

Photo 73 – Northeast Quadrant, Wetland A: Facing south along the east side of SR 159 toward the southern limits of Wetland A. A large patch of *Bidens frondose* (devil's-pitchfork, FACW) is located to the left.



Photo 75 – Northeast Quadrant, Data Point 3-OUT: Facing south toward data point 3-OUT. The location passed the Dominance Test for hydrophytic vegetation.



Photo 74 – Northeast Quadrant, Data Point 3-OUT: Facing north toward data point 3-OUT and along the woodline where the topography is slightly elevated compared to Wetland A. Great ragweed and horseweed were present.



Photo 76 – Northeast Quadrant, Data Point 3-OUT: Soil sample from data point 3-OUT exhibited the hydric soil indicator for Depleted Matrix. The sample was very dry and does not show coloration without



Photo 77 – Northeast Quadrant, Data Point 3-OUT: Test pit at data point 3-OUT was dry. While the FAC-Neutral Test was observed, no other hydrology indicators were present.



Photo 78 – Northeast Quadrant, Wetland A: Facing north along the elevated eastern border of Wetland A. The wetland is delineated by topography and by a transition toward more upland plant species.



Photo 79 – Northeast Quadrant, Wetland A: Facing south along the eastern border of Wetland A. Area contains plants with mixed indicator statuses, but still includes some obligate species (common boneset in bottom left corer).



Photo 81 – Northeast Quadrant: Facing southwest from within the forested area in the northwest quadrant of the AOI. No indications of surface water features were observed.



Photo 80 – Northeast Quadrant: Facing west from within the forested area in the northwest quadrant of the AOI. No indications of surface water features were observed.



Photo 82 – Northeast Quadrant, Data Point A-IN: Facing south toward data point A-IN from within Wetland A and along RSD-3. Large barnyard grass was the only dominant species present, but all other species were FACW or OBL.



Photo 83 – Northeast Quadrant, Data Point A-IN: Facing east toward data point A-IN and across Wetland A. Note the rise in topography further back that helps to delineate the wetland.



Photo 84 – Northeast Quadrant, Wetland A: Facing north along the eastern limits of Wetland A. Note the higher topography along the woodline of the right-of-way.



Photo 85 – Northeast Quadrant, Data Point A-IN: The soil sample at data point A-IN exhibited two indicators of hydric soils, including Depleted Below Dark Surface and Depleted Matrix.



Photo 87 – Northeast Quadrant, Wetland A and RSD-3: Facing southeast toward Wetland A and RSD-3 from SR 159. RSD-3 did not exhibit an OHWM or defined bed and bank.



Photo 89 – Northeast Quadrant, Wetland A and RSD-3: Facing southeast toward Wetland A and RSD-3 from SR 159. Photo shows the change in topography of where Wetland A expands beyond the roadside ditch (right).



Photo 86 – Northeast Quadrant, Data Point A-IN: Test pit at data point A-IN contained moist soils and became nearly saturated at the bottom. Geomorphic Position and FAC-Neutral Test indicators were present.



Photo 88 – Northeast Quadrant, Wetland A and RSD-3: Facing northeast toward Wetland A and RSD-3 from SR 159.



Photo 90 – Northeast Quadrant, Wetland A and RSD-3: Facing south along Wetland A and RSD-3 from the northern terminus of the AOI. The northern segment of Wetland A is confined to RSD-3.

Des. No. 2002197 SR 159 Small Structure Project at UNT to Splunge Creek, Vigo County



Photo 91 – Northeast Quadrant: Facing south along the vegetated rightof-way between RSD-3 and the treeline. The area is elevated, confining Wetland A to the roadside ditch.



Photo 93 – Northeast Quadrant: Facing east toward a gravel access drive over RSD-3 at the northern terminus of the AOI. Wetland A starts immediately south of the drive.



Photo 92 – Northeast Quadrant, RSD-3: Facing north along RSD-3, beyond the northern limits of the AOI. RSD-3 did not exhibit an OHWM or defined bed and bank.



Photo 94 – Northeast Quadrant, Beyond AOI: Facing northeast beyond the northern limits of the AOI toward a rural residential property.



Photo 95 – North Project Setting, Toward AOI: Facing south along SR 159 from the northern limits of the AOI. Topography north of the subject culvert is flat. Land use is forested and agricultural.



Photo 96 – North Project Setting, Beyond AOI: Facing north beyond the northern limits of the AOI. Topography is flat. Land use is agricultural and rural residential.

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Date		Temper	ature		HDD	CDD	Precipitation	New Snow	Snow Donth	
Dutt	Maximum	Minimum	Average	Departure	прр	CDD	Treeptation		Show Depth	
2022-08-01	86	68	77.0	0.6	0	12	0.14	0.0	0	
2022-08-02	80	69	74.5	-1.9	0	10	0.01	0.0	0	
2022-08-03	90	71	80.5	4.1	0	16	0.02	0.0	0	
2022-08-04	85	70	77.5	1.2	0	13	0.91	0.0	0	
2022-08-05	87	71	79.0	2.8	0	14	0.00	0.0	0	
2022-08-06	91	72	81.5	5.3	0	17	0.00	0.0	0	
2022-08-07	90	73	81.5	5.4	0	17	0.00	0.0	0	
2022-08-08	92	74	83.0	7.0	0	18	0.22	0.0	0	
2022-08-09	77	70	73.5	-2.4	0	9	0.12	0.0	0	
2022-08-10	82	67	74.5	-1.4	0	10	0.00	0.0	0	
2022-08-11	84	61	72.5	-3.3	0	8	0.11	0.0	0	
2022-08-12	78	60	69.0	-6.7	0	4	0.00	0.0	0	
2022-08-13	79	59	69.0	-6.6	0	4	0.00	0.0	0	
2022-08-14	81	66	73.5	-2.0	0	9	0.28	0.0	0	
2022-08-15	78	68	73.0	-2.4	0	8	0.00	0.0	0	
2022-08-16	82	63	72.5	-2.7	0	8	0.00	0.0	0	
2022-08-17	82	60	71.0	-4.1	0	6	0.00	0.0	0	
2022-08-18	84	59	71.5	-3.5	0	7	0.00	0.0	0	
2022-08-19	85	61	73.0	-1.8	0	8	0.00	0.0	0	
2022-08-20	83	64	73.5	-1.2	0	9	0.00	0.0	0	
2022-08-21	85	61	73.0	-1.5	0	8	1.78	0.0	0	
2022-08-22	81	63	72.0	-2.4	0	7	0.00	0.0	0	
2022-08-23	83	61	72.0	-2.2	0	7	0.00	0.0	0	
2022-08-24	85	60	72.5	-1.6	0	8	0.00	0.0	0	
2022-08-25	83	61	72.0	-1.9	0	7	0.00	0.0	0	
2022-08-26	85	67	76.0	2.3	0	11	0.00	0.0	0	
2022-08-27	85	66	75.5	2.0	0	11	0.00	0.0	0	
2022-08-28	90	70	80.0	6.7	0	15	0.46	0.0	0	
2022-08-29	90	71	80.5	7.4	0	16	0.35	0.0	0	
2022-08-30	82	65	73.5	0.6	0	9	0.21	0.0	0	
2022-08-31	81	56	68.5	-4.2	0	4	0.00	0.0	0	
Sum	2606	2027	-	-	0	310	4.61	0.0	-	
Average	84.1	65.4	74.7	-0.3	-	-	-	-	0.0	
Normal	85.4	64.6	75.0	-	2	311	3.06	0.0	-	

Climatological Data for FARMERSBURG TV-2, IN - August 2022

Observations for each day cover the 24 hours ending at the time given below (Local Standard Time).

Max Temperature : midnight
Min Temperature : midnight
Precipitation : midnight
Snowfall : unknown
Snow Depth : midnight

Date of field investigation: 8/25/2022

Project/Site: Des. 2002197: SR 159 UNT to Splunge Cr	eek	City/County	r: Vigo Cou	nty Sampling Date: 8/25/2022			
Applicant/Owner: INDOT, Crawfordsville District		State: IN Sampling Point: 1-OUT					
Investigator(s): Brock Ervin & Ben Neild, INDOT Crawfor	rdsville DE	_ Section, Township, Range: <u>Section 23, T 10 N, R 8 W</u>					
Landform (hillslope, terrace, etc.): Forested Flat			Local relief	(concave, convex, none): None			
Slope (%): < 2% Lat: 39.296926°		Long: -87.2	259186°	Datum: NAD 1983			
Soil Map Unit Name: AvB2 - Ava silt loam, 2 to 6 percen	t slopes, erod	led		NWI classification: No (See Remark			
Are climatic / hydrologic conditions on the site typical for	this time of ve	ear? Yes	X No	(If no, explain in Remarks)			
Are Vegetation Soil or Hydrology	significantly	/ disturbed?	Are '	"Normal Circumstances" present? Ves X No			
Are Vegetation, Soil, or Hydrology	_ orginitourity	oblomatic?	/If po	podod, ovolojn onv onswors in Romarka)			
SUMMARY OF FINDINGS – Attach site ma	naturally property of showing	a samplin	a point l	ocations, transects, important features, ef			
			5 Point	······································			
Hydrophytic Vegetation Present? Yes		ls th	ne Sampled	d Area			
Wetland Hydrology Present? Yes		with	in a Wetla	nd? Yes NoX			
Remarks:							
Data point taken in southwest quadrant of crossing at S located on the border of an NWI-mapped polygon classi stream and is mislocated. AvB2 Soil Unit Description: I	R 159 and UN fied as PFO1 No Flooding, I	NT to Splung A, but its line Moderately V	je Creek, at ear shape a Vell Draine	bout 20 feet from creek and 50 feet from the road. Point and location along the NWI line appear to reference the d, 0% Hydric Rating.			
VEGETATION – Use scientific names of plan	ts.						
T 01 1 (D1 1 1 00 ft 1 1	Absolute	Dominant	Indicator	Dominance Test worksheet:			
Tree Stratum (Plot size: <u>30 ft. radius</u>)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species			
1. Quercus palustris (Pin Oak)	20	- <u>ř</u>		Inat Are OBL, FACW, or FAC:4 (A)			
2. Cerus occidentaris Common Hackberry FAC		Y	FACW	Total Number of Dominant			
Juglans nigra (Black Walnut)	10	 N	FACU	Species Across All Strata: (B)			
5 Acer negundo Ash-Leaf Maple FAC	<u>10</u> 5	N	FAC	Percent of Dominant Species			
	70	= Total Cov	er	That Are OBE, FACW, of FAC. <u>60.00</u> (Are			
Sapling/Shrub Stratum (Plot size: 15 ft. radius)				Prevalence Index worksheet:			
1				Total % Cover of:Multiply by:			
2				OBL species x 1 =			
3				FACW species X 2 = 70			
4				FAC species <u>38</u> x 3 = <u>114</u>			
5				FACU species <u>34</u> x 4 = <u>136</u>			
Herb Stratum (Plot size: 5 ft. radius)		= Total Cov	er	$\begin{array}{c} \text{UPL species} \underline{0} x \text{ 5} = \underline{0} \\ \text{Output the species} \underline{107} (A) \underline{000} (B) \underline{107} (A) \underline{107} $			
1 Parthenocissus guinguefolia (Virginia-Creeper)	10	Y	FACU	Column Totals: <u>107</u> (A) <u>320</u> (B)			
2. Toxicodendron radicans (Eastern Poison Ivy)	10	Y	FAC	Prevalence Index = B/A =299			
3. Sanicula odorata (Clustered Black-Snakeroot)	5	N	FACU	Hydrophytic Vegetation Indicators:			
4. Ageratina altissima (White Snakeroot)	5	N	FACU	1 - Rapid Test for Hydrophytic Vegetation			
5. Persicaria virginiana Jumpseed FAC	2	N	FAC	X 2 - Dominance Test is >50%			
6. Rosa multiflora Rambler Rose FACU	2	Ν	FACU	$_$ 3 - Prevalence Index is ≤3.0 ¹			
7				4 - Morphological Adaptations ¹ (Provide supporting			
8				data in Remarks or on a separate sheet)			
9				Problematic Hydrophytic Vegetation (Explain)			
10				be present, unless disturbed or problematic.			
	34	= Total Cov	er				
vvoody vine Stratum (Piot size: <u>30 ft. radius</u>)	-		FACU	Hydrophytic			
Partnenocissus quinquerolia (Virginia-Creeper)	2		FACU	Vegetation			
2. <u>Toxicouentifon radicaris (Eastern Polson IVy)</u>	1	- Total Carr		Present? Yes X No			
	<u> </u>		CI				
Remarks: (Include photo numbers here or on a separate	e sheet.)						

SOIL

Profile Desc	ription: (Descri	be to the de	oth need	led to docu	nent the i	indicator	or confirm	n the absence of	findicators.)	
Depth	Matrix	(Redo	x Feature	s				
(inches)	Color (moist)	%	Colo	or (moist)	%	Type'	Loc ²	Texture	Remar	ks
0 - 4	10YR 4/3	100						St Cl		
4 - 20	10YR 5/4	100						St Cl		
								·		
<u> </u>										
¹ Type: C=Co	oncentration, D=E	Depletion, RM	I=Reduc	ed Matrix, M	S=Masked	I Sand Gra	ains.	² Locat	ion: PL=Pore Lining	g, M=Matrix.
Histosol	(A1)			Sandy (Gleved Ma	atrix (S4)		Coast Pr	airie Redox (A16)	
Histic Er	bipedon (A2)			Sandy I	Redox (S5	i)		Dark Sur	face (S7)	
Black Hi	stic (A3)			Stripped	d Matrix (S	, 6)		Iron-Man	iganese Masses (F	12)
Hydroge	en Sulfide (A4)			Loamy	Mucky Mir	neral (F1)		Very Sha	allow Dark Surface ((TF12)
Stratified	d Layers (A5)			Loamy	Gleyed Ma	atrix (F2)		Other (Ex	xplain in Remarks)	
2 cm Mu	ick (A10)			Deplete	d Matrix (I	F3)				
Depleted	d Below Dark Sur	face (A11)		Redox I	Jark Surfa	ace (F6) urfago (E7)		³ Indicators of	f bydropbytic ycact	tion and
Thick Da	Ark Surface (ATZ) Aucky Mineral (S1)		Depiete Redox I	Denression	ns (F8)		wetland h	vdrology must be n	resent
5 cm Mu	icky Peat or Peat	, (S3)			5661600101	10 (1 0)		unless di	sturbed or problema	atic.
Restrictive I	Layer (if observe	d):								
Туре:										
Depth (in	ches):							Hydric Soil Pi	resent? Yes	No <u>×</u>
Remarks:										
Very fine dry	vsediment dustv									
very line, dry	sediment, dusty									
HYDROLO	GY									
Wetland Hy	drology Indicato	rs:								
Primary Indic	cators (minimum o	of one is requ	ired; che	eck all that ap	oply)			Secondary	Indicators (minimu	m of two required)
Surface	Water (A1)		_	Water-Sta	ined Leav	es (B9)		Surfac	e Soil Cracks (B6)	
High Wa	ater Table (A2)		_	_ Aquatic Fa	auna (B13)		Draina	age Patterns (B10)	
Saturatio	on (A3)			_ True Aqua	tic Plants	(B14)		Dry-Se	eason Water Table	(C2)
Water M	larks (B1)		_	_ Hydrogen	Sulfide O	dor (C1)	in a De ete	Crayfis	sh Burrows (C8)	(00)
Sedimer	nt Deposits (B2)		_		Anizosphe	res on Liv		(C3) Satura		al Imagery (C9)
	or Crust (B4)			_ Presence Recent Irc	o Reducti	on in Tille	t) d Saile (Cl		orphic Position (D2)	S (DT)
Iron Der	(B5)			Thin Muck	Surface ((C7)		U) <u> </u>	Jeutral Test (D5)	
Inundati	on Visible on Aeri	al Imagery (F	37)	Gauge or	Well Data	(D9)		<u></u> 170-1		
Sparsel	Vegetated Conc	ave Surface	(B8)	Other (Exi	plain in Re	(20) emarks)				
Field Obser	vations:		. /	_ (=/		~/	1			
Surface Wat	er Present?	Yes	No X	Depth (in	ches):					
Water Table	Present?	Yes	No ×	Depth (in	, <u> </u>		_			
Saturation P	resent?	Yes	No ×	Depth (in	ches):		Wet	land Hvdrology F	Present? Yes	No ×
(includes cap	oillary fringe)							,		
Describe Re	corded Data (stre	am gauge, m	onitoring	well, aerial	photos, pr	evious ins	pections),	if available:		
Remarks:										

Pit very dry to bottom. FAC-Neutral Test = 2 of 3 = 33%.

Project/Site: Des. 2002197: SR 159 UNT to Splunge Cr	City/County	: Vigo Cou	Sampling Date: 8/25/2022					
Applicant/Owner: INDOT, Crawfordsville District	State: <u>IN</u> Sampling Point: _					t: <u>2-0UT</u>		
Investigator(s): Brock Ervin & Ben Neild, INDOT Crawfor	dsville DE	Section, To	wnship, Ra	nge: <u>Section 24, T</u>	10 N, R 8 V	V		
Landform (hillslope, terrace, etc.): Wooded Roadside Rig	ht-of-Way		Local relief	(concave, convex, r	none): <u>Non</u>	е		
Slope (%): < 5% Lat: 39.297272°		Long: <u>-87.2</u>	258829°		Datu	ım: <u>NAD</u>	1983	
Soil Map Unit Name: IvA- Iva silt loam, 0 to 2 percent slo	opes	-		1	VWI classifi	cation: No	on-Wetlan	d
Are climatic / hydrologic conditions on the site typical for	his time of ve	ar? Yes	× No	(If no, explai	n in Remar	ks.)		
Are Vegetation Soil or Hydrology	significantly	disturbed?	Are '	Normal Circumstan	ices" preser	nt? Yes	ХN	0
Are Vegetation Soil or Hydrology	naturally pr	blematic?	(If ne		answers in l	Remarks)		·
SUMMARY OF FINDINGS – Attach site ma	p showing	j samplin	g point l	ocations, trans	ects, im	portant	feature	s, etc.
Hydrophytic Vegetation Present? Ves	No X							
Hydric Soil Present? Yes	No X	Is th	e Sampled	Area				
Wetland Hydrology Present? Yes	No X	with	iin a Wetlai	nd? Yes		No <u>×</u>	. <u> </u>	
Remarks:		I						
Located in the woods in the northeast quadrant at SR 15 Flooding, Somewhat Poorly Drained, 5% Hydric Rating.	59 and UNT to	o Splunge C	reek, about	30 feet from creek	bank. IvA S	3oil Unit D	escription	: No
VEGETATION – Use scientific names of plan	ts.							
Tree Stratum (Plot size: 30 ft. radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test	workshee	t:		
1 Juglans nigra (Black Walnut)	<u>30</u>	Y	FACU	Number of Domin	ant Species	s C'	2	(A)
2. Quercus imbricaria (Shingle Oak)	30	Y	FACU			0		(,,,)
3. Carya laciniosa (Shell-Bark Hickory)	15	N	FACW	Total Number of I Species Across A	Jominant		4	(B)
4. Ulmus rubra (Slippery Elm)	5	N	FAC					(2)
5				Percent of Domin That Are OBL, FA	ant Species	} ር: {	50.00	(A/B)
	80	= Total Cov	er					(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Sapling/Shrub Stratum (Plot size: 15 ft. radius)				Prevalence Inde	x workshee	ət:		
1. Quercus palustris (Pin Oak)	2	<u> N </u>	FACW	Total % Cove	<u>er of:</u>	Mult	iply by:	
2. Fraxinus pennsylvanica (Green Ash)	2	<u> N </u>	FACW	OBL species	0	x1=	62	_
3				FACW species	<u> </u>	x2=	69	
4				FAC species	69	× 4 =	276	_
5		- Total Cov	or	LIPL species	3	x 5 =	15	_
Herb Stratum (Plot size:5 ft. radius)		- 10tai COV	CI	Column Totals	126	(A)	422	(B)
1. Sanicula odorata (Clustered Black-Snakeroot)	15	Y	FAC			. () _		_ (2)
2. Elymus virginicus (Virginia Wild Rye)	10	Y	FACW	Prevalence	Index = $B/$	A =	3.35	
3. Lonicera mackii (Amur Honeysuckle) Upl	3	N	UPL	Hydrophytic Veg	jetation Inc	licators:		
4. Lactuca floridana (Woodland Lettuce)	2	N	FACU	1 - Rapid Tes	t for Hydro	phytic Veg	jetation	
5. Ambrosia trifida (Great Ragweed)	2	<u>N</u>	FAC	2 - Dominand	e Test is >!	50%		
6. <u>Ageratina altissima (White Snakeroot)</u>	2	N	FACU	3 - Prevalenc	e Index is ≤	≦3.0'		
7. Parthenocissus quinquefolia (Virginia-Creeper)	2	<u>N</u>	FACU	4 - Morpholog	gical Adapta	ations' (Pro	ovide supp ate sheet)	porting
8. Symphyotrichum lateriflorum (Farewell-Summer)	2	<u>N</u>	FACW	Problematic	Hvdrophvti	c Vegetati	on ¹ (Expla	in)
9. Smilax hispida (Chinaroot)	1	<u>N</u>	FAC	¹ Indicators of hvdr	ic soil and v	wetland h	droloav m	nust
10		- <u></u>		be present, unless	disturbed	or problem	natic.	
Woody Vine Stratum (Plot size: 30 ft radius)	39	= Total Cov	er					
Parthenocissus quinquefolia (Virginia-Creeper)	3	<u>N</u>	FACU	Hydrophytic Vegetation				
<u></u>		= Total Cov	er	Present?	Yes	No	<u>X</u>	
			01					
Remarks: (Include photo numbers here or on a separate	e sheet.)							

Depth	Matrix	Redox	Features				
(inches)	Color (moist)	% Color (moist)	<u>% Type¹</u>	Loc ² Te	exture	Remarks	
0 - 3	10YR 4/3	100		5	St Cl		
3 - 20	10YR 5/4	100			St Cl		
	·						
					2		
ype: C=C	oncentration, D=Depletio	n, RM=Reduced Matrix, MS	=Masked Sand Grain	IS.	Location:	PL=Pore Lining, M=Matrix.	
yaric Soli	indicators:			In			
Histosol	(A1)	Sandy G	leyed Matrix (S4)	_	Coast Prairie I	Redox (A16)	
_ HISUC E	pipedon (AZ)	Sandy R	.edox (SS) Matrix (S6)		_ Dark Surface ((37) se Masses (E12)	
Hvdroge	en Sulfide (A4)		Aucky Mineral (F1)		Very Shallow	Dark Surface (TE12)	
Stratifie	d Lavers (A5)	Loamy G	Gleved Matrix (F2)		Very Shallow Dark Sullace (TFTZ)		
2 cm Mu	uck (A10)	Depleted	d Matrix (F3)	—		r in remarks)	
Deplete	d Below Dark Surface (A	11) Redox D	ark Surface (F6)				
Thick Da	ark Surface (A12)	Depleted	J Dark Surface (F7)	³	ndicators of hydr	ophytic vegetation and	
Sandy N	/lucky Mineral (S1)	Redox D	epressions (F8)		wetland hydrol	ogy must be present,	
5 cm Mu	ucky Peat or Peat (S3)			r	unless disturb	ed or problematic.	
Restrictive	Layer (if observed):						
Туре:							
Depth (in	ches):			Hy	dric Soil Presen	nt? Yes <u>No X</u>	
lemarks:							
emarks: 'ery fine, dr	y sediment, dusty.						
YDROLO	GY						
vetiand Hy	drology indicators:						
rimary Indi	cators (minimum of one is	s required; check all that app	<u>oly)</u>		Secondary Indic	ators (minimum of two requi	
Surface	Water (A1)	Water-Stair	ned Leaves (B9)		Surface Soi	I Cracks (B6)	
High Wa	ater Table (A2)	Aquatic Fai	una (B13)		Drainage Pa	atterns (B10)	
Saturati	on (A3)	True Aquat	ic Plants (B14)		Dry-Season	Water Table (C2)	
Water N	larks (B1)	Hydrogen S	Sulfide Odor (C1)		Crayfish Bu	rrows (C8)	
Sedimer	nt Deposits (B2)	Oxidized R	hizospheres on Living	g Roots (C3)	Saturation \	/isible on Aerial Imagery (C9	
Drift De	posits (B3)	Presence c	of Reduced Iron (C4)		Stunted or S	Stressed Plants (D1)	
	at an Cruck (D4)	Depent Iron	a Doduction in Tilled /	Solle (CG)	Coomorphi	Position (D2)	
Algal Ma	at of Clust (B4)			50115 (00)	Geomorphic		
Algal Ma Iron Dep	posits (B5)	Thin Muck	Surface (C7)	50115 (CO)	FAC-Neutra	al Test (D5)	

Saturation Present? Yes <u>No X</u> Depth (inches):	Wetland Hydrology Present? Yes	No _	×
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp	pections), if available:		
Breader			
Remarks:			
Pit very dry to bottom. FAC-Neutral Test = 1 of 4 = 25%.			

 Yes
 No
 X
 Depth (inches):

 Yes
 No
 X
 Depth (inches):

Sparsely Vegetated Concave Surface (B8) ____ Other (Explain in Remarks)

Field Observations: Surface Water Present?

Water Table Present?

Project/Site: Des. 2002197: SR 159 UNT to Splunge Creek	(City/County	r: Vigo Cou	nty Sampling Date: 8/25/2022			
Applicant/Owner: INDOT, Crawfordsville District				State: IN Sampling Point: 3-OUT			
Investigator(s): Brock Ervin & Ben Neild, INDOT Crawfords	ville DE	Section, Township, Range: Section 24, T 10 N, R 8 W					
Landform (hillslope, terrace, etc.): <u>Vegetated Right-of-Way</u>			Local relief	(concave, convex, none): <u>None</u>			
Slope (%): < 5% Lat: 39.297721°		Long: -87.2	258830°	Datum: NAD 1983			
Soil Map Unit Name: IvA - Iva silt loam, 0 to 2 percent slope	es	0		NWI classification: Non-Wetland			
Are climatic / hydrologic conditions on the site typical for this	time of ve	ar? Ves	X No	(If no, evplain in Remarks)			
	ignificantly	dicturbod?	<u> </u>	(Narmal Circumstances" procent? Voc. X			
Are vegetation, Soil, or Hydrologys	ignincantry		Ale	Normal Circumstances present? res <u>x</u> No			
Are Vegetation, Soil, or Hydrology n	aturally pro	samplin	(It ne a point l	ocations. transects. important features. etc.			
Hydrophytic Vogetation Procent? Vog X		,	5 Point	······································			
Hydric Soil Present? Yes X No	。 D	Is th	e Sampled	l Area			
Wetland Hydrology Present? Yes No		with	iin a Wetlar	nd? Yes NoX			
Remarks:							
Located about 15 feet east of ditch line in area with species goldenrod and horseweed). IvA Soil Unit Description: No	s with mixe Flooding, S	d wetland ir Somewhat P	idicator stat oorly Draine	uses and near area with dominant upland vegetation (tall ed, 5% Hydric Rating.			
VEGETATION – Use scientific names of plants.							
Tree Stratum (Plot size: 30 ft radius)	Absolute % Covor	Dominant	Indicator	Dominance Test worksheet:			
1 Carva ovata (Shaq-Bark Hickory)	<u>% Cover</u> 20		FACIL	Number of Dominant Species			
2 Quercus palustris (Pin Oak)	10	Y	FACW				
3.		. <u> </u>		Total Number of Dominant Species Across All Strata: 5 (B)			
4.							
5				Percent of Dominant Species That Are OBL_FACW_or FAC' 80.00 (A/B)			
	30	= Total Cov	er				
Sapling/Shrub Stratum (Plot size: 15 ft. radius)				Prevalence Index worksheet:			
1. Morus rubra (Red Mulberry)	3	<u>N</u>	FACU	Total % Cover of: Multiply by:			
2	·			$\begin{array}{c c} OBL \text{ species} & \underline{3} & x \ 1 = \underline{3} \\ \hline 5 \ 100 & x \ 1 = \underline{3} \\ \hline \end{array}$			
3	·	<u> </u>		FACW species 10 $x^2 = 220$			
4	·			FAC species 11 $x_3 = 33$			
5	2	- Tatal Cau		FACO species 43 $x 4 = 190$			
Herb Stratum (Plot size: 5 ft. radius)	3	= Total Cov	er	Column Totals: 173 (A) 452 (B)			
1. Leersia virginica (White Grass)	30	Y	FACW	$\frac{1}{1} = \frac{1}{1} = \frac{1}$			
2. Panicum dichotomiflorum (Fall Panic Grass)	30	Y	FACW	Prevalence Index = B/A =2.61			
3. Symphyotrichum lateriflorum (Farewell-Summer)	30	Y	FACW	Hydrophytic Vegetation Indicators:			
4. Lonicera japonica (Japanese Honeysuckle)	10	Ν	FACU	1 - Rapid Test for Hydrophytic Vegetation			
5. Toxicodendron radicans (Eastern Poison Ivy)	10	Ν	FAC	X 2 - Dominance Test is >50%			
6. Quercus palustris (Pin Oak)	10	N	FACW	3 - Prevalence Index is ≤3.0 ¹			
7. Lactuca floridana (Woodland Lettuce)	5	N	FACU	4 - Morphological Adaptations ¹ (Provide supporting			
8. <u>Rosa carolina (Carolina Rose)</u>	5	N	FACU	Problematic Hydrophytic Vegetation ¹ (Evplain)			
9. Solidago altissima (Tall Goldenrod)	5	N	FACU	¹ Indicators of hydric soil and wetland hydrology must			
10. Lycopus americanus (Cut-Leaf Water-Horehound)	3	N	OBL	be present, unless disturbed or problematic.			
Woody Vine Stratum (Plot size: 30 ft radius)	138	= Total Cov	er				
1 Parthenocissus guinquefolia (Virginia-Creener)	1	N	FACU	Hydrophytic			
2 Toxicodendron radicans (Fastern Poison Ivv)	1 <u> </u>	N	FAC	Vegetation			
	2	= Total Cov	er	Present? Yes X No			
Remarks: (Include photo numbers here or on a separate si	neet.)						
Immediately north of area containing predominantly Solida	go altissim	a (tall golde	nrod, FACU	I) and Erigeron canadensis (Canadian horseweed, FACU).			

SOIL

Profile Desc	cription: (Describe t	o the dept	h needed to docur	nent the	indicator	or confirm	n the absence of	indicators.)			
Depth Matrix Redox Features											
(inches)	Color (moist)% Color (moist)%Type ¹ _ L				Loc ²	Texture	Remarks				
0 - 5	10YR 6/2	95	7.5YR 4/4	5	С	Μ	St Cl				
5 - 9	10YR 7/3	100					St Cl				
9 - 20	10YR 5/2	95	7.5YR 4/4	5	С	М	St Cl				
			а.								
		<u> </u>			·						
¹ Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, M	S=Masked	d Sand Gra	ains.	² Locati	ion: PL=Pore Lining, M=Matrix.			
Hydric Soil	Indicators:						Indicators fo	r Problematic Hydric Soils ³ :			
Histosol	(A1)		Sandy (Gleyed Ma	atrix (S4)		Coast Pra	airie Redox (A16)			
Histic E	pipedon (A2)		Sandy F	Redox (S5	5)		Dark Surf	face (S7)			
Black H	istic (A3)		Stripped	d Matrix (S	66)		Iron-Man	ganese Masses (F12)			
Hydroge	en Sulfide (A4)		Loamy	Mucky Mi	neral (F1)		Very Sha	Illow Dark Surface (TF12)			
Stratified	a Layers (A5)		Loamy	d Matrix (Other (Ex	vplain in Remarks)			
2 cm with	d Relow Dark Surface	(A11)		u Matrix (Dark Surfa	rs) ace (F6)						
Thick Da	ark Surface (A12)	(711)	Deplete	d Dark Su	urface (F7)		³ Indicators of	hydrophytic vegetation and			
Sandy N	Aucky Mineral (S1)		Redox [Depressio	ns (F8)		wetland h	ydrology must be present,			
5 cm Mu	ucky Peat or Peat (S3)			. ,		unless dis	sturbed or problematic.			
Restrictive	Layer (if observed):										
Туре:											
Depth (in	ches):						Hydric Soil Pr	resent? Yes <u>X</u> No			
Remarks:											
Vonutino dr	v adimant duaty										
very line, dr	y sealment, dusty.										
	GY										
Wetland Hy	drology Indiastora										
	arology mulcators.						Coordon	Indianteur (minimum of two mousined)			
Primary India	cators (minimum or or	e is require			(50)		<u>Secondary</u>	a il a la (Da)			
Surface	Water (A1)		Water-Sta	Ined Leav	es (B9)		Surface Soil Cracks (B6)				
High Wa	ater Table (AZ)			auna (B13)		Drainage Patterns (B10)				
Saturati	on (A3)		True Aqua	Cultide O	(B14)		Dry-Se				
Water iv	iarks (BT)		Hydrogen			ina Dooto		tion Visible on Asticl Imagen (CO)			
Seuimer	$\frac{11}{2} \frac{1}{2} 1$		Oxiuizeu r	of Boduor	d Iron (C		(CS) Satura	d or Strongod Planta (D1)			
	posits (B3)		Presence	n Reduce	on in Tillo	t) d Saila (Cl		u of Stresseu Plants (DT)			
	al OF Clust (D4)		Recent ino					loutrol Tost (DE)			
	on Visible on Aerial In	agony (P7		Moll Data			<u> </u>	leutrar rest (D5)			
Inunuali		Surface (P) <u> </u>	vveli Dala	(D9)						
Sparser	y vegetated Concave	Sunace (E			illaiks)						
Surface Mot	valions.	~ \	la X Danth (in	abaa);							
Surface Wat	Present? Ye	·sN	-								
vvater rable	Present? Ye	la mal I la salar a la salar									
Saturation P	resent? Ye pillary fringe)	s N	io <u> </u>	cnes):		_ Wet	iand Hydrology P	resent? Yes No _X			
Describe Re	corded Data (stream	gauge, mo	nitoring well, aerial	photos, pr	evious ins	pections),	if available:				
Remarks:											
Pit verv dry f	to bottom FAC-Neutr	al Test = 3	of $5 = 60\%$ Slight	lv higher e	elevation in	ndicates w	etland may be de	fined by small changes in topography			
		u 1001 – 0	or of the original	, inglici e		aloutos W	saana may be de	mos sy oman onanges in topography.			

Project/Site: Des. 2002197: SR 159 UNT to Splunge Creek		City/County:	Vigo Cou	nty	Sampling Date: 8/25/2022			
Applicant/Owner: INDOT, Crawfordsville District				State: IN	Sampling Point: <u>A-IN</u>			
Investigator(s): Brock Ervin & Ben Neild, INDOT Crawfordsv	ille DE	Section, Township, Range: Section 24, T 10 N, R 8 W						
Landform (hillslope, terrace, etc.): Roadside Ditch Embankm	ent	L	.ocal relief	(concave, convex, none):	Open Concave Along Ditch	h		
Slope (%): < 5% Lat: 39.297968°		Long: -87.2	58858°		Datum: NAD 1983			
Soil Map Unit Name: IvA - Iva silt loam. 0 to 2 percent slope	3	- 0		NWI cl	assification. Non-Wetland			
Are climatic / hydrologic conditions on the site typical for this	time of ve	ar? Ves	X No	(If no, explain in R	emarks)			
Are Vegetation Soil or Hydrology si	unic or ye	disturbod?	Aro	<u>'Normal Circumstancos</u> " n	$\frac{1}{2}$			
Are Vegetation, 301, 01 Hydrology st			Ale					
SUMMARY OF FINDINGS – Attach site map s	howing	samplin	g point l	ocations, transects	, important features,	etc.		
Hydrophytic Vegetation Present? Yes X No					<u> </u>			
Hydric Soil Present? Yes X No		IS the	e Samplec	I Area	No			
Wetland Hydrology Present? Yes X No		with						
Data Point A-IN was located about 300 feet north of the cult bulge outside of the roadside ditch, which was otherwise co Hydric Rating.	vert and al nfined to t	ong the bacl he ditch. Iv/	k slope of t A Soil Unit	he roadside ditch, where we be constructed by the head of the head	vetland vegetation appeared Somewhat Poorly Drained,	d to 5%		
	Abaoluto	Dominant	Indicator	Dominanaa Taat wark	abaati			
T <u>ree Stratum</u> (Plot size: <u>N/A</u>) 1.	% Cover	Species?	Status	Number of Dominant Sp That Are OBL, FACW, of	Decies Dor FAC: 1 (/	A)		
2.				Total Number of Damin	``	,		
3				Species Across All Stra	ant ta: <u> </u>	B)		
4				Porcent of Dominant Sr				
5				That Are OBL, FACW, o	or FAC: <u>100.00</u> (/	A/B)		
Caption (Charthe Stratum (Distaine) N/A		= Total Cove	er	Provalance Index wor	kshoot:			
Sapling/Snrub Stratum (Plot size: N/A)				Total % Cover of	Multinly by:			
2		·		OBL species 15	$x_1 = 15$			
3		·		FACW species 62	$x_{2} = 124$			
4				FAC species 0	x 3 = 0			
5.				FACU species 0	x 4 = 0			
		= Total Cove	er	UPL species 0	x 5 = 0			
Herb Stratum (Plot size: 5 ft. radius)				Column Totals: 77	<u>′ (A) </u>	(B)		
1. Echinochloa crus-galli (Large Barnyard Grass)	40	Y	FACW					
2. Panicum dichotomiflorum (Fall Panic Grass)	15	N	FACW	Prevalence Index	= B/A = <u>1.81</u>			
3. Persicaria hydropiper (Mild Water-Pepper)	15	N	OBL	Hydrophytic Vegetatio	on Indicators:			
4. Bidens frondosa (Devil's-Pitchfork)	5	N	FACW	X 1 - Rapid Test for F	lydrophytic Vegetation			
5. Cyperus esculentus (Chufa)	2	<u>N</u>	FACW	X 2 - Dominance Tes	t is >50%			
6		·		X 3 - Prevalence Inde	X IS ≤3.0			
7		·		data in Remarks	s or on a separate sheet)	ting		
8		·		Problematic Hydro	phytic Vegetation ¹ (Explain)			
9		·		¹ Indicators of hydric soil	and wetland hydrology mus	st		
10	77			be present, unless distu	bed or problematic.			
Woody Vine Stratum (Plot size: N/A)		= Total Cove	er					
1.				Hydrophytic				
2				Vegetation	X No			
		= Total Cove	er –	163611: 165				
Remarks: (Include photo numbers here or on a concrete ch	eet)							