# Wetland Mitigation Site Plan

Rubbert Wetland Mitigation Site Phase 3
(Russel D. Lenz Property Site)
Township 20 North, Range 16 East, Section 17
Winnebago County
Southern Fox River/Lake Michigan Bank Region

Mitigation for USH 10/STH 441
Winnebago County
USH 10 – USH 10/STH 441
County CB – Oneida Street

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Prepared for the Wisconsin Department of Transportation NE Region – Green Bay

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## 1. Objectives

The Rubbert Wetland Mitigation Site Phase 3 (Russel D. Lenz property) is proposed to serve as mitigation for the project specific wetland impacts resulting from the Wisconsin Department of Transportation (WisDOT) USH 10/STH 441 (Tri-County Freeway) project in Winnebago and Calumet Counties. The goal for this proposed site is to provide the majority of the required mitigation for the USH 10/STH 441 projects. Any remaining impacts will be mitigated at a second site, and will be accounted for in a separate site plan document. A project location map for the USH 10/STH 441 project can be found in Attachment 1 and site location maps for the Rubbert Wetland Mitigation Site Phase 3 are shown in Attachment 2.

Based on the current site design, the Rubbert Wetland Mitigation Site Phase 3 is projected to construct the following types of wetland resources: 19.024 acres of wet meadow, 4.824 acres of shallow marsh, and 1.662 acres of deep marsh. Compensation credits for the acreages listed above are anticipated to be: 17.848 acres of establishment and 2.554 acres of enhancement. Attachment 3 details a breakdown of individual wetland types by specific compensation methods. Also, as noted in Attachment 3, 13.204 acres of upland buffer is proposed to be constructed as part of this site, of which 9.520 acres will be eligible for credit, providing 2.380 acres of credit. The upland buffer areas proposed to surround the site are intended to serve several key functions which are described below:

- Provide filtration for sediment and surface water carrying pesticides, herbicides, fertilizers, etc.
- Stabilize and provide permanent erosion control for the proposed berms against storm water runoff and fluctuating water levels within the site
- Provide habitat for various plant and field animal species
- Provide both a visual buffer against human activity for wildlife utilizing the interior portion of the site

The Rubbert Wetland Mitigation Site Phase 3 will also include debits resulting from permanent fills proposed by the project in existing wetlands. Currently 0.439 acres of existing wetlands at the site will be filled by the proposed design (berm and fixed weir construction). The total amount of credits anticipated from the Rubbert Wetland Mitigation Site Phase 3, after accounting for site debits, is 22.123 acres.

The current estimate of impacted wetlands resulting from the USH 10/STH 441 roadway expansion project is 32.156 acres which will require 36.589 acres of mitigation. These values do not include impacts at the Rubbert Wetland Mitigation Site Phase 3 and are further broken down and explained later in this report.

The projected impacts of the USH 10/STH 441 project in Winnebago and Calumet Counties are mainly shallow and deep marsh, wet meadow, shrub scrub and wooded swamp. These are predominately low areas in the drainage system along the highway corridor which serve several purposes including: storage of storm water and filtering runoff from adjacent drainage areas. Impacts to several waterways including an unnamed tributary to Little Lake Butte Des Morts (LLBDM) and impacts to LLBDM itself are also anticipated to occur as a result of the Tri-County Freeway project. All of the impacted wetlands

within the roadway corridor provide habitat for aquatic organisms and wildlife. The intent of the Rubbert Wetland Mitigation Site Phase 3 is to replace the impacted wetland types, specifically deep marsh, shallow marsh and wet meadow, while providing storm water storage and a filter for surface water runoff. The goal of this site is to provide a self-sustaining wetland site which requires minimal human intervention for maintenance purposes, blends in well with the surrounding landscape, and increases the available wildlife habitat in the area.

The wetland mitigation plan for this site was developed based on the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (EPA) joint rule on Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332; and 40 CFR Part 230 – date April 10, 2008). Compensatory mitigation is consistent with amendments to the Cooperative Agreement between the Wisconsin Department of Natural Resources (DNR) and WisDOT on compensatory mitigation for unavoidable wetland losses (July 2012), and the WisDOT Interagency Coordination Agreement and WisDOT Wetland Mitigation Technical Guidelines with DNR, USACE, EPA, USFWS and FHWA (March 2002).

### 2. Site Selection Criteria

A 2.5-mile GIS-based corridor search was initially completed for prospective mitigation sites to satisfy the mitigation requirements of the USH 10/STH 441 construction projects. Several potential sites were identified, none of which were determined to be exceptionally qualified. Due to the relatively densely developed nature of the existing roadway corridor, onsite alternatives were very limited. In order to expand the list of potential sites a review of former GIS-searches within the impacted watersheds was completed and yielded several additional potential sites. The property owners of the three most qualified properties identified in the above described searches were contacted; however, none of these sites were pursued further due to lack of property owner interest and mitigation feasibility.

Following additional agency coordination the Lenz Parcel was agreed upon for use as primary mitigation, but the DNR requested that any supplemental sites be located closer to the proposed roadway impacts. The Lenz Parcel was previously acquired with the Rubbert Wetland Mitigation Site Phase 2 parcels to buffer the Phase 2 construction work zone and provide connectivity to the adjacent Rubbert Wetland Mitigation Site Phase 1 parcels.

In order to identify additional prospective sites the initial search was reevaluated and expanded to include additional areas within the impacted watersheds. During the reevaluation exercise four sites were identified as potential supplemental mitigation sites. Attachment 4 provides information and the location of the Lenz Parcel and the four additional identified sites. The supplemental sites were field reviewed to gain further information of the suitability of each individual site. Coordination between officials from the following agencies: WisDOT, DNR, and USACOE discussed each of the supplemental sites via conference call and in person meetings to weigh the options. Items discussed included the existing site topography, current ownership/cost to acquire individual parcels, the location of each parcel relative to the location of the proposed roadway project, parcel size/available credits, and the presence of invasive species at the site. One of the additional parcels is being pursued as a potential

supplemental mitigation site and will be discussed in another site plan if real estate negotiations are successful.

The Lenz Parcel is located directly adjacent to the first and second phase Rubbert Mitigation Sites constructed as mitigation for other WisDOT construction projects along USH 45. Both of the previously constructed sites are similar in nature to what is proposed for the Phase 3 site and are functioning well, despite the Phase 1 site being wetter than originally anticipated which has resulted in cattails dominating a large portion of that site. When completed, the Rubbert Wetland Mitigation Site Phase 3 will connect the two adjacent Phase 2 wetland cells, thus providing a larger contiguous wetland complex. Construction of the Phase 3 site is also anticipated to enhance the hydrology of the southern cell of the Phase 2 site by conveying overland and shallow concentrated flow from the east and channeling it directly to the cell.

The Lenz Parcel is located in the Arrowhead River and Daggets Creek watershed which abuts the Little Lake Butte des Morts watershed where the proposed roadway construction wetland impacts will occur.

### 3. Site Protection Instruments

WisDOT currently owns, and plans to retain ownership of the Phase 3 site as well as the adjacent Phase 1 and 2 sites. As a result, WisDOT officials will bear the responsibility of all typically required maintenance. Restrictive covenants will be applied to the deed in order to protect the site into perpetuity. These covenants include restrictions on changing the character of the site and its vegetation, changing the land use at the site, and prohibit use of motorized vehicles within the site – all restrictive covenants to be applied to the site are shown in Attachment 5.

### 4. Baseline Information

The Rubbert Mitigation Site Phase 3 is located in the SW ¼ of the SE ¼ of Section 17, Township 20 North, Range 16 East in the Township of Clayton, Winnebago County, Wisconsin. The property, consisting of 39.45 acres of agricultural land lies along the north side and immediately adjacent to County II and is bounded by Hickory Avenue, USH 10 and Pioneer Road on the west, north and east sides respectively. The Wiouwash State Trail running mainly north and south is approximately ¼ mile west of the site. The Larson Drainage District drainage ditch heads south toward the parcel abutting in the northwest corner before turning west for approximately ¼ mile before heading south and crossing County II. This property is not located within a flood plain of any waterway – see Attachment 6 for a Flood Insurance Rate Map of the area.

**Topography** at the Rubbert Wetland Mitigation Site Phase 3 is sloped to drain in a general east to west pattern and is relatively flat with an average slope of approximately 1.3% over the site. The east one-third of the site is sloped slightly steeper than the remaining western portion. Overall the elevation relief throughout the 39.45 acre parcel is 7.3-feet from elevation 764.5 to elevation 757.3. Drainage throughout the site appears to be mainly overland flow with some minor defined swales. A larger drainage swale is located along the north property boundary. Storm water is conveyed through the site to the south cell of the Phase 2 site or the County II roadside ditch, both of which eventually end up in the Larson Drainage District channel.

**Surface Geology** of the site consists of glacial and post-glacial lake deposits of Holocene and Wisconsin age. U.S. Geological Services mapping of the region shows the area of the Rubbert Wetland Mitigation Site Phase 3 to be peat, till, silt, and clay, chiefly lake and stream sediments of the Holocene Floodplain, Kewaunee Formation and Holy Hill Formation; some deposits are in small separate basins.

**Existing wetlands** are present at the Rubbert Wetland Mitigation Site Phase 3. Attachment 7 depicts the locations of the delineated wetlands for the Phase 3 portion of the Rubbert Wetland Mitigation Site.

Land use at the Rubbert Wetland Mitigation Site has historically been agricultural, but this field has been fallow since 2012. It is unknown if there is any drain tile at the site used to aid in agricultural practices, but the adjacent sites did have drain tile. Existing land use maps of the project area are shown in Attachment 8.

**Adjacent land use** is dominated by rural undeveloped/agricultural lands. Two previously WisDOT constructed wetland mitigation sites are located along the west and north borders of the site. There is an active quarry approximately ¼-mile west of the site on the south side of County II in an area zoned as Light Industrial by Winnebago County.

**Soils** at the Rubbert Wetland Mitigation Site Phase 3 are shown in Table 1 below and a plan view of the soil locations are included as Attachment 9. The predominate soil type at the site is Neenah silty clay loam (NhA) which encompasses in excess half of the site. The remainder of the site is composed of Poy silty clay loam (Pt), Menasha clay (Mn), and Korobago (KyA) silt loam in order of decreasing prevalence. Both the Korobago silt loam and the Neenah silty clay loam are somewhat poorly drained and are listed as hydric inclusions on the NRCS hydric soils list. The Menasha clay and the Poy silty clay loam are poorly drained and are listed as hydric soils on the NRCS hydric soils list.

Table 1: Soils Present at the Rubbert Wetland Mitigation Site Phase 3

Map Unit	Soil Type	Slope
КуА	KOROBAGO SILT LOAM	0 TO 3 PERCENT SLOPES
Mn	MENASHA CLAY	0 TO 2 PERCENT SLOPES
NhA	NEENAH SILTY CLAY LOAM	0 TO 3 PERCENT SLOPES
Pt	POY SILTY CLAY LOAM	0 TO 2 PERCENT SLOPES

The impact site currently has projected 32.156 acres of impacted wetlands caused by the USH 10/STH 441 project in Winnebago and Calumet Counties. Losses to be mitigated for include the following: 24.445 acres of permanent losses (including 0.756 acres of permanent wetland impacts due to shading of structures over 20-ft), 0.172 acres of temporary impacts to wooded swamp and shrub scrub wetlands at the US 10/US 41 system interchange, and 1.175 acres of long-term temporary impacts caused by construction of an access required for the construction of the Little Lake Butte des Morts structures. In total, 36.589 acres of wetland credit will be required to mitigate losses caused by the roadway construction. Additional detailed information is presented in Attachment 10.

## 5. Credit Determination Methodology

The Rubbert Wetland Mitigation Site Phase 3 with the current design is estimated to provide 22.123 acres of compensation credits for the project specific impacts for the USH 10/STH 441 projects. A full breakdown of the type of wetlands proposed to be provided by each method of compensation is provided in Attachment 3.

The compensation ratios for the USH 10/STH 441 projects are based on the WisDOT Wetland Mitigation Banking Technical Guideline, March 2002, and are described in Table 2 below. The Rubbert Site is being considered near-site mitigation that will be constructed prior to the majority of USH 10/STH 441 projects causing the wetland impacts in Winnebago and Calumet Counties (construction timeframes of two USH 10/STH 441 projects will overlap with that of the Rubbert Site).

Table 2: Credit Ratios Used for Wetland Impacts and Compensation

Location	Description	Ratio Used
	Permanent Wetland Impacts	1.5:1
Roadway Construction	Clearing of Wooded Swamp	0.5:1
	Shading of Structures over 20-ft	0.5:1
	Long Term Temporary Impacts	0.5:1
Rubbert Wetland Mitigation Site Phase 3	Establishment	1:1
	Enhancement	3:1
	Upland Buffer	4:1
	Debits (Permanent Impacts)	1.5:1

## 6. A Mitigation Work Plan

The goal of the Rubbert Wetland Mitigation Site Phase 3 is to provide a self-sustaining wetland site that blends well with the adjacent wetland and agricultural properties and provides increased wildlife habitat. The intention of the site is to require minimal human intervention for maintenance purposes.

Main source of water for the Phase 3 site will be the existing drainage channel which flows from east to west along the north property boundary. Overland flow from the east will also contribute water to the site. The site is located in close proximity to the Larsen Drainage District channel but it is not anticipated that the channel will add any surface water flow into the site.

Two preliminary design concepts were considered for the site and presented at the agency coordination meeting on June 13, 2013. Both options included a channel which meandered through the site, deeper pockets adjacent to the channel and berms surrounding the site. Option 1 was slightly flatter, with its channel having a constant slope from the north section to the proposed weir. Option 2 includes a steeper slope (0.52%) in the northernmost 100 feet which flattened to 0.10% for the remaining length. At the Agency Coordination meeting between WisDOT, the Wisconsin Department of Natural Resources (WDNR), and the United States Army Corps of Engineers (COE), it was decided that Option 2 was most desirable. Modifications to Option 2 discussed included, the addition of several additional deeper pockets and diversifying plant species so as to avoid monotypic stands of cattails currently present in the Phase 1 site.

Since the preliminary options were presented, the suggested modifications have been incorporated and the current design can be described as follows. The proposed berms running along the north, west, and south property boundaries are proposed to have a top elevation of 763.00 with top widths of 10-feet, and side slopes of 6-foot horizontal to 1-foot vertical slopes typically. The berms along the east side of the property are proposed to have variable width tops at an elevation of 762.00, which is below the adjacent ground east of the project and will not impede surface water flow entering the site. The main channel meanders through the site for approximately 2,150-ft from its beginning in the northeast corner of the site at elevation 758.04 to the proposed fixed weir in the southwest corner of the site at elevation 756.00. The slope of the proposed channel has been modified slightly from what was proposed in Option 2 to a constant 0.095% grade. The reason for this change was the adjustment of inlet elevation in the northeast corner of the site during design refinement resulting from additional available existing ground surface information. The channel typical section consists of a 10-foot flat bottom with 50-foot horizontal to 1-foot vertical slopes extending 25-feet on either side of the flat bottom. From the edge of the proposed channel typical section the site is graded relatively flat and projects to the toe of slope of the proposed berms surrounding the site. Within these relatively flat areas are six irregularly shaped pond areas with bottom elevations ranging from 754.50 to 755.50 which are typically 2 to 3-feet below the adjacent proposed ground level. A minor channel is also proposed along the east property boundary to convey water from an existing swale from the adjacent agricultural field into the site. As previously mentioned the main channel throughout the site terminates in the southwest corner of the site at a fixed weir structure with tiered overflow elevations. The lowest elevation of the proposed weir is currently set at 757.00 which will allow for a typical maximum depth of 1-foot of water to be retained within the site. Attachment 11 contains preliminary project plan sheets.

As described and shown in Attachment 11, the proposed site will balance the cut and fill quantities within the site which will eliminate the need to haul material to or from the site during construction. All areas of excavation and berms will be covered with topsoil recovered from on-site to a minimum depth of 12-inches and will be prepared prior to seeding. Standard earthwork and construction methods are anticipated to be utilized for the construction of the Rubbert Mitigation Site Phase 3. Drain tile exploration is also proposed to be included in the project – if drain tile originally installed to drain the Phase 3 site for agricultural purposes is discovered it will be rendered inoperable in order to promote hydrology at the site. In the event drain tile from adjacent properties is discovered discharging into the Phase 3 site during construction, it will remain functional to prevent off-site drainage issues.

Following the earthwork construction activities, the site will be planted to create upland buffer areas as well as the following types of wetland types: wet meadow, shallow marsh, and deep marsh. The preliminary plan sheets in Attachment 11 show the proposed seeding/planting types at the site. The seeding mixtures and planting timetable (note that the early letting date of May 13, 2014 date is assumed for the following) for wet meadow, shallow marsh, deep marsh, and upland buffer are as follows:

The wet meadow and shallow marsh areas are proposed to be planted concurrently or immediately following site construction in the summer or early fall of 2014. The vegetation will be composed of a

mixture of forbs, sedges, rushes, and grasses. Table 3 lists the recommended seed mix and planting application rates for the wet meadow and shallow marsh wetlands.

**Table 3: Wet Meadow and Shallow Marsh Planting Mix** 

Common Name	Common Name Scientific Name		eding Rate	Percentage	
Fringed Brome	Bromus Ciliatus	1.24	lbs/acre	15.50%	
Bluejoint	Calamagrostis Canadensis	0.08	lbs/acre	1.00%	
Virginia Wild Rye	Elymus Verginicus	2.02	lbs/acre	25.25%	
Reed Manna Grass	Glyceria Grandis	0.26	lbs/acre	3.25%	
Annual Rye	Lolium italicum	1.3	lbs/acre	16.25%	
Fowl Bluegrass	Poa palustris	1.54	lbs/acre	19.25%	
Prairie Cordgrass	Spartina pectinata	0.5	lbs/acre	6.25%	
Pointed Brome	Carex scoparia	0.14	lbs/acre	1.75%	
Fox Sedge	Carex vulpinoidea	0.4	lbs/acre	5.00%	
Green Bulrush	Scirpus atrovirens	0.08	lbs/acre	1.00%	
Wool Grass	Scirpus cyperinus	0.04	lbs/acre	0.50%	
Soft Stem Bulrush	Scirpus validus	0.16	lbs/acre	2.00%	
Water Plantain	Alisma trivale	0.08	lbs/acre	1.00%	
Swamp Milkweed	Asclepias incarnata	0.02	lbs/acre	0.20%	
Swamp Aster	Aster puniceus	0.01	lbs/acre	0.10%	
Flat-Topped Aster	Aster umbellatus	0.01	lbs/acre	0.10%	
Joe-Pye Weed	Eupatorium maculatum	0.01	lbs/acre	0.10%	
Boneset	Eupatorium perfoliatum	0.01	lbs/acre	0.10%	
Sneezeweed	Helenium autumnale	0.01	lbs/acre	0.10%	
Tall Blazingstar	Liatris pycnostachya	0.03	lbs/acre	0.40%	
Great Blue Lobelia	Lobelia siphilitica	0.01	lbs/acre	0.10%	
Monkey Flower	Mimulus ringens	0.01	lbs/acre	0.10%	
Common Arrowhead	Sagittaria latifolia	0.04	lbs/acre	0.50%	
Blue Vervain	Verbena hastata	0.02	lbs/acre	0.20%	

The deep marsh areas will be planted summer/fall of 2014 utilizing native species with both rootstock and seed as shown in Table 4 below. The proposed deep marsh areas will vary in depth and are expected to be inundated throughout the majority of the year. The root stock will be planted when the water level is at a depth of 4 to 6-inches, in groups of 5 to 7. The proposed density of root stock planting will be approximately one root per square yard, or 4,848 roots per acre. Seeding of the deep marsh areas is proposed to happen concurrently with planting of the root stock. If the water level cannot be controlled, wet packaged seed will be mixed with damp clay balls and sowed in 2 to 4 inches of water.

**Table 4: Deep Marsh Planting Seed and Rootstock** 

<b>Common Name</b>	Scientific Name	Seeding/Planting Rate
Water Shield	Brasenia schreberi	692 roots/acre
Coontail	Ceratophyllum demersum	692 roots/acre
White Water Lily	Nymphaea odorata	866 roots/acre
Pickerelweed	pontederia cordata	80.00 oz seed/acre
Yellow Water Buttercup	Ranunculus flabellaris	692 roots/acre
Hardstem Bulrush	Schoenoplectus acutus	866 roots/acre
American Bur Reed	Sparganium americanum	520 roots/acre
Bladderwort	Urticularia vulgaris	520 roots/acre
Wild Rice	Zinzania aquatic	175.00 oz seed/acre

An upland buffer mixture is proposed to cover the berms constructed on-site in the summer/fall of 2014. The seeding mixture for the upland buffer will consist of native grasses and forbs which are shown in Table 5 below. Overall seeding rate for this mixture is 0.4 lbs/1000 sf.

Table 5: Upland Buffer Seeding Mix (WisDOT Bid Item 630.0170 – Seeding Mixture No. 70)

	Common Name	Scientific Name		ling Rate	Percentage
	Canada Anemone	Anemone Canadensis	0.348	lbs/acre	2
	New England Aster	Aster novae-angliae 0.		lbs/acre	2
	Purple Prairie Clover	Dalea (Petalostemum) purpurea	0.348	lbs/acre	2
	Canada Tick-trefoil	Desmodium canadense	0.348	lbs/acre	2
	Wild Geranium	Geranium maculatum	0.348	lbs/acre	2
Forbes	Western Sunflower	Helianthus occidentaalis	0.523	lbs/acre	3
For	Prairie Blazingstar	Liatris pycnostachya	0.348	lbs/acre	2
	Wild Bergamot	Monarda fistulosa	0.348	lbs/acre	2
	Yellow Coneflower	Ratibida pinnata	0.348	lbs/acre	2
	Showy Goldenrod	Solidago speciosa	0.348	lbs/acre	2
	Spiderwort	Tradescantia ohiensis	0.348	lbs/acre	2
	Golden Alexanders	Zizia aurea	0.348	lbs/acre	2
	Big Bluestem	Andropogon gerardi		lbs/acre	15
S	Sideoats Grama	Bouteloua curtipendula	2.614	lbs/acre	15
Grasses	Canada Wildrye	Elymus Canadensis	2.614	Lbs/acre	15
Gra	Little Bluestem	Schizachyrium (Andropogon) scoparium	2.614	lbs/acre	15
	Indiangrass	Sorgastrum nutans	2.614	lbs/acre	15
	Sky Blue Aster	Aster azureus			
es	White Wild Indigo	Baptisia leucantha			
orb	Pale Purple Coneflower	Echinacea pallida	Rate to equal the specified ra		pecified rate
Alt. Forbes	White Prairie Clover	Petalostemum candidum	of the species to be replaced		
A	Stiff Goldenrod	Solidago rigida			
	Hoary Vervain	Verbena stricta			

Erosion control during construction will include installation and maintenance of silt fence, culvert pipe checks, temporary ditch checks, rock bags (for silt fence relief), and tracking pads as necessary in applicable locations. Construction project staff on site will monitor the project throughout construction and adjust erosion control measures as needed throughout the project to eliminate any releases.

Erosion control immediately following construction will include mainly urban erosion mat without woven nylon mesh to prevent wildlife from becoming trapped. Erosion mat will be placed on the proposed berm embankments surrounding the site to prevent wind erosion and within the proposed channel. Rip rap is also proposed for use at the site and is planned to be placed along the east channel between the northeast and south berms at the main drainage swale entry to the site and at the proposed fixed weir structure. Attachment 11 includes preliminary plan sheets depicting the intended temporary and permanent erosion control features.

The proposed work will typically remain within the 39.45 acre parcel, but will extend slightly in certain locations into the abutting WisDOT mitigation sites. In doing this, typically through matching and blending proposed berms into existing berms, the individual site boundaries will remain defined but the proposed Phase 3 site will blend well with the adjacent sites. The Phase 3 site is being designed to avoid impacting any Phase 2 delineated compensation areas.

Currently, the proposed early letting date for the project is in May 2014 which would correlate to a summer/fall 2014 construction timeframe. The actual letting date for the project is July 2018 which would place construction in summer/fall 2018. Either schedule will allow the contractor to avoid the typically wettest times of the year minimizing ground disturbance outside of the site and minimize erosion control issues during construction.

### 7. A Maintenance Plan

The proposed plan for the Rubbert Mitigation Site Phase 3 is for WisDOT to retain ownership of the property into the future indefinitely. As a result, the typical required maintenance of the site will be the responsibility of WisDOT officials.

The design concepts incorporated into the Rubbert Mitigation Site Phase 3 also lend themselves to protecting the site from natural occurrences and promote minimal maintenance requirements. The berms around the site are designed with typical top widths of 10-ft and 6-foot horizontal to 1-foot vertical slopes to discourage damage caused by wildlife burrowing into the berms. The proposed water control structure in the southwest corner of the site will be a fixed weir, and should not require maintenance.

Control of invasive species including non-native Phragmites (Giant Reed Grass), Lythrum salicaria (Purple Loosestrife), and Phalaris arundinacea (Reed Canary Grass) by removal will be performed as necessary.

### 8. Ecological Performance Standards

The following performance standards will be used to evaluate the success of the Rubbert Wetland Mitigation Site Phase 3 during the monitoring period and will help to identify areas were corrective

actions are needed. In any performance standards are found to be unfeasible due to site conditions, WisDOT, USACOE and DNR will meet to determine whether the Site, performance standards or compensation ratios will be modified.

### 8.1 Hydrology

**Wet meadow communities.** Hydrology shall consist of saturation at or within 12 inches of the surface for a minimum of 30 consecutive days or two periods of 15 consecutive days, during the growing season under normal to wetter than normal conditions (70 percent of years based on most recent 30-year record of precipitation).

**Shallow marsh communities.** Hydrology shall consist of saturation to the surface, to inundation by up to 6 inches of water for a minimum of 60 consecutive days or two periods of 30 consecutive days or four periods of 15 consecutive days, during the growing season under normal to wetter than normal conditions (70 percent of years based on most recent 30-year record of precipitation).

**Deep marsh communities.** Hydrology shall consist of inundation by 6 to 36 inches of water throughout the growing season except in drought years (driest 10 percent of most recent 30-year record of precipitation).

### 8.2 Vegetation

**Hydrophytic vegetation.** Greater than 50% of the plant species within the wetland plant communities shall have a wetland indicator value of facultative (FAC) or wetter (FACW or OBL) by the 5<sup>th</sup> growing season for herbaceous vegetation.

### Areal cover

**Herbaceous plant communities.** Native, non-invasive perennial herbaceous species shall comprise at least 80 percent vegetative areal cover in herbaceous wetland communities and the upland buffer communities by the 5<sup>th</sup> growing season.

### **Species Richness**

**Wet meadow communities** shall be comprised of 20 or more native, non-invasive perennial herbaceous species by the 5<sup>th</sup> growing season.

**Shallow marsh communities** shall be comprised of 15 or more native, non-invasive perennial herbaceous species by the 5<sup>th</sup> growing season.

**Deep marsh communities** shall be comprised of 5 or more native, non-invasive perennial herbaceous species by the 5<sup>th</sup> growing season.

**Upland buffer communities** shall be comprised of 15 or more native, non-invasive perennial herbaceous species by the 5<sup>th</sup> growing season.

### 8.3 Invasive Species

**Areal cover.** During the monitoring period, invasive and/or non-native species shall be controlled so there is no more than 20 percent vegetative areal cover in wetland and upland buffer plant communities.

**Reed canary grass** (*Phalaris arundinacea*) shall be controlled so there is no more than 20 percent vegetative areal cover during the monitoring period.

**Purple loosestrife** (*Lythrum salicaria*) shall be controlled so there is no more than 1 percent vegetative areal cover during the monitoring period.

**Common reed** (*Phragmites australis*) shall be controlled so there is no more than 1 percent vegetative areal cover during the monitoring period.

## 9. Monitoring Requirements

### 9.1 As-Built Report

An as-built report shall be submitted to USACE and WDNR within 30 days of the completion of construction. This report will summarize the construction activities and describe any changes to the original plan.

### 9.2 Site Monitoring

Monitoring of the Rubbert Wetland Mitigation Site Phase 3 shall be completed in accordance with the WisDOT Wetland Mitigation Technical Guideline. Standard (Level B) monitoring procedures, as described in Appendix B of the guideline, are proposed to be used. Site monitoring shall be completed during the 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> growing seasons after construction.

Data collected during site monitoring will be used to prepare a monitoring report. This report will evaluate whether the Rubbert Wetland Mitigation Site Phase 3 is meeting the established ecological performance standards. Monitoring also will aid in determining if corrective action is needed at the Site.

### 9.3 Hydrology Monitoring

During 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> growing seasons after construction, groundwater elevations shall be monitored by staff gauge or monitoring well. Monitoring well data loggers will be installed at beginning of the growing season and will be removed at the end of the growing season. Water level and temperature measurements will be recorded by the device every 4 hours. Data loggers will be downloaded several times during the growing season and any issues with the devices will be identified at that time and corrected. Groundwater levels within the wells will be manually recorded concurrently with downloading of data loggers. Groundwater elevation graphs shall be prepared and incorporated into the monitoring report. Additionally, a monitoring well location map shall be prepared.

Additional shallow monitoring wells may be installed after the first growing season if the need for more comprehensive groundwater monitoring is identified. The proposed locations of additional wells will be discussed with USACE and DNR.

### 9.4 Vegetation Monitoring

A wetland delineation shall be completed by a wetland professional during the 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> growing seasons after construction in accordance with the 1987 Corps of Engineers Wetland Delineation Manual and the most recent Regional Supplement. This delineation shall be used to determine the wetland boundaries and creditable wetland acreage.

The plant species percent cover, wetland indicator status, life cycle (annual verse perennial), and seed source (native verse non-native) shall be recorded for each survey plot or transect within the wetland plant communities. Plant species percent cover, life cycle and seed source shall be documented for the upland buffer survey plots or transects. This information will be used to determine if the wetland communities and upland buffer area are meeting performance standards. Vegetation cover maps displaying vegetation type and percent cover shall be produced for the wetland and upland plant communities.

### 9.5 Site Photographs

During the required monitoring years, at least one photograph shall be taken in a representative location within each wetland community once between July 1<sup>st</sup> and September 30<sup>th</sup>. Photos shall be taken from the same reference point and direction of view each monitoring year. A plan view shall depict the location and direction of the photos.

### 9.9 Invasive Species Monitoring

The Site shall be monitored for the presence of non-native and invasive species each growing season of the monitoring period. The presence, location and percent cover of invasive and non-native species shall be recorded and displayed on vegetation cover maps. Control of invasive and/or non-native plant species shall be carried out for five full growing seasons. Control methods will vary based upon species, location and density and may consist of mowing, burning, disking, bio-control and/or herbicide treatments.

### 9.10 Monitoring Reports

Site monitoring reports shall be submitted on the status of the mitigation and shall document the progress of achieving the ecological performance standards. Monitoring reports will be prepared for the 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup>growing seasons after construction. The monitoring reports shall be submitted to USACE and DNR by December 31st following the growing season of each required monitoring year. The 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> year monitoring reports shall, at a minimum, include:

- Site photographs with photo point location map
- Vegetation cover maps
- Groundwater elevation graphs for each monitoring well and monitoring well location map
- Presence, location and percent cover of invasive and/or non-native species
- Any additional data and displays to document the satisfaction of the performance standards

• The 5<sup>th</sup> year monitoring report shall also contain a wetland delineation completed by a wetland professional in accordance with the 1987 Corps of Engineers Wetland Delineation Manual and the 2009 Northeast/North Central Interim Regional Supplement.

## 10. A Long-term Management Plan

The current plan for the Rubbert Wetland Mitigation Site Phase 3 is for WisDOT to retain full ownership of the property indefinitely. As a result WisDOT will bear the responsibility of maintaining a functional wetland site. Following the monitoring period and after establishment, routine site visits will be performed by WisDOT officials to ensure that the site is functioning as anticipated. Invasive species, if discovered during a site visit, will be removed to allow the native wetland species to reestablish itself. In the event of a catastrophic natural event which causes severe damage to the site WisDOT would create a project to restore the site.

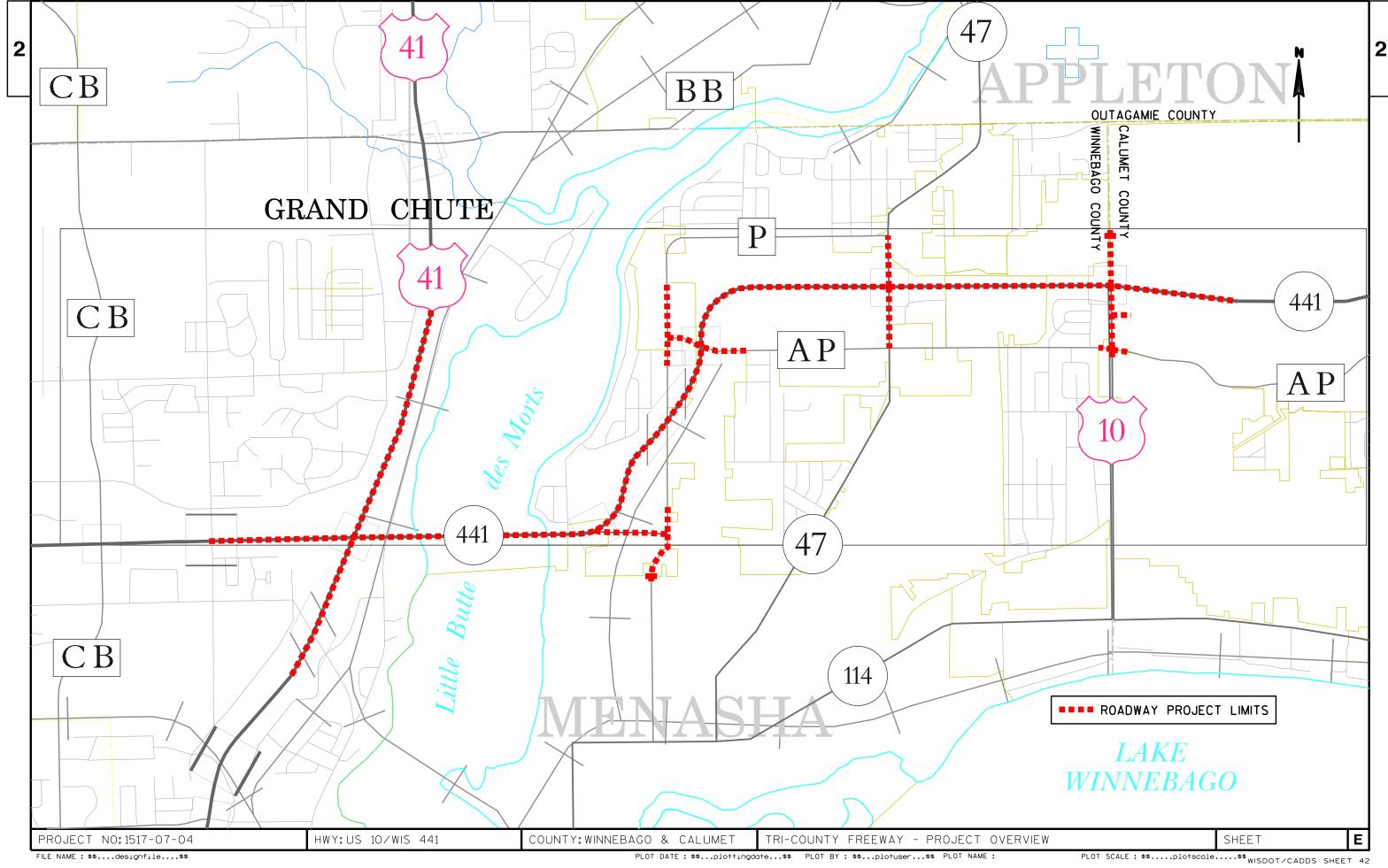
## 11. An Adaptive Management Plan

In the event that unforeseen changes to the condition of the Rubbert Wetland Mitigation Site Phase 3 occur or other components of the site occur WisDOT will lead the effort in coordinating with the DNR and COE to determine whether any of the following should be modified: the site itself, performance measures, or compensation ratios. Any modified attributes will need to be agreed upon by all parties mentioned above.

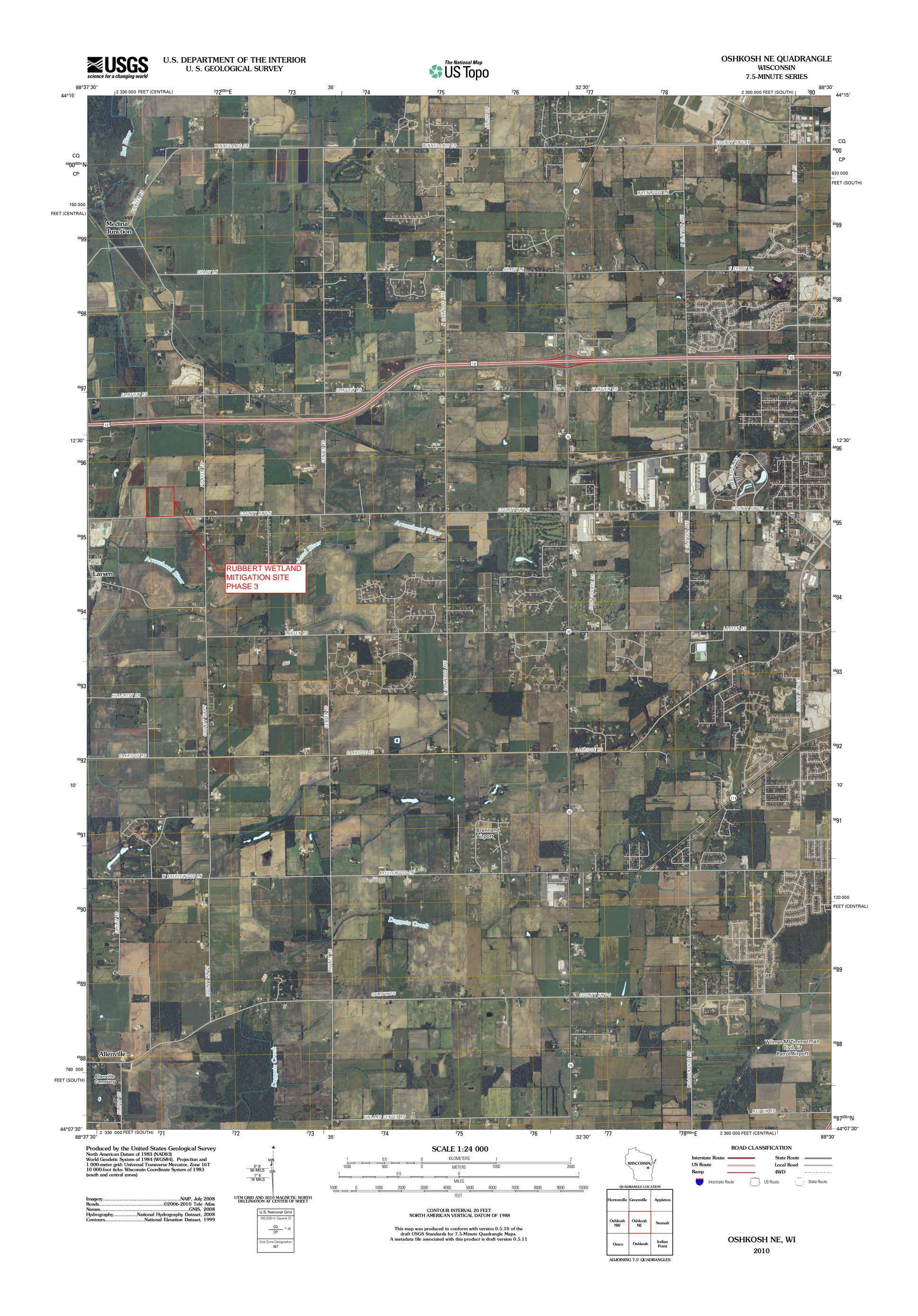
### 12. Financial Assurances

Through past mitigation projects WisDOT has established a reputation of devoting the required resources necessary to ensure proper establishment, as well as longevity of wetland sites. WisDOT has dedicated maintenance funds which are available to perform site maintenance operations or modifications in the event that changes are agreed upon by WisDOT, DNR, and COE if necessary.

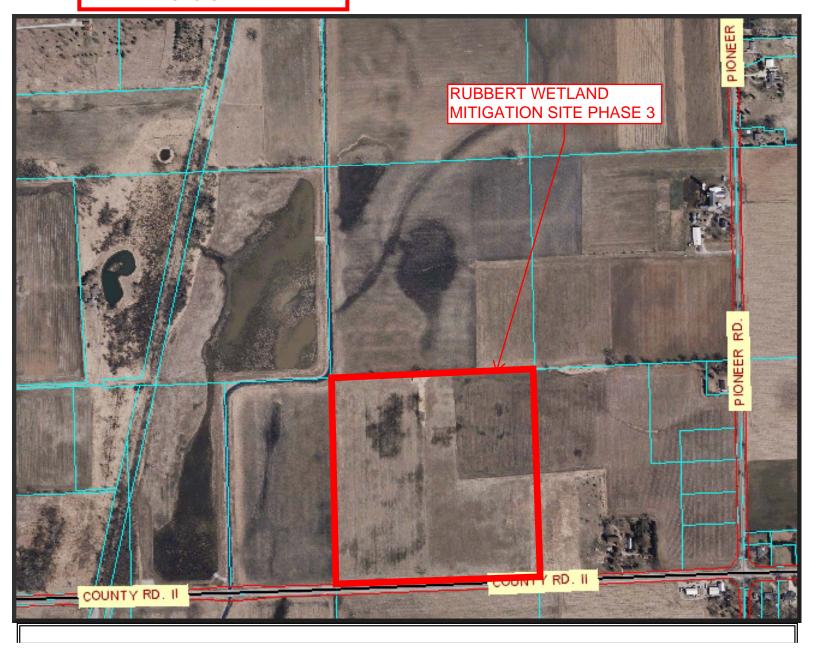
USH 10/STH 441 Project Location Map



Rubbert Wetland Mitigation Site Phase 3 Location Maps



RUBBERT WETLAND MITIGATION SITE PHASE 3 -AERIAL PHOTO OVERVIEW

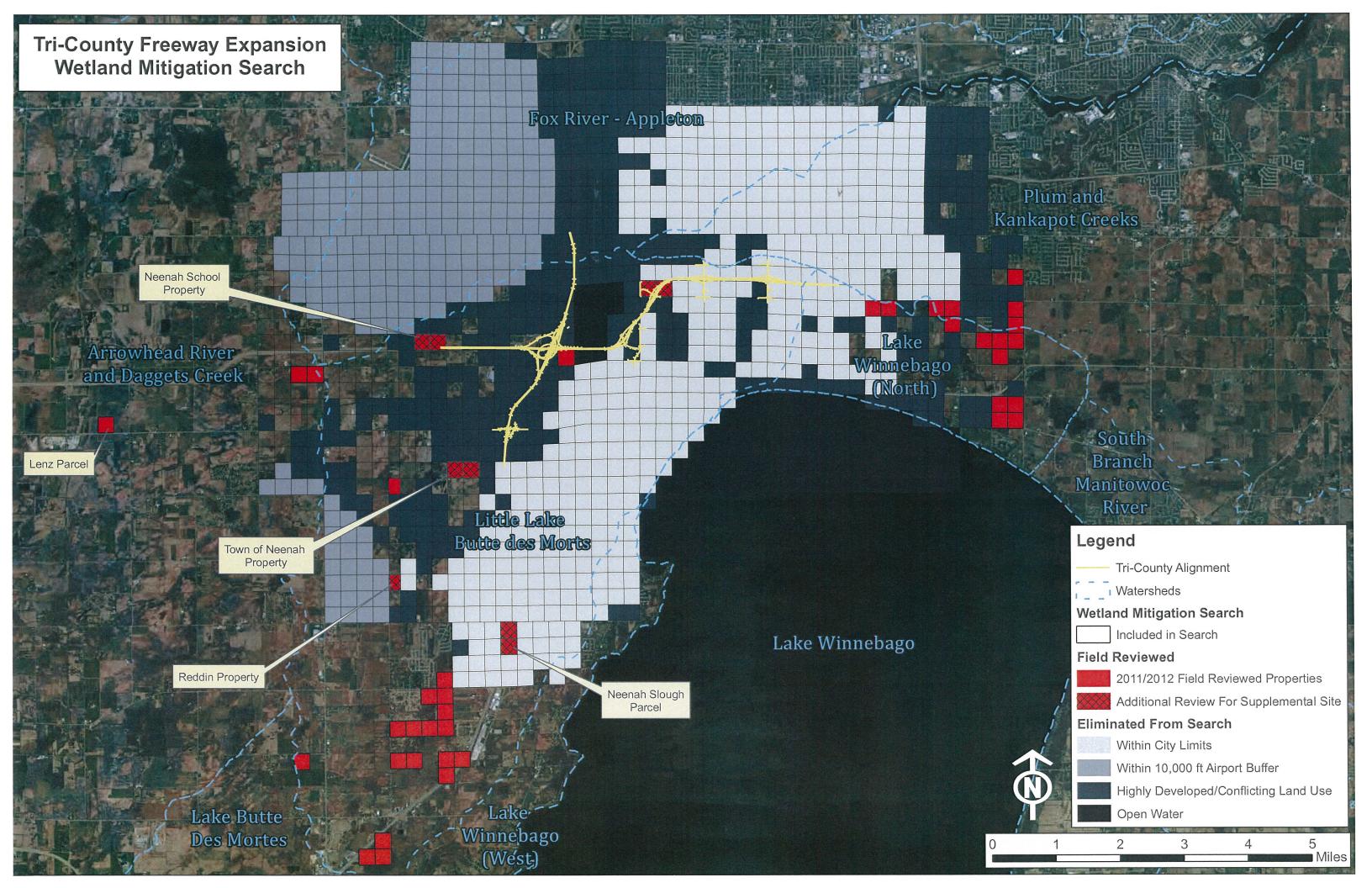


**Anticipated Site Credits** 

	Acres Constructed	Credit Ratio	Acres of Credit
Establishment			
Wet Meadow	14.359	1:1	14.359
Shallow Marsh	2.120	1:1	2.120
Deep Marsh	1.369	1:1	1.369
Total Establishment	17.848	1:1	17.848
Enhancement			
Wet Meadow	4.665	3:1	1.555
Shallow Marsh	2.704	3:1	0.901
Deep Marsh	0.293	3:1	0.098
Total Enhancement	7.662	3:1	2.554
Total Constructed Wetlands	25.510		20.402
Upland Buffer**			
Total Constructed	13.204		
Eligible for Credit	9.520	4:1	2.380
Total Credit	35.030		22.782
Debits*	0.439	1.5:1	0.659
Available Credit - Rubbert Phase 3			22.123

- \* Debits resulting from permanent fills in existing wetland on-site at the Rubbert Wetland Mitigation Site Phase 3
- \*\* Proposed berms with a top width of 10-ft and 6:1 side slopes were not considered eligible for credit. Only the berms along the east site boundary were considered eligible for credit.

Sites Investigated for USH 10/STH 441 Wetland Mitigation



**Site Covenants** 

# DESIGNATION OF LAND AS WETLAND MITIGATION SITE

# Declaration of Covenants, Conditions and Restrictions upon a "Conservancy Area"

These declarations ("DECLARATIONS") are made on the \_\_\_\_\_day of \_\_\_\_\_\_, 20\_\_\_\_, by the State of Wisconsin, Department of Transportation ("WisDOT"), as owner of the real property described below in Winnebago County, Wisconsin (the "CONSERVANCY AREA")

**CONSERVANCY AREA** (legal description of affected lands):

All of the SW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Section 17, T20N, R16E, Town of Clayton, Winnebago County, Wisconsin. Excepting those lands for highway purposes of CTH II.

Reserved for Register of Deeds Use
Return To:
Tax Parcel ID No.:

#### PURPOSE.

WisDOT desires and intends to preserve, in perpetuity, the CONSERVANCY AREA in a relatively natural condition by placing restrictions on the use of the CONSERVANCY AREA and by reserving to WisDOT restrictive covenants over the CONSERVANCY AREA and assigning to the U.S. Army Corps of Engineers ("the Corps") affirmative rights of enforcement to ensure the preservation of the natural elements and values of the CONSERVANCY AREA. The CONSERVANCY AREA is intended to be used as a wetland mitigation site as prescribed under 33 CFR Part 332, Compensatory Mitigation for Losses of Aquatic Resources and in accordance with other applicable Federal laws and regulations.

These DECLARATIONS constitute part of the environmental compensatory mitigation required under one or more Department of the Army permits, which permits would not be granted by the U.S. Army Corps of Engineers except upon WisDOT's creation of the DECLARATIONS and imposition of restrictions on future use of the CONSERVANCY AREA. Nothing in these DECLARATIONS creates, or is intended to create, an interest in real property in favor of the Corps.

These DECLARATIONS are intended to provide for maintaining and controlling other improvements or changes to the CONSERVANCY AREA and to insure that the property remain in a natural state and that its wetland areas be preserved or enhanced. These DECLARATIONS shall run with the real property for all purposes and shall be binding upon and inure to the benefit of the State of Wisconsin, WisDOT, the Corps as well, all owners, lessees, licensees, occupants of the CONSERVANCY AREA and their heirs, trustees, personal representatives, administrators, assigns and successors in interest.

### COVENANTS.

WisDOT imposes the following restrictive covenants ("restrictions") that shall run with and bind the CONSERVANCY AREA in perpetuity:

- **A.** USES. There shall be no commercial, industrial or residential activity undertaken or allowed within the CONSERVANCY AREA.
- **B.** BUILDINGS AND STRUCTURES. There shall be no buildings, dwellings, barns, roads, advertising signs, billboards or other structures built or placed in the CONSERVANCY AREA, except that structures essential to maintaining the site or that enhance the public's use of the site may be constructed on non-wetland portions of the CONSERVANCY AREA upon prior written approval of WisDOT and the Corps. Interpretive signs describing features of the site or vegetation or wildlife upon the site may be installed anywhere on the CONSERVANCY AREA with the prior written approval of WisDOT and the Corps so long as the construction and installation of the sign does not involve wetland fill.
- C. TOPOGRAPHY. There shall be no dredging, filling, excavating, mining, drilling or removal of any topsoil, sand, gravel, rock, minerals or other materials. There shall be no plowing, landscaping, bulldozing, or other activity that would alter the topography of the CONSERVANCY AREA.
- D. DUMPING/DISPOSAL. There shall be no dumping of trash, ashes, garbage or other unsightly or offensive material, including, but not limited to, any hazardous or toxic waste. Nor shall there be dumping or depositing of other materials if such action would alter the topography or hydrology of the CONSERVANCY AREA.
- **E.** WATER. The hydrology of the CONSERVANCY AREA will not be altered in any way or by any means including, but not limited to, pumping, draining, diking, impounding or diverting surface or ground water into or out of the CONSERVANCY AREA.
- **F.** AGRICULTURAL USES. No plowing, tilling, cultivating, planting, timbering, harvesting, grazing of domestic animals, or other agricultural activities may take place within the CONSERVANCY AREA.
- G. MOTORIZED VEHICLES AND WATERCRAFT PROHIBITED. There shall be no operation of any motorized vehicle, motorized watercraft, or motorized equipment within the CONSERVANCY AREA, except the State of Wisconsin or any successor owner of the property and their contractors or agents may use motorized vehicles and equipment as required to comply with federal, state, and local laws governing the safety and maintenance of the property or to construct or maintain any features expressed required or allowed by the Mitigation Site Plan referenced below.
- H. VEGETATION. There shall be no removal, cutting, mowing or alteration of any vegetation or change in the natural habitat in any manner, except that WisDOT or any successor owner of the property may take such steps as are necessary to comply with all federal, state, and local laws governing the safety and maintenance of the property, including the control of noxious weeds.

NOTWITHSTANDING the foregoing restrictions, WisDOT and its successors and assigns may construct and maintain any features and undertake any actions expressly required or allowed by the Mitigation Site Plan for the Rubbert Phase 3 Site, dated XX, as amended with approval of the Corps.

### RESERVED RIGHTS.

These DECLARATIONS do not authorize entry upon or use of the CONSERVANCY AREA by the general public. If the State of Wisconsin owns property rights in the property under which hunting, fishing, trapping, non-motorized boating, observing wildlife, or similar nature-based outdoor activity may be conducted, WisDOT, or such other agency of the State of Wisconsin as may be delegated responsibility for controlling such activities in the CONSERVANCY AREA, may permit public hunting, fishing, trapping, non-motorized boating, observing wildlife, or similar

nature-based outdoor activity within the CONSERVANCY AREA. The State of Wisconsin is not required to permit public hunting, fishing, or trapping under the terms of this paragraph. All such activities carried out in the CONSERVANCY AREA shall comply with all applicable federal, state and local laws, including, but not limited to game and fishery regulations. No activity conducted on the property may violate the provisions of these declarations. Nothing herein shall limit the State of Wisconsin's authority to hunt or exterminate animals that are dangerous or that pose a threat to public or animal health.

### MODIFICATION.

Future unforeseeable events or public necessity may require modification or termination of the Mitigation Site. If any credits from the Rubbert Phase 3 Site have been utilized, these DECLARATIONS in their entirety shall remain in effect in perpetuity unless mitigation acceptable to the Corps has been provided for the utilized credits and an amendment of these DECLARATIONS, including termination of the Corps' enforcement rights, is agreed to in writing by the Corps. If no credits from the Rubbert Phase 3 Site have been utilized, these DECLARATIONS may be vacated with written approval from the Corps. Any other modifications to, vacation of, or termination of these DECLARATIONS, including alteration of the Corps' enforcement rights, must be agreed upon in writing by the WisDOT and the Corps. Any such modification to, vacation of, or termination of these DECLARATIONS shall be made in recordable form and recorded in the same manner as this instrument. No person holding enforcement rights under these DECLARATIONS shall have any right to appeal or contest any modification agreement made under this paragraph.

### ENFORCEMENT.

A. Self-help Remedies for Breach. Violation of breach of any provisions of these DECLARATIONS shall entitle WisDOT the right to enter upon the property with respect to which said violation or breach exists and summarily to remove at the expense of the owner, lessee or occupant thereof, any structure, thing or condition that may be or exist thereon contrary to the intent and meaning of these DECLARATIONS.

### B. Judicial Remedies for Breach.

WisDOT, the U.S. Army Corps of Engineers, or any owner of property subject to these DECLARATIONS, may prosecute a proceeding in any court of competent jurisdiction against the person or persons who have violated or are attempting or threatening to violate any of these DECLARATIONS and may enjoin any such violation or breach, and may prosecute any and all remedies permitted them at law or in equity. This enforcement right shall include, but not be limited to, the right to bring an action (1) to enforce the terms of these DECLARATIONS, (2) to require the restoration of the CONSERVANCY AREA to its natural condition, or (3) to enjoin non-compliance by appropriate injunctive relief, or any combination of the these remedies.

Nothing herein shall be construed to entitle a person to institute any enforcement action against WisDOT or a successor owner for any changes to the CONSERVANCY AREA due to causes beyond WisDOT's or the successor owner's control and without WisDOT's or the successor owner's fault or negligence (such as changes caused by fire, flood, storm, civil or military authorities undertaking emergency action or unauthorized wrongful acts of third parties).

### C. Inspection.

WisDOT reserves the right for the State of Wisconsin or the Corps, their contractors, agents and invitees, to enter the CONSERVANCY AREA, in a reasonable manner and at reasonable times, for the purpose of inspecting the CONSERVANCY AREA to determine if persons owning or controlling the CONSERVANCY AREA are complying with terms of

### ENTRY.

WisDOT reserves the right for the State of Wisconsin or the Corps, their contractors, agents and invitees, to enter the CONSERVANCY AREA to observe, study, record and make scientific studies and educational observations consistent with the Mitigation Site Plan for the Rubbert Phase 3 Site, dated XX, as amended with approval of the Corps.

#### DEEMED TO CONSTITUTE NUISANCE.

The result of every action or omission whereby any provision of these DECLARATIONS or any modification of these DECLARATIONS is violated in whole or in part is hereby declared to be and to constitute a nuisance and every remedy allowed by law or equity against an owner, either public or private, shall be applicable against every such result and may be exercised by the State, WisDOT, the Corps, or any owner or lessee of property subject to these DECLARATIONS.

### FAILURE TO ENFORCE NOT WAIVER OF RIGHTS.

The failure of WisDOT, the State of Wisconsin, the Corps, or other person granted enforcement rights under these DECLARATIONS to enforce any provision of these DECLARATIONS may not be deemed to be a waiver of the right to do so thereafter nor the waiver of the right to enforce any other provision of these DECLARATIONS.

### ZONING LAWS AND REGULATIONS.

Nothing herein shall alter or change the ability of the State or any local unit of government to establish setback or zoning laws restricting construction or other activities on the property.

### **DIVISION OF LAND.**

The CONSERVANCY AREA may be divided, provided that all parcels created by any division are subject to the terms of these DECLARATIONS. But, no division may create a parcel that is not readily adaptable to the requirements of these DECLARATIONS.

### HIGHWAY ACCESS.

WisDOT reserves all common law and statutory rights of access to any abutting state highway from the CONSERVANCY AREA or any larger parcel of land of which the CONSERVANCY AREA is a part. If, at the time of execution of this document, the CONSERVANCY AREA or any larger parcel of land of which the CONSERVANCY AREA is a part lacks direct access to any other highway, WisDOT may permit one driveway access to be constructed in the highway between the roadway and a driveway on the property, pursuant to Wis. Stat. s. 86.07, provided that any driveway entrance permitted under the foregoing shall be removed immediately upon access from any non-state highway being established or available, and that use of any driveway entrance be limited to the purposes allowed in Covenant Par. G. Nothing herein authorizes construction of driveways or other facilities in the CONSERVANCY AREA.

### **GENERAL PROVISIONS.**

These DECLARATIONS shall run with and burden the CONSERVANCY AREA in perpetuity and shall bind WisDOT and WisDOT's successors and assigns. These DECLARATIONS are fully valid and enforceable by any party granted enforcement rights herein.

WisDOT warrants that it owns the right to establish these restrictions over the CONSERVANCY AREA, and that WisDOT either owns all property interests in the CONSERVANCY AREA which may be impaired by the establishment of these DECLARATIONS or that there are no outstanding mortgages, tax liens, encumbrances, or other interests in the CONSERVANCY AREA which have not been subordinated to these DECLARATIONS by signing below or by separate recorded instrument.

WisDOT agrees to pay any and all real property taxes or assessments levied by competent authority on the CONSERVANCY AREA that, if foreclosed or executed upon, would eliminate or

affect the rights and privileges conveyed herein. In the event WisDOT pays any delinquent property taxes or assessments for the CONSERVANCY AREA or any portion of the CONSERVANCY AREA, WisDOT shall have a lien on those lands for all monies so paid, together with interest at the rate of 12% per annum, and a claim against the owner of those lands. WisDOT may act to collect said claim against the owner or foreclose the lien on those lands, or both.

### ASSIGNMENT OF RIGHTS AND DUTIES.

Nothing herein shall be construed as limiting the right of the State of Wisconsin to sell, give or otherwise convey the CONSERVANCY AREA, or any portion thereof. Provided, however, that any such conveyance shall be subject to the terms of these DECLARATIONS.

Any or all of the rights, powers and reservations of WisDOT herein contained may be assigned to any person, corporation, or association which will assume the duties of WisDOT pertaining to the particular rights, powers and reservations assigned. Upon any person, corporation or association's evidencing its consent in writing to accept such assignment and assume such duties, he or it shall, to the extent of such assignment, have the same rights and powers and be subject to the same obligations and duties as are given to and assumed by WisDOT herein. Any permanent assignment of rights under this paragraph shall be evidenced by written instrument recorded in the same fashion as these DECLARATIONS.

If at any time a legal entity other than an individual who owns rights or obligations under these DECLARATIONS ceases to exist and has not assigned its rights or duties under these DECLARATIONS, the rights and duties of that person shall revert to the State of Wisconsin or WisDOT upon the State of Wisconsin or WisDOT recording of notice in the office of the Register of Deeds for the County in which the CONSERVANCY AREA lies that it is assuming those rights or duties pursuant to this provision of these DECLARATIONS.

The Corps may assign or transfer the rights granted to it in these DECLARATIONS to any federal or state agency.

### CONSTRUCTIVE NOTICE AND ACCEPTANCE.

Every person or other entity who now or hereafter owns or acquires any right, title or interest in or to any portion of the CONSERVANCY AREA made subject to these DECLARATIONS is and shall be conclusively deemed to have consented and agreed to every covenant, condition and provision contained herein, regardless of whether any reference to these DECLARATIONS is contained in the instrument by which such person or entity acquired an interest in the CONSERVANCY AREA.

The owner of any property affected by these DECLARATIONS must notify WisDOT and the Corps of the conveyance of any property affected by these DECLARATIONS in writing and by certified mail at least 60 days prior to the conveyance. The owner shall also notify WisDOT and the Corps at least 60 days prior to the establishment of other legal claims over the Conservancy Area. WisDOT or the Corps may prohibit the establishment of legal claims that are incompatible with the purposes and terms of the DECLARATIONS stated herein. Notice shall be provided to the following addresses:

WisDOT
Wisconsin Department of Transportation
Bureau of Technical Services
4802 Sheboygan Ave.
Madison, WI 53705

Corps U.S. Army Corps of Engineers St. Paul District, Attn: Regulatory Branch 180 Fifth Street East St. Paul, MN 55101-1678

No person who has failed to give notice to the WisDOT and the Corps as required under this paragraph shall have any right to notice of any action, inspection, or other activity conducted by the Corps, WisDOT, or their agents under the terms of these DECLARATIONS.

### WAIVER.

The State, its agencies, and its successors and assigns shall not be liable to any owner, lessee, licensee, occupant of the land, or other person, by reason of any mistake in judgment, negligence, nonfeasance, action or inaction, or for the enforcement or failure to enforce any provision of these DECLARATIONS.

No individual employee of WisDOT has authority to waive any restriction or requirement of these DECLARATIONS. Any modification or waiver may be made only in accordance with the requirements of the MODIFICATION provisions of these DECLARATIONS.

### **MUTUALITY AND RECIPROCITY.**

All covenants, conditions, restrictions and agreements contained herein are made for the direct, mutual and reciprocal benefit of each and every part and parcel of the CONSERVANCY AREA now or hereafter made subject to these DECLARATIONS. These declarations, covenants, conditions, restrictions and agreements shall create mutual, equitable obligations upon each parcel in favor of every other parcel; shall create reciprocal rights and obligations between the respective owners of all parcels and privity of contract and estate between all owners of said parcels, their heirs, executors, successors, trustees, personal representatives and assigns; and shall, as to the owner of each parcel, his heirs, executors, successors, trustees, personal representatives and assigns, operate as covenants running with the land, for the benefit of all other parties, the Corps and the State of Wisconsin.

### PARAGRAPH HEADINGS.

Paragraph headings, where used in these DECLARATIONS, are inserted for convenience only and are not intended to be part of these DECLARATIONS or in any way to define, limit or describe the scope and intent of the particular paragraphs to which they refer.

### **EFFECT OF INVALIDATION.**

If any provision of these DECLARATIONS is held to be invalid by any court, the invalidity of such provision shall not affect the validity of the remaining portions hereof.

## NAMES OF PARTIES AS USED.

The term "WisDOT" as used herein shall be deemed to include WisDOT, or such other successor agency of the State of Wisconsin having authority to build and maintain the State's highways. The term "Corps" as used herein means the United States Government, acting by and through the U.S. Army Corps of Engineers, and its successors and assigns.

The interest in land described herein is conveyed with all the appurtenances, rights and privileges belonging thereto, either in law or equity, for the proper use and benefit of purchasers of land subject to these DECLARATIONS, and their successors and assigns, forever. The interests in land reserved to WisDOT are reserved to WisDOT forever. Conveyance of the underlying fee to the property described herein from WisDOT to any other person or entity does not extinguish or affect the duties and responsibilities placed upon the landowner herein, nor affect the rights reserved to WisDOT herein.

### **GOVERNING LAW.**

These DECLARATIONS shall be construed according to the laws of the State of Wisconsin.

## **EXECUTIONS AND ACKNOWLEDGMENTS.**

Dated this d	ay of	, 20	
		State of Wisconsin, Department of Transportation	
		BY:	
State of Wisconsin County of	)s.s.		
This instrument v	was acknowledged	before me on, 20	_, by
Notary Public, State My Commission ex	e of Wisconsin pires/is:		

## **CONSENT AND SUBORDINATION.**

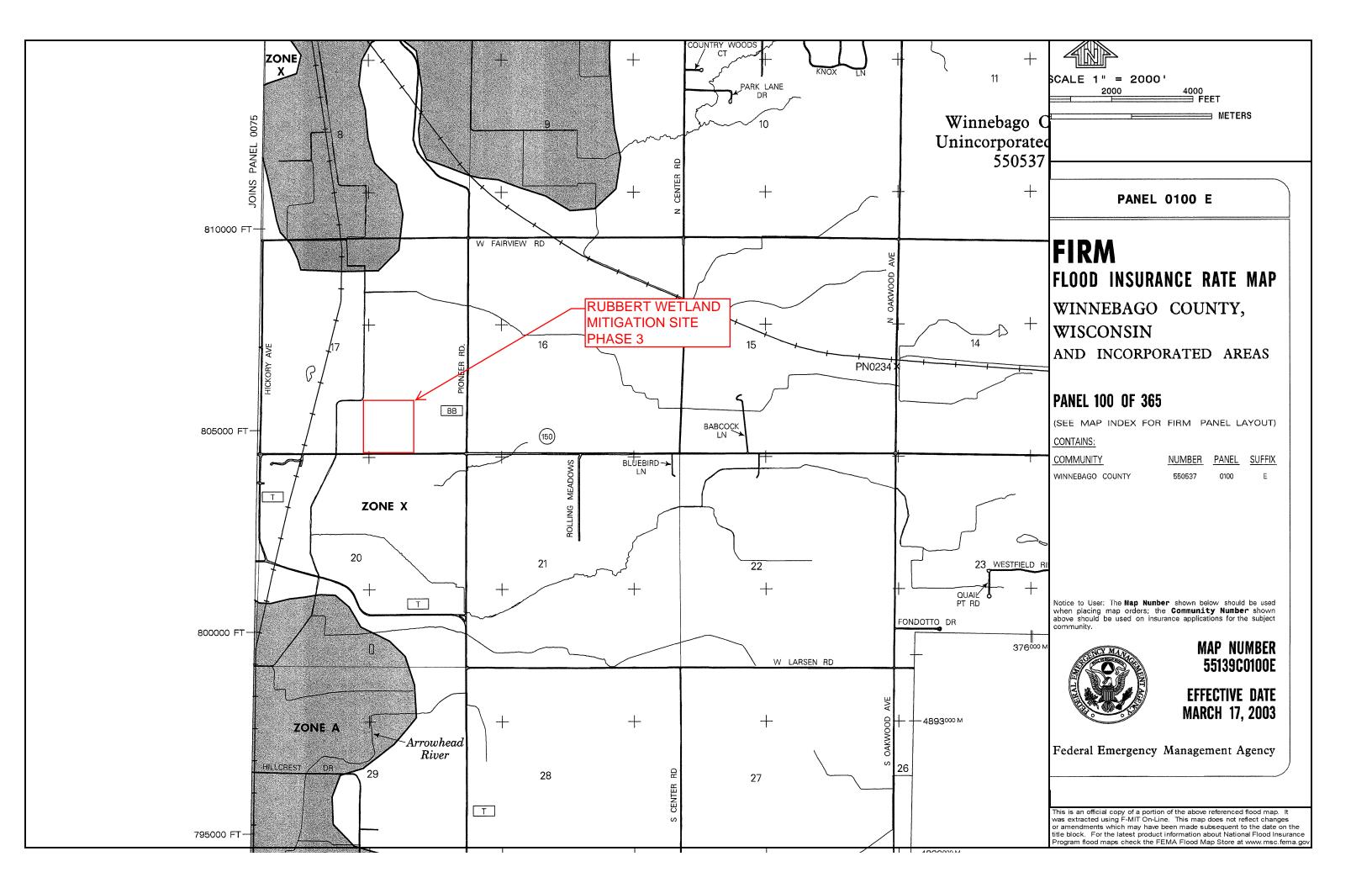
The undersigned consent and subordinate to the foregoing Creation and Grant of Covenants for the CONSERVANCY AREA.

SIGNATURE OF MORTGAGEE, IF ANY:

					(mor	tgag	gee name)		_
					By:_				
					Title	·			
State	e of Wisconsir	า	)						
Cour	nty of		)s.s. )						
This	instrument	was	acknowledged	before	me	on		, 200,	by
	ry Public, Sta		Wisconsin s/is:						
·									
SIGN	NATURE OF I	HOLD	ER OF OTHER	INTERE	STI	I RE	AL PROPERTY, IF ANY:		
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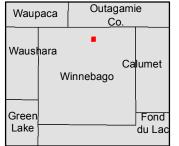
This instrument was drafted by the Wisconsin Department of Transportation

FEMA Flood Insurance Rate Map



Rubbert Wetland Mitigation Site Phase 3 Wetland Delineation



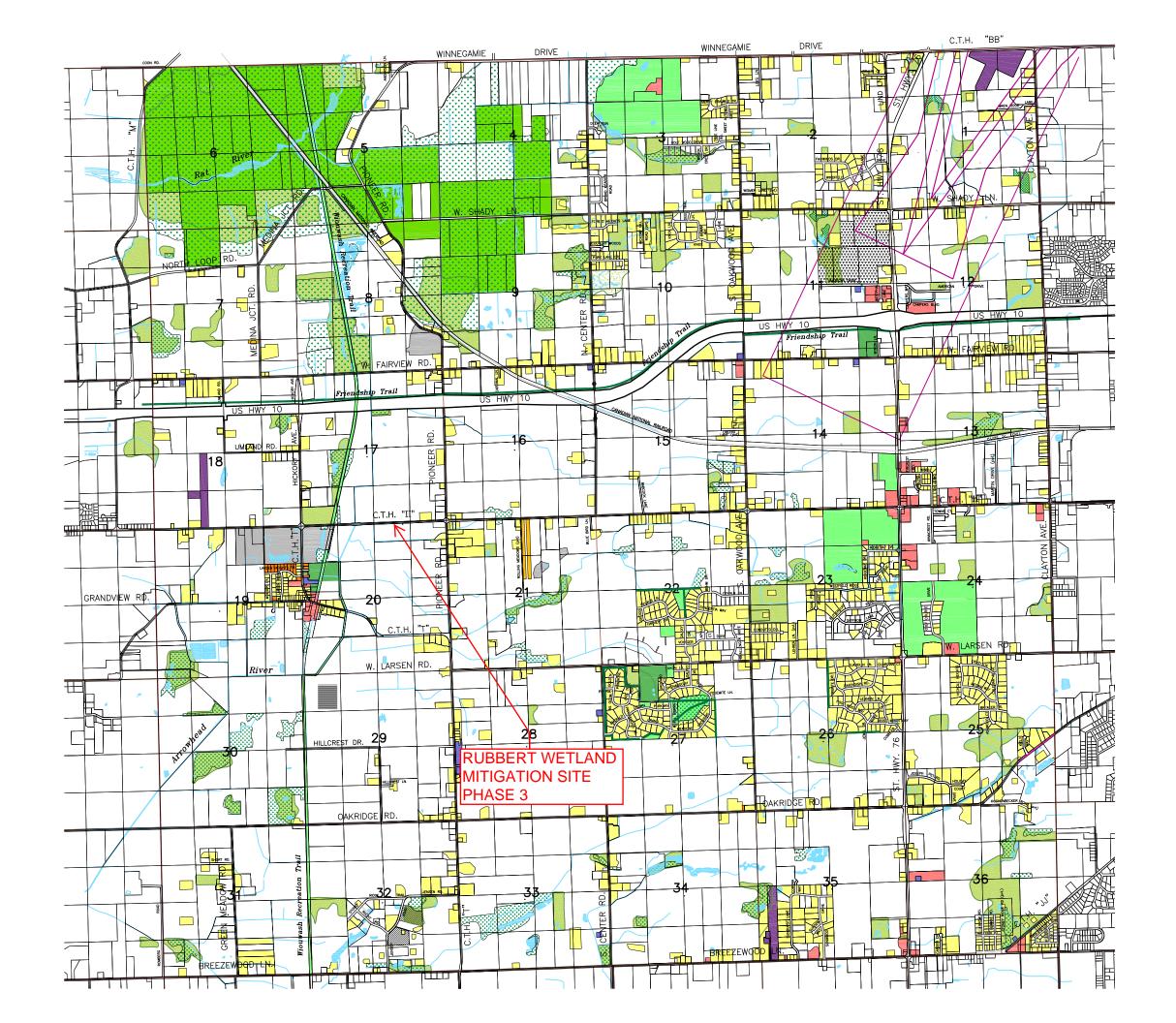


LENZ SITE
WINNEBAGO COUNTY, WISCONSIN
WISDOT NE REGION

**AECOM** 

Drawn:	SAL	06/11/2013				
Approved:	SMM	06/21/2013				
Scale:	AS SH	AS SHOWN				
PROJECT NUMBER	6027	60271742				
FIGURE NUMBER	4					

Existing Land Use Maps



# Town of Clayton

Existing Land Use Map 2004



### Legend

Single Family Residential Two Family Residential Multi-Family/Group Quarters Manufactured Housing Commercial Industrial Non-Metallic Mining Sites Utilities and Public Facilities Recreation and Conservation Wisconsin/DNR Lands Special Agriculture Area (Tree Farms, Nurseries, Vineyards, ect.) Undeveloped/Agriculture Area Wetlands Woods Open Water/Pool Lakes Airport Airport Zoning Boundary

This base map was created by the Winnebago County Geographic Information System. Any use or application by others is the responsibility of the user, at their own risk. Winnebago County disclaims all liability regarding the fitness of the information.

### Martenson & Eisele, Inc.

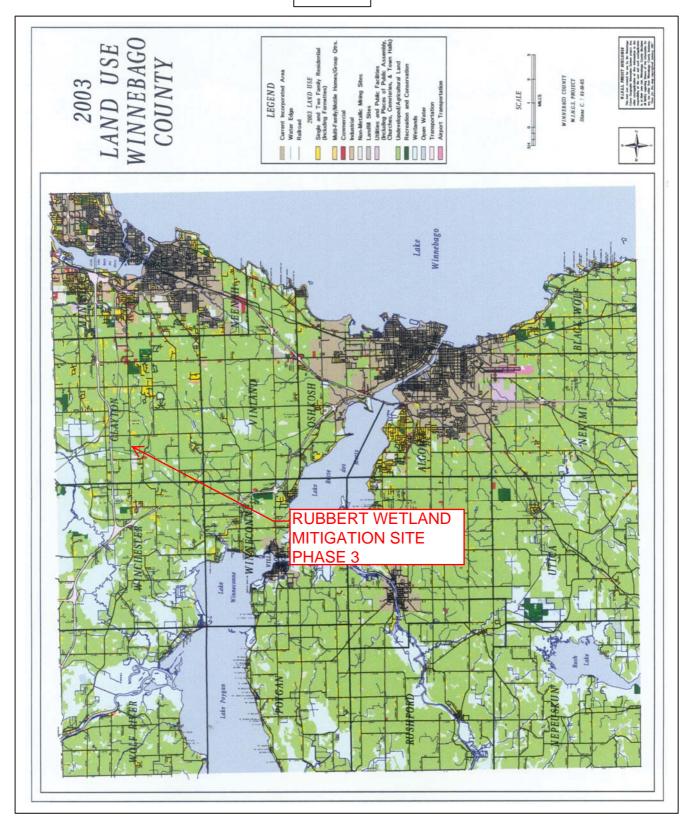
**Existing Trails** 



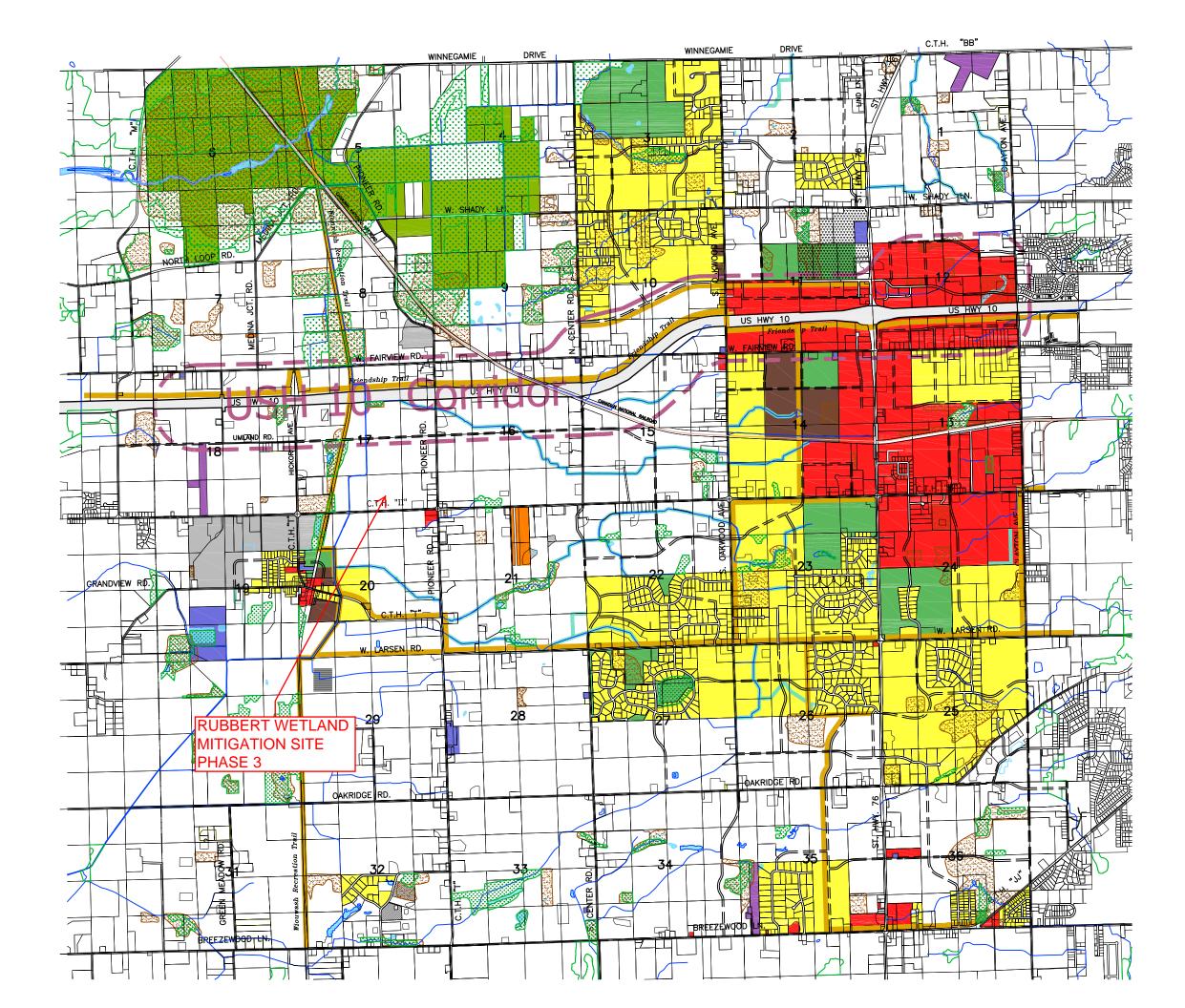
1377 Midway Road Menasha, WI 54952 www.martenson-eisele.com info@martenson-eisele.com 920,731,0381 1,800,236,0381 Planning Environmental Surveying Engineering Architecture

pnac267559lu\_ad2007.dwg\_03/19/09

### MAP 13



4/3/2006 88

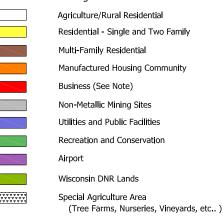


# Town of Clayton

### **Future Land Use Plan**



#### Legend



Abandoned Landfill Site

## Open Water/Pool Lakes

Recreational Trails
Future Roads

## Conservation/Drainage Way

Land Coverages

Wetlands

Woods

NOTE 1: "Business" represents Commercial and Industrial uses identified in the Winnebago County Commercial and Industrial Zoning Districts, subject to Town Site Plan and County Zoning Regulations.

NOTE 2: In the interest of making sound land use decisions, property owners in the USH 10 Corridor west of Oakwood Avenue are advised that at some point in the future, the demand for commercial development may expand west from the area shown as Business on this Future Land Use Plan. Property owners in the Corridor are advised that the Town of Clayton will support the expansion of commercial development in the USH 10 Corridor west of Oakwood Avenue when the infrastructure needed to support the commercial development can be provided in a cost effective and efficient manner. Property owners in the Corridor are advised that, in planning for the sale and/or development of their property, they should consider the potential impact of future commercial development on their property.

This data was created for use by the Winnebago County Geographic Information System Project. Any other use/application is the responsibility of the user and such use/application is at their own risk. Winnebago County discalaims all liability regarding fitness of the information for any use other than Winnebago business.

## Martenson & Eisele, Inc.



1377 Midway Road Menasha, WI 54952 www.martenson-eisele.com info@martenson-eisele.com 920.731.0381 1.800.236.0381 Planning
Environmental
Surveying
Engineering
Architecture

pnac267559lu\_ad2009.dwg\_Amended\_12/16/2009

Site Soils



### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Units

#### **Special Point Features**

(+) Blowout

■ Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

.. Gravelly Spot

Landfill

∧ Lava Flow

علد Marsh or swamp

Mine or Quarry

Miscellaneous Water

Rock Outcrop

Perennial Water

.

+ Saline Spot

"." Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Spoil Area

Stony Spot

Very Stony Spot

٧

Wet Spot

#### Other

#### **Special Line Features**

 $\sim$ 

Gully

Short Steep Slope

1

Other

#### **Political Features**

0

Cities

#### Water Features

Streams and Canals

#### **Transportation**



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

#### MAP INFORMATION

Map Scale: 1:2,240 if printed on B size (11" × 17") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Winnebago County, Wisconsin Survey Area Data: Version 9, Aug 26, 2011

Date(s) aerial images were photographed: 6/2/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## **Map Unit Legend**

Winnebago County, Wisconsin (WI139)							
Map Unit Symbol Map Unit Name		Acres in AOI	Percent of AOI				
КуА	Korobago silt loam, 0 to 3 percent slopes	2.0	5.0%				
Mn	Menasha clay	6.1	14.9%				
NhA	Neenah silty clay loam, 0 to 3 percent slopes	25.5	62.6%				
Pt	Poy silty clay loam	7.1	17.5%				
Totals for Area of Interes	t	40.7	100.0%				

Roadway Construction Anticipated Impacts

**Table 6: Wetland Mitigation Summary** 

DM	Wetland Location	Wetland Type*	Wetland Impacts (acres)	Mitigated Wetlands (acres)
SM   A.348   6.528	Perm	anent Impacts Mitigat	ion	· · ·
SM (Artificial)		DM	0.014	0.021
SS   0.950   1.426		SM	4.348	6.528
M		SM (Artificial)	0.028	0.042
M		SS	0.950	1.426
AB		M	1.747	2.623
Subtotal   9.636   14.465		WS	2.088	3.133
SM		AB	0.461	0.692
SS   0.890   1.336     M   5.543   8.316     Subtotal   7.467   11.205     SM   0.873   1.311     SS   2.322   3.483     M   0.227   0.342     M   0.227   0.342     Subtotal   3.422   5.136     SM   0.821   1.237     SS   0.104   0.156     M   0.597   0.896     Subtotal   1.522   2.289     SM   0.891   1.377   2.068     Subtotal   1.522   2.289     SM   1.377   2.068     SM   1.377   2.068     SM   1.377   2.068     SM   0.133   0.200     WS   0.132   0.198     Subtotal: Permanent Wetland Impacts Due to Construction Activities   23.689   35.561     SM   0.058   0.029     SS   0.423   0.212     WS   0.275   0.138     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20′   0.756   0.379     US 41 with US 10/WIS 441 System Interchange   SS (Temporary)   0.051   0.000     WS (Temporary)   0.054   0.027     Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation:   0.172   0.061		Subtotal	9.636	14.465
M   S.543   8.316     Subtotal   7.467   11.205     SM   0.873   1.311     SS   2.322   3.483     M   0.227   0.342     Subtotal   3.422   5.136     Subtotal   3.422   5.136     SM   0.821   1.237     SS   0.104   0.156     M   0.597   0.896     Subtotal   1.522   2.289     SM   1.377   2.068     Subtotal   1.522   2.289     SM   0.137   2.068     SM   0.137   2.068     SM   0.133   0.200     WS   0.132   0.198     Subtotal: Permanent Wetland Impacts Due to Construction Activities   23.689   35.561     SM   0.058   0.029     SS   0.423   0.2112     WS   0.275   0.138     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     US 41 with US 10/WIS 441 System Interchange   SS (Temporary)   0.051   0.000     WS (Temporary)   0.054   0.027     Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation: 0.172   0.061		SM	1.034	1.553
M	Parker Bandlatankan	SS	0.890	1.336
Midway Road Interchange	Racine Road Interchange	M	5.543	8.316
SS   2.322   3.483     M		Subtotal	7.467	11.205
M		SM	0.873	1.311
M	Midway Road Interchange	SS	2.322	3.483
SM   0.821   1.237		М	0.227	0.342
SS   0.104   0.156     M   0.597   0.896     Subtotal   1.522   2.289     SM   1.377   2.068     SM (Artificial)   0.000   0.000     Oneida Street Interchange   M   0.133   0.200     WS   0.132   0.198     Subtotal   1.642   2.466     Subtotal: Permanent Wetland Impacts Due to Construction Activities   23.689   35.561     SM   0.058   0.029     SS   0.423   0.212     WS   0.275   0.138     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     Subtotal: Temporary Impacts Mitigation   SS (Temporary)   0.051   0.000     WS (Temporary)   0.054   0.027     Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation:   0.172   0.061		Subtotal	3.422	5.136
M   0.597   0.896		SM	0.821	1.237
M   0.597   0.896		SS	0.104	0.156
SM	Appleton Road Interchange	M	0.597	0.896
SM (Artificial)         0.000         0.000           M         0.133         0.200           WS         0.132         0.198           Subtotal: Permanent Wetland Impacts Due to Construction Activities         23.689         35.561           SM         0.058         0.029           SS         0.423         0.212           WS         0.275         0.138           Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'         0.756         0.379           Permanent Impacts Total:         24.445         35.940           Temporary Impacts Mitigation           SS (Temporary)         0.051         0.000           WS (Temporary)         0.067         0.034           WS (Temporary)         0.054         0.027           Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation:         0.172         0.061		Subtotal	1.522	2.289
Oneida Street Interchange         M         0.133         0.200           WS         0.132         0.198           Subtotal         1.642         2.466           Subtotal: Permanent Wetland Impacts Due to Construction Activities         23.689         35.561           SM         0.058         0.029           SS         0.423         0.212           WS         0.275         0.138           Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'         0.756         0.379           Permanent Impacts Total:         24.445         35.940           Temporary Impacts Mitigation           SS (Temporary)         0.051         0.000           WS (Temporary)         0.067         0.034           WS (Temporary)         0.054         0.027           Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation:         0.172         0.061		SM	1.377	2.068
WS   0.132   0.198     Subtotal   1.642   2.466     Subtotal: Permanent Wetland Impacts Due to Construction Activities   23.689   35.561     SM   0.058   0.029     SS   0.423   0.212     WS   0.275   0.138     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     Permanent Impacts Total:   24.445   35.940     Temporary Impacts Mitigation     SS (Temporary)   0.051   0.000     WS (Temporary)   0.067   0.034     WS (Temporary)   0.054   0.027     Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation:   0.172   0.061		SM (Artificial)	0.000	0.000
Subtotal   1.642   2.466	Oneida Street Interchange	M	0.133	0.200
Subtotal: Permanent Wetland Impacts Due to Construction Activities   23.689   35.561		WS	0.132	0.198
SM   0.058   0.029		Subtotal	1.642	2.466
SS   0.423   0.212     WS   0.275   0.138     Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379     Permanent Impacts Total:   24.445   35.940     Temporary Impacts Mitigation	Subtotal: Permanent Wetland Impacts Due to Co	onstruction Activities	23.689	35.561
WS   0.275   0.138		SM	0.058	0.029
Subtotal: Permanent Wetland Impacts due to Shading of Structures Over 20'   0.756   0.379		SS	0.423	0.212
Permanent Impacts Total:   24.445   35.940		WS	0.275	0.138
SS (Temporary   0.051   0.000	Subtotal: Permanent Wetland Impacts due to Shading o	of Structures Over 20'	0.756	0.379
SS (Temporary)   0.051   0.000	Perm	anent Impacts Total:	24.445	35.940
US 41 with US 10/WIS 441 System Interchange         WS (Temporary)         0.067         0.034           WS (Temporary)         0.054         0.027           Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation:         0.172         0.061	Temp	oorary Impacts Mitigati	ion	
WS (Temporary) 0.054 0.027 Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation: 0.172 0.061		SS (Temporary)	0.051	0.000
Subtotal: Temporary Wetland Impacts due to Clearing of Vegetation: 0.172 0.061	US 41 with US 10/WIS 441 System Interchange	WS (Temporary)	0.067	0.034
		WS (Temporary)	0.054	0.027
US 41 with US 10/WIS 441 System Interchange SS (Temporary) 1.175 0.588	Subtotal: Temporary Wetland Impacts due to Clo	earing of Vegetation:	0.172	0.061
55 (1 cmps at 1)	US 41 with US 10/WIS 441 System Interchange	SS (Temporary)	1.175	0.588
Subtotal: Temporary Wetlands Impacts due to Construction of Causeway: 1.175 0.588	Subtotal: Temporary Wetlands Impacts due to Const	ruction of Causeway:	1.175	0.588
Total Temporary Wetland Impacts to be Mitigated: 1.347 0.649	Total Temporary Wetland Imp	acts to be Mitigated:	1.347	0.649
TOTAL WETLAND IMPACTS AND MITIGATION: 32.156 36.589	TOTAL WETLAND IMPACT	TS AND MITIGATION:	32.156	36.589

<sup>\*</sup>Wetland types are based on WisDOT's Wetland Mitigation Technical Guidelines: Wooded Swamp (WS), Shrub Scrub (SS), Deep Marsh (DM), Shallow Marsh, Wet Meadow (M), and Aquatic Bed (AB).

A total of 36.589 acres are to be mitigated for the project, however, the Rubbert Phase 3 site does not have adequate space to mitigate all of these impacts. Based on the mitigation plan (see **Attachment H: Wetland Fill & Mitigation Details**), it is anticipated that approximately 25.58 acres of wetland will be created, restored or enhanced at the Rubbert Phase 3 site. All remaining impacts will be mitigated at a second site that has yet to be determined in coordination with the WDNR and USACE. Wetland types and their approximate acreage to be mitigated at the site include the following:

- Deep Marsh (DM) 1.66 acres
- Shallow Marsh (SM) (elevation 757.00 feet and below, excluding deep marsh areas) 4.45 acres
- Wet Meadow (M) (elevation 757.00 feet and above excluding berm areas) 19.48 acres

Performance measures for the proposed wetland types are listed below. The performance measures are subject to modification based on consultation among WisDOT, the USACE and DNR during the 5-year monitoring period.

Preliminary Project Plan Sheets

**PLAN** 

### ORDER OF SHEETS

Section No. 1

Typical Sections and Details Section No. 2 Estimate of Quantities Section No. 3

Section No. 3 Miscellaneous Ougntities Right of Way Plat

Section No. 4 Plan and Profile Section No. 5

Section No. 6 Standard Detail Drawings Section No. 7 Sign Plates

Section No. 8 Structure Plans

Section No. 9 Computer Earthwork Data

Section No. 9 Cross Sections

TOTAL SHEETS =



DESIGN DESIGNATION

A.A.D.T. = N/A A.A.D.T. = N/A D.H.V. = N/A D.D. = N/A = N/A DESIGN SPEED = N/A **ESALS** = N/A

### CONVENTIONAL SYMBOLS

CORPORATE LIMITS PROPERTY LINE LOT LINE LIMITED HIGHWAY EASEMENT L \_\_\_ EXISTING RIGHT OF WAY PROPOSED OR NEW R/W LINE SLOPE INTERCEPT

REFERENCE LINE EXISTING CULVERT PROPOSED CULVERT (Box or Pipe) COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA



# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

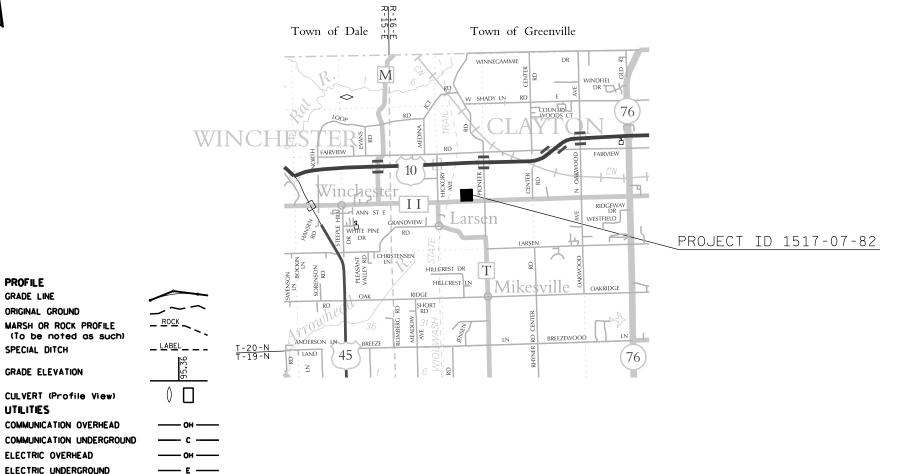
## USH 10 - USH 10/STH 441

**COUNTY CB - ONEDIA STREET** 

### NON HIGHWAY WINNEBAGO

RUBBERT WETLAND MITIGATION SITE PHASE 3

STATE PROJECT NUMBER 1517-07-82



"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCA), WINNEBAGO COUNTY, NAD 83 (1991) "ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODEDTIC VERTICAL DATUM OF 1929, NGVD 29."

FEDERAL PROJECT STATE PROJECT PROJECT CONTRACT 1517-07-82

> 90% PLANS FOR REVIEW ONLY **NOVEMBER 1, 2013**

> > ORIGINAL PLANS PREPARED BY **ENGINEERING, INC.** Transportation Engineering Services

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREPARED BY NE REGION Surveyor JT ENGINEERING, INC. Designer SCOTT EBEL Project Manager Regional Examiner Regional Supervisor CHAD DEGRAVE C.O. Examiner

APPROVED FOR THE DEPARTMENT

DATE:\_

**PROFILE** 

GRADE LINE ORIGINAL GROUND

SPECIAL DITCH

UTILITIES

GRADE ELEVATION

ELECTRIC OVERHEAD

SANITARY SEWER

UTILITY PEDESTAL

TELEPHONE POLE

Ħ

ф

STORM SEWER

POWER POLE

WATER

ELECTRIC UNDERGROUND

MARSH OR ROCK PROFILE

CULVERT (Profile View)

LAYOUT

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

SCALE L

(Signature)

### **GENERAL NOTES**

THE CONTRACTOR SHALL CONTACT THE UTILITES AND DIGGERS HOTLINE TO LOCATE AND FIELD VERIFY UTILITIES PRIOR TO THE START OF WORK. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTITLITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. ANY LOCAL. MUNICIPAL. OR OTHER UTILITY THAT IS NOT A MEMBER OF DIGGERS HOTLINE SHALL BE CONTACTED SEPARATELY.

EXISTING SURFACE ELEVATIONS USED TO CALCULATE PROPOSED EARTHWORK QUANTITIES ARE BASED UPON PREVIOUS CONSTRUCTION DTM'S. FIELD CHANGES TO THESE PROPOSED DTM'S WILL NOT BE REFLECTED IN THE EXISTING DTM FOR THIS CONTRACT.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT THE CONTRACTOR'S EXPENSE.

PLACE SALVAGED TOPSOIL IN ALL GRADED AREAS AS DESIGNATED BY THE ENGINEER IMMEDIATELY AFTER GRADING HAS BEEN COMPLETED. SEED AND PLACE EROSION MAT, IF REQUIRED BY THE ENGINEER OR SHOWN IN THE EROSION CONTROL PLANS, OVER ALL AREAS 5 DAYS AFTER PLACEMENT OF SALVAGED TOPSOIL.

EROSION BALES ARE TO ONLY BE USED FOR REINFORCEMENT OF PROPOSED SILT FENCE LOCATIONS ALONG WETLANDS. ANY OTHER USE OF EROSION BALES IS PROHIBITED.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PREMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WATERWAY.

FERTILIZER SHALL NOT BE USED NEAR NAVIGABLE WATERWAYS OR WETLANDS.

BROKEN CONCRETE CONTAINING STEEL SHALL NOT BE USED AS RIPRAP OR HEAVY RIPRAP.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

REMOVAL OF EROSION CONTROL DEVICES IS INCIDENTAL TO THE COST OF THEIR RESPECTIVE BID ITEMS.

EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

THE INTENT OF THE RUBBERT MITIGATION SITE PHASE 3 IS TO MAINTAIN A BALANCED CUT/FILL RELATIONSHIP. IF SITE CONDITIONS DO NOT ALLOW FOR THIS. AND THE ENGINEER APPROVES, THE ELEVATION OF THE BERMS CONSTRUCTED AS PART OF THIS PROJECT MAY BE ADJUSTED IN ORDER TO BALANCE THE CUT AND FILL QUANTITIES. THE ELEVATION OF THE BERMS CONSTRUCTED ALONG THE EASTERN PORTION OF THE SITE SHALL NOT BE INCREASED TO THE EXTENT THAT THEY RESTRICT NATURAL FLOW PATTERNS IN THE SITE.

THE FACTOR USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 1.20.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

STATIONING, DISTANCES, AND OFFSETS FOR SIGNS SHOWN IN THE PLANS ARE APPROXIMATE AND THE FINAL LOCATION OF SIGNS ARE TO BE DETERMINED BY THE ENGINEER.

BENCHMARK LOCATIONS SHOWN ON PLAN ARE APPROXIMATE AND SHOULD BE VERIFIED.

EXCAVATION REQUIRED FOR THE FIXED WEIR STRUCTURE IS NOT INCLUDED IN THE COMPUTER EARTHWORK AND IS INCIDENTAL TO THE WEIR STRUCTURE.

IN THE EVENT DRAIN TILE IS DISCOVERED DURING EXPLORATION OPERATIONS THE CONTRACTOR SHALL CRUSH OR OTHERWISE DISABLE THE DRAINTILE WITHIN THE LIMITS OF THE EXPLORATION TRENCH TO RENDER IT INOPERABLE AS APPROVED BY THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE BID ITEM DRAIN TILE EXPLORATION.





Dial or (800) 242-8511

www.DiggersHotline.com

### **UTILITY CONTACTS**

#### TIME WARNER CABLE MR. VINCE ALBIN 3520 DESTINATION DR

APPLETON, WI 54915 (920) 831-9249 MOBILE: (920) 378-0444 VINCEALBIN@TWCABLE.COM

### **CENTURYLINK**

MR. KEVIN HUFF 13057 S. MONITOR DR PALOS HEIGHTS, IL 60463 (708) 837-7927 KEVIN.HUFF@CENTURYLINK.COM

### **DNR AREA LIASON**

**BOBBI JO FISCHER** DEPARTMENT OF NATURAL RESOURCES 427 EAST TOWER DRIVE, STE 100 WAUTOMA, WI 54982 (920) 787-4686 EXT 3007

### **US ARMY CORP OF ENGINEERS**

ANN NYE OLD FORT SQUARE 211 N. BROADWAY, STE 221 GREEN BAY, WI 54303 (920) 448-2824 ANN.M.NYE@USACE.ARMY.MIL

### **WINNEBAGO COUNTY HIGHWAY COMMISSIONER**

**ERNIE WINTERS** 901 WEST COUNTY ROAD Y P.O. BOX 2764 OSHKOSH, WI 54903 (920) 232-1700

#### **COUNTY SURVEYOR**

JERRY BOUGIE WINNEBAGO COUNTY COURT HOUSE 445 ALGOMA BLVD OSHKOSH, WI 54903 (920) 236-4839

### **ORDER OF SECTION 2 DETAIL SHEETS**

**GENERAL NOTES** PROJECT OVERVIEW **CONSTRUCTION DETAILS EXISTING CONDITIONS MAP** GRADING PLAN **EROSION CONTROL PLAN** PLANTING PLAN ALIGNMENT PLAN

HWY: STH 441/USH 10 COUNTY: WINNEBAGO **GENERAL NOTES** SHEET: PROJECT NO: 1517-07-82

PLOT DATE : PLOT NAME: PLOT SCALE: 1:1

2

### **ABBREVIATIONS**

ALIGNMENT IDENTIFIERS MAIN CHANNEL S С EAST CHANNEL BA BERM A (NORTHWEST) BB BERM B (NORTH-CENTRAL) BC BERM C (NORTHEAST) BD BERM D (SOUTH) PΑ POND A (NORTHWEST) PB POND B (NORTHEAST) PC POND C (WEST-CENTRAL) PD POND D (EAST-CENTRAL) PΕ POND E (SOUTHWEST) POND F (SOUTHEAST) WP WEST PLANAR GRADING EAST PLANAR GRADING

AEW APRON END WALL AGG AGGREGATE

BAD BASE AGGREGATE DENSE BM BENCH MARK

C&G CURB AND GUTTER

C/L CENTER OR CONSTRUCTION LINE
CMCP CULVERT PIPE CORRUGATED METAL

CONC CONCRETE
CP CULVERT PIPE

CPRC CULVERT PIPE REINFORCED CONCRETE

CSD CONCRETE SURFACE DRAIN CY CUBIC-YARD

D DEGREE OF CURVE

Δ DELTA
DISCH DISCHARGE

EAT ENERGY ABSORBING TERMINAL

FE FIELD ENTRANCE HMA HOT MIX ASPHALT INV INVERT

L LENGTH OF CURVE LHF LEFT HAND FORWARD

LT LEFT
MIN MINIMUM
M/L MATCHLINE
NB NORTHBOUND
NC NORMAL CROWN
PAVT PAVEMENT

PC POINT OF CURVE

PCC POINT OF COMPOUND CURVE
PE PRIVATE ENTRANCE
PI POINT OF INTERSECTION
PLE PERMANENT LIMITED EASMENT

PT POINT OF TANGENT
R RADIUS OF CURVE
R/L REFERENCE LINE
R/W RIGHT OF WAY
RC REVERSE CROWN

RCAEW APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE

REQD REQUIRED

RHF RIGHT HAND FORWARD
RO RUN OFF LENGTH
RRSP RAILROAD SPIKE
RT RIGHT

SALV SALVAGED

SAPBC SALVAGED ASPHALTIC PAVEMENT BASE COARSE

SB SOUTHBOUND

SDD STANDARD DETAIL DRAWINGS SE SUPER ELEVATION

SF SQUARE FOOT

SSPRC STORM SEWER PIPE REINFORCED CONCRETE

STA STATION
SY SQUARE YARD
T TANGENT LENGTH
TLE TEMPORARY LIMITE

TLE TEMPORARY LIMITED EASEMENT
VCL VERTICAL CURVE LENGTH
VPC POINT OF VERTICAL CURVE
VPI POINT OF VERTICAL INTERSECTION
VPT POINT OF VERTICAL TANGENT

PROJECT NO: 1517-07-82 HWY: STH 441/USH 10 COUNTY: WINNEBAGO GENERAL NOTES SHEET: I

FILE NAME : \_\_\_\_\_\_ PLOT BATE : \_\_\_\_\_ PLOT BY : \_\_\_\_\_ PLOT NAME : \_\_\_\_\_ PLOT SCALE : 1:1

2

2

### **RUNOFF COEFFICENT TABLE**

	HYDROLOGIC SOIL GROUP												
		Α			В		С			D			
	SLOPE	RANGE (PEI	RCENT0	SLOPE	RANGE (PE	RCENT)	SLOPE	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	
ROW CROPS	0.08	0.16	0.22	0.12	0.20	0.27	0.15	0.24	0.33	0.19	0.28	0.38	
	0.22	0.30	0.38	0.26	0.34	0.44	0.30	0.37	0.50	0.34	0.41	0.56	
MEDIAN STRIP-	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25	0.30	
TURF	0.24	0.26	0.30	0.25	0.28	0.33	0.26	0.30	0.37	0.27	0.32	0.40	
SIDE SLOPE- TURF			0.25			0.27			0.28			0.30	
TURF			0.32			0.34			0.36			0.38	
PAVEMENT:													
ASPHALT						.7095							
CONCRETE .8095													
BRICK						.7080							
DRIVES, WALKS						.7585							
ROOFS						.7595							
GRAVEL ROADS,	, SHOULDEF	RS				.4060							

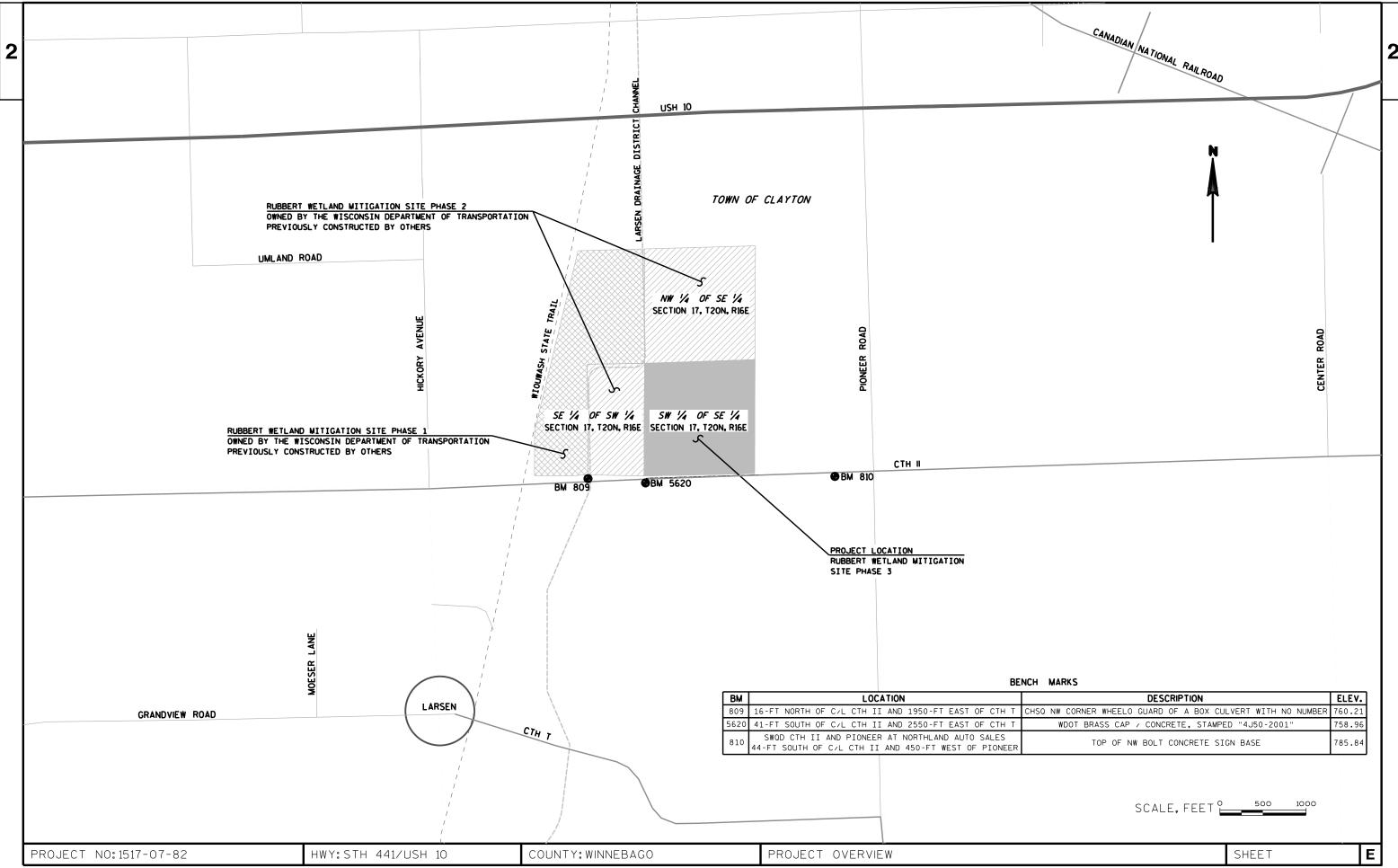
### <u>1517-07-82</u>

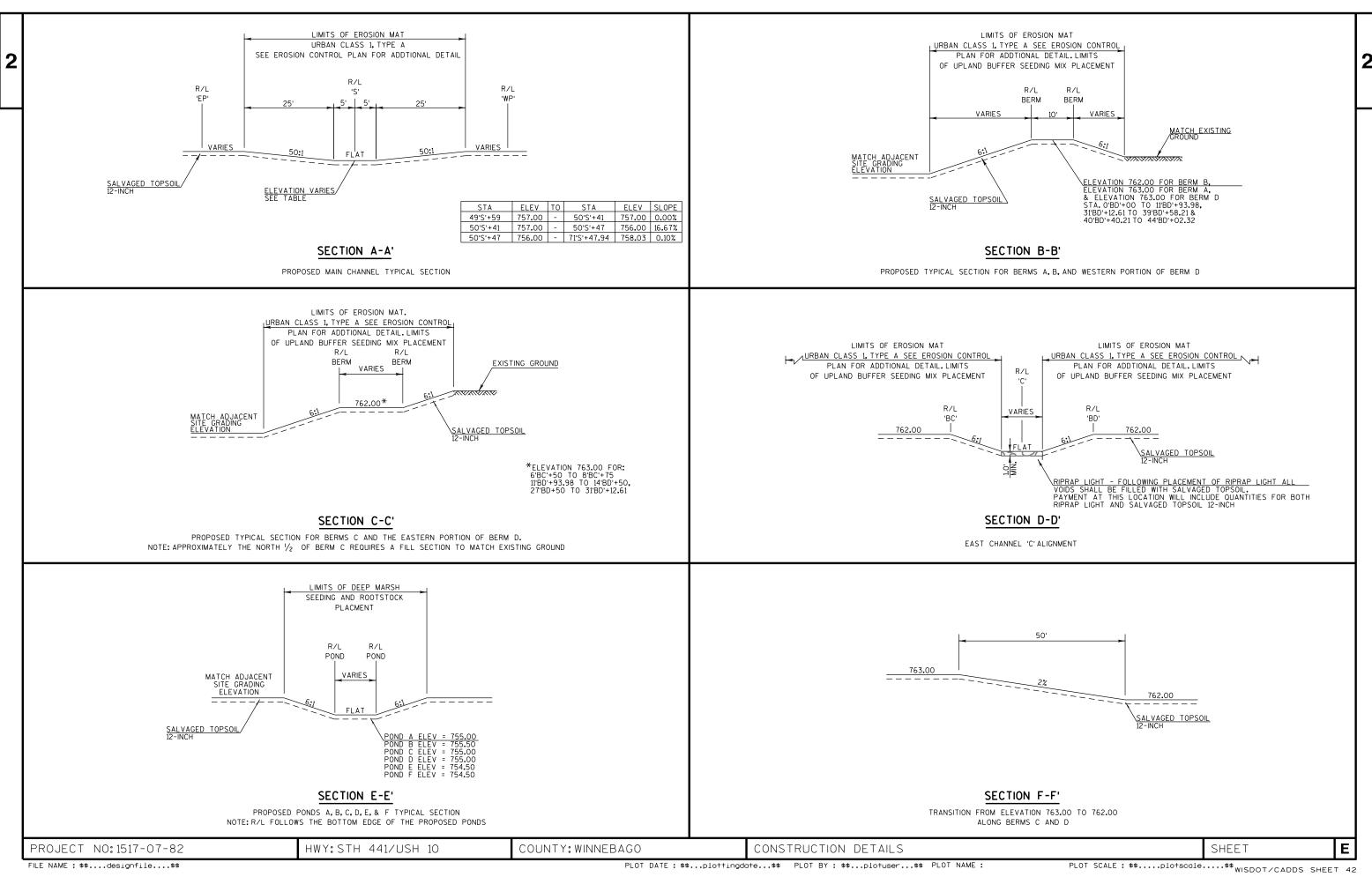
TOTAL PROJECT AREA = XXX

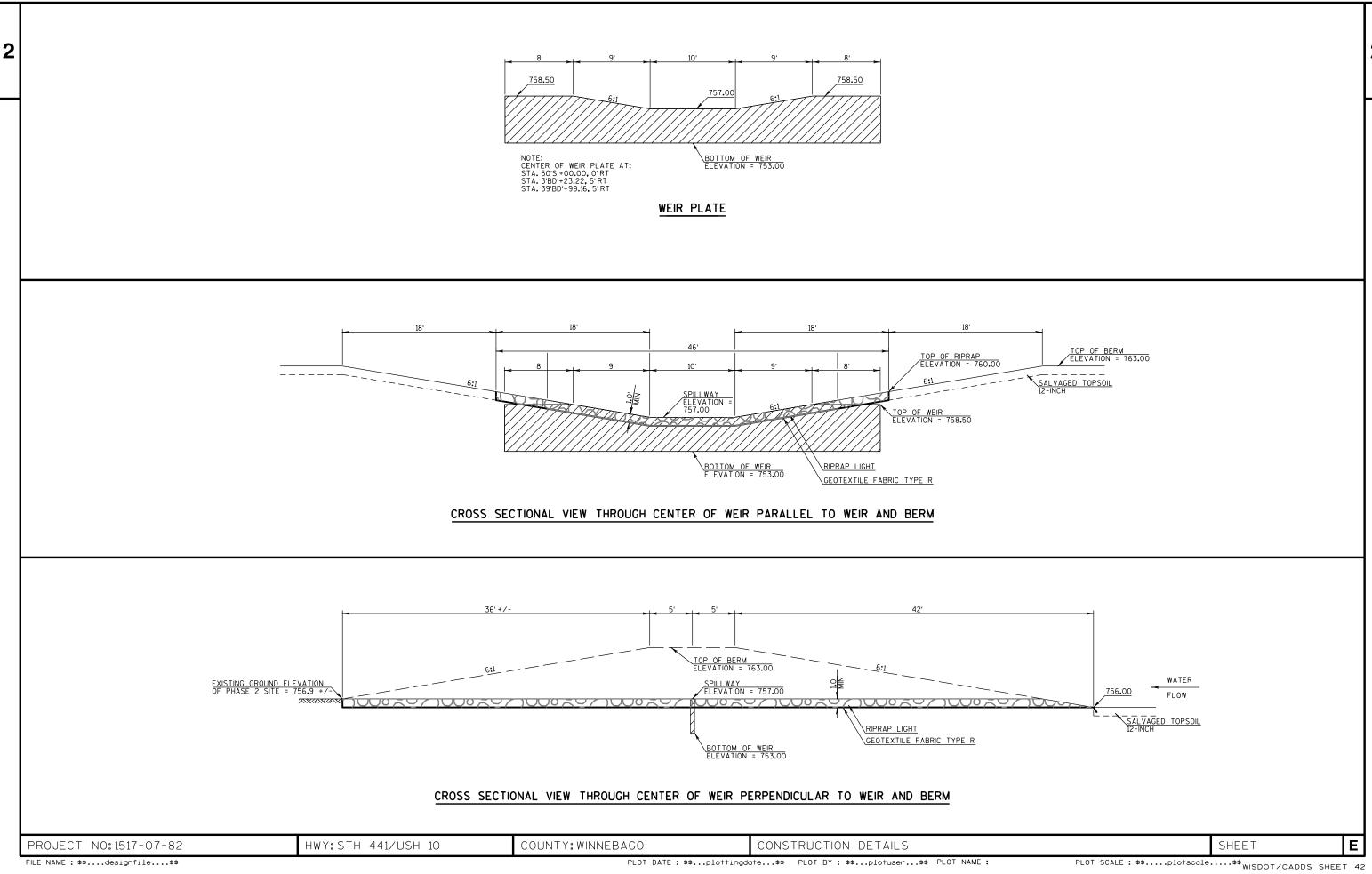
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = XXX

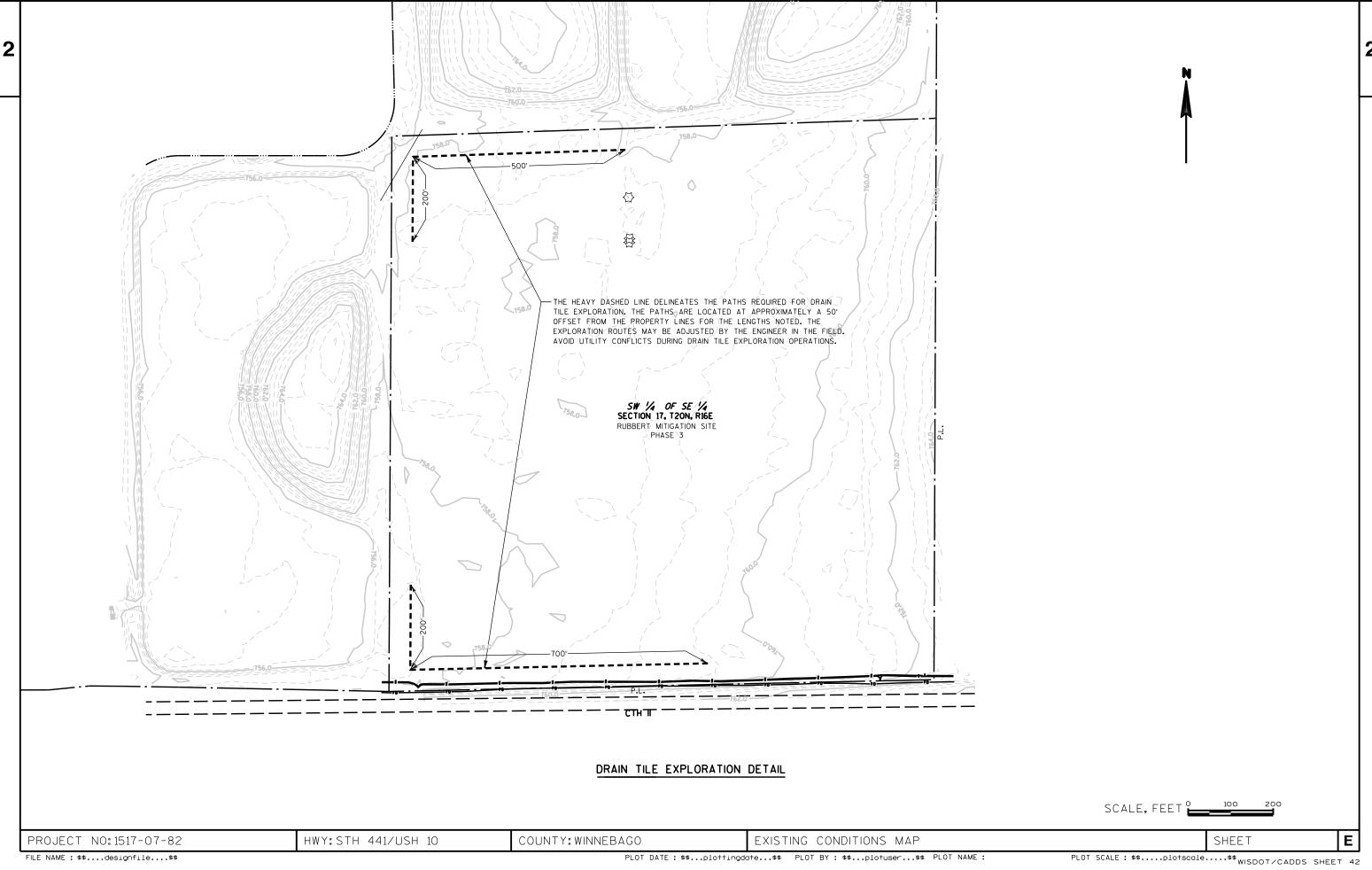
PROJECT NO: 1517-07-82 HWY: STH 441/USH 10 COUNTY: WINNEBAGO GENERAL NOTES SHEET: E

FILE NAME : \_\_\_\_\_ PLOT DATE : \_\_\_\_ PLOT BY : \_\_\_\_ PLOT NAME : \_\_\_\_ PLOT SCALE : 1:1



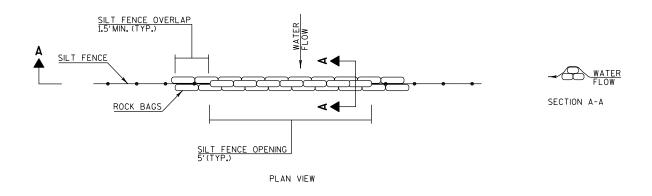




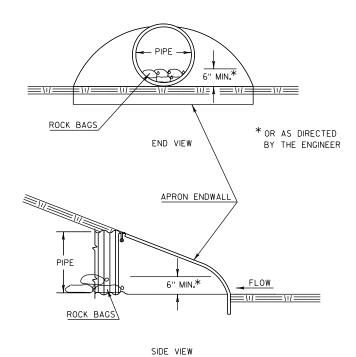


2

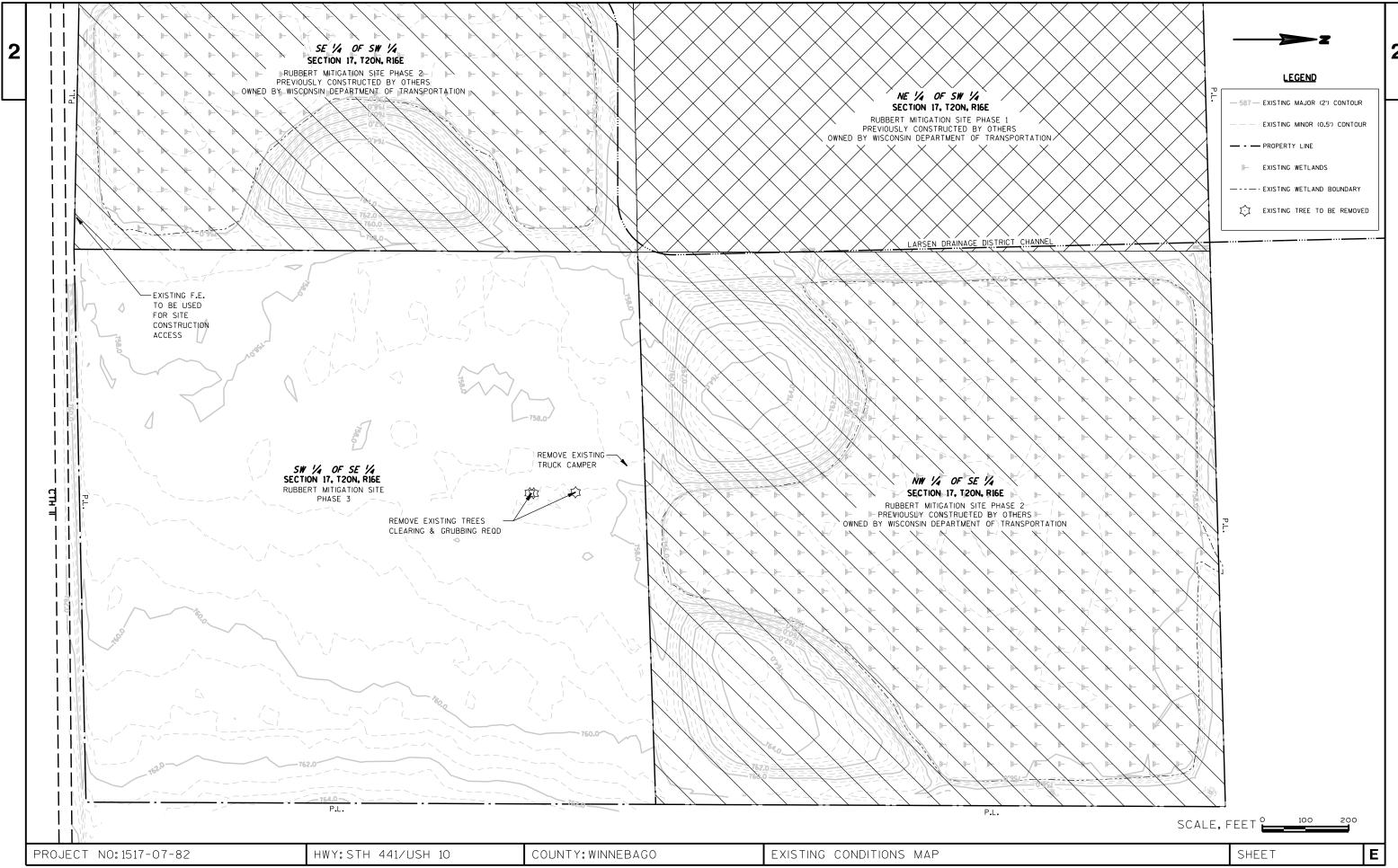
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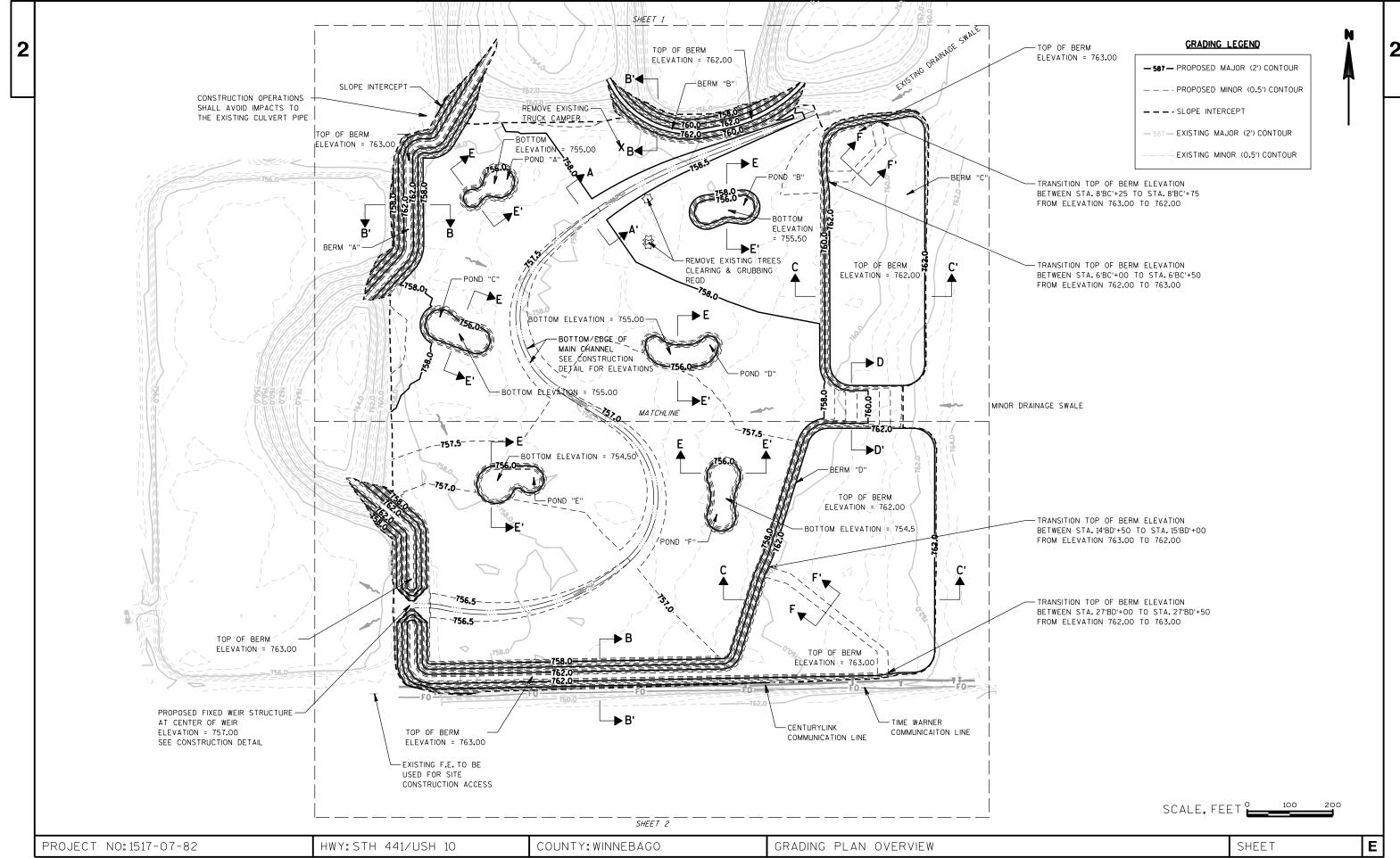


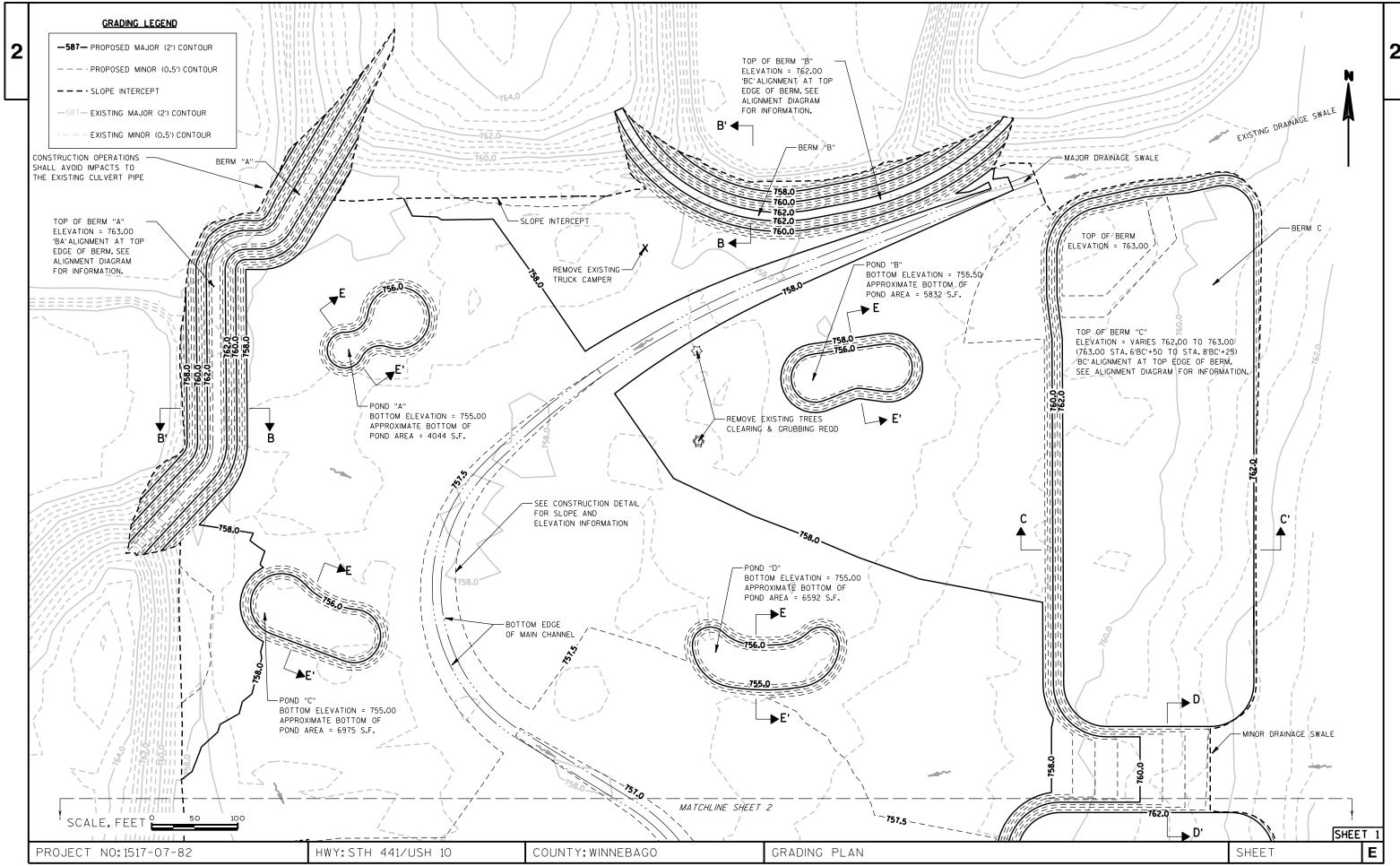
SILT FENCE RELIEF WITH ROCK BAGS

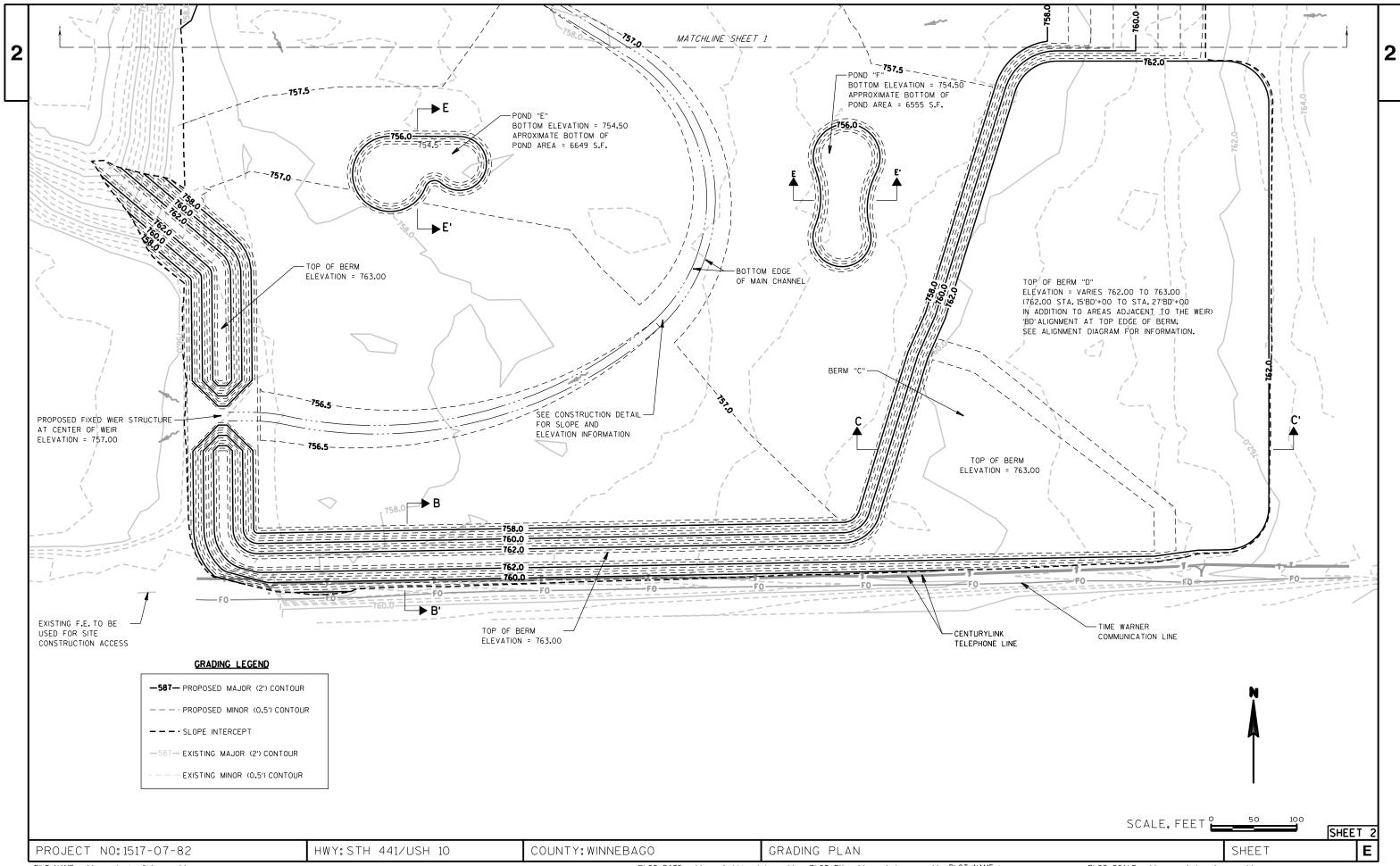


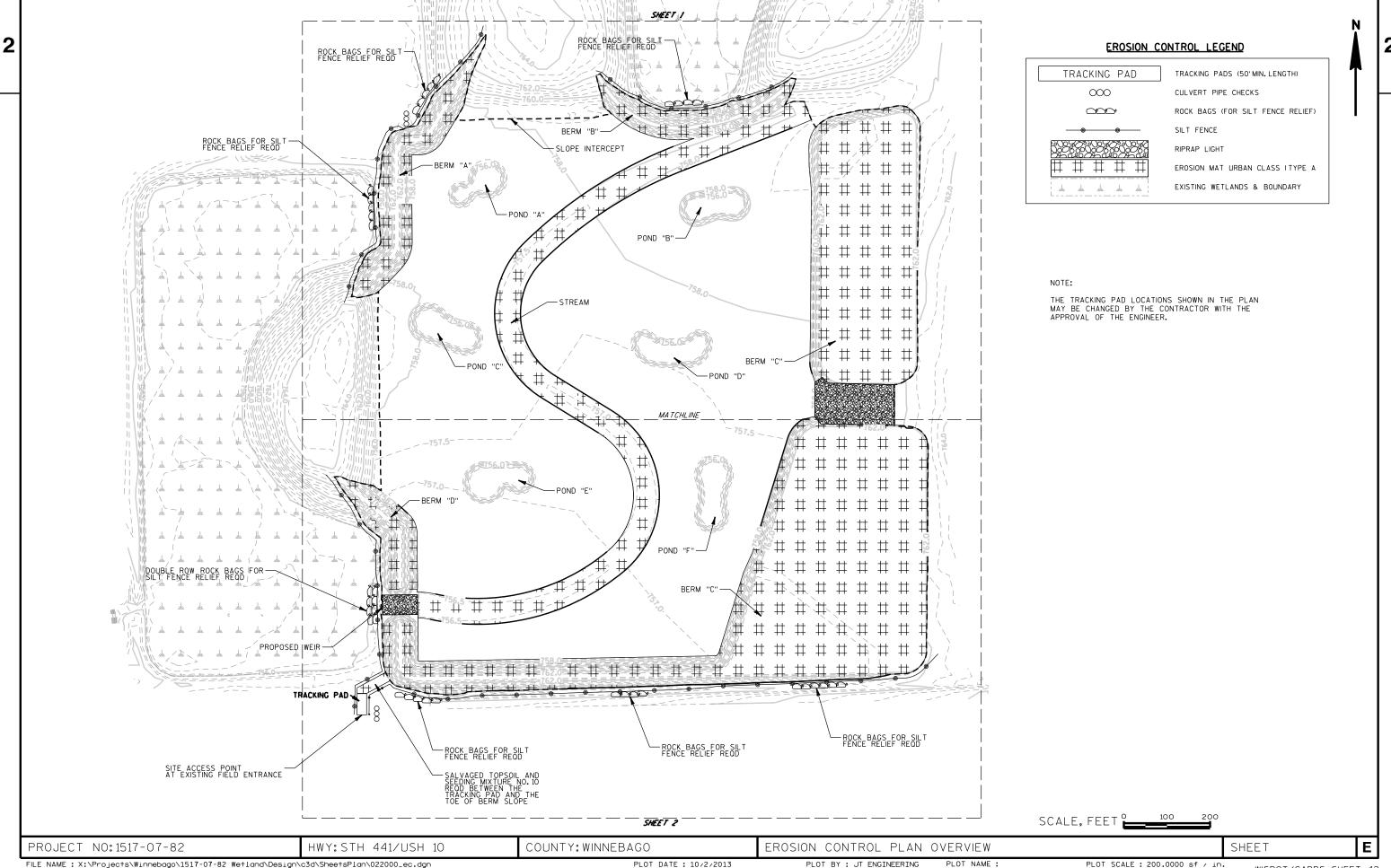
CULVERT PIPE CHECK

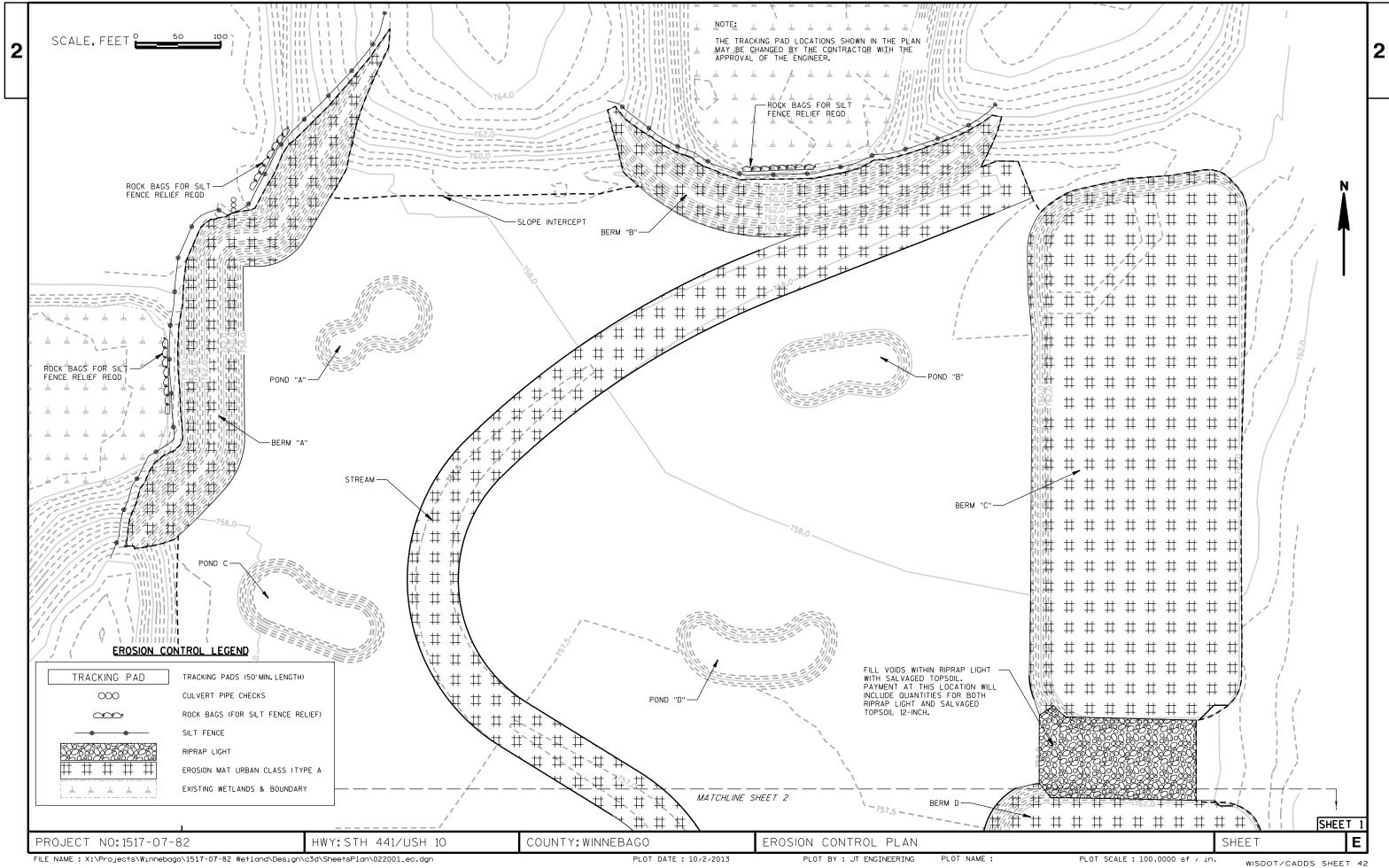


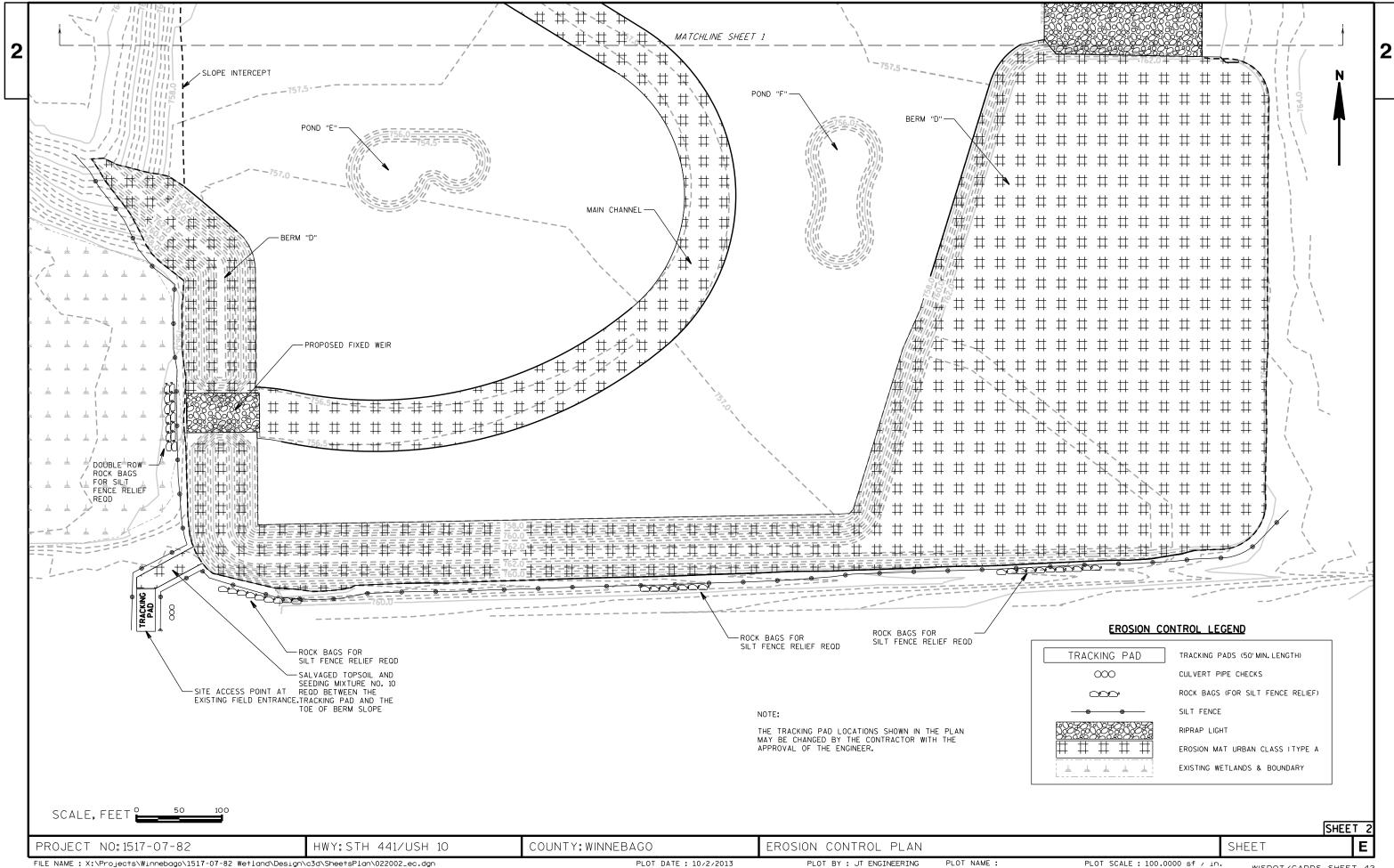


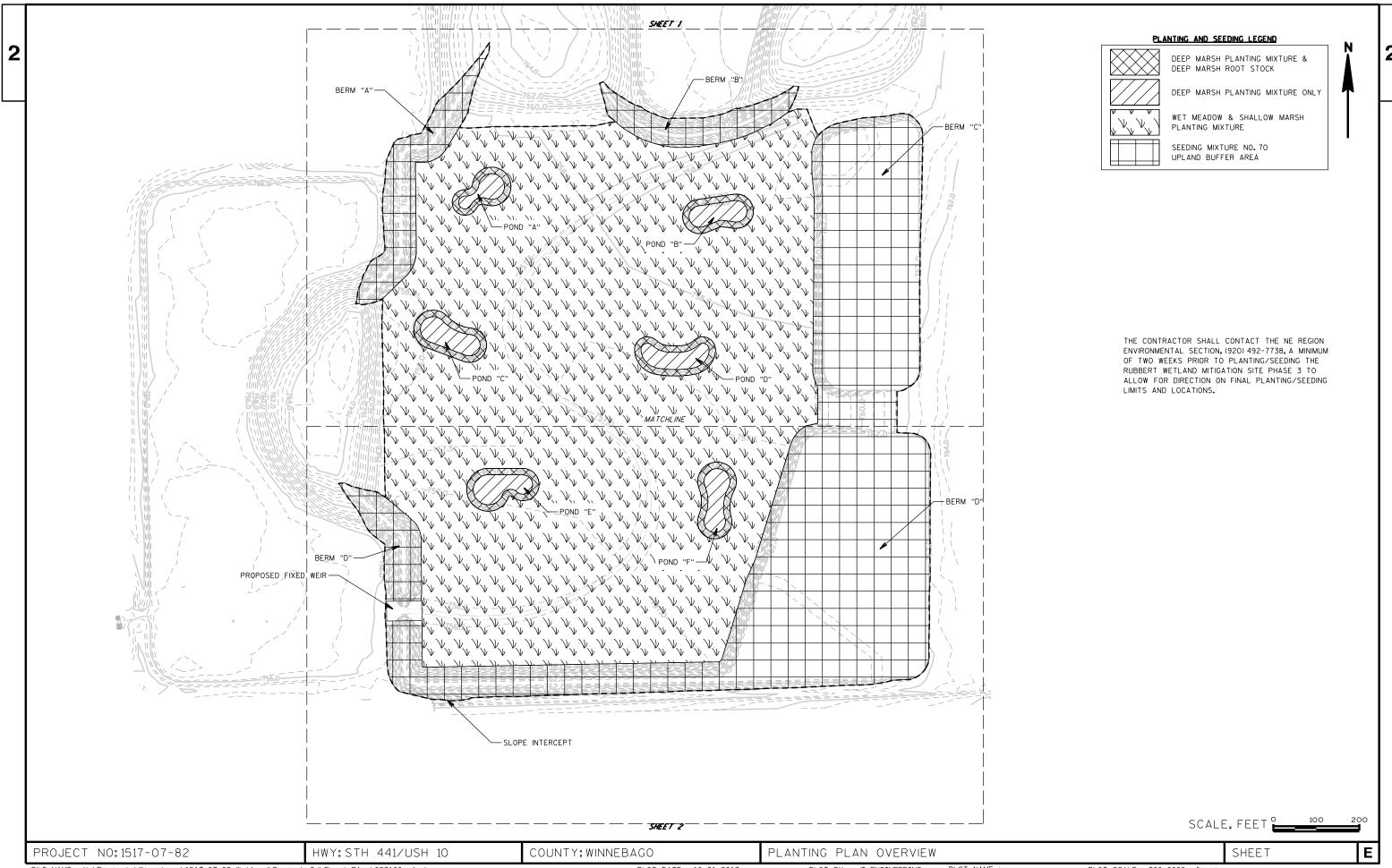


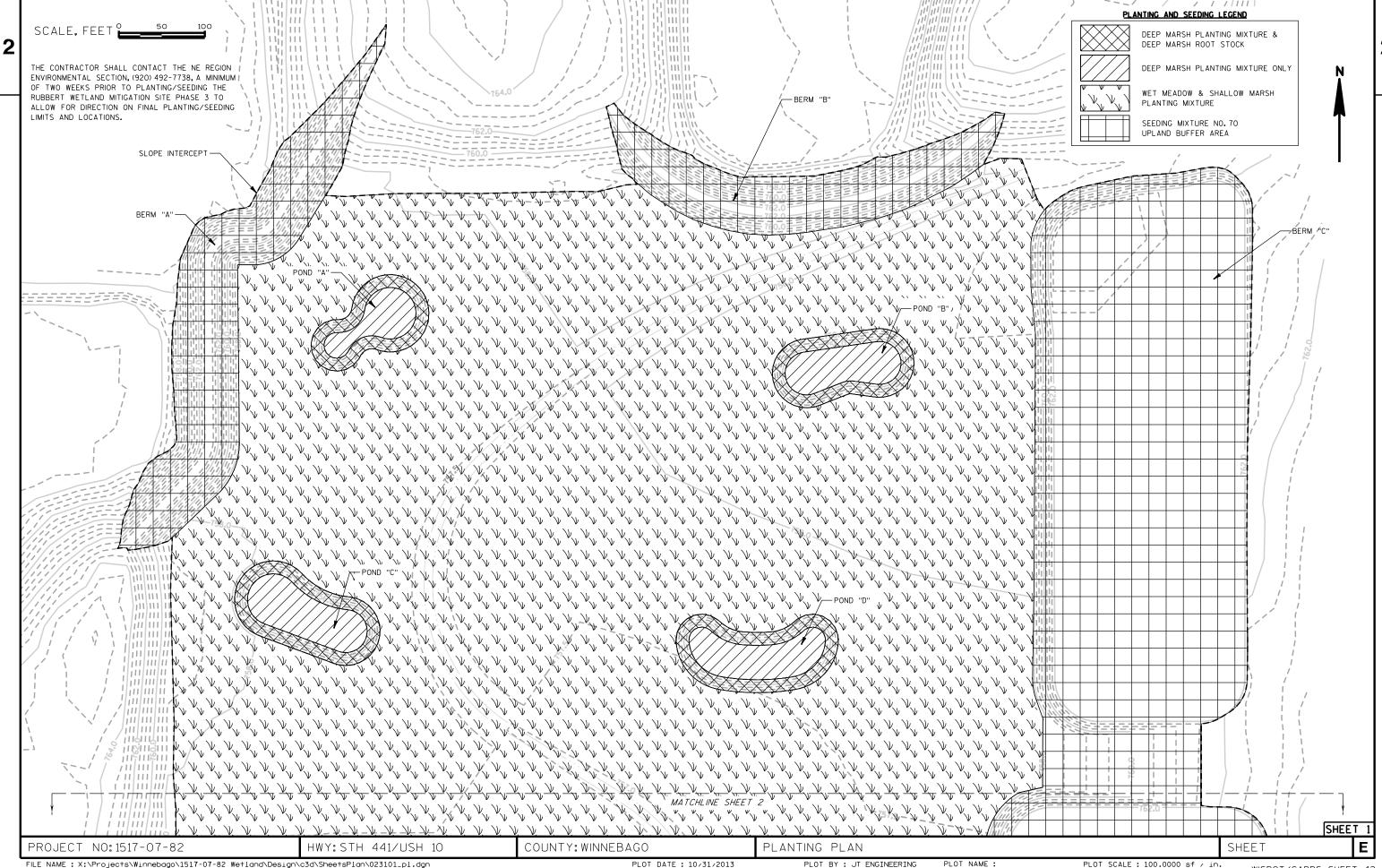


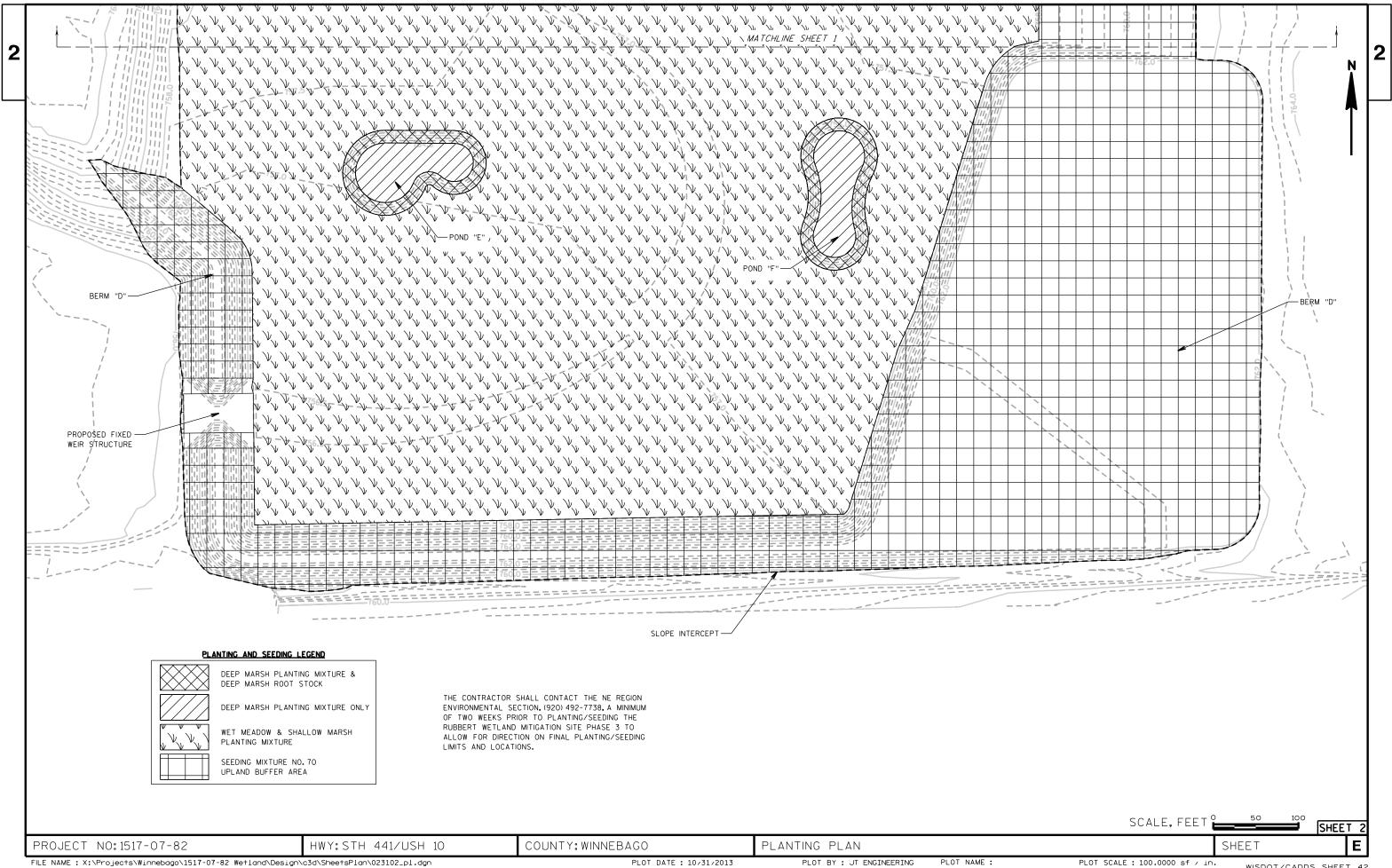


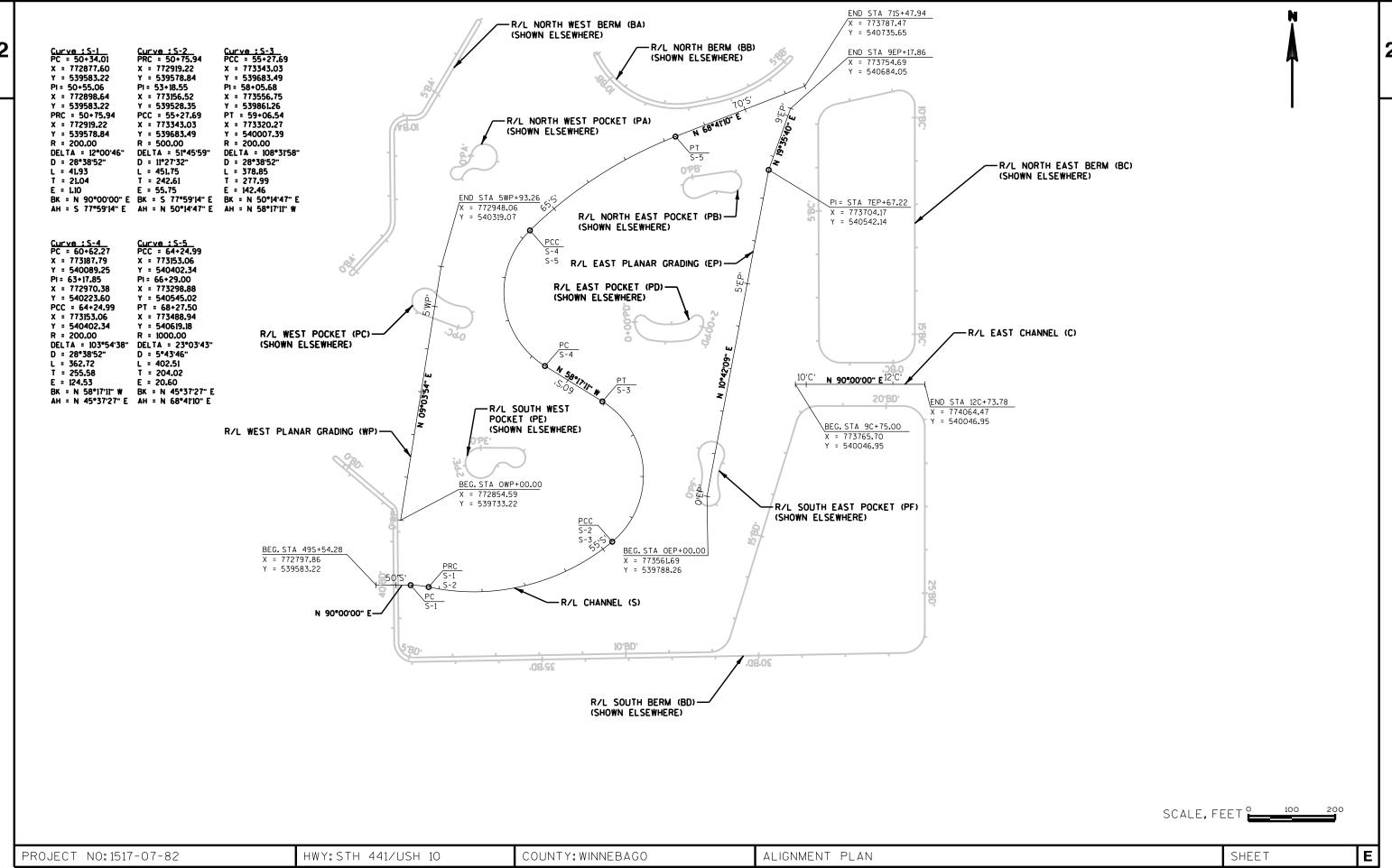


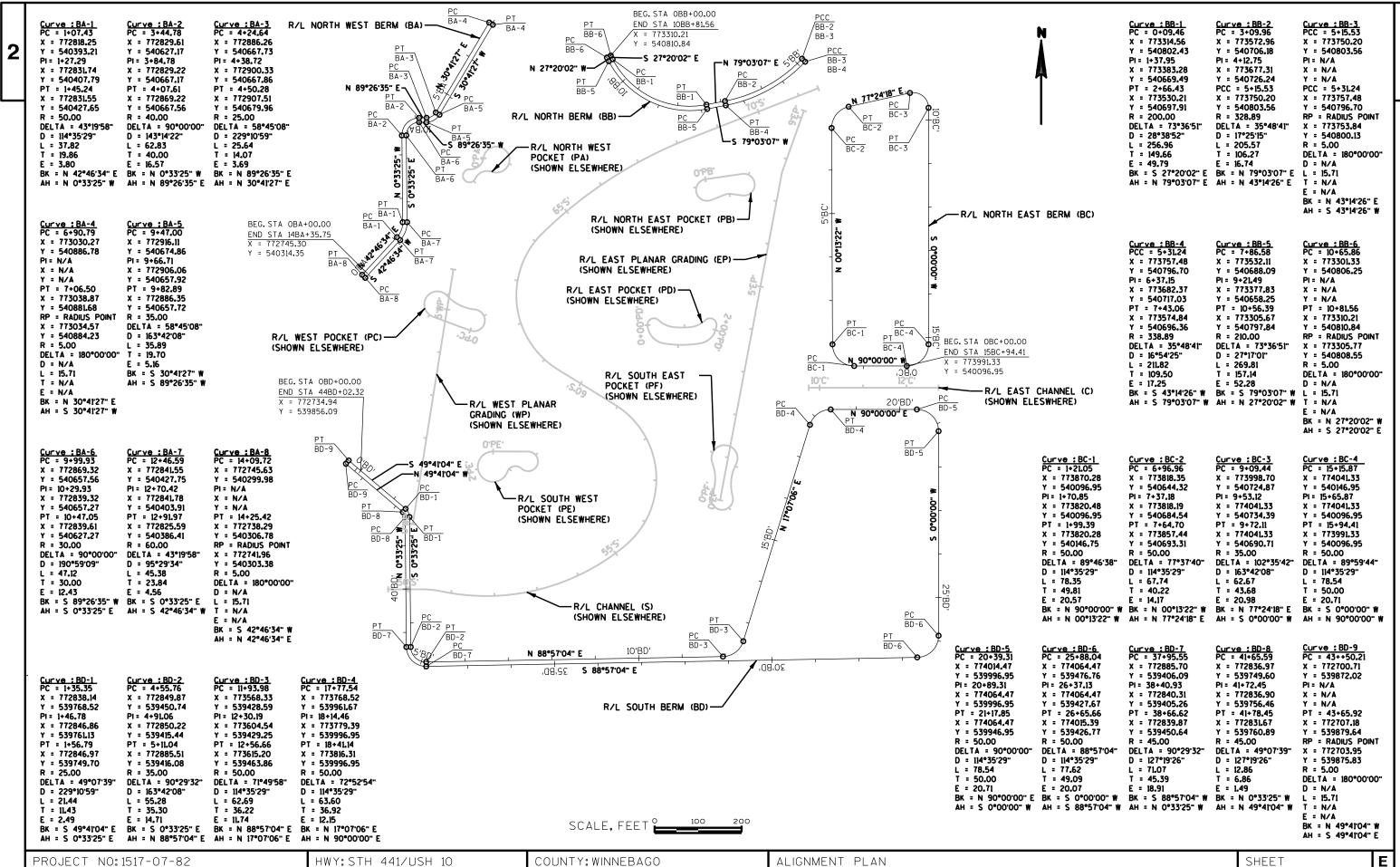














R/L NORTH EAST BERM (BC)-Curve : PA-1 PRC = 0+00.00 Curve : PA-2 PRC = 1+48.36 Curve : PA-3 PRC = 1+93.34 Curve : PA-4 PRC = 2+58.39 (SHOWN ELSEWHERE) Curve : PB-1 PC = 0+85.69 Curve: PB-2 PC = 1+98.58 Curve: PB-3 PC = 2+46.39 -R/L NORTH WEST BERM (BA) (SHOWN ELSEWHERE) X = 773017.40x = 773036.57 x = 772998.74 x = 772985.96 x = 773612.78 x = 773585.84 x = 773540.69 Y = 540575.45 Y = 540543.57 Y = 540528.06 Y = 540549.31 Y = 540538.64 Y = 540492.77 Y = 540478.40 -R/L NORTH BERM (BB) PI = N/A PI = 1+76.29 PI = N/A PI = 2+86.32 PI = N/A PI = 2+05.07 PI = N/A (SHOWN ELSEWHERE) X = 773010.44X = 773013.85X = N/A X = N/A X = N/AX = 773579.40X = N/A Y = 540553.42 Y = 540493.63 Y = N/A Y = N/A Y = 540547.75 Y = N/A Y = N/A BEG. STA OPA+00.00 PRC = 1+93.34 PRC = 2+58.39 PRC = 3+03.37 PT = 1+71.15 PT = 3+30.72PRC = 1+48.36 PT = 2+11.29 END STA 3PA+03.37 X = 773036.57X = 772998.74x = 772985.96X = 773017.40x = 773613.02x = 773573.36X = 773527.97Y = 540543.57 = 540528.06 Y = 540549.31 540575.45 = 773017.40 Y = 540489.12 = 540491.25 Y = 540526.41RP = RADIUS POINT R = 30.00RP = RADIUS POINT R = 30.00' = 540575**.**45 RP = RADIUS POINT R = 25.00RP = RADIUS POINT BEG.STA OPB+00.00 DELTA = 85°54'24" PA-4X = 773047.16 x = 772985.12 DELTA = 85°54'03" X = 773616.35DELTA = 29°07'32" x = 773531.54 END STA 3PB+30.72 PA-1 Y = 54057L64 D = 190°59'09" Y = 540534.34 D = 190°59'09" = 540513.89 D = 229°10'59" Y = 773532.52-N 81°47'36" E X = 773527.97R = 30.00L = 44.98 R = 15.00 1 = 44.98R = 25.00L = 12.71 R = 25.00Y = 540526.41DELTA = 248°27'33" T = 27.93 DELTA = 283°21'15" T = 27.93DELTA = 195°51'12" T = 6.50DEL TA = 193°16'02" PA-3 D = 190°59'09" D = 229°10'59" D = 229°10'59" E = 10.99 $D = N/\Delta$ E = 10.99 PB-1 F = 0.83PA-4 1 = 148.36 BK = N 69°20'32" W L = 65.05 BK = N 86°47'23" E BK = N 82°21'12" W L = 85.461 = 84.33 T = -179.55T = -23.71AH = S 24°45'04" W T = -22.05 AH = N 7°18'34" E AH = S 68°31'16" W T = -214.97 F = 68.24F = 41.67F = 206.28F = 241.41 \PRC PA-1 <del>00,0</del>0 BK = S 7º18'34" W BK = S 24°45'04" W BK = N 81º47'36" E PA-2 PA-2 BK = S 68°31'16" W AH = N 69°20'32" W AH = N 86°47'23" E AH = N 82°21'12" W AH = N 81°47'36" E PA-3 R/L NORTH WEST R/L NORTH EAST--N 82°21'12" W POCKET (PA) POCKET (PB) PC PB-2 S 68°31'16" W-Curve : PC-1 PC = 0+91.72 Curve : PD-1 PCC = 0+00.00 Curve : PC-2 PRC = 2+00.17 Curve : PC-3 PRC = 2+73.77 Curve : PD-3 PCC = 0+76.44 Curve : PD-4 PCC = 1+11.94 Curve : PD-2 PRC = 0+35.82 X = 772900.71X = 772933.28X = 772997.71R/L EAST POCKET (PD) -X = 773394.65X = 773419.98X = 773456.32X = 773491.78Y = 540210.49Y = 540258.88 Y = 540226.87 Y = 540190.85 Y = 540202.54 Y = 540186.18 Y = 540186.18 PI = N/A PI = 1+33.07 PI = 2+38.72 PI = N/A PI = 0+37.90 PI = 0+56.94 PI = 0+94.24 BEG. STA OPD+00.00 PD-1 PD-2 R/L EAST PLANAR GRADING (EP) x = 773474.05 X = N/A X = 772959.32X = N/A R/L WEST POCKET (PC) X = 773392.55X = 773435.27X = 773512.83PD-4 PC-2 (SHOWN ELSEWHERE) END STA 3PD+94.02 PD-2 Y = 540187.96 Y = 540184.68 Y = N/AY = 540230.45 Y = N/A 、PD-3 ′ PD-4 Y = 540228.69Y = 540187.96PD-5 PRC = 2+73.77 X = 773394.65PRC = 1+52.57 X = 773528.12 PRC = 2+00.17 PRC = 3+58.87 PRC = 0+35.82 PCC = 0+76.44PCC = 1+11.94x = 772997.71 x = 773456.32 X = 773491.78 x = 772986.68 x = 773419.98 X = 772933.28Y = 540190.85Y = 540202.54Y = 540258.88 Y = 540226.87 Y = 540178.54Y = 540202.54Y = 540186.18 Y = 540186.18RP = RADIUS POINT R = 100.00RP = RADIUS POINT PCC PD-8 R = 15.00R = 60.00R = 210.00R = 60.00DEL TA = 42°10'13" DELTA = 136°48'45" DELTA = 38°47'43" DELTA = 38°47'43" x = 772911.16 DELTA = 9°41'06" X = 772995.39N 69°36'58" W-PCC PD-6 Y = 540238.61 D = 57°17'44" Y = 540201.98 PD-1 PCC PD-7 D = N/A D = 95°29'34" D = 27°17'01" D = 95°29'34" R = 30.00L = 73.60 R = 25.00L = 35.82 L = 40.63 L = 35.50 L = 40.63BEG. STA OPC+00.00 BEG. STA OPE+00.00 DELTA = 207°07'00" T = 38.56 PD-7 T = 37.90DELTA = 195°03'11" T = 21.13T = 17.79T = 21.13END STA 3PC+58.87 D = 190°59'09" D = 229°10'59" END STA 3PE+60.99 E = 7.18 E = 25.76 E = 3.61E = 0.75 E = 3.61X = 772986.68L = 108.45 BK = S 42°29'57" E L = 85.11 X = 773039.40 BK = N 3°10'29" W BK = S 46°21'44" E BK = S 85°09'27" E BK = N 85°09'27" E Y = 540178.54 T = -124.40AH = S 84°40'11" E T = -189.22 Y = 539900.43 20'BD' AH = S 46°21'44" E AH = S 85°09'27" E AH = N 85°09'27" E AH = N 46°21'44" E E = 157.97 E = 215.86BK = N 69°36'58" W BK = S 84°40'11" E −S 89°42'53" E R/L SOUTH WEST -Curve : PD-7 PCC = 2+48.98 AH = S 42°29'57" E AH = N 69°36'58" W Curve: PD-5 PRC = 1+52.57 X = 773528.12 Curve : PD-6 PCC = 1+88.39 Curve : PD-8 PCC = 3+33.44 POCKET (PE) PE-3 O'F -R/L EAST CHANNEL (C) x = 773553.45 X = 773432.02 X = 773516.08BEG.STA OPF+00.00 PF-2 (SHOWN ELSEWHERE) Y = 540148.99 Y = 540148.99 Y = 540202.54 Y = 540190.85PF-2 END STA 3PF+65.54 PF-3 Curve : PE-1 PC = 0+80.85 Curve : PE-2 PRC = 1+68.47 Curve : PE-3 PRC = 2+08.08 PI = 3+69.32 PI = 1+90.47 PI = 2+24.27 PI = 2+91.61 X = 773543.21x = 773555.54X = 773396.64X = 773551.46X = 773474.05X = 773120.26X = 773104.68x = 773072.14 Y = 539800.42 Y = 540141.82 Y = 540155.02 Y = 540228.69Y = 540155.02 PE-1 PRC PE-2 Y = 539900.02 Y = 539861.18 Y = 539853.48 PF-4 PCC = 2+48.98 PCC = 3+33.44 PCC = 3+94.02 PCC = 1+88.39 PE-2 PI = N/A PI = 1+98.96 PI = N/A x = 773553.45 X = 773516.08x = 773394.65 X = 773432.02X = N/A X = 773082.54X = N/A Y = 540148.99 Y = 540190.85Y = 540148.99Y = 540190.85PF-4 Y = 539882.14 Y = N/A Y = N/A R = 15.00 R = 45.00 R = 250.00= 45.00 PF-1 PT = 3+60.99PRC = 1+68.47 PRC = 2+08.08 -R/L WEST PLANAR GRADING (WP) DELTA = 77°08'20" DELTA = 136°48'44" DELTA = 77°08'48" DELTA = 19°21'27" x = 773104.68X = 773072.14X = 773039.40(SHOWN ELESWHERE) D = N/A D = 127°19'26" D = 22°55'05" D = 127°19'26" Y = 539861.18 = 539853.48 Y = 539900.43L = 35.82 L = 60.59 L = 84.46L = 60.58 RP = RADIUS POINT R = 20.00RP = RADIUS POINT T = 37.90= 35.89 T = 42.6435.88 DELTA = 113°27'55" X = 773120.15X = 773039.24E = 12.56E = 3.61E = 12.56R/L SOUTH EAST E = 25.76Y = 539877.52D = 286°28'44" Y = 539865.43 BK = N 46°21'44" E BK = S 3°10'28" W BK = S 80°19'17" W BK = N 80°19'17" W POCKET (PF) R = 22.50L = 39.61R = 35.00AH = N 80°19'17" W AH = S 3°10'28" W AH = S 80°19'17" W AH = N 3°10'57" W DELTA = 250°18'48" DELTA = 223°08'08" T = 30.48 D = 254°38'52" E = 16.46 D = 163°42'08" R/L CHANNEL (S) BK = S 46°34'44" E L = 152.91 L = 87.63(SHOWN ELSEWHERE) Curve : PF-1 PRC = 0+00.00 Curve : PF-2 PRC = 0+75.39 Curve: PF-3 PRC = 1+95.23 Curve : PF-4 PRC = 2+70.62 AH = N 19°57'21" E T = -49.70 T = -56.92E = 83.71E = 95.78X = 773543.21X = 773543.84X = 773598.37X = 773590.47BK = S 89°42'53" E BK = N 19°57'21" F Y = 539800.42Y = 539874.04 Y = 539870.87 Y = 539797.68 AH = S 46°34'44" E 10'BD' AH = S 89°42'53" E PI = 0+39.59 PI = 2+34.82 30.BD. x = 773558.09X = N/Ax = 773579.93X = N/AY = 539837.11 Y = N/A Y = 539835.84 Y = N/A PRC = 0+75.39 PRC = 1+95.23 PRC = 2+70.62 PRC = 3+65.54 X = 773543.84x = 773598.37X = 773590.47X = 773543.21Y = 539874.04Y = 539870.87 Y = 539797.68 Y = 539800.42R/L SOUTH BERM (BD)-R = 100.00 RP = RADIUS POINT R = 100.00RP = RADIUS POINT DELTA = 43°11'51' X = 773571.82DELTA = 43°11'51' X = 773566.37(SHOWN ELSEWHERE) Y = 53979L02 D = 57°17'44" Y = 539884.85 D = 57°17'44" R = 30.00 L = 75.39 DELTA = 228°52'05" T = 39.59 L = 75.39R = 25.00DELTA = 217°31'34" T = 39.59D = N/A F = 7.552 D = N/A F = 7.55BK = N 22°05'21" E L = 119.84 BK = N 27°45'37" E L = 94.91 T = -66.03T = -73.59AH = S 21°06'28" E AH = N 15°26'13" W E = 102.53 E = 102.72BK = S 21°06'28" E BK = N 15°26'13" W AH = N 27°45'37" E AH = S 22°05'21" W SCALE, FEET =

COUNTY: WINNEBAGO

HWY: STH 441/USH 10

SHEE 1

Ε

REMOVING TRUCK CAMPER							
204. 9060. S. 01							
LOCATI ON	EA	REMARKS					
NORTH CENTRAL PORTION OF SITE	1						
TOTALS	1						

### **EARTHWORK SUMMARY**

Division	Location		<b>Common (1)</b> 205.0100	Salvaged/ Unusable Material	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate +/- (6)	Waste	Comment:
		Cut (2)	EBS Excavation (3)				Factor			
1	Channel/Ponds	44,928	0	0	44,928	0	0	44,928		
	Berm "A"	7	0	0	7	4,320	5,184	-5,177		
	Berm "B"	0	0	0	0	2,610	3,132	-3,132		
	Berm "C"	145	0	0	145	10,475	12,570	-12,425		
	Berm "D"	880	0	0	880	20,900	25,080	-24,200		
	_			-			-			
Total		45,960	0	0	45,960	38,305	45,966	-6	0	
	1	otal Common Ex	45,960							

- 1) Excavation Common is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Material is included in Cut.
- 4) Available Material = Cut Salvaged/Unusuable Material
- 5) Expanded Fill Factor = 1.20. Expanded Fill = Unexpanded Fill \* Fill Factor. No Rock, Marsh, or EBS will be used in fill on this project.
- 6) The Mass Ordinate + or Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

PROJECT NO: 1517-07-82 HWY: STH 441/USH 10 COUNTY: WINNEBAGO MISCELLANEOUS QUANTITIES SHEET: **E** 

FILE NAME : PLOT DATE : March 12, 2013 PLOT BY : JT ENGINEERING PLOT NAME : PLOT SCALE : 1:1

RIPRAP AND GEOTEXTILE FABRIC SUMMARY								
	606. 0100	645. 0130						
	RI PRAP	GEOTEXTI LE						
	LI GHT	FABRI C						
		TYPE R						
LOCATI ON	CY	SY	REMARKS					
WEIR INSTALLATION	140	440						
EAST DRAINAGE ENTRANCE	650	1, 950						
PROJECT	40	120	UNDI STRI BUTED					
TOTALS	830	2, 510						

DRAIN TILE EXPLORATION							
	612. 0700						
LOCATI ON	CY	REMARKS					
NW SITE CORNER	700						
SW SITE CORNER	900						
TOTALS	1, 600	•					

WATER						
	624. 0100					
LOCATI ON	MGAL	REMARKS				
RUBBERT WETLAND MITIGATION SITE PHASE 3	50	FOR DUST CONTROL				
TOTALS	50					

EROSION CONTROL SUMMARY								
	628. 1504	628. 1520	628. 2006	628. 7555	628. 7560	*675. 7570		
	SILT	SILT	EROSION MAT	CULVERT	TRACKI NG	ROCK		
	FENCE	FENCE	URBAN CLASS I	PIPE	PADS	BAGS		
		MAI NTENANCE	TYPE A	CHECKS				
LOCATI ON	LF	LF	SY	EACH	EACH		REMARKS	
BERM "A" AREA	785	785	4, 950	1		50		
BERM "B" AREA	505	505	3, 000			25		
BERM "C" AREA			17, 350			125		
BERM "D" AREA	1, 810	1, 810	36, 400					
MAIN CHANNEL			14, 000					
SITE ACCESS POINT	240	240	185	3	1			
PROJECT	835	835	3, 800	1		50	UNDI STRI BUTED	
TOTALS	4, 175	4, 175	79, 685	5	1	250		
I								

EROSION CONTROL MOBILIZATIONS								
	628. 1905	628. 1910						
	MOBI LI ZATI ON	MOBI LI ZATI ON						
	EROSI ON	EMERGENCY						
	CONTROL	EROSION CONTROL						
LOCATI ON	EACH	EACH						
	2	3						
TOTAL	2	3						

\*ASSUMES 24" x 12" x 6" BAG SIZE

PROJECT NO: 1517	7-07-82	HWY: STH 441/USH 10	COUNTY: WINNEBAGO	MISCELLANEOUS QUANTITIES	SHEET:	Е
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FILE NAME: PLOT DATE: March 12, 2013 PLOT BY: JT ENGINEERING PLOT NAME: PLOT SCALE: 1:1

3

LANDSCAPING SUMMARY								
	625. 0500	630. 0110	630. 0170	SPV. 0060. 150	SPV. 0085. 150	SPV. 0085. 151	SPV. 0180. 150	
	SALVAGED	SEEDI NG	SEEDI NG	DEEP	SEEDI NG,	SEEDING, WET MEADOW	SALVAGED	
	TOPSOI L	MI XTURE	MI XTURE	MARSH	DEEP MARSH	AND SHALLOW	TOPSOI L	
		NO. 10	NO. 70	ROOT STOCK	MI X	MARSH MIX	12-I NCH	
LOCATI ON	SY	LB	LB	EA	LB	LB	SY	REMARKS
RUBBERT WETLAND MITIGATION SITE PHASE 3			235	4, 000	30	200	187, 500	
SITE ACCESS POINT	190	3						
UNDI STRI BUTED	10	1	10	200	5	10	9, 400	
	·							
TOTALS	200	4	245	4, 200	35	210	196, 900	

TRAFFIC CONTROL SUMMARY									
		643. 0420		643. 0705		643. 0900		643. 0100	
		TRAFFIC CONTROL		TRAFFI C	C CONTROL TRAFFIC CONTROL		TRAFFIC		
	APPROXI MATE	BARRI CADES	S TYPE III	WARNING LIC	GHTS TYPE A	SIG	ins	CONTROL	
	SERVI CE	NO. IN		NO. IN		NO. IN		PROJECT	
LOCATI ON	DAYS	SERVI CE	DAYS	SERVI CE	DAYS	SERVI CE	DAYS	EACH	REMARKS
CTH II	102					4	408	1	
SITE ACCESS POINT	102	2	204	3	306	1	102	'	
TOTALS			204		306		510	1	

WEIR PLATE						
	SPV. 0165. 001					
LOCATI ON	SF	REMARKS				
RUBBERT WETLAND MITIGATION SITE PHASE 3	214					
TOTALS	214	=				

PROJECT NO: 1517-07-82 HWY: STH 441/USH 10 COUNTY: WINNEBAGO MISCELLANEOUS QUANTITIES SHEET: **E** 

FILE NAME: PLOT DATE: March 12, 2013 PLOT BY: JT ENGINEERING PLOT NAME: PLOT SCALE: 1:1