SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				Silt loam
1-12	A	10YR 2/1	—	—	Silt loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: DATA POINT LOCATED IN Wetland A.

Approved by HQUSACE 3/92

VP2

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE ML-188-1 Applicant/Owner: DTE Investigator: P. WYCHOFF, N. HILL	Date: 13 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW+	9.		
2. Cirsium vulgare	H	FACU-	10.		
3. Cornus amomum	S	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: area mowed in recent years
The wetland plants dominated the northwestern edge of the Plot. The non-dominant vegetation consists of many Facultative upland species.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -12 (in.)

Depth to Saturated Soil: -12 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-0.5	O				SILT LOAM
0.5-4	A	7.5YR 2/1			SILT LOAM
4-12	B	7.5YR 3/1			SILT LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks: Area recently cleared & planted with native prairie grasses.

Approved by HQUSACE 3/92

DP3

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1
Applicant/Owner: DTE
Investigator: P WYCHOFF, N. HILL

Date: 13 MAY 2008
County: MONROE
State: MI

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: _____
Transect ID: _____
Plot ID: DP3

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Carex vulpinoidea (35%)	H	OBL
2. Carex vesicaria (25%)	H	OBL
3. Ulmus americana	S	FACW-
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Forested wetland

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

__✓__ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 2 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- __✓__ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- __✓__ Water-Stained Leaves
- __✓__ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: runs parallel to railroad bed

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				SILT LOAM
1-3	A/E	10YR 3/1	—	—	SILT LOAM
3-12	B	10YR 4/2	10YR 4/6	many/ prominent	SILT LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

TREES resting in wetland

Data point located in Wetland B.

Approved by HQUSACE 3/92

DP4

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: Pinychoff, Nithill	Date: 13 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: ____ Transect ID: ____ Plot ID: DP4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Populus deltoides	T	FAC	9.		
2. Quercus rubra	T	FACU-	10.		
3. Ulmus americana	S	FACW-	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks): ____ Stream, Lake, or Tide Gauge ____ Aerial Photographs ____ Other ✓ No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: ____ Inundated ____ Saturated in Upper 12 Inches ____ Water Marks ____ Drift Lines ____ Sediment Deposits ____ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ____ Oxidized Root Channels in Upper 12" ____ Water-Stained Leaves ✓ Local Soil Survey Data ____ FAC-Neutral Test ____ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: 0 (in.) Depth to Free Water in Pit: -12 (in.) Depth to Saturated Soil: -12 (in.)	

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				SILT LOAM
1-5	A/E	10YR 3/1	—	—	SILT LOAM
5-12	B	10YR 4/2	10YR 5/6	common/prominent	SILT LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

DP 5

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: P. WYCHOFF, N. HILL	Date: 13 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
65% 1. Phalaris arundinacea	H	FACW+	9.		
30% 2. Cornus amomum	S	FACW	10.		
35% 3. Ulmus rubra	S	FAC	11.		
20% 4. Populus deltoides	T	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

✓ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ✓ Aerial Photographs
- ____ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 3 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ____ Inundated
- ✓ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Ø-1	O				
1-3	A	10YR 3/2	—	—	SILT LOAM
3-12	B	10YR 4/2	—	—	SILT LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: DATA POINTS taken within adjacent WETLAND "B"

Approved by HQUSACE 3/92

DP6

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: P. Wyckoff, N. Hill	Date: 13 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP6

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
75% 1. Phalaris arundinacea	H	FACW+	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Remainder of vegetation mixed sedges

HYDROLOGY

✓ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ✓ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: ✓ Inundated ✓ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ✓ Oxidized Root Channels in Upper 12" ✓ Water-Stained Leaves ✓ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: 2 (in.) Depth to Free Water in Pit: 0 (in.) Depth to Saturated Soil: 0 (in.)	
Remarks:	

DP 6

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-3	A	10YR 4/2	—	—	SILT LOAM
3-6	B	10YR 4/2	7.5YR 4/6	FEW/PROMINENT	SILT CLAY LOAM
6-12	B	10YR 4/2	10YR 5/6	FEW/PROMINENT	SILT CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Data Point 6 within Wetland C

Approved by HQUSACE 3/92

DP7

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE M1-188-1
Applicant/Owner: DTE
Investigator: P. WYCHOFF, N. HILL

Date: 15 MAY 2008
County: MONROE
State: MI

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID :
Transect ID:
Plot ID: DP7

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. PHRAGMITES AUSTRALIS	H	FACW+	9.		
2. CAREX vulpinoidea	H	OBL	10.		
3. PHALARIS ARUNDINACEA	H	FACW+	11.		
4. —	S		12.		
5. ACER SACCHARINUM	T	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

(✓) Recorded Data (Describe in Remarks):
- ( ) Stream, Lake, or Tide Gauge
- (✓) Aerial Photographs
- ( ) Other

( ) No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 1 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ( ) Inundated
- (✓) Saturated in Upper 12 Inches
- ( ) Water Marks
- ( ) Drift Lines
- ( ) Sediment Deposits
- ( ) Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ( ) Oxidized Root Channels in Upper 12"
- (✓) Water-Stained Leaves
- (✓) Local Soil Survey Data
- (✓) FAC-Neutral Test
- ( ) Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-6	A	10YR 3/1	—	—	SILT LOAM
6-9	B	10YR 4/2	10YR 4/6	FEW / PROMINENT	SILTY CLAY LOAM
9-14	B	10YR 5/2	7.5YR 5/8	MANY / PROMINENT	SILTY CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: too wet to sample deeper than 14"

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: deer

rained extensively day prior to sampling

Located in Wetland D

DP8

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: P. WYCHOFF, N. HILL	Date: 15 MAY 2009 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP8

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. PHRAGMITES AUSTRALIS (25%)	H	FACW+	9.		
2. PHALARIS ARUNDINACEA (30%)	H	FACW+	10.		
3.	S		11.		
4.	T		12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

✓ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ✓ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: ___ Inundated ✓ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12" ✓ Water-Stained Leaves ✓ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: 0 (in.) Depth to Free Water in Pit: 4 (in.) Depth to Saturated Soil: 0 (in.)	

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-4	A	10YR 3/1	10YR 5/4	FEW / DISTINCT	SILT LOAM
4-16	B	10YR 5/2	10YR 4/6	MANY / PROMINENT	Silty Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: TOO WET TO EXCAVATE DEEPER THAN 16"

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Located within Wetland C

DP9

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: P. WYCHOFF, N. HILL	Date: 15 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID: DP9

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
40% 1. PHALARIS ARUNDINACEA	H	FACW+	9.		
20% 2. BACOPA ROTUNDIFOLIA	H	OBL	10.		
25% 3. CORNUS AMOMUM	S	FACW+	11.		
4. ACER NEGUNDO	T	FACW-	12.		
5. Tilia americana	T	FACU	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 80%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 3 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ✓ Oxidized Root Channels in Upper 12"
- ✓ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-4	A	10YR 3/2	10YR 4/4	FEW / DISTINCT	SILT LOAM
4-8	B	10YR 3/2	—	—	SILT LOAM
8-18	B	10YR 5/2	10YR 4/6	MANY / PROMINENT	Silty Clay LOAM

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
✓ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Located in Wetland D

DP10

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: ML-188-1 Applicant/Owner: DTE Investigator: D. WYCHOFF, N. HILL	Date: 15 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID: DP10

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. ACER RUBRUM (20%)	T	FAC	9.		
2. ULMUS AMERICANA (5%)	T	FACW-	10.		
3. Ostrya virginiana (25%)	S	FACU-	11.		
4. QUERCUS BICOLOR (25%)	T	FACW+	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water:	0 (in.)
Depth to Free Water in Pit:	7 (in.)
Depth to Saturated Soil:	5 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Significant Precipitation day Before

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-½	O				
½-3	A	10YR 2/2	—	—	SILT LOAM
3-15	B	10YR 4/4	10YR 5/6	MANY/DISTINCT	Silty Clay LOAM

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
✓ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: Adjacent to Wetland D

DP 11

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/10/08 County: Monroe State: MICHIGAN
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP11

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Little Blue Stem	H		9.		
2. Cone Flower	H		10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks: Site recently Mowed and Planted to prairie grass.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: 14 (in.)
- Depth to Saturated Soil: 8 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- X Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Excessive rainfall in previous 72 Hours

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-½	O				
½-6	A	10YR 3/2	—	—	Silty Clay Loam
6-15	B	10YR 5/2	10YR 5/6	Many/Prominent	Silty Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks: Recently planted to native prairie grasses.

DP12

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: P. WYCHOFF, N. HILL	Date: 15 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP12

VEGETATION

Species composition

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
25% 1. PHALARIS ARUNDINACEA	H	FACW+	9.		
25% 2. Fragaria virginiana	H	FACU	10.		
25% 3. Euthamia graminifolia	H	FAC	11.		
100% 4. CORNUS AMOMUM	S	FACW	12.		
5. —	T		13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water:	0 (in.)
Depth to Free Water in Pit:	13 (in.)
Depth to Saturated Soil:	5 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ✓ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

DP12

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-0.5	O				
0.5-8	A	10YR 3/2	—	—	Silty Clay Loam
8-13	B	10YR 4/2	—	—	Silty Clay Loam
13-16	B	10YR 5/2	7.5YR 5/8	MANY/PROMINENT	Silty Clay Loam 2 photos

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Located in Wetland E.

Approved by HQUSACE 3/92

DP13

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: P. WYCHOFF, N. HILL	Date: 15 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? Yes (circled) No Is the site significantly disturbed (Atypical Situation)? Yes No (circled) Is the area a potential Problem Area? Yes No (circled) (If needed, explain on reverse.)	Community ID: ____ Transect ID: ____ Plot ID: DP13

VEGETATION

	Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
20%	1. RHAMNUS FRANGULA	H	FAC+	9.		
20%	2. Polygonum hydropiperoides	H (SHRUB)	OBL	10.		
25	3. QUERCUS BICOLOR	T	FACW+	11.		
20	4. ACER NEGUNDO	T	FACW-	12.		
20	5. ACER SACCHARINUM	T	FACW	13.		
	6.			14.		
	7.			15.		
	8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 14 (in.)

Depth to Saturated Soil: 4 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ✓ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ___ FAC-Neutral Test
- ✓ Other (Explain in Remarks)

Remarks: other: buttress trunks

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-0.5	O				
0.5-6	A	10YR 3/1	–	–	Silty Clay Loam
6-13	B	10YR 4/1	10YR 5/3	FEW / DISTINCT	SILTY CLAY LOAM
13-16	B	10YR 6/1	10YR 5/6	COMMON / PROMINENT	SILTY CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: rain extensive on day prior to sampling

Located in Wetland F.

DP14

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: P. WYCHOFF + NITHIL	Date: 15 MAY 2008 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP14 outside wetland F

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. RUBUS occidentalis	H	FACU	9.		
2. Polygonum hydropiperoides	H	OBL	10.		
3. Ostrya virginiana	S	FACU-	11.		
4. VITAS riparia	WV	FACW	12.		
5. ACER SACCHARUM	T	FACW	13.		
6. Quercus RUBRUM	T	FACU-	14.		
7. JUGLANS NIGRA	T	FACU	15.		
8.			16.		

100%
150%
20%
20%
20%

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 3/7

Remarks: no clear dominant herbaceous, diverse + < 20% for each sp.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

✓ No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: 15 (in.)
- Depth to Saturated Soil: 6 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ✓ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: Rained previous day

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Ø-1	O				
1-6	A	10YR 3/2	—	—	SILT LOAM
6-15	B	10YR 5/2	10YR 5/8	MANY / PROMT	SILTY CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: Rained a lot yesterday

decrease in buttress trunks + reduced hydrophytic vegetation
higher chroma than adjacent data point

Located in Forested area adjacent to wetland F

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

DP 15

Project/Site: MI-188-1
Applicant/Owner: DTE
Investigator: Wyckoff / Wolosyn

Date: 5/16/08
County: Monroe
State: MI

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID : _____
Transect ID: _____
Plot ID: DP 15

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. PHALARIS ARUNDINACEA	H	FACW+	9.		
2. Typha angustifolia	H	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
X Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12"
___ Water-Stained Leaves
X Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-4	A	10YR 3/1			SILTY CLAY LOAM
4-7	B	10 YR 3/1			SILTY CLAY LOAM
7-16	B	10YR 5/2	7.5 YR 5/6	MANY/PROM	CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks: POINT IN WETLAND "C"

DP16

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: WYCKOFF / WEIRICH	Date: 5-16-08 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP16

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. PHALARIS ARUNDINACEA	H	FACW+	9.		
2. Cornus amomum	S	FACW	10.		
3. Acer saccharinum	T	FACW	11.		
4. Ulmus americana	T	FACW-	12.		
5. Quercus bicolor	T	FACW	13.		
6. Populus deltoides	T	FAC	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- X Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 10 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- X Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-6	A	10YR 3/2	10YR 2/1	COMMON/FAINT	SILT LOAM
6-17	B	~~10YR 5/2~~ 10YR 3/2	10YR 4/6	FEW/PROM	SILTY CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: Point within wetland "I"

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

DP 17

Project/Site: DTE MI-189-1 Applicant/Owner: DTE Investigator: Gregg Bachman Peter Wyckoff	Date: 5/23/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: 17

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer Saccharinum	T	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 11" (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- X Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21- Lenawee Silty Clay Loam Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	—	/	/	/
1-8	A	10YR 3/1	10YR 5/4	Few / Distinct	Silty Clay Loam
8-15	B	10YR 5/3	7.5YR 4/6	Many / Prominent	Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

D.P. 18

Project/Site: DTE MI-188-1
Applicant/Owner: DTE
Investigator: Gregg Bachman Peter Wyckoff

Date: 5-23-08
County: Monroe
State:

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID :
Transect ID:
Plot ID: 18

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cornus amomum	S	FACW	9.		
2. Acer saccharinum	T	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 9" (in.)
Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12"
X Water-Stained Leaves
X Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 - Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	–	–	–	–
1-8	A	10YR 4/2	10YR 5/6	Common / Prominent	Silty Clay Loam
8-15	B	10YR 5/3	10YR 5/8	Many / Prominent	Silty Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)

Wetland Hydrology Present? (Yes) No

Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

D.P. 19

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE ML-188-1
Applicant/Owner: DTE
Investigator: G. Bachman P. Wyckoff

Date: 5-23-08
County: Monroe
State: MI

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID :
Transect ID:
Plot ID: 19

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW+	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-).

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
X Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 4 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12"
X Water-Stained Leaves
X Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 - Lenawee silty clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	-	-	-	-
1-7	A	10YR 3/1	10YR 5/6	Few/Prominent	Silt Loam
7-12	E	10YR 4/2	10YR 4/6	Common/Prominent	Silty Clay Loam
12-14	B	10YR 4/6	10YR 5/2	Many/Prominent	Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

1
D.P. 20

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: Gregg Bachman Peter Wyckoff	Date: 5-23-08 County: Monroe State: MI
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: 20

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Grass spp.	H	FACU	9.		
2. Acer Negundo	T	FAC+	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -15 (in.)

Depth to Saturated Soil: -15 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- X Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 - Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-½	O	–	–	–	–
½-2	A	10YR 3/2	–	–	Loamy Sand M.L.
2-15	B	10YR 4/6	–	–	Loamy Sand w/Gravel M.L.

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
X Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: Test pit located on top of dike

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

DP 21

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: Gregg Bachonw Peter Wyckoff	Date: 5-23-08 County: Monroe State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: 21

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Fraxinus pennsylvanica	T	FACW	9.		
2. Cornus amomum	S	FACW	10.		
3. Water hyssop	H	OBL	11.		
4. Vitis riparia	W.V.	FACW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 9 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- X Saturated in Upper 12 Inches
- X Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 - Lenawee silty clay loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-11	A	10YR 2/1	-	-	silt Loam - Small stones Pea
11-15	B	10YR 3/1	10YR 4/3	Many / Distinct	silty clay Loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
X Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
X Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

D.P. 22 up

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: Gregg Bachman Peter Wyckoff	Date: 5-23-08 County: Monroe State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: 22

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Fragaria virginiana	H	FACU	9.		
2. Grass	H	FACU	10.		
3. Cornus amomum	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other X No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: 0 (in.) Depth to Free Water in Pit: -15 (in.) Depth to Saturated Soil: -15 (in.)	
Remarks:	

SOILS

Map Unit Name (Series and Phase): 13A - Blount Loam

Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1/2	O	—	—	—	—
1/2-9	A	10YR 4/4	10YR 5/8	Few/ Prominent	Sandy Loam
9-15	B	10YR 4/4	10YR 5/8	Many Prominent	Sandy Clay Loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

Adjacent upland to Wetland W

DP 23 PEM

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: G Bachman P. Wyckoff	Date: 5-23-08 County: Monroe State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP23

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -16 (in.)

Depth to Saturated Soil: -16 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- __X__ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- __X__ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 13A Blount Loam

Drainage Class: Somewhat Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-½					
½-16	A	10YR 4/2	10YR 5/8	MANY/ PROMINENT	SILTY CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Located within Wetland W

D.P. 24

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff/Bachman	Date: 5/27/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 24

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cornus amomum	S	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -14 (in.)

Depth to Saturated Soil: -14 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

D.P. 24

SOILS

Map Unit Name (Series and Phase): 33 Pit-Aquents Complex

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1	—	—	ML SANDY CLAY LOAM
7-15	B	10YR 5/3			ML SANDY Clay Loam W/ Aggregate

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	Yes	(No)	
Hydric Soils Present?	Yes	(No)	

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

D.P. 25

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/27/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID: DP25

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cornus amomum	S	FACW	9.		
2. Vitis riparia	WV	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 1 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 33 Pit-Aquents Complex

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1/2	O	—	—	—	—
1/2-11	B	10YR 6/2	10YR 5/6	Common/Prominent	ML Clay Loam w/Rock

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Soil all made lands, not used in determination

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	(Yes)	No	
Hydric Soils Present?	(Yes)	No	

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: Soils not used in determination

Approved by HQUSACE 3/92

DP 26

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MT-188-1 Applicant/Owner: DTE Investigator: Wykoff/Bachman	Date: 5/27/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID: DP 26

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Fraxinus pennsylvanica	S	FACW	9.		
2. Cornus amomum	S	FACW	10.		
3. Phalaris arundinacea	H	FACW	11.		
4. Garlic Mustard	H		12.		
5. Vitis riparia	WV	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 80%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -15 (in.)

Depth to Saturated Soil: -15 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 33 Pit-Aquents Complex

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-15	A	10YR 3/3	-	-	ML Sandy Loam w/ Rock

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: Soil NOT USED FOR DETERMINATION
Clay Pottery + Brick

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: Soils not used for determination

Approved by HQUSACE 3/92

DP 27

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff/Bachman	Date: 5/27/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 27

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Ulmus americana	T	FACW-	9.		
2. Vitis riparia	WV	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 4 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- X Saturated in Upper 12 Inches
- X Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- ____ Local Soil Survey Data
- X FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 33- Pit-Aquents Complex

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	-	-	-	-
1-14	A	10YR 3/1	10 YR 5/8	Few/Prominent	CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DP 28

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/28/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID: DP 28

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Tilia americana (50%)	T	FACU	9.		
2. Acer saccharinum (20%)	T	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 6 (in.)

Depth to Free Water in Pit: -17 (in.)

Depth to Saturated Soil: -17 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- X Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-12	A	10YR 4/1	—	—	Silt Loam
12-17	B	10YR 5/2	10YR 5/6	Few/Prominent	Silt Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DP 24

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1
Applicant/Owner: DTE
Investigator: Wyckoff / Bachman

Date: 5/28/08
County: Monroe
State: Michigan

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: _____
Transect ID: _____
Plot ID: DP29

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Acer saccharinum	T	FACW
2. Toxicodendron radicans	WV	FAC
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: -15 (in.)
- Depth to Saturated Soil: -15 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- X Local Soil Survey Data
- ____ FAC-Neutral Test
- X Other (Explain in Remarks)

Remarks: Buttressed trunks

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1½	O	–	–	–	–
1½-7	A	10YR 4/2	10YR 4/3	Many/Faint	Clay Loam
7-15	B	10YR 3/2	10YR 4/6	Few/Prominent	Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- X Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DP

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1
Applicant/Owner: DTE
Investigator: G. BACHMAN J PHILLIPS

Date: 5/12/08
County: MONROE
State: MI

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: _____
Transect ID: _____
Plot ID: DP-30

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Quercus bicolor	tree	FACW+
2. Carya ovata	+,s	FACU-
3. Ulmus americana	+	FACW-
4. Crataegus calpodendron	s	
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 60%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
✓ No Recorded Data Available

Field Observations:
Depth of Surface Water: — (in.)
Depth to Free Water in Pit: 1 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
✓ Saturated in Upper 12 Inches
✓ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-8	A	10YR 3/1	—	—	SILT LOAM
8-12	B	10YR 4/3	10YR 5/6	P/ / DISTINCT	CLAY LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks: Located in Wetland L

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: JPhillips G Bachman	Date: 5/12/08 County: Monroe State: MI
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP 31

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Acer negundo	~~E~~T	Fac+
2. Ulmus americana	T	FACW-
3. Acer rubrum	T	FAC
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
✓ No Recorded Data Available

Field Observations:

Depth of Surface Water:	— (in.)
Depth to Free Water in Pit:	-12 (in.)
Depth to Saturated Soil:	-12 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
✓ Local Soil Survey Data
✓ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR 4/2	—	—	SILT CLAY LOAM
4-8	B	7.5YR 5/6	10YR 4/2	M PROMINENT	CLAY SILT LOAM
8-12	B	10YR 3/2	—	—	SILT LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-1BB-1 Applicant/Owner: DTE Investigator: J PHILLIPS & BACHMAN	Date: 5/12/98 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 32

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Typha angustifolia	H	OBL	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: 3 (in.)

Depth to Free Water in Pit: — (in.)

Depth to Saturated Soil: — (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ✓ Inundated
- ✓ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ✓ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	ORGANIC				
1-6	A	10yr 4/2	—	—	Clay Silt Loam
6-12	A	10yr 5/4	—	—	Clay Silt Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ✓ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Located in Wetland AA

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: R WICKOFF N HILL	Date: 5/12/08 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP 33

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Tilia americana	T	FACU	9.		
2. Quercus macrocarpa	T	FAC-	10.		
3. Rhamnus frangula	S	FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 60%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: 6 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ✓ Saturated in Upper 12 Inches
- ✓ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ✓ Oxidized Root Channels in Upper 12"
- ✓ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	ORGANIC				
1-9	A	10YR 4/1	—	—	CLAY SILT LOAM
9-12	A	10YR 4/2	10YR 5/6	FEW / DISTINCT	CLAY SILT LOAM

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: Located in Wetland L

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: BACHMAN, PHILLIPS	Date: 5/13/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 34

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Typha angustifolia	H	OBL	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100 %

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ✓ Inundated
- ✓ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ✓ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	ORGANIC				
4-12	A	10YR 6/2	—	—	CLAY

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ✓ Aquic Moisture Regime
- ___ Reducing Conditions
- ✓ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ✓ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

D.P. 35

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: G BACHMAN J PHILLIPS	Date: 5/13/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 35

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Ulmus americana	T	FACW-	9.		
2. Crataegus calpodendron	T		10.		
3. Cornus amomum	T	FACW+	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3	A	10YR 3/1	—	—	CLAY
3-12	A	10YR 5/3	—	—	Sandy Clay

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

D.P. 36

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1
Applicant/Owner: DTE
Investigator: G Bachman J Phillips

Date: 5/13/08
County: Monroe
State: Michigan

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID :
Transect ID:
Plot ID: DP 36

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Cornus amomum	S	FACW
2. Phalaris arundinacea	H	FACW+
3.		
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: 6 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	O				
4-12	A	3/1	—	—	CLAY

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
✓ Gleyed or Low-Chroma Colors

___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
✓ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MT-BB-1 Applicant/Owner: DT& Investigator: JPHILLIPS G BACHMAN	Date: County: State:
Do Normal Circumstances Exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID: DP37

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW+	9.		
2. Phragmites australis	H	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: ___ (in.)

Depth to Free Water in Pit: 5 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	O	-	-	-	-
4-12	A	3/1	-	-	CLAY

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
✓ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: _____ Applicant/Owner: _____ Investigator: G BACHMAN J PHILLIPS	Date: _____ County: _____ State: _____
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 38

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Ulmus americana	T	FACW-	9.		
2. Quercus macrocarpa	T	FAC-	10.		
3. Cornus amomum	S	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 70%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: 10 (in.)

Depth to Saturated Soil: 4 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ✓ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____

Drainage Class: POORLY DRAINED

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	O				
4-12	A	10yr 3/2	—	—	CLAY

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
✓ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: _____ Applicant/Owner: _____ Investigator: G BACHMAN J PHILLIPS	Date: _____ County: _____ State: _____
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 39

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Carex amomum	S	FACW	9.		
2. Phalaris arundinacea	H	FACW+	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)

Depth to Free Water in Pit: 8 (in.)

Depth to Saturated Soil: 4 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ✓ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ✓ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10yr 3/2			CLAY

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
✓ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
✓ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

W.P

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: _____
Applicant/Owner: _____
Investigator: G.BACHMAN J.PHILLIPS

Date: 5/15/08
County: _____
State: _____

Do Normal Circumstances Exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: _____
Transect ID: _____
Plot ID: DP 40

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer saccharinum	T	FACW	9.		
2. Acer negundo	S	FAC	10.		
3. Carya laciniosa	S	FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: — (in.)
Depth to Free Water in Pit: 10 (in.)
Depth to Saturated Soil: 5 (in.)

Wetland hydrology Indicators:
Primary Indicators:
____ Inundated
✓ Saturated in Upper 12 Inches
✓ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
____ Oxidized Root Channels in Upper 12"
✓ Water-Stained Leaves
✓ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____

Drainage Class: _____

Field Observations
Confirm Mapped Type? Yes No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10yr 3/2	—	—	

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
✓ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
✓ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: _____ Applicant/Owner: _____ Investigator: _____	Date: _____ County: _____ State: _____
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 4/

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer Saccharinum	T	FACW	9.		
2. Cornus amomum	S	FACW	10.		
3. Rhus glabra	S	?	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 60%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__✓__ No Recorded Data Available

Field Observations:

Depth of Surface Water: ____ (in.)

Depth to Free Water in Pit: _____(in.)

Depth to Saturated Soil: _____(in.)

Wetland hydrology Indicators:
Primary Indicators:
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
____ Oxidized Root Channels in Upper 12"
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____

Drainage Class: _____

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10yr 4/3	—	—	Sandy Loam
4-16	A	10yr 5/4	—	—	Loamy Sand

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: _____ Applicant/Owner: _____ Investigator: P WYCKOFF G BACHMAN	Date: 5/16/08 County: MONROE State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 42

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. WHEAT			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0

Remarks: TILLED AG FIELD

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: _____(in.)

Depth to Free Water in Pit: _____(in.)

Depth to Saturated Soil: _____(in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 26B MILTON CLAY LOAM

Drainage Class: WELL DRAINED

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A/E	10yr 3/4	—	—	SANDY SILT LOAM
6-15	B	10yr 5/6	—	—	CLAY LOAM

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks:

D.P. 42

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE S.E. Applicant/Owner: DTE Investigator: G.Bachman Peter Wyckoff	Date: 5-21-08 County: Monroe State: MI
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 42

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer Saccharinum	Tree	FACW	9.		
2. Acer Negundo	Shrub	FAC+	10.		
3. Vitis Riparia	W.V.	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -16 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- X Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- X Local Soil Survey Data
- ____ FAC-Neutral Test
- X Other (Explain in Remarks)

Remarks: Buttressed Trunks

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7	A-E	10YR 3/1	—	—	Silt Loam
8-16	B	10YR 5/2	10YR 5/8	Many/Prominent	Silty Clay Loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
X Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
X Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

D.P 43

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Gregg Bachman Peter Wyckoff	Date: 5-21-08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 43

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer Saccharinum	T	FACW	9.		
2. Cornus Amomum	S	FACW	10.		
3. Vitis Riparia	W.V.	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -16 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- X Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- X Local Soil Survey Data
- X FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A-E	10YR 3/1	10YR 5/6	Few Prominent	Silty Clay Loam
8-16	B	7.5YR 5/6	10YR 5/1	Many Prominent	Silty Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

D.P. 44

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: D.T.E. MI-188-1
Applicant/Owner: DTE
Investigator: Gregg Bachman Peter Wyckoff

Date: 5-21-08
County: Monroe
State: Michigan

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: _____
Transect ID: _____
Plot ID: 44

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phragmites australis	H	FACW	9.		
2. Acer Saccharinum	T	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
X Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 7" (in.)
Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12"
X Water-Stained Leaves
X Local Soil Survey Data
X FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-11	A	10YR 3/1	—	—	Silty Clay loam
11-15	B	10YR 3/2	10YR 5/3	Few Faint	Silty Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Excavation beyond 15" difficult due to water in test hole.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

D.P.45

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: Gregg Bachman Peter Wyckoff	Date: 5-21-08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: D.P.45

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer Saccharinum	T	FACW	9.		
2. Phalaris arundinacea	H	FACW+	10.		
3. Ulmus americana	T	FACW-	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Presence of Water hyssop around data point (obl.) pockets of Lilly of Valley (NI.)

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: 6 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- X Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- X Local Soil Survey Data
- ____ FAC-Neutral Test
- X Other (Explain in Remarks)

Remarks: Buttressed Trunks

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	-	-	-	-
1-12	A/E	10YR 3/2	-	-	Silt Loam
12-15	B	10YR 5/4	10YR 5/6	Common/Distinct	Silty Clay Loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
X Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

D.P 46

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188
Applicant/Owner: DTE
Investigator: Gregg Bachman Peter Wyckoff

Date: 5-21-08
County: Monroe
State: Michigan

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? (Yes) No
Is the area a potential Problem Area? (Yes) No
(If needed, explain on reverse.)

Community ID: _____
Transect ID: _____
Plot ID: 46

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW+	9.		
2. water hyssop	H	OBL	10.		
3. Laportea canadensis	H	FACW	11.		
4. Rosa multiflora	S	FACU	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: Multiflora Rose dominate canopy cover 65%

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: -4 (in.)
Depth to Saturated Soil: -4 (in.)

Wetland hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12"
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Soil pit on roadbed not able to excavate beyond 4"

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? Yes (No)

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	-	-	-	-
1-4		-			ML - Sand/Gravel

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: Soil / Test Pit in road bed unable to excavate beyond 4" depth.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: Soils not used to determine wetland.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

1
D.P. 47

Project/Site: DTE MI-188-1 Applicant/Owner: DTE Investigator: G. Bachman P. Wyckoff	Date: 5-21-08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : Transect ID: Plot ID: 47

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer nugundo	T	FAC+	9.		
2. Cornus amomum	S	FACW	10.		
3. Acer saccharinum	T	FACW	11.		
4. Vitis riparia	W.V.	FACW	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -14 (in.)

Depth to Saturated Soil: -14 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- X Local Soil Survey Data
- ___ FAC-Neutral Test
- X Other (Explain in Remarks)

Remarks: Buttressed Trunks

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0 - 1/2	O	—	—	—	—
1/2 - 12	A	10YR 2/1	—	—	Silt Loam
12 - 14	B	10YR 3/1	10YR 4/6	Common/Prominent	Silt Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

DP. 48

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: DTE MI-188-1
Applicant/Owner: DTE
Investigator: G. Bachman P. Wyckoff

Date: 5-21-08
County: MONROE
State: MICHIGAN

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? (Yes) No
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID :
Transect ID:
Plot ID: DP 48

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Acer Nugundo	T	FAC+
2. Cornus amomum	S	FACW
3. Populus deltoides	T	FAC+
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: -14 (in.)
Depth to Saturated Soil: -14 (in.)

Wetland hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12"
___ Water-Stained Leaves
X Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Test Pit on top of Dike

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? Yes (No)

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-9	A	10YR 4/2	10YR 4/6	Common/Prominent	ML Sand Loam w/ Gravels
9-14	B	10YR 4/4	10YR 4/2	Common/Distinct	M.L. Sand Loam w/ Gravel

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Test Pit on Dike/Berm Top (Made Lands) Suspected imported fill no borrow areas present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: Dike/Berm Large 8' Top width 4.5'+/- high. 3:1 side slope

Approved by HQUSACE 3/92

D.P. 49

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1
Applicant/Owner: DTE
Investigator: Wyckoff / Bachman

Date: 5/30/08
County: Monroe
State: Michigan

Do Normal Circumstances Exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID :
Transect ID:
Plot ID: DP49

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Acer saccharinum	T	FACW
2. Ulmus americana	T	FACW
3. Populus deltoides	T	FAC
4. Phragmites australis	H	FACW
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: Ø (in.)
Depth to Free Water in Pit: 3 (in.)
Depth to Saturated Soil: Ø (in.)

Wetland hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12"
X Water-Stained Leaves
X Local Soil Survey Data
X FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-½	O	–	–	–	–
½-7	A	10YR 4/2	10YR 5/6	Few/Prominent	Silty Clay Loam
7-14	B	10YR 5/2	7.5YR 4/6	Many/Prominent	Silty Clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

Approved by HQUSACE 3/92

D.P. 50

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: ML-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP 50

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phragmites australis	H	FACW	9.		
2. Vitis riparia	WV	FACW	10.		
3. Populus deltoides	T	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge X Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: ___ Inundated X Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12" X Water-Stained Leaves X Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: Ø (in.) Depth to Free Water in Pit: 9 (in.) Depth to Saturated Soil: 5 (in.)	

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1½	O	-	-	-	-
1½-9	A	10YR 4/1	10YR 5/8	Common/Prominent	Silty Clay
9-16	B	10YR 5/1	10YR 5/8	Many/Prominent	Silty Clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

DP 51

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 51

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks: Data point on road shoulder. No vegetation Present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: _____ (in.)
- Depth to Saturated Soil: _____ (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: Point on Road shoulder - impenetrable

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-?					Gravel Road ML

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Point on road shoulder. Impenetrable by shovel

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: Point on road shoulder

DP52

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP52

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW	9.		
2. Ulmus americana	T	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge X Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: ___ Inundated X Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): X Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves X Local Soil Survey Data X FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: 0 (in.) Depth to Free Water in Pit: -16 (in.) Depth to Saturated Soil: 4 (in.)	

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): _____

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	-	-	-	-
1-6	A	10YR 4/1	-	-	Silty Clay Loam
6-16	B	10YR 5/2	10YR 4/6	Common/Prominent	Silty Clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks:

DP 53

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wilkoff / Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 53

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Dandelion	H		9.		
2. Horsetail	H		10.		
3. Fragaria Virginiana	H		11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: Recently mowed

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____(in.)

Depth to Free Water in Pit: _____(in.)

Depth to Saturated Soil: _____(in.)

Wetland hydrology Indicators:

Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

DP 54

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP54

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phragmites australis	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- X Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: Ø (in.)
- Depth to Free Water in Pit: 3 (in.)
- Depth to Saturated Soil: Ø (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ✓ Saturated in Upper 12 Inches
- ___ Water Marks
- X Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

DP 55

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff/ Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID: * Transect ID: Plot ID: DP55

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Populus deltoides	T	FAC	9.		
2. Acer negundo	T	FAC+	10.		
3. Actium minus	H	NI	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 67%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ✓ No Recorded Data Available	Wetland hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: 0 (in.) Depth to Free Water in Pit: -15 (in.) Depth to Saturated Soil: -15 (in.)	

Remarks:

DP56

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1
Applicant/Owner: DTE
Investigator: Wyckoff / Bachman

Date: 5/30/08
County: Monroe
State: Michigan

Do Normal Circumstances Exist on the site?	Yes	(No)
Is the site significantly disturbed (Atypical Situation)?	(Yes)	No
Is the area a potential Problem Area? (If needed, explain on reverse.)	(Yes)	No

Community ID: _____
Transect ID: _____
Plot ID: DP56

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Acer negundo	T	FAC+
2. Populus deltoides	T	FAC
3. Rumex crispus	H	FACU
4. Garlic Mustard	H	
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: -5 (in.)
- Depth to Saturated Soil: -5 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

DP 57

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MP-188-1 Applicant/Owner: DTE Investigator: Wyckoff/Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP57

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer saccharinum	T	FacW	9.		
2. Acer negundo	T	FAC+	10.		
3. Populus deltoides	T	FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: 8 (in.)
- Depth to Saturated Soil: 1 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- X Saturated in Upper 12 Inches
- ____ Water Marks
- X Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 10 Lenawee Silty Clay Loam, Ponded

Drainage Class: Very Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2	O	-	-	-	-
2-16	B	10YR 5/6	10YR 4/2	Many	Clay

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: NO A Horizon present, Appears to have been previously excavated
Soils not used in determination

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

D.P. 58

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP58

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer negundo	T	FACt	9.		
2. Populus deltoides	T	FAC	10.		
3. Garlic Mustard	H		11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

_X_ No Recorded Data Available

Field Observations:

Depth of Surface Water: Ø (in.)

Depth to Free Water in Pit: -16 (in.)

Depth to Saturated Soil: 2 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ____ Inundated
- _X_ Saturated in Upper 12 Inches
- ____ Water Marks
- _X_ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- _X_ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- _X_ Other (Explain in Remarks)

Remarks: Buttressed Trunks

SOILS

Map Unit Name (Series and Phase): 10 Lenawee Silty Clay Loam, Ponded

Drainage Class: Very Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O	-	-	-	-
1-8	A	10YR 6/4	10YR 5/8	Common/Prominent	Sand
8-16	B	10YR 6/1	10YR 5/6	Common/Prominent	Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- X Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks:

D.P. 59

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP59

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100 %

Remarks: On top of Berm

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: -8 (in.)
- Depth to Saturated Soil: -8 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: On top of Berm

SOILS

Map Unit Name (Series and Phase): 10 Lenawee Silty Clay Loam, Ponded

Drainage Class: Very Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-½	O	-	-	-	-
½-8	A	10YR 6/3	-	-	Sandy Gravel

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: MC - Berm Soils not used for determinati

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Data Point on Berm

DP 60

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff/Bachman	Date: 5/30/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 60

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Ceratophyllum demersum	H	OBL	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- X Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 8 (in.)

Depth to Free Water in Pit: Ø (in.)

Depth to Saturated Soil: Ø (in.)

Wetland hydrology Indicators:

Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 10 Lenawee silty Clay Loam, Ponded

Drainage Class: Very Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	A	GLEY2 3/10B	-	-	Clay ML

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: ML Dredge spoils

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Dredge basin for spoils from Lake Erie

Soils not used for determination

Approved by HQUSACE 3/92

DP61

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/4/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP61

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). _____

Remarks: NO VEGETATION Present - Data Point on Gravel Road

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: – (in.)

Depth to Saturated Soil: – (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: NO SOIL BORING TAKEN. DATA POINT IN ROAD BED

SOILS

Map Unit Name (Series and Phase): 10 Lenawee Silty Clay Loam Ponded

Drainage Class: Very Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-??					ML Gravel Road

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: D.P. on Gravel Road. NO PIT Excavated

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks: Data Point on Gravel Road. Not a Wetland

D.P. 62

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/4/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP62

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Populus deltoides	T	FAC	9.		
2. Fraxinus pennsylvanica	S	FACW	10.		
3. Phalaris arundinacea	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100 %

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -15 (in.)

Depth to Saturated Soil: -15 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- X Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 10 Lenawee Silty Clay Loam Ponded

Drainage Class: Very Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	A	10YR 4/2	-	-	ML Loam
1-15	B	10YR 3/3	10YR 4/6	Many/Distinct	ML Loam

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks: Made-Land with 3"-6" Rock

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Soil not used in wetland determination

D.P. 63

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/5/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? (Yes) No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: DP 63

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cornus amomum	S	FACW	9.		
2. Toxicodendron radicans	H	FAC	10.		
3. Populus deltoides	T	FAC	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -12 (in.)

Depth to Saturated Soil: -12 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: No evidence of hydrology present

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-12	A	10YR 3/2	10YR 5/4	Common/Distinct	ML Loam w/aggregate

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Made land - Fill w/ small aggregate

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks: Soil is made land - not used in wetland determination.

DP 64

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/5/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP64

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Fraxinus pennsylvanica	S	FACW	9.		
2. Cornus amomum	S	FACW	10.		
3. Ulmus americana	T	FACW	11.		
4. Toxicodendron radicans	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: Ø (in.)

Depth to Free Water in Pit: -15 (in.)

Depth to Saturated Soil: Ø (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- X Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- X Local Soil Survey Data
- X FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-14	A	10YR 3/1	10YR 4/3	Common/Distinct	Silty Clay Loam
14-16	B	10YR 5/1	10YR 5/6	Many/Prominent	Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Crayfish burrows present

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: Wetland JJ

DP 65

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/5/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP 65

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phragmites australis	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 4 (in.)

Depth to Free Water in Pit: 0 (in.)

Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- X Inundated
- X Saturated in Upper 12 Inches
- X Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- X Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-6	A	10YR 4/2	10YR 5/6	Few/Prominent	Silty Clay Loam
6-12	B	10YR 5/2	10YR 4/6	Many/Prominent	Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Wetland II

Approved by HQUSACE 3/92

DP66

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/5/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP66

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phalaris arundinacea	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- X Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -16 (in.)

Depth to Saturated Soil: -16 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- X Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- X Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2	O				
2-9	A	10YR 3/1	10YR 4/3	Few/Distinct	Silty Clay Loam
9-16	B	10YR 4/1	10YR 4/6	Common/Prominent	Silty Clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: Wetland C

Approved by HQUSACE 3/92

DP 67

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff		Date: 6/5/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	(Yes) No Yes (No) Yes (No)	Community ID : _____ Transect ID: _____ Plot ID: DP67

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Water hyssop	H	OBL	9.		
2. Cornus amomum	S	FACW	10.		
3. Ulmus americana	T	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -16 (in.)

Depth to Saturated Soil: -16 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- X Local Soil Survey Data
- X FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-½	O				
½-8	A	10YR 3/1	10YR 4/6	Few/Prominent	Silty Clay Loam
8-16	B	10YR 4/1	10YR 5/8	Many/Prominent	Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Wetland HH

Approved by HQUSACE 3/92

DP68

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-188-1 Applicant/Owner: DTE Investigator: Wyckoff	Date: 6/5/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP68

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Water hyssop	H	OBL	9.		
2. Phalaris arundinacea	H	FACW	10.		
3. Acer saccharinum	T	FACW	11.		
4. Populus deltoides	T	FAC	12.		
5. Ulmus americana	T	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -16 (in.)

Depth to Saturated Soil: -16 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ____ Oxidized Root Channels in Upper 12"
- ____ Water-Stained Leaves
- X Local Soil Survey Data
- X FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 21 Lenawee Silty Clay Loam

Drainage Class: Poorly Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	O				
1-12	A	10YR 3/1	10YR 4/4	Few/Distinct	Silt Loam
12-16	B	10YR 4/1	10YR 4/6	Common/Prominent	Silty Clay Loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- X Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Wetland I

DP 69

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MI-108-1 Applicant/Owner: DTE Investigator: Wyckoff / Bachman	Date: 6/13/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP69

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Salix alba	S	FACW	9.		
2. Phragmites australis	H	FACW	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)

Depth to Free Water in Pit: -20 (in.)

Depth to Saturated Soil: -20 (in.)

Wetland hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 37 B Ottokee Variant Fine Sand

Drainage Class: Moderately Well Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-20	A/B	10YR 6/3			Sand

Hydric Soil Indicators:

___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed or Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes)	No	(Circle)
Wetland Hydrology Present?	Yes	(No)	
Hydric Soils Present?	Yes	(No)	

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks:

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: MF-188-1 Applicant/Owner: DTE Investigator: Wyckoff/Bachman	Date: 6/13/08 County: Monroe State: Michigan
Do Normal Circumstances Exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: DP70

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Phragmites australis	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- X Aerial Photographs
- ___ Other

___ No Recorded Data Available

Field Observations:
- Depth of Surface Water: 0 (in.)
- Depth to Free Water in Pit: 0 (in.)
- Depth to Saturated Soil: 0 (in.)

Wetland hydrology Indicators:
Primary Indicators:
- ___ Inundated
- X Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12"
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- X FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name (Series and Phase): 37B Ottolee Variant Fine Sand

Drainage Class: Moderately Well Drained

Taxonomy (Subgroup): _____

Field Observations
Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-15	A/B	10YR 5/2			Sand

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: Lake erie sand dune

APPENDIX C

FUNCTIONS/VALUES ASSESSMENT FORMS

Wetland Evaluation Supporting Documentation:

Listed below are the thirteen functions and values typically considered by the U.S. Army Corps of Engineers Regulatory Branch for Section 404 wetland permits. The Considerations and Qualifiers associated with each function and value were found in The Highway Methodology Workbook Supplement: Wetland Functions and Values: *A Descriptive Approach* and originally used for a New Hampshire highway project. The published considerations are flexible, based on best professional judgment and interdisciplinary team consensus and provide a comprehensive base for use in other projects.

Groundwater Recharge/Discharge:

This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. Recharge should relate to the potential for the wetland to contribute water to an aquifer. Discharge should relate to the potential for the wetland to serve as an area where groundwater can be discharged to the surface. It refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.

CONSIDERATIONS/QUALIFIERS

1. Public or private wells occur downstream of the wetland.
2. Potential exists for public or private wells downstream of the wetland.
3. Wetland is underlain by stratified drift.
4. Gravel or sandy soils present in or adjacent to the wetland.
5. Fragipan does not occur in the wetland.
6. Fragipan, impervious soils, or bedrock does occur in the wetland.
7. Wetland is associated with a perennial or intermittent watercourse.
8. Signs of groundwater recharge are present or piezometer data demonstrates recharge.
9. Wetland is associated with a watercourse but lacks a defined outlet or contains a constricted outlet.
10. Wetland contains only an outlet, no inlet.
11. Groundwater quality of stratified drift aquifer within or downstream of wetland meets drinking water standards.
12. Quality of water associated with the wetland is high.
13. Signs of groundwater discharge are present (e.g., springs).
14. Water temperature suggests it is a discharge site.
15. Wetland shows signs of variable water levels.
16. Piezometer data demonstrates discharge.
17. Other

Floodflow Alteration (Storage and Desynchronization):

This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events and the gradual release of floodwaters. It adds to the stability of the wetland ecological system or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas.

CONSIDERATIONS/QUALIFIERS

1. Area of this wetland is large relative to its watershed.
2. Wetland occurs in the upper portions of its watershed.
3. Effective flood storage is small or non-existent upslope of or above the wetland.
4. Wetland watershed contains a high percent of impervious surfaces.
5. Wetland contains hydric soils which are able to absorb and detain water.
6. Wetland exists in a relatively flat area that has flood storage potential.
7. Wetland has an intermittent outlet, ponded water, or signs are present of variable water level.
8. During flood events, this wetland can retain higher volumes of water than under normal or average rainfall conditions.
9. Wetland receives and retains overland or sheet flow runoff from surrounding uplands.
10. In the event of a large storm, this wetland may receive and detain excessive flood water from a nearby watercourse.
11. Valuable properties, structures, or resources are located in or near the floodplain downstream from the wetland.
12. The watershed has a history of economic loss due to flooding.
13. This wetland is associated with one or more watercourses.
14. This wetland watercourse is sinuous or diffuse.
15. This wetland outlet is constricted.
16. Channel flow velocity is affected by this wetland.
17. Land uses downstream are protected by this wetland.
18. This wetland contains a high density of vegetation.
19. Other

Fish and Shellfish Habitat:

This function considers the effectiveness of seasonal or permanent waterbodies associated with the wetland in question for fish and shellfish habitat.

CONSIDERATIONS/QUALIFIERS

1. Forest land dominant in the watershed above this wetland.
2. Abundance of cover objects present.

STOP HERE IF THIS WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE

3. Size of this wetland is able to support large fish/shellfish populations.
4. Wetland is part of a larger, contiguous watercourse.
5. Wetland has sufficient size and depth in open water areas so as not to freeze solid and retain some open water during winter.
6. Stream width (bank to bank) is more than 50 feet.
7. Quality of the watercourse associated with this wetland is able to support healthy fish/shellfish populations.
8. Streamside vegetation provides shade for the watercourse.
9. Spawning areas are present (submerged vegetation or gravel beds).
10. Food is available to fish/shellfish populations within this wetland.
11. Barrier(s) to anadromous fish (such as dams, including beaver dams, waterfalls, road crossing) are absent from the stream reach associated with this wetland.
12. Evidence of fish is present.
13. Wetland is stocked with fish.
14. The watercourse is persistent.
15. Man-made streams are absent.

16. Water velocities are not too excessive for fish usage.
17. Defined stream channel is present.
18. Other

Sediment/Toxicant/Pathogen Retention:

This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas.

CONSIDERATIONS/QUALIFIERS
1. Potential sources of excess sediment are in the watershed above the wetland.
2. Potential or known sources of toxicants are in the watershed above the wetland.
3. Opportunity for sediment trapping by slow moving water or deepwater habitat are present in this wetland.
4. Fine grained mineral or organic soils are present.
5. Long duration water retention time is present in this wetland.
6. Public or private water sources occur downstream.
7. The wetland edge is broad and intermittently aerobic.
8. The wetland is known to have existed for more than 50 years.
9. Drainage ditches have not been constructed in the wetland.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

10. Wetland is associated with an intermittent or perennial stream or a lake.
11. Channelized flows have visible velocity decreases in the wetland.
12. Effective floodwater storage in wetland is occurring. Areas of impounded open water are present.
13. No indicators of erosive forces are present. No high water velocities are present.
14. Diffuse water flows are present in the wetland.
15. Wetland has a high degree of water and vegetation interspersion.
16. Dense vegetation provides opportunity for sediment trapping and/or signs of sediment accumulation by dense vegetation is present.
17. Other

Nutrient Removal/Retention/Transformation:

This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries. This function considers the effectiveness of the wetland as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

CONSIDERATIONS/QUALIFIERS
1. Wetland is large relative to the size of its watershed.
2. Deep water or open water habitat exists.
3. Overall potential for sediment trapping exists in the wetland.
4. Potential sources of excess nutrients are present in the watershed above the wetland.
5. Wetland saturated for most of the season. Ponded water is present in the wetland.

6. Deep organic/sediment deposits are present.
7. Slowly drained fine grained mineral or organic soils are present.
8. Dense vegetation is present.
9. Emergent vegetation and/or dense woody stems are dominant.
10. Opportunity for nutrient attenuation exists.
11. Vegetation diversity/abundance sufficient to utilize nutrients.

STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

12. Waterflow through this wetland is diffuse.
13. Water retention/detention time in this wetland is increased by constricted outlet or thick vegetation.
14. Water moves slowly through this wetland.
15. Other

Production Export (Nutrient):

This function relates to the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

CONSIDERATIONS/QUALIFIERS

1. Wildlife food sources grow within this wetland.
2. Detritus development is present within this wetland
3. Economically or commercially used products found in this wetland.
4. Evidence of wildlife use found within this wetland.
5. Higher trophic level consumers are utilizing this wetland.
6. Fish or shellfish develop or occur in this wetland.
7. High vegetation density is present.
8. Wetland exhibits high degree of plant community structure/species diversity.
9. High aquatic vegetative diversity/abundance is present.
10. Nutrients exported in wetland watercourses (permanent outlet present).
11. "Flushing" of relatively large amounts of organic plant material occurs from this wetland.
12. Wetland contains flowering plants that are used by nectar-gathering insects.
13. Indications of export are present.
14. High production levels occurring, however, no visible signs of export (assumes export is attenuated).
15. Other

Sediment/Shoreline Stabilization:

This function relates to the effectiveness of a wetland to stabilize streambanks and shorelines against erosion.

CONSIDERATIONS/QUALIFIERS

1. Indications of erosion or siltation are present.
2. Topographical gradient is present in wetland.
3. Potential sediment sources are present up-slope.
4. Potential sediment sources are present upstream.
5. No distinct shoreline or bank is evident between the waterbody and the wetland or upland.

6. A distinct step between the open waterbody or stream and the adjacent land exists (i.e., sharp bank) with dense roots throughout.
7. Wide wetland (>10') borders watercourse, lake, or pond.
8. High flow velocities in the wetland.
9. The watershed is of sufficient size to produce channelized flow.
10. Open water fetch is present.
11. Boating activity is present.
12. Dense vegetation is bordering watercourse, lake, or pond.
13. High percentage of energy-absorbing emergents and/or shrubs border a watercourse, lake, or pond.
14. Vegetation is comprised of large trees and shrubs that withstand major flood events or erosive incidents and stabilize the shoreline on a large scale (feet).
15. Vegetation is comprised of a dense resilient herbaceous layer that stabilizes sediments and the shoreline on a small scale (inches) during minor flood events or potentially erosive events.
16. Other

Wildlife Habitat:

This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered. Species lists of observed and potential animals should be included in the wetland assessment report.

CONSIDERATIONS/QUALIFIERS

1. Wetland is not degraded by human activity.
2. Water quality of the watercourse, pond, or lake associated with this wetland meets or exceeds Class A or B standards.
3. Wetland is not fragmented by development.
4. Upland surrounding this wetland is undeveloped.
5. More than 40% of this wetland edge is bordered by upland wildlife habitat (e.g., brushland, woodland, active farmland, or idle land) at least 500 feet in width.
6. Wetland is contiguous with other wetland systems connected by a watercourse or lake.
7. Wildlife overland access to other wetlands is present.
8. Wildlife food sources are within this wetland or are nearby.
9. Wetland exhibits a high degree of interspersion of vegetation classes and/or open water.
10. Two or more islands or inclusions of upland within the wetland are present.
11. Dominant wetland class includes deep or shallow marsh or wooded swamp.
12. More than three acres of shallow permanent open water (less than 6.6 feet deep), including streams in or adjacent to wetland, are present.
13. Density of the wetland vegetation is high.
14. Wetland exhibits a high degree of plant species diversity.
15. Wetland exhibits a high degree of diversity in plant community structure (e.g., tree/ shrub/vine/grasses/mosses)
16. Plant/animal indicator species are present. (List species for project)
17. Animal signs observed (tracks, scats, nesting areas, etc.)
18. Seasonal uses vary for wildlife and wetland appears to support varied population diversity/abundance during different seasons.
19. Wetland contains or has potential to contain a high population of insects.
20. Wetland contains or has potential to contain large amphibian populations.

21. Wetland has a high avian utilization or its potential.
22. Indications of less disturbance-tolerant species are present.
23. Signs of wildlife habitat enhancement are present (birdhouses, nesting boxes, food sources, etc.).
24. Other

Recreation (Consumptive and Non-Consumptive):

This value considers the effectiveness of the wetland and associated water-courses to provide recreational opportunities such as canoeing, boating, fishing, hunting, and other active or passive recreational activities. Consumptive activities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland, whereas non-consumptive activities do not.

CONSIDERATIONS/QUALIFIERS
1. Wetland is part of a recreation area, park, forest, or refuge.
2. Fishing is available within or from the wetland.
3. Hunting is permitted in the wetland.
4. Hiking occurs or has potential to occur within the wetland.
5. Wetland is a valuable wildlife habitat.
6. The watercourse, pond, or lake associated with the wetland is unpolluted.
7. High visual/aesthetic quality of this potential recreation site.
8. Access to water is available at this potential recreation site for boating, canoeing, or fishing.
9. The watercourse associated with this wetland is wide and deep enough to accommodate canoeing and/or non-powered boating.
10. Off-road public parking available at the potential recreation site.
11. Accessibility and travel ease is present at this site.
12. The wetland is within a short drive or safe walk from highly populated public and private areas.
13. Other

Educational/Scientific Value:

This value considers the effectiveness of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.

CONSIDERATIONS/QUALIFIERS
1. Wetland contains or is known to contain threatened, rare, or endangered species.
2. Little or no disturbance is occurring in this wetland.
3. Potential educational site contains a diversity of wetland classes which are accessible or potentially accessible.
4. Potential educational site is undisturbed and natural.
5. Wetland is considered to be a valuable wildlife habitat.
6. Wetland is located within a nature preserve or wildlife management area.
7. Signs of wildlife habitat enhancement present (bird houses, nesting boxes, food sources, etc.).
8. Off-road parking at potential educational site suitable for school bus access in or near wetland.
9. Potential educational site is within safe walking distance or a short drive to schools.
10. Potential educational site is within safe walking distance to other plant communities.
11. Direct access to perennial stream at potential educational site is available.

12. Direct access to pond or lake at potential educational site is available.
13. No known safety hazards exist within the potential educational site.
14. Public access to the potential educational site is controlled.
15. Handicap accessibility is available.
16. Site is currently used for educational or scientific purposes.
17. Other

Uniqueness/Heritage:

This value relates to the effectiveness of the wetland or its associated waterbodies to produce certain special values. Special values may include such things as archaeological sites, unusual aesthetic quality, historical events, relative importance of wetland class geographicly, or unique plants, animals, or geologic features.

CONSIDERATIONS/QUALIFIERS

1. Upland surrounding wetland is primarily urban.
2. Upland surrounding wetland is developing rapidly.
3. More than 3 acres of shallow permanent open water (less than 6.6 feet deep), including streams, occur in wetlands.
4. Three or more wetland classes are present.
5. Deep and/or shallow marsh or wooded swamp dominate.
6. High degree of interspersion of vegetation and/or open water occur in this wetland.
7. Well-vegetated stream corridor (15 feet on each side of the stream) occurs in this wetland.
8. Potential educational site is within a short drive or a safe walk from schools.
9. Off-road parking at potential educational site is suitable for school buses.
10. No known safety hazards exist within this potential educational site.
11. Direct access to perennial stream or lake exists at potential educational site.
12. Two or more wetland classes are visible from primary viewing locations.
13. Low-growing wetlands (marshes, scrub-shrub, bogs, open water) are visible from primary viewing locations.
14. Half an acre of open water or 200 feet of stream is visible from the primary viewing locations.
15. Large area of wetland is dominated by flowering plants or plants that turn vibrant colors in different seasons.
16. General appearance of the wetland visible from primary viewing locations is unpolluted and/or undisturbed.
17. Overall view of the wetland is available from the surrounding upland.
18. Quality of the water associated with the wetland is high.
19. Opportunities for wildlife observations are available.
20. Historical buildings are found within the wetland.
21. Presence of pond or pond site and remains of a dam occur within the wetland.
22. Wetland is within 50 yards of the nearest perennial watercourse.
23. Visible stone or earthen foundations, berms, dams, standing structures, or associated features occur within the wetland.
24. Wetland contains critical habitat for a state- or federally-listed threatened or endangered species.
25. Wetland is known to be a study site for scientific research.
26. Wetland is a natural landmark or recognized by the state natural heritage inventory authority as an exemplary natural community.
27. Wetland has local significance because it serves several functional values.

28. Wetland has local significance because it has biological, geological, or other features that are locally rare or unique.
29. Wetland is known to contain an important archaeological site.
30. Wetland is hydrologically connected to a state or federally designated scenic river.
31. Wetland is located in an area experiencing a high wetland loss rate.
32. Other

Visual Quality/Aesthetics:

This value relates to the visual and aesthetic qualities of the wetland.

CONSIDERATIONS/QUALIFIERS
1. Multiple wetland classes are visible from primary viewing locations.
2. Emergent marsh and/or open water are visible from primary viewing locations.
3. A diversity of vegetative species is visible from primary viewing locations.
4. Wetland is dominated by flowering plants or plants that turn vibrant colors in different seasons.
5. Land use surrounding the wetland is undeveloped as seen from primary viewing locations.
6. Visible surrounding land use form contrasts with wetland.
7. Wetland views absent of trash, debris, and signs of disturbance.
8. Wetland is considered to be a valuable wildlife habitat.
9. Wetland is easily accessed.
10. Low noise level at primary viewing locations.
11. Unpleasant odors absent at primary viewing locations.
12. Relatively unobstructed sight line exists through wetland.
13. Other

ES Threatened or Endangered Species Habitat:

This value considers the suitability of the wetland to support threatened or endangered species.

CONSIDERATIONS/QUALIFIERS
1. Wetland contains or is known to contain threatened or endangered species.
2. Wetland contains critical habitat for a state or federally listed threatened or endangered species.

Wetland Function-Value Evaluation Form

EE, FF, SS

Total area of wetland 380 ac Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"? No

Adjacent land use Forested wetland, Lake Erie, Agriculture (Power plant (industry)) Distance to nearest roadway or other development 0'

Dominant wetland systems present PEM, open water Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Lower

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list) - Appendix D

Wetland I.D. A, C, J, M, N, R, W, Z, AA, CC, DD

Latitude 41.961 Longitude -83.261

Prepared by: SH Date 6/18/08

Wetland Impact:
Type - Area -

Evaluation based on:
Office ✓ Field ✓

Corps manual wetland delineation completed? Y ✓ N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X	7, 15		Primarily surface water driven system
Floodflow Alteration	X		1, 3, 5-8, 10-13, 15, 17, 18	X	Large flood storage potential, flat, hydric, outlet constricted
Fish and Shellfish Habitat	X		2, 3-6, 8-12, 14-17	X	Large wetland, cover, food sources, connected to Lake Erie, Pike
Sediment/Toxicant Retention	X		1-8, 10-16	X	Sediment from active ag, slow watercourse, dense veg
Nutrient Removal	X		1-14	X	Source of nutrients in ag land, large, deep, dense veg
Production Export	X		1-7, 10-11		wildlife habitat, breeding/spawning, ↑ diversity
Sediment/Shoreline Stabilization	X		3, 4, 6-7, 9, 12-13, 15	X?	sediment screen upstream, ~~diverse~~, dense veg, buffer storms
Wildlife Habitat	X		4-9, 11-13, 16-21, 23	X	diverse cover types, large size, ag buffer, ↑ density, wildlife obs.
Recreation		X	5, 9		Some suitability but NO access for recreation
Educational/Scientific Value		X	1, 5, 6, 14		" " " education
Uniqueness/Heritage	X		4-6, 24, 27-28, 31		Diverse wetland types, habitat suitable for ES, multiple functions, Mosaic
Visual Quality/Aesthetics ?		X	—		Some suitability, NO access
ES Endangered Species Habitat	X		1, 2		E. fox snake observed
Other					

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

B, D, F, G, I, L, O, P, S

Total area of wetland 183 ac Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"? No

Adjacent land use Emerg marsh, Agriculture, lake Erie, industry Distance to nearest roadway or other development 0'

Dominant wetland systems present PFO, PSS Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Lower

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list) Appendix D

Wetland I.D. T, V, X, Y, BB, GG, KK

Latitude 41.911 Longitude -83.261

Prepared by: SH Date 6/18/08

Wetland Impact:
Type — Area —

Evaluation based on:
Office ✓ Field ✓

Corps manual wetland delineation completed? Y ✓ N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X	7, 15		Surface water driven
Floodflow Alteration	X		1, 3, 5-13, 15, 17	X	Large flood storage, restricted outlet, dense veg
Fish and Shellfish Habitat		X	—		—
Sediment/Toxicant Retention	X		1, 2, 4, 8-10, 13, 14	X	Sediment from Ag, ↑ dense veg, shore veg
Nutrient Removal	X		1, 3-4, 7, 12-14	X	source of nut from ag, large wetland area, dense veg
Production Export	X		1, 2-5		habitat, breeding, converted to water source, some const.
Sediment/Shoreline Stabilization	X		3-4, 6, 9, 13-14		Sediment from Ag, dense veg additional to PEM
Wildlife Habitat	X		1, 4-9, 11, 12, 14, 16, 17, 23	X	Part of larger diverse types, buffered by ag, observ.
Recreation		X	5, 9		No access
Educational/Scientific Value		X	1, 5, 6, 14		No access
Uniqueness/Heritage	X		4, 5, 23, 27-28, 31		part of diverse wetland system, suitable for ES & function/value
Visual Quality/Aesthetics		X			No access
ES Endangered Species Habitat	X		1, 2,		
Other					

Notes:

* Refer to backup list of numbered considerations.

APPENDIX D

FLORA AND FAUNA SPECIES LISTS

The following flora and fauna species were observed by DU staff at the Site during wetland delineation and functions and values assessment field work in May and June 2008.

FLORA

Scientific Name	Common Name	Wetland Indicator	Physiognomy
Acer negundo	Box Elder	FACW-	Nt Tree
Acer rubrum	Red Maple	FAC	Nt Tree
Acer saccharinum	Silver Maple	FACW	Nt Tree
Alliaria petiolata	Garlic Mustard	FAC	Ad B-Forb
Bacopa rotundifolia	Water Hyssop		Forb
Brassica nigra	Black Mustard	[UPL]	Ad A-Forb
Carex grayi	Gray's Sedge	FACW+	Nt P-Sedge
Carex vesicaria	Inflated sedge	OBL	Nt P-Sedge
Carya laciniosa	Shellbark Hickory	FACW	Nt Tree
Cephalanthus occidentalis	Buttonbush	OBL	Nt Shrub
Ceratophyllum demersum	Coontail	OBL	Nt P-Forb
Cornus amomum	Silky Dogwood	FACW+	Nt Shrub
Cornus stolonifera	Red Osier Dogwood	FACW	Nt Shrub
Crataegus sp.	Hawthorn	[UPL]	Nt Tree
Equisetum sp.	Horsetail		Nt Fern Ally
Erigeron sp.	Fleabane		Forb
Eupatorium perfoliatum	Common Boneset	FACW+	Nt P-Forb
Eupatorium rugosum	White Snakeroot	[FACU]	Nt P-Forb
Fragaria virginiana	Wild Strawberry	FAC-	Nt P-Forb
Fraxinus pennsylvanica	Green Ash (Red Ash)	FACW	Nt Tree
Galium palustre	Marsh Bedstraw	[OBL]	Nt P-Forb
Galium sp.	Bedstraw	FAC	NT A-Forb
Geum sp.	Avens		Forb
Impatiens capensis	Jewelweed	FACW	Forb
Juglans nigra	Black Walnut	[FACU]	Nt Tree
Lycopus americanus	Common Water Horehound	OBL	Nt P-Forb
Morchella esculenta	Morel Mushrooms!		
Nymphea sp./ Nuphar sp.	Water Lily	OBL	Nt P-Forb
Onoclea sensibilis	Sensitive Fern	FACW	Nt Fern
Parthenocissus quinquefolia	Virginia Creeper	FAC-	Nt W-Vine
Phalaris arundinacea	Reed Canary Grass	FACW+	Nt P-Grass
Phragmites australis	Common Reed	FACW+	Nt P-Grass
Pilea pumila	Clearweed	FACW	Nt A-Forb
Platanus occidentalis	Sycamore	FACW	Nt Tree
Polygonum	Smartweed		Forb
Populus deltoides	Eastern Cottonwood	FAC+	Nt Tree
Prunus serotina	Wild Black Cherry	FACU	Nt Tree
Quercus bicolor	Swamp White oak	FACW+	Nt Tree
Quercus macrocarpa	Bur Oak	FAC-	Nt Tree
Quercus rubra	Red Oak	FAC	Nt Tree
Rhamnus frangula	Glossy Buckthorn	FAC+	Ad Shrub
Rhamnus sp.	Buckthorn		Ad Shrub
Sagittaria sp.	Arrowhead	OBL	Nt A-Forb
Salix sp.	Willow		Shrub/Tree

Solidago sp.	Golden Rod species		Forb
Taraxacum officinale	Common Dandelion	FACU	Ad P-Forb
Tilia americana	Basswood	FACU	Nt Tree
Toxicodendron sp.	Poison Ivy	FAC+	Nt W-Vine
Typha angustifolia	Narrow-Leaved Cattail	OBL	Ad P-Forb
Ulmus americana	American Elm	FACW-	Nt Tree
Ulmus rubra	Slippery Elm	FAC	Nt Tree
Viola sp.	Violet		Forb
Vitis riparia	Riverbank Grape	FACW-	Nt W-Vine
Vitus sp.	Grape		Nt W-Vine

FAUNA

Scientific Name	Common Name	Scientific Name	Common Name
Sylvilagus floridanus	Cottontail Rabbit	Quiscalus quiscula	Common Grackle
Canis latrans	Coyote	Stumus vulgaris	European Starling
Ondatra zibethicus	Muskrat	Myiarchus crinitus	Great Crested Flycatcher
Procyon lotor	Raccoon	Setophaga ruticilla	American Redstart
Sciurus niger	Eastern Fox Squirrel	Seiurus noveboracensis	Northern Waterthrush
Odocoileus virginianus	Whitetail Deer	Empidonax virescens	Willow Flycatcher
Ardea alba	Great Egret	Picoides pubescens	Downy Woodpecker
Bubulcus ibis	Cattle Egret	Picoides villosus	Hairy Woodpecker
Butorides virescens	Green Heron	Melanerpes carolinus	Red-bellied Woodpecker
Ardea herodias	Great Blue Heron	Colaptes auratus	Northern Flicker
Branta canadensis	Canada Goose	Sitta carolinensis	White-breasted Nuthatch
Anas platyrhynchos	Mallard	Melospiza melodia	Song Sparrow
Aix sponsa	Wood Duck	Spizella pusilla	Field Sparrow
Anas rubripes	Black Duck	Cardinalis cardinalis	Northern Cardinal
Cygnus olor	Mute Swan	Geothlypis trichas	Common Yellowthroat
Podilymbus podiceps	Pied-Billed Grebe	Vireo olivaceus	Red-eyed Vireo
Phalacrocorax auritus	Double-crested Cormorant	Vireo gilvus	Warbling Vireo
Haliaeetus leucocephalus	Bald Eagle	Cyanocitta cristata	Blue Jay
Buteo jamaicensis	Red-tailed Hawk	Tachycineta bicolor	Tree Swallow
Accipiter cooperii	Cooper's Hawk	Baeolophus bicolor	Tufted Titmouse
Pandion haliaetus	Osprey	Mniotilta varia	Black-and-white Warbler
Cathartes aura	Turkey Vulture	Catharus sp.	Thrush
Phasianus colchicus	Ring-necked Pheasant	Molothrus ater	Brown-headed Cowbird
Meleagris gallopavo	Wild Turkey	Progne subis	Purple Martin
Scolopax minor	American Woodcock	Carduelis tristis	American Goldfinch
Gallinago delicata	Common Snipe	Empidonax sp.	Flycatcher
Tyrannus tyrannus	Eastern Kingbird	Pheucticus ludovicianus	Rose-breasted Grosbeak
Megaceryle alcyon	Belted Kingfisher	Dendroica magnolia	Magnolia Warbler
Troglodytes aedon	House Wren	Turdus migratorius	American Robin
Cistothorus palustris	Marsh Wren	Orconectes rusticus	Rusty Crayfish
Dendroica petechia	Yellow Warbler	Lepisosteus sp.	Gar
Dendroica dominica	Yellow Throated Warbler	Cyprinus carpio	Common Carp
Passerina cyanea	Indigo Bunting	Rana pipiens	Northern Leopard Frog
Charadrius vociferous	Killdeer	Apalone spinifera	Spiny Soft-shell Turtle
Passer domesticus	House Sparrow	Graptemys geographica	Common Map Turtle
Sialia sialis	Eastern Bluebird	Chrysemys picta	Painted Turtle
Corvus brachyrhynchos	American Crow	Chelydra serpentina	Common Snapping Turtle
Zenaida macroura	Mourning Dove	Elaphe gloydi	Eastern Fox Snake
Poecile atricapillus	Black-capped Chickadee	Thamnophis sirtalis	Eastern Garter Snake
Icterus galbula	Baltimore Oriole		
Agelaius phoeniceus	Red-winged Blackbird		

APPENDIX E

QUALIFICATIONS

Investigative Staff Qualifications

On-site wetland delineations and data inventories were performed by the following DU staff:

Sheila Hess, Regional Biologist/Mitigation Specialist
Ms. Hess is responsible for the coordination and delivery of wetland mitigation strategy. She has experience with regulations that apply to compensatory wetland mitigation and with the protection, restoration, creation and evaluation of diverse wetland types and coordinates all aspects of mitigation projects including contract development, site identification, wetland delineation, land protection, survey, wetland design, construction management and monitoring and evaluation. Ms. Hess works with a team of biologists and engineers to develop creative, high-quality mitigation strategies that result in the successful replacement of wetlands functions.

Peter Wyckoff, Engineer
Mr. Wyckoff delivers conservation services throughout the Great Lakes region, including conducting topographic surveys of possible restoration sites, performing engineering design requirements for wetland restoration projects, computer-aided drafting, construction management, and wetland delineation. Mr. Wyckoff's technical skills include GPS surveys, AutoDesk Land Desktop, HydroCAD modeling, hydraulic engineering design and engineering design of aquaponics systems. Mr. Wyckoff has completed a Wetland Delineation short course.

Gregg Bachman, Senior Engineering Specialist
Mr. Bachman is in charge of topographic surveying and construction staking for wetland restoration projects. He is involved with the pre-survey planning, data collection and development of the final topographic survey drawings. Mr. Bachman provides horizontal and vertical control for topographic mapping and project construction, utilizing GPS equipment and conventional survey equipment. Mr. Bachman develops stakeout plans from the engineer's plans to provide staking in the field for construction of the wetland restoration project. Mr. Bachman is also involved in all aspects of the engineering department regarding the delivery of wetland restoration projects, including bid preparation, construction plan review, on-site construction inspection and construction management.

Jade Phillips, Engineering Technician
Mr. Phillips is involved with the engineering department delivering conservation services throughout the Mid-Atlantic region by surveying wetland restoration sites, on-site construction inspection and construction management. Mr. Phillips brings with him 11 years experience as an engineering technician with the Maryland Department of Agriculture. While with the Department of Agriculture he was responsible for the survey, design, layout and construction management of projects beneficial to agriculture and wildlife.

Warren Weirich, Manager of Conservation Programs
Mr. Weirich oversees multiple aspects of regional or national conservation service functions, such as project coordination, engineering, information systems, budgets, contract compliance and new product design. Mr. Weirich also supervises engineering staff associated with project delivery.

Nina Hill, Conservation Specialist

Ms. Hill works closely with the Regional Biologists of the Great Lakes Management Unit in the initiation and delivery of habitat conservation projects. She responds to requests from across the five state region, including technical assistance, land protection, local policy issues, and research on waterfowl issues. She conducts initial consultation and site evaluation for private lands restoration projects, and communicates project viability with various partner organizations. Through DU's partnership in Lake Erie CREP, Ms. Hill coordinates outreach efforts and assists private landowners through enrollment in this cost-share program. Ms. Hill's experience includes a variety of wildlife research projects examining habitat selection and factors influencing breeding success of waterbird, fish and amphibian species.

Kirk Mantay, Regional Biologist

Mr. Mantay is responsible for delivery of wetland conservation projects in multiple states in the Great Lakes Atlantic Region. He has conducted plant and/or wildlife inventories and endangered species studies, and has designed and implemented habitat restorations throughout the Mid-Atlantic region. His habitat design and construction experience ranges from submerged aquatic vegetation bed restoration to diamondback terrapin nesting habitat restoration, to transitional grassland management for waterfowl nesting.

Attachment 12-11

Section 12:
Activities that May Impact Wetlands

MDEQ Wetland Assessment
Wetland Identification File Number 8-58-0003-WA
(following 34 pages)

Note:
The headers, footers and page numbers apply to the original document within this attachment.

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
JACKSON DISTRICT OFFICE

JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

November 7, 2008

Mr. Randall Westmoreland
The Detroit Edison Company
One Energy Plaza
Detroit, Michigan 48226-1279

Dear Mr. Westmoreland:

SUBJECT: Wetland Identification Report
Wetland Identification File Number: 08-58-0003-WA

The Department of Environmental Quality (DEQ) conducted a Level 3 Wetland Identification Review of 1,106 acres on property located in Town 06S, Range 10E, Sections 16, 17, 20, 21, 28, and 29, Frenchtown Township, Monroe County on October 14, 15, and 16, 2008. The wetland review was conducted in accordance with Part 303, Wetland Protection of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); and Rule 4 (1), Wetland Identification and Assessment (R 281.924) of the Administrative Rules for Part 303. This is a report of our findings in response to your Wetland Identification Application.

The DEQ staff walked the flagged boundaries as requested in your wetland identification application. Based on our on-site review, which included review of plant communities, hydrologic indicators, and soils and an in-office review of other pertinent information, the DEQ confirms, in part, the wetland boundaries observed during the site inspection. Staff noted a few areas of disagreement with your consultant's boundaries.

Changes made to your consultant's boundaries include:

Wetland I
- connect flag I34 to flag I42
- connect flag I43 to flag I47

Wetland L
- connect flag L69 to flag L74

Wetland M and T
- connect flag M174 to flag T5
- leave berm out of wetland area

New Wetlands WW, XX, YY, and ZZ
- these four wetland areas shown on the map are located adjacent to the gravel pit lakes
- these wetlands were not flagged in the field, their locations are approximate

We documented the new boundaries on the enclosed site maps. The site maps of the review area were created by combining information from your consultant and the DEQ. The new maps identify the areas containing wetland and the non-wetland (upland). A new delineation is not necessary.

For those areas identified as regulated wetland on the site map; specifically Wetlands B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, BB, CC/DD, EE, FF, GG, HH, II, JJ, KK, WW, XX, YY, and ZZ; please be advised that any of the following activities require a permit under Part 303:

a) Deposit or permit the placing of fill material in a regulated wetland.
b) Dredge, remove, or permit the removal of soil or minerals from regulated wetland.
c) Construct, operate, or maintain any use or development in a regulated wetland.
d) Drain surface water from a regulated wetland.

For those areas identified as non-wetland (upland) and non-regulated wetland on the site map, the DEQ lacks jurisdiction under Part 303 for activities occurring in those areas. The non-regulated wetland, Wetland A, is not regulated since it is not contiguous to the Great Lakes, an inland lake or pond, or a river or stream.

You may request the DEQ reassess the subject review area, or any portion of the review area, should you disagree with the findings, within 60 days of the date of this report. A written request to reassess the Wetland Identification Review area must be accompanied by supporting evidence with regard to wetland vegetation, soils or hydrology different from, or in addition to, the information relied upon by DEQ staff in preparing this report. The request should be submitted to:

Wetland Identification Program
Land and Water Management Division
Department of Environmental Quality
P.O. Box 30458
Lansing, Michigan 48909-7756

Please be aware that this identification report does not constitute a determination of the presence of wetland that may be regulated under local ordinances or federal law. The U.S. Army Corps of Engineers (USACE) retains regulatory authority over certain wetlands pursuant to Section 404 of the Clean Water Act (CWA), and specifically those wetlands associated with traditionally navigable waters of the state. Navigable waters are generally the Great Lakes, their connecting waters, and river systems and lakes connected to these waters. In other areas of the state, the DEQ is responsible for identification of wetland boundaries for purposes of compliance with the CWA under an agreement with the U.S. Environmental Protection Agency.

Our review indicates your wetland identification area may be within those areas regulated by the USACE. Many activities within these areas may also require a federal review and/or a permit. Additional information may be obtained by contacting the USACE at 313-226-2218.

It should be noted that three State Threatened species were observed within the review area. Eastern fox snake (*Elaphe gloydi*) and bald eagle (*Haliaeetus leucocephalus*) were observed by individuals with Ducks Unlimited per their submitted wetland investigation report. American lotus (*Nulumbo lutea*) was observed in wetland CC & DD by DEQ staff during the site inspection on October 15, 2008. For more information concerning these species, please contact:

Ms. Lori Sargent
Department of Natural Resources, Wildlife Division
Email (preferred): SargentL@michigan.gov
Phone: 517-373-9418

This Wetland Identification Report is limited to findings pursuant to Part 303 and does not constitute a determination of jurisdiction under other DEQ administered programs. Any land use activities undertaken on the assessed parcel may be subject to regulation pursuant to the NREPA under the following programs:

Floodplain Regulatory Authority found in Part 31, Water Resources Protection
Part 91, Soil Erosion and Sedimentation Control
Part 301, Inland Lakes and Streams
Part 323, Shorelands Protection and Management
Part 325, Great Lakes Submerged Lands

The findings contained in this report are binding on the DEQ until October 16, 2011; a period of three years from the date of the site inspection; unless a reassessment is conducted. Please contact me if you have any questions regarding this report.

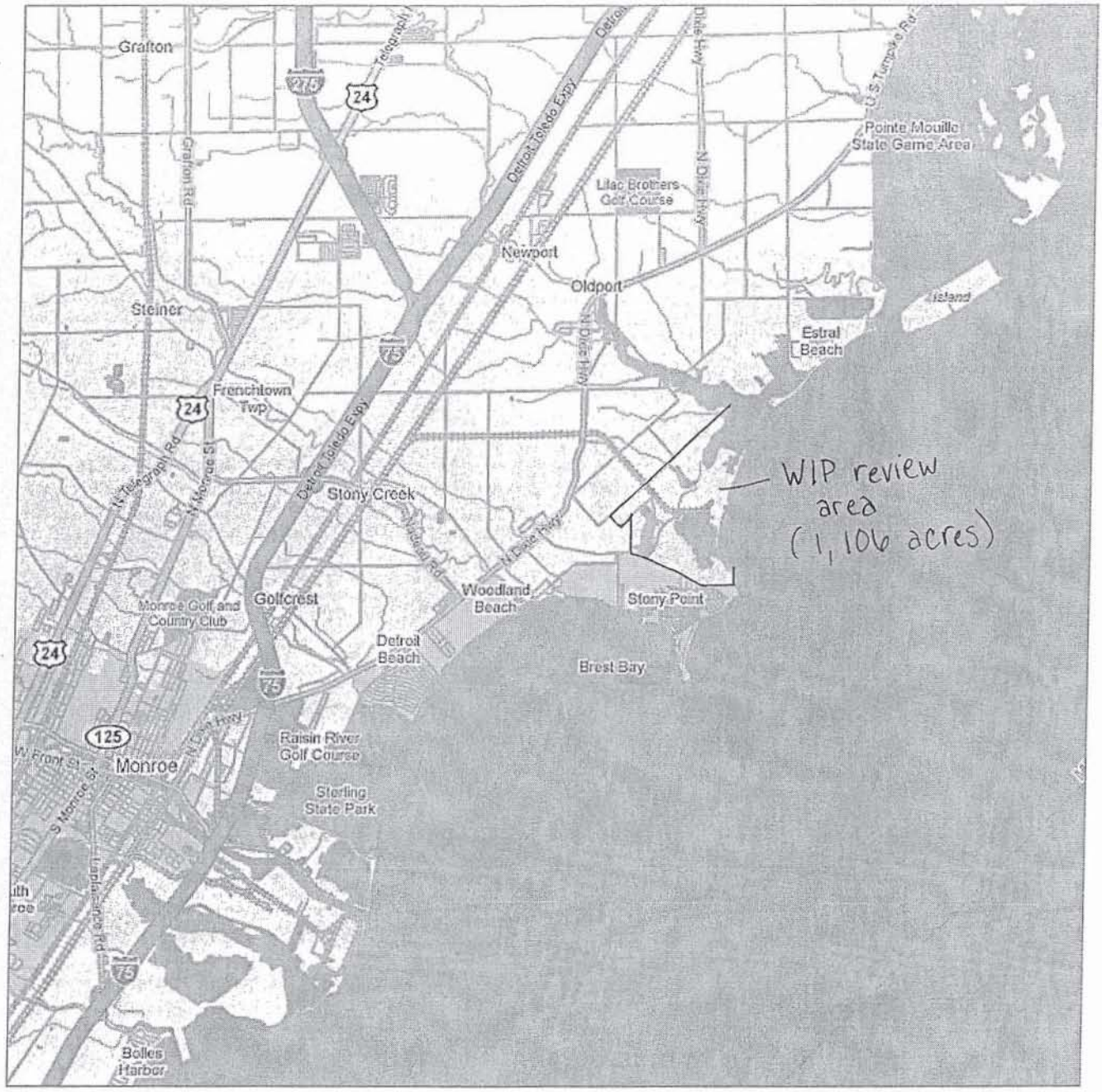
Sincerely,

Mary Vanderlaan
Jackson District Supervisor
Land and Water Management Division
517-780-7915

Enclosure

cc/enc: Monroe CEA
Monroe County Health Department
Frenchtown Township Clerk
USACE
City of Newport Clerk
Mr. Peter Wyckoff, Ducks Unlimited
Ms. Lori Sargent, DNR
Ms. Wendy Veltman, DEQ

MAP 1 of 28



SITE LOCATION

DTE – Fermi 08-58-0003-WA

LEGEND

- PSS — PALUSTRINE SCRUB SHRUB WETLAND
- PEM — PALUSTRINE EMERGENT WETLAND
- PFO — PALUSTRINE FORESTED WETLAND
- APPROXIMATE PROPERTY LINE
- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- HORIZONTAL & VERTICAL CONTROL

UP = Upland (non-wetland)
reg = regulated wetland
non-reg = non-regulated wetland

HORIZONTAL CONTROL – Coordinates are NAD 83 (CORS 1996) Michigan State Plane Coordinates, South Zone # 2113, units international feet. Coordinates established from NOS OPUS (National Geodetic Survey, Online Positioning User Service) solution for control point B1. Raw data was collected for 5 hours on June 4, 2008 using a Trimble 4700 GPS base receiver. OPUS solution for control point B1, North 167655.689 ift. East 13420948.599 ift.

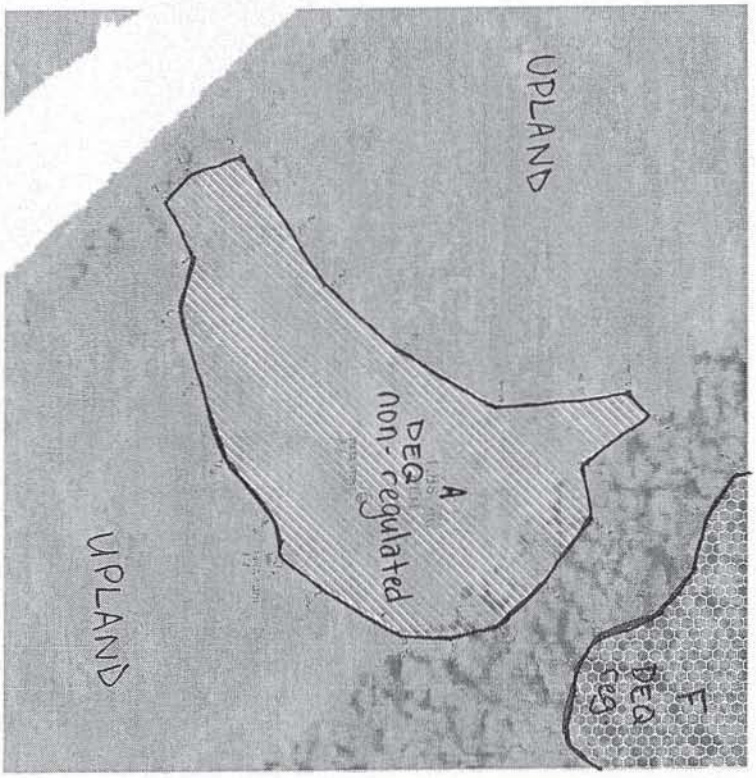
ONSITE CONTROL, HORIZONTAL

Control Point # 1 – Found concrete monument with brass cap on south side of Fermi Drive near sign.
N. 169217.291 ift.
E. 13423438.587 ift.

Control Point # B7 –Found concrete monument with brass cap on south side of Fermi Drive, 1.5 feet south of edge of pavement stamped "N 5108.143, E 3600 , EL. 580.181
N. 169181.477 ift.
E. 13422586.221 ift.

Control Point # B1 – Found yellow capped iron rod #29252, lathe marked "#B1 DTE"
N. 167655.689 ift.
E. 13420948.599 ift.

MAP 2 of 28



LEGEND

OPEN WATER (FLAGGED)

OPEN WATER (NOT FLAGGED)

WETLAND BOUNDARY

DATA POINT

WETLAND FLAG

PALUSTRINE SCRUB-SHRUB (PSS)

PALUSTRINE EMERGENT (PEM)

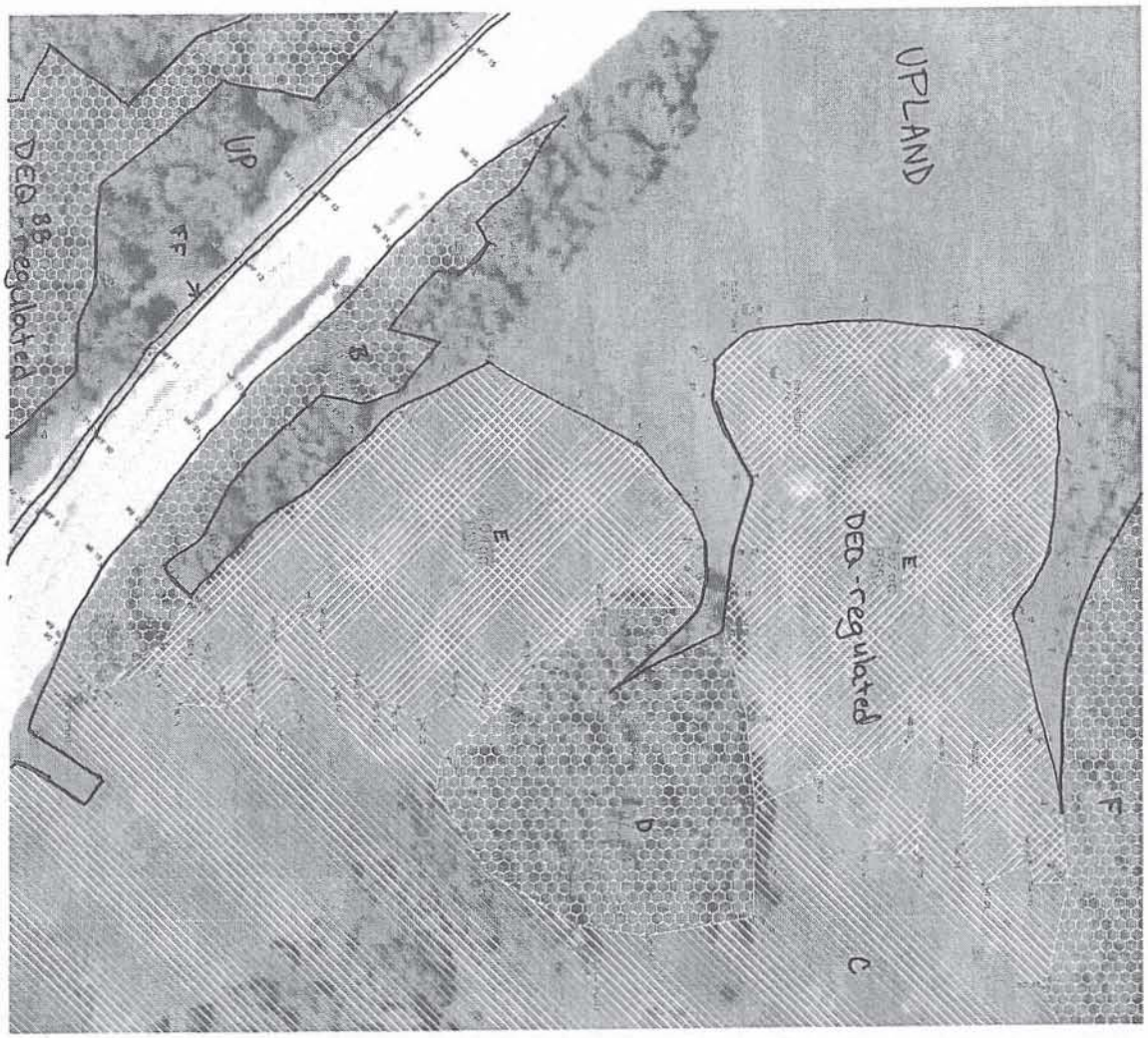
PALUSTRINE FORESTED (PFO)

GRAPHIC SCALE

N

- This drawing showing those areas containing wetland and not containing wetland is an approximation of the boundaries flagged on-site.
- This drawing does not authorize or permit activities requiring a permit in accordance with Part 303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Map prepared by: Kathleen Fairchild, DEQ
10/27/2008



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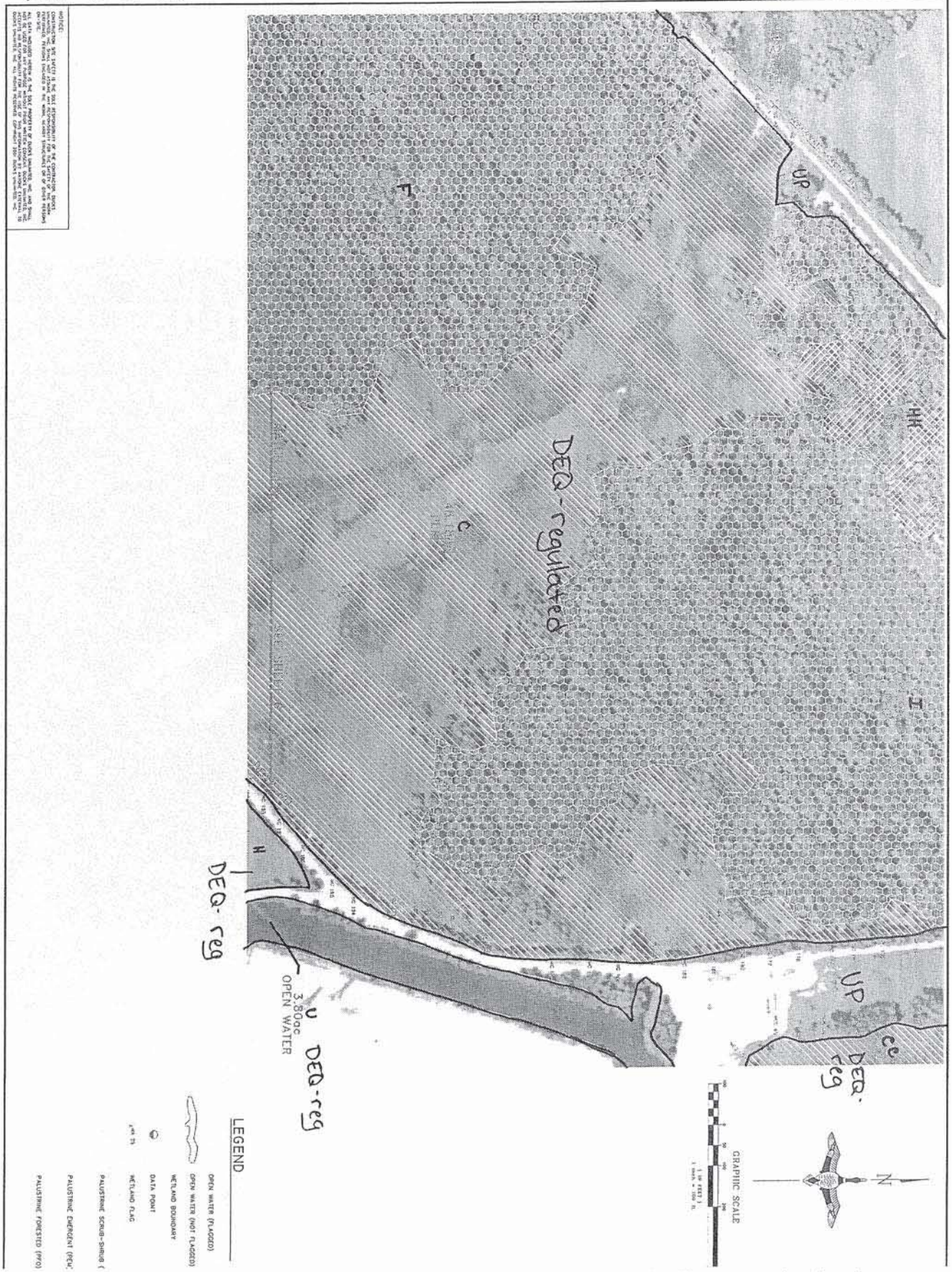

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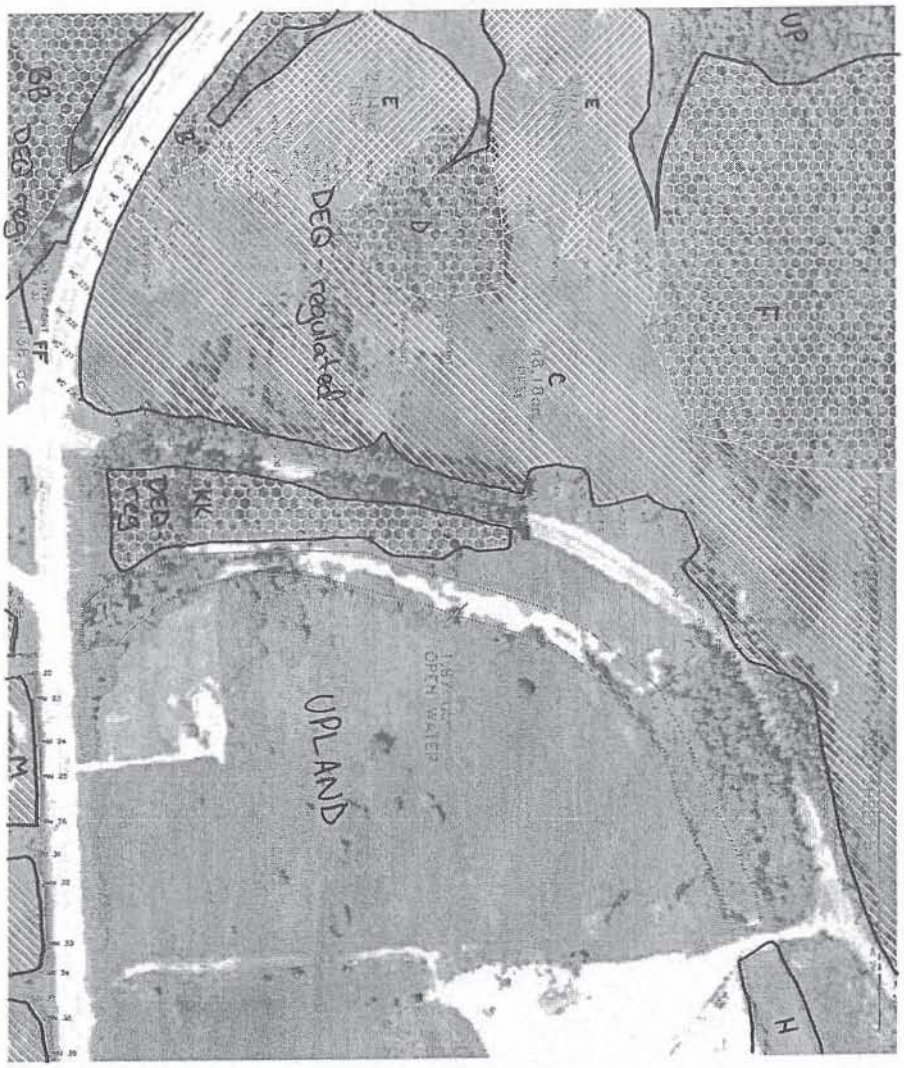

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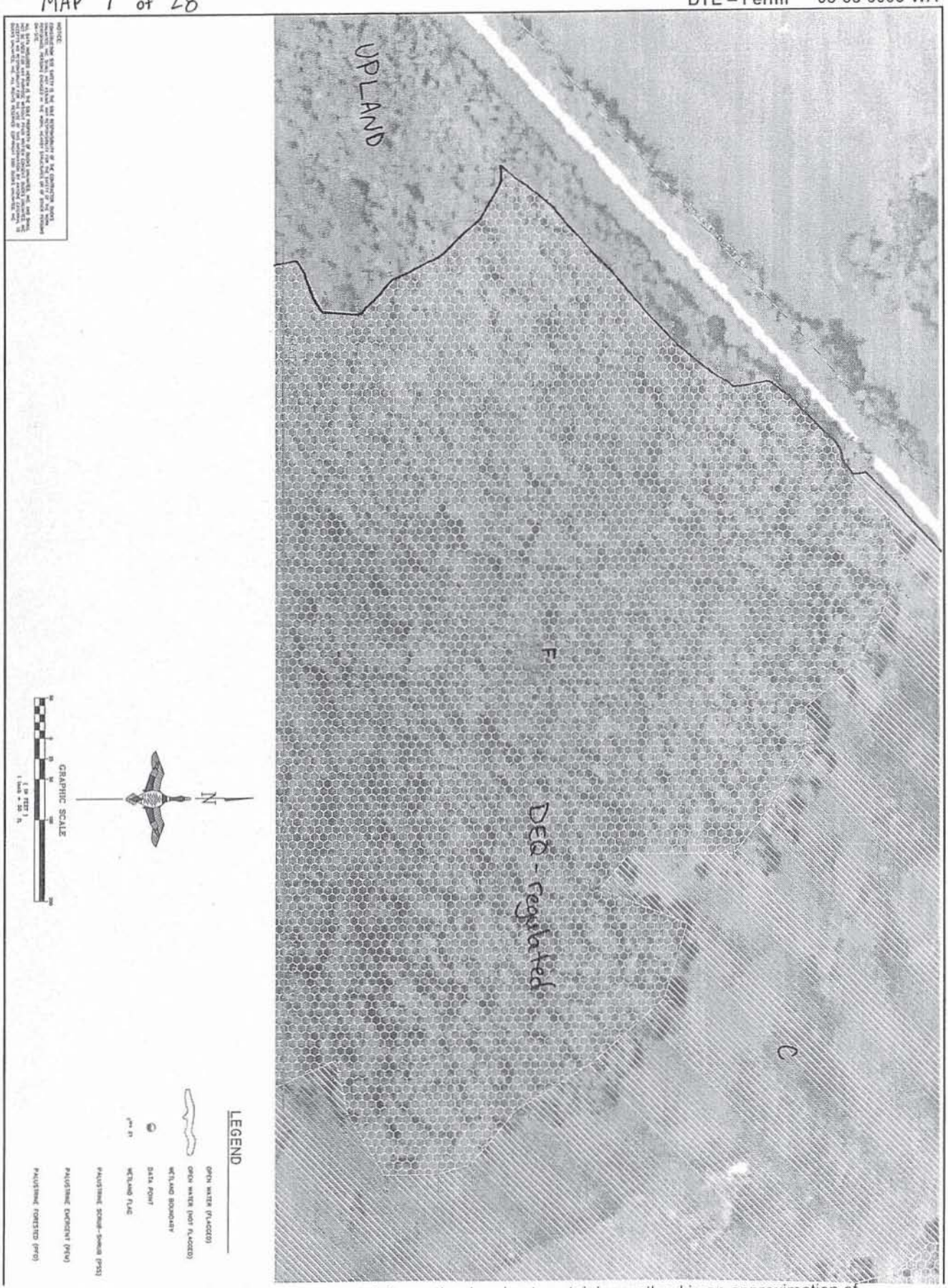
10/27/2008

MAP 7 of 28

DTE – Fermi 08-58-0003-WA



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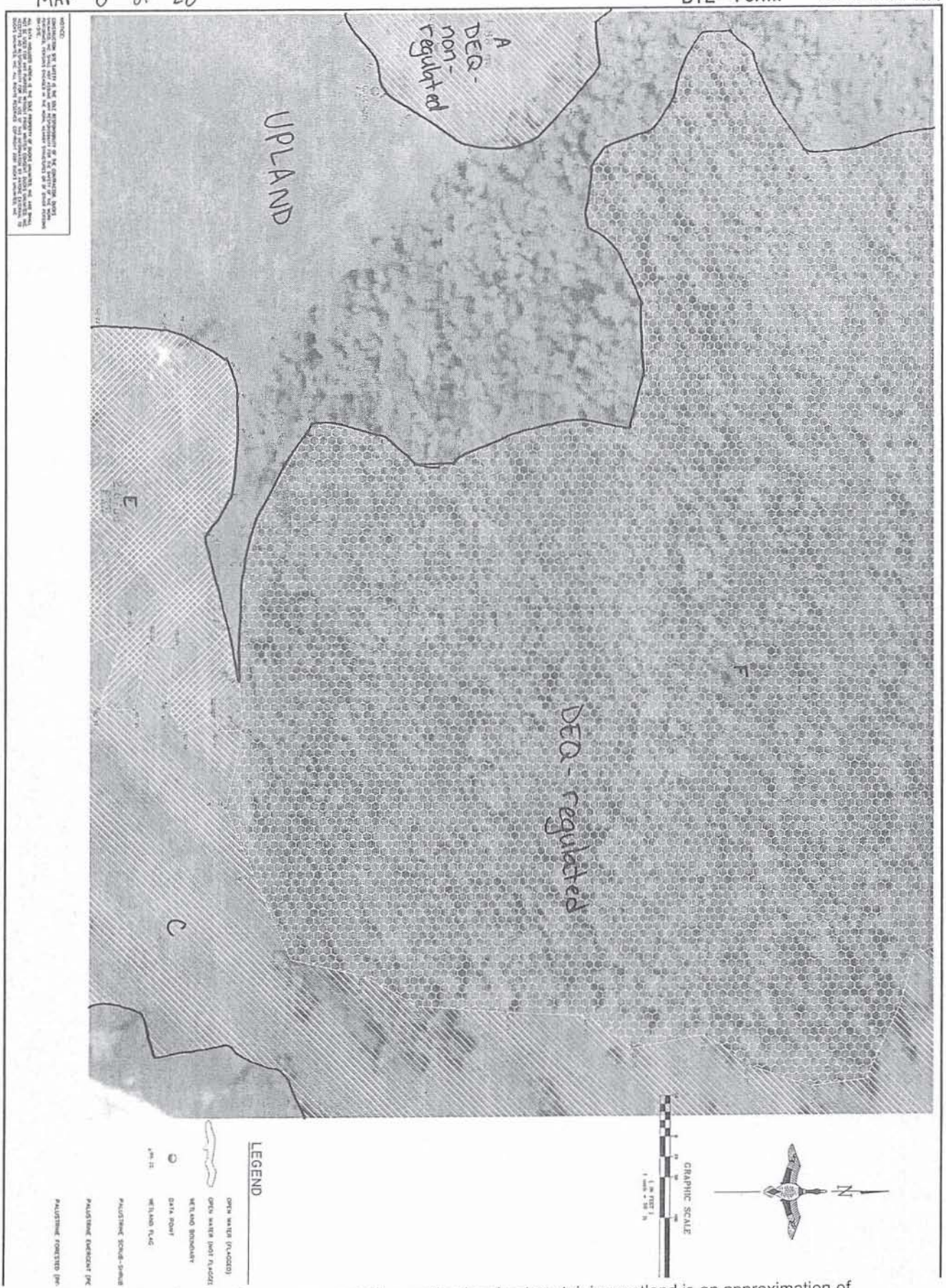

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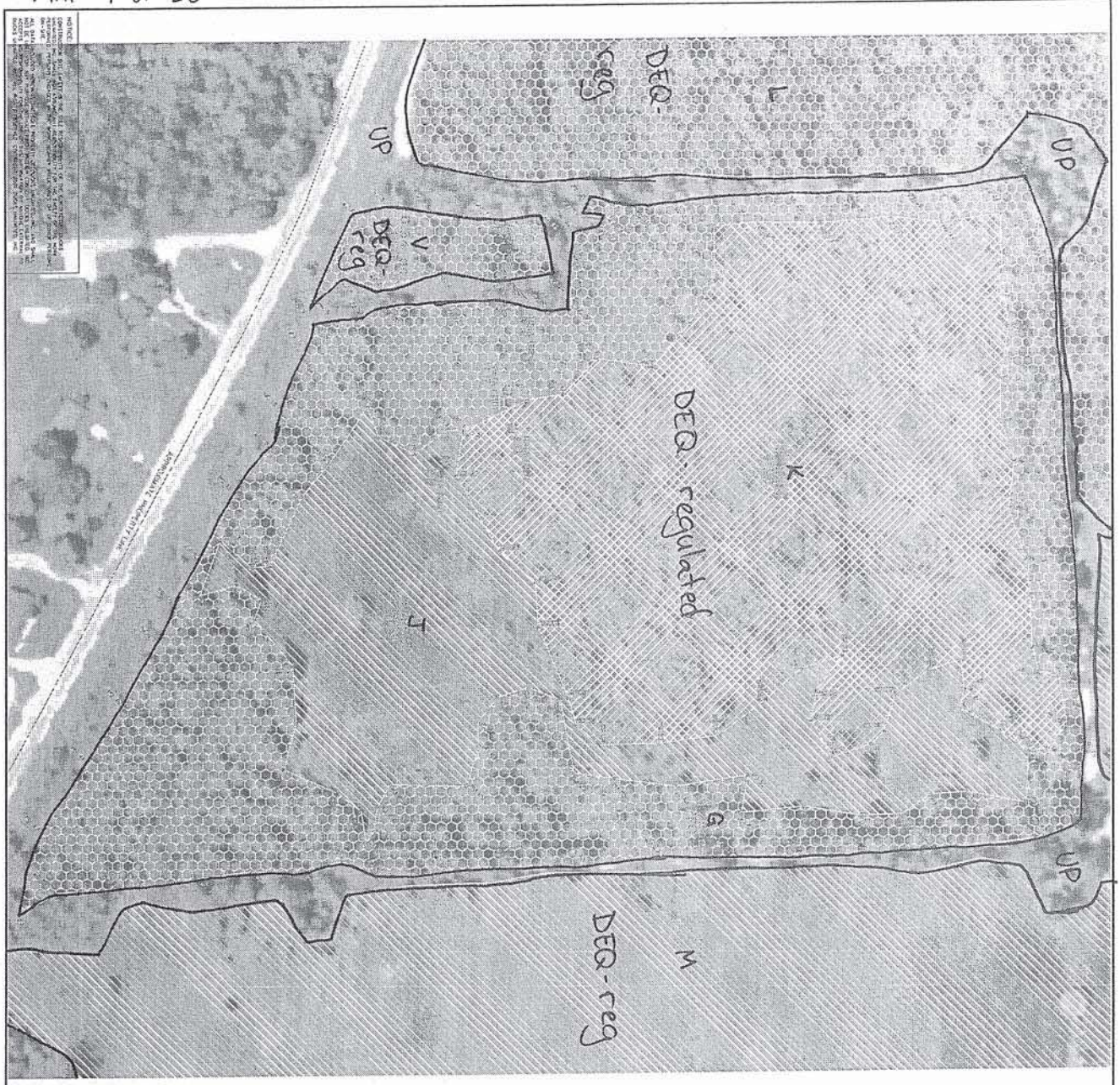

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DATA POINT

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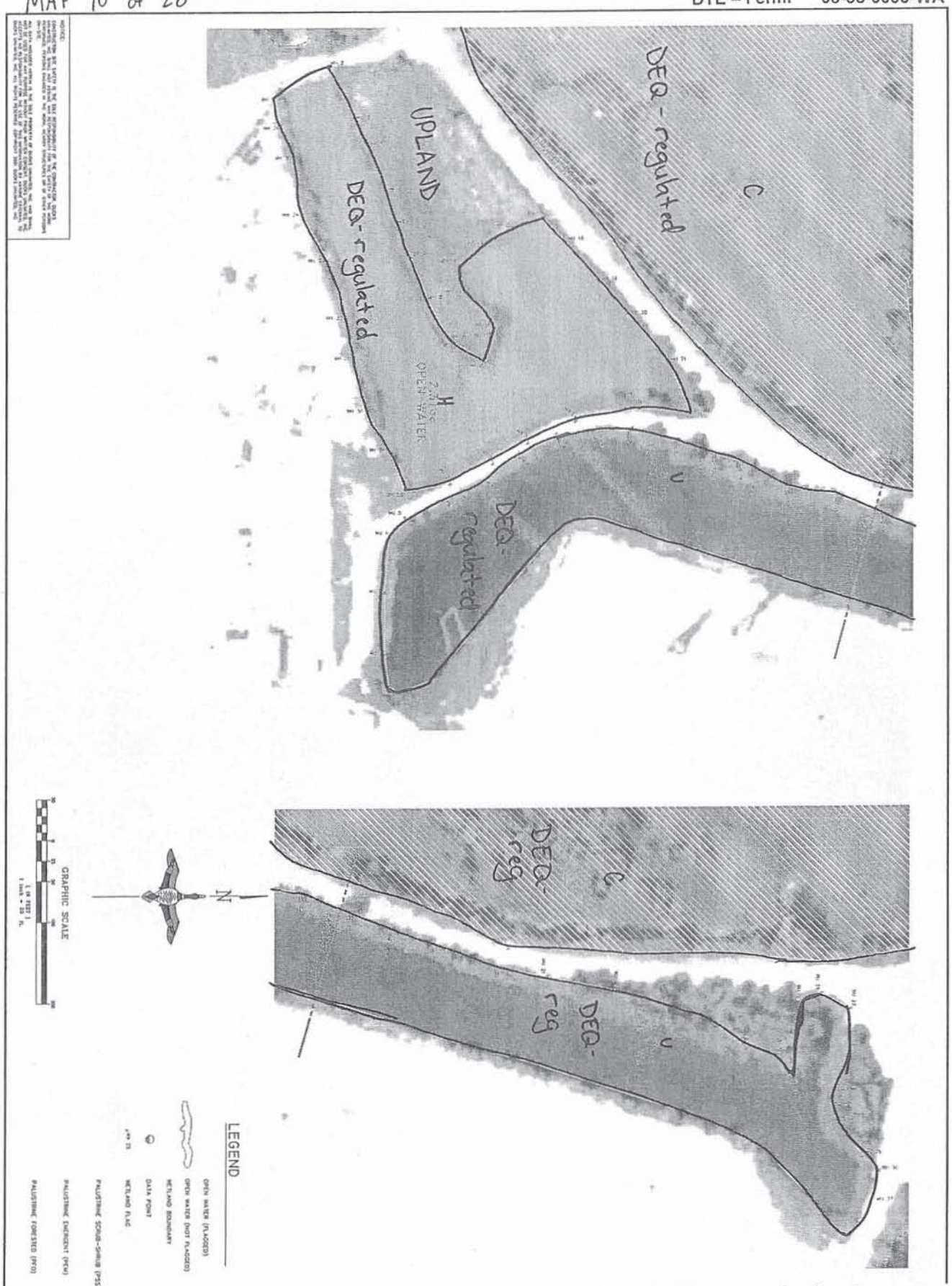

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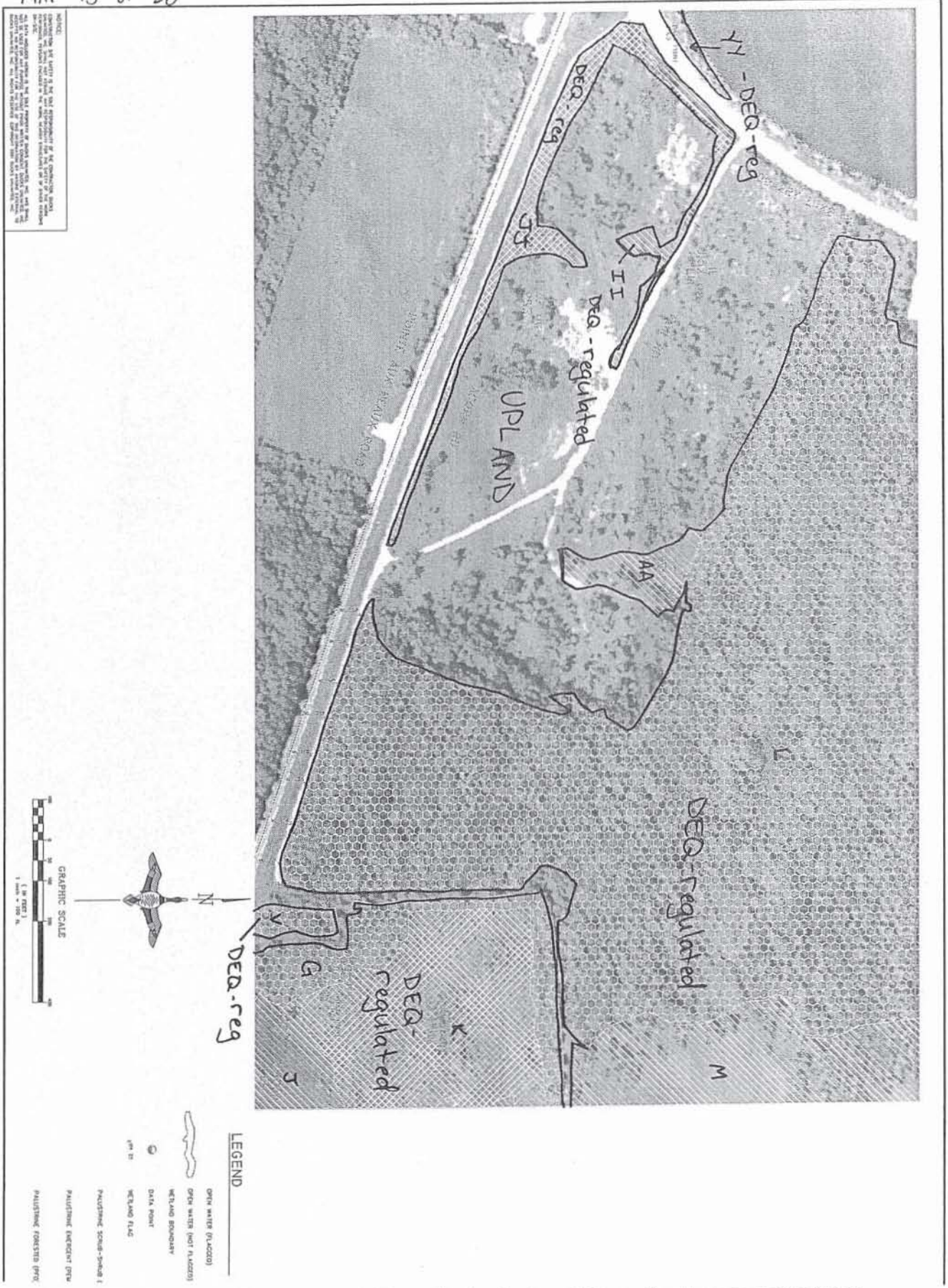

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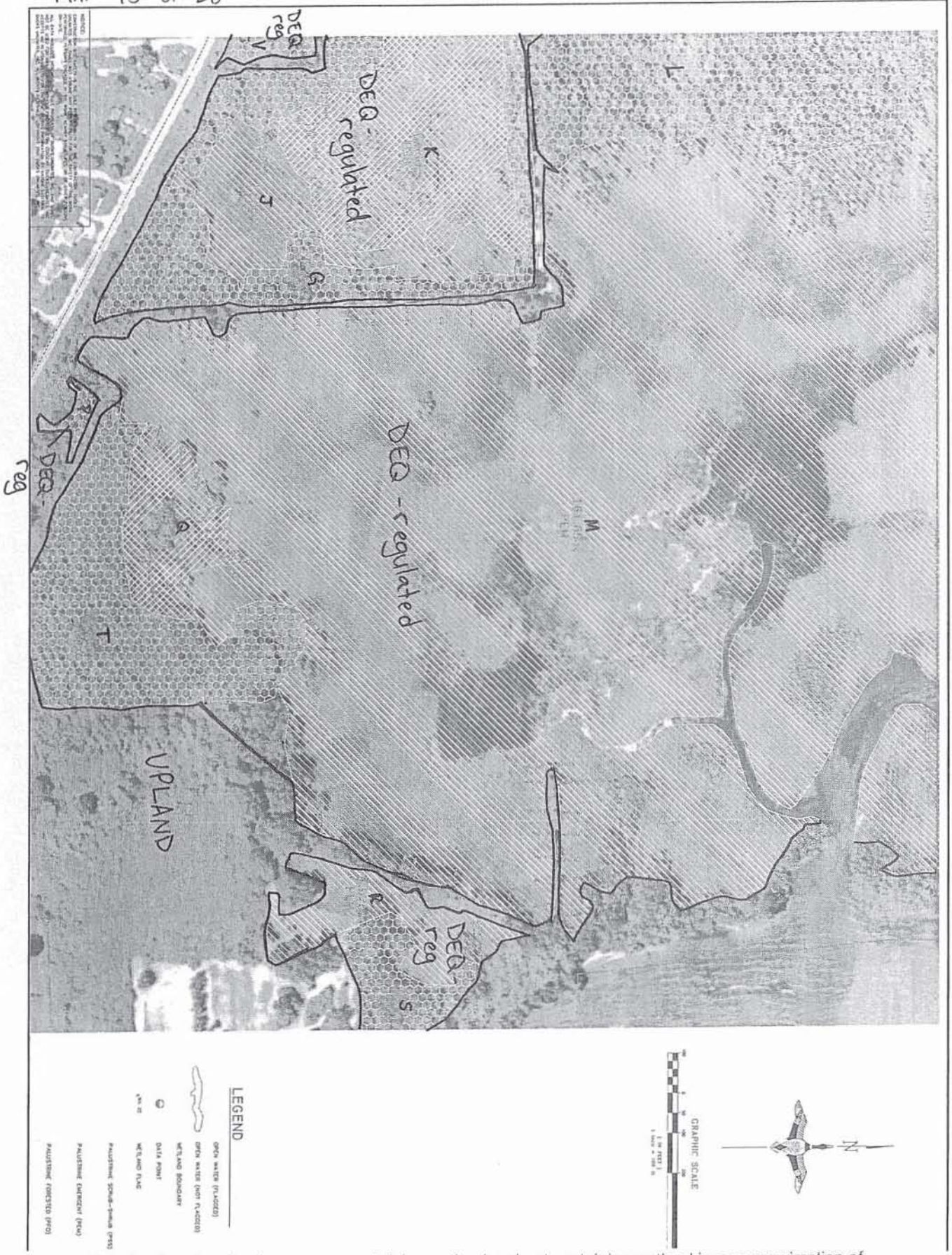

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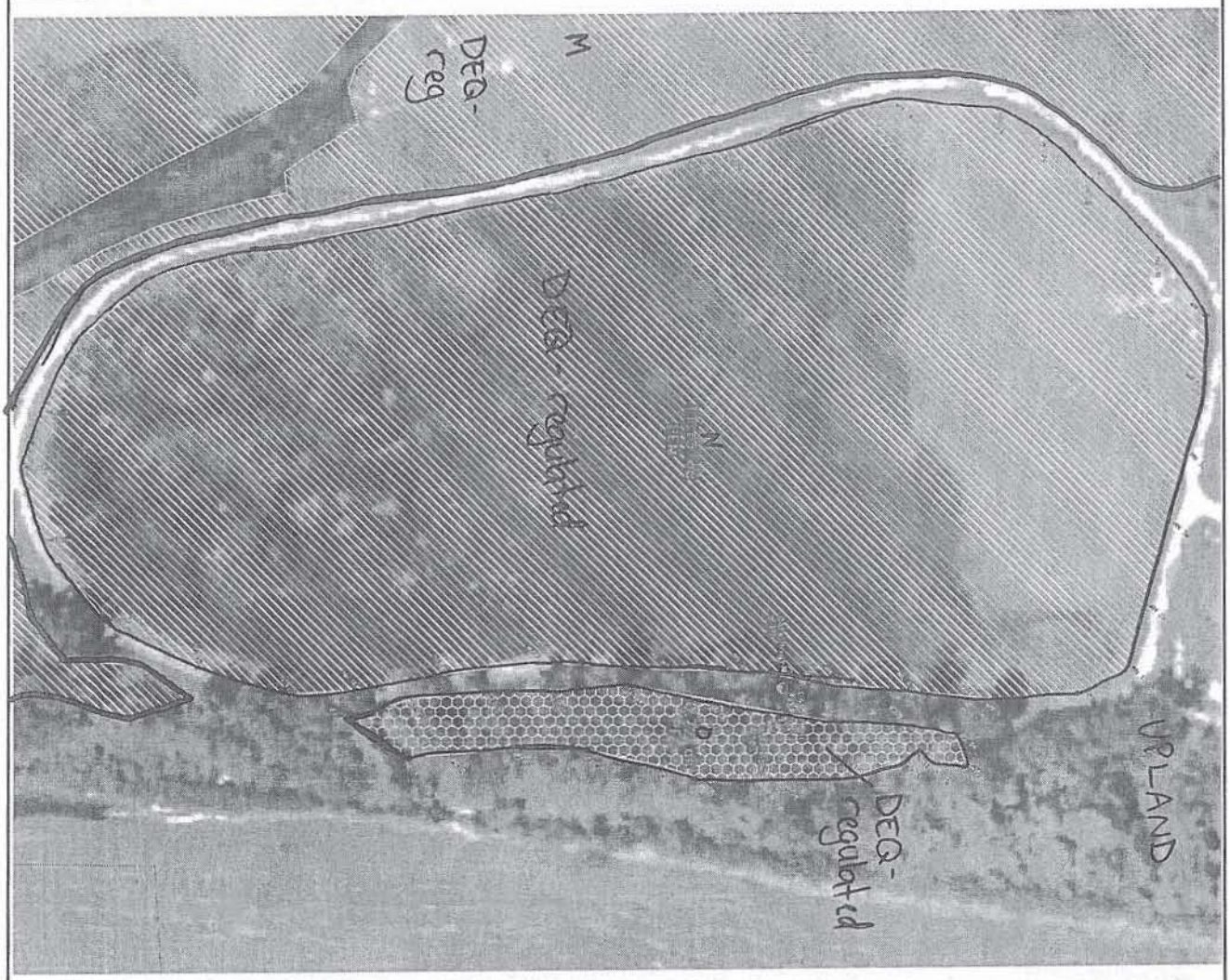

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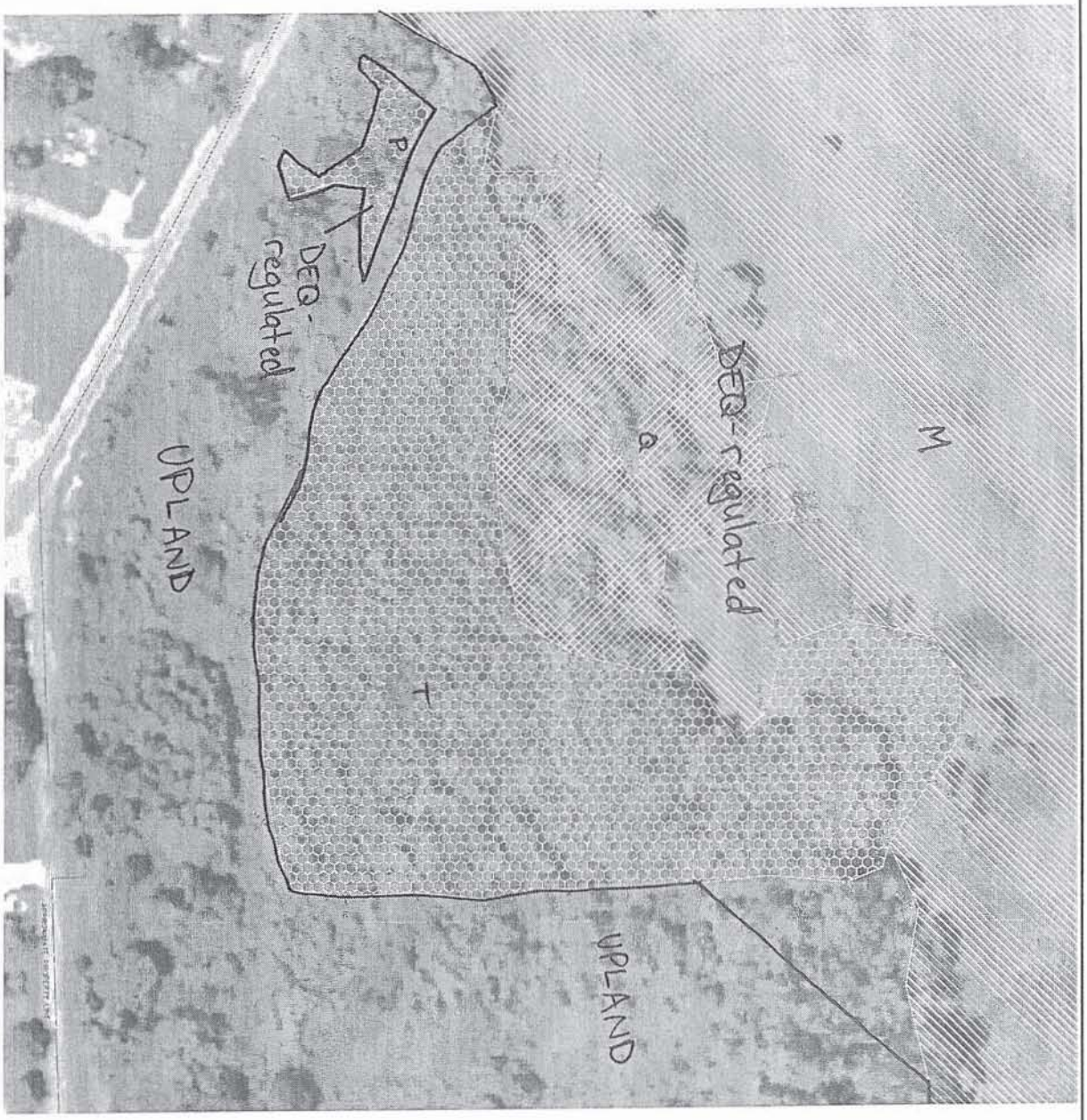
10/27/2008



LEGEND

OPEN WATER (FLAGGED)

OPEN WATER (NOT FLAGGED)

WETLAND BOUNDARY

DATA POINT

WETLAND FLAG

PALUSTRINE SCRUB-SHRUB (PSS)

PALUSTRINE EMERGENT (PEM)

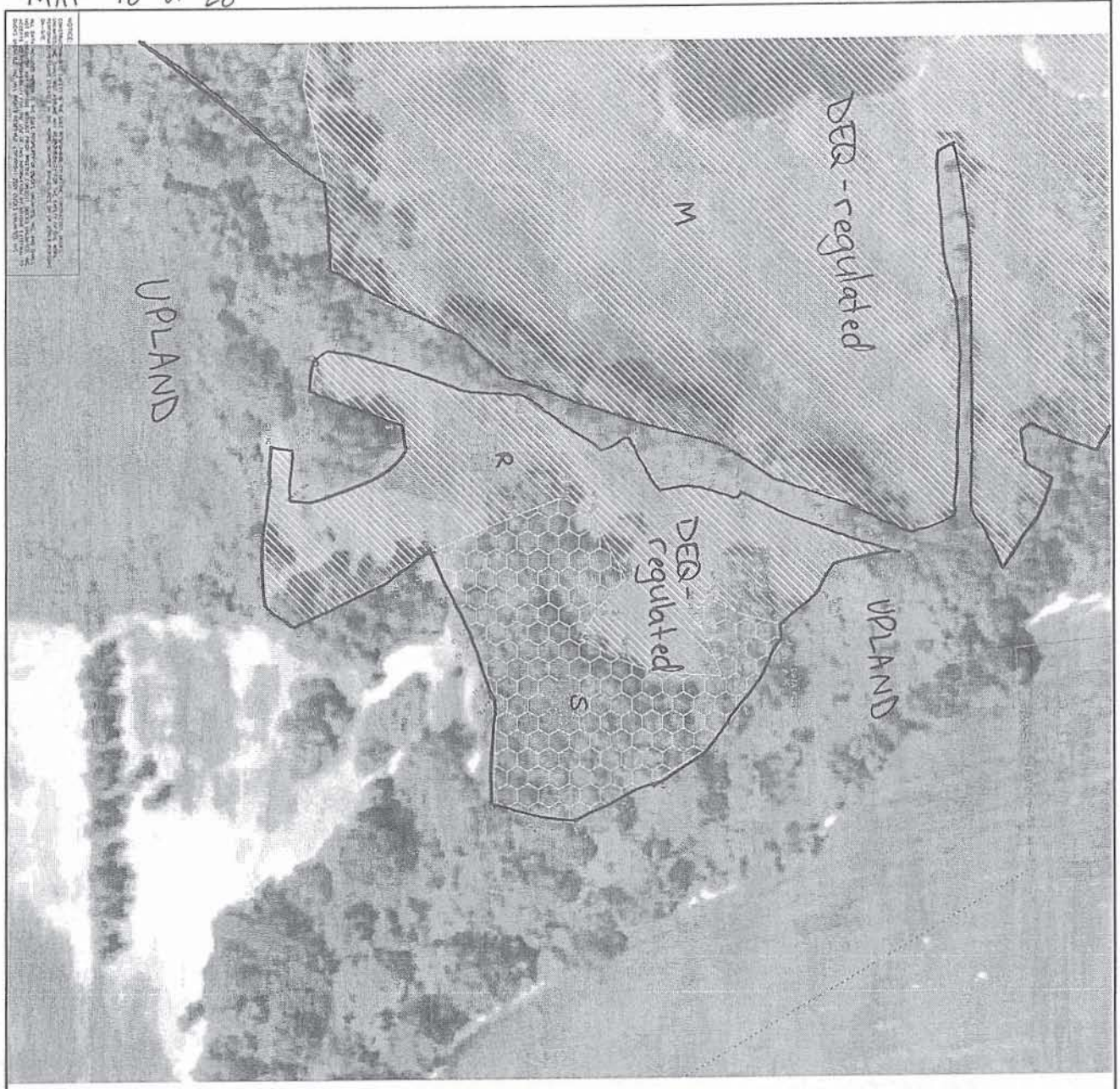
PALUSTRINE FORESTED (PFO)

GRAPHIC SCALE

N

- This drawing showing those areas containing wetland and not containing wetland is an approximation of the boundaries flagged on-site.
- This drawing does not authorize or permit activities requiring a permit in accordance with Part 303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Map prepared by: Kathleen Fairchild, DEQ
10/27/2008



LEGEND

GRAPHIC SCALE

N

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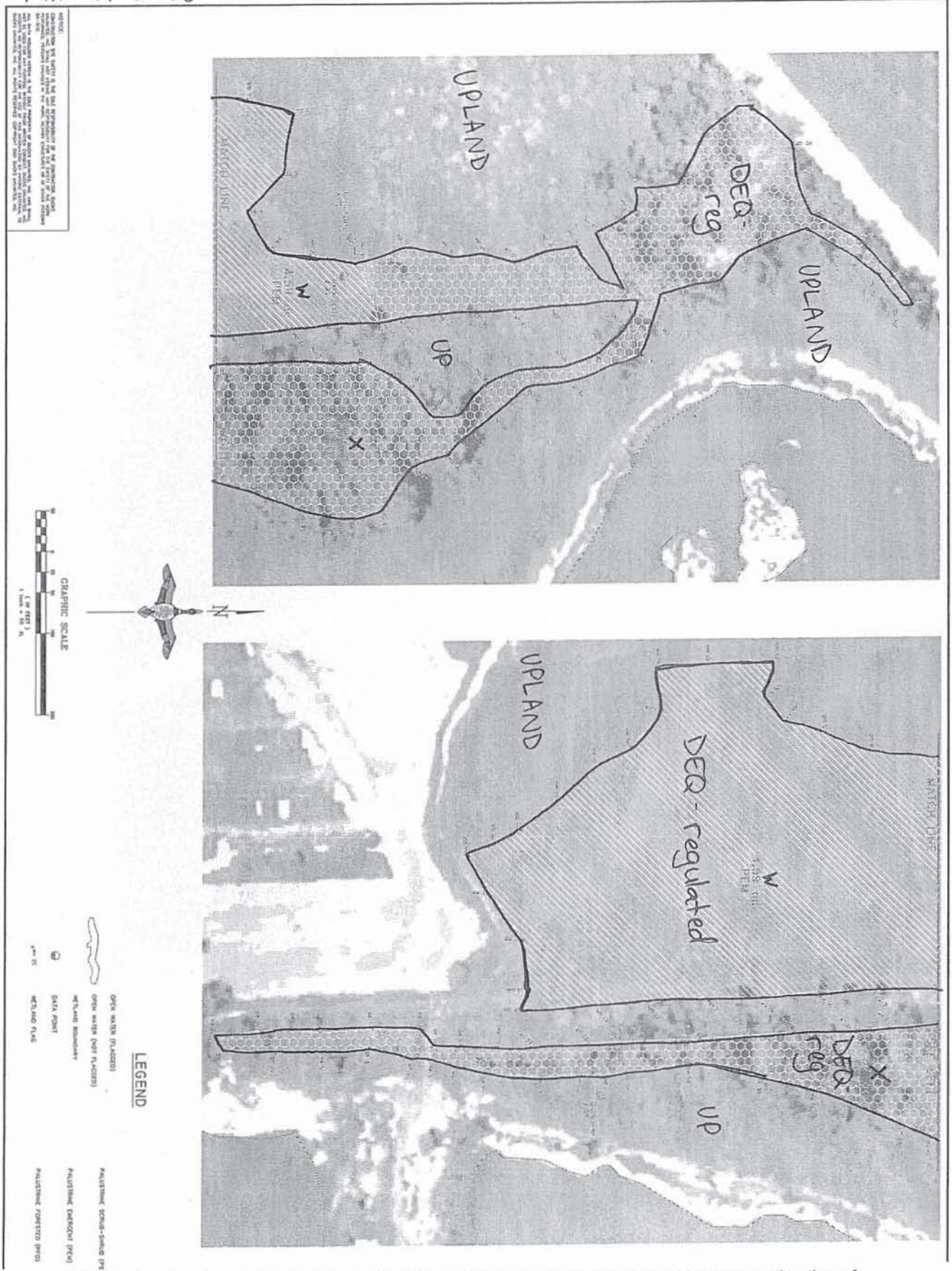

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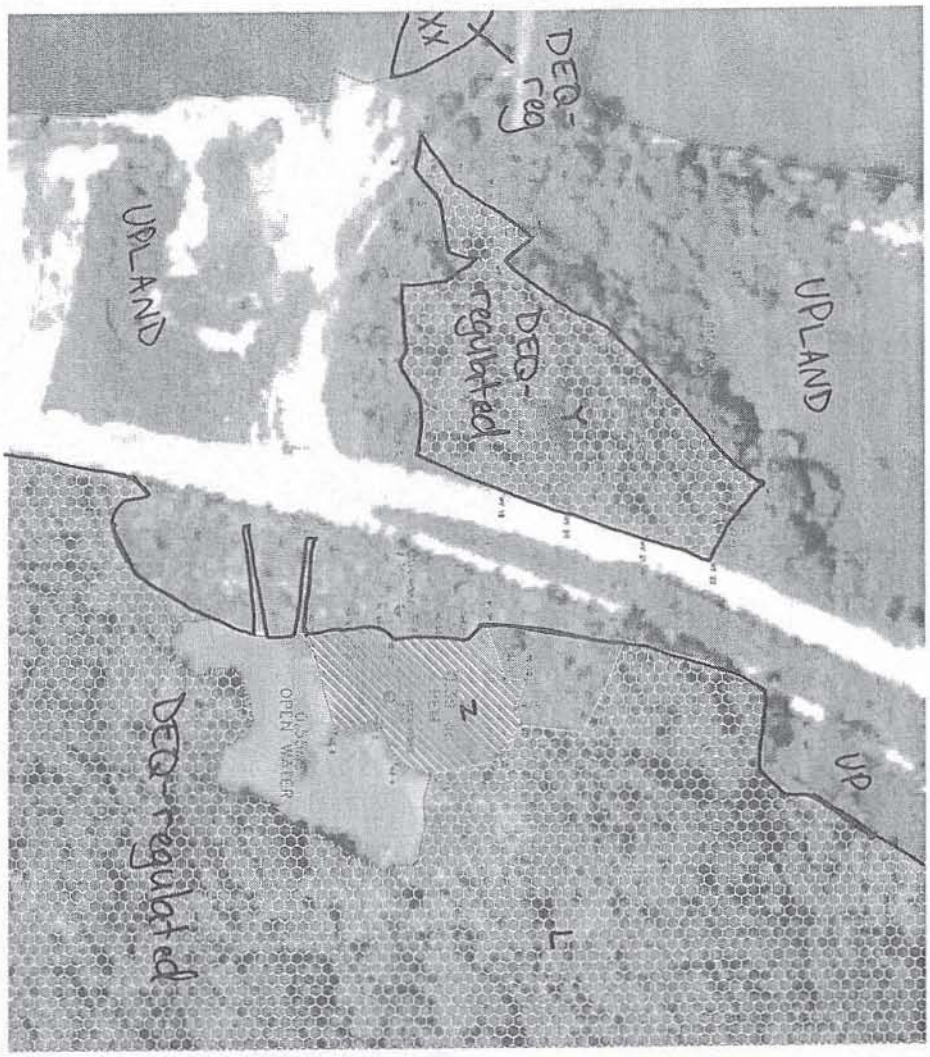
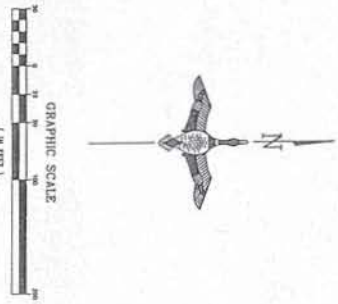
Map prepared by: Kathleen Fairchild, DEQ
10/27/2008





LEGEND

OPEN WATER (FLAGGED)
OPEN WATER (NOT FLAGGED)
WETLAND BOUNDARY
DATA POINT
WETLAND FLAG
PALUSTRINE SCRUB-SHRUB (PSS)
PALUSTRINE EMERGENT (PEM)
PALUSTRINE FORESTED (PFO)

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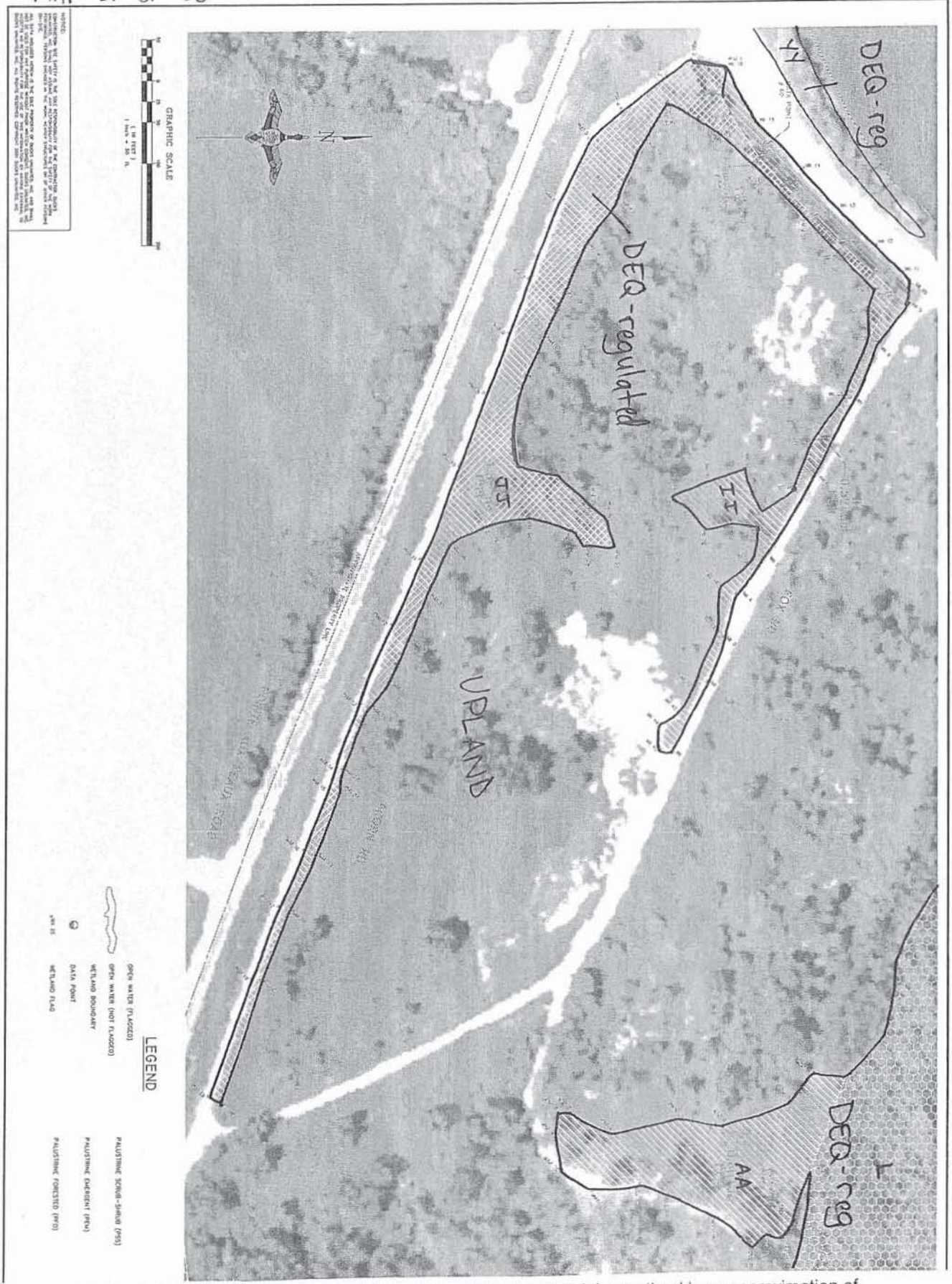

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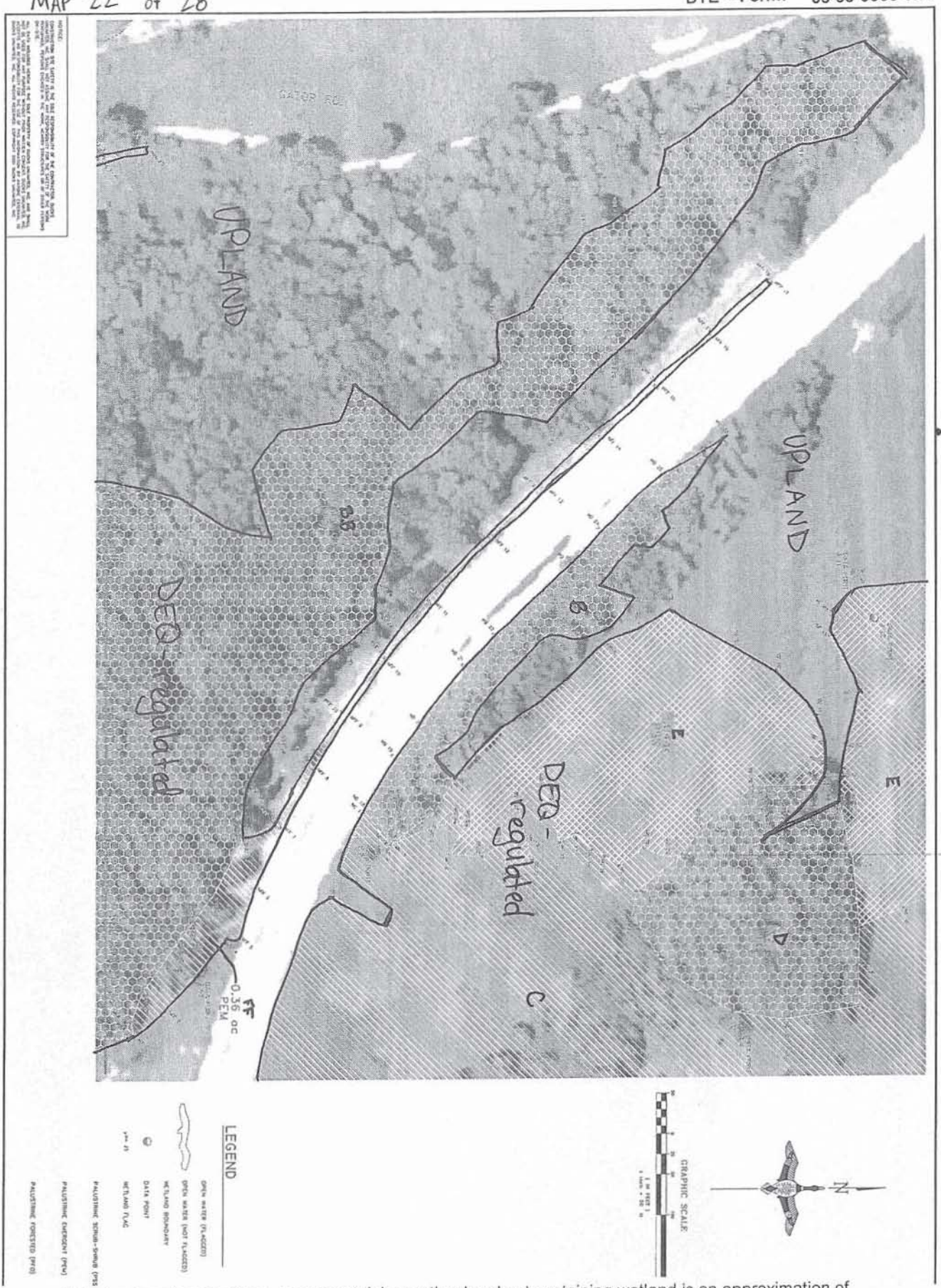

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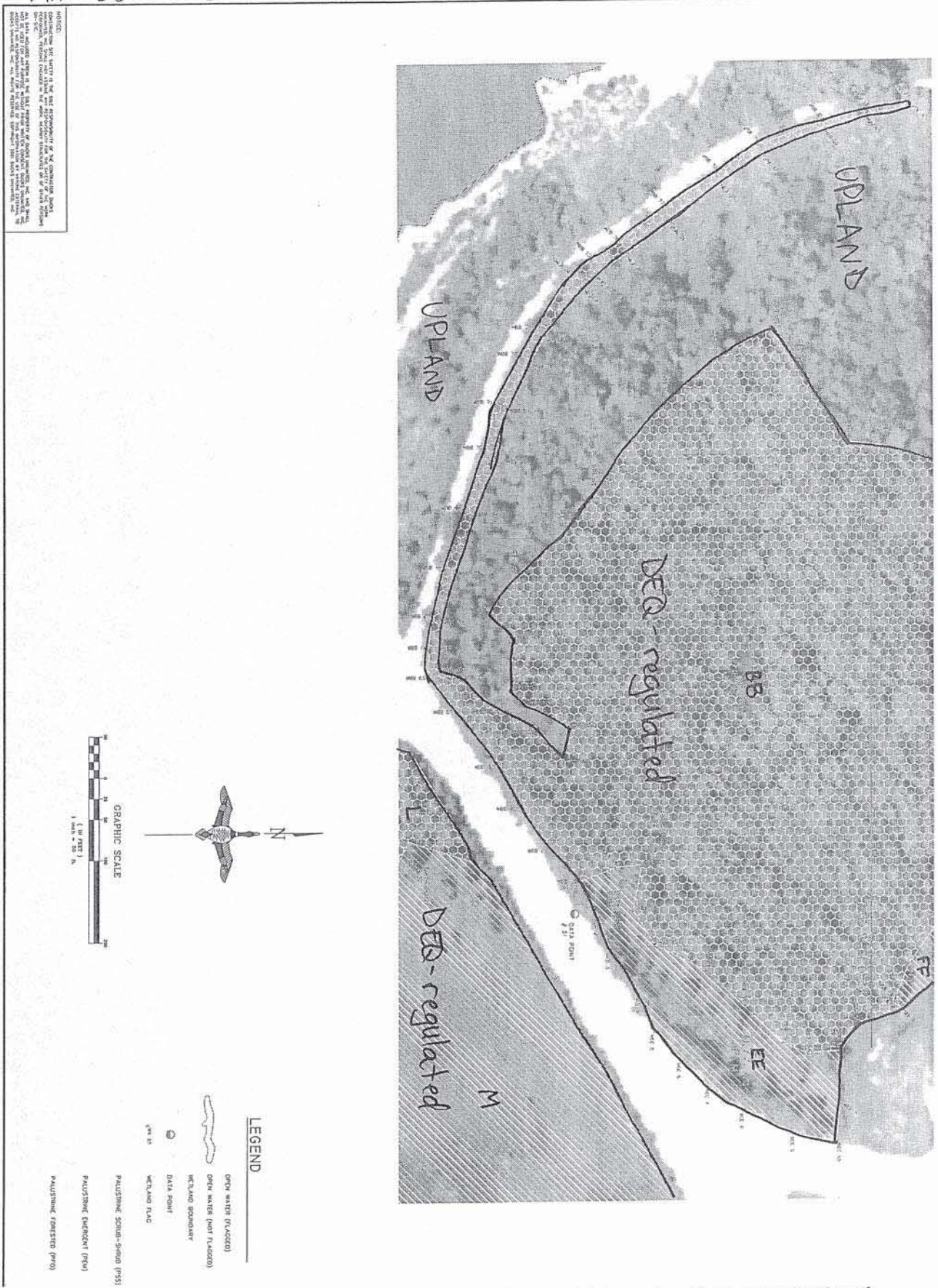
10/27/2008



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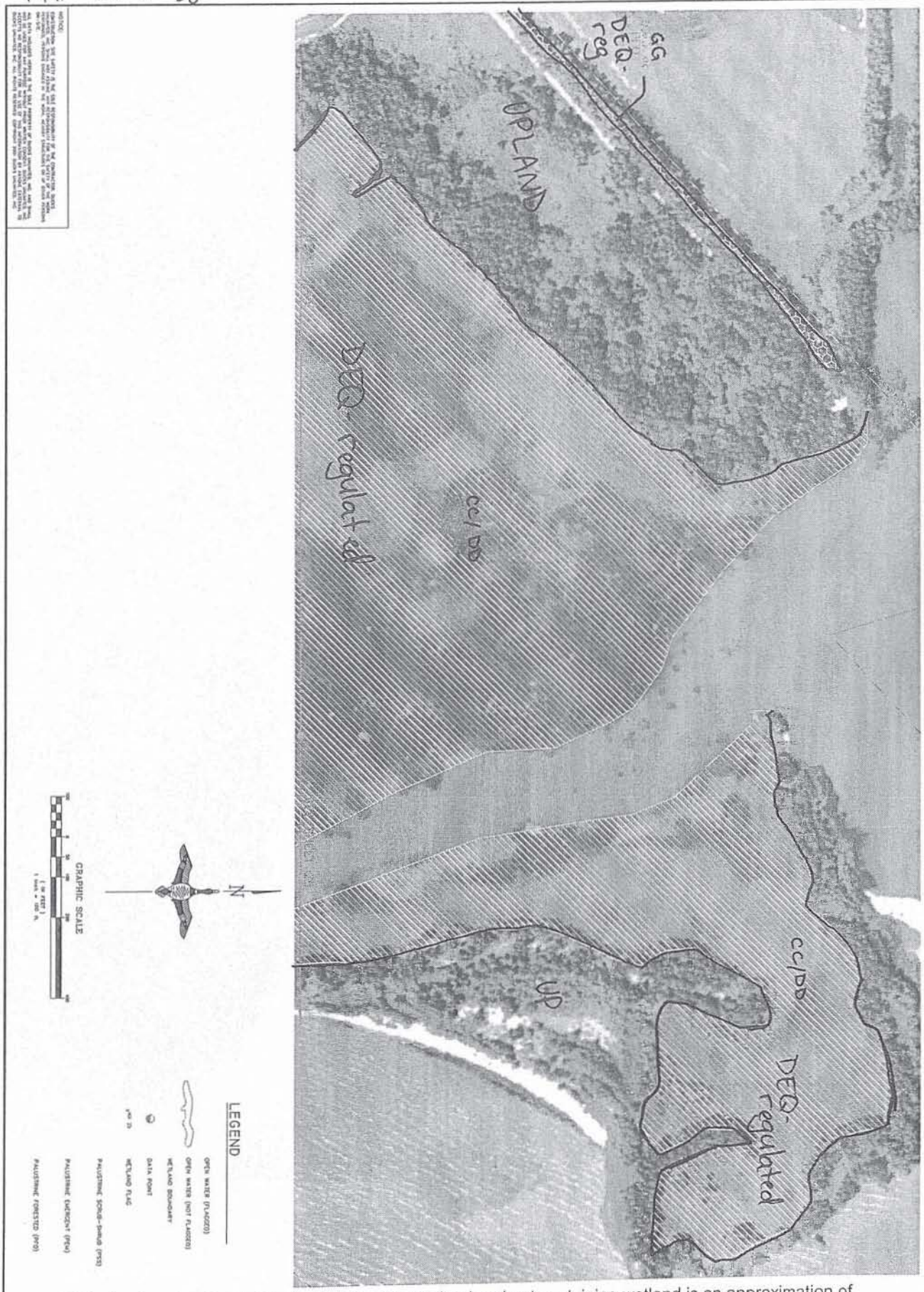

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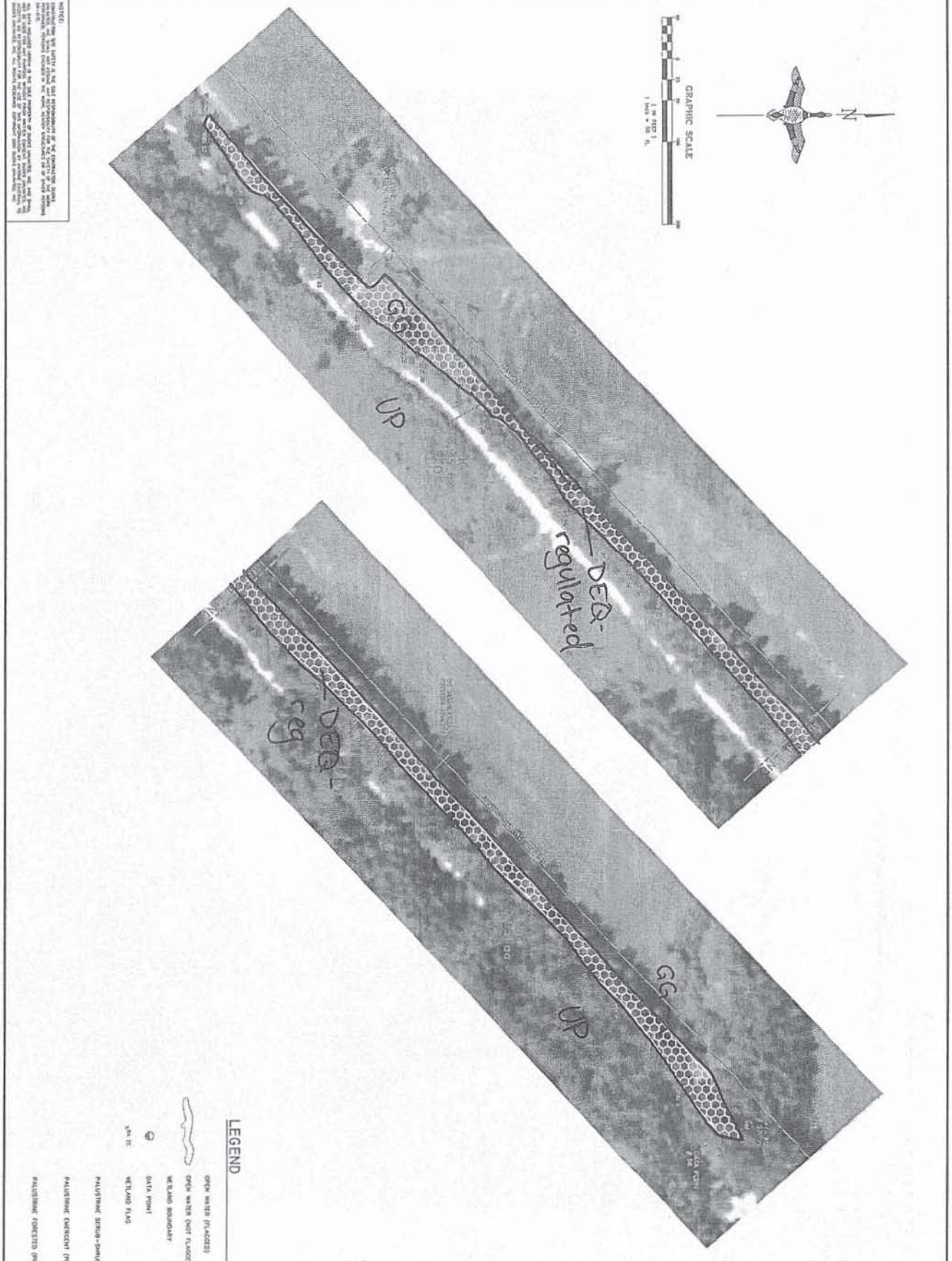

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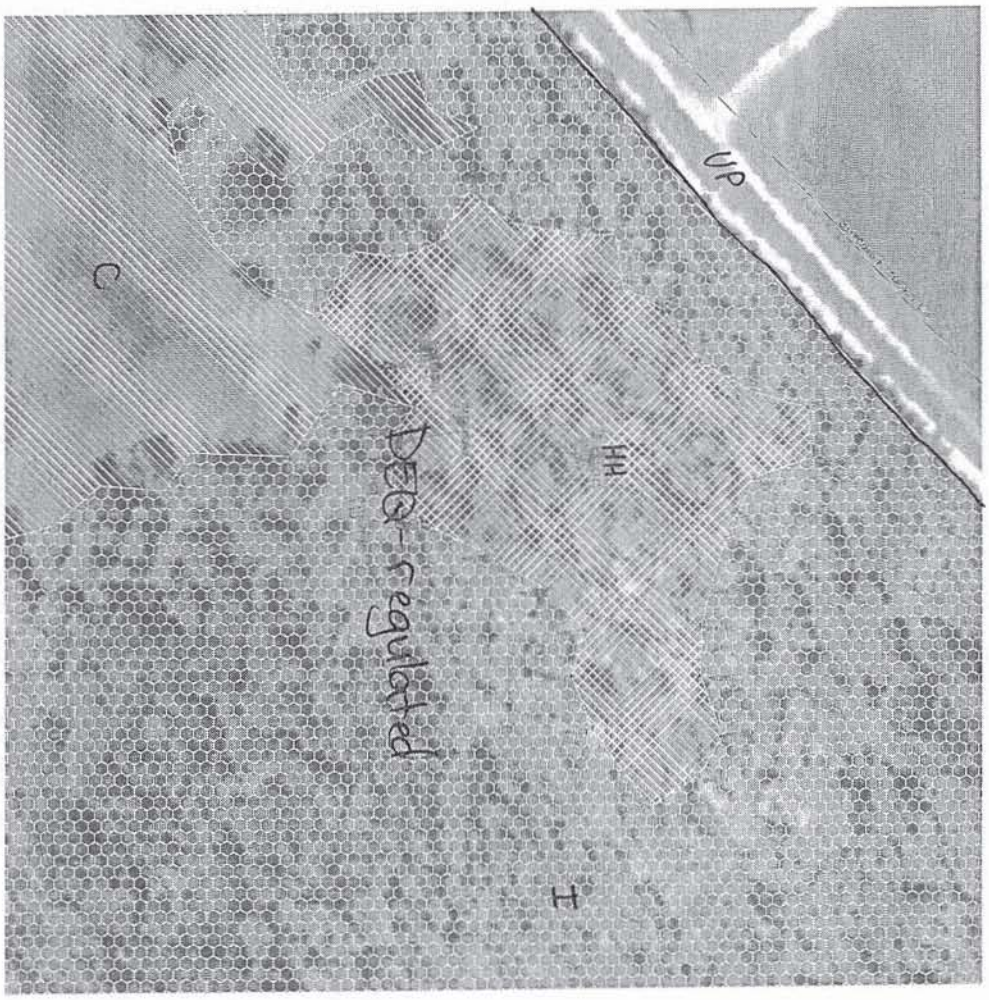

LEGEND

OPEN WATER (FLAGGED)

OPEN WATER (NOT FLAGGED)

WETLAND BOUNDARY

DATA POINT

WETLAND FLAG

PALUSTRINE SCRUB-SHRUB (PSS)

PALUSTRINE EMERGENT (PEM)

PALUSTRINE FORESTED (PFO)

GRAPHIC SCALE

N

- This drawing showing those areas containing wetland and not containing wetland is an approximation of the boundaries flagged on-site.
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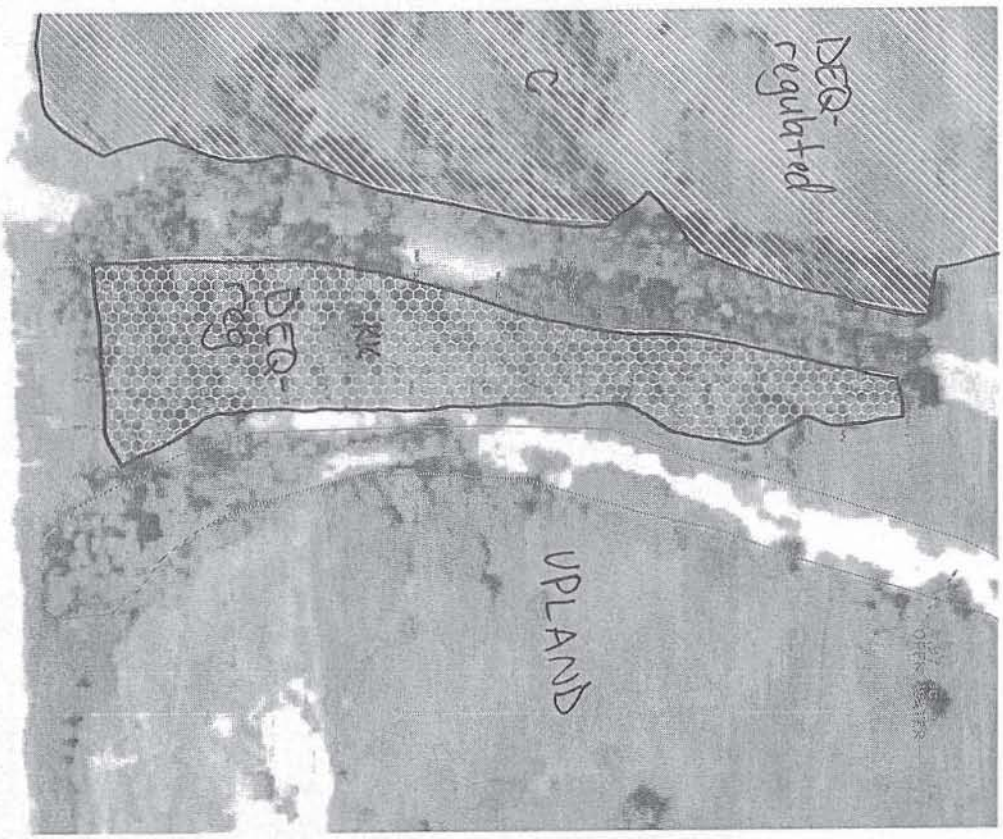

LEGEND

OPEN WATER (FLAGGED)

OPEN WATER (NOT FLAGGED)

WETLAND BOUNDARY

DATA POINT

WETLAND FLAG

PALUSTRINE SCRUB-SHRUB (P

PALUSTRINE EMERGENT (PEM)

PALUSTRINE FORESTED (PFO)

GRAPHIC SCALE

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Map prepared by: Kathleen Fairchild, DEQ
10/27/2008

NRC3-09-0010
RAI Question TE2.4.1-11

Enclosure 2

Wetland Identification Report Addendum
(following 2 pages)

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

March 30, 2009

Mr. Randall Westmoreland
The Detroit Edison Company
One Energy Plaza
Detroit, MI 48226-1279

Dear Mr. Westmoreland:

SUBJECT: Wetland Identification Report
Modified Wetland Identification File Number 08-58-0003-WA

The Department of Environmental Quality (DEQ) has been advised by your consultant, Mr. Peter Wycoff of Ducks Unlimited, that the location of wetland YY was incorrectly represented on the map in our original report issued November 7, 2008. The enclosed map, provided by Ducks Unlimited, shows the correct location of wetland YY. Wetland YY is located to the west of the area indicated on the original map.

This modified Report clarifies the previous report. No changes have been made to the regulatory status of the wetlands on site. The warranty period for this reassessment remains as October 16, 2011.

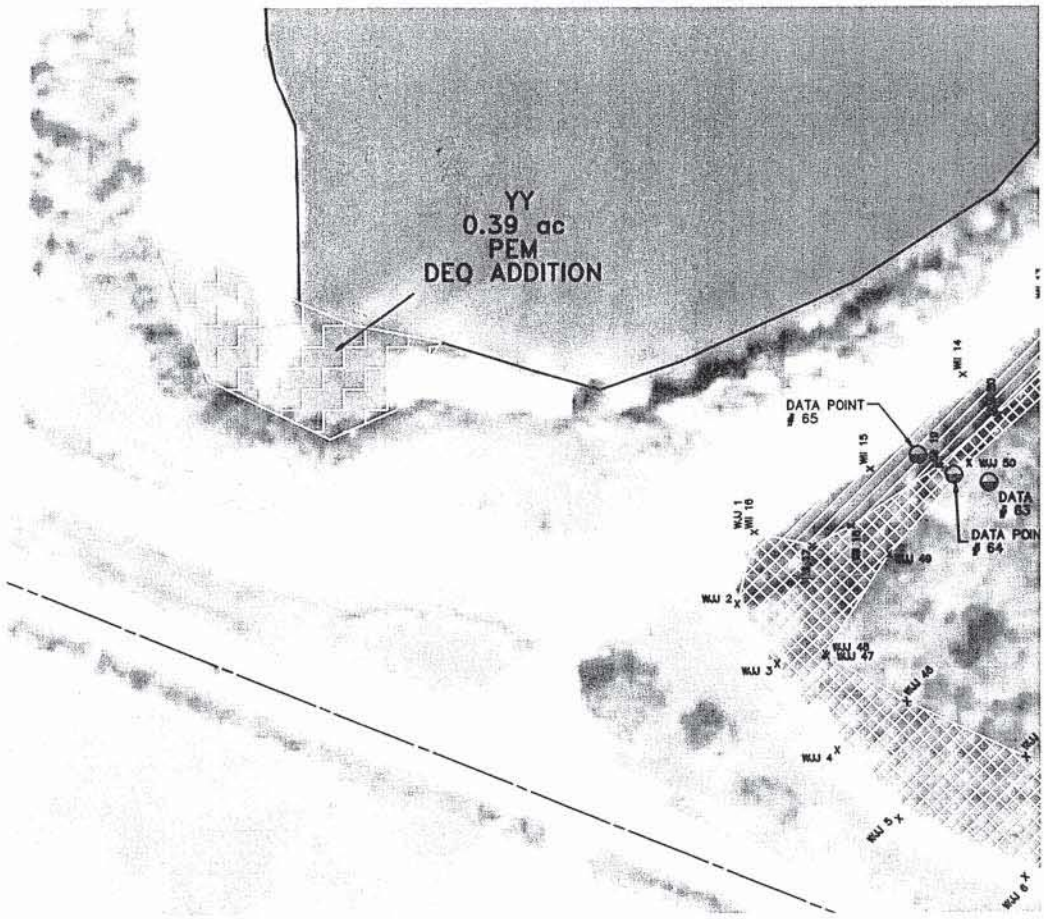
If you should have any questions regarding this letter, please contact me.

Sincerely,

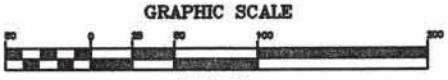
Todd Losee
Wetland Identification Program Coordinator
Land and Water Management Division
517-335-3457

Enclosure

cc: Monroe CEA
Monroe County Health Department
Frenchtown Township Clerk
USACE
Mr. Peter Wyckoff, Ducks Unlimited
Ms. Lori Sargent, DNR, Wildlife, Michigan Natural Features Inventory
Ms. Mary Vanderlaan, DEQ, Jackson District Office



GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DUCKS UNLIMITED, INC. SHALL NOT ASSUME ANY RESPONSIBILITY FOR THE SAFETY OF THE WORK PERFORMED, PERSONS ENGAGED IN THE WORK, NEARBY STRUCTURES OR OF OTHER PERSONS ON-SITE.

Attachment 12-12

Section 12:
Activities that May Impact Wetlands

USACE Jurisdictional Determination
November 9, 2010
(following 42 pages)

Note:
The headers, footers and page numbers apply to the original document within this attachment.

DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
REGULATORY OFFICE
477 MICHIGAN AVENUE, 6TH FLOOR
DETROIT, MICHIGAN 48226-2550

REPLY TO
ATTENTION OF:

November 9, 2010

Engineering & Technical Services
Regulatory Office
File No. LRE-2008-00443-1

Randy Westmoreland
Detroit Edison Company
2000 Second Avenue, 337 WCB
Detroit, 48226

Dear Mr. Westmoreland:

This is in response to our ongoing discussions regarding U.S. Army Corps of Engineers (USACE) jurisdiction at the Detroit Edison (DTE) Fermi nuclear power plant property located at 6400 North Dixie Highway, Frenchtown Township, Monroe County, Michigan (Encl. 1). The whole of DTE's property at this site abuts Lake Erie which is a navigable water of the United States (US). Lake Erie and adjacent wetlands at this property are under USACE regulatory jurisdiction. Any temporary or permanent construction in Lake Erie or the discharge of dredged and/or fill material in Lake Erie or its adjacent wetlands at the property must be authorized by the USACE. Our authority to regulate certain activities on and adjacent to waters of the US, including those at the property in question is found in Section 10 of the Rivers and Harbors Act (Section 10), and Section 404 of the Clean Water Act (Section 404).

Ducks Unlimited (DU) submitted a Wetland Investigation Report for the property, dated July 14, 2008, and requested verification of the DU-identified wetland delineation lines as defined in the report and a USACE jurisdictional determination (JD) on behalf of DTE. This response contains a report of our findings and a final JD. The overall map of the DU wetland delineation is contained in Enclosure 2. The Enclosure 2 drawing, derived from the DU Report (Appendix A drawing 2 of 28, dated July 7, 2008) also contains approximate locations of four other wetland areas (WW, XX, YY, ZZ) not contained in the DU report but discussed at the initial inspection. Enclosure 3 contains DU Report Appendix A drawings 4-18 and 20-28 which include more detailed delineation maps and USACE changes to the delineation.

Under Section 10, a USACE permit is required for any temporary or permanent structure or work in navigable waters of the US to what is called the Ordinary High Water Mark (OHWM). In Lake Erie, the OHWM extends approximately to the elevation contour of 573.4 feet referenced to the 1985 International Great Lakes Datum (IGLD 85). In addition, a Section 10 permit is required for structures or work outside this limit if they may affect the course, location, or condition of the waterbody as to its navigable capacity. Some typical examples of structures or work requiring Section 10 permits within this jurisdictional area include beach nourishment, boat ramps, mooring buoys, navigational aids, piers, culverts, water intakes, discharge pipes, silt curtains, coffer dams, boat hoists, pilings and construction of marina facilities, breakwaters, bulkheads, dredging, filling or discharging material such as sand, gravel or stones, groins and jetties, placement of riprap for wave protection or stream bank stabilization.

Section 404 requires a USACE permit for the temporary or permanent discharge of dredged or fill material into navigable waters of the United States and in wetlands adjacent to those waters. The area of USACE jurisdiction under Section 404 extends to the OHWM and to the upland boundary of any adjacent wetlands. Projects involving discharges typically include placement of fill material for homes, landscaping, structures, impoundments, causeways, road fills, dams and dikes, riprap, groins, breakwaters, revetments, and beach nourishment. Section 404 also regulates discharges of dredged material incidental to certain activities such as grading, mechanized land clearing, ditching or other excavation activity, and the installation of certain pile-supported structures.

During our site inspections we determined that the ordinary high waters of Lake Erie extend into and encompassed the areas listed below and shown on the referenced drawings. We consider these areas to be part of Lake Erie and subject to our Section 10 and 404 jurisdiction:

Area	Enclosure	Enclosure 3 Drawing no.
C (unnamed stream)	2 & 3	5 & 6
M including 1.97-acre open water (south overflow canal)	2 & 3	6, 14 & 15
N (dredged material disposal authorized per LRE-1977-10060)	2 & 3	16
U	2 & 3	10
CC & DD including 3.55-acre open water area	2 & 3	24 & 25
Lake Erie proper	2	

During our site inspections we determined that the following non-wetland open water features identified by DU on DTE property are physically separated from the ordinary high waters of Lake Erie by patches of upland ground: H (Encl. 2 and Encl. 3, drawing 10), and the quarry lakes (Encl. 2). We do not have Section 10 or Section 404 jurisdiction over such water features. The State of Michigan has assumed Federal permit authority for such non-navigable/non-wetland waters per Section 404(g) of the Clean Water Act (CWA) and 40 Code of Federal Regulations (CFR), Part 233.

Regarding USACE Section 404 jurisdiction at the property, we determined, during our site inspections, that the following DU-identified wetland areas, identified on Enclosure 2, are not adjacent to Lake Erie: A, H, W, X, Y, II, JJ, WW, XX, YY, ZZ. The State of Michigan has assumed Federal permit authority for such non-adjacent wetlands per Section 404(g) of the CWA and 40 CFR, Part 233. In the event that the Environmental Protection Agency, per 40 CFR, Part 233.50, directs us to conduct a permit evaluation for discharges in any of the non-navigable/non-wetland waters or non-adjacent wetlands at the property, the Detroit District USACE will make the final determination on Section 404 jurisdiction.

We confirmed the DU wetland delineation boundaries observed during the site inspections for the areas listed below and on the referenced drawings, except as noted:

DU Wetland Delineation Area	Enclosure	Enclosure 3 Drawing no.
B	2 & 3	4
D	2 & 3	4
E	2 & 3	4
F	2 & 3	7 & 8
G	2 & 3	9
I	2 & 3	11
J	2 & 3	9
K	2 & 3	9
L with addition of area resulting from connection of WL 69 to WL 74	2 & 3	12 & 13
O	2 & 3	16
P	2 & 3	17
Q	2 & 3	15 & 17
R	2 & 3	15 & 18
S	2 & 3	18
T	2 & 3	17
V	2 & 3	9
Z	2 & 3	12 & 20
AA	2 & 3	13 & 21
BB	2 & 3	22 & 23
EE	2 & 3	23
FF	2 & 3	22
GG	2 & 3	26
HH	2 & 3	11 & 27
KK	2 & 3	6 & 28

Our assertion of jurisdiction is based on the following criteria: (1) our determination that portions of the property are navigable waters of the US and recognition that the use, degradation, or destruction of this waterbody could affect interstate commerce; (2) our findings that the areas identified as wetlands meet our technical definition of a wetlands per the criteria in the 1987 *Corps of Engineers Wetlands Delineation Manual* and (3) our determination that the wetlands considered under USACE jurisdiction in this letter are adjacent (bordering, contiguous, or neighboring) to Lake Erie which is a navigable water of the US.

This letter contains an approved JD for the referenced property (Encl. 4). If you object to this determination, you may request an administrative appeal under USACE regulations at 33 CFR, Part 331. We have enclosed a flowchart of our Administrative Appeal Process for Approved JD (Encl. 5) and a Notification of Appeal Process (NAP) fact sheet and Request For Appeal (RFA) form (Encl. 6). If you request to appeal this determination you must submit a completed RFA form to the USACE Great Lakes and Ohio River Division office at following address:

Appeals Review Officer
U.S. Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Rm 10-524
Cincinnati, Ohio 45202-3222

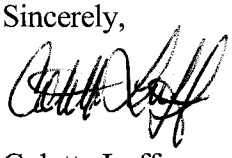
In order for an RFA to be accepted by the USACE, the USACE must determine that the RFA is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division office within 60 days of the date of the NAP sheet. If you decide to submit a RFA form, it must be received at the above address by January 9, 2011. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter. You may contact the Appeals Review Officer at (513) 684-6212 and send a facsimile at (513) 684-2460.

This JD is valid for a period of five years from the date of this letter unless new information warrants revision of the delineation before the expiration date.

If you have questions, please contact Colette Luff of this office at the above address, by telephone at 313-226-7485, or by E-Mail at Colette.M.Luff@usace.army.mil. Please refer to File No. LRE-2008-00443-1 in all future communications with this office.

We are interested in your thoughts and opinions concerning your experience with the Detroit District, Corps of Engineers Regulatory Program. If you are interested in letting us know how we are doing, you can complete an electronic Customer Service Survey from our web site at: **http://per2.nwp.usace.army.mil/survey.html**. Alternatively, you may contact us and request a paper copy of the survey that you may complete and return to us by mail or fax. Thank you for taking the time to complete the survey, we appreciate your feedback.

Sincerely,



Colette Luff
Project Manager
Permit Evaluation Eastern Branch

Enclosures

Enclosure 1: Location Map
Enclosure 2: Site Map
Enclosure 3: Detailed Wetland Delineation Boundary maps
Enclosure 4: Approved JD
Enclosure 5: Flowchart
Enclosure 6: NAP/RFA

Copy Furnished:

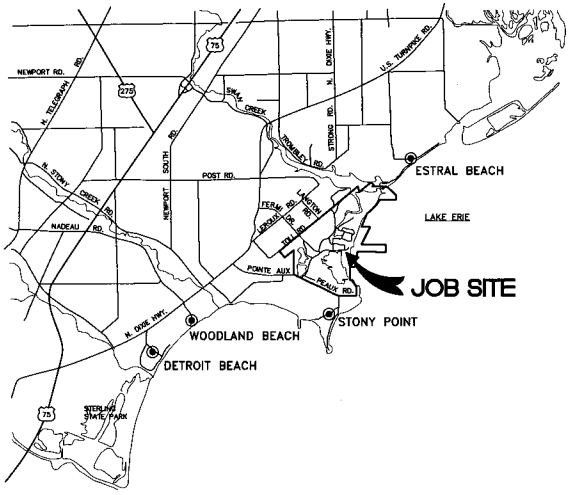
MDNRE, K. David, Jackson District Office (08-58-3) w/Encls.
NOAA, w/Print
Ducks Unlimited, Peter Wyckoff (MI-188-1) w/Encls.

DUCKS UNLIMITED INC.

DUCKS UNLIMITED INC.

DTE FERMI II PLANT
WETLAND DELINEATION

MONROE COUNTY, MICHIGAN



PROJECT LOCATION

SHEET INDEX

Global Leader in Wetlands & Wildlife Conservation
GREAT LAKES/ATLANTIC REGIONAL OFFICE
ANN ARBOR, MICHIGAN (734) 623-2000
DUCKS UNLIMITED

COVER SHEET
WETLAND DELINEATION
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

REVISIONS:

CAD FILE: COVER SHEET
DESIGNED BY: -
DRAWN BY: GB, DA
SURVEYED BY: GB, WW, PW
BOOK NO. # 16 PAGE 13-19
DATE: 7/7/08
PROJECT NO.: US-MI-188-1
GLARO-MI3-46-1

ENCLOSURE 1

GRAPHIC SCALE

500 0 250 500 1000 2000

(IN FEET)
1 inch = 500 ft.

LEGEND

PSS	PALUSTRINE SCRUB SHRUB WETLAND
PEM	PALUSTRINE EMERGENT WETLAND
PFO	PALUSTRINE FORESTED WETLAND
	APPROXIMATE PROPERTY LINE
	OPEN WATER (FLAGGED)
	OPEN WATER (NOT FLAGGED)
	WETLAND BOUNDARY
	DATA POINT
	HORIZONTAL & VERTICAL CONTROL

HORIZONTAL CONTROL – Coordinates are NAD 83 (CORS 1996) Michigan State Plane Coordinates, South Zone # 2113, units international feet. Coordinates established from NGS OPUS (National Geodetic Survey, Online Positioning User Service) solution for control point 81. Raw data was collected for 5 hours on June 4, 2008 using a Trimble 4700 GPS base receiver. OPUS solution for control point 81, North 167655.689 ift.
East 13420948.599 ift.

ONSITE CONTROL, HORIZONTAL

Control Point # 1 – Found concrete monument with brass cap on south side of Fermi Drive near sign.
N. 169217.291 ift.
E. 13423438.587 ift.

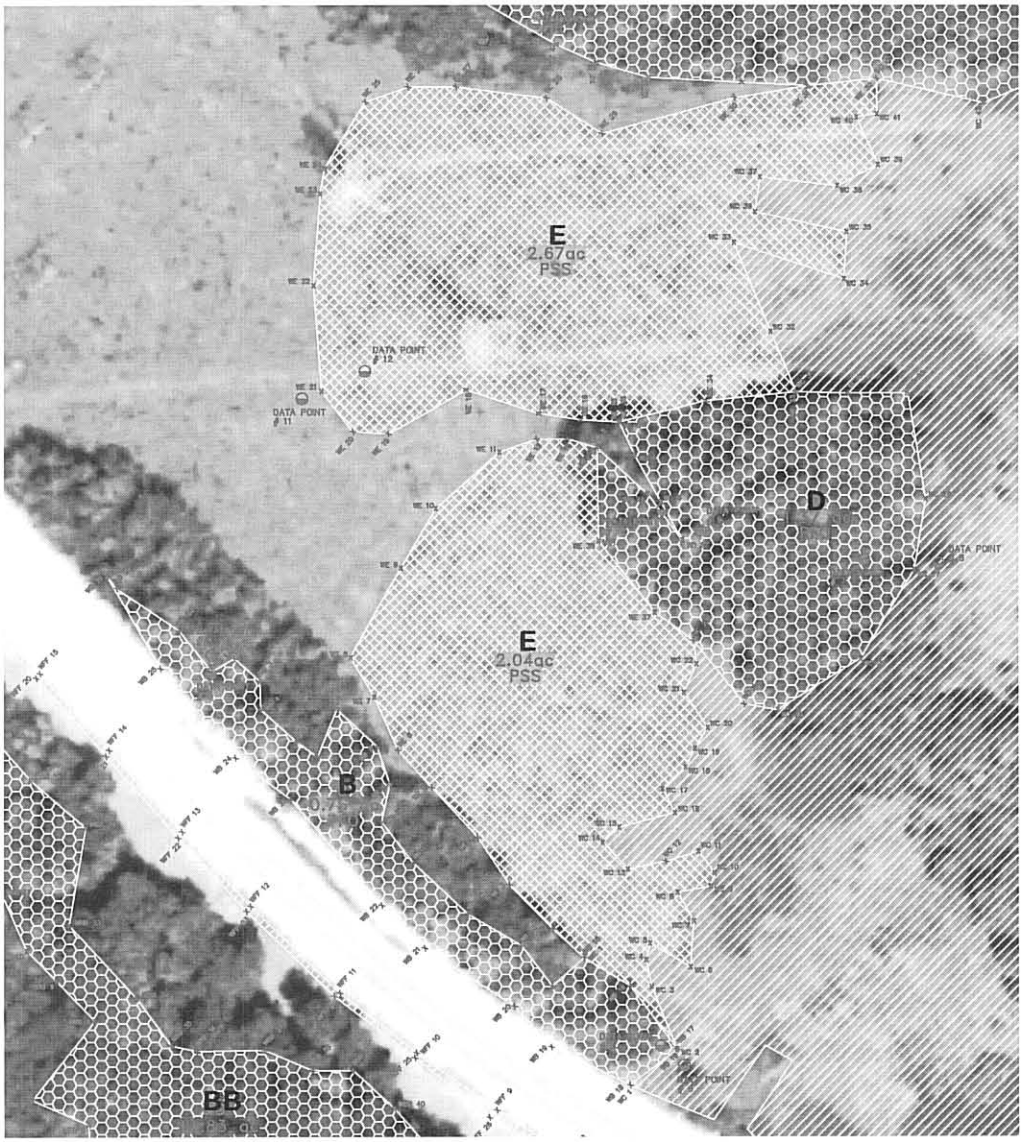
Control Point # 87 –Found concrete monument with brass cap on south side of Fermi Drive, 1.6 feet south of edge of pavement stamped "N.5106.143, E 3600 , EL. 580.167.
N. 169181.477 ift.
E. 13422586.221 ift.

Control Point # 81 – Found yellow capped iron rod #29252, lathe marked "#81 DTE"
N. 167655.689 ift.
E. 13420948.599 ift

ENCLOSURE 2

ENCLOSURE 3

(24 drawings)



N

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LEGEND

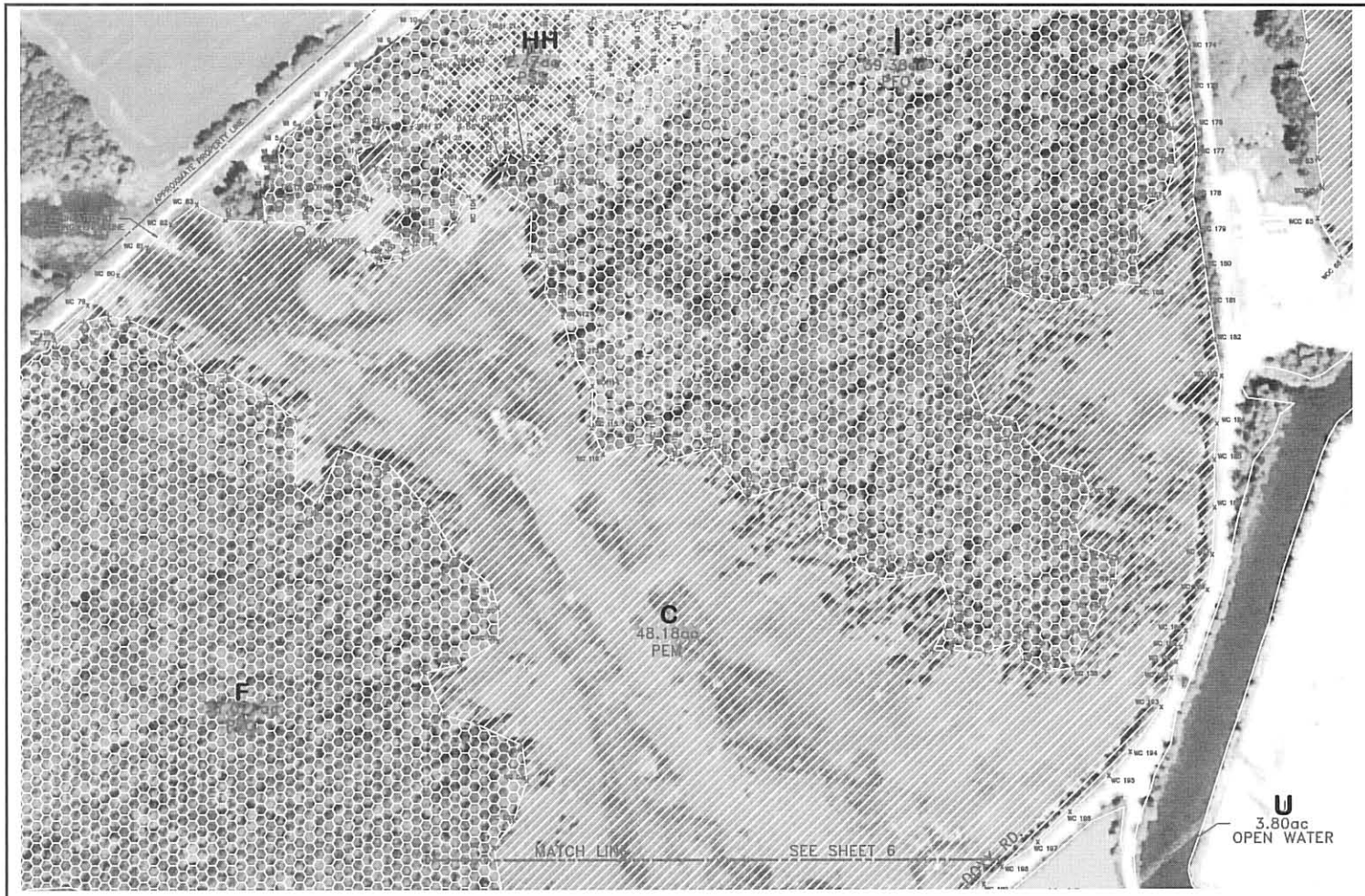
- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG (WA 25)
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

Global Leader in Wetlands & Wildlife Conservation
GREAT LAKES/ATLANTIC REGIONAL OFFICE
ANN ARBOR, MICHIGAN (734) 623-2000
DUCKS UNLIMITED

WETLAND DELINEATION B, D, E
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

REVISIONS:

CAD FILE:	Wetland Delineation 50
DESIGNED BY:	-
DRAWN BY:	GB, DA
SURVEYED BY:	GB,WW,PW
BOOK NO. & PAGE	16 PAGE 13-19
DATE:	7/7/08
PROJECT NO.:	US-MI-188-1
	GLARO-MI3-46-4



N

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WA 25 WETLAND FLAG
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

Global Leader in Wetlands & Wildlife Conservation
GREAT LAKES/ATLANTIC REGIONAL OFFICE
ANN ARBOR, MICHIGAN (734) 623-2000
DUCKS UNLIMITED

WETLAND DELINEATION C NORTH
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

REVISIONS:

CAD FILE:	Wetland Delineation 100
DESIGNED BY:	-
DRAWN BY:	GB, DA
SURVEYED BY:	GB,WK,PW
BOOK NO. #	16 PAGE 13-19
DATE:	7/7/08
PROJECT NO.:	US-MI-188-1
	GLARO-MI3-46-5

N

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG (WA 25)
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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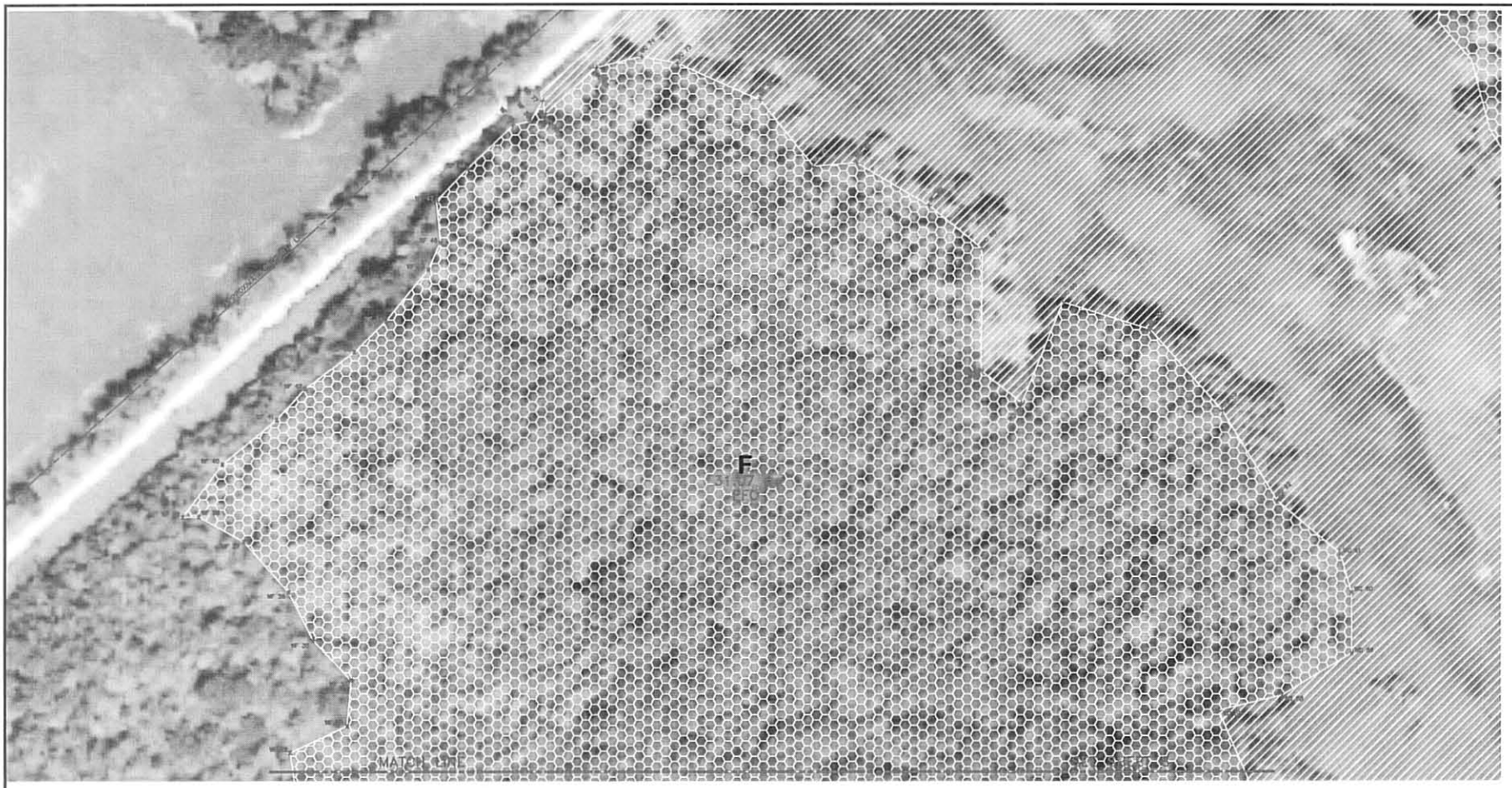
DUCKS UNLIMITED

WETLAND DELINEATION C SOUTH
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

REVISIONS:

CAD FILE:	Wetland Delineation 100
DESIGNED BY:	-
DRAWN BY:	CB, DA
SURVEYED BY:	GD,WW,PW
BOOK NO. #	16 PAGE 13-19
DATE:	7/7/08
PROJECT NO.:	US-MI-188-1

GLARO-MI3-46-6



N

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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WETLAND DELINEATION F NORTH
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

REVISIONS

CAD FILE:	Wetland Delineation 50
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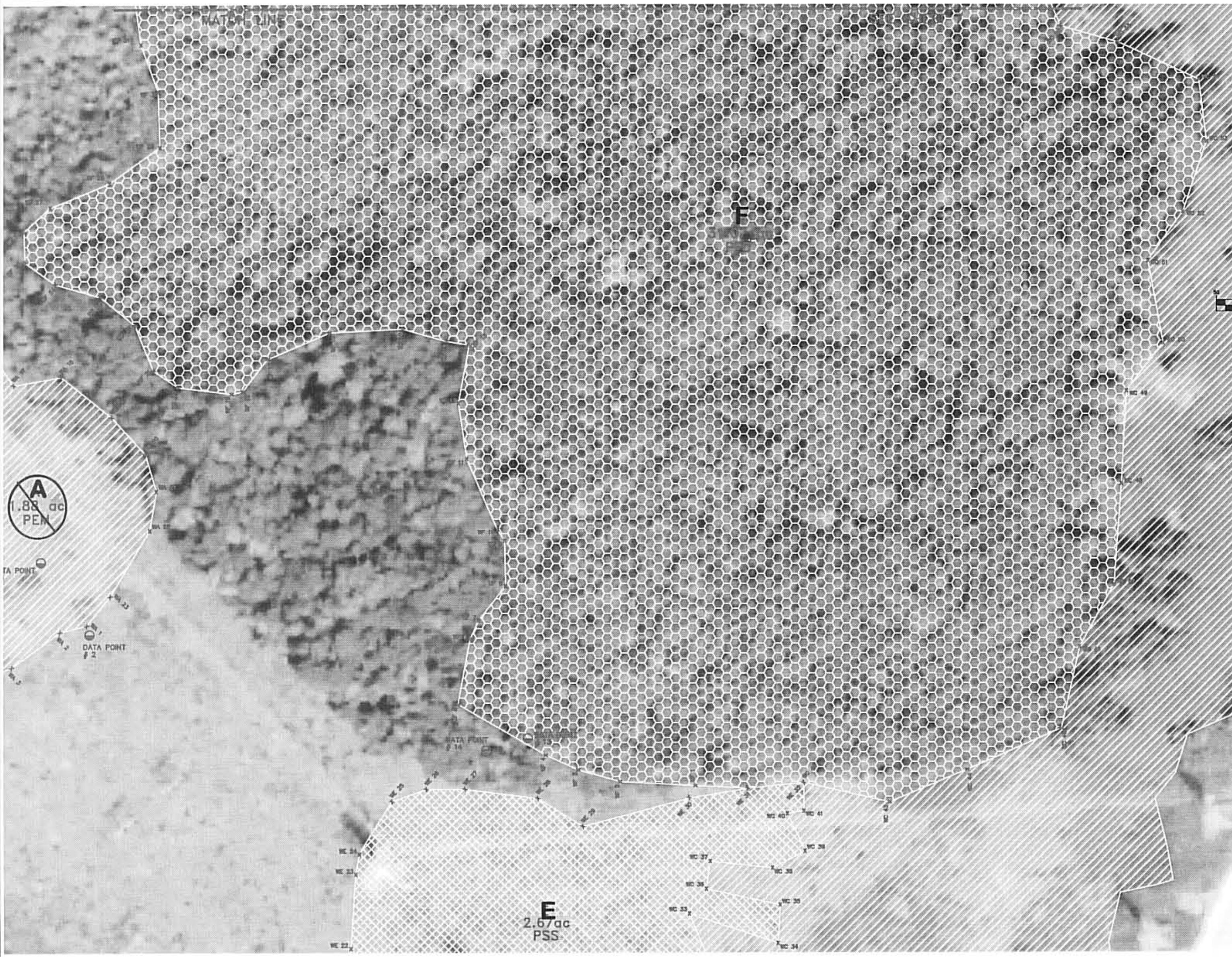
BOOK NO. #	16 PAGE 13-19
DATE:	7/7/08
PROJECT NO.:	US-MI-188-1

GLARO-MI3-46-7



N

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LEGEND

OPEN WATER (FLAGGED)

OPEN WATER (NOT FLAGGED)

WETLAND BOUNDARY

DATA POINT

WA 25 WETLAND FLAG

PALUSTRINE SCRUB-SHRUB (PSS)

PALUSTRINE EMERGENT (PEM)

PALUSTRINE FORESTED (PFO)

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WETLAND DELINEATION F SOUTH
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

REVISIONS:

CAD FILE:
Wetland Delineation 50

DESIGNED BY: -

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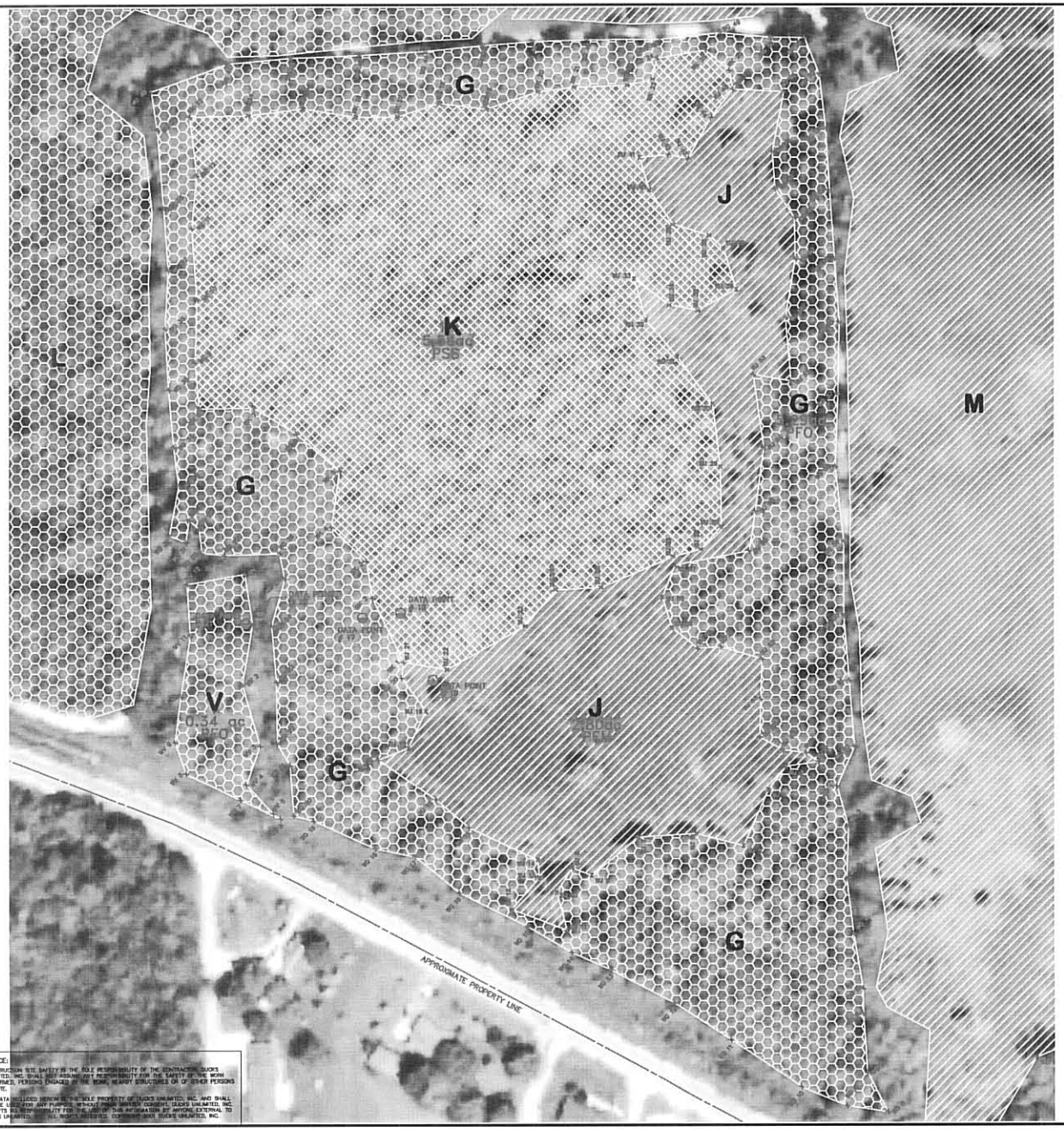

N

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WA 25 — WETLAND FLAG
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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WETLAND DELINEATION G, J, K, V
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

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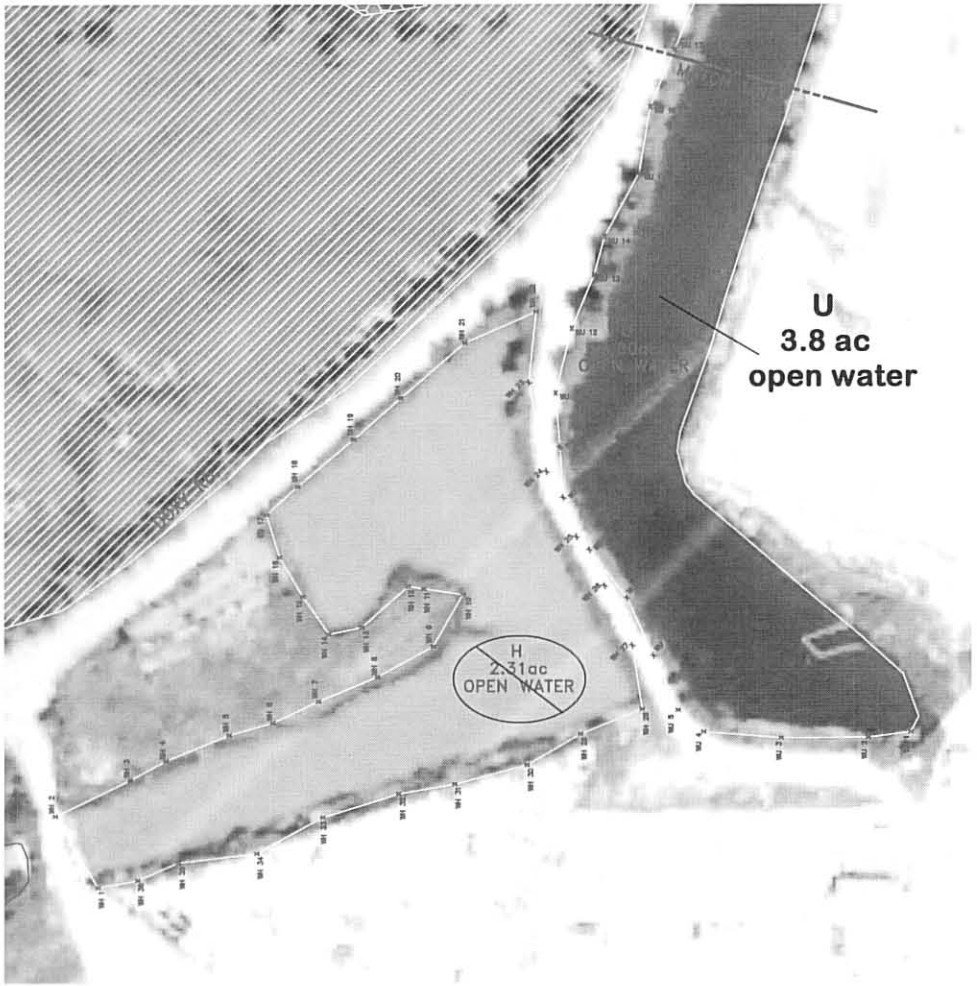

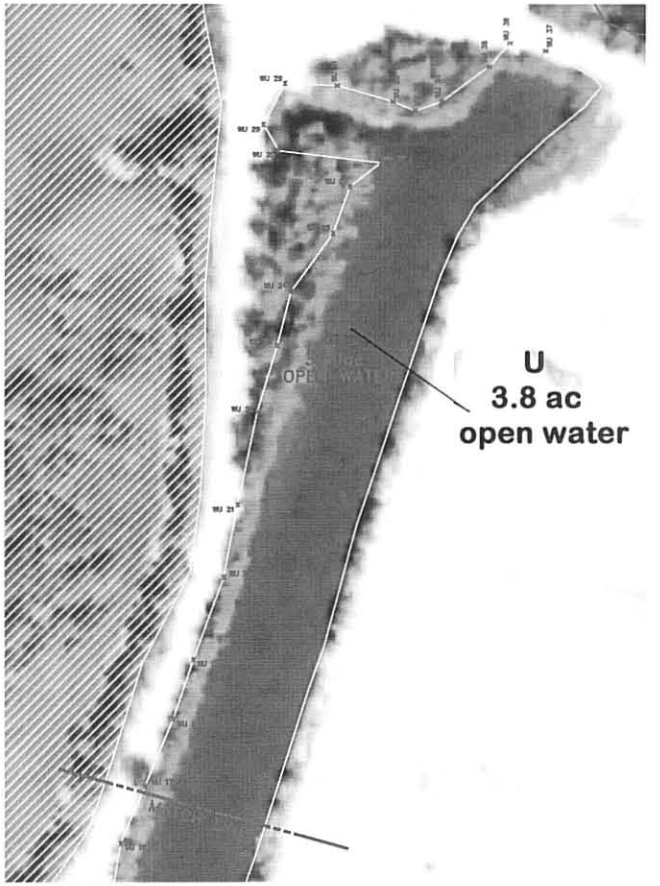

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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WETLAND DELINEATION H, U
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

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GLARO-MI3-46-10

N

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG (WA 25)
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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WETLAND DELINEATION I
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

REVISIONS:

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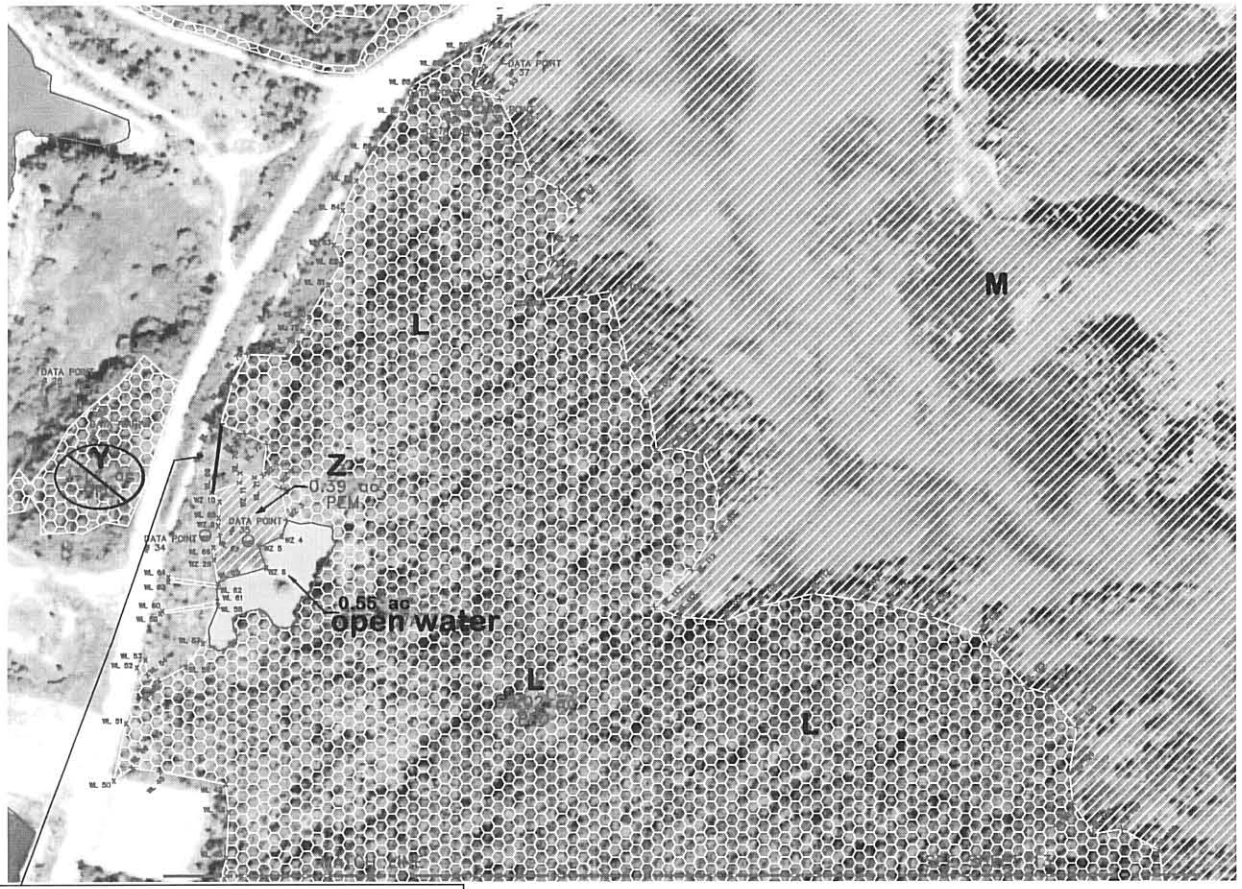
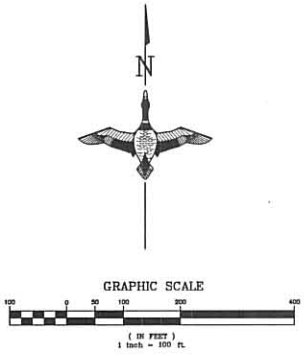
GLARO-MI3-46-11



USACE NOTE:

AREA L: ENLARGE-CONNECT WL 69 to WL 74



LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG (WA 25)
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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WETLAND DELINEATION L_NORTH
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

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	GLARO-MI3-46-12

N

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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WETLAND DELINEATION L SOUTH
DTE FERMI II PLANT
MONROE COUNTY, MICHIGAN

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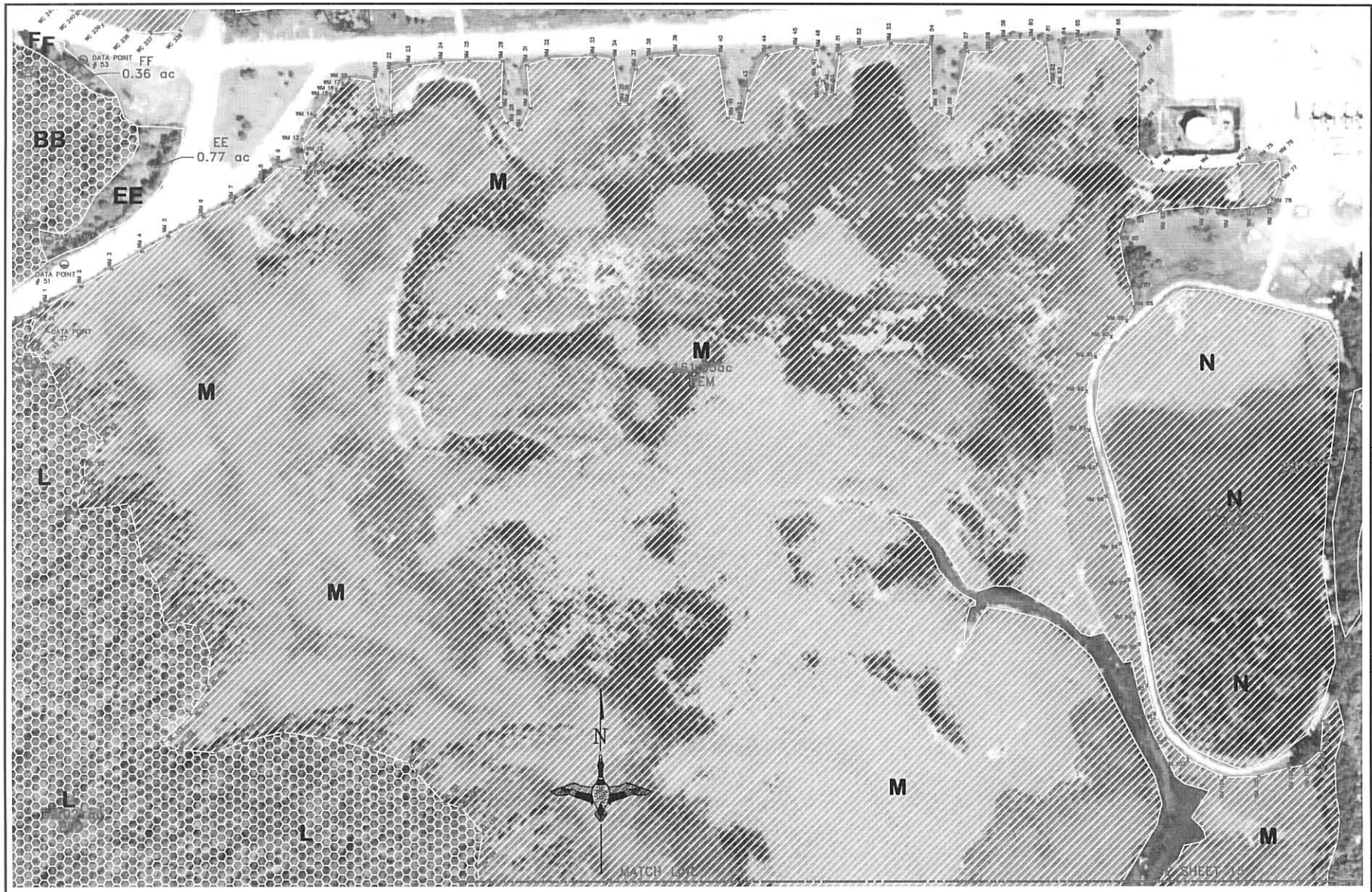

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

- OPEN WATER (FLAGGED)
- OPEN WATER (NOT FLAGGED)
- WETLAND BOUNDARY
- DATA POINT
- WETLAND FLAG
- PALUSTRINE SCRUB-SHRUB (PSS)
- PALUSTRINE EMERGENT (PEM)
- PALUSTRINE FORESTED (PFO)

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