G.14. - continued

Appendix 4:

Wetland Determination Data Forms – Midwest Region

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 3-Acre Southbrook Church Property City/County: Franklin / Milwaukee Sampling Date: April 17, 2015
Applicant/Owner: Southbrook Church State: WI Sampling Point: DP-1
Investigator(s): Tina Myers, PWS Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): plain Local relief (concave, convex, none): none-flat
Slope (%): 0% Lat: Long: Datum:
Soil Map Unit Name: Blount silt loam (BIA) WWI Classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (If no, explain in Remarks)
Are Vegetation N Soil N or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation N Soil N or Hydrology N naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area		
Hydric Soil Present?	Yes	No X	within a Wetland?	Yes	No X
Wetland Hydrology Present?	Yes	No X	If yes, optional wetland site ID:	none - upland	

Remarks: *WETS Analysis for the months of Jan-March indicates conditions are drier than normal range, however the NOAA map for the 90-day precipitation analysis prior to the date of the site visit indicates conditions are normal. There has been 3.45 inches of rain so far in April which is slightly wet.

VEGETATION - Use scientific names for plants.

Sampling Point: DP-1

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0%	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	100%	Y	FAC
2. *Daucus carota*	20%	N	UPL
3. *Solidago canadensis*	20%	N	FACU
4. *Symphyotrichum pilosum*	5%	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	145%	= Total Cover	

Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
X Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.) **Plant community is an upland meadow - other 2 wetland parameters are absent.**

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/2	100%					silt loam	
14-24	10YR 4/3	60%	7.5YR 5/6	40%	C	M	si cl loam	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none

Depth (inches): n/a

Hydric Soil Present? Yes ___ No X

Remarks: **Hydric soil criterion is not met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **USGS Topo Map (Figure 1, Appendix 1), 2-Foot Contour Map (Figure 2, Appendix 1), NRCS Soils Map (Figure 3, Appendix 1), 2000, 2005, 2010, & 2014 aerials (Figures 4A-D, Appendix 1), Wisconsin Wetland Inventory (Figure 5, Appendix 1), NOAA Precip Map (Figure 6, Appendix 1), WETS Analysis and data (Appendix 2)**

Remarks: **No wetland hydrology indicators are present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 3-Acre Southbrook Church Property City/County: Franklin / Milwaukee Sampling Date: April 17, 2015

Applicant/Owner: Southbrook Church State: WI Sampling Point: DP-2

Investigator(s): Tina Myers, PWS Section, Township, Range: NE 1/4 Sec 18, T5N, R21E

Landform (hillslope, terrace, etc.): plain Local relief (concave, convex, none): none-flat

Slope (%): 0% Lat: Long: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA) WWI Classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (If no, explain in Remarks)

Are Vegetation N Soil N or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N Soil N or Hydrology N naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area		
Hydric Soil Present?	Yes ____	No X	within a Wetland?	Yes ____	No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional wetland site ID:	none - upland	

Remarks: *WETS Analysis for the months of Jan-March indicates conditions are drier than normal range, however the NOAA map for the 90-day precipitation analysis prior to the date of the site visit indicates conditions are normal. There has been 3.45 inches of rain so far in April which is slightly wet.

VEGETATION - Use scientific names for plants.

Sampling Point: DP-2

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Rhamnus cathartica*	30%	Y	FAC
2. *Lonicera x bella*	20%	Y	FACU
3. *Acer negundo*	20%	Y	FAC
4. *Cornus alba*	3%	N	FACW
5. *Prunus serotina*	3%	N	FACU
6.			
7.			
	76%	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	100%	Y	FAC
2. *Daucus carota*	20%	N	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	120%	= Total Cover	

Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index B/A =

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.) **Plant community is an upland meadow/scrub shrub - other 2 wetland parameters are absent.**

SOIL Sampling Point: **DP-2**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/1	100%					si cl loam	
14-24	2.5Y 4/3	60%	10YR 5/8	40%	C	M	si cl loam	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none

Depth (inches): n/a

Hydric Soil Present? Yes ___ No X

Remarks: **Hydric soil criterion is not met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **USGS Topo Map (Figure 1, Appendix 1), 2-Foot Contour Map (Figure 2, Appendix 1), NRCS Soils Map (Figure 3, Appendix 1), 2000, 2005, 2010, & 2014 aerials (Figures 4A-D, Appendix 1), Wisconsin Wetland Inventory (Figure 5, Appendix 1), NOAA Precip Map (Figure 6, Appendix 1), WETS Analysis and data (Appendix 2)**

Remarks: **No wetland hydrology indicators are present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 3-Acre Southbrook Church Property City/County: Franklin / Milwaukee Sampling Date: April 17, 2015

Applicant/Owner: Southbrook Church State: WI Sampling Point: DP-3

Investigator(s): Tina Myers, PWS Section, Township, Range: NE 1/4 Sec 18, T5N, R21E

Landform (hillslope, terrace, etc.): plain Local relief (concave, convex, none): none - flat

Slope (%): 0% Lat: Long: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA) WWI Classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No *X (if no, explain in Remarks)

Are Vegetation **Y Soil N or Hydrology ***Y significantly disturbed? Are "Normal Circumstances" present? Yes No X

Are Vegetation N Soil N or Hydrology N naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	Is the Sampled Area		
Hydric Soil Present?	Yes X	No	within a Wetland?	Yes	No X
Wetland Hydrology Present?	Yes	No X	If yes, optional wetland site ID:	none - upland	

Remarks: *WETS Analysis for the months of Jan-March indicates conditions are drier than normal range, however the NOAA map for the 90-day precipitation analysis prior to the date of the site visit indicates conditions are normal. There has been 3.45 inches of rain so far in April which is slightly wet. **Vegetation disturbed - mowed grass ***Drained hydric soil

VEGETATION - Use scientific names for plants.

Sampling Point: DP-3

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0%	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	75%	Y	FAC
2. *Trifolium repens*	50%	Y	FACU
3. *Taraxacum officinale*	10%	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	135%	= Total Cover	

Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	135 (A)		465 (B)

Prevalence Index B/A = 3.4

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.) Mowed grass adjacent to a recently developed wetland and a new stormwater conveyance feature.

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
9-22	10YR 2/1	100%					si cl loam	
22-25	10YR 4/1	90%	10YR 5/6	10%	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks: **Meets a hydric soil indicator but does not appear to support hydrophytic vegetation or wetland hydrology.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No ___	Depth (inches):	___
Water Table Present?	Yes X	No ___	Depth (inches):	24"
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches):	22"

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **USGS Topo Map (Figure 1, Appendix 1), 2-Foot Contour Map (Figure 2, Appendix 1), NRCS Soils Map (Figure 3, Appendix 1), 2000, 2005, 2010, & 2014 aerials (Figures 4A-D, Appendix 1), Wisconsin Wetland Inventory (Figure 5, Appendix 1), NOAA Precip Map (Figure 6, Appendix 1), WETS Analysis and data (Appendix 2)**

Remarks: **No wetland hydrology indicators observed. Presence of water table likley due to a wetter than average April and recent heavy rain events.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: 3-Acre Southbrook Church Property City/County: Franklin / Milwaukee Sampling Date: April 17, 2015

Applicant/Owner: Southbrook Church State: WI Sampling Point: DP-4

Investigator(s): Tina Myers, PWS Section, Township, Range: NE 1/4 Sec 18, T5N, R21E

Landform (hillslope, terrace, etc.): very slight depression Local relief (concave, convex, none): very slightly convex (almost flat)

Slope (%): 0% Lat: Long: Datum:

Soil Map Unit Name: Ashkum silty clay loam (AsA) WWI Classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)

Are Vegetation **Y Soil N or Hydrology **Y significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation N Soil N or Hydrology N naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area		
Hydric Soil Present?	Yes X	No	within a Wetland?	Yes X	No
Wetland Hydrology Present?	Yes X	No	If yes, optional wetland site ID:	none - upland	

Remarks: *WETS Analysis for the months of Jan-March indicates conditions are drier than normal range, however the NOAA map for the 90-day precipitation analysis prior to the date of the site visit indicates conditions are normal. There has been 3.45 inches of rain so far in April which is slightly wet. **Recent change in vegetation and hydrology that was not present in 2012 during first phase of Southbrook project.

VEGETATION - Use scientific names for plants.

Sampling Point: DP-4

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0%	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	40%	Y	FAC
2. *Typha angustifolia*	30%	Y	OBL
3. *Phalaris arundinacea*	30%	Y	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	100%	= Total Cover	

Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index B/A =

Hydrophytic Vegetation Indicators:

- ____ Rapid Test for Hydrophytic Vegetation
- X Dominance Test is >50%
- ____ Prevalence Index is ≤ 3.0[1]
- ____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.) Wetland is a newly developed fresh (wet) meadow / shallow marsh community.

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100%					si cl loam	
20-24	10YR 5/1	75%	10YR 5/8	25%	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none

Depth (inches): n/a

Hydric Soil Present? Yes X No ___

Remarks: **Hydric soil criterion has been met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes X No ___ Depth (inches): 0"

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0"

Wetland Hydrology Present? Yes ___ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **USGS Topo Map (Figure 1, Appendix 1), 2-Foot Contour Map (Figure 2, Appendix 1), NRCS Soils Map (Figure 3, Appendix 1), 2000, 2005, 2010, & 2014 aerials (Figures 4A-D, Appendix 1), Wisconsin Wetland Inventory (Figure 5, Appendix 1), NOAA Precip Map (Figure 6, Appendix 1), WETS Analysis and data (Appendix 2)**

Remarks: **Saturation is most visible on the 2014 aerial indicating recent changes to hydrology. Note that the immediately adjacent new stormwater conveyance ditch is also present suggesting that the newly formed wetland is a result of the ditch construction and possibly a tile breakage.**

Appendix 5:

NR 151 Wetland Susceptibility Table

Wetland Category for Stormwater Permitting *			
Wetland	Highly Susceptible	Moderately Susceptible	Less Susceptible
W-1			X

Less Susceptible: Dominated by 90% or greater invasive species

Moderately Susceptible: Sedge meadows, fens, bogs, forested wetlands, fresh wet meadows, shallow/deep marshes, various swamps

Highly Susceptible: Trout streams, threatened and endangered species, fish and wildlife refuges, calcareous fens, wild and scenic rivers

* These designations apply to any project requiring NR 151 stormwater permitting and are based on wetland delineation field work and the professional opinion of R.A. Smith National, Inc. Final determination of wetland susceptibilty rests with the WDNR. Some of the characteristics of a Highly Susceptible wetland may not be apparent to RASN due to confidential data or data beyond the scope of this delineation (i.e. rare species, high quality trout stream etc). Navigable waterways may also be subject to NR 151 protective area standards.

Wetland Delineation Report

Southbrook Church

City of Franklin, Milwaukee County, Wisconsin

RASN Project No. 1120163

October 25th, 2012

Wetland Delineation Report

Southbrook Church
City of Franklin, Milwaukee County, Wisconsin

Prepared by:

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Lead Ecologist/Project Manager
&
Tina Myers, PWS
Ecologist/Project Manager

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16745 W. Bluemound Road, Suite 200
Brookfield, WI 53005-5938
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Prepared for:

Ron Romeis – Southbrook Church
11010 West St. Martin's Road
Franklin, WI 53132

October 25th, 2012

October 25, 2012

INTRODUCTION

R.A. Smith National, Inc. (RASN) is pleased to provide this Wetland Delineation Report for an approximately 22-acre property located at 11010 West St. Martin's Road in the City of Franklin, Milwaukee County, Wisconsin (Appendix 1, Figure 1). The property is owned by Southbrook Church whose contact is Mr. Ron Romeis.

The 22-acre property is located north in the NE ¼ of Section 18, Township 5 North, Range 21 East (Appendix 1, Figure 1). The property is bordered by West St. Martin's Road to the south, residential properties to the east and west, and St. Martin's Park to the north which contains wetlands, woodlands, and manicured lawn areas.

The purpose of the wetland delineation was to identify the proximity and extent of wetlands within the property in association with proposed phases for expansion of the church. Four (4) wetlands (wetlands "W-1 through W-4") were identified on the property. The delineation is presented here in terms of qualifications, methodology, results, and conclusions.

STATEMENT OF QUALIFICATIONS

RASN provides wetland and ecological services including wetland delineation, assessment, permitting, and restoration. RASN ecologists offer a wide variety of technical experience in the natural resource field, and have successfully completed projects throughout the Midwestern and Northeastern United States.

Ms. Heather Patti, PWS and Ecologist with RASN, earned a Masters Degree in Botany and a minor in Ecology from North Carolina State University. Ms. Patti is experienced with a variety of aspects of ecological restoration, including wetland, mixed hardwood, and prairie restoration. She provides over 15 years of experience in wetland delineation, assessment, and mitigation. Ms. Patti attended the Basic & Advanced Wetland Delineation course offered by UW-LaCrosse in 2005, became a WDNR Assured Wetland Delineator in 2009, and recently attended the Hydric Soil Identification Course offered by UW-LaCrosse in 2011.

Ms. Tina Myers has over 13 years of multidisciplinary ecological experience and is a PWS and Ecologist with RASN. She is also recognized as a Certified Wetland Specialist (CWS) in Illinois. Tina earned a Bachelor's degree in Conservation Biology from the University of Milwaukee in 1998 and has taken a multitude of ongoing educational courses including the Corps Wetland Delineation Training which she took in 2006. She has performed hundreds of wetlands delineations throughout Wisconsin and Illinois and is also experienced in wetland restoration, wetland and waterway permitting, wetland assessment, vegetation surveys including rare species surveys, wildlife surveys, and environmental monitoring.

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METHODOLOGY

The wetland delineation consisted of a map review followed by a site visit to delineate the on-site wetlands. The fieldwork documented the presence and absence of hydrophytic vegetation, wetland hydrology, and hydric soil indicators outlined in the *U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual*, Technical Report Y-87-1 (1987) and subsequent guidance documents (USACE 1991, 1992), Guidelines for Submitting Wetland Delineations in Wisconsin to the St. Paul District Corps of Engineers (USACE 1996), the *Basic Guide to Wisconsin's Wetlands and Their Boundaries* (Wisconsin Department of Administration Coastal Management Program, 2005), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)*, the guide for the USDA Natural Resources Conservation Services (NRCS) Field Indicators of Hydric Soils (version 7.0) in the United States, and in general accordance with Wisconsin Department of Natural Resources (WDNR) guidelines. Midwest Regional USACE supplement was recently adopted for the purpose of bringing the existing 1987 Manual up to date for wetland delineations. This supplement is intended to be used as an additional guidance to the 1987 Manual, and is not its replacement.

Prior to conducting fieldwork, RASN reviewed several maps for the property, including the United States Geological Survey (USGS) 7.5-minute quadrangle topographic map (Appendix 1, Figure 1), the NRCS Soil Survey Report for Milwaukee County (Appendix 1, Figure 3), the United States Geological Service (USGS) historical aerial photographs dated 2000, 2005 and 2010 (Appendix 1, Figures 4A-C), the Wisconsin Wetland Inventory Map (Appendix 1, Figure 5), the SEWRPC Environmental Corridor Map (Appendix 1, Figure 6) and NOAA's Advanced Hydrologic Prediction Service Map (Appendix 1, Figure 7).

Areas having wetland field indicators were evaluated in the field by RASN wetland scientists Ms. Heather Patti and Ms. Tina Myers during site visits on July 23rd and 24th, 2012. According to guidance described in the 1987 Manual and Midwest Regional Supplement, areas that are under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology are considered wetlands. RASN collected field data at sixteen (16) sample points, using a transect and data point approach following the USACE Midwest Supplement wetland determination forms (Appendix 3). A sharpshooter shovel was used to dig the soil pits, and a soil probe was also used to refine the wetland boundary. Cursory soil probes were also taken in areas that contained transitional hydrophytic vegetation. The delineated wetland areas were flagged and subsequently surveyed by McClure Engineering, Inc. Pink wire flags with the words "Wetland Delineation" were used to stake the wetland boundaries and data point locations. The wetland boundaries and data point locations are depicted on the Wetland Boundary Exhibit in Appendix 1, Figure 2. Observations were made at representative sample points along transects extending through upland and wetland areas. All wetlands and transects along wetland boundaries were photo documented as shown in Appendix 3.

RESULTS

The USGS topographic map (Appendix 1, Figure 1) shows the location of the property. The topography within the ranges in elevation between 792-806 feet above mean sea level where the lowest points are the wetlands W-1 and W-4 within the site. All four wetlands receive surface water runoff from the surrounding uplands and at least two may be considered isolated. There are no navigable waterways on the property.

According to the NRCS Soil Survey Report of Milwaukee County, Wisconsin (Appendix 1, Figure 3), mapped soils consist of Ashkum silty clay loam, 0-3% slopes (AsA), Blount silt loam 1-3% slopes (BlA), Houghton muck 0-2% slopes (HtA), and Morley silt loam, 2-6% slopes, eroded (MzdB2). Of these soil types, the NRCS hydric soil list classifies the Ashkum silty clay loam as a poorly drained soil, the Houghton muck as a very poorly drained hydric soil, and the Blount silt loam as a somewhat poorly drained partially hydric soil. The Morley silt loam, on the other hand, is a well-drained non-hydric soil. All four wetlands identified on the site are located within hydric

soil units.

RASN reviewed a series of recent aerial photographs from 2000, 2005, and 2010 (Appendix 1, Figures 4A-C). The 2000 aerial shows the landscape prior to the construction of the church, its adjacent parking lot, and stormwater pond. The 2005 aerial shows the landscape just a few years after the development occurred. And finally, the 2010 aerial shows the most current conditions of the property which have not changed significantly since 2005. As shown on all of the aerials, the site consists of emergent wetlands, shrub carr wetlands, upland woodland, upland meadow, and manicured lawn.

The Wisconsin Wetland Inventory Map (Appendix 1, Figure 5) depicts four wetlands within the property in the same approximate locations as W-1 through W-4. Each of the mapped wetlands is depicted with an E2K symbol, which stands for Emergent/ Wet meadow (E), narrow-leaved persistent (2), Wet Soil, Palustrine (K). In addition, the stormwater pond, which was built in 2002, is labeled as WoHx meaning Open Water (W) subclass unknown (o), standing water (H), excavated (x). The remaining areas that do not have a symbol are considered upland, even those areas with mapped hydric soils. Additionally, the SEWRPC Environmental Corridor Map (Appendix 1, Figure 6) depicts an Isolated Natural Resource Area (INRA) in the same location as W-4. The INRA extends off-site to the north, including wooded wetlands and uplands located on the St. Martin's Park proeprty.

Recent precipitation data are used to assess the current season's hydrology. Precipitation data can help make determinations as to whether or not the wetland hydrology criterion has been met at recorded data points. Rainfall data recorded by the local WETS table and the National Weather Service's Advanced Hydrologic Prediction Service (AHPS) were used to evaluate the hydrology of the site prior to the visit (Appendix 1, Figure 7). According to the local WETS table (Milwaukee Mt Mary College WI 5474), average precipitation in the Milwaukee area for the three months prior to the site visit (April through June) is 9.92 inches. Average rainfall for the month of July is typically 3.46 inches. Prior to the site visit, only 1.94 inches was recorded during the month of July according to the Weather Channel and approximately 0.06 inches was recorded on the day of the site visit. According to the AHPS map (Appendix 1, Figure 7), the late spring – early summer precipitation in the Milwaukee area fell approximately 4 to 6 inches below the normal range for this time of year. This suggests that the surface or near-surface hydrology at the time of the July 2012 site visit was dry for this time of year.

Field Investigation

All areas on the above-mentioned maps as being wetland or having wetland characteristics were evaluated in the field. A total of sixteen (16) data points were examined and four (4) wetlands totaling 4.97acres (155,478 square feet) were delineated and surveyed by McClure Engineering (Appendix 1, Figure 2). Cursory soil probes and data points in both upland and wetland areas were sampled in the field to determine the wetland boundaries. The data sheets were compiled and are included in Appendix 3. The following is a description of the delineated wetlands.

Wetland 1 – Shrub Carr, Fresh (Wet) Meadow & Shallow Marsh

Wetland 1 (W-1) consists of an approximately 3.35-acre depression dominated by reed canary grass (*Phalaris arundinacea*), sandbar willow (*Salix interior*), pussy willow (*Salix discolor*), red-osier dogwood (*Cornus alba*), gray dogwood (*Cornus racemosa*), green ash (*Fraxinus pennsylvanica*), eastern cottonwood (*Populus deltoides*), box elder (*Acer negundo*), and cattails (*Typha spp.*) (Appendix 1, Figure 2). The adjacent uplands mostly consist of upland meadow dominated by Kentucky blue grass (*Poa pratensis*), Queen Anne's lace (*Daucus carota*), Canada goldenrod (*Solidago canadensis*), and ox-eye daisy (*Leucanthemum vulgare*). Several remnant prairie species were also noted including black-eyed Susan (*Rudbeckia hirta*), yellow coneflower (*Ratibida pinnata*),

gayfeather (*Liatris pychnostachya*), bergamot (*Monarda fistulosa*), and stiff goldenrod (*Solidago rigida*). The uplands directly west of W-1 are predominantly mowed lawn.

Hydrology in W-1 is sustained by surfacewater runoff from the surrounding landscape. With the exception of the shallow (cattail) marsh, most of W-1 is considered a problem area due to its seasonal hydrology and dark Mollisol soils. In general, however, there was a discernible vegetative and topographic break between the upland and wetland boundary. Physical on-site evidence of wetland hydrology included geomorphic position and a positive FAC-Neutral test. Three wetland data points were taken within W-1 (Appendix 4). The data points were situated on the north and west sides of W-1 where adjacent development is most likely to occur.

According to the NRCS Soil Survey of Milwaukee County, Ashkum silty clay loam (AsA) is the dominant mapped soil type within W-1. This soil type is considered to be a poorly drained hydric soil whose water table typically ranges from within 0 to 12 inches below the soil surface. During the site visit, RASN did not observe a water table; however, the soils did fall within the range of characteristics for Ashkum silty clay loam having dark mollic epipedons and depleted matrices with redox concentrations below the mollic horizon.

Wetland 2 – Shrub Carr

Wetland 2 (W-2) consists of an approximately 0.2-acre depression dominated primarily by sandbar willow, green ash, eastern cottonwood, pussy willow, reed canary grass, stinging nettle (*Urtica dioica*), and fowl blue grass (*Poa palustris*). (Appendix 1, Figure 2). The adjacent uplands included similar upland meadow species associated with W-1.

Hydrology in W-2 is sustained by surface water runoff from the surrounding landscape. One wetland data point was taken within W-2 (Appendix 4) along one transect due to its small size and plant community uniformity. Like W-1, W-2 is considered a "problem area" due to its seasonal hydrology and dark Mollisol soils. Physical on-site evidence of wetland hydrology included geomorphic position and a positive FAC-Neutral test.

According to the NRCS Soil Survey of Milwaukee County, Ashkum silty clay loam (AsA) is also the dominant mapped soil type within W-2. Similar to W-1, RASN did not observe a water table in W-2; however, the soils once again fell within the range of characteristics for Ashkum silty clay loam having dark mollic epipedons and depleted matrices with redox concentrations below the mollic horizon.

Wetland 3 – Fresh (wet) Meadow

Wetland 3 (W-3) is an approximately 0.52-acre fresh (wet) meadow wetland depression dominated by reed canary grass (Appendix 1, Figure 2). Quaking aspen (*Populus tremuloides*) was more prevalent just along the northern edge of the W-2. The presence of tussock sedge (*Carex stricta*) in some pockets of W-2 suggests that this wetland was historically sedge meadow prior to the presence of invasive reed canary grass. The adjacent uplands included similar upland meadow species associated with W-1 and W-2 as well as manicured lawn.

Hydrology in W-3 is sustained by surface water from the surrounding landscape. Two wetland data points were taken within W-2 (Appendix 4) along two transects due to its medium size and plant community uniformity. The data points were situated on the south side of W-3 where adjacent development is most likely to occur. Like W-1 and W-2 is considered a "problem area" due to its seasonal hydrology and dark Mollisol soils. Physical on-site evidence of wetland hydrology included geomorphic position and a positive FAC-Neutral test.

According to the NRCS Soil Survey of Milwaukee County, Ashkum silty clay loam (AsA) is also the dominant mapped soil type within W-3. Similar to W-1 and W-2, RASN did not observe a water table in W-3; however, the soils once again fell within the range of characteristics for Ashkum silty clay loam having dark mollic epipedons and depleted matrices with redox concentrations below the mollic horizon.

Wetland 4 – Fresh (wet) Meadow

Wetland 4 (W-4) is an approximately 0.9-acre fresh (wet) meadow depressional wetland dominated by reed canary grass (Appendix 1, Figure 2). There is also a small pocket containing dominant cattails (*Typha spp.)* This wetland extends off-site into St. Martin's Park to the north where it becomes a wooded swamp dominated by silver maple (*Acer saccharinum*). The adjacent uplands are partially mowed lawn and scrub shrub directly west of W-4 and black walnut grove (*Juglans nigra*) south of W-4.

Hydrology in W-4 is sustained by surface water from the surrounding landscape. Two wetland data points were taken within W-4 (Appendix 4) along two transects due to its medium size and plant community uniformity. The data points were situated on the south and west sides of W-4 where adjacent development is most likely to occur. Like all of the wetlands within the property, W-4 is considered a "problem area" due to its seasonal hydrology and dark Mollisol soils. Physical on-site evidence of wetland hydrology included geomorphic position, oxidized roots, and a positive FAC-Neutral test.

According to the NRCS Soil Survey of Milwaukee County, Houghton muck (HtA)) is the dominant mapped soil type within W-4. Houghton muck is considered a very poorly drained hydric soil. Similar to the other wetlands within the proeprty, RASN did not observe a water table in W-4; however, the soils were similar to those identified in the other three wetlands having dark mollic epipedons and depleted matrices with redox concentrations below the mollic horizon.

CONCLUSION

Based on the wetland assessment completed by RASN, four (4) wetland areas were identified on the property. A total of 4.97acres (155,478 square feet) of wetlands were delineated and surveyed by McClure Engineering.

This report is limited to the delineation of state and/or federally regulated wetlands on the property. However, there may be other regulated environmental features within the property (e.g., historical, archaeological, threatened or endangered species). Federal, state and/or local units of government may have regulatory authority to restrict land use within or close in proximity to other environmental features. For example, Wisconsin Adm. Code NR 151.12 requires buffers or a "protective area" from the top of the channel of streams, rivers and lakes, or at the delineated boundary of wetlands. The jurisdictional decision on the width of wetland buffers rests with the WDNR. The local unit(s) of government may also have protective area buffers from wetlands than that imposed under NR 151.

The U.S. Army Corps of Engineers has regulatory authority over waters of the U.S. including adjacent wetlands, and the WDNR has regulatory authority over wetlands, navigable waters, and adjacent lands under Ch. 30 Wisconsin State Statues, Act 6, and NR 103 Wisconsin Administrative Code. Local jurisdictions may also have regulations through zoning ordinances. Our client, Southbrook Church, respectfully requests verification of the delineated wetlands by the USACE.

APPENDICES

Appendix 1: Figures

- **Figure 1: USGS Map/Site Location Map**
- **Figure 2: Wetland Boundary Map**
- **Figure 3: NRCS Soil Survey of Milwaukee County**
- **Figures 4 A-C: Aerial Photographs (2000, 2005 & 2010)**
- **Figure 5: Wisconsin Wetland Inventory Map**
- **Figure 6: SEWRPC Environmental Corridor Map**
- **Figure 7: NOAA Advanced Hydrologic Prediction Service Map**

Appendix 2: Site Photos

Appendix 3: Wetland Delineation Data Forms – Midwest Region

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Appendix 2: Site Photographs

Appendix 3: Wetland Determination Data Forms – Midwest Region

Appendix 1: Figures

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Figure 2: Wetland Boundary Map

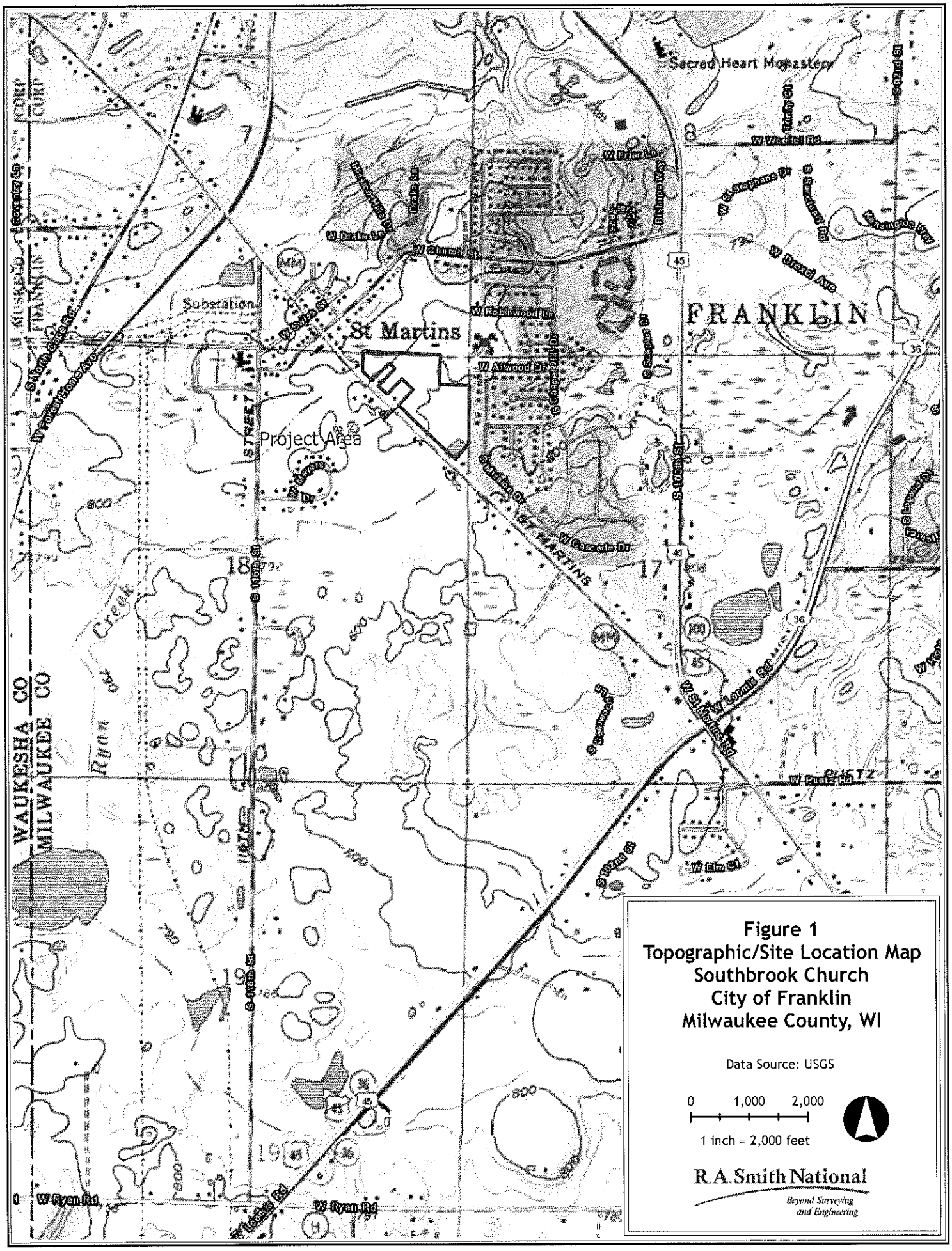
Figure 3: NRCS Soil Survey of Milwaukee County

Figures 4A-C: Aerial Photographs (2000, 2005, 2010)

Figure 5: Wisconsin Wetland Inventory Map

Figure 6: SEWRPC Environmental Corridor Map

Figure 7: 90-day Departure from Normal Precipitation Map


Sacred Heart Monastery
W Wardlaw Rd
W Drake Dr
W Church St
Substation
St Martins
FRANKLIN
W Atwood Dr
W Cascade Dr
W St Martins Rd
W Loomis Rd
W Puetz Rd
W Elm Ct
W Ryan Rd
Project Area
WAUKESHA CO
MILWAUKEE CO
Ryan Creek
Figure 1
Topographic/Site Location Map
Southbrook Church
City of Franklin
Milwaukee County, WI
Data Source: USGS
0 1,000 2,000
1 inch = 2,000 feet
R.A. Smith National
Beyond Surveying and Engineering

WETLAND / WATERWAY EXHIBIT

WETLAND BOUNDARY SURVEYED BY MC CLURE ENGINEERING
2010 AERIAL PHOTO SOURCE: SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

N

LEGEND

- DATA SAMPLE POINT
- WETLAND FLAG
- WETLAND BOUNDARY

Figure 2. Wetland/Waterway Boundary Map
Southbrook Church
City of Franklin
Milwaukee County, WI

GRAPHIC SCALE
150 0 34.5 75 150 300
(IN FEET)
1 inch = 150 ft.

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SHEET 1 OF 1

R.A. Smith National, Inc.

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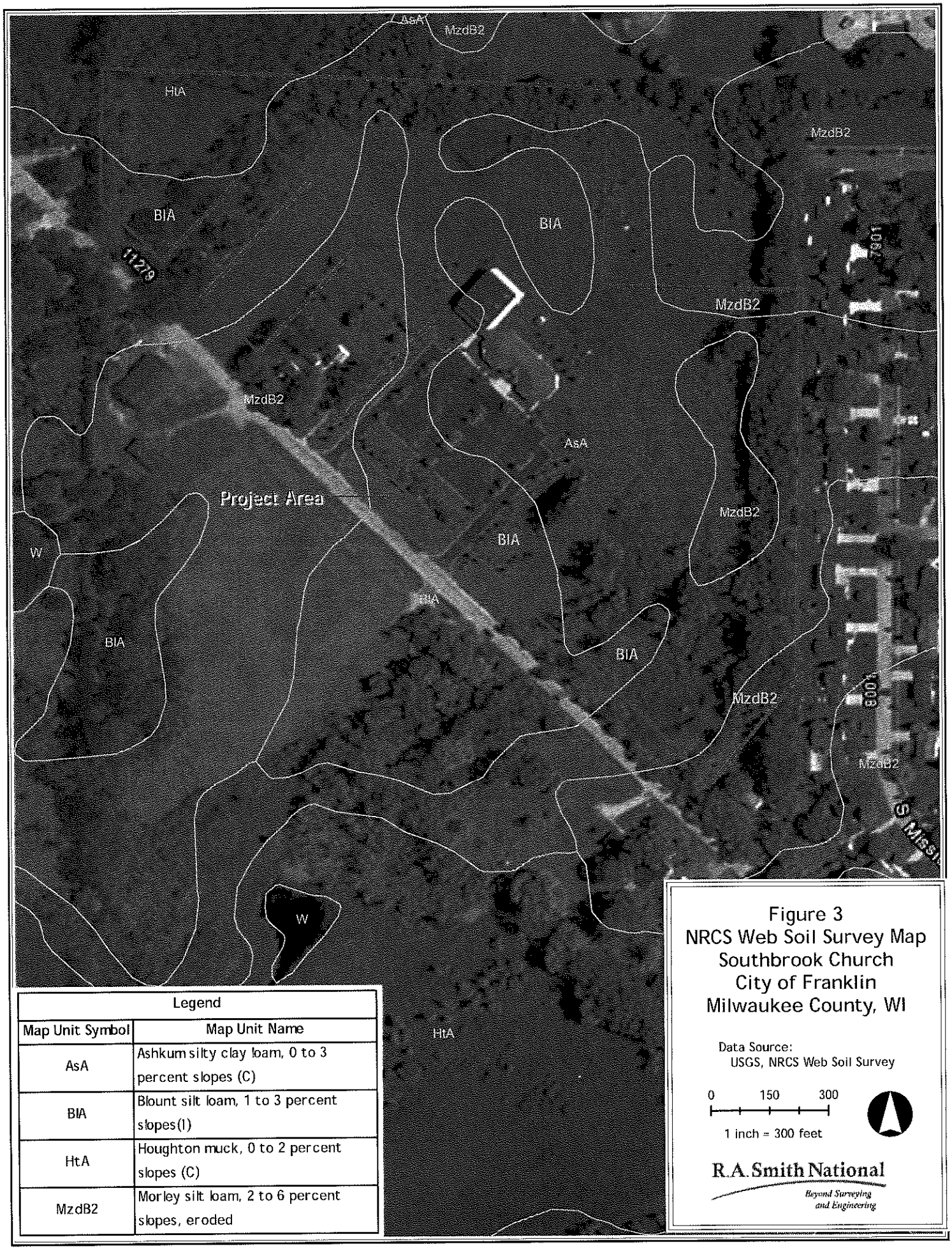

Legend	
Map Unit Symbol	Map Unit Name
AsA	Ashkum silty clay loam, 0 to 3 percent slopes (C)
BlA	Blount silt loam, 1 to 3 percent slopes(I)
HtA	Houghton muck, 0 to 2 percent slopes (C)
MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded

Figure 3
NRCS Web Soil Survey Map
Southbrook Church
City of Franklin
Milwaukee County, WI

Data Source:
USGS, NRCS Web Soil Survey

0 150 300

1 inch = 300 feet

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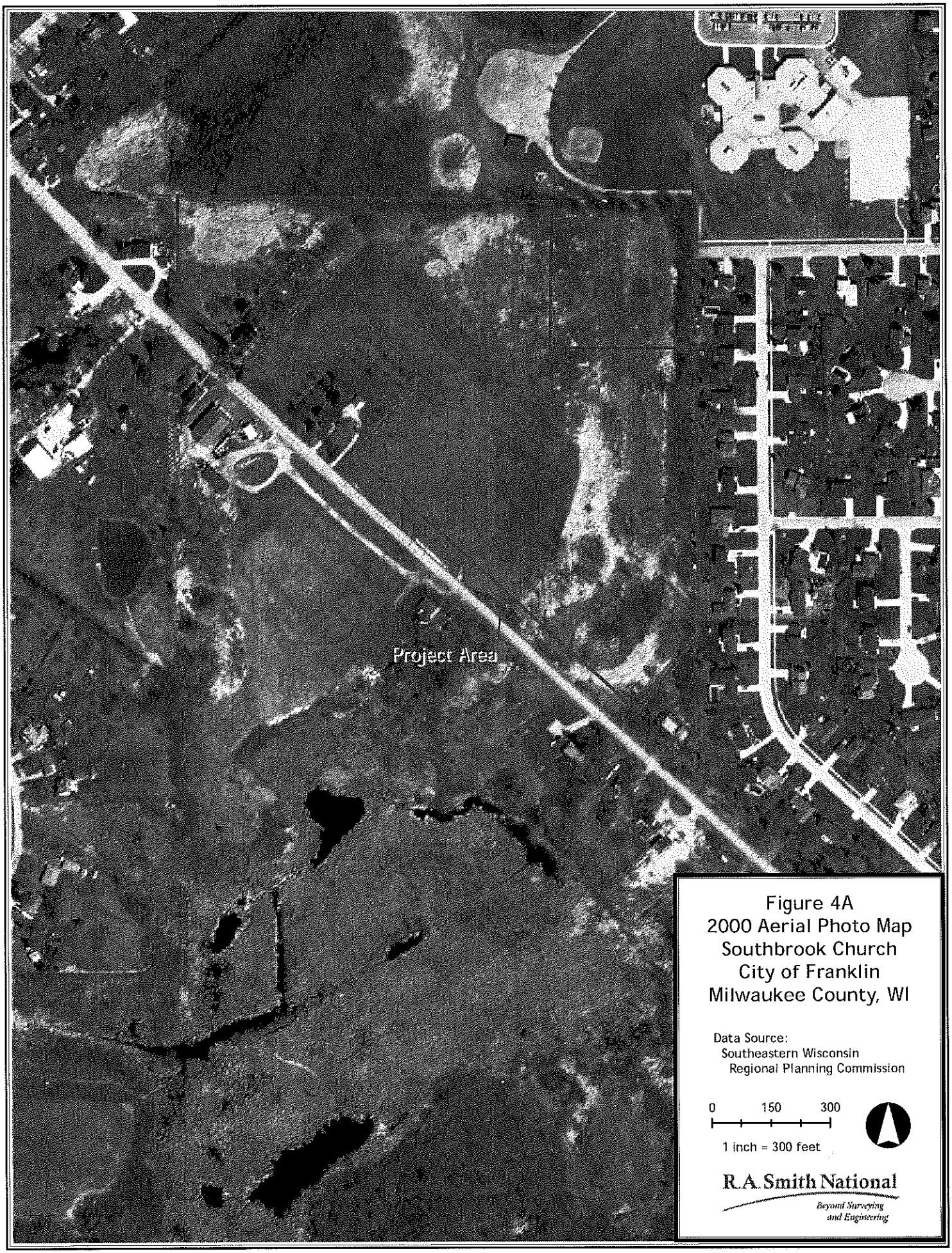

Figure 4A
2000 Aerial Photo Map
Southbrook Church
City of Franklin
Milwaukee County, WI

Data Source:
Southeastern Wisconsin
Regional Planning Commission

0 150 300

1 inch = 300 feet

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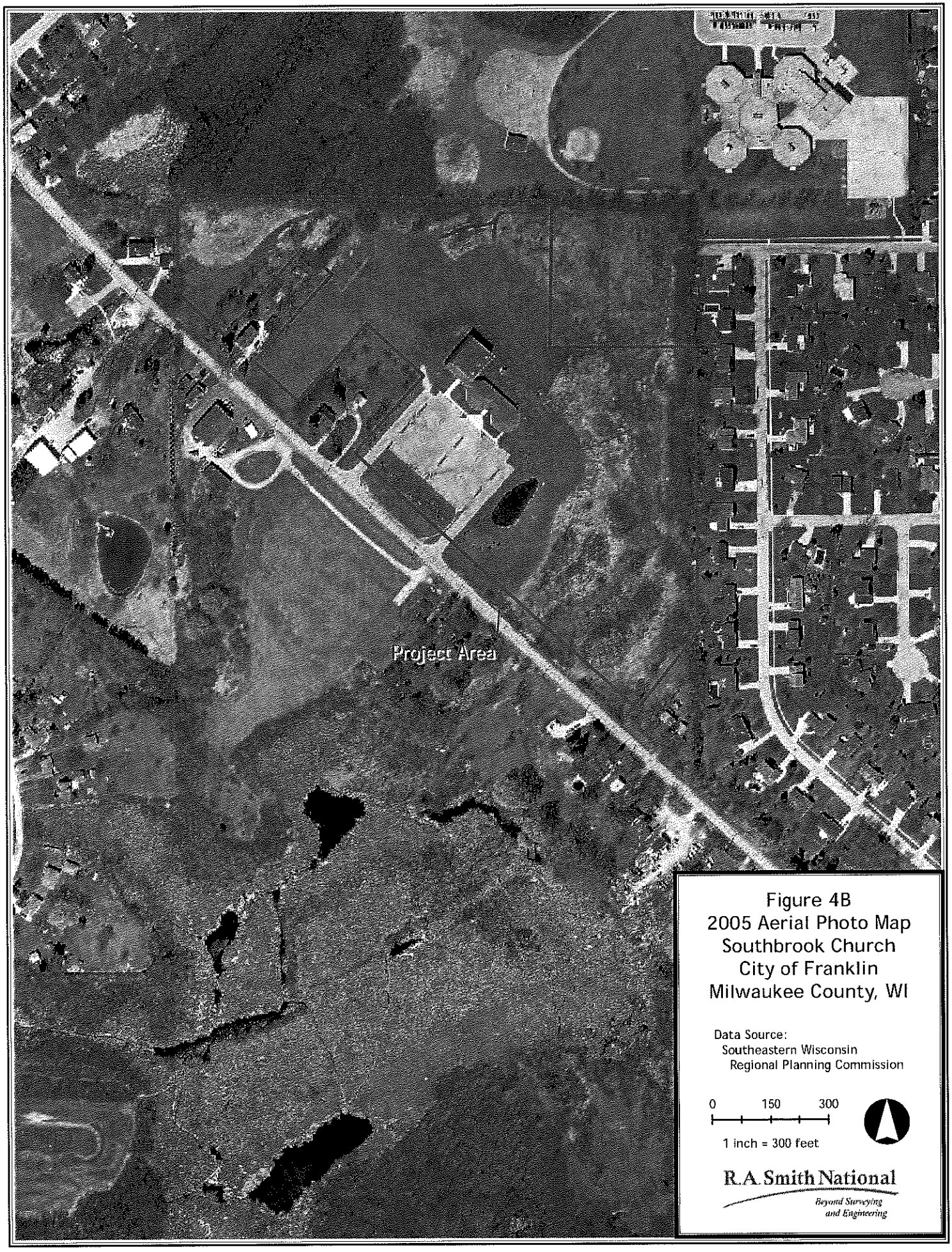

Figure 4B
2005 Aerial Photo Map
Southbrook Church
City of Franklin
Milwaukee County, WI

Data Source:
Southeastern Wisconsin
Regional Planning Commission

0 150 300

1 inch = 300 feet

R.A. Smith National
Beyond Surveying and Engineering

Figure 4C
2010 Aerial Photo Map
Southbrook Church
City of Franklin
Milwaukee County, WI

Data Source:
Southeastern Wisconsin
Regional Planning Commission

0 150 300

1 inch = 300 feet

R.A. Smith National
Beyond Surveying and Engineering

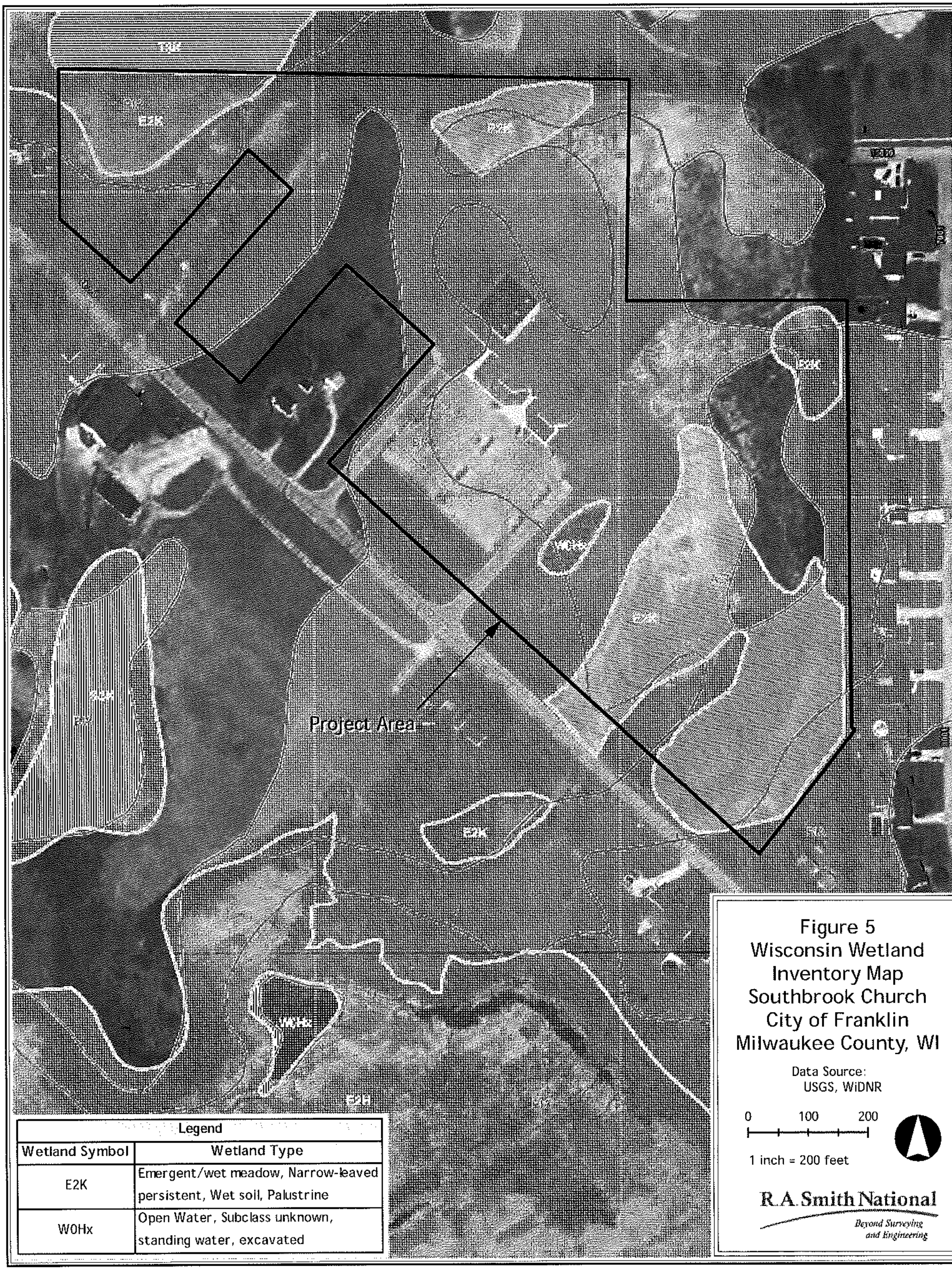

Figure 5
Wisconsin Wetland
Inventory Map
Southbrook Church
City of Franklin
Milwaukee County, WI

Data Source:
USGS, WiDNR

0 100 200

1 inch = 200 feet

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Beyond Surveying and Engineering

Legend

Wetland Symbol	Wetland Type
E2K	Emergent/wet meadow, Narrow-leaved persistent, Wet soil, Palustrine
W0Hx	Open Water, Subclass unknown, standing water, excavated

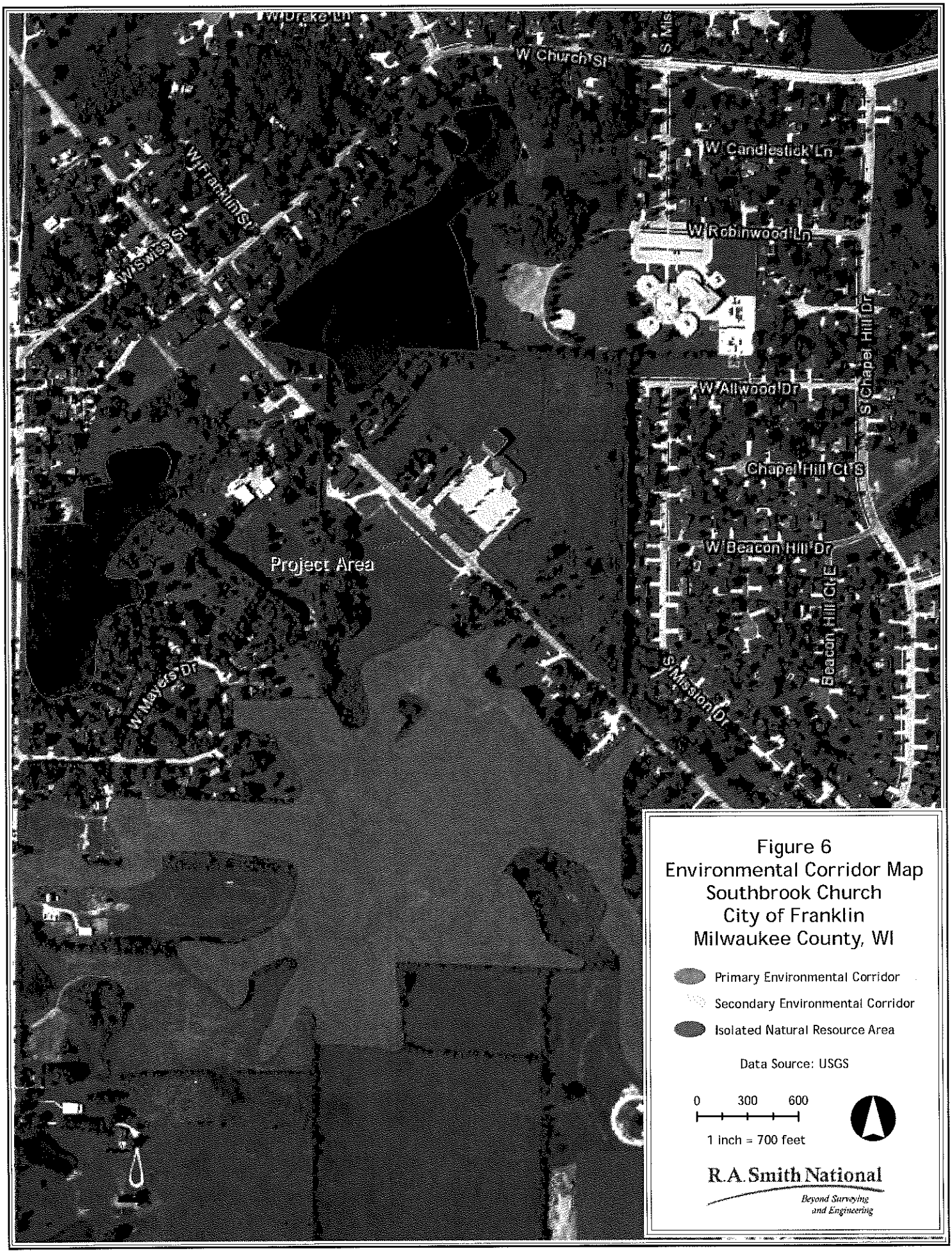

Figure 6
Environmental Corridor Map
Southbrook Church
City of Franklin
Milwaukee County, WI

Primary Environmental Corridor

Secondary Environmental Corridor

Isolated Natural Resource Area

Data Source: USGS

0 300 600

1 inch = 700 feet

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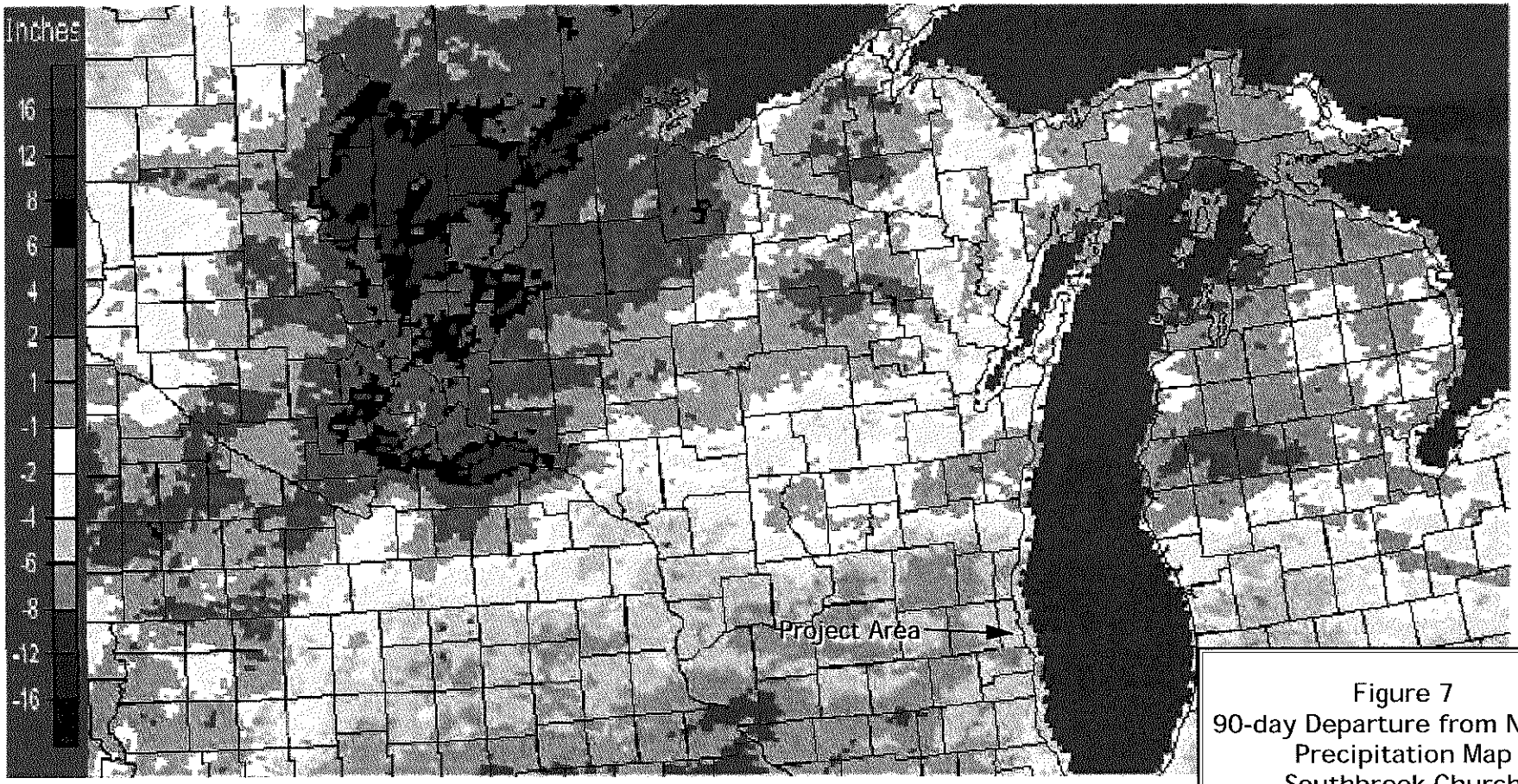

The project area falls within -4" to -6" of the normal precipitation range.

Figure 7
90-day Departure from Normal Precipitation Map
Southbrook Church
City of Franklin
Milwaukee County, WI

Data Source:
USGS, NOAA AHPS website

NOT TO SCALE

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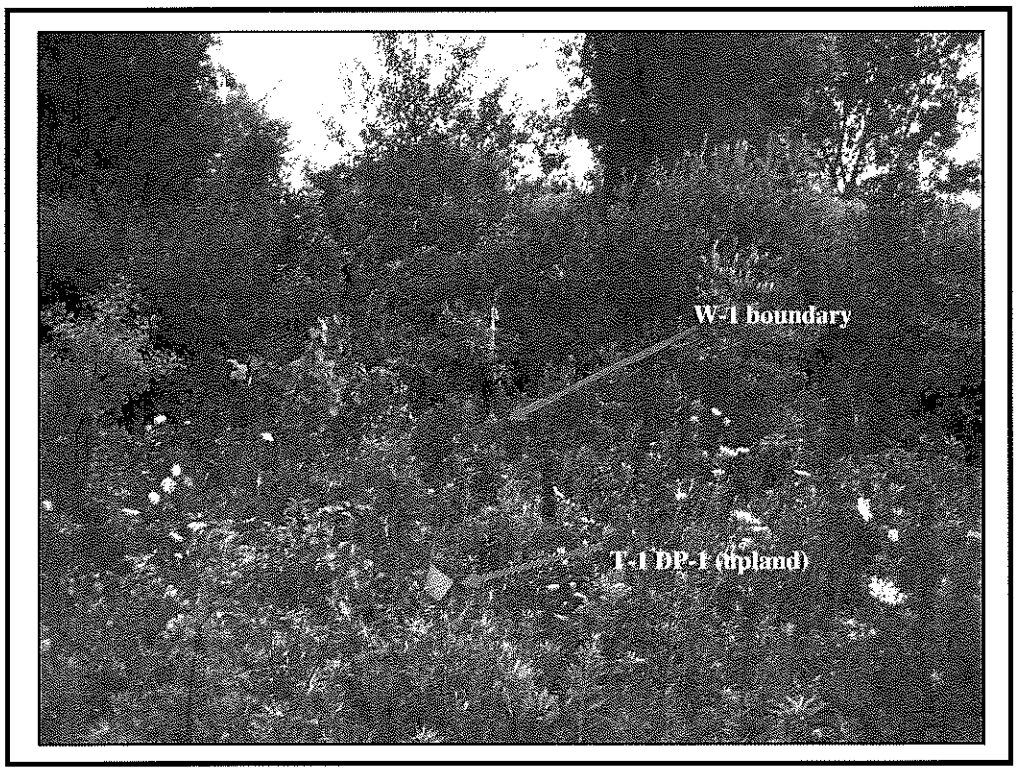
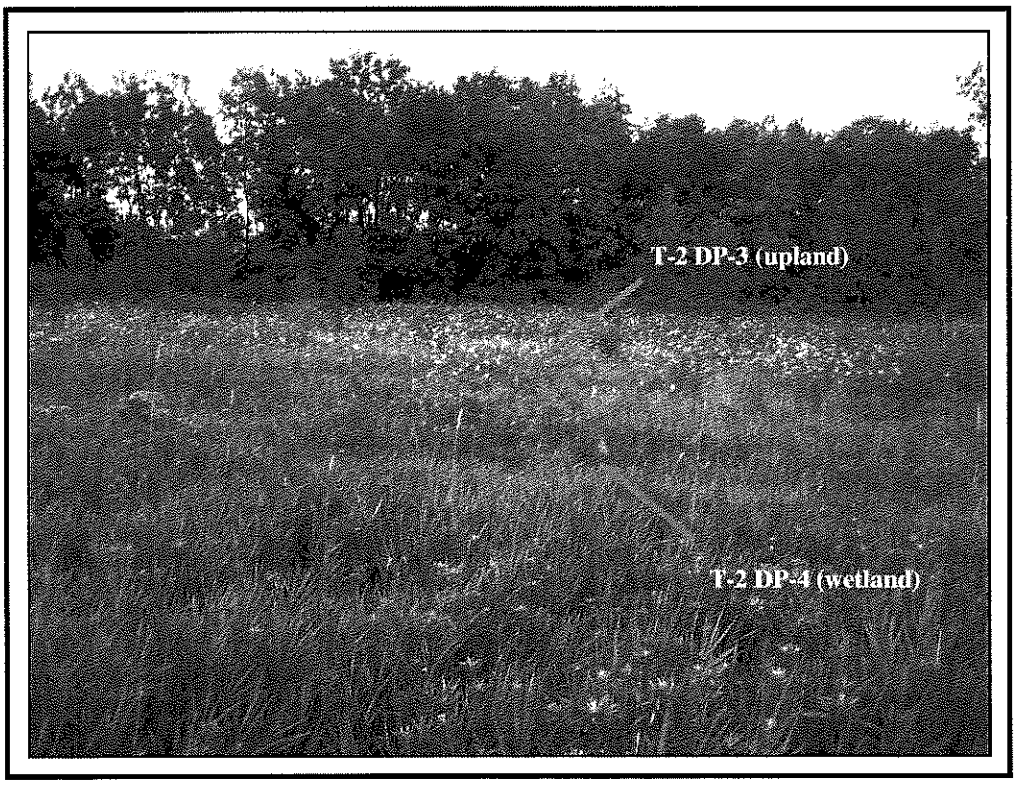
Appendix 2:

Site Photographs

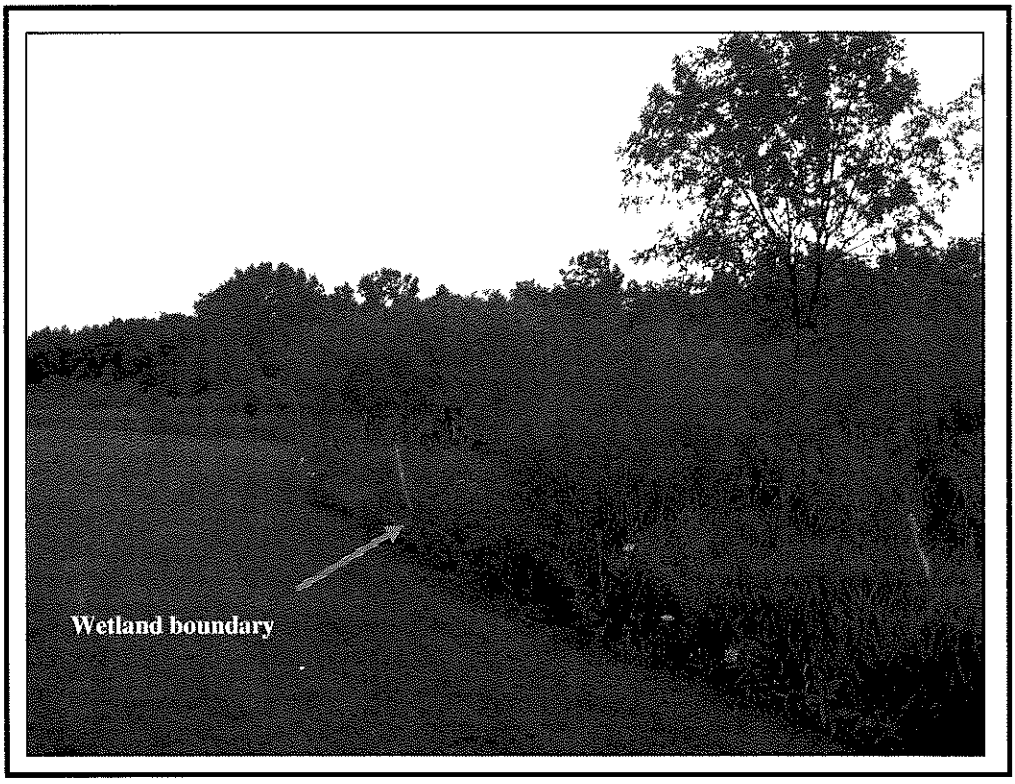


Photograph 1 (7/24/2012): South facing view of T-1 towards W-1.

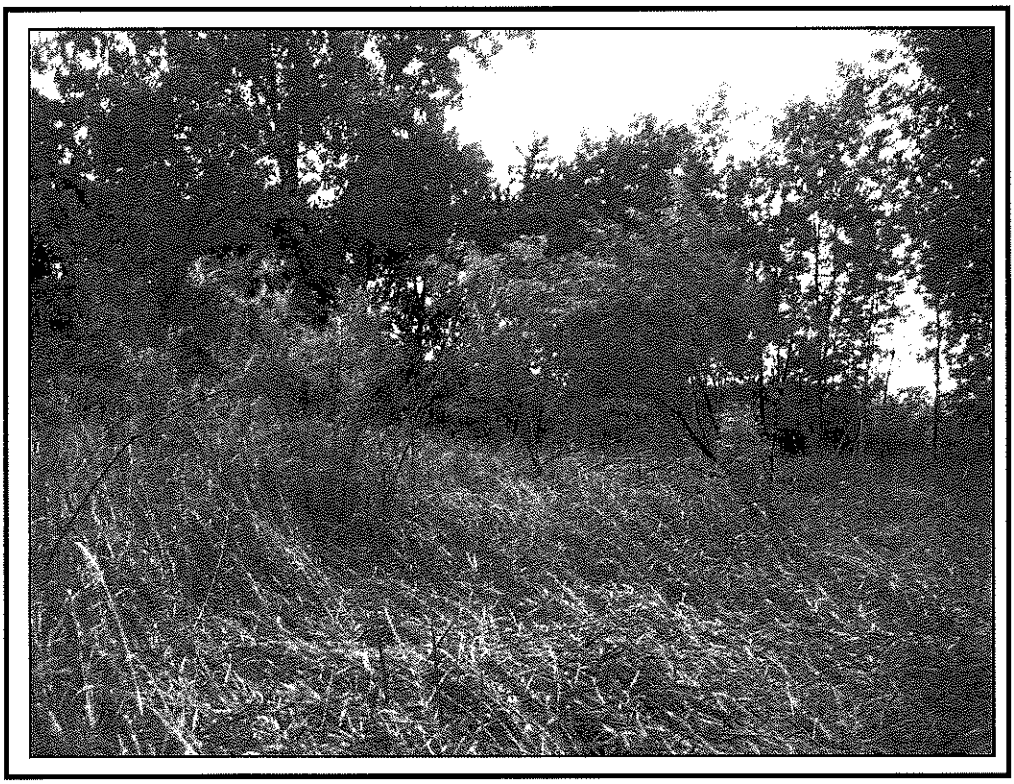


Photograph 2 (7/24/2012): East facing view of Transect 2 near northwestern portion of W-1.

Photograph 3 (7/24/2012): South view of Transect 3 along the western boundary of W-1.



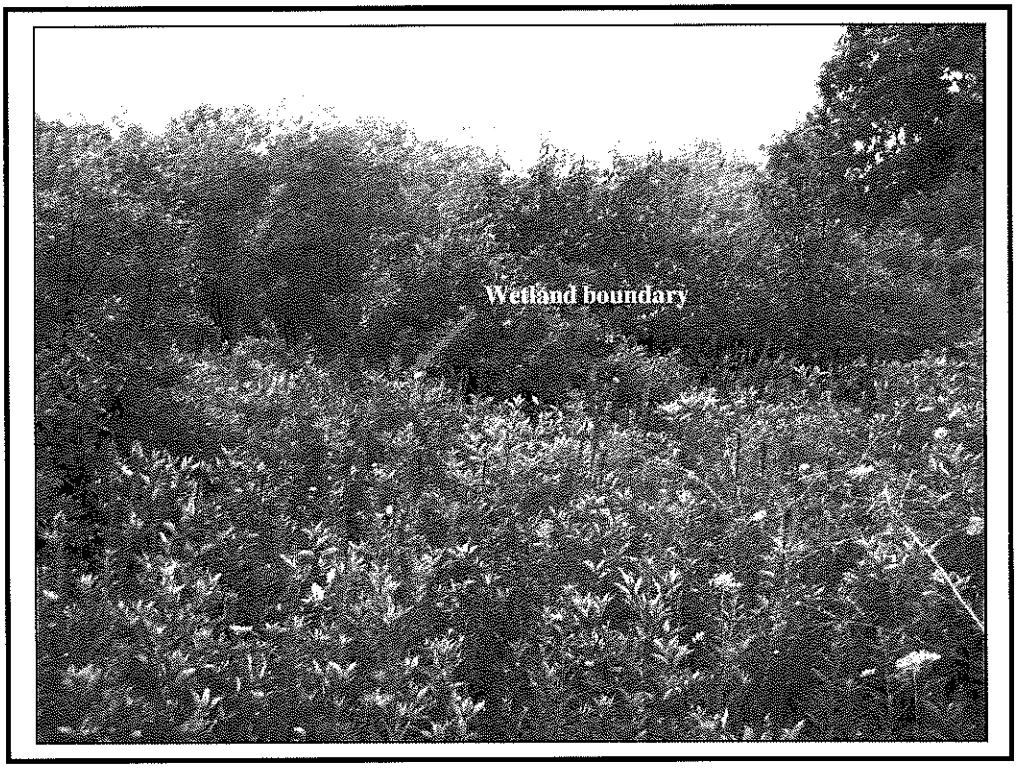
Photograph 4 (7/24/2012): North facing view of the western boundary of W-1.



Photograph 5 (7/24/2012): Interior view of the northeastern portion of W-1.

Photograph 6 (7/24/2012): Facing northwest along W-1 boundary from T-1. Shrub carr wetland is left of the flag and upland "old-field" is to the right.

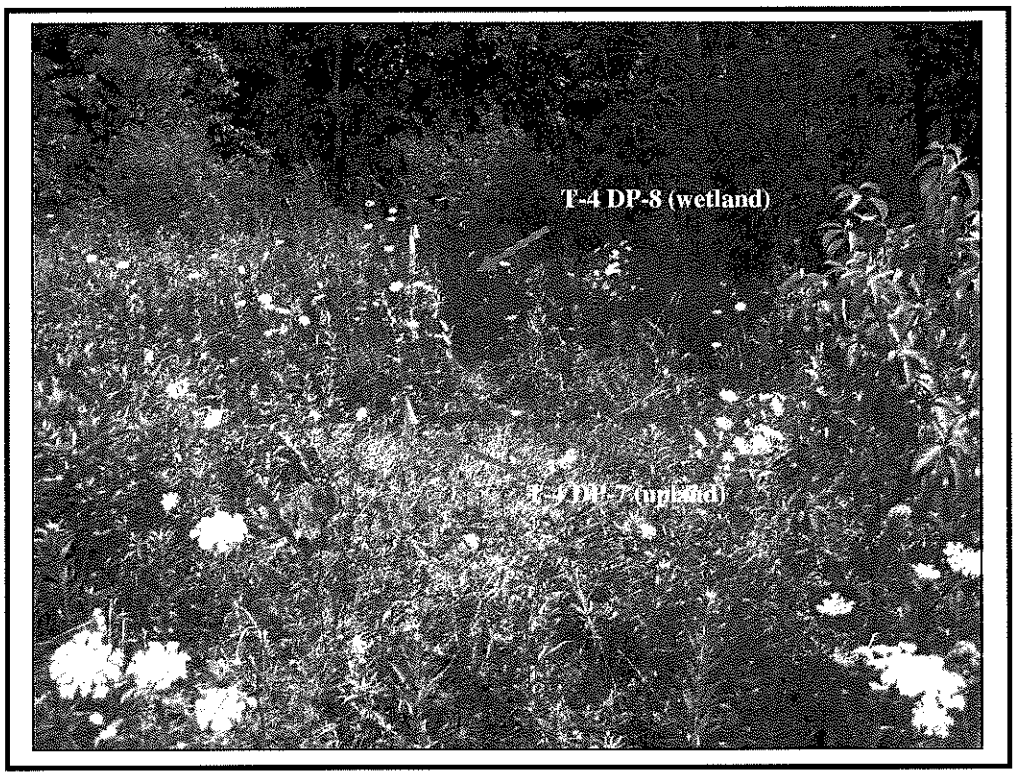
Photograph 7 (7/24/2012): Northeast view of interior of W-1 from the southeast portion of W-1. Note the shallow marsh community in the background.



Photograph 8 (7/24/2012): Upland peninsula within W-1. Shrub carr wetland is in the background and upland prairie remnant is in the foreground.

Photograph 9 (7/24/2012): South facing view of the stormwater pond that was built in 2002 during the construction of the church. The stormwater pond is exempt from NR103 regulation.

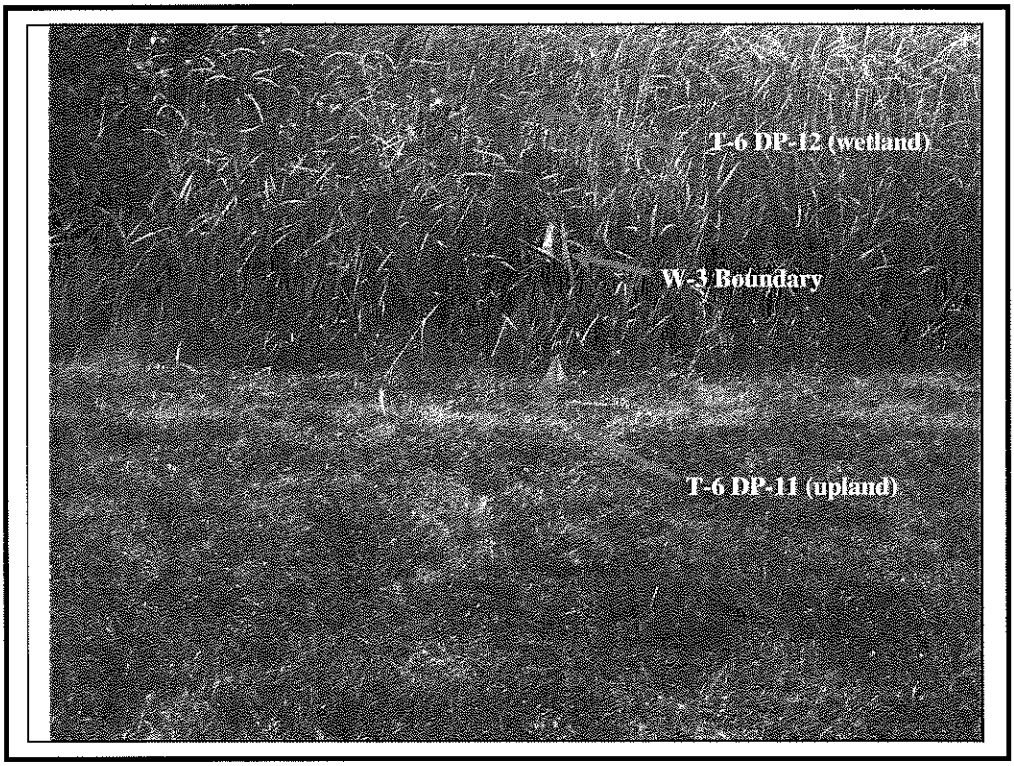
Photograph 10 (7/24/2012): South facing view of a typical upland plant community within the site. Uplands are dominated by cool season grasses and Queen Anne's lace. W-1 is in the background.



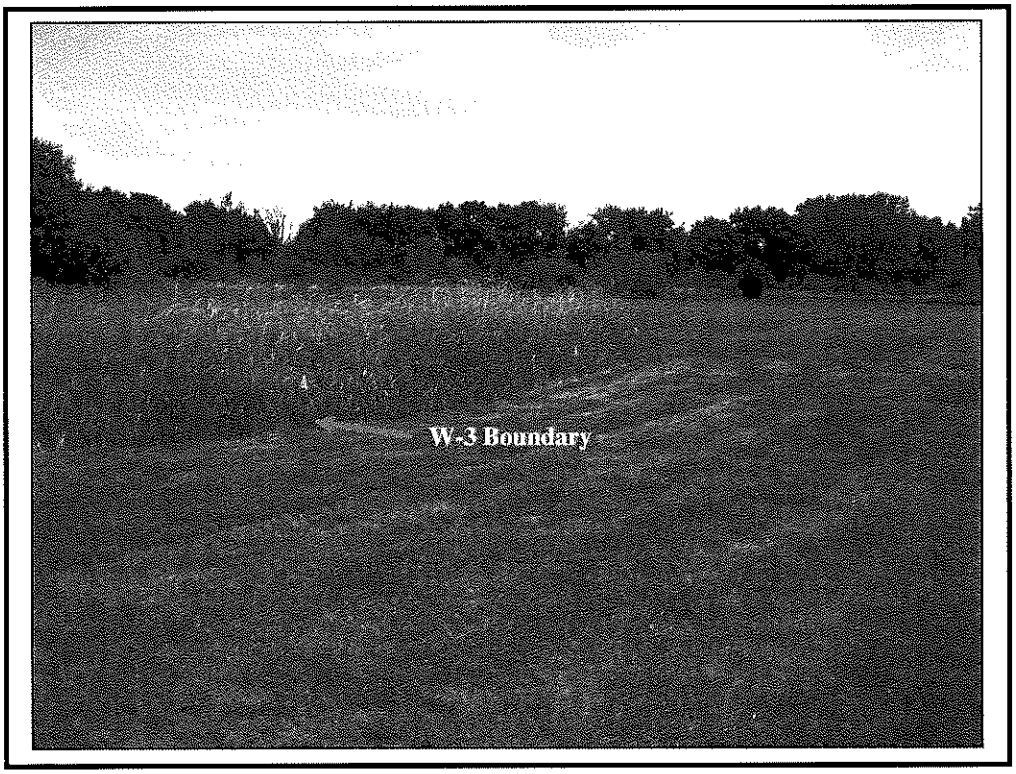
Photograph 9 (7/24/2012): East facing view of Transect 4 within W-2.

Photograph 10 (7/24/2012): Interior view of W-2, a shrub carr.

Photograph 9 (7/24/2012): North facing view of Transect 5 along W-3's boundary.

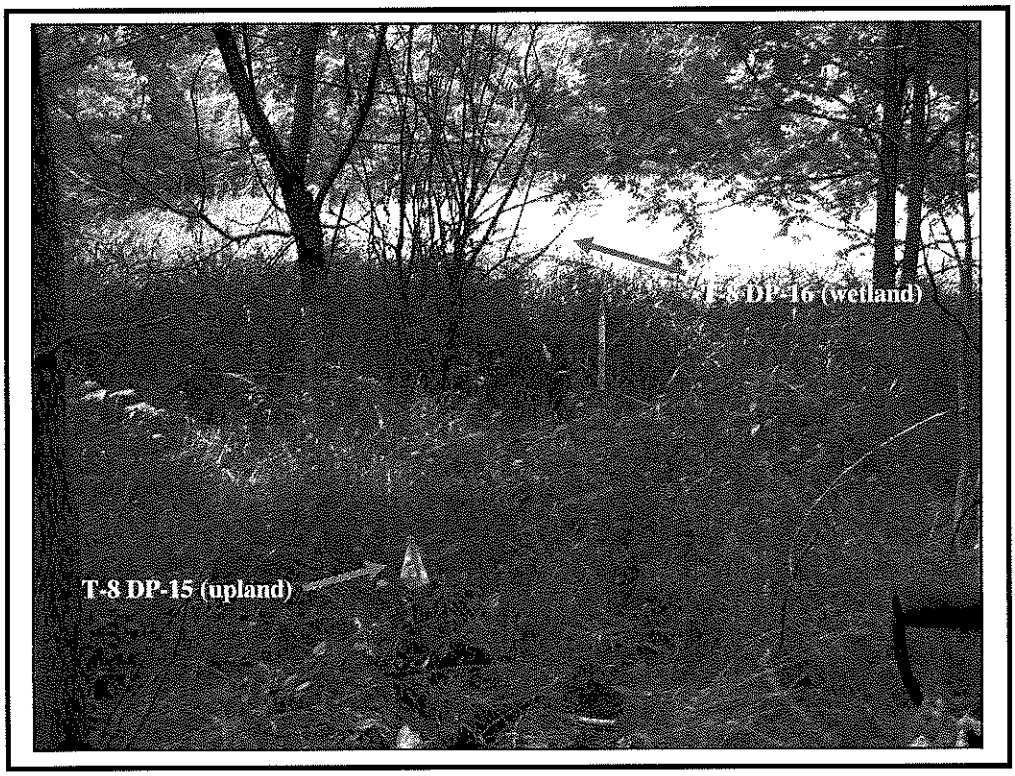


Photograph 10 (7/24/2012): East facing view of Transect 6 along the W-3 boundary.



Photograph 9 (7/24/2012): Overview of W-3, facing east.

Photograph 10 (7/24/2012): South facing view of Transect 7 along W-4's boundary.



Photograph 9 (7/24/2012): Northeast facing view of Transect 8 along W-4's boundary.

Photograph 10 (7/24/2012): Southwest facing view along the W-4 boundary.

Appendix 3:

Wetland Determination Data Forms – Midwest Region

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-1 DP-1(upl)
Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 2-3% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Morley silt loam (MzdB2), 2-6% slopes, eroded | WWI Classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil No or Hydrology No naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area	
Hydric Soil Present?	Yes ____	No X	within a Wetland?	Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional wetland site ID:	

Remarks: **Climatic conditions are very dry for this time of year -4-6 inches below average precipitation at date of site visit.**

VEGETATION - Use scientific names for plants.

Sampling Point: T-1 DP-1(upl)

Tree Stratum (Plot size: n/a)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Malus pumila*	30	Y	UPL
2. *Rhamnus cathartica*	5	N	FAC
3. *Cornus alba*	5	N	FACW
4.			
5.			
6.			
7.			
	40 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	80	Y	FAC
2. *Solidago canadensis*	30	N	FACU
3. *Melilotus officinalis*	30	N	FACU
4. *Rudbeckia hirta*	30	N	FACU
5. *Solidago rigida*	25	N	UPL
6. *Daucus carota*	20	N	UPL
7. *Fraxinus pennsylvanica*	5	N	FACW
8. *Taraxacum officinale*	2	N	FACU
9.			
10.			
11.			
12.			
13.			
14.			
	222 = Total Cover		

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	0	x 1 = 0
FACW species	10	x 2 = 20
FAC species	85	x 3 = 255
FACU species	92	x 4 = 368
UPL species	75	x 5 = 375
Column Totals:	262 (A)	1018 (B)

Prevalence Index B/A = 3.9

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
____ Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
The plant community is an upland meadow with some prairie remnant species. The prevalence index is above 3.0 and area lacks hydric soil and wetland hydroloy.

SOIL

Sampling Point: **T-1 DP-1(upl)**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/3	100	-				silty clay loa	
7-12	10YR 4/2 &	50	7.5YR 4/4	10	C	M	silty clayloan	
	10YR 3/3	40						
12-20	10YR 4/4	90	10YR 5/6	10	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes ___ No **X**

Remarks: **The hydric soil criterion is not met at this data point.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? Yes ___ No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present at this data point.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **Southbrook Church** City/County: **Franklin, Milwaukee** Sampling Date: **July 24, 2012**

Applicant/Owner: **Southbrook Church** State: **WI** Sampling Point: **T-1 DP-2 (wtd)**

Investigator(s): **Heather Patti & Tina Myers** Section, Township, Range: **NE 1/4 Sec 18, T5N, R21E**

Landform (hillslope, terrace, etc.): **depression** Local relief (concave, convex, none): **concave**

Slope (%): **0%** Lat: **See Figure 2** Long: **See Figure 2** Datum: **See Figure 2**

Soil Map Unit Name: **Ashkum silty clay loam (AsA), 0-3% slopes** WWI Classification: **E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (If no, explain in Remarks)

Are Vegetation **No** Soil **No** or Hydrology **No** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation **No** Soil ****Yes** or Hydrology ****Yes** naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No ____	Is the Sampled Area		
Hydric Soil Present?	Yes **X**	No ____	within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____	If yes, optional wetland site ID:	**W-1**	

Remarks: ***4-6 inches below average precipitation - drought conditions**

****Problem soil - Mollisol ** This is a depressional wetland with seasonal hydrology**

VEGETATION - Use scientific names for plants.

Sampling Point: **T-1 DP-2 (wtd)**

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1. *Salix nigra*	20	Y	OBL
2. *Populus tremuloides*	2	N	FAC
3.			
4.			
5.			
6.			
7.			
	22	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Salix discolor*	80	Y	FACW
2. *Cornus alba*	20	N	FACW
3. *Cornus racemosa*	10	N	FAC
4. *Populus tremuloides*	10	N	FAC
5.			
6.			
7.			
	120	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	20	Y	FAC
2. *Solidago canadensis*	20	Y	FACU
3. *Geum canadense*	15	N	FAC
4. *Fragaria virginiana*	10	N	FACU
5. *Euthamia graminifolia*	5	N	FACW
6. *Solidago gigantea*	5	N	FACW
7. *Oenthera blennis*	5	N	FACU
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	80	= Total Cover	

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **75%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes **X** No ____

Remarks: (Include photo numbers here or on a separate sheet.)

The hydrophytic vegetation criterion is met. The plant community is shrub-carr.

SOIL

Sampling Point: **T-1 DP-2 (wtd)**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100	-				silty clay loa	
4-14	10YR 3/1	95	10YR 5/8	5	C	M	silty clay loa	
14-20	10YR 5/2	90	10YR 5/8	10	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks: **The hydric soil criterion is met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **Seasonal wetland hydrology is present, but secondary indicators were observed.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-2 DP-3(upl)
Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 2-3% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil **Yes or Hydrology No naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area		
Hydric Soil Present?	Yes X	No ____	within a Wetland?	Yes ____	No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional wetland site ID:		

Remarks: *4-6 inches below average precipitation - drought conditions
**The soil is a mollisol containing a dark surface horizon, but vegetation and landscape position are indicative of uplands.

VEGETATION - Use scientific names for plants.

Sampling Point: T-2 DP-3(upl)

Tree Stratum (Plot size: n/a)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Malus pumila*	5	Y	UPL
2.			
3.			
4.			
5.			
6.			
7.			
	5 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	95	Y	FAC
2. *Daucus carota*	30	N	UPL
3. *Solidago canadensis*	15	N	FACU
4. *Phalaris arundinacea*	10	N	FACW
5. *Euthamia graminifolia*	8	N	FACW
6. *Ambrosia artemisiifolia*	5	N	FACU
7. *Vitis riparia*	2	N	FACW
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	165 = Total Cover		

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply by:	
OBL species	0	x 1 =	0	
FACW species	20	x 2 =	40	
FAC species	95	x 3 =	285	
FACU species	20	x 4 =	80	
UPL species	35	x 5 =	175	
Column Totals:	170	(A)	580	(B)

Prevalence Index B/A = 3.4

Hydrophytic Vegetation Indicators:
____ Rapid Test for Hydrophytic Vegetation
____ Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criterion is not met. The prevalence index is above 3.0. Hydric soil present but not wetland hydrology.

SOIL

Sampling Point: T-2 DP-3(upl)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100	-				silty clay loa	
6-17	10YR 2/1	90	10YR 5/8	5	C	M	silty clay	
			10YR 3/4	5	C	M		
17-21	10YR 5/2	95	10YR 5/8	5	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks: **The hydric soil criteria is met, although vegetation and hydrology indicative of uplands.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present. There is a subtle topo break between the upland and wetland boundary.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-2 DP-4 (wtd)
Investigator(s): Heather Patil & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): concave
Slope (%): 0% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: E2K
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil **Yes or Hydrology **Yes naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area	
Hydric Soil Present?	Yes X	No ____	within a Wetland?	Yes X No ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional wetland site ID:	W-1

Remarks: *4-6 inches below average precipitation - drought conditions
**Problem soil - Mollisol ** This is a depressional wetland with seasonal hydrology

VEGETATION - Use scientific names for plants.

Sampling Point: T-2 DP-4 (wtd)

Tree Stratum (Plot size: n/a)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	95	Y	FAC
2. *Phalaris arundinacea*	25	N	FACW
3. *Solidago gigantea*	20	N	FACW
4. *Euthamia graminifolia*	10	N	FACW
5. *Persicaria amphibia*	10	N	OBL
6. *Juncus dudleyi*	2	N	FACW
7. *Agrostis gigantea*	2	N	FACW
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	164	= Total Cover	

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	59	x 2 =	118
FAC species	95	x 3 =	285
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	164 (A)		413 (B)

Prevalence Index B/A = 2.5

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
X Dominance Test is >50%
X Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criterion is met. This is a fresh (wet) meadow community dominated by Kentucky blue grass.
Prevalence Index was completed to confirm wetland vegetation since KGB also commonly seen in uplands.

SOIL

Sampling Point: T-2 DP-4 (wtd)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(Inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	90	10YR 5/6	10	C	M	silty clay loa	
4-12	10YR 2/1	100	-				silty clay loa	
12-20	10YR 5/1	80	10YR 5/8	20	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks: **The hydric soil criterion is met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **Seasonal wetland hydrology is present, but secondary indicators were observed.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-3 DP-5 (upl)
Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 3-5% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: none mapped
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)
Are Vegetation **Yes Soil **Yes or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil **Yes or Hydrology No naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area		
Hydric Soil Present?	Yes ____	No X	within a Wetland?	Yes ____	No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional wetland site ID:		

Remarks: *4-6 inches below average precipitation - drought conditions
**The soil is a mollisol containing a dark surface horizon **mowed grass lawn and mixed matrix in soils profile indicating past disturbance

VEGETATION - Use scientific names for plants.

Sampling Point: T-3 DP-5 (upl)

Tree Stratum (Plot size: n/a)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	80	Y	FAC
2. *Elytrigia repens*	60	Y	FACU
3. *Taraxacum officinale*	5	N	FACU
4. *Daucus carota*	3	N	UPL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	148 = Total Cover		

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply by:
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	65	x 4 =	260
UPL species	3	x 5 =	15
Column Totals:	148 (A)		515 (B)

Prevalence Index B/A = 3.5

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
____ Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criterion is not met since it does not pass the PI and lacks hydric soil/wetland hydrology.
This is a maintained (mowed) lawn.

SOIL

Sampling Point: T-3 DP-5 (upl)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1 &	50	-				silty clay loar	
	10YR 4/3	50						
2-14	10YR 3/1 &	40	10YR 5/6	10	C	M	silty clay loar	
	10YR 4/3	50						
14-20	10YR 4/3	100	-				silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes ___ No **X**

Remarks: **The hydric soil criterion is not met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? Yes ___ No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present. There is a subtle topo break between the upland and wetland boundary.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-3 DP-6 (wtd)
Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): concave
Slope (%): 0% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: E2K
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil **Yes or Hydrology **Yes naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area		
Hydric Soil Present?	Yes X	No ____	within a Wetland?	Yes X	No ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional wetland site ID:	W-1	

Remarks: *4-6 inches below average precipitation - drought conditions
**Problem soil - Mollisol ** This is a depressional wetland with seasonal hydrology

VEGETATION - Use scientific names for plants.

Sampling Point: T-3 DP-6 (wtd)

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1. *Populus deltoides*	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	20 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Salix interior*	40	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	40 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. *Phalaris arundinacea*	90	Y	FACW
2. *Poa pratensis*	30	N	FAC
3. *Euthamia graminifolia*	30	N	FACW
4. *Lycopus americanus*	5	N	OBL
5. *Persicaria amphibia*	5	N	OBL
6. *Poa palustris*	2	N	FACW
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	162 = Total Cover		

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:
____ Rapid Test for Hydrophytic Vegetation
X Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criterion is met. The plant community is shrub-carr.

SOIL

Sampling Point: T-3 DP-6 (wtd)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/1	100	-				silty clay loan	
12-20	10YR 5/1	80	10YR 5/8	20	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks: **The hydric soil criterion is met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **Seasonal wetland hydrology is present, but secondary indicators were observed.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-4 DP-7 (upl)
Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 2-3% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (If no, explain in Remarks)
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation **Yes Soil **Yes or Hydrology No naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area	
Hydric Soil Present?	Yes ____	No X	within a Wetland?	Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional wetland site ID:	n/a

Remarks: *4-6 inches below average precipitation - drought conditions
**Soil is a mollisol with a dark surface horizon, but vegetation and landscape position are indicative of uplands.

VEGETATION - Use scientific names for plants.

Sampling Point: T-4 DP-7 (upl)

Tree Stratum (Plot size: n/a)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Cornus racemosa*	10	Y	FAC
2. *Lonicera x bella*	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	60	Y	FAC
2. *Daucus carota*	60	Y	UPL
3. *Solidago canadensis*	50	Y	FACU
4. *Trifolium hybridum*	10	N	FAC
5. *Symphotrichum novae-angliae*	5	N	FACW
6. *Cichorium intybus*	5	N	FACU
7. *Fraxinus pennsylvanica*	5	N	FACW
8. *Erigeron annuus*	2	N	FACU
9.			
10.			
11.			
12.			
13.			
14.			
	197	= Total Cover	

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test Worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 40% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:
____ Rapid Test for Hydrophytic Vegetation
____ Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes *X No ____

Remarks: (Include photo numbers here or on a separate sheet.)
*Vegetation is met but does not pass PI and data point lacks hydric soil and wetland hydrology. Poa pratensis, a FAC species, is more indicative of uplands in this circumstance.

SOIL

Sampling Point: **T-4 DP-7 (upl)**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(Inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	100	-				silty clay	
3-10	10YR 4/3	100	-				silty clay	
10-20	10YR 4/3	95	10YR 4/6	5	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes ____ No **X**

Remarks: **The hydric soil criterion is not met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No **X**	Depth (Inches): ____
Water Table Present?	Yes ____	No **X**	Depth (Inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No **X**	Depth (Inches): ____

Wetland Hydrology Present? Yes ____ No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012

Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-4 DP-8 (wtd)

Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E

Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): slightly concave

Slope (%): 0% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2

Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: E2K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (If no, explain in Remarks)

Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No Soil **Yes or Hydrology **Yes naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area	
Hydric Soil Present?	Yes X	No ____	within a Wetland?	Yes X No ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional wetland site ID:	W-2

Remarks: *4-6 inches below average precipitation - drought conditions

**Problem soil - Mollisol ** depressional wetland with seasonal wetland hydrology

VEGETATION - Use scientific names for plants.

Sampling Point: T-4 DP-8 (wtd)

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1. *Populus deltoides*	50	Y	FAC
2. *Fraxinus pennsylvanica*	10	N	FACW
3.			
4.			
5.			
6.			
7.			
	60	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Salix interior*	40	Y	FACW
2. *Salix discolor*	10	N	FACW
3.			
4.			
5.			
6.			
7.			
	50	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Phalaris arundinacea*	50	Y	FACW
2. *Poa palustris*	40	Y	FACW
3. *Apocynum cannabinum*	40	Y	FAC
4. *Lycopus americanus*	5	N	OBL
5. *Carex vulpinoidea*	3	N	OBL
6. *Symphotrichum puniceum*	3	N	OBL
7. *Daucus carota*	2	N	UPL
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	143	= Total Cover	

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

The hydrophytic vegetation criterion is met. Plant community is a shrub carr wetland.

SOIL

Sampling Point: **T-4 DP-8 (wtd)**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	100	-				silty clay	
3-14	10YR 3/1	90	10YR 5/6	10	C	M	silty clay	
14-20	10YR 5/2	90	10YR 5/8	10	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks:

The hydric soil criterion is met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **This is a depressional area with seasonal wetland hydrology, but secondary wetland indicators are present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-5 DP-9 (upl)
Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 2-3% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Blount silt loam (BIA), 1-3% slopes | WWI Classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)
Are Vegetation **Yes Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil **Yes or Hydrology No naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area	
Hydric Soil Present?	Yes ____	No X	within a Wetland?	Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional wetland site ID:	____

Remarks: *4-6 inches below average precipitation - drought conditions
**Mowed grass **Soil has dark surface horizon, but vegetation and landscape position are indicative of uplands.

VEGETATION - Use scientific names for plants.

Sampling Point: T-5 DP-9 (upl)

Tree Stratum (Plot size: n/a)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	100	Y	FAC
2. *Plantago major*	10	N	FAC
3. *Taraxacum officinale*	10	N	FACU
4. *Elytrigia repens*	10	N	FACU
5. *Trifolium repens*	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	135 = Total Cover		

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	110	x 3 =	330	
FACU species	25	x 4 =	100	
UPL species	0	x 5 =	0	
Column Totals:	135	(A)	430	(B)

Prevalence Index B/A = 3.2

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
X Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)
This is a manicured area - mowed lawn. *Poa pratensis* is planted and this area lacks hydric soil and wetland hydrology.

SOIL

Sampling Point: T-5 DP-9 (upl)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100	-				silty clay	
10-12	10YR 3/2	95	10YR 5/8	5	C	M	silty clay	
12-20	10YR 5/3	95	10YR 5/8	5	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes ___ No X

Remarks: **Soils are borderline hydric but are not quite met.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012

Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-5 DP-10 (wtd)

Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E

Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): slightly concave

Slope (%): 0% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2

Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: E2K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)

Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No Soil **Yes or Hydrology **Yes naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland?	Yes X No ____
Hydric Soil Present?	Yes X	No ____	If yes, optional wetland site ID:	W-3
Wetland Hydrology Present?	Yes X	No ____		

Remarks: *4-6 inches below average precipitation - drought conditions

**Problem soil - Mollisol ** This is a depressional area with seasonal wetland hydrology.

VEGETATION - Use scientific names for plants.

Sampling Point: T-5 DP-10 (wtd)

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1. *Fraxinus pennsylvanica*	20	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Sapling/Shrub Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Carex stricta*	60	Y	OBL
2. *Phalaris arundinacea*	40	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	100	= Total Cover	

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:

X Rapid Test for Hydrophytic Vegetation

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

The hydrophytic vegetation criterion is met. This is a fresh (wet) meadow plant community.

SOIL

Sampling Point: **T-5 DP-10 (wtd)**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-17	10YR 2/1	90	10YR 5/6	5	C	M	silty clay	
			10YR 3/4	5	C	M	silty clay	
17-20	10YR 5/1	90	10YR 5/8	10	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

[2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks:

The hydric soil criterion is met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (Inches): ___
Water Table Present?	Yes ___	No X	Depth (Inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **Depressional area with seasonal wetland hydrology, but secondary hydrological indicators are present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **Southbrook Church** City/County: **Franklin, Milwaukee** Sampling Date: **July 24, 2012**

Applicant/Owner: **Southbrook Church** State: **WI** Sampling Point: **T-6 DP-11 (upl)**

Investigator(s): **Heather Patti & Tina Myers** Section, Township, Range: **NE 1/4 Sec 18, T5N, R21E**

Landform (hillslope, terrace, etc.): **hillslope** Local relief (concave, convex, none): **convex**

Slope (%): **2-3%** Lat: **See Figure 2** Long: **See Figure 2** Datum: **See Figure 2**

Soil Map Unit Name: **Ashkum silty clay loam (AsA), 0-3% slopes** WWI Classification: **none mapped**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation ****Yes** Soil **No** or Hydrology **No** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation **No** Soil **Yes** or Hydrology **No** naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No **X**	Is the Sampled Area		
Hydric Soil Present?	Yes **X**	No ____	within a Wetland?	Yes ____	No **X**
Wetland Hydrology Present?	Yes ____	No **X**	If yes, optional wetland site ID:	**n/a**	

Remarks: ***4-6 inches below average precipitation - drought conditions**

****Mowed grass** ****Soil contains hydric characteristics and are problematic (Mollisol), but veg./ landscape position are indicative of uplands.**

VEGETATION - Use scientific names for plants.

Sampling Point: **T-6 DP-11 (upl)**

Tree Stratum (Plot size: **n/a**)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: **n/a**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: **5'R**)			
1. *Poa pratensis*	100	Y	FAC
2. *Trifolium repens*	40	Y	FACU
3. *Taraxacum officinale*	10	N	FACU
4. *Plantago major*	5	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	155 = Total Cover		

Woody Vine Stratum (Plot size: **n/a**)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply by:
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	105	x 3 =	315
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	155 (A)		515 (B)

Prevalence Index B/A = **3.3**

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation

____ Dominance Test is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ***X**

Remarks: (Include photo numbers here or on a separate sheet.)

The hydrophytic vegetation criterion is not met. This data point does not pass PI or exhibit morphological adaptations.

SOIL

Sampling Point: **T-6 DP-11 (upl)**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100	-				silty clay	
10-14	10YR 3/2	95	10YR 5/8	5	C	M	silty clay	
14-20	10YR 5/1	95	10YR 5/8	5	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes ___ No **X**

Remarks: **Soils are borderline hydric but not quite met. Vegetation and landscape position are indicative of uplands.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? Yes ___ No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012

Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-6 DP-12 (wtd)

Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E

Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): concave

Slope (%): 0% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2

Soil Map Unit Name: Ashkum silty clay loam (AsA), 0-3% slopes | WWI Classification: E2K

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)

Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No Soil **Yes or Hydrology **Yes naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland?	Yes X No ____
Hydric Soil Present?	Yes X	No ____	If yes, optional wetland site ID:	W-3
Wetland Hydrology Present?	Yes X	No ____		

Remarks: *4-6 inches below average precipitation - drought conditions

**Problem soil - Mollisol ** This is a depressional wetland with seasonal wetland hydrology.

VEGETATION - Use scientific names for plants.

Sampling Point: T-6 DP-12 (wtd)

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1. *Populus tremuloides*	30	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Populus tremuloides*	10	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Carex stricta*	60	Y	OBL
2. *Phalaris arundinacea*	50	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	110	= Total Cover	

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:

- ____ Rapid Test for Hydrophytic Vegetation
- X Dominance Test is >50%
- ____ Prevalence Index is ≤ 3.0[1]
- ____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

The hydrophytic vegetation criterion is met. This is within a fresh wet/sedge meadow community.

SOIL

Sampling Point: T-6 DP-12 (wtd)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10YR 2/1	90	10YR 5/6 &	5	C	M	silty clay	
			10YR 3/4	5	C	M	silty clay	
15-20	10YR 5/1	90	10YR 5/8	10	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): n/a

Hydric Soil Present? Yes X No ___

Remarks: **The hydric soil criterion is met. This is a problem soil - mollisol.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **This is a depressional wetland with seasonal wetland hydrology, but secondary hydrological indicators are present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012

Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-7 DP-13 (upl)

Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex

Slope (%): ~5% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2

Soil Map Unit Name: Houghton muck (Ht), 0-2% slopes | WWI Classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)

Are Vegetation **Yes Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No Soil No or Hydrology No naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland?	Yes ____ No X
Hydric Soil Present?	Yes ____	No X	If yes, optional wetland site ID:	n/a
Wetland Hydrology Present?	Yes ____	No X		

Remarks: *4-6 inches below average precipitation - drought conditions
**Mowed lawn

VEGETATION - Use scientific names for plants.

Sampling Point: T-7 DP-13 (upl)

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1. *Fraxinus pennsylvanica*	10	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	

Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5'R)			
1. *Poa pratensis*	60	Y	FAC
2. *Taraxacum officinale*	40	Y	FACU
3. *Trifolium repens*	25	N	FACU
4. *Plantago major*	15	N	FAC
5. *Glechoma hederacea*	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	145	= Total Cover	

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	75	x 3 =	225
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	155 (A)		525 (B)

Prevalence Index B/A = 3.4

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
X Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criterion is met due to the dominance of *Poa pratensis*. *Poa pratensis* is more reflective of uplands in this circumstance.

SOIL

Sampling Point: T-7 DP-13 (upl)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100	-				silty clay loam	
8-20	10YR 6/3	90	10YR 5/6	10	C	M	sandy loam	disturbed soil - sandy loam with gravel fragments

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none

Depth (inches): n/a

Hydric Soil Present? Yes ___ No X

Remarks: **The hydric soil criterion is not met. This is a disturbed soil - sandy loam with gravel fragments. Landscape position (on a slight hillslope) and lack of hydrologic indiactor indicate upland.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-7 DP-14 (wtd)
Investigator(s): Heather Patti & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): depression | Local relief (concave, convex, none): slightly concave
Slope (%): 0% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Houghton muck (Ht), 0-2% slopes | WWI Classification: E2K
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (If no, explain in Remarks)
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil **Yes or Hydrology **Yes naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area		
Hydric Soil Present?	Yes X	No ____	within a Wetland?	Yes X	No ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional wetland site ID:	W-4	

Remarks: *4-6 inches below average precipitation - drought conditions
**Problem soil - Mollisol ** This is a depressional wetland with seasonal wetland hydrology.

VEGETATION - Use scientific names for plants.

Sampling Point: T-7 DP-14 (wtd)

Tree Stratum (Plot size: n/a)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. *Phalaris arundinacea*	100	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:

X Rapid Test for Hydrophytic Vegetation
X Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criterion is met. This is a fresh (wet) meadow plant community.

SOIL

Sampling Point: T-7 DP-14 (wtd)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100	10YR 5/8	2	C	PL	silty clay	oxyidized roots at 8"
18-22	10YR 5/1	90	10YR 5/8	10	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes X No ___

Remarks: **The hydric soil criterion is met. This is a problem soil - mollisol.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **The wetland hydrology criterion is met.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Southbrook Church | City/County: Franklin, Milwaukee | Sampling Date: July 24, 2012
Applicant/Owner: Southbrook Church | State: WI | Sampling Point: T-8 DP-15 (upl)
Investigator(s): Heather Pattl & Tina Myers | Section, Township, Range: NE 1/4 Sec 18, T5N, R21E
Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): convex
Slope (%): 3-5% | Lat: See Figure 2 | Long: See Figure 2 | Datum: See Figure 2
Soil Map Unit Name: Blount silt loam (BIA), 1-3% slopes | WWI Classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No *X (if no, explain in Remarks)
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation No Soil No or Hydrology No naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area	
Hydric Soil Present?	Yes ____	No X	within a Wetland?	Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional wetland site ID:	

Remarks: *4-6 inches below average precipitation - drought conditions

VEGETATION - Use scientific names for plants.

Sampling Point: T-8 DP-15 (upl)

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species	Indicator Status
1. *Juglans nigra*	80	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	80 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15'R)			
1. *Rhamnus cathartica*	10	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Herb Stratum (Plot size: 5'R)			
1. *Festuca pratensis*	95	Y	FACU
2. *Aster sagittifolius*	40	Y	UPL
3. *Poa pratensis*	20	N	FAC
4. *Geum canadense*	10	N	FAC
5. *Hackelia virginiana*	5	N	FACU
6. *Erigeron annuus*	5	N	FACU
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	175 = Total Cover		

Woody Vine Stratum (Plot size: n/a)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	(A)		(B)

Prevalence Index B/A = ____

Hydrophytic Vegetation Indicators:

____ Rapid Test for Hydrophytic Vegetation
____ Dominance Test is >50%
____ Prevalence Index is ≤ 3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
The hydrophytic vegetation criterion is not met. This data point is located within a black walnut grove adjacent to the wetland.

SOIL

Sampling Point: T-8 DP-15 (upl)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/2	100	-				silty clay	disturbed soil - sandy loam with
18-20	2.5Y 7/2	100	-				sandy loam	gravel fragments

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: **none**

Depth (inches): **n/a**

Hydric Soil Present? Yes ___ No **X**

Remarks: **The hydric soil criterion is not met. This is a disturbed soil - sandy loam with gravel fragments present in the lower horizon.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No **X**	Depth (inches): ___
Water Table Present?	Yes ___	No **X**	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No **X**	Depth (inches): ___

Wetland Hydrology Present? Yes ___ No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **No wetland hydrology indicators present.**

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: **Southbrook Church** City/County: **Franklin, Milwaukee** Sampling Date: **July 24, 2012**

Applicant/Owner: **Southbrook Church** State: **WI** Sampling Point: **T-8 DP-16 (wtd)**

Investigator(s): **Heather Patti & Tina Myers** Section, Township, Range: **NE 1/4 Sec 18, T5N, R21E**

Landform (hillslope, terrace, etc.): **depression** Local relief (concave, convex, none): **concave**

Slope (%): **0%** Lat: **See Figure 2** Long: **See Figure 2** Datum: **See Figure 2**

Soil Map Unit Name: **Houghton muck (Ht), 0-2% slopes** WWI Classification: **E2K**

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ***X** (if no, explain in Remarks)

Are Vegetation **No** Soil **No** or Hydrology **No** significantly disturbed? Are "Normal Circumstances" present? Yes **X** No ____

Are Vegetation **No** Soil ****Yes** or Hydrology ****Yes** naturally problematic? (if needed, explain any answers in Remarks)

SUMMARY OF FINDINGS --- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes **X**	No ____	Is the Sampled Area		
Hydric Soil Present?	Yes **X**	No ____	within a Wetland?	Yes **X**	No ____
Wetland Hydrology Present?	Yes **X**	No ____	If yes, optional wetland site ID:	**W-4**	

Remarks: ***4-6 inches below average precipitation - drought conditions**

****Problem soil - Mollisol ** This is a depressional wetland with seasonal wetland hydrology.**

VEGETATION - Use scientific names for plants.

Sampling Point: **T-8 DP-16 (wtd)**

Tree Stratum (Plot size: **n/a**)	Absolute % Cover	Dominant Species	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: **n/a**)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: **5'R**)			
1. ***Phalaris arundinacea***	**100**	**Y**	**FACW**
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: **n/a**)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index B/A =

Hydrophytic Vegetation Indicators:

X Rapid Test for Hydrophytic Vegetation

____ Dominance Test Is >50%

____ Prevalence Index is ≤ 3.0[1]

____ Morphological Adaptations[1] (Provide supporting data in Remarks or on separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes **X** No ____

Remarks: (Include photo numbers here or on a separate sheet.)

The hydrophytic vegetation criterion is met. This is a fresh (wet) meadow plant community - monotypic reed canay grass.

SOIL

Sampling Point: T-8 DP-16 (wtd)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100	10YR 5/8	2	C	PL	silty clay	oxyidized roots at 3"
18-22	10YR 5/1	90	10YR 5/8	10	C	M	silty clay	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Much (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16) **(LRR,K,L,R)**
- ___ Dark Surface (S7) **(LRR,K,L)**
- ___ 5 cm mucky peat or peat (S3) **(LRR,K,L)**
- ___ Iron-Manganese Masses (F12) **(LRR,K,L,R)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none

Depth (Inches): n/a

Hydric Soil Present? Yes X No ___

Remarks: **The hydric soil criterion is met. This is a problem soil - mollisol.**

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

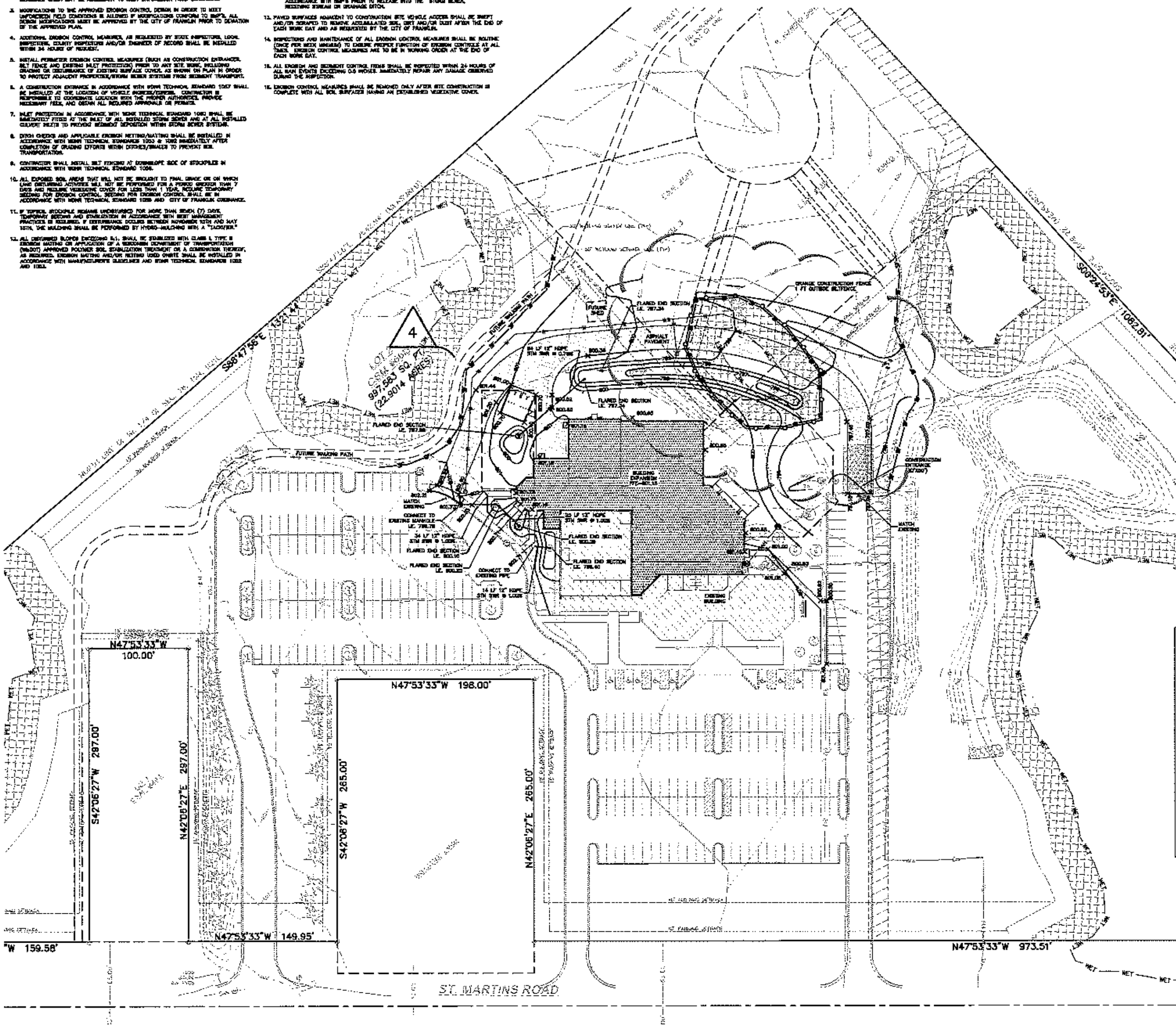
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

WWI Map, NRCS Soils Map, aerials, AHPS Precipitation data, Milwaukee County WETS table

Remarks: **The wetland hydrology criterion is met.**

CONSTRUCTION SITE EROSION CONTROL

GRADING NOTES



CONSTRUCTION STAGING PLAN

SOUTHBROOK CHURCH
FRANKLIN, WISCONSIN

STAGED OPERATIONS

1. INSTALL TRACKING PAD AT ENTRANCE TO SITE.
2. INSTALL SILT FENCE AS SHOWN ON THE APPROVED CONSTRUCTION PLANS.
3. GRADE SITE AS SHOWN ON THE APPROVED CONSTRUCTION PLANS COMPLETE WITH DITCH SYSTEMS AND STORM CULVERTS TO CONVEY STORMWATER PER DESIGN.
4. INSTALL PERMANENT RIP RAP TREATMENT AT THE DISCHARGE PIPES.
5. SEED AND WATER DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. PLACE EROSION CONTROL MATTING AS SHOWN ON THE PLANS. DISTURBED AREAS LEFT INACTIVE FOR SEVEN (7) DAYS SHALL BE STABILIZED TO MINIMIZE EROSION.
6. THE CONTRACTOR SHALL TOPSOIL AND SEED DISTURBED PORTIONS OF THE SITE AS THEY ARE COMPLETED AS IS PRACTICAL.
7. ALL OF THE EROSION CONTROL MEASURES FOR THE ENTIRE SITE MUST BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH WISCONSIN DNR REQUIREMENTS AND AS REQUIRED BY THE CITY OF FRANKLIN.

LEGEND

1" DIAMETER IRON PIPE FOUND (IPF)	EASEMENT LINE
SANITARY MANHOLE	SETBACK LINE
STORM MANHOLE	EXTERIOR PROPERTY LINE
CATCH BASIN ROUND	ADJACENT LOT LINE
CATCH BASIN SQUARE	WATER MAIN
OUTFALL PIPE	SANITARY SEWER
LIGHT POLE	STORM SEWER
POWER POLE	FIBER OPTIC
TELEPHONE PEDESTAL	UNDERGROUND TELEPHONE
SIGN	UNDERGROUND ELECTRIC
ELECTRICAL PEDESTAL/TRANSFORMER	RIP RAP
CONIFEROUS TREE	PROPOSED STORM INLET
DECIDUOUS TREE	PROPOSED STORM SEWER
BUSH	PROPOSED 1' CONTOUR
PROPOSED INLET PROTECTION	PROPOSED 5' CONTOUR
	SILT FENCE
	SAWCUT

GROTH
DESIGN
GROUP

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MILWAUKEE REGIONAL OFFICE
WAUKESHA, WISCONSIN 53188
MADISON | MILWAUKEE
KENOSHA | APPLETON
www.jsdinc.com

PROJECT

ADDITIONS AND
ALTERATIONS TO:

SOUTHBROOK
CHURCH

11010 ST. MARTINS
ROAD
FRANKLIN, WI 53132

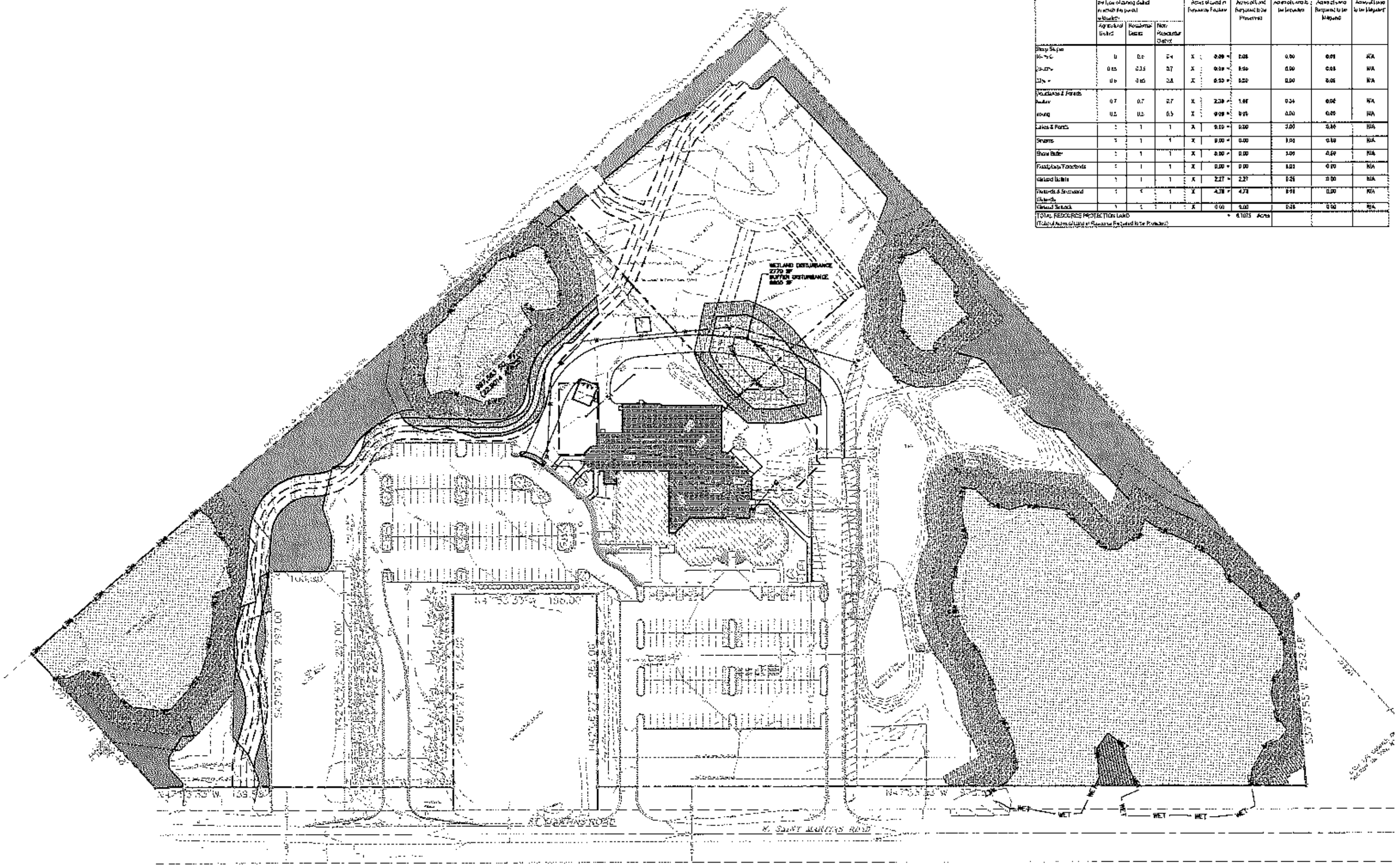
ISSUE

PROJECT INFO

SHEET TITLE

C2.0

Natural Resource Feature	Protection Standard Based Upon Zoning District Type (enter applicable standard from Table 15-4.0100 for the type of zoning district in which the parcel is located)				Acres of Land in Resource Feature	Acres of Land Required to be Protected	Acres of Land to be Disturbed	Acres of Land Required to be Mitigated	Acres of Land to be Mitigated
	Agricultural District	Residential District	Non-Residential District						
Steep Slopes									
10-19%	0	0.6	0.4	X	0.09 =	0.08	0.00	0.01	N/A
20-30%	0.65	0.75	0.7	X	0.09 =	0.06	0.00	0.01	N/A
30% +	0.9	0.85	0.8	X	0.55 =	0.50	0.00	0.05	N/A
Woodlands & Forests									
Mature	0.7	0.7	0.7	X	2.30 =	1.61	0.34	0.06	N/A
Young	0.5	0.5	0.5	X	0.09 =	0.05	0.00	0.00	N/A
Lakes & Ponds	1	1	1	X	0.00 =	0.00	0.00	0.00	N/A
Streams	1	1	1	X	0.00 =	0.00	0.00	0.00	N/A
Shore Buffer	1	1	1	X	0.00 =	0.00	0.00	0.00	N/A
Floodplains/Floodlands	1	1	1	X	0.00 =	0.00	0.00	0.00	N/A
Wetland Buffers	1	1	1	X	2.27 =	2.27	0.25	0.00	N/A
Wetlands & Shoreland Wetlands	1	1	1	X	4.78 =	4.78	0.01	0.00	N/A
Wetland Setback	1	1	1	X	0.00	0.00	0.08	0.00	N/A
TOTAL RESOURCE PROTECTION LAND (Total of Acres of Land in Resources Required to be Protected)					=	8.1075 Acres			



LEGEND

- WETLAND
- WETLAND BUFFER
- WETLAND SETBACK
- WOODLAND (MATURE)
- WETLAND BUFFER DISTURBANCE
- WETLAND SETBACK DISTURBANCE
- WOODLAND (MATURE) DISTURBANCE

1. DEVELOPMENT NAME: SOUTHBROOK CHURCH
2. LOCATION: 11010 ST. MARTINS ROAD FRANKLIN, WISCONSIN
3. OWNER/DEVELOPER: SOUTHBROOK CHURCH 9405 SOUTH 108TH ST FRANKLIN, WI 53132
4. ARCHITECT: GROTH DESIGN GROUP N58 W6181 COLUMBIA ROAD CEDARBURG, WI 53012
5. WETLANDS PER 2012 WETLAND DELINEATION BY R.A. SMITH NATIONAL
6. REFER TO CERTIFIED SURVEY MAP FOR PROPOSED EASEMENTS.

north

SCALE IN FEET
60' 0 60'

GROTH
DESIGN
GROUP

N58 W6181 COLUMBIA RD.
P.O. BOX 332
CEDARBURG, WISCONSIN 53012

PH. (262) 377-8001
FX. (262) 377-8003

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WAUKESHA, WISCONSIN 53186
262.513.0666 PHONE | 262.513.1232 FAX
MADISON | MILWAUKEE
KENOSHA | APPLETON
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PROJECT

ADDITIONS AND ALTERATIONS TO:

SOUTHBROOK CHURCH

11010 ST. MARTINS ROAD
FRANKLIN, WI 53132

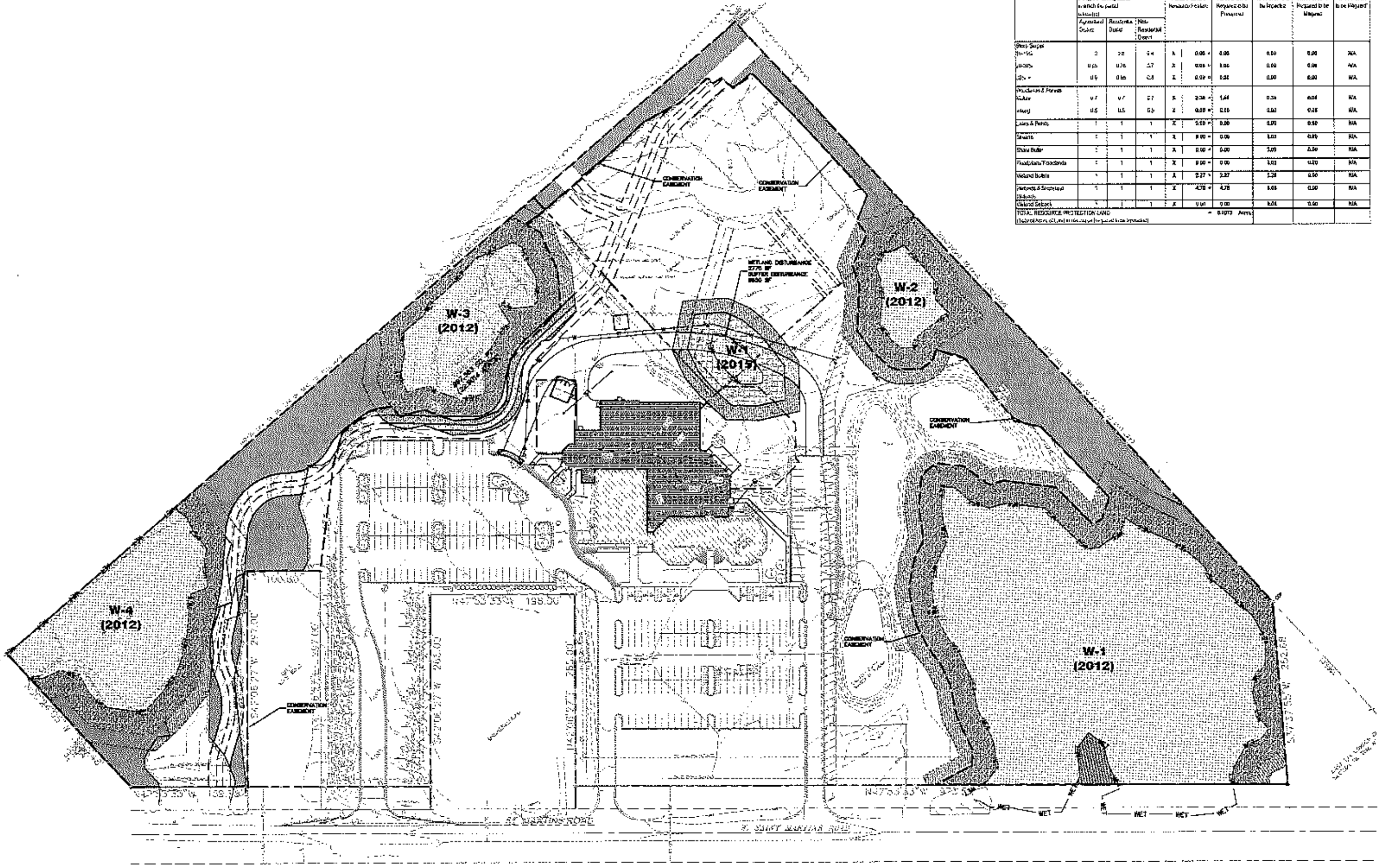
ISSUE

PROJECT INFO

SHEET TITLE
NATURAL RESOURCES PROTECTION PLAN

NR-1

© Groth Design Group, Inc.



Natural Resource Feature	Protection Standard (Select Urban Zoning District Type)			Acres of Land in Resource Feature		Acres of Land Required to be Protected	Acres of Land to be Impacted	Acres of Land Proposed to be Mitigated	Acres of Land to be Mitigated
	Agricultural District	Residential District	Non-Residential District						
Steep Slopes 10-19%	0	0.2	0.4	X	0.00	0.00	0.00	0.00	N/A
20-30%	0.65	0.75	0.7	X	0.06	0.06	0.00	0.00	N/A
30% +	0.9	0.85	0.8	X	0.02	0.02	0.00	0.00	N/A
Woodlands & Forests Mature	0.7	0.7	0.7	X	2.38	1.64	0.34	0.04	N/A
Young	0.5	0.5	0.5	X	0.30	0.15	0.00	0.15	N/A
Lakes & Ponds	1	1	1	X	0.00	0.00	0.00	0.00	N/A
Streams	1	1	1	X	0.00	0.00	0.00	0.00	N/A
Shore Buffer	1	1	1	X	0.00	0.00	0.00	0.00	N/A
Floodplains/Floodlands	1	1	1	X	0.00	0.00	0.00	0.00	N/A
Wetland Buffers	1	1	1	X	2.27	2.27	0.28	0.00	N/A
Wetlands & Shoreland Wetlands	1	1	1	X	4.78	4.78	0.05	0.00	N/A
Wetland Setback	1	1	1	X	0.01	0.00	0.04	0.00	N/A
TOTAL RESOURCE PROTECTION LAND				=	8.1073 Acres				

LEGEND

- WETLAND
- WETLAND BUFFER
- WETLAND SETBACK
- WOODLAND (MATURE)
- WETLAND BUFFER DISTURBANCE
- WETLAND SETBACK DISTURBANCE
- WOODLAND (MATURE) DISTURBANCE

1. DEVELOPMENT NAME: SOUTHBROOK CHURCH
2. LOCATION: 11010 ST. MARTINS ROAD FRANKLIN, WISCONSIN
3. OWNER/DEVELOPER: SOUTHBROOK CHURCH 9400 SOUTH 108TH ST FRANKLIN, WI 53132 CONTACT: DAVE HAMPSON PH: (262) 370-3800
4. ARCHITECT: GROTH DESIGN GROUP N58 W6181 COLUMBIA ROAD CEDARBURG, WI 53012
5. WETLANDS INDICATED ARE BASED ON WETLAND DELINEATION REPORT, DATED OCTOBER 25, 2012, BY HEATHER PATTI AND TINA MEYERS OF R.A. SMITH NATIONAL AS WELL AS A SUPPLEMENTAL WETLAND DELINEATION REPORT, DATED JUNE 25, 2015, BY TINA MEYERS OF R.A. SMITH NATIONAL.
6. REFER TO CERTIFIED SURVEY MAP FOR PROPOSED EASEMENTS.

north

SCALE IN FEET
60' 0 60'

GROTH
DESIGN
GROUP

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PROJECT

ADDITIONS AND ALTERATIONS TO:

SOUTHBROOK CHURCH

11010 ST. MARTINS ROAD
FRANKLIN, WI 53132

ISSUE

PROJECT INFO

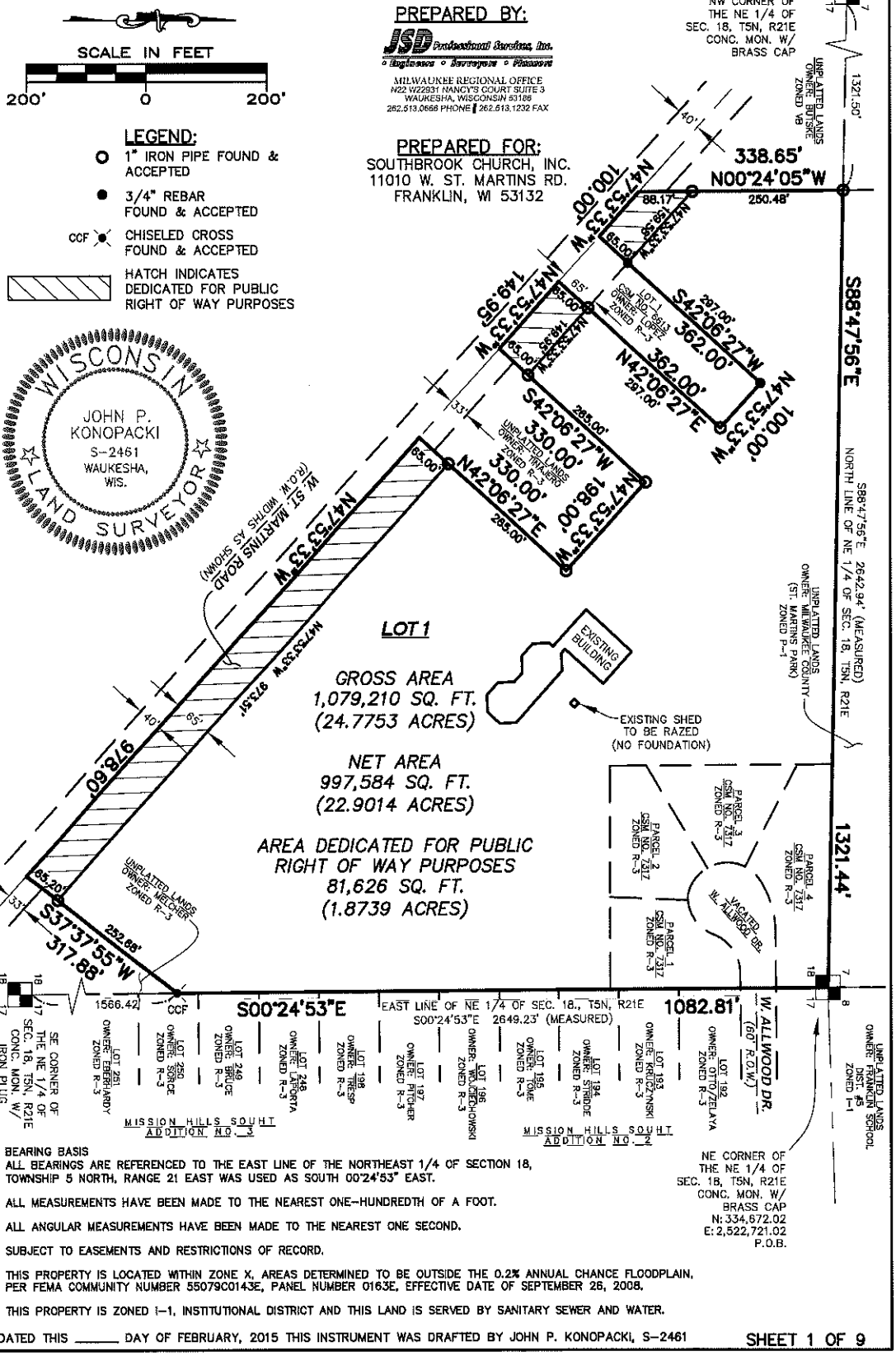
SHEET TITLE

NATURAL RESOURCE PROTECTION PLAN

EXHIBIT

CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN



JOHN P. KONOPACKI S-2461 WAUKESHA, WIS. WISCONSIN LAND SURVEYOR

BEARING BASIS
ALL BEARINGS ARE REFERENCED TO THE EAST LINE OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST WAS USED AS SOUTH 00°24'53" EAST.

ALL MEASUREMENTS HAVE BEEN MADE TO THE NEAREST ONE-HUNDREDTH OF A FOOT.

ALL ANGULAR MEASUREMENTS HAVE BEEN MADE TO THE NEAREST ONE SECOND.

SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

THIS PROPERTY IS LOCATED WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEMA COMMUNITY NUMBER 55079C0143E, PANEL NUMBER 0163E, EFFECTIVE DATE OF SEPTEMBER 26, 2008.

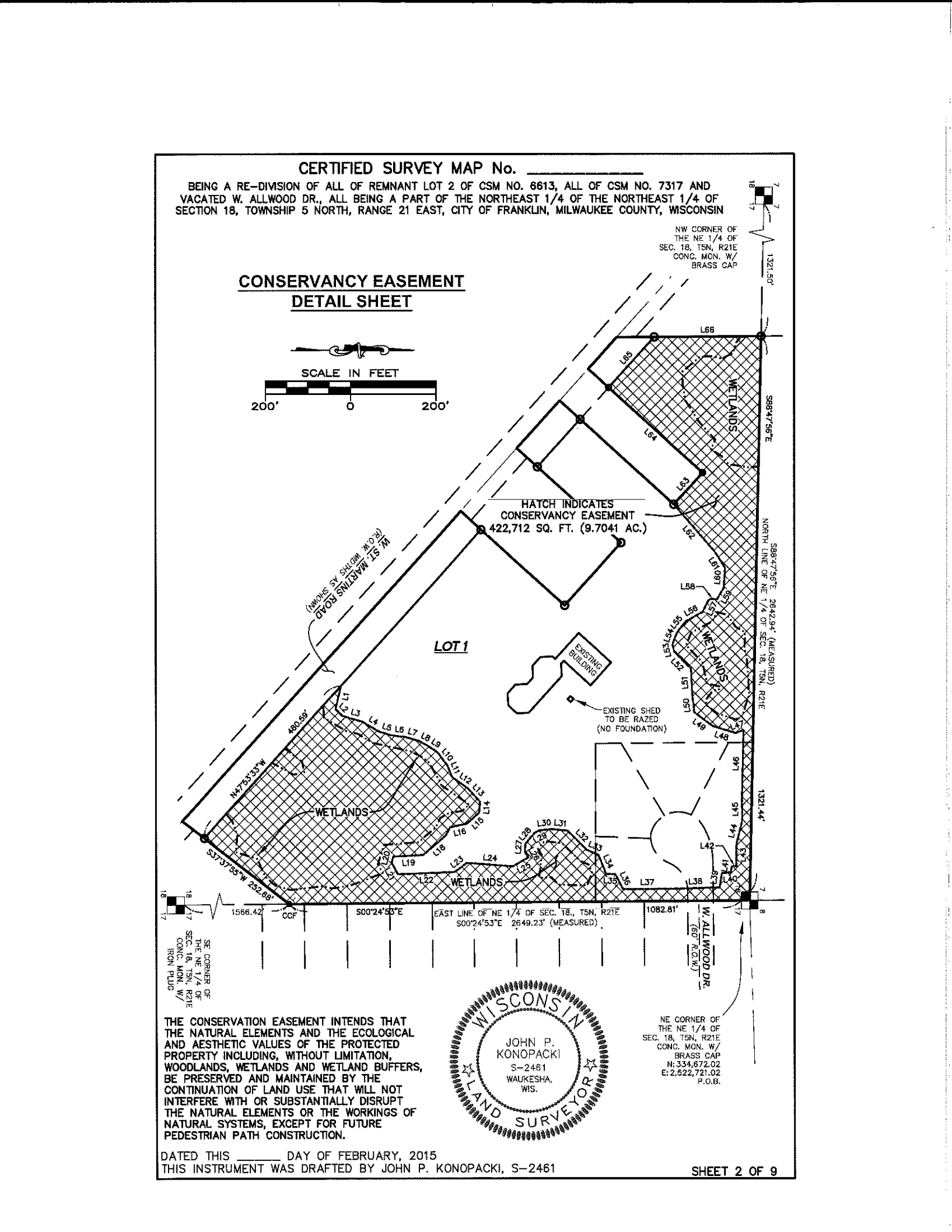
THIS PROPERTY IS ZONED I-1, INSTITUTIONAL DISTRICT AND THIS LAND IS SERVED BY SANITARY SEWER AND WATER.

DATED THIS _____ DAY OF FEBRUARY, 2015 THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

CONSERVANCY EASEMENT DETAIL SHEET



THE CONSERVATION EASEMENT INTENDS THAT THE NATURAL ELEMENTS AND THE ECOLOGICAL AND AESTHETIC VALUES OF THE PROTECTED PROPERTY INCLUDING, WITHOUT LIMITATION, WOODLANDS, WETLANDS AND WETLAND BUFFERS, BE PRESERVED AND MAINTAINED BY THE CONTINUATION OF LAND USE THAT WILL NOT INTERFERE WITH OR SUBSTANTIALLY DISRUPT THE NATURAL ELEMENTS OR THE WORKINGS OF NATURAL SYSTEMS, EXCEPT FOR FUTURE PEDESTRIAN PATH CONSTRUCTION.

WISCONSIN
JOHN P. KONOPACKI
S-2461
WAUKESHA, WIS.
LAND SURVEYOR

DATED THIS _____ DAY OF FEBRUARY, 2015
THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

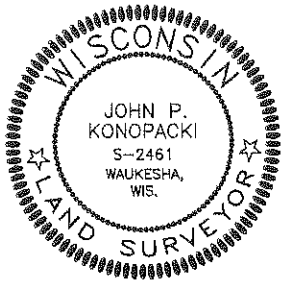
CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

CONSERVANCY EASEMENT LINE TABLE

LINE NO.	BEARING	DISTANCE
L1	S76°46'20"E	56.04'
L2	N45°00'31"E	22.17'
L3	N16°31'42"E	49.88'
L4	N30°51'14"E	43.68'
L5	N17°39'13"E	31.41'
L6	N05°29'40"E	28.29'
L7	N15°34'20"E	35.84'
L8	N27°20'57"E	23.94'
L9	N34°09'14"E	28.77'
L10	N52°27'57"E	38.69'
L11	N67°49'14"E	30.03'
L12	N34°05'43"E	45.20'
L13	N47°15'29"E	43.32'
L14	S87°12'38"E	25.18'
L15	S41°40'45"E	39.04'
L16	S11°53'40"E	42.90'
L17	S64°20'39"E	20.24'
L18	S40°40'41"E	71.25'
L19	S03°11'27"E	70.69'
L20	S74°56'55"E	14.32'
L21	N61°26'21"E	31.13'
L22	N02°12'40"W	133.64'
L23	N35°27'44"W	36.73'
L24	N04°15'17"E	109.55'
L25	N30°15'36"W	41.33'
L26	S60°03'29"W	15.59'
L27	N84°55'44"W	18.93'
L28	N49°54'58"W	33.09'
L29	N28°13'45"W	11.49'
L30	N06°32'31"W	28.24'
L31	N06°02'16"E	39.47'
L32	N44°54'28"E	63.83'
L33	N23°34'45"E	29.12'
L34	N67°21'04"E	47.45'
L35	N03°38'45"E	22.31'
L36	N62°49'56"E	39.01'

LINE NO.	BEARING	DISTANCE
L37	N00°17'19"W	114.73'
L38	N01°46'58"W	111.55'
L39	N82°10'21"W	33.69'
L40	N05°40'57"W	21.10'
L41	N81°46'03"W	13.77'
L42	N03°42'49"W	10.80'
L43	N89°47'51"W	52.65'
L44	N75°34'38"W	54.90'
L45	S89°08'12"W	54.99'
L46	N88°29'26"W	157.32'
L47	S18°14'14"E	20.85'
L48	S17°41'48"W	54.74'
L49	S36°57'16"W	53.34'
L50	S83°20'52"W	36.05'
L51	S86°39'45"W	66.83'
L52	S45°59'03"W	55.53'
L53	S77°04'04"W	17.73'
L54	N67°37'36"W	32.06'
L55	N51°27'39"W	31.14'
L56	N28°24'04"W	44.01'
L57	N63°54'42"W	33.57'
L58	N00°09'55"W	18.65'
L59	N60°02'44"W	30.98'
L60	N86°20'34"W	46.79'
L61	S58°03'06"W	44.68'
L62	S49°19'10"W	146.06'
L63	N47°53'33"W	100.00'
L64	S42°06'27"W	297.00'
L65	N47°53'33"W	159.58'
L66	N00°24'05"W	250.48'

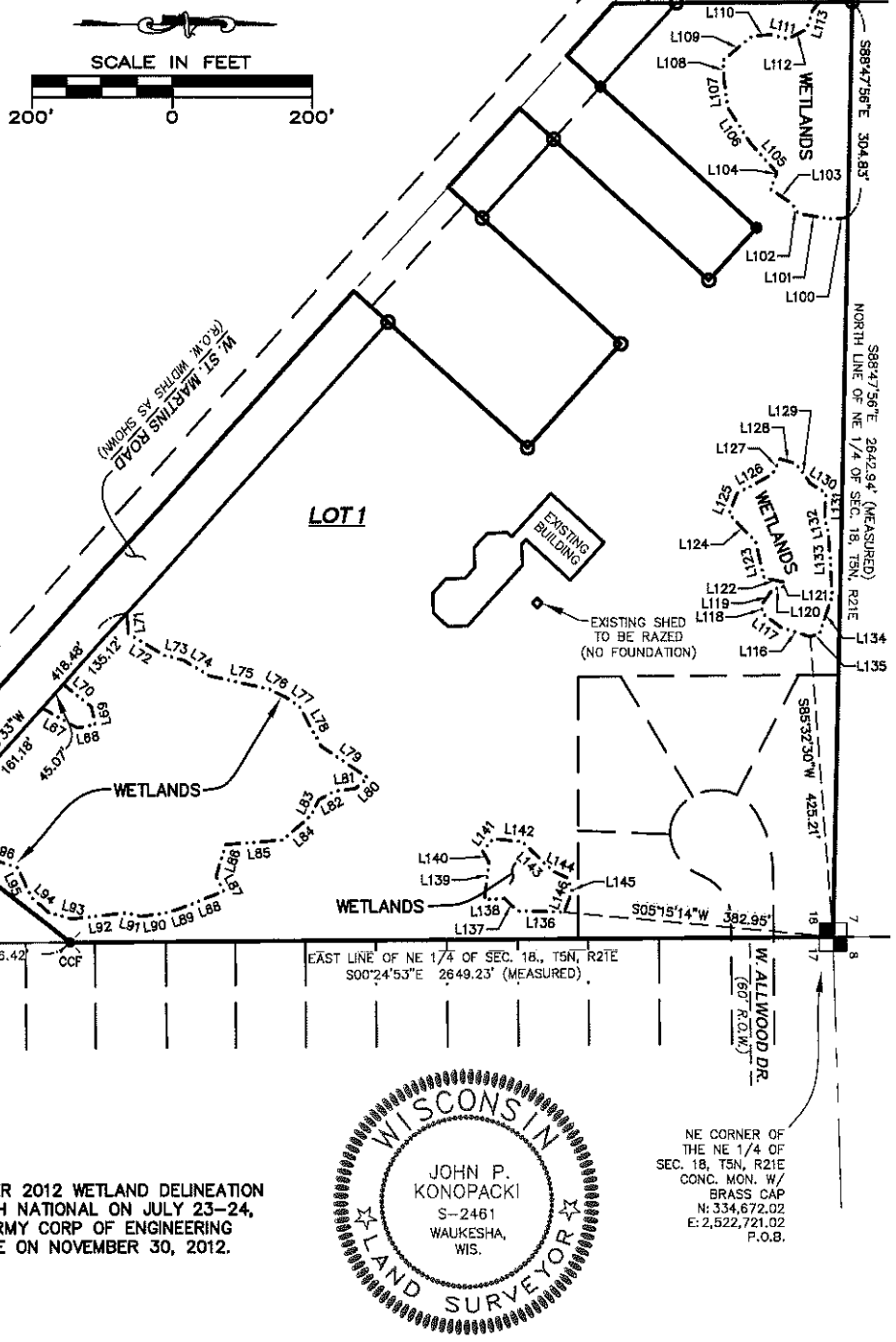


DATED THIS _____ DAY OF FEBRUARY, 2015
THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

WETLAND DETAIL SHEET



WETLANDS PER 2012 WETLAND DELINEATION BY R.A. SMITH NATIONAL ON JULY 23-24, 2012 WITH ARMY CORP OF ENGINEERING CONCURRENCE ON NOVEMBER 30, 2012.

WISCONSIN
JOHN P. KONOPACKI
S-2461
WAUKESHA, WIS.
LAND SURVEYOR

DATED THIS _____ DAY OF FEBRUARY, 2015
THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

CERTIFIED SURVEY MAP No. _____

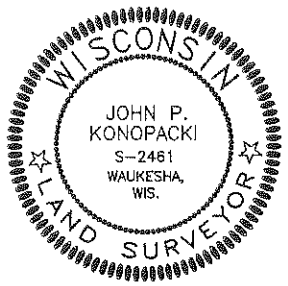
BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

WETLAND LINE TABLE

LINE NO.	BEARING	DISTANCE
L67	N29°01'56"E	58.17'
L68	N09°49'19"W	26.13'
L69	S77°12'52"W	26.18'
L70	S37°57'57"W	51.48'
L71	N85°13'43"E	29.27'
L72	N31°07'31"E	58.97'
L73	N13°38'44"E	28.72'
L74	N30°51'14"E	42.62'
L75	N12°24'57"E	90.39'
L76	N27°20'57"E	25.49'
L77	N34°09'14"E	22.15'
L78	N60°46'14"E	64.31'
L79	N34°05'43"E	78.96'
L80	S41°40'45"E	23.29'
L81	S06°19'43"E	29.01'
L82	S28°45'55"E	26.48'
L83	S64°20'39"E	23.53'
L84	S40°40'35"E	54.38'
L85	S04°26'57"E	80.77'
L86	S72°18'07"E	47.23'
L87	N61°26'21"E	23.94'
L88	S20°53'39"E	68.19'
L89	S16°57'48"E	21.16'
L90	S07°59'05"E	35.93'
L91	S14°40'36"W	21.11'
L92	S06°41'07"E	76.81'
L93	S15°03'11"W	35.62'
L94	S40°38'34"W	33.30'
L95	S65°41'50"W	45.64'
L96	S18°01'55"W	52.92'
L97	N84°29'34"W	37.61'
L98	S71°27'21"W	35.24'
L99	S50°25'59"W	24.21'
L100	S08°42'34"E	19.70'

LINE NO.	BEARING	DISTANCE
L101	S09°07'40"W	52.58'
L102	S57°58'46"W	16.07'
L103	S34°18'49"W	37.53'
L104	N67°51'49"W	24.51'
L105	S48°15'17"W	56.97'
L106	S57°13'10"W	59.36'
L107	S82°40'18"W	38.21'
L108	S86°32'17"W	28.52'
L109	N39°40'59"W	55.00'
L110	N02°54'01"W	26.42'
L111	N14°46'01"E	24.39'
L112	N28°09'31"W	29.82'
L113	N72°50'02"W	25.35'
L114	N51°16'00"W	18.29'
L115	N00°24'05"W	47.24'
L116	S17°15'28"W	42.94'
L117	S36°57'16"W	33.56'
L118	S83°20'52"W	11.66'
L119	N54°35'17"W	29.06'
L120	N04°17'53"W	12.90'
L121	N62°30'20"W	8.59'
L122	S12°03'10"W	30.57'
L123	S76°40'43"W	52.30'
L124	S46°22'01"W	54.97'
L125	N67°37'36"W	30.83'
L126	N28°52'35"W	57.27'
L127	N63°54'42"W	24.00'
L128	N17°20'25"E	23.30'

LINE NO.	BEARING	DISTANCE
L129	N52°54'47"E	34.73'
L130	N31°39'31"E	25.87'
L131	S88°02'06"E	37.62'
L132	N75°35'13"E	23.13'
L133	N86°27'26"E	85.80'
L134	S70°54'07"E	56.31'
L135	S18°14'14"E	14.32'
L136	S01°31'26"W	66.00'
L137	S43°44'45"W	25.41'
L138	S02°47'38"E	28.20'
L139	N83°16'32"W	53.45'
L140	S60°03'29"W	17.47'
L141	N49°54'58"W	22.92'
L142	N06°02'16"E	40.81'
L143	N44°02'36"E	60.69'
L144	N23°34'45"E	21.37'
L145	N67°21'04"E	20.58'
L146	S68°48'01"E	31.84'

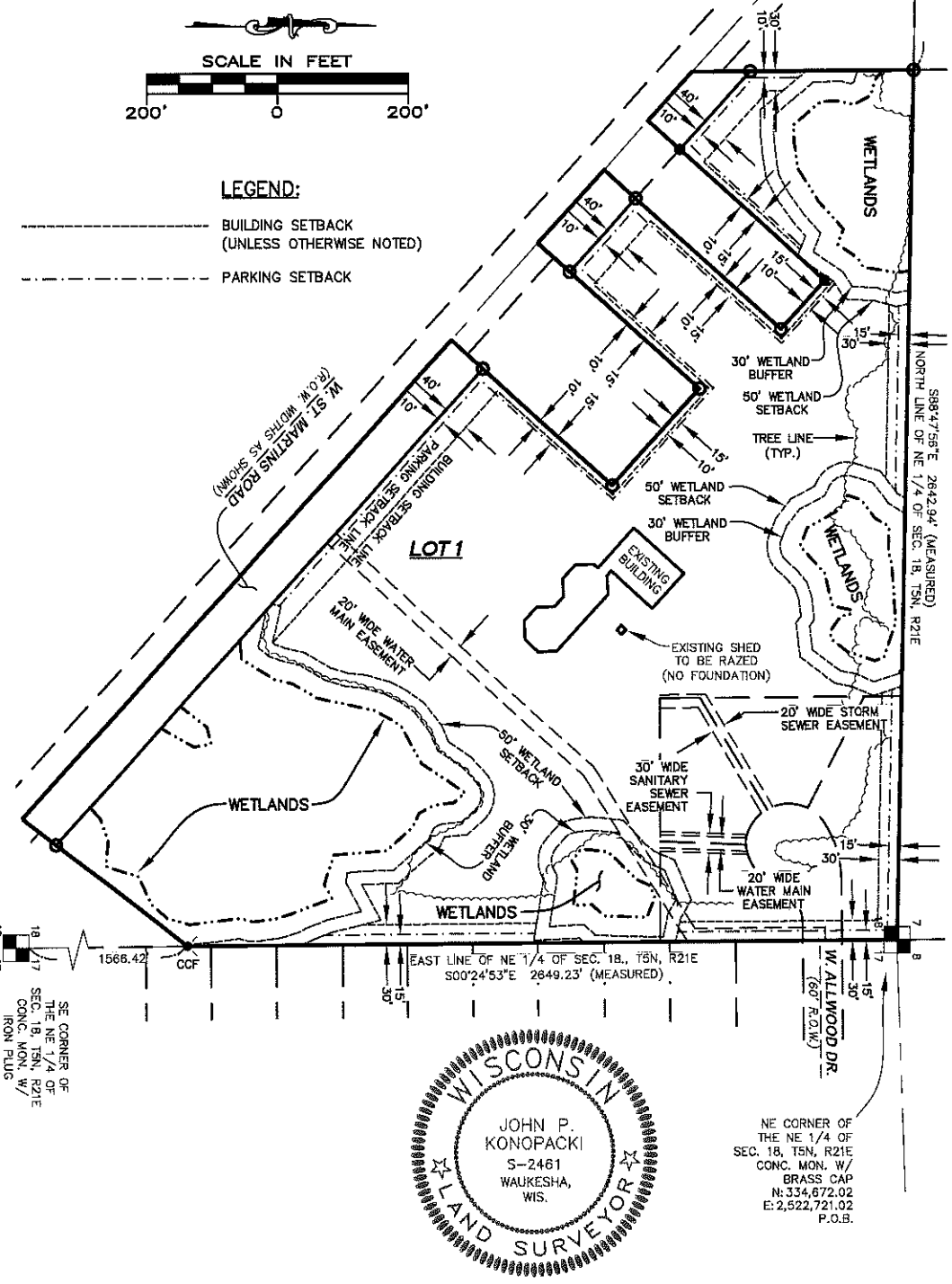


DATED THIS _____ DAY OF FEBRUARY, 2015
THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

SETBACK AND EASEMENT DETAIL SHEET



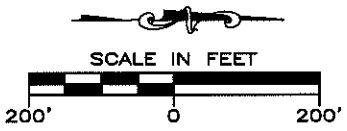
DATED THIS _____ DAY OF FEBRUARY, 2015
THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

CONTOUR DETAIL SHEET

ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1929 (NGVD29)



DATED THIS _____ DAY OF FEBRUARY, 2015
THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

SURVEYOR'S CERTIFICATE

State of Wisconsin)
) SS
County of Milwaukee)

I, John P. Konopacki, Professional Land Surveyor, do hereby certify that I have surveyed, divided, mapped and dedicated a re-division of all of remnant Lot 2 of Certified Survey Map No. 6613, recorded in Reel 4475, Image 2605 to 2608, Document No. 7666018 in the Milwaukee County Register of Deeds Office for Certified Survey Maps and all of Certified Survey Map No. 7317, recorded in Reel 5705, Image 5433 to 5435, Document No. 8673112 in the Milwaukee County Register of Deeds Office for Certified Survey Maps and vacated West Allwood Drive, all being a part of the Northeast 1/4 of the Northeast 1/4 of Section 18, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin, bounded and described as follows:

Beginning at the northeast corner of the Northeast 1/4 of said Section 18; thence South 00°24'53" East along east line of said Certified Survey Map No. 7317 and then along the east line of said Lot 2, 1082.81 feet to the southeast line of said Lot 2; thence South 37°37'55" West along said southeast line of said Lot 2, 317.88 feet to the southeast line of said Lot 2; thence North 47°53'33" West along said southwest line, 978.60 feet; thence North 42°06'27" East along said southwest line, 330.00 feet; thence North 47°53'33" West along said southwest line, 198.00 feet; thence South 42°06'27" West along said southwest line, 330.00 feet; thence North 47°53'33" West along said northeast right of way line, 149.95 feet to the aforesaid southwest line; thence North 42°06'27" East along said southwest line, 362.00 feet; thence North 47°53'33" West along said southwest line, 100.00 feet; thence South 42°06'27" West along said southwest line, 362.00 feet; thence North 47°53'33" West along said southwest line, 100.00 feet to the west line of said Lot 2; thence North 00°24'05" West along said west line, 338.65 feet to the north line of said Northeast 1/4; thence South 88°47'56" East along said north line, 1321.44 feet to the point of beginning.

Containing in all 1,079,20 square feet (24.7752 acres) gross and 997,584 square feet (22.9014 acres) net of land, more or less. Dedicating 81,626 square feet (1.8739 acres) of land, more or less, for public right of way purposes as graphically shown on this maps.

The right of way for West Allwood Drive has been vacated by the City of Franklin Resolution No. _____, as recorded in the Register of Deeds for Milwaukee County as Document No. _____.

All subject to easements and restrictions of record and potential future road widening and government restrictions, if any.

That I have made such survey, land division, right of way dedication and map by the direction of Southbrook Church, Inc. owner of said land.

That such map is a correct representation of all exterior boundaries and the land surveyed and the land division thereof and the right of way dedication made.

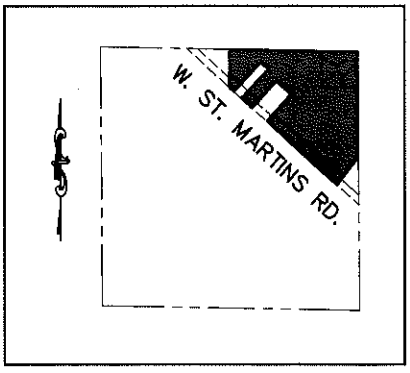
That I have fully complied with the provisions of Chapter 236 of the Wisconsin Statutes and Division 15-7.0700 of the City of Franklin Unified Development Ordinance in surveying, dividing, mapping and dedicating the same.

DATED THIS _____ DAY OF FEBRUARY, 2015

_____
John P. Konopacki, P.L.S.
Professional Land Surveyor, S-2461

WISCONSIN
JOHN P. KONOPACKI
S-2461
WAUKESHA, WIS.
LAND SURVEYOR

VICINITY MAP



NE 1/4 SEC. 18, T5N, R21E
SCALE 1" = 1,500'

CERTIFIED SURVEY MAP No. _____

BEING A RE-DIVISION OF ALL OF REMNANT LOT 2 OF CSM NO. 6613, ALL OF CSM NO. 7317 AND VACATED W. ALLWOOD DR., ALL BEING A PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 5 NORTH, RANGE 21 EAST, CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN

CORPORATE OWNER'S CERTIFICATE

Southbrook Church, Inc., a Wisconsin Corporation and existing under and by virtue of the Laws of the State of Wisconsin, as owner, certifies that said corporation caused the land described on this map, to be surveyed, divided, mapped and dedicated as represented on this map, in accordance with the provisions of Chapter 236 of the Wisconsin State Statutes and Division 15-7.0700 of the City of Franklin Unified Development Ordinance.

Southbrook Church, Inc. a Wisconsin Corporation:

_____ _____

State of _____)
) SS
_____ **County**)

Personally came before me this _____ day of _____, 2015, the above named _____, _____, and _____, _____, of the above named corporation, to me known to be such _____, and _____ of said corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said corporation by its authority.

_____

Notary Public, _____ County, _____

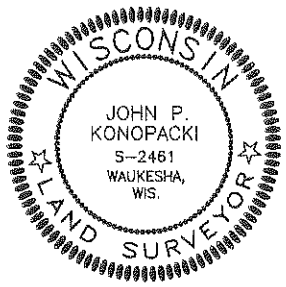
My Commission Expires _____

CITY OF FRANKLIN COMMON COUNCIL APPROVAL

This Certified Survey Map is hereby approved by the Common Council of the City of Franklin, on this _____ day of _____, 2015.

By: _____ Date: _____
Stephen Olson, Mayor

By: _____ Date: _____
Sandra L. Wesolowski, City Clerk



DATED THIS _____ DAY OF FEBRUARY, 2015
THIS INSTRUMENT WAS DRAFTED BY JOHN P. KONOPACKI, S-2461

CONSERVATION EASEMENT

Southbrook Church

This Conservation easement is made by and between the CITY OF FRANKLIN, a municipal corporation of the State of Wisconsin, hereinafter referred to as "Grantee," and Southbrook Church, Inc., a Wisconsin Corporation, hereinafter referred to as "Grantor," and shall become effective upon the recording of this Grant of Conservation Easement, together with the Acceptance following, with the Office of the Register of Deeds for Milwaukee County, pursuant to §700.40(2)(b) of the Wisconsin Statutes.

WITNESSETH

WHEREAS, Grantor is the owner in fee simple of certain real property, located within the City of Franklin, Milwaukee County, Wisconsin, Northeast 1/4 of the Northeast ¼ of Section 18, Township 5 North, Range 21 East, described in Exhibit A attached hereto and hereby made a part hereof (protected property); and

WHEREAS, the Grantor desires and intends that the natural elements and the ecological and aesthetic values of the protected property including, without limitation, mature woodlands, wetland buffers, and wetlands, and refer to Natural Resource Protection Plan by JSD Professional Services, Inc., dated January 23, 2015, with all applicable revision dates, which is located in the office of the Department of City Development, be preserved and maintained by the continuation of land use that will not interfere with or substantially disrupt the natural elements or the workings of natural systems, except for construction by the City of Franklin of a future 10-foot wide (maximum) pedestrian walking path at a mutually agreed to location; and

WHEREAS, Grantee is a "holder", as contemplated by §700.41(1)(b)1. of the Wisconsin Statutes, whose purposes include, while exercising regulatory authority granted to it, *inter alia*, under §62.23 and §236.45 of the Wisconsin Statutes, the conservation of land, natural areas, open space, and water areas; and

WHEREAS, the Grantor and Grantee, by the conveyance to the Grantee of the conservation easement on, over, and across the protected property, desire to conserve the natural values thereof and prevent the use or development of the protected property for any purpose or in any manner inconsistent with the terms of this conservation easement; and

WHEREAS, the Grantee is willing to accept this conservation easement subject to the reservations and to the covenants, terms, conditions, and restrictions set out herein and imposed hereby;

NOW, THEREFORE, the Grantor, for and in consideration of the foregoing recitations and of the mutual covenants, terms, conditions, and restrictions subsequently contained, and as an absolute and unconditional dedication, does hereby grant and convey unto the Grantee a conservation easement in perpetuity on, over, and across the protected property.

Grantee's rights hereunder shall consist solely of the following:

1. To view the protected property in its natural, scenic, and open condition;
2. To enforce by proceeding at law or in equity the covenants subsequently set forth, including, and in addition to all other enforcement proceedings, proceedings to obtain all penalties and remedies set forth under Division 15-9.0500 of the Unified Development Ordinance of the City of Franklin, as amended from time to time, any violation of the covenants subsequently set forth being and constituting a violation of such Unified Development Ordinance, as amended from time to time, or such local applicable ordinance as may be later adopted or in effect to enforce such covenants or the purposes for which they are made, it being agreed that there shall be no waiver or forfeiture of the Grantee's right to insure compliance with the covenants and conditions of this grant by reason of any prior failure to act; and
3. To enter the protected property at all reasonable times for the purpose of inspecting the protected property to determine if the Grantor is complying with the covenants and conditions of this grant.

And in furtherance of the foregoing affirmative rights of the Grantee, the Grantor makes the following covenants which shall run with and bind the protected property in perpetuity, namely, that, on, over, or across the protected property, the Grantor, without the prior consent of the Grantee, shall not:

1. Construct or place buildings or any structure;

2. Construct or make any improvements, unless, notwithstanding Covenant 1 above, the improvement is specifically and previously approved by the Common Council of the City of Franklin, upon the advice of such other persons, entities, and agencies as it may elect; such improvements as may be so approved being intended to enhance the resource value of the protected property to the environment or the public and including, but not limited to animal and bird feeding stations, park benches, the removal of animal blockage of natural drainage or other occurring blockage of natural drainage, and the like;
3. Excavate, dredge, grade, mine, drill, or change the topography of the land or its natural condition in any manner, including any cutting or removal of vegetation, except for the removal of dead or diseased trees;
4. Conduct any filling, dumping, or depositing of any material whatsoever, including, but not limited to soil, yard waste, or other landscape materials, ashes, garbage, or debris;
5. Plant any vegetation not native to the protected property or not typical wetland vegetation;
6. Operate snowmobiles, dune buggies, motorcycles, all-terrain vehicles or any other types of motorized vehicles.

To have and to hold this conservation easement unto the Grantee forever. Except as expressly limited herein, the Grantor reserves all rights as owner of the protected property, including, but not limited to, the right to use the protected property for all purposes not inconsistent with this grant. Grantor shall be responsible for the payment of all general property taxes levied, assessed, or accruing against the protected property pursuant to law.

The covenants, terms, conditions, and restrictions set forth in this grant shall be binding upon the Grantor and the Grantee and their respective agents, personal representatives, heirs, successors, and assigns, and shall constitute servitudes running with the protected property in perpetuity. This grant may not be amended, except by a writing executed and delivered by Grantor and Grantee or their respective personal representatives, heirs, successors, and assigns. Notices to the parties shall be personally delivered or mailed by U.S. Mail registered mail, return receipt requested, as follows:

To Grantor:
Southbrook Church, Inc.
11010 W. St. Martins Road
Franklin, WI 53132

To Grantee:
City of Franklin
Office of the City Clerk
9229 W. Loomis Road
Franklin,Wisconsin53132

In witness whereof, the grantor has set its hand and seals this on this date of _____, 20___.

Southbrook Church, Inc.

By: _____

STATE OF WISCONSIN)
) ss
COUNTY OF MILWAUKEE)

This instrument was acknowledged before me on the _____ day of _____, A.D. 20___by

_____ Southbrook Church, Inc.

To me known to be the person(s) who executed the foregoing Easement and acknowledged the same as the voluntary act and deed of said corporation.

_____
Notary Public

My commission expires _____

Acceptance

The undersigned does hereby consent to and accepts the Conservation Easement granted and conveyed to it under and pursuant to the foregoing Grant of Conservation Easement. In consideration of the making of such Grant Of Conservation Easement, the undersigned agrees that this acceptance shall be binding upon the undersigned and its successors and assigns and that the restrictions imposed upon the protected property may only be released or waived in writing by the Common Council of the City of Franklin, as contemplated by §236.293 of the Wisconsin Statutes.

In witness whereof, the undersigned has executed and delivered this acceptance on the ____ day of _____, A.D.20___.

CITY OF FRANKLIN

By: _____
Stephen R. Olson, Mayor

By: _____
Sandra L. Wesolowski, City Clerk

STATE OF WISCONSIN)
) ss
COUNTY OF MILWAUKEE)

Personally came before me this _____ day of _____, A.D. 20__, the above named Stephen R. Olson, Mayor and Sandra L. Wesolowski, City Clerk, of the above named municipal corporation, City of Franklin, to me known to be such Mayor and City Clerk of said municipal corporation, and acknowledged that they executed the foregoing instrument as such officers as the Deed of said municipal corporation by its authority and pursuant to Resolution No. _____, adopted by its Common Council on the _____ day of _____, 20__.

_____
Notary Public

My commission expires _____

This instrument was drafted by the City of Franklin.

Approved as to contents:

_____ _____
Nicholas Fuchs, Senior Planner Date
Department of City Development

Approved as to form only:

_____ _____
Jesse A. Wesolowski Date
City Attorney

EXHIBIT A
EASEMENT DESCRIPTION MAP

GRANTEE: CITY OF FRANKLIN
OFFICE OF THE CITY CLERK
9229 W. LOOMIS ROAD
FRANKLIN, WI 53132

GRANTOR: SOUTHBROOK CHURCH, INC.
11010 W. ST. MARTINS ROAD
FRANKLIN, WI 53132

LEGAL DESCRIPTION

A permanent conservation easement which crosses a part of the grantor's property located in the Northeast 1/4 of the Northeast 1/4 of Section 18, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin, bounded and described as follows:

Beginning at the Northeast corner of the Northeast 1/4 of said Section 18; thence South 00°24'53" East along the East line of said Northeast 1/4 also being the East line of Lot 2 of Certified Survey Map(CSM) #6613 as recorded with the Milwaukee County Register of Deeds,1082.81 feet; thence South 37°37'55" West along the East line of said Lot 2, 252.68 feet to a point on the north right of way line of W. St. Martins Road, thence North 47°53'33" West along said north right of way line, 480.59 feet; thence South 76°46'20" East, 56.04 feet; thence North 45° 00'31" East, 22.17 feet; thence North 16°31'42" East, 49.88 feet; thence North 30°51'14" East, 43.68 feet; thence North 17°29'13" East, 31.41 feet; thence North 05°29'40" East, 28.29 feet; thence North 15°34'20" East, 35.84 feet; thence North 27°20'57" East, 23.94 feet; thence North 34°09'14: East, 28.77 feet; thence North 52°27'57" East, 38.69 feet; thence North 67°49'14" East, 30.03 feet; thence North 34°05'43" East, 45.20 feet; thence North 47°15'29" East, 43.32 feet; thence South 87°12'38" East, 25.18 feet; thence South 41°40'45" East, 39.04 feet; thence South 11°53'40" East, 42.90 feet; thence South 64°20'39" East, 20.24 feet; thence South 40°40'41" East, 71.25 feet; thence South 03°11'27" East, 70.69 feet; thence South 74°56'55" East, 14.32 feet; thence North 61°26'21" East, 31.13 feet; thence North 02°12'40" West, 133.64 feet; thence North 35°27'44" West, 36.73 feet; thence North 04°15'17" East, 109.55 feet; thence North 30°15'36" West, 41.33 feet; thence South 60°03'29" West, 15.59 feet; thence North 84°55'44" West, 18.93 feet; thence North 49°54'58" West, 33.09 feet; thence North 28°13'45" West, 11.49 feet; thence North 06°32'31" West, 28.24 feet; thence North 06°02'16" East, 39.47 feet; thence North 44°54'28" East, 63.83 feet; thence North 23°34'45" East, 29.12 feet; thence North 67°21'04" East, 47.45 feet; thence North 03°38'45" East, 22.31 feet; thence North 62°49'56" East, 39.01 feet; thence North 00°17'19" West, 114.73 feet; thence North 01°46'58" West, 111.55 feet; thence North 82°10'21" West, 33.69 feet; thence North 05°40'57" West, 21.10 feet; thence North 81°46'03" West, 13.77 feet; thence North 03°42'49" West, 10.80 feet; thence North 89°47'51" West, 52.65 feet; thence North 75°34'38" West, 54.90 feet; thence South, 89°08'12" West, 54.99 feet; thence North 88°29'26" West, 157.32 feet; thence South 18°14'14" East, 20.85 feet; thence South 17°41'48" West, 54.74 feet; thence South 36°57'16" West, 53.34 feet; thence South 83° 20'52" West, 36.05 feet; thence South 86°39'45" West, 66.83 feet; thence South 45° 59'03" West, 55.53 feet; thence South 77°04'04" West, 17.73 feet; thence North 67°37'36" West, 32.06 feet; thence North 51°27'39" West, 31.14 feet; thence North 28°24'04" West, 44.01 feet; thence North 63°54'42" West, 33.57 feet; thence North 00°09'55" West, 18.65 feet; thence North 60°02'44" West, 30.98 feet; thence North 86°20'34" West, 46.79 feet; thence South 58°03'06" West, 44.68 feet; thence South 49°19'10" West, 146.06 feet to the Northeast corner of Lot 1 of said Certified Survey Map #6613; thence North 47°53'33" West along the North line of said Lot 1, 100.00 feet to the Northwest corner of said Lot 1; thence South 42°06'27" West along the West line of said Lot 1, 297.00 feet to a point on the north right of way line of W. St. Martins Road; thence North 47°53'33" West along said north right of way line, 159.58 feet to a point on the West line of said Lot 2; thence North 00°24'05" West along said West line of said Lot 2, 250.48 feet to a point on the North line of said Northeast 1/4, also being the North line of said Lot 2; thence South 88°47'56" East along said North line, 1321.44 feet to the point of beginning.

Containing in all 422,712 square feet (9.7041 acres) of land, more or less.

PREPARED BY:
JSD Professional Services, Inc.
Engineers • Surveyors • Planners
MILWAUKEE REGIONAL OFFICE
N22 W22931 NANCY'S COURT SUITE 3
WAUKESHA, WISCONSIN 53186
262.513.0666 PHONE | 262.513.1232 FAX

EXHIBIT A
EASEMENT DESCRIPTION MAP

GRANTEE: CITY OF FRANKLIN
OFFICE OF THE CITY CLERK
9229 W. LOOMIS ROAD
FRANKLIN, WI 53132

GRANTOR: SOUTHBROOK CHURCH, INC.
11010 W. ST. MARTINS ROAD
FRANKLIN, WI 53132

CONSERVANCY EASEMENT DETAIL SHEET

PREPARED BY:

JSD Professional Services, Inc.
Engineers • Surveyors • Planners
MILWAUKEE REGIONAL OFFICE
N22 W22931 NANCY'S COURT SUITE 3
WAUKESHA, WISCONSIN 53186
262.513.0666 PHONE | 262.513.1232 FAX

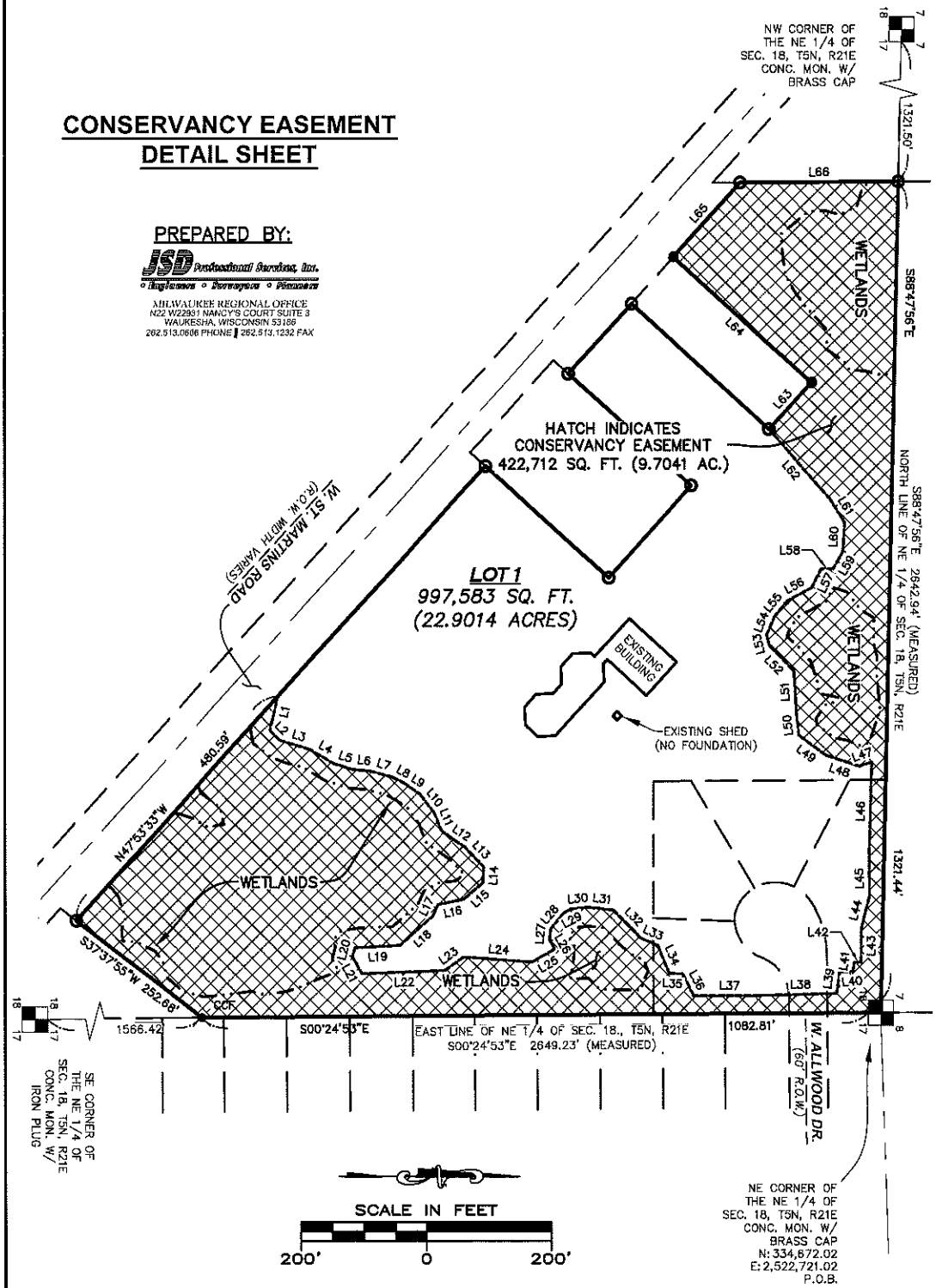


EXHIBIT A
EASEMENT DESCRIPTION MAP

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OFFICE OF THE CITY CLERK
9229 W. LOOMIS ROAD
FRANKLIN, WI 53132

GRANTOR: SOUTHBROOK CHURCH, INC.
11010 W. ST. MARTINS ROAD
FRANKLIN, WI 53132

CONSERVANCY EASEMENT LINE TABLES

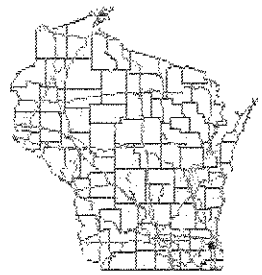
LINE TABLE		
LINE NO.	BEARING	DISTANCE
L1	S76°46'20"E	56.04'
L2	N45°00'31"E	22.17'
L3	N16°31'42"E	49.88'
L4	N30°51'14"E	43.68'
L5	N17°39'13"E	31.41'
L6	N05°29'40"E	28.29'
L7	N15°34'20"E	35.84'
L8	N27°20'57"E	23.94'
L9	N34°09'14"E	28.77'
L10	N52°27'57"E	38.69'
L11	N67°49'14"E	30.03'
L12	N34°05'43"E	45.20'
L13	N47°15'29"E	43.32'
L14	S87°12'38"E	25.18'
L15	S41°40'45"E	39.04'
L16	S11°53'40"E	42.90'
L17	S64°20'39"E	20.24'
L18	S40°40'41"E	71.25'
L19	S03°11'27"E	70.69'
L20	S74°56'55"E	14.32'
L21	N61°26'21"E	31.13'
L22	N02°12'40"W	133.64'
L23	N35°27'44"W	36.73'
L24	N04°15'17"E	109.55'
L25	N30°15'36"W	41.33'
L26	S60°03'29"W	15.59'
L27	N84°55'44"W	18.93'
L28	N49°54'58"W	33.09'
L29	N28°13'45"W	11.49'
L30	N06°32'31"W	28.24'
L31	N06°02'16"E	39.47'
L32	N44°54'28"E	63.83'
L33	N23°34'45"E	29.12'
L34	N67°21'04"E	47.45'
L35	N03°38'45"E	22.31'
L36	N62°49'56"E	39.01'

LINE TABLE		
LINE NO.	BEARING	DISTANCE
L37	N00°17'19"W	114.73'
L38	N01°46'58"W	111.55'
L39	N82°10'21"W	33.69'
L40	N05°40'57"W	21.10'
L41	N81°46'03"W	13.77'
L42	N03°42'49"W	10.80'
L43	N89°47'51"W	52.65'
L44	N75°34'38"W	54.90'
L45	S89°08'12"W	54.99'
L46	N88°29'26"W	157.32'
L47	S18°14'14"E	20.85'
L48	S17°41'48"W	54.74'
L49	S36°57'16"W	53.34'
L50	S83°20'52"W	36.05'
L51	S86°39'45"W	66.83'
L52	S45°59'03"W	55.53'
L53	S77°04'04"W	17.73'
L54	N67°37'36"W	32.06'
L55	N51°27'39"W	31.14'
L56	N28°24'04"W	44.01'
L57	N63°54'42"W	33.57'
L58	N00°09'55"W	18.65'
L59	N60°02'44"W	30.98'
L60	N86°20'34"W	46.79'
L61	S58°03'06"W	44.68'
L62	S49°19'10"W	146.06'
L63	N47°53'33"W	100.00'
L64	S42°06'27"W	297.00'
L65	N47°53'33"W	159.58'
L66	N00°24'05"W	250.48'

PREPARED BY:

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners
MILWAUKEE REGIONAL OFFICE
N22 W22931 NANCY'S COURT SUITE 3
WAUKESHA, WISCONSIN 53186
262.513.0666 PHONE | 262.513.1232 FAX

Surface Water Data Viewer Map



Legend

Wetland Class Points
- Dammed pond
- Excavated pond
- Filled excavated pond
- Filled/drained wetland
- Wetland too small to delineate

Filled Points

Wetland Class Areas
- Wetland
- Upland

Filled Areas

Rivers and Streams

Open Water

Air Photo Index (2008 NAIP)

Notes

0.1 0 0.07 0.1 Miles

NAD_1983_HARN_Wisconsin_TM


88° 3' 14" W
88° 2' 55" W
413950
414020
414090
414160
414230
414300
414370
42° 54' 9" N
42° 53' 50" N
4750520
4750450
4750380
4750310
4750240
4750170
4750100
4750030
4749960
AsA
MzdB2
MzdB2
MzdB2
AsA
MzdB2
BIA
BIA
Saint Martins
Map Scale: 1:2,870 if printed on A portrait (8.5" x 11") sheet.
Meters
0 40 80 160 240
N
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin
Survey Area Data: Version 9, Sep 18, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 7, 2014—Sep 22, 2014

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

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Milwaukee and Waukesha Counties, Wisconsin (WI602)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
AsA	Ashkum silty clay loam, 0 to 2 percent slopes	C/D	9.2	37.6%
BlA	Blount silt loam, 1 to 3 percent slopes	C/D	9.6	39.5%
MzdB2	Morley silt loam, 2 to 6 percent slopes, eroded	C	5.6	23.0%
Totals for Area of Interest			**24.4**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

W St Martins Rd
S Mission Dr
Park

Exhibit B

City of Franklin Environmental Commission

TO:	Common Council
DATE:	July 31, 2015
RE:	Special Exception application review and recommendation
APPLICATION:	Southbrook Church, Inc. (David Hampson, Building Committee/property owner), Applicant, dated: July 15, 2015 (11010 West St. Martins Road)

I. §15-9.0110 of the Unified Development Ordinance Special Exception to Natural Resource Feature Provisions Application information:

1. Unified Development Ordinance Section(s) from which Special Exception is requested:

   Special Exception requested from Sections 15-4.0102 and 15-4.0103 of the City of Franklin Unified Development Ordinance.

2. Nature of the Special Exception requested (description of resources, encroachment, distances and dimensions):

   The Special Exception Requested is to fill approximately 0.064 acres of wetland, grade and pave within approximately 0.26 acres of wetland buffer and grade, pave and maintain turf grass within approximately 0.40 acres of wetland setback at the Southbrook Church Inc. property located at 11010 West St. Martins Road.

3. Applicant's reason for request:

   The requested NRSE is for the purpose of filling the subject wetland area to allow for the expansion of the Southbrook Church facilities, and construction of the required fire lane and fire protection water main. This NRSE would also cover the construction of a walking path through wetland buffer/wetback and wooded areas by the City of Franklin (exact location TBD).

4. Applicant's reason why request appropriate for Special Exception:

The current project involves the expansion of the Church building, as well as construction of a fire lane, utilities and a paved walking trail (by City). This building expansion is based on the Church's Master Plan, which includes a future worship area expansion into the subject wetland area (refer to attached site plans). The applicant provided a 2012 Wetland Report for the property, which indicates the subject wetland (W-1) didn't exist during the Master Plan development.

II. Environmental Commission review of the §15-9.0110C.4.f. Natural Resource Feature impacts to functional values:

1. Diversity of flora including State and/or Federal designated threatened and/or endangered species:

   The proposed improvements will not impact any State or designated threatened or endangered species or species of special concern.

2. Storm and flood water storage:

   No significant impact is anticipated. The majority of the wetlands on the property are being protected via a Conservation Easement.

3. Hydrologic functions:

   No significant impact anticipated. The subject wetland (W-1) is an isolated wetland.

4. Water quality protection including filtration and storage of sediments, nutrients or toxic substances:

   No significant Impact is anticipated.

5. Shoreline protection against erosion:

   No impact is anticipated.

6. Habitat for aquatic organisms:

   No impact is anticipated.

7. Habitat for wildlife:

   No impact is anticipated.

8. Human use functional value:

The proposed trail will increase the Human use functional value of the natural resources on the north side of the property by providing public access to the site within close proximity to those features. The proposed trail will allow church members and residents better views from which to enjoy the aesthetic qualities of the natural resource features.

9. Groundwater recharge/discharge protection:

   No significant impact is anticipated.

10. Aesthetic appeal, recreation, education, and science value:

    The subject wetland (W-1) did not provide any aesthetic appeal, recreation, education or scientific value. However, the proposed trail is anticipated to have positive impacts on recreation for the neighborhood by providing an important connection for pedestrians and bicycles.

11. State or Federal designated threatened or endangered species or species of special concern:

    The proposed improvements will not impact any State or designated threatened or endangered species or species of special concern.

12. Existence within a Shoreland:

    No impact. The Church property is not located within a Shoreland.

13. Existence within a Primary or Secondary Environmental Corridor or within an Isolated Natural Area, as those areas are defined and currently mapped by the Southeastern Wisconsin Regional Planning Commission from time to time:

    No impact. The Church property is not located within a Primary or Secondary Environmental Corridor as defined and mapped by SEWRPC. A portion of an Isolated Natural Area (wetland) is present along the north property line. However, the portion of the wetland on Southbrook's property will be completely protected by a Conservation Easement.

III. Environmental Commission review of the §15-10.0208B.2.d. factors and recommendations as to findings thereon:

1. That the condition(s) giving rise to the request for a Special Exception were not self-imposed by the applicant (this subsection a. does not apply to an application to improve or enhance a natural resource feature): *The Southbrook property was investigated for the presence of wetlands in 2012 by Tina Meyers of R.A. Smith National. At that time, no wetland was discovered at the subject*

location. Subsequent to that investigation, the church constructed a west parking lot addition and associated stormwater drainage facilities. Part of that work involved constructing a small diversion berm to prevent runoff from Allwood Court from entering the open swale and stormwater pond system. That berm, over the past three years, blocked that runoff as designed, however it also ponded water above the swale causing the subject wetland to form. This scenario could not be foreseen and is therefore not self-imposed.

Furthermore the location of the proposed trail and the minimal associated resource impacts are due to the desired connections the trail will provide and the unique space constraints of the site. Therefore, the conditions giving rise to this special exception were not self-imposed.

2. That compliance with the stream, shore buffer, navigable water-related, wetland, wetland buffer, and wetland setback requirement will:

   a. be unreasonably burdensome to the applicants and that there are no reasonable practicable alternatives; *or*

   b. unreasonably and negatively impact upon the applicants' use of the property and that there are no reasonable practicable alternatives: *The proposed location of the path is the only practicable alternative given the desired connection it will provide and factoring in the constraints of the site. The path will be designed to minimize impacts to natural resource features and compliment the natural environment.*

   Relocation of the fire access lane would result in a greater distance from that pavement to the church building, if it were redesigned to avoid wetland impacts. This alternative was looked at, but deemed to be impracticable.

   The future worship area could not be reasonably redesigned without negative impacts to the internal flow of the facility. Furthermore, the future worship area cannot be redesigned due to the required fire lane and the constraints formed by the adjacent wetlands and stormwater basin. Said basin is surrounded by wetlands and, as such, is locked into its present location.

3. The Special Exception, including any conditions imposed under this Section will:

   a. be consistent with the existing character of the neighborhood: *the proposed impacts to natural resource features are minimal and will not adversely impact the existing character of the neighborhood; and*

b. not effectively undermine the ability to apply or enforce the requirement with respect to other properties: *The circumstances surrounding this project are unique to Southbrook Church and thus will not undermine the City's ability to apply or enforce the natural resource protection requirements with respect to other properties; and*

c. be in harmony with the general purpose and intent of the provisions of this Ordinance proscribing the requirement: *As the proposed impacts are minimal when compared to the amount of natural resources being protected on the property via a conservation easement and since the highest quality resources on the property are not being impacted by this project, the proposed project is in harmony with the general purpose and intent of the provisions of this Ordinance; and*

d. preserve or enhance the functional values of the stream or other navigable water, shore buffer, wetland, wetland buffer, and/or wetland setback in co-existence with the development (*this finding only applying to an application to improve or enhance a natural resource feature)*:

IV. Environmental Commission review of the §15-10.0208B.2.a., b. and c. factors and recommendations as to findings thereon:

1. Characteristics of the real property, including, but not limited to, relative placement of improvements thereon with respect to property boundaries or otherwise applicable setbacks:

   The project will meet all other zoning and site planning requirements.

2. Any exceptional, extraordinary, or unusual circumstances or conditions applying to the lot or parcel, structure, use, or intended use that do not apply generally to other properties or uses in the same district:

   The Southbrook property was investigated for the presence of wetlands in 2012 by Tina Meyers of R.A. Smith National. At that time, no wetland was discovered at the subject location. Subsequent to that investigation, the church constructed a west parking lot addition and associated stormwater drainage facilities. Part of that work involved constructing a small diversion berm to prevent runoff from Allwood Court from entering the open swale and stormwater pond system. That berm, over the past three years, blocked that runoff as designed, however it also ponded water above the swale causing the subject wetland to form. This situation is extraordinary and does not apply to other properties or uses in the same district.

3. Existing and future uses of property; useful life of improvements at issue; disability of an occupant:

The existing use is institutional and is envisioned to remain so.

4. Aesthetics:

   The aesthetics of the site will not be negatively impacted by the proposed improvements or the minimal impacts to natural resource features.

5. Degree of noncompliance with the requirement allowed by the Special Exception:

   The project will disturb approximately 0.064 acres of wetland, grade and pave within approximately 0.26 acres of wetland buffer and grade, pave and maintain turf grass within approximately 0.40 acres of wetland setback

6. Proximity to and character of surrounding property:

   Southbrook Church is surrounded by areas of natural resource features and St. Martin's Neighborhood Park to the north, single-family residences and Robinwood Elementary School to the east, single-family residences and vacant land owned by the Indian Community School to the south and single-family residences, vacant land owned by the Franklin Lions and the Herda's Hardware building to the west.

7. Zoning of the area in which property is located and neighboring area:

   Southbrook Church's property is zoned I-1 Institutional District and R-3 Suburban/Estate Single-Family Residence District. The property to the north is zoned P-1 Park District, the properties to the east are zoned I-1 Institutional District and R-3 Suburban/Estate Single-Family Residence District, properties to the south are zoned R-3 Suburban/Estate Single-Family Residence District and I-1 Institutional District and the properties to the west are zoned R-3 Suburban/Estate Single-Family Residence District, VR-Village Residence District, P-1 Park District and VB Village Business District.

8. Any negative effect upon adjoining property:

   No negative effects are anticipated.

9. Natural features of the property:

   The Southbrook Church property contains wetlands, wetland buffer, wetland setback and mature woodlands.

10. Environmental impacts:

The project will disturb approximately 0.064 acres of wetland, grade and pave within approximately 0.26 acres of wetland buffer and grade, pave and maintain turf grass within approximately 0.40 acres of wetland setback

V. Environmental Commission Recommendation:

The Environmental Commission has reviewed the subject Application pursuant to §15-10.0208B. of the Unified Development Ordinance and makes the following recommendation:

1. The recommendations set forth in Sections III. and IV. Above are incorporated herein.

2. The Environmental Commission recommends [approval] of the Application upon the aforesaid recommendations for the reasons set forth therein.

3. The Environmental Commissions recommends that should the Common Council approve the Application, that such approval be subject to the following conditions:
   a. The Conservation Easement shall be reviewed and approved by the Common Council, prior to the issuance of an Occupancy Permit.
   b. All required approvals and permits from the Army Corps of Engineers, the Wisconsin Department of Natural Resources and Federal Emergency Management Agency (FEMA) as may be necessary be obtained, prior to the commencement of work.
   c. Wetland disturbances shall be mitigated

The above review and recommendation was passed and adopted at a regular meeting of the Environmental Commission of the City of Franklin on the 22 day of July, 2015.

Dated this 31 day of July, 2015.

Wesley Cannon

Wesley Cannon, Chairman

Attest:

Curtis Bolton, Vice-Chairman

CITY OF FRANKLIN

REPORT TO THE PLAN COMMISSION

Meeting of August 6, 2015

Natural Resource Special Exception

Project Name:	Natural Resource Special Exception (NRSE) Request for Southbrook Church
Project Location:	11010 West St. Martins Road
Applicant:	Southbrook Church, Inc.
Existing Zoning:	I-1 Institutional District and R-3 Suburban/Estate Single-Family Residence District
Use of Surrounding Properties:	Areas of natural resource features and recreational to the north, single-family residential and institutional (school) to east, single-family residential, recreational and commercial to the south and single-family and institutional to the west.
2025 Comprehensive Plan:	Institutional, Residential and Areas of Natural Resource Features
Applicant Action Requested:	Recommendation to the Common Council for approval of the requested Natural Resource Special Exception (NRSE)

INTRODUCTION:

Please note:

- Staff recommendations are *underlined, in italics* and are included in the draft ordinance.

On June 29, 2015, the applicant submitted an application for a Special Exception to Natural Resource Feature Provisions of the City of Franklin Unified Development Ordinance (UDO) to the Department of City Development. JSD Professional Services has provided a Natural Resource Protection Plan (NRPP) and R.A. Smith National has provided two Wetland Delineation Reports for the wetlands on the subject 19.81-acre property. R.A. Smith National conducted field assessments on July 23 and 24, 2012 and April 17, 2015 to identify and delineate natural resource features on the subject property. The submittal also included a Conservation Easement document. *Staff recommends the Conservation Easement be reviewed and approved by the Common Council, prior to issuance of an Occupancy Permit.*

The applicant is requesting approval of a Special Exception to Natural Resource Feature Provisions of the City of Franklin Unified Development Ordinance to fill approximately 0.064 acres of wetland, grade and pave within approximately 0.26 acres of wetland buffer, and grade, pave and maintain turf grass within approximately 0.40 acres of wetland setback at the Southbrook Church Inc. property located at 11010 West St. Martins Road, as necessary for the current and future development of the Church, the installation of a fire lane, and to provide for a trail on the property that the City plans to develop.

Pursuant to Section 15-10.0208 of the Unified Development Ordinance (UDO), all requests for a Natural Resource Special Exception must be provided to the Plan Commission for a public hearing and its review and recommendation.

BACKGROUND:

On January 26, 2015, the applicant submitted applications for a Site Plan Amendment, Certified Survey Map, Rezoning, Comprehensive Master Plan Amendment and Right-of-Way Vacation for the Southbrook Church property located at 11010 W. St. Martins Road. The proposed site modifications included an approximately 23,600 square foot addition to the church, new exterior lighting, a new dumpster enclosure and a new fire lane to provide 360-degree access to the church building and a future trail to be developed by the City of Franklin along the north side of the property. The proposed Certified Survey Map, Rezoning, Comprehensive Master Plan Amendment and Right-of-Way Vacation related to the four single-family residential lots located at the northeast corner of the subject area and are currently owned by Southbrook Church, Inc.

The Southbrook Church, Inc. property is approximately 19.81 acres or 863,325 square feet. Currently, the site consists of the existing 16,300 square foot church building, 304 off-street parking spaces, storm water ponds and a shed.

At the May 19, 2015, meeting of the Common Council the following action was approved, "motion to direct the City Engineer to return with a contract for engineering services for the Southbrook Church Trail, W. St. Martins Road to W. Allwood Drive (approximately 1,450 linear feet). As the City is taking steps to move forward with the Trail project, Staff recommended the applicant include the natural resource impacts associated with the trail in this NRSE Application.

The Southboork Church Site Plan Amendment, Rezoning, Comprehensive Master Plan Amendment, Certified Survey Map and Right of Way Vacation Applications were all approved by the City of Franklin as part of the church's proposed building expansion. However, Condition No. 6 of Resolution No. 2015-7070 (approving the CSM) states, "A Natural Resource Protection Plan that includes the four (4) residential properties adjacent to West Allwood Drive shall be submitted to the Department of City Development for review and approval by Staff, prior to issuance of a Building Permit.

On June 4, 2015, after receiving a revised NRPP, Staff signed-off on issuance of the Building Permit for Southbrook Church, Inc. subject to the following conditions of approval:

1. The applicant shall either receive Common Council approval of a Special Exception to Natural Resource Feature Provisions of the UDO and WDNR approval to fill the recently discovered wetland at the rear of the building addition, or develop the alternate fire lane as depicted on Sheet C2.0 City-file stamped June 1, 2015 on file in the Department of City Development.

2. The applicant shall obtain final approval from the Fire Department prior to construction of the alternate fire lane.

3. Silt fencing and orange construction fencing shall be installed and maintained at the edge of the 30-foot wetland buffer as depicted on Sheet C2.0 City-file stamped June 1, 2015 on file in the Department of City Development until such time as all approvals are obtained for filling of the subject wetland.

4. The applicant shall record the Certified Survey Map and Conservation Easement with the Milwaukee County Register of Deeds Office, prior to issuance of an Occupancy Permit.

At the July 22, 2015 meeting of the Environmental Commission, the following action was approved: motion to recommend approval of the Special Exception to Natural Resource Features for Southbrook Church, Inc. subject to Staff conditions as listed and as presented to the Environmental Commission with further recommendation, not requirement, to mitigate wetland disturbances; and approval by the Plan Commission and Common Council prior to the commencement of work. The Environmental Commission's recommendation form is attached for your review.

PROJECT DESCRIPTION/ANALYSIS:

During an April 17, 2015 field delineation to update Southbrook's NRPP to include the four (4) residential properties adjacent to West Allwood Drive, Tina Myers of R.A. Smith National discovered a small wetland that had formed since the original NRPP was completed for the property in 2012. The subject wetland (W-1) straddles the property between Southbook Church and the Allwood Court Subdivision and is immediately north of a drainage ditch, which conveys stormwater from Southbrook's northwest parking lot to their stormwater pond in the southeast corner of the property. The applicant claims the wetland was man-made, basically an unintended consequence from grading associated with the church's parking lot and stomwater pond expansion in 2013. Filling of the wetland and the subsequent elimination of the associated wetland buffer and wetland setback will provide space for a future phase Worship Area, which is part of the Church's Master Plan, and make room for the fire lane proposed as part of the current church addition.

The applicant submitted a Wetland Exemption Application to the Wisconsin Department of Natural Resources (WDNR), which was denied. As such, the WDNR has claimed jurisdiction over the wetland the applicant is proposing to fill (W-1). According to the applicant, a General Fill Permit Application has been submitted to the WDNR. The WDNR's review of the General Fill Permit will be concurrent with the City's review of the NRSE Application. Staff does not believe a U.S. Army Corps of Engineers permit will be required for this project. *Staff recommends all required approvals and permits from the Army Corp of Engineers, the Wisconsin Department of Natural Resources and Federal Emergency Management Agency (FEMA) as may be necessary be obtained, prior to the commencement of work.*

The applicant is requesting approval to impact the following natural resource features:

- Approximately 0.064 acres (2,770 square feet) of wetland;
- Approximately 0.26 acres (11,326 square feet) of wetland buffer;

- Approximately 0.40 acres (17,424 square feet) of wetland setback;

The applicant is also proposing to impact approximately 0.034 acres (14,810.4 square feet) of mature woodlands, which represents approximately 30% of the mature woodlands on the property. However, this impact is permitted, as the minimum 70% protection standard for the resource feature is still being met. Therefore, the woodland impact is not part of the Natural Resource Special Exception Request. The mature woodland impacts area associated with the trail project the Church is partnering with the City on. The proposed trail will link Robinwood Elementary School and St. Martins Neighborhood Park (owned by Milwaukee County) with St. Martins Road.

Per Section 15-10.0208 of the Unified Development Ordinance (UDO), the applicant shall have the burden of proof to present evidence sufficient to support a Natural Resource Special Exception (NRSE) request. The applicant has presented evidence for the request by answering the questions and addressing the statements that are part of the Natural Resource Special Exception (NRSE) application. The applicant's responses to the application's questions and statements are attached for your review.

Alternatives:

The applicant did submit an alternate Site Plan, depicting an alternate route for the fire lane, which avoids any natural resource feature impacts. However, the Church does not wish to pursue this option, as the wetland would still impact their future phase Worship Area addition. Attached, please find a copy of the alternate Site Plan depicting the alternate fire lane route.

Mitigation:

The applicant is not proposing any mitigation as part of this request.

STAFF RECOMMENDATION:

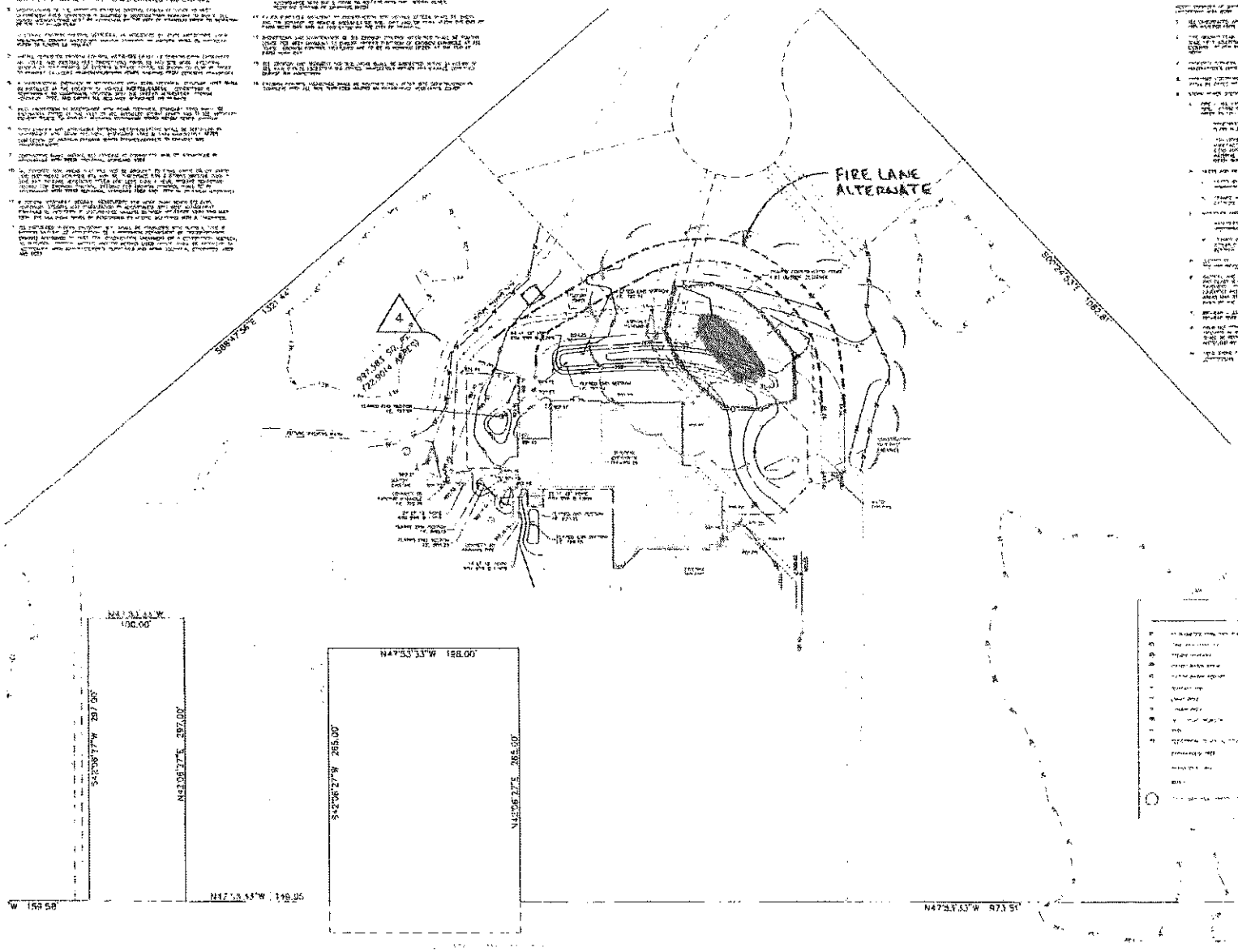
City Development Staff recommends approval of the proposed Natural Resource Special Exception (NRSE), subject to the following conditions of approval:

- *The Conservation Easement shall be reviewed and approved by the Common Council, prior to the issuance of an Occupancy Permit.*
- *All required approvals and permits from the Army Corp of Engineers, the Wisconsin Department of Natural Resources and Federal Emergency Management Agency (FEMA) as may be necessary be obtained, prior to the commencement of work.*

CONSTRUCTION SITE EROSION CONTROL

EXHIBIT - WETLAND ALTERNATE

FIRE LANE ALTERNATE



GRADING NOTES

CONSTRUCTION STAGING PLAN

LEGEND

GROTH DESIGN GROUP

JSD Professional Services, Inc.

PROJECT

ADDITIONS AND ALTERATIONS TO

SOUTHBROOK CHURCH

GROUP

PROJECT INFO

SHEET TITLE

C2.0