

Appendix N – Field Data Sheets

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

Project/Site: Carolina North Applicant/Owner: UNC Investigators: Lee Mallonee, Kevin Nunnery	Project No: 09802.01	Date: 10-Feb-2009 County: Orange State: North Carolina Plot ID: Wet LA 1 WET 7A
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Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation:)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on the reverse side)	Community ID: forested wetland Transect ID: none Field Location: in wetland 100 feet below culvert
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VEGETATION (USFWS Region No. 2)

Dominant Plant Species(Latin/Common)	Stratum	Indicator	Plant Species(Latin/Common)	Stratum	Indicator
<i>Acer rubrum</i> Maple,Red	Canopy	FAC	<i>Eulalia viminea</i> Microstegium,Nepal	Herb	FAC+
<i>Carpinus caroliniana</i> Hornbeam,American	Sh/Sap	FAC	<i>Smilax rotundifolia</i> Greenbrier,Common	Vine	FAC

Percent of Dominant Species that are OBL, FACW or FAC: (excluding FAC-) 4/4 = 100.00%	FAC Neutral: 0/0 = 0.00% Numeric Index: 12/4 = 3.00
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Remarks:

HYDROLOGY

<p><u>NO</u> Recorded Data(Describe in Remarks): <u>N/A</u> Stream, Lake or Tide Gauge <u>N/A</u> Aerial Photographs <u>N/A</u> Other</p> <p><u>YES</u> No Recorded Data</p> <p>Field Observations</p> <p>Depth of Surface Water: N/A (in.) Depth to Free Water in Pit: > 14 (in.) Depth to Saturated Soil: > 14 (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators <u>NO</u> Inundated <u>NO</u> Saturated in Upper 12 Inches <u>NO</u> Water Marks <u>NO</u> Drift Lines <u>NO</u> Sediment Deposits</p> <p><u>YES</u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required): <u>NO</u> Oxidized Root Channels in Upper 12 Inches <u>NO</u> Water-Stained Leaves <u>NO</u> Local Soil Survey Data <u>NO</u> FAC-Neutral Test <u>NO</u> Other (Explain in Remarks)</p>
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Remarks:

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

Project/Site: Carolina North Applicant/Owner: UNC Investigators: Lee Mallonee, Kevin Nunnery	Project No: 09802.01	Date: 10-Feb-2009 County: Orange State: North Carolina Plot ID: Wet LA 1 WET 7A
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SOILS

Map Unit Name (Series and Phase): Herndon silt loam, 6-10% slopes Map Symbol: HrC Drainage Class: well drained Taxonomy (Subgroup): Typic Hapludults Profile Description				Mapped Hydric Inclusion? Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
0-3	A	10YR4/3	10YR6/6	Few Faint	Loam	
3+	B	2.5Y7/2	7.5YR6/6	Few Prominent	Clay loam	
Hydric Soil Indicators: NO Histosol NO Histic Epipedon NO Sulfidic Odor NO Aquic Moisture Regime NO Reducing Conditions YES Gleyed or Low Chroma Colors NO Concretions NO High Organic Content in Surface Layer in Sandy Soils NO Organic Streaking in Sandy Soils NO Listed on Local Hydric Soils List NO Listed on National Hydric Soils List NO Other (Explain in Remarks)						
Remarks:						

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is the Sampling Point within the Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks:	

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: A1 WET 1
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Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on the reverse side)	Community ID: forested wetland Transect ID: none Field Location: in wetland 30 feet east of flag #1
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VEGETATION (USFWS Region No. 2)

Dominant Plant Species(Latin/Common)	Stratum	Indicator	Plant Species(Latin/Common)	Stratum	Indicator
<i>Pinus taeda</i>	Tree	FAC	<i>Quercus phellos</i>	Tree	FACW-
Pine, Loblolly			Oak, Willow		
<i>Ulmus americana</i>	Tree	FACW	<i>Smilax rotundifolia</i>	Vine	FAC
Elm, American			Greenbrier, Common		

Percent of Dominant Species that are OBL, FACW or FAC: (excluding FAC-) 4/4 = 100.00%	FAC Neutral: 2/2 = 100.00% Numeric Index: 10/4 = 2.50
Remarks: 	

HYDROLOGY

<u>NO</u> Recorded Data(Describe in Remarks): <u>N/A</u> Stream, Lake or Tide Gauge <u>N/A</u> Aerial Photographs <u>N/A</u> Other YES No Recorded Data Field Observations Depth of Surface Water: N/A (in.) Depth to Free Water in Pit: = 0 (in.) Depth to Saturated Soil: = 0 (in.)	Wetland Hydrology Indicators Primary Indicators <u>NO</u> Inundated YES Saturated in Upper 12 Inches <u>NO</u> Water Marks <u>NO</u> Drift Lines <u>NO</u> Sediment Deposits <u>NO</u> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <u>NO</u> Oxidized Root Channels in Upper 12 Inches <u>NO</u> Water-Stained Leaves <u>NO</u> Local Soil Survey Data YES FAC-Neutral Test <u>NO</u> Other (Explain in Remarks)
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Remarks: 1-2" ponding in places following rain last 24 hours
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DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: A1 WET 1
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SOILS

Map Unit Name (Series and Phase): Herndon silt loam, 6-10% slopes				Mapped Hydric Inclusion?	
Map Symbol: HrC		Drainage Class: well drained		Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Taxonomy (Subgroup): Typic Hapludults					
Profile Description					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc
0+	A/B	2.5Y5/1	10YR6/8	Many Distinct	Clay loam
Hydric Soil Indicators:					
NO Histosol			NO Concretions		
NO Histic Epipedon			NO High Organic Content in Surface Layer in Sandy Soils		
NO Sulfidic Odor			NO Organic Streaking in Sandy Soils		
NO Aquic Moisture Regime			NO Listed on Local Hydric Soils List		
NO Reducing Conditions			NO Listed on National Hydric Soils List		
YES Gleyed or Low Chroma Colors			NO Other (Explain in Remarks)		
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is the Sampling Point within the Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Remarks:	

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: A1 UPL 1
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Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation:)? Is the area a potential Problem Area? (If needed, explain on the reverse side)	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	Community ID: Upland Forest Transect ID: none Field Location: 30 feet west of A-1
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VEGETATION (USFWS Region No. 2)

Dominant Plant Species(Latin/Common)	Stratum	Indicator	Plant Species(Latin/Common)	Stratum	Indicator
<i>Pinus taeda</i>	Tree	FAC	<i>Carya ovata</i>	Tree	FACU
Pine, Loblolly			Hickory, Shag-Bark		
<i>Quercus alba</i>	Tree	FACU	<i>Juniperus virginiana</i>	Shrub/S	FACU-
Oak, White			Cedar, Eastern Red		

Percent of Dominant Species that are OBL, FACW or FAC- (excluding FAC-) 1/4 = 25.00%	FAC Neutral: 0/3 = 0.00% Numeric Index: 15/4 = 3.75
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Remarks:

HYDROLOGY

<p><u>NO</u> Recorded Data(Describe in Remarks): <u>N/A</u> Stream, Lake or Tide Gauge <u>N/A</u> Aerial Photographs <u>N/A</u> Other</p> <p><u>YES</u> No Recorded Data</p> <p>Field Observations</p> <p>Depth of Surface Water: N/A (in.)</p> <p>Depth to Free Water in Pit: > 13 (in.)</p> <p>Depth to Saturated Soil: > 13 (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators</p> <p><u>NO</u> Inundated <u>NO</u> Saturated in Upper 12 Inches <u>NO</u> Water Marks <u>NO</u> Drift Lines <u>NO</u> Sediment Deposits <u>NO</u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><u>NO</u> Oxidized Root Channels in Upper 12 Inches <u>NO</u> Water-Stained Leaves <u>NO</u> Local Soil Survey Data <u>NO</u> FAC-Neutral Test <u>NO</u> Other (Explain in Remarks)</p>
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Remarks:

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: A1 UPL 1
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SOILS

Map Unit Name (Series and Phase): Herndon silt loam, 6-10% slopes
Map Symbol: HrC **Drainage Class:** well drained
Taxonomy (Subgroup): Typic Hapludults
Profile Description

Mapped Hydric Inclusion?
 Field Observations Confirm Mapped Type? Yes No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast		Texture, Concretions, Structure, etc
0-6	A	10YR4/3	N/A	N/A	N/A	Loam
6+	B	10YR4/4	N/A	N/A	N/A	Loam

Hydric Soil Indicators:

<u>NO</u> Histosol <u>NO</u> Histic Epipedon <u>NO</u> Sulfidic Odor <u>NO</u> Aquic Moisture Regime <u>NO</u> Reducing Conditions <u>NO</u> Gleyed or Low Chroma Colors	<u>NO</u> Concretions <u>NO</u> High Organic Content in Surface Layer in Sandy Soils <u>NO</u> Organic Streaking in Sandy Soils <u>NO</u> Listed on Local Hydric Soils List <u>NO</u> Listed on National Hydric Soils List <u>NO</u> Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampling Point within the Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Hydric Soils Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	

Remarks:

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: B1 WET 1
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SOILS

Map Unit Name (Series and Phase): Wilkes gravelly loam, 15-45% slopes				Mapped Hydric Inclusion?	
Map Symbol: WxF Drainage Class: well drained			Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Taxonomy (Subgroup): Typic Hapludalfs					
Profile Description					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc
0-15	A/B	10YR6/2	10YR5/6	Common Faint	Clay loam
Hydric Soil Indicators:					
<u>NO</u> Histosol			<u>NO</u> Concretions		
<u>NO</u> Histic Epipedon			<u>NO</u> High Organic Content in Surface Layer in Sandy Soils		
<u>NO</u> Sulfidic Odor			<u>NO</u> Organic Streaking in Sandy Soils		
<u>NO</u> Aquic Moisture Regime			<u>NO</u> Listed on Local Hydric Soils List		
<u>NO</u> Reducing Conditions			<u>NO</u> Listed on National Hydric Soils List		
<u>YES</u> Gleyed or Low Chroma Colors			<u>NO</u> Other (Explain in Remarks)		
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is the Sampling Point within the Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks:	

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: B1 UPL 1
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Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation:)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on the reverse side)	Community ID: forested upland Transect ID: none Field Location: 50 ft west of flag # 18
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VEGETATION (USFWS Region No. 2)

Dominant Plant Species(Latin/Common)	Stratum	Indicator	Plant Species(Latin/Common)	Stratum	Indicator
<i>Liriodendron tulipifera</i>	Tree	FAC	<i>Pinus taeda</i>	Tree	FAC
Tree, Tulip			Pine, Loblolly		

Percent of Dominant Species that are OBL, FACW or FAC: (excluding FAC-) 2/2 = 100.00%	FAC Neutral: 0/0 = 0.00% Numeric Index: 6/2 = 3.00
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Remarks:

HYDROLOGY

<p><u>NO</u> Recorded Data(Describe in Remarks): <u>N/A</u> Stream, Lake or Tide Gauge <u>N/A</u> Aerial Photographs <u>N/A</u> Other</p> <p><u>YES</u> No Recorded Data</p> <p>Field Observations</p> <p style="margin-left: 40px;">Depth of Surface Water: N/A (in.)</p> <p style="margin-left: 40px;">Depth to Free Water in Pit: > 13 (in.)</p> <p style="margin-left: 40px;">Depth to Saturated Soil: > 13 (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators</p> <p><u>NO</u> Inundated</p> <p><u>NO</u> Saturated in Upper 12 Inches</p> <p><u>NO</u> Water Marks</p> <p><u>NO</u> Drift Lines</p> <p><u>NO</u> Sediment Deposits</p> <p><u>NO</u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><u>NO</u> Oxidized Root Channels in Upper 12 Inches</p> <p><u>NO</u> Water-Stained Leaves</p> <p><u>NO</u> Local Soil Survey Data</p> <p><u>NO</u> FAC-Neutral Test</p> <p><u>NO</u> Other (Explain in Remarks)</p>
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Remarks:

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: B1 UPL 1
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SOILS

Map Unit Name (Series and Phase): Wilkes gravelly loam, 15-45% slopes
Map Symbol: WxF **Drainage Class:** well drained
Taxonomy (Subgroup): Typic Hapludalfs

Mapped Hydric Inclusion?
 Field Observations Confirm Mapped Type? Yes No

Profile Description

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast		Texture, Concretions, Structure, etc
0-12	A	10YR5/6	N/A	N/A	N/A	Loam
12-15	B	2.5Y6/3	7.5YR6/6	Many	Distinct	Loam

Hydric Soil Indicators:

NO Histosol NO Histic Epipedon NO Sulfidic Odor NO Aquic Moisture Regime NO Reducing Conditions NO Gleyed or Low Chroma Colors	NO Concretions NO High Organic Content in Surface Layer in Sandy Soils NO Organic Streaking in Sandy Soils NO Listed on Local Hydric Soils List NO Listed on National Hydric Soils List NO Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soils Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampling Point within the Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: C1 WET 1
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SOILS

Map Unit Name (Series and Phase): Georgeville Silt Loam, 2-6% slopes
Map Symbol: GeB **Drainage Class:** well drained
Taxonomy (Subgroup): Typic Hapludults

Mapped Hydric Inclusion?
 Field Observations Confirm Mapped Type? Yes No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast		Texture, Concretions, Structure, etc
0-3	A	2.5Y4/2	10YR5/8	Few	Distinct	Clay loam
3+	B	2.5Y4/1	10YR5/8	N/A	N/A	Clay loam

Hydric Soil Indicators:

NO Histosol NO Histic Epipedon NO Sulfidic Odor NO Aquic Moisture Regime NO Reducing Conditions YES Gleyed or Low Chroma Colors	NO Concretions NO High Organic Content in Surface Layer in Sandy Soils NO Organic Streaking in Sandy Soils NO Listed on Local Hydric Soils List NO Listed on National Hydric Soils List NO Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is the Sampling Point within the Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	

Remarks:

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: C1 UPL 1
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Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation:)? Is the area a potential Problem Area? (If needed, explain on the reverse side)	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	Community ID: Upland Forest Transect ID: none Field Location: 30 feet west of flag #22
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VEGETATION (USFWS Region No. 2)

Dominant Plant Species(Latin/Common)	Stratum	Indicator	Plant Species(Latin/Common)	Stratum	Indicator
<i>Liriodendron tulipifera</i> Tree, Tulip	Tree	FAC	<i>Ulmus alata</i> Elm, Winged	Shrub/S:	FACU+
<i>Lindera benzoin</i> Spicebush, Northern	Shrub/S:	FACW	<i>Polystichum acrostichoides</i> Fern, Christmas	Herb	FAC

Percent of Dominant Species that are OBL, FACW or FAC: (excluding FAC-) 3/4 = 75.00%	FAC Neutral: 1/2 = 50.00% Numeric Index: 12/4 = 3.00
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Remarks:

HYDROLOGY

<p><u>NO</u> Recorded Data(Describe in Remarks): <u>N/A</u> Stream, Lake or Tide Gauge <u>N/A</u> Aerial Photographs <u>N/A</u> Other</p> <p><u>YES</u> No Recorded Data</p> <p>Field Observations</p> <p>Depth of Surface Water: N/A (in.) Depth to Free Water in Pit: > 13 (in.) Depth to Saturated Soil: > 13 (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators</p> <p><u>NO</u> Inundated <u>NO</u> Saturated in Upper 12 Inches <u>NO</u> Water Marks <u>NO</u> Drift Lines <u>NO</u> Sediment Deposits <u>NO</u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><u>NO</u> Oxidized Root Channels in Upper 12 Inches <u>NO</u> Water-Stained Leaves <u>NO</u> Local Soil Survey Data <u>NO</u> FAC-Neutral Test <u>NO</u> Other (Explain in Remarks)</p>
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Remarks:

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 20-Apr-2009 County: Orange State: North Carolina Plot ID: C1 UPL 1
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SOILS

Map Unit Name (Series and Phase): Georgeville Silt Loam, 2-6% slopes				Mapped Hydric Inclusion?														
Map Symbol: GeB		Drainage Class: well drained		Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>														
Taxonomy (Subgroup): Typic Hapludults																		
Profile Description																		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast		Texture, Concretions, Structure, etc												
0-6	A	10YR3/4	N/A	N/A	N/A	Loam												
6+	B	10YR3/6	N/A	N/A	N/A	Loam												
Hydric Soil Indicators: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><u>NO</u> Histosol</td> <td style="width: 50%; border: none;"><u>NO</u> Concretions</td> </tr> <tr> <td style="border: none;"><u>NO</u> Histic Epipedon</td> <td style="border: none;"><u>NO</u> High Organic Content in Surface Layer in Sandy Soils</td> </tr> <tr> <td style="border: none;"><u>NO</u> Sulfidic Odor</td> <td style="border: none;"><u>NO</u> Organic Streaking in Sandy Soils</td> </tr> <tr> <td style="border: none;"><u>NO</u> Aquic Moisture Regime</td> <td style="border: none;"><u>NO</u> Listed on Local Hydric Soils List</td> </tr> <tr> <td style="border: none;"><u>NO</u> Reducing Conditions</td> <td style="border: none;"><u>NO</u> Listed on National Hydric Soils List</td> </tr> <tr> <td style="border: none;"><u>NO</u> Gleyed or Low Chroma Colors</td> <td style="border: none;"><u>NO</u> Other (Explain in Remarks)</td> </tr> </table>							<u>NO</u> Histosol	<u>NO</u> Concretions	<u>NO</u> Histic Epipedon	<u>NO</u> High Organic Content in Surface Layer in Sandy Soils	<u>NO</u> Sulfidic Odor	<u>NO</u> Organic Streaking in Sandy Soils	<u>NO</u> Aquic Moisture Regime	<u>NO</u> Listed on Local Hydric Soils List	<u>NO</u> Reducing Conditions	<u>NO</u> Listed on National Hydric Soils List	<u>NO</u> Gleyed or Low Chroma Colors	<u>NO</u> Other (Explain in Remarks)
<u>NO</u> Histosol	<u>NO</u> Concretions																	
<u>NO</u> Histic Epipedon	<u>NO</u> High Organic Content in Surface Layer in Sandy Soils																	
<u>NO</u> Sulfidic Odor	<u>NO</u> Organic Streaking in Sandy Soils																	
<u>NO</u> Aquic Moisture Regime	<u>NO</u> Listed on Local Hydric Soils List																	
<u>NO</u> Reducing Conditions	<u>NO</u> Listed on National Hydric Soils List																	
<u>NO</u> Gleyed or Low Chroma Colors	<u>NO</u> Other (Explain in Remarks)																	
Remarks:																		

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soils Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampling Point within the Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 21-Apr-2009 County: Orange State: North Carolina Plot ID: D1 WET 1
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Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation:)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on the reverse side)	Community ID: Scrub Shrub wetland Transect ID: none Field Location: in wetland at flag # 34
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VEGETATION

(USFWS Region No. 2)

Dominant Plant Species(Latin/Common)	Stratum	Indicator	Plant Species(Latin/Common)	Stratum	Indicator
<i>Fraxinus pennsylvanica</i> Ash, Green	Tree	FACW	<i>Ludwigia palustris</i> Seedbox, Marsh	Herb	OBL
<i>Liquidambar styraciflua</i> Gum, Sweet	Tree	FAC+	<i>Carex lupulina</i> Sedge, Hop	Herb	OBL

Percent of Dominant Species that are OBL, FACW or FAC: (excluding FAC-) 4/4 = 100.00%	FAC Neutral: 3/3 = 100.00% Numeric Index: 7/4 = 1.75
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Remarks:

HYDROLOGY

<p><u>NO</u> Recorded Data(Describe in Remarks): <u>N/A</u> Stream, Lake or Tide Gauge <u>N/A</u> Aerial Photographs <u>N/A</u> Other <u>YES</u> No Recorded Data</p> <p>Field Observations</p> <p>Depth of Surface Water: <= 8 (in.) Depth to Free Water in Pit: N/A (in.) Depth to Saturated Soil: N/A (in.)</p>	<p>Wetland Hydrology Indicators</p> <p>Primary Indicators <u>YES</u> Inundated <u>YES</u> Saturated in Upper 12 Inches <u>NO</u> Water Marks <u>NO</u> Drift Lines <u>NO</u> Sediment Deposits <u>NO</u> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required): <u>NO</u> Oxidized Root Channels in Upper 12 Inches <u>NO</u> Water-Stained Leaves <u>NO</u> Local Soil Survey Data <u>YES</u> FAC-Neutral Test <u>NO</u> Other (Explain in Remarks)</p>
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Remarks:
 Majority of delineated area was ponded and flowed to an outlet ditch which connects to Bolin Creek.

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 21-Apr-2009 County: Orange State: North Carolina Plot ID: D1 WET 1
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SOILS

Map Unit Name (Series and Phase): Georgeville Silt Loam, 2-6% slopes		Map Symbol: GeB		Drainage Class: well drained	Mapped Hydric Inclusion?	
Taxonomy (Subgroup): Typic Hapludults				Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>		
Profile Description						
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast		Texture, Concretions, Structure, etc
0-2	A	2.5Y5/2	N/A	N/A	N/A	Silt loam
2+	B	2.5Y6/2	10YR4/6	Many	Distinct	Silt loam
Hydric Soil Indicators:						
NO Histosol		NO Concretions				
NO Histic Epipedon		NO High Organic Content in Surface Layer in Sandy Soils				
NO Sulfidic Odor		NO Organic Streaking in Sandy Soils				
NO Aquic Moisture Regime		NO Listed on Local Hydric Soils List				
NO Reducing Conditions		NO Listed on National Hydric Soils List				
YES Gleyed or Low Chroma Colors		NO Other (Explain in Remarks)				
Remarks:						

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is the Sampling Point within the Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks:	

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

Project/Site: Carolina North campus Applicant/Owner: University of North Carolina Investigators: K. Nunnery, L. Mallonee	Project No: 06808.01	Date: 21-Apr-2009 County: Orange State: North Carolina Plot ID: D1 UPL 1
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SOILS

Map Unit Name (Series and Phase): Georgeville Silt Loam, 2-6% slopes		Mapped Hydric Inclusion?				
Map Symbol: GeB Drainage Class: well drained		Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>				
Taxonomy (Subgroup): Typic Hapludults						
Profile Description						
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Mottle	Texture, Concretions, Structure, etc
0-6	A	10YR3/6	N/A	N/A	N/A	Sandy clay loam
6+	B	10YR4/4	N/A	N/A	N/A	Sandy clay loam

Hydric Soil Indicators: NO Histosol NO Histic Epipedon NO Sulfidic Odor NO Aquic Moisture Regime NO Reducing Conditions NO Gleyed or Low Chroma Colors	NO Concretions NO High Organic Content in Surface Layer in Sandy Soils NO Organic Streaking in Sandy Soils NO Listed on Local Hydric Soils List NO Listed on National Hydric Soils List NO Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soils Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampling Point within the Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks: