

1139 South Fourth Street Louisville, KY 40203 502.625.3009 Corporate Headquarters 6575 West Loop South, Suite 300 Bellaire, TX 77401 Main: 713.520.5400

### **VIA EMAIL**

February 17, 2022

Mr. David Baldridge
Chief, South Branch Regulatory Division
U.S. Army Corps of Engineers
Louisville District
600 Dr. Martin Luther King, Jr. Place
Louisville, Kentucky 40202
David.E.Baldridge@usace.army.mil
CELRL.Door.To.The.Corps@usace.army.mil

**Subject:** Request for Jurisdictional Determination

3500 Lees Lane Property Jefferson County, Kentucky Redwing Project No.: 103689

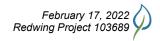
Dear Mr. Baldridge:

On behalf of LDG Development, LLC, RES Kentucky, LLC dba Redwing Ecological Services (Redwing) is pleased to submit this Request for Jurisdictional Determination to the U.S. Army Corps of Engineers (USACE) in support of the 3500 Lees Lane Property in Louisville, Jefferson County, Kentucky. The approximately 96-acre site is located on the southwest side of Lees Lane, approximately 0.4 mile southwest of the Cane Rune Road and Lees Lane intersection (Figures 1 and 2). This report describes the location, extent, and characteristics of waters/wetlands that were delineated on the property.

Habitat on-site consists primarily of mixed-age woods (Figure 2). Jurisdictional water/wetland features identified during the field assessment include:

- six intermittent streams totaling 8,040 linear feet (0.942 acre)
- 19 ephemeral streams totaling 1,950 linear feet (0.098 acre)
- seven wetlands totaling 2.801 acres
- one open water pond measuring 0.057 acre.

Non-jurisdictional, isolated features include 13 wetlands totaling 3.396 acres and one open water pond measuring 0.029 acre (Figure 3).



#### **METHODOLOGY**

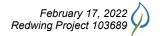
A delineation of jurisdictional waters/wetlands of the U.S. was completed by Redwing on January 5, 6, 7, and 11, 2021, using a combination of in-house research and field evaluation. In-house research included a review of the USGS topographic map, aerial photography, FEMA floodplain map, and the USDA Soil Survey Geographic Database for Jefferson County, Kentucky. Potential wetland areas were evaluated through documentation of the presence/absence of hydric soils, wetland hydrology, and hydrophytic vegetation, as defined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region – Version 2.0* (April 2012). Soil, hydrology, and vegetation data were collected on Routine Wetland Determination Data Forms for 46 points throughout the site (Figure 3), which are attached as Appendix A. The jurisdictional status of open waters, such as streams and ponds, was determined based on the presence/absence of an ordinary high water mark (OHWM), defined bed and bank features, and flow regime. The quality of the intermittent streams was assessed using the Rapid Bioassessment Protocol (RBP) as developed by the U.S. Environmental Protection Agency (USEPA) and the RBP Data Forms are attached as Appendix B. A Preliminary Jurisdictional Determination (PJD) for the jurisdictional features is provided as Appendix C and an Approved Jurisdictional Determination (AJD) Form for the isolated/non-jurisdictional features on the property is provided as Appendix D.

### **RESULTS**

Jurisdictional water/wetland features identified during the field assessment include six intermittent streams, 19 ephemeral streams, seven wetlands, and one open water pond (Figure 3). Non-jurisdictional, isolated features include 13 wetlands and one open water pond. The water/wetland features are summarized Table 1, depicted on Figure 3, and described in more detail below.

**Intermittent Streams:** Six jurisdictional intermittent streams were identified on the site during the field assessment. The intermittent streams had RBP scores ranging from 61 to 100 which characterizes them as "poor" quality. Intermittent Streams 2 through 6 have a downstream connection to Intermittent Stream 1, which connects off site to Mill Creek Cutoff. Therefore, all of the intermittent streams are considered jurisdictional.

Intermittent Stream 1 enters the site from a culvert beneath Lees Lane along the northern project boundary and flows southwest for 4,230 linear feet through the central portion of the site before exiting the site at the southern project boundary. Intermittent Stream 1 is mapped as a USGS dashed blue line stream. Intermittent Stream 1 measure four to ten feet in width with one to five-foot bank heights and substrate consisting of silt, gravel, and sand. During the field assessment, Intermittent Stream 1 contained trickle flow and pooled water at one to three inches in depth.



Intermittent Stream 2 originates from Wetland 8 and flows west for 440 linear feet into Intermittent Stream 1. Intermittent 2 is three to four feet wide with half-foot bank heights and silt substrate. During the field assessment, Intermittent Stream 2 contained trickle flow in the upstream and pooled water in the downstream with water one to three inches in depth.

Intermittent Stream 3 enters the site from a culvert beneath the railroad tracks along the eastern project boundary and flows west into Intermittent Stream 1. Intermittent Stream 3 is three to six feet wide with three to ten-foot bank heights and silt substrate. During the field assessment, Intermittent 3 had pooled water throughout at one to six inches in depth.

Intermittent Stream 4 originates from Wetland 3 and flows west then south for 315 linear feet before changing classifications to ephemeral and connecting to Intermittent Stream 1. Intermittent Stream 4 is three feet wide with two to eight-foot bank heights and silt substrate. During the field assessment, Intermittent 4 had pooled water throughout at one to three inches in depth.

Intermittent Stream 5 originates from Wetland 17 and flows east for 315 linear feet into Intermittent Stream 4. Intermittent Stream 5 is two feet wide with one to three-foot bank heights and silt substrate. During the field assessment, Intermittent 5 had pooled water throughout at one to three inches in depth.

Intermittent Stream 6 originates from Ephemeral Stream 17 and flows northwest for 945 linear feet into Intermittent Stream 1. Intermittent Stream 6 is three to six feet wide with one to ten-foot bank heights and sand substrate. During the field assessment, Intermittent 6 was dry with large deposits of sand in the bed, except for a few small pools below headcuts less than one inch in depth.

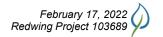
**Ephemeral Streams:** Nineteen jurisdictional ephemeral streams were identified on the site during the field assessment. All of the ephemeral streams are directly connected to jurisdictional streams and wetlands and, are therefore considered jurisdictional. The ephemeral streams range from one to four feet wide with bank heights ranging from less than six inches to eight feet and substrates consisting primarily of silt with minimal gravel. During the field assessment, all of the ephemeral streams were dry, except for Ephemeral Streams 1, 2, 6, 10, 12, 14 and 15 which exhibited pooled water in only portions of the channel. None of the ephemeral streams exhibited groundwater influence, which confirms that they only flow in direct response to precipitation.

Open Water Ponds: One jurisdictional open water pond and one isolated/non-jurisdictional open water pond were identified on the site during the field assessment.

Open Water Pond 1 measures 0.029 acre and was constructed prior to 1955 in an area that was previously upland crop field. Open Water Pond 1 is connected to Wetland 2; however, since Wetland 2 is considered non-jurisdictional due to the lack of a downstream connection to jurisdictional waters, Open Water 2 is also non-jurisdictional.

Open Water Pond 2 measures 0.057 acre and was constructed was constructed in between 1959 and 1971 in an area that was previously upland crop field. Open Water Pond 2 is connected to Wetland 4, which drains to Intermittent Stream 1 and therefore, Open Water 2 is considered jurisdictional.

Wetlands: Seven jurisdictional wetlands totaling 2.801 acres and 13 non-jurisdictional/isolated wetlands totaling 3.396 acres were identified during the field assessment. All of the wetlands are considered



forested, except Wetlands 5 and 6 which were emergent pockets. Jurisdicitonal wetlands include Wetlands 3 through 8 and 17. Wetlands 3, 5, 6, 7, 8 and 17 all directly connect to intermittent streams and Wetland 4 directly connects to an ephemeral stream that connects to Wetland 5. Since these wetlands directly connect to jurisdictional waters, they are under USACE jurisdiction.

Isolated wetlands include Wetlands 1, 2, 9 through 16, 18, 19, and 20. Wetland 1 is an old pond constructed prior to 1909 and has a defined berm around the entire boundary. Wetlands 2, 9 through 16, 18, 19, and 20 are located in depressions in the woods with upland areas surrounding the entire boundary. Since these 13 wetlands are located in defined depressions with no direct or indirect connection to other water/wetland features, these wetlands are considered isolated and are not under USACE jurisdiction.

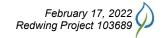
General site characteristics of soil, hydrology, and vegetation are discussed below:

**Soils:** The USDA Soil Survey Geographic Database for Jefferson County, Kentucky, maps the site as being primarily underlain by Otwood silt loam, Sciotoville silt loam, Urban land-Alfic Udarents complext, Weinbach silt loam, and Wheeling silt loam, with smaller areas of Robertsville silt loam and Urban land-Udorthents complex (Figure 4). Of the on-site soils, Robertsville silt loam is listed as hydric and Weinbach silt loam is listed as hydric-by-inclusion on the Jefferson County Hydric Soils List. Based on soil pits dug for the wetland determination data points, evidence of hydric soil was limited to the delineated wetlands and a few upland areas and includes the depleted matrix (F3), redox dark surface (F6), and hydrogen sulfide (A4) (Appendix A).

**Hydrology:** The main sources of hydrology to the site appear to be precipitation and surface runoff from adjacent properties, with some groundwater influence in the intermittent streams. The central and southern drainages on the site are located within the 100-year floodplain (Figure 5). Wetland hydrology indicators observed during the field assessment include surface water, saturation, high water table, hydrogen sulfide odor, water-stained leaves, water marks, sparsely vegetated concave surface, geomorphic position, and a positive FAC-neutral test (Appendix A).

**Vegetation:** The site consists primarily of a mix of upland woods and forested and emergent wetland habitat (Figures 2 and 3). Species commonly observed in the upland mixed-aged woods habitat include black locust (*Robinia pseudoacacia*), black cherry (*Prunus serontina*), sycamore (*Platanus occidentalis*), northern red oak (*Quercus rubra*), American beech (*Fagus grandifolia*), sweetgum (*Liquidambar styraciflua*), pin oak (*Quercus palustris*), slippery elm (*Ulmus rubra*), American hornbeam (*Carpinus caroliniana*), box elder (*Acer negundo*), red maple (*Acer rubrum*), bush honeysuckle (*Lonicera maackii*), multiflora rose (*Rosa multiflora*), American holly (*Ilex opaca*), common privet (*Ligustrum vulgare*), Japanese honeysuckle (*Lonicera japonica*), Allegheny blackberry (*Rubus allegheniensis*), Japanese stiltgrass (*Microstegium vimineum*), field garlic (*Allium vineale*), white snakeroot (*Ageratina altissima*), and sweet woodreed (*Cinna arundinacea*). These species are listed as obligate upland (UPL), facultative upland (FACU), facultative wetland (FACW), and facultative (FAC) on *The National Wetland Plant List: Eastern Mountains and Piedmont Final Regional Wetland Plant List – 2018 (NWPL).* 

Common species in the emergent wetland habitat include Japanese stiltgrass, sweet woodreed, Virginia wild rye (*Elymus virginicus*), and spearmint (*Mentha spicata*). Common species in the forested wetland habitat include pin oak, red maple, sweetgum, sycamore, slippery elm, box elder, American hornbeam, green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), Japanese stiltgrass, sweet woodreed, Virginia wild rye, Japanese honeysuckle, and blunt broom



sedge (Carex tribuloides). These species are listed as FAC, FACW, FACU, and obligate wetland (OBL) on the NWPL.

### **SUMMARY**

Based on the results of this delineation, jurisdictional water/wetland features identified during the field assessment include:

- six intermittent streams totaling 8,040 linear feet (0.942 acre)
- 19 ephemeral streams totaling 1,950 linear feet (0.098 acre)
- seven wetlands totaling 2.801 acres
- one open water pond measuring 0.057 acre.

Non-jurisdictional, isolated features include 13 wetlands totaling 3.396 acres and one open water pond measuring 0.029 acre. As the USACE holds final authority over determinations of the extent and location of jurisdictional waters/wetlands, we respectfully request USACE verification of delineated water/wetland boundaries and issuance of a Preliminary and Approved Jurisdictional Determination for the property.

We appreciate your review of this request. Please contact Kaitlin Ilnick or Ron Thomas at (502) 625-3009 with any questions regarding this report or the overall project.

Sincerely,

Kaitlin J. Alnick Kaitlin J. Ilnick

Project Manager II

Ronald L. Thomas Senior Project Manager

R:\Projects\103689-3500 Lees Lane\Reports\JD Report\Request for JD- 3500 Lees Lane.docx

Mr. Elijah Lacey – LDG Development, LLC CC:

Attachments: Table

> **Figures Photographs**

Appendix A: Wetland Determination Data Forms Appendix B: Rapid Bioassessment Protocol Forms

Appendix C: Preliminary Jurisdictional Determination Form Appendix D: Approved Jurisdictional Determination Form

# **TABLE**

Table 1: Water/Wetland Summary 3500 Lees Lane Property Jefferson County, Kentucky

Feature  Intermittent Stream 1 Intermittent Stream 2 Intermittent Stream 3	Stream Length (feet) 4,230	Stream Width (feet)	Area (acres)	Federal Status
Intermittent Stream 2 Intermittent Stream 3	V 23U			
Intermittent Stream 3	4,∠30	6	0.583	Jurisdictional
	440	4	0.040	Jurisdictional
	1,795	4.5	0.185	Jurisdictional
Intermittent Stream 4	315	3	0.022	Jurisdictional
Intermittent Stream 5	315	2	0.014	Jurisdictional
Intermittent Stream 6	945	4.5	0.098	Jurisdictional
Intermittent Stream Total	8,040		0.942	
Ephemeral Stream 1	90	1.5	0.003	Jurisdictional
Ephemeral Stream 2	175	2	0.008	Jurisdictional
Ephemeral Stream 3	25	1.5	0.001	Jurisdictional
Ephemeral Stream 4	125	1.5	0.004	Jurisdictional
Ephemeral Stream 5	65	1.5	0.002	Jurisdictional
Ephemeral Stream 6	135	2	0.006	Jurisdictional
Ephemeral Stream 7	135	2	0.006	Jurisdictional
Ephemeral Stream 8	65	1	0.001	Jurisdictional
Ephemeral Stream 9	35	1.5	0.001	Jurisdictional
Ephemeral Stream 10	60	1	0.001	Jurisdictional
Ephemeral Stream 11	30	1.5	0.001	Jurisdictional
Ephemeral Stream 12	140	3	0.010	Jurisdictional
Ephemeral Stream 13	105	1.5	0.004	Jurisdictional
Ephemeral Stream 14	50	2.5	0.003	Jurisdictional
Ephemeral Stream 15	85	2	0.004	Jurisdictional
Ephemeral Stream 16	45	2	0.002	Jurisdictional
Ephemeral Stream 17	475	3.5	0.038	Jurisdictional
Ephemeral Stream 18	85	1	0.002	Jurisdictional
Ephemeral Stream 19	25	1	0.001	Jurisdictional
Ephemeral Stream Total	1,950		0.098	March School
Wetland 1			0.174	Non-Jurisdictional
Wetland 2			1.457	Non-Jurisdictional
Wetland 3			0.875	Jurisdictional
Wetland 4			1.596	Jurisdictional
Wetland 5			0.046	Jurisdictional
Wetland 6			0.007	Jurisdictional
Wetland 7			0.063	Jurisdictional
Wetland 8			0.172	Jurisdictional
Wetland 9			0.108	Non-Jurisdictional
Wetland 10			0.667	Non-Jurisdictional
Wetland 11			0.017	Non-Jurisdictional
Wetland 12			0.049	Non-Jurisdictional
Wetland 13			0.459	Non-Jurisdictional
Wetland 14			0.270	Non-Jurisdictional
Wetland 15			0.059	Non-Jurisdictional
Wetland 16			0.040	Non-Jurisdictional
Wetland 17			0.042	Jurisdictional
Wetland 18			0.026	Non-Jurisdictional
Wetland 19			0.049	Non-Jurisdictional
Wetland 20			0.021	Non-Jurisdictional
Jurisdictional Wetland Total			2.801	
Non-Jurisdictional Wetland Total			3.396	
Open Water 1			0.029	Non-Jurisdictional
Open Water 2			0.057	Jurisdictional
Jurisdictional Open Water Total			0.057	5454.0tiorial
Non-Jurisdictional Open Water Total			0.029	
	9,990		3.898	

# **FIGURES**

Planning & Design

22-ZONE-0013

Received Dec. 5, 2022

Planning & Design

22-ZONE-0013

Received Dec. 5, 2022

# **PHOTOGRAPHS**



Photograph 1: The upstream portion of Intermittent Stream 1, facing downstream. January 5, 2021.



Photograph 2: The downstream portion of Intermittent Stream 1, facing downstream. January 11, 2021.



Photograph 3: Intermittent Stream 2, facing upstream. January 6, 2021.



Photograph 4: Intermittent Stream 3, facing upstream. January 7, 2021.



Photograph 5: Intermittent Stream 4, facing upstream. January 7, 2021.



Photograph 6: Intermittent Stream 5, facing downstream. January 7, 2021.



Photograph 7: Intermittent Stream 6, facing upstream. January 11, 2021.



Photograph 8: Ephemeral Stream 1, facing downstream below the old pond portion of Wetland 4. January 6, 2021.



Photograph 9: Ephemeral Stream 2, facing upstream. January 6,



Photograph 10: Ephemeral Stream 3, facing upstream. January 6, 2021.



Photograph 11: Ephemeral Stream 4, facing upstream. January 7, 2021.



Photograph 12: Ephemeral Stream 5, facing upstream. January 7, 2021.



Ephemeral Stream 6, facing downstream. Photograph 13: January 7, 2021.



Photograph 14: Ephemeral Stream 7, facing upstream. January 7, 2021.



Photograph 15: Ephemeral Stream 8, facing upstream. January 7, 2021.



Photograph 16: Ephemeral Stream 9, facing upstream near the confluence with Intermittent Stream 3. January 7, 2021.



Photograph 17: Ephemeral Stream 10, facing downstream. January 7, 2021.



Photograph 18: Ephemeral Stream 11, facing upstream. January 7, 2021.



Photograph 19: Ephemeral Stream 12, facing upstream. January 7, 2021.



Photograph 20: Ephemeral Stream 13, facing upstream. January 7, 2021.



Photograph 21: Ephemeral Stream 14, facing upstream. January 7, 2021.



Photograph 22: January 11, 2021. Ephemeral Stream 15, facing downstream.



Photograph 23: Ephemeral Stream 16, facing upstream. January 11, 2021.



Photograph 24: Ephemeral Stream 17, facing upstream. January 11, 2021.



Photograph 25: Ephemeral Stream 18, facing upstream. January 11, 2021.



Photograph 26: Ephemeral Stream 19, facing upstream. January 7, 2021.



Photograph 27: Wetland 1 in an old pond in the northern portion of the site. January 5, 2021.



Photograph 28: Wetland 2 in the northwestern portion of the site. January 5, 2021.



Photograph 29: Wetland 3 in the western portion of the site. January 5, 2021.



Photograph 30: Portion of Wetland 4 in an old pond that outlets to Ephemeral Stream 1. January 5, 2021.



Photograph 31: Wetland 4 in the northern portion of the site. January 6, 2021.



Photograph 32: Wetland 5 in the northern portion of the site below Ephemeral Stream 1. January 6, 2021.



Photograph 33: Wetland 6 in the northern portion of the site near Intermittent Stream 1. January 6, 2021.



Photograph 34: Wetland 7 in a drainage on the west side of Intermittent Stream 1. January 6, 2021.



Photograph 35: Wetland 8 in a broad drainage upstream of Intermittent Stream 2. January 6, 2021.



Photograph 36: Wetland 9 in the eastern portion of the site. January 6, 2021.



Photograph 37: Wetland 10 in the northeastern portion of the site. January 6, 2021.



Photograph 38: Wetland 11 in the southeastern portion of the site. January 7, 2021.



Photograph 39: Wetland 12 in the eastern portion of the site. January 7, 2021.



Photograph 40: Wetland 13 in the eastern portion of the site. January 7, 2021.



Photograph 41: Wetland 14 in the eastern portion of the site. January 7, 2021.



Photograph 42: Wetland 15 in the northeastern corner of the site. January 7, 2021.



Photograph 43: Wetland 16 in the northeastern corner of the site along Lees Lane. January 7, 2021.



Photograph 44: Wetland 17 in the southwestern portion of the site upstream of Intermittent Stream 5. January 11, 2021.



Photograph 45: Wetland 18 in the southwestern portion of the site. January 11, 2021.



Photograph 46: Wetland 19 in the southwestern portion of the site. January 11, 2021.



Photograph 47: Wetland 20 in the southern portion of the site. January 11, 2021.



Photograph 48: Open Water Pond 1, adjacent to Wetland 2 in the northwestern portion of the site. January 5, 2021.



Photograph 49: Open Water Pond 2, adjacent to Wetland 4 in the northern portion of the site. January 6, 2021.



Photograph 50: Upland area in between Wetlands 8 and 10. January 6, 2021.



Photograph 51: Upland area in between Wetland 19 and Ephemeral Stream 29. January 11, 2021.



Photograph 52: Mixed-age upland woods in the northern portion of the site. January 5, 2021.



Photograph 53: Mixed-age upland woods in the central portion of the site. January 5, 2021.



Photograph 54: Mixed-age upland woods in the southern portion of the site. This area seems to have been disturbed by past logging. January 11, 2021.

## **APPENDIX A**

# **WETLAND DETERMINATION DATA FORMS**

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site:	3500 Lees Lane Prop	erty		City/County: I	Louisville/ Jefferson	Sampling D	ete: 1/5/2	2021	
Applicant/Owner:	LDG Developme				State: Kentucky	<u> </u>	Sampling Point:	DP1	
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	ship, Range:			
Landform (hillslope		depression		Local relief (concave		concave	Slope (%):	0-1	
Subregion (LRR o			Lat.: 38.188		Long.: <u>-85.864479</u>		Datum:		
•	ne: RpA - Robertsvill					NWI Clas			
-	logic conditions of the					xplain in remarks			
Are vegetation	, soil	or hydrology, or hydrology, or hydrology,		significantly disinaturally proble		Are "normal ci	rcumstances"	Yes	
Are vegetation	, 5011	, Or Hydron		Indicating proble	mauc:		lain any answers in re		
						(	an a	Jilia	
SUMMARY	OF FINDINGS								
Hydrophytic veget	· ·	Yes		Is the Sampled Are	a.				
Hydric soil present		Yes		within a Wetland?		Y	es		
Wetland hydrology	y present?	Yes							
Pomarks: (Evolair	n alternative procedure	es horo or in a sonara	to report )						
Data point for Wet	·	s nere or in a separa	ite report.)						
2 a.a po 101 110									
HYDROLOG	γ								
Wetland Hyd	drology Indicators								
Primary Indicators	(minimum of one is re	equired: check all that	t apply)		Second	arv Indicators (mi	nimum of two require	ed)	
X Surface	-			Aquatic Plants (B14)		Surface Soil C		<u>uj</u>	
	ater Table (A2)	-		gen Sulfide Odor (C1)	<del>-</del>		tated Concave Surfa	ce (B8)	
Saturation	, ,	<del>-</del>		ed Rhizospheres on Livi		Drainage Patte		( -,	
X Water M		_		nce of Reduced Iron (C4					
	nt Deposits (B2)	_		nt Iron Reduction in Tille	· —		ater Table (C2)		
	posits (B3)	-		Muck Surface (C7)	• •	Crayfish Burro			
	at or Crust (B4)	-		(Explain in Remarks)	_		ble on Aerial Imagery	y (C9)	
	posits (B5)	-	<b>—</b>	•	_		essed Plants (D1)	•	
Inundation	on Visible on Aerial Im	agery (B7)				Geomorphic P			
X Water-S	Stained Leaves (B9)				_	Shallow Aquita	ard (D3)		
Aquatic	Fauna (B13)				_	Microtopograp	hic Relief (D4)		
<del></del> _					_>	FAC-Neutral T	est (D5)		
Field Observation									
Surface water pres		X No		Depth (inches):	1-4	Wetland			
Water table prese		No		Depth (inches):	N/A	hydrology			
Saturation present		No	o <u>X</u>	Depth (inches):	N/A	present?	Yes		
(includes capillary	fringe)								
Describe recorded	data (stream gauge i	monitoring well aeris	al nhotos in	revious inspections), if a	available:				
Describe recorded	rdata (stream gauge, i	monitoring well, aeria	ii priotos, pi	revious irispections), ir e	wallable.				
Remarks:									

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP1
		-		Dominance Test Worksheet
T Ott DI-t O: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Quercus palustris	60	Yes	FACW	that are OBL, FACW, or FAC: 4 (A)
2 Acer rubrum	30	Yes	FAC	Total Number of Dominant
3				Species Across all Strata: 6 (B)
4	-			
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 66.67% (A/B)
7				(100 0B2,171017, 011710.
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	90 =	Total Cover		FACW species x 2 =
		10101 00101		FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
				Column totals (A) (B)
2	-			Prevalence Index = B/A =
3				Trevalence index = B/A =
4				
<u> </u>				Hydrophytic Vegetation Indicators:
5				
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide supporting data in Remarks or on a
10				separate sheet)
	=	Total Cover		
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Carex tribuloides	5	Yes	FACW	hydrology must be present, unless
2 Lonicera japonica	3	Yes	FACU	disturbed or problematic
3 Elymus virginicus	3	Yes	FACW	
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				, ,
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	11 =	Total Cover		and woody plants less than 3.28 ft tall.
	-			Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	vines greater triair 5.20 it in neight.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	10	Yes	FACU	
2		100	17.00	
3				
4				
5				Hydrophytic
	10 =	Total Cover		vegetation present? Yes
		i otal Covel		present: 165
Pomarke: (Include photo pumbare have	n a congrete cheet\			
Remarks: (Include photo numbers here or o	ıı a separate sneet)			

SOIL Sampling Point: DP1 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Texture Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 2.5Y 5/1 90 10YR 4/6 10 М С clay 80 10YR 4/6 15 С М 3-8 2.5Y 5/2 clay 5 С Μ 2.5Y 4/3 8-14 2.5Y 5/2 70 5YR 4/6 30 С M clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: 3	3500 Lees Lane Property	/	City/County: L	ouisville/ Jefferson	Sampling D	ate: 1/5	5/2021
Applicant/Owner:	LDG Development, I			State: Kentucky	<b>-</b> · ·	Sampling Point:	DP2
• · · / <u>-</u>	K. Ilnick; J. Evans			Section, Towns	nip, Range:		
Landform (hillslope		berm	Local relief (concave		concave	Slope (%):	0-1
Subregion (LRR or			.187978	Long.: <u>-85.864675</u>		Datum:	
•			ppes (Hydric-by-Inclusion)	// // //	NWI Class		
-		e typical for this time of th	=		(plain in remarks)		
Are vegetation  Are vegetation	, soil , soil	, or hydrology , or hydrology	significantly dist		Are "normal cir present?	cumstances"	Yes
Ale vegetation _	, soii	, or frydrology	naturany problem	Ilduo:	•	ain any answers in	
					(	,	, , , , , , , , , , , , , , , , , , , ,
SUMMARY C	OF FINDINGS						
Hydrophytic vegeta	_	No	Is the Sampled Area	a			
Hydric soil present?	_	No No	within a Wetland?		N	)	
Wetland hydrology	present?	No					
Remarks: (Explain	alternative procedures h	ere or in a separate repo	urt )				
	land data point to Wetlar		11.)				
0.a poa 20 0p.	and data point to 11 ona.						
HYDROLOG	Y						
Wetland Hydr	ology Indicators						
Primary Indicators (	minimum of one is requi	ired; check all that apply)	l	Seconda	arv Indicators (mir	nimum of two require	ed)
-	Vater (A1)		ue Aquatic Plants (B14)		Surface Soil Cr		<del>cu,</del>
	er Table (A2)		drogen Sulfide Odor (C1)	_		tated Concave Surfa	ace (B8)
Saturation			kidized Rhizospheres on Livi	ng Roots (C3)	Drainage Patte		300 (20)
Water Ma			esence of Reduced Iron (C4	- · · · · -	Moss Trim Line		
	Deposits (B2)		ecent Iron Reduction in Tilled			ater Table (C2)	
Drift Depo			in Muck Surface (C7)		Crayfish Burrov		
	or Crust (B4)		her (Explain in Remarks)	_	_	ble on Aerial Image	ry (C9)
Iron Depo		~	TIET (Explain in Remaine)	_	_	essed Plants (D1)	ly (03)
	ก Visible on Aerial Image	on/(R7)		_	Geomorphic Po		
	ained Leaves (B9)	лу (от )		_	Shallow Aquita		
	ained Leaves (B9) auna (B13)			<del>-</del>	Microtopograph		
Aquatic i	aulia (D13)			_	FAC-Neutral Te		
				_		301 (20)	
Field Observations	s:						
Surface water prese	ent? Yes	No	X Depth (inches):	N/A	Wetland		
Water table present	t? Yes	No	X Depth (inches):	N/A	hydrology		
Saturation present?	Yes	No	X Depth (inches):	N/A	present?	No	
(includes capillary f	ringe)						
Describe recorded	data (stream gauge, mor	nitoring well, aerial photo	s, previous inspections), if a	vailable:			
_							
Remarks:							

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ints	Sampling Point: DP2
		-		Dominance Test Worksheet
T Ott DI-t C: (201)	Absolute %	Dominant	Indicator	
<u>Tree Stratum</u> Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Prunus serotina	30	Yes	FACU	that are OBL, FACW, or FAC: 2 (A)
2 Robinia pseudoacacia	20	Yes	FACU	Total Number of Dominant
3 Carpinus caroliniana	20	Yes	FAC	Species Across all Strata: 8 (B)
4 Quercus rubra	20	Yes	FACU	
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 25.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	90 =	Total Cover		FACW speciesx 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Stratum	Cover	Species	Status	UPL species x 5 =
1 Ligustrum vulgare	15	Yes	FACU	Column totals (A) (B)
2 Lonicera maackii	15	Yes	UPL	Prevalence Index = B/A =
3 Rosa multiflora	5	No	FACU	
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0* 4 - Morphological adaptations* (provide
9				supporting data in Remarks or on a
10	35 =	Total Cover		separate sheet)
		Total Cover		
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Lonicera japonica	20	Yes	FACU	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Carex blanda	10	Yes	FAC	disturbed or problematic
3 Elymus virginicus	3	No	FACW	alotalized of problematio
4 Ageratina altissima	3	No	FACU	
5				Definitions of Four Vegetation Strata
6			-	•
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	36 =	Total Cover		and woody plants less than 3.26 it tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
Woody vine ottatam 1 for olze (60)	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? No
Remarks: (Include photo numbers here or o	on a separate sheet)			

SOIL Sampling Point: DP2 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-4 10YR 4/3 100 silt loam 10YR 5/3 4-10 97 10YR 5/6 М С sandy loam 3 10-14 97 М 10YR 4/3 10YR 5/3 С silt loam 3 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: 3500 Lees Lane Pro	City/County: L	ouisville/ Jefferson	Sampling Date: 1/5/2021					
	pplicant/Owner: LDG Development, LLC		State: Kentucky	_	DP3			
Investigator(s): K. Ilnick; J. Evans	ator(s): K. Ilnick; J. Evans		Section, Townsh	ip, Range:				
Landform (hillslope, terrace, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1		
Subregion (LRR or MLRA) LRR	N Lat.: 38.		Long.: -85.865534		Datum:			
Soil Map Unit Name: WeA - Weinba	uch silt loam, 0 to 2 percent slop	pes (Hydric-by-Inclusion)		NWI Classi	fication:			
Are climatic/hydrologic conditions of th	ne site typical for this time of the	e year?	Yes (If no, ex	plain in remarks)				
Are vegetation , soil	, or hydrology	significantly dist		Are "normal circ	umstances"			
Are vegetation , soil	, or hydrology	naturally proble		present?	amounooo	Yes		
<u> </u>	, , , , ,			•	ـ in any answers in i			
					•	•		
SUMMARY OF FINDINGS	;	_						
Hydrophytic vegetation present?	Yes	Is the Sampled Are	а					
Hydric soil present?	Yes	within a Wetland?	-	Yes	<u> </u>			
Wetland hydrology present?	Yes							
I								
Remarks: (Explain alternative procedu	res here or in a separate repor	t.)						
Data point for Wetland 2.								
HYDROLOGY								
Wetland Hydrology Indicators								
	required, sheet, all that apply)		0			1\		
Primary Indicators (minimum of one is		- Ati- DIt- (D44)	Seconda	-	imum of two require	<del>3</del> 0)		
Surface Water (A1)		e Aquatic Plants (B14)		Surface Soil Cra				
High Water Table (A2)		drogen Sulfide Odor (C1)			ated Concave Surfa	ace (B8)		
X Saturation (A3)	Oxi	idized Rhizospheres on Livi	ng Roots (C3)	Drainage Patterns (B10)				
Water Marks (B1)	Pre	esence of Reduced Iron (C4	)	Moss Trim Lines (B16)				
Sediment Deposits (B2)	Re	cent Iron Reduction in Tilled	Soils (C6)	Dry-Season Wa	iter Table (C2)			
Drift Deposits (B3)		n Muck Surface (C7)		Crayfish Burrow				
				_		m. (CO)		
Algal Mat or Crust (B4)	Our	ner (Explain in Remarks)		_	le on Aerial Imager	y (C9)		
Iron Deposits (B5)				_	ssed Plants (D1)			
Inundation Visible on Aerial	imagery (B7)			_Geomorphic Po	sition (D2)			
Water-Stained Leaves (B9)				Shallow Aquitar	d (D3)			
Aquatic Fauna (B13)				Microtopograph	ic Relief (D4)			
<del></del>				FAC-Neutral Te	st (D5)			
Field Observations:								
Surface water present? Ye		X Depth (inches):	N/A	Wetland				
Water table present? Ye	es No	X Depth (inches):	N/A	hydrology				
Saturation present? Ye	es X No	Depth (inches):	6-10	present?	Yes			
(includes capillary fringe)								
Describe recorded data (stream gauge	e, monitoring well, aerial photos	s, previous inspections), if a	vailable:					
I								
Remarks:								
. tomante.								

<b>VEGETATION</b> (Four Strata) -	- Use scientific	names of pla	ints	Sampling Point: DP3
				Dominance Test Worksheet
T Ctt DI-t C (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	85	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
2				Total Number of Dominant
3				Species Across all Strata: 4 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 75.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	85 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Liquidambar styraciflua	15	Yes	FAC	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4	-		-	
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	15 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Cinna arundinacea	20	Yes	FACW	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Glechoma hederacea	10	Yes	FACU	disturbed or problematic
3				'
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
40				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
· ·	30 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	vines - All woody vines greater than 0.20 it in neight.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or c	n a separate sheet)			•
	. ,			

SOIL Sampling Point: DP3 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) Color (moist) 0-3 2.5Y 5/2 90 7.5YR 4/6 10 М silty clay loam С 3-10 90 D М 2.5YR 5/2 2.5Y 6/1 5 silt loam 7.5YR 4/6 5 С Μ 10-14 2.5Y 6/3 90 2.5Y 6/1 5 D M clay 2.5Y 5/6 5 С Μ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): clay Hydric soil present? Yes Depth (inches): 10 Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site:	3500 Lees Lane Property	1	City/County: L	ouisville/ Jefferson	Sampling D	eate: 1/5/2	2021
Applicant/Owner:	LDG Development, I			State: Kentucky		Sampling Point:	DP4
• ' •	K. Ilnick; J. Evans			Section, Townsl	nip, Range:		
Landform (hillslope	· · · · · · · · · · · · · · · · · · ·	terrace	Local relief (concave		none	Slope (%):	0-1
Subregion (LRR or			3.187931	Long.: <u>-85.865525</u>		Datum:	
•	ne: WeA - Weinbach silt			// // //	NWI Class		
-	ogic conditions of the site		=	`	(plain in remarks)		
Are vegetation  Are vegetation	, soil , soil	, or hydrology , or hydrology	significantly dist		Are "normal cir present?	cumstances"	Yes
Ale vogetation	, 3011	, or myaralay	natarany presses	nauo:	•	 lain any answers in re	
						•	,
SUMMARY	OF FINDINGS						
Hydrophytic vegeta	_	No	Is the Sampled Area	a			
Hydric soil present	_	No No	within a Wetland?		N	0	
Wetland hydrology	present?	No No					
Remarks: (Explain	alternative procedures he	ere or in a senarate reno	ort )				
Upland data point	•	sie of iii a separate repo	16.)				
HYDROLOG	i <b>Y</b>						
Wetland Hyd	rology Indicators						
Primary Indicators	(minimum of one is requi	red; check all that apply)	ı	Seconda	arv Indicators (mi	nimum of two required	d)
-	Water (A1)		ue Aquatic Plants (B14)	<del></del>	Surface Soil C	•	<del>-/</del>
	iter Table (A2)		/drogen Sulfide Odor (C1)	_		tated Concave Surfac	ce (B8)
Saturatio			kidized Rhizospheres on Livi	na Roots (C3)	Drainage Patte		20 (= 1)
	arks (B1)		esence of Reduced Iron (C4		Moss Trim Line		
	nt Deposits (B2)		ecent Iron Reduction in Tilled			ater Table (C2)	
	posits (B3)		nin Muck Surface (C7)		Crayfish Burro		
	it or Crust (B4)		ther (Explain in Remarks)	_		ble on Aerial Imagery	/(C9)
	osits (B5)		(Espision ),	_	_	essed Plants (D1)	(00)
	on Visible on Aerial Image	erv (B7)		_	Geomorphic P		
	tained Leaves (B9)	·· <b>y</b> (= · /		_	Shallow Aquita		
	Fauna (B13)			_	Microtopograp		
	,			<u> </u>	FAC-Neutral T		
Field Observation	is:						
Surface water pres	_	No	X Depth (inches):	N/A	Wetland		
Water table preser	_	No	X Depth (inches):	N/A	hydrology		
Saturation present	_	No	X Depth (inches):	N/A	present?	No	
(includes capillary	fringe)						
D "				2.11			
Describe recorded	data (stream gauge, mor	nitoring well, aerial photo	es, previous inspections), if a	vallable:			
Remarks:							
110							

Absolute % Cover  80 20	Dominant Species Yes Yes	Indicator Status FAC FAC	Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)  Total Number of Dominant Species Across all Strata: 7 (B)
80	Yes	FAC	that are OBL, FACW, or FAC: 2 (A)  Total Number of Dominant
			that are OBL, FACW, or FAC: 2 (A)  Total Number of Dominant
20	Yes	FAC	Total Number of Dominant
			oposice / isroce all citata.
			Percent of Dominant Species
			that are OBL, FACW, or FAC: 28.57% (A/B)
			Prevalence Index Worksheet
			Total % Cover of:
			OBL species x 1 =
100 =	Total Cover		FACW species x 2 =
			FAC species x 3 =
Absolute %	Dominant	Indicator	FACU species x 4 =
Cover			UPL species x 5 =
			Column totals (A) (B)
			Prevalence Index = B/A =
			Prevalence index = B/A =
3	Yes	FACU	
			Hydrophytic Vegetation Indicators:
			1 - Rapid test for hydrophytic vegetation
			2 - Dominance test is >50%
			3 - Prevalence index is ≤3.0*
			4 - Morphological adaptations* (provide
			supporting data in Remarks or on a
11 =	Total Cover		separate sheet)
	Total Cover		
			Problematic hydrophytic vegetation*
			(explain)
Cover	Species	Status	*Indicators of hydric soil and wetland
30	Yes	FACU	hydrology must be present, unless
15	Yes	FACU	disturbed or problematic
			Definitions of Four Vegetation Strata
			<b>3</b>
	•		
			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
			breast height (DBH), regardless of height.
			broadt noight (BBH), rogardiodd o'r noight.
			Sapling/shrub - Woody plants less than 3 in. DBH and
			greater than 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of size,
45 =	Total Cover		and woody plants less than 3.28 ft tall.
10	rotal Gover		
AL 1.0/			Woody vines - All woody vines greater than 3.28 ft in height.
Cover	Species	Status	
			Hydrophytic
			vegetation
0 =	Total Cover		present? No
	Absolute % Cover  5 3 3 3  11 =  Absolute % Cover 30 15  45 =  Absolute % Cover	Absolute % Cover Species  5 Yes 3 Yes 3 Yes  11 Total Cover  Absolute % Cover Species  Yes  Total Cover  Absolute % Cover  Total Cover  Dominant Species  Yes  Total Cover  Absolute % Cover  Dominant Species  Yes  Total Cover  Absolute % Cover  Absolute % Cover  Dominant Species	Absolute % Species Status  5 Yes UPL  3 Yes FACU  11 = Total Cover  Absolute % Dominant Species Status  12 Yes FACU  Absolute % Species Status  30 Yes FACU  15 Yes FACU  Absolute % Species Status  45 = Total Cover  Absolute % Species Status  Absolute % FACU  Indicator Status  FACU  FACU  Indicator Status  Indicator Status

VEGETATION (Four Strata) -- Use scientific names of plants

Sampling Point: DP4

SOIL Sampling Point: DP4 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> Color (moist) 0-14 2.5Y 5/3 95 7.5YR 5/6 3 М silty clay loam С 10YR 5/1 2 D М Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Property	/	City/County: L	ouisville/ Jefferson	Sampling Date:	1/5/2	2021
Applicant/Owner:	LDG Development,	LLC		State: Kentucky		ampling Point:	DP5
Investigator(s):	K. Ilnick; J. Evans			Section, Township	o, Range:	_	
Landform (hillslop	oe, terrace, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: 38.	186748	Long.: -85.867014	Da	tum:	
Soil Map Unit Nar	me: WeA - Weinbach si	t loam, 0 to 2 percent slop	pes (Hydric-by-Inclusion)		NWI Classifica	tion:	
Are climatic/hydro	ologic conditions of the site	e typical for this time of the	e year?	Yes (If no, exp	lain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dist	urbed?	Are "normal circum	stances"	
Are vegetation	, soil	, or hydrology	naturally proble		present?	. —	Yes
					(If needed, explain a	any answers in re	:marks)
SUMMARY	OF FINDINGS		_				
Hydrophytic vege	tation present?	No					
Hydric soil preser	-	No	Is the Sampled Area	1	No		
Wetland hydrolog	-	No	within a Wetland?		110		
vvettaria riyarolog	y present:	140					
Remarks: (Explain	n alternative procedures h	ere or in a separate repor	t.)				
	t for Wetlands 2 and 3.	' '	,				
HYDROLOG	ΒY						
Wetland Hyd	drology Indicators						
Primary Indicators	s (minimum of one is requ	ired: check all that anniv)		Socondari	y Indicators (minimu	m of two requires	۹)
-	Water (A1)		ue Aquatic Plants (B14)	Secondary	Surface Soil Crack		<u> </u>
	ater Table (A2)		drogen Sulfide Odor (C1)		Sparsely Vegetated		co (R8)
	ion (A3)		idized Rhizospheres on Livi	ng Poots (C3)	Drainage Patterns		<i>.</i> е (Во)
	Marks (B1)		esence of Reduced Iron (C4		Moss Trim Lines (E		
			·		•	•	
	ent Deposits (B2)		cent Iron Reduction in Tilled		Dry-Season Water		
	posits (B3)		n Muck Surface (C7)		Crayfish Burrows (	•	. (00)
	at or Crust (B4)	Otr	ner (Explain in Remarks)		Saturation Visible of		(C9)
	posits (B5)	(0.7)			Stunted or Stressed		
	ion Visible on Aerial Image	ery (B7)			Geomorphic Position		
	Stained Leaves (B9)				Shallow Aquitard (I	•	
Aquatic	Fauna (B13)				Microtopographic F	. ,	
					FAC-Neutral Test (	(50	
Field Observatio	ons:						
Surface water pre	esent? Yes	No	X Depth (inches):	N/A	Wetland		
Water table prese	-	No No	X Depth (inches):	N/A	hydrology		
Saturation presen	-		X Depth (inches):	N/A	present?	No	
(includes capillary	-		' ` ' _		•		
1							
Describe recorded	d data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if a	vailable:			
Remarks:							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ınts	Sampling Point: DP5
				Dominance Test Worksheet
Trac Stratium Plat Size (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Robinia pseudoacacia	35	Yes	FACU	that are OBL, FACW, or FAC: 3 (A)
2 Acer rubrum	15	Yes	FAC	Total Number of Dominant
3 Fagus grandifolia	15	Yes	FACU	Species Across all Strata: 9 (B)
4 Ulmus rubra	15	Yes	FAC	
5 Celtis occidentalis	10	No	FACU	Percent of Dominant Species
6 Juniperus virginiana	5	No	FACU	that are OBL, FACW, or FAC: 33.33% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	95 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	20	Yes	FACU	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0* 4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	20 =	Total Cover		separate sheet)
		Total Cover		Doobless Air budges but is a set of set
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Microstegium vimineum	50	Yes	FAC	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Lonicera japonica	20	Yes	FACU	disturbed or problematic
3 Rubus allegheniensis	20	Yes	FACU	
4				
5	-			Definitions of Four Vegetation Strata
6				-
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				<b>Herb</b> - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	90 =	Total Cover		and woody plants less than 5.20 it tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
VVOOdy VIIIO Galdani	Cover	Species	Status	
1 Lonicera japonica	30	Yes	FACU	
2				
3				
4				Hydrophytic
5		T		vegetation
	30 =	Total Cover		present? No
Demonico (Ingluido pht	m a comprete -tt\			
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP5 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Texture Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-8 10YR 4/3 80 10YR 3/6 20 М С silty clay loam 8-14 2.5Y 5/4 90 10YR 5/6 10 С М silty clay loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Proper	rty	City/County: L	ouisville/ Jefferson	Sampling Da	ite: 1/5	/2021
Applicant/Owner:	LDG Development	t, LLC		State: Kentucky	•	Sampling Point:	DP6
Investigator(s):	K. Ilnick; J. Evans			Section, Townshi	p, Range:	-	
Landform (hillslop	oe, terrace, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: <u>38</u>	.186436	Long.: -85.867139		Datum:	
Soil Map Unit Nar	me: WeA - Weinbach	silt loam, 0 to 2 percent slo	pes (Hydric-by-Inclusion)		NWI Classi	fication:	
Are climatic/hydro	ologic conditions of the si	te typical for this time of th	e year?	Yes (If no, exp	lain in remarks)	<u></u>	
Are vegetation	, soil	, or hydrology	significantly dist	urbed?	Are "normal circ	:umstances"	
Are vegetation	, soil	, or hydrology	naturally proble	matic?	present?		Yes
					(If needed, expla	in any answers in	remarks)
CLIBABAADV	OF FINDINGS						
SUMMARY	OF FINDINGS		1				
Hydrophytic vege	·	Yes	Is the Sampled Are	a			
Hydric soil preser		Yes	within a Wetland?		Yes	<u> </u>	
Wetland hydrolog	y present?	Yes					
			1				
	•	here or in a separate repo	rt.)				
Data point for We	etland 3.						
	2)/						
HYDROLOG	Ϋ́						
Wetland Hyd	drology Indicators						
Primary Indicators	s (minimum of one is rea	uired; check all that apply)		Secondar	v Indicators (min	imum of two require	ed)
	Water (A1)		ue Aquatic Plants (B14)	Occoridat	Surface Soil Cra		<del>cu)</del>
	ater Table (A2)		drogen Sulfide Odor (C1)	-	-	ated Concave Surfa	aco (B8)
			diogen Suilide Odor (C1) iidized Rhizospheres on Livi	ng Boots (C2)	Drainage Patter		ace (DO)
	ion (A3)		· · · · · · · · · · · · · · · · · · ·		-		
	Marks (B1)		esence of Reduced Iron (C4		Moss Trim Line:		
	ent Deposits (B2)		cent Iron Reduction in Tilled		Dry-Season Wa		
	posits (B3)		in Muck Surface (C7)		Crayfish Burrow		(00)
	at or Crust (B4)	Oti	her (Explain in Remarks)		•	le on Aerial Imagei	ry (C9)
	posits (B5)				•	ssed Plants (D1)	
	ion Visible on Aerial Ima	gery (B7)			Geomorphic Po		
	Stained Leaves (B9)				Shallow Aquitar		
Aquatic	Fauna (B13)				Microtopograph		
					FAC-Neutral Te	st (D5)	
				<u> </u>			
Field Observatio							
Surface water pre		X No	Depth (inches):	0-2	Wetland		
Water table prese	ent? Yes	No	X Depth (inches):	N/A	hydrology		
Saturation presen	nt? Yes	No	X Depth (inches):	N/A	present?	Yes	
(includes capillary	y fringe)						
Describe recorded	d data (stream gauge, m	onitoring well, aerial photo	s, previous inspections), if a	vailable:			
Remarks:							
ĺ							
ĺ							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP6
, ,		-		Dominance Test Worksheet
T 0	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	85	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
2 Fraxinus pennsylvanica	5	No	FACW	Total Number of Dominant
3				Species Across all Strata: 5 (B)
4				(2)
5	-			Devent of Deminant Charles
6	-			Percent of Dominant Species that are OBL, FACW, or FAC: 60.00% (A/B)
7	-			That are OBE, I AGW, OF I AC. (A/B)
8	-			Prevalence Index Worksheet
9	-			Total % Cover of:
10				OBL species x 1 =
	90 =	Total Cover		FACW species x 2 =
		10101 00101		FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Acer rubrum	10	Yes	FAC	Column totals (A) (B)
2		103	1710	Prevalence Index = B/A =
3	-			Trevalence index - DIA -
4	-			
5	-			Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
				<u> </u>
7				X 2 - Dominance test is >50% 3 - Prevalence index is ≤3.0*
8				4 - Morphological adaptations* (provide
				supporting data in Remarks or on a
10	10 =	Total Cover		separate sheet)
		Total Covel		
	Abachuta 0/	Dominant	Indicator	Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status	(explain)
4 Oissa				*Indicators of hydric soil and wetland
1 Cinna arundinacea		Yes	FACW	hydrology must be present, unless
2 Rosa multiflora	5	Yes	FACU	disturbed or problematic
3				
4				Definitions of Four Variation Office
5				Definitions of Four Vegetation Strata
6				
7				
8	-			
9	-			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
10	-			breast height (DBH), regardless of height.
11				
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15		T + + 0		and woody plants less than 3.28 ft tall.
	=	Total Cover		
				<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
	Cover	Species	Status	
1 Lonicera japonica	15	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	=	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			
Ī.				

SOIL Sampling Point: DP6 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) (Inches) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 70 0-14 2.5Y 6/1 10YR 5/8 30 С М clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site: 350	00 Lees Lane Property	,		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/5/	2021
Applicant/Owner:	LDG Development, I	LLC			State: Kentucky		Sampling Point:	DP7
Investigator(s): K. I	llnick; J. Evans				Section, Towns	ship, Range:		
Landform (hillslope, te	errace, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or MI			38.1850	)1	Long.: -85.86881		Datum:	
•		loam, 0 to 2 percent sl	_			NWI Clas		
Are climatic/hydrologic	c conditions of the site	typical for this time of	the yea			explain in remarks	)	
Are vegetation	, soil	, or hydrology	_	significantly dist		Are "normal c	rcumstances"	
Are vegetation	, soil	, or hydrology	_	naturally probler	natic?	present?		Yes
						(If needed, exp	olain any answers in re	emarks)
SUMMARY OF	EINDINGS							
SUMMART OF	· FINDINGS		$\overline{}$					
	10							
Hydrophytic vegetation	n present?	Yes		Is the Sampled Area	3			
Hydric soil present?	-	No No		within a Wetland?		<u></u>	lo	
Wetland hydrology pre	esent?	No						
5 . (5		·	<u> </u>					
	· · · · · · · · · · · · · · · · · · ·	ere or in a separate rep	ort.)					
Upland data point to V	Netland 3.							
HYDROLOGY								
Wetland Hydrole	ogy Indicators							
Driman Indiantara (m.	inimatum of one is requi	radi abadi all that anni	1. ()		0			1\
		red; check all that appl		5: (244)	Second		inimum of two require	;d)
Surface Wa	, ,			quatic Plants (B14)	_	Surface Soil C		
High Water			-	en Sulfide Odor (C1)	_		etated Concave Surfa	ce (B8)
Saturation (	•			ed Rhizospheres on Livi	_	Drainage Patt		
Water Mark	s (B1)	F	<sup>o</sup> resen	ce of Reduced Iron (C4	_	Moss Trim Lir	es (B16)	
Sediment D	eposits (B2)	F	Recent	Iron Reduction in Tilled	Soils (C6)	Dry-Season V	/ater Table (C2)	
Drift Deposi	ts (B3)	7	Γhin Μι	uck Surface (C7)	_	Crayfish Burro	ows (C8)	
Algal Mat or	Crust (B4)		Other (	Explain in Remarks)	_	Saturation Vis	ible on Aerial Imagery	y (C9)
Iron Deposit	ts (B5)			•	_	Stunted or Str	essed Plants (D1)	
	Visible on Aerial Image	ery (B7)			_	Geomorphic F		
	ned Leaves (B9)				_	Shallow Aquit		
Aquatic Fau							ohic Relief (D4)	
<u> </u>					_	FAC-Neutral		
					_	_	( -,	
Field Observations:								
Surface water present	t? Yes	No	Х	Depth (inches):	N/A			
Water table present?	Yes	No _	X	Depth (inches):	N/A	Wetland		
=	-			_ ' ' -		hydrology	No	
Saturation present?	Yes _	No	Х	Depth (inches):	N/A	present?	<u>No</u>	
(includes capillary frin	ge)							
					<u> </u>			
Describe recorded da	ta (stream gauge, mor	nitoring well, aerial pho	tos, pre	evious inspections), if a	vailable:			
I								
I								
Remarks:	_	_	_	<del></del>	_		_	<del></del>

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ınts	Sampling Point: DP7
		-		Dominance Test Worksheet
T Ott DI-t O: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Liquidambar styraciflua	80	Yes	FAC	that are OBL, FACW, or FAC: 4 (A)
2 Acer rubrum	20	Yes	FAC	Total Number of Dominant
3				Species Across all Strata: 7 (B)
4	-			``
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 57.14% (A/B)
7				(*=/
8				Prevalence Index Worksheet
9				Total % Cover of:
10	-			OBL species x 1 =
	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Lindera benzoin	30	Yes	FAC	Column totals (A) (B)
2 Rosa multiflora	20	Yes	FACU	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7	-			X 2 - Dominance test is >50%
8	-			3 - Prevalence index is ≤3.0*
9	-			4 - Morphological adaptations* (provide
10	-		-	supporting data in Remarks or on a
	50 =	Total Cover		separate sheet)
		10101 00101		Drahlamatia hydranhytia vagatatian*
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Lonicera japonica	30	Yes	FACU	*Indicators of hydric soil and wetland
2 Microstegium vimineum	15	Yes	FAC	hydrology must be present, unless disturbed or problematic
3 Rubus allegheniensis	5	No	FACU	distarbed of problematic
4			17.00	
5				Definitions of Four Vegetation Strata
6				Sommons of Four Togotation Strata
7				
8				
9	-			
10	-			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
				breast height (DBH), regardless of height.
12				C. Poster W. L. L. H. O. BRILL
12				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 3.20 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of size,
15	50 =	Total Cover		and woody plants less than 3.28 ft tall.
		Total Covel		
	Abaalut- 0/	Domine-+	Indicat	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status	
1 Laniagra ignamica			FACU	
1 Lonicera japonica	50	Yes	FACU	
2				
3				
4				Hydrophytic
5		Total Caver		vegetation
	50 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a congrata chaot\			
Incinarios. (include prioto numbers nere or o	n a scharate sileet)			

SOIL Sampling Point: DP7 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-6 10YR 5/3 95 10YR 5/8 5 М silt loam С 6-14 2.5Y 6/3 85 2.5Y 7/6 15 С М silty clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site: 3	3500 Lees Lane Propert	у	City/County:	Louisville/ Jefferson	Sampling Date:	1/5/2	021		
Applicant/Owner:	LDG Development,	LLC		State: Kentucky	_	pling Point:	DP8		
Investigator(s): K	K. Ilnick; J. Evans			Section, Townsh	ip, Range:				
Landform (hillslope,	, terrace, etc.):	depression	Local relief (concav	e, convex, none):	concave	Slope (%):	0-1		
Subregion (LRR or	MLRA) LRR N	Lat.: 38.	187133	Long.: -85.864189	Datur	n:			
Soil Map Unit Name	e: RoA - Robertsville s	silt loam, 0 to 2 percent slo	pes (Hydric)		NWI Classification	n:			
Are climatic/hydrolo	gic conditions of the sit	e typical for this time of the	e year?	Yes (If no, ex	plain in remarks)				
Are vegetation	, soil	, or hydrology	significantly dis	sturbed?	Are "normal circumsta	ances"			
Are vegetation	, soil	, or hydrology	naturally proble	ematic?	present?	_	Yes		
					(If needed, explain any	/ answers in re	marks)		
CUMMADY C	SE EINDINGS								
SUMMARY C	JF FINDINGS		1						
I bd	··	V							
Hydrophytic vegetat		Yes	Is the Sampled Are	ea					
Hydric soil present?		Yes	within a Wetland?		Yes				
Wetland hydrology	present?	Yes							
D / / E / ·	10 00 1 1		1)						
	•	nere or in a separate repor	•						
Data point to wella	nd 4. Data point taken	near portion of wetaind 4	that is an old man-made p	ona.					
LIVEROL OO	v								
HYDROLOG									
Wetland Hydr	ology Indicators								
Primary Indicators (	minimum of one is requ	ired; check all that apply)		Seconda	ry Indicators (minimum	of two required	1)		
X Surface W	Vater (A1)	Tru	e Aquatic Plants (B14)		Surface Soil Cracks (	B6)			
High Wate	er Table (A2)	X Hy	drogen Sulfide Odor (C1)	X	Sparsely Vegetated C	oncave Surfac	e (B8)		
Saturation	n (A3)	—— Oxi	dized Rhizospheres on Liv	ring Roots (C3)	Drainage Patterns (B	10)			
Water Ma	, ,		sence of Reduced Iron (C	- · · · · -	Moss Trim Lines (B16	•			
	Deposits (B2)		cent Iron Reduction in Tille		— Dry-Season Water Ta	•			
Drift Depo			n Muck Surface (C7)		Crayfish Burrows (C8				
	or Crust (B4)		ner (Explain in Remarks)		Saturation Visible on		(C9)		
Iron Depo		<del>_</del> -	(	_	Stunted or Stressed F		()		
	n Visible on Aerial Imag	erv (B7)		X	Geomorphic Position	, ,			
	ained Leaves (B9)	o., (2.)			Shallow Aquitard (D3)	. ,			
	auna (B13)								
	dulia (B 10)				Microtopographic Relief (D4) FAC-Neutral Test (D5)				
					-1710-1404141 1031 (D0	,			
Field Observations	 s:								
Surface water prese		X No	Depth (inches):	1-3					
Water table present		No No	X Depth (inches):	N/A	Wetland				
-					hydrology present?	Voo			
Saturation present? (includes capillary fr		NO	X Depth (inches):	N/A	present?	Yes			
(includes capillary ii	ilige)								
Describe recorded a	data (atroom gougo, me	unitaring wall, parial photos	s, previous inspections), if	ovoiloblo:					
Describe recorded (	Jala (Siream gauge, mo	oriitoring well, aerial priotos	s, previous inspections), in	avaliable.					
Damarka									
Remarks:									

				Dominance Test Worksheet
<u>Tree Stratum</u> Plot Size (30')	Absolute %	Dominant	Indicator	
1 Ulmus rubra	Cover 20	Species Yes	Status FAC	Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
2			1710	
3				Total Number of Dominant Species Across all Strata: 2 (B)
4				(-/
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:  OBL species x 1 =
10	20 =	Total Cover		OBL species x 1 = FACW species x 2 =
		Total Cover		FAC species x 3 =
Sapling/Shrub BL 4.6: (451)	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1				Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a separate sheet)
	0 =	Total Cover		
	Absolute 0/	Dominant	Indicator	Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status	(explain)
1 Microstegium vimineum	5	Yes	FAC	*Indicators of hydric soil and wetland
2		163	170	hydrology must be present, unless disturbed or problematic
3				distance of problematio
4				
5				Definitions of Four Vegetation Strata
6				, and the second
7				
8				
9				
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				breast height (DDF1), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15		<del></del>		and woody plants less than 3.28 ft tall.
	=	Total Cover		
	Absolute %	Dominant	Indicator	Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3		-	-	
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or on a	a separate sheet)			

VEGETATION (Four Strata) -- Use scientific names of plants

SOIL Sampling Point: DP8 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 2.5Y 4/2 90 5YR 4/4 10 М С silty clay loam 85 5YR 4/4 10 С М 3-5 2.5Y 4/1 silty clay loam 5YR 5/6 5 С Μ 5-14 2.5Y 5/2 70 5YR 4/6 15 С M clay 5YR 5/6 10 С Μ 2.5Y 4/1 5 D Μ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) X Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site: 35	500 Lees Lane Property	1		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/5/2	2021
Applicant/Owner:	LDG Development, I	LLC			State: Kentucky		Sampling Point:	DP9
Investigator(s): K.	. Ilnick; J. Evans				Section, Towns	ship, Range:		
Landform (hillslope,	terrace, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or N			38.1869		Long.: -85.86419		Datum:	
•	: RoA - Robertsville s					NWI Clas		
Are climatic/hydrolog	gic conditions of the site	typical for this time of	f the yea			explain in remarks	<b>,</b> )	
Are vegetation	, soil	, or hydrology	_	significantly dist		Are "normal c	rcumstances"	
Are vegetation	, soil	, or hydrology	_	naturally proble	natic?	present?	<del>.</del>	Yes
						(If needed, exp	olain any answers in re	marks)
SUMMARY O	E EINDINGS							
SUMMARTO	r FINDINGS							
	10							
Hydrophytic vegetati	on present?	No No		Is the Sampled Area	1			
Hydric soil present?	-	No No		within a Wetland?			No	
Wetland hydrology p	resent?	No						
		<del> </del>						
	Ilternative procedures he	ere or in a separate re	eport.)					
Upland data point to	Wetland 4.							
	_							
HYDROLOGY	<u> </u>							
Wetland Hydro	ology Indicators							
Drimon, Indicators (n	minimum of and is requi	ired, about all that any	als A		0		:-:	٦١/
	minimum of one is requi				Second	-	inimum of two required	<u>a)</u>
Surface W	` ,			quatic Plants (B14)	_	Surface Soil C		
	er Table (A2)			en Sulfide Odor (C1)	_		etated Concave Surfac	ce (B8)
Saturation	(A3)		Oxidize	d Rhizospheres on Livi	ng Roots (C3)	Drainage Patt	erns (B10)	
Water Mar	ks (B1)		Presen	ce of Reduced Iron (C4		Moss Trim Lin	es (B16)	
Sediment I	Deposits (B2)		Recent	Iron Reduction in Tilled	Soils (C6)	Dry-Season W	Vater Table (C2)	
Drift Depos	sits (B3)		Thin Mu	uck Surface (C7)		Crayfish Burro	ws (C8)	
Algal Mat o	or Crust (B4)		Other (I	Explain in Remarks)	_	Saturation Vis	sible on Aerial Imagery	(C9)
Iron Depos	sits (B5)					Stunted or Str	essed Plants (D1)	
Inundation	Visible on Aerial Image	ery (B7)				Geomorphic F	osition (D2)	
Water-Stai	ined Leaves (B9)					Shallow Aquit	ard (D3)	
Aquatic Fa					-		ohic Relief (D4)	
	(= 12)				_	FAC-Neutral		
					_		()	
Field Observations	<del></del>							
Surface water preser		No	Х	Depth (inches):	N/A			
Water table present?	_	No No	X	Depth (inches):	N/A	Wetland		
Saturation present?	Yes		X		N/A	hydrology	No	
(includes capillary fri	_	No	^	Depth (inches):	IN/A	present?	No	
(includes capillary in	rige)							
D " 1.1.1		26 2 10 2 1 1			21.11			
Describe recorded d	ata (stream gauge, mor	illoring well, aerial pri	otos, pre	evious inspections), ii a	valiable.			
Remarks:								
Ī								

<u>Tree Stratum</u> Plot Size (30')	Absolute %	Dominant	Indicator	
Tiee Stratum Fiot Size (50)	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	40	Yes	FAC	that are OBL, FACW, or FAC: 2 (A)
2 Prunus serotina	20	Yes	FACU	Total Number of Dominant
3 Liriodendron tulipifera	10	No	FACU	Species Across all Strata: 6 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 33.33% (A/B)
7				(*==)
8				Prevalence Index Worksheet
9			-	Total % Cover of:
10				OBL species x 1 =
10	70 =	Total Cover		
		Total Cover		· — —
0 1: (0) 1	A1 1 0/	5	1 2 4	FAC species x 3 =
Sapling/Shrub Stratum Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status	FACU speciesx 4 =
				UPL species x 5 =
1 Rosa multiflora	10	Yes	FACU	Column totals (A) (B)
2 Celtis occidentalis	10	Yes	FACU	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	20 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Microstegium vimineum	70	Yes	FAC	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Lonicera japonica	10	No	FACU	disturbed or problematic
3			17100	distance of problematio
4			•	
5				Definitions of Four Vegetation Strata
<u> </u>				Definitions of Four Vegetation Strata
6				
7				
8				
9				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
10				breast height (DBH), regardless of height.
11				broadt Holght (BB11), rogal aloco of Holght.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	80 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	Woody vines - All woody vines greater than 3.20 it in neight.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	25	Yes	FACU	
		163	TACO	
2				
3			-	
4				Hydrophytic
_				vegetation
5	25 =	Total Cover		present? No

VEGETATION (Four Strata) -- Use scientific names of plants

SOIL Sampling Point: DP9 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-4 2.5Y 4/3 97 10YR 5/6 3 М silty clay С 4-10 90 10YR 5/6 С М 2.5Y 5/3 5 silt loam 5 С Μ 2.5Y 6/4 10-14 2.5Y 5/3 75 2.5Y 6/6 25 С M clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Pro	perty		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/6/2	2021
Applicant/Owner:	LDG Developm	·		_ · · ·	State: Kentucky	<u> </u>	Sampling Point:	DP10
Investigator(s):	K. Ilnick; J. Evans				Section, Townsh	nip, Range:		
Landform (hillslop	_	terrac		Local relief (concave		none	Slope (%):	0-1
Subregion (LRR o	· ·		Lat.: 38.186	5722	Long.: <u>-85.864173</u>		Datum:	
•	me: ScA - Sciotoville		· · · · · ·		// // //	NWI Clas		
-	ologic conditions of the		-		·	cplain in remarks		
Are vegetation	, soil		ydrology ydrology	significantly dist naturally problei		Are "normal ci present?	rcumstances"	Yes
Are vegetation	, soii	, OI 113	/droiogy	Indicionally problem	matic :	•	lain any answers in re	
						(1	10111 a.r., a.r.	Jiliao,
SUMMARY	OF FINDINGS	i .						
Hydrophytic veget	•	Yes		Is the Sampled Area	а			
Hydric soil presen		Yes		within a Wetland?		Y	es	
Wetland hydrolog	y present?	Yes						
Domarke: (Evolair	n alternative precedu	ros horo or in a sc	parate report \					
Data point for We	n alternative procedur tland 4	les here or in a se	:parate report.)					
Data point for vvc	uana 4							
HYDROLOG	3Y							
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is	required: check al	II that apply)		Seconda	ery Indicators (m	inimum of two require	2d)
-	Water (A1)	10441104, 555		Aquatic Plants (B14)		Surface Soil C	•	<u>u)</u>
	ater Table (A2)			gen Sulfide Odor (C1)			etated Concave Surfa	ice (B8)
X Saturation	, ,			ed Rhizospheres on Livi	na Roots (C3)	Drainage Patt		00 (20)
	Marks (B1)			nce of Reduced Iron (C4		Moss Trim Lin		
	nt Deposits (B2)			it Iron Reduction in Tilled	-	_	/ater Table (C2)	
	posits (B3)			Muck Surface (C7)		Crayfish Burro		
	at or Crust (B4)			(Explain in Remarks)			ible on Aerial Imagery	v (C9)
	posits (B5)			(=/,		_	essed Plants (D1)	, (==,
	ion Visible on Aerial I	magery (B7)			•	Geomorphic F		
	Stained Leaves (B9)					Shallow Aquita		
	Fauna (B13)						hic Relief (D4)	
					X	FAC-Neutral 1	est (D5)	
						_		
Field Observation	ns:							
Surface water pre			No X	Depth (inches):	N/A	Wetland		
Water table prese			No X	Depth (inches):	N/A	hydrology		
Saturation presen		s X	No	Depth (inches):	3-10	present?	Yes	
(includes capillary	rfringe)							
Dogoribo rogordos	d data (atroom gauge	monitoring wall	agrical photograp	revious inspections), if a	wailable:			
Describe recorded	ı dala (siream gauge	, monitoring well,	aeriai priotos, pi	revious irispections), ir a	valiable.			
Remarks:								

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ınts	Sampling Point: DP10
		-		Dominance Test Worksheet
Trop Stratuma Diet Size (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	50	Yes	FAC	that are OBL, FACW, or FAC: 6 (A)
2 Quercus palustris	30	Yes	FACW	Total Number of Dominant
3 Liquidambar styraciflua	20	Yes	FAC	Species Across all Strata: 7 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 85.71% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Stratum	Cover	Species	Status	UPL species x 5 =
1 Acer rubrum	15	Yes	FAC	Column totals (A) (B)
2 Liquidambar styraciflua	15	Yes	FAC	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide supporting data in Remarks or on a
10		T		separate sheet)
	30 =	Total Cover		
	A L L . 4 - 0/	Di	III	Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status	(explain)
1 Cinna arundinacea	30	Yes	FACW	*Indicators of hydric soil and wetland
2 Lonicera japonica	7	No	FACU	hydrology must be present, unless disturbed or problematic
3	<u> </u>			alotal sou of prosioniatio
4	-			
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				<b>Herb</b> - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	37 =	Total Cover		and woody plants less than 3.26 it tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
woody vine Stratum 1 lot Size (50)	Cover	Species	Status	
1 Lonicera japonica	5	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	=	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP10 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 2.5Y 5/2 90 7.5YR 4/6 10 М silty clay С 3-10 90 7.5YR 4/6 С М 2.5Y 5/2 5 silty clay 2.5Y 6/6 5 С Μ 10-14 2.5Y 6/2 70 7.5YR 6/8 30 С M clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): clay Hydric soil present? Yes Depth (inches): 10 Remarks:

Project/Site:	3500 Lees Lane Prop	perty		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/6/2	2021
Applicant/Owner:	LDG Developme	-			State: Kentucky	<u> </u>	Sampling Point:	DP11
Investigator(s):	K. Ilnick; J. Evans				Section, Townsh	nip, Range:		
Landform (hillslop		terrace		Local relief (concave		none	Slope (%):	0-1
Subregion (LRR o	· ·		Lat.: 38.185	498	Long.: <u>-85.863937</u>		Datum:	
•	me: OtA - Otwood sil	•	· ·		// // //	NWI Clas		
-	ologic conditions of the	= -	-		·	cplain in remarks	•	
Are vegetation	, soil	, or hydr		significantly dist		Are "normal c	rcumstances"	Yes
Are vegetation	, soil	, or hydr		naturally proble	matter	present? (If needed, ext	olain any answers in re	
						(	nam any anti-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SUMMARY	OF FINDINGS							
Hydrophytic veget	•	Yes		Is the Sampled Area	а			
Hydric soil presen		No No		within a Wetland?			No	
Wetland hydrolog	y present?	Yes						
Remarks: (Explain	n alternative procedure	es here or in a sena	erate report )					
Upland data point	· ·	to licite of ill a sope	liate report.					
HYDROLOG								
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is re	equired; check all th	hat apply)		Seconda	ary Indicators (m	inimum of two require	d)
-	Water (A1)			quatic Plants (B14)		Surface Soil C	·	<del>,</del>
	ater Table (A2)			gen Sulfide Odor (C1)			etated Concave Surfac	ce (B8)
X Saturation	on (A3)		Oxidize	ed Rhizospheres on Livi	ng Roots (C3)	Drainage Patt	erns (B10)	
Water M	Marks (B1)		Preser	nce of Reduced Iron (C4	)	Moss Trim Lir	ies (B16)	
Sedime	nt Deposits (B2)		Recen	t Iron Reduction in Tilled	Soils (C6)		Vater Table (C2)	
Drift De	posits (B3)		Thin M	luck Surface (C7)		Crayfish Burro	ows (C8)	
Algal Ma	at or Crust (B4)		Other (	(Explain in Remarks)	_	Saturation Vis	ible on Aerial Imagery	(C9)
Iron Dep	posits (B5)				_	Stunted or Str	ressed Plants (D1)	
	ion Visible on Aerial Im	nagery (B7)				Geomorphic F		
	Stained Leaves (B9)					Shallow Aquit		
Aquatic	Fauna (B13)						ohic Relief (D4)	
					_	FAC-Neutral	est (D5)	
Field Observation								
Surface water pre			No X	Depth (inches):	N/A			
Water table prese			No X	Depth (inches):	N/A	Wetland		
Saturation presen			No X	Depth (inches):	12-14	hydrology present?	Yes	
(includes capillary					12-1-	process.	1.00	
(	9-/							
Describe recorded	d data (stream gauge,	monitoring well, ae	rial photos, pr	revious inspections), if a	vailable:			
Remarks:								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	nts	Sampling Point: DP11
, ,		-		Dominance Test Worksheet
T 0: / D: / (00)	Absolute %	Dominant	Indicator	
<u>Tree Stratum</u> Plot Size (30')	Cover	Species	Status	Number of Deminent Species
1 Acer rubrum	60	Yes	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)
	20	Yes	FAC	`
				Total Number of Dominant
3 Celtis occidentalis	15	No	FACU	Species Across all Strata: 7 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 57.14% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	95 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
				· — — — — —
1 Liquidambar styraciflua	30	Yes	FAC	Column totals (A) (B)
2 Rosa multiflora	20	Yes	FACU	Prevalence Index = B/A =
3 Fagus grandifolia	10	No	FACU	
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	60 =	Total Cover		separate sheet)
		Total Covel		
		<b>5</b>		Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Lonicera japonica	15	Yes	FACU	hydrology must be present, unless
2 Microstegium vimineum	12	Yes	FAC	disturbed or problematic
3				
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
10				breast height (DBH), regardless of height.
11				
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	27 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	The state of the s
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	12	Yes	FACU	
2	12	163	1700	
3				
4				Hydrophytic
5				vegetation
	=	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	on a separate sheet)			
	,			

SOIL Sampling Point: DP11 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-3 10YR 4/3 92 5YR 4/6 5 М silt loam С 10YR 5/6 С М 3 10YR 5/3 М 3-14 90 10YR 5/8 10 С silty clay loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay No Depth (inches): 14 Remarks:

Project/Site:	3500 Lees Lane Propert	ty	City/County: I	Louisville/ Jefferson	Sampling D	Date: 1/	/6/2021
Applicant/Owner:	LDG Development,	•		State: Kentucky		Sampling Point	
Investigator(s):	K. Ilnick; J. Evans			Section, Townshi	p, Range:		
Landform (hillslope	e, terrace, etc.):	terrace	Local relief (concave	e, convex, none):	none	Slope (%):	: 0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: 38.	.186917	Long.: -85.862056		Datum:	
-		It loam, 0 to 2 percent slop			NWI Class		
	=	te typical for this time of the	-		olain in remarks)	)	
Are vegetation	, soil	, or hydrology	significantly dist		Are "normal cir	rcumstances"	
Are vegetation	, soil	, or hydrology	naturally proble	matic?	present?	l ' enauroro ir	Yes
					(It needed, exp	lain any answers ir	ı remarks)
SUMMARY	OF FINDINGS		•				
		V					
Hydrophytic vegeta		Yes	Is the Sampled Are	a	V		
Hydric soil present		Yes	within a Wetland?		Ye	<u> </u>	
Wetland hydrology	y present?	Yes					
Remarks: (Explain	alternative procedures h	here or in a separate repor	ort \				
Data point to Wetl	•	IEIE UI III a separato repor	i.)				
Data point to 115	and 7.						
HYDROLOG	eY .						
Wetland Hyd	drology Indicators						
Primary Indicators	(minimum of one is requ	uired; check all that apply)		Secondar	y Indicators (mi	nimum of two requ	ired)
X Surface			ue Aquatic Plants (B14)		Surface Soil C		
	ater Table (A2)		drogen Sulfide Odor (C1)	-	_	etated Concave Su	rface (B8)
Saturatio			kidized Rhizospheres on Livi	ing Roots (C3)	Drainage Patte		,
X Water M			esence of Reduced Iron (C4	· · · · · · · · · · · · · · · · · · ·	Moss Trim Line		
	nt Deposits (B2)		ecent Iron Reduction in Tilled	· -	_	/ater Table (C2)	
	posits (B3)		in Muck Surface (C7)		Crayfish Burro		
	at or Crust (B4)		her (Explain in Remarks)		-	ible on Aerial Imag	erv (C9)
	posits (B5)	<del>_</del> -	Tor (Explain in Comaine,		_	essed Plants (D1)	cry (SS)
	on Visible on Aerial Imag	ion/(R7)			Geomorphic P		
	Stained Leaves (B9)	ery (br)			Shallow Aquita		
	Fauna (B13)				Microtopograp		
	radia (D.10)			X	FAC-Neutral T		
					1710-110	est (DC)	
Field Observation	ns:						
Surface water pres	sent? Yes	X No	Depth (inches):	1-3	Wetland		
Water table prese	ent? Yes	No	X Depth (inches):	N/A	hydrology		
Saturation present	t? Yes	No	X Depth (inches):	N/A	present?	Yes	
includes capillary							
Describe recorded	d data (stream gauge, mo	onitoring well, aerial photos	s, previous inspections), if a	available:	_	_	_
Remarks:							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ints	Sampling Point: DP12
		-		Dominance Test Worksheet
T Ott DI-t Oi (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	75	Yes	FAC	that are OBL, FACW, or FAC: 4 (A)
2 Fraxinus pennsylvanica	20	Yes	FACW	Total Number of Dominant
3			171011	Species Across all Strata: 4 (B)
4				Opecies Across all Ottata.
5				
				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				Decorded as Index Westerhead
8				Prevalence Index Worksheet
9				Total % Cover of:
10		<del></del>		OBL species x 1 =
	95 =	Total Cover		FACW species x 2 =
0 11 101 1		<b>5</b>		FAC speciesx 3 =
Sapling/Shrub Stratum Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
	Cover	Species	Status	UPL species x 5 =
1 Acer rubrum	10	Yes	FAC	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
_	10 =	Total Cover		separate sheet)
	·			Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
riot oize (5)	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Carex tribuloides	5	Yes	FACW	hydrology must be present, unless
2				disturbed or problematic
3				
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
				Carling/abouth Wasdy plants less than 2 in DRI and
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 5.20 ft (1 fm) tail.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	5 =	Total Cover		and woody plants less than 3.28 ft tall.
		Total Gover		March 1 2 2 4 1 2 2 2 4 1 2 2 2 4 1 2 2 2 4 1 2 2 4 1 2 4 1 2 2 2 4 1 2
	Absolute %	Daminant	Indicator	Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Dominant Species	Indicator Status	
1		Ороское	Claraco	
1	-			
3				
4				
5				Hydrophytic
3	0 =	Total Cover		vegetation
		Total Cover		present? Yes
Remarks: (Include photo numbers here or c	in a senarata shoot\			
nternants, (include prioto numbers here of c	ni a separate sneet)			

SOIL Sampling Point: DP12 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 2.5Y 4/1 75 5YR 4/6 20 М silty clay loam С 2.5Y 5/2 D М 5 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site: 3	3500 Lees Lane Proper	ty	City/County: L	ouisville/ Jefferson	Sampling Date:	1/6/2	2021
Applicant/Owner:	LDG Development	LLC		State: Kentucky	<u> </u>	Sampling Point:	DP13
Investigator(s):	K. Ilnick; J. Evans			Section, Townshi	ip, Range:		
Landform (hillslope,	, terrace, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or			8.186619	Long.: -85.861932		atum:	
•		t loam, 0 to 2 percent sl			NWI Classifica	ation:	
Are climatic/hydrolo	gic conditions of the sit	e typical for this time of		`	olain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dist		Are "normal circun	ıstances"	
Are vegetation _	, soil	, or hydrology	naturally probler	natic?	present?	. –	Yes
					(If needed, explain	any answers in re	∍marks)
SUMMARY	OF FINDINGS						
	or rindings		Ī				
Hydrophytic vegeta	tion present?	Yes					
Hydric soil present?	•	No	Is the Sampled Area	1	No		
Wetland hydrology		No	within a Wetland?				
, 3,	'						
Remarks: (Explain	alternative procedures	nere or in a separate rep	ort.)				
Upland data point to	o Wetland 4.		,				
HYDROLOG	<u>Y                                    </u>						
Wetland Hydr	ology Indicators						
Primary Indicators (	minimum of one is requ	ired; check all that appl	y)	Secondar	ry Indicators (minimo	um of two require	d)
Surface V	Vater (A1)	T	rue Aquatic Plants (B14)		Surface Soil Crack		<del></del>
	er Table (A2)		lydrogen Sulfide Odor (C1)		<ul> <li>Sparsely Vegetate</li> </ul>		ce (B8)
Saturation			Oxidized Rhizospheres on Livi	ng Roots (C3)	Drainage Patterns		,
Water Ma			Presence of Reduced Iron (C4		Moss Trim Lines (I		
Sediment	Deposits (B2)	—F	Recent Iron Reduction in Tilled	Soils (C6)	Dry-Season Water	Table (C2)	
Drift Depo	osits (B3)		hin Muck Surface (C7)		Crayfish Burrows (	C8)	
Algal Mat	or Crust (B4)	—	Other (Explain in Remarks)		Saturation Visible	on Aerial Imagery	/(C9)
Iron Depo		_	, ,		Stunted or Stresse		. ,
	n Visible on Aerial Imag	ery (B7)			- Geomorphic Positi		
Water-Sta	ained Leaves (B9)				Shallow Aquitard (	D3)	
Aquatic F	auna (B13)				Microtopographic F	Relief (D4)	
<u> </u>					FAC-Neutral Test	(D5)	
					_		
Field Observations	s:						
Surface water prese	ent? Yes	No	X Depth (inches):	N/A	Wetland		
Water table present	t? Yes	No	X Depth (inches):	N/A	hydrology		
Saturation present?	Yes	No	X Depth (inches):	N/A	present?	No	
(includes capillary fi	ringe)						
Describe recorded of	data (stream gauge, mo	onitoring well, aerial pho	tos, previous inspections), if a	vailable:			
Remarks:							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ınts	Sampling Point: DP13
		-		Dominance Test Worksheet
Tree Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	55	Yes	FAC	that are OBL, FACW, or FAC: 4 (A)
2 Liquidambar styraciflua	25	Yes	FAC	Total Number of Dominant
3 Liriodendron tulipifera	15	No	FACU	Species Across all Strata: 7 (B)
4				``
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 57.14% (A/B)
7	-		-	(110)
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
10	95 =	Total Cover		· — —
		Total Covel		FACW species x 2 = FAC species x 3 =
Capling/Charth	Abaaluta 0/	Daminant	Indicator	· — —
Sapling/Shrub Stratum Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status	FACU species x 4 =
<u> </u>				UPL species x 5 =(D)
1 Acer rubrum	15	Yes	FAC	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	15 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Lonicera japonica	5	Yes	FACU	*Indicators of hydric soil and wetland
2 Allium vineale	3	Yes	FACU	hydrology must be present, unless disturbed or problematic
	2		FACO	disturbed of problematic
3 Viola sororia		Yes	FAC	
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				breast neight (DBH), regardless of neight.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				, ,
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	10 =	Total Cover		and woody plants less than 3.28 ft tall.
		10101 00101		Manakasina Allasankasina manakaskas 2 20 ft in bainb
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute % Cover	Species	Status	
<b>.</b>				
1 Lonicera japonica	10	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	10 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			
	,			

SOIL Sampling Point: DP13 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-8 10YR 3/4 100 silt loam 8-14 10YR 5/6 90 10YR 4/3 D М 10 silty clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site: 3500 Le	ees Lane Property	,	City/County: I	ouisville/ Jefferson	Sampling D	Date: 1/6/2	2021
	OG Development, I	LLC		State: Kentucky	_	Sampling Point:	DP14
Investigator(s): K. Ilnick	k; J. Evans			Section, Towns	hip, Range:	_	
Landform (hillslope, terrac	e, etc.):	depression	Local relief (concave	e, convex, none):	concave	Slope (%):	0-1
Subregion (LRR or MLRA	) LRR N	Lat.: <u>3</u>	8.187297	Long.: -85.864806		Datum:	
Soil Map Unit Name: W	eA - Weinbach sil	t loam, 0 to 2 percent s	lopes (Hydric-by-Inclusion)		NWI Class	sification:	
Are climatic/hydrologic co	nditions of the site	typical for this time of	the year?	Yes (If no, e	xplain in remarks	)	
Are vegetation	, soil	, or hydrology	significantly dis	turbed?	Are "normal ci	cumstances"	
Are vegetation	, soil	, or hydrology	naturally proble	matic?	present?	_	Yes
					(If needed, exp	lain any answers in re	emarks)
SUMMARY OF FI	MDINGS						
SUMMART OF FI	INDINGS						
Hydrophytic vogetation pr	ocont?	Yes					
Hydrophytic vegetation pro Hydric soil present?	-	Yes	Is the Sampled Are	a	Ye	20	
Wetland hydrology presen	- t2	Yes	within a Wetland?				
Welland Hydrology preser	_	163					
Remarks: (Explain alterna	tive procedures h	ere or in a senarate rer	nort )				
Data point to Wetland 5.	tive procedures in	ere or iii a separate rep	orc.)				
Data point to Welland 0.							
HYDROLOGY							
Wetland Hydrology	Indicators						
wettand riyarology	ilidicator 5						
Primary Indicators (minim	um of one is requi	red; check all that appl	y)	Second	ary Indicators (mi	nimum of two require	d)
X Surface Water (	A1)	<sup>T</sup>	rue Aquatic Plants (B14)		Surface Soil C	racks (B6)	
High Water Tab	le (A2)	<u></u> +	lydrogen Sulfide Odor (C1)		Sparsely Vege	tated Concave Surfac	ce (B8)
X Saturation (A3)		<u></u> °	Oxidized Rhizospheres on Livi	ing Roots (C3)	Drainage Patte	erns (B10)	
Water Marks (B	1)	F	Presence of Reduced Iron (C4	<u> </u>	Moss Trim Lin	es (B16)	
Sediment Depos	sits (B2)	F	Recent Iron Reduction in Tilled	d Soils (C6)	Dry-Season W	ater Table (C2)	
Drift Deposits (E	33)		hin Muck Surface (C7)		Crayfish Burro	ws (C8)	
Algal Mat or Cru	ıst (B4)		Other (Explain in Remarks)		Saturation Visi	ble on Aerial Imagery	/ (C9)
Iron Deposits (B	5)				Stunted or Stre	essed Plants (D1)	
Inundation Visib	le on Aerial Image	ery (B7)		<u>&gt;</u>	Geomorphic P	osition (D2)	
Water-Stained L	eaves (B9)				Shallow Aquita	ırd (D3)	
Aquatic Fauna (	B13)			_	Microtopograp	hic Relief (D4)	
					FAC-Neutral T	est (D5)	
Field Observations:							
Surface water present?	Yes _	X No	Depth (inches):	1	Wetland		
Water table present?	Yes _	No _	X Depth (inches):	N/A	hydrology		
Saturation present?	Yes	X No	Depth (inches):	10-14	present?	Yes	
(includes capillary fringe)	_					<del></del>	
Describe recorded data (s	tream gauge, mor	nitoring well, aerial pho	tos, previous inspections), if a	vailable:			
Remarks:							
Saturation observed between	een 10 and 14 inc	hes was not associated	with a water table, bedrock,	or other restrictive laye	r. Therefore, the	criteria of the saturation	on (A3)
indicator was not met.							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP14
		-		Dominance Test Worksheet
Tree Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
<b>l</b> 1				that are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across all Strata: 1 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				(100.00% (17.0)
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	0 =	Total Cover		FACW species x 2 =
		Total Cover		FAC species x 3 =
Sapling/Shrub Build: (45)	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1			Status	Column totals (A) (B)
2	-			Prevalence Index = B/A =
				Prevalence index = B/A =
3				
4				Hadaada da Nanatatian hadiaatana
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide supporting data in Remarks or on a
10				supporting data in Remarks of on a separate sheet)
	=	Total Cover		ooparato chooty
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Microstegium vimineum	95	Yes	FAC	hydrology must be present, unless
2 Verbesina alternifolia	5	No	FAC	disturbed or problematic
3				
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11	-			breast height (DBH), regardless of height.
10				Sapling/shrub - Woody plants less than 3 in. DBH and
10				greater than 3.28 ft (1 m) tall.
l <del></del>				grouter than 6.25 it (1 m) tail.
14 15				Herb - All herbaceous (non-woody) plants, regardless of size,
	100 =	Total Cover		and woody plants less than 3.28 ft tall.
		Total Covel		
	A b a = 1: . ± = 0/	Domi	la die - t	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status	
_	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5	<del></del>			vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			
I				

SOIL Sampling Point: DP14 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-5 2.5Y 4/2 60 10YR 4/3 40 М silty clay С 5-14 2.5Y 4/2 85 10 С М 5YR 4/6 silty clay М 5YR 5/8 5 С Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay Yes Depth (inches): 14 Remarks:

Project/Site:	3500 Lees Lane Prope	rty		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/6/2	2021
Applicant/Owner:	LDG Developmen	•			State: Kentucky		Sampling Point:	DP15
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslope	e, terrace, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o			38.187		Long.: <u>-85.864983</u>		Datum:	
· ·		silt loam, 0 to 2 percent	_			NWI Clas		
· -		ite typical for this time o	f the yea			xplain in remarks	•	
Are vegetation	, soil	, or hydrology	_	significantly dist		Are "normal c	rcumstances"	V
Are vegetation	, soil	, or hydrology	_	naturally probler	matic?	present?	olain any answers in re	Yes
						(II ficeded, exp	nam any answers in re	marks)
SUMMARY	OF FINDINGS							
Hydrophytic veget	ation present?	Yes		le the Compled Are	_			
Hydric soil present	t?	No		Is the Sampled Area within a Wetland?	a		No	
Wetland hydrology	y present?	No						
	•	here or in a separate re	port.)					
Upland data point	to Wetlands 5 and 6.							
HADBOI OC	•v							
HYDROLOG								
Wetland Hyd	drology Indicators							
Primary Indicators	(minimum of one is rec	quired; check all that app	oly)		Second	ary Indicators (m	inimum of two require	d)
Surface	Water (A1)		True Ad	quatic Plants (B14)		Surface Soil C	racks (B6)	
High Wa	ater Table (A2)		Hydrog	en Sulfide Odor (C1)	_	Sparsely Vege	etated Concave Surfac	ce (B8)
Saturation	on (A3)		Oxidize	ed Rhizospheres on Livi	ng Roots (C3)	Drainage Patt	erns (B10)	-
	Marks (B1)			ce of Reduced Iron (C4	- · · · · -	Moss Trim Lir		
	nt Deposits (B2)			Iron Reduction in Tilled	· —		Vater Table (C2)	
	posits (B3)			uck Surface (C7)	· · · —	Crayfish Burro		
	at or Crust (B4)		•	Explain in Remarks)	_		sible on Aerial Imagery	/(C9)
	posits (B5)			,	_		essed Plants (D1)	()
	on Visible on Aerial Ima	igery (B7)			_	Geomorphic F		
	Stained Leaves (B9)	90.) (2.)			_	Shallow Aquit		
	Fauna (B13)				_		phic Relief (D4)	
	radia (BTO)				_	FAC-Neutral		
					_		03. (20)	
Field Observation	ns:							
Surface water pres		No	Х	Depth (inches):	N/A	Metland		
Water table prese		No	X	Depth (inches):	N/A	Wetland hydrology		
Saturation present		No	X	Depth (inches):	N/A	present?	No	
(includes capillary					· .			
. ,	9-7							
Describe recorded	d data (stream gauge, m	nonitoring well, aerial ph	otos, pr	evious inspections), if a	vailable:			
I	, , ,	<b>.</b>						
I								
Remarks:								
Ì								

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ants	Sampling Point: DP15
				Dominance Test Worksheet
Trop Stratuma Dist Size (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Fraxinus pennsylvanica	30	Yes	FACW	that are OBL, FACW, or FAC: 4 (A)
2 Acer rubrum	30	Yes	FAC	Total Number of Dominant
3 Liquidambar styraciflua	30	Yes	FAC	Species Across all Strata: 7 (B)
4 Prunus serotina	5	No	FACU	
5 Ulmus alata	5	No	FACU	Percent of Dominant Species
6				that are OBL, FACW, or FAC: 57.14% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL speciesx 1 =
	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum 1 lot 6/26 (10)	Cover	Species	Status	UPL species x 5 =
1 Lindera benzoin	10	Yes	FAC	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a separate sheet)
	=	Total Cover		ooparate shooty
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Lonicera japonica	25	Yes	FACU	hydrology must be present, unless
2 Glechoma hederacea	<u>15</u>	Yes	FACU	disturbed or problematic
3 Ageratina altissima	5	No No	FACU	
4 Microstegium vimineum	5	No No	FAC	D. C. W C. T W A. C Other
5 Allium vineale	<u>5</u>	No No	FACU FACU	Definitions of Four Vegetation Strata
6 Rubus allegheniensis 7		INO	FACU	
8			-	
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
				breast height (DBH), regardless of height.
12			-	Solling to the state of the sta
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 5.25 ft (1 fm) tail.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	57 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines All woody vines greater than 3.28 ft in height
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	10	Yes	FACU	
2				
3				
4			,	Hydrophytic
5				vegetation
	10 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			
Ī				

SOIL Sampling Point: DP15 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-4 10YR 3/3 100 silt loam 4-14 10YR 4/3 95 10YR 3/4 С М silt loam 5 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site: 3500 Lees Lane Proper Applicant/Owner: LDG Development	ty	City/County: Lo	uisville/ Jefferson	Sampling Da	ate: 1/6/2	.021
			State: Kentucky	_	Sampling Point:	DP16
Investigator(s): K. Ilnick; J. Evans	<del></del>		Section, Townsh	ip, Range:	· • <u> </u>	
Landform (hillslope, terrace, etc.):	depression	Local relief (concave,		concave	Slope (%):	0-1
Subregion (LRR or MLRA) LRR N	Lat.: 38.	<b>_</b>	Long.: -85.865306		Datum:	
Soil Map Unit Name: WeA - Weinbach s			J	NWI Class		
Are climatic/hydrologic conditions of the si			Yes (If no, ex	plain in remarks)	•	
Are vegetation , soil	, or hydrology	significantly distu		Are "normal cire	cumstances"	
Are vegetation , soil	, or hydrology	naturally problem		present?	Jamotanooo	Yes
				•	ain any answers in re	
					•	,
SUMMARY OF FINDINGS						
Hydrophytic vegetation present?	Yes	l				
Hydric soil present?	Yes	Is the Sampled Area		Ye	S	
Wetland hydrology present?	Yes	within a Wetland?		•		
Remarks: (Explain alternative procedures	here or in a separate repor	t.)				
Data point to Wetland 6.		•				
HYDROLOGY						
Wetland Hydrology Indicators						
Wetland Hydrology indicators						
Primary Indicators (minimum of one is requ	uired; check all that apply)		Seconda	ry Indicators (min	imum of two required	d)
X Surface Water (A1)	Tru	e Aquatic Plants (B14)		Surface Soil Cr	acks (B6)	
High Water Table (A2)	—— Hyd	drogen Sulfide Odor (C1)	X	<ul> <li>Sparsely Veget</li> </ul>	ated Concave Surfac	ce (B8)
Saturation (A3)		dized Rhizospheres on Living		Drainage Patte		,
Water Marks (B1)		sence of Reduced Iron (C4)		Moss Trim Line		
Sediment Deposits (B2)		cent Iron Reduction in Tilled	Soils (C6)	Dry-Season Wa		
Drift Deposits (B3)		n Muck Surface (C7)		Crayfish Burrov		
Algal Mat or Crust (B4)		ner (Explain in Remarks)	-	_	ole on Aerial Imagery	(C0)
		er (Explain in Remarks)		_	= -	(03)
Iron Deposits (B5)	mam. (D7)			_	ssed Plants (D1)	
Inundation Visible on Aerial Imag	jery (D7)		_^	Geomorphic Po		
Water-Stained Leaves (B9)			-	Shallow Aquita	-	
Aquatic Fauna (B13)				Microtopograph		
			<u> </u>	FAC-Neutral Te	est (D5)	
<b></b>						
Field Observations:						
	X No	Depth (inches):	1-2	Wetland		
Surface water present? Yes	Na	X Depth (inches):	N/A	hydrology		
•	No					
Water table present? Yes		X Depth (inches):	N/A	present?	Yes	
Water table present? Yes		X Depth (inches):	N/A	present?	Yes	
Water table present? Yes Saturation present? Yes		X Depth (inches):	N/A	present?	<u>Yes</u>	
Water table present? Yes Saturation present? Yes (includes capillary fringe)	No			present?	<u>Yes</u>	
Water table present? Yes Saturation present? Yes	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	
Water table present? Yes Saturation present? Yes (includes capillary fringe)  Describe recorded data (stream gauge, me	No			present?	Yes	

<b>VEGETATION</b> (Four Strata) -	- Use scientific	names of pla	nts	Sampling Point: DP16
	Absolute %	Dominant	Indicator	Dominance Test Worksheet
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species that are OBL, FACW, or FAC:(A)
2 3 4				Total Number of Dominant Species Across all Strata: 2 (B)
5 6 7				Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	0 =	Total Cover		FACW species x 2 =
Caplina/Chu.h	Abaaluta 0/	Dominant	Indicator	FACUapasias x 3 =
Sapling/Shrub Stratum Plot Size (15')	Absolute % Cover	Dominant Species	Indicator Status	FACU species x 4 = UPL species x 5 =
1				Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide supporting data in Remarks or on a
10		<del></del>		separate sheet)
	=	Total Cover		
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Cinna arundinacea	10	Yes	FACW	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Mentha spicata	10	Yes	FACW	disturbed or problematic
3				'
4				
5	·			Definitions of Four Vegetation Strata
6				
7				
8				
9				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
10				breast height (DBH), regardless of height.
11				
12				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
13				greater than 3.26 it (1 m) tall.
15	<del></del>			Herb - All herbaceous (non-woody) plants, regardless of size,
	20 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Manda Nin - Otratana Blat Cina (201)	Absolute %	Dominant	Indicator	Vitody Vities - 7 til woody Vities greater than 0.20 it in Holght.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5		Total Caver		vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	on a senarate sheet\			1
rtomarks. (moidde photo numbers here of t	ni a sepaiale sileelj			

SOIL Sampling Point: DP16 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-10 2.5Y 5/1 82 10YR 3/6 10 М silty clay С С М 5YR 4/6 5 5YR 5/8 С Μ 3 10-14 2.5Y 5/1 80 5YR 4/6 20 С M clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Prope	erty		City/County: !	Louisville/ Jefferson	Sampling	Date:	1/6/20	)21
Applicant/Owner:	LDG Developmen	•			State: Kentucky	· -	Sampling P		DP17
Investigator(s):	vestigator(s): K. Ilnick; J. Evans				Section, Towns	nship, Range:			
Landform (hillslop	e, terrace, etc.):	terrace		Local relief (concave	e, convex, none):	none	Slope	(%):	0-1
Subregion (LRR o	or MLRA) LRR N		Lat.: 38.18629	94	Long.: -85.866238		Datum:		
•	me: WeA - Weinbach					NWI Cla	ssification:		
Are climatic/hydro	ologic conditions of the	site typical for this ti	me of the year	?	Yes (If no, e	explain in remark	s)		
Are vegetation	, soil	, or hydro		significantly dis		Are "normal	circumstances"		
Are vegetation	, soil	, or hydro	logy	naturally proble	matic?	present?		. —	Yes
						(If needed, ex	plain any answe	rs in ren	narks)
SUMMARY	OF FINDINGS								
				<del></del>					
Hydrophytic veget	•	Yes		Is the Sampled Are	ea	,			
Hydric soil presen		Yes		within a Wetland?		-	Yes		
Wetland hydrolog	y present?	Yes							
Remarks: (Explain	n alternative procedures	e here or in a senar:	ete renort )						
Data point to Wet		S liter or in a separa	ate report.						
Data point to vvot	ianu 1.								
HYDROLOG	3Υ								
	drology Indicators								
_									
-	s (minimum of one is re	quired; check all tha			Second	dary Indicators (n		required)	
	Water (A1)	,		uatic Plants (B14)	_	Surface Soil			
	ater Table (A2)	,		n Sulfide Odor (C1)	_		getated Concave	Surface	; (B8)
X Saturati	on (A3)		Oxidized	I Rhizospheres on Liv	ing Roots (C3)	Drainage Pa	terns (B10)		
Water N	Marks (B1)		Presence	e of Reduced Iron (C4	4) _	Moss Trim Li	nes (B16)		
Sedime	nt Deposits (B2)		Recent I	ron Reduction in Tille	d Soils (C6)	Dry-Season	Water Table (C2	2)	
Drift De	posits (B3)		Thin Mud	ck Surface (C7)	_	Crayfish Buri	ows (C8)		
Algal Ma	at or Crust (B4)		Other (E	xplain in Remarks)	_	Saturation Vi	sible on Aerial Ir	magery (	C9)
Iron De	posits (B5)				_	Stunted or S	tressed Plants ([	<b>D1</b> )	
Inundati	ion Visible on Aerial Ima	agery (B7)			_	Geomorphic	Position (D2)		
Water-S	Stained Leaves (B9)				_	Shallow Aqui	tard (D3)		
Aquatic	Fauna (B13)				Microtopogra	phic Relief (D4)			
<del></del>					X FAC-Neutral	FAC-Neutral Test (D5)			
E'-1-1 Observatio									
Field Observatio		v N		D 41- /im ah 20):	-4				
Surface water pre		XN		Depth (inches):	<1	Wetland			
Water table prese			lo X	Depth (inches):	N/A	hydrology	.,		
Saturation presen		X N	<u> </u>	Depth (inches):	0-3	present?	Yes		
(includes capillary	rfringe)								
,									
Describe recoraed	d data (stream gauge, r	nonitoring well, aeria	al photos, prev	vious inspections), it a	available:				
Remarks:									

<b>VEGETATION (Four Strata)</b>	Use scientific	names of pla	ınts	Sampling Point: DP17
				Dominance Test Worksheet
T 01 1 PI 10: (00!)	Absolute %	Dominant	Indicator	
<u>Tree Stratum</u> Plot Size (30')	Cover	Species	Status	Number of Deminent Species
1 Quercus palustris	40	Yes	FACW	Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
			FAC	`,
2 Carpinus caroliniana	20	Yes	FAC	Total Number of Dominant
3				Species Across all Strata: 3 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
•	60 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1		<u> </u>		Column totals (A) (B)
2				Prevalence Index = B/A =
3				Prevalence index - B/A -
	-			
4	-			H. I. I. I. M. A. H. H. I.
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	0 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Microstegium vimineum	10	Yes	FAC	*Indicators of hydric soil and wetland hydrology must be present, unless
2		100	1710	disturbed or problematic
3	-			disturbed of problematic
4				D. C. W C. T W
5				Definitions of Four Vegetation Strata
6				
7	<u> </u>			
8				
9				T
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				bleast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	10 =	Total Cover		and woody plants less than 3.28 ft tall.
		10101 00101		West 1 - 1 - 2 - 2 - 1 - 1 - 2 - 2 - 2 - 2 -
	Absolute %	Deminant	Indicator	Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Dominant Species	Indicator Status	
		Оресіез	Otatus	
1				
2				
3				
4				Hydrophytic
5				vegetation
	=	Total Cover		present? Yes
Remarks: (Include photo numbers here or	on a separate sheet)			<del>.</del>
•	•			

SOIL Sampling Point: DP17 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 10YR 4/1 93 5YR 5/6 5 М silt loam С 5YR 4/6 М 2 С 3-10 10YR 5/2 90 10YR 5/8 10 Μ С clay 10YR 4/2 70 10YR 5/6 30 10-14 С M clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): clay Hydric soil present? Yes Depth (inches): 3 Remarks:

Project/Site: 35	500 Lees Lane Property		City/County: L	ouisville/ Jefferson	Sampling Date	e: 1/6/2	2021
Applicant/Owner:	LDG Development, I	LC		State: Kentucky		Sampling Point:	DP18
Investigator(s): K	. Ilnick; J. Evans			Section, Townshi	ip, Range:		
Landform (hillslope,	· · · · · · · · · · · · · · · · · · ·	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or N			8.18623	Long.: -85.866759		atum:	
-		•	opes (Hydric-by-Inclusion)		NWI Classific	ation:	
,	gic conditions of the site		•		olain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dist		Are "normal circui	nstances"	.,
Are vegetation	, soil	, or hydrology	naturally probler	matic?	present?	any angwara in r	Yes
					(If needed, explain	any answers in re	япаткэ)
<b>SUMMARY O</b>	F FINDINGS						
Hydrophytic vegetati	ion present?	Yes	la tha Canadad Ana	_			
Hydric soil present?	_	No	Is the Sampled Area within a Wetland?	1	No		
Wetland hydrology p	present?	No	within a Wetland:				
		<u> </u>					
Remarks: (Explain a	alternative procedures he	ere or in a separate rep	ort.)				
Upland data point to	Wetland 7.						
HYDROLOGY	,						
wetland Hydro	ology Indicators						
Primary Indicators (r	minimum of one is requi	red; check all that apply	<b>'</b> )	Secondar	ry Indicators (minim	um of two require	d)
Surface W	/ater (A1)	т	rue Aquatic Plants (B14)		Surface Soil Crac	ks (B6)	
High Wate	er Table (A2)	н	ydrogen Sulfide Odor (C1)		Sparsely Vegetate	ed Concave Surface	ce (B8)
Saturation	(A3)	0	xidized Rhizospheres on Livi	ng Roots (C3)	_ Drainage Patterns	; (B10)	
Water Mar	rks (B1)	P	resence of Reduced Iron (C4		Moss Trim Lines (	B16)	
Sediment	Deposits (B2)	R	ecent Iron Reduction in Tilled	Soils (C6)	_Dry-Season Wate	r Table (C2)	
Drift Depos	sits (B3)	т	hin Muck Surface (C7)		Crayfish Burrows	(C8)	
Algal Mat	or Crust (B4)	<b>—</b> 0	ther (Explain in Remarks)		Saturation Visible	on Aerial Imagery	/ (C9)
Iron Depos	sits (B5)				Stunted or Stress	ed Plants (D1)	
Inundation	Visible on Aerial Image	ry (B7)			Geomorphic Posit	ion (D2)	
Water-Sta	ined Leaves (B9)				Shallow Aquitard	(D3)	
	auna (B13)				- Microtopographic		
·	,				FAC-Neutral Test		
					=		
Field Observations	:						
Surface water prese	nt? Yes	No	X Depth (inches):	N/A	Wetland		
Water table present	? Yes	No	X Depth (inches):	N/A	hydrology		
Saturation present?	Yes	No	X Depth (inches):	N/A	present?	No	
(includes capillary fri	inge)						
Describe recorded d	lata (stream gauge, mor	itoring well, aerial phot	os, previous inspections), if a	vailable:			
Remarks:							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP18
		-		Dominance Test Worksheet
Trop Stratuma Diet Size (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Ulmus rubra	20	Yes	FAC	that are OBL, FACW, or FAC: 4 (A)
2 Liquidambar styraciflua	20	Yes	FAC	Total Number of Dominant
3 Quercus palustris	20	Yes	FACW	Species Across all Strata: 5 (B)
4 Prunus serotina	10	No	FACU	
5 Fraxinus pennsylvanica	10	No	FACW	Percent of Dominant Species
6				that are OBL, FACW, or FAC: 80.00% (A/B)
7				
8				Prevalence Index Worksheet
9	·			Total % Cover of:
10				OBL species x 1 =
	80 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plat Size (451)	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	20	Yes	FACU	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	20 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Microstegium vimineum	80	Yes	FAC	hydrology must be present, unless
2 Glechoma hederacea	15	No	FACU	disturbed or problematic
3 Lonicera japonica	10	No	FACU	
4 Rubus allegheniensis	3	No	FACU	
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	108 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
vvoody vine stratum Flot Size (50)	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)		_	
•				

SOIL Sampling Point: DP18 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-2 10YR 3/3 95 10YR 5/6 5 М silt loam С 2-4 10YR 5/4 87 10YR 5/8 С М silty clay 3 88 4-14 2.5Y 6/3 10 С Μ 2.5Y 5/6 silty clay 5YR 4/6 2 С M Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Pr	roperty		City/County: L	ouisville/ Jefferson	Sampling D	ate: 1/6	/2021
Applicant/Owner:	LDG Develop				State: Kentucky		Sampling Point:	DP19
Investigator(s):	K. Ilnick; J. Evans				Section, Townsh	nip, Range:		
Landform (hillslope	e, terrace, etc.):	terra	асе	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	· —		Lat.: <u>38.1</u>	185202	Long.: -85.865231		Datum:	
-	ne: OtA - Otwood	-	-			NWI Class	ification:	
Are climatic/hydro	logic conditions of the	he site typical for	this time of the	•		plain in remarks)		
Are vegetation	, soil		hydrology	significantly dist		Are "normal cir	cumstances"	
Are vegetation	, soil	, or	hydrology	naturally probler	matic?	present?		Yes
						(If needed, expl	ain any answers in i	remarks)
SIIMMADV	OF FINDINGS	2						
SUMMART	OF FINDING	<u> </u>		<del></del>				
Uvdranhytia vagat	ration propert?	Voo						
Hydrophytic veget	-	Yes Yes	-	Is the Sampled Area	a	Va		
Hydric soil present		Yes	-	within a Wetland?		Ye	<u> </u>	
Wetland hydrology	/ present?	res	-					
Remarks: (Evolair	alternative procedu	ures here or in a	senarate renort	<u>l</u>				
Data point to Wetl	า alternative procedเ land 8	ures nere or in a :	separate report	)				
Data point to well	and o.							
HYDROLOG	•v							
Wetland Hyd	drology Indicators							
Primary Indicators	(minimum of one is	s required; check	all that apply)		Seconda	ry Indicators (mir	nimum of two require	ed)
X Surface	Water (A1)		True	e Aquatic Plants (B14)		Surface Soil Ci	acks (B6)	
High Wa	ater Table (A2)		—— Hyd	lrogen Sulfide Odor (C1)		Sparsely Vege	tated Concave Surfa	ace (B8)
X Saturation	on (A3)		Oxio	dized Rhizospheres on Livi	ng Roots (C3)	Drainage Patte	rns (B10)	
	Marks (B1)			sence of Reduced Iron (C4	· · · · —	Moss Trim Line		
	nt Deposits (B2)			cent Iron Reduction in Tilled	·		ater Table (C2)	
	posits (B3)			n Muck Surface (C7)		Crayfish Burro		
	at or Crust (B4)			er (Explain in Remarks)		_	ble on Aerial Imager	rv (C9)
	posits (B5)			or (Explain in Homanio)		_	essed Plants (D1)	y (00)
	on Visible on Aerial	Imagen/ (R7)			-	Geomorphic Po		
	Stained Leaves (B9)				-	Shallow Aquita	` '	
	Fauna (B13)				-	Microtopograph		
Aquatic	r auria (B13)				X	FAC-Neutral To	` '	
						_ I AO-Nedilai II	53t (D3)	
Field Observation	ne.							
Surface water pres		es X	No	Depth (inches):	0-1			
				<del></del> · · · _		Wetland		
Water table prese		es		X Depth (inches):	N/A	hydrology		
Saturation present		es X	No	Depth (inches):	0-5	present?	Yes	
(includes capillary	tringe)							
D ib d - d	l -l-4- /-4			\ is\ if -				
Describe recorded	I data (stream gaug	e, monitoring wel	I, aerial photos	, previous inspections), if a	vailable:			
Remarks:								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ints	Sampling Point: DP19
				Dominance Test Worksheet
T Ott DI-t C: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer negundo	30	Yes	FAC	that are OBL, FACW, or FAC: 5 (A)
2 Ulmus americana	30	Yes	FACW	Total Number of Dominant
3				Species Across all Strata: 5 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				( = 2)
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
· ·	60 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Acer negundo	15	Yes	FAC	Column totals (A) (B)
2 Lindera benzoin	5	Yes	FAC	Prevalence Index = B/A =
3	<del></del> -			
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	20 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Microstegium vimineum	55	Yes	FAC	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Lonicera japonica	5	No	FACU	disturbed or problematic
3	<del></del> -			'
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
40				Sapling/shrub - Woody plants less than 3 in. DBH and
40				greater than 3.28 ft (1 m) tall.
11				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	60 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	vines - All woody vines greater than 0.20 it in neight.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5	· · · · · · · · · · · · · · · · · · ·			vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	on a separate sheet)			•
	. ,			

SOIL Sampling Point: DP19 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-5 10YR 4/2 95 5YR 5/6 5 М silt loam С 5-14 2.5Y 5/1 65 10YR 4/6 30 С М clay М 10YR 3/2 5 D Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Propert	ty		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/6/	2021
Applicant/Owner:	LDG Development,	, LLC			State: Kentucky	<u>-</u>	Sampling Point:	DP20
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslope	e, terrace, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or	· -		38.1850	)8	Long.: -85.865333		Datum:	
•	ne: OtA - Otwood silt lo	•				NWI Clas		
Are climatic/hydrol	logic conditions of the sit	e typical for this time of	f the yea			xplain in remarks	;)	
Are vegetation	, soil	, or hydrology		significantly dist		Are "normal c	ircumstances"	
Are vegetation	, soil	, or hydrology	_	naturally probler	natic?	present?	. <del>-</del>	Yes
						(If needed, exp	olain any answers in r	emarks)
CHANA ARV	OF FINDINGS							
SUIVIIVIANI	OF FINDINGS		$\overline{}$					
Listraphytic vocate	*-** ~	NIa						
Hydrig and propert	•	No No		Is the Sampled Area	3	,	d-	
Hydric soil present		No No		within a Wetland?		- 1	No	
Wetland hydrology	y present?	No						
Damarka: (Evalain	Harrativa pracaduras	in a congrato re	r+ \					
	n alternative procedures l	nere or in a separate re	∌porτ.)					
Upland data point	to wetiand 8.							
İ								
I								
::VDDQLQC	<b>3</b> 17							
HYDROLOG								
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is requ	uired; check all that app	oly)		Seconda	ary Indicators (m	inimum of two require	ed)
-	Water (A1)			quatic Plants (B14)	<del></del>	Surface Soil C	· · · · · · · · · · · · · · · · · · ·	
	ater Table (A2)		•	en Sulfide Odor (C1)	_		etated Concave Surfa	ice (B8)
Saturatio				d Rhizospheres on Livir	ng Roots (C3)	Drainage Patt		00 (20)
	Marks (B1)			ce of Reduced Iron (C4)	- · · · · -	Moss Trim Lir		
	nt Deposits (B2)			Iron Reduction in Tilled	Solis (Co)		Vater Table (C2)	
	posits (B3)		•	uck Surface (C7)	_	Crayfish Burro		(00)
	at or Crust (B4)	_	Otner (	Explain in Remarks)	_		sible on Aerial Imager	y (C9)
	posits (B5)	·=-			_		ressed Plants (D1)	
	on Visible on Aerial Imag	jery (B7)			_	Geomorphic F		
	Stained Leaves (B9)				_	Shallow Aquit		
Aquatic i	Fauna (B13)				_		ohic Relief (D4)	
					_	FAC-Neutral	rest (D5)	
Field Observation								
Surface water pres		No	X	Depth (inches):	N/A	Wetland		
Water table preser		No	X	Depth (inches):	N/A	hydrology		
Saturation present		No	X	Depth (inches):	N/A	present?	No	
(includes capillary	fringe)							
<u> </u>								
Describe recorded	d data (stream gauge, mo	onitoring well, aerial ph	otos, pre	evious inspections), if a	vailable:			
Remarks:								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ınts	Sampling Point: DP20
				Dominance Test Worksheet
T Ctt DI-t C (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	45	Yes	FAC	that are OBL, FACW, or FAC: 1 (A)
2 Prunus serotina	45	Yes	FACU	, , ,
	45	res	FACU	Total Number of Dominant
3				Species Across all Strata: 5 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 20.00% (A/B)
7				
8	·		· · · · · · · · · · · · · · · · · · ·	Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	90 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	60	Yes	FACU	<u> </u>
		162	PACU	``
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10	1			supporting data in Remarks or on a
	60 =	Total Cover		separate sheet)
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	(ехріаііт)
				*Indicators of hydric soil and wetland
1 Lonicera japonica	15	Yes	FACU	hydrology must be present, unless
2 Rubus allegheniensis	3	No	FACU	disturbed or problematic
3				
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
				breast height (DBH), regardless of height.
12	•			Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15				and woody plants less than 3.28 ft tall.
	=	Total Cover		
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum - Blot Size (201)	Absolute %	Dominant	Indicator	
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	20	Yes	FACU	
2 Toxicodendron radicans	3	No	FAC	
3				
4				
5				Hydrophytic
<sup>3</sup>		T-4-1 O		vegetation
	=	Total Cover		present? No
	<u> </u>			
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP20 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-3 10YR 3/3 100 silt loam 3-14 10YR 5/3 95 10YR 3/3 С М 5 silty clay loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Propert	у		City/County: Lo	ouisville/ Jefferson	Sampling [	Date: 1/6	5/2021
Applicant/Owner:	LDG Development,	•		- <u> </u>	State: Kentucky	<u> </u>	Sampling Point:	DP21
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslop		terrace		Local relief (concave,	convex, none):	none	Slope (%):	0-1
Subregion (LRR o	· -		38.1847	31	Long.: <u>-85.864794</u>		Datum:	
•	me: ScA - Sciotoville sill	•			//5	NWI Clas	-	
-	ologic conditions of the site		the year			xplain in remarks		
Are vegetation	, soil	, or hydrology , or hydrology	_	significantly distu naturally problen		Are "normal c present?	ircumstances"	Yes
Are vegetation	, 5011	, or flydrology	_	Ilaturally problem	Hatior	•	olain any answers in i	
						(	7GII. G, G	, ,
SUMMARY	OF FINDINGS							
Hydrophytic veget		Yes		Is the Sampled Area	1			
Hydric soil presen	-	Yes	Ì	within a Wetland?		Y	es	
Wetland hydrolog	y present?	Yes	Ì					
Remarks: (Explain	n alternative procedures h	ere or in a separate re	nort )					
Data point to Wet	· ·	IEIE OI III a separato io	port.					
HYDROLOG								
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is requ	ired; check all that app	ıly)		Second	ary Indicators (m	inimum of two require	ed)
-	Water (A1)			uatic Plants (B14)		Surface Soil C	•	
X High Wa	ater Table (A2)			n Sulfide Odor (C1)	_		etated Concave Surfa	ace (B8)
Saturati	on (A3)		Oxidized	Rhizospheres on Livir	ng Roots (C3)	Drainage Patt	erns (B10)	
Water N	Marks (B1)		Presenc	e of Reduced Iron (C4)		Moss Trim Lir	ies (B16)	
	nt Deposits (B2)			ron Reduction in Tilled	Soils (C6)		Vater Table (C2)	
	posits (B3)			ck Surface (C7)	_	Crayfish Burro		
	at or Crust (B4)		Other (E	xplain in Remarks)	_	_	sible on Aerial Image	ry (C9)
	posits (B5)				_	_	ressed Plants (D1)	
	ion Visible on Aerial Imag	ery (B7)			_	Geomorphic F		
	Stained Leaves (B9)				_	Shallow Aquit		
Aquatic	Fauna (B13)						ohic Relief (D4)	
						FAC-Neutral	est (D5)	
Field Observatio	ns:							
Surface water pre		No	Х	Depth (inches):	N/A	181-slamd		
Water table prese		X No		Depth (inches):	4	Wetland hydrology		
Saturation presen		No	Х	Depth (inches):	N/A	present?	Yes	
(includes capillary				' ` ` _				
<u> </u>								
Describe recorded	d data (stream gauge, mo	nitoring well, aerial pho	otos, pre	vious inspections), if a	vailable:			
Remarks:								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ints	Sampling Point: DP21			
				Dominance Test Worksheet			
T Ott DI-t C: (201)	Absolute %	Dominant	Indicator				
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species			
1 Acer rubrum	70	Yes	FAC	that are OBL, FACW, or FAC: 4 (A)			
2 Liquidambar styraciflua	15	No	FAC	Total Number of Dominant			
3 Platanus occidentalis	15	No	FACW	Species Across all Strata: 4 (B)			
4	<del></del> -						
5				Percent of Dominant Species			
6				that are OBL, FACW, or FAC: 100.00% (A/B)			
7				( = 2)			
8				Prevalence Index Worksheet			
9				Total % Cover of:			
10	-			OBL species x 1 =			
	100 =	Total Cover		FACW species x 2 =			
				FAC species x 3 =			
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =			
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =			
1 Acer rubrum	5	Yes	FAC	Column totals (A) (B)			
2				Prevalence Index = B/A =			
3							
4							
5				Hydrophytic Vegetation Indicators:			
6				1 - Rapid test for hydrophytic vegetation			
7				X 2 - Dominance test is >50%			
8				3 - Prevalence index is ≤3.0*			
9				4 - Morphological adaptations* (provide			
10				supporting data in Remarks or on a			
	5 =	Total Cover		separate sheet)			
	·			Problematic hydrophytic vegetation*			
Hards Otractions Diet Cine (51)	Absolute %	Dominant	Indicator	(explain)			
Herb Stratum Plot Size (5')	Cover	Species	Status	*Indicators of hydric soil and wetland			
1 Cinna arundinacea	10	Yes	FACW	hydrology must be present, unless			
2 Microstegium vimineum	10	Yes	FAC	disturbed or problematic			
3 Rubus allegheniensis	3	No	FACU				
4	-						
5	·			Definitions of Four Vegetation Strata			
6		·					
7							
8							
9							
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at			
11				breast height (DBH), regardless of height.			
12				Sapling/shrub - Woody plants less than 3 in. DBH and			
13				greater than 3.28 ft (1 m) tall.			
14							
15				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
	23 =	Total Cover		and woody plants less than 3.20 it tall.			
				Woody vines - All woody vines greater than 3.28 ft in height.			
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator				
Woody vine Stratum 1 lot Size (50)	Cover	Species	Status				
1							
2							
3							
4				Hydrophytic			
5				vegetation			
	0 =	Total Cover		present? Yes			
Remarks: (Include photo numbers here or o	on a separate sheet)		<u></u>				
i							

SOIL Sampling Point: DP21 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 2.5Y 5/1 90 10YR 4/6 5 М silty clay С 5YR 5/8 С М 5 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site: 3500 Lees Lane Property			City/County: I	_ouisville/ Jefferson	Sampling Date: 1/6/2021			
Applicant/Owner:	LDG Development	, LLC		State: Kentucky		Sampling Point:	DP22	
Investigator(s):	restigator(s): K. Ilnick; J. Evans			Section, Township	nship, Range:			
Landform (hillslop	oe, terrace, etc.):	terrace	Local relief (concave	e, convex, none):	none	Slope (%):	0-1	
Subregion (LRR o	or MLRA) LRR N	Lat.: 38.	184288	Long.: -85.864879		Datum:		
Soil Map Unit Nar	me: ScA - Sciotoville si	It loam, 0 to 2 percent slop	es		NWI Classi	fication:		
Are climatic/hydro	ologic conditions of the sit	te typical for this time of the	e year?	Yes (If no, exp	lain in remarks)			
Are vegetation	, soil	, or hydrology	significantly dis	turbed?	Are "normal circ	:umstances"		
Are vegetation	, soil	, or hydrology	naturally proble		present?	1	Yes	
					(If needed, expla	ain any answers in	remarks)	
CHMMADV	OE EINDINGS							
SUMMART	OF FINDINGS		I					
		N						
Hydrophytic veget	•	No No	Is the Sampled Are	a				
Hydric soil presen		No Year	within a Wetland?		No			
Wetland hydrolog	y present?	Yes						
D	10 10 1		()					
, ,	·	here or in a separate repor	t.)					
Upland data point	to wetland 9.							
HVDDOL OA	<b>2</b> V							
HYDROLOG	ΣΥ							
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is requ	uired; check all that apply)		Secondar	/ Indicators (min	imum of two requir	ed)	
	Water (A1)		e Aquatic Plants (B14)		Surface Soil Cra		<u></u>	
	ater Table (A2)		drogen Sulfide Odor (C1)			ated Concave Surf	ace (B8)	
X Saturati			dized Rhizospheres on Liv	ing Roots (C3)	Drainage Patter		400 (B0)	
	Marks (B1)		sence of Reduced Iron (C4	· · · · · · · · · · · · · · · · · · ·	Moss Trim Line			
	nt Deposits (B2)		cent Iron Reduction in Tille	·	Dry-Season Wa			
	posits (B3)		n Muck Surface (C7)		Crayfish Burrow			
						le on Aerial Image	m. (CO)	
	at or Crust (B4)		er (Explain in Remarks)			_	1y (C9)	
	posits (B5)	····· (D7)				ssed Plants (D1)		
	ion Visible on Aerial Imag	jery (b/)			Geomorphic Po			
	Stained Leaves (B9)			-	Shallow Aquitar	` ,		
Aquatic	Fauna (B13)			-	Microtopograph	, ,		
					FAC-Neutral Te	St (D5)		
Field Observation								
Field Observatio								
Surface water pre		No	X Depth (inches):	N/A	Wetland			
Water table prese	ent? Yes	No	X Depth (inches):	N/A	hydrology			
Saturation presen	nt? Yes	X No	Depth (inches):	12-14	present?	Yes		
(includes capillary	/ fringe)							
<b>J</b>								
Describe recorded	d data (stream gauge, mo	onitoring well, aerial photos	s, previous inspections), if a	available:				
Remarks:								
Ì								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ınts	Sampling Point: DP22
				Dominance Test Worksheet
T Ott DI-t C: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	85	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
2 Fraxinus pennsylvanica	10	No	FACW	Total Number of Dominant
3	<del></del> -			Species Across all Strata: 6 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 50.00% (A/B)
7				(****
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
· ·	95 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Acer rubrum	20	Yes	FAC	Column totals (A) (B)
2 Lonicera maackii	15	Yes	UPL	Prevalence Index = B/A =
3 Rosa multiflora	8	No	FACU	
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	43 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
51.46.45	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Microstegium vimineum	70	Yes	FAC	hydrology must be present, unless
2 Lonicera japonica	20	Yes	FACU	disturbed or problematic
3				·
4				
5				Definitions of Four Vegetation Strata
6				
7				
8	·			
9	<del></del> -			
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11	<del></del> -			breast height (DBH), regardless of height.
12	<del></del> -			Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	90 =	Total Cover		and woody plants less than 3.28 ft tall.
	·			Woody vines - All woody vines greater than 3.28 ft in height.
N/ 1 N/ 0/ 1 B) 10: (00)	Absolute %	Dominant	Indicator	
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	20	Yes	FACU	
2	<del></del> -			
3	<del></del> -			
4	_			Hydrophytic
5				vegetation
	20 =	Total Cover		present? No
Remarks: (Include photo numbers here or o	on a separate sheet)			
· · · · · · · ·	•			

SOIL Sampling Point: DP22 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-3 10YR 3/3 90 10YR 5/6 10 М silt loam С 10YR 5/6 3-12 10YR 4/4 90 10 С М silt loam 95 М 12-14 2.5Y 6/3 10YR 5/8 5 С clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay No Depth (inches): 12 Remarks:

Project/Site:	3500 Lees Lane Property	у	City/County: I	_ouisville/ Jefferson	Sampling Da	ate: 1/6	6/2021
Applicant/Owner:	LDG Development,	LLC		State: Kentucky		Sampling Point:	DP23
Investigator(s):	K. Ilnick; J. Evans			Section, Township	o, Range:		
Landform (hillslop	oe, terrace, etc.):	terrace	Local relief (concave	e, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: 38.	185196	Long.: -85.863919		Datum:	
Soil Map Unit Nar	me: ScA - Sciotoville silt	loam, 0 to 2 percent slop	es		NWI Class	fication:	
Are climatic/hydro	ologic conditions of the site	e typical for this time of the	e year?	Yes (If no, exp	lain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dis	turbed?	Are "normal circ	cumstances"	
Are vegetation	, soil	, or hydrology	naturally proble		present?		Yes
					(If needed, expla	ain any answers in	remarks)
SUMMARY	OF FINDINGS						
Hydrophytic vege	-	No	Is the Sampled Are	a			
Hydric soil preser	-	No No	within a Wetland?		No		
Wetland hydrolog	y present?	No					
Remarks: (Evolai	n alternative procedures h	nere or in a senarate renor	<u> </u> + \				
	t for Wetlands 8 and 10.	iere or irra separate repor	ι.)				
Opianu data point	i ioi vvelialius o aliu io.						
HYDROLOG	3Y						
	drology Indicators						
		irod: abook all that apply)		Casandan	. Indicatora (min	imarima of tara magni	rad\
-	s (minimum of one is requ		a Aquatia Planta (P14)	Secondary	•	imum of two requi	eu)
	Water (A1)		e Aquatic Plants (B14)		Surface Soil Cr		face (DO)
	ater Table (A2)		drogen Sulfide Odor (C1)	ing Docto (C3)		ated Concave Surf	ace (bo)
	ion (A3)		dized Rhizospheres on Liv	· · · · · · · · · · · · · · · · · · ·	Drainage Patte		
	Marks (B1)		esence of Reduced Iron (C4	·	Moss Trim Line		
	ent Deposits (B2)		cent Iron Reduction in Tille		Dry-Season Wa		
	posits (B3)		n Muck Surface (C7)		Crayfish Burrov		(00)
	at or Crust (B4)	Oth	ner (Explain in Remarks)			ole on Aerial Image	ry (C9)
	posits (B5)	(==)				ssed Plants (D1)	
	ion Visible on Aerial Image	ery (B7)			Geomorphic Po	` ,	
	Stained Leaves (B9)				Shallow Aquitar	` ,	
Aquatic	Fauna (B13)				Microtopograph		
					FAC-Neutral Te	:st (D5)	
Field Observatio	ons:			<u> </u>			
Surface water pre	esent? Yes	No	X Depth (inches):	N/A	Motion -		
Water table prese	-	No	X Depth (inches):	N/A	Wetland hydrology		
Saturation presen	-		X Depth (inches):	N/A	present?	No	
(includes capillary	-	<del></del>					
`	, 0 ,						
Describe recorde	d data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if a	available:			
Remarks:							
Ì							
ĺ							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP23
		-		Dominance Test Worksheet
Trop Stratuma Diet Size (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Liquidambar styraciflua	70	Yes	FAC	that are OBL, FACW, or FAC: 2 (A)
2 Prunus serotina	20	Yes	FACU	Total Number of Dominant
3 Celtis occidentalis	10	No	FACU	Species Across all Strata: 8 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 25.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Stratum	Cover	Species	Status	UPL species x 5 =
1 Lonicera maackii	25	Yes	UPL	Column totals (A) (B)
2 Ligustrum vulgare	5	No	FACU	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a separate sheet)
	30 =	Total Cover		Soparate street)
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Allium vineale	3	Yes	FACU	hydrology must be present, unless
2 Cinna arundinacea	3	Yes	FACW	disturbed or problematic
3 Lonicera japonica	3	Yes	FACU	
4 Rosa multiflora	3	Yes	FACU	D. C. 25 (F V (C 0)
5				Definitions of Four Vegetation Strata
6				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
				breast height (DBH), regardless of height.
12				C. Poster W. L. L. H. C. BRILL
10				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 0.20 it (1 iii) tall.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	12 =	Total Cover		and woody plants less than 3.28 ft tall.
		1014100101		Woody vines All woody vines greater than 2.29 ft in height
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	20	Yes	FACU	
2				
3	-			
4				Hydrophytic
5				vegetation
	20 =	Total Cover		present? No
Remarks: (Include photo numbers here or o	n a separate sheet)			
I .				

SOIL Sampling Point: DP23 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-5 10YR 4/3 100 silt loam 5-14 10YR 4/3 90 10YR 5/6 М С silty clay loam 5 М 5YR 5/8 5 С Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Prop	erty		City/County: L	ouisville/ Jefferson	Sampling I	Date: 1/6	/2021
Applicant/Owner:	LDG Developme			· ·	State: Kentucky	<u> </u>	Sampling Point:	DP24
Investigator(s):	K. Ilnick; J. Evans				Section, Townsh	nip, Range:		
Landform (hillslop	e, terrace, etc.):	terrace	Э	Local relief (concave	e, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	· · · · · · · · · · · · · · · · · · ·		Lat.: 38.18		Long.: <u>-85.862337</u>		Datum:	
•	ne: ScA - Sciotoville		· · · · ·			NWI Clas		
-	logic conditions of the		-		·	plain in remarks		
Are vegetation	, soil		/drology 	significantly dist		Are "normal c	ircumstances"	V
Are vegetation	, soil	, or ny	ydrology	naturally proble	matic?	present?	olain any answers in i	Yes
						(II riceded, exp	nam any answers in i	emarks)
SUMMARY	OF FINDINGS							
Hydrophytic veget	tation present?	Yes		le the Compled Are	_			
Hydric soil presen	t?	Yes		Is the Sampled Area within a Wetland?	a	Y	es	
Wetland hydrolog	y present?	Yes						
	n alternative procedure	s here or in a se	parate report.)					
Data point for We	tland 10.							
HYDROLOG	· v							
Wetland Hyd	drology Indicators							
Primary Indicators	(minimum of one is re	quired; check al	I that apply)		Seconda	ary Indicators (m	inimum of two require	ed)
Surface	Water (A1)		True /	Aquatic Plants (B14)		Surface Soil C	Cracks (B6)	
X High Wa	ater Table (A2)		—— Hydro	ogen Sulfide Odor (C1)		Sparsely Vege	etated Concave Surfa	ace (B8)
X Saturation	on (A3)		Oxidiz	zed Rhizospheres on Livi	ng Roots (C3)	Drainage Patt	erns (B10)	•
Water M	Marks (B1)		Prese	ence of Reduced Iron (C4	)	Moss Trim Lir	ies (B16)	
	nt Deposits (B2)			nt Iron Reduction in Tilled	·	_	/ater Table (C2)	
Drift De	posits (B3)		Thin N	Muck Surface (C7)		Crayfish Burro	ows (C8)	
Algal Ma	at or Crust (B4)		Other	(Explain in Remarks)		Saturation Vis	ible on Aerial Imager	v (C9)
	posits (B5)			,		_	essed Plants (D1)	, ,
	on Visible on Aerial Im	agery (B7)				Geomorphic F		
	Stained Leaves (B9)	-97 (7				Shallow Aquit		
	Fauna (B13)					_	phic Relief (D4)	
	radia (B 10)					FAC-Neutral		
							(20)	
Field Observation	ns:							
Surface water pre	sent? Yes		No X	Depth (inches):	N/A	Wetland		
Water table prese		X	No	Depth (inches):	6	hydrology		
Saturation presen		X	No	Depth (inches):	0-6	present?	Yes	
(includes capillary						<b>P</b>		
. ,	3 /							
Describe recorded	d data (stream gauge, r	nonitoring well,	aerial photos, p	previous inspections), if a	vailable:			
	( 0 0 7	9 ,		, ,,				
Remarks:								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ınts	Sampling Point: DP24
				Dominance Test Worksheet
T 01 1 PI 10: (00!)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Deminent Species
1 Acer rubrum	85	Yes	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
			FAC	`,
2 Acer negundo	15	No	FAC	Total Number of Dominant
3				Species Across all Strata: 2 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				
8			· · · · · · · · · · · · · · · · · · ·	Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Acer rubrum	10	Yes	FAC	Column totals (A) (B)
2		103	1710	Prevalence Index = B/A =
3				Prevalence index = B/A =
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
·	10 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Euonymus fortunei	2	No	UPL	*Indicators of hydric soil and wetland hydrology must be present, unless
2		110	<u> </u>	disturbed or problematic
3				distalbed of problematic
4	-		-	D. C. W C W
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				T
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				breast neight (DBH), regardless of neight.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15	-		-	Herb - All herbaceous (non-woody) plants, regardless of size,
	2 =	Total Cover		and woody plants less than 3.28 ft tall.
		rotal oover		West 1 - 1 - 1 - 1 - 1 - 1 - 0 - 0 - 0 - 1 - 1
	Absolute 0/	Dominant	Indicator	Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status	
		Ореспез	Otatus	
1				
2				
3	-			
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP24 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-6 10YR 3/2 85 5YR 4/6 15 М silty clay loam С 6-14 2.5Y 5/2 85 5YR 5/8 10 С М clay 10YR 6/6 М 5 С Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Depleted Matrix (F3) Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay Yes Depth (inches): Remarks:

Project/Site: 3	3500 Lees Lane Property	/	City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/7/	2021
Applicant/Owner:	LDG Development,		<del></del>	State: Kentucky	`	Sampling Point:	DP25
Investigator(s):	K. Ilnick; J. Evans			Section, Towns	hip, Range:	_	
Landform (hillslope	, terrace, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or	MLRA) LRR N	Lat.: <u>38</u>	3.184523	Long.: -85.866427		Datum:	
Soil Map Unit Name	e: OtA - Otwood silt loa	am, 0 to 2 percent slopes	S		NWI Clas	sification:	
Are climatic/hydrolo	ogic conditions of the site	typical for this time of the	ne year?	Yes (If no, ex	kplain in remarks	)	
Are vegetation _	, soil	, or hydrology	significantly dist	urbed?	Are "normal ci	rcumstances"	
Are vegetation _	, soil	, or hydrology	naturally probler	matic?	present?		Yes
					(If needed, exp	olain any answers in r	emarks)
SIIMMADV	OF FINDINGS						
SUMMARIC	JE FINDINGS						
Hydrophytic vegeta		No No	Is the Sampled Area	a			
Hydric soil present?	_	No No	within a Wetland?			lo	
Wetland hydrology	present?	No					
			()				
Remarks: (Explain	alternative procedures h	ere or in a separate repo	ort.)				
HYDROLOG	<u>Y</u>						
Wetland Hydr	rology Indicators						
Primary Indicators (	(minimum of one is requi	ired: check all that apply	1	Seconda	ery Indicators (m	inimum of two require	24)
-	Water (A1)		rue Aquatic Plants (B14)	0000.10.	Surface Soil C		;u)
	` '			_	_		(PQ)
	ter Table (A2)		ydrogen Sulfide Odor (C1)	D (C2)		etated Concave Surfa	ce (pg)
Saturation			xidized Rhizospheres on Livi	- · · · · -	Drainage Patt		
Water Ma			resence of Reduced Iron (C4		Moss Trim Lin		
	t Deposits (B2)		ecent Iron Reduction in Tilled	Soils (C6)		/ater Table (C2)	
	osits (B3)		hin Muck Surface (C7)	_	Crayfish Burro		
	t or Crust (B4)		ther (Explain in Remarks)	_	_	ible on Aerial Imager	y (C9)
Iron Depo				_	_	essed Plants (D1)	
	on Visible on Aerial Image	ery (B7)		_	Geomorphic F		
	ained Leaves (B9)			_	Shallow Aquita		
Aquatic F	Fauna (B13)				Microtopograp	hic Relief (D4)	
					FAC-Neutral 1	est (D5)	
Field Observation	s:						
Surface water prese	ent? Yes _	No	X Depth (inches):	N/A	Wetland		
Water table presen	nt? Yes	No	X Depth (inches):	N/A	hydrology		
Saturation present?	? Yes	No	X Depth (inches):	N/A	present?	No	
(includes capillary f	fringe)					· <u></u>	
Describe recorded	data (stream gauge, mor	nitoring well, aerial photo	os, previous inspections), if a	vailable:			
Remarks:							

<b>VEGETATION</b> (Four Strata)	Use scientific r	names of pla	ants	Sampling Point: DP25
				Dominance Test Worksheet
T Ott DI-t C: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Prunus serotina	40	Yes	FACU	that are OBL, FACW, or FAC: 2 (A)
2 Liquidambar styraciflua	30	Yes	FAC	Total Number of Dominant
3 Acer rubrum	20	Yes	FAC	Species Across all Strata: 6 (B)
4 Quercus rubra	10	No	FACU	(b)
	10	140	1700	
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 33.33% (A/B)
7				Prevalence Index Worksheet
8				
9				Total % Cover of:
10		<del></del>		OBL species x 1 =
	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum 1 lot 6126 (10)	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	50	Yes	FACU	Column totals (A) (B)
2 Ilex opaca	10	No	FACU	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	60 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Lonicera japonica	30	Yes	FACU	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Carex blanda	8	No	FAC	disturbed or problematic
3 Rosa multiflora	8	No	FACU	distance of problematic
4 Cinna arundinacea	5	No	FACW	
5			TACVV	Definitions of Four Vegetation Strata
6				Definitions of Four Vegetation Strata
7				
8				
9				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
10				breast height (DBH), regardless of height.
11				
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15				and woody plants less than 3.28 ft tall.
	51 =	Total Cover		and woody plants loss than 0.20 it tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
<u>woody virie Stratum</u> Flot Size (50 )	Cover	Species	Status	
1 Lonicera japonica	5	Yes	FACU	
2				
3				
4		-		Literatura mitratica
5				Hydrophytic vegetation
· ·	5 =	Total Cover		present? No
Remarks: (Include photo numbers here or o	on a separate sheet)			
, , ,	/			

SOIL Sampling Point: DP25 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) (Inches) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 10YR 5/2 80 10YR 5/3 20 С М silty clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site: 35	500 Lees Lane Property	l	City/County: I	_ouisville/ Jefferson	Sampling Da	ate: 1	/7/2021
Applicant/Owner:	LDG Development, I			State: Kentucky	_	Sampling Poin	
Investigator(s): K	. Ilnick; J. Evans			Section, Townsh	nip, Range:		•
Landform (hillslope,	terrace, etc.):	terrace	Local relief (concave	e, convex, none):	none	Slope (%)	): 0-1
Subregion (LRR or N	MLRA) LRR N	Lat.: 38.1	82522	Long.: -85.866383		Datum:	
•		loam, 0 to 2 percent slope			NWI Class	ification:	
	=	typical for this time of the	-		plain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dis		Are "normal cire	cumstances"	
Are vegetation	, soil	, or hydrology	naturally proble	matic?	present?		Yes
					(If needed, expla	ain any answers i	n remarks)
SUMMARY O	F FINDINGS						
Hydrophytic vegetati	· ·	Yes	Is the Sampled Are	a			
Hydric soil present?	_	Yes	within a Wetland?		Ye	3	
Wetland hydrology p	resent?	Yes					
Remarks: (Evolain a	alternative procedures h	ere or in a separate report.	)				
Data point for Wetla	•	ere or iii a separate report.	.)				
Data point for Wellan	nu i i.						
HYDROLOGY	<u> </u>						
Wetland Hydro	ology Indicators						
Primary Indicators (r	minimum of one is requi	ired; check all that apply)		Seconda	ary Indicators (min	imum of two requ	uired)
Surface W	ater (A1)	True	Aquatic Plants (B14)		Surface Soil Cr		<del></del>
X High Wate	er Table (A2)		rogen Sulfide Odor (C1)		_	ated Concave Su	ırface (B8)
Saturation	(A3)	Oxid	lized Rhizospheres on Liv	ing Roots (C3)	Drainage Patte	rns (B10)	
Water Mar			sence of Reduced Iron (C4	· · · · · · · · · · · · · · · · · · ·	Moss Trim Line		
	Deposits (B2)		ent Iron Reduction in Tille		Dry-Season Wa		
Drift Depos			Muck Surface (C7)		Crayfish Burrov		
	or Crust (B4)		er (Explain in Remarks)		_	ole on Aerial Imag	nery (C9)
Iron Depos			» (Zapiani iii rtemante)		_	ssed Plants (D1)	
	າ Visible on Aerial Image	erv (R7)			Geomorphic Po		
	ined Leaves (B9)	ny (51)			Shallow Aquita		
	auna (B13)				Microtopograph		
	turia (B10)				FAC-Neutral Te		
				<del></del>		· · · · (20)	
Field Observations	:						
Surface water prese	ent? Yes _	No	X Depth (inches):	N/A	Wetland		
Water table present	? Yes	X No	Depth (inches):	6	hydrology		
Saturation present?	Yes	No >	X Depth (inches):	N/A	present?	Yes	
(includes capillary fri	inge)						
		<del> </del>	<del></del>				
Describe recorded d	ata (stream gauge, mor	nitoring well, aerial photos,	previous inspections), if a	available:			
Remarks:							
romano.							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ints	Sampling Point: DP26
		-		Dominance Test Worksheet
T Ott DI-t Oi (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	95	Yes	FAC	that are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across all Strata: 3 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 66.67% (A/B)
7				<u> </u>
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	95 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1				Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	0 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Cinna arundinacea	5	Yes	FACW	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Lonicera japonica	3	Yes	FACU	disturbed or problematic
3				alotal sou of prosisting to
4				
5				Definitions of Four Vegetation Strata
6				<b>3</b>
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
				Continued have Management land them 2 in DDI and
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 5.20 ft (1 fm) tail.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
13	8 =	Total Cover		and woody plants less than 3.28 ft tall.
		Total Cover		W I
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3				
4				
5				Hydrophytic
<u> </u>	0 =	Total Cover	-	vegetation present? Yes
	=	i otal Covel		hieseir: 1es
Remarks: (Include photo numbers here or c	nn a senarate shoot)			<u> </u>
incinairos, (include prioto numbers here or c	n a separate street)			

SOIL Sampling Point: DP26 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Texture Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 10YR 4/2 97 5YR 5/6 3 М silt loam С 3-14 2.5Y 5/2 80 5YR 5/6 20 С М silty clay loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Proper	ty		City/County: L	ouisville/ Jefferson	Sampling l	Date: 1/7/	2021
Applicant/Owner:	LDG Development	, LLC			State: Kentucky		Sampling Point:	DP27
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslope	e, terrace, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.:	38.1824	123	Long.: -85.866304		Datum:	
-	ne: ScA - Sciotoville si	•					ssification:	
Are climatic/hydrol	ologic conditions of the sit	te typical for this time of	f the yea			xplain in remarks	<b>s</b> )	
Are vegetation	, soil	, or hydrology	_	significantly dist			ircumstances"	
Are vegetation	, soil	, or hydrology	_	naturally probler	natic?	present?	. <del>-</del>	Yes
						(If needed, exp	plain any answers in re	emarks)
CHMMARY	OF FINDINGS							
SUIVIIVIAINI	OF FINDINGS		$\neg$					
Lindranhydia yaqat	1	Vaa						
Hydric soil prosent	•	Yes		Is the Sampled Area	а	,	M=	
Hydric soil present		Yes		within a Wetland?			No	
Wetland hydrology	y present?	No						
Damarka: (Evolair	n alternative procedures	hara or in a congrete re						
Upland data point	•	nere or in a separate re	port.)					
Upianu uata pom	to wettand ii.							
r								
ı								
HYDROLOG	2V							
Wetiana nyu	drology Indicators							
Primary Indicators	s (minimum of one is requ	uired; check all that app	oly)		Seconda	ary Indicators (m	ninimum of two require	ed)
Surface	Water (A1)		True Ac	quatic Plants (B14)		Surface Soil 0	Cracks (B6)	
High Wa	ater Table (A2)		•	en Sulfide Odor (C1)	_		etated Concave Surfa	ice (B8)
Saturation				d Rhizospheres on Livir	ng Roots (C3)	Drainage Pati		•
	/larks (B1)		•	ce of Reduced Iron (C4)	- · · · · -	Moss Trim Lir		
	nt Deposits (B2)		•	Iron Reduction in Tilled			Vater Table (C2)	
	posits (B3)		•	uck Surface (C7)		Crayfish Burro		
	at or Crust (B4)			Explain in Remarks)	_		sible on Aerial Imagery	v (C9)
	posits (B5)		Valor (.	_Apidin in Nomano,	_		ressed Plants (D1)	y (CS)
	ion Visible on Aerial Imag	non//P7\			_	Geomorphic F		
	Stained Leaves (B9)	jery (D7)			_	Shallow Aquit		
					_			
Aquatio	Fauna (B13)				_	FAC-Neutral	phic Relief (D4)	
					_	FAU-INCUII 61	Test (Do)	
Field Observation	ne:							
		No	~	Donth (inches):	NI/A			
Surface water pres		No No	X	Depth (inches):	N/A	Wetland		
Water table preser		No	X	Depth (inches):	N/A	hydrology		
Saturation present		No	X	Depth (inches):	N/A	present?	No	
(includes capillary	fringe)							
<del> </del>								
Describe recorded	d data (stream gauge, mo	onitoring well, aerial pho	otos, pre	evious inspections), it a	vailable:			
ļ								
Remarks:								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ınts	Sampling Point: DP27
				Dominance Test Worksheet
T Ott DI-t C: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	90	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
2 Quercus palustris	10	No	FACW	Total Number of Dominant
3	<del></del>			Species Across all Strata: 5 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 60.00% (A/B)
7				(*=)
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
· ·	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Acer rubrum	15	Yes	FAC	Column totals (A) (B)
2 Rosa multiflora	5	Yes	FACU	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	20 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Microstegium vimineum	6	Yes	FAC	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Lonicera japonica	3	Yes	FACU	disturbed or problematic
3				'
4				
5				Definitions of Four Vegetation Strata
6				, and the second
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
· ·	9 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	vines - All woody vines greater than 5.20 it in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3				
4				Hydronhydia
5				Hydrophytic vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	on a separate sheet)			•
, p	,			

SOIL Sampling Point: DP27 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 10YR 4/2 97 5YR 5/6 3 М silt loam С 3-14 2.5Y 5/2 80 5YR 5/6 20 С М silty clay loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Proper	rty	City/County: L	ouisville/ Jefferson	Sampling Da	ate: 1/7/2	2021
Applicant/Owner:	LDG Development	•		State: Kentucky	<u> </u>	Sampling Point:	DP28
• ' ,	K. Ilnick; J. Evans			Section, Townsh	ip, Range:		
Landform (hillslope		terrace	Local relief (concave		none	Slope (%):	0-1
Subregion (LRR o	· -		8.183144	Long.: <u>-85.864136</u>	\$194# Ol:	Datum:	
•		ilt loam, 0 to 2 percent slo	•	Vac (If no ov	NWI Classi	fication:	
•		ite typical for this time of t	•		plain in remarks)		
Are vegetation  Are vegetation	, soil, soil	, or hydrology , or hydrology	significantly dist naturally proble		Are "normal circ present?	umstances"	Yes
Ale vegetation	, 3011	, or rigarology	Ilatarany problem	mano:	•	ain any answers in re	
					, .	,	,
SUMMARY	OF FINDINGS						
Hydrophytic vegeta	•	No	Is the Sampled Are	a			
Hydric soil present		No	within a Wetland?	_	No	<u> </u>	
Wetland hydrology	y present?	Yes					
Pomarke: (Eynlair	a alternative procedures	here or in a separate repo	ort \				
	along railroad ditch.	nere or in a separate rep	оп.)				
 	along ramoda anon.						
I							
I							
HYDROLOG	Y						
Wetland Hyd	drology Indicators						
Drimany Indicators	· (minimum of one is rea	uired; check all that apply	Λ	Seconda	ry Indicators (min	imum of two required	1/
-	Water (A1)		rue Aquatic Plants (B14)	JEWHUA	Surface Soil Cra	imum of two required	1)
	ater Table (A2)		lydrogen Sulfide Odor (C1)		_	acks (66) ated Concave Surfac	oo (R8)
X Saturation	, ,		oxidized Rhizospheres on Livi	ing Roots (C3)	Drainage Patter		æ (во <i>)</i>
	on (A3) Marks (B1)		Presence of Reduced Iron (C4	· · · · · ·	Moss Trim Lines		
	nt Deposits (B2)		Recent Iron Reduction in Tilled		Dry-Season Wa		
	posits (B3)		hin Muck Surface (C7)		Crayfish Burrow		
						ns (Co) Nole on Aerial Imagery	(00)
	at or Crust (B4)	<u> </u>	Other (Explain in Remarks)		_	= -	(C9)
	oosits (B5) on Visible on Aerial Imag	/D7\		_	_	ssed Plants (D1)	
	on Visible on Aerial Imaç	gery (D7)			Geomorphic Po		
	Stained Leaves (B9) Fauna (B13)				Shallow Aquitar		
Aqualic	rauna (B13)				Microtopographi FAC-Neutral Te		
				_	_ FAC-Neutral Te	St (D5)	
Field Observation	ns:						
Surface water pres		No	Depth (inches):	X	Wetler d		
Water table prese		X No	Depth (inches):	2	Wetland hydrology		
Saturation present		X No	Depth (inches):	0-2	present?	Yes	
(includes capillary					<b>.</b>		
Ì	0 ,						
Describe recorded	data (stream gauge, m	onitoring well, aerial phot	os, previous inspections), if a	vailable:			
Remarks:							

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ints	Sampling Point: DP28
				Dominance Test Worksheet
T Ott DI-t C: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	70	Yes	FAC	that are OBL, FACW, or FAC: 2 (A)
2 Acer negundo	20	Yes	FAC	Total Number of Dominant
3 Quercus palustris	10	No	FACW	Species Across all Strata: 4 (B)
4	<del></del> -			
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 50.00% (A/B)
7				(102)
8				Prevalence Index Worksheet
9	-			Total % Cover of:
10	-			OBL species x 1 =
	100 =	Total Cover		FACW species x 2 =
		Total Cover		FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Lonicera maackii	80	Yes	UPL	· — —
2		162	UPL	Column totals (A) (B) Prevalence Index = B/A =
				Prevalence index – B/A –
3				
' <del></del>				Hadronkada Vanstalian Indiatana
5	-			Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide supporting data in Remarks or on a
10				supporting data in Remarks of on a separate sheet)
	= 08	Total Cover		ooparate erroety
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
· · · · · · · · · · · · · · · · · · ·	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Glechoma hederacea	15	Yes	FACU	hydrology must be present, unless
2 Allium vineale	5	No	FACU	disturbed or problematic
3 Carex blanda	5	No	FAC	
4 Elymus virginicus	2	No	FACW	
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11	1			breast height (DBH), regardless of height.
	-			Continuate the Weeds plants less than 2 in DRI and
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 5.20 ft (1 fil) tall.
				Herb - All herbaceous (non-woody) plants, regardless of size,
15		Total Cover		and woody plants less than 3.28 ft tall.
	=	Total Cover		
				<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? No
Remarks: (Include photo numbers here or o	on a separate sheet)	<del></del>		

SOIL Sampling Point: DP28 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-14 10YR 3/2 97 5YR 5/6 3 С М silty clay loam rocky fill present in this layer. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Proper	ty	City/County: I	Louisville/ Jefferson	Sampling D	ate: 1/	7/2021
Applicant/Owner:	LDG Development	, LLC		State: Kentucky	_	Sampling Point:	DP29
Investigator(s):	K. Ilnick; J. Evans			Section, Townsh	ip, Range:		
Landform (hillslop	oe, terrace, etc.):	terrace	Local relief (concave	e, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: <u>38.</u>	183589	Long.: -85.86493		Datum:	
Soil Map Unit Nar	me: ScA - Sciotoville sil	t loam, 0 to 2 percent slope	es		NWI Class	sification:	
Are climatic/hydro	ologic conditions of the sit	e typical for this time of the	e year?	Yes (If no, ex	plain in remarks)	i	
Are vegetation	, soil	, or hydrology	significantly dis	turbed?	Are "normal cir	cumstances"	
Are vegetation	, soil	, or hydrology	naturally proble	ematic?	present?		Yes
					(If needed, exp	lain any answers in	remarks)
SUMMARY	OF FINDINGS						
Hydrophytic vege	· ·	Yes	Is the Sampled Are	ea			
Hydric soil preser		Yes	within a Wetland?		Ye	÷S	
Wetland hydrolog	y present?	<u>Yes</u>					
Remarks: (Evolais	n alternative procedures	here or in a separate repor	<u> </u>				
Data Point to Wel	•	nere or in a separate repor	)				
Data i oiit to we	uana 12.						
HYDROLOG	GΥ						
	drology Indicators						
		uirad: abaak all that apply)		Casanda	m. Indiaatara (mi	nimo af tora va arri	d\
-	•	uired; check all that apply)	a Agustia Dianta (D14)	Seconda		nimum of two requi	rea)
	Water (A1)		e Aquatic Plants (B14)		Surface Soil C		foce (DO)
	ater Table (A2)		drogen Sulfide Odor (C1)	ing Deets (C3)		tated Concave Sur	ace (bo)
X Saturati			dized Rhizospheres on Liv		Drainage Patte		
	Marks (B1)		sence of Reduced Iron (C4		Moss Trim Line		
	ent Deposits (B2)		cent Iron Reduction in Tille	u 30iis (C6)	_	ater Table (C2)	
	posits (B3)		n Muck Surface (C7)		Crayfish Burro		(00)
	at or Crust (B4)	Oth	er (Explain in Remarks)			ble on Aerial Image	ry (C9)
	posits (B5)	··· (D7)			_	essed Plants (D1)	
	ion Visible on Aerial Imag	jery (B7)			Geomorphic P		
	Stained Leaves (B9)				Shallow Aquita		
Aquatic	Fauna (B13)				Microtopograp	` '	
					FAC-Neutral T	est (D5)	
Field Observatio	ons:						
Surface water pre	esent? Yes	No	X Depth (inches):	N/A	Wetland		
Water table prese		X No	Depth (inches):	3	hydrology		
Saturation presen		X No	Depth (inches):	0-3	present?	Yes	
(includes capillary						-	
ĺ							
Describe recorded	d data (stream gauge, mo	onitoring well, aerial photos	, previous inspections), if a	available:			
Remarks:							
Ì							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ınts	Sampling Point: DP29
		-		Dominance Test Worksheet
To - Otrotoro Diet Oie - (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	70	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
2 Liquidambar styraciflua	15	No	FAC	Total Number of Dominant
3 Fraxinus pennsylvanica	10	No	FACW	Species Across all Strata: 4 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 75.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	95 =	Total Cover		FACW speciesx 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Stratum	Cover	Species	Status	UPL speciesx 5 =
1 Acer negundo	15	Yes	FAC	Column totals (A) (B)
2 Fagus grandifolia	10	Yes	FACU	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0* 4 - Morphological adaptations* (provide
9				supporting data in Remarks or on a
10	25 =	Total Cover		separate sheet)
		Total Cover		
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Cinna arundinacea	20	Yes	FACW	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Carex vulpinoidea	5	No	OBL	disturbed or problematic
3 Rubus allegheniensis	2	No	FACU	alotal sou of prosioniatio
4				
5				Definitions of Four Vegetation Strata
6				Ĭ
7				
8				
9				
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	27 =	Total Cover		and woody plants less than 3.28 ft tall.
	·			Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
vvoody vine diatam 1 lot olze (60)	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP29 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 10YR 4/2 95 10YR 5/8 5 М silt loam С 3-14 2.5Y 6/2 70 20 С М 2.5Y 6/8 clay М 10YR 5/8 10 С Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Proper	ty	City/County: L	ouisville/ Jefferson	Sampling Da	ate: 1/7	7/2021
Applicant/Owner:	LDG Development	t, LLC		State: Kentucky	_	Sampling Point:	DP30
Investigator(s):	K. Ilnick; J. Evans			Section, Townsh	ip, Range:	•	
Landform (hillslop	e, terrace, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: <u>38</u> .	183544	Long.: -85.8645		Datum:	
Soil Map Unit Nar	ne: ScA - Sciotoville si	ilt loam, 0 to 2 percent slop	es		NWI Class	ification:	
Are climatic/hydro	logic conditions of the si	te typical for this time of th	e year?	Yes (If no, ex	plain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dis	urbed?	Are "normal cire	cumstances"	
Are vegetation	, soil	, or hydrology	naturally proble	matic?	present?	,	Yes
					(If needed, expla	ain any answers in	remarks)
SUMMARY	OF FINDINGS						
Hydrophytic veget	tation present?	No	1.4.0				
Hydric soil presen	ıt?	No	Is the Sampled Are within a Wetland?	a	No	)	
Wetland hydrolog	y present?	No	within a wettand:		,		
Remarks: (Explair	n alternative procedures	here or in a separate repo	rt.)				
Upland data point	to Wetlands 12 and 13.						
<b>HYDROLO</b>	3Y						
Wetland Hyd	drology Indicators						
Primary Indicators	s (minimum of one is req	uired; check all that apply)		Seconda	ry Indicators (min	imum of two requir	·ed)
-	Water (A1)		ue Aquatic Plants (B14)		Surface Soil Cr		<del></del>
	ater Table (A2)		drogen Sulfide Odor (C1)		_	ated Concave Surf	ace (B8)
Saturati			idized Rhizospheres on Livi	ng Roots (C3)	Drainage Patte		,
	Marks (B1)		esence of Reduced Iron (C4	· · · · —	Moss Trim Line		
	nt Deposits (B2)		cent Iron Reduction in Tilled	·	Dry-Season Wa		
	posits (B3)		in Muck Surface (C7)		Crayfish Burrov		
	at or Crust (B4)		ner (Explain in Remarks)		_	ole on Aerial Image	ry (C9)
	posits (B5)		ior (Explain in Romano)		_	ssed Plants (D1)	1, (00)
	ion Visible on Aerial Imag	nery (R7)			Geomorphic Po		
	Stained Leaves (B9)	gory ( <i>Dr.)</i>			Shallow Aquita		
	Fauna (B13)				Microtopograph	` '	
	Tauna (B10)				FAC-Neutral Te	` '	
						lot (20)	
Field Observatio	ns:						
Surface water pre	esent? Yes	No	X Depth (inches):	N/A	Wetland		
Water table prese		No No	X Depth (inches):	N/A	hydrology		
Saturation presen		No	X Depth (inches):	N/A	present?	No	
(includes capillary				<u> </u>			
` ' '	3 /						
Describe recorded	d data (stream gauge, m	onitoring well, aerial photo	s, previous inspections), if a	vailable:			
	( 0 0 ,	0 , 1	, , ,				
Remarks:							
ĺ							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP30
		-		Dominance Test Worksheet
T Ott DI-t O: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	80	Yes	FAC	that are OBL, FACW, or FAC: 1 (A)
2 Liquidambar styraciflua	10	No	FAC	Total Number of Dominant
3				Species Across all Strata: 5 (B)
4	-			
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 20.00% (A/B)
7				(===
8				Prevalence Index Worksheet
9				Total % Cover of:
10	-			OBL species x 1 =
	90 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	35	Yes	FACU	Column totals (A) (B)
2 Liquidambar styraciflua	5	No	FAC	Prevalence Index = B/A =
3				
4	-			
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	40 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Glechoma hederacea	35	Yes	FACU	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Lonicera japonica	30	Yes	FACU	disturbed or problematic
3 Allium vineale	15	No	FACU	distarbed of problematic
4			17100	
5				Definitions of Four Vegetation Strata
6				- Commission of Commission Commission
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
				breast height (DBH), regardless of height.
12				Continue (about 1945)
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 5.20 ft (1 fm) tall.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	= 80	Total Cover		and woody plants less than 3.28 ft tall.
		I Stal COVE		Weedvidee Allinesticities and the COOK STATE
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	20	Yes	FACU	
2		165	TACO	
3				
4				
5				Hydrophytic
	20 =	Total Cover		vegetation present? No
	=	Total Covel		present: NO
Remarks: (Include photo numbers here or o	n a senarate sheet\			1
Tremarks. (molade photo numbers nere of o	n a separate sneet)			

SOIL Sampling Point: DP30 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) (Inches) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 10YR 4/3 97 10YR 5/6 3 С М silt loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Pro	perty		City/County:	Louisville/ Jefferson	Sampling	Date:	1/7/202	21
Applicant/Owner:	LDG Developm	nent, LLC			State: Kentucky	_	Sampling P	oint:	DP31
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	nip, Range:			
Landform (hillslop	e, terrace, etc.):	terra	се	Local relief (concav	e, convex, none):	none	Slope	(%):	0-1
Subregion (LRR o	or MLRA) LRR	N	Lat.: 38.	183612	Long.: -85.864463		Datum:		
Soil Map Unit Nar	me: ScA - Sciotovil	e silt loam, 0 to 2	percent slop	es		NWI Cla	ssification:		
Are climatic/hydro	logic conditions of th	e site typical for t	his time of the	e year?	Yes (If no, ex	oplain in remark	s)		
Are vegetation	, soil	, or h	ydrology	significantly dis	sturbed?	Are "normal	circumstances"		
Are vegetation	, soil	, or h	ydrology	naturally proble	ematic?	present?			Yes
						(If needed, ex	plain any answe	rs in rem	ıarks)
SUMMARY	OF FINDINGS	}							
Hydrophytic veget	=	Yes		Is the Sampled Are	ea				
Hydric soil presen		Yes		within a Wetland?			Yes		
Wetland hydrolog	y present'?	Yes							
Remarks: (Evolair	n alternative procedu	res here or in a s	enarate renor	<u> </u>					
Data point to Wet	•	ies liele of ill a s	eparate repor	)					
Data point to vvet	iana 10.								
HYDROLOG	ЭΥ								
	drology Indicators								
		romitrodi obsoli d	II that annly (		0	(	-!!		
-	(minimum of one is	required; check a		a Aquatia Dianta (D14)	Seconda		ninimum of two r	equirea)	
X Surface	` '			e Aquatic Plants (B14)	_	Surface Soil		Curfoss	(D0)
	ater Table (A2)			Irogen Sulfide Odor (C1)	wing Doots (C2)		getated Concave	Surface	(DO)
X Saturati				dized Rhizospheres on Liv	· · · · · · · · · · · · · · · · · · ·	Drainage Par			
	Marks (B1)			sence of Reduced Iron (Co		Moss Trim Li		Λ.	
	nt Deposits (B2)			cent Iron Reduction in Tille	a Solis (Co)	_	Water Table (C2	)	
	posits (B3)			n Muck Surface (C7)	_	Crayfish Buri		4.	20)
	at or Crust (B4)		Oth	er (Explain in Remarks)	_		sible on Aerial In		J9)
	posits (B5)	(==)				_	tressed Plants (E	)1)	
	ion Visible on Aerial I	magery (B7)				_	Position (D2)		
	Stained Leaves (B9)					Shallow Aqui			
Aquatic	Fauna (B13)				_		phic Relief (D4)		
					_	FAC-Neutral	Test (D5)		
Field Observatio	ns:								
Surface water pre	sent? Ye	s X	No	Depth (inches):	0-1	Wetland			
Water table prese				X Depth (inches):	N/A	hydrology			
Saturation presen			No	Depth (inches):	0-3	present?	Yes		
(includes capillary						p. 000			
` . , 	<b>3</b> ,								
Describe recorded	d data (stream gauge	, monitoring well,	aerial photos	, previous inspections), if	available:				
Remarks:									
Ĭ									

GETATION (FC	oui Siraia)	Use scientific ı	iailles oi pia	1115	Sampling Point: DP31
			<b>5</b>		Dominance Test Worksheet
Tree Stratum	Plot Size (30')	Absolute %	Dominant	Indicator	
	( /	Cover	Species	Status	Number of Dominant Species
Acer rubrum		50	Yes	FAC	that are OBL, FACW, or FAC: 2 (A)
71007 74074777					
					Total Number of Dominant
					Species Across all Strata: 3 (B)
					Demonstrat Demoissant Consider
					Percent of Dominant Species
					that are OBL, FACW, or FAC: 66.67% (A/B
					Prevalence Index Worksheet
					Total % Cover of:
					OBL species x 1 =
		50 =	Total Cover		FACW species x 2 =
					FAC species x 3 =
apling/Shrub_	Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum	FIOL SIZE (13)	Cover	Species	Status	UPL species x 5 =
					Column totals (A) (B)
					Prevalence Index = B/A =
					Hydrophytic Vegetation Indicators:
					1 - Rapid test for hydrophytic vegetation
					X 2 - Dominance test is >50%
					3 - Prevalence index is ≤3.0*
					4 - Morphological adaptations* (provide
					supporting data in Remarks or on a
		0 =	Total Cover		separate sheet)
					5 11 21 1 2 1 2 1 2
					Problematic hydrophytic vegetation*
Herb Stratum	Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
icib otratam	1 101 0120 (0 )	Cover	Species	Status	*Indicators of hydric soil and wetland
Glechoma hederad	202	10	Yes	FACU	
					hydrology must be present, unless
Cinna arundinacea	)	10	Yes	FACW	disturbed or problematic
					Definitions of Four Vegetation Strata
					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
					breast height (DBH), regardless of height.
					מומטן אונים אונים וויים אונים וויים אונים וויים
					<b>_</b>
					Sapling/shrub - Woody plants less than 3 in. DBH and
					greater than 3.28 ft (1 m) tall.
					Herb - All herbaceous (non-woody) plants, regardless of si
					and woody plants less than 3.28 ft tall.
		20 =	Total Cover		and the state of t
					Woody vines All woody vines greater than 2.00 ft in Install
					Woody vines - All woody vines greater than 3.28 ft in heigh
ody Vine Stratum	Plot Size (30')	Absolute %	Dominant	Indicator	
, viiio Ottatuiii	5. 5.20 (00)	Cover	Species	Status	
					1
					Hydrophytic
					vegetation
		0 =	Total Cover		present? Yes
arks: (Include photo n	umbers here or on	a separate sheet)			
•		•			

SOIL Sampling Point: DP31 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 10YR 4/3 97 10YR 5/8 3 М silt loam С 10YR 5/8 3-14 2.5Y 4/2 90 С М 5 clay М 2.5Y 6/8 5 С Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Property	y		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/7	/2021
Applicant/Owner:	LDG Development,	•			State: Kentucky	<del>-</del>	Sampling Point:	DP32
Investigator(s):	K. Ilnick; J. Evans				Section, Townsh	hip, Range:		
Landform (hillslop		terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	· ·		38.1847	737	Long.: <u>-85.862998</u>		Datum:	
-	me: ScA - Sciotoville sill		_			NWI Clas		
-	ologic conditions of the site		the yea			xplain in remarks		
Are vegetation	, soil	, or hydrology	_	significantly dist		Are "normal c	ircumstances"	V
Are vegetation	, soil	, or hydrology	_	naturally probler	natic?	present?	olain any answers in i	Yes remarks)
						(II IIEEUEU, EA	Jidiii diiy diiswois ii i	lemarks)
SUMMARY	OF FINDINGS							
			$\Box$					
Hydrophytic veget	tation present?	Yes		1: 4: O Ave				
Hydric soil presen	it?	Yes		Is the Sampled Area within a Wetland?	1	Y	es	
Wetland hydrolog	y present?	Yes		Willill a Welland.				
` .	n alternative procedures h	nere or in a separate re	port.)			<u> </u>		
Data point to Wetl	land 14.							
I								
I								
	_							
''YDDOL 04	21/							
HYDROLOG								
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is requ	ired; check all that app	ly)		Seconda	ary Indicators (m	inimum of two require	ed)
-	Water (A1)			quatic Plants (B14)		Surface Soil C	•	<u> </u>
	ater Table (A2)			en Sulfide Odor (C1)			etated Concave Surfa	ace (B8)
Saturation				ed Rhizospheres on Livir	ng Roots (C3)	Drainage Patt		
	Marks (B1)			ce of Reduced Iron (C4)	- · · · · -	Moss Trim Lin		
	nt Deposits (B2)			Iron Reduction in Tilled			Vater Table (C2)	
	posits (B3)			uck Surface (C7)		Crayfish Burro		
	at or Crust (B4)			Explain in Remarks)			sible on Aerial Imagei	rv (C9)
	posits (B5)		J ,	,			ressed Plants (D1)	<b>y</b> (33)
	ion Visible on Aerial Imag	erv (B7)				Geomorphic F		
	Stained Leaves (B9)	ory (2. )				Shallow Aquit		
	Fauna (B13)						ohic Relief (D4)	
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Tauria (B 10)					FAC-Neutral		
					_		(50)	
Field Observation	ns:							
Surface water pre		No	Х	Depth (inches):	N/A	Wetland		
Water table prese		X No		Depth (inches):	5	wetiand hydrology		
Saturation presen		No	Х	Depth (inches):	N/A	present?	Yes	
(includes capillary						L		
Describe recorded	d data (stream gauge, mo	nitoring well, aerial pho	otos, pre	evious inspections), if a	vailable:			
Remarks:								

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ınts	Sampling Point: DP32
				Dominance Test Worksheet
T Ctt DI-t C (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	95	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
2				Total Number of Dominant
3				Species Across all Strata: 4 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 75.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	95 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Liquidambar styraciflua	20	Yes	FAC	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	20 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Cinna arundinacea	5	Yes	FACW	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Lonicera japonica	5	Yes	FACU	disturbed or problematic
3				'
4				
5				Definitions of Four Vegetation Strata
6				, and the second
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
40				Sapling/shrub - Woody plants less than 3 in. DBH and
40				greater than 3.28 ft (1 m) tall.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
· ·	10 =	Total Cover		and woody plants less than 3.28 ft tall.
	<del></del> -			Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	vines - All woody vines greater than 0.20 it in neight.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or c	on a separate sheet)			•
	. ,			

SOIL Sampling Point: DP32 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 10YR 4/2 80 10YR 5/8 10 М silty clay С 5YR 4/6 10 С М Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Property	/	City/County: L	ouisville/ Jefferson	Sampling D	Date: 1/7/:	2021
Applicant/Owner:	LDG Development, I			State: Kentucky	_ ` `	Sampling Point:	DP33
Investigator(s):	K. Ilnick; J. Evans			Section, Townsl	nip, Range:		
Landform (hillslope	e, terrace, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or	r MLRA) LRR N	Lat.: <u>38</u>	.184912	Long.: -85.862698		Datum:	
Soil Map Unit Nam	ne: ScA - Sciotoville silt	loam, 0 to 2 percent slop	es		NWI Clas	sification:	
Are climatic/hydrological	ogic conditions of the site	typical for this time of the	=		oplain in remarks	)	
Are vegetation	, soil	, or hydrology	significantly dist		Are "normal ci	rcumstances"	
Are vegetation	, soil	, or hydrology	naturally probler	matic?	present?		Yes
					(If needed, exp	olain any answers in re	∍marks)
SIIMMADV	OF FINDINGS						
SUMMART	JF FINDINGS		т — —				
	10	N					
Hydrophytic vegeta	—	No No	Is the Sampled Area	<b>a</b>			
Hydric soil present	_	No No	within a Wetland?		N	lo	
Wetland hydrology	present?	No					
	alternative procedures he	ere or in a separate repo	rt.)				
Upland data point t	to Wetlands 10 and 14.						
LIVEDOL OO	w						
HYDROLOG	<u>  Y                                   </u>						
Wetland Hydi	rology Indicators						
Primary Indicators	(minimum of one is requi	ired: check all that apply)		Seconda	ery Indicators (mi	inimum of two require	١٩/
-	Water (A1)		ue Aquatic Plants (B14)	00001100	Surface Soil C	•	<u>u)</u>
	` ,			_			/D9\
	ter Table (A2)		drogen Sulfide Odor (C1)	D t- (O2)		etated Concave Surfa	ce (Bø)
Saturatio			kidized Rhizospheres on Livi		Drainage Patte		
Water Ma			esence of Reduced Iron (C4)		Moss Trim Lin		
	t Deposits (B2)		ecent Iron Reduction in Tilled	Soils (C6)		/ater Table (C2)	
	oosits (B3)		in Muck Surface (C7)		Crayfish Burro		
	t or Crust (B4)	Oth	her (Explain in Remarks)			ible on Aerial Imagery	/ (C9)
	osits (B5)					essed Plants (D1)	
Inundatio	on Visible on Aerial Image	∍ry (B7)			Geomorphic P	osition (D2)	
Water-St	tained Leaves (B9)				Shallow Aquita	ard (D3)	
Aquatic F	Fauna (B13)				Microtopograp	hic Relief (D4)	
					FAC-Neutral T	est (D5)	
Field Observation	is:						
Surface water pres	sent? Yes	No	X Depth (inches):	N/A	Wetland		
Water table presen	nt? Yes	No	X Depth (inches):	N/A	hydrology		
Saturation present	? Yes	No	X Depth (inches):	N/A	present?	No	
(includes capillary t	_		<del></del> · · · <del>_</del>		•		
	- '						
Describe recorded	data (stream gauge, mor	nitoring well, aerial photo	s, previous inspections), if a	vailable:			
		-					
Remarks:							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ınts	Sampling Point: DP33
		-		Dominance Test Worksheet
Trac Stratum Plat Size (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Juniperus virginiana	30	Yes	FACU	that are OBL, FACW, or FAC: 3 (A)
2 Acer rubrum	30	Yes	FAC	Total Number of Dominant
3 Acer negundo	20	Yes	FAC	Species Across all Strata: 8 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 37.50% (A/B)
7	·			
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	= 08	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Stratum	Cover	Species	Status	UPL species x 5 =
1 Lonicera maackii	15	Yes	UPL	Column totals (A) (B)
2 Ilex opaca	15	Yes	FACU	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a separate sheet)
	30 =	Total Cover		Sopulate shooty
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
l	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Microstegium vimineum	40	Yes	FAC	hydrology must be present, unless
2 Lonicera japonica	20	Yes	FACU	disturbed or problematic
3 Carex blanda	<u> </u>	No	FAC	
4 Rubus allegheniensis	5	No	FACU	Definitions of Four Vegetation Strata
5				Definitions of Four Vegetation Strata
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
				breast height (DBH), regardless of height.
12				Solling to the state of the sta
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				greater than 5.20 ft (1 fm) tall.
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	70 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines All woody vines greater than 3.28 ft in height
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	20	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	20 =	Total Cover		present? No
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP33 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 10YR 4/4 0-14 100 silt loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Pro	perty		City/County:	Louisville/ Jefferson	Sampling	Date:	1/7/2021
Applicant/Owner:	LDG Developm	ent, LLC			State: Kentucky		Sampling Po	oint: DP34
Investigator(s):	K. Ilnick; J. Evans				Section, Tow	nship, Range:		•
Landform (hillslop	oe, terrace, etc.):	terrace		Local relief (concav	e, convex, none):	none	Slope (	%): 0-1
Subregion (LRR o	or MLRA) LRR I	١	Lat.: 38.1	86159	Long.: -85.860965		Datum:	
Soil Map Unit Nar	me: ScA - Sciotoville	silt loam, 0 to 2 po	ercent slope	s		NWI Cla	ssification:	
Are climatic/hydro	ologic conditions of the	site typical for this	time of the	year?	Yes (If no	, explain in remark	s)	
Are vegetation	, soil	, or hyd	Irology	significantly dis	sturbed?	Are "normal	circumstances"	
Are vegetation	, soil	, or hyd	Irology	naturally proble	ematic?	present?		Yes
						(If needed, ex	plain any answer	s in remarks)
SUMMARY	OF FINDINGS							
Hydrophytic veget	tation present?	Yes						
Hydric soil presen	nt?	Yes		Is the Sampled Are within a Wetland?	ea	,	Yes	
Wetland hydrolog	y present?	Yes		within a welland?		•		
Remarks: (Explair	n alternative procedur	es here or in a sep	arate report.	.)				
Data point to Wet	land 15.							
<b>HYDROLO</b>	ΒY							
Wetland Hyd	drology Indicators						,	
Primary Indicators	s (minimum of one is r	equired: check all	that apply)		Seco	ndary Indicators (n	ninimum of two re	auired)
-	Water (A1)			Aquatic Plants (B14)		Surface Soil		
	ater Table (A2)			rogen Sulfide Odor (C1)			getated Concave	Surface (B8)
X Saturati				lized Rhizospheres on Liv	vina Roots (C3)	Drainage Pa		Suridee (Be)
	Marks (B1)			sence of Reduced Iron (C		Moss Trim Li		
	nt Deposits (B2)			ent Iron Reduction in Tille			Water Table (C2)	
	posits (B3)			Muck Surface (C7)	ed Solis (CO)	Crayfish Buri		
							sible on Aerial Im	
	at or Crust (B4)			er (Explain in Remarks)				
	posits (B5) ion Visible on Aerial Ir						tressed Plants (D	1)
		nagery (b7)					Position (D2)	
	Stained Leaves (B9)					Shallow Aqui		
Aquatic	Fauna (B13)						phic Relief (D4)	
						X FAC-Neutral	Test (D5)	
Field Observatio	ns:							
Surface water pre		s X	No	Depth (inches):	0-1			
Water table prese				X Depth (inches):	N/A	Wetland		
Saturation presen			No Z	Depth (inches):	0-6	hydrology present?	Yes	
(includes capillary		,		Deptil (illones).	0-0	present	163	
(includes capillar)	, iiiige)							
Describe recorded	d data (stream gauge,	monitoring well, a	erial photos,	previous inspections), if	available:			
	( 3 3 /	3 ,	' '	1 //				
Remarks:								
Ì								

					Dominance Test Worksheet
Troe Stretum Die	ot Cine (201)	Absolute %	Dominant	Indicator	
<u>Tree Stratum</u> Plo	ot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum		60	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
					that are OBL, I ACW, OI I AC(A)
2 Quercus palustris		40	Yes	FACW	Total Number of Dominant
3					Species Across all Strata: 3 (B)
4					
5					Percent of Dominant Species
6					that are OBL, FACW, or FAC: 100.00% (A/B)
7					
8					Prevalence Index Worksheet
9					Total % Cover of:
10					
10					OBL species x 1 =
		100 =	Total Cover		FACW speciesx 2 =
					FAC species x 3 =
Sapling/Shrub		Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plo	ot Size (15')	Cover	Species	Status	UPL species x 5 =
<u> </u>					<u> </u>
1 Quercus palustris		5	Yes	FACW	Column totals (A) (B)
2					Prevalence Index = B/A =
3					
4					
· <del></del>					II. Local Co. Vocada Co. L. Postoro
5					Hydrophytic Vegetation Indicators:
6					1 - Rapid test for hydrophytic vegetation
7					X 2 - Dominance test is >50%
8					3 - Prevalence index is ≤3.0*
-					
9					4 - Morphological adaptations* (provide
10					supporting data in Remarks or on a
<u> </u>		5 =	Total Cover		separate sheet)
					Deskilonoskie kondesenkokie on makekienk
			<b>5</b>		Problematic hydrophytic vegetation*
Herb Stratum Pl	ot Size (5')	Absolute %	Dominant	Indicator	(explain)
	(- )	Cover	Species	Status	*Indicators of hydric soil and wetland
1					hydrology must be present, unless
2					disturbed or problematic
3					
3 4					
3 4 5					Definitions of Four Vegetation Strata
3 4 5 6					
3 4 5					
3 4 5 6					
3 4 5 6 7					
3 4 5 6 7 8					
3 4 5 6 7 8 9					Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
3 4 5 6 7 8					Definitions of Four Vegetation Strata
3 4 5 6 7 8 9					Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
3 4 5 6 7 8 9 10 11					Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and
3 4 5 6 7 8 9 10 11 12 13					Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
3 4 5 6 7 8 9 10 11 12 13					Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
3 4 5 6 7 8 9 10 11 12 13					Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size,
3 4 5 6 7 8 9 10 11 12 13		0 =	Total Cover		Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
3 4 5 6 7 8 9 10 11 12 13		0 =	Total Cover		Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
3 4 5 6 7 8 9 10 11 12 13					Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size,
3 4 5 6 7 8 9 10 11 12 13 14	ot Size (30')	Absolute %	Dominant	Indicator	Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
3 4 5 6 7 8 9 10 11 12 13 14	ot Size (30')			Indicator	Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
3 4 5 6 7 8 9 10 11 12 13 14	ot Size (30')	Absolute %	Dominant		Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo		Absolute %	Dominant		Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo		Absolute %	Dominant		Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo		Absolute %	Dominant		Definitions of Four Vegetation Strata  Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo		Absolute %	Dominant		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo		Absolute %	Dominant		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo		Absolute % Cover	Dominant Species		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4		Absolute %	Dominant		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5		Absolute % Cover	Dominant Species		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation
3 4 5 6 7 8 9 10 11 12 13 14 15  Woody Vine Stratum Plo 1 2 3 4 5	nbers here or on a sep	Absolute % Cover  0 =	Dominant Species	Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines - All woody vines greater than 3.28 ft in height.  Hydrophytic vegetation

VEGETATION (Four Strata) -- Use scientific names of plants

SOIL Sampling Point: DP34 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-6 10YR 4/2 85 5YR 5/6 10 М silty clay loam С 10YR 5/8 С М 5 6-14 2.5Y 5/2 75 5YR 5/6 20 С Μ clay 10YR 5/8 5 С M Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): clay Hydric soil present? Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Property	у		City/County: L	ouisville/ Jefferson	Sampling I	Date: 1/7/2	2021
Applicant/Owner:	LDG Development,	•			State: Kentucky	<u> </u>	Sampling Point:	DP35
• ' '	K. Ilnick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslope	· · · · · · · · · · · · · · · · · · ·	terrace		Local relief (concave		none	Slope (%):	0-1
Subregion (LRR o			38.1862	291	Long.: <u>-85.861066</u>		Datum:	
· ·	ne: ScA - Sciotoville silt		_				ssification:	
	logic conditions of the site		the yea			xplain in remarks		
Are vegetation	, soil	, or hydrology	_	significantly dist			ircumstances"	V
Are vegetation	, soil	, or hydrology	_	naturally probler	natic?	present?	 plain any answers in re	Yes emarks)
						(II libeueu, en	Jialii aliy aliswels ii i	elliaikə <i>j</i>
SUMMARY	OF FINDINGS							
Hydrophytic vegeta	ation present?	No						
Hydric soil present	t?	No		Is the Sampled Area within a Wetland?	1	1	No	
Wetland hydrology	y present?	No		Willilli a Welland.				
, ,	n alternative procedures h	nere or in a separate re	port.)					
Upland data point	to Wetlands 15 and 16.							
I								
I								
<u>l</u>					_			
יייים מעריי	***							
HYDROLOG								
Wetland Hyd	drology Indicators							
Primary Indicators	(minimum of one is requ	ired; check all that app	oly)		Seconda	ary Indicators (m	ninimum of two require	ed)
-	Water (A1)			quatic Plants (B14)		Surface Soil (	•	
High Wa	ater Table (A2)			en Sulfide Odor (C1)			etated Concave Surfa	ice (B8)
Saturation				d Rhizospheres on Livir	ng Roots (C3)	Drainage Patt		
	Marks (B1)			ce of Reduced Iron (C4)	- · · · · -	Moss Trim Lir		
	nt Deposits (B2)			Iron Reduction in Tilled			Vater Table (C2)	
	posits (B3)			uck Surface (C7)	<u> </u>	Crayfish Burro		
	at or Crust (B4)			Explain in Remarks)	_		sible on Aerial Imagery	v (C9)
	posits (B5)			,	_		ressed Plants (D1)	, (
	on Visible on Aerial Imag	erv (B7)				Geomorphic F		
	Stained Leaves (B9)	, ,			_	Shallow Aquit		
	Fauna (B13)				_		phic Relief (D4)	
<del></del> ·	,				_	FAC-Neutral		
Field Observation	ns:							
Surface water pres	sent? Yes	No	Х	Depth (inches):	N/A	Wetland		
Water table prese	ent? Yes	No	Χ	Depth (inches):	N/A	hydrology		
Saturation present	t? Yes	No	Х	Depth (inches):	N/A	present?	No	
(includes capillary	fringe)	<del></del>		_				
Describe recorded	d data (stream gauge, mo	nitoring well, aerial pho	otos, pre	evious inspections), if a	vailable:			
Remarks:								

<b>VEGETATION (Four Strata)</b> -	Use scientific r	names of pla	ants	Sampling Point: DP35
				Dominance Test Worksheet
Tree Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Robinia pseudoacacia	30	Yes	FACU	that are OBL, FACW, or FAC: 1 (A)
2 Acer rubrum	30	Yes	FAC	Total Number of Dominant
3 Quercus rubra	20	No	FACU	Species Across all Strata: 7 (B)
4 Diospyros virginiana	15	No	FAC	
5 Ulmus rubra	10	No	FAC	Percent of Dominant Species
6				that are OBL, FACW, or FAC: 14.29% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	105 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	20	Yes	FACU	Column totals (A) (B)
2 Lonicera maackii	20	Yes	UPL	Prevalence Index = B/A =
3 Acer rubrum	10	No	FAC	Trevalence index = B//( =
4 Juniperus virginiana	5	No	FACU	
5			TACO	Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0* 4 - Morphological adaptations* (provide
9				supporting data in Remarks or on a
10		<del></del>		separate sheet)
	=	Total Cover		
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Allium vineale	30	Yes	FACU	hydrology must be present, unless
2 Lonicera japonica	15	Yes	FACU	disturbed or problematic
3				
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
40				greater than 3.28 ft (1 m) tall.
				9
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	45 =	Total Cover		and woody plants less than 3.28 ft tall.
		10141 00101		Washington Allowands visus and the COO file being
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %  Cover	Species	Status	
1 Lonicera japonica	10	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	=	Total Cover		present? No
Remarks: (Include photo numbers here or o	on a separate sheet)			

SOIL Sampling Point: DP35 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 10YR 3/4 100 silt loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Prope	erty	City/County: L	ouisville/ Jefferson	Sampling Da	ite: 1/7/	/2021	
Applicant/Owner:	LDG Developmer	nt, LLC		State: Kentucky	_	Sampling Point:	DP36	
Investigator(s):	K. Ilnick; J. Evans			Section, Townsh	ip, Range:	_		
Landform (hillslop	e, terrace, etc.):	depression	Local relief (concave	e, convex, none):	concave	Slope (%):	0-1	
Subregion (LRR o	or MLRA) LRR N	Lat.: 3	8.186437	Long.: -85.860947		Datum:		
Soil Map Unit Nar	ne: ScA - Sciotoville s	silt loam, 0 to 2 percent slo	ppes		NWI Classi	fication:		
Are climatic/hydro	ologic conditions of the s	site typical for this time of t	he year?	Yes (If no, ex	plain in remarks)			
Are vegetation	, soil	, or hydrology	significantly dis	turbed?	Are "normal circ	umstances"		
Are vegetation	, soil	, or hydrology	naturally proble	matic?	present?	-	Yes	
					(If needed, expla	iin any answers in r	remarks)	
CLIMMADV	OF FINDINGS							
SUMMART	OF FINDINGS		1					
Hydrophytic veget	•	Yes	Is the Sampled Are	a				
Hydric soil presen		Yes	within a Wetland?		Yes			
Wetland hydrolog	y present?	Yes						
D	16 C 1		()					
	•	s here or in a separate rep	ort.)					
Data point to Wet	land 16.							
HYDROLOG	2V							
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is re-	quired; check all that apply	<i>(</i> )	Seconda	rv Indicators (mini	imum of two require	ed)	
-	· Water (A1)		rue Aquatic Plants (B14)		Surface Soil Cra			
	ater Table (A2)		ydrogen Sulfide Odor (C1)	X	_	ated Concave Surfa	ace (B8)	
			xidized Rhizospheres on Livi		Drainage Patter		100 (20)	
			resence of Reduced Iron (C4	- · · · -	Moss Trim Lines			
	ent Deposits (B2)		ecent Iron Reduction in Tille	· —	Dry-Season Wa			
	posits (B3)		hin Muck Surface (C7)		Crayfish Burrow			
	at or Crust (B4)		other (Explain in Remarks)		_	le on Aerial Imager	n/ (C0)	
	posits (B5)	<u> </u>	miei (Explain in Remarks)		Stunted or Stres	_	y (C9)	
	posits (เมื่อ) ion Visible on Aerial Ima	ngon/ (P7)			Geomorphic Po			
	Stained Leaves (B9)	agery (br)		_^	Shallow Aquitar	` ,		
	` '				_			
Aqualic	Fauna (B13)				Microtopographic Relief (D4)  X FAC-Neutral Test (D5)			
				_^	- FAC-Neuliai Te	st (D3)		
Field Observatio								
		V No	Donth (inches)	1.5				
Surface water pre		X No	Depth (inches):	1-5	Wetland			
Water table prese		No	X Depth (inches):	N/A	hydrology	.,		
Saturation presen		No	X Depth (inches):	N/A	present?	Yes		
(includes capillary	/ tringe)							
D ib	d data (atua aua aranga		\ i \ i					
Describe recorded	data (stream gauge, n	nonitoring well, aerial phot	os, previous inspections), if a	ivaliable:				
Remarks:								

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	ınts	Sampling Point: DP36
				Dominance Test Worksheet
To - Otrotoro Diet Oie - (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	20	Yes	FAC	that are OBL, FACW, or FAC: 4 (A)
2 Fraxinus pennsylvanica	20	Yes	FACW	Total Number of Dominant
3				Species Across all Strata: 4 (B)
4				``
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	40 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Acer rubrum	10	Yes	FAC	Column totals (A) (B)
2 Acer negundo	10	Yes	FAC	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8	-			3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10	-		-	supporting data in Remarks or on a
	20 =	Total Cover		separate sheet)
		10141 00101		Drahlamatia hydranhytia vagatatian*
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1			-	*Indicators of hydric soil and wetland
				hydrology must be present, unless disturbed or problematic
3				distalbed of problematic
4	-		-	
5				Definitions of Four Vegetation Strata
6				Deminions of Four Vegetation Strata
7				
8				
9				
10	-			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
	-			breast height (DBH), regardless of height.
12	-		-	
12				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
13				greater than 3.26 it (1 iii) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15	0 =	Total Cover		and woody plants less than 3.28 ft tall.
		Total Cover		L
	A b = = 1 b = 0/	Damain and	la dia atau	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute % Cover	Dominant Species	Indicator Status	
	Oover	Opecies	Otatus	
1			-	
2			-	
3				
4				Hydrophytic
5		T-t-LO	-	vegetation
	0 =	Total Cover		present? Yes
Pomarke: (Include photo pumbara hare	un a congreto chest\			
Remarks: (Include photo numbers here or o	n a separate sneet)			

SOIL Sampling Point: DP36 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 2.5Y 5/1 85 5YR 5/8 10 М silty clay С 10YR 5/6 С М 5 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Property	/	City/County: L	.ouisville/ Jefferson	Sampling Dat	e: 1/7/	2021
Applicant/Owner:	LDG Development,			State: Kentucky	_ · ·	Sampling Point:	DP37
Investigator(s):	K. Ilnick; J. Evans			Section, Townsh	ip, Range:		
Landform (hillslope	e, terrace, etc.):	depression	Local relief (concave	, convex, none):	concave	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: <u>38</u> .1	184329	Long.: -85.870573		Datum:	
Soil Map Unit Nan	ne: UeC - Urban land-Alfic	Udarents complex, fragipan s	substratum-over loamy sedimen	ıt	NWI Classif	cation:	
Are climatic/hydro	logic conditions of the site	e typical for this time of the	year?	Yes (If no, ex	plain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dist		Are "normal circu	ımstances"	
Are vegetation	, soil	, or hydrology	naturally probler	natic?	present?	. <del>-</del>	Yes
					(If needed, explai	n any answers in re	emarks)
SUMMARY	OF FINDINGS						
Hydrophytic veget	ation present?	Yes	la the Compled Are	_			
Hydric soil present	t?	Yes	Is the Sampled Area within a Wetland?	1	Yes		
Wetland hydrology	y present?	Yes	William & Francis				
	•	ere or in a separate report	t.)				
Data point to Wetl	land 17.						
HYDROLOG	2V						
	drology Indicators						
-	(minimum of one is requi			Seconda	-	num of two require	ed)
	Water (A1)		e Aquatic Plants (B14)	_	Surface Soil Cra		
X High Wa	ater Table (A2)		drogen Sulfide Odor (C1)	_		ted Concave Surfa	ce (B8)
Saturation	on (A3)	Oxio	dized Rhizospheres on Livi	ng Roots (C3)	Drainage Patterr	ıs (B10)	
Water M	/larks (B1)	Pre	sence of Reduced Iron (C4		Moss Trim Lines	(B16)	
Sedimer	nt Deposits (B2)	Rec	cent Iron Reduction in Tilled	l Soils (C6)	Dry-Season Wat	er Table (C2)	
Drift Dep	posits (B3)	Thir	n Muck Surface (C7)		Crayfish Burrows	s (C8)	
Algal Ma	at or Crust (B4)	Oth	er (Explain in Remarks)		Saturation Visible	e on Aerial Imagery	y (C9)
Iron Dep	oosits (B5)	<del></del>		<u> </u>	Stunted or Stress	sed Plants (D1)	
Inundation	on Visible on Aerial Image	ery (B7)		X	Geomorphic Pos		
X Water-S	Stained Leaves (B9)			_	Shallow Aquitard	(D3)	
Aquatic	Fauna (B13)				Microtopographic	Relief (D4)	
<del></del>				X FAC-Neutral Test (D5)			
Field Observation		Na	V Dente (inches)	A1/A			
Surface water pres	-		X Depth (inches):	N/A	Wetland		
Water table prese	-	XNo	Depth (inches):	6	hydrology	.,	
Saturation present	-	No	X Depth (inches):	N/A	present?	<u>Yes</u>	
(includes capillary	fringe)						
Dagariba recorded	d data (atraam galligo, mo	=itaring well porial photos	vious inspections) if a	veilable:			
Describe recorded	data (stream gauge, mo	nitoring well, aerial priotos	s, previous inspections), if a	valiable:			
D							
Remarks:							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP37
		-		Dominance Test Worksheet
T Ott DI-t O: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Quercus palustris	40	Yes	FACW	that are OBL, FACW, or FAC: 5 (A)
2 Acer rubrum	30	Yes	FAC	Total Number of Dominant
3				Species Across all Strata: 7 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 71.43% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	70 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
<u>Stratum</u>	Cover	Species	Status	UPL species x 5 =
1 Ligustrum sinense	15	Yes	FACU	Column totals (A) (B)
2 Quercus palustris	5	Yes	FACW	Prevalence Index = B/A =
3 Rosa multiflora	3	No	FACU	
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide supporting data in Remarks or on a
10		T. I. I. O.		separate sheet)
	=	Total Cover		
	A b = = lost = 0/	D t	la dia atau	Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status	(explain)
1 Cinna arundinacea	25	Yes	FACW	*Indicators of hydric soil and wetland
2 Microstegium vimineum	20	Yes	FAC	hydrology must be present, unless disturbed or problematic
3 Lonicera japonica	8	No	FACU	distalbed of problematic
4 Glechoma hederacea	8	No	FACU	
5			17100	Definitions of Four Vegetation Strata
6				
7				
8	-			
9	-			
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13	1			greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	61 =	Total Cover	<del></del>	and woody plants less than 3.28 ft tall.
	<u> </u>			Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	, g
Woody ville Stratum Plot Size (50)	Cover	Species	Status	
1 Lonicera japonica	15	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	=	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP37 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Texture Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-6 2.5Y 6/1 60 5YR 5/8 40 М С clay clay 6-14 70 20 С М 2.5Y 6/1 5YR 5/8 2.5Y 6/8 5 С Μ 2.5Y 3/3 5 С M Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Property	у		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/7/2	2021
Applicant/Owner:	LDG Development,	•		- · · · -	State: Kentucky		Sampling Point:	DP38
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	ship, Range:		
Landform (hillslope	, terrace, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or			38.1841	16	Long.: <u>-85.87069</u>		Datum:	
-	e: ScA - Sciotoville silt	· · · · · · · · · · · · · · · · · · ·				NWI Clas		
	ogic conditions of the site		the yea			explain in remarks	•	
Are vegetation	, soil	, or hydrology	_	significantly dist		Are "normal ci	rcumstances"	
Are vegetation _	, soil	, or hydrology	_	naturally probler	natic?	present?		Yes
						(ir needed, exp	olain any answers in re	emarks)
SUMMARY (	OF FINDINGS							
OOMMAKT (	<u> </u>		$\neg \vdash$					
Hydrophytic vegeta	ation present?	Yes						
Hydric soil present	- ·	No		Is the Sampled Area	a		No	
Wetland hydrology	-	No		within a Wetland?				
wedana nyarology	prosont:							
Remarks: (Evolain	alternative procedures h	ere or in a senarate re	nort )					
	to Wetlands 17 and 18.	ere or irra separate re	port.)					
Opiana data point i	.0 Wellands 17 and 10.							
HADBOI OC	·V							
HYDROLOG								
Wetland Hyd	rology Indicators							
Primary Indicators	(minimum of one is requi	ired; check all that app	ıly)		Second	larv Indicators (m	inimum of two require	ed)
	Water (A1)			quatic Plants (B14)		Surface Soil C	· · · · · · · · · · · · · · · · · · ·	<u></u>
	ter Table (A2)			en Sulfide Odor (C1)			etated Concave Surfa	ice (R8)
Saturatio				d Rhizospheres on Livii	na Roots (C3)	Drainage Patt		ice (Do)
Water Ma				ce of Reduced Iron (C4)		Moss Trim Lin		
	t Deposits (B2)			Iron Reduction in Tilled	Solis (Co)		Vater Table (C2)	
	osits (B3)			uck Surface (C7)	_	Crayfish Burro		
	t or Crust (B4)		Other (E	Explain in Remarks)	_		sible on Aerial Imagery	y (C9)
	osits (B5)				_		ressed Plants (D1)	
	on Visible on Aerial Image	ery (B7)			_	Geomorphic F		
	tained Leaves (B9)				_	Shallow Aquita		
Aquatic F	Fauna (B13)				_		ohic Relief (D4)	
					_	FAC-Neutral 1	rest (D5)	
					<del></del>			
Field Observation	ıs:							
Surface water pres	sent? Yes	No	Χ	Depth (inches):	N/A	Wetland		
Water table preser	nt? Yes	No	Х	Depth (inches):	N/A	hydrology		
Saturation present	? Yes	No	Х	Depth (inches):	N/A	present?	No	
(includes capillary	-					-		
Ì	<i>C</i> ,				1			
Describe recorded	data (stream gauge, mo	nitoring well, aerial pho	otos, pre	evious inspections), if a	vailable:			
 I	( J J ,	······· 5 , .		, ,,				
Remarks:								
Tomano.								

				Dominance Test Worksheet
Tree Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
Tiee Stratum Flot Size (30)	Cover	Species	Status	Number of Dominant Species
I Acer rubrum	30	Yes	FAC	that are OBL, FACW, or FAC: 6 (A)
Robinia pseudoacacia	20	Yes	FACU	Total Number of Dominant
3 Fraxinus pennsylvanica	20	Yes	FACW	Species Across all Strata: 9 (B)
Liquidambar styraciflua	20	Yes	FAC	`,
5				Percent of Dominant Species
				that are OBL, FACW, or FAC: 66.67% (A/B)
				(1715)
3				Prevalence Index Worksheet
<u> </u>				Total % Cover of:
)	90 =	Total Cover		OBL species x 1 =
	=	Total Cover		FACW species x 2 =
0 11 101 1		<b>5</b>		FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Piet Ciza (10)	Cover	Species	Status	UPL species x 5 =
Acer negundo	5	Yes	FAC	Column totals (A) (B)
Rosa multiflora	3	Yes	FACU	Prevalence Index = B/A =
i				Hydrophytic Vegetation Indicators:
_				1 - Rapid test for hydrophytic vegetation
				X 2 - Dominance test is >50%
				3 - Prevalence index is ≤3.0*
				4 - Morphological adaptations* (provide
				supporting data in Remarks or on a
	8 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
Microstegium vimineum	35	Yes	FAC	*Indicators of hydric soil and wetland
2 Elymus virginicus	20	Yes	FACW	hydrology must be present, unless disturbed or problematic
B Lonicera japonica	15	No	FACU	disturbed of problematic
	10			
	5	No	FACW	Definitions of Four Variation Charles
5 Allium vineale		No	FACU	Definitions of Four Vegetation Strata
<u> </u>				
9				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
)			-	breast height (DBH), regardless of height.
1				siedet neight (2211), regal diese et neight
2				Sapling/shrub - Woody plants less than 3 in. DBH and
3				greater than 3.28 ft (1 m) tall.
1				
5				Herb - All herbaceous (non-woody) plants, regardless of size and woody plants less than 3.28 ft tall.
_	85 =	Total Cover		and woody plants less than 3.20 it tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	The state of the s
oody Vine Stratum Plot Size (30')	Cover	Species	Status	
l Lonicera japonica	15	Yes	FACU	
2 Euonymus fortunei	3	No	UPL	
B				
1				
<u> </u>				Hydrophytic
)	18 =	Total Cayor		vegetation
	=	Total Cover		present? Yes
marks: (Include photo numbers here or on	a separate sheet)			

SOIL Sampling Point: DP38 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-4 10YR 3/4 100 silt loam 4-14 10YR 5/3 85 10YR 5/6 С М 15 silty clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane Propert	у	City/County: I	_ouisville/ Jefferson	Sampling Da	ite: 1/1	1/2021
Applicant/Owner:	LDG Development,	LLC		State: Kentucky		Sampling Point:	DP39
Investigator(s):	K. Ilnick; J. Evans			Section, Township	o, Range:		
Landform (hillslop	oe, terrace, etc.):	terrace	Local relief (concave	e, convex, none):	none	Slope (%):	0-1
Subregion (LRR o	or MLRA) LRR N	Lat.: 38.	184059	Long.: -85.870908		Datum:	
Soil Map Unit Nar	me: ScA - Sciotoville sil	t loam, 0 to 2 percent slop	es		NWI Classi	fication:	
Are climatic/hydro	ologic conditions of the site	e typical for this time of the	e year?	Yes (If no, exp	lain in remarks)		
Are vegetation	, soil	, or hydrology	significantly dis	turbed?	Are "normal circ	:umstances"	
Are vegetation	, soil	, or hydrology	naturally proble		present?		Yes
					(If needed, expla	in any answers in	remarks)
SIIMMARY	OF FINDINGS						
SOMMAN	OI TINDINGS		Ī				
Hydrophytic veget	tation procent?	No					
Hydric soil presen		No	Is the Sampled Are	a	No		
Wetland hydrolog		No	within a Wetland?		140		
welland hydrolog	y present:	140					
Remarks: (Explain	n alternative procedures h	nere or in a separate repor	† )				
	t to Wetlands 18 and 19.	icic of ill a separate repor	,				
Opiana data point	to wellands to and 19.						
HVDDOL OA	<b>2</b> V						
HYDROLOG							
Wetland Hyd	drology Indicators						
Primary Indicators	s (minimum of one is requ	ired; check all that apply)		Secondary	/ Indicators (min	imum of two requir	red)
Surface	Water (A1)	Tru	e Aquatic Plants (B14)		Surface Soil Cra	acks (B6)	
High Wa	ater Table (A2)	—— Hyd	drogen Sulfide Odor (C1)		Sparsely Vegeta	ated Concave Surf	face (B8)
Saturati	on (A3)	Oxi	dized Rhizospheres on Liv	ing Roots (C3)	Drainage Patter	ns (B10)	
Water N	Marks (B1)	Pre	sence of Reduced Iron (C4	<u> </u>	Moss Trim Line:	s (B16)	
Sedime	nt Deposits (B2)	Red	cent Iron Reduction in Tille	d Soils (C6)	Dry-Season Wa	ter Table (C2)	
Drift De	posits (B3)	Thi	n Muck Surface (C7)		Crayfish Burrow	's (C8)	
Algal Ma	at or Crust (B4)	— Oth	er (Explain in Remarks)		Saturation Visib	le on Aerial Image	ery (C9)
	posits (B5)		, ,			ssed Plants (D1)	
	ion Visible on Aerial Imag	ery (B7)			Geomorphic Po		
Water-S	Stained Leaves (B9)				Shallow Aquitar	d (D3)	
	Fauna (B13)				Microtopograph	ic Relief (D4)	
<u> </u>	, ,				FAC-Neutral Te	st (D5)	
Field Observatio	ns:						
Surface water pre	esent? Yes	No	X Depth (inches):	N/A	Wetland		
Water table prese	•		X Depth (inches):	N/A	hydrology		
Saturation presen			X Depth (inches):	N/A	present?	No	
(includes capillary							
`	, <b>,</b>						
Describe recorded	d data (stream gauge, mo	nitoring well, aerial photos	s, previous inspections), if a	available:			
	( 0 0 /	0 , 1	,, ,,				
Remarks:							
ĺ							

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP39
		-		Dominance Test Worksheet
T Ott DI-t Oi (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	80	Yes	FAC	that are OBL, FACW, or FAC: 1 (A)
2 Quercus palustris	15	No	FACW	`, '
3			171011	Total Number of Dominant Species Across all Strata: 4 (B)
4				Opedes Across all citata.
5				Percent of Dominant Species
6	-			that are OBL, FACW, or FAC: 25.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL speciesx 1 =
	95 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Piot Size (18)	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	60	Yes	FACU	Column totals(A)(B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7	-			2 - Dominance test is >50%
8	-			3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	60 =	Total Cover	-	separate sheet)
		10101 00101		Dark I am aki a ku dha aki a u a a akaki a a
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	(explain)
1 Lanicara ispanica			FACU	*Indicators of hydric soil and wetland
1 Lonicera japonica	60	Yes		hydrology must be present, unless
2 Rubus allegheniensis	10	No	FACU	disturbed or problematic
3 Rosa multiflora	10	No	FACU	
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				T \\\
10				<b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11	1			breast fieight (DBF1), regardless of fieight.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13	<u> </u>			greater than 3.28 ft (1 m) tall.
14				
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	= 08	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	The state of the s
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	30	Yes	FACU	
2			- 11100	
3				
4	-			
5				Hydrophytic
<sup>3</sup>		Total Caver		vegetation
	30 =	Total Cover		present? No
Demandra /Indicale whate without here are	un a concrete about)			
Remarks: (Include photo numbers here or c	on a separate sneet)			

SOIL Sampling Point: DP39 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 10YR 3/3 100 silt loam 3-10 10YR 4/4 75 D М 2.5Y 5/2 15 silty clay 10YR 5/8 10 С Μ 10-14 2.5Y 5/3 90 10YR 5/8 5 С M silty clay loam 10YR 4/3 5 D Μ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

Project/Site:	3500 Lees Lane I	Property			City/County: I	Louisville/ Jefferson	Sampling [	Date: 1/1	11/2021
Applicant/Owner:			_C			State: Kentucky		Sampling Point:	DP40
Investigator(s):	K. Ilnick; J. Evans	S				Section, Town	ship, Range:		
Landform (hillslop	oe, terrace, etc.):		depression		Local relief (concave	e, convex, none):	concave	Slope (%):	0-1
Subregion (LRR o	· · · · · · · · · · · · · · · · · · ·	RR N		.at.: <u>38.18</u>		Long.: <u>-85.871116</u>		Datum:	
-					ostratum-over loamy sedimer		NWI Clas		
-	ologic conditions of	the site t		-			explain in remarks		
Are vegetation	, soil		, or hydrolo	_	significantly dis		Are "normal c	ircumstances"	V
Are vegetation	, soil		, or hydrolo	ogy _	naturally proble	ematic?	present?	olain any answers in	Yes remarks)
							(II Needed, exp	nam any answers in	Temarks
<b>SUMMARY</b>	OF FINDING	3S							
Hydrophytic vege	tation present?	_	Yes		Is the Sampled Are	<b>.</b>			
Hydric soil preser	ıt?	_	Yes		within a Wetland?	ra .	Y	es	
Wetland hydrolog	y present?	_	Yes						
			<del></del>						
	n alternative proce	dures her	e or in a separate	ie report.)					
Data point to Wet	land 18.								
HYDROLOG	ΒΥ								
	drology Indicators	s							
-	s (minimum of one	is require	d; check all that			Secon		inimum of two requi	red)
	Water (A1)		_		Aquatic Plants (B14)	_	Surface Soil C		
	ater Table (A2)		_		ogen Sulfide Odor (C1)	<del>-</del>		etated Concave Sur	face (B8)
X Saturati			_		zed Rhizospheres on Liv	-	Drainage Patt		
	Marks (B1)		_		ence of Reduced Iron (C4	· —	Moss Trim Lir		
	ent Deposits (B2)		<u> </u>		nt Iron Reduction in Tille	d Soils (C6)		Vater Table (C2)	
	posits (B3)		_		Muck Surface (C7)	_	Crayfish Burro		
	at or Crust (B4)		_	Other	(Explain in Remarks)	_		sible on Aerial Image	∍ry (C9)
	posits (B5)					_		ressed Plants (D1)	
	ion Visible on Aeria	٠.	/ (B7)			-	X Geomorphic F	` ,	
	Stained Leaves (B	∌)				=	Shallow Aquit	` '	
Aquatic	Fauna (B13)					_		ohic Relief (D4)	
						_	X FAC-Neutral	rest (D5)	
Field Observation									
Field Observatio Surface water pre		Voo	Y No.		Depth (inches):	1.2			
Water table prese		Yes Yes	X No			1-3 N/A	Wetland		
-		_					hydrology	Vaa	
Saturation present (includes capillary		Yes _	X No	, <del></del>	Depth (inches):	0-2	present?	Yes	
(includes capillar)	, iiiige)								
Describe recorder	d data (stream da)	ıge moni	oring well aerial	I nhotos r	previous inspections), if a	available:			
Decembe received	a data (otrodin gae	igo, mom	ornig won, donar	r priotoc, p	novious inspections), in c	availabio.			
Remarks:									
. tomanto									
Ì									

<b>VEGETATION (Four Strata)</b>	Use scientific	names of pla	ants	Sampling Point: DP40
				Dominance Test Worksheet
T 044 DI-4 0: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	60	Yes	FAC	that are OBL, FACW, or FAC: 3 (A)
2 Quercus palustris	20	Yes	FACW	
3		163	TACV	Total Number of Dominant Species Across all Strata: 3 (B)
				Species Across all Strata(B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7	<u> </u>			
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL speciesx 1 =
	= 80	Total Cover		FACW speciesx 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU speciesx 4 =
Stratum	Cover	Species	Status	UPL speciesx 5 =
1 Acer rubrum	20	Yes	FAC	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7			<u> </u>	X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10	<u> </u>			supporting data in Remarks or on a
'-	20 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	*Indicators of hydric soil and wetland
1				hydrology must be present, unless
2				disturbed or problematic
3				·
4				
5				Definitions of Four Vegetation Strata
6				_
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
	·			Sapling/shrub - Woody plants less than 3 in. DBH and
40				greater than 3.28 ft (1 m) tall.
44				greater trian 0.20 it (+ iii) tain
15				Herb - All herbaceous (non-woody) plants, regardless of size,
· -	0 =	Total Cover		and woody plants less than 3.28 ft tall.
		10141 00101		Manda vines All woods vines are stor than 2.20 ft in height
	Absolute %	Dominant	Indicator	<b>Woody vines</b> - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1		·		
2				
3				
4				n i a e
5				Hydrophytic vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or	on a separate sheet)			
The state of the s	a separate enlest/			

SOIL Sampling Point: DP40 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-2 10YR 5/2 100 silty clay 2-14 2.5Y 5/1 70 7.5YR 4/6 25 М С clay М 5YR 5/6 5 С Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? clay Yes Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: 3500	0 Lees Lane Property	,	City/County: L	ouisville/ Jefferson	Sampling D	Date: 1/11/2	2021
Applicant/Owner:	LDG Development, I	LLC		State: Kentucky	_	Sampling Point:	DP41
Investigator(s): K. III	nick; J. Evans			Section, Townsh	nip, Range:		
Landform (hillslope, ter	race, etc.):	terrace	Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or ML	· <del></del>		38.18383	Long.: <u>-85.871049</u>		Datum:	
Soil Map Unit Name:	ScA - Sciotoville silt	loam, 0 to 2 percent s	slopes		NWI Class	sification:	
Are climatic/hydrologic	conditions of the site	typical for this time o	=		plain in remarks	)	
Are vegetation	, soil	, or hydrology	significantly dist		Are "normal ci	cumstances"	
Are vegetation	, soil	, or hydrology	naturally probler	natic?	present?		Yes
					(If needed, exp	lain any answers in re	emarks)
SUMMARY OF	FINDINGS						
Hydrophytic vegetation	present?	Yes					
Hydric soil present?	_	Yes	Is the Sampled Area	1	Ye	es	
Wetland hydrology pre	sent?	Yes	within a Wetland?		•		
, 3,1	-						
Remarks: (Explain alte	rnative procedures h	ere or in a separate re	eport.)				
Data point to Wetland	· ·	'	1 /				
·							
HYDROLOGY							
Wetland Hydrolo	gy Indicators						
Primary Indicators (mir	nimum of one is requi	red: check all that and	nlv)	Seconda	ry Indicators (mi	nimum of two required	d)
Surface Water		ou, oncor un unut up	True Aquatic Plants (B14)		Surface Soil C		<u>u)</u>
X High Water T	` '		Hydrogen Sulfide Odor (C1)	_		tated Concave Surfac	ce (B8)
X Saturation (A			Oxidized Rhizospheres on Livi	na Roots (C3)	Drainage Patte		DC (DO)
Water Marks	•		Presence of Reduced Iron (C4		Moss Trim Line		
Sediment De			Recent Iron Reduction in Tilled			ater Table (C2)	
Drift Deposits			Thin Muck Surface (C7)		Crayfish Burro		
				_			. (CO)
Algal Mat or			Other (Explain in Remarks)	_	_	ble on Aerial Imagery	(09)
Iron Deposits		(D7)		_	_	essed Plants (D1)	
	isible on Aerial Image	ery (B7)			Geomorphic P		
	ed Leaves (B9)			_	Shallow Aquita		
Aquatic Faun	a (B13)				Microtopograp		
				<u> </u>	FAC-Neutral T	est (D5)	
Field Observations:							
Surface water present?	? Yes	No	X Depth (inches):	N/A			
Water table present?	Yes	X No	Depth (inches):	2	Wetland		
Saturation present?	Yes	X No	Depth (inches):	0-2	hydrology present?	Yes	
(includes capillary fring	_	X NO	Deptil (illolles).	0-2	present	163	
	<b>c</b> )						
Describe recorded data	a (stream gauge, mor	nitoring well, aerial ph	otos, previous inspections), if a	vailable:			
	(gg-,		,  ,,				
Remarks:							

<b>VEGETATION (Four Strata)</b> -	- Use scientific	names of pla	ints	Sampling Point: DP41
				Dominance Test Worksheet
T 01 1 PI 10: (00!)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Quercus palustris	60	Yes	FACW	that are OBL, FACW, or FAC: 4 (A)
2 Acer rubrum	20	Yes	FAC	`,
		Yes	FAC	Total Number of Dominant
3				Species Across all Strata: 5 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 80.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	= 08	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1				<u> </u>
				``
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	0 =	Total Cover		separate sheet)
	Absolute %	Dominant	Indicator	Problematic hydrophytic vegetation* (explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	(ехріант)
				*Indicators of hydric soil and wetland
1 Elymus virginicus	10	Yes	FACW	hydrology must be present, unless
2 Cinna arundinacea	5	Yes	FACW	disturbed or problematic
3 Lonicera japonica	5	Yes	FACU	
4				
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
				breast height (DBH), regardless of height.
12	•			Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15				and woody plants less than 3.28 ft tall.
	=	Total Cover		and need, plante less than 6.20 it tain
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1				
2				
3				
4				
5				Hydrophytic
	0 =	Total Cayor		vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or c	n a separate sheet)			

SOIL Sampling Point: DP41 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-2 10YR 5/2 97 10YR 5/8 3 М silt loam С 2-10 70 10YR 5/6 30 С М silty clay 2.5Y 4/2 75 10-14 10YR 5/2 10YR 5/6 20 С Μ silty clay 5YR 4/6 5 С M Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) X Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: 350	oject/Site: 3500 Lees Lane Property			Louisville/ Jefferson	Sampling Date:	1/11/2	2021	
Applicant/Owner:	LDG Development, I			State: Kentucky		ampling Point:	DP42	
Investigator(s): K. II				Section, Townsh	ownship, Range:			
Landform (hillslope, te	rrace, etc.):	terrace	Local relief (concave	e, convex, none):	concave	Slope (%):	0-1	
Subregion (LRR or ML	_RA) LRR N	Lat.: <u>38</u> .	183164	Long.: -85.870825	Da	tum:		
•		am, 6 to 12 percent slopes			NWI Classifica	tion:		
Are climatic/hydrologic	conditions of the site	typical for this time of the	year?	Yes (If no, ex	plain in remarks)	_		
Are vegetation	, soil	, or hydrology	significantly dist		Are "normal circum	stances"		
Are vegetation	, soil	, or hydrology	naturally proble	matic?	present?	. —	Yes	
					(If needed, explain a	any answers in re	marks)	
SUMMARY OF	FINDINGS							
Hydrophytic vegetatior	n present?	Yes						
Hydric soil present?	-	No	Is the Sampled Are within a Wetland?	:a	No			
Wetland hydrology pre	esent?	No	within a wettand?					
<u> </u>		<del></del>	<u></u>					
Remarks: (Explain alte	ernative procedures he	ere or in a separate repor	t.)					
Upland data point on t	he terrace near the do	ownstream portion of Inter	rmittent Stream 1.					
<u> </u>								
HYDROLOGY								
Wetland Hydrolo	ogy Indicators							
Primary Indicators (mir	nimum of one is requi	red; check all that apply)		Seconda	ry Indicators (minimu	m of two required	1)	
Surface Wat			ie Aquatic Plants (B14)		Surface Soil Cracks		·/	
High Water	` '		drogen Sulfide Odor (C1)	_	Sparsely Vegetated		·≏ (R8)	
Saturation (A		· · · · · · · · · · · · · · · · · · ·	idized Rhizospheres on Livi	ing Roots (C3)	Drainage Patterns (		e (DC)	
Water Marks	•		esence of Reduced Iron (C4		Moss Trim Lines (B	•		
Sediment De			cent Iron Reduction in Tilled		Dry-Season Water	•		
Drift Deposit			in Muck Surface (C7)	u 30iis (00)	Crayfish Burrows (0			
						•	(00)	
Algal Mat or			ner (Explain in Remarks)		Saturation Visible o		(C9)	
Iron Deposits		(5-1)			Stunted or Stressed			
	/isible on Aerial Image	ry (B7)			Geomorphic Position			
	ed Leaves (B9)			_	Shallow Aquitard (D	•		
Aquatic Faur	na (B13)				Microtopographic R			
					FAC-Neutral Test (I	D5)		
Field Observations:								
Surface water present	? Yes	No	X Depth (inches):	N/A				
Water table present?	Yes		X Depth (inches):	N/A	Wetland			
Saturation present?	Yes		X Depth (inches):	N/A	hydrology present?	No		
(includes capillary fring	_		A Deput (monos).	IN/A	present:	INU		
(IIICiddes Capillary IIII)	3c)							
Describe recorded dat	ta (stream gauge mor	nitoring well, aerial photos	s, previous inspections), if a	availahle.				
Describe recorded day	.a (Sucam yaugo, moi	Illuling well, aerial prictor	, previous irispections, ir c	Maliabic.				
Remarks:								
Remarks.								

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP42
		-		Dominance Test Worksheet
T Ott DI-t O: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer negundo	40	Yes	FAC	that are OBL, FACW, or FAC: 5 (A)
2 Ulmus rubra	20	Yes	FAC	Total Number of Dominant
3				Species Across all Strata: 9 (B)
4				( ,
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 55.56% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	60 =	Total Cover		FACW species x 2 =
		. 514. 5575.		FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Lonicera maackii	30	Yes	UPL	Column totals (A) (B)
2 Acer negundo	20	Yes	FAC	Prevalence Index = B/A =
3 Rosa multiflora	10	No	FACU	Trevalence index - DIA -
4		INO	TACO	
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide supporting data in Remarks or on a
10				separate sheet)
	=	Total Cover		, ,
				Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute %	Dominant	Indicator	(explain)
	Cover	Species	Status	*Indicators of hydric soil and wetland
1 Elymus virginicus	20	Yes	FACW	hydrology must be present, unless
2 Euonymus fortunei	10	Yes	UPL	disturbed or problematic
3 Microstegium vimineum	10	Yes	FAC	
4 Glechoma hederacea	10	Yes	FACU	
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				, ,
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	50 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	vines greater triair 5.20 it in neight.
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Euonymus fortunei	5	Yes	UPL	
2		100		
3				
4				
5				Hydrophytic
	5 =	Total Cover		vegetation present? Yes
		i otai ouvei		present: 165
Pamarke: (Include photo numbers here or o	n a senarate shoot)			
Remarks: (Include photo numbers here or o	n a separate sneet)			

SOIL Sampling Point: DP42 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Texture Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> silty clay loam 0-3 10YR 4/4 100 10YR 4/3 90 10YR 4/6 С М 3-8 10 silty clay loam 92 М 8-14 10YR 4/4 10YR 4/6 5 С silty clay loam 10YR 5/3 Μ 3 D Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: 3500	) Lees Lane Property	,		City/County: L	ouisville/ Jefferson	Sampling [	Date: 1/11/	/2021
	LDG Development, I	LLC			State: Kentucky		Sampling Point:	DP43
Investigator(s): K. Ilr	nick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslope, ter	race, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR or MLF	RA) LRR N	Lat.: 3	38.1814	112	Long.: -85.865997		Datum:	
Soil Map Unit Name:						NWI Clas		
Are climatic/hydrologic	conditions of the site	typical for this time of	the yea		`	xplain in remarks	;)	
Are vegetation	, soil	, or hydrology	_	significantly dist		Are "normal c	ircumstances"	
Are vegetation	, soil	, or hydrology	_	naturally probler	natic?	present?		Yes
						(If needed, exp	olain any answers in re	emarks)
SUMMARY OF	EINDINGS							
30WWAKT OF	FINDINGS		$\neg$					
I ludranhutia vanatatian	nracent?	No						
Hydrophytic vegetation	present?	No No		Is the Sampled Area	a		la.	
Hydric soil present?		No No		within a Wetland?			No	
Wetland hydrology pres	sent?	No						
Remarks: (Explain alter	rnativo procedures h	oro or in a senarate rer	ant )					
, ,		are or in a separate rep	юп.)					
Upland data point along	j rainoad diton.							
HYDROLOGY								
Wetland Hydrolog	gy Indicators							
Primary Indicators (min	imum of one is requi	red: check all that appl	v)		Second	arv Indicators (m	inimum of two require	ed)
Surface Wate				quatic Plants (B14)		Surface Soil C	· · · · · · · · · · · · · · · · · · ·	<u>-u)</u>
High Water T	` '			en Sulfide Odor (C1)			etated Concave Surfa	rce (R8)
Saturation (A:			-	d Rhizospheres on Livi	ng Roots (C3)	Drainage Patt		.ce (D0)
	•			•	- · · · · -			
Water Marks				ce of Reduced Iron (C4	· —	Moss Trim Lir		
Sediment De				Iron Reduction in Tilled	Solis (Co)		Vater Table (C2)	
Drift Deposits				uck Surface (C7)	_	Crayfish Burro		
Algal Mat or 0		—	Other (E	Explain in Remarks)	_		sible on Aerial Imagery	y (C9)
Iron Deposits					_		ressed Plants (D1)	
	sible on Aerial Image	ry (B7)			_	Geomorphic F		
	d Leaves (B9)				_	Shallow Aquit		
Aquatic Faun	a (B13)				_		ohic Relief (D4)	
					_	FAC-Neutral	ſest (D5)	
Field Observations:								
Surface water present?	Yes _	No _	Χ	Depth (inches):	N/A	Wetland		
Water table present?	Yes	No	Χ	Depth (inches):	N/A	hydrology		
Saturation present?	Yes	No	Х	Depth (inches):	N/A	present?	No	
(includes capillary fringe	e)			_				
Describe recorded data	(stream gauge, mor	nitoring well, aerial pho	tos, pre	evious inspections), if a	vailable:			
	· • •			•				
Remarks:								
110								
İ								

<b>VEGETATION</b> (Four Strata) -	- Use scientific	names of pla	nts	Sampling Point: DP43
		-		Dominance Test Worksheet
T Ctt DI-t C (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	90	Yes	FAC	that are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across all Strata: 5 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 40.00% (A/B)
7				
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	90 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Lonicera maackii	80	Yes	UPL	Column totals (A) (B)
2				Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	= 08	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Lonicera japonica	10	Yes	FACU	*Indicators of hydric soil and wetland hydrology must be present, unless
2 Microstegium vimineum	5	Yes	FAC	disturbed or problematic
3				'
4				
5				Definitions of Four Vegetation Strata
6				Ĭ
7				
8				
9				
10				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11				breast height (DBH), regardless of height.
40				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
				3 ( )
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	15 =	Total Cover		and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
	Absolute %	Dominant	Indicator	The state of the s
Woody Vine Stratum Plot Size (30')	Cover	Species	Status	
1 Lonicera japonica	5	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	5 =	Total Cover		present? No
Remarks: (Include photo numbers here or c	on a separate sheet)			•
, 22 p. 22	,			

SOIL Sampling Point: DP43 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-14 10YR 4/3 85 10YR 5/8 10 М silt loam С 10YR 4/6 5 С М Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site:	3500 Lees Lane Proper	rty		City/County: L	ouisville/ Jefferson	Sampling	Date: 1/11	/2021
Applicant/Owner:	LDG Development	t, LLC			State: Kentucky		Sampling Point:	DP44
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslop	e, terrace, etc.):	terrace		Local relief (concave	, convex, none):	none	Slope (%):	0-1
Subregion (LRR o			38.1823	361	Long.: -85.867878		Datum:	
	ne: ScB - Sciotoville si		_				ssification:	
Are climatic/hydro	ologic conditions of the si	te typical for this time o	f the yea			xplain in remarks	s)	
Are vegetation	, soil	, or hydrology	_	significantly dist			ircumstances"	
Are vegetation	, soil	, or hydrology	_	naturally probler	natic?	present?		Yes
						(If needed, ex	olain any answers in r	emarks)
CIIMMADV	OE EINDINGS							
SUMMART	OF FINDINGS							
l li	·	M-						
Hydrophytic veget	· ·	No No		Is the Sampled Area	1			
Hydric soil presen		No No		within a Wetland?			No	
Wetland hydrolog	y present?	<u>No</u>						
D	16 - 12 - 1							
	n alternative procedures	here or in a separate re	∍port.)					
Upland data point	in flat woods.							
İ								
HYDROLOG	<u>۲</u>							
Wetland Hyd	drology Indicators							
Primary Indicators	s (minimum of one is req	uired: check all that an	olv)		Second	ary Indicators (m	inimum of two require	ad)
	Water (A1)	ulled, check all that ap		quatic Plants (B14)	Second	Surface Soil (	· · · · · · · · · · · · · · · · · · ·	<del>(u)</del>
	` '		•		_			as (DO)
	ater Table (A2)			en Sulfide Odor (C1)			etated Concave Surfa	ce (B8)
Saturation			•	d Rhizospheres on Livi		Drainage Pat		
	Marks (B1)		•	ce of Reduced Iron (C4		Moss Trim Lin		
	nt Deposits (B2)		•	Iron Reduction in Tilled	Soils (C6)		Vater Table (C2)	
Drift De	posits (B3)		Thin Mu	uck Surface (C7)		Crayfish Burr	ows (C8)	
Algal Ma	at or Crust (B4)		Other (I	Explain in Remarks)		Saturation Vis	sible on Aerial Imager	y (C9)
Iron Dep	posits (B5)					Stunted or St	ressed Plants (D1)	
Inundati	ion Visible on Aerial Imaç	gery (B7)			<u> </u>	Geomorphic I	Position (D2)	
Water-S	Stained Leaves (B9)				_	Shallow Aquit	ard (D3)	
Aquatic	Fauna (B13)				· <u>-</u> -	Microtopogra	ohic Relief (D4)	
					· <del></del>	FAC-Neutral	Test (D5)	
					_	_		
Field Observation	ns:							
Surface water pre	esent? Yes	No	Х	Depth (inches):	N/A	Wetlend		
Water table prese		No	X	Depth (inches):	N/A	Wetland		
Saturation presen		No	X	Depth (inches):	N/A	hydrology present?	No	
(includes capillary				Beptit (mones).	14//	present.	140	
(morados sapinary	iiiigo)							
Dosoribo rocordos	d data (stream gauge, m	onitoring well, sorial ph	otos pr	ovious inspections) if a	vailable:			
Describe recorded	a data (Stream gauge, m	oriitoring well, aerial pri	otos, pre	evious irispections), ir a	valiable.			
Remarks:								

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP44
		-		Dominance Test Worksheet
T Ott DI-t O: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer rubrum	70	Yes	FAC	that are OBL, FACW, or FAC: 1 (A)
2 Prunus serotina	30	Yes	FACU	Total Number of Dominant
3				Species Across all Strata: 5 (B)
4				
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 20.00% (A/B)
7				
8	•			Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	100 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Stratum	Cover	Species	Status	UPL species x 5 =
1 Rosa multiflora	70	Yes	FACU	Column totals (A) (B)
2 Acer negundo	10	No	FAC	Prevalence Index = B/A =
3				
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9	-			4 - Morphological adaptations* (provide supporting data in Remarks or on a
10				separate sheet)
	= 80	Total Cover		
		<b>.</b>		Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status	(explain)
1 Lanisara ignanias			FACU	*Indicators of hydric soil and wetland
1 Lonicera japonica 2 Rubus allegheniensis	<u>20</u> 5	Yes No	FACU	hydrology must be present, unless disturbed or problematic
2 Rubus allegheniensis 3 Microstegium vimineum	5	No	FACO	disturbed of problematic
4			170	
5	-			Definitions of Four Vegetation Strata
6				Definitions of Four Vegetation of the
7				
8				
9				
10	-			Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
11	-			breast height (DBH), regardless of height.
10				Sapling/shrub - Woody plants less than 3 in. DBH and
13	•			greater than 3.28 ft (1 m) tall.
14	-			
15				Herb - All herbaceous (non-woody) plants, regardless of size,
	30 =	Total Cover	-	and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	, ,
woody vine Stratum Plot Size (30)	Cover	Species	Status	
1 Lonicera japonica	60	Yes	FACU	
2				
3				
4				Hydrophytic
5				vegetation
	60 =	Total Cover		present? No
Remarks: (Include photo numbers here or o	n a separate sheet)			

SOIL Sampling Point: DP44 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> 0-3 10YR 4/4 100 silt loam 3-14 10YR 5/4 100 silt loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site: 35	500 Lees Lane Property	,		City/County: L	ouisville/ Jefferson	Sampling D	Date: 1/11	1/2021
Applicant/Owner:	LDG Development, I				State: Kentucky	<u>-</u>	Sampling Point:	DP45
• · · · · —	Ilnick; J. Evans				Section, Towns	hip, Range:		
Landform (hillslope, t	· · · · · · · · · · · · · · · · · · ·	terrace		Local relief (concave	, convex, none):	concave	Slope (%):	0-1
Subregion (LRR or M			38.1830	)8	Long.: <u>-85.869656</u>		Datum:	
•	OtC - Otwood silt loa		_			NWI Clas		
	gic conditions of the site		the yea			xplain in remarks		
Are vegetation	, soil	, or hydrology	_	significantly distr		Are "normal ci	rcumstances"	Voc
Are vegetation	, soil	, or hydrology	_	naturally probler	nauc?	present? (If needed, exp	lain any answers in r	Yes remarks)
						(11 11000000, 0	idiri diriy diribi.c.o	Gilanoj
SUMMARY O	F FINDINGS							
 	_	_		_	<del>_</del>	_	_	_
Hydrophytic vegetation	on present?	Yes		Is the Sampled Area	a			
Hydric soil present?	_	No		within a Wetland?	•		lo	
Wetland hydrology pr	resent?	No						
- · /=l-il	· · · · · · · · · · · · · · · · · · ·							
	Iternative procedures he	ere or in a separate re	port.)					
Upland data point to	Wetiana ∠u.							
HYDROLOGY	,							
Wetland Hydrol								
-								
	ninimum of one is requi				Seconda	-	inimum of two require	ed)
Surface Wa	` '			quatic Plants (B14)	_	Surface Soil C		
	r Table (A2)			en Sulfide Odor (C1)	_		etated Concave Surfa	ace (B8)
Saturation				d Rhizospheres on Livir		Drainage Patte		
Water Mark	ks (B1)	'	Presen	ce of Reduced Iron (C4)		Moss Trim Lin	es (B16)	
Sediment [	Deposits (B2)	!	Recent	Iron Reduction in Tilled	Soils (C6)	Dry-Season W	/ater Table (C2)	
Drift Depos	sits (B3)		Thin Mu	uck Surface (C7)	_	Crayfish Burro	ws (C8)	
Algal Mat o	or Crust (B4)		Other (I	Explain in Remarks)	_	Saturation Vis	ible on Aerial Imager	ry (C9)
Iron Deposi	its (B5)					Stunted or Str	essed Plants (D1)	
Inundation	Visible on Aerial Image	ery (B7)			_	Geomorphic P	osition (D2)	
Water-Stair	ned Leaves (B9)					Shallow Aquita	ard (D3)	
Aquatic Fau	una (B13)					Microtopograp	hic Relief (D4)	
<del></del>					_	FAC-Neutral T	est (D5)	
						_		
Field Observations:	:							
Surface water preser	_	No	Χ	Depth (inches):	N/A	Wetland		
Water table present?	Yes	No	Χ	Depth (inches):	N/A	hydrology		
Saturation present?	Yes	No	Χ	Depth (inches):	N/A	present?	No	
(includes capillary frir	nge)				_			
Describe recorded da	ata (stream gauge, mor	nitoring well, aerial pho	tos, pre	evious inspections), if a	vailable:			
Remarks:								

<b>VEGETATION (Four Strata) -</b>	- Use scientific	names of pla	nts	Sampling Point: DP45
		-		Dominance Test Worksheet
T Ott DI-t O: (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1 Acer negundo	40	Yes	FAC	that are OBL, FACW, or FAC: 4 (A)
2 Quercus rubra	30	Yes	FACU	Total Number of Dominant
3			17100	Species Across all Strata: 6 (B)
4				Opecies Across all otrata.
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 66.67% (A/B)
7				December 1 - West about
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	70 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub Plot Size (15')	Absolute %	Dominant	Indicator	FACU speciesx 4 =
Stratum Stratum	Cover	Species	Status	UPL species x 5 =
1 Lindera benzoin	40	Yes	FAC	Column totals (A) (B)
2 Lonicera maackii	40	Yes	UPL	Prevalence Index = B/A =
3 Rosa multiflora	8	No	FACU	
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
	88 =	Total Cover		separate sheet)
				Problematic hydrophytic vegetation*
	Absolute %	Dominant	Indicator	(explain)
Herb Stratum Plot Size (5')	Cover	Species	Status	
1 Carex blanda	10	Yes	FAC	*Indicators of hydric soil and wetland
2 Microstegium vimineum	10	Yes	FAC	hydrology must be present, unless disturbed or problematic
3 Elymus virginicus	5	No	FACW	distance of problematic
4 Allium vineale	2	No	FACU	
5			17100	Definitions of Four Vegetation Strata
6	-			Definitions of Four Vegetation of alla
7	-			
8				
9				
				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
10				breast height (DBH), regardless of height.
11				
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15				and woody plants less than 3.28 ft tall.
	27 =	Total Cover		11000, plante 1000 than 0.20 it tall.
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
woody vine otratum 1 lot olze (50)	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	n a separate sheet)			•
1	, ,			

SOIL Sampling Point: DP45 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Type<sup>1</sup> (Inches) Color (moist) Color (moist) Loc<sup>2</sup> 0-2 10YR 3/3 100 silt loam 2-10 10YR 3/3 70 2.5Y 4/2 30 D М silty clay 10-14 92 10YR 4/3 10YR 3/2 5 D Μ sandy clay 10YR 5/8 3 С M Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? No Depth (inches): Remarks:

## WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont

Project/Site:	3500 Lees Lane Pro	perty		City/County: L	ouisville/ Jefferson	Sampling D	Date: 1/11	/2021
Applicant/Owner:	LDG Developm			• • • • <u> </u>	State: Kentucky	<u> </u>	Sampling Point:	DP46
Investigator(s):	K. Ilnick; J. Evans				Section, Towns	nip, Range:		
Landform (hillslop	e, terrace, etc.):	Toe of sl	·	Local relief (concave	, convex, none):	concave	Slope (%):	0-1
Subregion (LRR o			Lat.: 38.182	294	Long.: <u>-85.869525</u>		Datum:	
· ·	ne: OtC - Otwood s					NWI Class		
	logic conditions of the		-			(plain in remarks)		
Are vegetation	, soil		/drology 	significantly dist		Are "normal ci	cumstances"	
Are vegetation	, soil	, or hy	/drology	naturally proble	matic?	present?		Yes
						(If needed, exp	lain any answers in re	emarks)
SUMMARY	OF FINDINGS							
	<u> </u>							
Hydrophytic veget	tation present?	Yes						
Hydric soil presen	•	Yes		Is the Sampled Are	a	Ye	es	
Wetland hydrolog		Yes		within a Wetland?		,		
, 0								
Remarks: (Explain	n alternative procedur	es here or in a se	parate report.)					
Data point to Wet	land 20.							
HYDROLOG	SY							
Wetland Hyd	drology Indicators							
Primary Indicators	(minimum of one is i	required; check al	I that apply)		Seconda	arv Indicators (mi	nimum of two require	ed)
X Surface	-			Aquatic Plants (B14)		Surface Soil C		
	ater Table (A2)			gen Sulfide Odor (C1)			tated Concave Surfa	ice (B8)
Saturati				ed Rhizospheres on Livi		Drainage Patte		(==)
	/arks (B1)			nce of Reduced Iron (C4	- · · · · -	Moss Trim Line		
	nt Deposits (B2)			t Iron Reduction in Tilled			ater Table (C2)	
	posits (B3)			luck Surface (C7)		Crayfish Burro		
	at or Crust (B4)			(Explain in Remarks)	_	_	ible on Aerial Imagery	v (C0)
				(Explain in Nemarks)	-	_	essed Plants (D1)	y (C9)
	oosits (B5)	magam, (D7)				_		
	on Visible on Aerial Ir	nagery (b7)			_^	Geomorphic P		
	Stained Leaves (B9)				_	Shallow Aquita		
Aqualic	Fauna (B13)					Microtopograp	` ,	
					_	FAC-Neutral T	est (D3)	
Field Observatio	ns:							
Surface water pre		s X	No	Depth (inches):	1-2			
Water table prese			No X	Depth (inches):	N/A	Wetland		
Saturation presen			No X	Depth (inches):	N/A	hydrology present?	Voc	
(includes capillary			NO	Deptil (iliches).	IN/A	present?	Yes	
(includes capillally	illige)							
Describe recorded	d data (stream dauge	monitoring well	aerial photos in	revious inspections), if a	vailable <sup>.</sup>			
Describe recorded	a data (Stream gaage	, monitoring well, t	acriai priotos, p	revious inspections), ii d	valiable.			
Remarks:								
rtomanto.								

<b>VEGETATION</b> (Four Strata) -	- Use scientific ı	names of pla	nts	Sampling Point: DP46
		-		Dominance Test Worksheet
Tree Streeture Diet Size (201)	Absolute %	Dominant	Indicator	
Tree Stratum Plot Size (30')	Cover	Species	Status	Number of Dominant Species
1				that are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across all Strata: 1 (B)
4				``
5				Percent of Dominant Species
6				that are OBL, FACW, or FAC: 100.00% (A/B)
7				(42)
8				Prevalence Index Worksheet
9				Total % Cover of:
10				OBL species x 1 =
	0 =	Total Cover		FACW species x 2 =
				FAC species x 3 =
Sapling/Shrub	Absolute %	Dominant	Indicator	FACU species x 4 =
Stratum Plot Size (15')	Cover	Species	Status	UPL species x 5 =
1 Acer negundo	5	Yes	FAC	Column totals (A) (B)
2		100	1710	Prevalence Index = B/A =
3				Trovalorios iridox 2/71
4				
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid test for hydrophytic vegetation
7				X 2 - Dominance test is >50%
8				3 - Prevalence index is ≤3.0*
9				4 - Morphological adaptations* (provide
10				supporting data in Remarks or on a
10	5 =	Total Cover		separate sheet)
		Total Cover		
	Aboolute 0/	Dominant	Indiantor	Problematic hydrophytic vegetation*
Herb Stratum Plot Size (5')	Absolute % Cover	Dominant Species	Indicator Status	(explain)
	Cover	Opecies	Otatus	*Indicators of hydric soil and wetland
1				hydrology must be present, unless
2				disturbed or problematic
3				
4				D 6 35 (5 M
5				Definitions of Four Vegetation Strata
6				
7				
8				
9				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
10				breast height (DBH), regardless of height.
11				
12				Sapling/shrub - Woody plants less than 3 in. DBH and
13				greater than 3.28 ft (1 m) tall.
14				Herb - All herbaceous (non-woody) plants, regardless of size,
15				and woody plants less than 3.28 ft tall.
	0 =	Total Cover		
				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum Plot Size (30')	Absolute %	Dominant	Indicator	
	Cover	Species	Status	
1				
2				
3				
4				Hydrophytic
5				vegetation
	0 =	Total Cover		present? Yes
Remarks: (Include photo numbers here or o	on a separate sheet)			

SOIL Sampling Point: DP46 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks Color (moist) Color (moist) Type<sup>1</sup> Loc<sup>2</sup> (Inches) 0-3 10YR 4/2 97 5YR 4/6 3 М silty clay С 3-14 2.5Y 3/2 87 10YR 5/8 10 С М clay М 5YR 4/6 3 С Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains - <sup>2</sup>Location: PL=Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils: 2 cm Muck (A10) (MLRA 147) Histisol (A1) Dark Surface (S7) Polyvalue Below Surface (S9) (MLRA 147, 148) Coast Prairie Redox (A16) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) X Depleted Matrix (F3) Stratified Layers (A5) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Muck Mineral (S1) (LRR,N Iron-Manganese Masses (F12) (LRR N MLRA 147, 148) MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Gley Matrix (S4) \*Indicators of hydrophytic vegetation Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) and wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) present, unless disturbed or problematic Restrictive Layer (if observed): Hydric soil present? Yes Depth (inches): Remarks:

## **APPENDIX B**

# RAPID BIOASSESSMENT PROTOCOL FORMS

NVESTIGATORS: K. linick, T. Evans				
NVESTIGATORS   K. linick, T. Evans				
Verify Site LAT/LONG vs GPS	PROJECT: 103689			
Station	PM 🗸			
Station   Downstream   Upstream   Partially Exposed (25-50%)   Ephemeral	TYPE:			
LAT   38.186366				
LONG				
WEATHER         Now         Past 24 hours         LOCAL WATERSHED FEATURES (Predominant Surrounding Land And And And And And And And And And A	<b>V</b>			
Heavy rain				
Has there been a scouring rain in the last 14 days?	<u>l Use):</u>			
Intermittent showers	<b>V</b>			
	, 🗆			
Yes				
INSTREAM FEATURES  HYDRAULIC STRUCTURES  STREAM FLOW  RIPARIAN VEGETATION  CHANNEL ALT  Stream Width  4 ft Dams Dry Trees Herbaceous Dredging Channelization  Reach Length 1,280 m Island Low Dom. Tree/Shrub Taxa: (Full)				
Stream Width 4 ft Dams Dry Trees V Herbaceous V Dredging  Maximum Depth 0.25 ft Bridge Abutments Pooled Grasses Shrubs V Channelization  Reach Length 1,280 m Island Low Dom. Tree/Shrub Taxa: (Full) (Full) (If Quercus palustris Juglans n. Normal Prunus serotina Ulmus ru.  Riffle/Run/Pool Sequence (No. Sampled in Reach) Riffle Run Pool  P-CHEM Instrument Used: Date Calibrated:  Temp(°F) D.O. (mg/l) %Saturation pH(S.U.) Cond. (µS/cm) Tul  Substrate Est. P.C. Riffle 10 % Run 30 % Pool 60 % Reach 1  Silt/Clay (<0.06 mm/0.002 in) X X X X  Sand (0.06–2 mm/0.002–0.08 in)				
Maximum Depth         0.25 ft         Bridge Abutments         Pooled         Grasses         ✓ Shrubs         ✓ Channelization           Reach Length         1,280 m         Island         Low         Dom. Tree/Shrub Taxa:         (Full) □ (full) □	ERATIONS			
Reach Length 1,280 m Island				
Discharge   Cfs   Waterfalls   High   Quercus palustris   Juglans n.				
Other:   Normal   Prunus serotina   Ulmus run	Partial)			
Riffle/Run/Pool Sequence         (No. Sampled in Reach)	igra			
P-CHEM         Instrument Used:         Date Calibrated:           Temp(°F)         D.O. (mg/l)         %Saturation         pH(S.U.)         Cond. (μS/cm)         Tu           Substrate Characterization           Substrate         Est.         P.C.         Riffle         10         %         Run         30         %         Pool         60         %         Reach T           Silt/Clay (<0.06 mm/0.002 in)	bra			
Temp(°F)				
Substrate Characterization           Substrate         Est.         P.C.         Riffle         10         %         Run         30         %         Pool         60         %         Reach T           Silt/Clay (<0.06 mm/0.002 in)				
Substrate         Est.         P.C.         Riffle         10         %         Run         30         %         Pool         60         %         Reach T           Silt/Clay (<0.06 mm/0.002 in)	ib			
Substrate         Est.         P.C.         Riffle         10         %         Run         30         %         Pool         60         %         Reach T           Silt/Clay (<0.06 mm/0.002 in)				
Silt/Clay (<0.06 mm/0.002 in) X X X X Sand (0.06–2 mm/0.002–0.08 in)				
Sand (0.06–2 mm/0.002–0.08 in)	otal			
Gravel (2–64 mm/0.08–2.52 in)				
Cobble (64–256 mm/2.52–10.08 in)				
Boulders (>256 mm/10.08 in)				
Bedrock Section Sectio				

NOTES/COMMENTS:			
Bluegrass Bioregi (High Gradient Assessi		Headwater (<5.0 mi <sup>2</sup> )	Wadeable (>5.0 mi <sup>2</sup> )
Fully Supporting	(Excellent)	156-200	130-200
Supporting but Threatened and Partially Supporting	(Average)	142-155	114-129
Not Supporting	(Poor)	0-141	0-113



Project Name:	e: 3500 Lees Lane Property Stream Name: Intermittent Stream 1										
		BP High Gradient Habit									
Habitat	Onthreat	Condition Categ	•	B							
Parameter SCORE	Optimal 20 19 18 17 16	Suboptimal 15 14 13 12 11	Marginal 10 9 8 7 6	Poor 5 4 3 2 1							
1. Epifaunal	20 13 10 17 10	13 14 13 12 11	10 9 0 7 0	3 4 3 2 1							
Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e.,	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.							
Score	logs/snags that are not new fall and not transient).	not yet prepared for colonization (may rate at high end of scale).	disturbed of removed.								
2. Embeddedness											
<b>3</b> Score	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.							
3. Velocity/Depth	All formulations of the state o										
Regime <b>2</b> Score	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).							
4. Sediment Deposition  11	Little or no enlargement of islands or point bars and less than 5% (<20% for low-gradient streams) of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% (20-50% for low-gradient) of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low-gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition.							
5. Channel Flow Status 16 Score	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.							
6. Channel Alteration  18  Score	Channelization or dredging absent or minimal; stream with normal pattern.	evidence of past channelization, i.e.,	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.							
7. Frequency of Riffles (or bends)  11	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.		Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.							
Left/Right Bank	10 9	8 7 6	5 4 3	2 1							
8. Bank Stability  4 LB  4 RB	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	areas of erosion mostly healed over.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.							
9. Vegetative Protection  4 LB RB	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.							
10. Riparian Vegetative Zone Width  9 LB  9 RB	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.		Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.							
Total Score	NOTES/COMMENTS:										
100	Poor Quality										

STREAM NAME:	Intermittent Stre	am 2			LOCATI	ON:	3500 L	ees Lane Proper	ty		
STATION #: RBP	2				COUNT	Y:	Jeffers	on	PRO	<b>JECT</b> : 103689	
INVESTIGATORS	: K. Ilnick, T. Eva	ns			DATE:	1/6/2	021	TIME:	2:00	АМ 🗌	PM 🗸
Verify Site LAT/LONG	G vs GPS Ye	s No N/A					CAN	OPY COVER::		STREAM T	YPE:
						Fully	Expose	ed (0-25%)		Perennial	
	Station	Downstream		Upstrean	1	Parti	ally Exp	osed (25-50%)		Ephemeral	
LAT	38.186044					Parti	ally Sha	ded (50-75%)		Intermittent	<b>_</b>
LONG	-85.865862					Fully	Shaded	d (75-100%)	<b>✓</b>		
WEATHER	Now Past	24 hours		LOC	CAL WAT	TERSI	HED FE	ATURES (Predo	minant	Surrounding Land	Use):
Has there been a		Heavy rain		Surface N	/lining		Constr	uction		Forest	<b>V</b>
scouring rain in the		Steady rain		Deep Mir	ing		Comm	ercial		Pasture/Grazing	
last 14 days?		Intermittent show	ers/	Oil Wells			Industr	ial		Silviculture	
Yes		Clear/sunny		Land Dis	oosal		Row C	rops		Urban Runoff/ Storm Sewers	
No 🗹	<b>V</b>	Cloudy		Residenti	al					Cionii Coword	
INSTREAM	FEATURES	HYDRAULIC STRUC	TURES	STREAM	I FLOW		RIPAR	IAN VEGETATIO	N	CHANNEL ALTE	RATIONS
Stream Width	2-3 ft	Dams		Dry		Trees	s 🗸	Herbaceous	<b>✓</b>	Dredging	
Maximum Depth	0.25 ft	Bridge Abutments		Pooled		Grass	ses 🔽	Shrubs	<b>/</b>	Channelization	
Reach Length	134 m	Island		Low		Dom.	Tree/S	hrub Taxa:		(Full) (Pa	artial)
Discharge	cfs	Waterfalls		High			Linde	ra benzoin		Platanus occide	entalis
		Other:		Normal			Lirioden	dron tulipifera		Acer negun	do
Riffle/Run/P	ool Sequence	(No. Sampled in R	teach)		R	iffle _	Rur	nPool			
P-CHEM		Instrument Used:						Date Calibr	ated:		
Temp(°F)	D	.O. (mg/l)	%Satur	ation			pH(S.U.)	Cond. (μ	S/cm)	Turb	
			_			-			_		
			Substr	ate Cha	racteriz	ation					
Substrate Est.	P.C.	Riffle	%	Run	100	)	%	Pool	%	Reach To	tal
Silt/Clay (<0.06 mr	m/0 002 in)				Х		_		_		
Sand (0.06–2 mm/	•										
Gravel (2–64 mm/	,	1									
Cobble (64–256 m	•	†									
Boulders (>256 mr	•										
Bedrock				1						<del>                                     </del>	
										<u> </u>	
NOTES/COMME	NTS:										
(Hig	Bluegrass Bioreg h Gradient Asses		Heady (<5.0		Wadea (>5.0						
Fully Supporting		(Excellent)	156-	200	130-2	200					

Supporting but Threatened and Partially Supporting (Average) 142-155 114-129 Not Supporting (Poor) 0-141 0-113



Project Name:	3500 Lees Lane Property	Stream Na	me: Intermittent Stream	2
-		BP High Gradient Habit		
Habitat	2 desail	Condition Categ	•	
Parameter SCORE	Optimal 20 19 18 17 16	Suboptimal 15 14 13 12 11	Marginal 10 9 8 7 6	Poor 5 4 3 2 1
1. Epifaunal	20 13 10 17 10	13 14 13 12 11	10 3 0 7 0	3 4 3 2 1
Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e.,	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
Score	logs/snags that are not new fall and not transient).	not yet prepared for colonization (may rate at high end of scale).	disturbed or removed.	
2. Embeddedness				
<b>3</b> Score	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
3. Velocity/Depth	All 6			
Regime 2 Score	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
4. Sediment Deposition 6 Score	Little or no enlargement of islands or point bars and less than 5% (<20% for low-gradient streams) of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% (20-50% for low-gradient) of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low-gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
5. Channel Flow Status 11 Score	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
6. Channel Alteration  18  Score	Channelization or dredging absent or minimal; stream with normal pattern.	evidence of past channelization, i.e.,	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
7. Frequency of Riffles (or bends) 5	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.		Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
Left/Right Bank	10 9	8 7 6	5 4 3	2 1
8. Bank Stability  7 LB 7 RB	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	areas of erosion mostly healed over.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
9. Vegetative Protection  8 LB	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
10. Riparian Vegetative Zone Width  9 LB  9 RB	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.		Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
Total Score	NOTES/COMMENTS:			
96	Poor Quality			

STREAM NAME	E:	Intermitte	ent Strea	m 3			LOCATI	ON:	350	00 Lees l	ane Propert	у			
STATION #: RI	BP 3						COUNT	Y:	Jeff	ferson		PRO.	JECT:	103689	
INVESTIGATOR	RS:	K. Ilnick,	T. Evan	S			DATE:	1/7/	2021		TIME:	10:30	)	AM 🗸	РМ
Verify Site LAT/LC	DNG vs	GPS	Yes	□ No □ N/A					(	CANOPY	COVER::		S1	REAM T	YPE:
								Ful	ly Exp	osed (0-	25%)		Perenn	ial	
		Station		Downstream		Upstrean	n	Pa	rtially I	Exposed	(25-50%)		Ephem	eral	
LAT	3	8.18326	9					Partially Shaded (50-75%)				Intermi	tent	<b>✓</b>	
LONG	-8	35.86644	19					Ful	ly Sha	ded (75-	-100%)	<b>V</b>			
WEATHER	2	Now	Past 2	4 hours		LOC	CAL WAT	TERSHED FEATURES (Predominant					Surround	ing Land	Use):
Has there been	•			Heavy rain		Surface N	Mining		Cor	nstructio	n		Forest		<b>√</b>
scouring rain in				Steady rain		Deep Min	ning		Cor	mmercia	l		Pasture	/Grazing	
last 14 days?				Intermittent show	ers	Oil Wells			Indi	ustrial			Silvicult	ure	
Yes				Clear/sunny		Land Disp	posal		Rov	w Crops				Runoff/ Sewers	
No 🗹		<b>V</b>	<b>V</b>	Cloudy		Residenti	ial						Otomi	OCWCIS	
INSTRE	AM FE	ATURES	3	HYDRAULIC STRUC	TURES	STREAM	/ FLOW		RIP	PARIAN \	/EGETATION	ı	CHANN	IEL ALTE	RATION
Stream Width		3-4	ft	Dams		Dry		Tre	es	✓ H	lerbaceous	<b>V</b>	Dredgir	ng	
Maximum Depth	- 1	0.5	<b>f</b> t	Bridge Abutments		Pooled		Gra	sses	☑ s	hrubs	<b>V</b>	Channe	lization	
Reach Length	-	547	m	Island		Low		Dor	n. Tre	e/Shrub	Таха:		(Full)	(P:	artial)
Discharge			cfs	Waterfalls		High			,	Acer rub	rum		Que	rcus palu	ıstris
	-			Other:		Normal			Liquic	dambar s	styraciflua		Fraxinu	ıs pennsy	/Ivanica
Riffle/Run	ı/Pool	Sequen	ce	(No. Sampled in R	each)		R	iffle .		Run	Pool				
P-CHEM				Instrument Used:							Date Calibra	ted:			
Temp(°F)			D.C	D. (mg/l)	%Satu	ration			pH(S.	.U.)	Cond. (µ\$	S/cm)		Turb	
					•			-			_			_	
					Subst	rate Cha	racteriza	atio	n						
Substrate Es	st.	P.C	Э.	Riffle	%	Run	30	)	%	Poo	I 70	%		Reach To	otal
Silt/Clay (<0.06	mm/0	.002 in)					Х		_		Х	_			
Sand (0.06–2 m	m/0.0	02–0.08	in)												
Gravel (2–64 mi	m/0.08	3–2.52 in	)												
Cobble (64–256	3 mm/2	2.52–10.0	08 in)												
Boulders (>256	mm/1	0.08 in)													
Bedrock															
NOTES/COMM	MENTS	S:													
(H		uegrass Gradient	•		Head (<5.0	_	Wadea (>5.0 ı								
Fully Supporting				(Excellent)	156-	200	130-2	200					N. T		

Bluegrass Bioregio (High Gradient Assessi	Headwater (<5.0 mi <sup>2</sup> )	Wadeable (>5.0 mi <sup>2</sup> )	
Fully Supporting	(Excellent)	156-200	130-200
Supporting but Threatened and Partially Supporting	(Average)	142-155	114-129
Not Supporting	(Poor)	0-141	0-113



Project Name:		Stream Na		3
11-1 200	R	BP High Gradient Habit		
Habitat	Optimal	Condition Categ Suboptimal	gory Marginal	Poor
Parameter SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e.,	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
Score	logs/snags that are not new fall and not transient).	not yet prepared for colonization (may rate at high end of scale).	disturbed or removed.	arrotatio or labiting.
2. Embeddedness  3 Score	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
3. Velocity/Depth Regime 3 Score	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
4. Sediment Deposition  3	Little or no enlargement of islands or point bars and less than 5% (<20% for low- gradient streams) of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine section of the section of the section of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low-gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
5. Channel Flow Status 10 Score	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
6. Channel Alteration 18 Score	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr.) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
7. Frequency of Riffles (or bends) 5 Score	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
Left/Right Bank	10 9	8 7 6	5 4 3	2 1
8. Bank Stability  2 LB  2 RB	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
9. Vegetative Protection  4 LB RB	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
10. Riparian Vegetative Zone Width  8 LB	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.		Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
Total Score	NOTES/COMMENTS:			
73	Poor Quality			
i ''				

		High Gradier	nt Bioa	assess	ment S	i <u>trea</u>	ı <u>m Vis</u>	s <u>it Sh</u>	eet			
STREAM NAME:	Intermittent St	tream 4			LOCATI	ON:	3500 L	_ees La	ane Property	/		
STATION #: RBP 4	4				COUNT	Y:	Jeffers	son		PRO.	<b>JECT</b> : 103689	
INVESTIGATORS:	K. Ilnick, T. Ev	vans			DATE:	1/7/2	:021		TIME:	2:30	AM 🗌 F	PM 🔽
Verify Site LAT/LONG	vs GPS Y	Yes No N/A	\				CAI	NOPY	COVER::		STREAM TYP	'E:
						Fully Exposed (0-25%)				Perennial		
	Station	Downstream		Upstrean	n	Part	ially Exp	osed (	25-50%)		Ephemeral	
LAT	38.184616					Part	Partially Shaded (50-75%)			Intermittent	<b>V</b>	
LONG	-85.869112					Fully	y Shade	d (75-1	00%)	<b>V</b>		
WEATHER	Now Pa	ast 24 hours		LOC	CAL WAT	ΓERS	HED FE	ATUR	ES (Predom	ninant S	Surrounding Land Us	<u>se):</u>
Has there been a		Heavy rain		Surface N	Mining		Constr	ruction			Forest	<b>V</b>
scouring rain in the		Steady rain		Deep Min	ning		Comm	nercial			Pasture/Grazing	
last 14 days?		Intermittent show	Intermittent showers Oil		i		Industr	rial			Silviculture	
Yes		Clear/sunny		Land Disp	posal		Row C	rops			Urban Runoff/ Storm Sewers	
No 🗵	<b>V</b>	✓ Cloudy		Residenti	ial						0.0111.001.1.1	
INSTREAM I	FEATURES	HYDRAULIC STRUC	TURES	STREAM	VI FLOW		RIPAR	RIAN VE	EGETATION		CHANNEL ALTERA	ATIONS
Stream Width	3 ft	Dams		Dry		Tree	s 🗸	He	rbaceous	<b>/</b>	Dredging	
Maximum Depth	0.25 ft	Bridge Abutments		Pooled		Gras	ses 🗸	Sh	rubs	<b>/</b>	Channelization	
Reach Length	96 m	Island		Low	<b></b>	Dom	. Tree/S	Shrub T	axa:		(Full) (Part	tial)
Discharge	cfs	waterfalls		High			Platanu	ıs occid	lentalis		Prunus serotina	а
ĺ		Other:		Normal			Fagus	s grand	difolia			
Riffle/Run/Po	ol Sequence	(No. Sampled in R	≀each)		R	iffle _	Rui	n	_Pool			
P-CHEM		Instrument Used:							Date Calibra	ted:		
Temp(°F)		D.O. (mg/l)	%Saturatio				pH(S.U.)	)	Cond. (μS	S/cm)	Turb.	
						-			•	_		
			Substr	rate Cha	racteriz	ation	<u> </u>					
Substrate Est.	P.C.	Riffle	%	Run	70	,	%	Pool	30	%	Reach Tota	ıl
Silt/Clay (<0.06 mm	/0.002 in)	+ =		+-	Х			$\vdash$	Х			
Sand (0.06–2 mm/0	,	+		+-								
Gravel (2–64 mm/0.	•	+		+-								
Cobble (64–256 mm	•	)		+-				$\vdash$				
Boulders (>256 mm		+		+-							†	
Bedrock	,	+		+-				$\vdash$			<u> </u>	
		-!						<u> </u>			<u></u>	
NOTES/COMMEN	TS:											
	Bluegrass Biore Gradient Asse	•	Headv (<5.0		Wadea (>5.0 r			James M			W M. M.	
Fully Supporting		(Excellent)	156-	-200	130-2	200						
Supporting but Thre Partially Supporting		(Average)	142-	-155	114-1	129			oly . A		The state of	

Not Supporting (Poor) 0-141 0-113



Project Name:		Stream Na		4
11-1-24-4	R	BP High Gradient Habit		
Habitat	Optimal	Condition Categ Suboptimal		Poor
Parameter SCORE	20 19 18 17 16	15 14 13 12 11	Marginal 10 9 8 7 6	5 4 3 2 1
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but not yet prepared for colonization	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	transient).	(may rate at high end of scale).		
Score	,	,		
2. Embeddedness 3 Score	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
3. Velocity/Depth Regime 3 Score	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
4. Sediment Deposition  8 Score	Little or no enlargement of islands or point bars and less than 5% (<20% for low-gradient streams) of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% (20-50% for low-gradient) of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low-gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
5. Channel Flow Status 11 Score	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
6. Channel Alteration 18 Score	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr.) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
7. Frequency of Riffles (or bends) 8	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
Left/Right Bank	10 9	8 7 6	5 4 3	2 1
8. Bank Stability  3 LB  RB	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
9. Vegetative Protection  5 LB	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
10. Riparian Vegetative Zone Width  9 LB  9 RB	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.		Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
Total Score	NOTES/COMMENTS:			
88	Poor Quality			
	1			

		High Gradier	t Bioa	ssess	ment S	trea	m Vis	it Sheet			
STREAM NAM	IE: Intermittent Stream	am 5			LOCATI	ON:	3500 L	ees Lane Propert	y		
STATION #: R	RBP 5				COUNT	<b>Y</b> :	Jefferso	on	PRO	JECT: 103689	
INVESTIGATO	RS: K. Ilnick, T. Evar	ns			DATE:	1/7/20	021	TIME:	3:00	AM 🗌	PM 🗸
Verify Site LAT/LC	ONG vs GPS Yes	No N/A					CAN	OPY COVER::		STREAM T	YPE:
_		_				Fully	Expose	d (0-25%)		Perennial	
	Station	Downstream	1	Upstrean	n	Parti	ally Exp	osed (25-50%)		Ephemeral	
LAT	38.184486					Parti	ally Sha	ded (50-75%)		Intermittent	<b>✓</b>
LONG	-85.869635					Fully	Shaded	(75-100%)	<b>✓</b>		
WEATHER	Now Past	24 hours		LO	CAL WAT	TERSI	IED FE	ATURES (Predor		Surrounding Land	
Has there been		Heavy rain		Surface I	Mining		Constru	uction		Forest	✓
scouring rain in last 14 days?	the	Steady rain		Deep Mir	ning		Comme	ercial		Pasture/Grazing	
,		Intermittent show	ers	Oil Wells			Industri	al		Silviculture	
Yes		Clear/sunny		Land Dis	posal		Row Cı	rops		Urban Runoff/ Storm Sewers	
No 🗹	<b>V V</b>	Cloudy		Resident	ial						
INSTRE	EAM FEATURES	HYDRAULIC STRUC	TURES	STREAM	/ FLOW		RIPARI	AN VEGETATIO	٧	CHANNEL ALTE	RATIONS
Stream Width	2ft	Dams		Dry		Trees	· /	Herbaceous	<b>V</b>	Dredging	
Maximum Depth	h 0.25 ft	Bridge Abutments		Pooled		Grass	ses 🔽	Shrubs	7	Channelization	
Reach Length	96 m	Island		Low	<b></b>	Dom.	Tree/Sh	rub Taxa:		(Full) (Pa	artial)
Discharge	cfs	Waterfalls		High			Querci	us palustris		Celtis occider	ntalis
		Other:		Normal			Prunu	ıs serotina		Ligustrum vul	gare
Riffle/Rur	n/Pool Sequence	(No. Sampled in R	each)		R	iffle _	Run	Pool			
P-CHEM		Instrument Used:						Date Calibra	ated:		
Temp(°F)	D.	O. (mg/l)	%Satur	ation			oH(S.U.)	Cond. (µ	S/cm)	Turb	-
			Substr	ate Cha	racteriza	ation					
Substrate E	est. P.C.	Riffle	%		100		%	Pool	%	Reach To	tal
Silt/Clay (<0.06	6 mm/0.002 in)	-			Х		-		_		
	nm/0.002–0.08 in)										
Gravel (2–64 m	nm/0.08–2.52 in)			1							
Cobble (64–256	6 mm/2.52–10.08 in)										
Boulders (>256	6 mm/10.08 in)										
Bedrock	·										
NOTES/COMM	MENTS:										
(H	Bluegrass Bioregi High Gradient Assess		Headv (<5.0	_	Wadea (>5.0 i						
Fully Supporting	q	(Excellent)	156-2	200	130-2	200			1 7		
, ,, ,,	_	, ,					10		and a		
Supporting but <sup>-</sup> Partially Suppor	Threatened and rting	(Average)	142-	155	114-1	129					
Not Supporting		(Poor)	0-1	41	0-11	13					* 7.6
Kentucky I	Division of Water's "Me	ethods for Assessing H 2011) (Revision 1)	abitat in	Wadeabl	e Waters	,,					

Project Name:	3500 Lees Lane Property	Stream Na	me: Intermittent Stream	5
-	R	BP High Gradient Habit	at	
Habitat		Condition Categ		_
Parameter SCORE	Optimal 20 19 18 17 16	Suboptimal 15 14 13 12 11	Marginal 10 9 8 7 6	Poor 5 4 3 2 1
1. Epifaunal	20 19 10 17 10	13 14 13 12 11	10 9 8 7 8	5 4 5 2 1
Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e.,	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
Score	logs/snags that are not new fall and not transient).	not yet prepared for colonization (may rate at high end of scale).	disturbed or removed.	unstable of lacking.
2. Embeddedness				
<b>3</b> Score	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
3. Velocity/Depth	All faux valacity/danth regimes present			
Regime <b>2</b> Score	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
4. Sediment Deposition  8	Little or no enlargement of islands or point bars and less than 5% (<20% for low-gradient streams) of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% (20-50% for low-gradient) of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low-gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
5. Channel Flow Status 10 Score	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
6. Channel Alteration 15 Score	Channelization or dredging absent or minimal; stream with normal pattern.	evidence of past channelization, i.e.,	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.		Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.
Left/Right Bank	10 9	8 7 6	5 4 3	2 1
8. Bank Stability  3 LB  3 RB	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	areas of erosion mostly healed over.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
9. Vegetative Protection  5 LB  RB	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
10. Riparian Vegetative Zone Width  9 LB  9 RB	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.		Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
Total Score	NOTES/COMMENTS:			
83	Poor Quality			

STREAM NAME	: Intermittent S	Stree	High Gradier			LOCATI				s Lane F		v			
		ollea	111 6								Topen	1	IECT: 400	000	
STATION #: RB						COUNT			efferson		_		JECT: 103		[
	S: K. Ilnick, T. E					DATE:	1/1	1/202		TIM		10:00	<u> </u>		M
Verify Site LAT/LOf	NG vs GPS	Yes	No N/A				L			PY COV	ER::		STREA	M TYP	E:
				1			ł	•	•	(0-25%)			Perennial		
	Station		Downstream		Upstrean	n	ł			ed (25-5	•		Ephemeral		
LAT	38.182346						ł		•	ed (50-75	,		Intermittent		∠
LONG	-85.869403				1					75-100%	,	✓			
WEATHER	Now Pa	ast 2	4 hours		LO	CAL WAT	TER				Predon	ninant S	Surrounding La	and Us	
Has there been a			Heavy rain		Surface I	Mining		С	Construc	tion			Forest		<b>✓</b>
scouring rain in the last 14 days?	he		Steady rain		Deep Mir	ning		С	Commer	cial			Pasture/Graz	ing	
lact i i aayo i			Intermittent show	ers	Oil Wells			In	ndustrial				Silviculture		
Yes			Clear/sunny		Land Dis	posal		R	Row Cro	ps			Urban Run Storm Sew		
No 🔽	<b>~</b>	<b>√</b>	Cloudy		Resident	ial		J							
INSTREA	M FEATURES		HYDRAULIC STRUC	TURES	STREAM	/ FLOW		R	RIPARIA	N VEGET	TATION	1	CHANNEL A	LTERA	TIONS
Stream Width	4-5 ft		Dams		Dry	<b></b>	Tre	ees	<b>✓</b>	Herbac	eous	<b>✓</b>	Dredging		
Maximum Depth	0.1 ft		Bridge Abutments		Pooled		Gra	asses	s 🔽	Shrubs		<b>V</b>	Channelizatio	n	
Reach Length	288 m		Island		Low		Do	m. Tı	ree/Shr	ub Taxa:			(Full)	(Parti	al)
Discharge	cf	s	Waterfalls		High				Acer n	egundo			Acer ru	ıbrum	
			Other:		Normal			Pla	atanus d	occidenta	lis		Quercus	palustr	is
Riffle/Run/	Pool Sequence		(No. Sampled in R	each)	<u> </u>	R	iffle		Run _	Poo	ol				
P-CHEM			Instrument Used:							Date	Calibra	ted:			
Temp(°F)		D.C	D. (mg/l)	%Satu	ration			pН	(S.U.)	С	ond. (µ\$	S/cm)		Turb.	
<u> </u>				_								_		_	
				Subst	rate Cha	racteriza	atio	n .							
Substrate Es	t. P.C.		Riffle	%		90		%	<u>′</u>	ool	10	%	Reac	h Total	
									<u> </u>						
Silt/Clay (<0.06 n	•														
Sand (0.06–2 mr	•					Х					Х				
Gravel (2–64 mm	,														
· ·	mm/2.52–10.08 in	)													
Boulders (>256 mm/10.08 in)															
Bedrock															
NOTES/ODE	TNTC.														
NOTES/COMM	ENIS:														
	Bluegrass Bio	_		Head	water	Wadea	able	9 ,		粉灣 新 《	A COM	MORE EST ATO	16.20 Sec. 11 10 10		W EST
(High Gradient Assessn			ments)	(<5.0	mi²)	(>5.0 ı	mi²)	)			1				
Fully Supporting			(Excellent)	156-	-200	130-2	200			MEN		1	J. M.		9
, in any			,,												
Supporting but Threatened and			(Average)	142-	-155	114-1	114-129								

Bluegrass Bioregi (High Gradient Assess		Headwater (<5.0 mi <sup>2</sup> )	Wadeable (>5.0 mi <sup>2</sup> )	
Fully Supporting	(Excellent)	156-200	130-200	
Supporting but Threatened and Partially Supporting	(Average)	142-155	114-129	
Not Supporting	(Poor)	0-141	0-113	
Kentucky Division of Water's "Me	, ,	Habitat in Wadeab	ole Waters"	



Project Name:		Stream Na		6				
	RBP High Gradient Habitat							
Habitat	Optimal	Condition Categ Suboptimal		Poor				
Parameter SCORE	20 19 18 17 16	15 14 13 12 11	Marginal 10 9 8 7 6	5 4 3 2 1				
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e.,	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.				
Score	logs/snags that are not new fall and not transient).	not yet prepared for colonization (may rate at high end of scale).	disturbed or removed.					
2. Embeddedness  2 Score	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.				
3. Velocity/Depth Regime 3 Score	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).				
4. Sediment Deposition  3 Score	Little or no enlargement of islands or point bars and less than 5% (<20% for low-gradient streams) of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% (20-50% for low-gradient) of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low-gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition.				
5. Channel Flow Status 5 Score	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.				
6. Channel Alteration 7 Score	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr.) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.				
7. Frequency of Riffles (or bends) 5 Score	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.				
Left/Right Bank	10 9	8 7 6	5 4 3	2 1				
8. Bank Stability  3 LB  RB	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.				
9. Vegetative Protection  5 LB	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.				
10. Riparian Vegetative Zone Width  9 LB  9 RB	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.		Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.				
Total Score	NOTES/COMMENTS:							
61	Poor Quality							
I "								

# **APPENDIX C**

# PRELIMINARY JURISDICTIONAL **DETERMINATION FORM**

## Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

## **BACKGROUND INFORMATION**

A. REPOR	T COMPLETION DATE FOR PJD:	
B. NAME A	ND ADDRESS OF PERSON REQUESTING P	JD:
C. DISTRIC	T OFFICE, FILE NAME, AND NUMBER:	
(USE THE T	T LOCATION(S) AND BACKGROUND INFOFTABLE BELOW TO DOCUMENT MULTIPLE ASSOURCES AT DIFFERENT SITES)	
State:	County/parish/borough:	City:
Center c	oordinates of site (lat/long in degree decimal fo	rmat):
Lat.:	Long.:	
Universa	l Transverse Mercator:	
Name of	nearest waterbody:	
	PERFORMED FOR SITE EVALUATION (CHE e (Desk) Determination. Date:	ECK ALL THAT APPLY):
Field	Determination. Date(s):	
TABLE	OF AQUATIC RESOURCES IN REVIEW AREA W JURISDICTIO	

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Re	ceived Dec.	<del>5, 2022</del>	<pre>Planning &amp; Des:</pre>	ign	22-ZONE-0013

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

## SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriate below where indicated for all checked items:	iately reference sources
Maps, plans, plots or plat submitted by or on behalf of Map:	•
<ul> <li>Data sheets prepared/submitted by or on behalf of the</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation</li> </ul>	·
Data sheets prepared by the Corps:	
Corps navigable waters' study:	
U.S. Geological Survey Hydrologic Atlas:	
USGS NHD data.	
USGS 8 and 12 digit HUC maps.	
U.S. Geological Survey map(s). Cite scale & quad nam	
Natural Resources Conservation Service Soil Survey.	Jitation:
☐ National wetlands inventory map(s). Cite name:	
State/local wetland inventory map(s):	
FEMA/FIRM maps:	
100-year Floodplain Elevation is:	
Photographs: Aerial (Name & Date):	·
or Other (Name & Date):	
Previous determination(s). File no. and date of respon	se letter:
Other information (please specify):	
IMPORTANT NOTE: The information recorded on the been verified by the Corps and should not be relied determinations.	
Regulatory staff member completing PJD (	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable) <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

## 3500 Lees Lane Property Jefferson County, Kentucky

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Intermittent 1	38.186222	-85.865936	4,230 linear feet (0.583 acre)	non-wetland	Section 404
Intermittent 2	38.185950	-85.865900	440 linear feet (0.040 acre)	non-wetland	Section 404
Intermittent 3	38.183180	-85.867028	1,795 linear feet (0.185 acre)	non-wetland	Section 404
Intermittent 4	38.184826	-85.869173	315 linear feet (0.022 acre)	non-wetland	Section 404
Intermittent 5	38.184460	-85.869625	315 linear feet (0.014 acre)	non-wetland	Section 404
Intermittent 6	38.182607	-85.869970	945 linear feet (0.098 acre)	non-wetland	Section 404
Ephemeral 1	38.187172	-85.864567	90 linear feet (0.003 acre)	non-wetland	Section 404
Ephemeral 2	38.186458	-85.864949	175 linear feet (0.008 acre)	non-wetland	Section 404
Ephemeral 3	38.186431	-85.865731	25 linear feet (0.001 acre)	non-wetland	Section 404
Ephemeral 4	38.185146	-85.866362	125 linear feet (0.004 acre)	non-wetland	Section 404
Ephemeral 5	38.185068	-85.866503	65 linear feet (0.002 acre)	non-wetland	Section 404
Ephemeral 6	38.184995	-85.867026	135 linear feet (0.006 acre)	non-wetland	Section 404
Ephemeral 7	38.182997	-85.867923	135 linear feet (0.006 acre)	non-wetland	Section 404
Ephemeral 8	38.183059	-85.867207	65 linear feet (0.001 acre)	non-wetland	Section 404
Ephemeral 9	38.183097	-85.866632	35 linear feet (0.001 acre)	non-wetland	Section 404
Ephemeral 10	38.183167	-85.865541	60 linear feet (0.001 acre)	non-wetland	Section 404
Ephemeral 11	38.183355	-85.864270	30 linear feet (0.001 acre)	non-wetland	Section 404
Ephemeral 12	38.184423	-85.868769	140 linear feet (0.010 acre)	non-wetland	Section 404
Ephemeral 13	38.184587	-85.868679	105 linear feet (0.004 acre)	non-wetland	Section 404
Ephemeral 14	38.184800	-85.869314	50 linear feet (0.003 acre)	non-wetland	Section 404
Ephemeral 15	38.184111	-85.870494	85 linear feet (0.004 acre)	non-wetland	Section 404
Ephemeral 16	38.182763	-85.870379	45 linear feet (0.002 acre)	non-wetland	Section 404
Ephemeral 17	38.181379	-85.867317	475 linear feet (0.038 acre)	non-wetland	Section 404
Ephemeral 18	38.183290	-85.869124	85 linear feet (0.002 acre)	non-wetland	Section 404
Ephemeral 19	38.185627	-85.866434	25 linear feet (0.001 acre)	non-wetland	Section 404
Open Water 2	38.187079	-85.862604	0.057 acre	non-wetland	Section 404
Wetland 3	38.186380	-85.867567	0.875 acre	wetland	Section 404
Wetland 4	38.186659	-85.864315	1.596 acre	wetland	Section 404
Wetland 5	38.187281	-85.864829	0.046 acre	wetland	Section 404
Wetland 6	38.187034	-85.865336	0.007 acre	wetland	Section 404
Wetland 7	38.186366	-85.866534	0.063 acre	wetland	Section 404
Wetland 8	38.185360	-85.865393	0.172 acre	wetland	Section 404
Wetland 17	38.184303	-85.870423	0.042 acre	wetland	Section 404

# **APPENDIX D**

# **APPROVED JURISDICTIONAL DETERMINATION FORM**

## APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): February 2022
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: Louisville District, 3500 Lees Lane Property
C.	PROJECT LOCATION AND BACKGROUND INFORMATION:  State: Kentucky County/parish/borough: Jefferson City: Louisville  Center coordinates of site (lat/long in degree decimal format): Lat. 38.184667° N, Long. 85.865867° W.  Universal Transverse Mercator:  Name of nearest waterbody: Mill Creek Cut Off  Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Ohio River  Name of watershed or Hydrologic Unit Code (HUC): 05140101 Ohio River  Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.  Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  Office (Desk) Determination. Date:  Field Determination. Date(s):
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	we area. [Required]  Waters subject to the ebb and flow of the tide.  Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.  Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S.  a. Indicate presence of waters of U.S. in review area (check all that apply):   TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs  Non-RPWs that flow directly or indirectly into TNWs  Wetlands directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs  Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:  Non-wetland waters: linear feet: width (ft) and/or acres.  Wetlands: acres.
	c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):
	<ul> <li>Non-regulated waters/wetlands (check if applicable):<sup>3</sup></li> <li>Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Within the project boundary, 13 wetlands and one open water pond are isolated due to a lack of connection to downstream features.</li> </ul>

**SECTION I: BACKGROUND INFORMATION** 

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.
<sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>&</sup>lt;sup>3</sup> Supporting documentation is presented in Section III.F.

### **SECTION III: CWA ANALYSIS**

### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW Identify TNW:	
	Summarize rationale supporting determination: .	
2.	Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":	

## B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

## 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

## Watershed size: Pick List Drainage area: **Pick List** Average annual rainfall: inches Average annual snowfall: inches (ii) Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. Tributary flows through **Pick List** tributaries before entering TNW. Project waters are **Pick List** river miles from TNW. Project waters are Pick List river miles from RPW. Project waters are **Pick List** aerial (straight) miles from TNW. Project waters are **Pick List** aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Identify flow route to TNW5: Tributary stream order, if known:

(i) General Area Conditions:

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b)	General Tributary Characteristics (check all that apply):  Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate):  Average width: feet  Average depth: feet  Average side slopes: Pick List.
	Primary tributary substrate composition (check all that apply):  Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:  Presence of run/riffle/pool complexes. Explain:  Tributary geometry: <b>Pick List</b> Tributary gradient (approximate average slope): %
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:
	Surface flow is: Pick List. Characteristics:
	Subsurface flow: Pick List. Explain findings:  Dye (or other) test performed:
	Tributary has (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):  clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line sediment sorting leaf litter disturbed or washed away sediment deposition water staining other (list):  Discontinuous OHWM. <sup>7</sup> Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):    High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  Explain: .tify specific pollutants, if known:

(iii)

<sup>&</sup>lt;sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):  Riparian corridor. Characteristics (type, average width):  Wetland fringe. Characteristics:  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:  Other environmentally-sensitive species. Explain findings:  Aquatic/wildlife diversity. Explain findings:
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Wetland Characteristics:  General Wetland Characteristics:  Properties:  Wetland size: acres  Wetland type. Explain:  Wetland quality. Explain:  Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: <b>Pick List</b> . Explain findings:  Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:  ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: artify specific pollutants, if known:
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	reristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List proximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:  TNWs: linear feet width (ft), Or, acres.  Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.  Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:  Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
3.	Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs.  Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
4.	<ul> <li>Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.</li> <li>Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.</li> <li>Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:</li> <li>Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is</li> </ul>
	seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.  Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters.  As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.  Demonstrate that impoundment was created from "waters of the U.S.," or  Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  Demonstrate that water is isolated with a nexus to commerce (see E below).
SUC SUC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain:  Other factors. Explain:
	ntify water body and summarize rationale supporting determination:

E.

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters:  Wetlands: acres.
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):  ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.  ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.  ☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).  ☑ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Open Water 1 and Wetlands 1, 2, 9-16, and 18-20 lack a connection to other surface waters. They are located in defined depressions with no direct connections or indirect connections through drainages, swales, or overland flow to jurisdictional waters.  ☐ Other: (explain, if not covered above):
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource: .  Wetlands: acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).  Lakes/ponds: 0.029 acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: 3.396 acres.
SE	CTION IV: DATA SOURCES.
Α.	SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):    Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:   Data sheets prepared/submitted by or on behalf of the applicant/consultant.   Office concurs with data sheets/delineation report.   Office does not concur with data sheets/delineation report.   Data sheets prepared by the Corps:   Corps navigable waters' study:   U.S. Geological Survey Hydrologic Atlas:   USGS NHD data.   USGS 8 and 12 digit HUC maps.   U.S. Geological Survey map(s). Cite scale & quad name:1:24,000 – Louisville West, Kentukcy Quad.   USDA Natural Resources Conservation Service Soil Survey. Citation:Soil Survey Geographic Database for Jefferson County, KY (2008).   National wetlands inventory map(s). Cite name:   State/Local wetland inventory map(s). FEMA/FIRM maps:FEMA NFHL (2015).   100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)   Photographs: Aerial (Name & Date): kygisserver.ky.gov ArcGIS Services (2018).   or Of Other (Name & Date): Site photographs: January 5, 6, 7, and 11, 2021.   Previous determination(s). File no. and date of response letter:   Applicable/supporting case law: Applicable/supporting case law: Applicable/supporting case literitude.
	Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: .