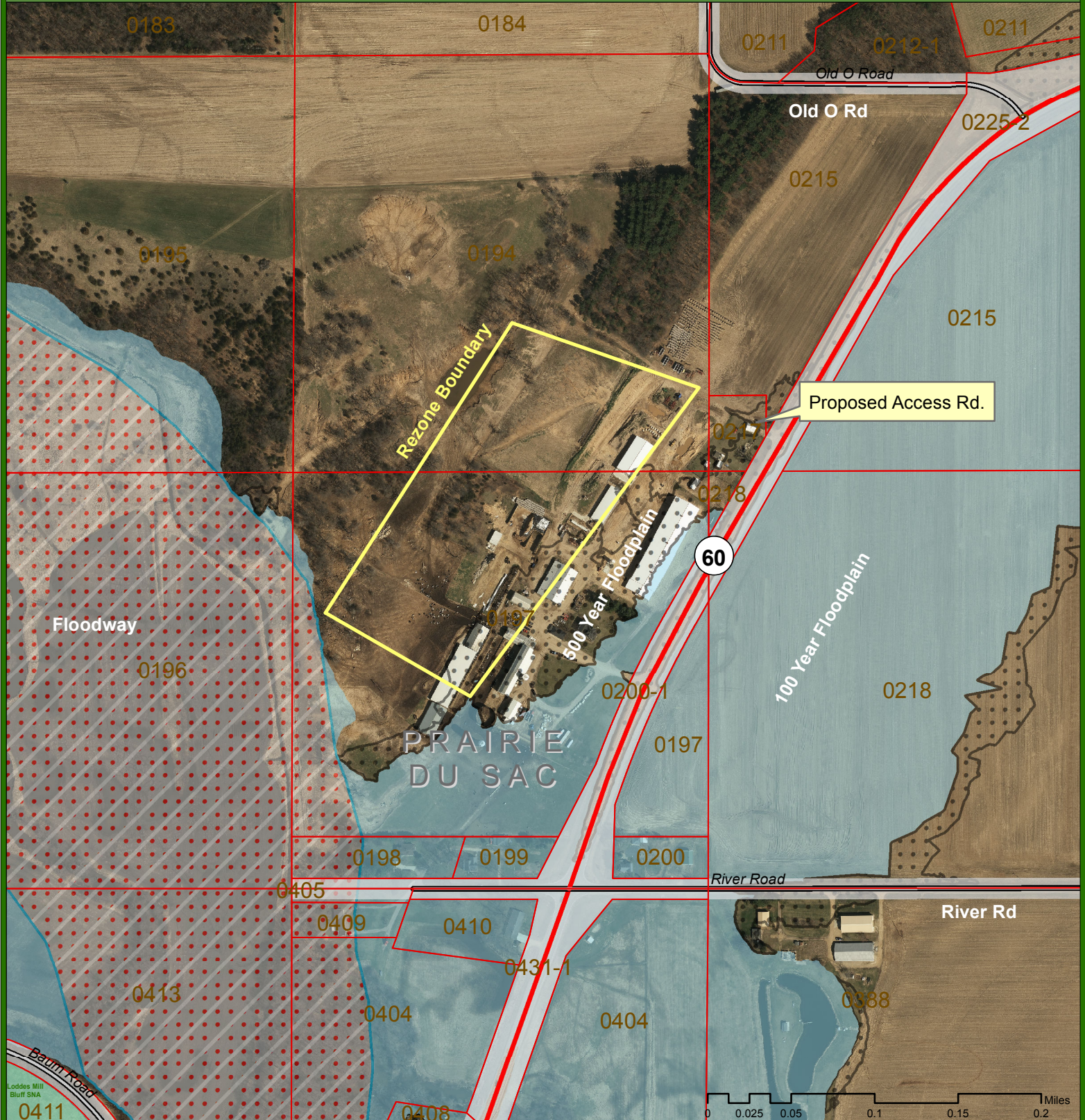


Yahara Materials, Inc, Rezone Petition 12-2017



Legend

- PlatOfSurvey
- TaxParcel
- Road Centerlines Town

FEMA Flood Zones

- <all other values>

FLD_ZONE, FLOODWAY

- 0.2 PCT chance - 500 year
- A, 100 year - No established Elev
- AE, 100 year - Established Elev
- AE, FLOODWAY
- X, Above 0.2 PCT Chance



FOR INFORMATIONAL PURPOSES ONLY
Sauk County does not attest to the accuracy
of the data contained herein and makes no
warranty with respect to its correctness or validity.
Data contained in this map is limited by the method
and accuracy of its collection.

May 3, 2017

TO THE MEMBERS OF THE SAUK COUNTY CONSERVATION, PLANNING, AND ZONING COMMITTEE:

Dennis Polivka, E3681 County Road JJ, Spring Green, WI 53588
Eric Peterson, S9801 Exchange Road, Prairie du Sac, WI 53578
Judy Ashford, S6611 Bluff Road, Merrimac, WI 53561
John Dietz, S4821 Golf Course Road, Reedsburg, WI 53559
Richard Flint, E7189 Eagle Ridge Court, Reedsburg, WI 53959
Chuck Spencer, S5075 Lovers Lane, Baraboo, WI 53913

Hearing of a Rezoning Petition:

Petition #12-2017 Rezone. A petition to consider a rezone from an Exclusive Agriculture to an Agriculture zoning district pursuant to s.7.150 Ordinance Amendments of the Sauk County Zoning Ordinance. Said rezone is located in the Town of Prairie du Sac, Sauk County, Wisconsin.

Please take note:

A hearing on the above Petition has been scheduled for TUESDAY, May 23rd, 2017 at 9:15 a.m. in the COUNTY BOARD ROOM.

A copy of the Notice of Hearing is enclosed.

Sincerely,



Lisa M. Wilson, AICP

Director

Sauk County Conservation, Planning, & Zoning

Copy (with enclosure) to:

Sauk County Clerk, Sauk County West Square Building
Richard Nolden, Prairie du Sac Town Clerk, E10098 Highway PF, Prairie du Sac, WI 53578 (certified mail)
Henry Elsing, 829 21st St, Prairie du Sac, WI 53578 (certified mail)
Adjacent property owners



Staff Report
Conservation, Planning, and Zoning Committee
Yahara Materials, Inc., Applicant
Elsing Farms LLC, Property Owner
Rezoning Petition No. 12-2017

Hearing Date: May 23, 2017

Applicant:

Yahara Materials, Inc.

Staff:

Lisa Wilson, AICP

355-4830

lwilson@co.sauk.wi.us

Current Zone:

Exclusive Agriculture

Proposed Zone:

Agriculture

Relevant Plans:

Town of Prairie du Sac Comprehensive

Applicable Zoning Regulations:

7.150 Ordinance Amendments

7.038(1) Nonmetallic mining site, one acre or greater

Notification:

(by U.S. mail, except newspaper)

May 3, 2017: Newspaper

May 3, 2017: CPZ Committee

May 3, 2017: Town Clerk

May 3, 2017: Adjacent Landowners

Town Board Recommendation:

Scheduled for the May 9th, 2017 Town Board Meeting

Exhibits:

- A. Statement of Purpose
- B. Operational Plan
- C. Erosion Control & Storm water Mgmt. Plan
- D. Potential Fugitive Emission Sources
- E. Aggregate Processing Plant Sound Level Assessment
- F. Various Maps/Survey

Request

Yahara Materials Inc., hereafter referred to as 'applicant,' are requesting a rezone for 14.96 acres of land from exclusive agriculture to agriculture for the purpose of obtaining a special exemption permit for mineral extraction to operate a sand pit. The area proposed for excavation and for use as bedding sand for the local dairy industry is located within a sand hill on the legally described parcel. Upon completion of the sand operation, the applicant will grade the disturbed area for animal rearing and crop storage. Section 7.038(1) Non-metallic mining site, one acre or greater is permitted by issuance of a special exception within the Agricultural District.

The applicant has submitted background information regarding the proposed operation, which has been included as attachments. Pending approval of the rezoning, the applicant will need to obtain a special exception permit through the Board of Adjustment.

Legal Description of Area

Being a Plat of a Survey of a

Parcel of Land Lying in Part of the Southeast One-Quarter of the Southeast One-Quarter and in Part of the Northeast One-Quarter of the Southeast One-Quarter all in Section 8, Township 9 North, Range 6 East, Town of Prairie du Sac, Sauk County, Wisconsin.

Commencing at the Southeast Corner of Section 8; Thence North 00°04'17" East, 1586.35 Feet Along the East Line of the Southeast One-Quarter; Thence North 89°55'43" West, 31.87 Feet to the Point of Beginning; Thence North 70°50'33" West, 626.15 Feet; Thence South 32°44'12" West, 1091.71 Feet; Thence South 60°02'27" East, 529.12 Feet; Thence North 36°31'01" East, 1215.73 Feet to the Point of Beginning.

Parcel contains approximately 651,760 square feet or 14.96 acres.

Town of Prairie du Sac Recommendation and Comprehensive Plan

The Town of Prairie du Sac reviewed the rezone request at their regular meeting held on May 9, 2017. The Town did approve the rezone request as well as provided clarification on how this relates to their Comprehensive Plan. While the Town's Comprehensive Plan still only allows for one non-metallic mineral extraction operation of more than 24 months or more than 15 acres; an exception is noted. This exception allows for sand to be extracted for agriculture use on the farm or some other farm.

While this would be the second non-metallic mineral extraction operation in the Town of Prairie du Sac, the operation plan notes that the pit will produce sand primarily for bedding dairy cattle in the local area. This statement would appear to be consistent with their Comprehensive Plan.

Adjacent Zoning and Land Uses

The adjacent zoning and land uses are as follows:

| Direction | Zoning | Land Use |
|-----------|-----------------------|------------------------|
| Property | Exclusive Agriculture | Pasture/Farm Buildings |
| North | Exclusive Agriculture | Crop/Fields |
| South | Exclusive Agriculture | Crops/Fields/Buildings |
| East | Exclusive Agriculture | Crops/Fields |
| West | Exclusive Agriculture | Crops/Stream/Woods |

The southwest corner of the area is located within the Floodway and 100 Year Floodplain. See the cover map showing the location of the floodway and floodplain.

Rezone Standards from Exclusive Agriculture

Wis. Stats. 91.48 allows for the rezone of land out of exclusive agriculture, providing the entity can find all of the following:

- (a) The land is better suited for a use not allowed in the farmland preservation zoning district.
The subject property has been and continues to be mined. The applicant will be continuing the current operation.
- (b) The rezoning is consistent with any applicable comprehensive plan.
As noted, the Town of Prairie du Sac recently updated their comprehensive plan to allow more than one mineral extraction site in town at any given time. This would be the second mining site.
- (c) The rezoning is substantially consistent with the county certified farmland preservation plan.
The proposal would appear to be consistent, as the proposed rezoning will allow for the continuation of a non-agricultural use for a specified period of time within a limited area. Once the mining use is completed, the property will be restored to allow for agricultural activities and associated agricultural uses in the future.
- (d) The rezoning will not substantially impair or limit current or future agricultural use of surrounding parcels of land that are zoned for or legally restricted to agricultural use.

Farming operations continue to exist in the immediate adjacent area. As the pit operation closes each phase, the site will be graded to allow for the construction of farm buildings and agricultural activities such as cultivating crops, harvesting crops, and raising livestock.

Additional Considerations

In January 2015, staff received complaints regarding some buildings constructed on the property without proper permits from the County. In July 2015, County staff received complaints regarding the on-going mining operation. Currently, the applicant is operating the pit on the subject property. Initially, the pit/project opened as a “borrow” area for a WisDOT transportation project at USH 12 – STH 60 intersection. The pit was to be reclaimed; however, the reclamation did not take place and the operation was found to be in violation of Sauk County Ordinances. The applicant is looking to continue the activities of the pit for ten (10) years. In order to come into compliance to continue this operation, a rezone of the property and special exception permit are required.

Property Access: The site has access from an existing driveway on the east end of the farm buildings from Hwy 60. Staff has reached out to WisDOT regarding this access point. WisDOT is currently evaluating the access for safety and needed improvements.

Committee Action Options

Approve Petition 12-2017, based on the facts of the request presented at the public hearing, that the proposed rezone from exclusive agriculture to agriculture appears to be consistent with respective plans, and that rezone met all standards and findings noted.

Disapprove Petition 12-2017, based on the facts of the request presented at the public hearing, the Town of Prairie du Sac recommend disapproval of the rezone, and that the rezone does not meet the standards and findings noted.

Modify and Approve Petition 12-2017. Not Recommended.

Petition # 12 - 2017

2016 DEVELOPMENT APPLICATION
 Sauk County Office of Conservation, Planning, and Zoning
 505 Broadway Street - Sauk County West Square Building
 Baraboo, Wisconsin 53913
 (608) 355-3245

GENERAL

1. It is strongly recommended that the applicant meet with a staff person prior to completing this application, with adequate time prior to an application deadline.
2. The applicant should complete and sign the form and provide all material listed within this application.
3. Please note: The application and attachments become part of the official public records of Sauk County and are therefore not returnable.

TYPE OF APPLICATION: Rezoning Conditional Use Subdivision Plat Zoning Text Change
 (Please circle one or more)

ZONING:
 CURRENT Exclusive agriculture PROPOSED (if applicable) Agriculture

ORDINANCE SECTIONS: 7.060 and 7.145 Sauk County Code of Ordinances

NAME OF SUBDIVISION (if applicable) Not applicable

PROJECT LOCATION SE 1/4 Section 8 T9N, R6E APPLICANT Yahara Materials, Inc.

TOWNSHIP Prairie du Sac PHONE NUMBER 608-849-4162

PROPERTY OWNER Elsing Farms MAILING ADDRESS PO Box 277 Waunakee, WI 53597

SIGNATURE OF APPLICANT _____ DATE _____

Fee Paid: (make checks payable to Sauk County CPZ) \$500 Receipt # ✓ (Credit Account # 10063-444240)

County Clerk - For reporting at the next County Board of Supervisors meeting Y/N

County Supervisor Eric Peterson

TYPE OF APPLICATION, FEES, AND INFORMATION REQUIREMENTS

| Type of Application Fee Required | Project Facts (Please see Page 2) | Preliminary/Final Plan Site Plan | Other Information (As required) |
|--|--------------------------------------|---|---|
| Subdivision Plat \$300 plus \$20/lot (class I) \$600 plus \$20/lot (class I & III) | Yes | Preliminary and Final Plat 1 reproducible copy | Development Plan Covenants/Bylaws Utility/Access Easements Other information pursuant to Sauk Co. Code ch. 22 |
| Rezoning/CUP \$500 | Yes | Site Plan 1 reproducible copy | Aerial Photo of Site# Utilities statement* |
| Zoning Text Change \$500 | Yes | No | |

APPLICATION DEADLINE

All applications must be received by 12:00 noon by the Conservation, Planning, and Zoning Department on the day of the application deadline. In order to be accepted, the application must contain all required items and information described in the application. Partial applications will not be accepted for placement on the Conservation, Planning, and Zoning Committee agenda.

PROJECT FACTS

Please complete the following information. Contact a staff person if you need assistance.

| | <u>Existing zoning</u> | <u>Existing land use</u> | |
|--------------|------------------------------|--------------------------|--|
| Subject Area | <u>Exclusive agriculture</u> | <u>Pasture</u> | Total Site Area (Acres): <u>14.96</u> |
| North | <u>Exclusive agriculture</u> | <u>Crop land</u> | Total Site Area (Square Footage): <u>651,760</u> |
| South | <u>Exclusive agriculture</u> | <u>Crop land</u> | |
| East | <u>Exclusive agriculture</u> | <u>Crop land</u> | |
| West | <u>Exclusive agriculture</u> | <u>Crop land</u> | |

JUSTIFICATION STATEMENT

Please answer the following questions. Contact a staff person if you need assistance.

1. General description of the request.

Change zoning from Exclusive Agriculture to Agriculture to allow for the mineral extraction
of bedding sand.

2. Related background information on the project and site.

The site was used as a borrow pit for the Highway 12/60 project in 2015. The owner would
like to sell sand for cattle bedding.

3. Justification, special reasons or basis for the request.

Upon completion of the mineral extraction operations the site will be utilized for
an animal rearing facility and storage of crops.

SITE PLAN

Submit the following plan(s): Scaled site/plot plan showing: date, north arrow, graphic scale; location of property lines, rights-of way, easements, water courses; streets, driveways, intersections; outlines of all buildings, setbacks, dimensions; means of vehicular and pedestrian access; layout and location of all off-street parking; proposed location of requested land uses; metes and bounds legal description of area to be rezoned (when applicable) other information pursuant to Sauk County Code chs. 7 and 22.

SUBDIVISION PLAT


Subdivision plats shall be signed and sealed by a registered surveyor and should include a legal description, computation of the total acreage of the site and any other requirements as defined by Wisconsin State Statutes Chapter 236 and Sauk County Code ch. 22.

APPLICANT ACCOUNTABILITY AGREEMENT

Upon signing this document, I take the full responsibility and agree to the following:

- A) I shall obtain all necessary permits, from all appropriate governmental units, including any applicable land use and sanitary permits from Sauk County, and any Town, State, and Federal permits.
- B) I hereby certify that all information contained in this document and provided with the application for a Rezone, Conditional Use Permit or Subdivision Plat, is true and correct. I understand that no construction, including, but not limited to, the pouring of a foundation, basement, or the construction or alteration of any other structure, may occur before the issuance of all necessary permits. Further, I understand that if construction does occur before I have obtained all necessary permits, additional fees, forfeitures, and removal of the non-permitted structure(s) may be assessed against me.
- C) I shall allow representatives from the Sauk County Conservation, Planning, and Zoning Department to access my property to inspect the project's design, layout, construction, operation and/or maintenance.

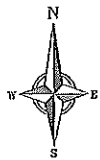
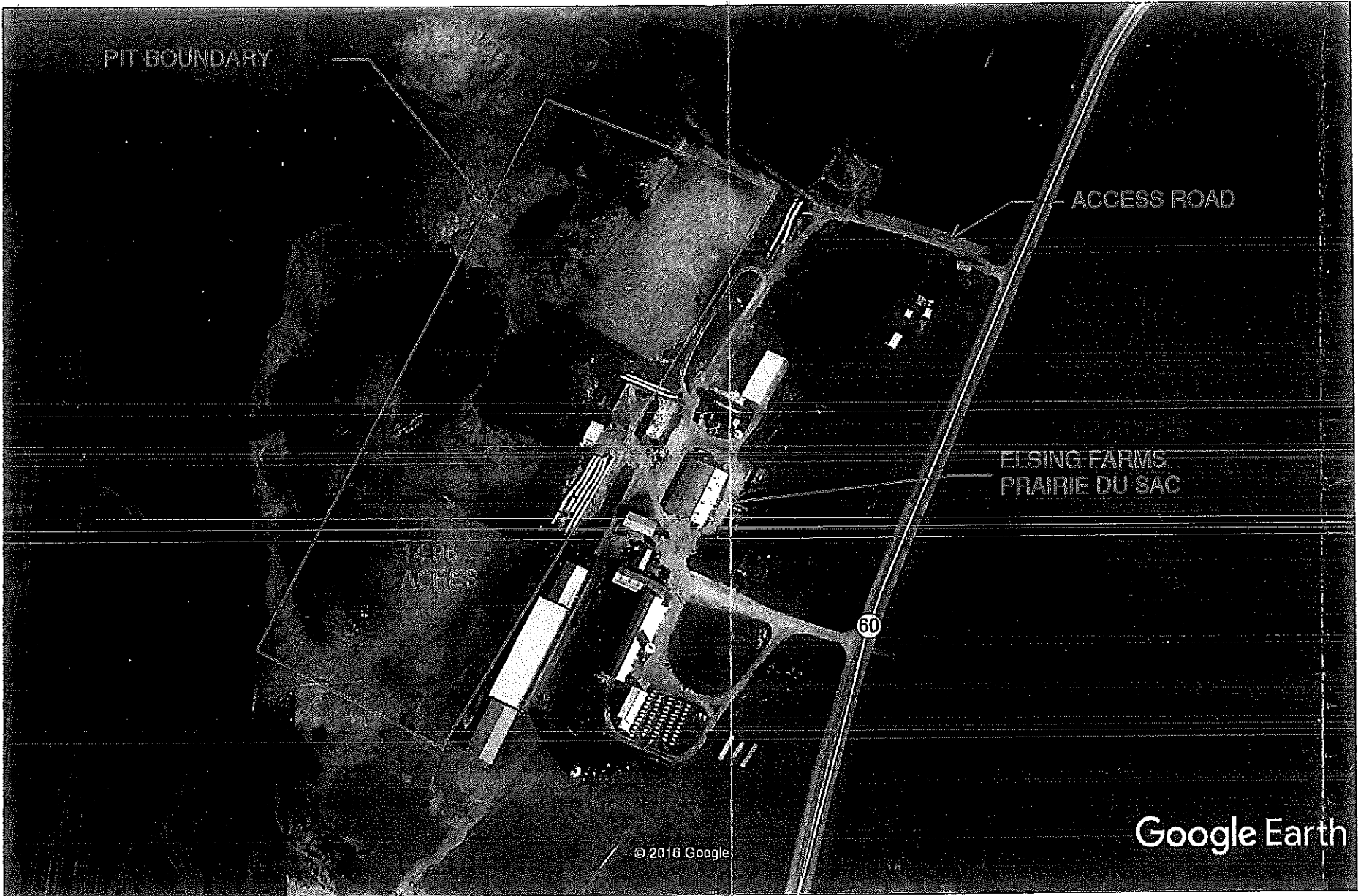
Signed by: _____


Property Owner

Date: 2-17-16

Revised 1/7/16

PROPOSED BEDDING SAND PIT AERIAL

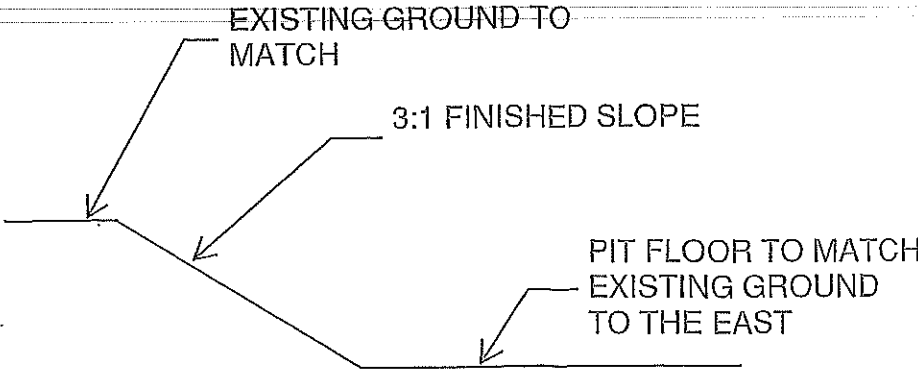


NOTE: PROPOSED SAND PIT WAS SURVEYED BY PAT DIETRICH ON 8/3/16

Google Earth



PROPOSED FINISHED CROSS SECTION



TITLE: PROPOSED BEDDING SAND PIT
COUNTY: SAUK

LOCATION: ELSING FARM
ADDRESS: E 10481 HWY 60, SAUK CITY WI 53583

PROPOSED BEDDING SAND PIT

NOTE: PROPOSED SAND
PIT TO BE SURVEYED BY
PAT DIETRICH ON 2/17/16

14.95
ACRES

ACCESS ROAD

ELSING FARMS
PRAIRIE DU SAC

60

© 2016 Google

Google Earth

Google Earth

feet
meters

1000

400



PLAT OF SURVEY

BEING A PLAT OF A SURVEY OF A PARCEL OF LAND LYING IN PART OF THE SOUTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER AND IN PART OF THE NORTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER ALL IN SECTION 8, TOWNSHIP 9 NORTH, RANGE 6 EAST, TOWN OF PRAIRIE DU SAC, SAUK COUNTY, WISCONSIN.

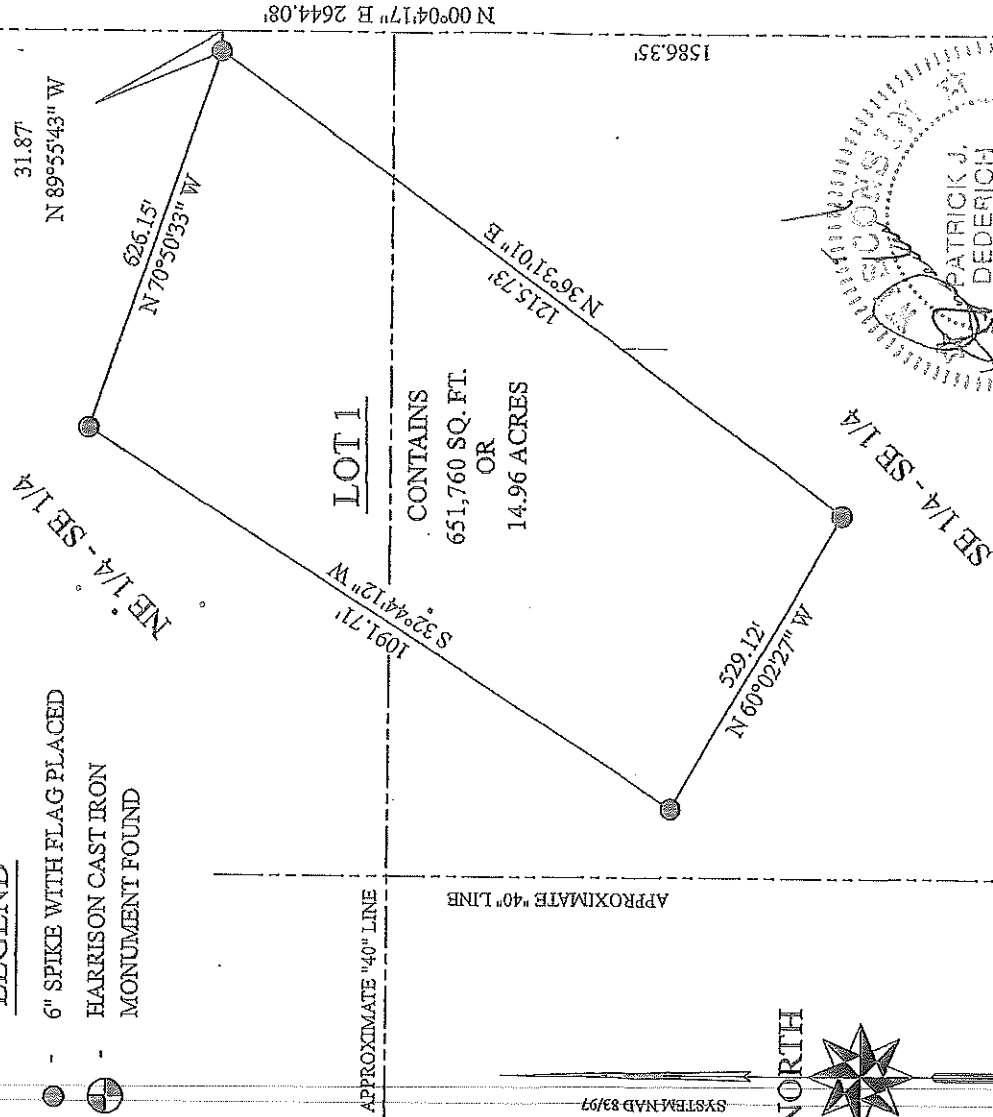
E. 1/4 COR.
SEC. 8

LEGAL DESCRIPTION:

COMMENCING AT THE SOUTHEAST CORNER OF SECTION 8;
THENCE NORTH 00°04'17" EAST, 1586.35 FEET ALONG THE EAST LINE OF THE SOUTHEAST ONE-QUARTER;
THENCE NORTH 89°55'43" WEST, 31.87 FEET TO THE POINT OF BEGINNING;
THENCE NORTH 70°50'33" WEST, 626.15 FEET;
THENCE SOUTH 32°44'12" WEST, 1091.71 FEET;
THENCE SOUTH 60°02'27" EAST, 529.12 FEET;
THENCE NORTH 36°31'01" EAST, 1215.73 FEET TO THE POINT OF BEGINNING.
PARCEL CONTAINS APPROXIMATELY 651,760 SQUARE FEET OR 14.96 ACRES.

LEGEND

- 6" SPIKE WITH FLAG PLACED
- HARRISON CAST IRON MONUMENT FOUND



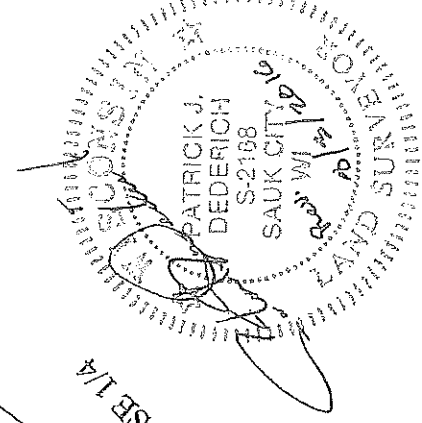
SURVEYED BY DIRECTION OF TIM GEHEGAN
OF YAHARA MATERIALS
FOR REZONING PURPOSES

APPROXIMATE SECTION LINE

S. E. COR.
SEC. 8

I, PATRICK J. DEDERICH, REGISTERED LAND SURVEYOR, DO HEREBY CERTIFY THAT:
I HAVE SURVEYED THE PROPERTY DEPICTED HEREON AND THIS IS A
CORRECT REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION
OF THE PROPERTY AND ITS BOUNDARIES.

THIS SURVEY AND MAP WERE MADE IN ACCORDANCE WITH ACCEPTABLE
PROFESSIONAL STANDARDS AND THE INFORMATION CONTAINED HEREON
IS CORRECT AND TRUE TO THE BEST OF MY INFORMATION, KNOWLEDGE
AND BELIEF



AZMARK SURVEYS, L.L.C.
PRECISION LAND SURVEYING

P.O. BOX 637
SAUK CITY, WI 53583-0637
Phone: (608) 644-0369

JOB NAME
YAHARA 2

SHEET 1 OF 1

TOPOGRAPHIC EXHIBIT

BEING A TOPOGRAPHIC REPRESENTATION OF A PARCEL OF LAND LYING IN PART OF THE SOUTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER AND IN PART OF THE NORTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER ALL IN SECTION 8, TOWNSHIP 9 NORTH, RANGE 6 EAST, TOWN OF PRAIRIE DU SAC, SAUK COUNTY, WISCONSIN.

FEMA BASE FLOOD ELEVATION DETERMINATION SOUTH OF THIS PROPERTY IS 744.3 FT. AND NORTH OF THIS PROPERTY IS 744.9 FT
CONTOURS IMPORTED FROM SAUK COUNTY LIDAR AND FIELD VERIFIED.
LOWEST FIELD OBSERVED ELEVATION ON THE PROPERTY WAS 749.9'.

IT IS MY PROFESSIONAL DETERMINATION, BASED ON FIELD MEASUREMENTS AS COMPARED TO FEMA PUBLISHED BASE FLOOD ELEVATIONS THAT EXCAVATION OF MATERIALS WITHIN THIS SITE WILL NOT INTRUDE UPON OR ENTER INTO FLOODPLAIN UNLESS THEY GO BELOW 744.9 FEET OF ELEVATION.

LEGEND

 HARRISON CAST IRON
MONUMENT FOUND

CONTOUR INTERVAL IS 2'

BEARINGS BASED ON THE
SAUK COUNTY COORDINATE
SYSTEM NAD 83/97

NORTH



SCALE 1" = 300'

1057.73'

31.87'
N 89°55'43" W

N 70°50'33" W

626.15'

1091.71'
S 32°44'12" W

1215.73'

N 00°04'17" E 2644.08'

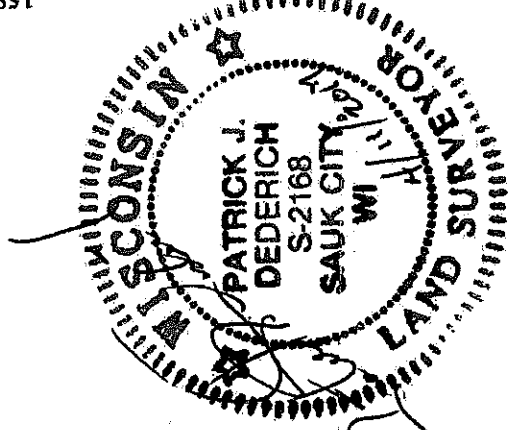
BENCHMARK
ELEV. 747.8 FT.

BENCHMARK IS NW COR.
CONCRETE EHTANOL
TANK SUPPORT PLATFORM

1586.35'

N 36°31'01" E

529.12'
N 60°02'27" W



PREPARED BY DIRECTION OF TIM GEOHEGAN
OF YAHARA MATERIALS
FOR FLOODPLAIN DETERMINATIONS

APPROXIMATE SECTION LINE

S. E. COR.
SEC. 8

E. 1/4 COR.
SEC. 8

I, PATRICK J. DEDERICH, REGISTERED LAND SURVEYOR, DO HEREBY CERTIFY THAT:

I HAVE FIELD VERIFIED THE ELEVATION INFORMATION DEPICTED ON THIS EXHIBIT AND IT IS AN ACCURATE AND CORRECT REPRESENTATION OF THE TOPOGRAPHY OF THE PROPERTY AND ITS BOUNDARIES.

THIS EXHIBIT WAS MADE IN ACCORDANCE WITH ACCEPTABLE PROFESSIONAL STANDARDS AND THE INFORMATION CONTAINED HEREON IS CORRECT AND TRUE TO THE BEST OF MY INFORMATION, KNOWLEDGE AND BELIEF.

JOB NAME
YAHARA 2

SHEET 1 OF 1

AZMARK SURVEYS, L.L.C.
PRECISION LAND SURVEYING

P.O. BOX 637
SAUK CITY, WI 53583-0637
Phone: (608) 644-0369

TOWN OF PRAIRIE DU SAC BOARD MINUTES FOR MAY 09, 2017

Agenda Item #1: Chair Janine Godfriaux-Leystra called the meeting to order at 7:00pm.

Agenda Item #2: The Board Said the Pledge of Allegiance

Agenda Item#3: Tom Murphy motion, John Lichtenheld second to approve the agenda as written. Motion passed.

Agenda Item #4: Tom Murphy motion, John Lichtenheld second to approve the April minutes and treasurers reports as presented. Motion passed.

Agenda Item #5: John Lichtenheld motion, Craig Walch second to award the road construction bids of Roesser and Center roads to Scott Construction for \$ 75,464.76. Motion passed. Next John Lichtenheld motion, Craig Walch second to award Chip Seal bids of Pine Meadow and Pine Circle Roads to Scott Construction for \$21,156.00. Motion passed.

Agenda Item #6: Tom Murphy Motion, John Lichtenheld second to approve The Bender Land Division Development as presented with the addition to extend the driveway easement to the south lot line. Motion passed.

Agenda Item #7: John Lichtenheld motion, Tom Schneller second to approve the Elsing Rezone Request as presented. Motion passed. Also John Lichtenheld motion, Tom Murphy second to send Sauk Co. Planning and Zoning the Rezone Petition No. 12-2017 as an attachment to the Rezone Request to clarify the Town of Prairie du Sac position concerning mining sites within the Town. Motion passed.

Agenda Item #8: Committee updates, no action taken.

Agenda Item #9: Patrolman report given, no action taken.

Agenda Item #10: No action taken on other business.

Agenda Item #11: No public comment.

Agenda Item #12: Tom Schneller motion, Tom Murphy second to spend \$7,882.16 in May checks. Motion passed.

Agenda Item #13: Tom Murphy motion, Craig Walch second to adjourn. Motion passed. Meeting adjourned at 8:56pm.

Richard Nolden, Clerk

Town of Prairie du Sac comments for Rezone Petition No 12 -2017

Point of clarification:

On Page 2 of the Staff Report, reference is made (in the sections Town of Prairie du sac Recommendation and Comprehensive Plan and again under Rezone Standards from Exclusive Agriculture.) "The Town of Prairie du Sac recently updated their comprehensive plan to allow more than one operational mineral extraction site in the town at any given time. This would be the second mining site."

The Sauk Prairie Comprehensive Plan update still allows for only one non-metallic mineral extraction operation of more than 24 months or more than 15 acres, with one exception: Sand may be extracted for agriculture use on the farm or some other farm. Excerpt from plan is below:

Sauk Prairie Comprehensive Plan (Update Adopted April, 2017) Volume 2, Page 53, Agriculture Other Policies:

- ... 3. The Town and extraterritorial zoning committees will consider special exception and conditional use permit applications for non-metallic mineral extraction sites provided that:
- a. The Town shall limit mineral extraction operations to sand, rock, and gravel quarries only, with only one non-metallic mineral extraction operation of more than 24 months or more than 15 acres allowed to operate in the Town at any one time. This limit does not include sand extracted on a farm if put to agricultural use on the farm or on some other farm. 'Agricultural use' means any activity that is consistent with the definition of agriculture and is conducted for the purpose of producing an income or livelihood. 'Agriculture means the art or science of cultivation soil, harvesting crops, and raising livestock.
 - b. The extraction site and any associated buildings minimize use of Group I through II soils, as shown on Map 4 in the Volume 1 of this Comprehensive Plan.
 - c. The applicant submits for local review a complete project description, operations plan, and reclamation plan as required under the Sauk County Zoning Ordinance.
 - d. The project meets all standards applicable to special exception permits and conditional use permits, and specifically to mineral extraction operations, in the associated zoning ordinance.
 - e. Rock quarry operations shall be set back at least 1,320 feet from residences on parcels not in the same ownership.

There is one long-term non-metallic mineral extraction site operating in the Town of Prairie du Sac. This would be the second non-metallic mineral extraction operation in the Town of Prairie du Sac. The Sauk Prairie Comprehensive Plan allows for such only if extracted materials are used as part of an agriculture operation. The general description of the request and the related background information found on page 2 of the 2016 Development Application (Petition 12-2017) lists the use of extracted sand as cattle bedding sand. The introduction of the Operational Plan indicates that the pit will produce sand primarily for bedding dairy cattle in the local area. When considering a second non-metallic mineral extraction operation in the Town, extracting sand for dairy cattle bedding is an agriculture use, and is consistent with our Comprehensive Plan.



P.O. Box 277 Waunakee, WI 53597-0277 Phone 608-849-4162 Fax 608-849-5062

**Operational Plan
Elsing Farms, LLC
Bedding Sand Pit**

- Introduction:** Yahara Materials, Inc., on behalf of Elsing Farms, LLC, is requesting a change of zoning on 14.96 acres of land from exclusive agriculture to agriculture for the purpose of obtaining a special exemption permit for mineral extraction to operate a sand pit.
- The proposed sand pit will produce sand primarily for bedding dairy cattle in the local area. The operational expectancy of the pit is ten (10) years.
- Location:** SE ¼ Section 8, T9N-R9E
Hwy 60
Prairie Du Sac Township, Sauk County, Wisconsin
- Ownership:** Elsing Farms, LLC
829 21st Street
Prairie Du Sac, WI 53578
- Operator:** Yahara Materials, Inc.
P.O. Box 277
Waunakee, WI 53597-0277
- Access:** The site will be accessed by an existing driveway on the east end of the farm buildings. This access point has been approved by WisDOT.
- Description of Operations:** The proposed sand pit is located behind the Elsing Farms, LLC shop and calf rearing facilities. The site will be worked in an east to west direction, removing the sand from the hill and creating a level surface for future cattle rearing facilities and crop storage buildings.
- The screening of the sand will occur 3 to 5 times per year depending upon market demand. As the excavation proceeds to the west, the back slope will be graded to a 3:1 slope and seeded down to prevent erosion. All activities associated with the operation of the sand pit will occur outside the regulatory floodways, and the site will be used for activities agriculture in nature upon the reclamation.

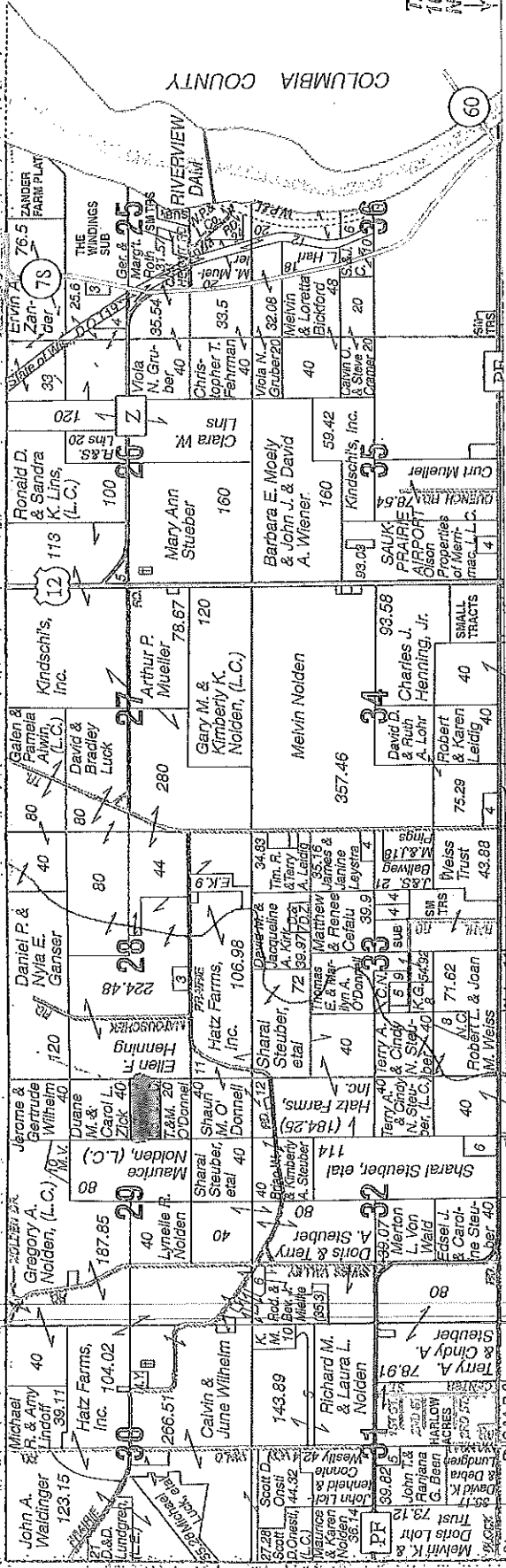
- Erosion Control:** During all phases of operation, disturbed areas will be closely monitored for potential erosion. The use of silt fencing, hay bales, rip rap, and prompt seeding and mulching of disturbed areas will minimize erosion.
- Dust Control:** Spray bars will be utilized on crushing and screening equipment for dust suppression. The traveled areas of the pit will be watered by truck as necessary to control dust. (Please refer to Yahara Materials, Inc.'s Fugitive Emission Plan for further detail.)
- Hours of Operation:** 6:00am to 6:00pm Monday through Friday
6:00am to 2:00pm on Saturdays (When necessary)
- Reclamation:** At the conclusion of each phase of the pit operation, the site will be graded for the construction of farm buildings and agricultural activities which are for the purpose of producing an income or livelihood that are consistent with the art or science of cultivating crops, harvesting crops, and raising livestock. The back slope of the north end of the site will be graded to a 3 to 1 slope as prescribed in Wisconsin's Administrative Code Chapter NR 135 pertaining to Nonmetallic Mining Reclamation. All activities associated with the operation of the sand pit and graded sites will be at elevations and distance from regulatory floodways as determined by Sauk County.
- Conclusion:** Legitimate concerns regarding pit operations usually center on the issues of environment, and the safety of all those in the immediate vicinity of the proposed site. Yahara Materials, Inc., as an aggregate producer, is in the most highly regulated industry in the state. We conduct our operations well within these regulations, and with particular regard to the concerns of our neighbors about noise and dust. Our well-conceived operational and reclamation plans will assure that all concerns are met.

Respectfully Submitted,

Timothy Geoghegan
Supervisor
YAHARA MATERIALS, INC.

SEE PAGE 27

SEE PAGE 21



008900

008900

008900



P.O. Box 277 Waunakee, WI 53597-0277 Phone 608-849-4162 Fax 608-849-5062

EROSION CONTROL AND STORMWATER MANAGEMENT PLAN FOR ELSING SAND PIT

EROSION CONTROL MEASURES:

ENTRANCE:

The entrance to this site has 200 feet of clear stone, which prevents tracking of material onto public roads. All slopes are seeded with grasses to provide cover.

BERMS:

The stripped soils will be separated in stock piles, the overburden will be stripped and used as the base of the berm, the top soil will be used to top dress the berms. The top soil and the subsoil will be used in the final restoration. The berms will be constructed with a depression that will serve as a sediment trap at the base of the berm. (See detail. The berms will be seeded and mulched in the spring from May 15 to May 30.). If needed the berm will have a buffer beyond the limits of the berm. This buffer will be seeded and mulched.

SILT FENCING:

Silt Fencing is used as necessary when soils are being stripped and stockpiled.

STONE WEEPER:

A stone weeper will be used to slow water velocity and trap any sediment as necessary. The weeper will be built with 3 to 6 inch clear stone, with a depression in the middle and higher at the slope of the ditch. The weeper will have a face with 1 to 2 inch stone.

SEEDING & MULCHING:

Seeding:

All the berms and non-farmable areas will be seeded at a rate of 7 pounds per 1,000 square feet of #20 WisDot Specification seed mixture within 7 days of completion of the grading operations. To optimize growth all planting will be conducted between May 15th in the spring, and no later than September 15th in the fall. Fertilizer shall be applied at the rate of 10 pounds per 1,000 square feet 16-8-8 (NPK). The steep side slopes of the quarry will be stabilized with seed and polymer treatment to prevent any erosion.

As our long range plan is to return this site to agriculture, the relatively flat or gently sloping area would be returned to row crops, such as corn and soybeans or to alfalfa. Therefore seeding of the quarry floor will be unnecessary except to allow for any waterways within the site.

Mulching:

The berms will be stabilized with 90 lbs per 1000 square foot (2.5 tons/sq.ft.) of mulch.

Note*: Please see enclosed WisDOT specifications for seed properties and germination rates.

MAINTENANCE:

The berms will be inspected and repaired according to the needs of the site. This will include cleaning of the weeper, the sediment basins and additional application of seed and mulch, if necessary. The drive way will be maintained free of sediment or soil deposits.

COST:

The annual estimated cost of the erosion control measures is approximately \$1500.00 per year

SCHEDULE:

All schedules are presented as an estimate, as work at this site is market driven, and operational dates may vary as market demands dictate. The schedule presented represents a typical year.

May 1st: Strip top soil and overburden, prepare and shape berms for seeding. Construct the swale next to the berms. Direct the excess of runoff into the quarry.

May 15th: Seed and mulch berms and disturbed areas.

August 15th: Seeding established and repair the areas where new vegetation is needed.

September 1st Inspect all erosion control measures to insure effectiveness.

NOTE: The site is internally draining, no road ditches are present at the site, no cross section, runoff velocities, culverts, are applicable to this site.

CONTACT PERSON:

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Office: (608)-849-4162
Fax: (608)-849-5062

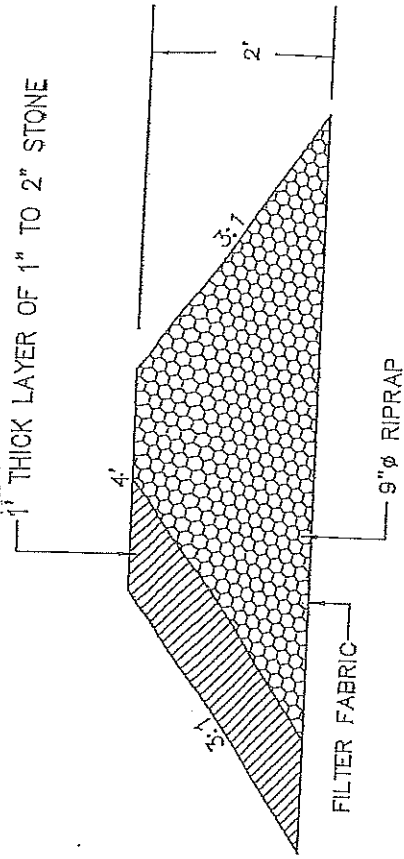
EROSION CONTROL NOTES:

- 1.) Install a 50' X 20' X 1' deep pad of 6" "Breaker Run" stone at the end of the paved entrance road to prevent sediment from being tracked onto the adjacent paved public roadway. Sediment reaching the public roadway shall be removed by street cleaning (not hydraulic flushing) before the end of each workday.

- 2.) Erosion Control measures shall be installed per these plans. Other erosion control measures may be necessary as directed by the engineer and may include silt fence, stone weepers, seed mixtures, or additional sediment traps.
- 3.) Channelized Runoff from adjacent areas passing through the site shall be diverted around disturbed areas. Upon completion of the grading and site restoration shown on the site reclamation, the drain way from the north shall be re-directed through the site.
- 4.) Stabilized Storage Piles; soil stockpiles or dirt storage piles shall be contained on the site by silt fence or other suitable means. The containment measures shall remain in place until the area is adequately stabilized. The soil stockpiles shall be seeded with temporary perennial rye seeding mixture within 7 days of completion of the stockpile.
- 5.) Yahara Materials, Inc. shall maintain the erosion control measures during quarry operations. The Township or the property owner shall be responsible for erosion control upon completion of the site reclamation.

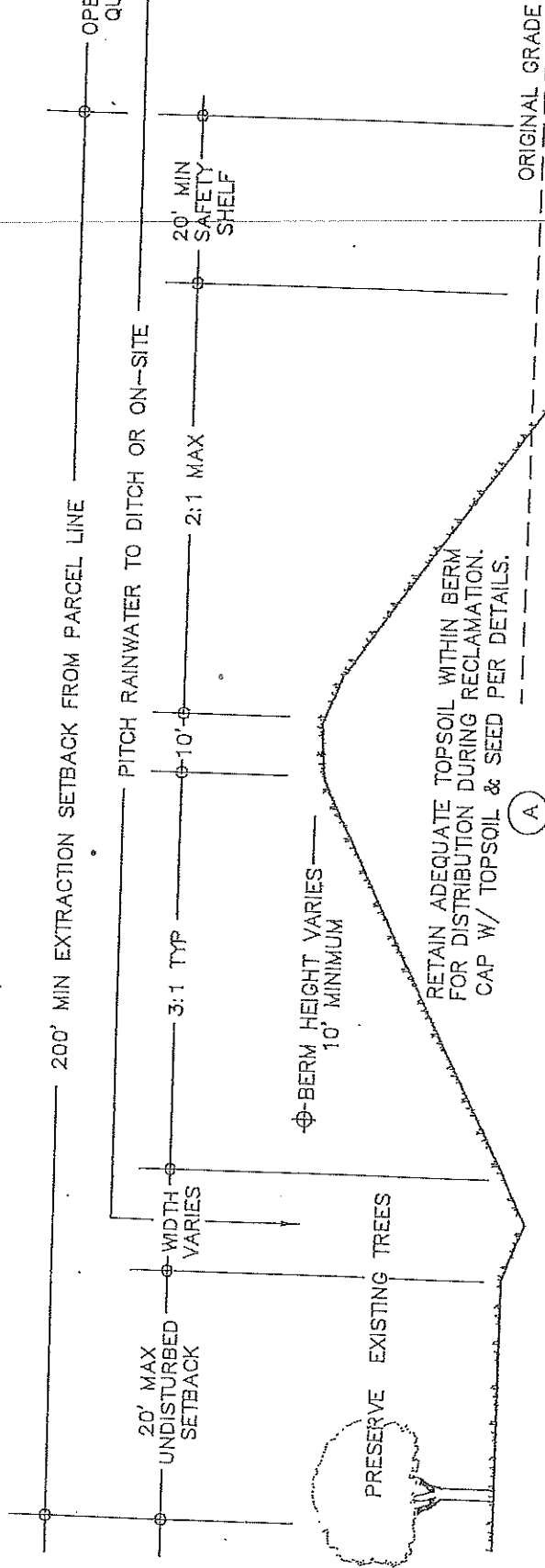
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2 WEEPER DETAIL

NO SCALE

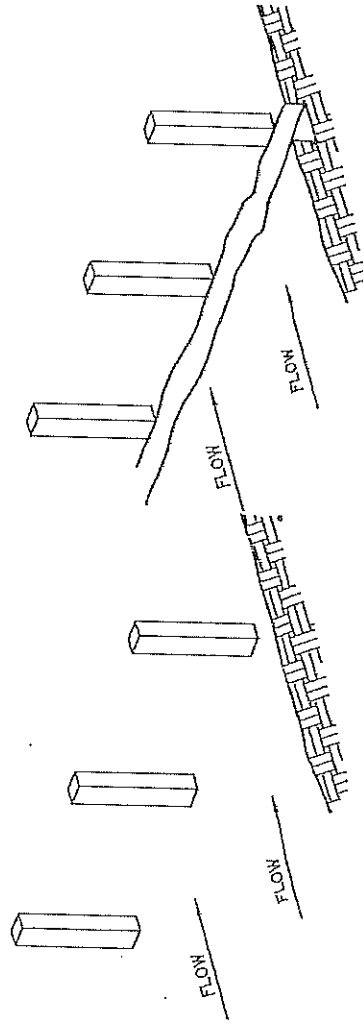


3 SECTION THROUGH LANDSCAPED ENCLOSURE BERM

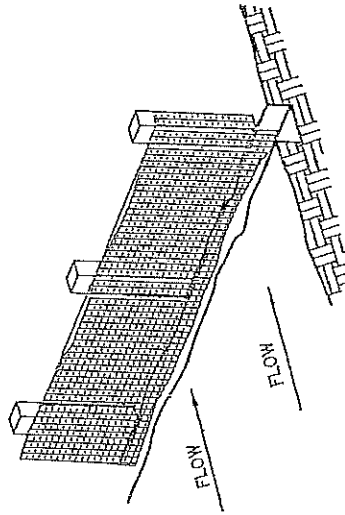
PLANT SPECIES & FREQUENCY SHOWN PER SHEET 1

CONSTRUCTION OF A FILTER BARRIER

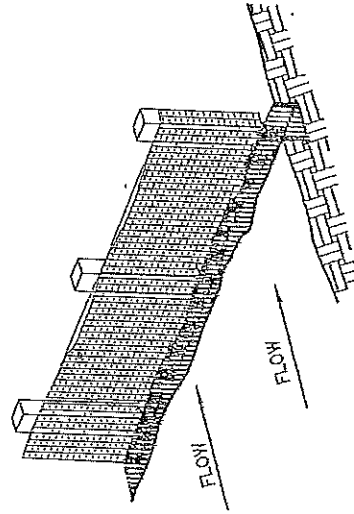
1. DRIVE STAKES INTO THE GROUND AT LEAST 8".
STAKE SPACING TO BE PER MANUFACTURERS
RECOMMENDATIONS.
2. EXCAVATE A 4" x 4" TRENCH UPSLOPE ALONG
THE LINE OF STAKES.



3. STAPLE FILTER MATERIAL ON UPSLOPE SIDE
OF STAKES AND EXTEND IT INTO THE TRENCH.
WHEN JOINTS ARE NECESSARY, OVERLAP
MATERIAL BETWEEN TWO STAKES AND FASTEN
SECURELY.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



SILT FENCE DETAIL

TABLE OF NATIVE SEED MIXTURES

| SPECIES | SPECIES BOTNICAL NAME | PURITY AND GERMINATION minimum % | MIXTURE PROPORTIONS in percent | |
|-----------------------|---|----------------------------------|--------------------------------|---------|
| | | | NO. 70 | NO. 70A |
| Canada Anemone | <i>Anemone canadensis</i> | PLS | 2 | |
| Butterflyweed | <i>Asclepias tuberosa</i> | PLS | | 2 |
| New England Aster | <i>Aster novae-angliae</i> | PLS | 2 | 2 |
| Partridge-pea | <i>Chamaecrista (Cassia) fasciculata</i> | PLS | | 2 |
| Purple Prairie Clover | <i>Dalea (Petalostemum) purpurea</i> | PLS | 2 | 2 |
| Canada Tick-trefoil | <i>Desmodium canadense</i> | PLS | 2 | |
| Flowering Spurge | <i>Euphorbia corollata</i> | PLS | | 2 |
| Wild Geranium | <i>Geranium maculatum</i> | PLS | 2 | |
| Western Sunflower | <i>Helianthus occidentalis</i> | PLS | 3 | 2 |
| Rough Blazingstar | <i>Liatris aspera</i> | PLS | | 2 |
| Prairie Blazingstar | <i>Liatris pycnostachya</i> | PLS | 2 | |
| Lupine | <i>Lupinus perennis</i> | PLS | | 3 |
| Wild Bergamot | <i>Monarda fistulosa</i> | PLS | 2 | |
| Horse Mint | <i>Monarda punctata</i> | PLS | | 2 |
| Yellow Coneflower | <i>Ratibida pinnata</i> | PLS | 2 | 2 |
| Showy Goldenrod | <i>Solidago speciosa</i> | PLS | 2 | 2 |
| Spiderwort | <i>Tradescantia ohiensis</i> | PLS | 2 | 2 |
| Golden Alexanders | <i>Zizia aurea</i> | PLS | 2 | |
| Big Bluestem | <i>Andropogon gerardi</i> | PLS | 15 | 15 |
| Sideoats Grama | <i>Bouteloua curtipendula</i> | PLS | 15 | 20 |
| Canada Wildrye | <i>Elymus Canadensis</i> | PLS | 15 | 15 |
| Junegrass | <i>Koeleria macrantha</i> | PLS | | 5 |
| Little Bluestem | <i>Schizachyrium (Andropogon) scoparium</i> | PLS | 15 | 20 |
| Indiangrass | <i>Sorghastrum nutans</i> | PLS | 15 | |

630.2.1.5.1.1.2 Mixture

(1) The contractor shall select a seed mixture or mixtures that meet with the engineer's approval, and unless specified otherwise in the contract, shall conform to the following:

1. Use seed mixture No. 10 where average loam, heavy clay, or moist soils predominate.
2. Use seed mixture No. 20 where light, dry, well-drained, sandy, or gravelly soils predominate and for all high cut and fill slopes generally exceeding 6 to 8 feet (1.8 to 2.4 m), except where using No. 70.
3. Use seed mixture No. 10 or No. 20 on all ditches, inslopes, median areas, and low fills, except where using No. 30 or No. 70.
4. Use seed mixture No. 30 for medians and on slopes or ditches generally within 15 feet (4.5 m) of the shoulder where a salt-tolerant turf is preferred.
5. Use seed mixture No. 40 in urban or other areas where a lawn type turf is preferred.
6. Use seed mixture No. 60 only on areas, the contract designates or the engineer specifies. Use it as a cover seeding for newly graded wet areas or as a nurse crop for specified wetland seed mixtures. The contractor shall not apply it to flooded areas.

7. Use seed mixture Nos. 70 and 70A on slopes and upland areas the contract designates or the engineer specifies. Use seed mixture No. 70 on loamy soils and seed mixture No. 70A on sandy soils.

630.2.1.5.1.2 Temporary

- (1) Under the Seeding Temporary bid item, use a temporary seed mixture conforming to 630.2.1.5.1.4. Use oats in spring and summer plantings. Use winter wheat or rye for fall plantings started after September 1.

630.2.1.5.1.3 Nurse Crop

- (1) If seeding bare soil with either mixture 70 or 70A, include the work under the Seeding Nurse Crop bid item.

630.2.1.5.1.4 Borrow Pits and Material Disposal Sites

- (1) For seeding borrow pits and material disposal sites beyond the right-of-way, use seed mixtures conforming to seed mixture No. 10, No. 20, No. 70 or No. 70A of 630.2.1.5.1.1 or a borrow pit mixture composed of seeds of the species, purity, germination and proportions, by weight as given below:

| PERMANENT | | |
|--------------------|------------------|-----------------------|
| SPECIES | % MINIMUM PURITY | % MINIMUM GERMINATION |
| Alfalfa | 98 | 90 |
| Bromegrass | 85 | 85 |
| Orchardgrass | 80 | 85 |
| Timothy | 98 | 90 |
| Red Clover | 98 | 90 |
| Alsike Clover | 97 | 90 |
| Ladino Clover | 95 | 90 |
| Kentucky Bluegrass | 98 | 85 |
| Birdsfoot Trefoil | 95 | 80 |

| TEMPORARY | | |
|------------------|------------------|-----------------------|
| SPECIES | % MINIMUM PURITY | % MINIMUM GERMINATION |
| Annual Oats | 98 | 90 |
| Agricultural Rye | 97 | 85 |
| Winter Wheat | 95 | 90 |

| NURSE CROP | | |
|-----------------|------------------|-----------------------|
| SPECIES | % MINIMUM PURITY | % MINIMUM GERMINATION |
| Annual Oats | 98 | 90 |
| Annual Ryegrass | 97 | 90 |
| Winter Wheat | 95 | 90 |

- (2) For the borrow pit mixture use, by weight, 60 percent temporary species seeds and 40 percent permanent species seeds.
- (3) For the temporary component, use any combination of temporary seeds listed in the table above.
- (4) For the permanent component, use seeds from not more than 4 of the permanent species listed in the table above in any combination.
- (5) When nurse crop is required for spring seeding before June 15, use annual oats. For fall seeding after October 15, use winter wheat, or annual ryegrass.

630.3 Construction

630.3.1 General

- (1) If not protecting with a mulch cover, perform seeding, except Nos. 60, 70 and 70A mixtures at times of the year when temperature and moisture conditions are suitable for seeding, except during midsummer.
- (2) Perform seeding, except Nos. 60, 70 and 70A mixtures, in conjunction with mulching as specified in section 627 at any time the engineer allows.
- (3) The contractor may perform seeding of Nos. 60, 70 and 70A mixtures at any time soil conditions are suitable, except between June 15 and October 15, unless the engineer allows otherwise.



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Yahara Materials, Inc. recognizes the need for a comprehensive and consistent company policy that outlines control measures, activities, and management options that contribute to a reduction in fugitive emissions from crushing, processing, and transporting of non-metallic mineral aggregates at quarry locations. This plan specifies potential fugitive emissions sources and the appropriate control methods.

Plan Outline

I. POTENTIAL FUGITIVE EMISSION SOURCES

- A. Transport of shot rock to crusher
- B. Crushing Operations
- C. Screening Operations
- D. Conveying of Aggregate Products
- E. Stockpiling and Stockpile Maintenance
- F. Truck Transport of Final Products
- G. Total Facility

II. FUGITIVE EMISSIONS CONTROL OPTIONS

- A. Water Spray Application
- B. Drop Height Management
- C. Site Traffic Speed Control

III. TRAINED PERSONNEL RESPONSIBILITIES

- A. Maintain Control Equipment in Operable Condition
- B. Evaluate Fugitive Emissions and Need for Control Application
- C. Maintain Access to Water Sources as Needed
- D. Enforce Speed Limits on Process Vehicular Traffic
- E. Truck Transport of Final Product
- F. Total Facility

IV. RECORDKEEPING

- A. Activity Documentation

I. POTENTIAL FUGITIVE EMISSION SOURCES

- A. Transport Shot Rock to Crusher — Loader traffic to and from the primary crusher from the shot rock or nibble pile may create excess fines in the tire lanes when surface moisture conditions are dry. Loader operators should scrape and replace traffic lane aggregates when necessary to reduce surface fines. Water may be added as necessary to maintain fugitive suppression.
- B. Crushing Operations — Each reduction phase of the crushing process has the potential to generate fugitive emissions. Primary crushing typically exhibits the least fugitive generation, with each successive reduction having a greater potential for emissions. Each facility or crushing spread has spray equipment, including pumps, hose, spray nozzles, and spare parts. Spray nozzle location and water application rate is determined by the operator to provide maximum control under situational circumstances. The nozzle or nozzles may be located on one crusher or all crushers at the facility, depending on the needed control.
- C. Screening Operations — Screening operations may generate fugitive emissions and are particularly susceptible to wind and low moisture conditions. The initial screen may have adequate material moisture for good emissions control in most circumstances, but as with the reduction phase, each successive screening operation has an increased potential for emissions, with decreased material moisture contents and finer fractions. Water addition during crushing exhibits the best control for screening operations.
- D. Conveying of Aggregate Products — Conveyance of rock products during the processing of aggregates exhibits the least potential for fugitive emissions of all the processes at a facility. The drop or transfer points between processes and conveyors provide the most opportunity for emissions, but are typically the easiest to control. Wind and/or low moisture conditions may be abated by water application, and minimizing the drop height between transfer points. For normal operations, application of a single management tool may be very effective in controlling emissions.
- E. Stockpiling and Stockpiling Maintenance — Stockpiling operations at crushing facilities consist of placing aggregates in storage piles with stackers or front-end loaders. Stackers are typically adjustable; so drop height to the pile can be controlled as with other conveyors. Loader transfer results in fewer emissions from dumping, but greater potential from the loader traffic and tire contact with generated fines. Travel roads may be sprayed with water for longer lasting control. Scraping and application of new aggregate can also be effective in controlling fugitive emissions from this operation. Fugitive emissions from stockpiles are highly dependent on aggregate gradation, weather, location, stockpile age, and amount of loading face activity.
- F. Truck Transport of Final Product Truck traffic in the area of crushing operations has the potential to generate excessive surface fines on haul roads. Watering and speed controls are the most effective options for controlling fugitive emissions from truck traffic. Any one of these management options may be incorporated into routine operations to provide continuous benefit.
- G. Total Facility — Minimizing the emissions from fugitive sources at a crushing and processing facility requires a knowledge of potential contributing factors on the part of operations level personnel, and a common-sense application of available management options to provide significant control of fugitive emissions from crushing operations.

II. FUGITIVE EMISSIONS CONTROL OPTIONS

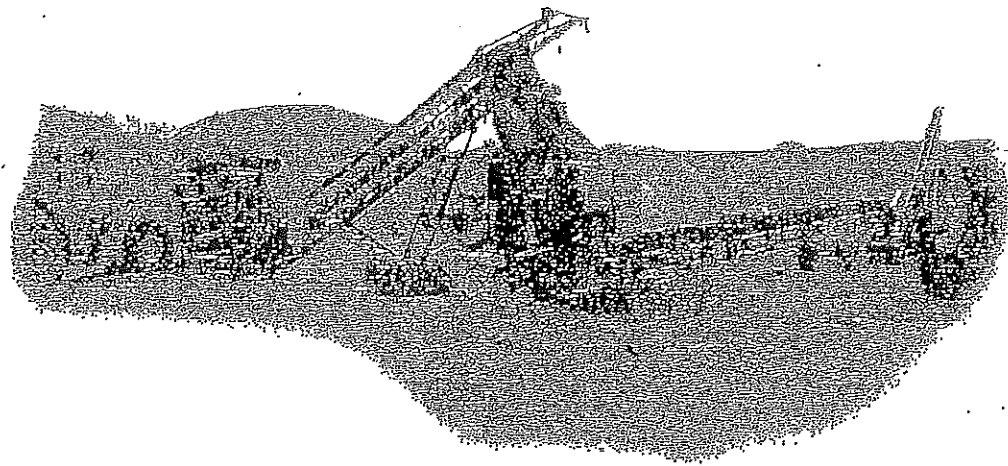
- A. Water Spray Application — Water may be added directly to aggregate product with spray nozzles at any phase of the production cycle. Each facility is equipped with adequate equipment to make multiple-point application of water if needed. The person responsible for plant operations decides where application affords the best control efficiency for current conditions. In addition to material control; the plant foreman is responsible for water application to site roads and stockpiles as necessary to maintain acceptable site opacity.
- B. Drop Height Management — Facility foreman is responsible for minimizing drop height at all material transfer points, including stacker and loading operations.
- C. Site Traffic Speed Control — Facility foreman or company responsible official enforces appropriate speed limit in the production area. Speed limit determination is influenced by site-specific conditions and may be lowered at the foreman's discretion, to provide greater control influence.

III. TRAINED PERSONNEL RESPONSIBILITIES

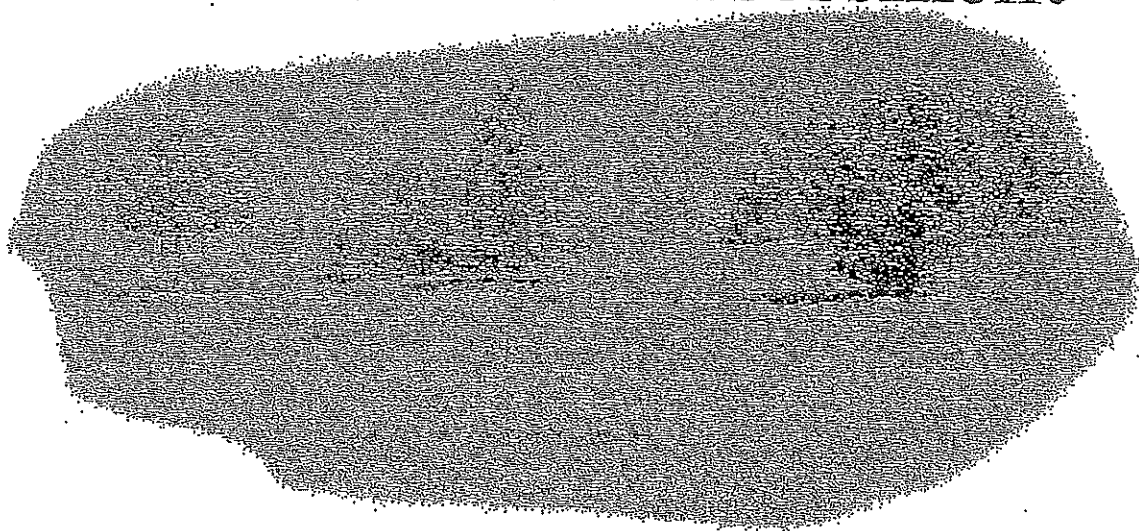
- A. Maintain Control Equipment in Operable Condition — The facility foreman is responsible for managing emissions control and is required to maintain all suppressive equipment in operational condition according to the Malfunction Prevention and Abatement Plan. He must maintain adequate spare parts inventory to accommodate changing conditions and equipment replacement.
- B. Evaluate Fugitive Emissions and Need for Control Application — The facility foreman or other person designated as being trained for operations management is required to evaluate conditions, process variables, and fugitive emissions on a continuous basis during crushing operations. From this evaluation, the trained person determines whether opacity and emissions are within allowable levels, and if not, to apply available control options as needed to gain the required level of fugitive control.
- C. Maintain Access to Water Sources as Needed — The foreman is responsible for locating and maintaining access to water resources to provide adequate fugitive emissions control. For normal operations, application of a single management tool may be very effective in controlling emissions.
- D. Enforce Speed Limits on Process Vehicular Traffic — The facility foreman/responsible person must determine if enforced speed limits are effective in controlling fugitive emissions from that source. He has authority to reduce vehicular speeds as appropriate to gain the needed control. Site speed limits affect all process vehicles, including loaders, trucks, and visitors.
- E. Transport of Final Product — Truck traffic in the area of crushing operations has the potential to generate excessive surface fines on haul roads. Watering and speed controls are the most effective options for controlling fugitive emissions from truck traffic. Any one of these management options may be incorporated into routine operations to provide continuous benefit.
- F. Total Facility — Minimizing the emissions from fugitive sources at a crushing and processing facility requires a knowledge of potential contributing factors on the part of operations level personnel, and a common-sense application of available management options to provide significant control of fugitive emissions from crushing operations.

VI. RECORDKEEPING

- A. Activity Documentation – Yahara Materials, Inc. is committed to accurate and complete documentation of crushing process parameters that influence and indicate compliance with applicable State and Federal regulations. The facility foreman is required to record important process information on a daily basis, maintain the daily records for inspection, and to deliver the records to the company office for storage and reference for an additional four years.
-



Aggregate Processing Plant Sound Level Assessment



Gail Jensen, P.E.
Keith Mathison

Section 1.0

Introduction

1.1 Purpose

Sounds generated by industry, transportation and normal day to day activities are receiving attention by the general public. Sound generated by aggregate processing plants is among the industries that are becoming a local interest. Expanding residential developments are encroaching on the areas where aggregate processing plants operate. Concerned neighbors are becoming more interested in aggregate processing plant operations in their neighborhoods. To this end, a study was conducted last construction season (2003) to measure, record and comment on the sound levels generated by normal operation of aggregate processing plants. The result of these sound pressure readings is used to determine any potential problems with sound leaving the plant site boundaries and to examine any preventive measures to any problems that may exist.

1.2 Acoustics

In order to put the data recorded into perspective, it is necessary to understand how sound is measured. When an object moves it produces a vibration. When an object vibrates in the atmosphere it moves air particles around it, and in turn, these air particles move air particles around them creating a pulse of the vibration through the air. Sound is measured in decibel (one tenth of a bel), which is the amount of air pressure on the eardrum.

The human ear perceives sound that occurs within the frequency range of 20Hz (Hertz) and 20kHz. In addition the human ear will detect sound that is above the hearing threshold, which is a function of frequency. A standardized A-weighting curve was developed to measure the change in sensitivity of the ear with respect to frequency. Sound level measured is typically denoted as decibels (dBA).

A quiet home or whisper is about 33 dBA (decibels). Normal conversation is about 63 dBA and a jackhammer is about 103 dBA. Table 1 lists the typical sound levels encountered each day by most people. Sound intensity can be perceived differently by individuals due to the efficiency of the individuals hearing ability.

| | |
|-------|---|
| 80-89 | Concrete Mixer, Noisy Workshop, Main Road Traffic |
| 70-79 | Noisy Office, Car Interior, Vacuum Cleaner, TV, Radio |
| 60-69 | Busy Office, Normal Speech |
| 50-59 | Urban Residence, Average Office, Quiet Restaurant |
| 40-49 | Small Town Residence, Living Room |
| 30-39 | Quiet Home, Whisper, Normal Sleep |
| 20-29 | Broadcast or Recording Studio |
| 10-19 | An-echoic Chamber |

Table 1 Typical Sound Levels

A change of 3 dBA is barely noticeable to the human ear, but a change of 5 dBA is clearly noticeable to the human ear. A change of 10 dBA is a doubling of the typical loudness of the sound. Theoretically, sound levels decrease by 6 dBA from a point source for each doubling of the distance from the source.

1.3 Study Parameters

For this study, sound pressure levels were measured with a Radio Shack 33-2055A and/or a Casella Cel-231 Digital Sound Survey hand-held meter. Aggregate processing plants were taken to be a point source center at the generator trailer (loudest source of an aggregate processing plant), rather than the individual components of the plant. Sound emanates from a source in a spherical pattern therefore a ray pattern of measurement was used to intersect the spherical wave at a given distance. Distances from the generator were measured and readings were taken in each quadrant for set intervals from the source.

Noise Measurements at an Actual Sand and Gravel Operation and Other Everyday Noises

(1) Noise measurements were taken at the Mathy Construction Sievertson Sand and Gravel Operation on October 3 and 5, 2000. Results are provided below.

(2) Background noise measurements were also taken at the intersection of County Highways B and P on October 7, 2000. Results are provided below.

(3) Reference everyday noise levels were obtained from the League of the Hard of Hearing. These noises are also provided for reference.

Sand and Gravel Operation Noise Levels

| <u>Location</u> | <u>Noise Level (in Decibels, dBA)</u> |
|--|---|
| Immediately adjacent to primary crusher | 88 |
| Immediately adjacent to screener | 95 |
| Immediately adjacent to generator | 99 |
| Immediately adjacent to loading trucks | 76 |
| Average | 90 |
| 500 feet from processing equipment | 60 |
| 750 feet from processing equipment (behind berm) | 49 |
| 1000 feet from processing equipment (behind berm) | 47 |
| 1500 feet from processing equipment (behind berm) | 43 |
| 2 miles from processing equipment | 47 |
| 1000 feet from processing equipment (no berm) | 58 |

Other Everyday Noises

| | |
|---|----|
| Highway B & P background | 57 |
| Highway B & P background when vehicles pass | 75 |
| Immediately adjacent to ^{Farm} Riley Tractor in high idle | 97 |
| Normal conversation | 60 |

Home

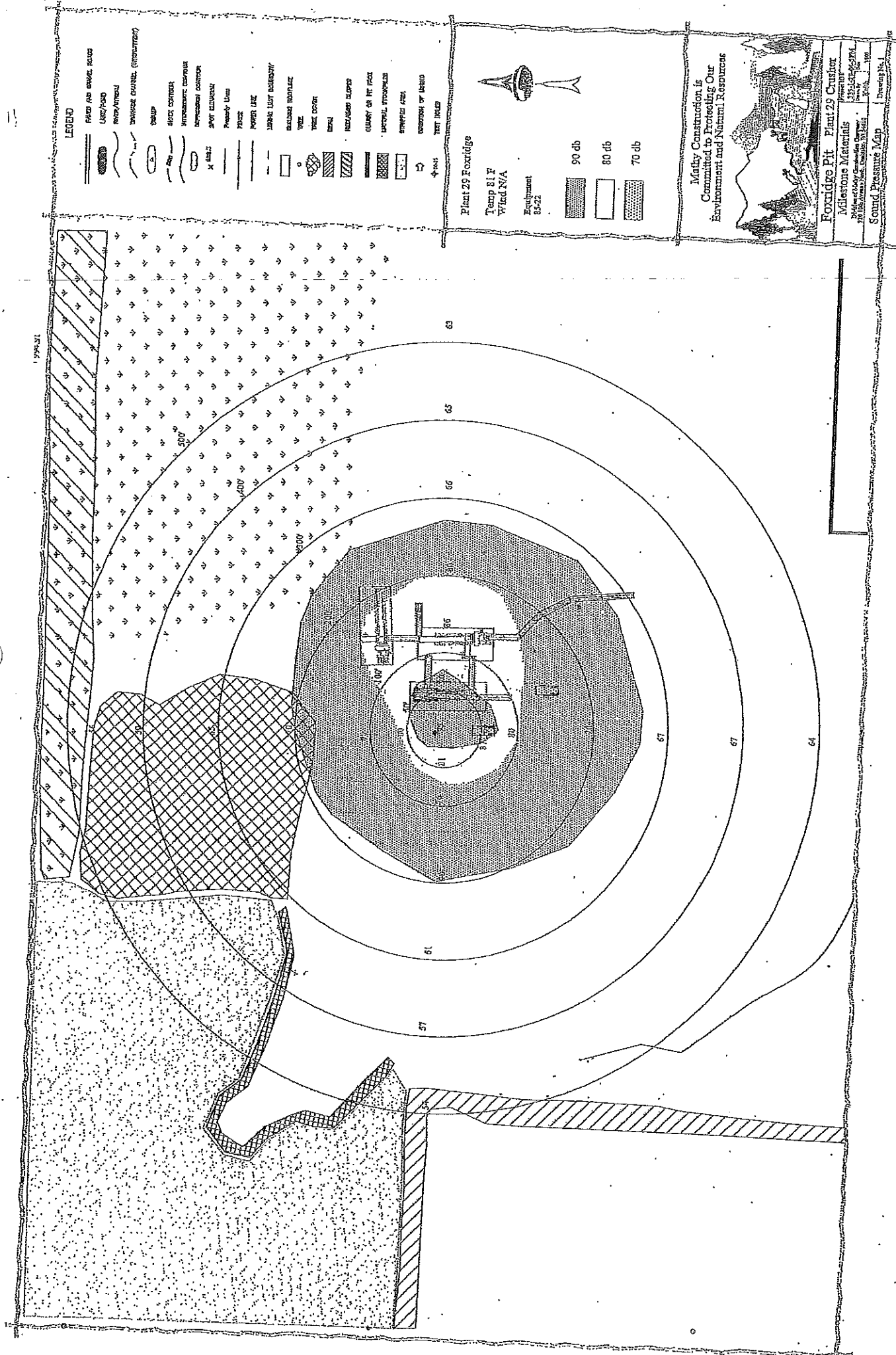
- 50 refrigerator
- 50 - 60 electric toothbrush
- 50 - 75 washing machine
- 50 - 75 air conditioner
- 50 - 80 electric shaver
- 55 coffee percolator
- 55 - 70 dishwasher
- 60 sewing machine
- 60 - 85 vacuum cleaner
- 60 - 95 hair dryer
- 65 - 80 alarm clock
- 70 TV audio
- 70 - 80 coffee grinder
- 70 - 95 garbage disposal
- 75 - 85 flush toilet
- 80 pop-up toaster
- 80 doorbell
- 80 ringing telephone
- 80 whistling kettle
- 80 - 90 food mixer or processor
- 80 - 90 blender
- 80 - 95 garbage disposal
- 110 baby crying
- 110 squeaky toy held close to the ear
- 135 noisy squeeze toys

Work

- 40 quiet office, library
- 50 large office
- 65 - 95 power lawn mower
- 80 manual machine, tools
- 85 handsaw
- 90 tractor
- 90 - 115 subway
- 95 electric drill
- 100 factory machinery
- 100 woodworking class
- 105 snow blower
- 110 power saw
- 110 leafblower
- 120 chain saw, hammer on nail
- 120 pneumatic drills, heavy machine
- 120 jet plane (at ramp)
- 120 ambulance siren
- 125 chain saw
- 130 jackhammer, power drill
- 130 air raid
- 130 percussion section at symphony
- 140 airplane taking off
- 150 jet engine taking off
- 150 artillery fire at 500 feet
- 180 rocket launching from pad

Recreation

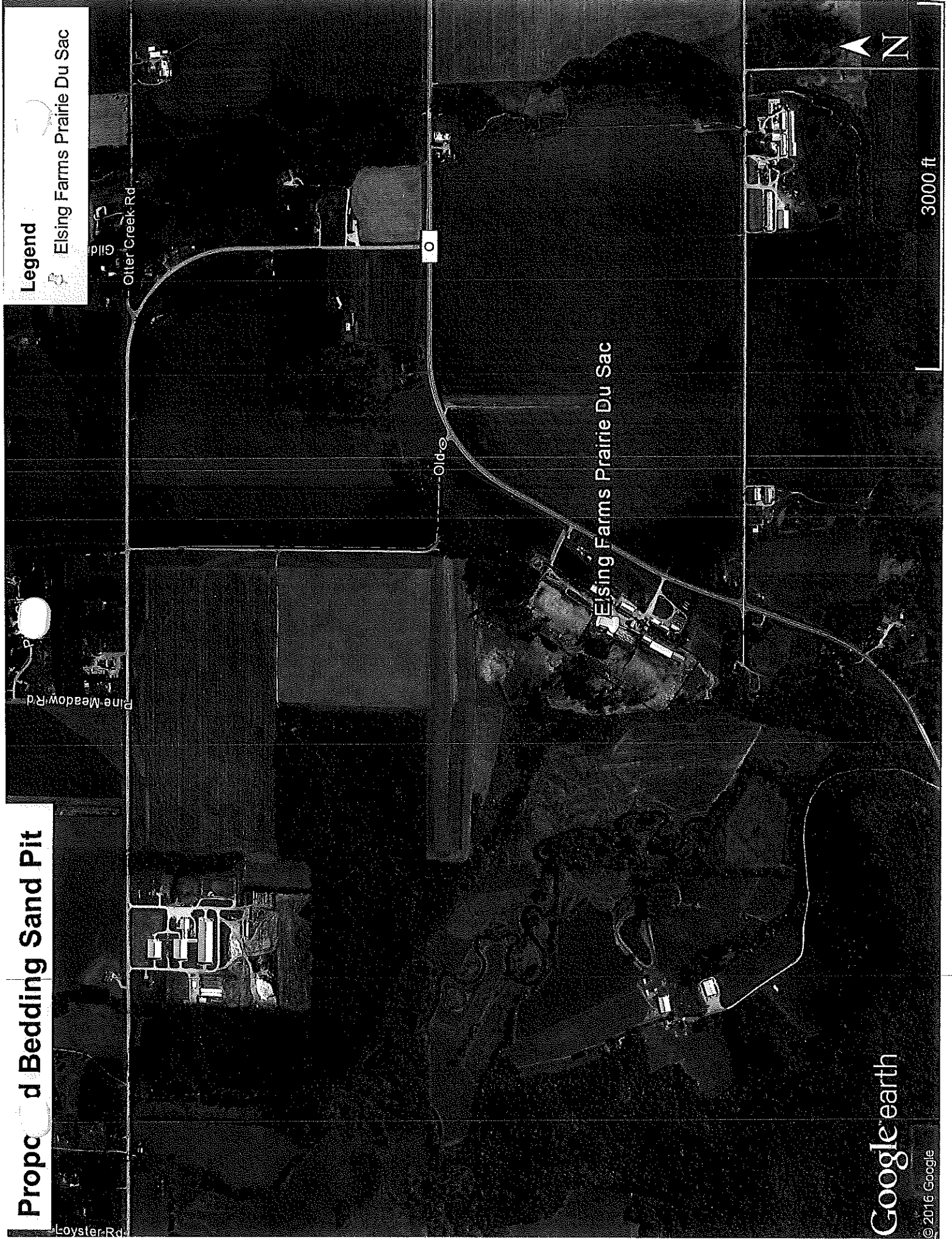
- 40 quiet residential area
- 70 freeway traffic
- 85 heavy traffic, noisy restaurant
- 90 truck, shouted conversation
- 95 - 110 motorcycle
- 100 snowmobile
- 100 school dance, boom box
- 110 disco
- 110 busy video arcade
- 110 symphony concert
- 110 car horn
- 110 - 120 rock concert
- 112 personal cassette player on high
- 117 football game (stadium)
- 120 band concert
- 125 auto stereo (factory installed)
- 130 stock car races
- 143 bicycle horn
- 150 firecracker
- 156 capgun
- 157 balloon pop
- 162 fireworks (at 3 feet)
- 163 rifle
- 166 handgun
- 170 shotgun



Proposed Bedding Sand Pit

Legend

Elsing Farms Prairie Du Sac



Google earth

© 2016 Google

1) Proposed mine site at E10495 State Road 60.

CUP 12-2017



2) Elsing Farms, LLC. just south of the mine.



3) Agricultural and forested properties to the north.

CUP 12-2017



4) Fields on the east side of Highway 60.



Photo 2