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Fehn Companies  
Gary Fehn  
5050 Barthel Ind. Dr  
PO Box 256  
Albertville, MN 55301  
763-497-2428

## Project Narrative for Mahler Aggregate Mine Expansion

The project is an expansion of an existing mining operation initially approved by the City of Hanover under an Interim Use Permit (IUP) issued to Mahler Enterprises, LLC for a 37-acre parcel in 2006. The IUP was originally scheduled to expire on December 31, 2012. The Hanover City Council amended the IUP in 2011, 2018, and 2019 with time extensions. The current IUP will now expire December 31, 2019.

Fehn Companies (or associated entity) is in process of acquiring additional adjacent properties resulting in a combined total property area of 184.9 acres, and proposes to expand the existing gravel mine from 25 acres up to 155 acres. The properties and surrounding lands are known for aggregate resources and surface soils are typically sandy loams. The 130-acre mining expansion area is mostly cropland that has been under agricultural use for decades. The eastern boundary of the property abuts the Crow River. Land adjacent to the Crow River will remain unchanged and includes areas of floodplain, natural vegetation, and wetlands. No mining excavation or stockpiling of materials will occur in the floodplain or shoreland area.

Expansion of the existing aggregate mine will be phased over 15 to 20 years, depending on the demand for aggregate and market conditions. All phases of mining will ultimately cover up to 155 acres. Each of five phases will cover about 25 to 40 acres. The number of phases and mining pace will be determined by market demand for mining materials. Mining will generally be phased from the existing mine to the west and then to the south. Stormwater management basins will be constructed as part of first phase excavation and will be configured to remain in place through all phases and reclamation after mining is complete.

Mining is expected to eventually remove approximately 5.5 million cubic yards of aggregate material over the 15- to 20-year project lifespan. Mining will remove sand and gravel to depths between 20 feet and 26 feet. The bottom of the mine surface will be at least 10 feet above the groundwater level. Stormwater ponds, infiltration basins, and wash ponds may be located lower, but will be at least 3 feet above corresponding groundwater levels. A 345-kV overhead transmission line runs diagonally northwest-southeast through the site. Existing transmission line poles will remain in place with mining excavation sloped around poles to maintain support as allowed by Xcel Energy Company. Slopes at edges of mined areas will be as steep as 3:1, but these slopes will be flattened to 5:1 or flatter during reclamation.

Vehicles will access the mine from 15th Street NE, at the intersection of 15th Street and River Road NE/Lander Avenue NE. Traffic generated by the project include employee passenger

vehicles and trucks hauling earthen material. Haul routes will follow county and state roadways that are collectors and arterials as much as possible. The Traffic Study completed as part of the EAW process concluded that area intersections operate at acceptable Levels of Service under existing and proposed (year 2020) conditions. The project is expected to have minimal impact on the area roadway network.

Aggregate mining will be conducted using front-end loader extraction. Material processing may include screening, crushing, washing, and stockpiling. Crushing and screening equipment will be staged in proximity to the mining activity. Material stockpiles will also be created in proximity to the mining activity. Crushing/screening equipment and material stockpiles will move across the site with excavation operations. Material stockpiles will typically be 30-foot maximum height.

The washing operation will recycle with excavated ponds that will typically be filled with 3 to 4 feet of water pumped from an onsite well. The wash plant will include three ponds: an initial pond to catch fine native soil materials and two secondary ponds for water quality treatment and infiltration. Water from the third pond will be reused in wash operations.

Concrete recycling will occur intermittently, about twice per year during the construction season and is not expected to exceed 50,000 cubic yards of recycled material per year. Portable crushing machinery will be positioned at relatively low elevations in the gravel pit to maximize the vertical distance and buffer from neighboring land uses.

Measures to reduce noise and increase screening from neighbors will include 200-foot setbacks from residential zoned property lines, creation of 10-foot high topsoil berms that will deflect noise and provide a visual screening barrier, and placement of the portable crusher equipment at lower elevations. Topsoil stockpiles and berms will be seeded and stabilized to prevent erosion.

There are no permanent structures existing on the property and none are proposed. Temporary structures will be utilized at the site for storage of equipment and operations activities (ie. scale shack, etc.). All temporary structures will be removed at the time of reclamation. Employee vehicle parking will be located adjacent to the temporary structures.

Reclaimed mined areas will be planted to temporary grassland as part of reclamation. Best Management Practices (BMPs) will be implemented to protect water quality and reduce the potential for soil erosion and sedimentation.

Hours of mining operation are proposed as follows:

Monday through Friday

6:30 am to 7:00 am:

employee arrival

equipment warmup

staging of materials and prepare for loading

7:00 am to 7:00 pm:

excavation and crushing production

loading of materials  
trucking off-site

Saturday

6:30 am to 7:00 am:  
employee arrival  
equipment warmup  
staging of materials and prepare for loading

7:00 am to 2:00 pm  
limited operations to loading and trucking off-site (periodically needed  
due to construction weather delays during the week)  
no crushing, screening, or washing operations

Existing 15<sup>th</sup> Street is in poor condition and needs improvement. The city of Hanover collects an aggregate tax at a rate that equates to \$0.135 per cubic yard (\$0.05/cy Fehn to City; \$0.085/cy Fehn to Wright County to City) of material mined and hauled off-site. City of Hanover Fund #409 Mahler Pit – 15<sup>th</sup> Street Improvement Fund has a collected balance of \$94,832.55. An additional \$15,000 +/- is anticipated to be deposited for 2019 resulting in a fund balance of approximately \$110,000.00.

It is estimated that mine expansion will yield 5.5 million cy resulting in future deposit of \$742,500.00 (5.5M x \$0.135) to 15<sup>th</sup> Street Improvement Fund. Total aggregate tax collected to end of mining operations would then be \$852,500.00 (\$110,000.00 + \$742,500.00).

Improvement of 15th Street between River Road NE/Lander Avenue NE and Wright Co Hwy 19 is proposed as follows:

- Spring or early summer 2020; Fehn Companies undertake reclaim existing bituminous and pave with new 5” depth bituminous pavement (design and costs as approved by city engineer)
- Reclaim/repave estimate \$200,000.00
- City contribute \$100,000.00 from 15<sup>th</sup> Street Improvement Fund
- Fehn Companies contribute \$100,000.00 +/- balance
- City refund aggregate tax collected on annual basis to Fehn Companies until \$100,000.00 construction cost amount is repaid

At end of mining operations, a balance of \$652,500.00 is estimated to be available in the 15<sup>th</sup> Street Improvement Fund for future reconstruction of the road.

Please contact us with any questions. We appreciate your consideration.

Gary Fehn