

J & D QUARRY

Conditional Use Permit Application

ADDENDUM



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DANE COUNTY PLANNING & DEVELOPMENT

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Economic Development*
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April 6, 2023

Tri County Paving
PO Box 394
DeForest, WI 53532

RE: Conditions/Concerns regarding CUP #2584

Dear Mr. Gradel,

The Dane County Zoning and Land Regulation Committee held a public hearing regarding conditional use permit (CUP) #2584 March 28, 2023. At the meeting, the public raised concerns about the proposed non-metallic mineral extraction activity. I have summarized the concerns below.

In order to obtain a conditional use permit, the proposal must meet eight (8) standards as listed under the zoning ordinances. Many times, conditions must be placed on the conditional use permit to address concerns in meeting these eight (8) standards. The standards are listed at the end of this letter.

Please review the topics below and provide your response regarding the concerns. Staff has provided an objective view of each topic. The response to the items will be helpful for the Zoning and Land Regulation Committee in rendering a decision on the conditional use permit.

Hours of Operation

Applicant: Work schedule as per application: 7am to 6pm weekdays, 7am to 4pm on Saturdays.
No operations on Sundays and holidays as defined by county staff.

Blasting schedule: Monday through Friday between the hours of 8am to 2pm.

No schedule provided regarding asphalt/concrete temporary batch plants.

Citizens: No night time operations; 8am to 4pm; M-F only (7am to 6pm).

Staff: It appears that the hours of operation are within the normal hours as suggested in the zoning ordinance. At the public hearing, there was a reference of removing Saturday work. The applicant shall provide an update to the hours of operation. Please note, operational hours will need to accommodate for warmup and maintenance of equipment.

Berms

Applicant: The operation plan shows berms being constructed along Bonetti Road and along the south side of the entrance path. The detail shows 6-foot berms.

Citizens: The public would like to see plantings on the berms especially along Bonetti Road. ROW.

Staff: Berms are beneficial in controlling dust, maintaining storm water on site, and improving the aesthetics to the property. Some quarries in Dane County have planted 4-foot evergreen trees every 100 feet to improve aesthetics. Applicant shall provide additional information on the proposed berms regarding landscaping and maintenance of the berms.

Quarry/Operation Setbacks

Applicant: The application shows a 10-foot setback from property lines.

Citizens: The public expressed concerns regarding this limits of the quarry operation.

Staff: The application does not conform to the minimum conditions as noted in the zoning ordinance. As part of the standard conditions for mineral extraction sites, a 20-foot setback from property lines and a 30-foot setback for town roads are required. The applicant proposes an "undisturbed area" towards the southerly portion but is not clearly defined. The applicant shall provide an updated operations plan showing the limits of land disturbance in accordance with minimum conditions and clearly define the proposed southerly buffer area.

Noise Limitations/Back up Alarms

Applicant: All vehicles will be equipped with MSHA –approved backup alarms and muffler systems. Noise generation is similar to agricultural equipment.

Citizens: The public suggested placing a 75 decibel limit measured 100 feet away from property line. They have also suggested back-up alarms be reduced in some fashion.

Staff: Quarrying activity inherently produces noise due to the operation of crushing machines, end loaders, and the loading of trucks. Noise limits have been set by towns on other quarry operations in the past. A general standard of 75 decibels Dba has been used for quarry operations in the past. The applicant will need to review operational volumes to see if this is an achievable limit and identify a suitable location of equipment within the site to achieve this limit. The applicant shall provide an updated operations plan showing more detail of where equipment will be placed on the site.

Mine Safety and Health Administration (MSHA) mandates that back-up alarms are required for all equipment and vehicles used in surface and sub-surface mines. Beeping alarms are a standard in the industry. MSHA is somewhat vague on the alternative noises that could be used. Operator should incorporate a one way directional of truck equipment to avoid using back up alarms as much as practical.

Review of CUP

Applicant: The application does not state an expiration date. Amount of material on site is estimated to be around a 75-year supply.

Citizens: The public have expressed an annual review by town and county. The operation be limited to the operator and the CUP would expire in 10 years.

Staff: Under the special requirements for non-metallic mineral extraction sites, the town and the county are required to set a time limit based on the quantity of material. It has been common practice to set a time limit on quarry operations to allow the operation to be reviewed after the activity has been in operation. Equipment, stockpiles, internal truck routing, and depth of quarry, all change over time. It may be necessary to evaluate the operation as the operation moves through its phases. In the past, the County has been setting a time limit between 5 and 25 years for mineral extraction CUPs. Given the scale of the operation, staff is suggesting that a time limit of 15 years be placed on the conditional use permit if approved. The applicant shall provide an expiration date for the CUP. If it is beyond 15 years, the applicant shall substantiate reasoning beyond the suggested limit.

Truck Traffic

Applicant: The primary haul route will be south on Bonetti Road to County Hwy DM. Bonetti Road is capable of handling truck traffic. Anticipate 60,000 tons +/- of processed gravel to be extracted per year. The total amount will depend on the construction market and need for gravel.

Citizens: The amount of truck traffic in the neighborhood is too intense for the rural area. Bonetti Road is unsafe for additional truck traffic due to existing design.

Staff: Bonetti Road may have limitations being used as a truck route. Due to width being 18 feet north of the site, the proposed haul route, south on Bonetti Road, appears to be appropriate. As noted in the Staff Report, it appears that the roadway is capable of handling 250 vehicle trips per day. Staff is concerned that the roadway limitation may be exceeded due to the quarry activity and additional temporary plants proposed. Bonetti Road rests on the Dane/Vienna town line. The roadway is regulated and maintained by the Town of Vienna. The applicant shall provide information on Vienna's acceptance of using Bonetti Road for trucking purposes and if any improvement are to be made to the roadway. The applicant shall also provide additional information regarding the anticipated amount of truck traffic per day. At the public hearing, the applicant stated that temporary asphalt/concrete plant were no longer proposed for the site. Please verify in written response.

Tarping of Trucks

Applicant: The application does not address tarping of trucks.

Citizens: The public has requested that all trucks be tarped leaving the site.

Staff: It has been a common practice for many quarry operations to use tarps on hauling vehicles to reduce impacts on other vehicles during transportation of materials off-site. The applicant should consider all materials being tarped as part of the hauling operation when practical. The applicant shall provide additional information regarding the possibility of loads being tarped.

Preblast Survey

Applicant: Survey as per SPS 307 for homes located within 500 feet and notified 24 hours in advance as well as the historical home located at 7801 Dunroven Rd.
Citizens: No blasting allowed.

Staff: Wisconsin Administrative Code SPS 307.40 requires blasters to conduct pre-blast surveys of buildings as determined by distance/intensity ratio as listed under the code. Setting additional requirements appears to be subjective. The site has a very low housing density and the proposed blasting events are noted to be six to eight times a year. Given the infrequent blasting, staff suggests that the standard conditions as listed under the zoning ordinance be used as part of the conditions for the CUP, if approved.

Fencing

Applicant: A fence will be installed along Bonetti Rd and on the south end of the site as shown on plans. A 6 foot tall fence is shown in a detail on the grading plans.

Citizen: The public has requested that an 8-foot minimum chain link fence be used along the northerly portion of the proposed site.

Staff: The application does not conform to the minimum conditions as noted in the zoning ordinance. As part of the standard conditions for mineral extraction sites, a 4-foot minimum fence shall be placed around the entire extraction area. The applicant shall provide an updated operations plan showing proposed fencing in accordance with special requirements.

Pumping of Water/Groundwater Protection

Applicant: No pumping; stormwater will be contained on site and no material will be removed that lies below the natural water table. The sandstone layer will not be disturbed. All operations will be conducted above the water table and there will be no impact on underground water.

Citizen: Concerns regarding draw down of groundwater and wells in the area; no pumping.

Staff: The floor of the quarry is approximately 75 to 90 feet above groundwater. The operator will need to illustrate a specific area on the operations plan to contain and manage the stormwater. Additional details on the location of a holding pond for stormwater will need to be addressed. No stormwater will be allowed to be pumped off-site unless approved by DNR.

High-Capacity Well

Applicant: The application states that a high-capacity well is proposed for the washing of material and concrete production.

Citizens: The public expressed concerns regarding the water table being lowered and existing wells becoming dry.

Staff: It appears that most of the water that will be used for the purposes of removing fine particles as a product of crushing rock. It is common practice to store the extracted water on-site to be reused for washing of aggregate. The water will not be trucked off-site. The

applicant should provide more information on the intent of the well, how the water will be used, anticipated quantity used, and provide details regarding wash areas and location of wash water detention basins.

Property Values

Applicant: Adjacent property owners will feel little to no impact with the proposed mineral extraction. The town designates this area as an Agricultural Preservation Planning area which greatly limits additional housing in the surrounding area.

Citizens: Concerns with negative impacts on property values, study showing lower property values.

Staff: There are five home sites within 1000 feet of the proposed site, four existing houses and one undeveloped residential lot. Applicant should provide information that supports their view showing that the proposed quarry will have little to no impact on property values.

Farmland Preservation Policies

Applicant: The application notes that the project will be divided into two phases. Measures will be made to allow as much land to be row cropped as possible.

Citizens: No comment.

Staff: The proposal is within a Farmland Preservation Area. The reclamation for the site notes that the property will be returned to crop production once the material is extracted anticipated to be completed in 2090. The plan notes that the workable area will be reclaimed as the operation permits. It is suggested that a more detailed plan be developed how the proposed site is being reclaimed in phases to support the policies.

As mentioned above, proposal needs to meet all eight (8) standards in order to obtain a CUP. As you are responding to these concerns, please make sure you take in to account the standards. Please feel free to comment on other items that may have been stated during the public hearing that are not listed in above concerns.

Regards,

Daniel Everson
Assistant Zoning Administrator

ADDENDUM FOR J&D QUARRY APPLICATION

HOURS OF OPERATION

Monday thru Friday 6 am - 5 pm, Saturdays and Sundays Closed. Saturdays will be only for Municipality Projects Township, County & State. The Town of Dane will be notified in advance before any Saturday work. Only maintenance of equipment (no blasting, crushing, trucking, stockpiling ect.) will be allowed after hours. There shall be no operation of any kind on holidays. Holidays are to include New Year's Eve, New Year's Day, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas Eve, Christmas Day.

TEMPORARY CONCRETE/ASPHALT PLANT

We are removing the Temporary Concrete/Asphalt Plant from our Application.

BERMS

The proposed berms will be fine graded, seeded, and mulched. After vegetation growth we will maintain the berms by mowing 3 – 4 times per year for appearance and to prevent noxious weeds from growing on the berms. We will not be installing trees, with our large mowing operations it would be difficult to mow around the trees and keep the aesthetics of our berm looking nice.

QUARRY/OPERATION SETBACKS

We have included an updated operations plan (page 10) showing a 20-foot setback from property lines as a part of the standard conditions for mineral extraction sites. The 30-foot setback for town roads is include as well.

Noise Limitations/Backup Alarms

We would agree to placing a 75-decibel limit measured 100' away from the property lines of 7841 Bonetti Rd. and 7715 Bonetti Rd (the two homesteads closest to the quarry). To help

reduce back up alarm noise we will route truck traffic to one-way routes. However, it is impossible for a loader to not backup when loading trucks with aggregates.

Review of CUP

Staff is suggesting 15 years be placed on the conditional use permit if approved. Tri County Paving is requesting a 20 year CUP based upon the investment cost from opening the proposed quarry. The cost we will incur is reconstructing Viaduct Road and the intersection of Bonetti Road and Viaduct Road, we will excavate and install new 24" wide gravel shoulders on Bonetti Road and Viaduct Road. Including new culvert extension and widening the road at the waterway as per engineer. Opening the quarry, including Earthmoving building berms, erosion control, landscaping, fencing 6', rather than 4', we will asphalt the entire roadway to the bottom of the quarry for dust control. Based upon the estimated amount of material we are producing, It will take 20 years to recuperate the cost to open the proposed quarry.

Truck Traffic

We have included the Town of Vienna Road Maintenance & Bond agreement on page 6. A letter of review and recommendation from the Town of Vienna Engineer on page 7. The upgrade to Bonetti Road will create a 20' wide paved road with 2' shoulders on each side. According to Trans 204.03 Page 5. Town road Standards Table B a 20' Roadway, 2' Shoulder, 24' wide roadway, the Average Daily Traffic is 250 – 400 vehicle trips. Tri County Paving made the recommendation for Truck Traffic to have speed limit of 30 mph on town roads. Tri County Paving will follow the Conditions of the Town of Dane and the Town of Vienna for speed limits to be followed. Bonetti Road is the same width as Hahn Road in the Town of Vienna where we travel on to get aggregate material out of the Ripp Quarry, and safety has never been an issue on Hahn Road. The proposed quarry will be in operation April 15th – December 31st, approximately 178 workdays. If we hauled out 100,000 ton (4,651 loads) in 178 days would average 26 loads per workday. Due to the Location of the Proposed quarry we do not anticipate very much FOB sales. However, the quarry is only 11 minutes from our Asphalt plant. We will not be trucking out of the quarry every day. There is a shortage of Dump trucks in the construction industry so we are limited in when we can haul. During the paving season we will be trucking on days where we are rained out on projects and when we have smaller projects that don't need a lot of trucks. So it is possible that we will haul out 1 or 2 times per week, skip a week, then maybe 2 – 3 times next week. It will vary during the paving season. Most of the trucking will happen between Thanksgiving and December 31st. when the paving season is over and trucks are available.

Tarping of Trucks

We will post a sign stating, "Please Tarp Loads". Most all our trucks have tarps, so we will use them. The problem is that some Municipal trucks do not have tarps along with some small excavation companies. We do not want to turn away local municipal trucks or small companies because they don't have tarps.

Preblast Survey

We will follow the standard conditions as listed under the zoning ordinance.

Fencing

We will be installing a 6' woven wire fence around the entire quarry. This is shown on the addendum operations plan (page 10) and a detail of the fence is on page 9.

Pumping of Water/Ground water protection

No water will be leaving the quarry. The quarry will drain internally. The addendum operations plan (page 10) shows a stormwater collection pond.

High- Capacity Well

The addendum operations plan (page 10) shows the area in the quarry where the well will be located, it also shows the area of the wash plant. We will apply to the DNR for a permit to get a high capacity well. It is a lengthy process; it will take 5-6 months to get the permit approved. The well driller and the DNR do their due diligence to make sure the installation of the well will not harm any existing wells and that the water supply is sufficient to sustain the well. The high capacity well will be used to fill 2 wash ponds. We will use approximately 10,000,000 gallons per year depending on market. Once the ponds are full the water will be reused and recycled between the 2 ponds. We will only add water as it evaporates or as it is absorbed by the limestone.

Property Values

I have provided a local study (page 11) done by Scott L. McWilliams a Certified Appraiser on Property values around the Mile Road quarry in the Town of Windsor and the Homburg quarry in the Town of Rutland. A good source to use to see for yourself how properties around a quarry have been assessed is "Accessdane". If you go on the website, you will see how properties around a quarry have increased in value year to year. The question from the neighbors is, yeah but do they sell and for how much? The Scott L. McWilliams Mile Road Quarry study shows an example of 9 homes, the list price, the sale price and the distance to the quarry, the percentage of the sales price to the list price was 99%. The conclusion to his study was the reviewed sales price per sq.ft.; average days on the market: and the percentage of list price to sales price gave not indication that the proximity to this non-metallic mining operation adversely impacted the sales price or marketing time. Mr. McWilliams stated based upon my review, I find no market supported evidence to support a decrease in market value for the homes in the immediate area of the proposed mining operations.

Farmland Preservation Policies

It is important to the Owners of the land and to Tri County Paving that the land will be farmed during and after reclamation of the J & D quarry. Farming operations will not stop for the Life of the CUP. Phase 1 consists of 23.32 acres and Phase 2 consists of 18.61 acres. All of Phase 2 will be farmed as we start Phase 1 and the remainder of the unopened area of Phase 1 will be farmed. When we open Phase 2, that material will be used to start reclamation of Phase 1. As we open more areas in Phase 2 more areas of Phase 1 will be reclaimed. The most amount of land that will be opened at one time will be approx.: 24 acres.

Chapter Trans 204

EXISTING TOWN ROAD IMPROVEMENT STANDARDS

Trans 204.01 Purpose.
Trans 204.02 Definitions.

Trans 204.03 Town road standards.
Trans 204.04 Exceptions to standards.

Trans 204.01 Purpose. The purpose of this chapter is to establish uniform minimum design standards for the improvement of existing town roads, as required by s. 82.52, Stats.

History: Cr. Register, September, 1992, No. 441, eff. 10-1-92; correction made under s. 13.92 (4) (b) 7., Stats., Register March 2012 No. 675.

Trans 204.02 Definitions. In this chapter:

(1) "Average daily traffic" or "ADT" means the total traffic volume during a stated period divided by the number of days in that stated period; unless otherwise specified, the stated period is one year.

(2) "Bridge rehabilitation" means the preservation or restoration of the structural integrity of an existing bridge as well as work to correct safety defects.

(3) "Bridge replacement" means building a new bridge to replace an existing bridge.

(4) "Design speed" means the maximum safe speed that can be maintained over a specified section of a highway when conditions are so favorable that the design features of the highway govern.

(5) "Improvement" means a town road construction project with a projected design life of at least 10 years.

(6) "Improvement level" means the type of construction improvement. It can range from resurfacing to complete reconstruction of a town road.

(7) "Load posted" means the placement of regulatory signs at a bridge indicating the safe load carrying capacity of the bridge.

(8) "Recondition" means work in addition to resurfacing, and includes pavement widening, shoulder paving, and improvement of an isolated grade, curve, intersection or correction of a sight distance problem to improve safety.

(9) "Reconstruction" means total rebuilding of an existing town road to improve maintainability, safety, geometrics and traffic service.

(10) "Resurfacing" means placing a new surface, exclusive of seal coating, on an existing roadway to provide a better all weather surface, a better riding surface, and to extend or renew the pavement life.

(11) "Roadway" means the portion of a highway, including shoulders, for vehicular use.

(12) "Shoulder" means the portion of a roadway that is contiguous to the traveled way and is used primarily for vehicular stopping in an emergency.

(13) "Traveled way" means the portion of the roadway designed for movement of vehicles exclusive of the shoulders.

(14) "Usable bridge width" means the clear width between curbs or rails, whichever is less.

History: Cr. Register, September, 1992, No. 441, eff. 10-1-92.

Trans 204.03 Town road standards. (1) The minimum design standards for each of the town road improvement levels are as shown in the following tables:

TABLE A—RECONSTRUCTION

TRAFFIC VOLUME			ROADWAY WIDTH DIMENSIONS IN FEET		
Design Class	Current ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway
T1	Under 250	40	20	3	26
T2	250–750	50	22	4	30
T3	Over 750	55	24	6	36

TABLE B—RESURFACING AND RECONDITIONING

TRAFFIC VOLUME			ROADWAY WIDTH DIMENSIONS IN FEET		
Design Class	Current ADT	Design Speed MPH	Traveled Way	Shoulder	Roadway
TR1	Under 250	—	18	2	22
TR2	250 – 400	40	20	2	24
TR3	401 – 750	50	22	2	26
TR4	Over 750	55	22	4	30

Note: Examples of resurfacing and reconditioning improvements which may be appropriate for existing town roads include, but are not limited to, pavement rehabilitation; widening lanes and shoulders; replacing bridge elements to correct structural deficiencies; bridge deck overlays; bridge and culvert replacement; and other related improvements such as minor grading, subgrade work and correction of drainage problems.

(2) The geometry of the town road shall be designed to safely accommodate vehicles traveling at the design speed selected for the road improvement.

(3) The minimum design standards for existing town bridges are as shown in the following table:

TABLE C – EXISTING BRIDGES

CURRENT TRAFFIC VOLUME ADT	USABLE BRIDGE WIDTH
Under 400	Traveled way
400 – 750	Traveled way plus 1 foot each side
Over 750	Traveled way plus 2 feet each side

(4) Bridge replacement, rehabilitation or widening is required where a bridge is either load posted or has a usable width that is less than the traveled way width. Bridge replacement or widening should be evaluated if the usable bridge width is less than the values shown in Table C. If widening of the traveled way is planned as part of the town road improvement, the usable bridge width should be compared to the approaches after they are widened to determine whether or not bridge replacement or widening should be evaluated.

J & D Quarry Road Agreement Between Tri-County Paving and Town of Vienna

Additions: 4/14/23

- Tri-County Paving will excavate the existing shoulder and install new gravel to a width of (Remove: 18 inches to) 24 inches on Bonetti Rd. and Viaduct Rd.. This will help strengthen the roadway.
- Tri-County Paving will trim or remove trees within the right a way of Viaduct Rd. West of Bonetti Rd. to improve the vision. (Addition: As Needed)
- Tri-County Paving will set a speed limit of 30 M.P.H. on all quarry truck traffic. (Addition: On Town Roads)
- Addition: Viaduct Rd. will be reconstructed 100' West of Bonetti Rd. to Dunroven Rd. – Remove asphalt, excavate 24", install aggregates, grade, pave Hot Mix Asphalt to a width of 22', and install 2' foot gravel shoulder.
- Addition: Change intersection at Bonetti Rd. to a 3 way Stop and install Stop Ahead signs.
- Addition: Truck Entrance signs on Bonetti Rd.
- Addition: Survey Right of Way at the intersection of Bonetti Rd. & Viaduct Rd.)

Memorandum

To: Kathy Clark, Town Clerk
Town of Vienna

Date: 5-11-2023

From: Scott Anderson, P.E.

CC:

RE: Bonnetti Roadway Review
Tri County Proposed Non-Metallic Mine

I conducted a site visit on May 4th, 2023 to review the existing Bonnetti road corridor from the intersection of Dunroven Road to the entrance of the proposed non-metallic mine. This distance is approximately 4,000 feet in total length. Representatives from the Town of Vienna public works and Tri County Paving were in attendance.

The existing roadway section is asphalt pavement that is 20' to 22' in width with overgrown 1' wide aggregate shoulders. The topography is rolling with agricultural land on the east side of the road and existing woods on the west side of the road. There are three residential driveways along this stretch of roadway all being on the west side.

After review of the materials for this conditional use permit and talking to the applicant and Town of Vienna public works, I have the following recommendations that should be made to this roadway corridor before the non-metallic mine becomes operational.

The improvements shall include

Bonnetti Roadway

1. To increase safety the shoulders shall be widened. Over excavation of the shoulder along the entire length and widening for a uniform width of 24" shoulders on each side of the roadway. This will increase the minimum full travel width of the roadway to 24' at a minimum and 26' in some other areas. Reditching as necessary to accommodate the shoulder improvements will be necessary.
2. To add 24" of shoulder as mentioned above in bullet point #1, the existing 48" diameter CMP culvert located approximately 1,550' north of the Bonnetti and Viaduct intersection shall be extended on the eastern side. The length to be extended shall be enough to ensure a 24" shoulder and back slope (at a 3:1 slope) down to the existing ditch line. This will entail pushing the ditch out away from the road and regrading the existing culvert entrance in the agricultural field outside of the road right of way. Along the western side

of this culvert crossing, there is about a 45' stretch where it is impracticable to add a 24" shoulder. The existing paved width is already 22' at this location.

Intersection of Bonetti and Viaduct

- Establishing the existing right of way by a licensed land surveyor at the Bonetti and Viaduct intersection. Removal of all shrubs and trees in the right of way at this intersection to improve site visibility. For the intersection, I'd recommend a three way stop or securing a vision triangle easement within the northwest quadrant of the intersection. All trees and shrubs within this vision triangle would be removed for visibility at this intersection. The section of Viaduct approaching the intersection is controlled by the Town of Dane. With that being said, I can only recommend these items, as they would have the final say on this matter.

If you have any other questions, comments, or concerns on this matter, please feel free to reach out to me.

