

Information for File #2012-04692-NJC

Applicant: Chippewa Sand, LLC

Corps Contact: Nathan Campbell

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Phone: 651-290-5324

Primary County: Chippewa County, Wisconsin

Section: 1 & 2

Township: 31 North

Range: 10 West

Information Complete On: June 17th, 2013

Posting Expires On: August 8th, 2013

Authorization Type: Section 404 Clean Water Act

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above. An approved jurisdictional determination will be made prior to reaching a permit decision, and will be posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/>.

Project AFTER-THE-FACT APPLICATION? No

PROJECT INVOLVES:

THREATENED OF ENDANGERED SPECIES? No
TRIBAL TRUST OR OTHER RESOURCES? No
A LISTED STATE-IMPAIRED WATER? No
FEMA 100-YEAR FLOODPLAIN? No

COASTAL RIDGE&SWALE CMPLEX? No
MINK, KAKAGON OR BAD RIVER? No
PLEASANT PRAIRIE ADID? No

PROJECT DESCRIPTION AND PURPOSE: The processing plant receives and processes raw frac sand from an existing nearby mine site and ships the processed frac sand off-site via rail. The amount of sand to be shipped via railcar exceeds the existing rail storage capacity of the the processing facility due to the limitations of the rail service. The purpose of the project is to provide a staging and storage area for railcars prior to shipment. The proposed project includes nine storage tracks with a total capacity of over 200 railcars. The layout will provide a direct connection between the processing facility and the storage area, while bypassing the existing rail line in order to avoid interrupting mainline traffic as well as increase rail safety.

The proposed project includes the construction of a single rail line with a 55-foot footprint from the existing sand processing plant, which will cross CTH Q adjacent to the existing mainline rail and then branch into multiple lines for rail car storage. The existing entrance drive will be widened from 15 feet to 28 feet and will extend north to the rail storage area, for a total length of 1,600 linear feet. From the access drive to CTH SS, CTH Q will be widened from 25 feet to 40 feet and a bypass/turn lane will be added at the access road

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: The rail line, access road improvements and CTH Q widening will result in impacts to 42,598 square feet of hardwood swamp, 6,208 square feet of fresh (wet) meadow, and 5,411 square feet of wet-to-wet mesic prairie.

ALTERNATIVES CONSIDERED: Three alternative sites for the rail storage project were considered.

Alternative Site A: Alternative Site A is located approximately 0.85 miles north of the Chippewa Sand processing facility. Site A is a small, undeveloped parcel of land which could potentially be used to connect to the larger land area to the west for rail storage. Utilizing this site would require crossing a mapped waterway of Sand Creek. The small parcel was recently purchased by Superior Silica Sand, LLC, located adjacently north of this site. Superior Silica Sand, LLC is unwilling to sell the property; therefore Site A was eliminated from consideration.

Alternative Site B: Alternative Site B is located approximately 0.32 miles north of the processing facility with only one road crossing between sites.

A total of 9 acres of the 10 acre parcel is wetland. Utilizing the site for rail storage would require a large amount of fill to match the rail elevation. Because of the large wetland impacts that would be required, the amount of fill material needed and the limited buildable area, Site B was eliminated from consideration.

Alternative Site C: Just south of the processing facility, there is a 1.4 mile corridor that extends to 75th Street and is located between STH SS/Mainline rail and USH 53. Because of the USH 53 right-of-way, the buildable width of the corridor is approximately 160 feet, which would restrict the storage to two long rail tracks and a service road. There are mapped wetlands on two-thirds (24 acres) of this area. Locating the rail storage at this site would result in 8 acres of wetland impacts. Due to the significant wetland impacts required to utilize this site and the narrow width available for storage, Site C was eliminated from consideration.

Proposed Site (Site D): The proposed site (Site D) is located directly north of the processing facility with only one road crossing (CTH Q) between the sites. Site D is 73 acres and composed of agricultural land and wetlands. The area currently in agricultural use will provide ample area for rail storage, space for clean out and inspection of railcars, and an existing entrance drive can be improved and used to access the site. Although 17.6 acres of wetland exist, impacts can be held to less than 1.5 acres. Site D was selected because the size allows for maximum rail storage area, results in least amount of wetland impacts, and the landowner was willing to sell the property.

Five alternative layouts, including a no-build alternative were considered for the rail storage project.

No-build Alternative (Option 1): The no-build alternative would result in no additional rail car storage. Not building the project would not address the rail storage needs of the sand processing plant. The no-build alternative was rejected from further consideration because it would result in not meeting the project purpose and need.

Alternative Layout (Option 2) – New Access Drive:

The alternative design for the access road involves creating a new vehicle access point and abandoning the existing entrance road. The existing drive is inadequate to safely accommodate two-way, heavy truck traffic; upgrades needed include widening the road and establishing adequate side-slopes. This would result in impacts to Wetland 1 and Wetland 3. This alternative design proposes locating a new entrance and access road farther south on CTH Q in an attempt to avoid impacting Wetland 3. CTH Q must be upgraded from CTH SS to the access drive, and includes road widening, turn lane, and side-slope flattening. Road widening and slope

flattening would still result in approximately 0.06 acres of impact to the southern portion of Wetland 3 and will significantly increase construction costs associated with road upgrades. Additionally, an entrance further south on CTH Q would have poor line of sight to the south because of a crest in road profile and therefore would result in hazardous conditions for exiting the site. Although Option 2 meets the project purpose and need, it would nearly double construction costs associated with the road upgrades and would still involve impacts to Wetland 3; therefore, Option 2 was rejected.

Alternative Layout (Option 3) – Southern Turn-out from Mainline:
An alternative design positions the rail turnout from the mainline immediately after crossing CTH Q, then veers west to the rail storage area. This option minimizes the length of rail and the length of the access drive necessary to reach the storage area, and therefore reduces construction costs. Designed with 2:1 embankment area slopes, the rail would have an average footprint width of approximately 55 feet. For just the rail, Option 3 would result in approximately 1.67 acres of wetland impacts, including all of Wetland 2. Moving railcars between the storage facility and the loading track would require the use of the mainline, which has the potential to interrupt mainline service. Option 3 meets the project purpose and need, but increases the safety risk and does not minimize wetland impacts; therefore Option 3 was rejected.

Alternative Layout (Option 4) – Northern Turn-out from Mainline:
An alternative design positions the turnout from the mainline approximately 700 feet north of CTH Q, and then the rail veers west to the rail storage area and crosses Wetland 1 at the narrowest possible point. Designed with 2:1 embankment area slopes, the rail would have an average footprint width of approximately 55 feet. For just the rail, Option 4 would result in approximately 0.91 acres of wetland impacts. By crossing Wetland 1 at the narrowest possible point, impacts to Wetland 2 would be avoided. This option proposes less wetland impacts (approximately 0.76 acres less) for rail construction as compared to Option 3. This option requires the use of the mainline to move railcars between the storage facility and the loading track. Rail traffic along the mainline is anticipated to continue to increase with multiple sand processing facilities along this line, which will limit accessibility to the storage area and increases the risk of collisions. Utilizing the mainline to access the storage area will further increase mainline traffic and potentially interrupt mainline service. Although Option 4 reduces wetland impacts compared to Option 3, it also increases the safety risk and has the potential to interrupt service along the mainline; therefore Option 4 was rejected.

Alternative Layout (Option 5) – Bridge Crossing:

An alternative design for crossing Wetland 1 is to cross the wetland using a bridge, which would significantly reduce wetland impacts. In order to clear both sides of the wetland, the bridge would need to span about 550 feet in length. The bridge would be supported by pillars and must be structurally capable to support the weight of railcars plus any transported materials. Bridge maintenance occurs more frequently than the standard rail, hence has more potential to interfere with site access and use of the storage area. Option 5 proposes the least amount of wetland impacts, but because of the significant cost, structural liability, increased maintenance, and risk of structural failure of the bridge, Option 5 was rejected.

Proposed Layout (Option 6) – New Direct Rail Connection

Option 6 proposes to construct a new rail line directly adjacent to the existing mainline. This rail would begin at the processing facility, cross CTH Q, continue north for approximately 700 feet, and then turn west towards the storage area by crossing Wetland 1 at the narrowest point. The new rail line will be located 15 feet off-set from the mainline; this is the minimum allowed distance per the Union Pacific (UP). Rail side slopes are designed with 2:1 embankment area slopes (the steepest allowed within UP right-of-way) to reduce wetland impacts versus using the more stable 3:1 slope. Constructing with 3:1 slopes would result in an additional 0.16 acres of wetland impact. For the rail line installation, 1.08 acres of wetland impacts are proposed, which is less than that proposed in Options 3. This entirely independent rail line will allow optimum utilization of the storage site, while minimizing the safety risk and not interrupting mainline service. The existing entrance drive will be improved and used as the access road; upgrades to CTH Q will occur from the access drive to CTH SS and include road widening, turn lanes, side-slope flattening, and culvert extensions. The access road route reduces the amount of new ground disturbance, the length of the access road, and the length of necessary road improvements to CTH Q as compared to Option 2. Also, using the existing drive will align the access drive and dry plant entrance directly across the street from each other. The access drive will be constructed with 3:1 slopes from the road shoulder. Although Option 6 proposes slightly more wetland impacts (0.08 acres more) for roadway and access road improvements as compared to Option 2, Option 6 proposes significantly less new ground disturbance and reduced construction costs. Option 6 reduces wetland impacts to the greatest extent practicable while meeting the purpose and need of the project. Total wetland impacts for Option 6 are 1.25 acres.

COMPENSATORY MITIGATION:

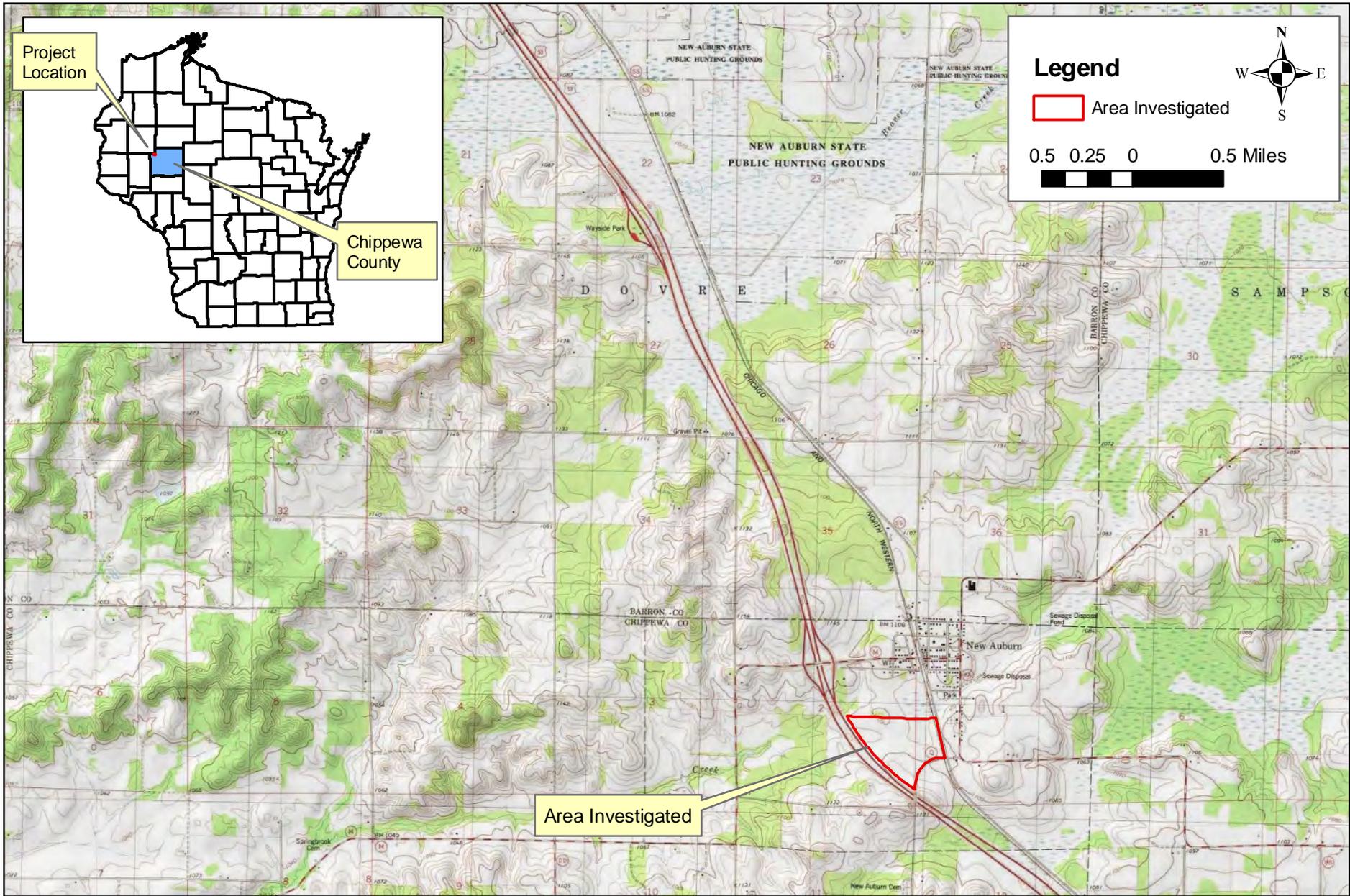
Chippewa Sand, LLC proposes to satisfy its compensatory wetland mitigation requirement for the 1.25 acres of unavoidable wetland loss by

purchasing 1.75 bank credits from Tallgrass Land Conservation – Bass Creek Wetland Mitigation, LLC (TLC – Bass Creek), located in the Lower Rock Creek Watershed Management Unit (WMU) of the Mississippi River Basin. Since there are no credits available within the WMU where impacts are proposed, credits are proposed to be purchased from a bank outside of the Lower Chippewa WMU but still within the Mississippi River Basin. The credits are of Floodplain Forest community type, and considered “in-kind” for the impacts to Hardwood Swamp community. The wetland replacement is considered “out of place” because the impact site is not within TLC – Bass Creek’s base service area, therefore the base ratio of 1.2:1 was increased by 0.25, resulting in the approved 1.45:1 mitigation ratio. The project minimizes wetland impacts to the greatest extent practicable, and will alleviate the effects of construction on remaining site wetlands by installation of temporary erosion control BMPs.

Drawings See attached.

Attachment 1: Site Location

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Project: CHSAC 120782
Print Date: 08/02/2012
Map by: NAW
Projection: Chippewa Co Coord
US Feet
Source: ESRI, WDNR, SEH

PROJECT LOCATION MAP

CHIPPEWA SAND, LLC, RAIL STORAGE SITE

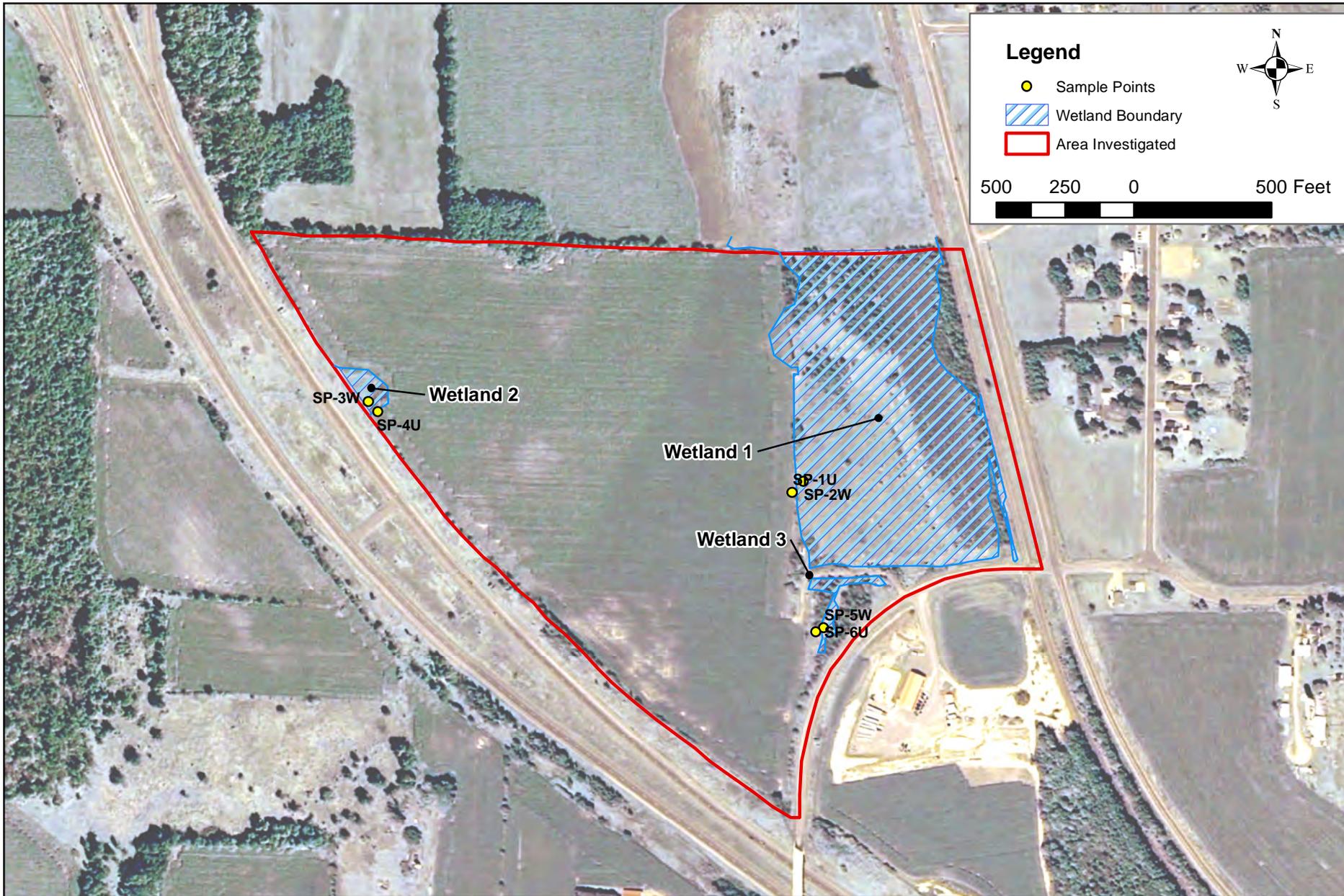
New Auburn, Wisconsin

Figure
1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Attachment 2: Wetland boundaries

Map Document: P:\AEC\CHSact\120782\3-env-st\03-reps\maps\Fig 5 Wetland Boundary Map.mxd



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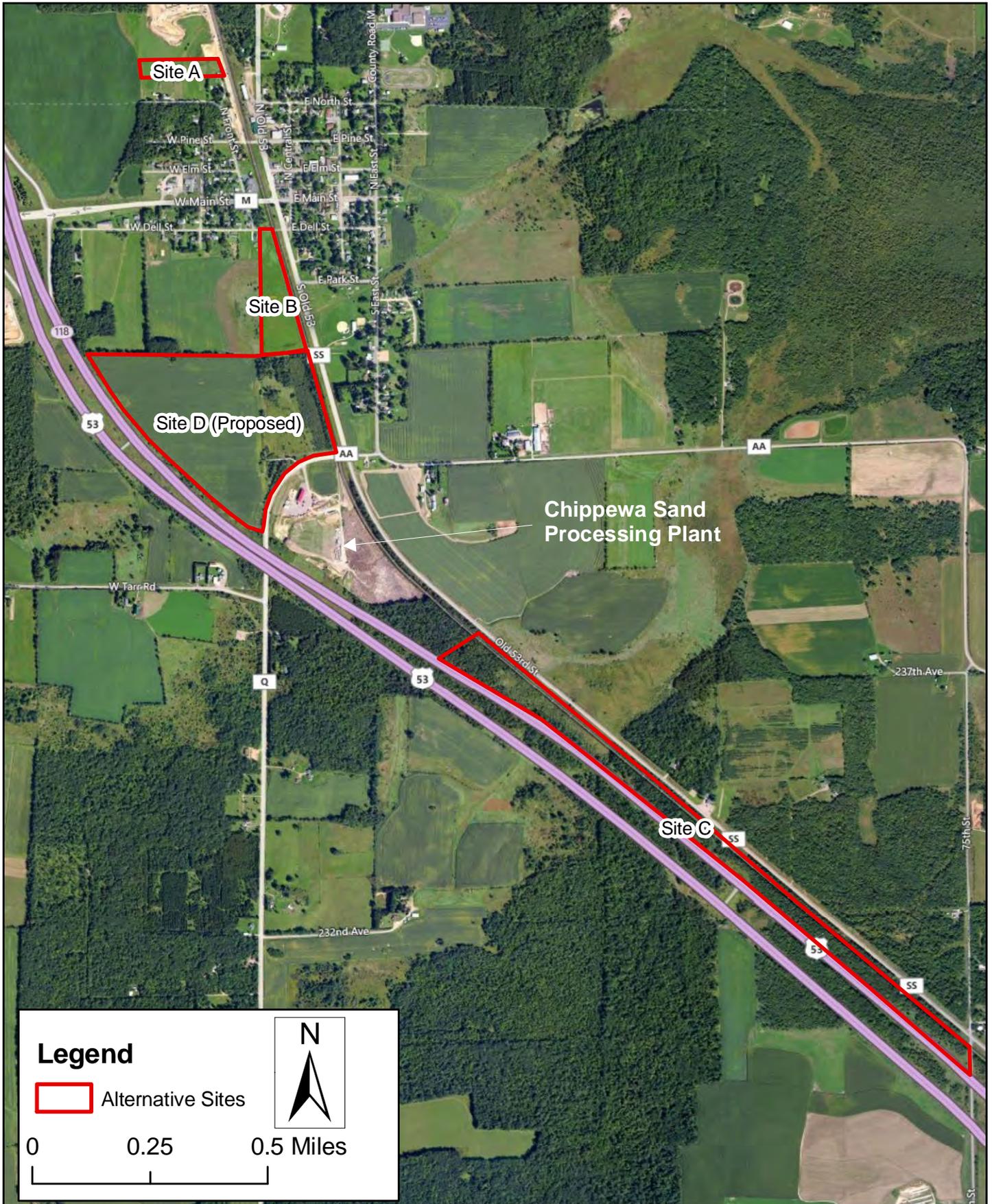
Project: CHSAC 120782
Print Date: 08/03/2012
Rev: 05/03/2013
Map by: NAW
Projection: Chippewa Co Coord,
US Feet
Source: NAIP, SEH

WETLAND BOUNDARY MAP

CHIPPEWA SAND, LLC, RAIL STORAGE SITE
New Auburn, Wisconsin

Figure
3

Attachment 3: Alternative Site Locations



Legend

Alternative Sites



0 0.25 0.5 Miles



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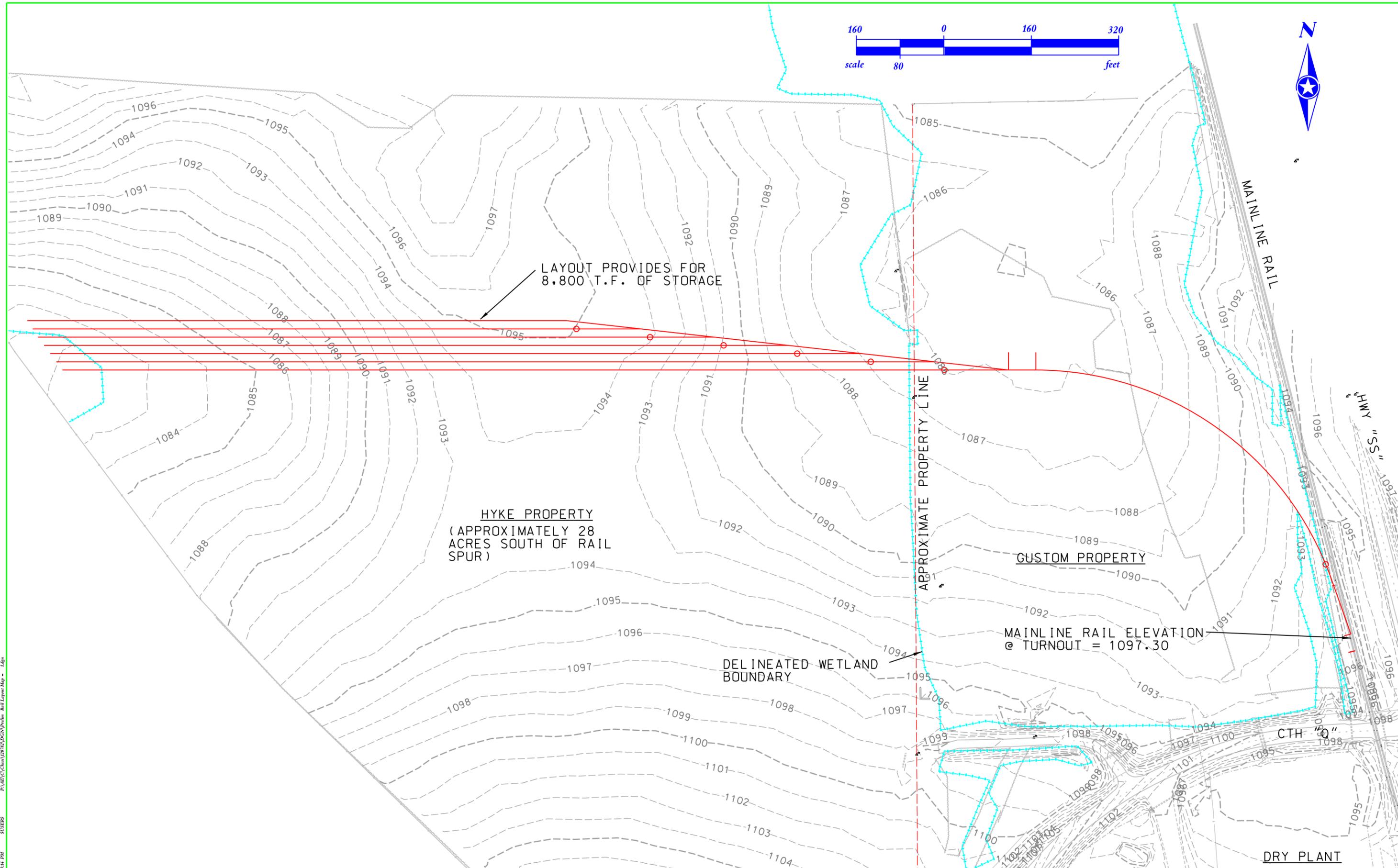
Project: CHSAC 120782
Print Date: 01/07/2013

Map by: RB
Projection: UTM NAD83
Source: bing.com, USGS

Alternative Site Options
Chippewa Sand, LLC- Rail Storage Site
New Auburn, Chippewa County, WI

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Attachment 4: Alternative Layout Options



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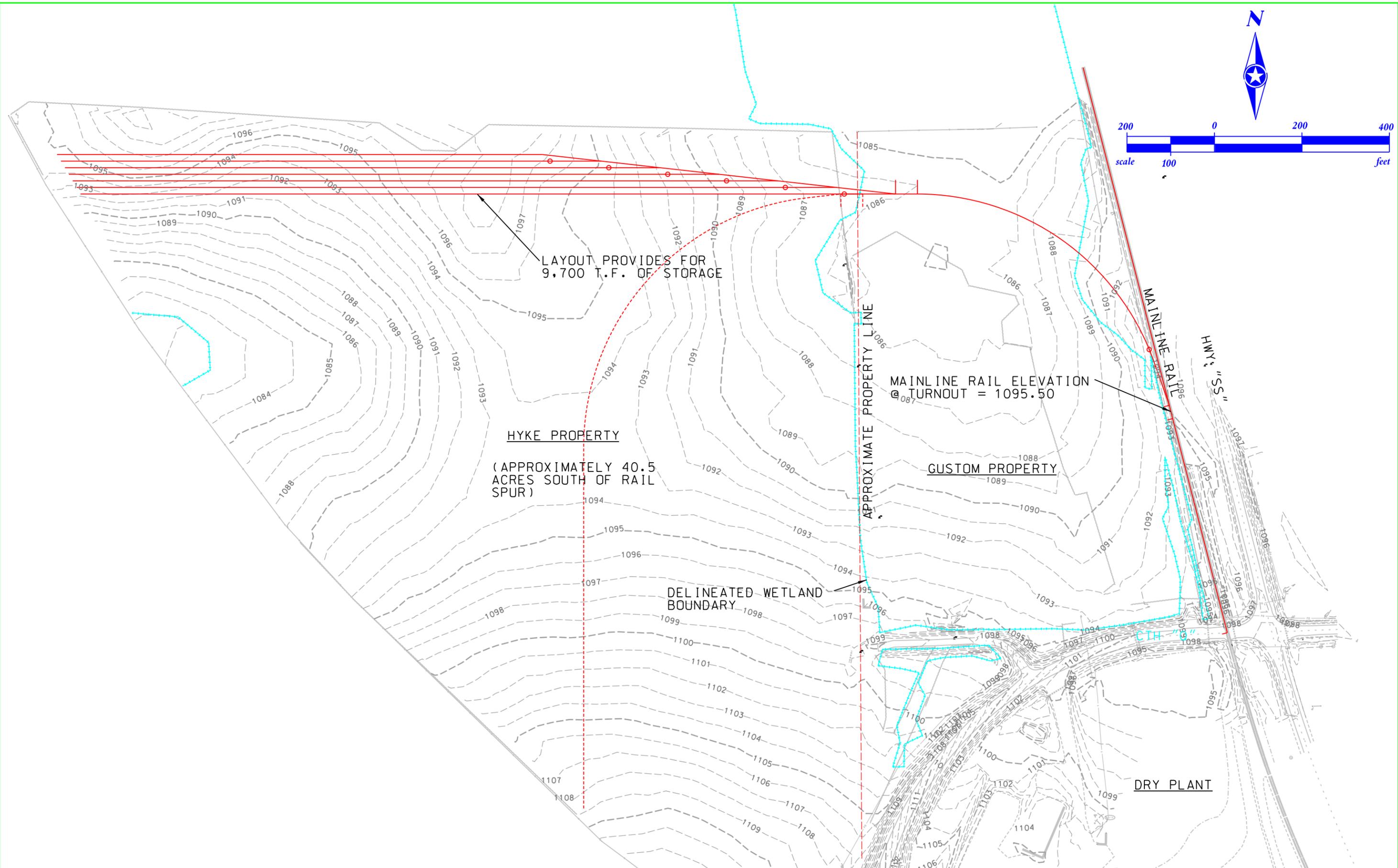


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 CHIPPEWA COUNTY, WISCONSIN

PRELIMINARY SITE MAP
 OPTION NO. 3

FILE NO.	1
CHSAC-120782	
DATE	5/30/2012
	1



LAYOUT PROVIDES FOR 9,700 T.F. OF STORAGE

MAINLINE RAIL ELEVATION @ TURNOUT = 1095.50

HYKE PROPERTY
(APPROXIMATELY 40.5 ACRES SOUTH OF RAIL SPUR)

CUSTOM PROPERTY

DELINEATED WETLAND BOUNDARY

DRY PLANT

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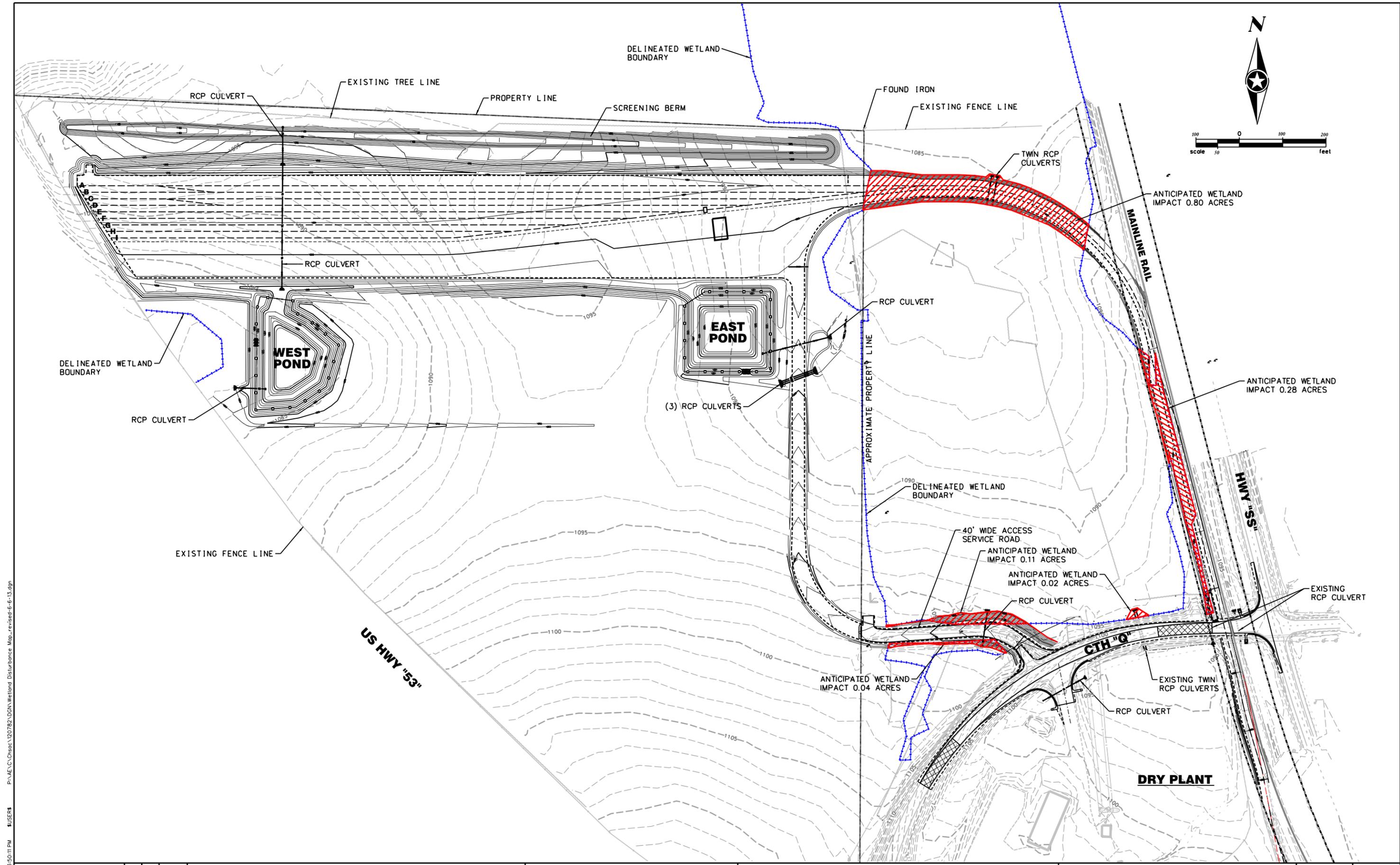
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CHIPPEWA COUNTY, WISCONSIN

PRELIMINARY SITE MAP
OPTION NO. 4

FILE NO.
CHSAC-120782
DATE
5/30/2012

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PROPOSED SITE PLAN

FILE NO.	FIGURE
CHSAC-120782	2
DATE	
6/11/2013	