
TO:

Chippewa County Land Conservation & Forest Management

IN REFERENCE TO:

***A Non-Metallic Mining Reclamation Plan Modification for
the Bischel Pit, Town of Eagle Point, Chippewa County, WI***

SUBMITTED BY:

***Milestone Materials
717 Short Street
Eau Claire, WI 54701***

DATE:

December 21, 2015

Reclamation Plan Modification for the Bischel Pit

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INTRODUCTION

The purpose of this document is to give supporting information for the request to modify our existing reclamation plan at the gravel pit known as the “Bischel Pit” in Section 5 in the Town of Eagle Point to add an additional approximately 7 acres to the existing permitted area and reclamation plan. In addition, we propose to revise our operations and reclamation plan to remove the existing setback on the east side of the property along the adjoining property line with Delores Morning. Stelter, Inc. operates the property as a gravel pit. Mining would be conducted up to the property line on both sides, therefore removing a “hump” in the middle of the two properties. The information in this document follows the Chippewa County Reclamation ordinance code. No other changes are proposed as part of this reclamation plan.

(1) Initial Site Plan

(a) Initial Site Maps, to Include:

- 1. Location map to indicate general location of the project in the county or township;**
Please refer to **Figure 1, Plat Map** for the location of the Bischel Pit.
- 2. Topographic map of affected lands;**
Please refer to **Drawing 1, Existing Conditions Map.**
- 3. Property boundaries showing the land under consideration and neighboring parcels located within 660 feet of the project site;**
Please refer to **Drawing 1, Existing Conditions Map**

4. **Roads located on or within 660 feet of the project site, with road names indicated;**
Please refer to **Drawing 1, Existing Conditions Map**
5. **Road right-of-way lines;**
Please refer to **Drawing 1, Existing Conditions Map.**
6. **Locations of all structures within 660 feet of the site and the use of each structure;**
Please refer to **Drawing 1, Existing Conditions Map.**
7. **Location and names of all intermittent and perennial streams and lakes as indicated on USGS 7.5 min topographic maps;**
Please refer to **Drawing 1, Existing Conditions Map.**
8. **Areas which convey concentrated flows to or from the site;**
Please refer to **Drawing 1, Existing Conditions Map.**
9. **Locations of all wetlands within 660 feet of the site;**
Please refer to **Drawing 1, Existing Conditions Map.**
10. **Boundaries of previous excavations on the site;** Please refer to **Drawing 1, Existing Conditions Map.**
11. **Wells within 660 feet of the site;**
Please refer to **Drawing 1, Existing Conditions Map.**
12. **Groundwater elevation at the site and source of the information (boring, county groundwater map, well data, etc);**
Exploratory borings conducted at the site in 1997 and 2009 indicate groundwater elevations to be approximately 1000', which is approximately 2' to 24' below the existing pit floor and approximately 25' to 30' below the area proposed to be added to the reclamation plan.

(b) Supporting Information for Initial Site Description:

1. Owner & Applicant Information

The Bischel Pit is owned by Mathy Construction Company; 920 10th Avenue; Onalaska, WI 54650.

The mine operator will continue to be Milestone Materials, a Division of Mathy Construction; 920 10th Avenue; Onalaska, WI 54650.

2. Lease

Milestone Materials is a Division of Mathy Construction Company so a lease will not be required at this property.

3. Legal Description

The legal description for the Bischel Pit is: part of the NW ¼ - SW ¼ of Section 5, T30N – R8W, Town of Eagle Point, Chippewa County, Wisconsin described as Lot 2 in CSM Map No. 4430 Volume 20 Page 167-169. Please refer to **Figure 2** for a copy of the Certified Survey Map.

The parcel number is: #23008-0532-7443-0002.

4. Parties of Interest

List the names and addresses of parties of interest within 660 feet of the project site. Adjoining Landowners within 660 feet of the project site are as follows:

Chippewa County
711 North Bridge Street
Chippewa Falls, WI 54729

Raymond Michels
13601 STH 124
Bloomer, WI 54724

Stelter, Inc.
15331 STH 124
Bloomer, WI 54724

Charles F. III Et. Al
% Delores Morning
13951 STH 124
Bloomer, WI 54724

Charles & Cathy Morning
18186 STH 124
Bloomer, WI 54724

State of Wisconsin
Department of Transportation

Daniel L. Bischel Estate
18259 State Highway 124
Bloomer, WI 54724

5. Soils Information

Thicknesses of the A & B soil horizons and the method of determination.

The A Horizon (topsoil) is an average of 6 inches thick and the B Horizon (subsoil) is an average of 7 inches thick. Thicknesses were determined by soil borings and from stripping and stockpiling the soils at the current pit operations. Please refer to **Figure 3** for the Soils Map and Descriptions. ⁽¹⁾

According to the USDA Soil Survey for Chippewa County, the average topsoil thickness at the site is 8 inches and the average subsoil thickness is 8 to 13 inches.

The Bischel Pit was opened in 1998. Topsoil and overburden have already been stripped from the sand and gravel at the existing permitted Phases 1, 2 and 3. A and B horizons have been kept separate where possible and stored as berms around the perimeter of the pit. The existing A and B horizon berms are not labeled or identified.

A and B horizons removed from Phase 4 will be stockpiled separately and identified.

Phase 4 soils consist of the Chetek sandy loam. Please see **Figure 3**.

(2) Site Operations Plan

(a) Site Operations Maps

Please refer to **Drawing 2, Operations Plan Map.**

(b) Description of Site Operations

1. Description or list of the type of materials to be extracted;

Sand and gravel

2. Description or list of the type of extraction and processing activities to be conducted at the site;

The typical excavation operation sequence begins with the removal of the soil from the top of the sand and gravel deposit using bulldozers, backhoe and haul trucks or scrapers.

Sand and gravel has historically been excavated from above the water and hauled by end-loaders or trucks to the crushing and screening plant and/or the washing plant. Sand and gravel is also excavated below the water table. At the crushing and screening plant the sand and gravel is crushed and sized into various aggregate products and stockpiled by conveyors. The processing plants include several crushing units, screening units and conveyors. The plants are portable and are easily moved within the excavation and in and out of the site as needed to replenish the aggregate product stockpiles. Portable washing plants are also utilized at the site, to wash the aggregate for use in various products. The existing Conditional Use Permit for the Bischel Pit allows for the installation of a temporary asphalt plant for projects that come up in the area. The plant will be in the pit on a limited basis for the duration of any projects that come up.

The processing area is shown on the Operations Map, however, the location of the equipment and stockpiles is temporary and will move throughout the life of the mine. The location shown is only to give an idea of what an operations scenario may look like.

For the washing process, an area in the floor is excavated below the water table to create a wash pond. Water for sand and gravel washing is pumped from this pond. Excess water from the washing operation is transferred to settling ponds. Once the fine sediment has settled to the bottom of the pond, water from the settling ponds will be pumped back to the wash plant for re-use. No flocculants nor chemicals are used in processing.

No high capacity wells are proposed for this operation.

Mining will occur below the water table to a depth of approximately 10 to 30 feet.

End-loaders are used to load the aggregate products into trucks from the stockpiles. The trucks are then weighed on a scale before leaving the site.

Occasionally, as recycle products become available, recycled concrete and asphalt is hauled to the Bischel Pit for temporary storage and processing into aggregate products. None of the recycle materials are buried on site and all of the recycle materials are temporarily stockpiled and hauled from the site after processing. The Bischel Pit is registered in accordance with Section 30-77 of the Chippewa County Non-Metallic Mining Reclamation Ordinance to keep these products on site.

Other nearby sources of sand and gravel will be utilized to provide aggregate to the processing plants on site. Sand and gravel will be hauled in to be used in making the various products for local road construction projects.

There are no wetlands present on the Bischel Pit Property. The closest potential wetlands are located to the southeast of the property approximately 350 feet.

Existing approved hours of operation for gravel pit operations at the Bischel Pit are: 6:00 am to 9:00 pm, Monday through Friday; and 6:00 am to 3:00 pm on Saturday. Existing approved hours of operation for the temporary asphalt plant at the Bischel Pit are: 5:00 am to 10:00 pm Monday through Saturday. Occasional 24 hour operations may be required due to Wisconsin Department of Transportation requirements. Maintenance may be conducted outside of these hours.

Equipment involved in the sand and gravel operation is listed below.

Topsoil & Overburden Removal:	1 backhoe
	1 bulldozer
	2-3 scrapers
	1-3 haul trucks
Processing Operations:	1-2 crushing and screening plants
	1 washing plant
	1 portable power generator
	1-2 front end-loaders
	1-4 conveyors/stackers
	1 temporary asphalt plant
Other:	Portable toilet
	Portable scale & scalehouse

Access to the existing gravel pit is through the existing Bischel Pit driveway at address 18287 STH 64.

In addition to truck traffic hauling products and equipment needed for the mine operation, traffic for other mine activities (installation of BMP's, company personnel, reclamation activities) will utilize the driveway.

3. Estimated volume of materials to be extracted during the operation of each cell, during the permit period, and during the full life of the operation;

The estimated volume of materials to be extracted by cell:

- Phase 1 – approximately 20,000 cy sand and gravel
Soils have already been stripped & stockpiled
- Phase 2 – approximately 30,000 cy sand and gravel
Soils have already been stripped & stockpiled
- Phase 3 – approximately 180,000 cy sand and gravel
Soils have already been stripped & stockpiled
- Phase 4 - approximately 320,000 cy sand and gravel
Topsoil to strip is estimated at: 4,600 cy
Overburden to strip is estimated at: 9,000 cy

TOTAL OPERATION: Approximately 550,000 cy sand & gravel
Approximately 4,600 cy topsoil
Approximately 9,000 cy overburden.

Soils from Phase 1, Phase 2 and Phase 3 have already been stripped & stockpiled as berms around the perimeter of the site. Estimated volume of the soil that is in the berms is approximately 41,000 CY.

It is difficult to predict how much material will be extracted during the annual reclamation permit period because the amount of material removed from the site is totally dependent upon local work in the area. We could estimate 50,000 cy out a year or 150,000 cy out in a permit period. However, for example, if we have no work out of the pit in a given year, or get a substantial project two years in a row, that amount could be doubled.

4. Methods for site dewatering and effluent discharge. Discharges may require a Wisconsin Pollution Discharge Elimination Permit;

There will not be any dewatering conducted at the site. The Wisconsin Department of Natural Resources Storm Water Program regulates the proposed sand and gravel excavation operation. Milestone Materials has coverage under the General Permit for

Nonmetallic Mining Operations. With the exception of limited lengths of access road, all storm water and spring snowmelt water from the operation will be contained in the below grade excavation, with no runoff leaving the excavation or processing area. The existing Bischel Pit General Stormwater Permit will be revised to include the ready mix plant. The Facility Identification Number for the site is 15603 and the FID is: 609002460.

In accordance with our Wisconsin DNR permit, the site is internally drained. The site has been internally drained since it was opened in 1998 and has never had an issue with erosion or stormwater leaving the site.

Based on usage at similar existing facilities where wash water is being recycled, the typical annual water usage from the washing operation is estimated to be at approximately 11,000,000 gallons per year.

5. Stormwater permits required by other agencies;

The Wisconsin DNR requires a stormwater permit through NR 216. The Facility Identification Number for the site is 15603 and the FID is: 609002460.

6. Erosion control permits required by other agencies;

The Wisconsin DNR requires a stormwater permit through NR 216.

Please see **Figure 4** for typical erosion control BMP's to be used at the site. The typical drawings were taken from the Wisconsin Department of Natural Resources Stormwater Construction Technical Standards. ⁽²⁾

7. Description of reclamation activities to be conducted during mining operations.

This includes but is not limited to a description of topsoil stripping, stabilization and conservation methods to be used during operations. Reclamation activities are to be conducted on an ongoing and progressive basis;

Topsoil and subsoil removed from the pit area has been saved and stored as vegetated berms around the perimeter of the site. The soil will stay in the berms until needed for reclamation upon completion of mining. All berms have been sloped and seeded with DOT Seed Mix 20 and mulched. Silt fence was installed at the toe of slopes until the berms were vegetated.

The process of topsoil and subsoil removal and stockpiling as berms will continue with the area we are proposing to add with this modification. Topsoil and subsoil will be stockpiled separately where possible and the berms will be sloped, seeded and mulched as described above and labeled.

Excavation in the water table has been started and is moving north on the east side of Phase 1. Currently the west side of Phase 1, Phase 2 and Phase 3 are used for stockpile and crushing areas, along with the temporary asphalt plant site, when needed. A road through the phases will be left open for trucks hauling to and from the site and to ease in reclamation. Once mining and reclamation of the slopes is complete, any internal roads will be removed and reclaimed and the driveway will remain.

As required by the Chippewa County standards for “Nonmetallic Mine Sites in which Ponds are Created”, the final pond will be constructed with an irregular shoreline and varying slopes from 10:1 to 3:1 if adequate overburden material is available on site; and all pond slopes will be 3:1 or flatter and extend a minimum of 6 feet vertically below the season low water level or as far as possible depending on the safety of our equipment and operators working near the water.

Please refer to **Drawing 4, Cross Sections** for a typical cross section of the existing operation and the proposed reclaimed site.

The approximate thickness of the subsoil to be spread at the site is 8 inches to 13 inches. The approximate depth of the topsoil to be spread is 6 inches to 8 inches.

8. The sequence and progression through and between planned cells;

Excavation of the sand and gravel has been on-going in the Phase 1, Phase 2 and Phase 3. Mining into the groundwater has been on-going in Phase 1 and in the southern portion of Phase 3. Prior to commencement of mining in Phase 4, the existing berm along the east side of Phase 4 will be moved to the 50-foot setback area of State Highway 124. Additional berms will be created during topsoil and overburden removal of Phase 4. Excavation into Phase 2, Phase 3 and Phase 4 will commence in the groundwater at the same time as operations enter into Phase 4. The property line on the east side of the Bischel Pit will be excavated and the topsoil and overburden material will be saved for reclamation in conjunction with excavation in Phase 2. Please see **Figure 11** for the 50-foot setback waivers with Stelter, Inc. and the William L. Bischel Estate. The stockpile area, scale, scale house, and processing equipment will continue to be located in the Phase 3 but will also move around to Phase 2 and Phase 4. The temporary asphalt plant is typically located in the in Phase 3 and will also be located in Phase 4. The wash plant and wash pond area will be located in Phase 3 but will also move throughout each phase of the operation. The processing area and equipment will move around the site as mining progresses through the site.

We will continue excavation in Phase 1 in the water table initially, then north into Phase 2 and Phase 3. As we move north through those three phases, we will reclaim the southern slopes and side slopes of the pond.

As more water is created in Phases 1 and 2 the stockpile and processing areas will move to the north and east into Phases 3 and 4.

9. A timetable for the commencement and cessation of nonmetallic mining operations. The timetable shall document the sequence of excavation and reclamation during operation of each cell, during the permit period, and during the projected life of the site;

Nonmetallic mining has been ongoing at the Bischel Pit since 1998. Mining will cease at the Bischel Pit upon the removal of all sand and gravel resources at the site. Upon completion of mining, final reclamation of the wildlife pond will commence, including removal of the road through all of the Phases.

It is difficult to estimate the actual dates or even years that the excavation and operations will commence and cease during the operation of each cell, during the permit period and during the projected life of the mine, because our operations are totally dependent upon the existing market in the local area. All of our material is sold for local construction purposes, whether for Wisconsin State DOT projects or local contractors, it's 100% dependent upon the work available. Some years we may disturb 1 – 5 acres of land, whereas other years, we may disturb very little, if any. The topsoil and subsoil at the existing Bischel Pit permitted areas has been removed and stored around the perimeter of the site as berms.

It is estimated that Phase 4 will begin upon obtaining the Conditional Use Permit and Reclamation Plan modification approvals. In addition, expansion up to the property line in the Setback Waiver Areas will occur throughout the life of the pit. Please refer to **Figure 11** for the Setback Waiver documents with Stelter, Inc for the property line to the east of the Bischel Pit and for the setbacks with the newly-created parcel owned by the Dan Bischel Estate to the south and west.

We struggle with trying to predict the future and what the construction market will bear. The estimates listed could change considerably from year to year.

APPROXIMATE Reclamation Timetable

Phase 1: reclamation will begin when excavation below the water table is completed on the east sides in Phase 1 and Phase 2 and will occur beginning on the southern edge of Phase 1. Side sloping of Phase 1 will occur with progression of the pond being excavated to the north and removal of the east property line setback area. The

reason for the on-going reclamation is so that equipment will have as much room as possible above the groundwater to ensure the safety of the equipment operators. Final reclamation of Phase 1 will be completed when the sand and gravel reserves are depleted.

Phase 2: The eastern side slopes will be done concurrently with progression of the excavation in the water table progressing to the north and the removal of the 50 foot setback area to the east. The reason for the on-going reclamation is so that equipment will have as much room as possible above the groundwater to ensure the safety of the equipment operators. Final reclamation of Phase 2 will be completed when the sand and gravel reserves are depleted.

Phase 3: Phase 3 will be excavated below the water table and will be reclaimed when stockpile area is no longer needed.

Phase 4: Phase 4 will be excavated in conjunction with Phase 1, Phase 2 and Phase 3 if the need for certain products arises. Phase 4 will be the last area to be reclaimed, upon completion of mining in the water table.

The Bischel Pit will be reclaimed according to the Reclamation Plan approved by the Chippewa County LCFM. When possible, reclamation will occur concurrently with the development and progression of excavation activity in each phase. A reclamation bond is currently on file at Chippewa County LCFM for \$120,000. Final reclamation will be anywhere from 2045 to 2065.

(3) Final Site Plan

(a) Site Operations Maps

Please refer to **Drawing 3, Reclamation Plan Map.**

(b) Description of Final Reclamation:

1. Description of plans for disposition of surface structures, roads, and related facilities after cessation of mining;

All portable facilities operating on the site will be removed upon completion of mining prior to commencement of reclamation. Roads will be removed.

2. Description of topsoil reapplication;

Topsoil will be reappplied in accordance with Wisconsin Construction Specification 26, #4, from Section IV, Technical Guide, of the USDA-NRCS (**Figure 5**).⁽³⁾

The Technical Guide states that surfaces that will have topsoil applied shall be cleared of trees, stumps, roots, brush, rubbish and stones that are larger than 6 inches in diameter. Topsoil will not be placed until the subsurface is prepared. Spreading shall not be done when the ground is frozen or weather conditions are unsuitable.

Topsoil and subsoil will be first be removed from the berms with excavators or loaders and transported in dump trucks to the area in the mine to be reclaimed. Topsoil and subsoil will be separated the best to our ability. Trucks will be routed to limit traffic over areas where subsoil has already been applied. Trucks will dump the topsoil and subsoil and bulldozers will spread the material on the slopes of the mine to approximately 6” to 13” thick on the slopes of the mine and to approximately 6 feet below the groundwater surface. The use of tracked equipment while spreading topsoil and subsoil will limit soil compaction. 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 portion of the soil profile.

All slopes will be stabilized using best management practices including seeding, mulching, erosion control mat, hydro-seeding, etc. Please refer to **Figure 6** for the Wisconsin Erosion Control Product Acceptability List (PAL) Channel and Slope Erosion Control Matrix⁽⁴⁾.

The application of subsoil (approximately 6” to 8’ thick) and the application of topsoil (approximately 8” to 13” thick) will be applied in separate layers.

3. A description of how the reclamation plan addresses the long-term safety of the reclaimed mining site. The description shall include a discussion of site-specific safety measures to be implemented at the site and include measures that address public safety with regard to adjacent land uses.

The site will be reclaimed to passive recreation and wildlife habitat with a pond. The site will be lowered approximately 15’-30’ with 3:1 or flatter slopes around the perimeter of the non-metallic mining area and to 6 feet vertically below the water surface. There will be minimal safety issues because the site will have a safety shelf of 3:1 slopes around the pond perimeter. The remainder of the site will be above water and will remain approximately at the same elevation it currently is.

4. Seeding plan which shall include a seeding schedule, seeding type and rates, mulching, netting, tree plantings, and other techniques needed to accomplish soil and slope stabilization;

As stated in the NRCS Conservation Practice Standard Critical Area Planting Code 342 (**Figure 7**) **V. B. 3**. “During recommended seeding periods seedbed preparation shall immediately follow construction activities. For seeding outside recommended seeding periods other erosion control methods such as applying mulch or seeding temporary cover, shall be performed. Seedbed preparation methods include: a) conventional tillage and b) no till”.⁽⁵⁾ As stated in the 2015 Wisconsin DOT Standard Specification for Seeding (Section 630) (**Figure 8**); 630.3.2 Preparation of Seed Bed; (1) Complete grading, shouldering, topsoiling, and fertilizing, if part of the work under contract, before permanent seeding, except the contractor may place the fertilizer and seed mixture in one operation if using equipment designed for the purpose; (2) Just before seeding, work the area being seeded with discs, harrows, or other appropriate equipment to obtain a reasonably even and loose seedbed.⁽⁶⁾

Seeding shall take place immediately following reclamation dirtwork activities. According to the NRCS Conservation Practice Standard Critical Area Planting Code 342 (**Figure 7**) **V. C. 5 (Table 2)**, seeding for the Central Range of Wisconsin can take place between 4/15 and 6/1 for spring seeding, and between 8/1 and 8/21 for late summer seeding. Seeding may occur in the fall if conditions are favorable.⁽⁵⁾

Methods of seeding will be done as discussed in the 2015 Wisconsin DOT Standard Specification for Seeding (Section 630)(**Figure 8**), 630.3.3.1, Method A or 630.3.3.2, Method B.⁽⁶⁾

All areas to be seeded will be mulched. Mulching will be placed on the seed within 2 days after completing the seeding. Mulch will not be placed during periods of high winds. As stated in the 2013 Wisconsin DOT Standard Specification for Mulching (Section 627) (**Figure 9**), mulching will be conducted using 627.3.2.1, Netting; or 627.3.2.2, Method B, Tackifier, or 627.3.2.3, Method C, Crimping.⁽⁷⁾

A Wisconsin DOT seed mix Number 20 will be used for interim reclamation.

The slopes of the Bischel Pit will be planted for Upland Grassland Wildlife Habitat and Wildlife Pond. Chippewa County’s recommended seeding Mix 2 will be utilized as attached in **Figure 10**.

In the event invasive or noxious species are encountered, depending on the species and rate of establishment that it may not be possible to eradicate the infestation;

however, the goal is to prevent establishment of invasive species and to establish a management plan to maintain and control them to target levels. NRCS Conservation Practice Standard Critical Area Planting Code 342 (**Figure 7**) will also be followed for noxious weed monitoring and control.

Once attainable guidelines are developed with assistance from Chippewa County LCFM staff, Milestone Materials agrees to implement a soil rehabilitation and vegetative management plan to reasonably guide ongoing efforts to systematically manage the reclaimed areas of the mine.

All slopes at the site will be 3:1 or flatter and to 6 feet vertically below the water surface for the wildlife pond; above water will be seeded and mulched for erosion control. Therefore, there will be no pollution to surface water or groundwater as a result of Upland Grassland Wildlife Habitat and Wildlife Pond.

5. Description of the anticipated future use of the site;

The final end land use will be Upland Grassland Wildlife Habitat and Wildlife Pond. There will be no development on the reclaimed mine site where the Upland Grassland Wildlife Habitat and Wildlife Pond is located.

Criteria for Measuring Reclamation Success

Criteria that will be used to determine reclamation success of the Upland Grassland Wildlife Habitat and Wildlife Pond will include species diversity, plant density, biomass, soil chemistry and fertility, and soil organic matter.

Percent cover should be 70 percent averaged over the site. The measurement of cover should be timed to correspond with the period of peak vegetative growth, typically in August.

Diversity and plant density will be measured by comparing to established successful areas that are similar in vegetation to the reclaimed site, either with test plots or other reclaimed sites.

Soil chemistry and fertility and soil organic matter will be measured with soil sampling.

Visual inspections will also be performed to assure there is no erosion which will also be used as a measurement criteria.

REFERENCES

- (1) Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/> . Accessed [7/20/2015].
- (2) Wisconsin Department of Natural Resources, Storm Water Construction Technical Standards. Available online at http://dnr.wi.gov/topic/stormwater/standards/const_standards.html. Accessed [7/20/2015].
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- (4) Wisconsin Department of Transportation, Erosion Control Product Acceptability List for Multi – Modal Applications. Available online at <http://www.dot.wisconsin.gov/business/engrserv/docs/pal.pdf>. Accessed [7/20/2015].
- (5) Natural Resources Conservation Service, United States Department of Agriculture. Electronic Field Office Technical Guides. Available online at <http://efotg.sc.egov.usda.gov/references/public/WI/342.pdf>. Accessed [7/20/2015].
- (6) Wisconsin Department of Transportation, 2015 Standard Specifications for Seeding. Available online at: <http://wisconsindot.gov/rdwy/stndspec/ss-06-30.pdf#ss630>. Accessed [7/20/2015].
- (7) Wisconsin Department of Transportation, 2015 Standard Specifications for Mulching. Available online at <http://wisconsindot.gov/rdwy/stndspec/ss-06-27.pdf#ss627>. Accessed [7/20/2015].

Figure 1. Plat Map

Figure 2. Certified Survey Map

Figure 3. Soils Map and Descriptions

Figure 4. Erosion Control Best Management Practices

Figure 5. – NRCS FOTG 26 Topsoiling

Figure 6. Wisconsin DOT Erosion Control Product Acceptability List (PAL)

Figure 7. NRCS Critical Planting Code 342

Figure 8. Wisconsin DOT Seeding Specification #630

Figure 9. Wisconsin DOT Mulching Specification #627

Figure 10. Chippewa County Seeding Mix

Figure 11. Setback Waivers

Figure 12. Drawings