

COMMENTS RECEIVED AND RESPONSES CONCERNING THE ENVIRONMENTAL ASSESSMENT WORKSHEET FOR

Jordan Aggregates Proposed Mining Operation EAW Sand Creek Township Scott County, Minnesota

The headings for the EAW Item topics are in brackets.

Comments received are in normal font following the name/organization of the commenter in bold font.

Staff responses are in Bold Underlined Italics

Note: Comments received note the name of the commenter and are either quotes from their comments or are paraphrased by staff to capture the essence of the concern as it relates to the EAW item in question. *Staff responses to the comments follow each comment and are in italics and noted as Staff Response.* Comments received that were of similar concern are addressed once throughout the document.

General Comments Opposing the Mining operation with no reference to specific EAW items:

Staff received many letters and emails where the commenter simply opposed the mining operation due to general reasons such as increased traffic, pedestrian safety, property value, etc., but did not provide substantive comments regarding the EAW issues. Non-substantive comments have not been responded to in these Findings of Fact and Conclusions. However, all comments received, including the non-substantive comments, have been provided to the County Board of Commissioners.

The comments considered in this document were all received within the designated comment period except comments from the Minnesota Department of Natural Resources, Minnesota Department of Health and the Sand Creek Township. However, each of these governmental units notified us that their comments would be late. Staff accepted these comments for consideration recognizing that their comments were substantive and the units of government will play an instrumental role in future decisions related to this project should it proceed.

Acronyms: Throughout this document the following acronyms will be used: Minnesota Pollution Control Agency (MPCA or PCA), Minnesota Department of Health (MDH), Minnesota Department of Natural Resources (MNDNR or DNR), Minnesota Department of Transportation (MNDOT), State Historical Preservation Office (SHPO), Office of the State Archaeologist (OSA), Minnesota Environmental Quality Board (MNEQB or EQB), Environmental Impact Statement (EIS), Environmental Assessment Worksheet (EAW), Responsible Governmental Unit (RGU), U. S. Fish and Wildlife (USFW).

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6. Project Description

City of Jordan

“The remaining final pond is stated to be 36 acres, although on page 16 of the EAW it says the pond will be 33 acres. Please confirm that the measurements are consistent throughout the document and its attachments.

Staff Response: *The developer provided the following clarification regarding their proposed project: “Acreages listed in the EAW are grouped in different ways depending upon the question being addressed. The pond area is designed to be 35.9 acres. Of this 35.9 acres of pond area, 3.1 acres are proposed to be classified as “Type 3 Shallow Marsh” wetland, and the remaining 32.8 acres will be considered “open water.”*

A two-lot rural residential subdivision is the final proposed use. In addition, Jordan Aggregates proposes to create wetland in the lowland area (at one spot in the EAW, it states 38 acres of wetlands and wetland buffer, and in Item 10 it states 22 acres of wetlands and 29.9 acres of brush/grassland/buffer). Again, please confirm that the measurements are consistent throughout the document and its attachments.

Staff Response: *The developer provided the following clarification: “acreages listed in the EAW are grouped in different ways depending upon the question being addressed. The project proposes 22 acres of wetland (18.9 acres of “Type 1 Floodplain Forest” and 3.1 acres of “Type 3 Shallow Marsh”) and 15.7 acres of “upland buffer.” Combined, the wetland and upland buffer areas total 37.7 acres. These acreages are split out in this manner for purposes of determining potential wetland credit. Item 10 addresses before-and-after land cover types, and 10 correctly identifies 29.9 acres of post-project brush/grassland/buffer, which includes 15.7 acres of “upland buffer” and 14.2 acres of other brush/grasslands that would not qualify as “upland buffer” for purposes of potential wetland credit.*

Jordan Aggregates is proposing to have temporary asphalt and concrete mixing plants in the mine site and bring recycled bituminous asphalt and concrete to the site. The EAW states that the plants must meet County zoning ordinance chapter 10 mining requirements.

Staff Response: *The amounts of recyclable concrete and asphalt that can be stored on a site at any time are set by the County with conditions on the solid waste facility license that will be required. Limiting factors for this site will include a condition for all such material to be stored on a concrete pad with runoff containment.*

The estimated amount mined per day uses truck loads, which can vary based on truck size. It would be helpful if the EAW confirmed this rate with volume (or weight) measurements, because measuring by truck loads is vague.

Staff Response: *The developer provided the following clarification: “The EAW assumes that aggregate products will be exported from the site using 18-CY trucks. The estimated 10,000 export trips per year yields an annual mining volume of 180,000 cubic yards (truck volume) or weight of 288,000 tons.”*

The City is concerned with the proposed variance request by Jordan Aggregates regarding delaying the timing of reclamation. Scott County requires reclamation to start after 25% of the total area or 4 acres (whichever is less). Jordan Aggregates is planning to request a variance in the Interim Use Permit (IUP) for Mining, but the EAW

doesn't state what the desired variance would be and why the standard reclamation requirements are not achievable. Please include the proposed reclamation threshold that would be requested in the variance. The City would like the opportunity to comment at the time of this or any other variance request.

Staff Response: *The nature of the variance request for site remediation will be subject to public hearing as part of the IUP process. Interested parties may provide comments in regard to any variance requests at that time.*

Will final pond be stocked with fish? Is the final pond normal water level (NWL) equal to 720, or something else? It is stated that 720 ft is the groundwater surface elevation, but the proposed pond's NWL is unclear. How does the NWL elevation of the pond compare to the 100-year flood elevation?

Staff Response: *The developer has not had discussions with the Minnesota Department of Natural Resources regarding stocking the pond with fish. However, it might be likely that fish will be introduced into the pond during flood conditions. The normal water level of the pond is reflective of the ground water elevation in this area which fluctuates under flood conditions. The normal ground water elevation is approximately 720 feet above mean sea level (MSL). There is a gradient on the existing water table due to the soil's resistance to flow that will be removed when the pond is excavated resulting in a leveling of the water table. The 100 year flood elevation which varies across the site from 733 in the southwest to 731.5 in the northeast is expected to inundate the mine site with flood waters from Sand Creek, especially after the full surficial area of the pond is exposed.*

We recommend a 10-ft wide bench at 10:1 slope just under the NWL of the proposed pond. This is a common requirement for storm water ponds, so that people or wildlife at the pond 's edge have an safety area of shallower water and are able to walk out of the pond if needed. The bench also allows for wetland vegetation to enhance water quality.”

Staff Response: *Staff agree. Though it is not clear from the drawings submitted for the EAW the developer provided the following response to this question: “Proposed grading for the pond perimeter includes a 15-foot wide bench at a 15:1 slope as shown on Sheet 4 Reclamation Plan included with the EAW document. This bench is wider and flatter than minimum requirements.”*

Figure 6 - Soil Classification Map - two different colors on this figure are labeled "Sparta fine sand, 2 to 6 percent slopes." Please clarify.

Staff Response: *The olive soils are HdB2 Hubbard Fine Sand, 2 to 6 percent slopes, and brown soils are HdC2 Hubbard Fine Sand, 6 to 12 percent slopes.*

Figure 8 - Existing Natural Resources - not all of the hatching is labeled (yellow lines). This figure needs a legend.

Staff Response: *This figure is an attachment included in the Botanical Survey Report (Attachment A). Please see the Botanical Survey Report for more information on the figure. Please use Figure 7 for information on existing vegetation.*

Sand Creek Township

The EAW does not appear to provide information on the proposed operating times for the mining and other activities on site.

- a. What months of the year will the operations be open?
- b. What days of the week and hours of the days will the operations be open?"

Staff Response: The hours of operation have not been finalized. The hours of operation will be established when the Developer applies for the Mining Interim Use permit. The Developer is considering requesting 7 am to 7 pm Monday – Saturday primarily April through November.

The EAW does not discuss the security measures to be installed at the proposed mining operation. Will there be a perimeter fence to prevent access to the site by children?”

Staff Response: Site security is an issue normally addressed as part of the IUP process. The proposer has stated that the driveway entrance will be secured with a gate but that a perimeter fence is not proposed. If a regional trail is extended through this area as anticipated site security may become more important. One limiting factor of course is the majority of the proposed mine site is in the flood plain of Sand Creek and maintaining a fence around the site would be problematic.

The EAW mentions that the Developer will request a variance from the County restoration requirements as part of the Interim Use Permit application. The Township is concerned that it appears that the developer intends to have the entire mining site opened with bare soil exposed before any restoration is started.”

Staff Response: Any variance would need to be supported by justifiable circumstances and reasonable alternatives and will be considered as part of the IUP process.

Sand Creek Township

“General

The effort in this response is to emphasize the proposed mining operation in the 'context' of the surrounding area and region. Since the EAW has provided little or no comprehensive information enabling the respondents to evaluate the proposal, it is important that the negative impact on the surrounding community be thoroughly examined. An EIS is required to explore, research, collect necessary data and document the proposed gravel mine issue in the 'context' of the surrounding area and region.”

“Consistent with all submittals is the general lack of adequate planning, incomplete information in the 'context' of the area surrounding the project and the necessary in-depth research leading to a just, reasonable and comprehensive decision. Unfortunately, a narrow myopic examination of desperate issues has resulted in a stand alone project proposal which justifies itself alone. The EAW is asking for an examination of a collection of singular issues without concern for the 'whole'.

Staff Response: The EAW provided sufficient maps and descriptions of the existing surrounding land uses for purposes of describing the proposed project in the context of the current setting. Staff acknowledge that the EAW did not examine future land use impacts from this mine because specific land use plans for this area have not been prepared. The area is currently designated in the County’s 2030 Comprehensive Land Use Plan as Urban Business Reserve, which is intended to preserve land at very low densities (one unit per 40 acres) until commercial or industrial uses are possible with urban services. This area was designated for urban business reserve largely to reflect the current uses. It is acknowledged that the approval of this mine with the resulting reduction of buildable land does not improve the economics of expansion of municipal services into this area. However, mining is an allowable use in the County Zoning Ordinance in this area. This issue can be addressed further if the Board believes that the proposed mine might present a significant limitation for future more valuable land use options in this area. Further analysis would essentially involve a focused land use plan with involvement of the Township and City such as would occur through an orderly annexation process. However, Staff believe that this issue could also be addressed by the Planning Advisory

Commission as part of the IUP process. The Planning Commission can require that the site be restored to replace the same amount of non-flood plain acreage that currently exists on this parcel to address concerns about potential future development conflicts.

As the encroaching urbanization and development invades prime areas of Sand Creek Township, unreal pressures on local, social and natural environments occur, particularly our water and soil. The proposed gravel mine potentially and severely threatens the health and welfare of the surrounding area. It unnecessarily puts pressure on existing transportation systems and becomes a problem of public safety, on-going maintenance and nuisance.

Staff Response: We agree with the comment but suggest that development questions in Sand Creek Township adjacent to Jordan should be dealt with proactively through an orderly annexation agreement. This issue is beyond the scope of an EAW.

Potential cumulative impact is far-reaching - responsibilities

No one can be excused from the responsibility to act conscientiously and comprehensively. They must exert all effort to protect and inform the public at all stages of the planning, review and decision making process. Potentially, without sufficient examination and research, the public and environment is at risk and can hold all those who accept and approve this proposal without sufficient information, in some form or another, liable. What might seem as a minor and local issue can have a cumulative 'ripple effect' impacting far-reaching areas and regions beginning at the proposed gravel mine outward.

Staff Response: Staff agree with this observation but would suggest that an orderly annexation agreement process be considered for those areas of Sand Creek Township adjacent to the City of Jordan that appear to be desirable for extension of municipal services for optimum land use development. The EAW process has its limitations but the process has helped to illuminate the issue about lack of definitive long range plans for the subject area and provided an opportunity for interested citizens to become effectively involved.

Operation over time

This proposed gravel mine project is projected to be in operation for 25 years. Obviously, one cannot see what the conditions or situations may be or occur during that time period and potentially well beyond. Complete and thorough study, such as an EIS can provide, coupled with sufficient and adequate testing and monitoring will be required. Regular and full complete reporting on a frequent basis will be necessary to confirm the Owner's compliance with the IUP and a formally issue of a subsequent IUP to continue with the mining operations and to include any modifications to the IUP permit.

Staff Response: Preparation of an EIS does not provide any additional insight into the future. An EIS following an EAW is desirable when one or more significant potential impacts have been identified and need more detailed analysis and consideration to quantify the impacts or prepare appropriate mitigation.

Important Issues - unresolved

Lack of a complete and in-depth project proposal for public review.

Staff Response: Staff believed that the proposed project was adequately described for purposes of preparing an EAW. However, Staff have noted in this document several areas where additional

information about the project is needed to address the concerns which were noted in comments received.

The proposed gravel mine operation has included a concrete and bituminous operation, which each, in themselves, should be considered separately due to their negative impact on the area and region. All material concerning each of the proposals must have a formal public review throughout the mining operation.

Staff Response: The EAW process requires that the proposed project be described in its entirety within the document and not split up into separate issues. Impacts from individual activities are often cumulative and thus would not be properly considered as separate issues. The developer's proposal to consider future concrete and asphalt recycling and a portable hot mix plant was included in the EAW and comments with concerns associated with these operations were received and responded to elsewhere in this document.

Mining operation - scope - time - change

The EAW is lacking in a complete scope and detailed statement of the proposed operations. Particularly the use of the mine and its delivery of product being inclusive of both the Owner's use and sales of product to customers outside the Owner's mine operation is not anticipated, projected and reported.

Staff Response: Sale of product to other contractors is mentioned in the EAW in addition to the use of product for the developer's contracted projects.

The months of the year and the daily time of the mining operation and other user's activity must be reevaluated to be consistent and all inclusive.

Staff Response: Operation of gravel mines in Minnesota is seasonal by nature depending on weather conditions and the demand for product. This project will likely be more limited than many other mining operations as mining below the water level will likely not be able to continue when the pond is frozen or during flood conditions.

Any future changes to up-scale or down-scale or modify the mining operation must be reported to the Sand Creek Town Board prior to the changes being made. All permits and adjustments to any monitoring systems must be filed and/or authorized prior to any changes to be made.”

Staff Response: Staff agree; such conditions are normally addressed as part of an IUP amendment which involves the township.

“Reclamation - Process scope

The process of reclamation must begin immediately after the start of mining operations and be professionally planned by a landscape architect and installed by a professional landscape general contractor. The reclamation design and implementation plan shall be phased, using a diverse planting of appropriate native plants and be guaranteed through two growing seasons. The reclamation plan shall include site preparation, security fencing, grading, construction, planting, seeding, appropriate electrical and mechanical as necessary, maintenance and a two year guarantee. No variance from a commitment to an approved reclamation plan throughout the mining operation will be allowed except by authorization from Sand Creek Town Board. The applicant shall provide a reclamation plan to the Sand Creek Town Board for their review, comment and approval.

Staff Response: These comments will be forwarded for consideration during the IUP process. Sand Creek Township's authority for involvement with land use permits is limited to an opportunity to review and submit comments during an IUP amendment consideration process with the Scott County Planning Commission for ultimate consideration by the Scott County Board of Commissioners. Sand Creek Township does not have legal authority to impose conditions approve or deny such permits. They can only recommend such actions for consideration by the County Board.

End Use

Assuming that the end use of the mine property should have a public and private value, a 'pond' does not offer much. The applicant should re-submit a proposal that either provides options for sufficient area available for future private development, institutional, commercial, and/or public park access in combination with the pond. The pond shall have appropriately designed slopes allowing for management of siltation, access and maintenance. Provide a minimum of 150' of buffer setback with required landscape and security elements.

Staff Response: Staff agree that the removal of a portion of the current buildable land could have an adverse impact on the economics of extending urban services into this area to accommodate future business development. Staff are recommending that this concern be addressed as part of the IUP with the consideration that the site could be restored in such a way that the economic feasibility of extension of municipal services to accommodate the future development of this area will not be significantly jeopardized. This approach is consistent with staff recommendations for the Credit River Sand and Gravel Mining Operation EAW completed in 2004. Staff refer to sub-item 4 in Item 6 of that EAW for a description of how that proposer agreed to site restoration after mining below the water table in order to comply with the Scott County Zoning Ordinance that requires reclamation of the mining area to an End Use that is compatible with the Comprehensive Land Use Plan. Site reclamation must not result in unstable soils, drainage issues, site elevations or other conditions which may present a barrier to extension of municipal services and/or future development of the site. In order to accomplish this Staff recommend that:

Consideration of the variance request be consistent with the Zoning Ordinance.

The applicant should provide some form of financial guarantee.

The mine should be monitored to verify that the site is being restored according to the Chapter 10 and the approved End Use Plan.

There be routine monitoring of the quality of material used to restore the mine. Clean granular (sand) materials should be backfilled to an elevation at least 10 feet above the water table elevation. Suitable compactable fill soil and top soil should be used as fill above the granular materials to restore the amount of buildable area above the 100 year flood elevation as existed prior to mining.

Alternatives

Lacking in the EAW are reasonable alternatives and options.

Staff Response: The operational aspects of projects undergoing an EAW are provided by the proposer. An EIS requires consideration of alternative locations and optional aspects to minimize impacts, but an EAW only requires consideration of the potential impacts from the proposed project. The developer did not identify any alternatives for operation or scope of the project. However, they

did provide alternatives and options for addressing ground water contamination. The EAW noted, however, that a financial security would be provided to address the most conservative of the proposed options and lacking in the EAW is any analysis of a best option, the costs and related impacts. This analysis must be completed before consideration of the IUP. See Staff Recommendations at the end of this document.

Continued maintenance and repairs

Lacking in the EAW are statements concerning on-going maintenance, warranties and repairs of the mine and adjacent areas of impact.

Staff Response: Staff agree and will recommend that the IUP address how maintenance of public roads used for this operation will be addressed.

Monitoring

Lacking in the EAW are adequate provisions for complete monitoring of the potential impacts as the result of the mining operations.

Staff Response: Staff note that the EAW included a proposed ground water monitoring plan; however, it did not address provisions for monitoring noise, air quality, traffic impacts, or other impacts. These should be addressed prior to consideration of an IUP application. See Staff Recommendations at the end of this document.

Enforcement

Lacking in the EAW are expressed concerns for public safety and security as well as enforcement and restitution of any impact occurrences resulting from the mining operation.

Staff Response: Concerns for public safety are routinely addressed by local law enforcement and for project related issues outside of the scope of established regulations; they can be addressed in IUP conditions. Costs associated with addressing anticipated impacts can also be addressed through required securities as a condition for the IUP. Costs for remediation of the site related to solid wastes such as waste concrete and asphalt imported for recycling will be addressed through the separate Solid Waste Facility license required for this aspect of the proposed project. Securities such as a letter of credit or permit bond are required to cover the potential cost of removal of this material in the event the project fails to do so prior to restoration of the site. The amount of the security is reviewed annually to ensure that the cost for removal stays current with the costs related to the amount of this waste material stock piled as well as local options for disposition.

Miscellaneous

Although not specifically apparent at this time, the applicant, through the EAW, should show a willingness to be cooperative and project a sincere interest in being a 'good neighbor'. The applicant shall maintain direct and frequent communication with the Town Board of Sand Creek Township as required.”

Staff Response: Staff concur.

Kathy Lopic

“3. RESTRICTIONS – If you think you can solve all the issues brought up during the EAW process by applying restrictions or conditions, who will monitor and enforce those conditions? Conditions that I expect might be placed on the gravel mine operation are hours of operation, number of trucks per day, weight of trucks, routes of travel for the trucks. Who will be sitting out there each and every day to enforce those rules. Some of these trucks will not be Hentges trucks and can claim they didn’t know the rules. Who has the ability to weigh these trucks? I know the police chief in Jordan has said they will not be able to monitor the traffic for counts, routes or weights. And the County may require soil tests and water tests as conditions. Who will be performing those tests and how often? Will it be the business owner himself? That is putting the fox in charge of the hen house. Does the County have those resources to test weekly, monthly? And what will they be testing for? Usually those tests get expensive if you test for many different things. If the County pays, there goes the “cheap” gravel. Or will you, as so often is the case with CUPs, rely only on complaints to generate enforcement? If that is the case, now the County has compromised the property rights and devalued the land of nearby property owners by allowing a smelly, noisy business to operate with heavy trucks traveling past their homes daily and likely contaminating their drinking water, and you want the landowners to police this operation? How unfair.”

Staff Response: One of the criteria for determining the need for an EIS is “the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project.” When addressing the specific issues noted in comments to this EAW staff have proposed conditions for consideration during the IUP process to address these very concerns. Should the proposer refuse to accept or abide by the conditions set forth in the IUP process the permit can be denied or if violated after the issuance, the permit can be revoked. Staff have suggested conditions which we believe are enforceable and have in some instances suggested the impositions of fees for the permit to cover the cost for monitoring to ensure compliance. To the extent that additional information and review of proposed mitigation or changes to the operation as proposed suggested in the Findings of Fact and Conclusions be needed prior to consideration of the IUP application, either additional time can be given to prepare this information prior to determination of the adequacy of the EAW or an EIS can be ordered. See Staff Recommendations at the end of this document.

Scott County will enforce the conditions set in the IUP through the Zoning Ordinance #3 Chapter 2-Section 2-13(1). The violation of the conditions or provisions of any permit issued pursuant to this Ordinance shall be a misdemeanor. Staff recommend that the Developer pay an annual IUP permit fee to cover costs associated with monitoring compliance with the established conditions, such as hours of operation, # of trucks per day, etc.

The EAW recommends a condition in the IUP that requires an efficacy analysis, cost estimates, and identification of funding sources to be secured for the ongoing monitoring and implementation of the mitigation plan. It was our intention that secured funding sources would be used for the County to hire a private consultant to perform any required environmental monitoring. The County can collaborate with appropriate state agencies as needed. This recommendation was to avoid questions about the accuracy of the results of the ground water testing and the County would be informed of any possible contamination.

Travis Cherro

“Section 6b Temporary Portable Asphalt and Concrete Mixing Plant. The temporary portable asphalt or concrete mixing plant can operate for a maximum of two hundred and forty hours annually, unless extension is approved. Is the asphalt plant there just to tar Valley View road or do they plan on running it off and on for the

next 25 years? Who is going to be monitoring that the plant runs no longer than its allowed time frame for the year?

Staff Response: *The Developer is planning on operating the asphalt plant for the life of the mine. However, the Developer must apply for a permit every year. Temporary portable asphalt and concrete mixing plants are allowed for a limited time per year and must receive permits for each subsequent year they are requested. Failure to comply with the established conditions the previous year can result in denial of permits for subsequent years.*

Section 6b. Mining Operation. Aggregate products will be available for commercial sale and will be exported from the site by trucks at a rate of 10,000 round trips per year and up to 110 round trips per day during periods of peak demand. Who is going to be monitoring they do not exceed these amounts?

Staff Response: *EQB rules stipulate that the mitigation measures presented in an EAW must be specific and reasonably expected to effectively mitigate the identified environmental impacts of the project. The proposer did not suggest mitigation addressing on-going monitoring of all the conditions that have the potential to cause significant environmental impacts if they are not complied with. In response, staff have suggested reasonable conditions for consideration during the IUP process for this purpose. To address the number of trucks staff are recommending an automated vehicle counter with real-time feedback to the County should be considered. The proximity to the County's computer network across the road and railroad tracks may afford a direct digital connection, alternatively, a dedicated telephone line can be employed for data transfer. The number of trucks entering and leaving the pit can be monitored accurately and checked daily. If violations occur they can be addressed quickly. The cost for this and associated monitoring by the County's Code Enforcement officer can be paid by the developer through an annual IUP Permit.*

Section 6b. Reclamation. The developer has indicated the Chapter 10 requirements to begin restoration efforts after 4-acres of mining will conflict with their proposed phasing of the mining operation. Now what happens if Sand Creek floods again and they have not stabilized the soil, it will contaminate the creek. Considering phases 2b, 2c and 3b are right next to the creek.”

Staff Response: *Mine operation during flood conditions has not been clarified by the developer. This issue must be addressed as well as what measures they propose to stabilize the soil between Sand Creek and the proposed mine pond.*

Carl and Karen Day

“In the EAW the gravel pit is requesting hours of operation from 6:00 am to 10:00 pm. They are also requesting that they be allowed to operate 24 hours during their peak period of approximately six weeks. What are their peak periods? It is assumed that these hours would be during the spring and summer when windows and doors of homes are opened. Stated in the EAW was the possibility that the noise and vibration levels would exceed state standards. Please be advised that the Brentwood neighbors were aware that studies were being conducted because only brand new trucks with the Hentges signs painted on them were traveling up and down Valley View Drive.

Staff Responses: *The hours of operation will be established when the Developer applies for the Mining Interim Use permit. The Developer did not propose in their description of operations for the EAW that they would request to operate for 24 hours during peak periods, however, staff noted that such requests are common for hot mix plants when roads are being constructed and noted that should the developer make such a request they would need to demonstrate how they will address noise. Though noise standards are not enforceable by the MPCA for 173rd St./Valley View Rd*

because it is exempt due to its classification, noise impacts that exceed the state standards are considered significant environmental impacts none-the-less and Staff are recommending that those standards not be exceeded so as to adversely impact area residents and businesses. Staff recommend that the developer be required to demonstrate to the satisfaction of the county that state noise standards not be exceeded so as to adversely impact area residents and businesses as required information for changes in operations requiring review. Staff will also recommend that all County costs for review of the developer's information, including the cost for technical assistance to the County from noise experts be paid for by the developer.

If the developer proposed ongoing night time operation in their initial IUP application this would constitute a significant change from the project description presented in the EAW, and could require an amended EAW to address the night time noise impacts and proposed means of mitigating them.

The EAW does not adequately address the number of trucks or the hours of peak travel for the trucks. Will the trucks be solely those belonging to the S.M. Hentges Company or will they be independent truckers? Who will monitor the trucks? Will they be clearly marked and covered with tarps, so that when something does happen such as spillage, the incident will be able to be documented?

Staff Response: The number of trucks entering and leaving the pit will need to be monitored. Staff suggest this can be done electronically with real time connectivity for the County to monitor. Staff believe that it is reasonable and possible to count the number of trucks entering and leaving. The number of trucks was demonstrated by noise modeling to be directly related to the potential for noise level exceedance, therefore it is recommended that a specific number of trucks entering and leaving the pit be established as a condition in the IUP to preclude violation of noise standards. Since the number proposed by the developer and considered in the EAW is 110 round truck trips per day staff recommend that be the number established as a condition in the IUP.

Minnesota Statutes Chapter 169.81 Subdivision 5 "Manner of loading. No vehicle shall be driven or moved on any highway unless such vehicle is so constructed, loaded, or the load securely covered as to prevent any of its load from dropping, sifting, leaking, blowing, or otherwise escaping therefrom". When there are established regulations to effectively address impacts and they can reasonably be expected to be enforced then they can be relied upon as a reasonable means to address a potential environmental impact.

We now find in the EAW that there will be asphalt and concrete plants within the gravel pit. Who will monitor the incoming asphalt and concrete that is to be reclaimed and processed? Who will monitor the noise levels and the odors emanating from these portable plants? This is not addressed in the EAW, but they allude to the Jordan Aggregate facility doing this."

Staff Response: The noise levels are relative to the number of trucks regardless of what they are transporting. This issue can be addressed by monitoring and restricting the number of truck trips per day. The noise levels from stationary sources such as crushers, concrete and asphalt processing equipment are regulated by the Minnesota Pollution Control Agency. Prior to being permitted to introduce concrete or asphalt processing equipment the pit operator will be required to obtain an amendment to their IUP and provide acceptable documentation demonstrating that the proposed equipment can be operated within the established limits of the State's noise rules. The County can use outside expert resources to assist in reviewing noise documentation provided by the pit operator.

Staff acknowledge that odors from asphalt plants are another issue and aside from the MPCA's Air Quality regulations there are no State rules or established standards to monitor or address odors.

Asphalt processing plants, which typically include storage piles of aggregate materials and rubble crushing operations, must operate within MPCA permit requirements and other State and Federal agency requirements pertaining to air emissions, noise, odors, and dust. However, the state of Minnesota does not currently have rules that limit odor emissions. The developer has not provided an analysis of the potential for the proposed Project to contribute odor emissions. Staff agree with the concern since neighboring land uses include a nursing home, a regional training facility a youth detention facility and area residents. This area is also subject to air inversion conditions which could concentrate air pollutants and odors in the valley, however other than traffic there are very few air emission sources in this area. Staff reviewed the EAW for the Bituminous Roadways Roseville Asphalt Plant prepared by the MPCA in July of 2010 (<http://www.pca.state.mn.us/index.php/view-document.html?gid=13958>) The referenced study included an ambient air quality analyses with air dispersion modeling. The Hot Mix Asphalt plant EAW prepared by the MPCA noted above was, like this one, proposed to operate under an Option D Registration Permit (Minn. R. 7007.1130). That facility is considerably larger, is located closer to the middle of the metropolitan area in an industrial park and yet they found no significant additional impact from the proposed facility warranting restrictions. This facility is required to obtain an air quality permit from the MPCA and they will be responsible for monitoring air quality. As noted odor problems are not addressed by the State but staff to not believe that odor will constitute a significant issue due to the limited hours of operation for the asphalt plant.

7. Project Magnitude

Data:

City of Jordan

“In Item 6, it is stated that the property is 98 acres, of which 84.7 acres will be mined. In Item 7, the total area of the proposed project should be listed as 98 acres, with a breakdown of how those 98 acres will be used (84.7 acres for mining, 2.8 acres for perimeter buffer space, 10.5 acres will be used for X, etc.). Please confirm that the measurements are consistent throughout the document and its attachments.”

Staff Response: The developer provided the following response to this question as it relates to their proposed operation: “The EAW distinguishes between the Property area and the Project area. The project area as described in the EAW includes those land areas within the 98-acre property that are proposed for mining (84.7 acres) plus buffer strips upon which site screening activities will be implemented (2.8 acres). The remaining 10.6 acres of the property will be unaffected by the proposed mining project.”

8. Permits and Approvals

City of Jordan

“A Title 5 Air Permit from the MPCA should be added to this list. The City would like the opportunity to comment at the time of all permit requests.”

Staff Response: Staff concur with the City’s statement. A Title 5 Air Permit is needed. This was noted in the EAW but it was not stated specifically what type of permit would be required. The City will need to contact the MPCA about being notified of their opportunity for comment on the permit.

Minnesota Pollution Control Agency (MPCA)

“The demolition of the existing structures must be in compliance with state and federal regulations that require the structure be inspected for hazardous materials such as asbestos, lead based paint, light ballasts, thermostats, stored chemicals, ozone depleting chemicals, etc. Regulated asbestos-containing materials (RACM) should be abated prior to demolition activities. A "Notification of Asbestos Related Work" must be submitted to the Minnesota Department of Health by a licensed asbestos inspector ten working days prior to conducting abatement activities, if abatement of 160 square feet, 260 linear feet, or 35 cubic feet of RACM is required. A "Notification of Intent to Perform a Demolition" must be submitted to the MPCA ten working days prior to the commencement of demolition. Flaking lead based paint that may be present on the structure should be encapsulated or removed and properly disposed of off-site at the appropriate disposal facility prior to demolition activities. Any lead based paint chips that are present on the ground following demolition should also be removed and properly disposed of off-site at the appropriate disposal facility. The Project proposer should also consider recycling as much of the structure materials as possible to reduce the volume of material disposed of in the landfill. If you have any questions regarding demolition issues or asbestos and lead paint abatement, please contact Jennifer Lopac in our St. Paul office, at 651-757-2536.”

Staff Response: The Developer will submit a “Notification of Intent to Perform a Demolition” to the MPCA ten working days prior to commencement of work. The Developer will submit a “Notification of Asbestos Related Work” to the Minnesota Department of Health if asbestos abatement is needed. The Developer will notify the MPCA and MDH of demolition as required by the MPCA and MDH.

9. Land Use.

Pete and Deb Ewals

“Need to also mention the nearby Holzer Park to the Southeast, Valley Green Park with over 350 dwellings to the southeast, Brentwood Neighborhood to the southwest. There are two railways bounding or nearly bounding the property. Louisville Swamp is nearby to the northwest.”

Staff Response: The location of the proposed site relative to surrounding land uses was provided in the EAW. Staff will present the map below that identifies Holzer Park, Valley Green Park, Brentwood, the two railways, and Louisville Swap in our presentation of the Findings of Fact to the Board of Commissioners.



10. Cover Types

City of Jordan

“As stated above, the total area of the project is 98 acres. This table should include all the areas so that the totals add up to 98 acres. At one spot in the EAW, it states 38 acres of wetlands and wetland buffer, and in Item 10 it states 22 acres of wetlands and 29.9 acres of brush/grassland/buffer. Please confirm that the measurements are consistent throughout the document and its attachments.”

Staff Response: See staff response to a similar question in Item 6.

11. Fish, Wildlife and Ecologically Sensitive Resources.

City of Jordan

“Impacts on fish/wildlife were not adequately addressed. The Minnesota Department of Natural Resources Natural Heritage Information System report in Attachment A is dated July 30, 2009. The data are valid for 1 year, as new species are continuously being found and reported, so this database search has expired and Jordan Aggregates must request an update.

The reclamation plan is for grasses and rural residential lots, but Item 11 states that this mining is going to disturb 43% of the woodland areas that buffer Sand Creek. It seems reclamation should include some woodland areas, too. Item 12 states some of the wetland restored will be floodplain forest. This needs clarification. What plants are proposed for this area?

The impact of the mine on fish migration also should be addressed.

The ultimate goal should be to provide "as good or better" habitat in the reclaimed condition."

Staff Response: Staff recommend that the information provided in Attachment A be updated prior to consideration of the IUP. Staff also agree that site vegetation along Sand Creek that serves to screen the mine site from the Hwy 169 be maintained and a vegetative screening plan be provided for consideration as a condition of the IUP Permit application.

Pete and Deb Ewals

"Fish, wildlife and ecologically sensitive resources states that more habitat will be created. The 36 acres of open water does not create more habitat or better habitat. The hole will be over 100 ft deep leaving a direct path to the aquifer for surface water from Sand Creek to enter. The drawdown of sand creek by pumping ground water will alter the flow of a Losing stream (Sand Creek). This could result in a total collapse of the fisheries of Sand Creek. We have many people who fish the creek in the city of Jordan. This draw down of the water table in the creek would impact the fish migration up and down the creek to and from the Minnesota River. A full assessment of the environmental impact to Sand Creek cannot be ignored.

Staff Response: Staff have ordered a more sophisticated model of the ground water relative to the proposed mining operation. The drawdown potential from the mining operations was part of that analysis and addressed the concerns relative to reducing the flow of Sand Creek through the stretch adjacent to the mine. The findings from this modeling effort will be presented to the Board as part of these Findings of Fact.

See item 24. Please consider how habitat, animal and plant life in federal wetland/wildlife preserve areas buffering the Minnesota River and Louisville Swamp and Sand Creek may be impacted by air inversions combined with odor, noise and dust."

Staff Response: There are several other mining operations that generate similar odors, noise and dust along Minnesota Valley National Wildlife Refuge so the impacts to wildlife in this complex river/wetland/forested environment should be well understood by the Minnesota Department of Natural Resources, and the U.S. Fish and Wildlife Services. They were copied on this EAW but have not submitted comments in this regard. Scott County has traditionally relied upon the expertise of these agencies with their vested interests in the wildlife habitat of the Minnesota River Valley to provide comment on projects adjacent to this habitat.

12. Physical Impacts on Water Resources.

Minnesota Department of Natural Resources

"Item 12 Physical Impacts on Water Resources: The EAW identified the potential for Sand Creek to overtop and flow into the project area. Please clarify the following statement "...potential for Sand Creek to overtop and

breach the natural berm that remains in place as a result of mining operations” as this statement appears contradictory in nature. Specifically as it uses the terms/statements “natural berm” and “as a result of mining operations.”

Staff Response: The developer in response to this question responded: “Existing ground elevation in the 100-foot wide strip of land between Sand Creek and the proposed mining limits vary between Elev. 728 and 730. Mining operations to the north of this buffer strip will lower ground elevations to Elev 722. The buffer strip will thus function as a “natural berm” at least 100 feet wide between Sand Creek and the mine. The 100-year flood elevation for Sand Creek varies from Elev. 731.5 to 733 from east to west along the south property boundary, and from Elev. 731.5 to 732.4 in the area where the “natural berm” will be left in place. The EAW acknowledges the potential for Sand Creek flood elevations to rise above the elevation of the “natural berm” at some future point in time, with flood waters entering the mine area. The EAW also acknowledges the potential for erosion of the “natural berm” to occur during the times when flood waters are rising and flowing into the mining area and when flood waters are receding and flowing from the mine area back to Sand Creek. Existing trees, brush, and grasses within the buffer strip will be left in place for natural erosion protection.” In response to the concern of Sand Creek eroding through this strip of land and forming a new channel through the proposed mine pond the developer has proposed to stabilize the crest of the “natural berm” along the mining limits to prevent erosion and rechannelization of Sand Creek. No specifics on this have been submitted or reviewed by the County or DNR. Staff acknowledge this issue needs further review by the DNR.

Additionally it is stated in Item 12 that “in the event the berm is breached, the mine operator will be required to return the creek to its original channel and restore the berm.” Sand Creek is a DNR Public Water and is identified in the DNR Public Waters Inventory. A Work in Public Waters Permit would be required for this type of activity. The DNR cannot guarantee permit approvals for modifying the course, current or cross-section of Sand Creek. The EAW should also clarify the necessary permits and/or authorizations that any work within wetlands, floodplains and/or waterbodies mentioned throughout the report may require.

Staff Response: The developer anticipated being able to restore any eroded soil between the channel of Sand Creek into the excavated pond to its original elevation. The developer has suggested they could submit a plan to modify this strip of land along the creek to reduce the potential for soil erosion during flood events. This plan should be provided and evaluated for feasibility by the DNR before consideration of the IUP application. Though details for reinforcing of soil to prevent erosion have not been provided it is anticipated it would involve working in the flood plain and perhaps flood way of Sand Creek. This needs to be evaluated more thoroughly by several State Agencies and we expect both Sand Creek Township and the City of Jordan have an interest in this. Staff note that in discussions with the DNR it was stated that if Sand Creek erodes a channel into the mine pond and remains after flood water recession connected with the pond, future mining activity may be prohibited by the DNR and the DNR may prohibit restoration of the strip of land in the floodplain which separated the pond from Sand Creek. Therefore, staff acknowledge that this issue needs further study.

Item 12 Wetlands: The EAW discussed the potential for the creation of approximately 38 acres of floodplain forest wetland within the Property Boundaries. The information provided in the table in Item 10 Cover types appeared to include this data. If the creation of floodplain forest wetland is not part of the proposed action and is only, as indicated in some sections of the document, a potential action, this information should not be included in the table as an “After Reclamation” total. In addition, the descriptions and acreage of these areas was not clear throughout the document.”

Staff Response: *Staff acknowledge that this is confusing and requested that the developer provide a response and their response was: “Portions of the project area located within the flood plain will be reclaimed at elevations and with soils and vegetation that are amenable to classification of those areas as Type 1 Floodplain Forest and Type 3 Shallow Marsh wetlands. The project proposer may pursue formal designation and banking of those areas as wetlands.” Staff find that the developer’s response still lacks details which would likely be important to review by several agencies interested in wetland banking.*

Pete and Deb Ewals

“Sand Creek is a losing stream. Pumping ground water will change the hydrology of the stream (lowering the water table 0.6 ft to 1.8 ft) this could change the flow of the water under the stream bed as well. Further study is required. See Hydraulic Impacts of Quarries and Gravel Pits Prepared by J.A. Green, J.A. Pavlish, R.G. Merritt, and J.L. Leete Minnesota Department of Natural Resources, Division of Waters for the Legislative Commission on Minnesota Resources funded by the Minnesota Environment and Natural Resources Trust Fund http://files.dnr.state.mn.us/publications/waters/Quarries_Impacts_Cover_Table_of_Contents.pdf

Staff Response: *Staff reviewed the recommended document at:*

http://www.dnr.state.mn.us/publications/waters/quarries_impacts.html. This document “found no negative impacts on ground-water levels from sand and gravel pits in alluvial deposits that operate below the water table and do not dewater, similar to this project. These pits will not affect the quantity of water available to shallow domestic wells on neighboring properties. Further analysis of this concern was conducted by the County who retained Barr Engineering to prepare a more sophisticated model of the impacts expected from this proposed project. Those findings will be reported as part of these Findings of Facts. The relevance of a change in ground water temperature associated with the pond for adjacent wells appears to us to be a smaller consideration than the potential introduction of contaminants into these wells. See Staff Recommendations at the end of this document.

Sand Creek overtops the natural berm most years, if not twice a year. The possible impact of contaminated water entering the open water pond with an almost direct access to the aquifer creates a high potential for long term pollution to a public resource only 400 ft from the city limits and cannot be ignored. The city of Jordan could be on the hook for millions of dollars in water treatment to make the water drinkable. The EAW does not adequately address the potential impact to the aquifer. Prevention of contaminants getting to the aquifer should be addressed.”

Staff Response: *This issue was also noted in comments from the Minnesota Department of Health and will be addressed in their comments as well. At issue is the open pond with or without receiving flood waters from Sand Creek will have the potential for contaminating the ground water in the alluvial deposits from which some adjacent wells receive water. Staff believe that it will be imperative that an alternative public water supply source be established to address contamination and will recommend that considering the likelihood of the risk of contamination that the developer be required to address the alternative water supply as a pre-condition for the IUP. The cost for this alternative water supply should be known and agreed to as a condition for the application for the IUP and sufficient securities received for this purpose before the permit is issued. See Staff Recommendations at the end of this document.*

“This natural berm would have to be maintained into perpetuity to keep Sand Creek out of the proposed mine area. By definition the natural berm becomes a dike by not allowing the creek to move naturally. Who will have to pick up the maintenance after the 20 years is up?”

Staff Response: *The EAW suggested that the mining operator would be responsible for maintaining this stretch of natural barrier land between Sand Creek and the mine pond for “20 years after cessation of mining or for 1 year after a 100 year flood event if the berm withstands the event without damage, whichever occurs first.” Staff felt that this time period would provide sufficient assurance of the stability of the soil between the mining pond and Sand Creek. The developer has provided a response to this issue by stating that “Sand Creek will be allowed to naturally meander within the 100-foot buffer strip.” They suggest that their proposed mitigation measures, (the details of which have not been provided) will prevent encroachment upon the mining area. See Staff Recommendations at the end of this document.*

City of Jordan

“Physical impacts on water resources are not adequately addressed. More study is required to ensure mitigation of surface water (storm water) quality/quantity impacts, both during mining operations and after mine is closed.”

Staff Response: *The stormwater analysis for the mining operation provided by the developer for the EAW indicated that stormwater runoff would be self-contained within the mining project area. This would obviously not be the case during flood conditions when the additional amount of exposed soil could result in additional sediment movement into Sand Creek and ultimately the Minnesota River. This issue should be further evaluated and appropriate mitigation proposed if the impact is deemed significant. This should be able to be addressed as part of their NPDES and other permits that are required.*

The study should include nearby Sand Creek's 100-yr, 10-yr, 5-yr, 2-yr flood impacts on mining activities. Flood waters will likely pick up pollutants, as the property seems to flood regularly.

Staff Response: *Elevations for the 10-year event range from 730.1 on the downstream end of the site to 731.1 on the upstream end of the site. The 2 and or 5 year events can be determined, but would require more time to rerun both the Hydrologic model and Hydraulic model. The EAW acknowledged that the project site is subject to frequent flooding. Staff note also that this area is subject to ice dam formation at the location of the previous bridge over Sand Creek. The presence of a large mass of ice on the surface of the proposed mine pond could contribute to future ice dam related flooding problems. This issue needs further consideration.*

Per the EAW, Sand Creek is a "losing creek" in this area, meaning it's a groundwater source in this area. The effect of mining activity on Sand Creek and groundwater quality is unclear. In addition, the potential negative impact on fish migration should be addressed.

Staff Response: *Staff agree that more information was needed regarding ground water as was noted in comments received from the MDH as well. The County retained the assistance of Barr Engineering for this purpose and their report included in these “Findings”.*

It is unclear how Jordan Aggregates proposes to prevent or control contamination from imported fill (550 ,000 to 650,000 CY). Who will regulate and monitor this? What are the testing requirements? This would affect both groundwater and surface water. The City of Jordan would like to be included in the communication during this process.

Staff Response: *Staff agree that there is a legitimate concern for the quality of fill soil hauled back to this site. Ground water is highly susceptible to contamination in this area and removal of what protective soil exists on this site and exposing the aquifer to potential contamination from imported*

contaminated soil must not be allowed. Monitoring every incoming load of soil is impossible. Monitoring of perimeter wells would provide evidence of contamination, but that is not preventative. Staff cannot monitor every load of soil and even requiring prior approval for the locations that return soil would come from presents a significant regulatory challenge. The developer has noted in the EAW that “The Developer will identify the source of imported material and assess the potential for contamination. This assessment will include contacting the source site owner/operator to ascertain whether any known contamination exists and reviewing available environmental documents (Phase I ESA, etc.) if they exist. If the history of imported soil is unknown, sampling and laboratory analysis of the soil will be required to demonstrate compliance with the Soil Reference Value (SRV) limits prior to the material being accepted at the site. The reclamation fill cannot contain chemical constituents of concern that exceed the limits specified for the MPCA’s Tier I SRV. Documentation of investigation and test results of imported fill will be provided to Scott County as a condition of the mining IUP. No open dumping will be allowed at the site.” Staff acknowledge that allowing the mining operator to determine whether or not imported fill is contaminated is problematic and impossible for the County to monitor. It will be impossible to for the County to ensure that every truck showing up at the mine with a load of back hauled fill soil will be scrutinized. This remains an issue of concern that needs additional control. See Staff Recommendations at the end of this document.

An additional 22 acres of wetlands does not seem appropriate for this site. With no existing wetlands, the required hydrology and hydric soils, etc, are probably not present to create new wetlands.

Staff Response: Staff agree the excavated pit will not have wetland characteristics, but rather characteristics of a small, deep, spring fed lake that gets flooded periodically by Sand Creek. The environmental impacts associated with this are discussed elsewhere in this document.

The treatment of the mine process water is not adequately addressed. More study is required regarding the storage and treatment of mine process water to ensure the protection of surface and ground water. In addition, the EAW says no water is anticipated to leave the site due to percolation. The impact of this surface water on groundwater quality needs to be evaluated.”

Staff Response: The developer has proposed gravel wash ponds that are lined. Sediment will be trapped in the sedimentation ponds and removed as necessary to maintain the capacity of the ponds. The developer stated in the EAW that “A detailed wash basin design and analysis is beyond the scope of this EAW and will be submitted with the IUP application, but it is anticipated that the basin will measure approximately 15 feet by 42 feet by 3 feet deep.” Staff agreed with the developer that the details of a wash basin were not critical to an EAW and could be reviewed as part of the IUP.

Metropolitan Council

“The text on page 13 correctly identifies increased vulnerability of nearby wells during Sand Creek flooding; due to the creation of an open water basin that will provide a direct pathway between poor quality-flood waters and drinking water aquifer(s). However, the mitigation measures identified in the EAW to address impacts on water resources do not include measures to prevent groundwater contamination due to Sand Creek flood waters. Council staff recommends that the Response to Comments document offer specific mitigation measures to diminish the potential for contamination of the central working basin of the mine, and therefore the local drinking water aquifer(s), due to anticipated flooding of adjacent Sand Creek.”

Staff Response: Staff acknowledge that the Metropolitan Council raises a legitimate question. The EAW did not sufficiently address the potential for contamination from Sand Creek flood waters being introduced directly into an open mine pit that exposed the local aquifer and placed down gradient

wells, both public and private at increased risk of contamination. Though alternative water supplies could be provided to mitigate contaminated wells the issue of opening up a mine pit into a local aquifer used for a drinking water supply for both public and private users is an issue needing additional analysis. The Minnesota Department of Health well construction rules Chapter 4725.4350 would require a well constructed on the proposed site to be flood proofed by extending the sealed casing five feet above the 100 year flood elevation. Allowing an open mine pit, which is essentially a huge 120 foot deep open well to be periodically inundated by a flooding creek appears contradictory to Minnesota law and the established regulations intended for protection of aquifers. To be consistent with the intent of Minnesota well laws the mine pit would need to have a berm constructed at least five feet higher than the 100 year flood elevation to prevent inundation by Sand Creek. However, the proposed location of the mine would preclude such a berm as it would have to be constructed within the 100 year flood plain elevation of Sand Creek, which is prohibited, or would significantly reduce the area on the site which could be mined. Staff find that this issue is of significant concern that must be addressed to the satisfaction of the County, DNR, MDH and Metropolitan Council. See Staff Recommendations at the end of this document.

Sand Creek Township

“The EAW mentions excavation slopes during the operation of the mining. However, there is no mention of the final slopes for the pond to be created. It appears that these slopes will be about 2(H): 1(V) from the plan sheets in the EAW. These slopes are also over 200 feet long. These steep, long slopes present the potential for considerable erosion of the slopes with deposition of the eroded material into the pond and degradation of the water quality in the pond.

a. Pond slopes should be flatter.

b. Who will have long term responsibility for maintenance of the pond? The Township is concerned with the statement that maintenance of the berm between the pond and Sand Creek may lapse 1 year after a 100 year flood event if that flood should occur before 20 years after cessation of mining operations.

Staff Response: Staff agree that the side slopes of the finished pond seemed very steep and we asked the developer to provide engineering justification for leaving the slopes this steep. The developer has provided the following response: “The angle of repose for the native sand and gravel materials that comprise the inside slope of the pond is approximately 1.5H:1V based upon values published in literature. The proposed 2H:1V slope is flatter than the angle of repose and provides a safety factor of approximately 1.3 against sliding/slumping. The pond is expected to generally maintain a slight outward hydraulic gradient relative to the groundwater as a result of direct rainfall and runoff from the mining site, which has the effect of further stabilizing the pond slopes. The energy from wave action in the pond will be dissipated on the safety bench on the pond perimeter rather than on the lower pond slopes. The bench has 5H:1V outside slopes rather than 2H:1V as on the lower pond slopes.” Staff note, however, that though there might be a slight outward hydraulic gradient on the west side of the pond, the water table elevation slopes four feet across the width of the pond so there will be an equivalent inward gradient on the east side of the pond, which could result in increased potential for erosion on the creek side of the pond. Therefore, the issue of the pond side slope remains controversial and will need to be further evaluated. See Staff Recommendations at the end of this document.

The EAW mentions creation of new wetlands. However, the only discussion of the preparation or approval of a design for the wetlands, or for a monitoring plan for the wetlands, is made in terms of applying for wetland credits. These design and monitoring elements will be needed to create viable, long lasting wetlands whether or

not wetland credits are applied for. Without these elements there is an increased chance that the wetland areas will be poorly draining, stagnant pools with unsuitable vegetation.”

Staff Response: *The value of future wetlands and viability of wetland credits for the mined pond hole has been questioned by several responders. Staff agreed that this issue needed further clarification from the developer who provided the following in response: “Proposed finished grade of the Type 1 Floodplain Forest wetland areas is set approximately 1 foot above the water table and is sloped at an average 0.4 percent from the perimeter toward the pond. This grading plan is conducive to creation of floodplain forest wetland, while at the same time promoting surface drainage and minimizing marshy ground conditions. Staff believe more detail on the preparation of these proposed wetlands in addition to proposed method of vegetating this is needed, especially since the proposed area is in a floodplain and subject to erosion at any time.*

13. Water Use.

Kathy Lopic

“FILTRATION - I know the County looks at this gravel as a potential inexpensive source for the County’s use on their roads and projects. On the surface that looks to be good use of taxpayer monies, but the gravel has a more important use that has been going on probably since the glacier was last here and will continue into the foreseeable future if left intact. The gravel is a filter for the overflow of water from the polluted Sand Creek that occurs nearly every year. It prevents most or all of those pollutants from reaching the aquifers that provide water to people near and far. I believe Sand Creek is among the top 10 most polluted rivers in Minnesota. Clean water is much more important than any profit for an individual business owner or for a source of cheap gravel for the County or State. We must use our natural resources wisely.

Staff Response: *The County recognizes that there are considerable sand and gravel deposits throughout the county, especially along the Minnesota River Valley and this particular proposed site is not critical as a source of gravel to the county. Staff also acknowledge that this site possesses some unique characteristics not seen anywhere else in the County. Though several other gravel operations are upgradient from water wells only one other site has proposed to mine into the water table and in that location (which hasn’t commenced yet) there are no downgradient wells at risk. This site is also unique in that it is subject to periodic inundation by flood waters. Staff recognized the risk to downgradient wells, in this case, several non-community public water supply wells. See Staff Recommendations at the end of this document.*

POTENTIAL LAWSUITS – It is unknown to where the aquifers, that I referred to above, travel. There may be people hundreds of miles away that will access those aquifers that have been polluted by Sand Creek through the open pit at the gravel mine for their drinking water. The Star Tribune had an article on Jan 5, 2011 that talked about spending grant money to search for the source of pollutants in rivers, aquifers and lakes and to eliminate the source of the pollution. What if one source is traced back to that open pit at the gravel mine? Who will be responsible for the cleanup, if it can be cleaned up? What if you found out that your well or municipal water system was polluted by a business that was given a CUP or IUP by Scott County, and your family was suffering health problems attributable to that pollution, and you found out that the County had been notified by many people, engineers, etc that the water would be contaminated? Would you not sue to recover the cost of medical bills, pain & suffering, etc. experienced by your family? The EAW itself states that there will be pollution. The County would be irresponsible if not criminal by allowing this obvious pollution.”

Staff Response: *The proposed project has been reviewed by the Minnesota Departments of Health, Natural Resources and Minnesota Pollution Control Agency as well as a competent hydrologist with*

Barr Engineering retained by the County. The consensus is that the proposed pit presents a threat to only a few down gradient wells because the ground water flowing through this area eventually discharges into the Minnesota River. The County recognizes its obligation to responsibly evaluate this potential environmental impact and any proposed mitigation. Staff believe this is beyond the scope of review during an IUP. See Staff Recommendations at the end of this document.

Heidi Lawrie

“One of the biggest fear we have out there, Sand Creek flooding over. If the polluted river were to flood, it could flow into the pond and contaminate it. From there some fear, it could seep into the groundwater, and into our drinking water. The mining operation will be below the level of the water table.”

Staff Response: Staff have acknowledged this concern and responded in several locations within this document.

Minnesota Department of Natural Resources

“Item 13 Water Use: The groundwater model results presented showed that pumping the Mine Well would result in an average drop of 0.6 feet in the water table elevation of Sand Creek within the project area. It was concluded that this drop would not have a significant impact to the discharge volume in Sand Creek. However, before that conclusion can be made it would be necessary to identify the geographic extent of the groundwater impacts, specifically the length of Sand Creek likely to experience the lower base flow. Although this reach is characterized as a losing stream, the additional drop in groundwater elevation could result in increased channel instability by reducing the capacity of the channel to transport sediment. Sand Creek is listed as impaired for turbidity. Increasing channel instability would likely result in additional sediment related issues, i.e. aggradation, which could lead to increased temperatures and low dissolved oxygen.

Staff Response: Staff agree with this concern and have requested ground water modeling from Barr Engineering that takes into consideration the leveling of the water table which slopes from east to west with a gradient of approximately four feet across the proposed excavated pond. The leveling of the water table in the pond will act to lower the water table on the east side of the pond by approximately two feet, potentially in addition to the pumping impact, the modeling which has been conducted will be presented. Additional analysis of the impact to Sand Creek needs to be done to address the concerns noted by the MNDNR. See Staff Recommendations at the end of this document.

The EAW correctly identified the need for a water appropriation permit for the new well. Water usage was estimated to be about 500,000 to 2 million gallons annually with monthly usage variations. Although it is understood that the usage at the site will vary based on the factors listed in the EAW, well usage demands during certain times of the year may change the effect the well pumping has on Sand Creek as discussed above and should be taken into consideration.

Staff Response: Staff agree. This modeling was done and is attached to this document.

The proposed project does not include direct impacts to the floodplain forest area to the south. It is possible that this area, as well as other wetlands within the immediate area of groundwater flow direction, may also be impacted by the hydrologic alterations to the site as a result of the proposed mining activities. The potential effects of the hydrologic alteration may lower the capillary fringe in the root zone, or may result in the complete absence of water for wetland plants.

Staff Response: Staff agree. This modeling needs to be done.

The proposed project includes mining below the water table down to a termination elevation of 600 feet or to bedrock if encountered above the 600-foot elevation. As identified in the EAW, the proposed project site is located in an area of high ground water contamination susceptibility. The Sand Creek is currently not meeting water quality standards and is listed as having multiple impairments, including metals. By exposing the groundwater to nearby surface waters such as this, you are increasing the likelihood of contamination. The EAW attachments included a Preliminary Water Monitoring Plan that identified monitoring parameters and frequency. The proposer should coordinate monitoring parameters with the Minnesota Pollution Control Agency and Scott County to ensure that it coincides with the Sand Creek Total Maximum Daily Load Project that is currently underway. There may also be potential for the cone of depression, created by excavating down to bedrock and removing substantial amounts of material, to affect nearby wells along with Sand Creek.

Staff Response: Staff agree that this issue was not adequately modeled in the EAW and have retained the services of Barr Engineering to conduct additional modeling (see attached). See Staff Recommendations at the end of this document.

The processing plant area has been identified to be located along the northern portion of the proposed project area. Review of the proposed contour lines in the attached figures indicated that this area is at a higher elevation than the mined area. The processes proposed in this area include the use of, or stockpiling of, recycled asphalt that contain hazardous materials. The potential for spills and leaks, or the potential for materials to leech into the groundwater should be acknowledged in the groundwater susceptibility and surface water quality discussions.”

Staff Response: Staff agree. This issue is addressed further in response to MDH comments.

Minnesota Department of Health

“This letter is in response to the Environmental Assessment Worksheet (EAW) for the proposed sand and gravel mining operation by Jordan Aggregates. The Minnesota Department of Health (MDH) appreciates the opportunity to comment on this project. Earlier, MDH staff has commented informally on preliminary proposals by Jordan Aggregates for the proposed mining activities north of the city of Jordan.”

Below in blue are MDH’s referenced comments taken from emails.

From Bruce Olson to Steve Robertson

Al Frechette called me just before noon about this proposed sand and gravel mine that is proposed for Scott County. See his e-mail message for the details. He wanted to know if we would have any problems with the pit going in directly up gradient from two non-community systems. I asked that he send me the report but mentioned that the travel time from the pit to the wells could present two possible concerns –

1. Possible pathogen influence if Sand Creek does flood the pit and introduces pathogens into the recharge water coming from the pit
2. The potential for MDH to classify the non-community wells directly under the influence of surface water if we start to see bacterial hits or evidence of recent recharge.

I quickly looked at the report and the modeling was done with the WHAEM code that Otto did for EPA about 10 or so years ago. I am not sure if the modeling assumptions are in the report, but we should look over this to make sure that everyone involved understands what the long-term drinking water issues may be if the project proceeds as planned. There may be a need for the mining operation to set up a fund for well replacement if MDH sampling indicates a surface water influence over time.”

From Steve Robertson to Bruce Olson

“Here are a few of my thoughts on the Jordan Aggregates sand and gravel mine proposal. Feel free to edit and amend in replying to Al. Also, I’d be happy to get together to discuss if you want.

One of the principal issues here (as you have already noted) is the proximity of both PWS and private wells to the proposed mine. Our concern is that rapid travel times may allow pathogens present in surface water to migrate to the wells. I don’t think they have adequately investigated this issue with respect to evaluating the uncertainty of the model parameters that factor directly in controlling travel time from the mine to the wells. Specifically, the particle tracks computed in the model were done using a porosity of 0.3. Porosity ranges for sands in the literature typically start at about 0.2 or 0.25, either of which will result in faster computed travel times. Also, the model used for the simulations assumed a constant hydraulic conductivity value of 67 ft/day. Slug test measurements from the site indicate hydraulic conductivity ranges from 36 to 91 ft/day. Even wider variations in hydraulic conductivity values are derived from specific capacity testing from nearby wells. For example, the hydraulic conductivity derived from specific capacity testing at well 753654 is 287 ft/day.

These deficiencies in the hydrogeologic analysis should be addressed by making additional model runs to evaluate uncertainty in the porosity and hydraulic conductivity. Further, additional data collection is probably warranted to narrow the range of hydraulic conductivity values suggested by slug tests and specific capacity tests from nearby wells. Along these lines, the suggestion that Al makes in his comments in the PDF that a pumping test be performed is probably a good one. I am concerned that the unconsolidated materials may exhibit heterogeneities that have not been sufficiently characterized.

Also, as far as I can tell they have not represented Sand Creek in the model. The justification for this is that the creek is losing in this segment and thus does not act a groundwater sink. But it is a source, and should be represented as such, even if the volumes are small.

Also, Al points out that they do not really represent in the model the surface water body that will develop as the sand and gravel is removed. That could be important. As he points out, such a feature will flatten gradients in the mine area, which could in turn affect hydraulic gradients in the adjacent aquifer materials.

Lastly, it appears as if the existing topography offers little protection from flooding from Sand Creek. Without any change in grading, the mine itself will likely be flooded with water from Sand Creek during such events. The effects of such a scenario on gradients may be transient, but such an eventuality could easily be evaluated with a model.”

“The Drinking Water Protection Section of MDH generally only responds to EAWs that involve project activities located inside of drinking water supply management areas (DWSMAs). The project site for the Jordan Aggregates mine is just north of the city of Jordan's DWMSA. Enclosed is a set of general concerns MDH has with regard to sand and gravel mining operations in DWSMAs.

The primary focus of our earlier comments concerned the potential effect of mining operations on the water quality of nearby public water supply wells. The proposer has addressed most of our concerns by 1) creating a groundwater flow model and running simulations to determine the travel time from the mine to nearby wells and 2) proposing a monitoring plan that will make it possible to evaluate the possible effect of mining activities on downgradient water quality.

In examining the proposed monitoring plan, we note that all the downgradient monitoring wells are relatively shallow. Comparing data for nearby bedrock wells contained in the County Well Index Database with water

table elevations in the vicinity of the proposed mine, it appears that there is a downward gradient between the unconsolidated sands and the bedrock. That, in conjunction with the depth to which the proposed mine activities will extend, means that water quality effects, if any, may extend to depths in the groundwater system that are not currently proposed for sampling in the monitoring plan. We understand that the issue of vertical gradients in the unconsolidated materials and between these materials and the bedrock will be investigated further as project activities proceed. If these activities substantiate the existence of such gradients, MDH suggests amending the monitoring plan to include sampling from a well constructed in either the deep Quaternary materials or in bedrock.” MDH also included a handout (see attached with highlighted sections noted by Staff for emphasis).

Staff Response: The MDH raises issues about the potential for the deeper aquifer, the Franconia, which appears to be exposed under the site to be affected by exposing it to surface water contamination by excavating to bedrock. The MDH stated “it appears that there is a downward gradient between the unconsolidated sands and the bedrock” and suggested that further analysis of this be provided to determine if the Franconia, which is relied upon by private wells to the south west of the site might also be at risk. Staff have consulted with Barr Engineering in this regard and they believe there is an upward gradient to the flow of water from the Franconia. However, staff agree that additional analysis of this is needed. Staff highlighted sections in the MDH handout designed for local units of government to use as guidance in reviewing mining activities relative to drinking water sources and aquifer impacts. This handout suggested a number of protective measures which staff recommend be developed into conditions for the IUP. Of primary issue, however is the impact of flooding into the pond which the MDH states should be avoided as it introduces surface water runoff contamination into the aquifer. See Staff Recommendations at the end of this document.

Metropolitan Council

“The text on page 14 correctly identifies the potential for impacts to groundwater quantity and quality at nearby wells and in Sand Creek. However, the EAW does not address potential impacts of ground water elevation decline on springs and wetlands immediately adjacent to the proposed project area. The attached figure provides the location of the City of Jordan's Drinking Water Supply Management Area (DWSMA) and water supply wells, nearby private wells, and the nearby spring.

Staff Response: Staff retained the assistance of Barr Engineering to address some of these concerns. See attached report. The report did not specifically address potential impacts to a down gradient spring. Staff were not aware of the presence or location of a specific spring of concern, but recognized that the wetlands in general receive ground water in this area. The primary potential of loss of ground water from this project will be from the process well which is subject to a DNR appropriations permit. This issue can be further examined as part of that review.

The large wetland complex west of the proposed mine site is part of the Louisville Swamp Unit of the Minnesota Valley National Wildlife Refuge (Refuge). The Refuge is a component of the Metropolitan Council's Regional Recreation Open Space System, and is afforded protection under the Council's Recreation Open Space Policy Plan, and the Metropolitan Land Use Planning and Metropolitan Significance Review Acts. The Refuge was established primarily for the protection of-birds and wildlife and the habitat that supports them. Providing appropriate recreation associated within the setting is also one of the main purposes of the Refuge. The concern exists that drawdown from the onsite well could impact wetlands within and nearby the Refuge and could result in habitat loss, resulting in negative impacts to the Refuge.

Staff Response: This issue can be further examined as part of the DNR’s ground water appropriation permit review.

Council staff recommends that the Response to Comments document provide documentation of the extent of potential drawdown impacts to nearby wetland water levels due to on-site well use, and improved mitigation measures to reduce the impact on those wetlands and the adjacent spring.”

Staff Response: This issue can be further examined as part of the DNR’s ground water appropriation permit review.

US Fish and Wildlife Service

“1) Some wetlands on the Refuge may be discharge wetlands where groundwater discharges influence both water quantity and quality. Pumping at the mine may have the potential to intercept or drawdown wetland waters. Given the size of the aquifer and the typical surface expression of groundwater in the valley, our primary concern is that an unmapped soil inclusion (such as gravel) would funnel groundwater directly to areas on the Refuge. The preliminary information suggests that the wetlands won't be impacted significantly by groundwater withdrawals at the mine. However, a more detailed groundwater model is recommended to help make that determination.

Staff Response: This issue can be further examined as part of the DNR’s ground water appropriation permit review. This issue would likely require additional boring information which could most appropriately be required and analyzed during the DNR’s ground water appropriation permit.

2) Wetlands on the north end of the Refuge appear to be sourced, at least partially, by Sand Creek flows. According to the EAW, pumping at the mine will cause drawdown in Sand Creek. Improved modeling of groundwater/surface water interactions will also help define any potential impacts.”

Staff Response: See attached report from Barr Engineering. See Staff Recommendations at the end of this document.

“4) Page 17 of the EAW states that the developer has agreed to monitor wells at the S.C.A.L.E. Regional Training Facility and that additional private wells may be monitored and included in the draft monitoring plan (Scott County Association for Leadership and Efficiency). The draft monitoring plan lists five groundwater monitoring wells, two water level piezometers, and one surface monitoring point, all of which occur within the property boundary of the mine. We recommend the monitoring plan be updated so additional wells near the Refuge boundary are included in your routine hydrology and contaminants monitoring.”

Staff Response: Staff would appreciate assistance from the Metropolitan Council in suggesting the location of additional monitoring wells.

City of Jordan

“According to the Minnesota DNR, mines can affect groundwater and surface water systems in various ways. Some potential impacts are:

- lowering of local ground-water and surface-water levels from mining operations and mine dewatering,
- changes in turbidity levels in ground water due to blasting and quarry operations,
- interruption of groundwater conduit flow paths by rock removal, and
- temperature change (thermal impacts) in springs and surface water streams.

Groundwater quality impacts, during mining operations and after mine is closed, should be evaluated in more detail. The proposed mine is in a high susceptibility area (as shown on Figure 5). The pond created by the mining will expose the underlying aquifer. In this way, gravel mining creates a "new avenue" for pollutants to

enter groundwater. In addition, Sand Creek is one of the more polluted waterways in the state. When Sand Creek overflows its banks, which it does just about every year, the polluted water will have a clear path to the groundwater.

Barr Engineering, on behalf of Scott County, says more study is needed to confirm impacts on groundwater. We agree that further detailed ground water modeling is needed to address the impact of the mine on City and private wells.

Staff Response: Staff agree that this is the most significant environmental impact identified in the EAW and acknowledge that it has not been fully examined nor has specific mitigation been presented. Prior to release of the EAW, Staff had asked the developer to allow the County to retain Barr Engineering to conduct additional ground water modeling and the developer instead acknowledged that their proposed mining operations were likely to result in impacts to some wells. Staff then asked the developer to prepare specific mitigation plans to address the potential for aquifer/well contamination and they agreed to fund the extension of municipal water to affected wells but provided no details. Staff believed this would be sufficient to move forward with an EAW. Based on the comments received, Staff recognized the need for both additional definition of which wells were at risk as well as what method of mitigation could address the impacts. Barr Engineering was retained to address the question about the extent of risk and their report is attached. Barr Engineering's report finds that the proposed mine will not have a direct impact on any current City wells, but notes several private wells and the County's non-community public water well at the SCALE facility as being at risk. Staff acknowledge that specifics on how to mitigate this impact remain unanswered and must be addressed before an IUP can be considered. See Staff Recommendations at the end of this document.

The EAW suggests a solution to the potential contamination of local wells is to extend the City of Jordan municipal water system to that area. However, we believe Jordan Aggregates should have a proactive process for prevention of contamination, not just monitoring as proposed. The additional modeling should also address potential negative quantity impact on the aquifers used by existing residents and businesses.

Staff Response: Staff agree that the focus in the EAW was to address potential contamination of the wells and did not adequately address contamination of the alluvial drift and Franconia aquifers. The MDH also suggested preventative actions for the mining operation itself to minimize the potential for contamination of the aquifers from mine related actions. However, the excavation of the pit and subsequent direct exposure of the underlying aquifers to an excavated surface water reflection of the ground water presents an unavoidable threat to these aquifers. This is an acknowledged threat for which no specific mitigation has been addressed. Staff acknowledge this is a significant environmental impact that has not been adequately characterized or addressed and thus should be better understood. See Staff Recommendations at the end of this document.

The EAW states groundwater modeling of travel time of pollutants is inconclusive. We are concerned with assumptions used in the Jordan Aggregates' model. We believe the coefficient used for hydraulic conductivity (permeability) was too low for the sand and gravel formation in the area. This assumption resulted in an exaggerated travel time to reach the existing wells. The coefficient used seems more appropriate for silt and clay.

Staff Response: Staff had recognized this issue after reviewing the developer's consultant's ground water modeling and consulted with the Minnesota Department of Health. That correspondence has been referenced by the MDH in their comments to this EAW and have been included in this document. Staff retained the assistance of Barr Engineering to remodel the ground water impacts

expected from the mining operation using a more sophisticated model and better parameters. See attached Barr Engineering report.

If Jordan Aggregates requests municipal water service, the current municipal supply and treatment capacity will be adequate if the additional demand is 150 GPM or less. The City needs to retain reserve capacity for future expansion in other areas. The potential water demand for this area needs to be confirmed before an educated cost estimate to supply and treat water can be determined. This unexpected demand for municipal water will require capital costs for upgrading the City's system earlier than would otherwise be required.

Additionally, the ultimate service area needs to be confirmed so that an appropriate distribution system can be planned.

Staff Response: Staff agree. The issue of mitigating the anticipated impacts to adjacent non-community public water supply wells serving the SCALE facility and private wells has not been adequately addressed by the developer. This issue needs additional analysis. See Staff Recommendations at the end of this document.

The extent of the possible contamination is not understood. Therefore, there is not enough information to determine the cost to deliver water to the mine and other affected users. These types of costs would normally be escrowed by Jordan Aggregates before starting operation.

Staff Response: See previous comments above. Staff agree that in order for an escrow or other financial assurance for mitigating impacts to the ground water and identified potentially impacted wells there needs to be a plan that specifies what will be done. This has not been presented. Mitigation could include options other than extension of municipal services, however those options should be evaluated for efficacy and potential impacts of their own. See Staff Recommendations at the end of this document.

City officials want a clear understanding for all stakeholders of what agency regulates and monitors ground water and surface water (Sand Creek) pollution.

Staff Response: Ground and surface water concerns are regulated by several state agencies as well as by local authorities to some extent. Addressing the potential issues related to the complexity of regulatory oversight related to surface and ground water in Minnesota is beyond the scope of an EAW on a local project. However, it is relevant to acknowledge that there are multiple authorities involved and multiple permits required. The potential impacts to surface and ground water have not been thoroughly examined and multiple agencies and jurisdictions have appropriately noted insufficiencies through this EAW process, which staff have acknowledged and responded to. See Staff Recommendations at the end of this document.

Significant questions remain regarding groundwater impacts, not only on a local level, but regional and state-wide as well.”

Staff Response: Staff have responded to ground water impacts relative to the proposed project. Regional and state wide impacts unrelated to this project are not relevant to this EAW.

Sand Creek Township

“ The EAW only briefly mentions that the proposed mining operation is near the wastewater treatment facility (ponds) for the City of Jordan.

a. Will the creation of the pond in the proposed mining operation affect the water levels in the treatment facility ponds?

b. Will contaminants from the treatment facility ponds reach the mining pond and contaminate that water body?”

Staff Response: *The Jordan waste water treatment ponds are noted as appropriate in the EAW. The ponds are regulated by the MPCA and are supposed to be adequately lined to prevent contamination of ground water. The only potential for concern relative to the waste water ponds is they are located upstream on Sand Creek and could, if flooded discharge contaminated water into Sand Creek which then could introduce contamination into the mine pond. This issue has been considered to the extent that flooding of Sand Creek inundating the mine pond is acknowledged as a source of contamination that would have not likely impacted area wells if not for the huge mine excavation removing existing filtering soils and allowing direct access of contamination into one or more aquifers.*

“The EAW indicates that Scott County's consultants, or others, had concerns with the groundwater modeling and noise analysis performed for the proposed mining operation. The EAW also indicates that mitigation is proposed rather than additional modeling or analysis. The modeling and analysis should result in a clear understanding of the environmental issues with groundwater and noise. If that level of clarity cannot be obtained from the EAW an Environmental Impact Statement (EIS) should be considered for the proposed mining operation.”

Staff Response: *Staff indeed have raised questions in regard to both potential ground water impacts and the inadequacy of the modeling provided by the developer's consultant as well as noise impacts that have not been thoroughly addressed. Additional ground water modeling has been done by Barr Engineering and presented in this document. Additional noise modeling will need to be done as noted in the EAW for the stationary sources of noise proposed by the developer such as the concrete and asphalt plants when they apply for the permit required to allow them. They would need to demonstrate that they can comply with all applicable noise requirements at that time. Staff conclude this adequately addresses the stationary sources of noise at the pit. Staff noted in the EAW that noise from trucks along 173rd ST/Valley View Drive is not regulated by the State's Noise Rules as this road is exempt from those rules. Staff noted that the IUP could however, acknowledge that noise from trucks associated with this proposed operation could be addressed through conditions on the IUP and further recommended that an escrow fund be maintained by the operator to fund noise monitoring as needed by the County. Since noise levels along the road are directly related to the number of trucks, this number could be regulated by conditions to the IUP as well. Staff believe that this issue can be adequately addressed through the IUP and therefore no additional study is needed in regard to noise impacts.*

Sand Creek Township

“Of most concern is the potential of groundwater contamination. Realizing that no contamination from the mining operation can be documented at this time, every effort to know (test and scientifically research and report as part of an EIS) the existing conditions and proposed (anticipated) conditions impact must be thoroughly documented, reviewed, presented to the public, discussed and decided prior to the issue of any permits.

Contamination is very possible due to unforeseen natural and/or careless operations management. The source of contamination can be from a single event or a combination of events due to, but not limited to:

The Mining Operation itself

Flood

Adjacent Aeration Ponds
Sand Creek
Minnesota River
Transportation systems such as Highways and RR
Utilities
Adjacent land uses

Upon the recommendation of two hydrological engineers and the our sensibility, an EIS is required to research, evaluate and document water issues and the impact on the ground water and potential ground water contamination stemming from this project.

Staff Response: See staff comments and Barr Engineering's report attached. Also see Staff Recommendations at the end of this document.

An analysis of Sand Creek Water relative to the existing 'Ground Water Protection Plan' must be undertaken.

Staff Response: Staff believe that it would not be productive to this EAW to do costly analyses of Sand Creek water. This stream is subject to runoff from a large area which can change with time. In addition, flood conditions can rapidly change the characteristics of this stream. The EAW assumed the stream could carry contaminants that could migrate through the aquifer once introduced and impact some wells as noted in the Barr Engineering report attached.

The developer must provide an independent certified professional firm or an appropriate responsible party to monitor and inspect the imported soil material and its impact on the water quality (ref: Scott County Ground Water Protection Plan - page 50, chp 4.7 mining operation 4.7.1).

Staff Response: Staff agree that monitoring of all imported soil will be needed to ensure that contamination is not introduced on this highly susceptible site. As noted elsewhere, such monitoring is problematic and staff recommend additional consideration be given as to how this might be accomplished.

Ground water mitigation measures must include monitoring wells should be installed, operated and maintained on all sides of the Jordan Aggregate Proposed Mining Operation site (North, South East, and West) within a minimum radius of one mile including the bluffs on the East side of the site.

Staff Response: Location of monitoring wells will be established in consultation with Barr Engineering, the MDH, MNDNR and MPCA.

The EAW alludes to the fact that the ground water will be contaminated. What methods and technology will the developer perform to resolve this issue and what preventable systems will be used?"

Staff Response: See comments above.

Pete and Deb Ewals

"Proposer is requesting a variance from chapter 10.5.30 of the zoning requirements. That reclamation shall begin after mining 25% or (4) acres whichever is less.

Staff Response: Consideration of a variance related to the mining operation is generally deferred to the IUP process, but in this case it has the potential to result in significant environmental impacts should the strip of undisturbed land within the flood plain between the proposed excavation and Sand

Creek be eroded allowing flow of Sand Creek into the pond. This issue appears to warrant additional analysis as a pre-condition for the application of an IUP. See Staff Recommendations at the end of this document.

The groundwater susceptibility to contamination is considered to be high risk in this area. What is the point of having a county code to protect ground water if we allow a variance in this high susceptibility area?

Staff Response: To the extent that such a variance would have an impact on ground water staff would agree. However, the variance at issue does not appear to have any relationship to potential impacts on ground water.

The proposer is requesting to import fill into the mine for reclamation purposes. The developer will identify the source of the imported material and assess the potential for contamination. Only parcel owners who would have owned the site continuously since we became a state would have that kind of knowledge. Owners of land cannot know what contaminants are in their soils by looking at it visually. All loads of reclamation fill require testing for possible contaminants prior to the reclamation process. See figure 5 titled Bedrock Geology and Susceptibility to Groundwater Contamination.”

Staff Response: Staff have acknowledged elsewhere in this document that monitoring the importation of reclamation fill soil is problematic. There is an element of risk with the proposed approach from the developer that may be acceptable in other locations where the ground water is not as highly susceptible as it is on this site, but staff have serious reservations about this issue and suggest that additional analysis of the procedure for evaluating and monitoring the importation of fill soil should be done.

“The impact to Sand Creek’s wetland by drawing down the water table 0.6 ft to 1.8ft will have an impact on the natural wetland of Sand Creek. Please provide further study in this area.

Staff Response: The Barr Engineering report helped address this issue see attached.

MDH identified as an issue the time travel between ground water impacted by the surface water pond and nearby wells “concern is rapid travel time may allow pathogens present in surface water to migrate to wells.” The developer is providing mitigation options. County should require prevention first, then a mitigation option.

Staff Response: Staff agree that prevention is always the first priority. However, the only way to ensure status quo conditions relative to ground water protection would be to deny this use. The EAW is limited to evaluation of potential environmental impacts, consideration of developer proposed mitigation and adequacy of existing regulatory controls relative to addressing potential environmental impacts. The EAW is not a permitting process. However, staff, in consideration of the findings of an EAW can suggest conditions for an IUP and can even recommend denial if they believe the identified environmental impacts cannot or will not be adequately addressed.

Please show a plan for prevention of pollution entering our ground water. How much water do we have? How many gallons can we pollute safely? Who will pay after the 20 years are up?

Item Ground Water Quality (page 16)

Staff Response: The purpose of an EAW is to identify potential environmental impacts and consider appropriate mitigation. This EAW has identified a serious threat to ground water, which is likely to result from the excavation of a large pit into the ground water in an area subject to frequent flooding from Sand Creek. It is appropriate for policy makers to weigh the value of existing ground water

resources that are providing potable water for a non-community public water supply well and several private wells that have been demonstrated to be at risk from this proposed project with the value to the area from another gravel mine. However, staff are concerned that an accurate analysis of the costs and risks associated with this project have not been adequately presented and would recommend additional analysis of this issue. See Staff Recommendations at the end of this document.

Removing protective soils and mining a hole 115-120 feet deep. This cuts down on emergency response time. The site is bounded or nearly bounded on two sides by railroad tracks. We do not know what hazardous material the railroad is carrying. The hole will be there forever. How would we protect the aquifer in the case of a toxic spill?

Staff Response: Staff agree that the excavation will significantly increase the risk of aquifer contamination in this area which is already highly susceptible to ground water contamination. Should contamination reach the pond it would be in the aquifer eliminating response time.

Mining Conditions (page 20) Please explain how runoff during a flooding event will be contained by the mine. This area is subject to frequent flooding events from Sand Creek. Those floods would inundate the mine then recede back into Sand Creek increasing the sediment load. Recycled asphalt and concrete with unknown contaminants would also add to the problem. Further detail is required in this area.”

Staff Response: Staff agree with the concern and will recommend conditions for the IUP that will require that all sources of contamination be placed at least five feet above the 100 year flood elevation including stockpiles of concrete and asphalt. The MDH has further suggested that these materials be stored on a diked concrete pad.

Travis Cherro

“Section 13 Ground Water Mitigation Measures. Unless the developer presents an acceptable mitigation plan, staff will recommend that the securities established by the Developer for mitigation of ground water contamination sufficient to connect potentially affected wells to Jordan's municipal water supply..... In lieu of explaining each mitigation measure, the Developer has decided to plan for the worst case scenario and provide connection to municipal water.... Financial assurance for the connection to a small community publicly managed water supply or city water will be established as a part of the IUP process.

How will the residence know that the Developer is in compliance with codes for monitoring water quality? Will the developer be testing every home's water periodically for water quality? Or are they just going off their monitoring wells? If the water does become contaminated, what will the Developer's measures be to provide the home owners with clean water till the permanent solution is in place? Will the developer be responsible for 100% of the cost to hook home owners up to city water, including hooking city water up to the house not just to the street?”

Staff Response: The County's consultant has prepared additional ground water modeling for this project and identified those wells which might be at risk. All at risk wells in addition to the monitoring wells recommended by the County will be tested in accordance with an approved monitoring plan. The County will collaborate with the MDH on the efficacy of the monitoring plan. Staff will recommend that should this project proceed, the developer will be responsible for all costs associated with connecting all affected wells to a public water supply. The properties so connected would likely assume water utility service charges associated with water use. However, the details of the mitigation (providing a public water supply) have not been established yet and this is a topic that needs additional study.

Carl and Karen Day

“We are also concerned about the possible draw down of the aquifer. Jordan residents already have water restrictions. Within the EAW it states that the anticipated annual water requirement for the site will be 500,000 to 2 million gallons. That is a large variable. When will the peak times of water usage be? We assume that it will be during the spring and summer months, which will cause additional stress on the aquifer.

Staff Response: Water use for the mine operation is regulated by the Minnesota Department of Natural Resources through a ground water appropriation permit. One of the factors they consider is potential interference with surrounding wells.

In the EAW it states that during the reclamation period fill will be hauled in to the site. Where will this fill come from? Who will monitor that the fill does not contain further pathogens, which will again possibly contaminate further the surrounding area or the water?”

Staff Response: Staff have acknowledged this concern elsewhere in this document and have responded that this issue needs further study. See Staff Recommendations at the end of this document.

Louis Pearson

“How can the aquifer support pumping another 2 million gallons of water per year, when the City of Jordan tells us there is a watering ban every year; that we need to ration it, and are in danger of running out? The water gain from recycling will be very limited due to the nature of allowing fine particles to settle over time and the basin is pretty small. I would expect most of the water to evaporate before it is used, therefore it doesn't help curb water usage much. Vote “No” on this project.

Staff Response: See response to previous similar question.

The Groundwater Susceptibility sheet (figure 5), indicates this area has a very high susceptibility to groundwater contamination. The preferred mitigation is to connect to the City of Jordan's water supply- but there is likelihood that even the city's water may get contaminated due to the close proximity to the mining site. Nothing is mentioned anywhere in the EAW about that. That would be a big long-term problem for many homes/families. A very big hole. Vote “No” on this project.

Staff Response: This comment has been responded to in previous similar comments.

On page 15 of the document, the MDH has concerns that rapid travel times may allow pathogens present in surface water to migrate to wells in the area. The resolution is to monitor wells. The problem with this (and present in the whole document) is mitigation is necessary because the likely hood is high. The only problem is monitoring for the inevitable, and then what? By then people, residents, families, children, etc. have been adversely affected and then a contingency has to be implemented, which will take time, money, etc. Vote “No” on this project.

Staff Response: Staff agreed with this concern and noted in the EAW that mitigation would need to be clearly established and funded before the IUP was issued. However, the timing of the funding and the scope of the mitigation has not been defined. Staff have concluded that this issue needs further consideration. See Staff Recommendations at the end of this document.

Another issue raised on page 15 is the quality of water in a drawdown from the mine well. In drawdowns or when the groundwater levels are being caused to fluctuate, there is usually debris that becomes dislodged and can lead to impurities getting into drinking water.

Staff Response: Staff are unsure what is being referred to here, but do not believe that this is a significant concern for impurities getting into drinking water.

On page 16, the EAW indicates the MGS has designated the area as highly susceptible to ground water contamination. The mining would remove protective soils currently existing in the majority of the subject site, and leave a pond to 120' deep. The pond, during and after excavation will expose the ground water aquifer and create a potential source and pathway for contamination to surrounding private and public drinking water supplies (City of Jordan too). The solutions again are monitoring and suggestions of possible mitigation which are incomplete and don't address the other property owners, people, families, and children being impacted, immediate contingency alternatives. They/ we, will be that ones that suffer. No thank you.

Too risky, too costly, just say "no".

Staff Response: See previous response to this concern.

I noticed a lot of suggestions that monitoring would take place in alerting for contamination on wells, groundwater, soil, etc. and I was wondering if that would be done by a professional independent party? I suspect the developer wants to do that with his staff to keep costs down? This is only inviting trouble, dishonesty, and harm to the public. The county can't be expected to monitor anything as it needs to help address millions of dollars in budget shortfall. Same with the state, except it's in the billions of dollars. So do you just trust a company to do the right thing all the time? Can you say Enron, Exxon, BP, Fanny Mae, Freddy Mac, Bernie Madoff, Denny Hecker, etc? You even have independent parties (Anderson Accounting) that were guilty of "fudging" numbers to make things look good for their customers. Too risky, too costly, just say "no".

Staff Response: Staff agree that for any monitoring to be perceived as independent and objective that it should be conducted by an independent qualified testing laboratory. The details of the monitoring plan have not been developed yet and this should be completed before consideration of an application for an IUP. See Staff Recommendations at the end of this document.

To continue with pg. 17, Ground Water Mitigation Measures; the choice of mitigation is to connect to Jordan's municipal water supply. The trouble with that is, Jordan's water supply could in all likelihood be affected to. Then what? That's forever my friend. Constant filtering forever? There is nothing in the EAW that addresses that problem and cost for thousands of people/ home owners. Big hole.

Staff Response: Staff have addressed this same concern in previous comments and acknowledged that this issue needs further study.

Also on pg 17 are monitoring parameters, such as isotope ratios, coliform bacteria. I didn't see anything here about the temperature pollution that the ground water aquifer would incur due to the possible hydrological changes caused by the mining operation?

Staff Response: Staff acknowledge that changes to ground water resulting from the excavation into the aquifer of a large deep pond will change the water temperature in addition to potentially water chemistry and biological characteristics. This issue needs further analysis. See Staff Recommendations at the end of this document.

On page 19, Site Development and Reclamation Plan; says a plan must be developed. It must address dust, noise, possible pollutant discharges, hours and duration of operation, actions to be taken to mitigate environmental impacts, erosion, etc. This part is missing diesel smoke, mining dirt dust, dirt dust falling off the trucks onto city streets, dust from crushing rocks and concrete- the pollution in concrete being held in the area by the air inversions, smell (asphalt) being held in the area by the air inversions, road repair, safety from over the road trucks, etc.

Staff Response: Staff agree that all of the noted concerns must be addressed. Some of the issues are routinely dealt with for gravel mining operations and present no significantly different challenges from other locations. Some of the concerns are subject to regulation, such as noise, air pollution (including dust) traffic safety and debris falling off of trucks. The issue of air inversions has traditionally not been dealt with comprehensively in air quality permits because according to the MPCA Air Quality Division, the air quality modeling required for permit consideration is not sophisticated enough to take into consideration air inversion factors such as water temperatures in the valley which may cause temporary air layering. Recognizing that the asphalt plant would be operating only 240 hours per year and during normal day time operating hours, and that aside from the traffic corridor there are few other contributing air emission sources in the area, the chances for impacts related to air inversions would be minimal. Staff believe that this issue could be addressed through conditions to the IUP that addressed operation of the asphalt plant during periods when the region is under an air quality index advisory and stagnation of air in the valley is likely. Such a condition might be imposed should the developer request extended hours of operation or operation during the night.

On pg 20, Mining Condition; it is stated that the resulting pond will receive runoff during the active life of the mine. So pollution from stormwater, etc, can and will get into the pond and then be a conduit for aquifer contamination. This pond will also be a source for mosquitoes and potentially West Nile Virus. I don't see that issue addressed anywhere in the EAW. The problem with a pond there is it is a conduit for direct contamination to the aquifer, being it's below the water table- forever. It's lower than Sand Creek, and when that floods the pond (and it will)- that contaminates the aquifer. Nothing good can come of this.

Staff Response: Staff have acknowledged the risk of aquifer contamination related to the pond and exposed aquifers. Staff sought advice from the Metropolitan Mosquito Control District on the question of mosquito breeding habitat. According to Kirk Johnson, Vector Ecologist a large open pond will not provide the best habitat for mosquito breeding as wave action prevents optimum larval survival and during active mining, sediment in the pond is also a negative factor for mosquito habitat.

Pages 22,23; indications of high risk/ susceptibility to ground water/ aquifer contamination. On-site personnel to monitor fueling, maintenance operations, inspect equipment regularly for fluid leaks. When one occurs affected soil will immediately be removed and spill will be reported- who will police this? The owner? Hello, Exxon Valdeezee" BP Deep Horizon? Come on people, you know what happens when the cat's away? The mice will play. And who will train the personnel how/ what/ where to inspect? Will they be certified? Will they be covered in the whistle-blower protection law? And has that law done a bit of good? No, it's almost worthless."

Staff Response: Staff have acknowledged that the significant risks associated with this particular project site will require additional monitoring. The County's IUP process allows for an annual permit fee which would be used to cover the cost of routine inspections. Scott County currently licenses and inspects every generator of hazardous waste and every business handling solid waste in the County and we have a good track record of preventing improper management of hazardous wastes. The seven counties in the metropolitan area are the only counties in the United States that

have the authority to regulate and inspect businesses that generate or manage hazardous waste, so the training and capabilities of our enforcement staff are superior in this regard relative to the rest of the nation.

Michael Kahn and Mary Martin-Kahn

“Should ground water be contaminated do to the developer’s mining operation, we as well users, will be forced to find alternatives to provide water to our home. While the developer assures that they will provide bonds and or other financial resources as a curative measure into the future, we find it difficult to believe that they can assure their financial viability 45 years into the future (25 years of operation and 20 years beyond as noted in the EAW.) Once the ground water is contaminated, which is likely per this report, it is not reversible. This puts all residents in the area at risk along with individual, township, city, county and state resources at risk.”

Staff Response: The commenter’s property is outside of the area identified by the County’s Hydrologist as being potentially at risk from ground water contamination that might occur from this project. However, the questions posed are valid for those whose wells that may be impacted. Should this project proceed, staff will recommend that a specific mitigation plan with details on where and when the public water supply will come and be provided. That plan will be required to include a detailed cost estimate and staff will recommend that the project proposer be required to provide funding sufficient to pay for implementing the mitigation plan before mining commences. See Staff Recommendations at the end of this document..

Chris Boemer

“I am concerned about many of the issues that this gravel pit proposal will cause and that have been outlined in the EAW. We pay extremely high prices for water because of the shortages during the summer. What will this do to our water supply? Will this impact the quality of our water? Who within the community will monitor this and will be responsible if our water is contaminated? What will this do to the Sand Creek? The area around this creek is a flood plane. Will this mining operation negatively impact this situation?”

Staff Response: The commenter’s property is outside of the area identified by the County’s Hydrologist as being potentially at risk from ground water contamination that might occur from this project. The concerns noted have been addressed elsewhere in this document.

14. Water-related Land Use Management District

Metropolitan Council

“The document states that neither the mining activities nor the reclamation plan involve placing any fill below the existing floodplain level, however *Item 26* text and the proposed facility layout plans indicate that a perimeter screening barrier, including a berm, will be constructed around the entire site. The record of decision document needs to clarify this discrepancy and provide more detail with respect to the design of the proposed berm, including a cross-section, maintenance requirements, and required associated plantings within the portion of the barrier that will be placed within the Sand Creek floodplain.”

Staff Response: Staff acknowledge that the wording regarding the berm along the Sand Creek side of the project site is confusing. Staff have had subsequent discussions with the developer in regard to the specifics related to maintaining a strip of undisturbed land between the defined Sand Creek channel and the proposed excavation. The developer has proposed some form of soil stabilization technology along this area to reduce the potential for Sand Creek eroding a new channel into and

through the proposed excavated pond as this could preclude further mining if it were to occur, or at a minimum require permits from the DNR to re-establish a channel outside of the excavated pond. Staff acknowledge this issue needs further clarification and input from the DNR and others. See Staff Recommendations at the end of this document.

US Fish and Wildlife Service

“3) Erosion of spoil piles and/or levees associated with the mine could potentially fill downstream wetlands. We recommend that all overburden and imported reclamation fill be located above the 100-year flood plain, and any repair or restoration to the natural berm separating the mining site from Sand Creek be managed to reduce erosion.”

Staff Response: Staff agree, the issue of location of stockpiled overburden can be addressed in the IUP. The issue of how the natural berm might be repaired, restored or reinforced to reduce erosion needs to be dealt with in more detail and evaluated by the agencies that have regulatory interests. See Staff Recommendations at the end of this document.

Louis Pearson

“This EAW is incorrect in the definition of the 100 year floodplain: this area and the Minnesota River has had record flooding 3 times in the 60’s, at least one in 1991, and two last year, once in the spring and once in the summer, from rain.”

Staff Response: The 100-year flood is more accurately referred to as the 1% annual exceedance probability flood, since it is a flood that has a 1% chance of being equaled or exceeded in any single year. The 100 year floodplain is the area that has a 1% chance of being covered by floodwaters in any single year. This is a statistical based analysis based on past history of flood levels.

While the 100-year flood event represents the 1% exceedance probability, this does not mean that more frequent events could also inundate much of the same area. Inundation from more frequent events will not be to the same depth or area as the 100-year event. In fact from the same Flood Insurance Rate study used to determine the 100-year elevation, it is known that the 10-year event will also inundate portions of the project area.

In terms of Sand Creek, the flooding event of 1960 is generally considered to be relatively close to a 100-year flood event. Similarly, the 1965 flood event on the Minnesota River is also considered to be relatively close to the 100-year flood event. Although the creek has utilized portions of its floodplain repeatedly in the past, those events have all been smaller than the 100 year event.

Staff acknowledge that the definition of a 100 year flood is being questioned nationally as climate change is causing more frequent severe weather events. The current flood elevations for this area have been recently studied and are in the process of being reviewed by the Federal Emergency Management Agency (FEMA).

15. Water-Surface Use.

16. Erosion and Sedimentation.

17. Water Quality: Surface Water Runoff.

Minnesota Pollution Control Agency (MPCA)

“Please be aware that the Minnesota River and Sand Creek are listed on the MPCA Draft 2010 303(d) Total Maximum Daily Load (TMDL) list of impaired waters. We recommend you check with the current listing of impaired waters on the MPCA Web site at <http://www.pca.state.mn.us/water/tmdl-tmdl-303dlist.html>. Sand Creek is listed as impaired for turbidity (T) and fish bioassessments (B-F). The Minnesota River is listed impaired for mercury (Hg), fecal coliform (FC), turbidity (T), and PCBs. The impairments will dictate additional increased stormwater treatment both during construction and require additional increased permanent treatment post construction. These requirements will be included in the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit. The Project proposer should determine that compliance with these increased stormwater water quality treatments can be achieved on the project site or elsewhere. Questions regarding Construction Stormwater Permit requirements should be directed to Larry Zdon at 651-757-2839. Information regarding the MPCA's Construction Stormwater Program can be found on the MPCA's Web site at: <http://www.pca.state.mn.us/water/stormwater/stormwaterc.html>.

Staff Response: Staff acknowledge that mining in the floodplain has the potential for exposing disturbed soil to flood waters as well as runoff into Sand Creek. A detailed operations plan should be prepared in consideration of this issue and provided for review to regulatory agencies. See Staff Recommendations at the end of this document.

In addition, any project that will result in over 50 acres of disturbed area and has a discharge point within one mile of a special or impaired water is required to submit their Stormwater Pollution Prevention Plan (SWPPP) to the MPCA for a review at least 30 days prior to the commencement of land disturbing activities. If the SWPPP is found to be out of compliance with the terms and conditions of the General Permit, further delay may occur. The MPCA encourages the project proposer to meet with staff at preliminary points to avoid this situation. Questions regarding SWPPPs should be directed to Todd Smith at 651-757-2732.”

Staff Response: The developer has responded to this concern by stating that “requirements of the MPCA related to NPDES/SWPPP are acknowledged and will be completed by the project proposer”, however, considering that the operational plan and possibly even the proposed mining plan could be questioned and modified by the MPCA, it would seem appropriate if this issue were resolved prior to submittal of a proposed mining plan to the County for consideration.

Sand Creek Township

“5. The EAW mentions creation of an infiltration basin near Valley View Drive. Who will have responsibility for the long term operation and maintenance of the infiltration basin?”

Staff Response: The issue of maintenance of infiltration basins (stormwater ponds) is within the purview of the Township. This issue has obviously not been adequately addressed with the township and should be resolved before submittal of an IUP application.

18. Water Quality: Wastewaters

City of Jordan

“The treatment of the mine process water is not adequately addressed. Additional study is required regarding the storage and treatment of mine process water to ensure the protection of surface and ground water.

Staff Response: The developer provided a general description of their material wash basins. Generally ground water would not be considered to be at risk from material washed from the product, which had already been in contact with the ground water. However, placement of the wash sedimentation basins in a location where they can be protected from flooding and provided with sufficient freeboard to preclude overtopping during storm events is important. More detail on the material washing and water recycling is needed to address these concerns before consideration of an IUP.

If municipal water service is requested for this area, a wastewater collection system should also be provided for.”

Staff Response: Staff agree that the end use plan proposed has significant limitations for on-site sewage system construction especially if this area is to be considered for urban business expansion. The proposed use of this site will limit options currently possible for future development and could thus affect the economics of extension of municipal services to develop this area. See Staff Recommendations at the end of this document.

19. Geologic Hazards and Soil Conditions

Travis Cherro

“Section 19 Geological hazards and soil condition mitigation measures. On site personnel will monitor fueling and maintenance and inspecting equipment regularly for fluid leaks. How regularly are they going to be looking for leaks and how will we even know that this is happening?”

Staff Response: Staff acknowledge that concerns about ground water protection in this area are legitimate as this area is highly susceptible to ground water contamination. The MDH has recommended that activities that might present a risk to ground water such as storage of fuel and fueling of equipment be done in a location such as on a concrete pad where there is additional protection afforded. Staff have also acknowledged the need to inspect the operation of this gravel mine routinely due to the uniquely sensitive location.

20. Solid Waste, Hazardous Waste, Storage Tanks.

City of Jordan

“The handling of hazardous wastes onsite due to asphalt and concrete plant operations has been ignored. What wastes are anticipated and how will they be handled, stored, and ultimately disposed of? For example, diesel fuel is commonly used to clean equipment used in the production and construction of asphalt pavements. The City would like the opportunity to comment prior to any permits being issued.”

Staff Response: The proposal to accept waste concrete and asphalt requires a solid waste facility license. Licensed solid waste facilities are required to establish separate financial assurance mechanisms to address removal of this waste in the event the facility closes prematurely. The facilities are also inspected by the County. The developer has not proposed to be handling hazardous “wastes” on site. However, it is acknowledged that some hazardous chemicals like diesel fuel will be used on site. Proper management of hazardous chemicals will need to be addressed in the IUP.

Metropolitan Council

“The document indicates that the project proposes to accept recyclable concrete and asphalt for processing and blending with sand and gravel. Chemical compounds such as polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and heavy metals might be present in recycled asphalt and concrete and therefore leach from the material piles. This might occur as a result of the chemical composition of asphalt and from contamination occurring from vehicle traffic on the roadway surfaces. The potential that anyone day's delivery of asphalt to the mine for recycling and stockpiling throughout the life of mine operation could result in the release of contaminated leachate that would enter the groundwater table from this location is sufficient to request consideration for periodic groundwater quality monitoring throughout the life of mine operation, or until on-site asphalt recycling and stockpiling is discontinued. The Council recommends that in addition to the groundwater monitoring parameters proposed in Table 2 of the Water Monitoring Plan in the Appendix, that monitoring of heavy metals (Ba, Cd, Cr, Cu, Pb, Ni, and Zn) be incorporated into the monitoring plan to track potential off-site movement of asphalt leachate.”

Staff Response: Staff acknowledge the concern noted by the Council in relation to the importation, stockpiling and recycling of waste concrete and asphalt but would note that monitoring for the release of chemicals associated with these wastes in locations that are highly susceptible to ground water contamination would appear to be more reasonable as a means of monitoring the effectiveness of a containment system. Staff will be recommending conditions for the IUP consistent with the MDH recommendations in this regard – that this material be stored on a concrete pad with runoff containment.

21. Traffic.

City of Jordan

“In general, the City of Jordan is not prepared to accommodate the additional truck traffic on the haul routes proposed by the developer. Significant additional study is required to adequately address the impacts on affected neighborhoods in Jordan.

A. Consideration for the use of the CSAH 9 Minnesota River crossing to access US 212 and markets to the west and north should be reviewed. Concerns of Carver County and other stakeholders should be considered.

Staff Response: Carver County CSAH 11 is the route that is most direct to US 212 from the proposed mine. This corridor is a 9 ton county road and is part of Carver County’s county state aid system.

Based on the assumptions in the EAW, truck traffic to the east and south would not be anticipated to use TH 21 or TH 282 through Jordan, but would use other alternate routes. This understanding should be confirmed.

Staff Response: The proposer has indicated that these trunk highways are not part of the designated haul route for materials. As trunk highways, freight traffic cannot be restricted except during spring

weight restrictions. While these routes are not the designated haul route from the site, once traffic reaches the trunk highway system, Mn/DOT has specified no route restrictions.

It is unclear what the current and proposed truck traffic percentages are on all possible haul routes. Please provide a comparison of the truck percentages of total traffic and the Cumulative Design Equivalent Single Axle Load (ESAL's) for the No-Build and Build conditions on the affected haul routes. As a part of this item, volume of truck traffic hauling ALL for the following must be considered:

- 1) Hentges AND Non-Hentges trucks hauling gravel out
- 2) Hentges AND Non-Hentges trucks hauling mixed asphalt and concrete paving materials out
- 3) Hentges AND Non-Hentges trucks hauling materials IN to the site, both recycled and virgin.

Staff Response: The proposer has stated that the maximum trips entering and exiting the site will be capped at 110 trips per day. This includes all types of materials, gravel and asphalt exported from the site, recycled materials and other materials brought in to the site. The increased truck volume associated with this development when added to the existing traffic on Valley View still does not exceed the minimum 10 ton design threshold.

What is the current roadway pavement condition of the haul routes, specifically Valley View Drive? Are the current roadways able to handle the increased truck traffic based on the existing roadway pavement design and condition? If needed, what upgrades to the existing roadway design are necessary to handle the traffic loads?

Staff Response: Roadway pavement conditions are addressed in Item 21 of the EAW. From the EAW text: "Valley View Drive will be improved to a 10 ton standard road from 173rd Street to Mendoza Street.

While Valley View Drive is designated as a Municipal State Aid (MSA) Street and future Collector Street, it currently does not meet MSA requirements, including but not limited to pavement strength, street width and right-of-way width. The 2008 Annual Average Daily Traffic (AADT) for Valley View Drive was 860, but the 2030 forecast shown in the 2030 Jordan Transportation Plan is 4,500.

Furthermore, current land use along Valley View Drive is residential in nature, with setbacks of generally less than the required minimum (30 ft front, 35 ft rear). Some homes are very close to the right-of-way. Existing residential driveway spacing is inconsistent with normal collector street design. Livability concerns raised by increased truck traffic are likely to be exacerbated in areas with deficient building setbacks and conflicts points from numerous residential driveways. The Jordan City Council felt so strongly about this that they passed a resolution that Valley View Drive not be allowed as a haul route. They believe Syndicate Street/Frontage Road is more appropriate to carry truck traffic. This may require improvements/adjustments to intersection at Syndicate Street/CR 9/TH 169 (such as an additional northbound left turn lane on CR 9).

To meet State Aid design standards for Valley View Drive, a minimum total width for a 2-lane collector or local with ADT(Average Daily Traffic)<10,000 of 38 ft by Minnesota Rule 8820.9946 Minimum Design Standards; Urban Reconditioning Projects. According to Minnesota Rule 8820 .2500 Minimum State-Aid Standards, the minimum widths of right-of-way for state-aid routes must be at least 60 feet within cities and 66 feet in rural areas, except that the right-of-way may be less for routes that are within a city, that were constructed before November 13, 1995, and that can be reconstructed to new construction standards within the previously existing right-of-way.

Valley View Drive is planned by the City to be a Major Collector street. The City's 2008 Comprehensive Plan, Chapter 7, states that Major Collector streets, a 12 ft lane is required for each direction of travel. In addition to the travel width, minimum shoulder/parking lane widths are also required to accommodate parked or stalled vehicles. For Minor Collector streets in residential areas, a minimum right-of-way width of 80 ft is necessary for the added roadway width, as well as to provide added setback distance between the roadway and homes along the roadway. Right-of-way widths greater than 100 ft will be required on Major Collector roadways within commercial areas to accommodate the potential for higher traffic volumes and the need for additional lanes.

Staff Response: Staff acknowledge that the current classification of Valley View Drive in the City of Jordan appears inconsistent with its physical condition. This is an issue that the City is responsible for addressing. Further, the City acknowledges that this corridor is planned to be a Major Collector Street. The issue of the current condition, current designation and planned designation should be resolved by the City and made known to the County during the IUP process.

Due to concerns with truck traffic on Valley View Drive west of Syndicate Street, please provide traffic and roadway analysis of the following alternate truck routes:

- 1) Trucks exiting the site to southbound TH 169, use 173rd Street to access TH 169. (This analysis should consider MnDOT changing this intersection to eliminate northbound left turns.)
- 2) Trucks exiting the site to south bound or northbound TH 169, use Syndicate Street/Frontage Road to travel from Valley View Drive to CSAH 9. Again, this alternative is preferred by the City Council.
- 3) Provide the analysis of the pavement condition, pavement design, and design ESAL's.

Staff Response: See response to G below.

The intersections of Valley View Drive with CSAH 9 and Syndicate/Frontage Road with CSAH 9 are stop sign controlled with one-lane of approach. Please provide peak hour intersection analysis of these intersections for existing and 2030 for the no-build and build traffic options. This should include a queuing analysis on Valley View Drive and Syndicate/Frontage Road

- 1) Related: Please provide queuing analysis of the TH I69/CSAH 9 signalized intersection to ascertain the potential for blocking of Syndicate/Frontage Road.
- 2) Based on this analysis, are turn lanes or additional turn lanes needed to provide acceptable operations or to keep the left turn queues from blocking adjacent streets or right turning/thru movement vehicles?

Staff Response: Turning movement counts were performed in April 2010 at CH 9 and Valley View, it was determined that no traffic volume warrants were close to being met with 2010 traffic counts. The additional truck traffic projected by the proposer will not trigger any signal warrants being met as a result traffic generated by the project. The in-place intersection configuration is adequate to accommodate the additional truck traffic without a signal.

The City has suggested that Syndicate be considered as an alternative to Valley View Drive within the City of Jordan. The Scott County Traffic Engineer has reviewed this intersection and has determined that option to be an unacceptable alternative because of its close proximity to TH 169 (less than 200 feet). This intersection is not spaced adequately to provide turn lanes and to ensure that turning traffic to northbound CH 9 will not experience conflicts due to the turning movements at Syndicate.

The City would like additional haul route alternatives to be considered, such as extending Valley View Road to Bluff Drive. The City is also considering the extension of TH 185 Street from CSAH 9 to the east, as shown in the City's Transportation Plan. These alternatives should be considered in the analysis of truck haul routes.

Staff Response: The City has also suggested that haul routes be considered on yet to be constructed routes which are outside the proposer's ability to analyze until such routes are studied and approved for construction by the city and/or Sand Creek Township.

The City is concerned that the revisions to the intersection of TH 169 with 173rd Street will have unintended consequences of sending undesirable and uncontrolled truck traffic through the City, namely TH 282, TH21, and Creek Lane.

Staff Response: The improvements at TH 169 and 173rd St are not part of the development proposal.

Based on the access change at TH 169/173rd Street to eliminate northbound left turns, please re-evaluate the traffic modeling to ascertain the traffic impacts on other routes.

Staff Response: Staff are not aware of any other routes to evaluate and the City did not suggest any.

An analysis of the traffic implications of the proposed project should consider impacts to haul routes with the future interchange at TH169/TH282/CR9.

Staff Response: Future improvements to TH169/TH282/CR9 are not currently proposed nor is there currently any adopted study to adequately guide a traffic impact analysis. In the event changes are proposed to this intersection area it is expected that those changes would be planned to accommodate all current and projected traffic in the area.

Jordan Aggregates' financial commitment to appropriate haul route corridor upgrades and ongoing maintenance as has not been determined. The financial commitment to this maintenance requirement should be considered as long as there are impacts on haul routes, to pavement structure and clean-up of hauled materials. This commitment needs to be understood and agreed to by all parties to ensure upgrades and ongoing maintenance of haul routes.

Staff Response: The ongoing maintenance is an issue that would be addressed as part of an IUP application. There is a reimbursement methodology recently developed by the Local Road Research Board that could be utilized to adequately determine the proposer's incremental share of ongoing maintenance costs.

Certain hauling-related requirements should also be included in such an agreement, such as haul trucks should be identifiable in case of infractions, and trailers must be covered with tarps to secure the loads.”

Staff Response: As a general response to Jordan's comments related to traffic, the project proposer had indicated he has committed to improving Valley View within the City of Jordan to a 10 ton standard. Within the Township, the Proposer has agreed to work in partnership with the County to improve the gravel road to a 10 ton standard. If the improvements are completed as proposed, the road surface design will be sufficient to handle the proposed 10,000 annual round trips from the site. Therefore, the request that a cumulative Esal analysis be performed is unnecessary since the proposer has already committed to improving Valley View Drive to a 10 ton standard. Esals are only used for determining pavement section design. Additionally, all questions related to State Aid Design Standards would be addressed through this developer's commitment to reconstruct the road. Trails, non mandated guidelines and other City amenities would remain the responsibility of the City.

Jordan Parks and Recreation Commission

“The EAW does not sufficiently address three issues of impact on Jordan's Jackie Holzer Park.

First, what safety impact will added heavy truck traffic on the proposed haul route (Valley View Drive to CR9) have on the park? The EAW should address the impact of traffic conflicts on bicyclists, pedestrians, and motorized traffic. The EAW should address the impact of traffic on Scott County's trail route plans

Second, what impact will odor, dust, air quality and noise emissions have on use of the park?

Third, will vibrations cause any structural issues in Holzer Park? Jackie Holzer Park is Jordan's largest. It is our principle venue for summertime youth instructional baseball and softball programs. Typically, hundreds of people participate in these programs, as students, attending parents and family members, and instructors. The park is in use most days during the Summer.”

Staff Response: See response above related to Jordan’s traffic concerns. Impacts to Holzer Park, were not considered in the EAW. Staff do not necessarily agree that there would be significant impacts to a park from increased day time truck traffic on the adjacent road. The existing heavy rail line between the park and the subject road would most certainly generate much more vibrations than the truck traffic on the street. The proximity of the park to the City’s waste water treatment plant already presents concerns for odor and air quality that apparently did not present an issue when the city opted to construct the park in this location. Air emissions from the proposed asphalt plant, however, could impact air quality in the valley environment during air inversion events. This issue is dealt with further in the Item 23. In its current function, Valley View is a Municipal State Aid road, (recently designated as such by the City), and is intended to accommodate higher volumes of traffic including expected higher volumes of commercial traffic than a local street.

Pete and Deb Ewals

“County Planning Ordinance recommends not running heavy trucks through residential areas. 2030 Comprehensive Plan Scott County is ignoring the City of Jordan’s plan for a full interchange at 173rd St and Hwy 169.”

Staff Response: The developer provided the following response which staff agree with: “The project is estimated to generate an average of 54 round trips per day by gravel haul trucks, and a peak of 110 round trips per day. These estimates include all customers/users of the proposed mine site. All outbound traffic from the mine will use the proposed route consisting of Valley View Road to County Road 9 (average 54 trips per day). It is estimated that only 10 percent of the inbound traffic (average 6 trips per day) will use the County Road 9/Valley View Drive route. The remaining 90 percent of inbound traffic (average 48 trips per day) will use the 173rd Street/Valley View Drive route. Current annual average daily traffic on Valley View Drive in the City of Jordan, based upon City of Jordan 2008 Comprehensive Plan Update, is 850 trips per day. The proposed new traffic constitutes an average increase of approximately 6 percent of current traffic levels. Projected future average daily traffic (year 2030) on Valley View Drive is 4,500 trips per day. The proposed new traffic constitutes an increase of approximately 1 percent of future projected traffic levels.

The option of using the 173rd Street access to Highway 169 was evaluated. MNDOT determined that the 173rd Street route was not suitable.

The option of using the Syndicate Street route from Valley View to County Road 9 was evaluated. The County Engineer determined that the intersection of Syndicate Street with County Road 9 is too close to the intersection of County Road 9 with Highway 169 to allow for left turns by gravel haul

trucks from Syndicate Street to County Road 9. Staff has determined that the proposed route for outbound traffic from the mine, Valley View Road to the intersection with County Road 9, is the only viable outbound route from the mine.

It is estimated that 80 percent of the outbound traffic from the mine will travel to destinations northeast of the site via Highway 169, and the remaining 20 percent will travel to destinations southwest of the site via Highway 169. There may be occasional destinations east/southeast or west/northwest from the site, in which case some traffic may travel on County Road 9 north from the intersection with Valley View Drive or south on Highway 282/Highway 21 south from the intersection of County Road 9 and Highway 169. All these routes are county state-aid highways or state trunk highways that are designed for truck traffic. Current annual average daily traffic on all routes beyond the Valley View Drive route ranges from 2,650 to 22,500. The additional truck traffic from the proposed project does not represent a significant increase that warrants further study.

The noise analysis for Valley View Drive indicates that the proposed truck traffic will comply with noise laws. Traffic controls on Valley View Drive (speed limits, crosswalks) will address safety concerns related to the proposed truck traffic.

Valley View Drive is designated as a Municipal State Aid street in the City of Jordan and currently carries commercial truck traffic. Although the pavement condition of Valley View Drive is currently adequate, it is determined that the additional proposed truck traffic will contribute to deterioration of the pavement and reduce its life cycle. The pavement can be improved to accommodate the proposed truck traffic, and the project proposer has offered to contribute financially to the costs of the required pavement upgrade within the City.

The project proposer and the City have met on numerous occasions to discuss alternatives to the proposed Valley View Drive route. The project proposer has expressed a willingness to use other viable routes should such routes become available in the future. Examples include a new road, referred to as the 185th Street route, that would run between Valley View Drive and County Road 9 along the north City limits; and a new road, referred to as the Bluff Drive route, that would connect Valley View Drive to Bluff Drive northeast of the City.”

Minnesota Department of Transportation (MnDOT)

“The EAW incorporates Cooperative Agreement project (SP 7009-70) thus satisfying Mn/DOT’s prior concerns regarding haul routes and establishment of a ¾ access at the intersection of TH 169 and 173rd Street. It should be noted that the Cooperative Agreement project includes removal of the Jordan Avenue median crossing just north of 173rd Street allowing for extended turn lanes at 173rd Street. For questions concerning these comments, please contact David Sheen, Mn/DOT Metro Traffic, at (651) 234-7824.

Also concerning the Cooperative Agreement project at TH 169 and 173rd Street, Sand Creek Township and Scott County should continue to work with the Mn/DOT Cooperative Agreement Engineer and the Mn/DOT Metro State-Aid Office Project Manager to ensure successful completion.

Please note that any work not included in the Cooperative Agreement project that impacts Mn/DOT Right of Way will require a permit. Mn/DOT permit forms are available from Mn/DOT’s utility website at <http://www.dot.state.mn.us/utility/>. For questions concerning permits, please contact Buck Craig, Mn/DOT’s Permits Section, at (651) 234-7911.”

Staff Response: No Response needed.

Sand Creek Township

The Township believes that one of the conditions for operation of the mine should be the need to monitor the operation of the entrance of the mine onto Valley View Drive and a requirement that the mine operator shall construct a turn lane/bypass lane on Valley View Drive if required.

Staff Response: this can be addressed through the IUP process.

The EAW states that Valley View Drive from 173rd Street to Mendoza Street will be upgraded to 10 Ton standard. 173rd Street from TH 169 to Valley View Drive must also be a 10 Ton roadway.

Staff Response: 173rd St. will be constructed to a 10 ton design as part of a municipal COOP project managed by the County.

The Township will not be utilizing eminent domain to acquire any right of way for improvements to Valley View Drive required for the proposed mining operation.”

Staff Response: Acknowledged.

The EAW provides a minimal description of overall traffic impacts. The traffic discussion should be much more detailed, with a discussion of existing, no-build and build conditions. This discussion would also be more useful if it contained a description of the type of trucks that will make up the traffic to and from the mining operation and the percentage of each type of truck in that traffic.

The EAW should more clearly describe the source of the trip generation assumption. The Institute of Transportation Engineers Trip Generation report is typically used for estimating trips based on land use type. If a trip generation rate is not listed in the report, the source of the trip generation estimate and the assumptions made to apply the rate to this situation shall be described.

Staff Response: The Trip generation manual is used to determine trip generation when development specific is not available. The EAW addresses the development's proposed trip generation.

Typically, vehicular trips are quantified as one trip equaling one origin to one destination, not a round trip. Thus, where the EAW lists "... 110 round trips per day during periods of peak production", the true volume is 220 trips per day. Similarly, the anticipated truck volume should be 10 trips per hour with a maximum of 22 trips per hour during peak production.

Staff Response: This is consistent as proposed by the developer.

While the discussion describes the quarry operation traffic, it does not quantify the trips for any proposed ready-mix, aggregate sales, cement delivery, asphalt material delivery, fuel and service trips, recycle material delivery or employee vehicle trips. These need to be included.

The EAW describes the trip distribution as 80% to and from the north, and 20% to and from the south. Figure 15 shows the traffic pattern along the haul road and out onto TH 169. The figure and the discussion does not indicate the existing and no-build scenario traffic volumes, turning movements or levels of service at the intersections, especially at TH 169. Furthermore, this analysis should overlay the trips generated from the quarry site and distributed onto the roadway network in the build conditions. Resulting levels of service should be

determined for comparison. Any intersections experiencing levels of service D or worse should prompt a mitigation plan.

Staff Response: The proposed haul route utilizes Valley View Road to CH 9. Turning movement counts were performed in April 2010 at CH 9 and Valley View, it was determined that no traffic volume warrants were close to being met with 2010 traffic counts. The additional truck traffic projected by the proposer will not trigger any signal warrants being met as a result traffic generated by the project. The in-place intersection configuration is adequate to accommodate the additional truck traffic without a signal.

Haul trucks are typically slow to accelerate from a standstill (e.g. at a stop sign or traffic signal). Therefore, these vehicles require longer gaps in the traffic stream to make a left turn. This greater time needs to be accounted in the discussion of left turns onto and off of TH 169 and County Highway 9, and the problem is compounded by the high speed of the conflicting traffic (especially along TH 169). The combination of high approach speeds, few available gaps, and slow acceleration may lead to safety issues with these left turning trucks. How will these issues be addressed?

Staff Response: MnDOT has jurisdiction over TH 169. Their comments did not include concerns with truck acceleration or turning movements based on the haul road trip distribution. See County Traffic Engineer's comment for CH 9.

A long term maintenance plan should be addressed for the haul road. Prolonged truck traffic will deteriorate the pavement much faster than under normal traffic scenarios. Will the quarry be assessed for these future pavement reconstruction projects?"

Staff Response: To be addressed as part of IUP process, see comment above.

The EAW is not clear as to what can be accurately anticipated and planned for from all of the traffic generated from this mining operation. Again, any traffic generated from a bituminous or concrete operation should be considered under a separate EAW proposal submission. Complete information must include but be not limited to:

- Owner's Truck Haul
- Other Truck Haul
- Other Hauling system such as RR
- Miscellaneous
- Transportation

The EAW is vague, incomplete and does not adequately describe the methods, travel routes, intersection provisions and controls to be in place throughout the duration of the mining operations.

Due the lack of collaboration and cooperation, optional transportation opportunities have not been considered. These options must include but not be limited to:

- MNDOT
- TWP / County
- City of Jordan
- RR
- Alternatives and Options"

Staff Response: See previous comments in this section. The proposer has been meeting with the above mentioned agencies for over 2 years discussing alternative routes and roadway specific mitigative alternatives.

John Krajewski

“First, the number of the trucks rolling through Jordan has been grossly understated. The figures presented are useless as the growth of the SW area during the "25" year lifetime of this business is not yet quantifiable. These trucks will roll from early in the morning to late at night, especially during the summer months. Reliable numbers considering future growth within the County and State along with estimates of the sand and gravel needs are not reliable. To issue a conditional permit without confident numbers is irresponsible.”

Staff Response: The EAW addresses Truck volumes and the IUP process will address hours of work.

“Accidents and Traffic Congestion. Crossing 169 to 282 will become increasingly congested due to the slow acceleration of the trucks. The unregulated Creek Lane / 282 intersections have a high potential as an accident site. Coming down the 282 hill into Jordan and crossing 21 is another. How far does it take to stop a loaded gravel truck and "will it" be able to stop during a light change? Exiting the Burger King, McDonald's area and turning left onto 282 is presently at best, risky. Visualize the back up of vehicles crossing 169 onto 282 with a queue of loaded gravel trucks and don't forget the empty ones returning for another load. I don't know how an operator of such a site can supply accurate figures for traffic generated by other than his own operation and present it for the purpose of obtaining a permit. It doesn't exist yet! Neither do figures for future traffic increases on 169. This truck traffic will impact the area in many ways and for many years. All data and projected use must be presented before a permit is issued. A truck route does not belong going thru a town.”

Staff Response: The haul routes proposed do not include the area discussed. Any truck traffic on these routes would be related to project activities outside of the control of this proposal.

“Where is common sense used when it is proposed to drive several miles south to head north? Alternative options have been presented. Some good, some questionable, but here, MNDOT, and Scott County must bite the bullet and use, in advance, the projected tax revenues they expect to receive to come up with a viable solution, and not one in Jordan, but down the highway closest to where the gravel is mined.

There are many other operations on 169 that allow slow moving trucks to cross over and use an acceleration lane to head north. There's plenty of visibility on the highway in that area to allow a crossing. When MNDOT really decides to improve the 169 corridor and has the funding, a better solution can be found. For now, maybe not the best idea, but better than going thru town.”

Staff Response: The haul route proposed was the one analyzed in the EAW after discussions with the MDOT regarding TH 169.

Louis Pearson

“On pg. 25, Traffic; “parking spaces added= 0” Hello? If you have people working at the site they will have to park somewhere, and hence parking spaces will be added. I would guess about 10-20. This document appears to have been presented with a bias: to hold back possible negative information and facts. This only incriminates the developer and gives evidence/ reason to require a in-depth complete and thorough examination of all the details related to this project, and the impact on our society. On this same issue, with the truck route directions; it's described that the trucks will turn left from Valley View Dr, onto Scott County Road 9. I live here, and drive that same street every day. Let me tell you, an intersection control is going to be required- that costs money.

And cars driving through it on Co. Rd. 9 usually go faster than the 40 mph limit through it. It's an accident waiting to happen, someone is going to get injured or killed."

Staff Response: *See previous responses regarding the need for traffic controls at Co. Rd. 9.*

Michael Kahn and Mary Martin-Kahn

"We are opposed to the use of Valley View Drive as the designated truck route. Valley View Drive is used by local township and city residents along with limited commercial vehicles (depending on whether or not the portion of Valley View is inside or outside Jordan City Limits) to access Hwy 169 or routes. We have no other access to Hwy 169 or any other city or county roads than Valley View Drive. That said, Valley View Drive is not constructed, designed or controlled to allow for 220 trucks trips per day.

The developer has already stated that they cannot control any vehicle noise, so it follows that they cannot control speed or the safe operation of the vehicles involved. Vehicles hauling aggregates and related products maybe or are generally paid by the round so observing safety rules, regulations speed limits or conditional use permits, is not in their best financial interest and in our opinion, unlikely. Scott County most likely does not have the resources to sufficiently monitor the road use to ensure our safety. As a result, we as residents, will have issues leaving or coming to our homes. Note: recently a heavy vehicle was struck by a train and the driver killed in this area. Increased truck traffic will most likely lead to increase truck accidents."

Staff Response: *See previous responses relative to noise and traffic.*

Pete Giancola

"Since the Gravel Pit will attract multitudes of carriers corporate or individuals with their own truck, From far and wide across the Metro area because of the scarcity of this commodity, when will these vehicles be required to be inspected?

Before they are loaded with thousands of Lbs of Gravel only to find out after the accident that they were out of service? Or randomly while they are at the pit BEFORE they are loaded and become unstoppable freight trains of destruction by carrying out thorough random safety inspections?

The question that I have is that a majority if not all of the trucks are inspected during the "off" season like February. They are not inspected during the time that they are loading and unloading at the pit and then traveling intermixed with residential traffic.

You also do not have the same regulations of "Intra" State commerce VS "inter" state commerce. You could potentially have a truck driver who works three jobs jumping into the cab of their personal dump truck unimpeded, only to fall asleep or doze off after having been loaded. How will the County deal with this issue?

Will the county screen vehicles on a random basis during the peak season for out of service vehicles before the fatalities and injuries occur?"

Staff Response: *The State of Minnesota is responsible for regulating trucks and licensing drivers.*

Margaret and Mark Knutson

"We would like to see additional traffic assessment done and ask the county to look for alternative routes that are more direct to Hwy 169. Why does the county have to wait for the 2030 plan before making changes to the intersection of Hwy 169 & 173rd. There currently is enough truck traffic and safety issues in this area that should require the County and State to reconsider the 2030 plan."

Staff Response: The timing of comprehensive plan updates is seldom driven by individual projects.

Wayne Fahrenkamp

“The proposed travel route for all gravel trucks is Valley View Road, which is a city street maintained by the city of Jordan. This proposed route is part of the Brentwood neighborhood where dozens of homes and their families reside. It is estimated that at peak times, 110 trucks a day will be leaving the mining operation to their destination and 110 trucks returning. The increased traffic has several repercussions, first is the safety issue. Valley View Road is a commonly walked street by both children and adults. Increased traffic will drastically increase the chances of someone being seriously injured or even worse, killed by a truck driver in route to their destination. As residents we are now being told that a cement plant and an asphalt plant are in the plans to be built adjacent to the proposed mining operation. It is unclear how many trucks for both the cement plant and asphalt plant will be traveling on the proposed gravel route in addition to the gravel trucks, but even conservative estimates tell us that the amount of total traffic is far more than what should be allowed for a residential street.

The increased traffic will bring increased noise, diesel exhaust and dust to everyone in our neighborhood. According to H.M. Hentges, the noise from the gravel trucks will not only take place just during working hours but will take place 24 hours a day during peak times of the year. This peak time is neither specific as to when the peak time starts or stops or its duration during the year. In addition, the increased dust has already created concerns as a health issue to those in the neighborhood. This will seriously reduce the quality of life for the residents of Brentwood.”

Staff Response: See Staff responses to the comments from the City of Jordan in this section.

22. Vehicle Related Air Emissions

23. Stationary Source Air Emissions

City of Jordan

“The City believes the impacts of the asphalt and concrete plants have not been adequately addressed.”

Staff Response: Staff agree and note that the issue of air inversions has traditionally not been dealt with comprehensively in air quality permits because according to the MPCA Air Quality Division, the commonly used air quality modeling for permit consideration is not sophisticated enough to take into consideration air inversion factors such as water temperatures in the valley which impact air layering. Staff reviewed an EAW prepared by the MPCA on a larger asphalt facility closer to the center of the metropolitan area in an industrial park. The emissions from that facility were not deemed by the MPCA as a significant environmental issue. Recognizing that air inversion conditions in the Minnesota River Valley generally occur at night and are of limited duration, staff recommend that consideration could be given to imposing conditions on the asphalt plant operations should the mining operator request approval for operation beyond 240 hours per year or operation during night time hours. The MPCA issues air quality index advisories during prolonged regional stagnant air conditions. These alerts could be used as a criteria for restricting asphalt plant operation especially at night or if the operator requests permission to operate the asphalt plant for more than 240 hours per year.

Louis Pearson

“On pg, 27, air emissions resulting from dust, motor exhaust, asphalt, etc; the fugitive dust from the concrete crushing operation is not defined here. That is some of the worst type of dust you can have- concrete has an MSDS sheet because of its hazardous to your health. And this Minnesota River Valley has the tendency for air inversions that keep the dust and pollution trapped near ground surface. Diesel motor exhaust smoke is very insidious; its fine particulate matter is carcinogenic, and permeates even the skin. The excessive truck traffic in Jordan’s residential neighborhood of Brentwood Addition, would have serious consequences on resident’s health due to trucks passing every 2.72 minutes possibly. The EAW goes on to list asphalt plant air pollutants like VOC’s, CO, SO’2 , NO’x, HAP’s including PAH’s, phenols, volatile HAP’s, metal HAP’s, and total HAP’s. And the Minnesota River Valley has the tendency for air inversions that keep the dust and pollution trapped near ground surface. This operation will be close and just downwind from Jackie Holzer Park, around 2000 feet. It’s used extensively in summer by kids playing baseball and softball. That would be a terrible thing to subject our children to. The health risks are just too great.”

Staff Response: See previous comments regarding air emissions.

Chris Boemer

“I am also concerned by the noise, the diesel exhaust fumes, and the dust and dirt generated by this truck traffic. My bedroom window is less than 100 feet from the stop sign on Valley View and County Road 9. I have sleep apnea and use a cpap machine, which means I take in significantly more pollutants generated by these trucks.”

Staff Response: See previous response. Staff acknowledge that there are known sensitive receptors in the vicinity of the proposed mine that could be more adversely affected by air pollution, especially during air inversion events when pollution concentrates in the valley. There are currently no air quality monitoring stations in Jordan, the closest one operated continuously by the MPCA is in Shakopee and it monitors primarily for particulates. However, in discussions with several MPCA technical staff it was suggested that using the region’s air quality index advisory program would be a reasonable approach to address this issue. They noted that stagnation of air generally affects the entire region. Considering that the inversion conditions in valleys generally occur primarily at night when the asphalt plant would not be operating, concerns for air quality would be primarily an issue during longer periods of regional air stagnation. Recognizing that the primary source of air quality impact in Jordan is traffic related, staff do not believe that air emissions from an asphalt plant operated 240 hours per year presents a significant impact relative to the existing sources. However, the air quality index advisory warning notices issued by the MPCA could be used to trigger restrictions on asphalt plant operation especially if the operator requested to operate during night time hours or for longer periods of time than the 240 hours per year general limit. This issue would obviously need further discussion as it could adversely affect contractual obligations for the operator unless they incorporated this factor into their asphalt delivery contracts.

24. Odors, Noise and Dust.**City of Jordan**

“The City believes that noise, air pollution, and odors from the following are not adequately addressed: equipment onsite, trucks in City of Jordan and beyond, the asphalt and concrete plant dust and smell. This includes not only the areas near the mining and plant operation, but also a long haul routes in City neighborhoods. Additionally, please include Holzer Park in the analysis. Even though, as the EAW states, there

are no State ambient air quality odor standards, odors could be mitigated by controlling hours of operation or by other means. What odor mitigation measures are proposed?

Staff Response: *See responses to two previous similar questions in reference to air pollution issue. The developer has not proposed any response to odor issues and staff have no suggestions for addressing odor issues for this project other than as suggested addressing them through control of the hours of operation.*

The City believes the hours of operation (7 am to 10 pm) are excessive. The City would like the hours of operation to be reconsidered and would like to be involved in the regulating hours of operation.

Staff Response: *The hours of operation are normally discussed as part of the IUP and interested parties are afforded an opportunity for input at that time. Concerns identified as part of the EAW that might influence hours of operation are also considered in the IUP process.*

Noise - The EAW states that when mining operations are closer than 175 meters to Noise Abatement Criteria (NAC)-1 receptors to the west of the site; and when mining operations are closer than 145 meters to the NAC-2 receptors, "the processing and/or asphalt plant operations will be curtailed to comply with noise regulations." What does "curtail" mean, exactly? Will Jordan Aggregates limit or change machinery, or limit hours? Several options are listed on page 9 of Attachment D. Will all of these be implemented, regardless of the noise level, or will there be a staged implementation of the options to meet the noise limit? Will there be permanent noise monitors at the receptors? Please describe in more detail how Jordan Aggregates will monitor and mitigate the noise when within the above-mentioned ranges of the receptors."

Staff Response: *Attachment D Noise Analysis Report did indeed suggest that operations could be curtailed to comply with noise regulations but did not provide much more detail. This needs to be clarified prior to consideration of the IUP. There have been no discussions about permanent noise monitors and the county does not have the ability to respond rapidly to noise complaints. However, as noted, one of the closest receptors is a County facility that is a NAC 1 receptor, so it is likely if conditions are such that state noise standards are being exceeded it is reasonable to assume that monitoring would likely be conducted and the state regulations enforced.*

Sand Creek Township

"Odors, Noise and Dust

Probably the most compromising issue coupled with groundwater contamination and traffic is the nuisance caused by the minute by minute disturbance effecting the 'quality of life' of adjacent and existing resident dwellers. No adequate screening or watering can preclude the probable odors, noise and dust. The proposed mine will have a negative effect on the surrounding area and region.

The EAW indicates that noise level standards may be violated if early truck traffic occurs. If the IUP for the proposed mining operation is approved, it should include a requirement for testing and monitoring of noise levels. Of particular sensitivity is assisted living facility to the North of the proposed Mining operation.

An independent consultant must be retained to monitor noise levels of machinery and truck operations used in the mining operations, on and off site. Although considered by the Town Board, any future consideration of an asphalt and/or concrete facility must also be monitored.

Vehicle-related air and noise emissions require the monitoring of trucks and other equipment to have up-to-date noise suppressants and trucks must be identified with specific, readable, numbers. Truck hauling should utilize a cover over material.”

Staff Response: Taking the issues separately, Staff acknowledge that gravel mining operations have impacts related to odors, noise and dust on surrounding residents. That being said, gravel mining can coexist in residential areas as is evidenced by Pearson’s operation in Savage, which is surrounded by residential development and even a High School on one corner. That mining operation is considerably larger than the proposed operation and though logistics are different, dust and noise are issues that they have been able to address to the satisfaction of the neighbors. Portable asphalt hot mix operations are also operating in several locations in Scott County in proximity to residential, commercial and agricultural land uses. Staff acknowledge that there have been a few odor complaints from residents but generally these plants are accepted as part of the common urban exposure to odors from industrial and commercial sources just as are odors from agricultural operations in the rural area. Considering that this facility would be limited to 240 hours of operation per year and during the daytime hours staff do not believe that odor problems are a significant environmental issue. Should the operator request additional operating hours or night time operation this issue can be addressed at that time.

This site was evaluated in standard fashion for noise impacts and the findings were presented appropriately in the EAW. Staff acknowledge that additional analysis on the location and selection of some of the equipment must be made and must be operated to comply with noise regulations. However, this is an environmental impact for which there are existing regulatory controls. Noise from truck traffic can be monitored if complaints are received and the number of trucks entering and leaving the pit can also be monitored to ensure that the number of trips per hour does not exceed the proposed number to the extent that noise violations would be expected. Staff acknowledge that a noise mitigation plan needs to be developed yet and specifics need to be established to control dust. These issues are normally dealt with appropriately during the IUP process where local jurisdictions and residents are afforded an opportunity for effective input.

The issue of the asphalt plant and associated emissions was addressed in Item 23.

Pete and Deb Ewals

“Related Complaints have been heard at Scott County Board Meetings about local Asphalt Plant. Additional receptors not mentioned at Louisville Swamp Wildlife Refuge, Valley Green Neighborhood, Brentwood Neighborhood and Holzer Park.”

Staff Response: See related responses in Item 23.

Thom Boncher

“First, the statement that Scott County has not received complaints about the Knife River mining operation is not consistent with the events of the County Board hearing for the Knife River Corporation mining IUP. I believe that hearing took place on May 22, 2010. I have a very distinct memory of a resident complaining about odor, and asking that she be reimbursed for hotel expenses during the time when the Knife River asphalt plant is operating. I remember the Knife River manager asking if the complainant would like him to put some kind of scent into the system. I believe his words were, "What would you like? Cherry?" And she replied, more or less, "How about clean country air?" Also during that hearing, the mining operator expressed surprise that so many people showed up to oppose the IUP. He said words to the effect that no one had ever shown up before. Then he added something about "except Mrs. (name redacted) who shows up every year."

Second, citing the supposed lack of complaints relative to other operations ignores the fact that none of those operations is in an area comparably affected by air inversion layers.”

Staff Response: Staff agree that odor complaints associated with asphalt plants have been received, though rare. See staff comments in Item 23 regarding air quality impacts.

John Krajewski

“The quantity of carbon monoxide, toxic chemicals, asbestos particles and other carcinogens that will be emitted from these trucks must be presented, and the short and long term consequences must be factored into the effects on the health of the people not only living close to the route but throughout the town. Quantifying these products and their effect on persons is reason enough to deny a permit and require a detailed Environmental Impact Study.”

Staff Response: The scope of this project related to the number of trucks proposed is inconsequential in relation to the current and anticipated vehicle traffic on Highway 169 relative to vehicle related air emissions.

“Now, Environmental Impact Studies in their present form may not consider peace and quiet as part of their domain but those people living by the roadside and those within a few blocks of the routes will not get any peace or quiet from the noise made by a diesel truck carrying a load of sand or gravel. Vibrations must be considered. When the City, State and St. John's Church were considering the possibility of structural damage to the church at the intersection of Hwy. 282/ Hwy 21 widening I don't think gravel trucks were on the table. What will happen now? What about people living right next to the roads and the certainty of damage to their homes.”

Staff Response: Staff acknowledge that “peace and quiet” are not an items considered in an EAW. However, the condition of the road which relates to vehicle vibrations is acknowledged as needing to be addressed as noted in the staff responses to Item 21 and the concern for noise has been addressed elsewhere in this Item. Staff note that consistency with surrounding land uses is considered in Item 27. Unfortunately, the City and Township do not have any specific plans for development of this area and as a result the County’s underlying land use as Urban Business Reserve takes precedence. That land use would not preclude gravel mining but the consideration is subject to approval of an Interim Use Permit and one of the criteria is compatibility with surround land uses. That determination is made by the County Board of Commissioners in consideration of recommendations from the Township, City of Jordan and County Planning Commission, staff and the findings of this EAW.

Travis Cherro

“Section 24 Noise mitigation measure. Since the State's noise regulations cannot be enforced on the exempt roads (Valley View Drive), complaints from residence along the road would need to be addressed by the County (if at all) through conditions established in the IUP. So, I am of the understanding that we will pretty much have no say on the noise of the trucks that come by our homes. What about regulations on Jake Brakes? What about the trucks that have straight exhaust which is much louder than a stock truck? Can we get a city ordinance for noise pollution in our area?”

Staff Response: The commenter is correct that the MPCA will not enforce the State’s noise regulations related to traffic on an exempt road. However, as noted in the EAW, noise related to truck traffic is still an environmental impact and should be addressed in an IUP. There are several options that could be considered in this regard such as truck counting or noise monitoring but have not been detailed in the EAW. Further analysis of this issue is needed including preparation of a noise monitoring and mitigation plan.

Noise pollution. Referring to tables 3-10. In these tables they use the dBAs from a vehicle that is traveling 30 mph. Valley View drive does not have a posted speed limit and when I question the Scott County person that was at our meeting he could not guarantee that the speed limit would be 30 mph on Valley View Drive. So the Developer's dBAs for the trucks cannot be accurate.

Staff Response: Staff recognize and agree with the analysis the commenter notes that relates noise levels from trucks to their speed of travel. However, the critical receptors are the nursing home and residents along Valley View Drive within the City of Jordan. The likely truck speed adjacent to Valley View Nursing home is assumed to be at most 30 miles per hour due to the restricted speed required to safely negotiate a 90 degree turn at the corner of 173Rd St and Valley View Drive. The speed is controlled in the City of Jordan to 30 miles per hour. Therefore the analysis of noise relative to truck speed was deemed acceptable to staff. The issue becomes then one of the number of trucks, which is discussed in previous responses in this section.

Noise pollution 2.2 Noise Sources. 1) Excavating, loading, and hauling aggregate materials at the active mine face for mining above the water table. Mining equipment will include a combination of excavators, loaders, and haul trucks. Not more than two pieces of equipment would be operating at any given time. How can the Developer say that no more than two pieces of equipment will be running at the same time? It's not realistic. Look at other mining operations. So, if they use their dBAs of only two pieces of equipment running. There will be much more noise when five or six pieces are running at the same time.

Staff Response: Staff accepted the developer's analysis of noise as reasonable recognizing that not all equipment will be operated at the same time due to limitations on the number of available equipment operators. There are other variables such as cloud cover, wind speed and direction, and proximity of portable equipment that are factors related to noise levels for any receptor. Noise from stationary operations at the mine site can be monitored and regulated, thus controlled. Staff have recommended in response to a previous comment in this section that a noise monitoring and mitigation plan needs to be developed.

Noise pollution 3.0 Noise regulation. Mining and trucking operations will be conducted only during day time hours (7 am to 10 pm). Will we have a say on their hours of operation?"

Staff Response: The hours of operation are established with the IUP which is a public process with input from the Township, staff and Planning Commission and includes a public hearing to receive comments from interested parties.

Louis Pearson

"On pg 28, Odor, Noise; the operations will of course have an objectionable odor, which will be hard to regulate and enforce annoyance issues. This means it will not be able to be addressed very well after the mining starts. It will be a continual irresolvable problem. County staff hasn't found other jurisdictions have received odor complaints for asphalt plants. Again, the Minnesota River Valley has the tendency for air inversions that keep the dust and pollution trapped near ground surface. I was in the neighborhood when they were testing noise levels from the over the road trucks. I can tell you it was not done in a "reality" setting. The testing truck was not loaded, the truck was a SM Hentges truck with a new muffler (the trucks that will be used in this project will be independently owned and operated, so likely weak on maintenance, like mufflers), and the driver was very gently using the gas pedal to keep the engine from making noise. Can you say "Skewed Data." I like to call this example "Cheating", and is typical of the developer, which I have explained in detail, in several particulars concerning this EAW, and typical business practice examples exposed. Also the developer wants to run the

asphalt plant at night; noise, and odor problems will be horrific just when you are having outdoor activities with family and friends in the summer. Just leave the windows open to get some fresh air? I don't think so. Same goes for the noise pollution, which is slightly admitted to on pages 31 & 32. However, on pg. 33 the EAW's opinion is that noise is not enforceable by state law (exempt roads=all paved roads), it would be a county, issue (and Jordan?) This is impunity pure and simple, violating resident's peace and personal space with impunity. No thank-you."

Staff Response: Staff wish to assure the commenter that we take all comments seriously and have attempted to respond from the perspective that we are employed by the County to protect the environment. That being said, there are environmental impacts for which established regulations exist and some which can only be addressed through special conditions attached to the permit being considered. Noise from stationary sources can be regulated by the State with assistance from the County. Noise from trucks traveling on exempt roads can be regulated through reasonable conditions imposed on the permit and thus enforced by the County's Code Enforcement Officer. Odor complaints are best addressed by considering the appropriateness of a land use being considered that would present such concerns with the existing surrounding land uses. The City's sewage treatment operation is just a half mile south of the proposed site and presents existing odor concerns at least seasonally for residents in this area. The proposed asphalt plant would operate for a maximum of 240 hour per year, a very limited time unless extended through a permit amendment, subject to a public hearing. Asphalt plants are permitted annually so if neighbors experience significant problems the first year of operation they could express their concerns so that staff would have grounds to negotiate mitigative measures with the mine operator before the asphalt plant was approved in subsequent years. Obviously, there is a need for effective communications between the affected residents and the governmental entities responsible for protecting them. Staff would like to see detailed mitigation plans prepared for truck related noise, site related noise, odor and dust prior to consideration of an application for the IUP.

25. Nearby Resources.

City of Jordan

"Archaeology - The Phase 1 archaeological survey, conducted by Blondo Archaeological Services, is inconsistent with typical methodology.

There are no letters of concurrence from the State Historic Preservation Office (SHPO) or Office of the State Archaeologist (OSA). The only letter from the SHPO in the EAW was stating there were no known archaeological/historical sites recorded. However, Blondo did indicate there was a large site north of the project location and historic sites to the south. In fact, the north site is extremely old and has the potential for a buried cultural horizon.

Both the SHPO and OSA are on the Environmental Quality Board's (EQB) reviewing list for EAW's. Please confirm that the report has been sent to SHPO or OSA for review and concurrence.

Staff Response: Staff have advised the developer to obtain an updated response from SHPO and OSA prior to submittal of their IUP application.

Designated Parks, Recreation Areas or Trails - Holzer Park, which is nearby the proposed mine, was essentially ignored by EAW. How does Jordan Aggregates propose to prevent or mitigate negative impacts, including noise, odors, visual, traffic, etc. to this popular City park?"

Staff Response: Staff did not believe that impacts from the gravel mining operation would present a significant concern for Holzer Park considering it is adjacent to the City's sewage treatment plant and separated by a major railroad from Valley View Drive. However, further discussion about how Holzer Park is used by the community with specific concerns relative to the mining operation that might interfere with its use could be presented by the City during the IUP process.

Pete and Deb Ewals

“Please provide supporting data on how Louisville Swamp will or will not be affected including water flows, and combination of air inversions with odor and dust.”

Metropolitan Council

“The project site is within 0.5 mile of the Refuge. The document indicates that the Refuge will not be affected by the proposed mining operation. The Council's 2030 Regional Parks Policy Plan identifies the Spring Lake Regional Trail Search Corridor in the general area of the project site. The proposed regional trail will connect the planned Spring Lake Regional Park to proposed regional trails in Jordan. Scott County will be determining the regional trail alignment through a future planning process.”

Staff Response: The location of a regional trail along this study corridor has not been defined. In the absence of an adopted trail plan it is impossible to address this concern except to note as areas develop in the absence of trail plans options that might have been considered for a trail may be eliminated or compromised.

26. Visual Impacts.

Minnesota Department of Natural Resources

“Item 26 Visual Impacts: As read, the proposer would be required to place a screening barrier along property lines that will have to meet the County Zoning Ordinance standards. The County Zoning Ordinance requires a greenbelt planting strip of evergreen and/or deciduous trees. The planting plan should consider the inclusion of a condition that requires monitoring and/or maintenance of these plantings to ensure viability.

Staff Response: Staff acknowledge that a detailed screening plan has not been provided to the County by the proposer. The type of screening and a detailed maintenance plan should be prepared for consideration prior to consideration of an IUP. Considering that screening from HWY 169 will likely be an issue and the proposed project would eliminate options for plantings outside of the floodplain, a screening plan would need to be reviewed by the DNR.

The proposed mine is anticipated to operate for a period of 25 years. The EAW should include the hours of operation and the types of operations permitted during those hours, days of operation and what times of the year the site will be in operation. This information is valuable when assessing the potential for impact to nearby resources.”

Staff Response: Staff agree that more details on the progression of the mine operation and the hours of operation should be provided for consideration during the IUP process.

City of Jordan

“We are concerned about the visual impact of the final grading plan. The proposal shows the building sites graded uniformly over a large area which we believe will look too "engineered." We recommend a grading plan with undulating hills which will better-match the surrounding landscape and provide various kinds of wildlife habitat. We also recommend incorporating the grading of the stormwater infiltration basin in the undulating hills, so it blends in and becomes a beautifying site feature, not just a "hole". The "natural" shape of the proposed pond is good, but we recommend different depths in the pond to provide for varying kinds of habitat for aquatic plants and animals. As mentioned under comment 11, the ultimate goal should be to provide "as good or better" habitat in the reclaimed condition.

Staff Response: In the absence of detailed land use plans for this area it was difficult for the developer to anticipate what type of end plan might be acceptable. Staff recommend that the City of Jordan, Sand Creek Township and Scott County consider an orderly annexation agreement for this area if the City has an interest in influencing what the end use plan might look like. The scope of that process falls outside of the scope of an environmental review process. However, staff acknowledge that the end use plan appears to reduce the options and perhaps affect the economic viability for future development. This impact could be analyzed further.

The EAW states that a buffer area will be planted with evergreen trees and/or deciduous trees and plants. It is recommended that deciduous trees, shrubs and plants that are native to this area be chosen, in order to provide wildlife habitat and food, and to better blend in with the surrounding Minnesota River valley. A good source for appropriate native plants may be to try to match some of the plants found at the Louisville Swamp Wildlife Refuge nearby. Please consult with the Minnesota Department of Natural Resources for appropriate planting selections.

Staff Response: Staff acknowledge that a more detailed plan must be prepared for plantings to achieve a visual screen around the site. This plan should be reviewed by appropriate regulatory agencies prior to submittal for consideration of an IUP.

This item did not address visual impacts from the asphalt and concrete plants, including the plume from the asphalt plant.”

Staff Response: Staff agree that the EAW did not address visual impacts of dust or emissions from an asphalt plant however, these issues are normally addressed as part of the facilities air emissions permit from the MPCA. Visible emissions are not allowed. If necessary, air management equipment would be required by the MPCA to prevent visible emissions from a crusher or from an asphalt plant. Dust control on the site would also be required to prevent plumes of dust from emanating from the mine operations. The details of how they would address air quality issues would be addressed by their air quality permit and could also be addressed in by conditions on the IUP.

Sand Creek Township

“Screening or other mitigation strategies

As commented above, and as proposed in the EAW, screening of the mining operations or mitigation of the nuisances will not adequately provide sufficient control or management of the mine throughout the mining operation including guarantees. Beyond a listing of existing plant material, or listing proposed plant material to be used generally during the process of reclamation, a plan is vital. A specific plan that designs a phase by phase planting scheme that is effective and appropriate for the process of reclamation and serves as a landmark example of a reclaimed gravel mine.”

Staff Response: Staff agree that a detailed screening plan must be prepared subject to approval by several regulatory units of government, including the DNR, Scott County, Sand Creek, the City of Jordan and possibly the MN DOT.

27. Compatibility with Plans and Land Use Regulations.

City of Jordan

“The City is concerned with the proposed loss of 8.8 acres of wooded forest. Although the area is not currently in Jordan's 2030 planning area, this could change depending on development pressures in the area and requests for municipal services by Jordan Aggregates (zoned Commercial reserve by County).

The developer has also suggested that they may be requesting municipal services in the future. A proactive cooperative approach is needed with the County, the Township, and the City to address the possibility of City Comprehensive Plan Amendments and related annexations.

Only 2 lots are proposed in the reclamation plan. This is not consistent with Scott County's 2030 plan for commercial zoning. The low density, if the area becomes part of the City, is also a concern.”

Staff Response: Staff agree that the proposed end use plan presents some issues for future development. The most critical of the issues noted by the City in this section appears to staff to be the issue of providing potable water to the wells in the area that are believed to be at risk from the proposed mining operations. The developer was asked by staff to provide a detailed monitoring and mitigation plan to address the mutually acknowledged likelihood of ground water contamination that would threaten adjacent non-community public water supply wells and private wells. The developer prepared a generic monitoring plan subject to further review and approval but only presented four conceptual options for consideration as mitigation. Staff acknowledge that a detailed and funded mitigation plan should be developed to enable an informed decision before permitting this project. See Staff Recommendations at the end of this document.

Sand Creek Township

“Land Use - Comp Plan - Ordinances - Coordinated effort with adjacent authorities

Unfortunately, inadequate, collaborative and comprehensive land planning will not allow this or any other proposal to be methodically, seriously reviewed and considered. Consideration of the proposed mine suffers from being located in a district which Scott County has identified as zoned 'Urban Expansion Reserve'. In practice the area is like a 'planning district desert' with no forward looking guidance during the period when, as anticipated, it will be annexed by the City of Jordan. Any collaboration between the City and the County has resulted in a 'hands-off' planning deferring to the other authority with little concern for the immediate. Any and all impromptu land uses that are potentially inconsistent with the existing land use are thought of as an opportunity to make a change, not necessarily a change for the good, but a change driven most often by special interest, convenience and money, not comprehensively.

Staff Response: Staff agree as noted in previous comments on the issue of land use compatibility that consideration of uses in areas likely to be annexed by an adjacent city are best done through an orderly annexation agreement. In the absence of that, the County's land use designations for urban expansion reserve districts limits development to prevent premature development from occurring that may obstruct or limit future orderly development. Interim uses like mining are allowed in these

districts only when it can be demonstrated that the end use plans would not obstruct future development from occurring when the city is ready to expand into these areas. The proposed mining operation will remove over 8 acres of developable land above the 100 year floodplain and may limit options for interim development by destroying most of the suitable locations for on-site sewage treatment. In addition, it may require premature extension of municipal water service to accommodate those public water supply wells that are acknowledge to be at risk of contamination from the open mine pit or might involve provision of an alternative water supply that could complicate the economics of bringing municipal services into this area in the future. That issue, which is related to land use compatibility is further discussed in Item 19. See Staff Recommendations at the end of this document.

Hiding behind a genuine but naive 'Comprehensive Guide Plan' for Scott County are 'Policies' seen as a 'vision' but in reality are a unfortunate way of deferring a 'vision' to a developer with a mere check list of compliance with the policy and no vision (as in to see and understand) that is comprehensive.

Adding to the confusion is the fact that Sand Creek Township and the City of Jordan do not have an 'Orderly Annexation Agreement'. Incidentally, we are the only Township and City in Scott County without such an agreement. As a result, considering this EAW for a proposed gravel mining operation does not have the benefit of collaboration and cooperation, even with Scott County, to comprehensively evaluate the proposal.”

Staff Response: While Jordan and Sand Creek Township are not the only city and township without an orderly annexation agreement, Staff agree that an orderly annexation agreement should be pursued and might have helped resolve the issues identified in this EAW. However, environmental review preparations like an EAW are able to reveal issues that should be considered prior to planning for future development of an area.

Pete and Deb Ewals

“End Use Plan. (pages 8-9)

Scott County’s Comprehensive plan identifies the site as Commercial Reserve District. The end use is inconsistent with Scott County’s 2030 plan. Proposer is planning two residential lots. Very little land will be left to build on. This land is only 400 ft from the city limits. Removing 36 acres that close to the city limits and leaving very little, if any commercial land to develop in a commercial corridor is very short-sighted. This is a forever project. Leaving the City of Jordan with a legacy of a diminished tax base in the future. This also goes against the Met Council Plan of containing urban sprawl.

We have 98 acres of land of that 73 acres are currently in crop production. 74 acres will be water when finished.”

Staff Response: The end use plan is consistent with the Comprehensive Plan. The commercial reserve area is intended to preserve land at very low density (one unit per 40 acres) until commercial or industrial uses are permitted with urban services.

28. Impact on Infrastructure and Public Services.

City of Jordan

“Jordan Aggregates proposes to extend municipal water to those nearby residents whose wells may be impacted by groundwater contamination from the mine. These residents are not currently within City limits, and therefore

not within City jurisdiction. What are the costs associated with extending the water main to these residents, and ensuring that the City of Jordan has an adequate supply of water to include these residents? What were the assumptions used to estimate these costs? How does Jordan Aggregates propose to cover these costs?

No in-depth evaluation of how this contamination will impact the City of Jordan's drinking water was included.

All municipal infrastructure impacts should be evaluated in more detail to find alternatives with the greatest possible community support, and to confirm costs and define responsibility of the developer. The City of Jordan should be part of this negotiation process. The process should also include opportunities for public involvement. These concerns would also apply to the infrastructure of Sand Creek Township, Scott County, and the State of Minnesota.”

Staff Response: Staff agree. The concern about extension of municipal water service from Jordan or an alternative to provide a public water supply from outside of the area identified as being at risk from contamination from the mine needs further analysis. The level of that analysis will involve numerous governmental entities. Staff recommend that this analysis be completed before this issue is considered for an IUP because the EAW was inadequate in addressing how this anticipated environmental impact could be mitigated. See Staff Recommendations at the end of this document.

29. Cumulative Impacts.

Sand Creek Township

“Summary-The Cumulative Impact.

The property is located in an extremely tight developable land area with surrounding existing limitations. Due to the available land, wetlands, Sand Creek, Minnesota River, other in-place land uses and other infrastructure systems such as roads, railroad, utilities, aeration ponds, etc. as well as the probable nuisances created by the mine and it's operation, the potential for damaging effects to the ground water, transportation systems, infrastructure and the nearby existing residential community is critical and requires an in-depth examination of the proposed gravel mine and its operation. These potentially severe and critical problems impacting the area surrounding the proposed mine can be addressed more successfully and completely by the EIS process.”

Staff Response: See Staff Recommendations at the end of this document.

Kathy Lopic

“CUMULATIVE IMPACT Number 29 of the EAW is referring to noise, dust, odor and traffic. But I am thinking of additional pollution being added to Sand Creek and ultimately ending up in the pit. In Jordan a funeral home is intending to start a Crematory operation. Because it sits on the banks of Sand Creek and Jordan has air inversion, it is very probable that the ambient mercury from the burning of amalgam dental fillings will be added to Sand Creek's pollution. There may be other businesses farther up Sand Creek that come along or spills that will have a cumulative impact on the ground waters.”

Staff Response: Staff do not agree that mercury releases from a crematorium would present a significant additional threat related to the proposed mining operation. However, staff acknowledge that during flood conditions after the mined out pond is created and flooded any soluble contaminants being carried by Sand Creek flood waters will present concerns for the wells which have been demonstrated to be at risk.

Jim Fink

“Minnesota Rule part 4410.1700, subpart 7, item B requires that the RGU consider the “cumulative potential effects of related or anticipated future projects” when determining the need for an environmental impact statement.

These projects are on the shores of Sand Creek, an impaired waterway and a losing creek. Pollution travels at the same rate as water and will find its way into drinking wells within one year.

Section 30 of Mining Operation EAW addresses other potential environmental impacts.

As noted in the Citizens Request for an EAW regarding the Ballard-Sunder proposed Crematory many known and unknown risks exist. The Jordan valley is subject to regular air inversions and the toxic emissions including heavy metals will cause air, land and water pollution. The residential area of the Jordan Valley is an inappropriate location for a high temperature incinerator and the annual flooding of the site of the proposed mining operation, including asphalt and concrete production, present significant risks to the environment. Property owners and the City of Jordan will experience impaired air, water and land quality as a result of either operation.”

Staff Response: Staff agree that “cumulative potential effects of related or anticipated future projects” must be considered. Preparation of the EAW was helpful in identifying some of these issues. A significant issue is that the project site area does not have a plan for development, but is being held in a zoning classification intended to preserve future options. Therefore it is difficult to predict what cumulative impacts might be of concern. Additionally, there are no air quality base studies in the Jordan area that staff are aware of to use to evaluate the health implications associated with incremental additional sources of potential air emission sources. However, staff after consulting with the MPCA’s Air Quality permitting, modeling and testing staff do not believe that the proposed project will contribute significant amounts of pollutants to the air. The asphalt plant would only be permitted to operate for 240 hours per year without additional authorization and operation could be restricted by conditions to an IUP to limit emissions from the asphalt plant during periods when the metropolitan area is under an air quality index alert.

Pete and Deb Ewals

“This project proposes to leave a high susceptibility area in a much more compromised state forever. This project may need to be considered a cumulative impact project in conjunction with every current and future project now and in the future which is upstream along Sand Creek and has potential for air, water or soil contaminants to access Sand Creek.

Staff Response: Land use planning decisions are increasingly taking into consideration the environmental impacts associated with surface and ground water. Air quality concerns, though not currently an issue being considered routinely in Minnesota relative to land development planning is increasingly being recognized as an important factor in other places. However, consideration of cumulative potential effects as part of an environmental review project should in the opinion of staff consider the relevancy of the incremental increase of a given impact from the proposed project in relation to existing or potential inevitable similar impacts in the subject area. In the case of air emissions, the relevancy of the incremental increase from an asphalt plant that operates up to 240 hours per year and up to 220 trucks per day associated with this project is in the opinion of staff insignificant enough to consider as a factor warranting costly study relative to air emissions in the area. However, the impact from the removal of what protective soils currently exist in an area already highly susceptible to ground water contamination and in the process changing the

topography to allow for flooding and direct inundation of flood waters deep into the aquifer through a 120 foot deep excavation into the aquifer a significant impact on a relatively small area – the capture area for impacted wells, which currently enjoy safe reliable ground water. See Staff Recommendations at the end of this document.

Please explain how the future cumulative impacts of future projects upstream along Sand Creek will be considered in conjunction with the high susceptibility for ground water contamination and aquifer contamination with this project. What will be the method to assist future project decisions in considering the cumulative impact with the permanent condition of vulnerable drinking water created by this project?

Staff Response: *Staff have assumed in our responses related to the quality of Sand Creek flood waters which would occasionally flood into the excavated pond that the flood waters will present a significant risk of introducing contamination directly into the aquifer and potentially adversely impacting affected wells. Therefore, staff see no point in trying to determine the potential for cumulative adverse impacts to the quality of the water in Sand Creek during flood events.*

There is currently a project for a Crematorium the City of Jordan being reviewed by the Environmental Quality Board system with the Minnesota Department of Health as the which needs to be considered for cumulative impact with this project. Please reference <http://www.ejnet.org/crematoria/reindl.pdf> and <http://www.ejnet.org/crematoria/>.”

Staff Response: *Staff disagree as noted above, that the significance of additional air quality impacts from the proposed mining activity warrant consideration of the cumulative impacts on air quality relative to the proposed crematorium. The issue with the crematorium is mercury and mercury emissions have not been associated with gravel mining or asphalt plant operation.*

30. Other Potential Environmental Impacts.

City of Jordan

“Issues associated with the asphalt and concrete plants are not adequately addressed. Please provide detail about how negative impacts caused by the asphalt and concrete plants will be prevented or mitigated.”

Staff Response: *Staff have provided responses throughout this document related to specific suggested impacts from the proposed asphalt and concrete plants and do not know of any other impacts needing to be addressed.*

31. Summary of Issues

City of Jordan

“The following is a summary of the categories of environmental impacts which still have significant unanswered questions:

- 1) asphalt and concrete plants.
- 2) quality of life issues for area neighborhoods.
- 3) quantity and quality of site surface waters, including Sand Creek.
- 4) quantity and quality of ground water and impacts on area wells.
- 5) thorough analysis of haul route alternatives involving City of Jordan and affected

public. The City desires additional alternatives be evaluated.

- 6) capital costs and maintenance costs associated with increased truck traffic on City streets.
- 7) capital costs and maintenance costs associated with unanticipated requests for municipal water service and wastewater collection and treatment.
- 8) incompatibility of proposed land use.
- 9) wildlife impacts, including fish in Sand Creek.
- 10) archaeology.”

Staff Response: Responses to the specific items noted by the City of Jordan are:

asphalt and concrete plants; Can be addressed through MPCA permits and the IUP.

quality of life issues for area neighborhoods; This is not an EAW issue but can be addressed through the IUP.

quantity and quality of site surface waters, including Sand Creek; Staff do not believe that the quantity of surface waters is an issue.

quantity and quality of ground water and impacts on area wells; Staff do not believe, based on modeling provided by Barr Engineering that quantity of ground water is an issue, but do acknowledge that quality impacts to some wells is a significant issue needing further analysis and a detailed mitigation plan.

thorough analysis of haul route alternatives involving City of Jordan and affected public. The City desires additional alternatives be evaluated. Staff acknowledge that there are issues noted by the local road authorities related to the proposed haul routes that must be resolved before the IUP can be considered.

capital costs and maintenance costs associated with increased truck traffic on City streets; Staff acknowledge that there are issues noted by the local road authorities related to capital and maintenance costs that must be resolved before the IUP can be considered.

capital costs and maintenance costs associated with unanticipated requests for municipal water service and wastewater collection and treatment; Staff acknowledge this is a significant issue that needs further technical analysis and will involve multiple regulatory agencies.

incompatibility of proposed land use; Staff acknowledge there are questions about the compatibility of the proposed use in this area. However, we believe that in the absence of detailed land use plans the Scott County Planning Commission and County Board can address these issues through the IUP process.

wildlife impacts, including fish in Sand Creek; Staff note that there were no comments from the U.S. Fish and Wildlife Service or Department of Natural Resources in this regard and we do not anticipate any significant adverse impacts on area wildlife as a result of this project other than dislocation of habitat to some extent.

archaeology; Staff believe that archaeological issues have been adequately addressed but will recommend that should archaeological significant materials be discovered during mining operations that the Minnesota Historical Society be so advised.

**FINDINGS OF FACT AND CONCLUSIONS
FOR
THE ENVIRONMENTAL ASSESSMENT WORKSHEET
FOR
JORDAN AGGREGATES PROPOSED MINING OPERATION
SAND CREEK TOWNSHIP, SCOTT COUNTY**

In consideration of the comments received and reviewed, and subsequent analytical study provided by the County's consultant, Barr Engineering, staff recommends the following Findings of Fact and Conclusion:

A. The type, extent, and reversibility of effects:

The Developer has proposed to develop a sand and gravel mine on 98 acres within portions of the southwest quarter of Section 8 and the northwest quarter of Section 17, Township 114 North, Range 23 West. Of this area, 84.7 acres will be mined and the balance will be perimeter buffer space. The mining operations include operation of a temporary asphalt plant and portable concrete mixing plant with receipt of waste concrete and asphalt to be crushed and recycled. The mine is proposed to extend approximately 120 feet below the water table, which serves as a local aquifer for several private and non-community public water supply wells in the vicinity.

Numerous comments were received that questioned whether or not an adequate analysis was made in the EAW of the type and extent of potential effects. Staff believe that the EAW was inadequate in this regard in several areas. Staff believe that the following aspects require additional analysis:

Impacts identified through the EAW for which further analysis or details on mitigation are recommended by Staff before proceeding to the IUP process:

Issues which could be addressed by the developer prior to submittal of an IUP:

- Address how noise impacts from trucks can be kept below the level that would violate the state's noise rules as if they were applicable to the subject roads.
- Prepare appropriate agreements with the City of Jordan and Sand Creek Township to address how costs for anticipated road improvements and road maintenance related to the increased truck traffic related to this facility will be addressed.
- Submit noise modeling for the specific pieces of equipment proposed to be operated on the site.
- In consideration of comments from the MDH propose how imported waste concrete and asphalt will be managed on site to protect ground water.
- Submit a proposed plan to adequately evaluate the import of potentially contaminated reclamation soil with sufficient criteria and mechanisms open to review by the County to ensure proper monitoring of the quality of import soil.
- The developer should meet with the City of Jordan, Sand Creek Township and Scott County to reconsider their end use plan if needed to be consistent with the visions for future land use by these controlling units of government.

Issues which Staff believe fall into the scope of an EIS because of the need to collect additional complex data and involve review by numerous regulatory bodies:

- Further analysis of the impacts to local aquifers and preparation of a detailed mitigation plan for the provision of water supply for identified potentially impacted wells.
- Analysis of the impacts to Sand Creek and impacted wetlands resulting from the construction of an adjacent deep pond in the floodplain. Impacts noted in the EAW comments included erosion of the upgradient side wall of the pond into Sand Creek, impacts to area wetlands and potential risk of rechannelization of Sand Creek.

B. The cumulative potential effects of related or anticipated future projects:

The proposed mining operation will require provision of public water supply to several nearby private and at least one public well that have been modeled to be impacted by the mining operation. It was noted in the EAW that the developer had agreed to fund provision of an acceptable public water supply to those wells which were demonstrated through modeling to be impacted. However, the details of this proposed mitigation were not presented and will need to be established. The provision of public water supply to this area could, depending on the details have additional positive or negative impacts for the future development of this area.

The proposed mining operation will contribute emissions affecting local air quality, however, staff have reviewed a recent EAW prepared by the MPCA as noted in the Response to Comments and have concluded that the contributions of air pollutants from this mining operation will not be significant.

The proposed mining operation will contribute to odor related emissions in this area, but because the asphalt plant, the primary source of potential odor problems is proposed to operate for only 240 hours per year, staff suggest that this is not a significant additional concern for odors in this area, especially in consideration of the proximity to the City’s sewage treatment plant.

C. The extent to which effects can be mitigated by ongoing public regulatory authorities:

(“provided that the RGU may rely only on mitigation measures that are specific and can reasonably be expected to be effective.”)

- Impacts of traffic on existing highways can be controlled to the extent that MNDOT, the City of Jordan and Sand Creek Township have authority to restrict access permits or impose conditions on required permits such as the IUP.
- Impacts from noise to affected receptors can be controlled from the anticipated fixed sources associated with the mine but to a lesser extent for noise from truck traffic since the travel routes are on exempt roads. Noise as it relates to the number of trucks in a given period of time could be controlled by conditions on the IUP that limit the number of trucks per day as this is directly related to the level of noise.
- Impacts to Sand Creek which will flood into the mine area may be regulated by prohibiting mining when the pond is connected to the creek by either the Minnesota Department of Natural Resources and/or through conditions on the IUP. However impacts such as ice jams from ice released into the creek from the mine pond during flood events may not be easy to address.

- Control of the quality of imported soil used for reclamation may be difficult to monitor.
- Minnesota Department of Health regulations can address contaminated wells to the extent that water quality standards can be enforced, though cost for mitigation would not be addressed.

D. The extent to which effects can be anticipated and controlled as a result of other studies undertaken by public agencies or the project Proposer, or of previous EISs.

None of the anticipated effects are known or anticipated to be controlled by future studies conducted by public agencies or have been addressed in specific applicable terms by previous EISs.

E. It is, therefore, concluded that an Environmental Impact Statement is needed.