GTAC
GOGEBIC TACONITE

June 17, 2013

Wisconsin Department of Natural Resources
101 South Webster Street
PO Box 7921
Madison, WI 53707-7921

Dear Secretary Stepp:

Re: Bulk Sample Plan
Wisconsin Statutes 295.45

This letter serves to submit a plan for perform Bulk Sampling on five previously disturbed sites. Three of the sites were previously disturbed as bulk sampling locations in 1960. Another site was disturbed as a blasting test location in 1961. Site 3A is the location of a disturbance associated with the logging operations in the area.

Included in this submittal, you will find:

- A Bulk Sample Plan Narrative addressing the requirements of Wisconsin Statutes 295.45.
- Map 1 – Location Map
- Figure 1 – Plan View Site 1
- Figure 2 – Plan View Site 2
- Figure 3A – Plan View Site 3A
- Figure 4 – Plan View Site 4
- Figure 5 – Plan View Site 5
- Reclamation Cost estimate

We look forward to discussing the project in more detail with your staff. Any questions should be directed to our Hurley office at (715) 561-2601. Our mailing address is:

Gogebic Taconite, LLC
402 Silver Street
Hurley, WI 54534

Sincerely,

Timothy J Myers
Engineer

Bulk Sampling Plan

Applicant: **Gogebic Taconite, LLC**
402 Silver Street
Hurley, WI 54534

Project Name: **GTAC Bulk Sampling Project**

Date: **June 17, 2013**

OVERVIEW

The Bulk Sampling Plan describes the excavation of less than 10,000 tons of material at a potential mining site for the purposes of obtaining site-specific data to assess the quality and quantity of the ferrous mineral deposits and of collecting data from and analyzing the excavated materials in order to prepare the application for a mining permit or other approval.

The excavated materials will be processed in a laboratory. The results of the testing are used to determine the sizes and quantities of the machinery needed to beneficiate the raw ore to a saleable product.

Bulk sampling activities were performed on this property in 1960 by Oliver Mining Division of US Steel Corporation. At that time, taconite technology was an emerging technology. The testing was performed with the best technology of the time. Now, over fifty years later, another set of rock samples are required for the specific design of a new beneficiation mill for this reserve.

Four locations were disturbed in 1960. Trenches were excavated that were approximately 200 feet long by 24 feet wide. The pit locations were stripped of vegetation. Soils were removed by heavy equipment. Drilling and blasting was performed to break the rock. Each location produced about 100 cubic yards of material that was hauled offsite to a railroad siding for shipment.

Reclamation activities were not performed and the disturbed sites were allowed to grow vegetation with volunteer species.

This proposed activity will utilize three (3) of the previously disturbed sites to collect another sample set. Those sites are identified as Bulk Sample Sites 1, 2 and 4. Two

additional sites will be disturbed in new locations. Bulk Sample Site 3A is located on an existing logging road. Bulk Sample Site 5 is a previously disturbed site that was used for a blasting test in 1961. This application describes the procedures to be used to collect these rock samples.

295.45 (2)(a)

A description and map of the bulk sampling site, including the number of acres in the site, the number of acres of land that will be disturbed, if any, associated with each bulk sampling location, and the locations and types of sampling or studies to be conducted at each bulk sampling location.

Five bulk sample sites are proposed to be disturbed. Using the names from the 1960 activity, the sites are numbered 1, 2, and 4. Bulk Sample Site 3A will be located near Bulk Sample Site 4. Bulk Sample Site 5 is located in the central part of the reserve. See the map entitled "Map 1 - Bulk Sample Sites" for the generalized location of the disturbances.

Bulk Sample Site 1 is located in the Northeast quarter of the Southwest Quarter of Section 33 Township 45 North, Range 1 West. The site will include and disturb 0.59 acres. Refer to "Figure 1 – Plan View – Site 1".

Rock Samples are proposed to be collected from a trench that is approximately 234 feet long and averages 21 feet wide.

Bulk Sample Site 2 is located in the Northeast Quarter of the Southwest Quarter of Section 33 Township 45 North, Range 1 West. The site will include and disturb 0.90 acres. Refer to "Figure 2 – Plan View – Site 2".

Rock Samples are proposed to be collected from two trenches with dimensions of approximately 150 feet long and averaging 13 feet wide and dimensions of 70 feet long and averaging 20 feet wide.

Bulk Sample Site 3A is located in the Northwest Quarter of the Southeast Quarter of Section 01 Township 44 North, Range 2 West. The site is an existing disturbance associated with forestry activity. The site will include and disturb 0.71 acres. Refer to Figure 3 – Plan View – Site 3A.

Rock Samples are proposed to be collected from a trench that will be approximately 200 feet long and 20 feet wide.

Bulk Sample Site 4 is located in the Northwest Quarter of the Southeast Quarter of Section 01 Township 44 North, Range 2 West. The site will include and disturb 1.11 acres. Refer to "Figure 4 – Plan View – Site 4".

Rock Samples are proposed to be collected from a trench that is approximately 143 feet long and averages 30 feet wide.

Bulk Sample Site 5 is located in the Southwest Quarter of the Northeast Quarter of Section 33 in Township 45 North, Range 1 West. The site will include and disturb 0.64 acres. Refer to "Figure 5 – Plan View – Site 5".

Samples will collected from representative strata to be processed through an offsite pilot plant or to equipment manufactures to determine the types and number of machines necessary to design a new processing mill for the reserve.

295.45 (2)(b)

A description of the methods to be used for bulk sampling.

The proposed activity will occur in areas previously disturbed by similar operations in 1960.

The property has been enrolled in the Managed Forestland Program with Wisconsin DNR. As found at Wisconsin Statutes 77.83 (2)(a), the land is open to the public for hunting, fishing, hiking, sight-seeing and cross-country skiing. All other activities on these lands, including camping, biking, and operation of unauthorized motorized vehicles, are prohibited.

A safety perimeter will be established approximately 300 feet outside of the proposed activity area. The area will be marked with Danger Signs to alert the general public that an industrial activity is occurring nearby. A safety fence will be erected around the disturbance to further protect the public from ongoing activities on the site.

Vegetation will be removed from the proposed disturbance. Any marketable material will be recovered for commercial use such as a lumber mill raw product, pulp mill raw product or biofuel. Any remaining woody material will be disposed of in compliance with existing rules and regulations such as mulching.

Stormwater drainage control will be established by the utilization of berms, diversion ditches, hay bales, sand bag berms and/or sediment fence. When the conditions allow, up gradient surface runoff may be directed away from the site by diversion ditches or berms.

Soils material will be removed from the disturbed areas and stockpiled for later use in reclamation of the site. Any material deemed as topsoil will be segregated and reserved for application during the regrading activities. Due to the previous disturbances on these sites, topsoil, if any would have been intermixed with other materials. Any soils layer encountered will be maintained in stockpiles separate from bedrock materials.

The bedrock will be cleared of extraneous materials. Drilling will be performed on a prescribed pattern and will be accomplished by using a construction drill. The material will be blasted to a size comparable to the projected run-of-mine size material (approximately 6 to 12 inches in size). Blasting will be performed by contracted blasting services. No explosives will be stored on site.

The sample material will be loaded by heavy machinery into highway trucks for transport to the pilot plant facility. An alternative procedure will be the loading off-highway trucks at the pit and transporting the material to a staging area where the sample material will be transferred to highway trucks for transport to the pilot plant. Material will be transferred directly to the highway truck or the material may be placed on a pad to prevent contamination of the sample. The highway truck would then be loaded from the material stored on the pad. Stormwater control will be provided around the pad.

After the bulk sampling activity has been completed and no further sampling is required, the Department will be notified that backfilling will begin. Notification will be by email or Registered Mail. Backfilling will begin within 5 days of the notification to the Department. The excavation slopes will be graded to remove excessive grades. Backfilling will be performed with the available material with the goal to blend the disturbance into the existing ground contours. Stockpiled soils material will be applied to the regraded area before revegetation occurs.

Seeding will follow. See the Revegetation Plan as discussed at the discussion of the requirements of Statute 295.45 (2)(d) below for details.

295.45 (2)(c)

A site-specific plan for controlling surface erosion that conforms to requirements under ss. 281.33 (3) and 283.33 and that identifies how impacts to plant and wildlife habitats will be avoided or minimized to the extent practicable.

Refer to the Figures attached to this application. Each of the five bulk sample sites are detailed in these sketches with the applicable Stormwater Management procedures proposed.

Stormwater Management may include the use of silt fence, earthen berms, hay bales, diversion ditches or similar barriers to divert water away from the disturbance. Silt fence, earthen berms, hay bales or similar barriers will be used to filter any runoff before it leaves the site. Vehicular access to the site will be managed to maintain the surface runoff through sediment control such as silt fence prior to leaving the work site.

At the end of the activity, the site will be regraded and any topsoil will be replaced. The area will be seeded and mulched with the appropriate mixtures.

The bulk sampling activities will occur in areas of previous disturbances. Plant and wildlife habitat in these areas have adapted to the previously disturbed sites. A redisturbance of an area already impacted by activities was the deciding factor for locating the bulk sampling sites. Each of the sites is relatively small and located in a forested area. Animals displaced by the activity have adequate habitat to relocate.

A Stormwater Application that will address this activity will be submitted separate from this application.

295.45 (2)(d)

A revegetation plan for each area where bulk sampling will be performed that describes how adverse impacts to the environment will be avoided or minimized to the extent practicable and how the site will be revegetated and stabilized and that identifies how adverse impacts to plant and wildlife habitats will be avoided or minimized to the extent practicable.

REVEGETATION PLAN

In the event that any topsoil has been stockpiled, it will be returned to the site and spread once regrading is completed.

All sites shall be seeded to establish vegetation. Composite soil samples will be collected. The samples will be submitted to the local agronomy center for available nutrient analysis. The analysis will provide a recommended fertilizer application rate.

Soil preparation may include raking, discing or harrowing to loosen the soil.

Seed mix would contain:

68% Common Oats
14% Annual Rye

4% Timothy
7% Virginia Wild Rye
7% Canada Wild Rye
0.25% Black-eyed Susan

The seed will be planted no deeper than 1/8-inch at 73.25 pounds per acre. Seed bed shall be loosened to 4 inches of depth.

Once fertilizer and seed have been applied, the seeded area will be raked, disked, harrowed or utilize other methods in order to cover the seed.

Mulching material shall consist of straw or hay in an air-dry condition, wood excelsior fiber or wood chips. Mulch shall be spread at a thickness of ½ to 1-1/2 inches. Compacted bales are to be broken and loosened to create a loose blanket over the seeded area.

The pre-existing roads shall be graded and left in place for future use by the landowner. Refer to the landowner letters in the appendix. If the road is aggregate surfaced, grading will be performed to establish drainage towards the ditchline. Any culverts that were installed will be removed. Once culverts are removed, berms will be created across the roadway to divert surface drainage off the roadbed.

295.45 (2)(e)

The estimated time for completing the bulk sampling and revegetation of the bulk sampling locations.

The bulk sampling and revegetation will occur during the period from July 2013 to November 2014.

295.45 (2)(f)

A description of any known adverse environmental impacts that are likely to be caused by the bulk sampling and how those impacts will be avoided or minimized to the extent practicable.

There are no known adverse environmental impacts that are likely to be caused by the bulk sampling activity.

Three sites (Sites 1, 2 and 4) were previously disturbed in 1960 and were not reclaimed and have remained open to the elements. From this 50 year old activity, no adverse

environmental impacts have been identified. The process of collecting a sample replicates the 1960 activity. Site No. 3A is located on a road that was used in the timber industry. Numerous rock outcrops can be found in this area because of the shallow soils cover. Site No. 5 was disturbed in 1961 as a blasting test site. Site reclamation will include areas that the historic activities left behind.

A preliminary wetland inventory has been performed on four sites (Sites 1, 2, 3A and 4). These previously disturbed sites did not have wetland locations. Agency field verification will follow. Any wetland impacts along roads will be addressed in the Stormwater Application that will follow under a separate submittal.

The target areas of the Ironwood Formation to be collected will be in the Pence, Norrie and Plymouth members. These geologic members consist of sedimentary rocks that are iron oxide in nature. Long term exposure to the elements has not produced negative environmental impacts on the site.

Each proposed site has existing disturbances that allow surface runoff to exit the site and not pool water. No wetlands have been identified in these bulk sample sites.

295.45 (2)(g)

A description of any adverse effects, as defined in s. 44.31 (1), that the bulk sampling might have on any historic property, as defined in s. 44.31 (3), that is a listed property, as defined in s. 44.31 (4), that is on the Wisconsin inventory of historic places, as defined in s. 44.31 (12), or that is on the list of locally designated historic places under s. 44.45; or any scenic or recreational areas; and plans to avoid or minimize those adverse effects to the extent practicable.

First, a check to the Wisconsin Historical Society inventory reveals no known archeological sites in the Project Area.

Second, Sites 1, 2, 3A, 4 and 5 are located on sites with previous extensive disturbances. Site access will be by using the existing roads used with the active forestry practices on the site or roads that were used in the previous bulk sampling activity.

The sites are remote and are forested. Activities will be screened from the general public by the forested areas.

295.45 (5)(a) BONDING

A person who intends to engage in bulk sampling shall submit with the bulk sampling plan a bond in the amount of $5,000 that is conditioned on faithful performance of the requirements of this section, that is issued by a surety company licensed to do business in this state, and that provides that the bond may not be canceled by the surety, except after not less than 90 days' notice to the department in writing by registered or certified mail.

A surety bond in the amount of $5,000 has been provided with the application. A specific bond estimate has been provided within "Table 1 – Reclamation Cost Estimate". After DNR review, the appropriate bond amount will be provided to the Department.

295.45 (5)(e)

The department may require that the amount of the bond submitted under this subsection be increased at any time, if the department determines that it is unlikely that the bond would be adequate to fund the cost to this state of completing the revegetation plan.

A Reclamation Cost Estimate has been included. See "Table 1 – Reclamation Cost Estimate" that follows this page. The Reclamation Cost Estimate totals $33,601.00 for reclaiming 5 bulk sample sites and 2 access roads. A Surety Bond in the amount of $5,000.00 has been provided with this submittal as required by 295.45 (5)(a). After DNR review, the appropriate bond amount will be provided to the Department.

295.45 (7)

Notwithstanding any provision in ch. 23, 29, 30, 31, 169, 281, 283, 285, 289, or 291 or a rule promulgated under those chapters applicable to an approval identified under sub. (3), the department shall require the bulk sampling activity for which the approval is issued to be conducted at locations that result in the fewest overall adverse environmental impacts.

By reusing existing unreclaimed disturbed areas, this activity will minimize the impacts as compared to areas that have not been disturbed in the past. Regrading and revegetation of the existing disturbances will also be accomplished.

FIGURES
Figure 1 – Plan View – Site 1
Figure 2 – Plan View – Site 2
Figure 3 – Plan View – Site 3A
Figure 4 – Plan View – Site 4
Figure 5 – Plan View – Site 5

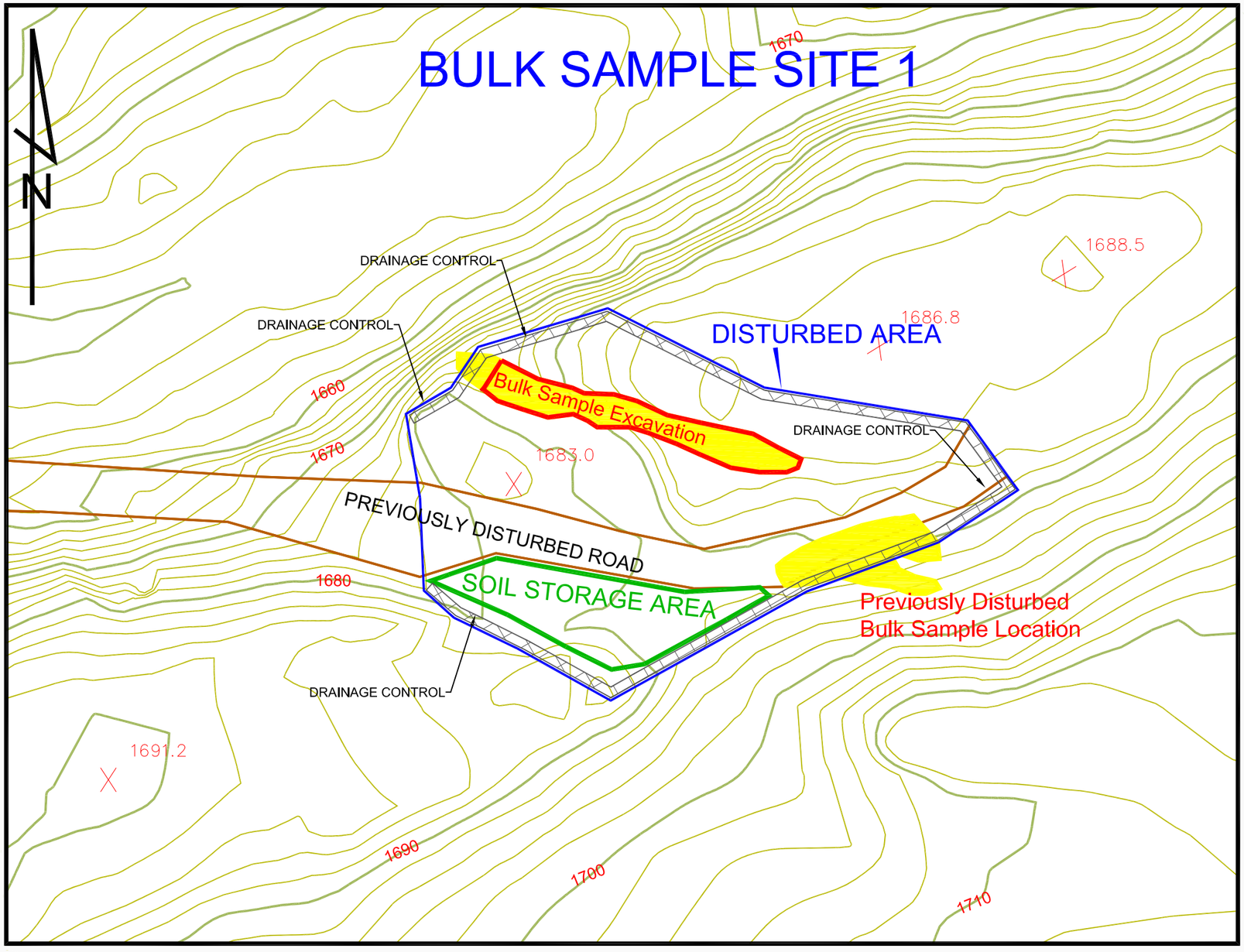
MAPS
Map 1 – Bulk Sampling Sites

TABLES
Table 1 – Reclamation Cost Estimate

Gogebic Taconite, LLC
Bulk Sampling
Reclamation Cost Estimate
June 17, 2013

Location	Activity	Number	Units	Unit Cost	Tot Cost	Location Cost
Regrading	Mob/Demob	1	lot	$3,000	$3,000	
						$3,000
Site 1		0.59	Disturbed Acres			
		4914	Pit Area (Sq Ft)			
		1100	Ft Access Road			
	Backfill	1820	Cubic Yards	$3	$5,460	
	Soil Fill	951.9	Cubic Yards	$2	$1,904	
	Seed	43.2175	Pounds Seed	$2.35	$102	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	Access Road	2	Hours D6 dozer	$110	$220	
	Seed	29.59596	Pounds Seed	$2.35	$70	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	TOTAL					$8,355
Site 2		0.9	Disturbed Acres			
		3350	Pit Area (Sq Ft)			
		800	Ft Access Road			
	Backfill	1240.7407	Cubic Yards	$3	$3,722	
	Soil Fill	124.1	Cubic Yards	$2	$248	
	Seed	65.925	Pounds Seed	$2.35	$155	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	Access Road	2	Hours D6 dozer	$110	$220	
	Seed	21.524334	Pounds Seed	$2.35	$51	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	TOTAL					$4,996
Site 3A		0.71	Disturbed Acres			
		4000	Pit Area (Sq Ft)			
		300	Ft Access Road			
	Backfill	1481.4815	Cubic Yards	$3	$4,444	
	Soil Fill	148.1	Cubic Yards	$2	$296	
	Seed	52.0075	Pounds Seed	$2.35	$122	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	Access Road	2	Hours D6 dozer	$110	$220	
	Seed	8.0716253	Pounds Seed	$2.35	$19	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	TOTAL					$5,702
Site 4		1.11	Disturbed Acres			
		4290	Pit Area (Sq Ft)			
		0	Ft Access Road			
	Backfill	1588.8889	Cubic Yards	$3	$4,767	
	Soil Fill	158.9	Cubic Yards	$2	$318	
	Seed	81.3075	Pounds Seed	$2.35	$191	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	Access Road	2	Hours D6 dozer	$110	$220	
	Seed	0	Pounds Seed	$2.35	$0	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	TOTAL					$6,096
Site 5		0.64	Disturbed Acres			
		3800	Pit Area (Sq Ft)			
		300	Ft Access Road			
	Backfill	1407.4074	Cubic Yards	$3	$4,222	
	Soil Fill	140.7	Cubic Yards	$2	$281	
	Seed	46.88	Pounds Seed	$2.35	$110	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	Access Road	2	Hours D6 dozer	$110	$220	
	Seed	8.0716253	Pounds Seed	$2.35	$19	
	Mulch	10	Straw Bales	$10	$100	
	Seed Labor	4	Hours Labor	$50	$200	
	TOTAL					$5,453

TOTAL PROJECT ESTIMATED RECLAMATION COST **$33,601.01**



SITE LOCATION
Township 45 North, Range 1 West
NE SW Section 33

Disturbed Acreage 0.59 Acres

Existing Pit Outline Copied
from Historic Documents

Mapping based on 2 foot surface contours

GTAC GOGEBIC TACONITE

Gogebic Taconite
402 Silver Street
Hurley, WI 54534

BULK SAMPLING APPLICATION
FIGURE 1
PLAN VIEW SITE No. 1

0 50' 100' 150'

SCALE: 1"= 50'

By: TJM	Project:
Date: 05-14-2013	
Drawing: Bulk Sampling Site Plan 2013-0514	
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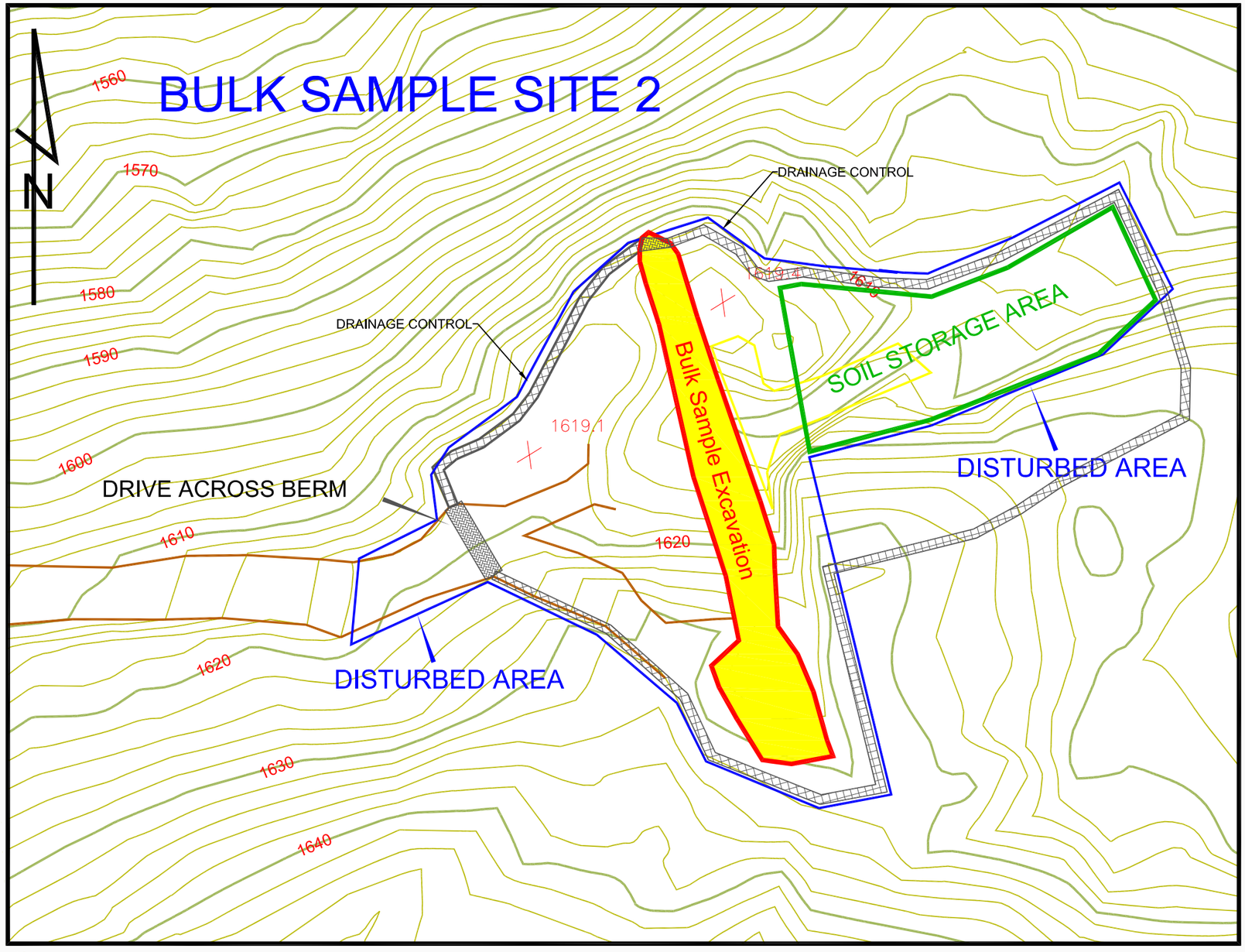

SITE LOCATION
Township 45 North, Range 1 West
NE SW Section 1

Disturbed Acreage 0.90 Acres

Existing Pit Outline Copied
from Historic Documents

Mapping based on 2 foot surface contours

Gogebic Taconite
402 Silver Street
Hurley, WI 54534

BULK SAMPLING APPLICATION

FIGURE 2

PLAN VIEW SITE No. 2

0 50' 100' 150'

SCALE: 1"= 50'

By: TJM	Project:
Date: 05-14-2013	
Drawing: Bulk Sampling Site Plan 2013-0514	
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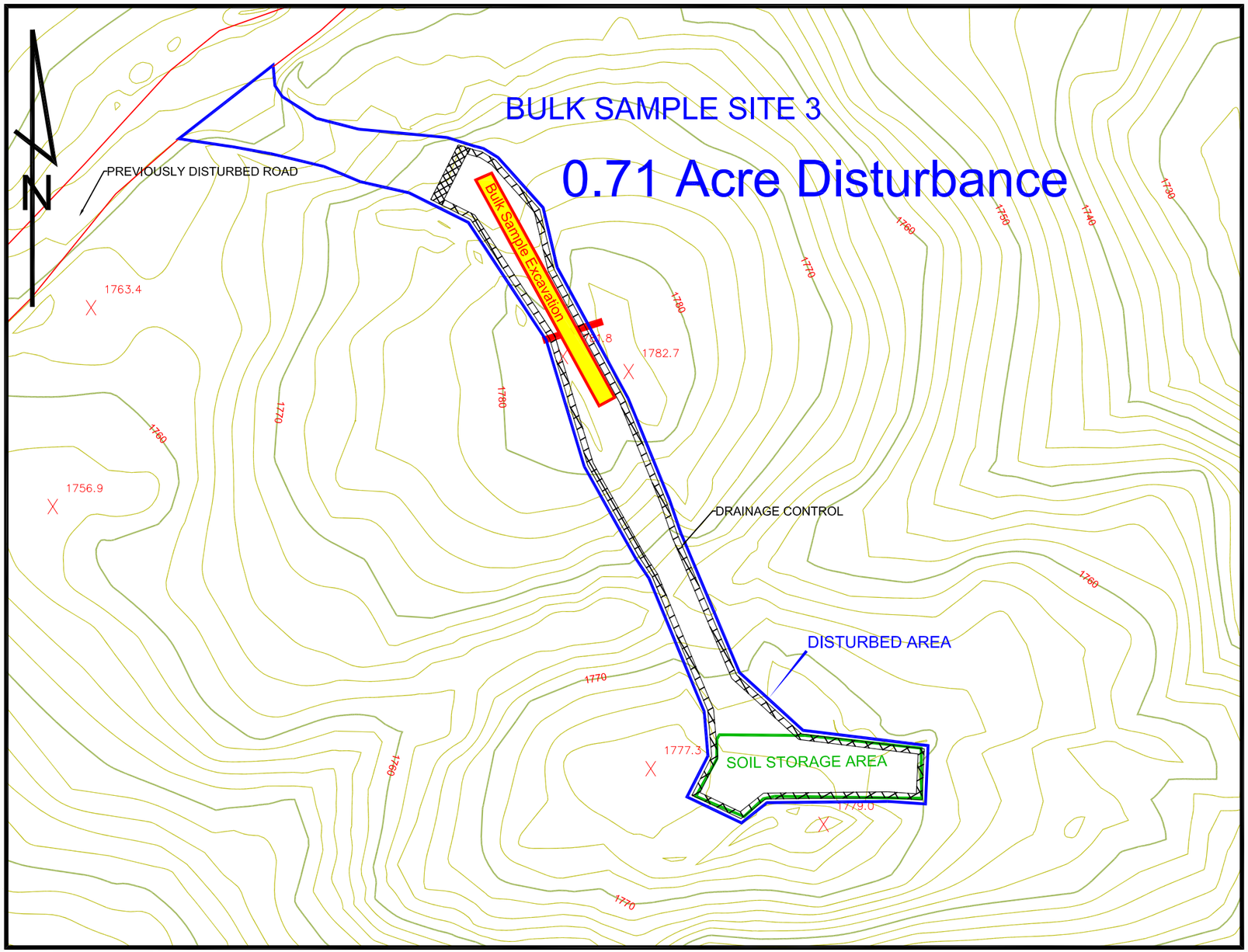

SITE LOCATION
Township 44 North, Range 2 West
NW SE Section 2

Disturbed Acreage 0.71 Acres

Mapping based on 2 foot surface contours

Gogebic Taconite
402 Silver Street
Hurley, WI 54534

BULK SAMPLING APPLICATION
FIGURE 3A
PLAN VIEW SITE No. 3A

0 80' 160' 240'

SCALE: 1"= 80'

By: TJM	Project:
Date: 05-14-2013	
Drawing: Bulk Sampling Site Plan 2013-0514	
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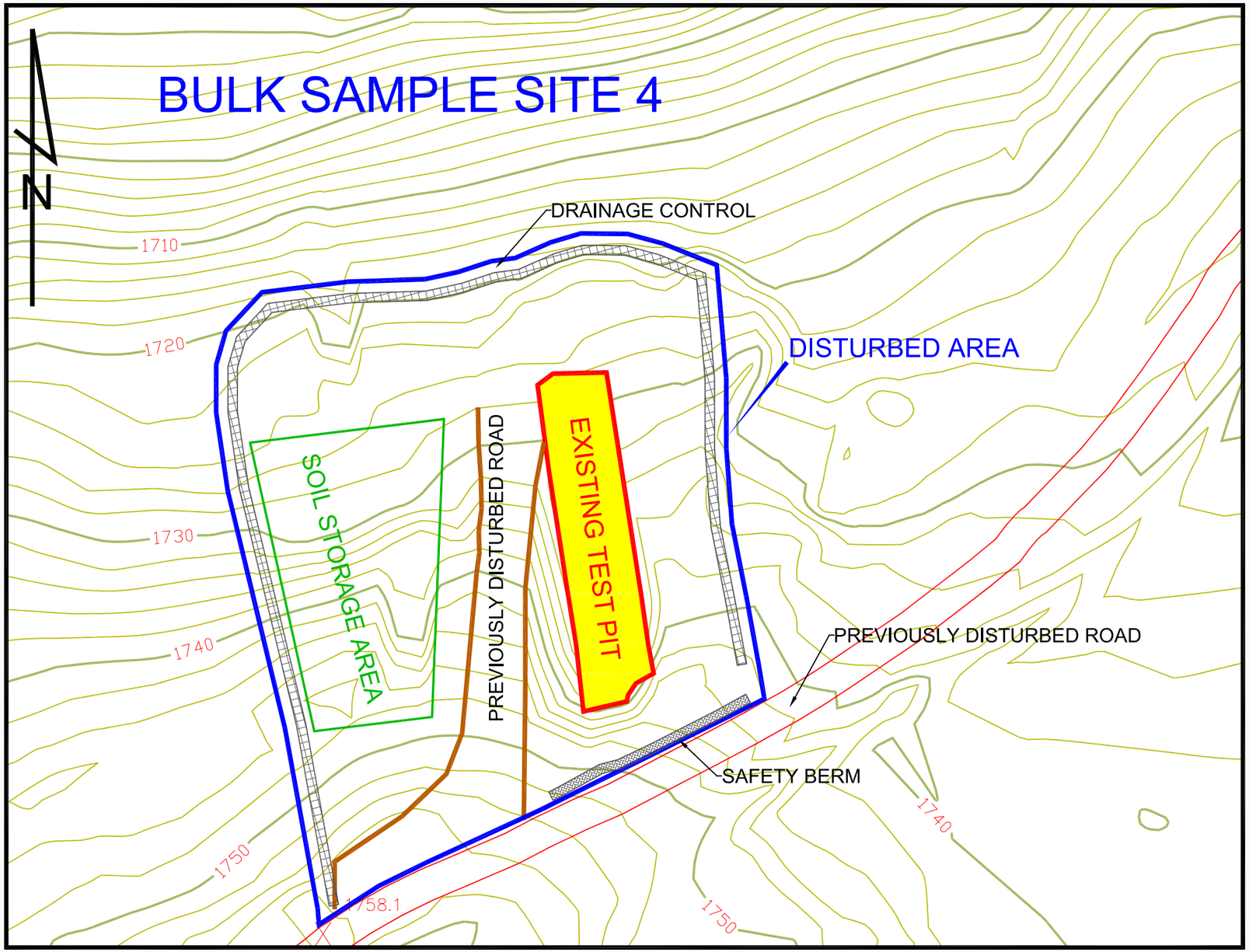

SITE LOCATION
Township 44 North, Range 2 West
NW SE Section 1

Disturbed Acreage 1.11 Acres

Existing Pit Outline Copied
from Historic Documents

Mapping based on 2 foot surface contours

Gogebic Taconite
402 Silver Street
Hurley, WI 54534

BULK SAMPLING APPLICATION
FIGURE 4
PLAN VIEW SITE No. 4

0 50' 100' 150'
SCALE: 1"= 50'

By: TJM	Project:
Date: 05-14-2013	
Drawing: Bulk Sampling Site Plan 2013-0514	
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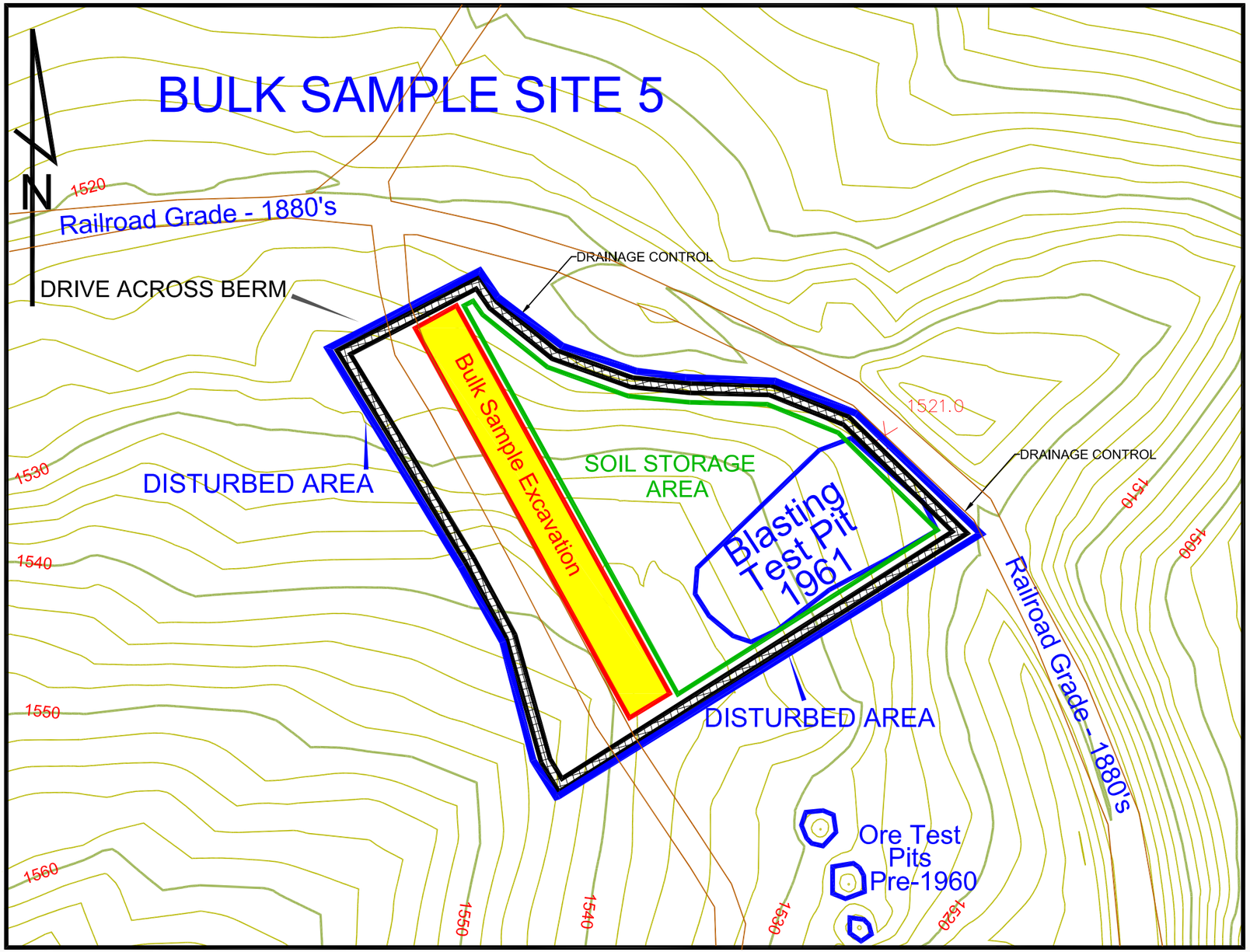

SITE LOCATION
Township 45 North, Range 1 West
SW NE Section 33

Disturbed Acreage 0.64 Acres

Existing Blast Test Pit Outline
Copied from Historic Documents

Mapping based on 2 foot surface contours

Gogebic Taconite
402 Silver Street
Hurley, WI 54534

BULK SAMPLING APPLICATION

FIGURE 5

PLAN VIEW SITE No. 5

0 50' 100' 150'

SCALE: 1"= 50'

By: TJM	Project:
Date: 06-14-2013	
Drawing: Bulk Sampling Site Plan 2013-0514	
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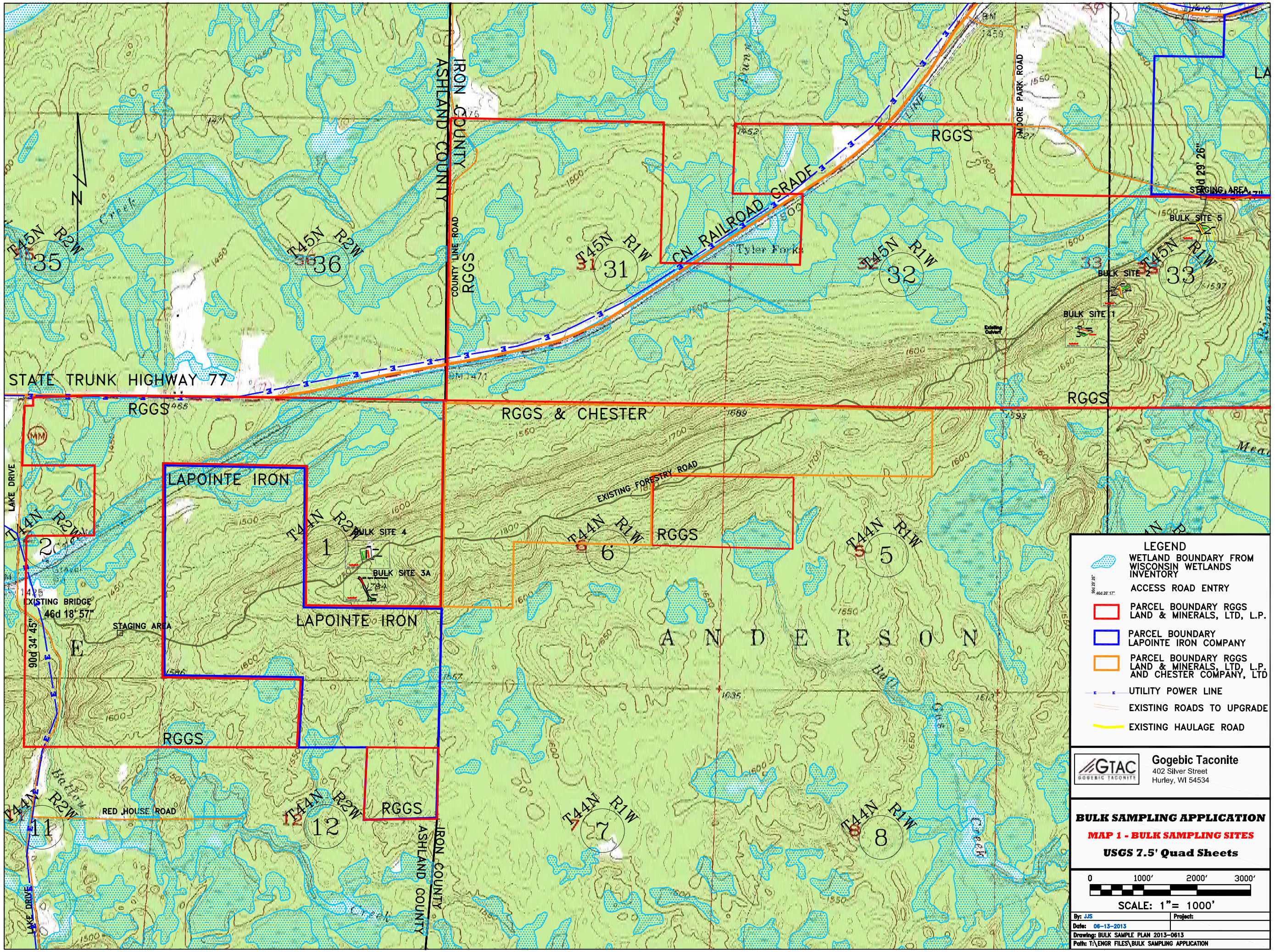

IRON COUNTY
ASHLAND COUNTY
COUNTY LINE ROAD
CN RAILROAD GRADE
Tyler Forks
MOORE PARK ROAD
STAGING AREA
BULK SITE 5
BULK SITE 2
BULK SITE 1
STATE TRUNK HIGHWAY 77
RGGS
RGGS & CHESTER
LAPOINTE IRON
EXISTING FORESTRY ROAD
BULK SITE 4
BULK SITE 3A
LAKE DRIVE
EXISTING BRIDGE
46d 18' 57"
90d 34' 45"
STAGING AREA
A N D E R S O N
RED HOUSE ROAD
T45N R2W
T45N R1W
T44N R2W
T44N R1W
35
36
31
32
33
2
1
6
5
11
12
7
8
LEGEND
WETLAND BOUNDARY FROM WISCONSIN WETLANDS INVENTORY
ACCESS ROAD ENTRY
PARCEL BOUNDARY RGGS LAND & MINERALS, LTD, L.P.
PARCEL BOUNDARY LAPOINTE IRON COMPANY
PARCEL BOUNDARY RGGS LAND & MINERALS, LTD, L.P. AND CHESTER COMPANY, LTD
UTILITY POWER LINE
EXISTING ROADS TO UPGRADE
EXISTING HAULAGE ROAD
GTAC
Gogebic Taconite
402 Silver Street
Hurley, WI 54534
BULK SAMPLING APPLICATION
MAP 1 - BULK SAMPLING SITES
USGS 7.5' Quad Sheets
0 1000' 2000' 3000'
SCALE: 1"= 1000'
By: JJS
Project:
Date: 06-13-2013
Drawing: BULK SAMPLE PLAN 2013-0613
Path: T:\ENGR FILES\BULK SAMPLING APPLICATION