Non-Metallic Mining Reclamation Plan

Wyeville Site Mine Extension

Town of Byron, Wisconsin

SEH No. HICRU 118013

April 27, 2012

SEH

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April 27, 2012

RE: Wyeville Site Mine Extension
Non-Metallic Mining Reclamation Plan
Town of Byron, Wisconsin
SEH No. HICRU 118013

Mr. Bryce Richardson
Monroe County Land Conservation Department
820 Industrial Drive, Suite 3
Sparta, WI 54656

Dear Mr. Richardson:

On behalf of Hi-Crush Proppants LLC, Short Elliott Hendrickson Inc. (SEH®) is submitting the enclosed document titled "Non-Metallic Mining Reclamation Plan" and the Application for a Non-Metallic Mining Permit (Appendix A-2). This reclamation plan applies to an approximate 353-acre proposed non-metallic mine extension located in Sections 8 and 17; Township 18 North; Range 1 East; Town of Byron, approximately 5 miles east of Tomah, Wisconsin.

This Reclamation Plan has been prepared in accordance with Wisconsin Statute Chapter 295, Wisconsin Administrative Code Chapter NR135, and Monroe County Ordinance Chapter 8, Article II. If you have any questions pertaining to the contents of the attached Reclamation Plan, please contact me at 715.720.6200 or via email at pnewman@sehinc.com.

Sincerely,

Phil Newman
Project Manager

SLS/NW
p:\fj\h\hicru\118013\reports&specs\rpts\rec plan wyeville site 4.27.12.docx

Non-Metallic Mining Reclamation Plan

Wyeville Site Mine Extension
Town of Byron, Wisconsin

Prepared for:
Hi-Crush Proppants LLC
Houston, Texas

Prepared by:
Short Elliott Hendrickson Inc.
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Chippewa Falls, WI 54729-3374
715.720.6200

Certification Page

I hereby certify that this reclamation plan was prepared by me, or under my direct supervision, in accordance with Wisconsin Statute Chapter 295, Wisconsin Administrative Code Chapter NR135, and Monroe County Ordinance Chapter 8, Article II.

Shanna Skallet — Date: 4/27/2012
Compliance Supervisor, Hi-Crush Proppants, LLC

Phil Newman — 26594 PE Number — Date: 4-27-2012
Project Manager, SEH

Certification of Reclamation Plan

I, as a representative of the operator and owner of the property described herein, do hereby certify that I have reviewed the reclamation plan, concur with its provisions, agree to permit its implementation, and certify that reclamation will be carried out in accordance with this reclamation plan.

Jay Alston — Date: 4-27-2012
Hi-Crush Proppants LLC
Chief Operating Officer

Distribution List

No. of Copies	Sent to
1	Mr. Bryce Richardson Monroe County Land Conservation Department 820 Industrial Drive, Suite 3 Sparta, WI 54656
4	Mr. Jay Alston Hi-Crush Proppants LLC Three Riverway, Suite 1550 Houston, TX 77056

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Non-Metallic Mining Reclamation Plan

Wyeville Site Mine Extension

Prepared for Hi-Crush Proppants LLC

1.0 Introduction

This Non-Metallic Mining Reclamation Plan has been prepared for the proposed extension to the Wyeville Site non-metallic mine located in the Town of Byron, Wisconsin. This reclamation plan has been prepared by Short Elliott Hendrickson Inc. (SEH®) in coordination with Hi-Crush Proppants, LLC (Hi-Crush) in accordance with Wisconsin Statute Chapter 295, Wisconsin Administrative Code Chapter NR135, and Monroe County Ordinance Chapter 8, Article II. The NR135 Reclamation Plan Checklist and Code Citations document is included as **Appendix A-1**.

2.0 Site Information

2.1 Project Description

The operator, Hi-Crush, proposes to extract sand from unconsolidated Pleistocene stream deposits at the proposed Wyeville Site Mine Extension for use as a proppant in petroleum wells. The sand will be mined to the extent practical using earthmoving equipment, which may include but not limited to excavators, dozers, front end loaders, conveyors, off-road haul trucks and hydraulic dredging equipment. Existing processing activities at the site include screening, washing, drying, stockpiling, and storage. The processed material will be shipped offsite via railroad cars, which are loaded and stored on the existing rail spur. The Application for a Nonmetallic Mining Permit is included as **Appendix A-2**.

The project site is located in the southwest ¼ and the southeast ¼ of Section 8 and the north ½ of the northeast ¼ of Section 17, Township 18 North, Range 1 East, in the Town of Byron, Monroe County, Wisconsin (**Figure 1**). The site consists of approximately 353 acres of agricultural land and existing mine and plant facilities.

2.1.1 Existing Mine Area

The proposed project is an extension to an existing 20-acre mine located in the southwest ¼ of the southwest ¼ of Section 8, Township 18 North, Range 1 East (**Figure 1**). The existing mine, processing plant, stockpile area and Phase 1 of the extension are covered under Monroe County Nonmetallic Mining Reclamation Permit #055-081-00000-060. These areas are shown on **Figure 2B**.

2.2 Site Description

The Parcel ID numbers for the project area are listed below. **Figure 2B** shows the overall property boundaries.

Parcel Number		Property Description
Existing Processing Facility & Mine	006-00162-0001	THE NW ¼ OF SW ¼ LYING SW OF THE RR EXC A PARCEL; Section 8
	006-00163-0000	SW ¼ OF SW ¼; Section 8
	006-00164-0000	THE E ½ OF SW ¼ LYING SW OF THE RR
Existing Rail Spur	006-00168-0001	THE SW ¼ OF SE ¼ LYING SW OF THE RR
	006-00378-5000	PART OF THE NW ¼ OF NE ¼, AS DSCR IN #605064
	006-00375-9000	PART OF THE SW ¼ OF NE 1/4 , BEING RR R/W
	006-00375-6000	NE ¼ OF NE 1/4 , AS DSCR IN 605064
	006-00384-5000	PART OF THE SE ¼ OF NE ¼, AS DSCR IN #605064
	006-00399-5000	PART OF THE NE ¼ OF SE ¼, BEING RR R/W
	006-00366-5000	PART OF THE NW ¼ OF SW ¼, DESCR IN #605064 *Project boundary includes approximately 7 acres portion of the parcel.
Proposed Extension	006-00161-1000	PRT of E ½ of SW ¼, LYING NE OF THE RR AS DSCR IN #611683; ALSO AN EASE IN #611684; Section 8
	006-00167-1000	PRT OF NW ¼ OF SE ¼ AS DSCR IN #611683; Section 8 *Approximately 8.4 acres of parcel are included within the mine limit.
	006-00166-1000	PRT OF NE ¼ OF SE ¼ AS DSCR IN #611683; Section 8 *Approximately 9.2 acres of parcel are included within the mine limit.
	006-00168-0000	THE SW ¼ OF SE ¼ LYING NE OF THE RR; Section 8 *Approximately 31.0 acres of parcel are included within the mine limit.
	006-00169-0000	SE ¼ OF SE ¼; Section 8 *Approximately 12.9 acres of parcel are included within the mine limit.
	006-00377-0000	PART OF THE NW ¼ OF NE ¼, LYING EAST OF THE RR; Section 17 *Approximately 7.5 acres of parcel are included within the mine limit.
	006-00375-000	NE ¼ of NE ¼ EXC RR; Section 17 *Approximately 5.4 acres of parcel are included within the mine limit.
	006-00381-0000	PART OF THE SE ¼ OF NE ¼, LYING EAST OF THE RR; Section 17

2.2.1 Owner & Operator Information

The proposed mine extension at the Wyeville Site is owned and will be operated by Hi-Crush. Copies of the property deeds are included in **Appendix B**.

Operator Contact:
Jay Alston
Chief Operating Officer
Hi-Crush Proppants LLC
Three Riverway, Suite 1550
Houston, TX 77056
Phone: (985) 634-3767
Email: jayalston@hicrushproppants.com

2.2.2 Location of Man-Made Features

There are no man-made features currently located within the proposed mine extension property. The existing plant, maintenance, office buildings rail and rail spur are shown of **Figure 3**. Residential buildings associated with Valley Junction are located to the northwest of the proposed mine extension area. Several cranberry operations are located to the north and east of the project property and the project property is bounded on the west by State Highway (HWY) 173.

3.0 Geologic Composition and Depth of Mineral Deposit

The geology of the proposed project location consists of unconsolidated Pleistocene stream deposits which fill valleys cut into the underlying Mt. Simon Formation. These sands are extremely clean and well-rounded and tend to coarsen with depth. As the Wonewoc is not present at Wyeville, but is present in the hills approximately six (6) miles west of Tomah, the stream deposits are likely reworked Wonewoc sand grains, deposited during periods of recurring glaciation over the last 100,000 years. The clay fraction of these unconsolidated sands average 2 to 3 percent, while Wonewoc in outcrop will include over 10 percent fine clay and silt particles. Boring information shows that the approximate elevation of the top of the deposit is 915 feet MSL. The floor of the deposit is estimated to be approximately 855 feet MSL.

3.1 Distribution, Thickness, and Type of Topsoil

The USDA Natural Resources Conservation Service (NRCS) soil survey data for Monroe County shows the proposed project boundary to include five (5) soil series. The topsoil thickness ranges from 6 to 14 inches with a weighted average of 7 inches and the B-horizon thickness ranges from 3 to 30 inches with a weighted average of 18 inches. The soil thickness spreadsheet and NRCS Custom Soil Resource Report used to estimate the topsoil and B-horizon thickness are include in **Appendix C**.

3.2 Groundwater Information

The groundwater elevation for the property area was estimated based on the Water-Table Elevation Map of Monroe County (I.D Lippelt, Water Table Elevation, Irrigable Lands Inventory, Phase 1 - Ground Water and Related Information, Wisconsin Geological and Natural History Survey, September, 1981.), local potable well information, and site soil boring information. A depth to groundwater map, groundwater contours, and select Well Constructor's Reports for local potable wells are included as **Appendix D-1**, **Appendix D-2**, and **Appendix D-4**, respectively. Based on the available information, the estimated water table elevation at the project property ranges from approximately 908 to 920 feet above mean

sea level (MSL). Groundwater flow direction at the site appears to be southeast following the Lemonweir River valley (**Appendix D-2**).

Four shallow groundwater monitoring wells were installed on the property at the locations shown on **Appendix D-3**. Data collected at these locations indicate a water-table elevation of approximately 912 to 913 feet MSL in this area of the site.

It is likely that the shallow water table in the area is significantly influenced by cranberry operations. Growers will often dewater the cranberry fields during the growing season and flood the fields during harvest. Likewise, Hi-Crush will be dewatering during mining activities and will locally affect the potentiometric surface.

Hi-Crush plans to install observation wells, which will be instrumented with pressure transducers and data loggers. Select local domestic wells may also be monitored, where possible. Continuous groundwater data will be collected and analyzed to characterize the hydrogeologic environment in the vicinity of the site. Dewatering activities will be modified to minimize the potential for impact to wetlands and other surface water features.

4.0 Surface Waters and Site Drainage

4.1 Location of Surface Waters

The project area is located in the Beaver Creek-Juneau Watershed, which is part of the Mississippi River Basin. The project is bounded to the east by the Lemonweir River, which has been historically straightened. An oxbow of the original Lemonweir River is located in the southeast portion of the project area (**Figure 1** and **Figure 2A**). Two named streams, Brandy Creek and Mill Creek, are located to the north and south of the project area, respectively. Additional intermittent ditches on the southwest portion of the project drain to Mill Creek. Intermittent ditches are shown by the USGS on the east side of the project area; however, these ditches were not observed during an August 2011 site visit by SEH. Both Mill Creek and Brandy Creek drain south and east to the Lemonweir River. The adjacent surface waters have no special designations, nor are they listed as impaired waters. Wetland basins associated with the Lemonweir River were delineated and are discussed further in **Section 5.1**.

4.2 Existing Topography and Drainage Patterns

Existing site topography is shown on **Figure 1** and **Figure 2A**. All areas of the site ultimately drain southeast to the Lemonweir River.

5.0 Biological Information

The proposed project is located in the Central Sand Plains Ecological Landscape which is comprised of nearly level expanse of lacustrine and outwash sand that originated from a huge glacial lake (WDNR, January 23, 2012). The western portion of this landscape is mostly forest or wetland with oak, pine, and aspen are the most abundant forest cover types and tamarack and black spruce in the peatlands and bottomland hardwoods in the floodplain forests. Agricultural activities in this ecological landscape include potato and cranberry production.

The proposed project area includes agricultural fields, farmed wetlands, floodplain forest wetlands, and existing mine and plant facilities. The floodplain forest is primarily a mixture of mature deciduous species. Wetlands are discussed further in **Section 5.1**.

The WDNR has listed several species according to their probability of occurring in the Central Sand Plains Ecological Landscape. This list is included as **Appendix E-1**, “Species

Occurring in the Central Sand Plains Ecological Landscape." This list indicates what species may be present; however, a survey for wildlife was not performed at the proposed project location. An endangered resources review will be performed for the site prior to construction and Hi-Crush will comply with all state and federal endangered species laws.

5.1 Wetlands

Review of the Wisconsin Wetlands Inventory (WWI), Web Soil Survey for Monroe County (NRCS 2012), and historical aerial photographs indicated one large and several small potential wetland areas within the property boundary. The wetlands within the east portion of the project area were delineated on August 11 and September 30, 2011. The project area to the west of the railroad tracks was assessed prior to the construction of the plant facilities and the rail spur. A permit to fill wetlands was obtained from the U.S. Army Corps of Engineers and the Wisconsin Department of Natural Resources for the rail spur area.

The wetlands located within the east portion of the project area include seasonally flooded basins located within an active agricultural field and floodplain wetlands associated with the Lemonweir River. The wetland boundaries are shown on **Figure 3**. The "Wetland Delineation Report, Wyeville Site, September 2011" and the "Technical Memorandum, Wetland Delineation Update, October 13, 2011" are included as **Appendix E-2** and **Appendix E-3**, respectively.

The wetland areas identified were delineated according to the 1987 U.S. Army Corps of Engineers *Wetland Delineation Manual* and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region.* Any proposed wetland impacts will be permitted accordingly through the necessary agencies.

6.0 Areal Extent and Phasing of Operations

The Areal Extent of the project is shown in **Figure 3.** The mining of the proposed project will proceed in six (6) phases, as shown on **Figure 3**. Phase 1 is the existing mine area and is covered by the Non-Metallic Mine Reclamation Plan that was submitted to the Monroe County Land Conservation Department on February 28, 2011. Phase 1 will be completed in 2012. Phase 2 began in 2012 and will have a duration of approximately one (1) year. The remaining phases have durations between 0.8 and 1.3 years. The phase durations are calculated based on the production of approximately 1.5 million tons of sand product per year. **Table 1** shows the estimated volume of topsoil, B-horizon, overburden, product waste, and final product amount for each phase and the total mine extents. Due to the topography of the mine site, changes in sand quality, quantity of reject material and the actual quantity mined each year, there will be some variation in the quantity of product obtained from each phase and, therefore, the actual duration of each phase may vary.

Table 1
Estimated Reclamation and Product Volumes

Phase	Phase Area (Acres)	Topsoil Volume	B-Horizon Volume	Overburden Volume	Product Reject Volume Available for Reclamation	Product Amount (Tons)	Phase Duration (Years)
2	15.77	14,800	38,200	0	591,600	1,626,700	1.1
3	19.68	18,500	47,600	0	675,000	1,856,300	1.2
4	20.93	19,700	50,600	0	718,200	1,975,100	1.3
5	20.70	19,500	50,100	0	706,500	1,942,700	1.3
6	13.10	12,300	31,700	0	437,900	1,204,300	0.8
Total	90.18	84,800	218,200	0	3,129,200	8,605,100	6

Notes: Volumes are in cubic yards.

Operation of the proposed mine site will include the removal of topsoil and B-horizon and the extraction of the sand resource within each phase. The topsoil, B-horizon, and reject material from the processing plant will be segregated and stockpiled on-site for later use during reclamation. The sand resource will be excavated, trucked, and conveyed to the wet plant for additional processing. A description of the wet plant process is included in **Section 6.1.1**. The product sand will then be transported via conveyor to the dry plant, where it will be dried, sorted according to size, and loaded onto railcars for shipment.

Phase 2 is located east of the existing mine area (Phase 1) as shown on **Figure 3**. Mining in Phase 2 began in March 2012 with the removal of topsoil and B-horizon. Similar to Phase 1, Phase 2 is dewatered via pumping in order for the mine equipment to remove material below the groundwater table. Any changes to the mine dewater discharge will be coordinated with the appropriate state and local agencies. Once dewatered, the equipment will mine the area to the floor depth of approximately 855 feet MSL. Reject material from Phase 1 and Phase 2 will be placed in Stockpile A, as shown on **Figure 3**.

Prior to completion of Phase 2, the stockpile and material handling area located northwest of Phase 3 and Phase 4 will be constructed. During this construction, a temporary storm water collection area will be dug within the Phase 3 area. The stockpile and material handling area will be graded to maintain internal site drainage by directing storm water to the active mine areas. Mining will proceed in Phase 3 with the removal of topsoil and B-horizon which will be placed in berms, as shown on **Figure 3**. Phase 3 and Phase 4 will be mined using methods employed in Phase 1 and Phase 2 and will include dewatering of the mining area. The mine dewatering discharge location for these phases will be coordinated with the appropriate state and local agencies. Once dewatered, Phase 3 and Phase 4 will be mined to a floor depth of approximately 855 feet MSL. Reject material from Phase 3 and will be placed in Stockpile B, as shown on **Figure 3**.

Phase 5 and Phase 6 will be mined to the extent practicable using methods employed in all previous phases, but will transition to a hydraulic dredging operation if groundwater monitoring shows potential impact to the adjacent wetlands or the Lemonweir River. Hydraulic dredging will require some dewatering during the initial construction of the phases. The initial construction will use excavation equipment to remove enough material to allow the dredge equipment space to float on the water surface when extracting the sand. Once in place, the hydraulic dredge will extract sand that will be pumped into the excavated areas of

Phase 3 and Phase 4 to be dewatered. The dewatered material will then be transported to the plant for processing. Reject material from Phase 5 and Phase 6 will be used to reclaim Phase 3 and Phase 4.

Vision Screening Methods

The project is located within direct view of one public roadway, HWY 173, and several surrounding properties. Mature trees will be left intact, where possible, as a vision screening method. Berms and/or vegetation will be installed along HWY 173 and north of eastern mine areas. Proposed berm locations are shown on **Figure 3**.

6.1.1 On-site Processing

After excavation, the reserve sand will be hauled and conveyed to the wet plant and stockpiled for processing. The stockpile is located over a tunnel with live load feeders that automatically feed the reserve sand to the plant via covered belt conveyors. The conveyors feed the reserve sand into two primary screens that remove oversized material. The material passing the screen is mixed with water and is further screened and scrubbed. The fine material remaining in the slurry is pumped to a thickener where flocculant is added to settle the particles. The process water carrying some remaining clay particles is then discharged to the reclamation pond for further settling. Additional information on the proposed flocculant is attached in **Appendix F**. The fine material collected in the thickener will be dewatered and sent to the reclamation pond. The reject material that is removed prior to the thickener will be stockpiled for future use in reclamation or will be sold as a farm sand product, such as animal bedding.

The material held during the scrubbing and screening process, sand greater than 70 mesh, will be dewatered and stockpiled via conveyor belts. This product sand will be conveyed to the dry plant for drying, sorting, and shipment via railcar.

6.2 Storm Water Management and Erosion Control

Before construction or mining begins within a drainage area, the offsite receiving areas will be protected by the installation and construction of the appropriate erosion control BMPs and temporary storm water collection areas. All erosion control BMPs will be installed according to the guidelines provided in the WDNR Technical Standards. The processing and loading areas will be graded to collect surface water run-off within the mine area.

Where necessary to protect offsite drainage areas, diversion channels will be installed to route storm water run-off to the active mine area. Proposed erosion control BMPs are shown on **Figure 3**. Additional erosion control measures will be installed where necessary.

Temporary erosion control measures employed at the proposed project site may include (DNR Technical Standards are in parentheses):

- Mine roads outside the active mine area will employ water bars, silt fence, and/or lined channels as necessary (Silt Fence – 1056, Channel Erosion Mat – 1053).
- Erosion bales and sediment logs will be placed as ditch checks in swales and ditches (Ditch Checks – 1062, Sediment Bale Barrier - 1055).
- Silt fence installed at road perimeters, the edges of berms and stockpiles, around the wet plant area, and outside the active mine area where it is not protected by previously installed erosion control measures (Silt Fence – 1056).

- Seed and mulch will be applied on berms, permanent stockpiles, diversions, channels, road slopes, pond slopes located outside the active mine area, and any mine area that is no longer active (Seeding – 1059, Mulch – 1058).
  - Temporary erosion control seeding is discussed in **Section 6.3**.
  - Final reclamation seeding is discussed in **Section 8.4**
- Erosion mat will be placed in concentrated flow channels and on slopes greater than 4:1 (Channel Erosion Mat – 1053, Non-channel Erosion Mat – 1052).
- Rock rip-rap will be placed, where necessary, as ditch checks, channel liners, and at inlet/outlet structures (Ditch Checks – 1062).
- Stone tracking pads will be used at the site access point during initial construction. The main access road entrance will be paved to prevent off-site sediment deposition (Stone Tracking Pad – 1057).
- Other methods will be used as necessary.

Erosion control BMPs will be inspected weekly and within 24 hours after rainfall events of 0.5 inches or greater until the drainage area has been either temporarily or permanently reclaimed and meets the revegetation standards discussed in **Section 8.5**.

In the event of slope failures, failed seeding, or persistent erosion problems, additional engineered BMPs will be assessed and applied where practicable. Engineered BMPs may include hydroseeding, silt fence, erosion control mats, turf reinforcement mats, water diversions, rock lined chutes, slope breaks, soil stabilizers, and inlet protection.

Storm water on the proposed project site is regulated by the State of Wisconsin Department of Natural Resources. Mine operation shall be conducted in a manner that assures compliance with all applicable water quality and storm water management requirements.

6.3 Temporary Erosion Control Vegetation Plan

Disturbed areas not at final reclamation grade shall be seeded with a temporary stabilization seed mix to provide erosion control. Temporary stabilization seed mix installation shall occur during the growing season. Table 1 (below) shows the proposed temporary stabilization seed mix. Adjustments to the proposed seed mix may be necessary based on availability and site suitability.

Table 2
Temporary Stabilization Seed Mix

Common Name	Scientific Name	Seed Composition
Kentucky Bluegrass	*Poa pratensis*	25%
Creeping Red Fescue	*Festuca rubra*	25%
Annual Ryegrass	*Lolium multiflorum*	25%
Perennial Ryegrass	*Lolium perenne*	25%

Seeding will be performed using the best available methods for each disturbed area and will follow procedures described in Section 630 of the Wisconsin Department of Transportation Standard Specification for Highway and Structure Construction (2012 Edition) (WisDOT Standard Specifications). The seed will be spread at a rate of approximately 175 pounds per acre. After seeding, areas will be mulched using the best available methods and will follow procedures described in Section 627 of the WisDOT Standard Specifications. When

necessary, areas within 75 feet of wetlands shall have erosion mat installed in place of mulch. Applicable seeding and mulching standards are included in **Appendix G.**

6.4 Additional Operation and Reclamation Information

Refuse and Other Solid Wastes

All mining refuse, including overburden and product waste material that cannot be sold as a usable product, shall be reused in accordance with this reclamation plan. All other solid waste shall be disposed of in accordance with all applicable federal, state, and local requirements.

Environmental Compliance and Additional Permits

The operation and reclamation of the proposed project will comply with all applicable federal, state, and local laws and regulations, including those related to environmental protection.

7.0 Post-Mining Land Use

The post-mining land use will include a privately owned lake with wetland and upland riparian properties that can be utilized for recreation and/or residential use.

8.0 Reclamation Measures

8.1 Final Grading and Slopes

During reclamation, materials will be applied to all disturbed areas at various depths to reconstruct the maximum 3:1 upland slopes and 6:1 or flatter riparian slopes as shown in **Figure 4** and **Figure 5**. Slopes located below the ordinary high-water mark (OHWM) will be 2:1 as shown on **Figure 4** and **Figure 5**. The OHWM is based on existing groundwater information and is estimated between 910 and 916 feet MSL. Slopes of 2:1 will only be used in areas that are completely below the water surface. The riparian slopes will be created by pushing reject material and adjacent soils into the mine area as shown on **Figure 4** and **Figure 5**. The lake floor will be sloped as shown on **Figure 4** and **Figure 5**.

All slopes will be graded to meet state and county reclamation regulations, which require a maximum of 3:1 slopes in upland reclaimed areas and 6:1 or flatter in the riparian reclaimed areas. Slope reconstruction materials shall consist of reject material from the processing plants, B-horizon material, and topsoil. Topsoil and B-horizon will be installed according to methods described in **Section 8.2.4**. Seeding and mulching will be performed according to methods described in **Section 8.4**.

8.1.1 Safety

No highwalls will exist after the proposed project site is graded to the final reclamation grade shown in **Figure 4** and **Figure 5**. Some 2:1 slopes will occur within the lake area. Once graded to final reclamation grade, the site will not pose any safety concerns associated with the mining process that took place at the proposed project site. The proposed project site will be reclaimed in a manner that complies with all applicable federal, state, and local regulations governing public health, safety, and welfare.

8.2 Topsoil & Storage

8.2.1 Topsoil Removal

Topsoil and B-horizon material will be removed, segregated, and stockpiled. Management of topsoil will follow methods described in Section 625 of the WisDOT Standard Specifications, included in **Appendix G-1.**

8.2.2 Topsoil Storage and Protection

All topsoil and B-horizon material will be stockpiled onsite. See **Figure 3** for proposed stockpile locations. All stockpiles will be seeded and mulched according to **Section 6.4.**

8.2.3 Contemporaneous Use of Topsoil

Where practicable, the topsoil removed to prepare an area for the next phase of mining will be immediately redistributed to complete reclamation on the previous working area.

8.2.4 Topsoil Redistribution and Site Preparation

Topsoil redistribution and site preparation in upland areas will follow methods described in Section 625 of the WisDOT Standard Specifications including as **Appendix G-1.** Soil redistribution and site preparation in riparian areas will follow the aforementioned methods with exception of the placement of topsoil. No topsoil will be placed below the ordinary high-water mark. These areas will have only B-horizon material placed in order to prevent excessive nutrient leaching, which may cause eutrophic conditions and result in algal blooms.

Site preparation prior to application of the topsoil and B-horizon material will use methods that ensure optimum adherence between the topsoil/B-horizon and the underlying overburden material. Seeding of all exposed areas will occur as described in **Section 8.4**. Soil compaction will be minimized to the extent practicable by limiting unnecessary traffic or tracked vehicles during and after the placement of the subsoil and topsoil layers. Topsoil redistribution will not be performed during or immediately following a precipitation event.

8.3 Structures

No structures will remain after final reclamation. The plant facilities will be removed. All mine roads, berms, and storm water BMPs will be graded to meet the final reclamation plan grades shown on **Figure 4** and **Figure 5**. The entrance road may remain after site closure to allow access to the site during future use.

8.4 Reclamation Vegetation Plan

After subsoil and topsoil reapplication, the seedbed shall be prepared by discs, harrows or other equipment to obtain a smooth, firm (not compacted) seedbed. Seeding and plantings shall occur during the growing season when soil conditions are suitable. Based on a lake habitat post-mining land use and the presence of sandy soils, a combination of seed mixes and plantings will be used for the final reclamation areas. Table 3 shows proposed seed mixes. Adjustments to the proposed seed mix may be necessary based on availability and success.

Table 3
Reclamation Seed Mixes

Common Name	Scientific Name
Riparian Areas	
Sweet Flag	*Acorus calamus*
Common Water Plantain	*Alisma subcordatum*
Blue Flag Iris	*Iris virginica*
Monkey Flower	*Mimulus ringens*
Arrowhead	*Sagittaria latifolia*
Giant Bur-Reed	*Sparganium eurycarpum*
Blue Joint Grass	*Calamagrostis Canadensis*
Bristly Sedge	*Carex comosa*
Fringed Sedge	*Carex crinite*
Porcupine Sedge	*Carex hystericina*
Reed Manna Grass	*Glyceria grandis*
Fowl Manna Grass	*Glyceria striata*
Common Rush	*Juncus effusus*
Rice Cut Grass	*Leersia oryzoides*
Hard-Stemmed Bulrush	*Scirpus acutus*
Dark-Green Bulrush	*Scirpus atrovirens*
Wool Grass	*Scirpus cyperinus*
River Bulrush	*Scirpus fluviatilis*
Red Bulrush	*Scirpus pendulus*
Soft-Stem Bulrush	*Scirpus validus*
Prairie Cord Grass	*Spartina pectinata*
Upland Areas	
Big Bluestem	*Andropogon gerardii*
Sideoats Grama	*Bouteloua curtipendula*
Blue Grama	*Bouteloua gracilis*
Praire Brome	*Bromus kalmii*
Canada Wild Rye	*Elymus canadensis*
June Grass	*Koeleria cristata*
Little Bluestem	*Schizachyrium scoparium*
Indiangrass	*Sorghastrum nutans*
Prairie Dropseed	*Sporobolus heterolepsis*
Anise Hyssop	*Agastache foeniculum*
Lead Plant	*Amorpha canescens*
Butterfly Milkweed	*Asclepias tuberosa*
Heath Aster	*Aster ericoides*
Smooth Blue Aster	*Aster laevis*
Canada Milk Vetch	*Astragalus canadensis*
Prairie Coreopsis	*Coreopsis palmate*
White Prairie Clover	*Dalea candidum*
Purple Prairie Clover	*Dalea purpurea*
Showy Tick Trefoil	*Desmodium canadense*
Showy Sunflower	*Helianthus laetiflorus*
Button Blazingstar	*Liastris aspera*
Wild Bergamot	*Monarda fistulosa*
Large-flowered Beardtongue	*Penstemon grandiflorus*
Black-eye Susan	*Rudbeckia hirta*
Gray Goldenrod	*Solidago nemoralis*
Stiff Goldenrod	*Solidago rigida*
Hoary Vervain	*Verbena stricta*

Disturbed areas will be seeded as soon as practicable. A nurse crop may be used to assist the establishment of the final reclamation seed mix. Annual Oats may be used when spring planting is possible and Annual Ryegrass or Winter Wheat may be used when fall or winter planting is necessary.

Seeding will be performed using the best available methods and will follow procedures described in Section 630 of the WisDOT Standard Specification. The riparian areas will be seeded with an emergent wetland seed mix in areas 18 inches below and 24 inches above the OHWM as shown on **Figure 5**. After spreading at the recommended seeding rate, the area will be lightly raked or dragged to cover the seed with approximately ¼ inch of soil. After seeding, areas will be mulched using the best available methods and will follow procedures described in Section 627 of the WisDOT Standard Specifications. When necessary, areas within 75 feet of wetlands shall have erosion mat installed in place of mulch. Applicable seeding and mulching standards are included in **Appendix G.**

Proposed shrub staking and tree plantings will occur in the areas shown on **Figure 4**. Tree plantings will occur as scattered tree colonies within the proposed areas and will use a Wisconsin State Forest Nursery Bottomland Hardwood Packet (or a similar mix of species). All plantings will be performed in accordance with state recommended planting methods. Shrub staking will include species harvested in nearby landscapes and will be performed in accordance with WDNR recommended planting methods for bank stabilization.

8.5 Revegetation Standards

In order to determine successful revegetation for both temporary and final vegetation cover within the revegetated areas, reclaimed areas will be assessed for density of the perennial vegetative cover. Reclamation will be considered complete when “final stabilization” has been achieved, as defined in Wisconsin Code NR 216. This standard states that final stabilization is achieved when a “uniform perennial vegetative cover has been established with a density of at least 70% of the cover for unpaved areas and areas not covered by permanent structures.” Some areas of unvegetated beach lakeshore may be included in the reclamation. These areas will not meet the aforementioned standard, but will be stabilized through appropriate grading practices and adjacent vegetation in order to prevent erosion.

The annual assessment of reclaimed areas will be included in the annual reclamation report. Once reclaimed areas have achieved the aforementioned vegetative cover results, the areas will be considered successfully reclaimed and no further reclamation activities shall be required for that location.

8.6 Reclamation Erosion Control

Reclamation grading will proceed according to methods described in **Section 8.1**. Reclamation shall be conducted and completed in a manner that assures compliance with the WDNR water quality standards for surface waters and wetlands (Wis. Admin. Code chs. NR 102 to 105). Storm water diversions will remain in place during initial reclamation grading to allow for diversion of runoff from grading activities, but will be removed and graded according to **Figure 4** and **Figure 5** after reclamation of the entire contributing drainage area. Prior to reclamation grading, erosion control BMPs will be constructed and/or installed according to the guidelines provided in the WDNR Technical Standards as necessary to prevent erosion and control deposition of sediment outside the area being reclaimed. Erosion control measures will include silt fence installation in areas not protected by previously installed erosion control measures, installation of erosion control mat on slopes greater than

4:1, and application of seed and mulch to all disturbed areas. Seeding and mulching will occur according to methods described in **Section 8.4** and topsoil installation will be performed according to methods described in **Section 8.2.3**. Erosion control BMPs and the newly reclaimed areas will be inspected weekly and within 24 hours after rainfall events of 0.5 inches or greater until the area meets the revegetation standards discussed in **Section 8.5**. In the event of slope failures, failed seeding, or persistent erosion problems on reclaimed acreage, engineered BMPs will be assessed and applied where practicable. Engineered BMPs may include hydroseeding, silt fence, erosion control mats, turf reinforcement mats, water diversions, rock lined chutes, slope breaks, soil stabilizers, and inlet protection.

8.7 Interim Reclamation

The main mine areas will remain open and unreclaimed until all final site reclamation; however, where possible, berms, stockpiles and any areas outside the main mine area will be reclaimed prior to final site reclamation to reduce potential erosion during mine operations and to qualify for the reduction of fees under NR135.41.

8.8 Follow-up Inspections and Necessary Site Maintenance

During mine operation and reclamation, all erosion control and storm water control structures will be inspected and maintained in accordance with Wisconsin Administrative Code NR 216. Annual inspections of the reclaimed areas will occur until each area meets the reclamation measures described in **Section 8.0**. Inspection results will be provided to the regulatory authority as part of the annual reclamation report. The operator shall perform any maintenance necessary to prevent erosion, sedimentation, or environmental pollution prior to issuance of the County Certification of Reclamation and release of financial assurance.

8.9 Annual Operator Report

The mine operator shall complete and submit an annual report in accordance with NR 135.36 and Monroe County Ordinance Chapter 8, Article II. The annual report information required under NR 135.36 is included in **Appendix H**.

9.0 Criteria for Successful Reclamation

Compliance with reclamation measures described in **Sections 8.1** through **8.8** shall be determined by on-site inspections by the regulatory authority, Monroe County Land Conservation Department (Department), or its agent. Compliance with reclamation measures may also be determined by reports presenting results obtained during reclamation inspections. The reports shall include summarized data on revegetation, photo documentation, or other evidence that the reclamation measures described in **Sections 8.1** through **8.8** have been met.

Once reclaimed areas have achieved the reclamation measures described in **Sections 8.1** through **8.8**, the areas will be considered successfully reclaimed and no further reclamation activities shall be required. The operator will notify the Department in writing that reclamation has been completed. Reclamation of those areas will be considered complete after the Department inspects the area and issues the County Certification of Reclamation.

10.0 Final Site Actions

The berms, stockpiles, roads, and infiltration ponds will be removed after mining is complete. The plant facilities shall be completely removed as part of the final reclamation measures. The entrance road may remain in place for potential future use. All areas will be reclaimed using the procedures outlined in **Section 8.0** prior to project completion.

11.0 Financial Assurance

Financial assurance will be achieved through a bond by Hi-Crush prior to commencement of mining operations. Per the March 23, 2012 letter from the Monroe County Land Conservation Department, financial assurance will be supplied at a rate of $10,000 per acre of unreclaimed area. Financial assurance will be available for all unreclaimed areas until the Department issues the County Certification of Reclamation.

12.0 References

Wisconsin Department of Natural Resources. Ecological Landscapes: Central Sand Plains Ecological Landscape. WDNR website. 23 Jan 2012. <http://dnr.wi.gov/topic/landscapes/index.asp?mode=detail&Landscape=7 >.

SLS/NW

List of Figures

REPRODUCED FROM

USGS WYEVILLE QUADRANGLE

WISCONSIN - MONROE CO. 7.5 MINUTE SERIES

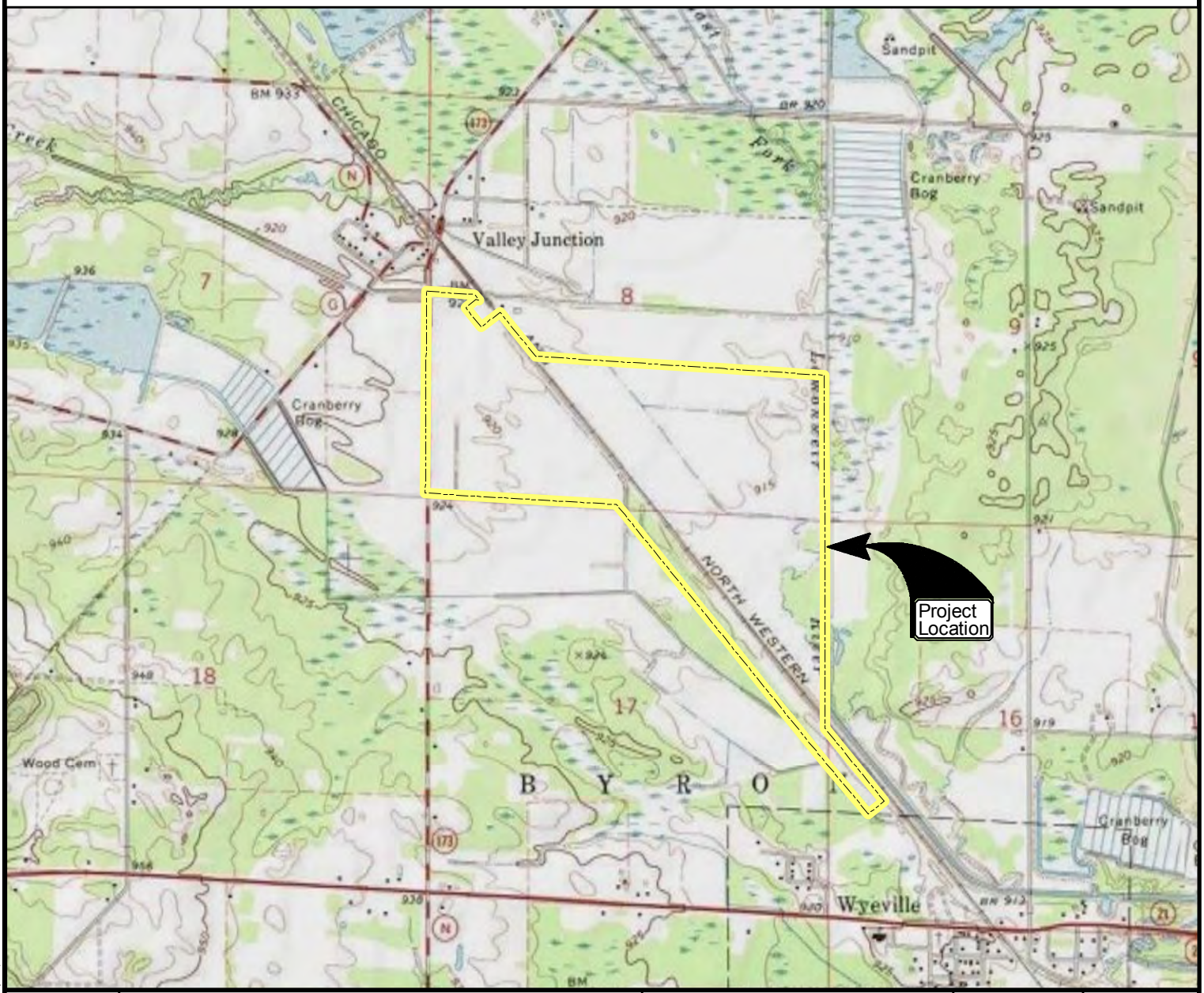
1970

TOWNSHIP: 18N
RANGE: 1E
SECTIONS: 8 & 17

N
W E
S

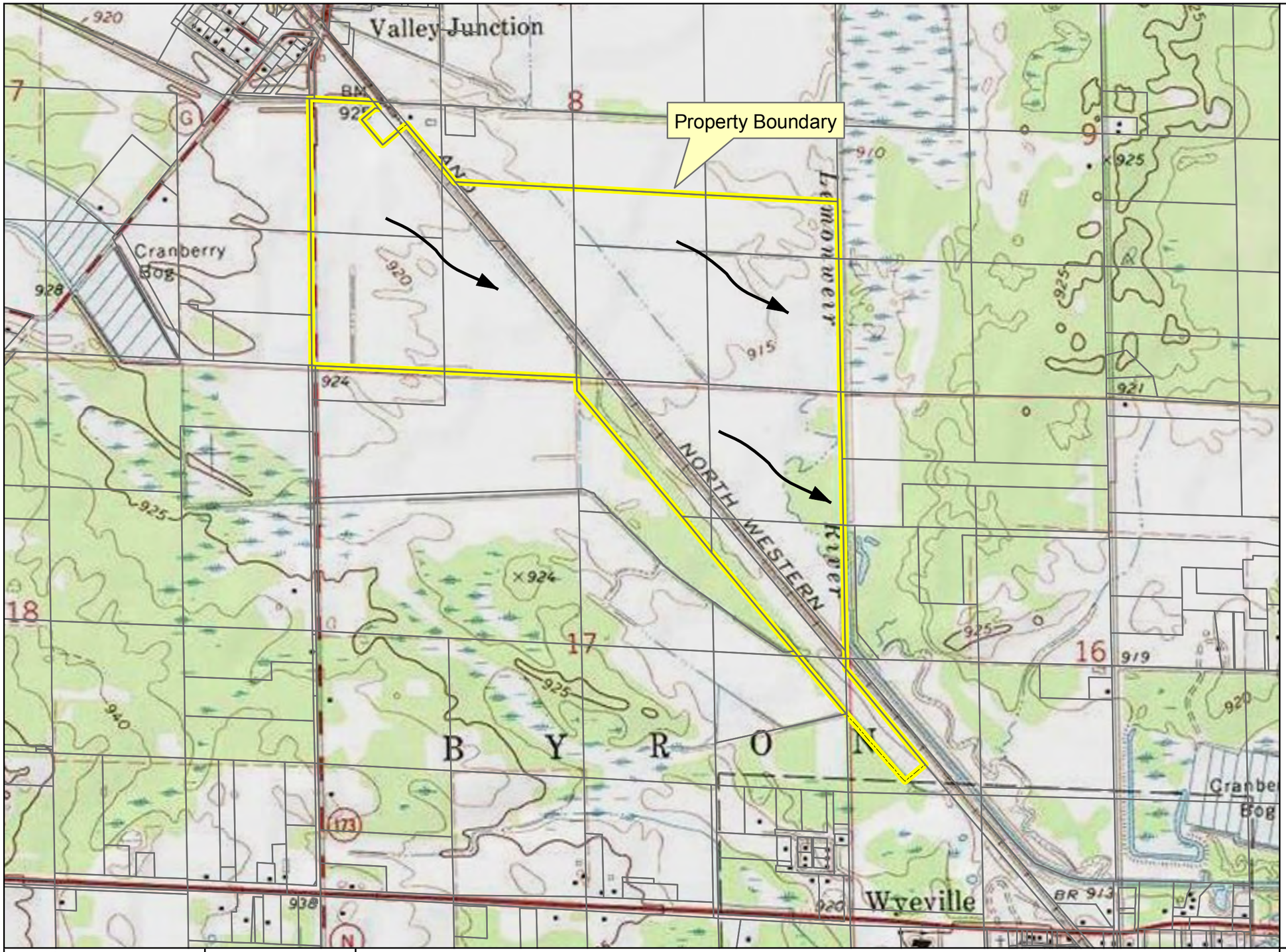
0 1,000 2,000 Feet

1 inch = 2,000 feet



SEH	**HI-CRUSH PROPPANTS LLC.- WYEVILLE SITE** **TOWN OF BYRON** **MONROE COUNTY, WISCONSIN**	**SITE LOCATION MAP**	PROJ. NO. HICRU120369 DATE 4/20/12	Figure 1

File: P:\F-J\H\Hicru\120369\Gis\Figure 1_Site LocationMap.mxd
Printing Date: Monday, April 16, 2012 2:23 PM



Legend

- Flow Direction Arrows
- Property Boundary

TOWN OF BYRON
T18N R1E

N
W E
S

0 500 1,000 2,000 Feet

* Usgs Basemap

File: P:\FJH\Hicru\120369\Gis\Figure 2A - Existing Site Contours.mxd
Printing Date: Friday, April 27, 2012 8:59 AM

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI
PHONE: (715) 720-6200
FAX: (715) 720-6300
WATTS: 800-325-2055
www.sehinc.com

Project: HICRU120369
Print Date: 04/27/2012

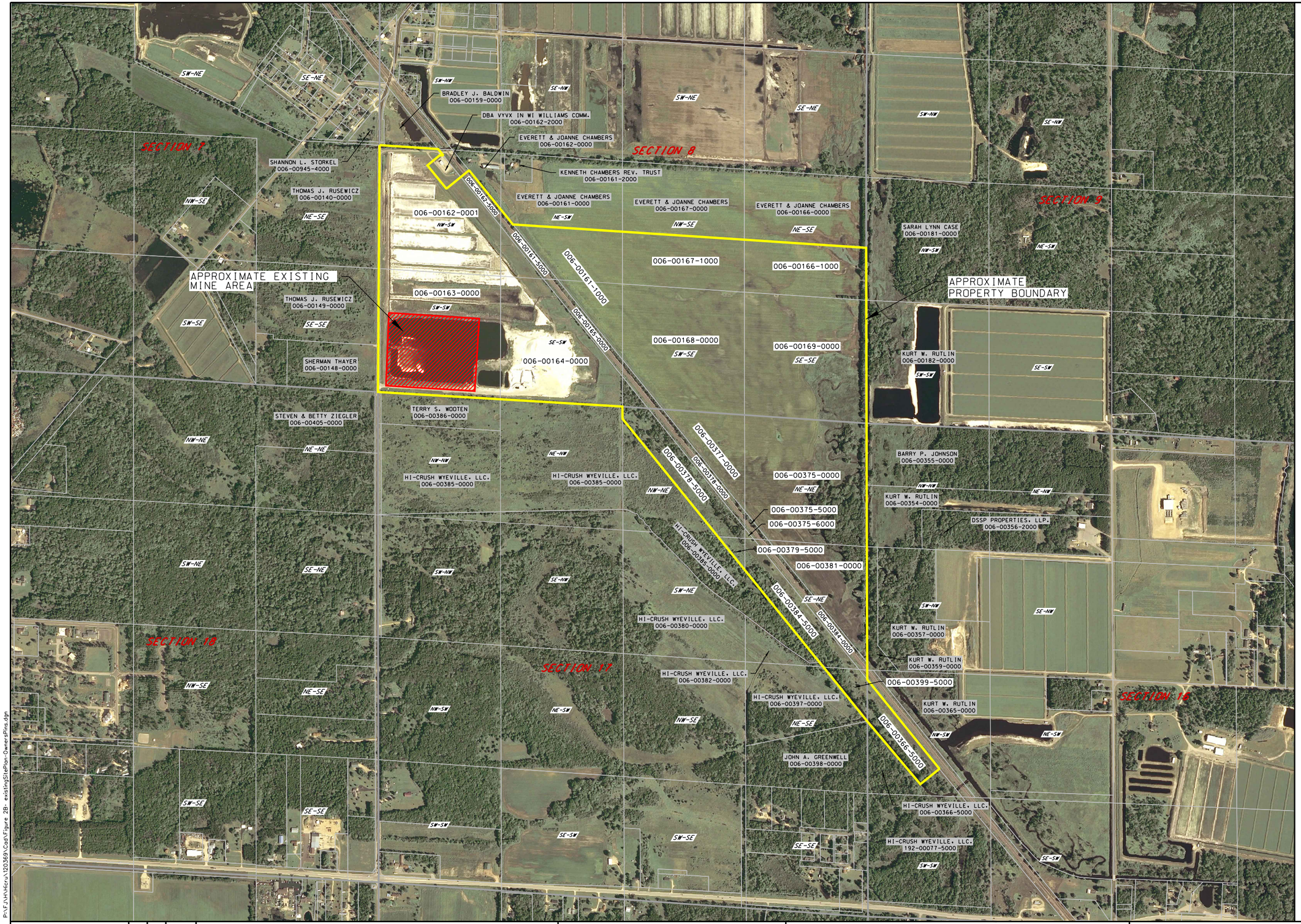
Projection: Barron Co Coord, Feet
Source: Usgs Basemap

HI-CRUSH PROPPANTS, LLC- WYEVILLE SITE

Monroe County, Wisconsin

Existing Site Map Contour Map

Figure 2A



N

500 0 500
250

Legend

- Approximate Existing Mine Area
- Approximate Property Boundary
- Parcel Line
- Section Line
- SECTION 31 Section Number

TOWN OF BYRON
T18N R01E

* 2010 NAIP PHOTOGRAPHY

P:\FJVH\Hicru\120369\Cad\Figure 2B- existingSitePlan-OwnersPins.dgn

4/27/2012

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DESIGNED: ---
CHECKED: ---

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PHONE: 715.720.6200
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

HI-CRUSH PROPPANTS, LLC– WYEVILLE SITE
TOWN OF BYRON
MONROE COUNTY, WISCONSIN

EXISTING SITE PLAN
PROPERTY INFORMATION

FILE NO. HICRU120369
DATE 4/27/2012

FIGURE 2B

SECTION 7

SECTION 8

SECTION 9

SECTION 18

SECTION 17

SECTION 16

BERM

RECLAMATION MATERIAL STOCKPILE 'A'

APPROXIMATE CONVEYOR RAILROAD CROSSING

MATERIAL TRANSFER AREA

RECLAMATION MATERIAL STOCKPILE 'B'

B-HORIZON BERM

TOPSOIL BERM

STORM POND

OFFICE BUILDING

PROCESS PLANT

SILT FENCE

PHASE 1 / NEW FRESHWATER POND

2

3

4

5

6

APPROXIMATE PROPERTY BOUNDARY

RECLAMATION POND

FRESHWATER POND

WETLANDS

N

400 0 400

200

Legend

Proposed

- Mine Phase Line
- 5 Mine Phase Number
- Process Plant
- Berms
- Stockpiles
- Pond
- Silt Fence
- Approximate Property Boundary

- Wetlands
- Parcel Line
- Section Line

* 2010 AERIAL PHOTOGRAPHY

P:\FJN\Hicru\120369\Cad\Figure 3- operationsSitePlan.dgn

4/26/2012

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HI-CRUSH PROPPANTS, LLC– WYEVILLE SITE
TOWN OF BYRON
MONROE COUNTY, WISCONSIN

OPERATIONS SITE PLAN

FILE NO. HICRU120369

DATE 4/26/2012

FIGURE 3

SECTION 8

CONTOUR LINES

CROSS SECTION LINES

SHRUB STAKE AREA

APPROXIMATE PROPERTY BOUNDARY

SCATTERED TREE COLONY PLANTING AREA

SECTION 17

A

B

C

D

840

850

854

858

860

862

864

N

200 0 200

100

Legend

Proposed

- Major Contour Line
- Minor Contour Line
- Cross Section Line
- Scattered Tree Colony Planting Area
- Shrub Stake Area
- Approximate Property Boundary

- Parcel Line
- Section Line

TOWN OF BYRON
T18N R01E

* 2010 AERIAL PHOTOGRAPHY

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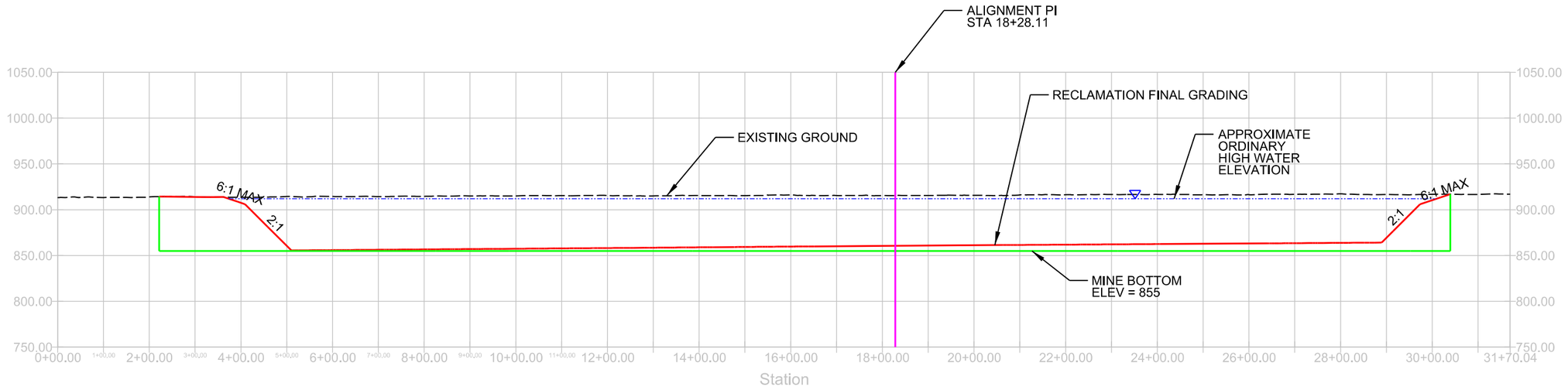
HI-CRUSH PROPPANTS, LLC– WYEVILLE SITE
TOWN OF BYRON
MONROE COUNTY, WISCONSIN

FINAL SITE PLAN

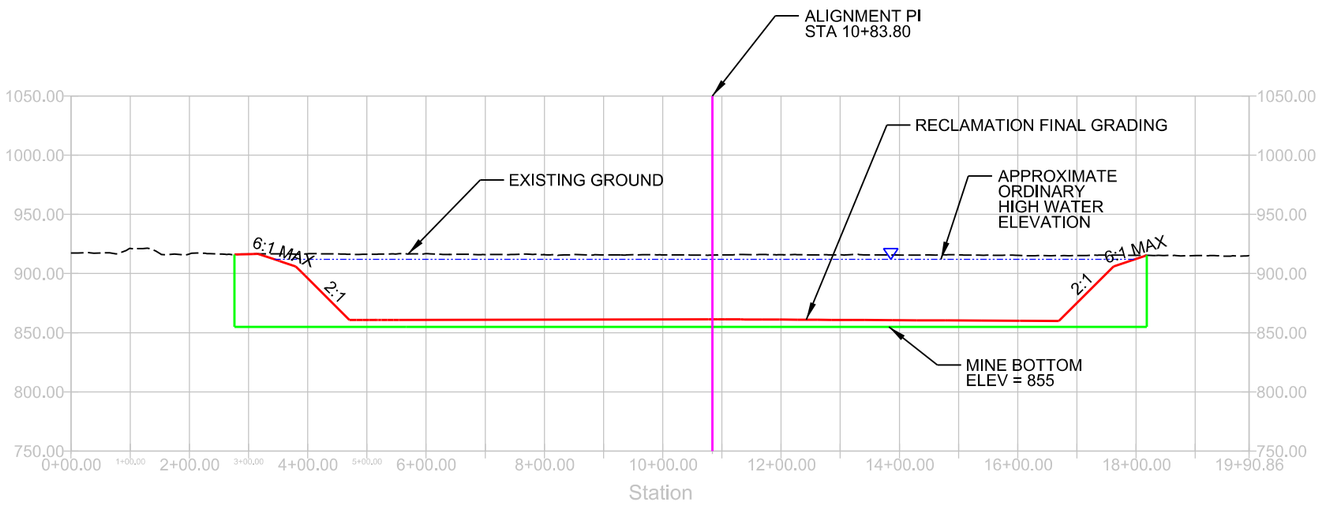
FILE NO. HICRU120369

DATE 4/27/2012

FIGURE 4



SECTION A-A



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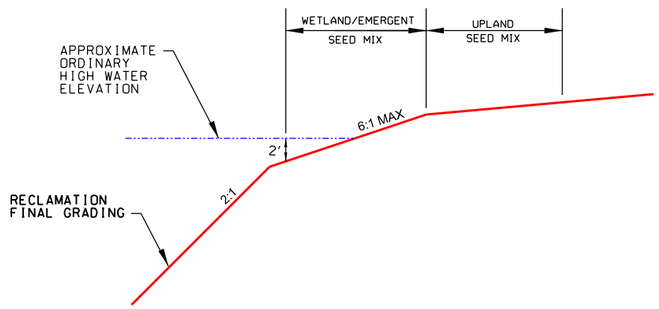

SEEDING DETAIL

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4/27/2012

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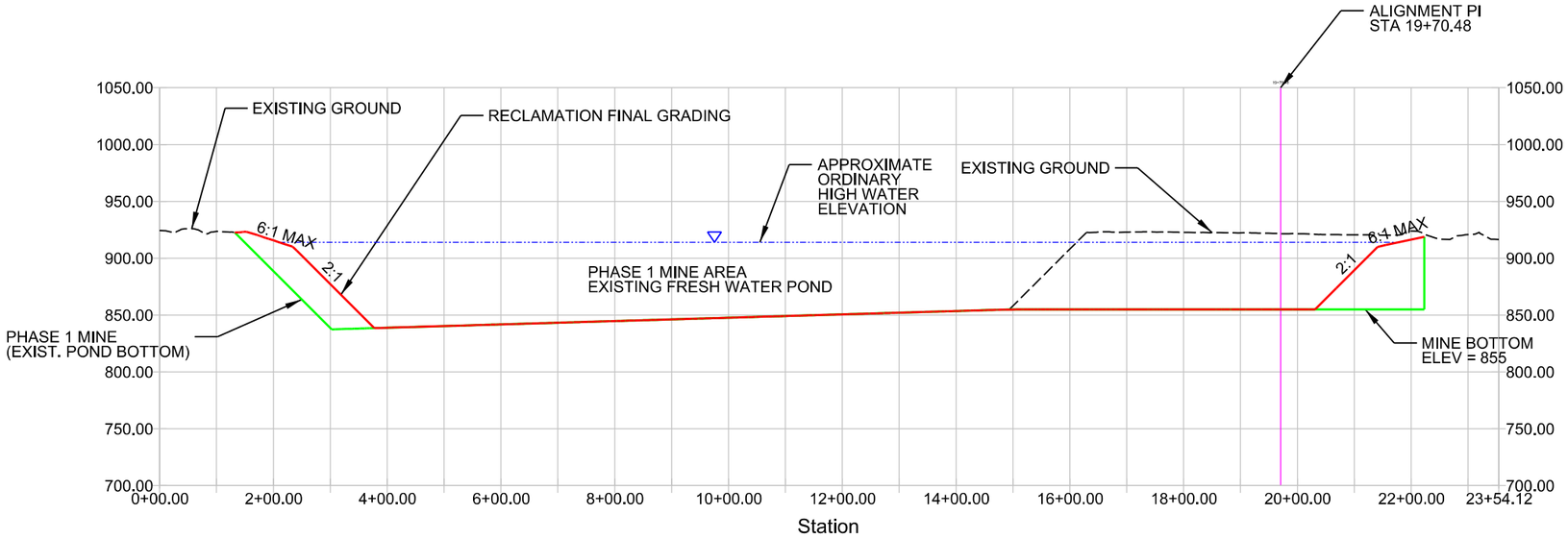
HI-CRUSH PROPPANTS, LLC– WYEVILLE SITE
TOWN OF BYRON
MONROE COUNTY, WISCONSIN

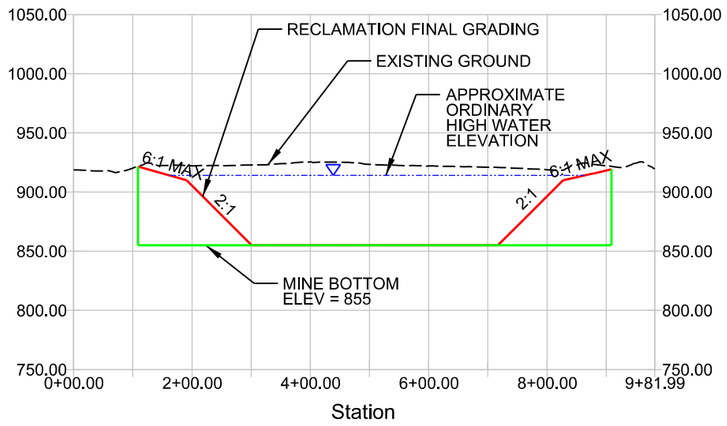
CROSS SECTIONS
EAST SIDE

FILE NO. HICRU120369
DATE 4/27/2012

FIGURE 5A



SECTION C-C



SECTION D-D

P:\FJH\Hicru\120369\Cad\Figure 5B- crossSection-west.dgn

4/27/2012

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CHECKED: ---

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SEH
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CHIPPEWA FALLS, WI 54729

HI-CRUSH PROPPANTS, LLC- WYEVILLE SITE
TOWN OF BYRON
MONROE COUNTY, WISCONSIN

CROSS SECTIONS
WEST SIDE

FILE NO. HICRU120369
DATE 4/27/2012

FIGURE 5B

Appendix A

Reclamation Plan Checklist and Permit Application

A-1 – Reclamation Plan Checklist and Code Citations

A-2 – Application for Nonmetallic Mining Permit

A-1 – Reclamation Plan Checklist and Code Citations

RECLAMATION PLAN CHECKLIST AND CODE CITATIONS

IMPORTANT: *The checklist below is based on a restatement of the reclamation plan requirements of s. NR 135.19. However, it is only a summary, and users should refer to the code text itself when interpretations are needed or in order to resolve any ambiguities. The checklist is included both to assist in the process of preparing and submitting a "complete" reclamation plan for review and for use by plan reviewers. There is no intent to imply that all items on this checklist are necessary in all reclamation plans. Should you have questions on the need for your plan to include a given item, please contact your regulatory authority.*

NR 135.19(1) PLAN REQUIRED. An operator who conducts or plans to conduct nonmetallic mining on or after August 1, 2001 shall submit to the regulatory authority a reclamation plan that meets the requirements of this section and complies with the standards of Subch. II. To avoid duplication, the reclamation plans may, by reference, incorporate existing plans and materials that meet the requirements of Chapter NR 135.

☒ **Site Information:** Section 2.0

NR 135.19(2) SITE INFORMATION. The reclamation plan shall include information sufficient to describe the existing natural and physical conditions of the site, including, but not limited to:

☒ **Maps:** Figures 1, Figures 2A and 2B, Figure 3.

NR 135.19(2)(a) Maps of the nonmetallic mining site including the general location, property boundaries, the areal extent, geologic composition and depth of the nonmetallic mineral deposit, the distribution, thickness and type of topsoil, the approximate elevation of ground water, the location of surface waters and the existing drainage patterns.

Note: Some of or all of the information required above may be shown on the same submittal, i.e. the site map required by par. (a) may also show topography required by par. (c).

☒ **General Location:** Figure 1

☒ **Property Boundaries:** Figure 1, Figures 2A and 2B, Figure 3, and Figure 4

☒ **Areal Extent:** Figure 3

☒ **Geologic Composition and Depth of the Mineral Deposit:** Section 3.0

☒ **Distribution, Thickness and Type of Topsoil:** Section 3.1

☒ **Approximate Elevation of Ground Water:** Section 3.2

☒ **Location of Surface Waters:** Section 4.1

☒ **Existing Drainage Patterns:** Figure 2B and Section 4.2

☒ **Existing Topography:** Figure 1 and Figure 2B

NR 135.19(2)(c) Existing topography as shown on contour maps of the site at intervals specified by the regulatory authority.

Note: Some of or all of the information required here may be combined to avoid duplication, e.g. a single map may show anticipated post-mining topography required by par. (c) as well as structures and roads as required by par. (d).

☒ **Location of Manmade Features:** Section 2.2.2, Figures 2A and 2B

NR 135.19(2)(d) Location of manmade features on or near the site.

☒ **Previously Mined Areas: (IF APPLICABLE)** Section 2.1.1, Figure 2B

NR 135.19(2)(e) For existing mines, a plan view drawing showing the location and extent of land previously affected by nonmetallic mining, including the location of stockpiles, wash ponds and sediment basins.

☒ **Biological Information:** Section 5.0

NR 135.19(2)(b) Information available to the mine operator on biological resources, plant communities, and wildlife use at and adjacent to the proposed or operating mine site.

☒ **Post-mining Land Use:** Section 7.0

NR 135.19(3) POST-MINING LAND USE. ***(a)*** The reclamation plan shall specify a proposed post-mining land use for the nonmetallic mine site. The proposed post-mining land use shall be consistent with local land use plans and local zoning at the time the plan is submitted, unless a change to the land use plan or zoning is proposed. The proposed post-mining land use shall also be consistent with any applicable state, local or federal laws in effect at the time the plan is submitted.

Note: A proposed post-mining land use is necessary to determine the type and degree of reclamation needed to correspond with that land use. The post-mining land use will be key in determining the reclamation plan. Final slopes, drainage patterns, site hydrology, seed mixes and the degree of removal of mining-related structures, drainage structures and sediment control structures will be dictated by the approved post-mining land use.

NR 135.19(3)(b) Land used for nonmetallic mineral extraction in areas zoned under an exclusive agricultural use ordinance pursuant to s. 91.75, Stats., shall be restored to agricultural use.

Note: Section 91.75(9), Stats., contains this requirement. Section 91.01(1), Stats., defines the term "agricultural use".

[X] **Reclamation Measures** Section 8.0

NR 135.19(4) RECLAMATION MEASURES. The reclamation plan shall include a description of the proposed reclamation, including methods and procedures to be used and a proposed schedule and sequence for the completion of reclamation activities for various stages of reclamation of the nonmetallic mining site. The following shall be included:

[X] **Earthwork and Grading:** Figure 4 and Figure 5; Section 8.1

NR 135.19(4)(a) A description of the proposed earthwork and reclamation, including final slope angles, high wall reduction, benching, terracing and other structural slope stabilization measures.

[X] **Topsoil:** Section 8.2

NR 135.19(4)(b) The methods of topsoil or topsoil substitute material removal, storage, stabilization and conservation that will be used during reclamation.

[X] **Topography:** Figure 4 and Figure 5

NR 135.19(4)(c) A plan or map which shows anticipated topography of the reclaimed site and any water impoundments or artificial lakes needed to support the anticipated future land use of the site.

[X] **Structures:** Figure 4; Section 8.3

NR 135.19(4)(d) A plan or map which shows surface structures, roads and related facilities after the cessation of mining.

[X] **Cost:** Section 11.0

NR 135.19(4)(e) The estimated cost of reclamation for each stage of the project or the entire site if reclamation staging is not planned.

[X] **Revegetation Plan:** Section 8.4

NR 135.19(4)(f) A revegetation plan which shall include timing and methods of seed bed preparation, rates and kinds of soil amendments, seed application timing, methods and rates, mulching, netting and any other techniques needed to accomplish soil and slope stabilization.

☒ **Revegetation Standards:** Section 8.5

NR 135.19(4)(g) Quantifiable standards for revegetation adequate to show that a sustainable stand of vegetation has been established which will support the approved post-mining land use. Standards for revegetation may be based on the percent vegetative cover, productivity, plant density, diversity or other applicable measures.

☒ **Erosion Control:** Figure 4; Section 8.6

NR 135.19(4)(h) A plan and, if necessary, a narrative showing erosion control measures to be employed during reclamation activities. These shall address how reclamation activities will be conducted to minimize erosion and pollution of surface and groundwater.

☒ **Interim Reclamation: (OPTIONAL)** Section 8.7

NR 135.19(4)(i) A description of any areas which will be reclaimed on an interim basis sufficient to qualify for the waiver of fees pursuant to s. NR 135.41 and which will be subsequently disturbed prior to final reclamation. Descriptions shall include an identification of the proposed areas involved, methods of reclamation to comply with the standards in Subch. II and timing of interim and final reclamation.

☒ **Criteria for Successful Reclamation** Section 9.0

NR 135.19(5) The reclamation plan shall contain criteria for assuring successful reclamation in accordance with s. NR 135.13.

☒ **Certification of the Reclamation Plan** Certification Page

NR 135.19(6) CERTIFICATION OF RECLAMATION PLAN. ***(a)*** The operator shall provide a signed certification that reclamation will be carried out in accordance with the reclamation plan. The landowner and lessee, if different from the operator, shall also provide signed certification that they concur with the reclamation plan and will allow its implementation, except as provided in par. (b).

NR 135.19(6)(b) For the following situations, the landowner and lessee, if different from the mine operator, are not required to submit a written certification in accordance with par. (a). For these situations, the operator shall provide written evidence that the landowner and lessee, if different than the operator, have been provided with a written copy of the reclamation plan.

1. The mine operator has submitted a reclamation plan for an existing mine in accordance with s. NR 135.18(1).

2. The operator has submitted a reclamation plan for a new or reopened mine in accordance s. NR 135.18(2) which is located on land for which a lease agreement or memorandum of lease between the landowner and applicant was recorded prior to 8 months following December 1, 2000 *(i.e. August 1, 2001)*.

Note: Please see the certification statement examples in Appendix G for more information.

☒ **Financial Assurance** Section 11.0

NR 135.40(1-13)

Note: Please see Appendix B, Part 11 and Appendix F for more information on financial assurance.

☒ **Submitting the Plan** The attached Non-metallic Mining Reclamation Plan will be submitted to the Monroe County Land Conservation Department for approval.

NR 135.19(7) APPROVAL. The regulatory authority shall approve, approve conditionally or deny the reclamation plan in writing in accordance with s. NR 135.21(1)(f) for existing mines and s. NR 135.21(2) for new or reopened mines. Conditional approvals shall be issued according to s. NR 135.21(3), and denials of permit applications shall be made according to s. NR 135.22.

A-2 – Application for Nonmetallic Mining Permit

Monroe County
Land Conservation Department
820 Industrial Drive, Suite 3
Sparta WI 54656
(608) 269-8976

APPLICATION FOR RECLAMATION PERMIT FOR NEW OR REOPENED NONMETALLIC MINING SITES
Form NM-02 Date - 1/12

PLEASE COMPLETE ALL INFORMATION ON THIS APPLICATION. PRINT OR TYPE. Use of this form is required for any nonmetallic mining reclamation permit application filed pursuant to Chapter NR 135, Wis. Adm. Code. Monroe County will not consider your application unless you complete and submit all information required by this application form.

1. **Applicant/Operator**
Hi-Crush Proppants LLC
Address
Three Riverway, Suite 1550
City, State, Zip Code
Houston, TX 77056
Telephone No. (Include area code)
(985) 634-3767

2. **Property Owners/Lessors (if different from Applicant/Operator)**
_____
Address
_____
City, State, Zip Code
_____
Telephone No. (Include area code)

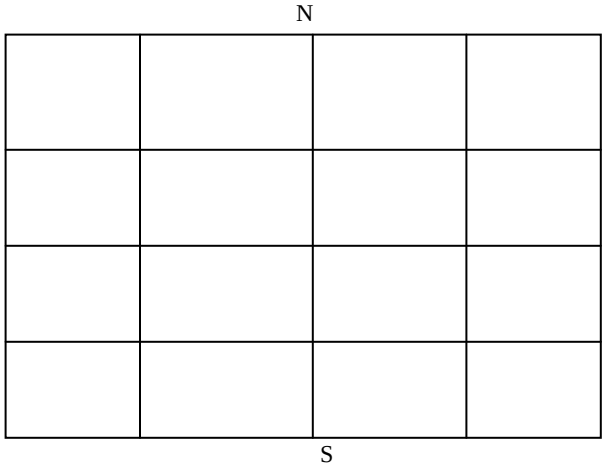
(Additional owner/lessor information can be submitted on separate sheet)

3. **Property Description: Provide the complete legal description of the property on which the mine is located (example: N ½ , NE ¼, Section 3, T29N, R6E)**

See Section 2.1 and 2.2 of attached Non-Metallic Mining Reclamation Plan
Town, City, Village of ___ _____, County of MONROE
Tax Parcel Number _____
Total Site Acreage 353 acres (including areas previously permitted)

4. **General Location Map - draw the location of the site on the section map below. Include roads and any other pertinent information and label ¼ ¼ section points. Alternatively, attach a plat map, topographic map or other map of sufficient detail to enable access to the site by public roads**

See Figures 1-3 of the attached Non-Metallic Mining Reclamation Plan



5. **Project Information: Please provide a brief description of the general location (including surrounding land use) and the nature of the nonmetallic mine (type of deposit, proposed frequency and expected duration of mining activity).**

See attached Non-Metallic Mining Reclamation Plan

6. Reclamation Plan: A reclamation plan conforming to s. NR 135.19, Wis. Adm. Code must be submitted with this permit application, including any previous regulatory approvals so long as they meet the reclamation standards of subch. II of NR 135 as allowed under ss. NR 135.21(1)(d) and (e), Wis. Adm. Code.

I hereby certify, as a duly authorized representative or agent, that the operator, Hi-Crush Proppants LLC (name of operator), will provide, as a condition of the reclamation permit, financial assurance as required by s. NR 135.40, Wis. Adm. Code, upon granting of the reclamation permit and before mining begins.

I also certify that, if applicable, the land owner or lessor has been provided with a copy of the reclamation plan as required by s. NR 135.19(6)(b), Wis. Adm. Code and a signed certification from the landowner indicating their concurrence with the reclamation is attached to this application.

Signature of Applicant or Duly Authorized Agent _____ Date Signed _____

7. Fees:

Acres currently undisturbed that will be activated January 1, 2012 through December 31, 2012 **51+ acres**

Total fee for 2012 (includes DNR fee) (see table below) = **$ NA**

Hi-Crush has paid $950 for 2012. No additional fee needed.

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

Signature of Applicant or Duly Authorized Agent _____ **Date Signed** _____

FEE SCHEDULE

Mine Size, Unreclaimed Acres	2010 Monroe Co. Fee	Wisconsin DNR's Annual Fee	Total Annual Fee 2011
1 to 5 acres	$150	$35	$185
6 to 10 acres	$300	$70	$370
11 to 15 acres	$450	$105	$555
16 to 25 acres	$600	$140	$740
26 to 50 acres	$700	$160	$860
51 acres or larger	$750	$175	$925

MAKE CHECKS PAYABLE TO: MONROE COUNTY LAND CONSERVATION DEPT.

LEAVE BLANK - FOR RECEIVING AGENCY USE ONLY

Permit No.	**Date Received** **Date Application Was Complete**
Date Reclamation Plan Received: **Received By:**	**Date Financial Assurance Received:** **Received By:** **Amount**