

NON-METALLIC MINING RECLAMATION PLAN

Operator: John S. Olynick, Inc.

Owner: Andre and Colleen Blanchard

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Summary

This reclamation plan has been developed to provide information about the existing site of the proposed mine, the proposed site operations, and how the mine will be reclaimed to the proposed post mining land use.

This reclamation plan is for a 10.3 acre site extension located approximately ½ mile east of the intersection of County Highway K and 235th Street in the Town of Estella (Appendix A). The land currently does have an existing sand and gravel pit at the site, operated by John S. Olynick, Inc. The site is currently permitted under NR135 with Chippewa County.

(Permit number 2001-29). The existing pit also has a Chapter 30 permit through the DNR.

(FID: 609025230, FIN: 21580)

The operator will mine sand and gravel that is located on glacial outwash that is characterized as meltwater stream sediment from the Chippewa Lobe. The site will be mined above the water table and will be reclaimed to establish prairie wildlife habitat and aquatic wildlife habitat.

A. Site Information

1. Landowner

Landowner: Andre and Colleen Blanchard
Address: P.O. Box 231
City, State, ZIP: Cornell, WI 54732

Applicant: John S. Olynick, Inc.
Address: N7918 State Hwy. 73
City, State, ZIP: Gilman, WI 54433

2. Lease:

See (Appendix B)

3. Legal Description

Tax Parcel Number(S): 23107-2614-50100000

Described As Follows: Gov. Lot 10 (SE NE) Subject to Scenic Easement Alg Chippewa River and State Hwy 178 as in V326 P505. Subject to Gravel & Soil Lease to John S. Olynick, Inc. Per Doc #882611. Life Estate to Lee & Yvonne Blanchard.

4. Property Owners Within 660 Feet of Project Site

Peter R. Lemay	23878 200 th Ave Cornell, WI 54732
John S. Olynick, Inc.	N7918 State Hwy. 73 Gilman, WI 54433
Haas Sons Property, LLC.	203 E Birch Street Thorp, WI 54771

5. Soil Information

Soil Survey of Chippewa County shows the soils at the mine site are mapped as MkB, MkC, CkB, AfB and CkC2. The report finds that the gravel has very little topsoil (Appendix C).

The site does have an existing gravel pit. The horizons are visible on the face of the excavation.

A horizon – 6 inches of topsoil

B horizon - Approx. 12 inches of grey clay

Using the soil survey estimates the maximum volume of topsoil for the entire mine site is 8,308 cubic yards of topsoil and 16,617 cubic yards of subsoil.

6. Groundwater information

Based on the 1988 UW-Extension Map “Generalized Ground-Water Elevation for Chippewa County Wisconsin” groundwater is flowing northwest towards the Chippewa River. Groundwater elevation is approximately 960 feet.

B. Site Operations

1. Description of Materials to be Extracted

Sand and gravel products will be extracted and processed at the site.

2. Extraction and Processing to be Conducted at the Site

An existing driveway is established at the site, which enters off of County Highway K. Sand & gravel will be mined or crushed, and removed from the site. A portable crushing plant may be used to process the material and stockpile it on site. Materials within the mine will be excavated and transported using bulldozers, excavators, trucks, end loaders, and crushing equipment.

Sand and gravel will be excavated from the mine above the water table. Excavation will starting on the West end and working to the North and East. No high capacity wells will be installed or used to support sand and gravel processing.

No flocculants or other chemicals will be used to support sand and gravel processing. No waste materials that are generated off-site will be hauled to the mine, stockpiled or used in site reclamation.

3. Volumes of Materials

A sequence of mine Phases is planned to systematically mine and reclaim the site. The anticipated area of disturbance and estimated volume of raw materials to be removed during the life of the mine is as follows.

Phase	Area (acre)	During 1 st two years (cubic yards)	During Full Life of Operation (cubic yards)
1	5.36	Approx. 40,000 yds.	132,000
2	4.94	0	238,000
Total	10.30	Approx. 40,000	370,000

4. Site Dewatering and Effluent Discharge

The site will be an internally drained, however, some site dewatering may occur. Site dewatering will be with the use of a water pump discharging water from a storage pond. Pumping locations will be along the north pit boundary, discharging to the north.

5. Stormwater Permits/Management

The operator will obtain a Wisconsin DNR Nonmetallic Mining storm water permit and manage storm water in standards established in the permit. At a minimum stormwater will be contained within the mine boundaries for all rainfall events up the 25-year, 24-hour event (4.87 inches)

Soil berms created during topsoil and subsoil stripping will be stabilized and used to contain and direct stormwater runoff towards the excavated floor of the mine where it will infiltrate. Stormwater will be managed this way over the entire life of the mine. A

notice of intent will be sent to the DNR.

6. Erosion Control & Permits

All topsoil and subsoil stockpiles will be graded to a slope of 3:1 or flatter and stabilized as soon as conditions allow conserving soil and limiting erosion. Silt fence will be installed along all soil stockpiles to control erosion. Berms will be stabilized using best management practices including seeding, mulching, erosion control mat, hydro-seeding, etc. Erosion and sediment control best management practices will be installed as determined by the Wisconsin Erosion Control Product Acceptability List (PAL) Channel and Slope Erosion Control Matrices (Appendix E).

7. Reclamation Activities During Operations

A process of contemporaneous reclamation will be used to systematically mine and reclaim the site. Under this process the site will be reclaimed as soon as possible after materials have been extracted and processed using the planned Phase sequence.

Most of Phase 1 will remain unreclaimed as Phase 2 is being mined and used as a stockpile area. Phase 2 will be restored as excavation reaches the pit boundaries.

All of the topsoil (estimated 6 inches) will be stripped and stockpiled in berms. Following topsoil stripping operations all of the subsoil (estimated 12 inches) will be stripped and stockpiled in berms that are separate from the topsoil berms. All berms will be shaped to a 3:1 slope or flatter and seeded with DOT Seed Mix 20. Mining operations will then excavate, process, and remove sand and gravel from the site.

When excavation of sand and gravel in a phase is complete, rough grading work will be performed to create slopes around the perimeter of the mine that are 3:1 or flatter. Rough grading will also be performed to establish reclamation grades for the mine floor. Subsoil will then be placed over the slopes and flat lying areas of mine to a depth of 10 inches or more.

Topsoil will then be placed over the subsoil to a depth of 6 inches or more. Upon completion of subsoil and topsoil re-application, soils testing will be performed following procedures established in the Wisconsin Nutrient Management Standard 590 to determine the organic matter, phosphorus, potassium and pH. Soil amendments (including lime and fertilizer) will be applied based on the soil test results to meet the fertility requirements needed to achieve the intended post mining land use.

The site will then be seeded (Appendix D).

Reclamation test plots will be established within the first two years of mining. Test plots will be established for each post mining land use. These test plots will be monitored and used to help determine success in future areas of mine reclamation.

8. Timetable/Sequence of Operations

<u>Location</u>	<u>Activity</u>
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Phase 1	The operator will start at the existing pit limits and continue East and North until it reaches the boundaries of the mine. This will take approximately 5-10 years.
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Phase 2	The operator will continue excavating East and North to the pit boundaries. This will take approximately 5-10 years. The operator will restore slopes along the east, south and north boundary of Phase 2. The pit floor of Phase 1 will be used as a staging area for truck loading or stockpiles.
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9. Timetable

Estimated period of operation/extraction for each Phase:

Phase 1	5-10 years
Phase 2	5-10 years
Total	10-20 years

C. Final Site

1. Disposition of Structures and Roads

The driveway will remain and provide access to the reclaimed area. There are no areas of concentrated flow entering, leaving, or within the reclaimed mine site.

2. Soil Reapplication & Reconditioning

Subsoil will be applied to all areas of the mine including slopes and any portion of the pit floor that is not under water. This work will be done with scrapers or bulldozers. Slopes will be stabilized using best management practices including seeding, mulching, erosion control mat, hydro-seeding, etc. Erosion and sediment control best management practices will be installed as determined by the Wisconsin Erosion Control Product Acceptability List (PAL) Channel and Slope Erosion Control Matrices (Appendix E).

Subsoil material will then be removed from the berms with excavators or loaders and transported in dump trucks to the area in the mine to be reclaimed. Trucks will be routed to limit traffic over areas where subsoil has already been applied. Trucks will dump subsoil and bulldozers will spread the material to be 10 inches thick on the slopes and floor of the mine. The use of tracked equipment while spreading subsoil will limit soil compaction.

Topsoil material will then be removed from the berms with excavators or loaders and transported in dump trucks to the area in the mine to be reclaimed. Trucks will be routed to limit traffic over areas where subsoil or topsoil has already been applied. Trucks will dump topsoil and bulldozers will spread the material to be 6 inches thick on the slopes and floor of the mine. The use of tracked equipment while spreading topsoil will limit

soil compaction.

In the event that rubber tire equipment cannot be routed to prevent subsoil and topsoil compaction deep tillage equipment will be used to alleviate compaction in the upper 12 to 14 inches of the soil profile.

Soils testing will be performed following procedures established in the Wisconsin Nutrient Management Standard 590 to determine the organic matter, phosphorus, potassium and pH. Soil amendments (including lime and fertilizer) will be applied based on the soil test results to meet the fertility requirements needed to achieve the intended post mining land use.

3. Safety Assurances

Given the slopes on the reclaimed mine site and the post mining land uses, there are very limited safety concerns.

4. Seeding Plan

Seeding will be selected to achieve the post mining land use that is planned for each designated area. All areas will be reclaimed to passive recreational and will be seeded with native grasses. Seed will be broadcast seeded and rolled to improve seed – soil contact. DNR Seed Mix 2 will be used in these areas and applied at the rates listed (Appendix D).

5. Future Use

The post mining land use will be for Conservation/Ecological Use

Land Cover Type/Plant Community

Shallow ponded/Deep Ponded

Management Approach

The proposed performance measures used to determine reclamation success are:

- a. The establishment of a mine soil profile with a minimum of 6 inches of topsoil and 10 inches of subsoil.
- b. The establishment of full plant rooting depth.
- c. The establishment of target soil chemistry and fertility to achieve and sustain the post mining land use.
- d. The establishment of the seeding so that:
 - i. All species in the seeding are present.
 - ii. No more that 50% of the total vegetation is one species from the seed mix.
 - iii. Biomass shall be a minimum of one ton per acre per year.

Site monitoring will be conducted to assess the success of the seeding and monitor the site for invasive or noxious plan species. Areas of failed seeding shall be examined to determine the cause of the failure. Invasive or noxious species will be spot treated with herbicide according to the product label or hand removal and disposed of properly.

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