

Figure 8 – Berm / Mound Construction

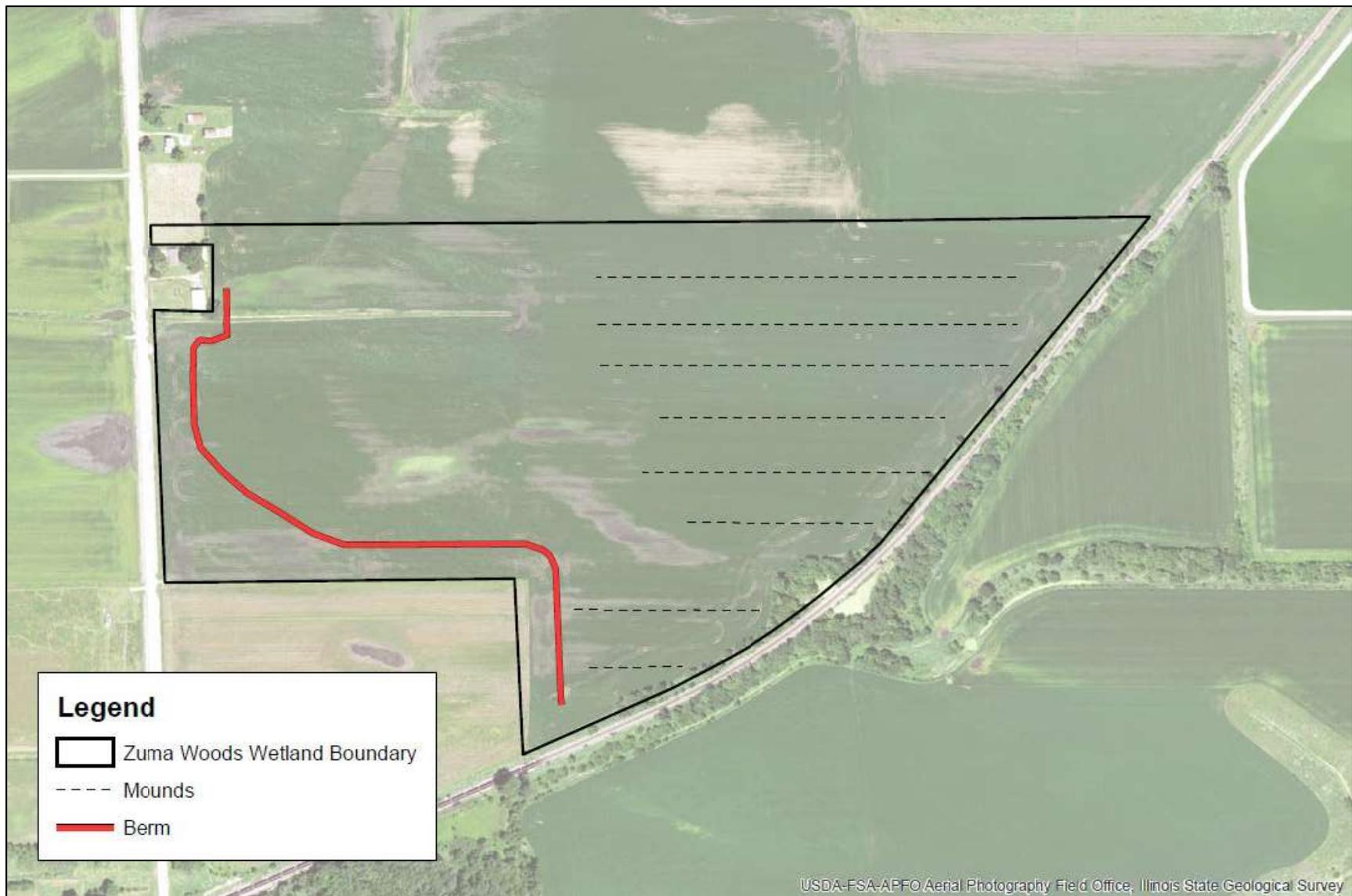
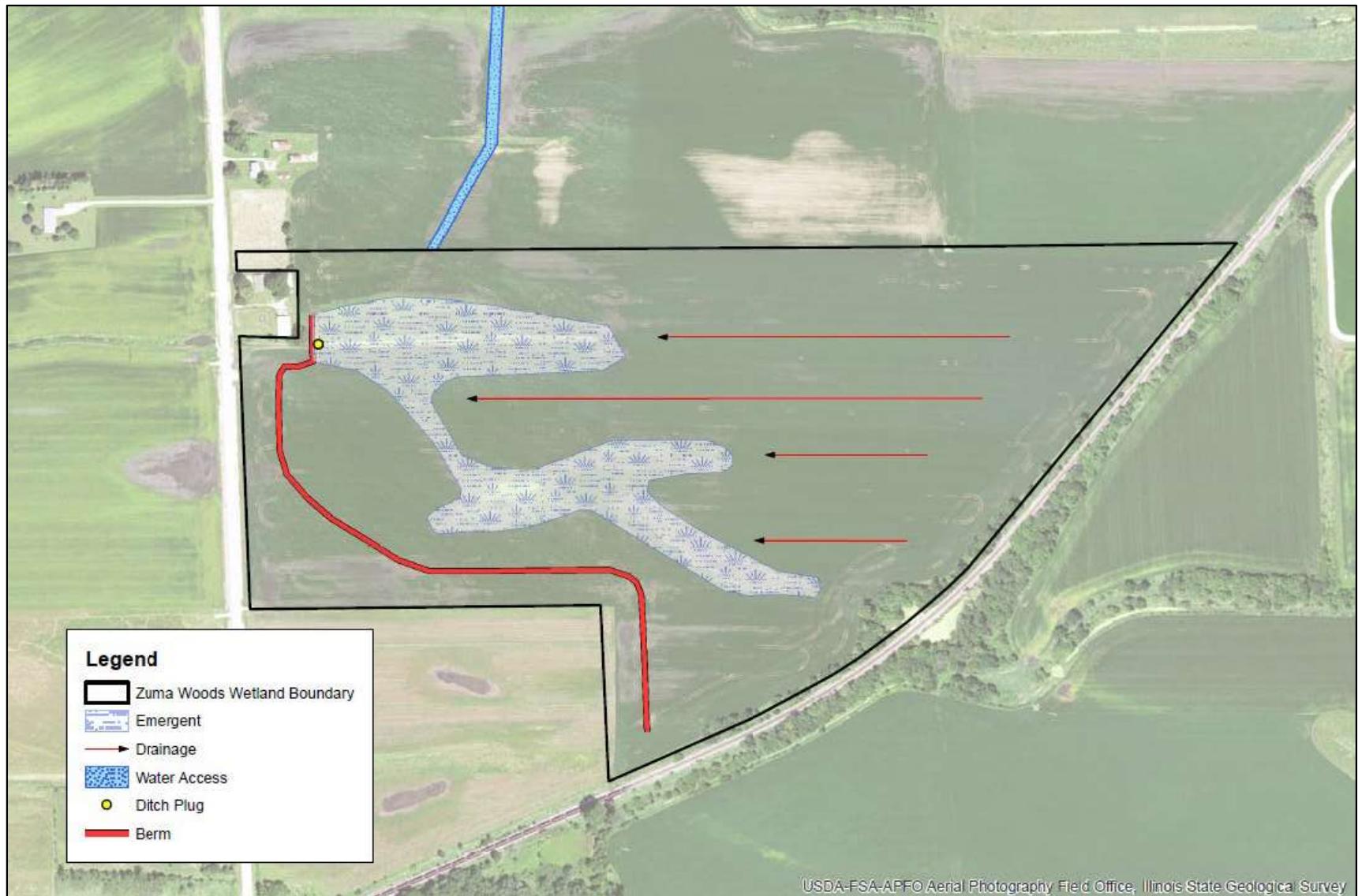
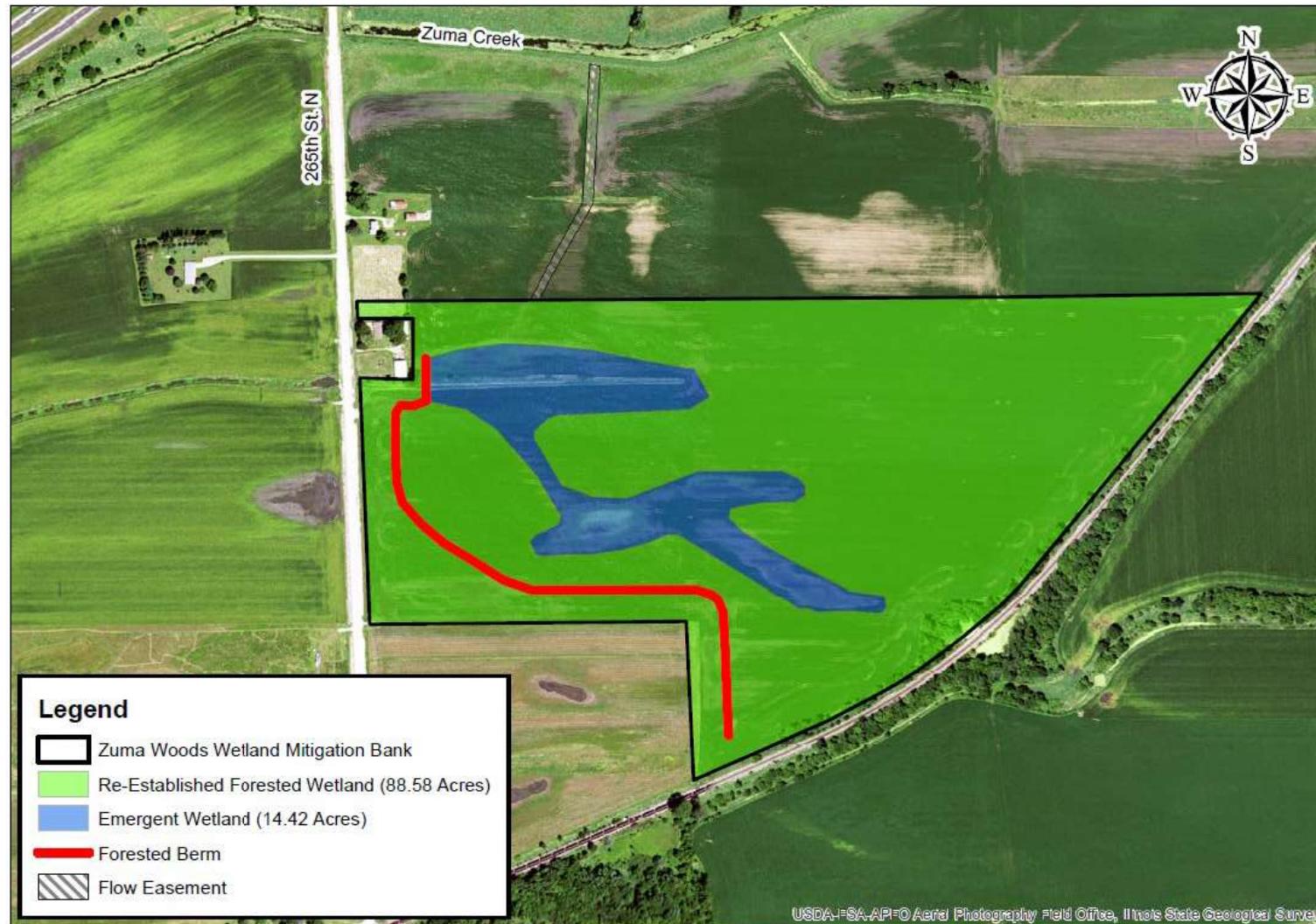


Figure 9 – Restored Hydrology



Mitigation Plan

Figure 10 – Mitigation Plan Map



Forested Wetland

This area will follow all recommendations outlined in the WFI-B Umbrella Mitigation Banking Instrument (**UMBI**) for tree planting requirements. The forested planting equates to twenty foot by twenty foot (20 ft x 20 ft) spacing equaling 109 trees/acre.

Forested Wetland Area = 88.58-acres x 109 trees/acre = 9,656 trees (+/-)

*Tree Varieties	Trees per Acre	Forested Wetland:	
		Acres Planted	Total Trees
Pin Oak (<i>Quercus palustris</i>)	12	88.58	1,063
Sycamore (<i>Platanus occidentalis</i>)	9	88.58	797
Bur Oak (<i>Quercus macrocarpa</i>)	10	88.58	886
Northern Pecan (<i>Carya Illinoensis</i>)	9	88.58	797
Swamp White Oak (<i>Quercus bicolor</i>)	10	88.58	886
Hackberry (<i>Celtis occidentalis</i>)	9	88.58	797
Schuette's Oak (<i>Quercus schuettei</i>)	9	88.58	797
Button Bush (<i>Cephalanthus occidentalis</i>)	5	88.58	443
Persimmon (<i>Diospyros virginiana</i>)	4	88.58	355
Winterberry (<i>Ilex verticillata</i>)	4	88.58	355
Kentucky Coffee (<i>Gymnocladus dioicus</i>)	9	88.58	797
River Birch (<i>Betula nigra</i>)	10	88.58	886
Black Chokeberry (<i>Aronia melanocarpa</i>)	9	88.58	797
Totals	109	88.58	9,656

Emergent Wetland

Botanical Name	Common Name	PLS Oz/Acre
Permanent Grasses/Sedges		
<i>Bolboschoenus fluviatilis</i>	River Bulrush	1.00
<i>Carex comosa</i>	Bristly Sedge	2.50
<i>Carex lacustris</i>	Common Lake Sedge	0.50
<i>Carex lirida</i>	Bottlebrush Sedge	4.00
<i>Carex stricta</i>	Common Tussock Sedge	1.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge	2.00
<i>Eleocharis palustris</i>	Great Spike Rush	1.00
<i>Juncus effusus</i>	Common Rush	1.00
<i>Leersia oryzoides</i>	Rice Cut Grass	3.00
<i>Schoenoplectus acutus</i>	Hard-Stemmed Bulrush	2.50
<i>Schoenoplectus pungens</i>	Chairmaker's Rush	1.50
<i>Schoenoplectus tabernaemontani</i>	Great Bulrush	6.00
	Total	26.00
Temporary Cover		
<i>Avena sativa</i>	Common Oat	512.00
	Total	512.00
Forbs/Shrubs		
<i>Acorus americanus</i>	Sweet Flag	1.00
<i>Alisma subcordatum</i>	Common Water Plantain	2.00
<i>Asclepias incarnata</i>	Swamp Milkweed	1.00
<i>Boehmeria cylindrica</i>	False Nettle	1.00
<i>Cephaelanthus occidentalis</i>	Buttonbush	6.00
<i>Decodon verticillatus</i>	Swamp Loosestrife	0.50
<i>Eutrochium maculatum</i>	Spotted Joe-Pye Weed	0.50
<i>Hibiscus spp.</i>	Rose Mallow Species	4.00
<i>Iris virginica v. shrevei</i>	Blue Flag	6.00
<i>Lobelia cardinalis</i>	Cardinal Flower	0.25
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.25
<i>Lycopus americanus</i>	Common Water Horehound	1.00
<i>Mimulus ringens</i>	Monkey Flower	1.00
<i>Peltandra virginica</i>	Arrow Arum	16.00
<i>Penthorum sedoides</i>	Ditch Stonecrop	0.50
<i>Persicaria spp.</i>	Pinkweed Species	2.00
<i>Pontederia cordata</i>	Pickerel Weed	4.00
<i>Sagittaria latifolia</i>	Common Arrowhead	2.00
<i>Sparganium eurycarpum</i>	Common Bur Reed	6.00
<i>Verbena hastata</i>	Blue Vervain	1.00
	Total	56.00