

DESIGN 45, LLC.
TECHNICAL DESIGN

**BLANCHARD SOUTH SITE
FOR
JOHN S. OYNICK, INC.
CHIPPEWA COUNTY, WI**

NON-METALLIC MINING RECLAMATION PLAN

Operator: John S. Olynick, Inc.

Owner: Lee and Yvonne Blanchard

Table of Contents

-Reclamation Plan Narrative.....	Page 1-7
-Permit Application.....	Form 2700-008
-Plan Set (11" x 17").....	Initial Site Map Operations Site Map Final Site Map Cross Sections

Appendix A - Site Location-Plat Book Page

Appendix B - Lease

Appendix C- Soil Information

Appendix D - Seed Mix

Appendix E - PAL Erosion Control Matrix

Appendix F - Cost Estimates

Appendix G - Copy of Notice of Intent to Department of Natural Resources. Form 3400-179

Appendix H - Wetland Evaluation

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 an 11.5 acre site 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 2001-28).

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 and below the water table and will be reclaimed to establish prairie wildlife habitat and aquatic wildlife habitat.

A. Site Information

1. Landowner

Landowner: Lee and Yvonne Blanchard
Address: 20279 County Hwy. K
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): 23107-2532-00000000
Described as follows: NW ¼ SW ¼ Life estate to Lee and Yvonne Blanchard

4. Property Owners Within 660 Feet of Project Site

Peter R. Lemay	
John S. Olynick, Inc.	

5. Soil Information

Soil Survey of Chippewa County shows the soils at the mine site are mapped as AfB, CkD2 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 9,200 cubic yards of topsoil and 18,400 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 970 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 and below the water table in two lifts. The first lift will be to the existing pit floor elevation. The second lift will be removing the floor of the pit creating a pond. Starting on the South end and working to the North. 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 Cells 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.

Cell	Area (acre)	During 1 st two years (cubic yards)	During Full Life of Operation (cubic yards)
1	3.44	Approx. 40,000 yds.	129,000
2	8.08	0	238,000
Total	11.52	Approx. 40,000	367,000

4. Site Dewatering and Effluent Discharge

The site will be an internally drained. No site dewatering will occur.

5. Stormwater Permits/Management

The operator will obtain a Wisconsin DNR Nonmetallic Mining stormwater permit and manage stormwater in accordance with the standards established in the permit. At a minimum stormwater will be contained within the mine boundaries for all rainfall events up the 10 year, 24 hour frequency storm (4.1 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 Cell sequence.

Most of Cell 1 will remain unreclaimed as Cell 2 is being mined and used as a stockpile area. Cell 2 will be restored as the pit floor is being removed.

At the beginning of the mining operations for each cell, stumps and slash will be incorporated in the final slopes of areas to be reclaimed in the existing pit. 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 Cell 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

Location Activity

- Cell 1 The operator will start at the existing face and continue west and south until it reaches the boundaries of the mine. This will take approximately 2 years.
- Cell 2 The operator will continue excavating south to the pit boundaries. This will take approximately 3-10 years. While removing the pit floor, the operator will restore slopes along the east, south and west boundary of Cell 2. The pit floor of Cell 1 will be used as a staging area for truck loading or stockpiles.

9. Timetable

Estimated period of operation/extraction for each cell:

Cell 1	2 years
Cell 2	3-10 years
Total	10 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 Land planted to establish prairie wildlife habitat and aquatic wildlife habitat.

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 than 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 plant 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.

Appendix A - Site Location-Plat Book Page

Appendix B - Lease

Appendix C- Soil Information

Appendix D - Seed Mix

Appendix E - PAL Erosion Control Matrix

Appendix F - Cost Estimates

Appendix G - Copy of Notice of Intent to Department of Natural Resources. Form 3400-179

Appendix H - Wetland Evaluation

C:\Design 45\Projects\1509 Blanch So\Project Managment\Documents\County Narrative.doc

5. Project Information: (Acreages to report are the total number of active and unreclaimed acres)

- A. Type of deposit proposed for mining Sand and gravel.
- B. Type of processing Screening and crushing gravel
- C. Approximate total acreage proposed for mine site (life of mine) 11.50 acres
- D. Approximate acreage to be disturbed in first calendar year of operation 6 acres First active year _____
- E. Current land use of site **The site is currently a permitted sand and gravel operation.**
- F. Land is: leased owned by applicant other, specify _____
- G. Estimated total life of mine 5-12 years.
- H. Other permits held for site (circle): i. DNR-Chapter 30 ii. County Zoning iii. DNR-Stormwater iv. Other: _____

6. Threatened or Endangered Species:

Are you aware of any listed threatened or endangered species at the nonmetallic mining site? Yes No

If "Yes", attach documentation of the threatened or endangered species.

Note: Be aware that Chippewa County may, pursuant to s. 29.604(6r), Wis. Stats., consult with the Bureau of Endangered Resources on whether approval of this permit may affect a listed threatened or endangered species. The presence of a listed threatened or endangered species may affect certain aspects of the nonmetallic mining site under the requirements of this statute.

7. Cultural or Historical Resources:

Are you aware of any listed cultural or historical resources at the nonmetallic mining site? Yes No

If "Yes", attach documentation of the cultural or historical resource.

Note: Be aware that Chippewa County may, pursuant to s. 44.40, Wis. Stats., consult with the State Historic Preservation Officer on whether approval of this permit may have an adverse affect upon historic property. The presence of historic property may affect certain aspects of the nonmetallic mining site under the requirements of this statute.

8. Wetlands Protection:

Are you aware of any wetlands at the nonmetallic mining site? Yes No

If "Yes", documentation of and measure to protect wetlands is required in Reclamation Plan.

Note: Be aware that Chippewa County shall, pursuant to s. 281.15, Wis. Stats., and ch. NR103, Wis. Adm. Code, require that the nonmetallic mining project meet the wetland water quality standard provisions in ch. NR103. The presence of wetlands may affect certain aspects of the nonmetallic mining site under the requirements of ch. NR103.

9. Reclamation Plan: Submit a reclamation plan conforming to Chippewa County **PLAN SPECIFICATIONS FOR NON-METALLIC MINES IN CHIPPEWA COUNTY** and s. NR135.19 with this permit application. Include any previous regulatory approvals (if applicable) so long as they meet the reclamation standards of the Chippewa County Non-Metallic Mining Reclamation Ordinance.

The landowner and lessee, if different from the operator, must also provide signed certification that they concur with the reclamation plan and will allow its implementation.

I hereby certify as a duly authorized representative that the operator will provide financial assurance as required by s. NR135.40 upon granting of the reclamation permit and before mining begins. I further certify and that if the land containing the mine site is owned or leased by someone other than the operator, the landowner or lessee has been provided with a copy of the reclamation plan submitted with this application as required by s. NR135.19(6) Wis. Adm. Code.

Signature of Applicant or Duly Authorized Representative

Dated Signed

PERMIT FEES		<i>(To be completed by Chippewa County)</i>	
Total Proposed Size _____		Current Year Active or Unreclaimed Acres _____	
Includes areas currently disturbed or to be disturbed before the end of the current calendar year (includes areas for excavation, stockpiling, processing, conservation practices, and roads). See Section 5C. and 5D.			

Annual Permit Fee (based on current year total of active and unreclaimed acres)			
County Fee		\$ _____.	_____
State Fee		\$ _____.	_____

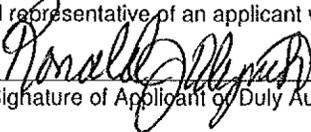
Plan Review Fee (based on total size of pit)			
		\$ _____.	_____

Public Notice			
		\$ _____.	_____

TOTAL RECLAMATION PERMIT FEE DUE		\$ _____.	_____
Make checks payable to Chippewa County Department of Land Conservation and Forest Management			
Please be aware that additional fees may be incurred should a Public Hearing be held for review of this permit. Such fees will be assessed at a later date.			

11. Certification

I hereby certify that the information contained herein is true and accurate. I also certify that I am the applicant or that I am the duly authorized representative of an applicant who is authorized to apply for a permit.


Signature of Applicant or Duly Authorized Representative

4-15-15
Dated Signed

12. County Permit Information		<i>(To be completed by Chippewa County)</i>
Date Application Received (this form):		
Check Amount: \$	Check No.	Date Received:
Public Notice Dates:		
Financial Assurance Received:	Type:	
Financial or Bonding Institution:		
Permit No.		
Date Permit Issued:	Staff Signature	

Legal Definitions

¹ Chippewa County Non-Metallic Mining - "Unreclaimed acre" or "unreclaimed acres" means those unreclaimed areas in which nonmetallic mining has occurred after August 1, 2001 and areas where nonmetallic mining reclamation has been completed but is not yet certified as reclaimed under sub. 30-137.(c). However the terms "Unreclaimed acre" or "unreclaimed acres" do not include:

1. Those areas where reclamation has been completed and certified as reclaimed under sub.30-137.(c).
2. Those areas previously affected by nonmetallic mining but which are not used for nonmetallic mining after August 1, 2001.
3. Those portions of nonmetallic mining sites which are included in a nonmetallic mining reclamation plan approved pursuant to this chapter but are not yet affected by nonmetallic mining.
4. Areas previously mined but used after August 1, 2001 for a non-mining activity, such as stockpiling of materials used for an industrial activity such as an asphalt plant, concrete batch plant, block and tile operation or other industry that uses products produced from nonmetallic mining.
5. For purposes of fees under sub 30-135, those areas within a nonmetallic mining site which the regulatory authority has determined to have been successfully reclaimed on an interim basis in accordance with s. NR 135.41.

² Chippewa County Non-Metallic Mining - "Nonmetallic mining site" or "site" means all contiguous areas of present or proposed mining described in par. (a), subject to the qualifications in par. (b).

(a) Nonmetallic mining site means the following:

1. The location where nonmetallic mining is proposed or conducted.
2. Storage and processing areas that are in or contiguous to areas excavated for nonmetallic mining.
3. Areas where nonmetallic mining refuse is deposited.
4. Areas affected by activities such as the construction or improvement of private roads or haulage ways for nonmetallic mining.
5. Areas where grading or regrading is necessary.
6. Areas where nonmetallic mining reclamation activities are carried out or structures needed for nonmetallic mining reclamation, such as topsoil stockpile areas, revegetation test plots, or channels for surface water diversion, are located.

(b) "Nonmetallic mine site" does not include any of the following areas:

1. Those portions of sites listed in par. (a) not used for nonmetallic mining or purposes related to nonmetallic mining after August 1, 2001.
2. Separate, previously mined areas that are not used for nonmetallic mineral extraction after August 1, 2001 and are not contiguous to mine sites, including separate areas that are connected to active mine sites by public or private roads.
3. Areas previously mined but used after August 1, 2001 for a non-mining activity, such as stockpiles of materials used for an industrial process unrelated to nonmetallic mining.