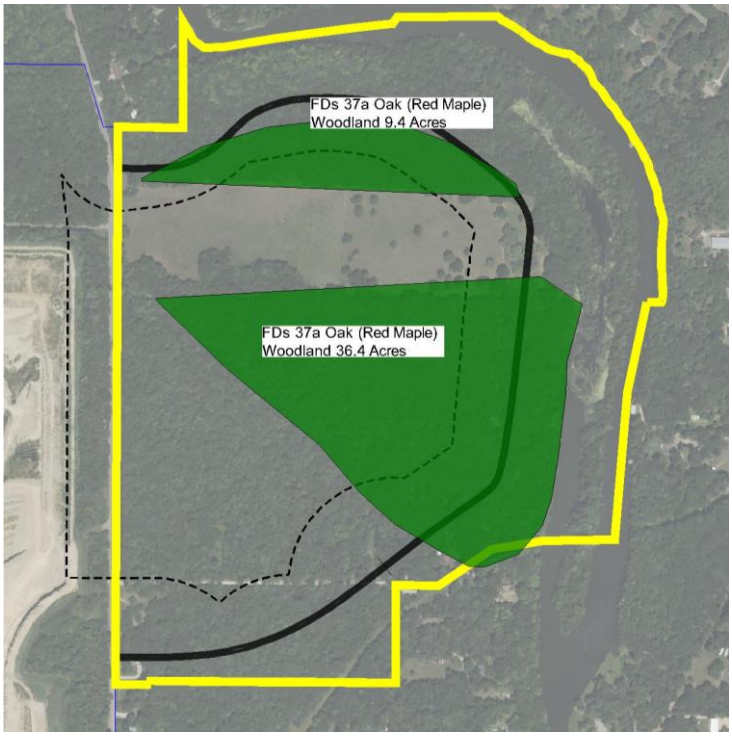
S1	Critically imperiled
S2	Imperiled
S3	Vulnerable to extirpation
S4	Apparently secure, uncommon but not rare
S5	Secure, common, widespread and abundant

The record provides the site with a sub national rank of S4 indicating that the relative rarity or endangerment of this community in Minnesota is apparently secure and an uncommon but not rare terrestrial community type. The site has an element occurrence (EO) rank of CD. C rank occurrences have fair ecological integrity. They show strong evidence of human disturbance but retain some characteristics species and have potential for recovery with protection and management. D rank occurrences have poor ecological integrity. The original composition and structure of the community have been severely altered by a human disturbance or invasion by exotic species and they have little chance of recovery to their natural or historic condition. A ranking of CD describes a site with fair to poor estimated viability.

As described above, up to 69 acres of wooded area is anticipated to be removed under the proposed road relocation Option 1. The figure below illustrates the locations of the two native plant communities identified in the Minnesota County Biological Survey (MBS) which are located within the site with respect to the site boundary and proposed quarry excavation limits, and a conceptual road realignment.

Approximately one-third of the native plant communities would remain intact under Option 1. According to the MDNR[2], wooded areas that are present over the remainder of the site that are not mapped as native plant community polygons primarily represent: 1) land where modern human activities such as farming, overgrazing, wetland drainage, recent logging and residential and commercial development have destroyed or greatly altered the natural vegetation; and 2) native plant community polygons that were below minimal size criteria.

[2] Minnesota Geo https://resources.gisdata.mn.gov/pub/gdrs/data/pub/us_mn_state_dnr/biota_dnr_native_plant_comm/metadata/npc_metadata.html



MDNR Native Plant Communities

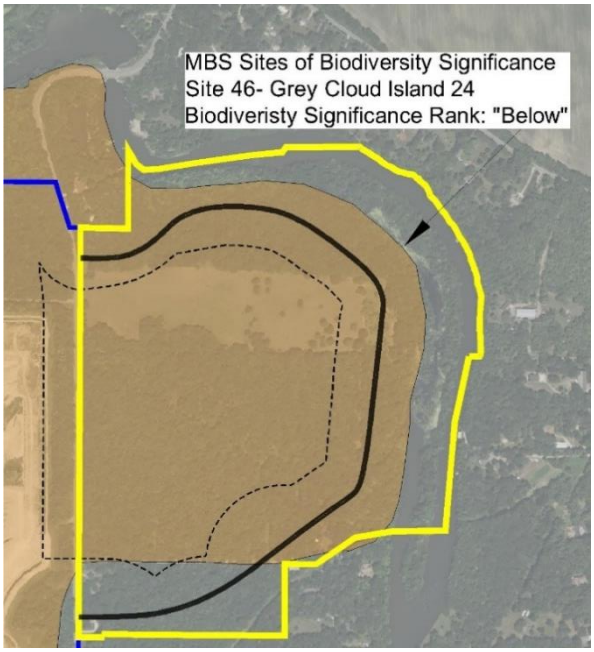
There is an area ranked as an Area with Potential Local Conservation Value within the project boundary that the Minnesota Biological Survey (MBS) considered for Sites of Biodiversity Significance but was determined to be below the minimum biodiversity threshold for statewide significance. The area is ranked as "below". Sites with a ranking of "below" lack occurrences of rare species or natural features, or do not meet the MBS standards for Outstanding, High, or Moderate rank. These sites may include areas of conservation value at the local level, such as habitat for native plants and animals, corridors for animal movements, buffers surrounding higher quality natural areas, or areas with good potential for restoration of native habitat. The figure below illustrates the area within the site that was evaluated by the MBS.

The Grey Cloud Township Comprehensive Plan, which speaks to the conservation value at a local level, described the woodlands as follows:

"Extensive biological surveys of the Township have been completed. Prior to the emergence of the dry mesic forest predominant today, the island was covered by oak savannas, oak barrens, and possibly some prairie. Heavy grazing eliminated much of the native ground layer flora, and elimination of fires resulted in the emergence of aspen, birch, red cedar, and young oak. The understory is typical for deciduous and mixed forests but troubled with invasion of exotics like buckthorn and prickly ash. Older oak mortality is now occurring, and replacement by ironwoods, hickories, basswoods, and sugar maples. The woodlands in the Township have become a mesic forest. The wooded areas of the Township have no rare floristic components that make them unique. The Grey Cloud vegetative communities appear to be typical of the

old oak woodlands and mesic forests within the Twin Cities region, many of which stretch along the bluffs of the Mississippi, Minnesota, and St. Croix Rivers." [3]

The figure below illustrates the extent of the woodlands with the MBS ranking of "Below". The proposed excavation limits and a conceptual road alignment are also shown illustrating that the woodland removal would be within the below ranking.



The entire woodland area is noted in the MRCCA as a Significant Existing Vegetative Stand. The Township has adopted a MRCCA Ordinance which was granted conditional approval in January 2023 and was adopted by the Town Board on March 3, 2023. The MRCCA Ordinance was included in the Grey Cloud Island Township 2040 Plan. A vegetation permit from the Township and a vegetation restoration plan must also be developed that is in alignment with the reclamation plan for the site that is consistent with the Township's planned future land use, post mining, of the site.

Holcim initiated an assessment of the woodlands that are present in the eastern expansion area and has confirmed the DNR native plant community described above and identified additional remnant native plant communities within the eastern expansion area, beyond the MBS mapped Oak Woodland described above. These areas are considered remnant native plant communities because they have been disturbed and degraded by invasive species such as buckthorn, garlic mustard, honeysuckle and earth worms.

The initial assessment found remnant FDs 38/FDs 37 Southern Dry-Mesic Oak hickory woodland and southern dry mesic prairie. The southwestern portion of the site is quite degraded with openings in the oak canopy occupied by boxelder, buckthorn, and iron wood. There is also evidence of oak wilt, two lined

[3] Grey Cloud Island Township, Minnesota 2040 Comprehensive Plan, Adopted by the Town Board Nov. 14, 2018

chestnut borer, bur oak blight, and potentially old clearing areas for roads. The plant community, including the shrub layer, is degraded with very little herbaceous native vegetation.

There were two remnant sections of MHs38 (Southern Mesic Oak-Basswood Forest) identified on-site. These areas were found to contain the least invasive species of all the woodland areas on the site. These two areas are located outside of the proposed limits of quarry excavation. Unlike the other woodland and forest areas, there was an absence of mature buckthorn or buckthorn seedlings, noxious weeds, or invasives such as garlic mustard. There was primarily leaf litter or bare soil with very little ground cover. There was sugar Maple regeneration occurring as well. The MHS 38 was the highest quality forest type found in the project area. These areas are located along Grey Cloud Channel outside of the quarry limit. The proposed re-alignment of CR 75 has not been finalized but it would be possible to design the road to avoid these two remnant native communities.

A third remnant native plant community was identified to the east and southeast of the pastureland identified as a UPs 23 Southern Mesic Prairie/Ups24 Southern Mesic Savanna. This area was likely part of the Oakwood line to the North and South, but was truncated and disturbed by creating the grazing field in the past and the potential oak tree losses due to oak wilt disease. With management it could be restored to resemble one of these nearby natural communities. A small 9 acre FFs59 Floodplain forest – Southern Terrace Forest was also identified in the northeast portion of the site along Grey Cloud Channel. This area had several dead and dying green and black ash, dead elms, and living Cottonwood trees. The volume of dying trees is creating a major disturbance and opening the ground layer to invasive species like Reed Canary grass. The pasture that is located centrally and largely within the proposed excavation area does not support a native plant community. Native species have been replaced by non-native or invasive species through grazing.

There are ample opportunities for restoration work along the wooded area of Grey Cloud Channel. As part of the IUP application, Holcim will develop a vegetation restoration plan to improve the health of the remaining wooded corridor. The forest restoration plan will be in alignment with the MRCCA and the Township's vegetation permit requirements and will be implemented during the period of active mining. The reclamation plan will be developed to provide for native vegetation and additional tree planting in upland areas. The reclamation plan will provide for future development consistent with the Township's planned land uses post reclamation.

RGU Comment Response:

While the response above does provide additional information about the types and quality of vegetation and habitat in the area, it does not provide detailed mitigation measures of that habitat loss beyond what is already in the EAW. The DNR comment explicitly states a significant impact due to the loss of vegetation in this area.

DNR Comment A4.2

2. Page 25, Land Use, MNRRA and MRCCA: Under Grey Cloud Island Township's MRRCA ordinance (Ord. No. 60), Section 5.24(E), an Annual Operating Permit that includes a site management plan approved by the Township is required. The site management plan must include "reclamation plans consistent with the stated end use for the land." The reclamation plan should include vegetation restoration plans consistent with the reclamation vision. DNR notes the project would involve

intensive vegetation clearing within a mapped native plant community and significant existing vegetation stand. Under the Township's MRCCA ordinance, Section 9.2 and 9.4, a vegetation permit will be required. As part of this permit, a vegetation restoration plan is required (see Section 9.6). DNR recommends the Township require a reclamation plan and a vegetation restoration plan that is consistent with the community's vision for the post-mining future for this land.

Response A4.2

Thank you for your comment. As described in Response A4.1 above, Holcim will be developing a vegetation restoration plan and a quarry restoration plan consistent with the stated end use for the property. These plans will be part of the application materials submitted for Township and County consideration during their respective permitting processes. The vegetation permit is a mechanism that establishes on-going regulatory authority and approval of the vegetation restoration plan.

DNR Comment A4.3

3. Page 28, Native Plant Communities and Significant Vegetation Stands: This section states that, "Consequently, the loss of this forested area would not be a significant loss of unique forest resources in the region." Even degraded sites provide important wildlife habitat. "Below" sites lack occurrences of rare species and natural features or do not meet Minnesota Biological Survey (MBS) standards for outstanding, high, or moderate rank. These sites may include areas of conservation value at the local level, such as habitat for native plants and animals, corridors for animal movement, buffers surrounding higher-quality natural areas, areas with high potential for restoration of native habitat, or open space. The removal of 79 acres of forest cover within the MRCCA is a significant impact.

Response A4.3

See response A.4-1 which describes the maximum disturbance of woodlands of 69acres, discusses the local value of degraded woodlands that would remain and restoration opportunities to improve the overall heath and wildlife value of the wooded corridor that would remain along the entire Grey Cloud Channel.

In addition to the managing and restoration activities within the remaining woodlands which will result in and promote improved wildlife habitat for native plants and animals, protection of corridors for animal movement, and establish a buffer along Grey Cloud Channel, Holcim will adopt the following best management practices to minimize disturbance within all areas where woodlands:

1. Minimize disturbance within all areas where woodlands will remain

2. No parking of equipment or stockpiling supplies outside of designated areas

3. No stockpiling topsoil or other materials outside of designated areas

4. Use of effective erosion prevention and sediment control measures

5. Holcim will inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species

6. Processing and operation areas will be limited to areas designated for disturbance.

7. Disturbed soils will be revegetated with native species both on a temporary basis for perimeter berms and on a permanent basis as part of final reclamation as soon as possible after final grading has been completed.

8. Use of weed free mulches and seed mixes.

DNR Comment A4.4

3. Page 34, Soils and Topography: We recommend that BWSR-approved, weed-free, native seed mixes be used to the greatest degree possible for soil and berm stabilization.

Response A4.4

Weed free native seed mixes will be used on all berm stabilizations and during establishment of vegetation during reclamation activities.

DNR Comment A4.5

5. Page 52, Rare Features. This section does not discuss the location of the forested area within the Mississippi River Twin Cities Important Bird Area or the Mississippi Flyway. Even degraded natural vegetation is important habitat within this urban section of the Mississippi River. Losing a portion of a connected forest is a significant loss even when that forest is not in prime condition. Losing the area proposed in the project will increase habitat fragmentation in the area, and could create edge effects that negatively affect the remaining forest.

Response A4.5

See response A.4-1. Conservation measures which Holcim has already adopted at the Larson Quarry and will continue to implement in the eastern expansion area will protect a continuous corridor along both the Mississippi River and Grey Cloud Channel, enhance areas of degraded habitat, and limit the potential for edge effects by managing existing invasives and using weed free native seed mixes throughout the project area.

MDNR Comment A4.6

6. Page 59, Visual. Given the proximity to the Mississippi River, we recommend that project lighting minimize wildlife impacts. Animals depend on the daily cycle of light and dark for behaviors such as hunting, migrating, sleeping, and protection from predators. Light pollution can affect their sensitivity to the night environment and alter their activities. In addition to the undesirable effects of upward facing lighting, the hue of lights can also affect wildlife. LED lighting has become increasingly popular due to its efficiency and long lifespan. However, these bright lights tend to emit blue light, which can be harmful to birds, insects, and fish. The DNR recommends that any projects using LED luminaries follow the MnDOT Approved Products for luminaries, which limits the uplight rating to 0. A nominal color temperature below 2700K is preferable for wildlife, and so we recommend choosing products that have the lowest number for backlight and glare (all approved products should already be 0 for uplight).

We also recommend that all non-essential lighting be turned off during the Mayfly hatch as well as follow the Audubon Society's Lights Out program. This program advocates for darkening all buildings

and structures during the bird migration from midnight until dawn March 15 - May 31 and August 15 - Oct 31. Information on this program can be found at: http://mn.audubon.org/conservation/lights-out-faq.

Response A4.6

The operation uses only limited lighting as needed for safety and security. Holcim will follow the MnDOT Approved Products for luminaries, which limits the uplight rating to 0 for lighting used during operations and for site security and will choose products that have the lowest number for backlight and glare.

MDNR Comment A4.7

7. Page 61, Dust and Odors: DNR advises that chloride used in dust suppressants, such as calcium chloride, does not degrade, but instead builds up to levels that are toxic to plants and wildlife.

Response A4.7

Holcim uses limited amounts of calcium chloride in accordance with manufacturers' recommendations and their MPCA NPDES/SDS Permit to control fugitive dust within their internal access road of the existing quarry and in compliance with the MPCA Air Emissions Permit. The expansion project will utilize conveyors for the majority of the transport of material from the mine face to the operations area which significantly reduces the need for the use of chemical dust suppressants within the quarry.

Attachment A5 SHC comments on behalf of Grey Cloud Island Township (GCIT) Comment Letter

GCIT Comment A5.1

The Hours of Operation identified in the Project Description were permitted through a special approval process in the 2023 and 2024 operating seasons. The EAW should be corrected to include the standard hours of operation established within the CUP and the Annual Mining Permit and the hours noted should be specifically noted as modified for specific seasons.

Response A5.1

Thank you for your comment. The EAW is corrected as to include the standard hours of operation allowed by ordinance and the requested hours noted as a seasonal modification as follows:

Ordinance 49 - Section V. Mining, Regulations–A. Operating Conditions–3. Hours of Operation). Section V-A-3(e) of Ordinance 49 provides the Board with the discretion to modify operating hours upon the request of the operator when the seasonal nature of the work or unusual circumstances require longer working hours.

Due to the seasonal nature of the work at the Larson Quarry, the Grey Cloud Town Board granted Holcim extended hours of operation for the 2023 and 2024 operating season. The permission was granted following the issuance of the annual mine permit. The Proposer has requested in their 2025 Administrative Permit application, that the Board consider adopting the requested hours of operation as a permit condition of the annual permit rather than approving them at a later date to establish the operating conditions all in one document making it easier for the Company and the Township to comply and regulate

the mine with all of the conditions included in one document. The Proposer anticipates continuing to request extended hours of operation as mining continues into the eastern reserves. The extended hours are important and allow the Company to run a second shift, which is crucial given the shortened construction season in Minnesota and the seasonal nature of aggregate production.

The extended hours have been and are expected to be granted on a seasonal basis and conditional upon Holcim satisfactorily responding to and addressing any noise complaints to the satisfaction of the Town Board. Any conditional approval of extended hours can include language that the Town Board can modify or revoke the extended hours if they find that Holcim has not satisfactorily addressed noise complaints that may arise through the course of extended operations. As in the past, the Proposer would reserve the option to request extended haul hours as special circumstances arise.

The hours allowed by ordinance are presented below with the requested extended hours indicated in red underline.

ORDINANCE

> Excavation, Crushing, Screening, Washing & Stockpiling: Monday through Friday, ~~7~~6:00 a.m. to ~~7~~10:00 p.m., and Saturday 7:00 a.m. to 12:00 p.m.
>
> Blasting: Occurs various days per week Monday through Friday, during the hours of 8:00 a.m. and 4:00 p.m.
>
> Barge Loading & Hauling / Maintenance & Repair of Plant and Equipment: Monday through Friday, 12:01 a.m. to 12:00 midnight.
>
> Loading/Hauling by Truck: Loading of trucks for delivery may be conducted between the hours of 7:30 a.m. and 4:00 p.m., Monday through Friday.
>
> Hauling by truck of excavation materials on public roads within the Township may be conducted only between the hours of 8:00 a.m. and 4:30 p.m., weekdays. No truck hauling is permitted on Saturdays, without prior approval, Sundays or on the following holidays: New Year's Day, Memorial Day (observed), Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. The foregoing hours of operation and hauling may be modified by the Town Board in case of public emergency or upon the request of the operator when the seasonal nature of the work or unusual circumstance requires longer working hours. An occasional modification may be granted by the Town Board Chair.

GCIT Comment A5.2

The figure labeled as "Inset 6-1 From Operation Plan January 1971" and referenced in the text as a 50-year planning study (1971 Plan) should be further described. It is unclear from the description if the Plan Map shown was officially adopted by the Township, Washington County, or both; or if the plan was an internal operations plan produced for Sheily's purposes. Whether the plan was officially adopted by the Township and/or the County should be clearly documented if used as basis in support of Option 1.

Response A5.2

The EAW included Inset 6-1 to illustrate that Option 1 has been part of the quarries' long-range plan for

decades. It is unknown whether the Town Board officially adopted the plan. The EAW text does not imply that it was officially adopted. However, there is evidence that this plan and others, including the future land use plan, were shared with the Township in the early 1970's and that the Town Board has been aware of the Proposer's plans to mine the eastern reserves and reroute County Road 75 for decades. Additionally, the 1985 Settlement Agreement between Shiely (original quarry owner) and Grey Cloud Island Township established the overall scope and extent of the present and future mining operations at the Larson Quarry and the Township agreed to show Parcel D (the eastern expansion area) as appropriate for "long range mineral development" on their amended Critical Areas Comprehensive Plan. The eastern expansion area has been officially recognized by the Township as appropriate for future mining since at least the 1980's.

GCI Comment A5.3

The Project Description describes Option 1 and Option 2 with respect to the Proposed Project. The Project Description briefly references that the segment of CR 75 running through and adjacent to the easterly project mining area is identified within the Washington County 2040 Transportation Plan as a candidate for turnback to a Township roadway. No further analysis or description is provided regarding how the turnback could, or would, impact the Township and its infrastructure. However, preliminary conversations have indicated that depending on the Option selected that the County may, or may not, be willing to maintain the roadway. This should be addressed within the Project Description.

Response A5.3

Washington County Public Works comments in the EAW indicate they would support Option 1 if Grey Cloud Island Township assumes jurisdiction of the entire extent of County Road 75. If the turnback were to occur, Holcim and the Township would need to enter into a road maintenance agreement and assume an appropriate proportion of road maintenance costs. Even under Option 2, CR 75 from 105th Street S. to 14th Avenue is identified in the Washington County 2040 Transportation Plan as a candidate for jurisdictional change from a county road to a local township road.

GCI Comment A5.4

Reclamation. It is unclear from the description what components of the "Reclamation Plan" have been approved, and by whom, and what components are subject to review by the Township and County in the future. This language should be corrected for clarity so that the Township and County's roles in the reclamation are clear since it has the potential to economically impact the long-term sustainability of the Township.

Response A5.4

The County requires a reclamation plan be submitted with each of the five-year CUP renewal application which is approved as part of the CUP approval. The plan must meet the standards of the ordinance, and a condition of the permit is that restoration must take place in general accordance with the plan submitted as part of the permit application.

Previous Conceptual final use plans have been submitted as part of the five-year applications which illustrate the Option 1 road realignment and potential future uses associated with final buildout of the mine, these are conceptual in nature to demonstrate possible future uses. No future use has been proposed or approved as part of the mining permits.

GCI Comment A5.5

The Table should be corrected to address the potential need to apply for Variances from the Township's Ordinances, specifically related to setbacks, and planned mining activities within the setbacks (See comments related to Item 10). The Table's Status could reflect that the need for the variances will be determined, and therefore could be reflected as, "To be applied for, if required."

Response A5.5

As suggested, the Permits Table in Section 9 is amended as follows:

Unit of Government	Type of Application	Status
Washington County	Conditional Use Permit (5-year term)	To be submitted
	Approval of CR 75 Relocation Plans including memorandum of understanding/developer's agreement (for Option 1)	To be submitted
	Approval of CR 75 bridge plans, temporary reroute and limited use permit for right of way crossing (for Option 2).	To be submitted
Grey Cloud Island Township	Administrative Permit (Annual)	To be applied for
	Mississippi River Corridor Critical Area (MRCCA) Annual Operating Permit and vegetation permit	To be applied for
	Approval of Road Relocation Project Plans or Bridge Plans if County Road 75 turned back to Township	To be applied for
	Stormwater Management Plan approval	To be applied for
	Rezoning	To be applied
	Variance from Township ordinances (setbacks, planned activities within setbacks)	To be applied for, if required
Minnesota Department of Natural	Water Appropriation Permit (Aggregate Washing)	Permit obtained.

Resources (MDNR)		67-200
	Water Appropriation Permit (Dewatering) Permit obtained.	Permit obtained. 2002-6042
Minnesota Pollution Control Agency (MPCA)	Nonmetallic Mineral Mining General Air Emission Permit 03700352-001	MN0030473Permit obtained 03700352-101
	NPDES/SDS Permit (Pit dewatering and washwater discharge)	Permit obtained. MN0030473
	Construction NPDES/SDS	To be applied for
South Washington Watershed District	Site Review that may include the following as applicable: • Erosion and Sediment Control • Floodplain Management • Stormwater Management • Groundwater Management • Water Appropriation • Greenways and Open Space	In conjunction with County CUP permitting
	WCA Notice of Decision regarding wetland delineation wetland Boundary/Type concurrence	11/22/2023

GCI Comment A5.6

10.a.i. Existing Land Use. ○ The statement, "Reclamation of the Larson Quarry will provide opportunities to develop new parks and open space within the community if the community determines it appropriate;" should be removed as it does not reflect the existing condition. No reclamation activities have occurred.

Response A5.6

Comment noted, this statement will be removed from the existing land use section.

GCI Comment A5.7

10.a.iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc. ○ General Zoning Restrictions. The paragraph indicates that the Project Proposer believes that they have nonconforming rights related to the extraction within the expansion area, and therefore they do not need to follow the requirements. While that may be the

Project Proposer's position, the Township may or may not agree with the conclusion. Therefore, this section should include additional analysis regarding how Option 1 and Option 2 Concept Plans are in conflict or compliance with the current ordinance. This section should be corrected. ▪ Parcel history. Since the Project Proposer indicates that non-conforming rights are applicable, historical documentation should be provided. Information should include any historical permits, land use permits or other documented approvals indicating mining in the area identified within the EAW.

Response A5.7

The legal analysis of non-conforming use rights is beyond the scope of environmental review. Environmental review neither approves nor denies the project or the quarry extraction limits, or non-conforming use rights associated with the project. The Proposer maintains that certain legal non-conforming rights apply to Larson Quarry, and some have been previously recognized in annual mine permits issued for the Quarry. The intention of the EAW is to study the maximum quarry extents, and the EAW acknowledges that final setback requirements will be determined during the County and Township permitting processes. Historical permits, land use permits, and/or other documented approvals supporting any legal non-conforming use rights as may be applicable will be provided in the permit application documentation at the time of permitting. As noted under Response A5.5, variances may be applied for, if required.

GCI Comment A5.8

MNRRA and MRCCA. The analysis provides a description regarding the active mining and extraction but does not adequately address or describe the impact of the road realignment as shown in Option 1. Significant vegetation will be removed, grading activities, increased impervious surfaces, viewsheds, traffic will be rerouted into the setback area and PCA permanently, etc., and impacts should all be evaluated if the purpose of this EAW is to evaluate the road alignment that was not addressed within the 2005 EAW. This section should be corrected to address the impact within the MRCAA [sic] and to the existing natural resources within the overlay.

Response A5.8

Option 1 with the road realignment would result in approximately 10-13 acres of vegetation removal. This is included in the up to 69 acres of woodlands that would be removed under Option 1. Approximately 4-4.5 acres of impervious surface would be added, based on an impervious surface roadway design of 12-foot drive lanes, 4 ft bituminous shoulders, and 1 ft aggregate shoulders and assumes 33 ft wide grassed ditches on either side. Again, depending upon the final alignment, up to a total of approximately 4-4.5 acres of wooded area within the DNR Native Plant Community Grey Cloud Island 24 (MCBS site number 46 FDs37a - Oak - (Red Maple) Woodland ranked S4 apparently secure, not rare) described under Response A4.1, would be removed in conjunction with the road realignment portion of the project.

Holcim will develop a vegetation restoration plan in accordance with the Townships MRCCA Ordinance to improve the health of the remaining wooded corridor as part of the Township's vegetation permit requirements. A forest restoration plan will be prepared to mitigate the proposed impacts within the

MRCCA. In addition, the reclamation plan will be developed to provide for native vegetation and additional tree planting in post reclamation upland areas.

GCI Comment A5.9

Native Plant Communities and Significant Vegetation Stands. This section acknowledges that there is impact but dismisses the significance of the impact without recognizing the standards established by the MRCCA. The impact should be quantified, and potential mitigation identified within subsection (c.) of this item or subsequent items of the EAW. This should be included specifically for impacts within the setback area as a result of the road realignment and construction.

Response A5.9

The application for the vegetation restoration plan will include mitigation of the proposed removals of vegetation. The MRCCA ranking of Significant Vegetation Stands does not consider the health of the vegetation stand. The MCBS ranks the entire area as "below" with respect to biodiversity significance and is more fully described in Response A4.1. The vegetation has local value for wildlife, screening, and protection of surface water quality. The vegetation restoration plan will consider the local value of the woodlands and will provide for a network of connected green corridors and natural wooded spaces and will consider the following mitigation measures consistent with the Township's MRCCA Ordinance:

- Restoration of vegetation;
- Preservation of existing vegetation where feasible;
- Stormwater runoff management to protect nearby wetlands and surface water;
- Minimizing impervious surfaces and promotes infiltration;
- Maintain a continuous woodland corridor along Grey Cloud Channel that provides screening of the mine operations and realigned roadway from the public water; and
- Wetland and drainage route preservation.

GCI Comment A5.10

Project compatibility with MNRRA and MRCCA. As previously stated, this section does not adequately address the road realignment and construction as part of Option 1. This section should be updated to clearly describe the quantity/extent of impact, especially as it relates to the road realignment and construction contemplated in Option 1.

Response A5.10

See response A5.8 for quantification of extent of impact as it relates to the road realignment and construction as part of Option 1. Construction of the roadway will be designed to minimize removal of or disturbance to natural vegetation. The alignment will avoid construction activity within the bluff impact zone and will consider the soils, shallow bedrock, and topography to minimize grading and ground disturbance activities. Clearing will be kept to the minimum necessary and road grades will be designed to blend with the natural terrain and minimize visual impacts to public river corridor views. Vegetation removal associated with mining will be conducted to expose the smallest practical area of soil to erosion

for the least possible time. The vegetation restoration plan will identify priority areas that have the best chance of successful restoration, show signs of erosion, or are visible from Grey Cloud Channel. The plan will include restoring a healthy understory and the establishment of native vegetation that provides suitable habitat and effective soil stability, runoff retention, and infiltration capability. The plan will be prepared by a qualified individual and will include a vegetation maintenance component. Vegetation established within the new right of way will be native vegetation.

GCI Comment A5.11

10b. Discuss the project's compatibility with nearby land uses, zoning and plans listed in Item 9a above, concentrating on implications for environmental effects.
While broadly addressed in Item 22., the potential impact from blasting – particularly within a reduced setback area from occupied structures – should be considered and evaluated within this section since there is no other specific item which addresses how blasting is experienced and/or impacts residential property owners. The response provided in Item 22 does not adequately discuss/evaluate the impact of blasting and vibration with nearby land uses (residential) as required by this Item.

Response A5.11

Blasting has been on-going at the Larson Quarry since the onset of the mining operations in the 1950s. The purpose of the blasting is to fracture the limestone with explosives to facilitate rock removal with conventional mining equipment. Blasting occurs periodically throughout the production season. The past three years blasting has occurred on an average of 26 blasts per season spread out over a 7 month production season and have ranged from 17 to 31 blasts per year. A typical blast at the Larson quarry may last up to 2 to 3 seconds.

Blasting is accomplished by drilling a series of holes into the rock typically 3-6 inches in diameter. A small booster and blasting cap are placed in the hole followed by the blasting agent. A booster provides just enough energy to detonate the blasting agent. Boosters in each hole are detonated individually by detonators that have built-in time delays. Using delays that are milliseconds apart disperses the energy released by the total amount of explosives. To an observer, a blast seems to happen instantaneously. What takes place, however, is a rapid progression of smaller explosions. Careful engineering goes into determining the precise location of the holes and timing sequence.

Blasting creates ground vibrations as the energy from the blast travels through the ground and eventually dissipates. Blasting also creates air overpressure or impulse noise. Ground vibration is measured in terms of Peak Particle Velocity (PPV) with units in inches per second and is a measure of particle movement within the ground, it is not a measurement of surface movement. State and Federal blasting standards have been developed for both peak particle velocity and air over pressure that are protective of nearby structures.

Previous Administrative Permits issued by the Township for the Larson Quarry have included a condition as follows: "Blasting will be within applicable state/federal guidelines for this type of operation and applies to all residential properties."

Federal standards: The effect of blasting on homes was studied for decades by the USBM which resulted in two papers, the USBM Report of Investigation (RI) 8507, "Structure Response and Damage Produced by Ground Vibration From Surface Mine Blasting (Siskind, D.E. et al., 1980a). and USBM RI 8485 "Structure Response and Damage Produced by Airblast From Surface Mining" (Siskind, D.E., et al., 1980b) which resulted in the establishment of federal standards limits on ground vibration and air over pressure levels determined to be protective of buildings and infrastructure. The federal standards are frequency dependent. When seismographs are used to record and quantify the effects of each blast, (which they are at the Larson Quarry) the protective limits are based on RI 8507 as shown by the "Z" curve on the Figure below[4].

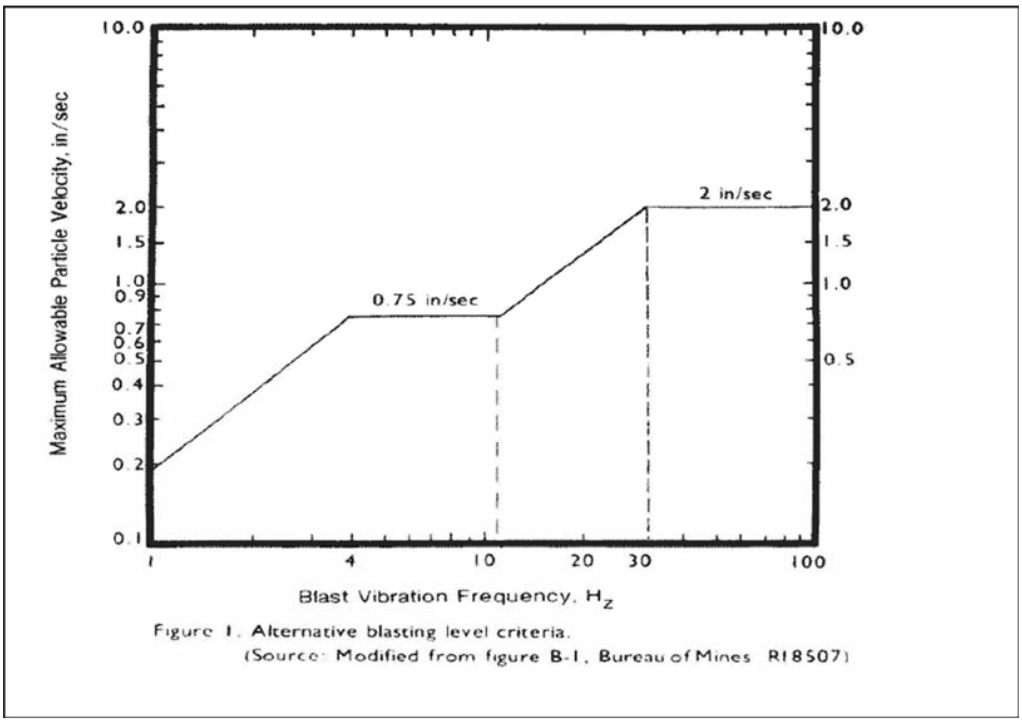


Figure 1

Title 30 of the Code of Federal Regulations (CFR) Part 816.67 defines blasting limits for air overpressure and ground vibration from the use of explosives for surface mining. According to the CFR requirements, the air blast shall not exceed **133 decibels** as measured on a linear scale, for a 2 Hz High-Pass system, which is the lower frequency limit of the blast measuring system, and typical for most blasting seismographs.

State Standards: The State of Minnesota Department of Natural Resources defines blasting requirements for air overpressure and ground vibration from metallic mineral mining in the Minnesota Administrative

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Rules Chapter 6130, Part 6130.3900. Subpart 1 states that air overpressure on lands not owned or controlled by the permittee shall not exceed 130 decibels as measured on a linear scale, sensitive to a frequency band ranging from six cycles per second to 200 cycles per second. Subpart 2 states that the maximum peak particle velocity from blasting shall not exceed 1.0 inch per second (ips) at the location of any structure located on lands not owned or controlled by the permittee.

At the Larson Quarry, blasting is monitored with seismographs; the Figure 1 limits are used to demonstrate that blasting is being conducted at levels that are below the threshold for cosmetic damage to structures and in compliance with both state federal standards. Third party seismograph monitoring is conducted at the Site in accordance with the annual mining permit issued by the Township. The seismograph monitoring provides quantification of the ground vibration and air overpressure effects. The Site utilizes four permanent seismographs. A fourth seismograph is used if needed to provide quantification of blasting effects between the blast and the nearest structure. A third party prepares a monthly blasting report that is provided to the Township. The highest PPV is recorded on the Z curve that includes both the State and Federal standards. An example is illustrated below where the highest PPV recorded for each monitoring location for each blast that month. Any point lying before the black Z curve (federal standard_) and the red s straight line (State standard) represents compliance with the standard. Seismographs are used to record and quantify and confirm the effects of each blast.

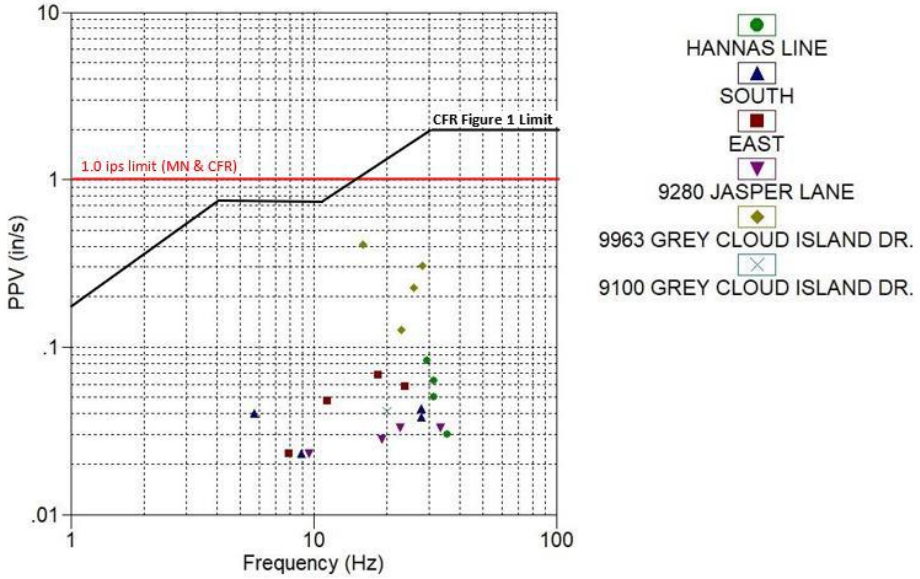


Figure 2: Seismic data compared to State/Federal Limits

The standards must be met at nearby structures whether they are 1000 feet from the blast area or 200 feet from the blast area. Because PPV dissipates with distance, a seismograph is placed near the closest structure, quantifying worst case vibrations and demonstrating compliance with the blasting standards. The monthly blasting report which quantifies the blasting effects is prepared by a third party and submitted to the Township on a monthly basis. In summary, quantification of the effects of blasting are

anticipated to be below state and federal standards for all blasts at all structures. Third party monitoring of each blast confirms this.

Each blast is engineered and takes into consideration the distance to the closest structure. Blast design parameters such as hole spacing, hole depth, loading, stemming, and delay are established based on the field conditions and setbacks from structures. These are adjusted as blasting gets closer and closer to a structure to ensure that the state and federal standards for protecting the structure are met. Homes are built to move and react to everyday activity and environmental motion like slamming of a door, a passing train, or vibrations produced by thunderstorms. Building materials can withstand specific vibration levels before damage occurs.

Ground vibration is greatest closest to the blast and rapidly dissipates with distance from a blast. This means that the distance to the closest structure is a key input into blast design. Scaled distance formulas are used to calculate the anticipated blast effects from various explosive weights per delay at different distances. Then the actual seismograph readings can be evaluated to develop and further aid in subsequent blast design and ensure that standards can be met at the closest structures. Blasts within 100 feet of a structure can be designed to safely stay below the State and Federal standards established to be protective of structures and infrastructure.

People can feel vibration and are very perceptive to even very small amounts of ground motion, well below vibration that could cause damage to structures. This means that residents in the vicinity of the quarry may feel a blast and hear the blast since ground vibrations move faster than the air overpressure waves so people may feel the ground motion and then hear the blast a short moment later – similar to seeing lightening and then hearing thunder. A typical blast at the Larson Quarry lasts 2-3 seconds which means that with the anticipated future blast frequency a cumulative effect totaling less than two minutes a year is anticipated to be heard or felt by residents.

Holcim will prepare a Blast Monitoring Plan for blasting within the expansion area. The Blast Monitoring Plan will be provided to the County and Township for approval as part of permitting materials. The Blast Monitoring Plan will address the blasting process, best practices, notification procedures, blast monitoring, pre-blast surveys, reporting requirements, standards, and blast vibration mitigation measures to ensure compliance with adopted standards. Pre-blast surveys to be conducted by an independent contractor will be offered to residents with structures located in proximity to the quarry expansion limits. A pre-blast survey protects both the homeowner and the operator by documenting any pre-mining defects and structural issues in order to establish a starting point for an independent professional review in the event damages from the blasting activity are claimed. After blasting has started, any changes that are found can be compared to the initial condition and to seismograph records.

In addition, Holcim will offer to nearby residents an option of being placed on a blast notification list. People who opt in will be notified via text the morning that a blast is planned and then again shortly before the blast takes place. Because blasting occurs so infrequently and can occur at any time between the allowed hours of 8:00 am and 4:00 pm, notification just prior to a blast eliminates nearby residents being surprised by the blast.

GCI Comment A5.12

10c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in item 10b above and any risk potential.

Mitigation should be described here for impacts to the MRCCA and PCAs as a result of the road realignment.

Response A5.12

Potential impacts to PCAs are limited to the DNR native plant community and the significant vegetative stand which are described in detail in responses A4.1-A4.4 and A5.8-A5.9. The vegetation restoration plan will be implemented by Holcim and administered under the Township's regulatory authority and required vegetation removal permit.

GCI Comment A5.13 As previously noted, this is the appropriate item to discuss the potential incompatibility between blasting activities and residential uses. This section should be updated/corrected to reflect specific mitigation related to blasting within proximity to occupied residential structures.

Response A5.13

A Blast Monitoring Plan will be prepared which will include pre-blast surveys for structures located near the eastern blasting limits, a blast notification process to notify nearby residents prior to a blast and contact information for reporting a blasting complaint. See also response A5.11

GCI Comment A5.14

Transportation: Subsection (a) requires that the Project Proposer, "Describe traffic-related aspects of project construction and operation." This analysis/description is not provided. A potential significant impact associated with the mining operations is the quantity of truck traffic, which is not identified or described. The number of truck trips, full load/empty, time of travel, haul routes, etc., all impact the surrounding properties and are not addressed within the transportation item. While this is a continuation of an existing use, Township residents have indicated increasing numbers of truck trips as well as changing haul routes. The only way to verify the impact is to identify the counts within the EAW analysis.

Response A5.14

As indicated in the EAW, the proposed project will have no impact on traffic generation and no change to the timing of haul traffic. Currently material produced at the site is either barged to Holcim's distribution yard in St Paul or trucked to local markets. The haul routes used to deliver to local markets are dictated by the location of the job. Traffic generation is seasonal with the higher rates generated in Q2 and Q3 and so typically when looking at aggregate operations, traffic generation is broken down into an analysis of quarters. Traffic generation rates from the past five years of load counts based on a five day haul week as allowed by Township Ordinance. Average hourly traffic generation rates are based on the hauling hours

allowed by the Township's Ordinance which stipulate that loading of trucks for delivery may be conducted only between the hours of 7:30 a.m. and 4:00 p.m., Monday through Friday, with hauling by truck on public roads within the Township to be conducted between the hours of 8:00 am and 4:30 pm., Monday through Friday. Peak hour generation rates are based on am peak at 10% of daily average and pm peak hour is based on 8% of daily average.

Quarter	Q1 Jan-March	Q2 April- June	Q3 July-Sept.	Q4 Oct-Nov.
Avg. loads/day (Rounded up)	12.6 (13)	46.6 (47)	48.4 (49)	33.0 (33)
Avg trips/day	26	94	98	66
Avg load/hour (rounded up)	1.5 (2)	5.5 (6)	5.7 (6)	3.9 (4)
Avg trips/hr	4	12	12	8
Peak am (8-9) Loads/hr / trips/hr	2/4	6/12	6/12	4/8

The table above is based on five-year averages from 2020-2024. The demand for local aggregates drives the load count for each year. During 2022 there was a large local project that resulted in peak traffic generation rates in the month of June which were over two times the typical June rates and resulted in 14 loads/hr during the peak hauling period in June 2022.

Typically, about one-third of the total production at the site is trucked to local markets and two-thirds of production is barged. The five-year average for percentage of materials hauled by truck to local markets is 32.5% as shown on the table below. There is not a trend towards an increased percentage of material hauled by truck. Total loads hauled in both 2023 and 2024 were lower than the five-year average and also do not indicate an increase in hauling to meet local demand. The project is not expected to increase truck hauling or change the percentage of material hauled by barge.

Year	Percent Hauled
2020	35.6%
2021	28.8%
2022	32.0%
2023	33.3%
2024	32.6%
AVG	32.5%

GCI Comment A5.15

Transportation: No evaluation was completed regarding the construction traffic or trips associated with construction of the road realignment of either Option 1 or Option 2. Construction traffic will be

compounded with hauling trucks from the mining operation, and the potential impact was not evaluated.

Response A5.15

Transportation: Traffic generation rates from the construction of a project are typically not included in the project traffic impact analysis. It is anticipated that equipment to construct the road will need to be mobilized to the site for both options and that the road contractor employees will need to commute to and from the job site during construction. The increase in traffic associated with the construction of the new alignment (Option 1) or the temporary roadway (Option 2) is temporary in nature and not considered by definition a significant environmental effect.

GCI Comment A5.16

Access should be described for Option 1 and Option 2 in more detail. The current mining operation appears to utilize secondary and/or emergency exits that will no longer be present depending on which option is selected.

Response A5.16

No change to site access under Option 1 or Option 2 is proposed. The current established site access will continue to be utilized for both options. The current mining operation has one main access and does not have a secondary or emergency access point. There is an easement for a private driveway through the northern portion of the existing quarry providing access to a property north of the quarry west of CR 75. This driveway will be relocated along the northern property line per an existing agreement and the Project will not impact the relocated driveway. There is an existing 33 ft easement to the east of CR 75 for ingress and egress to three residential properties located southeast of the proposed expansion area. Portions of this driveway easement may be relocated and an easement provided for those residents that the easement benefits. With Option 1, the final alignment and design of the rerouted CR 75 will consider the required modification to the driveway serving these three properties and access to the properties to CR 75 will be maintained.

GCI Comment A5.17

Transportation: No mitigation is identified given the current lack of analysis. Once proper analysis is completed, this section should be reviewed.

Response A5.17

The project is not proposing to increase traffic. The project is proposing to transfer the majority of product by barge substantially reducing the number of haul trips associated with the quarry. The Township through the on-going regulatory authority of their mining ordinance established limits on the hours of truck hauling. No potential significant effects with respect to traffic were identified and therefore no mitigation is proposed.

Attachment A6 National Park Service (NPS) Comment Letter

NPS Comment A6.1

Section 1 - Land Use (pg. 25) MNRRA and MRCCA

"For a project to be compatible with the MRCCA, the land use must be managed to maintain the character of the river corridor within the context of residential and neighborhood development, and also to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas. The proposed project complies with MRCCA setback requirements, and the mining limits will be far enough from the Mississippi River and the Grey Cloud Channel to preserve the character of the river corridor in terms of its scenic and natural value. The post-reclamation end use is a vision of a mixture of open space, lake, and residential development which supports the Townships future rural residential land use plans. Summarily, the proposed mine expansion plan in combination with the reclamation plan is compatible with the national MNRRA Program and the state MRCCA Program." (pg. 25)

Grey Cloud Island Township's MRCCA ordinance (Ord. No. 60) establishes clear requirements for reclamation and vegetation management for projects like the Larson Quarry expansion. Vegetation clearing within mapped native plant communities and significant vegetation stands requires a vegetation permit (Sections 9.2 and 9.4). Under Section 9.6, a vegetation restoration plan must also be developed to restore the site in a manner consistent with the community's vision for the area after the mining operation is completed.

The proposed project in the EAW includes extensive vegetation clearing in a mapped native plant community, and without detailed and enforceable restoration strategies, these activities pose significant risks of long-term ecological degradation. Such outcomes would directly conflict with the goals of the Mississippi NRRA CMP and MRCCA rules, which prioritize ecological integrity and the protection of native habitats.

The NPS recommends that the township requires clear detailed reclamation and vegetation restoration plans that align with the Township's stated post-mining land use goals, mitigate long- term impacts to ecological integrity and native plant communities, and include enforceable measures to ensure compliance with the MRCCA ordinance.

Response A6.1

Thank you for your comment. Please see responses to the Minnesota Department of Natural Resources comments A4.1 -A4.6 and responses to Grey Cloud Township comments A5.8-A5.10 which address the existing vegetation, Native plant communities, significant vegetation stands, Township vegetation permit and vegetation restoration plans. Holcim has partnered with Great River Greening and has been voluntarily restoring woodland habitat along the western setback area of the Mississippi River and will be developing a vegetation restoration plan for the degraded woodlands that will remain along the Grey Cloud Channel corridor as part of the vegetation permit which will align with the Township's stated post-mining goals and enhance the long-term integrity of the native plant communities on the site.

RGU Response to Comment

Please see the RGU response to DNR comment A4.1.

NPS Comment A6.2

Section 1 – Land Use (pg. 27-28) Native Plant Communities and Significant Vegetation Stands

"Consequently, the loss of this forested area would not be a significant loss of unique forest resources in the region." (pg. 28)

As identified in the EAW, "The Project Area contains one area identified by the National Park Service as a Significant Existing Vegetative Stand, and one area identified by the MDNR as a native plant community." These are largely intact, overlapping forested areas. Despite the classification with the EAW as "common" and "degraded," the presence of forested land still provides invaluable resources such as habitat for local native plants and animals, buffer zones to surrounding natural areas, scenic and aesthetic values, and as a site of potential future forest habitat improvements. The loss of these 79 acres within the Mississippi NRRA and MRCCA boundaries would be a significant loss.

Response A6.2

Please see responses A4.1 -A4.6 and A5.8-A5.10 which acknowledge that while the area has a biodiversity significance rating of "below" it may still hold local wildlife value. Improving habitat of the remaining wooded area is proposed as part of the vegetation restoration plan associated with the Township's required vegetation removal permit. A wildlife corridor along the Grey Cloud Channel will be maintained. Based on other comments received, the maximum amount of woodland cover to be removed has been more accurately determined to be a maximum of 69 acres of tree loss with 44 acres remaining in the expansion area Under Option 1, as in Repose A4.1 above. The remaining woodland area would be managed through the vegetation restoration plan referenced above.

Attachment A7 Washington County Public Works (PW) Comment Letter

PW Comment A7.1

Washington County has reviewed the Holcim Larson Quarry Expansion Project Environmental

Assessment Worksheet (EAW), dated September 24, 2024. Per Minnesota State Statute, an EAW has been triggered by Holcim-MWR, Inc. (Holcim)'s proposal to expand its existing Larson Quarry at 10120 Grey Cloud Island Drive South in St. Paul Park, Minnesota, 55071. The expansion project is proposed to expand the existing limestone quarry onto a 148-acre property located east of the current approved mining area. Washington County Public Works understands that the expansion of the mining area is estimated to extend the life of mining activities at Holcim's Larson Quarry by approximately 20-25 years.

The existing subsurface limestone resources located on Upper Grey Cloud Island have significant regional benefit. Aggregate products, such as the materials comprised at the Larson Quarry and at the proposed expansion area, are vital to the construction industry in our rapidly growing county. Per the Washington

County Development Code, Washington County will continue to support new mining endeavors and maintain existing mining operations in order to maintain geographically disperse mining operations within Washington County. Because the aggregates industry provides a critical commodity to the local economy, Washington County believes the remaining limestone resources on Upper Grey Cloud Island have significant regional benefit and continuing to harvest these local resources is reasonable if the appropriate environmental processes are undertaken and all permits are received.

Response A7.1

Thank you for your comment.

PW Comment A7.2

Washington County's Mining Land Use Authority
Because the proposed expansion area is located in an unincorporated community of Washington County, the Washington County Development Code applies to Holcim's mining operations. Chapter 7 of the Development Code, Mining Regulations, is intended to provide for the economic availability and removal of natural resource materials within Washington County. The provisions set forth within the Development Code establish regulations, safeguards, and controls for this jurisdiction regarding noise, dust, traffic, drainage, and groundwater quality to minimize environmental and aesthetic impacts on mine or mine-adjacent property.

Chapter 7 of the Development Code sets requirements for mining permitting within Washington County's jurisdiction. The Larson Quarry is currently operating under a valid Washington County 5-year Conditional Use Permit (CUP), which was issued on May 31, 2023. Upon completion of the environmental analysis process for the proposed expansion project, permitting can commence to update the CUP to include the expanded area. The County will review the permit at that time and consider the conditions required to mitigate any potential impacts within the EAW. Washington County Planning Advisory Commission (PAC) will consider an amendment to the 5-year Conditional Use Permit (CUP). In addition to the County's permit, the mine will need to work with Grey Cloud Island Township to complete any zoning permits for the project.

Response A7.2

Comment noted. The County CUP and Township zoning permits are noted in the permits table in Section 9 of the EAW and the updated Table included in Response A5.5

PW Comment A7.2

Transportation
Washington County Public Works understands that Option 1 would require significant realignment of County Road 75 (Grey Cloud Island Dr S). Washington County Public Works would support Option 1 if Grey Cloud Island Township assumes jurisdiction of the entire extent of County Road 75, because the permanent relocation of the roadway as shown on Option 1 Site Plan (C2.1) would no longer provide the functions of a county highway due to the circuitous route. If Option 1 were to be pursued, a jurisdictional

transfer of County Road 75 from Washington County to Grey Cloud Island Township, at the expense of Holcim, would need to be facilitated before the permanent realignment of County Road 75.

Washington County Public Works understands that Option 2 would require a temporary realignment of County Road 75. Washington County Public Works acknowledges that the aggregate material below the roadway within the County's public right-of-way has significant regional benefit and therefore Public Works supports a temporary realignment of the County Road to allow mining in the County's public right-of-way to occur. If Option 2 were to proceed, the provisions of the temporary realignment of the County Road would be identified through Washington County's transportation permitting process.

Response A7.2

Thank you for your comment.

PW Comment A7.3

While Washington County Public Works would support both options identified in the EAW, the preference is for Option 2 to proceed into permitting since previous communication with the Township indicates that they do not have the financial resources to maintain an additional roadway.

Coordination with Washington County will be required to determine the specific details of the proposed infrastructure in the County's public right-of-way. Regardless of the option selected, the following items need to be taken into consideration. The considerations include, but are not limited to:

1. All temporary and final conditions of County Road 75 within the County's public right-of-way must be constructed in accordance with MN State Statute 8820 for a 40 mile per hour (mph) design speed.
2. All work associated with the temporary and/or permanent realignment of County Road 75 would be paid for by Holcim.
3. All property required for temporary and/or permanent realignment of County Road 75 would be dedicated to the applicable agency, at the expense of Holcim.
4. Holcim will need to obtain the necessary transportation permit(s) from Washington County Public Works for work within the County's public right-of-way.

    a. A Washington County Access Permit is required for any new driveway, commercial access, field entrance, or private/public street to a Washington County highway, or for a modification or change in use of an existing access. A permit application shall be submitted 30 days prior to the start of work – additional time may be required if plan revisions are needed. In addition to the applicable fee, a refundable deposit is required, based on the scope of work.
    b. A Washington County Right of Way Permit is required for work which obstructs the right-of- way, grading in County right-of-way, utility installations and maintenance, etc. Permit requirements include an application, registration form, location map, sketch/plan, temporary traffic control plan (if requesting obstruction/closure/detour), and Certificate of Liability Insurance.

5. Those occupying, using, or seeking to occupy or use the right-of-way, or place any equipment or facilities in the right-of-way, must be registered with Washington County. A Right of Way Occupancy Registration Form is available on Washington County's website.

Response A7.3

Holcim understands that under Option 1 an agreement regarding jurisdictional authority, final design, dedication of right of way, and costs associated with design, construction, and maintenance agreements acceptable to the County and Township would need to be reached prior to moving forward with an application for Option 1.

PW Comment A7.4

Washington County Public Health and Environment
Washington County Groundwater Planning Team appreciates the attention to previous comments within the EAW and has the following additional comments:

1. There is record of individual Subsurface Sewage Treatment Systems (SSTS) within the mapped area. Any sewage tank(s), drywells/cesspools, or SSTS component(s) located shall be properly abandoned. A County permit for septic system abandonment shall be submitted to the Washington County Department of Public Health and Environment.
2. Any water supply wells located during the expansion or active mining phases need to be sealed according to Minnesota Department of Health regulations to mitigate potential groundwater contamination.
3. All solid and hazardous waste, including waste from historic dumping, must be removed from the property and managed at an appropriately permitted waste disposal facility.
4. Washington County Groundwater Plan and guidelines expect appropriate planning and project execution when developing in or around areas with karstic geologic features. We emphasize the need to follow MPCA and Minnesota state standards when mine activity alters or impacts groundwater and/or quality.
5. Project dewatering and general water use should not impact the water quality or quantity of private wells in the surrounding area.
6. The Project Site overlaps with and/or is closely situated to PFBA and PFOS contaminated areas. If moving soil in a PFAS contaminated area, the project will need to follow MPCA rules. Monitoring and testing mechanisms should be put in place for tracking on-site developments of PFAS contamination if such occurs.

Response A7.4

Comments noted.

PW Comment A7.5

Reclamation
Washington County interprets the reclamation plan submitted with the Larson Quarry Expansion Project EAW to be consistent with what's been submitted and approved for the Larson Quarry's

current 5-year Conditional Use Permit (CUP), which was issued on May 31, 2023. Washington County Public Works is comfortable with the plan identified and will further coordinate the details of the final condition for the manmade lake through the future 5-year CUP permitting process. The reclamation plan will need be reviewed by the Washington County Conservation District through the CUP process and the applicant will be required to comply with recommendations from the Conservation District. The end use of the setback areas outside of the unnatural lake will need to follow Township zoning regulations. Final development of the setback area(s) will be coordinated through the applicable agency's development approval process

Response A7.5

Comment noted.

Attachment B1 Joe Neumann Comment Letter

All comments received during the comment period can be found here:
https://www.washingtoncountymn.gov/CivicAlerts.aspx?AID=4147

Neumann Comment B1.1

I support this plan to allow expansion of the Larson Quarry. The quarry operation employs residents of Washington County, adds to the tax revenue of the county and city, and ships a majority of products by barge to reduce the number of trucks on local streets and roads, reducing truck traffic and allowing for more efficient shipping of aggregate products. These are all things that are necessary for our community to grow and thrive in the coming years. Preventing this expansion will cause the closure of the operation, speeding up residential development of the area and increasing the traffic to the island.

Response B1.1

Thank you for your comment.

Attachment B2 Erick Boustead Comment Letter

Boustead Comment B2.1

I believe there should be further environmental study and review before a decision is made re: Larson Quarry seeking to expand operations at Grey Cloud Island.

Response B2.1

Thank you for your comment. The County, as the Responsible Government Unit (RGU), will be making a positive or negative declaration on the need for an EIS as part of the current environmental review process based on the Project's potential for significant environmental effects in accordance with Minn. Rule 4410.1700, subparts 6 and 7. In deciding whether a project has the potential for significant environmental effects, the RGU "shall compare the impacts that may reasonably be expected to occur from the project with the criteria in this rule," considering the following factors (part 4410.1700, subparts 6 and 7):

A. Type, extent, and reversibility of environmental effects;
B. Cumulative potential effects of related or anticipated future projects;
C. The extent to which environmental effects are subject to mitigation by ongoing public regulatory authority; and
D. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other Environmental Impact Statements.

The Project has previously gone through environmental review in 2005 with a negative declaration of need dated September 20, 2005 for an Environmental Impact Statement. Findings of fact were adopted to support the decision which evaluated impacts that may reasonably be expected to occur from the project in accordance with the above criteria. In 2005 it determined that it was reasonable to expect that significant environmental effects would not occur form the Project. The County will review

information contained in the updated EAW, comments, and response to comments, and make a decision based on the potential for significant effects based on the above criteria.

Boustead Comment B2.2

Grey Cloud Island is a site of deep significance for Dakota people. As the Dakota are the first people of this land, their concerns and wishes should be a primary consideration in how to move forward. We must protect Grey Cloud Island for future generations.

Response B2.2

Thank you for your comment. Please see **Response A3** for additional information regarding cultural resources.

Attachment B3 Tim Foster Comment Letter

Foster Comment B3.1

I am only writing in fear that our government may let this land be rezoned to be stripped and flooded. Please do not give in to the Swiss corporation. Don't except brides[sic] or payouts. This is right in the metro area. They can mine the ample rural areas throughout the state. Please leave this sacred land intact. Why would this even be considered? What is in it for the township citizens? Who would benefit from this?

Response B3.1

Thank you for your comment. The proposed eastern expansion area has been noted as potential future mining in Township planning documents for several decades. The existing subsurface limestone resources located on Upper Grey Cloud Island have significant regional benefit. Aggregate products, such as the materials comprised at the Larson Quarry and at the proposed expansion area are vital to the construction industry in our rapidly growing county.

Attachment B4 Jeffrey Mohr and Tanya Hodge Comment Letter

Mohr and Hodge Comment B4.1

We are writing with comments and concerns about the proposed Larson Quarry mine expansion. After reviewing the EAW, we believe an Environmental Impact Statement is warranted to better understand the permanent negative impact that it will have on our community. Furthermore, significant modifications are in order to curtail this impact.

First, neither option 1 nor option 2 of road relocation/mining areas are respecting the 500’ foot setback from our property line for extraction. We are at 9301 Grey Cloud Island Drive (property north of the expansion area). This needs to be highlighted and corrected.

Response B4.1

The EAW studies the maximum extent of quarry excavation and acknowledges that actual permitted setbacks may be greater. There is a legally recorded agreement recorded against your property that

waives objections to certain setbacks for mineral extraction. As such, the Proposer could apply for a variance, as they have previously with respect to mining activities west of CR 75, and therefore the maximum extent of potential mining is indicated on the plans included in the EAW. As indicated in the EAW - "This EAW studies the greatest area of impact proposed by the Proposer. Final setback requirements will be determined during the permitting process."

Mohr and Hodge Comment B4.2

The dewatering information is from 2004. This was before the discovery of PFAS in our wells. Does dewatering create a "current" in the aquifer pulling more contaminants to our groundwater?

Response B4.2

The 2004 dewatering study was prepared by Barr Engineering for the 2005 EAW. Barr Engineering prepared an updated study in 2018 after the discovery of PFAS in the regional groundwater which was also included in the EAW Attachment 8. The PFAS area of groundwater concern extends across the eastern expansion area. Wells that surround the Project area have a health advisory and are eligible for Point of Entry Treatment systems. While dewatering may increase the rate of flow towards the quarry within the immediate vicinity of the Site as shown in Attachment 8, the Barr model predicted the extent of the dewatering influence to extend outward toward the Main Channel of the Mississippi River and grey Cloud Channel, but not beyond these limits. For this reason, most of the water being captured by the dewatering comes from the river and surrounding alluvium nearest the quarry and not the areas most affected by PFAS. Because the wells referenced by the commentor are outside this area of influence, the PFAS migrating toward those wells would do so regardless of the existence of the Project. The Minnesota Pollution Control Agency will continue to manage the installation and maintenance of in-home (POETS) systems and continue to test private wells for PFAS at no cost to the homeowners. Homeowners can use the well sampling request form to have their well added to the sampling program. UltraPure is the Culligan affiliate that installs and maintains the granular activated carbon filtration systems for Grey Cloud Island Township. Their contact info is: 507-581-5823.

Mohr and Hodge Comment B4.3

The Barr Engineering study from 2004 seems to show a gradual slope to the floor of the pit. This is inaccurate as the intention is a vertical 100' wall. Does this affect the amount of dewatering that will occur?

Response B4.3

The contours depicted on the 2004 figure represent predicted future groundwater drawdown contours not topographic contours.

Mohr and Hodge Comment B4.4

We have seen a sharp reduction in wildlife in recent years due to habitat loss. How will mine expansion and road relocation impact wildlife corridors for our non-human residents? Option 1 seems to eliminate corridors completely with the road right on the bluff line down to Grey Cloud Island Channel.

Response B4.4

Both options retain a wooded corridor along the Grey Cloud Channel. Both Options will require a vegetation restoration plan to improve the health the of the remining wooded area which has been degraded by invasive species and has evidence of Oak Wilt and Emerald Ash Borer. See Response A4.1 through A4.6 and A5.8 though A5.10 for additional information.

Mohr and Hodge Comment B4.5

How will blasting so close to our homes affect our infrastructure? (wells, foundations, etc.) Impact to the human environment is important too!

Response B4.5

Please see Response A5.11, Attachment A.

Mohr and Hodge Comment B4.6

Dumping of trash (Couches, hazardous waste, construction debris) is a major concern of ours. How will road relocation cause more opportunity for dumpers to furtively pollute our island? If the road is on the bluff next to the channel; they could throw it directly in the river.

Response B4.6

The final alignment of the road has not been determined but is expected to be setback a sufficient distance from the wooded bluff that it is not reasonable to conclude that trash or hazardous waste could easily be thrown directly into the river from the road. The realignment of the road will not significantly change the current opportunities that exist in the community for illegal dumping. The Washington County Sheriff's Office is responsible for enforcement of illegal dumping in Grey Cloud Island Township.

Mohr and Hodge Comment B4.7

Are we engaging the Prairie Island Band of Ojibwe for their feedback on the permanent unreclaimable destruction of their ancestral home? The archaeological site assessment is weak. We are not swayed by a “negative shovel test”. Are you? There is multidimensional and priceless value to this land for our native population.

Response B4.7

The PIIC has been engaged as part of the EAW process. Please see Attachment A3 Prairie Island Indian Community (PIIC) Comment Letter PIIC Comments A3.1 – A3.9 and Responses A3.1-A3.9 for additional information.

Mohr and Hodge Comment B4.8

We have spent a small fortune installing a solar array on our roof, a fast charger and 2 EVs which we can charge with our solar to decrease our dependence on fossil fuels. How will increased dust production from mining closer to our home impact the efficiency of our solar and impair our ability to reduce our carbon footprint?

Response B4-8

The MPCA Air Emissions Permit under which Holcim operates requires control of fugitive dust emissions. Holcim operates adjacent to many solar arrays without impacting the panel efficiently. Two letters from solar project operators discussing this topic and confirming that there is no impact from dust on their operations or efficiencies are provided below.

MSC GreyCloud01, LLC

January 13, 2025

Ms. Patty Bestler
Regional Manager, Environmental & Land Services
Holcim – MWR, Inc.
2815 Dodd Road, Suite 101
Eagan, MN
Via Email: patty.bestler@holcim.com

Re: Solar Garden near Larson Quarry

Dear Ms. Bestler:

I am writing regarding the proposed Larson Quarry expansion and the Environmental Assessment Worksheet Holcim submitted in relation to this expansion.

As you know, MSC GreyCloud01, LLC has owned and operated a 1 MW community solar garden since 2019 on land leased from Holcim near the proposed Larson Quarry expansion area in Grey Cloud Island Township. We have not experienced any adverse impacts to the operations or efficiency of our solar garden since 2019 and do not anticipate any negative impacts resulting from the proposed expansion. On the contrary, our firm has an interest in expanding our solar garden if excess land were to become available from Holcim outside of the expansion area.

Holcim has been a great partner to our firm, and we are very appreciative of Holcim's long-term commitment to promoting renewable energy in the region.

Please contact me with any questions.

Thank you,

Robert W. Stolpestad

200 Southdale Center, Edina, MN 55435

TBB, LLC.

January 14, 2025

To Whom It May Concern,

I am writing to express our sincere recommendation for Aggregate Industries, whose proactive partnership and professionalism during the planning process of their tunnel installation near our Empire Township solar garden in were exemplary.

From the outset, Aggregate Industries demonstrated a collaborative spirit, engaging with our team to address potential concerns and opportunities. One specific concern was that their mining operations within 200' of our solar garden would create enough dust to reduce the overall production of energy or require extra cleaning of the solar panels themselves. During mining we did not experience any detriment to our operations. Again, their commitment to transparency, attention to detail, and willingness to incorporate feedback ensured a seamless integration of their project with our solar garden's operational and environmental goals.

In particular, Tom Schmit took proactive steps to minimize disruptions to our facilities, proposing innovative solutions that protected both the integrity of the solar garden and the surrounding environment. They consistently communicated timelines, managed resources effectively, and maintained open lines of dialogue, ensuring mutual trust and a shared vision throughout the project.

The result of their efforts was not only a successfully planned tunnel installation but also a strengthened partnership that exemplifies what can be achieved through thoughtful collaboration. I have no hesitation in recommending Aggregate Industries to any organization seeking a reliable and forward-thinking partner in infrastructure development.

Please do not hesitate to contact me at cleopold@reeapartments.com or 651-389-3822 if you would like to discuss our experience further.

Best regards,

Christy Leopold, Project Manager

TBB LLC – Empire Township solar garden

Mohr and Hodge Comment B4.9

If allowed to proceed with expansion, can we make the mine extract in a fashion that would allow for a gradual grade down to the future lake so that it can actually be used by future generations? A fifty foot cliff down to a 50' deep lake seems like a major safety concern eternally.

Response B4.9

The perimeter of the lake within the eastern expansion area will be designed with appropriate safety considerations including potential safety benches, safe water exits, and rock fall catches designed into the perimeter sections at appropriate locations. There will be the opportunity to develop a shallow

entrance area for beach or boat access in the existing quarry. Please see also Response A4.1 of Attachment A.

Mohr and Hodge Comment B4.10

Option 1 shows the addition of two 90 degree turns on CR75 to start and end the ring road. Engine braking (which *does* occur all the time) and acceleration of the mine trucks around these turns will cause significant noise pollution.

Response B4.10

The location of the roadway of the plans in the EAW shows a conceptual alignment. The final design of the roadway will take this comment under consideration.

Attachment B5 Tracy Moe Comment Letter

Tracy Moe Comment B5.1

I want to know if there are plans to keep or eliminate the driveway along the easement from CR 75 to the Christianson property abutting the Grey Cloud Slough. It's a 33ft wide easement and recorded at Washington County.

Response B5.1

With the maximum extent of the proposed quarry limits, a portion of the easement could be impacted. In that case the driveway would be relocated and the easement amended in accordance with an agreement between the operator and the three property owners who utilize the access easement. If an agreement is not reached, the mining limits can be adjusted to prevent the need to relocate. The EAW shows the maximum potential impact. If Option 1 and the relocation of CR 75 is approved, a new access easement will be granted by Holcim to the Christenson and two other property owners.

Attachment B6 Lynn Utecht Comment Letter

Utecht Comment B6.1

The proposal for a variance to mine the Larson Pit to jump the road at County Road 75. Is just plain wrong. And not well thought out by. Wholesome. The only thing this non American company wants. Is the money from the mine? They could give a rat's ass about the environment, pollution it will cause or the hardships on the residents.

Environment: They will be taking away permanently habitat for deer, fox, numerous small animals, eagles, hawks, other birds, bees plus insects.

Response B6.1

Thank you for your comment. Please see Response A4.1 and A4.3 in Attachment A for additional information regarding potential impacts to habitat and proposed mitigation.

Utecht Comment B6.2

Pollution: from blasting, crushing, trucking, plus loading will pollute the air plus waterways. This mine is between the Mississippi River and pool to backwaters. The runoff from dirt, oil, diesel, and blasting waste will go into the waterways also. The wells that are already affected will likely dry up. The wells not affected yet are likely to become compromised. Holcim won't even admit to those wells already affected. What do you think they will do when others are?

Response B6.2

The Larson Quarry operates under the ongoing regulatory authority of the MPCA. This includes coverage under an MPCA General Non-Metallic Air Emission Permit and a MPCA NPDES/SDS Individual Permit which allows for discharge from the Larson facility. The MPCA issues air quality permits to ensure that a facility complies with federal and state rules, regulations, and ambient air quality standards established to protect the public health from adverse effects. The NPDES/SDS Individual Permit regulates dewatering discharge to surface waters. A Stormwater Pollution Prevention Plan (SWPPP) is currently in place for the existing quarry and will be modified and implemented for future operations. Monitoring and reporting of off-site discharges is required. Groundwater modeling predicts the anticipated drawdown at full quarry development and water levels are tracked as the quarry and the associated dewatering expands. Several of the domestic water-supply wells listed in the Minnesota Well Index within the area predicted to be affected by dewatering have well construction logs available. The available well logs indicate that the wells in the area are generally at least 175 feet deep, are completed in the Jordan Sandstone and generally have over 100 feet of available drawdown and are not at risk of drying up. Holcim will offer well agreements to well owners located within the predicted area of potential impact. See response B7.2.

Utecht Comment B6.3

Resident hardships: wells are just one of the issues affecting residents. In addition to dust, truck traffic, messed up roads, tearing up near brand new roads, noise and light pollution. There is the fact that further mining will devalue the residence property. In most if not all cases, these homes are the major investment and only nest eggs they have with this devalued. Most are at risk to being homeless and retirement. It is not right to have a foreign company come into our land., rape it, leave a 200 foot deep lake and essentially abandon the area stamping mind. Another aspect that is ludicrous is mining within 200 feet of a house or. Structure. This is dangerous. Period. Do not let this happen. Not one person on Holcim's board would want that near their house, but they force it on us? I can't understand why the MNDNR, MN PCA, federal PCA, federal EPA have not gotten involved in this. Do they approve on just or just not know? It's time to contact all of them, period.

Response B6.3

Mineral extraction standards adopted by the County and Township are implemented, and permit conditions imposed, with Best Management Practices put into place to minimize nuisance conditions which may be created by the mine. The EAW is distributed to a number of government agencies, including the MDNR, MPCA, MDH, and Federal EPA, National Park Service, US Army Corps of Engineers, US Fish and Wildlife Service, in accordance with Minnesota's Environmental Review Rules. See Attachment A for Agency comment letters and responses.

Utecht Comment B6.4

After the scathing denial Holcim got from the federal government a few years back, denial to mine the Mississippi Waterway. This proposal should also follow suit. No more mining on Grey Cloud Island**.**

Response B-6.4

Comment noted.

Attachment B7 Jane Speech Comment Letter

Speech Comment B7.1

Operations Overview

The limestone is currently being quarried in two separate cuts or benches within the active mining area. The upper bench, about 50 feet thick, Is typically removed first followed by extraction of the lower bench, also about 50 feet. Once material is blasted and extracted, It is transported via a conveyer system to the processing plant where it is crushed, screened and/or washed. Processed materials are loaded onto barges or trucks for transportation to their destination. The majority of the processed material is currently and will continue to be transported via barge up the Mississippi River to the company's distribution yard in St. Paul. Some material will also be trucked out on CR 75, depending upon the demand of local projects.

Define 'majority' more specifically. Before Minneapolis closed a riverside yard, 90% or more of the Larson material was moved by barge. Did the percentage change? Has that translated into more truck traffic on CR75? Maximizing barge transfer and minimizing truck traffic results in better conditions for local residents.

Response B7.1

Material that is hauled to market by truck has always been limited to that which is needed to meet local demand for local projects. Closing of a riverside yard did not impact this. The majority of the material is still barged. The percentage of material hauled by truck has been averaging approximately 33% over the past several years. The increase from 90% barging in the past to 33% occurred sometime ago and is associated with the growth of Cottage Grove and the local market, not the closing of any barging facilities.

Speech Comment B7.2

Effects of dewatering must closely be monitored and measures to mitigate or repair adverse effects on residents' wells must be enforced. Are procedures in place to help residents pursue complaints without bureaucratic entanglement?

Response B7.2

Holcim will offer a well owner agreement to well owners located within the predicted area of drawdown established by Barr Engineering Co. The well interference agreement will identify procedures to follow in the event that a residents' well experiences well interference. A licensed well driller of choice will inspect the well. If the well driller determines that the issue is the result of declining water levels associated with

the dewatering, Holcim will be responsible for remedying the problem and restoring water to the resident. The well owner agreement will streamline the well interference process that the MDNR has established. However, if the issue is not resolved to the satisfaction of the well owner, the State's well interference resolution process can still be pursued.

Speech Comment B7.3

Explosives provide a valuable tool for mining, and blasts can be well designed. Larson Quarry seismographic data indicate regulatory compliance. Our responsibility as residents of Grey Cloud Island is to ensure remedial measures are in place if blasts have unexpected deleterious effects

Response B7.3

A Blast Monitoring Plan will be prepared and submitted for approval as part of the County and Township permits. The Blast Monitoring Plan will outline notification and remedial measures in the event a blast exceeds the state and federal standards. Please see also Response A5.11 in Attachment A for additional information regarding blasting.

Speech Comment B7.4

If Option 1 is undertaken, how long would construction take? Final hookup is estimated at days or weeks, but how long would it take to prepare and build? About 6000 feet (1.14 miles) of County Road suitable for heavy trucks? Would cleared trees be burned, chipped, salvaged for firewood or taken off the island? How much truck? Traffic would be added for hauling aggregate materials from the Larson Quarry (or the Nelson Plant) to the roadbed?

Response B7.4

It is anticipated that construction of the realigned road would be completed within one mining season. Work will be required to take place in accordance with MnDOT tree clearing timing requirements (MnDOT Technical Memorandum No 17-04-ENV-02. Larger trees removed as part of the project will be cut to size and transported to a lumber yard for processing. Stumps are to be ground on-site and the chips remain in place and/or moved with soils when constructing berms and during reclamation and ultimately decompose. Wood slash may also be used in accordance with the NPDES Permit as a sediment control measure during construction phases and removed as part of final stabilization.

Speech Comment B7.5

In its current configuration, CR 75 is about 1.1 to 1.2 miles long from the Larson Quarry driveway to the Culvert slash Bridge. A road around the expanded pit would be about 1.14 miles long. With a realignment, perhaps 0.1 or so miles of the current CR 75 would be eliminated. That still leaves an extra mile of road to be traversed, not only by residents and extra traffic from the outside development, (such as Mississippi Dunes), but by gravel trucks hauling from the Larson Quarry. Having trucks exit the island as quickly as possible is preferred. It's also preferable for safety to have a straight course instead of one with multiple curves.

Response B7.5

Comment noted.

Speech Comment B7.6

When mining is done and dewatering ended, Cloud Island will have new lakes furnished mainly with high quality water discharge from the Prairie Du Chien/Jordan rock formations. It is in everyone's best interest - including Holcim, since they'll still own the perimeter land to maximize post-mining development options. Waterfront land is expected to remain very desirable. Highest and best use of the land could be achieved more easily without the limitations of a truck route through it.

Response B7.6

Thank you for your comment. Truck traffic would be expected to be minimal once mining and reclamation is completed and residential land uses developed around the perimeter of the created lake.

Speech Comment B7.7

Isn't Geneva Avenue S on the **east** side of Grey Cloud Channel?

Response B-7.7

Correct, Geneva Avenue S. is located on the east side of Grey Cloud Channel. Figure 5 is an excerpt from Grey Cloud Township's Planned Land Use Map contained in Grey Cloud Island's Comprehensive Plan and Geneva Avenue is incorrectly labeled on that figure.

Speech Comment B7.8

In 2004 Barr Engineering developed Groundwater Flow Model Simulations. The difference between models for (a) continued dewatering of existing quarries and (b) ceasing dewatering in existing quarries indicated less drawdown if pumping ceases in the existing quarries. The latter scenario seems better for Grey Cloud residents.

Response B7.8

Comment noted. The ability to separate dewatering from the southern existing quarry excavation presents challenges and would require changes to processing areas and barge loading facilities that are no longer considered feasible.

Speech Comment B7.9

In 2018, Barr updated the simulations. Results reinforce the case for ceasing dewatering of the existing quarries, with dewatering confined to the proposed expansion area.

Response B7.9

Comment noted. The ability to separate dewatering from the southern existing quarry excavation presents challenges and would require changes to processing areas and barge loading facilities that are no longer considered feasible.

Attachment B8 Ben Humlie Comment Letter

Humlie Comment B8.1

What will be done with the wood waste created when mature trees are removed? Is it going to be used in a sustainable way in terms of lumber or will it go to Pigs Eye to be mulched and burned?

Response B8.1

Larger trees will be cut to size and transported to a lumber yard for processing. Smaller trees and shrubs etc., will be ground into wood chips and these chips are burned for energy. Stumps are to be ground on-site and the chips remain in place and/or moved with soils when constructing berms and during reclamation and ultimately decompose. Wood slash may also be used in accordance with the NPDES Permit as a sediment control measure during construction phases and removed as part of final stabilization.

Humlie Comment B8.2

Are any mitigation being taken for migratory nesting birds in the proposed area? This project may have a negative effect on the hunting opportunities on private residents' land and water's edge of the channel.

Response B8.2

The Project will need to follow MnDOT requirements for migratory bird protection for removals within the County Road right- of way. The Project will also require a permit from the Township to remove vegetation. A vegetation restoration plan is a component of this permit. The restoration plan will be prepared in coordination with the USFWS to address migratory birds. Remaining wooded areas will be managed to improve the health of the wooded area and the habitat for wildlife, nesting, and migratory birds along the Grey Cloud Channel corridor. Please see responses to the Minnesota Department of Natural Resources comments A4.1-A4.6 and responses to Grey Cloud Township comments A5.8-A5.10 which address the existing vegetation, native plant communities, significant vegetation stands, township vegetation permit, and vegetation restoration plans.

Humlie Comment B8.3

If work beings and Native American artifacts or remains are found how will that situation be handled?

Response B8.3

An Inadvertent Discovery Plan is being prepared by the Archeological Consultant which will be implemented during ground disturbing activities. The Plan will outline training and steps to take by Holcim if cultural resources are encountered during the life of the Project. If during the course of mining activity

mounds or other significant cultural features are found, all work will stop immediately, and the Office of the State Archaeologist (OSA) and the Minnesota Indian Affairs Council (MIAC) will be consulted as stated in Section 15 of the EAW.

Attachment B9 Teri O'Connor Comment Letter

O'Connor Comment B9.1

How can the EAW say that blasting within this expansion is not going to affect anyone/anything outside of the expansion? I live up the hill on the east side of the Grey Cloud Channel and we hear and feel the explosions from the current quarry up there - it will be much worse with the expansion. This does not make sense to me. It will not only be louder and more rattling but it will also disturb migrating and nesting species in the channel. How can the county or state say it won't?

Response B9.1

Air overpressure, which can be heard and which causes rattling of windows, is regulated by standards developed by the US Bureau of Mines. Air overpressure is monitored during each blast to demonstrate compliance with the standards. As blasting gets closer to residences, the blast design is modified to maintain compliance with the federal standard even as the distance to adjacent residences is reduced. Please see Agency Responses A5.11 in Attachment A for additional information regarding blasting.

O'Connor Comment B9.2

I would like to go on record as preferring Option 2 for the roadwork that Holcim is proposing. I think the bridge would be less impactful and keep the island in better shape after the company finally leaves it.

Response B-9.2

Thank you for your comment.

Attachment B10 Tanya Hodge Comment Letter

Hodge Comment B10.1

Dewatering and the Discharge of Per- and poly-fluoroalkyl substances (PFAS): Holcim's plan to increase, as stated in the EAW, the dewatering and discharge of untreated PFAS water into Pool 2 of the Mississippi River could have devastating environmental impacts beyond the state of Minnesota. The questions: Are there PFAS present in Holcim's test wells? They should be tested, and the test results should be made public. Furthermore, if PFAS are present, does this bring about a clear and present danger to the Mississippi River? Holcim may need to fill up the pit with the contaminated water to keep it where it is so that it does not become a conduit for the extensive spreading of PFAS-contaminated water. Pool 2 is already contaminated. The fact that PFAS is present does not undermine the importance of PFAS concentration.

Response B10.1

Holcim's test wells are groundwater monitoring wells and therefore only monitor groundwater elevations in the Prairie du Chien aquifer. PFAS have not been tested in these wells. PFAS are already known to be present in surrounding wells and the area is part of the East Metro Superfund Site. The groundwater impacted by the PFAS is moving toward the discharge area of the Mississippi River. PFAS is also present in the Mississippi River, where elevated levels have been found downgradient of the Pig's Eye Wastewater treatment plant and Pig's eye dump. The Project does not increase or change the concentration of PFAS in the groundwater or of the impacted groundwater ultimately reaching the Mississippi River. Please see also Responses 13.19-13.34.

Hodge Comment B10.2

With an EIS, could stakeholders, including the Minnesota Pollution Control Agency, EPA, Friends of the Mississippi, and South Washington County Watershed District, provide comments, research, and expertise on the environmental impact of the increased discharge of PFAS into the Mississippi River?

Response B10.2

This is not an EIS, it is an EAW. The EAW was submitted to the MPCA, Federal EPA, South Washington County Watershed District, US Army Corps of Engineers, and the National Park Service for review and the opportunity to provide comments as part of the Environmental Review Process. Any member of the public, including groups like Friends of the Mississippi, had the opportunity to comment on the EAW. The Project will follow state rules and guidance as they are developed through the MPCA's PFAS Blueprint and PFAS remediation work plan developed to address existing PFAS contamination.

Attachment B11 Jeffrey Mohr Comment Letter

Mohr Comment B11.1

One of my concerns from my previous comments was the mining boundary on the map of the EAW not respecting the 500' setback from my property line. My assumption is that the mine will say that they have a covenant on my property. This is true. However, the covenant is not and has never been legal. Ordinance 36 from 1985 (Which was repealed by ord. 49) states "An owner of property within the **CE district**, other than the applicant, may enter a written agreement with the applicant in recordable form to authorize mining within 500' of such owners property. Such authorization shall not be valid unless the written agreement is in fact recorded." The key thing here is that my property is not in the CE District and never has been. This agreement has not been enforceable since the date of its inception. For reference, the CE District boundary is the land east of CR 75 to the river. My property is entirely west of CR75 not in the CE district which is shaded above. Holcim has agreed at a previous hearing that my property is not in the CE. The town board has already ruled that the covenant on my property is not valid. I have attached both the covenant and the 2022 Town Board resolution on a previous variance request and validity of the covenant. Please add these pieces of information to my previous comments about the proposed mining boundary line on the north portion of the EAW.

Response B11.1

The covenant is a legally recorded document, it is simply that the Township Ordinance does not recognize a waiver of setbacks unless the legal agreement is between properties zoned CE. The intention of the EAW is to study the maximum quarry extents which could be requested through a variance process. The EAW acknowledges that final setback requirements will be determined during the County and Township permitting process. Historical permits, land use permits, or other documented approvals supporting any legal non-conforming use rights as may be applicable to any request for reduced setbacks or in support of a variance application would be provided in the permit application documentation.

Attachment B12 Ashley Ruka Comment Letter

Ruka Comment B12.1

WE LOVE OUR HOME because of the wildlife that we coexist with. This is by and large the most important reason we love our two acres on Grey Cloud Island. We moved here to live amongst the deer, the opossums, the rabbits, the coyotes, the countless beautiful birds, the raccoons, the bats, the fireflies, the bees, the butterflies… I can go on. This expansion project will directly impact what we love so very much. As mentioned many times within the EAW, wildlife will move out as phases of the mining project occur. And because the very composition of the land and space will be different and gone, there is not a habitat for them to return to. The EAW mentioned the return of wildlife after reclamation in 25 years. But the wildlife that will leave is not what will return. A deep lake is not the correct habitat for a beautiful, 6-point buck! The EAW also points out the conversation value of the proposed expansion area. I ask that Washington County contribute to those conservation efforts rather than work against them.

Response B12.1

Thank you for your comment.

Ruka Comment B12.2

WE LOVE OUR HOME because of the beautiful trees and forest. The loss of trees is catastrophic for this project. Both in the mining and in the construction or rerouting of CR-75. The EAW makes notes of up to 75 acres of cleared vegetation and topsoil. It mentions a 70% reduction in trees if Option 1 moves forward and a 40% reduction in Option 2. This reduction in tree cover directly impacts the wildlife that exist on Grey Cloud and the residents that live here. Furthermore, there is no plan in the EAW to replant trees. Because there will be no place for them to grow. Page 28 of the report notes “[there is not a significant] loss of unique forest resource” but I contend that while our trees may not be “unique” it is still a *loss* of forest! And a loss that will not be recovered.

Response B12.2

Thank you for your comment. Please see responses to the Minnesota Department of Natural Resources comments A4.1 -A4.6 and responses to Grey Cloud Township comments A5.8-A5.10 which address the existing vegetation, native plant communities, significant vegetation stands, township vegetation permit, and vegetation restoration.

Ruka Comment B12.3

WE LOVE OUR HOME because of the quiet. The only traffic on 99th Street South is our own and that of our neighbors. Is it not a pass through, but a cul de sac. In one conceptual drawing I have seen, Option 1 of the CR-75 proposals brings this road down our street. However, the materials presented at the public comment meeting show the road would run along the backside of our property. The first scenario would be absolutely devastating to my boys and I to live on a road with an AADT of 1550 passes a day including countless semi-trucks loaded with aggregate. This is not why we chose to live where we do. We chose to live where we do to get away from that sort of bustle and noise.

Response B12.3

The Project does not propose relocating CR 75 down 99th Street South.

Ruka Comment B12.4

I respectfully ask that you weigh the true economic impact that mining these additional 70 acres will actually produce to the loss of one of the most beautiful places in the county! I AMENTIRELY AGAINST THIS EXPANSION AND FIND IT UNNECESSARY. I don't believe Holcim is in such a desperate place to need to mine these additional acres to maintain their business. And I have a hard time believing there are noPub [sic] other MN regions or mining operations that could fulfill any perceived and forecasted aggregate need.

IF the project moves ahead with all of the necessary variances, permits, and permissions, I would like it noted that my preference for CR-75 is OPTION 2. I would also like it noted that upon my boys' graduation from Park High School, we will move away from this place we love so much

Please allow Grey Cloud to remain the beautiful gem that it is. Set a standard for balance between the Holcim Corporation and township/residents' desires. There need not be a monopoly. We have coexisted to date; albeit, with some rough spots. But they are already looking to expand mining into the Northern Reserves and with this additional parcel, there just won't be much left.

Response B12.6

Comment noted.

Attachment B13 Richard Polta Comment Letter

Polta Comment B13.1

Attachments C1, C2.1, C2.2, C3.1, C3.2, Figures 2-14, and possibly other attachments all show Holcim's property extending to the East side of the Grey Cloud Channel. This doesn't match Washington County parcel viewer website. The website shows parcels on each side of the channel stopping at the water's edge not extending across the channel. My parcel description states the property extends east from the centerline of the channel. Other parcels east of the channel descriptions have the same description.

Property Address: 9600 GENEVA AVE S

GREY CLOUD ISLAND TWP, MN 55071 MAPS

Class: Residential

Legal Description: PT SE1/4 BEING THAT PT OF S 300FT OF N 600FT LYING E OF C/L OF GREY CLOUD CHANNEL EXC E 66FT & EXC A 33FT WIDE STRIP OF LAND DEEDED TO ARANCO OF MN IN BK 302 PG 547 SUB TO 66FT EASE TO MN PIPE LINE CO & SUB TO FLOWAGE EASE Section 24 Township 027 Range 022property viewer.

Question: Why the difference from what Holcim is showing compared to what property descriptions state?

Response B13.1

Property lines shown on the Washington GIS are not legal surveys and the property descriptions shown on tax statements are often abbreviations of the legal description on the title to the land. In this instance there are three parcels that border the Grey Cloud Channel, each with a different description of the relationship with the channel. The western most parcel describes the property line extending to the centerline of the existing slough, the northeast parcel describes the property line as excluding lands lying northerly and easterly of the slough (therefore property extends to the northern and eastern edge of the slough) and the southernmost parcel describes the property line as lying west of the center line of the main channel of Grey Cloud Island Slough as shown on the United States Department of the Interior Geological Survey Map N445- W9252.5/7.7 edition of 1951.

The mine plan and excavation limits illustrated on the plans and used as a basis of study to the EAW are based on a setback from the OHW of Grey Cloud Channel and are not dependent on the actual location of the property line along Grey Cloud Channel. The figures in the EAW are not legal boundary surveys, but are sufficient for the level of detail and analysis of the environmental review. Any forthcoming permit applications for rezoning or mining permits will include a survey and legal description.

Polta Comment B13.2

Site Plan Option1 realign CR 75 sheet # C2.1

Under this option Washington County Public Works has told Holcim and Grey Cloud Island Township if this option goes forward CR 75 would be turned over/forced onto the Township. Township would own the road and be responsible for all maintenance, repair, and replacement costs. This would be the entire length of CR 75 not just the section going around the mining operation. Currently the Township incurs no costs related to CR 75.

Question: Being the road realignment would be done solely at Holcims request and benefit. Would Holcim reimburse the Township for the added cost to the township to maintain the entirety of CR75 in perpetuity?

Response B13.2

If a turnback were to occur, Holcim would assume the cost of construction of the realignment and enter into a maintenance agreement with the Township and assume an appropriate proportion of road maintenance costs if the road is relocated, the details of which will be fully developed as part of the

required turn back agreements.

Polta Comment B13.3

Site Plan Option 2 bridge / underpass to quarry sheet # C2.2

Under this option a bridge will be built which needs periodic inspections, maintenance, and eventually replacement. These will be ongoing cost forever unless the bridge is removed and filled in.

Question: Being the bridge option is requested and built solely for Holcim's benefit. Will Holcim reimburse Washington Counties costs to inspect, maintain, and replace the bridge when needed in perpetuity? Holcim would assume the cost of construction of the bridge and enter realignment and enter into a maintenance agreement with the Township and assume an appropriate proportion of road maintenance costs if the road is relocated, the details of which are not fully developed at this time.

Response B13.3

Under Option 2, Holcim would enter into an agreement with Washington County regarding cost allocation for construction and maintenance. The details of which are not fully developed at this time.

Polta Comment B13.4

Page 4 Operations Overview.

The majority of the processed material is currently and will continue to be transported via barge up the Mississippi River to the company's distribution yard in St. Paul. Some material will also be trucked out on CR 75, depending upon the demand of local projects.

Question: To state some material will be trucked on CR 75, doesn't give real numbers. Grey Cloud Township residents continuously file complaints on trucking noise and the number of trucks coming out of the Larson plant. Most residents agree the number of trucks from the plant has increased year after year. What % of material will be trucked verses hauled by barge? Actual truck numbers, and tonnage numbers need to be provided. Historically and future.

Response B13.4

As indicated in the EAW the proposed Project will have no impact on traffic generation and no change to the timing of haul traffic. Currently material produced at the Site is either barged to Holcim's distribution yard in St Paul, or trucked to local markets. The haul routes used to deliver to local markets are dictated by the location of the job. Traffic generation is seasonal with the higher rates generated in Q2 and Q3 and so typically when looking at aggregate operations, traffic generation is broken down into an analysis of quarters. Traffic generation rates from the past five years of load counts is based on a five day haul week as allowed by Township Ordinance. Average hourly traffic generation rates are based on the hauling hours allowed by the Township's Ordinance which stipulate that loading of trucks for delivery may be conducted only between the hours of 7:30 a.m. and 4:00 p.m., Monday through Friday, with hauling by truck on public roads within the Township to be conducted between the hours of 8:00 am and 4:30 pm., Monday through Friday. Peak hour generation rates are based on am peak at 10% of daily average and pm peak hour is based on 8% of daily average.

Five Year Traffic truck trips by quarter 2020-2024

Quarter	Q1 Jan-March	Q2 April- June	Q3 July-Sept.	Q4 Oct-Nov.
Avg. loads/day (Rounded up)	12.6 (13)	46.6 (47)	48.4 (49)	33.0 (33)
Avg trips/day	26	94	98	66
Avg load/hour (rounded up)	1.5 (2)	5.5 (6)	5.7 (6)	3.9 (4)
Avg trips/hr	4	12	12	8
Peak am (8-9) Loads/hr / trips/hr	2/4	6/12	6/12	4/8

The table above is based on five-year averages from 2020-2024. The demand for local aggregates drives the load count for each year. During 2022 there was a large local project that resulted in peak traffic generation rates in the month of June which were over two times the typical June rates and resulted in 14 lds/hr during the peak hauling period in June 2022.

Typically, about one-third of the total production at the site is trucked to local markets and two-thirds of production is barged. The five-year average for percent of materials hauled by truck to local markets is 32.5% as shown on the table below. There is not a trend towards an increased percentage of material hauled by truck. Total loads hauled in both 2023 and 2024 were lower than the five-year average and also do not indicate an increase in hauling to meet local demand. The Project is not expected to increase truck hauling or change the percentage of material hauled by barge.

Percentage of annual production trucked from Larson Mine

Year	Percent Hauled
2020	35.6%
2021	28.8%
2022	32.0%
2023	33.3%
2024	32.6%
AVG	32.5%

Annual production over the past five years has ranged from approximately 0.5 Mtons to 0.7 Mtons with the months of June through October seeing the highest number of truck trips averaging 1,000-1500 loads per month and 50-60 loads per day. Future truck trips are anticipated to remain in this range and are dependent upon the local demand and the aggregate supply needs of the local area.

Polta Comment B13.5

The expansion area will be mined utilizing the same methods used at the existing Larson Quarry. The quarry is dewatered, which lowers the groundwater table within the limestone deposit to allow removal of the limestone using dry mining methods. Trees are removed in phases as areas are prepared for mining. Topsoil and overburden are removed and used to create screening berms and safety berms. The berms are seeded and mulched, and vegetation is established to reduce the potential for erosion. The material used to construct the screening berms may eventually be used in reclamation activities.

MRCCA regulations require: New and, where practicable, existing nonmetallic mining operations must not be readily visible and must be screened by establishing and maintaining natural vegetation. The unscreened boundaries of nonmetallic mining areas are limited to only the barge loading area.

Question: It takes a berm and natural vegetation to screen the mined area. This is the reason for the berms in the first place to screen the mining or mined area. Removing the berms to use the material elsewhere now leaves the mine non screened. If the material used to construct the screening berms is used in reclamation activities. How would the existing nonmetallic mining operations be not visible?

Response B13.5

Berms are constructed before mining activities begin. Screening berms are intended to stay for the entirety of the mining operation and are removed after the mining is completed as part of final reclamation. Once the mining operations are concluded the screening berms are no longer needed to screen mine operations.

Polta Comment B13.6

The quarry operates seasonally, typically from late March through November each year. The main processing plant is located approximately three quarters of a mile to the southwest of the expansion area and operates in conformance with the hours permitted by Grey Cloud Island Township. The approved operating hours for the 2023 and 2024 mining seasons were from 6:00 a.m. to 10:00 p.m., Monday through Friday and 7:00 a.m. to 12:00 p.m. on Saturdays.

Comment: This statement is misleading and should be corrected, as the approved operating hours in Holcims 2024 annual permit were 7 AM to 7PM. Holcim was only allowed to operate till 10 PM by special permission from the Town Board. This section should state the actual facts stating how hours were approved.

Response B13.6

Thank you for your comment. Please see Response A5.1 in Attachment A which will address your comment. The amended hours were approved by the board at a subsequent meeting after the issuance of the annual mine permit.

Polta Comment B13.7

Page 5-6: Plan Sheet C2.1 - Site Plan Option 1 illustrates the conceptual site layout of the road relocation option. The final alignment will be subject to future input from the County and Township. The plan sheet identifies the locations of adjacent homes, driveways and property lines with respect to the proposed realignment. As shown on Plan Sheet C2.1, minor modifications to an existing private driveway easement through the expansion area will be necessary to provide access from the new road realignment to three homes located southeast of the expansion area. Access to all other residents will not be impacted. The existing Larson Quarry site access will not be impacted and a new site access to the east will not be needed. The eastern reserves will be accessed by progressive quarry activity from the existing eastern quarry limits moving to the east. Extraction and transfer of material from the active quarry face to the processing area would occur at recessed elevations well below the surrounding grade.

Question: How can the statement be made that extraction and transfer of material will be made at recessed elevations well below the surrounding grade when the mining operation starts at grade level and possibly includes 53-70 acres? And what is (well below surrounding grade)?

Response B13.7

Site Plan Option 1 involves mining at recessed mine floor elevation progressing from the current quarry floor of the existing mine and expanding east through the current CR 75 setback acre and right of way. Under Option 2 mining will also progress from the current quarry floor to the east through the underpass area of the future bridge and through the current CR 75 setback area to open up the area to the east sufficiently to construct the bridge. Material will be transported from the east to the processing area along the underpass at the current quarry floor elevation. The quarry floor is approximately 100 feet below the surrounding grade.

Polta Comment B13.8

CR 75 is a rural two-lane roadway with no turning lanes, sidewalks, or trails. Based on Minnesota Department of Transportation (MnDOT) 2018 traffic count data, the segment of CR 75 proposed for relocation has an annual average daily traffic (AADT) volume of 1,550 with a posted speed of 40 mph.

Comment: Traffic count data needs to be updated as the data stated from 2018 is going on 7 years old. Local residents have all stated every year there has been an increase in traffic in the Grey Cloud area. Do we have actual current data. Washington County did do traffic studies in the area of the Town Hall in the past year or two.

Question: How do Current County traffic numbers compare to the numbers Holcim quoted?

Response B13.8

The 2018 AADT of 1,550 is the most recent available published data from MnDOT. Washington County last conducted a raw traffic count in June of 2022 with a result of 742 vehicles per day. The data was given to MnDOT and was adjusted to a traffic volume of 690 vehicles per day due to the fluctuation of traffic in the summer time when the traffic count was performed. MnDOT's Annual average traffic volumes over the past three decades has ranged from 1,150 AADT in 2015 to 2,100 AADT in 2000 and 2003. The most recent raw traffic count indicates a reduction in traffic.

Polta Comment B13.9

Since road realignment represents a relatively small section of road and does not include any new connections, the average daily traffic volume is not expected to change current traffic patterns or volumes. Washington County has jurisdiction for CR 75, therefore, any plans to modify the road would require coordination with and approval from the County.

Comment: Plans to modify CR75, or build additional roads all require approval from the Township as well as the County, not just the County.

Response B13.9

Comment noted plans to modify CR 75 will require approvals from both the County and the Township.

Polta Comment B13.10

The bridge will be located near the middle of the western mining limits of the expansion area, (Plan Sheet C2.2 Site Plan Option 2.) Construction of the bridge will involve a temporary relocation of County Road 75 and utilities around the eastern portion of the construction area. The existing roadway will be removed within the construction area. Limestone will be removed through a corridor running from the existing eastern limits through the 200-foot setback area west of CR 75, through the CR 75 R-O-W and through the 200-foot setback area on the east side of CR 75.

Comment: The 200-foot setback area on the east side of CR 75 is incorrect. As current township ordinance 49.3 requires a 500-foot setback of mining operations from any road right of way.

Response B13.10

The EAW illustrates the maximum mining limits that may be requested by Holcim to study the maximum impact during environmental review. Mining within the 200 foot setback area to accommodate the construction of the bridge and underpass or to the 200 foot setback area proposed on the east side of 75 would be subject to the Township Permitting process.

Polta Comment B13.11

The construction of the bridge will require a temporary detour for an estimated three to five years to allow time to create the underpass, staging area, and build the bridge.

Question: The estimated time to build the proposed bridge is extremely long. This should be able to be completed in less than one construction season. The new bridge on CR 75 over the Grey Cloud Channel was completed in less than one year and involved the same or more building constraints, including water, sheet piling, etc. Why would this bridge take so long to build?

Response B13.11

It is anticipated to take this amount of time because the underpass area needs to be mined out and the mine area extended far enough to the east so that the bridge can be safely constructed a sufficient distance from active quarry areas.

Polta Comment B13.12

Question: How would option 2 to build a bridge over CR 75 meet MRCCA requirements 6106.0110 sub5.d: New and, where practicable, existing nonmetallic mining operations must not be readily visible and must be screened by establishing and maintaining natural vegetation. The unscreened boundaries of nonmetallic mining areas are limited to only the barge loading area;

Response B13.12

The bridge can be designed with barrier railings that screen the mine from traveling motorists. Natural vegetation along the setback areas of CR-75 will screen the mine along the remainder of the road.

Polta Comment B13.13

Reclamation of the Larson Quarry will be performed upon conclusion of mining activity. The intent of reclamation is to leave the site in a stable condition, minimize the potential for erosion, and establish site conditions that allow for future development of the land. Plan Sheets C3.1 and C3.2 illustrate the reclamation condition of the existing quarry and expansion area and include information on the approximate site elevations upon completion of reclamation grading.

Question: How does this limited description on land reclamation, and statement “reclamation will be performed upon the conclusion of mining” satisfy the requirements of MRCCA rules 6106.0110 F. existing and new nonmetallic mining operations must submit land reclamation plans to the local government compatible with the purposes of this chapter.

Response B13.13

A land reclamation plan satisfying the requirements of the MRCCA Rules will be submitted with any forthcoming application.

Polta Comment B13.14

Question: MRCCA rules 6106.0110 require you to explain where staged reclamation may occur at certain points during the life of the site; What is the plan for staged reclamation?

Response B13.14

For quarries that dewater and reclaim predominantly to a created lake, staged reclamation is different than a typical mining operation that establishes predominantly upland areas. The majority of quarried land currently exists in its reclamation condition and grade with very little additional reclamation activity required across the majority mined floor of the quarry. Once mining is completed, dewatering ceases and the excavation fills with water. Reclamation activities around the edge of the lake, creating certain habitats and safe water exists and shallow lake entry locations will be performed just prior to ceasing dewatering activity.

Polta Comment B13.15

Chart shows a loss of 43 areas of wooded land being removed for option #2, and 79 acres being lost under option #2.

6106.0150 VEGETATION MANAGEMENT STANDARDS.

Subpart 1. Purpose. The purpose of this part is to establish standards that:

A. sustain and enhance the biological and ecological functions of vegetation;

B. preserve the natural character and topography of the Mississippi River Critical Corridor Area; and

C. maintain stability of bluffs and steep slopes and ensure stability of other areas prone to erosion.

Subp. 2. Applicability. This part applies to:

A. shore impact zones;

B. areas within 50 feet of a wetland or natural drainage way;

C. bluff impact zones;

D. areas of native plant communities; and

E. significant vegetative stands identified in local governments' adopted plans.

Subp. 3. General provisions.

A. Intensive vegetation clearing is prohibited, except for the following activities, which are allowed by local permit:

Question: how does this removal of vegetation comply with MRCCA rules?

Response B13.15

Please see Responses to MDNR Comments A4.1 through A4.6 and Responses to GCTI responses A5.8 though A5.10 in Attachment A.

Polta Comment B13.16

Page 19: chart shows Unit of Government for approval Washington County. Approval of CR 75 Relocation Plans including memorandum of understanding/developer's agreement (for Option 1) and Approval of CR 75 bridge plans, temporary reroute and limited use permit for right of way crossing (for Option 2). Both these items require Township approval.

Response B13.16

Comment noted.

Polta Comment B13.17

Because the Project is an expansion of the existing quarry and the expansion area has already undergone environmental review, many of the required permits have been issued. Some of the existing permits will require a permit amendment or reissuance as noted below.

Question: How can the project be considered an expansion of an existing quarry? As the proposed mining area is not zoned for mining, hasn't been mined, and is blocked off from the existing mine by a County Road. This should be considered a new mine requiring zoning approvals, operating conditions, reclamation planning, Township approval, County approval, meet MRCCA rules, etc?

Response B13.17

It is considered an expansion because it would involve the existing mine area getting larger, not withstanding the need to obtain required permits.

Polta Comment B13.18

Existing land use of the site as well as areas adjacent to and near the site, including parks and open space, cemeteries, trails, prime or unique farmlands.

Grey Cloud Island Township is characterized as a semi-rural community. The existing land use of the Project Area is predominantly idle woodland and pastureland/grassland that has been held in reserve by Holcim for more than 50 years. Land use adjacent to the Site includes the existing CR 75 roadway and existing Larson Quarry immediately to the west of CR 75. The Grey Cloud Channel borders the Project Area to the north and east, and the remaining area near the Project Area includes open space, residential and agricultural land uses. There are approximately 12 residences located between 600 and 1,000 feet from the proposed mining limits. The existing Larson Quarry is the only full-time employer within the community. Figure 4 - Existing Land Use illustrates existing land use of the expansion area and in the vicinity of the Site.

Question: Complaints from blasting have been made from residents as far away as 8000 feet from the mining operation. (South end of Summitt Ave in Saint Paul Park), and 7500 feet from (Cottage Grove residents in the Mississippi Dunes) neighborhood. The proposed mining area will put approximately 50 homes less than 3000 feet from the mining operation, and the majority of those homes are less than 2000 feet from the mining operation. And there are approximately 100-150 which have felt effects from blasting. To be fully transparent if the applicant is listing distances from mining to homes why doesn't the applicant list the number of homes and distance from mining for all homes in the area which have felt the effects from blasting?

Response B13.18

The number of residents that were listed in closer proximity to the mine was based on the distance where concerns regarding damage to structures are most relevant. Blasting can be safely conducted within 100 feet of structures and meet the established State and Federal Standards for protecting structures from structural and cosmetic damage. See also Response A5.11 in Attachment A.

Polta Comment B13.19

Attachment #5 Nearby Residential Well Information.

This chart should be updated and all information gathered. There is no date on the table, and wells may have been modified since the table was created. There are too many sections of the chart marked “null”. To truly tell the effects any additional dewatering may have on area wells, information before any dewatering takes place, and then during dewatering operations, not just after the fact. To wait just creates estimates, assumptions, and unanswered questions on dewatering effects.

Response B13.19

Table information was derived from the MDH MN Well Index and includes the most recent readily available information. Water levels will continue to be monitored and a well owner agreement will be offered to well owners within the predicted area of influence. Holcim will offer a well owner agreement to well owners located within the predicted area of drawdown established by Barr Engineering Co. and their modelling reports included as Attachment 8 of the EAW. The well owner agreement will identify procedures to follow in the event that a resident experiences well interference or an impact to their water supply. A licensed well driller of choice will inspect the well. If the well driller determines that the issue is the result of declining water levels associated with dewatering, Holcim will be responsible for remedying the problem and restoring water to the resident. The well owner agreement will streamline the well interference process that the MDNR has established. However, if the issue is not resolved to the satisfaction of the well owner, the State’s well interference resolution process can still be pursued by the well owner.

Polta Comment B13.20

Comments / Questions on dewatering.

1. Page 32 of the attachment’s states:

Karst features can include a network of fractures and solution cavities that create high flow systems that affect groundwater flow and contaminant transport. Faster and more variable contaminant transport may occur in karst terrain than in a more homogeneous non-karst terrain. Karst features may also allow direct pathways for contaminants to reach underground aquifers from the surface. The Project involves both dewatering and removal of the karst prone bedrock. The dewatering activity changes the direction of groundwater flow in the immediate vicinity of the mine. This eliminates the potential for contaminant transport from the mine off-site but increases the potential for contaminant transport from off-site sources to the mine.

Response B13.20

Please see Attachment 8 including the result of the 2018 groundwater modeling. There is no evidence that the dewatering will significantly change the direction of groundwater flow in the immediate vicinity of the mine. Karst is not a significant concern related to either mining or dewatering aspects of the project because:

1. Dewatering is not new to the site area and has been on-going on for decades under an existing

appropriations permit from the MDNR. This means that serious effects if present, would have likely been apparent by now. The potential for future effects related to dewatering are under the on-going regulatory authority of the MDNR.

2. As stated in the EAW Section 12b (iv) and Attachment 8, the proposed increase in dewatering primarily affects the Project Area which does not have known or suspected karst features. The closest identified karst feature is located north of the quarry and outside of the radius of influence of dewatering. While the area is mapped as being susceptible to karst, due to the shallow nature of the bedrock, there is no evidence of karst features within the upper Grey Cloud Island or the development of karst features due to the past 70 years of dewatering.
3. The effects of dewatering are predicted to be constrained hydraulically by Grey Cloud Channel and other surface water features in the immediate vicinity of the Project Area. Contaminant migration that is occurring in karst features outside this area would continue to occur regardless of whether the Project exists or not.

Polta Comment B13.21

2. Page 50 of the attachment's states:

Dewatering at the Site has the potential to draw groundwater towards the site influencing groundwater flow directions and gradients in the immediate vicinity of the Quarry. Because the quarry is situated adjacent to the Mississippi River, the regional direction of groundwater flow in the area surrounding the site remains east to west-southwest towards the discharge area of the Mississippi River. With no Project, groundwater from the Prairie du Chein Aquifer discharges to the Mississippi River. With the Project, groundwater is ultimately discharged to the river as well, although some of the groundwater gets intercepted by the dewatering operation prior to reaching the river. This groundwater is treated in a sedimentation basin and then discharged into the river. The quarry is not a source of PFAS, and the Project will not impact the existing regional PFAS contamination. The Project will follow state rules and guidance as they are developed through MPCAs PFAS Blueprint and continued work in addressing and cleaning up existing PFAS contamination.

3. Page 38 of the attachment's states: The Mississippi River is an MPCA 303d impaired water located within one mile of the Site. This river segment has an EPA-approved impairment for: Aluminum; Fecal coliform; Mercury in fish tissue; Mercury in water column; Nutrients; PCBs in fish tissue; Perfluorooctane sulfonate (PFOS); Perfluorooctane sulfonate (PFOS) in fish tissue; Total suspended solids (TSS).20 These impairment(s) are considered to be construction related parameters, which are the parameters of concern associated with aggregate mining operations.

Response B13.21

The Project is not expected to either exacerbate or improve water quality related to these impairments. Discharges from wash water, stormwater and quarry dewatering are regulated under the existing Individual NPDES/SDS permit. The Project is not expected to either exacerbate or improve water quality related to existing Mississippi River impairments.

Polta Comment B13.22

MPCA PFAS well monitoring maps show a direct path of PFAS contamination coming from the Woodbury dump site directly to the Upper Grey Cloud Island area. Talking with staff from PFAS meetings, they said there is a gap in the well monitoring data in the straight line between the Woodbury dump site and Upper Grey Cloud Island due to very few wells to monitor. As most of the area is served by city water. MPCA staff commented if you draw a line from the Woodbury dump site to Upper Grey Cloud Island, wells on each side of that line indicate contamination. The farther from that line going NW and SE contamination in wells show less contamination. Data provided states the site has the potential to draw ground water towards the site influencing ground water flow directions and gradients in the immediate vicinity of the quarry.

Response B13.22

Aas stated above, the PFAS contamination is not from the quarry but is from upgradient locations that are flowing toward the quarry under current conditions on the way to the river or in the river itself. The effects of dewatering are localized due to the hydraulic barriers in place which do not allow significant capture of contaminants that are not already flowing toward the quarry.

Polta Comment B13.23

5. The dewatered level of the quarry is stated to be approximately 50 feet lower than the normal pool level of the Mississippi River.

Response B13.23

Thank you for your comment. Section 6 of the EAW includes the project description. The depth of mining is the same as the existing permitted operation of 630 feet above mean sea level.

Polta Comment B13.24

6. The new bridge on CR 75 was open to river flow thru the channel in 2017. Fall of 2017 a residential well on Pioneer Road became contaminated with Fecal Coliform bacteria. This well had been in service since the 1960 time with no problem. Also, the Metropolitan Waste Control Commission does not chlorinate its Metro Plant effluent discharge during winter months. No doubt the non-chlorinated Treatment plant discharge is flowing from the Mississippi River, thru the Grey Cloud Channel, thru rock formations, to the effected well.

Response B13.24

Comment noted.

Polta Comment B13.25

7. As proposed the quarry will be dewatered to a level of approximately 50 feet lower than normal Mississippi River level. This creates about 20 PSI of differential pressure from the river level to the quarry bottom.

Response B13.25

A change in pressure is planned and is necessary to dewater the rock as part of the Project.

Polta Comment B13.26

8. The current size of the mine, and proposed additional mining areas being dewatered leaves a reduced area for natural precipitation to replenish natural groundwater. This ends up being natural groundwater is being replaced by polluted Mississippi River and Grey Cloud Channel water. It is a known fact that the existing 5 monitor wells water level, follows river water level. As the river level rises so does the water level in the 5 monitoring wells. When the river level drops so do the water levels in the 5 monitoring wells.

Response B13.26

Most of the precipitation falling on the Project Area would fall into the existing or proposed quarry and be discharged to the river. Due to the close proximity of this recharge to the river, this is nearly identical to the movement of this recharge that would occur if there were no Project.

Polta Comment B13.27

Questions: Taking into consideration the 8 previously listed items.

With the 50-foot differential of river water level to the dewatered mine floor this creates a perfect condition where polluted river water is drawn thru the fractured Karst rock formations toward the mine. This has already happened in the area by Pioneer Road. As a well was contaminated with Fecal Coliform from the Grey Cloud Channel. As the proposed mine expands, more water will be drawn from all sides of the mine. Data in the attachments supplied show Monitoring Well #5 will have a drawdown of 24.2 feet. Any ground water pumped out, will naturally be replaced by water from areas outside the mine pit. Geography of the area strongly suggests this replace water will come from the Mississippi River and Grey Cloud Channel.

Response B13.27

As stated above and addressed in the EAW, the migration of contaminants and possible presence of karst within the area of capture for the quarry are similar to those that would occur with or without the Project. In either case, contaminants would migrate toward the river or into the quarry with discharge to the river. The Project does not significantly alter these conditions or create new conditions that would exacerbate existing contamination or cause more contaminant migration in areas that would not otherwise experience contamination. As noted in the Barr report (Attachment 8 of EAW), groundwater seeping into quarry comes from the Mississippi River, the Grey Cloud Channel, and the bedrock. The wells that are located between the Mississippi River or Grey Cloud Channel are completed in the Jordan Aquifer at an elevation 60-80 feet below the elevation of the groundwater that moves from the Mississippi River through the alluvial sediments and seeps into the quarry floor. Dewatering will not draw contaminated Mississippi River water into the Jordan. Beneath the quarry floor, water from the Jordan moves in an upward gradient and the flow is not downward from the river to the Jordan Aquifer.

Polta Comment B13.28

Question: How do we know polluted river water be drawn in from the river won't contaminate the entire Karst formation in the area?

Response B13.28

See Attachment 8 to the EAW which shows that the dewatering induces flow from around the quarry into the quarry itself. The water captured from the river only travels a short distance to the quarry where it emerges into the quarry sump and is discharged back into the river. There is no physical means for this water to migrate upgradient into the bedrock beyond the quarry into areas beyond the immediate vicinity of the Project regardless of the presence or absence of karst.

Polta Comment B13.29

Question: What will be the long-term effect as continued dewatering naturally creates a path for river water to flow into the Karst formation in the area?

Response B13.29

See Response B13.29. The "karst formation" in this case is the rock that will be mined and removed as a result of the Project. Therefore, there will be no long-term effect on the rock.

Polta Comment B13.30

With the 50-foot differential of river water level to the dewatered mine floor this creates a perfect condition where polluted river water is drawn thru the fractured Karst rock formations toward the dewatered mine.

Question: How can the public be assured the proposed dewatering won't increase the already know PFAS water contamination problems, or create additional problems?

Response B13.30

There are several aspects of this project that can offer confidence that the project will not increase PFAS contamination. First, the understanding that the PFAS exists in the groundwater and is already flowing through same formations as it is currently on its way to the river. The Project cannot change that as it is merely doing the same as the existing conditions. Second, the modeling results show conclusive evidence that the capture of groundwater is limited by Grey Cloud Channel and other hydraulic factors within the immediate vicinity of the Project. The effects of drawdown do not extend appreciably into the bedrock east of the Project. Third, the PFAS area of groundwater concern extends across the eastern expansion area. Wells that surround the Project area have a health advisory and are eligible for Point of Entry Treatment systems. While dewatering may increase the rate of flow towards the quarry within the radius of influence predicted in the Barr model to extend from the quarry to the Main Channel of the Mississippi River and Grey Cloud Channel, it will not cause an increase in concentration of PFAS contaminants in the water. Fourth, additional information regarding the Potential for PFAS contamination as a result of expanded dewatering operations will be submitted with the permit application to address this concern. The Minnesota Pollution Control Agency will continue to manage the East Metro PFAS Superfund Site and

Holcim will comply with any testing, programs, and best management practices for working within the area of impacted groundwater that MPCA develops.

Polta Comment B13.31

With the increased size of the dewatered mine, and proposed size of the mine increasing. There is less area for natural precipitation to replenish natural groundwater.

Question: Without natural precipitation being able to keep up with dewatering flow rates how does this affect water quality, and the water table to replenish itself in the area?

Response B13.31

The primary source of recharge supplying water to the dewatering is the Mississippi River. This is the reason why the area of groundwater is so limited. Precipitation and recharge to groundwater within the vicinity of the Site do provide some of the water that will be captured by the quarry but this recharge would otherwise flow a short distance to discharge to the river regardless of the Project.

Polta Comment B13.32

The Mississippi River is an MPCA 303d impaired water located within one mile of the Site. Knowing the water pumped out of the mining site will naturally try to replace itself with ground water from all directions. And with the fractured rock in the area, much of that water will come from the Grey Cloud Channel and Mississippi River.

Question: With the Mississippi River and Grey Cloud Channel being a known source of impaired water. How will this effect ground water quality in the area?

Response B13.32

The largest contribution of groundwater from the Mississippi River to the quarry will be from the areas that are immediately adjacent to the river. Water will flow from the river through the 500 ft setback and seep into the quarry where it will be intercepted, captured, mixed with the other noted sources of water and returned via discharge to the river and will have no significant effect on groundwater quality the area. The river water and groundwater within the quarry's capture zone can only migrate into the quarry and cannot migrate upgradient of the quarry. Therefore, the river water captured is simply returned to the river without significant changes to the groundwater outside the vicinity of the Project. The wells that are located between the Mississippi River or Grey Cloud Channel are completed in the Jordan Aquifer at an elevation 60-80 feet below the elevation of the groundwater that moves from the Mississippi River through the alluvial sediments and seeps into the quarry floor. Dewatering will not draw contaminated Mississippi River water down into the Jordan aquifer. Beneath the quarry floor, water from the Jordan is moves upward and does not flow from the river downward to the Jordan aquifer.

Polta Comment B13.33

The Grey Cloud Channel was opened up to flows from the Mississippi River in 2017.

Question: was the degraded / polluted water quality in the Grey Cloud Channel since 2017 considered in data included in the current EAW?

Response B13.33

The EAW notes that Grey Cloud Channel is an impaired water and is subject to additional stormwater management. The MPCA has additional stormwater management requirements for sites within one-mile of an impaired water.

Attachment B-14 Allen Shetka Comment Letter

Shetka Comment B14.1

Alternate 1

The December 2022 EAW version shows CR.75 relocated with gentle curves (inset 6-1 of operations plan January 1971). C2.1 of this EAW shows the relocation with two 90 degree connections to C.R.75.

The stated AADT in the EAW is 1,550 which includes a good number of gravel semi's/trucks. To replace a major collector straight stretch of roadway with one 3,500 feet longer with curves and 90 degree turns is ludicrous and flies in the face of traffic engineering common sense.

Response B14.1

The road alignment shown for consideration in the EAW is conceptual. Final design of the alignment including details of the transition from the current road alignment to the new alignment will be developed prior to making an application. The final road alignment will require approval from the County and the Township.

Shetka Comment B14.2

The following comments are based on a road relocation with a design speed of 40 mph including curves: The net length increase is 3,500 feet and with an ADT of 1,500 would result in 994 addition miles/day,363,000 miles/year and at a fuel average of 30 miles/gal would be 12,000 gallons of fuel.

The travel time would increase to 1 minute 20 seconds which on the face may not seem excessive but in an emergency for police, fire and ambulance every second is critical and would be greatly increased if the EAW "design" were adopted.

The EAW states Holcim would be responsible for construction and maintenance and that C.R.75 would likely lose designation. If the Township would be the R.O.W. owners how would this be administered? Perhaps an endowment/escrow established/funded by Holcim to reimburse costs.

Additionally, how would power lines et.al. be handled?

Response B14.2

Holcim would enter into an agreement as to construction and maintenance with the road authority.

Utilities would be relocated within the new right of way as part of the road relocation project.

Shetka Comment B14.3

Alternate 2

It's stated the excavation and bridge construction would take 3 to 5 years and a detour would be in place. Assume this is because excavation would be only during summer operation. Why not require excavation and stockpile of material year round to considerably shorten the timeline?

If winter excavation is not feasible first construct earth ramps to raise the roadway and bridge to an elevation to accommodate future excavation under the bridge. The ramps and bridge could hopefully be build in one season.

As with alternate 1 who is responsible for construction and on going maintenance of the bridge?

Response B14.3

The actual construction of the bridge itself may take one year, but the temporary realignment will be required for a longer period of time to in order to remove the limestone to create the underpass and progress the mine limits far enough away from the bridge before beginning bridge construction to safely allow mining activity and bridge construction. As with the Option 1, Holcim would be responsible for construction costs and would enter into an agreement with the road authority regarding construction and on-going maintenance.

Shetka Comment B14.4

Has an alternate for a conveyor/bridge system over the existing road been explored compared to the construction/maintenance costs and the disruption/inconvenience both temporary and permanent to the Township for alternates 1 and 2?

Response B14.4

This option was explored, and determined to not be feasible.

Shetka Comment B-14.5

Additional questions

After mining is complete are there any plans on how to safeguard the 40 foot bluff and 60 foot deepwater that will result (a very attractive hazard)?

What is the anticipated start time for alternate 1?

What is the anticipated start time for alternate 2?

Response B14.5

The reclamation plan to be submitted with the application materials will be further developed taking into consideration comments received on the Project through the Environmental Review Process. The perimeter design will consider safety benching berming and other features.

Attachment B-15 Jenni Lubke Comment Letter

Lubke Comment B15.1

I am writing to you regarding the Larson Mine Project.

I am a resident of River Acres, and have lived here for 2 years now. I chose to live here because of the tranquility, after having spent over a decade in downtown Chicago. I work from home with a view of Mooers lake outside my office window. Our house is on a well. I am concerned about the project releasing more PFAS into our environment.

Response B15.1

The quarry is not a source of PFAS. The Project will follow state rules and guidance as they are developed through MPCAs PFAS Blueprint as they continue to work in addressing and cleaning up existing PFAS contamination. Please see also Responses B13.33 and 13.33 for additional information regarding PFAS.

Lubke Comment B15.2

My husband and I frequently kayak and fish around grey cloud island multiple days a week in the summertime.

There are impacts to the biodiversity of the area. This directly affects my enjoyment of the migratory birds and aquatic species I am able to observe from my home on the river's edge. Alternatives should be seriously considered to protect the wildlife near our homes, and near Gray cloud SNA - a very important RSEA that is extremely close to this proposed site.

Response B15.2

Please see Responses to MDNR Comments A4.1 through A4.6 and Responses to GCTI responses A5.8 though A5.10 in Attachment A for additional information regarding the biodiversity of the area and proposed mitigation strategies for improving the habitat that will remain.

Lubke Comment B15.3

Cottage Grove should be trying to attract sustainable businesses that do not impact our natural world in a negative way. We have an amazing section of the Mississippi River to keep clean and preserve for future generations. We should not be clearing trees from the island.

Cottage Grove should be trying to attract residents who care about the land. I believe that the mine expansion will decrease the desirability to live in Cottage Grove, and specifically in River Acres and grey cloud island neighborhoods.

Response B15.3

Thank you for your comment.

Attachment B16 Richard Polta Comment Letter 2

Polta Comment B16.1

This is an article from MN Post

Wastewater treatment plays large role in spread of Minnesota's PFAS contamination, report finds

by Mohamed Ibrahim

11/16/2023

A new report by the Minnesota Center for Environmental Advocacy (MCEA) shows wastewater treatment plays a large role in the widespread contamination of "forever chemicals" known as PFAS across the state.

In recent years, the Minnesota Legislature has passed some of the most robust legislation in the nation to help reduce how much PFAS makes it into the environment. But the report's findings suggest state lawmakers and officials will now need to go beyond laws aimed at reducing the chemicals' use and turn toward addressing PFAS that is already pervasive in the state's environment.

The report, released last week, was co-authored by the MCEA and Matt Simcik, an environmental health sciences professor at the University of Minnesota. It describes high levels of per- and polyfluoroalkyl substances, or PFAS, found in four waterways they tested over the summer: the Mississippi River, as well as the Sauk River, Clearwater River and Johnson Creek in central Minnesota.

According to their results, the highest concentrations of PFAS were found in the Mississippi River channel receiving water discharged from the Metro treatment plant in St. Paul.

Let it be noted the Metro Treatment Plant is located upstream from Upper Grey Cloud Island.

Since 2017 when the Grey Channel was opened to allow Mississippi River water to flow thru it. That created the condition where Upper Grey Cloud Island is completely surrounded by River water. This allows PFAS contaminated river water to be drawn into the Karst rock formation anywhere around the island. Dewatering a large amount of area on the island will result in river water flowing thru the rock formations to refill the areas dewatered.

Question: Based on the above information and other readily available information on PFAS in Wastewater. Natural precipitation is not enough to replace the amount of water removed thru the dewatering process. The proposed dewatering will now draw PFAS contaminated water from Contaminated ground water, and the contaminated Mississippi River.

Response B16.1

Thank you for your comment. Please see response B13.31 and B13.33 for a description of the hydrology of the dewatering in relationship to the river, the quarry and the lack of potential negative effect on

surrounding wells.

Polta Comment B16.2

What long term effect is this going to have on ground water used for drinking / residential wells on Upper Grey Cloud Island and surrounding areas?

Response B16.2

Please see Response B13.33

Polta Comment B16.3

What studies have been done since 2017, when the Grey Cloud channel was opened up to river flows regarding PFAS contamination now available from two different sources and the proposed dewatering?

Response B-16.3

The Minnesota Pollution Control Agency has conducted several studies regarding PFAS contamination Studies that have been conducted regarding PFAS contamination since 2017. Including :
PFAS Ambient Background Concentrations, PFAS Remediation Guidance, Evaluation of current alternatives and estimated cost curves for PFAS removal and destruction from municipal wastewater, and several reports on residential well sampling for PFAS, as well as specific studies related to the East Metro Superfund Site that the MPCA manages.
(These studies are available on MPCA's website at https://www.pca.state.mn.us/air-water-land-climate/pfas-studies-and-reports)

Attachment B17 Local 49 Comment Letter

Local 49 Comment B17.1

Thank you for the opportunity to submit comments on the Environmental Assessment Worksheet (EAW) for the Holcim Larson Quarry Project. The International Union of Operating Engineers Local 49 (IUOE Local 49) is a construction labor union representing 15,000 heavy equipment operators and their families in Minnesota, North Dakota, and South Dakota. Our members work in a wide array of industries across the state performing construction, maintenance and operations work–including construction and aggregate mining.

The workers at the existing Larson Quarry are members of IUOE Local 49 and are local to the region. The facility provides family-sustaining wages and benefits for our members and their families. As noted in the EAW, the current facility is projected to exhaust its reserves in the next 5-7 years. Approval of the proposed expansion is critical to their retention and continued employment at the facility and would extend the life of the facility for 20 to 25 years.

Response B17.1

Thank you for your comment.

Local 49 Comment B17.2

Beyond the direct employment of our members at the facility, the proposed project is critical to ensuring a needed and cost-effective supply of construction-grade aggregate materials to ready mix plants in the twin cities region. As the largest construction union in the state, we know how important a local supply of concrete products is to keeping construction projects on time and on budget. Without this project it is likely that a new source of aggregate materials would need to be identified and would likely be much further away. This would increase costs for construction projects, traffic congestion resulting from the additional trucking requirements, and greenhouse gas emissions. If a new source of aggregate were not identified, critical infrastructure projects could be delayed, resulting in fewer job opportunities for our members and impacting overall economic growth in the region.

Response B17.2

Thank you for your comment.

Local 49 Comment B17.3

Having reviewed the EAW, we believe the project does not have the potential for significant environmental impacts and thus a full Environmental Impact Statement (EIS) is not required under state law. As noted in the EAW, an environmental review was completed for the expansion area in 2005 by Washington County and it was determined that an EIS was not needed. While the 2005 EAW did not include the proposed option of relocating County Road 75, thus necessitating the present EAW, that additional proposal does not create the potential for significant environmental impacts. As a result, we would respectfully encourage Washington County to determine that a full EIS is not required.

The mining project developed by Holcim is responsible and would appropriately protect and mitigate impacts to the environmental resources in the region. We thank Washington County for your ongoing work on this project and the opportunity to provide comments. We fully support the project and would encourage its timely approval to provide assurance of future employment to our members that work at the facility.

Response B17.3

Thank you for your comment.

Attachment B-18 Steve Christensen Comment Letter

Christensen Comment B18.1

I would like to see CO Rd stay where it is. I have concerns that if the road gets moved the number of trucks will be going along the Channel and would cause a considerable amount of noise. Where the proposed road would be there would not be much to mitigate the noise.

Response B18.1

Thank you for your comment. Please see Attachment 14 of the EAW, County Road Realignment Noise Assessment by Barr Engineering for additional information on anticipated noise resulting from the road relocation.

Christensen Comment B18.2

Additional question where the water run off would go? Probably right in the river.

Response B18.2

Stormwater runoff from the road will be managed in accordance with local and state stormwater management requirements which require water quality and water quantity control measures prior to discharging to a surface water. Design of the stormwater management features will be included in the final design of the road realignment.

Christensen Comment B18.3

Of course if Holcim would move the entrance to the North side of quarry that would certainly help with noise levels. I have lived here since 1991 and besides the noise the trucks routinely exceed the speed limit and with proposed road that could lead to safety issues. When I purchased my house in 1988 I knew the mine would come someday but did not know about road being moved. I know the mine makes noise but nothing like semi trucks blasting through your yard.

Response B-18.3

Thank you for your comment.

Attachment B19 Aggregate & Ready Mix Association of Minnesota Comment Letter

ARM Comment B19.1

The vitality of Minnesota's communities relies on local access to quality aggregate sources. The social, economic, and environmental health of our State requires construction aggregates to build and maintain our schools, places of worship, hospitals, affordable homes, transportation infrastructure, utilities, and much more. It is estimated that 8 tons of aggregates are required per Minnesotan per year to maintain our way of life. In the seven-county metropolitan area, with a population of 3.7 million people, this would mean that we would need about 30 million tons of aggregates every year.

Minnesotans need aggregates and yet, our supply in the metropolitan area is diminishing with every passing day. In the year 2000, the Minnesota Geological Survey (MGS) estimated that aggregate resources in the metro area had declined by 70%. Moreover, MGS estimated that metro aggregate resources would be exhausted by the year 2029. There is no question that the metro needs aggregates and that the supply is strikingly limited.

One must also recognize that it is essential to all broader societal needs to access aggregates as close as practical to their place of use. The cost to transport aggregates escalates rapidly with distance, such that deliveries further than 20 miles quickly become cost prohibitive. In addition to minimizing economic

costs, aggregates sourced close to project sites also reduce greenhouse gases associated with transport. By minimizing the long-distance import of aggregates, we reduce the vehicle miles traveled on Minnesota roadways, which in turn reduces the overall impact on our infrastructure and environment. Looking to sources other than those currently in use, is more costly in both economic and environmental terms.

The essential nature of locally available construction materials is one that is being raised at all levels of society. At the state level, Minnesota's Office of the Legislative Auditor (OLA) recently completed an evaluation of Aggregate Resources. The OLA found that little has been done to protect and plan for the use of aggregate resources, despite the essential nature of access to aggregate resources.

At the national level, the 117th Congress passed the ROCKS Act to study, examine, and identify the means to access the aggregates that are necessary to infrastructure development. The ROCKS Act brings the State Geologic Surveys together with industry leaders to ensure smart policies that promote informed planning decisions. We see that, today, the entire country is recognizing the importance of making the best use of locally available materials.

Response B19.1

Thank you for your comments.

Attachment B-20 Ted & Christina Ries Comment Letter

We're writing to share our thought on Holcim's proposed Larson Quarry mine expansion, We believe the proposal is problematic for a number of reasons. Our primary concerns are:

Ries Comment B-20.1

Well water. Neighbors have had problems with their well water. In one instance, Lynn Utech saw her well water drop at the same time Holcim was blasting at the town hall directly adjacent to her house. Lynn's well pump burned up because it was 14 feet out of the water when the well company came to inspect it. Holcim offered to pay to replace Lynn's well pump. To us, this indicates their culpability. The township has data to support this. It records well-water levels attest wells around the quarry. The records show the test well between Lynn and the site of blasting dropped at the same time. We believe this issue should be closely examined before approving any expansion.

Response B20.1

Holcim will offer a well owner agreement to well owners located within the predicted area of drawdown established by Barr Engineering Co. The well owner agreement will identify procedures to follow in the event that a resident experiences well interference or an impact to waste supply. A licensed well driller of choice will inspect the well. If the well driller determines that the issue is the result of declining water levels associated with dewatering, Holcim will be responsible for remedying the problem and restoring water to the resident. The well owner agreement will streamline the well interference process that the MDNR has established. However, if the issue is not resolved to the satisfaction of the well owner, the State's well interference resolution process can still be pursued by the well owner.

Ries Comment B20.2

Erosion. Some of the ground on the northern part of the pit is more erodible than at other ends of the pit because the rock is softer there. The wall on the NE corner collapsed a couple years back and caved in. Erosion should be taken into account in any EAW.

Response B20.2

The mine operator has not found the rock in the northern part of the quarry to be softer or more erodible than other parts of the quarry. Generally, the Prairie Du Chien bedrock is able to form stable near vertical slopes. You see this along the Mississippi River just west of the quarry where the limestone bluffs are a prominent feature. Additionally, erosion prevention and sediment control are regulated under the Stormwater Pollution Prevention Plan required by the MPCA NPDES/SDS Permit.

Ries Comment B20.3

Archeological assessment. We are not convinced that the archeological assessment of Ojibwe artifacts was as thorough as Holcim suggested. Given where our property is, we believe that we would've seen some evidence if as many sample holes were dug as they claim. I understand this EAW is for the east side of the county road, but Holcim says they dug these sample holes on the west side of the road at the same time. I mow up and down that driveway, and I would've seen evidence of those holes. I would've driven over some of them, but I never did.

Response B20.3

Thank you for your comment. The Archaeological investigation for the eastern expansion area was performed by a qualified third party consulting firm. Abraham Ledezma served as Principal Investigator for the archaeological investigation. Mr. Ledezma meets the requirements for the Secretary of the Interior's Guidelines for Professional Qualifications in Archaeology. Mr. Ledezma has over 17 years of experience and received an M.S. in Applied Anthropology from Missouri State University in 2012 and a B.A. in Anthropology, with an emphasis in Archaeology from Minnesota State University Moorhead in 2008. Please see also Response A3.3 in Attachment A regarding additional coordination with MIAC which will occur.

Ries Comment B-20.4

Holcim said it worked in conjunction with the Prairie Island Band of Ojibwe, but we asked the band's Tribal Historic Preservation Office about it, and they sounded unaware of it. Respecting this tribe is a priority of ours, and we are deeply concerned by the prospect that Holcim mischaracterized Prairie Island.

Response B-20.4

Please see the PIIC comment letter and responses Attachment A3 and the list of communication and field visit that occurred. In Situ recommends a conditional finding of No Historic Properties Affected within the surveyed Project area, pending the results of the assessments of the soil pile anomalies by MIAC in the spring. In addition, In Situ recommends the development and approval of an Inadvertent Discovery Plan

prior to Project construction and, after further tribal consultation, archaeological and/or tribal monitoring may be necessary during construction of the Project.

Attachment B21 Beth Zaiken Comment Letter

Zaiken Comment B21.1

I am a resident of Grey Cloud Island township, with my home being less than 1 mile from the proposed mine expansion area. I am concerned about the potential long-term ramifications of this mine expansion and it's impact on the community and the surrounding environment--please see my comments on specific issues regarding the Larson Quarry Expansion EAW as follows:

First of all the timing and commentary period associated with this EAW are not adequate for the impact it will have on the local community. Posting the documents in mid December, with a commentary period that runs through a busy holiday season (during the coldest and most difficult time of year for people with mobility issues), and in conjunction with another EIS that proposes a similar large project in the region with the exact same comment period (the Nelson mine expansion), is the worst possible timing for public transparency and seems almost designed to keep people from noticing and commenting on the project proposed.

Response B21.1

Thank you for your comment. Environmental review is governed by Minn. Rules 4410 which establishes a specific timeline for noticing a public comment period and the length of the public comment period. Recognizing that the public comment period landed during the holiday season, Washington County as the RGU extended the public comment period by two weeks to allow the government agencies and the public adequate time for public comment. A public meeting which, by rule is optional for an EAW, was also held by the County for residents to learn more about the Project as they considered submitting comments.

Zaiken Comment B21.2

Holcim claims the proposed mine expansion has been proposed and understood to be the “plan" since the early 1970s. While this expansion may have been recognized by the Grey Cloud Island Township 2040 Comprehensive Plan as a potential active mining site, it is always accompanied by statements that indicate that it is dependent upon the township rezoning the area in question from it's current medium density residential zoning--which has never been a foregone conclusion and the township has never indicated it's consent or approval of this plan. The area in question is located in a region that may have once been far removed from a larger urban community, fine for an extractive industry site, but the contiguous metropolitan area has grown around it in the last several decades on all sides. Today, in 2025, this region is now surrounded by residential areas, which continue to rapidly develop and expand. The land in question would undoubtedly be of better use to the community as a residential development rather than consumed by exploitative mining practices.

Response B21.2

Thank you for your comment.

Zaiken Comment B21.3

The impact of changing CR 75 as is proposed in Option 1--this realignment of the road adds more than double the distance it currently occupies and would likely prompt it's reassignment from a county road to a local one, which would create an undue burden on the local township in terms of maintenance and upkeep. The impact of trucking in it's current state has degraded the roadways condition faster than had been anticipated by the company or the township, with the township being left the responsible party. The additional distance would add to commute times and increase wear and tear on vehicles for local residents--multiplied over the years in perpetuity it is not an insubstantial concern. The longer roadway and it's placement along the perimeter of the upper island also expose traffic to more likelihood of wildlife strikes, as the large population of deer and other fauna that use this area as a throughway try to adapt to the change.

Response B21.3

If a turnback of County Road 75 from the County to the Township would occur, Holcim would assume the cost of construction of the realignment and enter into a maintenance agreement with the Township and assume an appropriate proportion of road maintenance costs if the road is relocated, the details of which will be fully developed as part of the required turn back agreements.

Zaiken Comment B21.4

In addition, the location of the road in Option 1 is proposed as being just 200 ft from the OHW of Grey Cloud slough--with a significant elevation drop off on that side of the bluff into the slough. The curvature of this proposed road and it's proximity to a precipitous drop off increase the danger to residents driving it in winter and during inclement weather, should they vear off the road. Possible increase in setback or additional safety measures should be considered. This resident, while opposed to the expansion project in it's entirety, would express a preference for Option 2 (wherein the road remains in it's current location and a bridge/underpass is built at the expense of the company).

Response B21.4

Thank you for your comment. The final design of the road realignment be required to road design standards developed for safety and will need to be approved by both the Township and the County.

Zaiken Comment B21.5

The EAW states that the area is identified as an "area with potential local conservation value “and that there is a presence of federally listed endangered species including the rusty patched bumblebee and long-eared bat, as well as many state level threatened species that are continually subject to habitat loss and degradation in this area. The Project Area is on the border between a High Potential Zone and a Low Potential Zone and within a Primary Dispersal Zone, suggesting that the likelihood of encountering a rusty-patched bumblebee in the Project Area is moderate to high. The last environmental review for the proposed expansion area was completed in 2005--20 years ago. This region has undergone significant change in it's ecology and climate since that time and a new professional survey of present endangered

species should be conducted. The only mitigation efforts addressed in this document speak about the condition of the land after it's reclamation--which will not happen for 20-25 years. By then it will be far too late to help the listed species in this region.

Response B21.5

Thank you for your comment. Holcim has been working on establishing a n pollinator habitat at the entrance to the existing mine and will evaluate the feasibility of incorporating pollinator habitat in the vegetation restoration plan and in upland areas of the reclamation plan, where native vegetation will be established which would support rusty-patched bumblebee. The project will also follow guidance for northern long eared bat management including appropriate times for removing vegetation that do not disturb roosting trees. Please see Responses to MDNR Comments A4.1 through A4.6 and Responses to GCTI responses A5.8 though A5.10 in Attachment A for current information on habitat and vegetation restoration efforts at this facility.

Zaiken Comment B21.6

This project is being proposed simultaneously with another by the same mining company Holcim. The Nelson Mine Backwaters Project (EIS) on the lower island is situated south and east of this location but the region is highly susceptible to various features of Karst geology that include intrusion of surface water to groundwater and various natural subterranean pathways by which groundwater travels. This EAW does not address the possible interaction of these two projects and it's effect on regional groundwater movement or quality. The lower Nelson mine project proposes to drill 200 feet into the Mississippi River Bed, while this project proposes to continually dewater the surface limestone excavation. There is no contemplation on how the drawdown of water in this upper mine might affect the quality of groundwater wells that the residential community depends on situated between the two sites--will there be additional seepage from the Mississippi river site into groundwater that is being pulled from this upper site? Could this change the direction of seepage in the aquifer? The river has a high degree of contamination that is currently not an issue with water drawn from wells but disturbing the bedrock to such a degree might introduce opportunities for contamination that are not currently being considered.

Response B21.6

The Barr groundwater modeling reports included as Attachment 8 of the EAW include maps of predicted limits of drawdown effects from the eastern expansion which do not extend to the Nelson Mine. The Nelson mine does not involve dewatering, indicating that the two projects will not interact. There have been a series of water level monitoring wells that have been routinely monitored for decades. This data was used in the modeling efforts developed for this EAW. Please also see response to comments 13.19-13.34 for more information regarding additional seepage from the Mississippi River into the groundwater.

Zaiken Comment B21.7

Locals who are considering installing residential solar panels do not believe that the dust mitigation efforts proposed at the excavation site would sufficiently protect them from the effects of the trucking of

these materials in distributing dust outside and around the mine boundaries. The accumulation of dust on photovoltaic panels can affect their efficiency over their lifetime, degrading the value of this type of new investment in green energy.

Response B21.7

The MPCA Air Emissions Permit under which Holcim operates requires control of fugitive dust emissions. Holcim operates adjacent to several solar arrays without impacting the solar panel efficiencies. Two letters from solar project operators discussing this topic and confirming that there is no impact from dust on their operations or efficiencies are provided in Response B4-8.

Zaiken Comment B21.8

Additionally this EAW does not adequately address the possible noise disturbance on local residences to the north and east of the site--the company proposes using the same berm structures and dimensions it uses currently, however this site is far closer to those houses and they are at a significantly higher elevation than the properties surrounding the current excavation area--with the open Grey Cloud slough between (which will not have the same sound mitigating effect as the forested areas near the current boundaries). The berms proposed may not be sufficient to disburse the sound of blasting and equipment to those residences higher on the bluff overlooking the site.

Response B21.8

The majority of noise sources from the quarry operation are associated with the main processing, stockpile, and loading areas. These activities are proposed to remain at their current location in the southwestern portion of the Site. The mine face will act as a topographic shield which deflects and absorbs sound energy as the quarry progresses in the direction of homes located east of the mine limits. Vegetation has only a minimum impact on reducing noise levels, on the other hand earthen berms are proven noise barriers. In addition, noise from the facility is regulated by the MPCA as part of the Air Emission Permit. The facility must meet the state noise standards at the location of all residences located in the vicinity of the site.

Attachment B22 Michael Zaiken Comment Letter

Zaiken Comment B22.1

My name is Dr. Michael Zaiken, PhD. I presently reside in Grey Cloud Island Township and am an Assistant Professor at the University of Minnesota. In both of these capacities I have significant concerns regarding the proposed Larson Quarry Expansion project. In my professional capacity, I have had extensive training in data analysis and interpretation; using that skill, I have reviewed the Environmental Assessment Worksheet provided by Holcim for its proposed expansions. I found that review deficient on countless fronts, and below I proffer specific, actionable comments with respect to issues I have noted in those respects where Holcim failed, in my considered judgment, to account for reasonable implications and contingencies which arise as likely by-products or residuals attendant on its proposed action below.

Response B22.1

Thank you for your comment.

Zaiken Comment B22.2

Geology and Soils: The EAW identifies significant geological issues regarding the presence of karst-type features in the project area that have the potential to seriously affect groundwater flow and transport of contaminants at the surface. Such karst features have a peculiar system of underground drainage, and their presence can greatly enhance the chances of disturbance in groundwater movement, resulting in unforeseen effects on nearby ecosystems. Furthermore, karst areas are particularly sensitive to surface disturbances that can provide pathways for surface contaminants to easily infiltrate into the groundwater. The geologic features associated with these risks are discussed at great length on pages 28 through 35 of the EAW. Holcim's proposed mitigation strategies of stripping karst-prone bedrock and dewatering the mine are intended to address these risks but raise significant concerns about their adequacy. Of the various steps, especially the dewatering of water from mines-a common mining procedure-is surrounded by environmental issues galore. There might be considerable lowering of the groundwater level over extensive radial distances, often in the range of several kilometers away from the site. This often occurs, fairly often, in both open-pit and underground mining, whereby the water tables have to be drawn down for operations to take place.

Response to B22.2

See Attachment 8 of the EAW. The extent of lowering of water levels for the Project is not extensive and is limited to the vicinity of the Project Area near the Mississippi River and Grey Cloud Channel.

Zaiken Comment B22.3

Yet, this alteration in the water table can result in the emergence of unexpected environmental consequences like the drying up of springs or streams around it that rely on a constant source of groundwater.

Response to B22.3

See Response to B22.2 regarding extent of drawdown. Section 11 of the EAW notes one sinkhole is documented outside the vicinity of the quarry beyond Grey Cloud Channel. The Karst Features Inventory Database, which documents the location of karst features and springs, does not indicate any reported springs in the vicinity of the Project. There are no groundwater fed streams in the vicinity of the project

Zaiken Comment B22.4

Further, dewatering grossly affects contaminant migration relating to the natural flow of groundwater with chemical fertilizers, hydrocarbons, and landfill leachate. Extremely hazardous to surround soils and groundwater, which, due to greater depth from the excavation point, increases the distance over which contaminants may travel.

Response to B22.3

There do not appear to be significant sources of contamination within the capture zone for the dewatering from the modeling conducted except for PFAS which would be migrating toward the site even if it were not dewatered. Capture of contaminants and the quality of the discharge would be regulated under the discharge permit for the site.

Zaiken Comment B22.4

Dewatering dredged sediments can also release a range of hazardous substances, including heavy metals and volatile organic compounds, both of which are known to pose significant ecological risk.

Response to B22.4

The Project does not propose dredging or dewatering of dredged sediments.

Zaiken Comment B22.5

Therefore, Holcim should give a very detailed mitigation plan that addresses the whole scale of these issues, especially in cases where the bedrock stripping and dewatering remain their foremost strategies.

Response B22.5

Although lowering of the water table is expected near the quarry, the extensive modeling conducted for the EAW does not indicate that significant effects on supply wells or natural resources are likely. Therefore, mitigation plans are not appropriate or necessary.

Zaiken Comment B22.6

These could entail vertical barriers to eliminate or reduce contaminant migration during excavation, and organic polymers such as chiton and cationic polyacrylamide, which enhance the efficiency of dewatering while reducing its risks to the environment. Moreover, post-mining, managed aquifer recharge could be used to recharge groundwater levels, thus avoiding long-term environmental implications. With no such higher-order mitigations in sight, Holcim's current management practice regarding the region's karst geology is very alarming.

Response B22.6

The purpose of environmental review is to identify and address the potential for significant environmental effects. If such effects are identified, they can be addressed with mitigation. Washington County Groundwater Plan and guidelines expect appropriate planning and project execution when developing in or around areas with karstic geologic features. The quarry follows MPCA and Minnesota state standards when mining activity alters or impacts groundwater and/or quality.

Zaiken Comment B22.7

Additionally, the EAW acknowledges that there needs to be a Stormwater Pollution Prevention Plan. It would be prepared for final design along with roadway modifications. This does appear as Holcim

attempting to postpone its creation after approval is received on this project to circumvent important environmental consideration processes. Given that there were multiple options for the roadways, Holcim should be required to produce a SWPPP for every option in front of approval, so that any and all possible environmental impacts could be considered and minimized.

Response B22.7

Minn. Rule 4410.3100 Prohibition on Final Government Decisions does not allow permits to be issued while undergoing environmental review. The SWPPP is a regulatory requirement with site specific elements specified by rule whcih can only be completed once final mine plans have been developed and approved for the Project. These and all regulatory requirements will be met as part of the Project.

Zaiken Comment B22.8

Impact on Appropriation of Water: The EAW states that the Larson Quarry currently operates under two water appropriation permits for up to 340 million gallons per year for washing aggregate and 5,500 million gallons per year for dewatering activities. The EAW argues that these quantities of water usage will not increase under the proposed expansion. However, this argument rests primarily upon a 2005 groundwater study prepared by Barr Engineering that does not reflect an up-to-date perspective on a proposed expansion of this nature. There is no apparent evidence provided to ensure that water usage for washing the aggregate does not increase and that the stakeholders do not get open access to the groundwater model, from the EAW to make valid Holcim representations for review or independently. Although the EAW mentions various water management approaches - monitoring and assessment, adaptive use practices, and contingency plans - all these are just mentioned and no concrete proposal or action plan is attached to the document. This lack of a concrete water management plan seriously questions the potential of Holcim to address properly the issues on water appropriation for its mining operation and to ensure sustainable use of the resource. The EAW should have clearly stated proposals on how the water resources would be dealt with and that no local water supplies would be burdens, prior to this EAW being approved.

Response B22.8

The estimates are correct as provided in the EAW. The groundwater model was updated in 2018 by Barr Engineering as provided in Attachment 8 to the EAW. Dewatering will be conducted under the requirements of a water appropriation permit issued by the MDNR. The permit conditions require reporting and use of appropriate methods for water management are utilized including those mentioned above if required by MDNR.

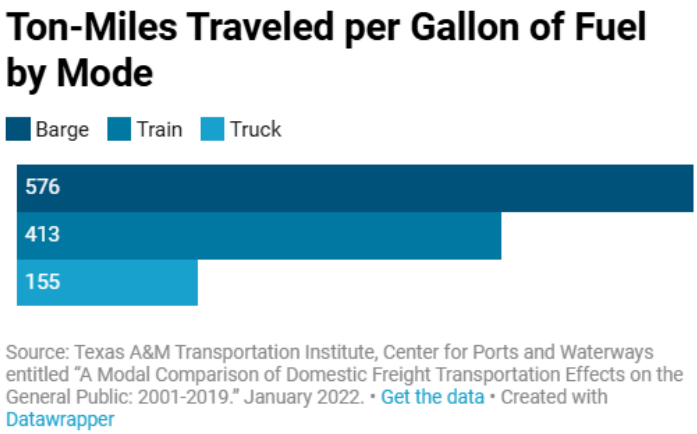
Zaiken Comment B22.9

Operational Claims and Considerations: There are a number of operational claims as in the EAW such as the so-called environmentally-friendly transporting system and the mining process that are pleading to be seriously looked into. For example, the EAW claims that the barge transportation system will produce less CO2 than an equivalent number of truck transports. While this may be true, it is not very specific or comparative to other ways of transportations. More in-depth analysis would be of benefit within the EAW on the emissions reduction emanating from the barge transport system as a function of carbon

footprint from the manufacture of barges, consumption of fuel, and possible implications on surrounding structures.

Response B22.9

Research from the Texas A& M Transportation Institute provides a specific comparison to alternative modes of transportation as shown below. Tons per mile is defined as the transport of one ton of freight (aggregate in this case) for one mile.



Zaiken Comment B22.10

Similarly, it is stated in the EAW that each mining blast will be designed to minimize ground vibration and sound pressure level consistent with adequate energy to fracture the bedrock. However, the document fails to explicate both the ways in which these parameters are going to be measured and the applied particular techniques in mitigating these environmental effects. Given the likelihood of blasting activities to impact local communities, wildlife, and ecosystems, more detail should be provided in the EAW regarding measures taken to minimize these impacts and the monitoring processes to ensure that environmental standards are met.

Response Comment B22.10

Please see Response A5.11 in Attachment A

Zaiken Comment B22.11

The EAW also raises concerns related to the mine's dewatering process, especially in light of the increasing frequency of drought conditions in the region. Although this is the most important consideration, the EAW does not take into consideration the issue of mining a dewatered mine during a drought. This needs to be considered in a more detailed analysis of how the climate variability factor may impact the dewatering at the mine and how these alterations in the mine would disrupt local ecosystems further.

Response Comment B22.11

The MDNR Water Appropriations Permit considers the potential effects of drought and retains the authority to amend WAPS as may be necessary to protect water supply.

Zaiken Comment B22.12

Moreover, water utilized for site dust control can result in contaminated runoff, but the EAW does not examine whether the discharge of this water can be injurious to local habitats or water quality.

Response Comment B22.12

Water use for dust control is permitted and regulated under the MPCA's NPDES/SDS permit. Discharges are managed and monitoring for total suspended solids and other pollutants is a requirement of the permit. Watering is managed to provide dust control on unpaved roads at an application rate so as to not create surface water runoff. It should also be noted that wearing haul roads to control fugitive dust emissions is a requirement of the MPCA's air emissions permit.

Zaiken Comment B22.13

Also, the EAW's proposed stormwater runoff disposal by the creation of lakes is not without its problems. The chemical makeup of such lakes in respect to pH and other chemical factors has not been satisfactorily addressed. It will be important to consider how the water chemistry may evolve over time and affect biological processes and local wildlife. Moreover, standing bodies of water can become breeding sites for pests, such as mosquitoes, which could lead to other ecological consequences. In relation, the EAW should be discussed in detail in long run ecological effects created by the construction of such lakes, and how they would be managed without causing an adverse effect on anything.

Response Comment B22.13

The EAW does not propose stormwater disposal by the creation of lakes.

Zaiken Comment B22.14

Protection and management of habitat - According to the EAW setbacks as well as buffers zones should be considered while saving the sensitive habitats from detrimental effects of the mining activities. Nevertheless, all these measures are actually effective, depending on design, implementation, and management. Where the setbacks are designed to be too narrow, they cannot guarantee protection from noise, dust, and other disturbances emanating from the mines. Unless actively managed, a buffer zone would not ensure the prevention of the encroachment of invasive species and the maintenance of native vegetation, and therefore may fail in its function. Thus, specific management of habitats needs to be developed, entailing particular actions to maintain native plant species, control invasive species, and preserve critical habitat. The EAW should contemplate comprehensive habitat assessment to outline the precise needs of sensitive species in the area, which could provide design specifics for buffer zones and setback areas.

Response B22.14

Thank you for your comment. Please see Responses A-4.1 and A-4.3 in Attachment A that describes existing habitat, potential effects and proposed mitigation.

Zaiken Comment B22.15

Monitoring and Adaptive Management**:** EAW's proposed general program for monitoring on the project has not been forthcoming with the actual parameters to be monitored, that is, populations of species or actual water quality conditions, habitat condition, and time for monitoring. Unless these specifics are agreed on, it could be difficult for a credible plan to be enacted that would lead to the reasonable and timely detection of potential adverse impacts. Further, EAW does not specify an adaptive management plan. The EAW, based on monitoring showing a sensitive species population decline or other environmental damage, should outline specific mitigating actions. Without a plan, there is the possibility of prolonged degradation without opportunity for intervention. A far more robust program of monitoring and adaptive management will be required if the project is to respond in a timely and effective manner to environmental concerns.

Response B22.15

Current mine monitoring plans are described in the EAW including water level monitoring stormwater and dewatering discharge monitoring, air emission and water appropriations reporting, Additional monitoring plans may be developed for the proposed expansion, as determined appropriate using the EAW to inform both the decision makers and the Project proposer in the development and approval of such plans. For example in conjunction with the vegetation permit and vegetation restoration plan. These plans will be developed using information obtained in the environmental review process to inform the development of such monitoring.

Zaiken Comment B22.15

Invasive Species Management: The potential introduction of invasive species through the construction activities is one of the major environmental concerns. Although the EAW mentions possible measures, such as equipment cleaning and monitoring for invasives, it does not really provide a detailed, actionable plan to prevent the spread of these species. This can be very disruptive to local ecosystems, where invasives often outcompete native flora and fauna. If the construction equipment is not well cleaned or if materials brought to the site contain invasive seeds, it's likely the project will contribute to its spread. As such, the EAW must include a comprehensive management plan for invasive species with specific protocols on equipment cleaning, invasives monitoring, and rapid response strategies should invasives be found. In addition, the construction personnel would be trained in the identification and management of invasive species to effectively achieve the plan.

Response B22.15

Please see Response A4.1-A4.6 A5.11 and A5.13 in Attachment A for information on invasive species control.

Zaiken Comment B22.16

Timing for Construction Activities: The EAW indicated that the construction activities would be scheduled so as not to coincide with the critical periods like breeding or migration seasons of the concerned species. However, due to the tight schedule of the project, it is likely that the construction would be rushed hence the activities might be undertaken within the sensitive periods. This may impact local

wildlife, including nest disruption or interference with migratory patterns. The EAW should address plans for possible delay or adjustment to the construction schedule and schedule work in a manner so that sensitive times of the year are avoided. Adaptation to circumstances as they present themselves is necessary so that wildlife may be protected.

Response B22.16

The above comment appears to be in reference to avoidance of seasonal activities described in Section 14, in regard to construction. The EAW does not provide a schedule, does not indicate that there is a tight schedule for this project, or that construction would be rushed. It is reasonable to conclude that as stated in the EAW, construction activities will be scheduled so as not to coincide with critical periods like breeding or migration. Requirements for addressing species and habitats will be part of the conditions and subject to on-going regulatory authority of the DNR, MnDOT and/or applicable government units.

Zaiken Comment B22.17

Water Quality Monitoring: As noted in the EAW, stormwater discharges will be subject to the MPCA's NPDES/SDS permit program. However, it failed to provide enough detail on what the parameters to be monitored are and with what frequency. This might not allow for effective supervision of those aspects that may affect water quality and cause impairment in the aquatic ecosystem. For example, ignoring the monitoring of significant parameters such as turbidity, nutrient, or contaminant levels may risk release of any substance into the water from the proposed project, adversely impacting a certain population of fish or mussel. The EAW should include a comprehensive water quality monitoring program that identifies parameters to be monitored, their frequency, and mitigation measures to be taken when the limits are exceeded. Real-time monitoring and public reporting of the water quality data should also be considered, which would ensure accountability in this area.

Response B22.17

Water quality monitoring is currently performed under an MPCA's NPDES/SDS Individual Permit for this facility which establishes the parameters, monitoring frequency, and reporting requirements. The permit would be updated to include the proposed expansion area and the MPCA could change monitoring requirements as they determine appropriate. Monitoring results were provided in Attachment 6 of the EAW.

Zaiken Comment B22.18

Post-Reclamation Plans: General post-reclamation plans of the EAW include the development of a deep-water lake and the upland areas as native vegetation, but these have not been worked out in great enough detail regarding design, timeline, and success criteria to determine how habitat might effectively be reestablished to provide suitable support for the wildlife. The plan for reclamation should be more complete, stating specific activities along with timelines and well-defined criteria for success. Ongoing monitoring and maintenance to ensure that the reclaimed areas achieve ecological sustainability in the long term need to be provided within the EAW.

Response B22.10

The Reclamation Plan will be developed as part of the permit application process with Washington County and Grey Cloud Island Township. It will include the details mentioned above, taking into consideration information gathered throughout the environmental review process.

Zaiken Comment B22.11

Climate Change Considerations**:** Climate change is not adequately considered in the EAW, regarding how it might affect the effectiveness of the mitigation measures. Changes in precipitation could affect the amount available for dust control or to support vegetation during reclamation, and extreme weather events in the form of flooding or drought may increase erosion or impact both construction activities and post-reclamation success. A climate resiliency assessment should be done for the EAW to account for the possible climate-related hazards to the project itself and the involved ecosystems. On this basis, Holcim should look for ways of enhancing the resistance of the project and other ecosystems to the impact of climate change through adaptive management that will ensure whatever mitigation done is durable.

Response B22.11

The intention of the climate change section in the EAW, which was recently incorporated into the worksheet by the Environmental Quality Board, is to provide the framework for the Proposer to consider what effects predicted climate change may have on their projects and to consider incorporating adaptive strategies into the project design. The information presented in the EAW is adequate. The Metropolitan Council's comment letter (Attachment A1, Comment A1.2) addresses this as "The discussion of climate trends and proposed mitigation measures are adequate given the limited impact that the identified climate trends will have on mining operations." The comment continues on to recommend use of native vegetation in upland areas as a climate adaptation, which the proposer has committed to.

Zaiken Comment B22.12

Local Land-Use Conflicts: Although the EAW has mentioned that the proposed land use is in concert with Grey Cloud Township's future plans, it has not considered strongly potential conflicts with present land use and/or community concerns. Increased traffic, noise, and dust due to quarry operations could be an issue related to local opposition and project implementation. Public concerns or other concerns might also be minimized through direct one-on-one contact between Holcim and the local people via public meeting and consultations. Pre-identify possible issues to proactively work out. Such community-related section in EAW, in turn, must demonstrate an integration of all public feedback for further planning so as to ensure that local peoples' concerns necessarily get full attention.

Response B22.12

Thank you for your comment. The land use section is intended to address compatibility with land use plans and the individual items of concern you mention are addressed as individual topics throughout the EAW. Environmental Review is designed to obtain input from all stakeholders and to utilize that feedback in final project design and decision making. Land use decisions are made by the local land use authority after completion of an environmental review. The local land use authority can utilize information and

mitigation measures identified in the environmental review process to write local land use permits and permit conditions intended to minimize and mitigate potential land use conflicts.

Attachment B23 Ray Kaiser Comment Letter

Kaiser Comment B23.1

The EAW refences data collected over 20 years ago "Results of Groundwater Flow Model Simulations of Proposed Larson Quarry Expansion" dated November 29, 2004. This analysis appears to be primarily focused on water table drawdown and does not address contaminate transfer. Significant changes in groundwater contaminant classification namely PFAS and its prevalence in local groundwater warrants additional assessment of the proposed mining expansion and dewatering to evaluate the effects on local groundwater levels, contamination, flow, treatment options, and correlation to Mississippi River Discharge / Recharge interactions with local aquifers. This evaluation should consider potential impacts associated with Holcim's Nelson Mine Backwater project to evaluate potential interactions and effects on groundwater.

Response B23.1

The EAW references and includes as Attachment 8 the 2004 groundwater flow model report as well as the updated 2018 flow model report and 2023 memorandum, a compilation of decades of site specific data collection and modeling work. The development of the site conceptual model associated with this modeling work is a useful tool in assessing contaminant transport as well as potential drawdown effects.

Additional assessment of the proposed mining expansion and dewatering to evaluate the effects on local groundwater levels is included in Attachment 8 of the EAW. Drawdown effects associated with the Project do not extend to the Nelson Mine. The PFAS area of groundwater concern extends across the eastern expansion area and upgradient of the expansion area. The effects of dewatering are localized due to the hydraulic barriers in place which do not allow significant capture of contaminants that are not already flowing toward the quarry. The Barr model predicted the extent of the dewatering influence to extend outward toward the Main Channel of the Mississippi River and Grey Cloud Channel, but not beyond these limits. For this reason, most of the water being captured by the dewatering comes from the river and surrounding alluvium nearest the quarry and not the areas most affected by PFAS. Additional assessment of contaminant flow, and PFAS contamination is provided in responses 13.39 through 13.34 which demonstrates that the Project will not increase PFAS contamination or draw contaminated river water to the Jordan aquifer which supplies local private wells. The area is included in the East Metro Superfund site and as such treatment options have been assessed by the MPCA. Point of entry treatment systems have been installed in affected wells within the Township including wells that surround the project area. The Minnesota Pollution Control Agency will continue to manage the installation and maintenance of in-home (POETS) systems and continue to test private wells for PFAS at no cost to the homeowners.

Kaiser Comment B23.2

The EAW does not include any assessment or potential hazardous implications and mitigation

strategies for blasting which may occur close to residence due to mining at distances less than allowed by local ordinances. A variance has not been obtained however the EAW depicts mining at distance less then allowed by local ordinances. The sociological impacts associated with mining in close proximity to residences should be address via an EIS.

Response B23.2

Please see response A5.11in Attachment A for more information regarding blasting and the measures taken to insure blasting is conducted in a manner that meets State and Federal standards for vibration and air overpressure at the setback distances proposed for the project.

Kaiser Comment B23.3

New mining is prohibited in the Shore Impact Zone and Bluff Impact Zone and within the required structure setback from the bluff line and ordinary high-water level (OHWL). A legal definition of "new mining" should be included to establish limits on "the expansion or movement of an existing mine" which provides no limits regarding how far a mine could expand or move it operations effectively negating the MRCCA new mining prohibition.

Response B23.3

It is not the purview of the Proposer to determine legal definitions for "new mining". The project proposes to maintain a 500 foot setback from the OHW and does not propose to mine within the bluff impact zone or shore impact zone.

Kaiser Comment B23.4

The EAW does not address noise, the current conveyor system can be heard at residences throughout the neighboring community. Please provide a noise assessment of current and proposed equipment as conveyor equipment operates continuously (beyond daytime noise standard hours).

Response B23.4

Existing and proposed noise sources and associated sound levels are described in Section 19 of the EAW. The Site must operate in compliance with State Noise Standards which are regulated through the MPCA air permit. The project does not propose changes to the existing processing, stockpiling, or loading areas.

Kaiser Comment B23.5

The EAW proposes a reroute of county road 75 but does not address the long term economical Implication for the Township if ownership of the road will be transferred.

Response B-23.5

Please see Response B13.2 for information on maintenance costs of County Road 75 reroute.

Kaiser Comment B-23.6

In addition to the afore mentioned comments I believe the scope of the requested mining expansion should receive the diligence of a full EIS.

Response B-23.6

Thank you for your comment.

Attachment B24 Lance Stariha Comment Letter

Stariha Comment B24.1

As the homeowner at 9260 Grey Cloud Trail, Grey Cloud Island Twp., my property sits directly across Grey Cloud Channel from the new location where Holcim Corp wants to start mining. I have had to live with the weekly blasting that shakes my house, puts cracks in my sheetrock, and disturbs the overall tranquility of living in this rural setting. We've even heard about wells for homes that abut the current mining operation that have run dry due to the mining operations. We've had to deal with the unrelenting truck traffic as they haul gravel out of both mining areas. I know neighbors that used to take walks down our quiet country road, that won't anymore, due to almost being hit by this commercial traffic.

Response B24.1

Please See response A5.11 in Attachment A for additional information regarding blasting and the blast monitoring plan that will be prepared for the facility as part of the mine permit applications to the County and Township.

Please see Response B20.1 for additional information regarding a Well Owners Agreement that will developed and offered to all well owners within eh predicted area of dewatering effects. The proposer is responsible for paying for and restoring water supply for any wells that experience water supply issues.

Stariha Comment B24.2

We've been battling the BNSF railroad on the 300 acre tract across the street from us for years. We've had our wells contaminated by 3M pollutants and have had to deal with water filtration issues for years. And now they want us to deal with even more mining issues? I don't want to listen to the constant machinery operation if they are allowed to move right across the channel from us. Today we can hear the cows mooing in the pasture over there. All that machinery noise would trave a straight path right across to where all our homes are lined up on the channel. And what do the citizens get for having to deal with all this? We do not want this to be approved.

Response B24.2

Thank you for your comment.

Attachment B25 Tabitha Wahlin Comment Letter

Wahlin Comment B25.1

I am writing as a homeowner in Grey Cloud Township, located across from the area where Holcim Corp. is proposing to begin mining. As someone who enjoys the natural beauty of this area, I have serious concerns about the potential impacts this mining operation could have on both the environment and my property.

One of the things I most appreciate about living here is the wildlife. I regularly see eagles in the area and enjoy watching the deer that pass through. I am worried that the mining operation will disturb their habitat, forcing them to leave the area. The noise, disruption, and changes to the land could have a significant impact on these animals, and it's concerning to think that this peaceful environment maybe altered forever.

Response B25.2

Thank you for your comment Please see Reponses A 4.1-A4.6 and A5.8-A5.10 for information regarding changes to habitat and vegetation restoration plans currently being conducted by Holcim as well as future plans that will be developed as part of the local permitting process.

Wahlin Comment B25.3

In addition to the environmental impact, I am also concerned about how the mining will affect my property. I already experience the effects of blasting from the current mine, which is located farther away than the proposed site. I can feel the vibrations in my home, and I've noticed cracks in the walls, which have been increasing over time. If the mine is moved closer to our area, I'm worried that these issues will only get worse. I'm also concerned about the potential effects on my well, as I've heard of others whose wells were impacted by nearby mining activities.

Response B25.3

Please see response A5.11 in Attachment A

Wahlin Comment B25.4

I hope that the county will carefully consider the potential effects this mining operation will have on both the residents of Grey Cloud Township and the surrounding wildlife. We moved here for the peaceful, rural lifestyle, and I am concerned that this proposed mining project could change that in a way that might not be in the best interest of the community.

Thank you for your time and consideration. I hope you will make the right decision by not approving the new proposed mining site.

Response B25.4

Thank you for your comment.

Attachment B26 Josh Wahlin Comment Letter

Wahlin Comment B26.1

My name is Josh Wahlin, I live and am the property owner of 9220 Grey Cloud Trail S, Grey Could Island Township. I am writing to voice my concerns about the expansion of the Holcim Larson Quarry to the east side of CR 75. That chunk of land is directly across the Grey Cloud Channel from my property and I am horrified to think about the mining operation that close to the back channel and my property. There are other properties around Grey Cloud Island that are much closer to mining operations than I am that have structural damage to their homes, garages, and barns because of the dynamite blasting that occurs multiple times each week. Although we aren't as close to the mine as others are, we do have concrete foundation damage, cracks in our walls, and experience vibrations with blasting, and are stressed about how much worse it will get if Holcim is granted access directly across the channel from us.

Response B26.1

Please see Reponses A5.11 in Attachment A for information regarding blasting.

Wahlin Comment B26.2

Another concern is the amount of wildlife that reside in, on, and around the island. I am an avid outdoorsman and conservationist and love the natural habitat that the island has to offer. We have a great population of whitetail deer, turkey, waterfowl, eagles, etc. The acreage that Holcim is planning to mine, will not only be loud, annoying, and ugly, but it will also take this beautiful natural habitat away from the island and damage our wildlife populations.

Response B26.2

Please see Responses A4.1-A4.2 for information on existing habitat, potential impacts and proposed mitigation.

Wahlin Comment B26.3

I am also concerned about the history of Grey Cloud Island and the acreage that our Native American friends inhabited. The family and relatives of Grey Cloud Woman inhabited the entire area of Grey Cloud Island and I think it's unjust to allow a European company to come in and literally blow up this island one blast at a time.

Response B26.3

Thank you for your comment

Wahlin Comment B26.4

Lastly, I am concerned about the back channel bluffline and what kind of damage closer blasting will have on it. We enjoy pontooning/kayaking the backchannel every summer and are amazed at the different chunks of bluff line that collapse or cave into the river each summer. Our bluffs are mostly made up of limestone which in turn can be very easily crumbled. I'm concerned with how close the mine

will push the limits with their blasting and boundaries as they are already breaking the rules and blasting within the ”500 foot rule of residential properties.”

Response B26.4

Blasting can be safely conducted within 500 feet of the Grey Cloud Channel. The intention of the EAW is to study the maximum quarry extents, and the EAW acknowledges that final setback requirements and will be determined during the County and Township permitting process. Holcim has not broken any rules with respect to blasting setbacks from residential properties. Please see Response A5.11 in Attachment A for additional information regarding blasting.

Attachment B27 Nibi Ogichidaa Ikwe Comment Letter

Ikwe Comment B27.1

I am writing to express my concerns about mining at Holcim-MWR-Inc, Grey Cloud Island Township, Washington Co, Minnesota. I do not agree with this mining proposal in any way. My stomach twisted in a knot as I researched the history and facts of this site. Several burial mounds have been noted by ARS Archeological Reconnaissance Survey. It is disrespectful and industrial greed if you keep mining the area knowing many of our Ancestors are buried near there.

Response B27.1

Thank you for your comment. Please see also Response A3.1 and A3.3 of Attachment A for information regarding additional coordination with MIAC.

Comment B27.2

All surface water of the Grey Cloud Island Channel, Mississippi River, Mississippi backwaters, and all surrounding lakes, streams, creeks, and natural springs will forever be negatively affected. The dewatering process is an extreme threat and high risk to our Prairie Du Chien Aquifer. It is vulnerable to contamination, especially in areas of erosion or removed bedrock. All groundwater should be highly protected and preserved for emergency use, and for future generations.

Response B27.2

The dewatering process does not pose a threat to the water quality in the Prairie du Chein Aquifer. The Site operates under a MDNR Water Appropriation Permit regulating the withdrawal of groundwater and an MPCA NOPDES/SDS Permit which regulates the dewatering discharge to the Mississippi River, along with monitoring and reporting requirements associated with these permits. Operating under the on-going regulatory authority of these agencies helps to insure that there are no significant impacts to nearby surface and groundwater.

Ikwe Comment B27.3

Displacing wildlife, forest, and rare vegetation to move this limestone somewhere else is a huge waste and extreme exploitation of our natural resources. Say NO to the mine.

Response B27.3

That you for your comment. Please see Responses A4.1-A4.6 for information regarding the condition of the existing woodlands and vegetation, potential impacts to the vegetation, mitigation work that has already been voluntarily conducted by Holcim, as well as proposed future vegetation restoration work that would be performed as art of the mine expansion permitting.

Ikwe Comment B27.4

Traditional Ecological Knowledge (TEK) is the key solution to moving forward in a good way. Limestone is a natural filter that can clean water and air. Natural limestone in the environment is effective at removing heavy metals, manganese, and phosphorus. Natural limestone in the environment reduces ph levels which helps prevent harmful bacteria and algae. Natural limestone in the environment is a natural filter that has a specific purpose for cleaning the water. We need to keep our limestone where it's at, intact, and safe from mining exploitation. Water is life.

Response B27.4

Thank you for your comment.

Attachment B28 - Joan Miller Comment

Comment B28.1

My name is Joan Miller and I live at 8898 Grey Cloud Island Drive south. Grey Cloud Township. I don't believe that Holcim should be able to have the variance or very mine this area. This permit has been open for three years now and in the initial permit, they did not include a variance. It is my understanding that they just added onto it recently.

I do not agree that they should be able to mine 500 feet from the two properties indicated on report. Ordinance 49.3 was adopted May 8 2024 was amended to supersede the prior ordinances. It states that no mining stockpiling within 500 feet of adjoining property lines not structures.

The mining company should have some respect for the two property owners, the new property owners. They had nothing to do or were told about the agreements made before they bought their homes. I am sure that they would not have purchased their homes because the resale value and having the mind in your backyard. They were told by the Town Board and by the mining company everything was going be OK and that they had nothing to worry about which was a lie so why should these people have to pay the consequences for the previous owners and the previous members of the town board.

Response B28.1

Thank you for your comment. Mining setbacks studied in the EAW represent the farthest extent of the proposed quarry limits in order to evaluate the greatest potential impact in the EAW. Setbacks will be established in the County and Township mine permits and may vary form those studied in the EAW.

Comment B28.2

There was a poster up at the open hearing saying that no harm will come to the environment by mining in the northern section. How can that be statement be true, if you take down a grove of trees and wild grasses that is making a difference in the environment. How do you think the wild life will exist? You take down trees, you strip the land of everything that's green and viable and you don't think that that is hurting the environment. Why do they have to strip the land so totally of The mining company is I feel trying to drain the spirit of Grey Cloud Island and strip it dry of all of its soul. Maybe past residents/town board members made mistakes making deals with the mining company. Maybe these people were naïve and didn't think about the consequences, but this is 2025 reality is we can't keep taking from the earth and we need to respect your fellow man. Tonya and Jeff spoke at a meeting, and Tonya asked the members from Holcim mine "How would they like to have this happening 500 feet from a structure of their home. The lawyer couldn't even raise his eyes to look at her. Things were done wrong and they need to be set correct. Again should these people suffer when they were not made aware of these deals and in one case they were told everything was gonna be all right don't worry about it? Somebody (the mining company and the township) needs to make it right with these homeowners because they are going lose a big investment on their homes. How could they sell the property?

Response B28.2

Thank you for your comment. The meeting you are referring to was related to the 2025 Township Administrative Permit which is to continue to mine on the west side of CR 75. It is not related to the EAW and the expansion to the east side of CR 75.

Comment B28.3

Hours of excavation. These hours need to be cut down at least to 7 to 5 Monday through Friday and because they are so close to residents of Grey Cloud.

Hours of operation are established within the County and Township permits. See Response A5.1 of Attachment A for more information regarding hours of operation.

BOARD OF COUNTY COMMISSIONERS
WASHINGTON COUNTY, MINNESOTA

RESOLUTION NO. 2025-015

DATE February 18, 2025

DEPARTMENT Public Works

MOTION BY COMMISSIONER Bigham

SECONDED BY COMMISSIONER Miron

RESOLUTION OF THE WASHINGTON COUNTY BOARD OF COMMISSIONERS MAKING A POSITIVE DECLARATION REQUIRING AN ENVIRONMENTAL IMACT STATEMENT FOR THE PROPOSED LARSON QUARRY EXPANSION

WHEREAS, MN Rule 4410 establishes the requirements for the preparation of an Environmental Assessment Worksheet (EAW); and

WHEREAS, Washington County is the Responsible Governmental Unit (RGU) for the preparation of an EAW for mine operations in the unincorporated areas of the county; and

WHEREAS, Aggregate Industries prepared an EAW in 2005 for the proposed Larson Quarry expansion in Grey Cloud Island Township which resulted in five public and agency comments and none noted a potential for significant impact; and

WHEREAS, the County Board passed a resolution on September 20, 2005 for a negative declaration on that EAW; and

WHEREAS, Aggregate Industries never began work in the EAW expansion area and therefore the 2005 EAW is too outdated to remain valid; and

WHEREAS, Holcim-MWR, Inc. (formerly Aggregate Industries) started preparation of a new EAW in 2023; and

WHEREAS, Washington County, as the RGU, deemed the EAW complete in November 2024 which began the public comment process for the EAW; and

WHEREAS, Washington County must make either a negative declaration or a positive declaration on the need for an Environmental Impact Statement (EIS) based on the data in the EAW and the comments received; and

WHEREAS, the Washington County Board of Commissioners makes the following findings of fact:

1. An EAW was distributed to the Minnesota Environmental Quality Board Environmental Review Program EAW Distribution List.
2. A 45-day comment period was held from December 3, 2024, to January 17, 2025
3. Washington County hosted a Public Comment Meeting at the Grey Cloud Island Township on January 9th, 2025, during which the County answered questions and accepted written comments.
4. Thirty-six public and agency comments were received, and responses were prepared.
5. The EAW and public comments were presented to the Washington County Planning Advisory Commission at their meeting on January 28th, 2025.
6. Public comments received during the EAW comment period raised concerns with the potential for significant impacts related to:
    a. Cultural resources and archeological impacts due to not meeting review requirements of the Minnesota Indian Affairs Council (MIAC),

b. Removal of a significant vegetative stand with insufficient mitigation measures identified.

7. While not meeting the definition of significant impact, the response to comments documents identified many items that need to be updated in the EAW. These issues should be updated during an EIS process.

8. Additionally, any new environmental regulations or data should be incorporated into an EIS.

9. The proposed project may have the potential for significant environmental effects due to the items listed above as defined by Minnesota Rules, part 4410.1700, subpart 7, and that further study is necessary to adequately address these issues.

10. The preparation of an Environmental Impact Statement (EIS) will provide a detailed analysis of the potential environmental impacts, reasonable alternatives to the proposed project, and potential mitigation measures to reduce adverse effects.

NOW, THEREFORE, BE IT RESOLVED the Washington County Board of Commissioners makes a positive declaration requiring an Environmental Impact Statement for the project pursuant to Minnesota Rules, part 4410.1700. subpart 3.

ATTEST: Kevin Corbid

COUNTY ADMINISTRATOR

Stan Karwoski

COUNTY BOARD CHAIR

	YES	NO
MIRON	X	
KARWOSKI	X	
COX	X	
BIGHAM	X	
CLASEN	X	