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Ashland sasd1021e 11 4 Ashland sasd1022p 18 7 Ashland sase006p_x 4, 5 2 Ashland sase1001e 15 4 Ashland sase1002e 15 4 Ashland sase1003e 16 5 Ashland sase1004e 16 5	
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sshland sase1010i 17 6	
shland sase1011i 17 6	
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Ashland sase1015i 17 6	
shland sase1016e 17 6	
Ashland sase1017e 17 6	
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sshland sase1020p 16 5	
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Iron	sird1005i	32	15
Iron	sird1006e	32	15

Waterbody Data C	nicet									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Project						2020-06-12			sbad1001e	
State:	(County/Pa	rish:			USGS Wate	body Name	:		
Wisconsin		Bayfield				None				
Company:	(Crew Mem	ber Initi	als:		Latitude:			Longitude:	
Enbridge		KDF/AGG				46.575124			-91.032516	
Survey Type:	Centerli	ne 🗆	Re-Rou	te		Access Road	□Facility	□Other	I	
Waterbody Type:	River	✓	Stream			Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wate	er 🗸	Clear		1	Γurbid	☐Sheen on Surface	□Surfac	e Scum 🗆	Algal Mats □Other
Existing Condition ^a :	Highly F	unctional	Stream	☐ Mode	erately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description:	Natural		Artificial	, man-made	4	Manipulated				
Flow Regime: (check one)	Epheme	eral 🗆	Intermit	tent		Perennial	☐ Connec	ting		
Sinuosity within Survey Corridor: (check one)	Straight	. ▼	Meande	ering			<u> </u>			
Description Notes: The ephemeral stream be feature is fed by seepage								oadside ditch v	vetland (wbad	11001e) to the south. The
Measurements										
Depth of Water: 0.25 ft	t. N	N/A□	Unknow	n Water	Edge	to Water Ed	ge: <u>3</u> ft.	N/A□	OHWM Widt	h: <u>4</u> ft.
OHWM Indicator: (check all that apply)	□ Cle	ear line on	bank	□Shelving		□Wrested ve	egetation	 Scouring		□Water staining
(orosi an arat appry)		nt, matted, ng vegetat		□Wrack line	е	☑ Litter and o	lebris	□Abrupt plan	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Be	drock	☐ Boul	lder 🗆	Cobb	le 🗆 G	ravel	☑ Sand	☐ Silt/ cla	y 🗆 Organic
Observations										
Riparian Zone Present:	☐ Ye:	S	▼ N	0						
Vegetation Layers: (check all that apply)	☑ Tre	es	√ S	aplings/Shru	bs	☑ Herbs				
Dominant Bank Vegetati Athyrium filix-femina, Bet	ula papy	rifera, Ace								
Aquatic Habitats (ex: submone.			itic vegetatio	on, overhanging b	oanks/re	oots, leaf packs, la	rge submerged v	vood, riffles, deep p	ools, etc.):	
Aquatic Organisms Obs None.	erved (/	ist):								
Disturbances (ex: livestod Moderate bank erosion, g			waterbody	/, waste discha	arge pi	ipes):				
Observation Notes: None.										



sbad1001e_N (across)



sbad1001e_SE (downstream)



sbad1001e_NW (upstream)

Waterbody Data 3	iicci							
Description								
Project Name:				Date:			Waterbody S	urvey ID:
Line 5 Relocation Project				2020-06-22			sbad1002e	
State:	Coun	ty/Parish:		USGS Wate	erbody Name	:		
Wisconsin	Bayfi	eld		None				
Company:	Crew	Member Initi	als:	Latitude:			Longitude:	
Enbridge	DMP	AGG		46.575593			-91.029928	
Survey Type:	Centerline	☐ Re-Rou	te	□Access Road	 Facility	□Other		
Waterbody Type: (check one)	River	☑ Stream	[☐ Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Water	☑ Clear	[□Turbid	☐Sheen or Surface	n □Surfac	e Scum □A	lgal Mats □Other
Existing Condition ^a :	Highly Funct	onal Stream	✓ Moderat	tely Functional		☐ Functionally	Impaired Strea	am
Feature Description:	Natural	☐ Artificia	l, man-made	✓ Manipulated				
Flow Regime:	Ephemeral	☐ Intermi	tent	☐ Perennial	☐ Connec Swale	ting		
Sinuosity within Survey Corridor: (check one)	Straight	☑ Meando	ering					
Measurements								
Depth of Water: 0.25 ft.	N/A□	Unknow	n□ Water Ed	dge to Water E	dge: 2ft.	N/A□	OHWM Width	n:2ft.
OHWM Indicator: (check all that apply)	✓ Clear lin	e on bank	□Shelving	□Wrested	egetation/	Scouring		□Water staining
(onoon an anat apply)	☑Bent, ma missing ve		□Wrack line	□Litter and	debris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	☐ Bedrock	☐ Bou	lder □ Co	obble \Box	Gravel	☑ Sand	□ Silt/ clay	☐ Organic
Observations								
Riparian Zone Present: (check one)	▼ Yes	□ N	lo					
Vegetation Layers: (check all that apply)	✓ Trees	√ S	aplings/Shrubs	☑ Herbs	3			
Dominant Bank Vegetation Abies balsamea, Acer sac	chárum, Car	•	•					
Aquatic Habitats (ex: submer None.	erged or emerge	d aquatic vegetati	on, overhanging bank	ks/roots, leaf packs,	large submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Observine.	erved (list):							
Disturbances (ex: livestock There is a powerline corrid	access, man dor to the no	ıre in waterbod th.	y, waste discharge	e pipes):				
Observation Notes: The feature begins at wetl south of this feature.	and wbad10	02 and flows	south. The strea	am abruptly sto	os within the f	orest. Another o	ephemeral stre	eam is present to the



sbad1002e_E (across)



sbad1002e_S (downstream)



sbad1002e_N (upstream)

Waterbody Data Si	icci								
Description									
Project Name:					Date:			Waterbody	Survey ID:
Line 5 Relocation Project					2020-07-09			sbad1005e	
State:	Count	y/Parish:			USGS Water	body Name			
Wisconsin	Bayfie	eld			UNT to North	Fish Creek			
Company:	Crew	Member Init	ials:		Latitude:			Longitude:	
Enbridge	DMP/	AGG			46.570827			-91.018936	
Survey Type:	Centerline	☐ Re-Rou	ute	□A	ccess Road	☑Facility	□Other		
Waterbody Type: ☐ F	River	☑ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	lo Water	□ Clear		√ T	urbid	☐Sheen on Surface	□Surfac	e Scum 🗆	Algal Mats □Other
Existing Condition a:	Highly Functi	onal Stream	☐ Modera	ately	Functional S		Functionally	Impaired Stre	eam
Feature Description: (check one)	latural	☐ Artificia	al, man-made	▼ 1	Manipulated				
Flow Regime: √ E (check one)	phemeral	☐ Intermi	ttent	□ F	Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor:	Straight	☑ Meand	ering						
Measurements									
Depth of Water: 0.5 ft.	N/A□	Unknov	vn□ Water E	dge	to Water Ed	je: <u>2</u> ft.	N/A□	OHWM Wid	th: <u>2</u> ft.
OHWM Indicator: (check all that apply)	☑ Clear line	e on bank	□Shelving		☑ Wrested ve	getation	✓ Scouring		□Water staining
(oncon an anat appry)	☑Bent, ma missing veg		□Wrack line		□Litter and o	ebris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	☐ Bedrock	☐ Bou	ulder □ C	obbl	e □ G	ravel	☑ Sand	Silt/ cla	y 🗆 Organic
Observations									
Riparian Zone Present:	□ Yes	▼ 1	No						
Vegetation Layers: (check all that apply)	▼ Trees		Saplings/Shrub	S	✓ Herbs				
Dominant Bank Vegetation Acer saccharum, Thalictru	o n (list): m dasycarpu	ım							
Aquatic Habitats (ex: subme Pools, riffles, runs, and wo		l aquatic vegetat	ion, overhanging ba	nks/rc	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse None.	rved (list):								
Disturbances (ex: livestock There is a substantial amo	access, manu unt of trash i	ire in waterboo n the stream	ly, waste dischard . The trash cor	ge pi isists	pes): s of barrels, ti	es, paint bud	ckets, and toys		
Observation Notes: The feature is an ephemer stream has been significar				all p	erennial strea	m. The featu	re occurs withi	n a swale tha	at has steep banks. The



sbad1005e_SW (across)



sbad1005e_SE (downstream)



sbad1005e_NW (upstream)

Trater sear Bata	011000											
Description												
Project Name:							Date:			Waterbody St	ırvey ID:	
Line 5 Relocation Proje	ct						2020-07-09			sbad1004p		
State:	Scription Sect Name: Section Section							body Name	:			
Wisconsin	County/Parish: Bayfield Crew Member Initials: DMP/AGG Centerline Re-Route River Stream Highly Functional Stream Moon: Natural Artificial, man-made Straight Meandering Turbid water within the feature during the site						UNT to Norti	n Fish Creek				
Company:		Crew M	ember Ini	tials:			Latitude:			Longitude:		
Enbridge		DMP/A	GG				46.570540			-91.018452		
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	oute	[ΠА	ccess Road	☑ Facility	□Other	I		
· ,	River		✓ Stream	n	[Ditch	☐ Swale	☐ Cana	I 🗆 C	Other	
	☐ No Wa	ter	☐ Clear		[√T	urbid	☐Sheen on	□Surfac	e Scum	gal Mats □Othe	ər
	☐ Highly	Function	nal Stream	1 Y	Moderat	tely	Functional S	Surface tream [☐ Functionally	Impaired Strea	m	
(check one)	□ Natural						Manipulated					
Flow Regime: [check one]	☐ Ephem	eral	☐ Interm	nittent	[√ F	Perennial	☐ Connection Swale	ting			
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Mean	dering								
Measurements												
Depth of Water: 2	ft.	N/A□	Unkno	wn□	Water Ed	lge	to Water Ed	ge: <u>5</u> ft.	N/A□	OHWM Width	: <u>6</u> ft.	
OHWM Indicator:	▼ CI	ear line	on bank	□Sh	elving		▼ Wrested ve	egetation	✓ Scouring	I	□Water staining	
(orosit air aiat appry)	√ Be missi	nt, matte	ed, or tation	□Wr	ack line		□Litter and o	lebris	□Abrupt plan	t community	☐Soil characterist change	tic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Co	bbl	e 🗆 G	ravel	☐ Sand	☑ Silt/ clay	□ Organic	
Observations												
Riparian Zone Present	:	es	₹	No								
Vegetation Layers: (check all that apply)	☑ Tr	ees	√	Sapling	s/Shrubs		✓ Herbs					
Dominant Bank Veget Abies balsamea, Acer	ation (list negundo,): Alnus in	cana, Gly	ceria str	riata, Phal	lari	s arundinacea	ì				
Aquatic Habitats (ex: su Riffles, pools, runs, ove	ubmerged or erhanging	emerged a vegetati	quatic vegeta ion, and la	ation, overh	hanging bank ody debris	ks/ro	oots, leaf packs, la	rge submerged w	vood, riffles, deep p	ools, etc.):		
Aquatic Organisms Ol None.	oserved ((list):										
Disturbances (ex: lives A pipeline corridor cuts	tock access through t	s, manure he surve	e in waterbo ey area. Th	dy, waste he trees	e discharge within the	e pip e a	pes): rea have bee	n cleared.				
Observation Notes: The feature is a small p feature has been manip						nd.	The stream i	s located with	nin a swale tha	t has very stee	p banks. Part of the	в



sbad1004p_S (across)



sbad1004p_E (downstream)



sbad1004p_SW (upstream)

valerbody Data Si	1001									
Description										
Project Name:				Date:				Waterbody	Survey ID:	
Line 5 Relocation Project				2020-0	06-22			sbad1003e)	
State:	Count	y/Parish:		USGS	Water	body Name	:	I		
Wisconsin	Bayfie	ld		None						
Company:	Crew I	/lember Initi	als:	Latitud	de:			Longitude:	1	
Enbridge	DMP/A	AGG		46.575	5038			-91.029576	3	
Survey Type: (check one)	enterline	☐ Re-Rou	te	□Access I	Road	Facility	□Other			
Waterbody Type: ☐ R	iver	✓ Stream		☐ Ditch		☐ Swale	☐ Cana	I [Other	
Water Appearance: (check one)	o Water	✓ Clear		□Turbid		□Sheen on Surface	□Surfac	ce Scum [∃Algal Mats	□Other
Existing Condition ^a :	lighly Function	onal Stream	☐ Modera	tely Functi			☐ Functionally	Impaired St	ream	
Feature Description: ☐ N (check one)	atural	☐ Artificia	l, man-made	☑ Manipul	ated					
Flow Regime: √ E (check one)	phemeral	☐ Intermit	tent	□ Perenn		☐ Connect	ting			
Sinuosity within Survey Corridor:	traight	☑ Meande	ering							
Measurements										
Depth of Water: 0.25 ft.	N/A□	Unknow	m	dge to Wat	ter Edg	e: <u>1</u> ft.	N/A□	OHWM Wid	dth: 1 ft.	
OHWM Indicator: (check all that apply)	▼ Clear line	on bank	□Shelving	□Wres	sted ve	getation	Scouring		□Water st	taining
(onest all that apply)	☑Bent, mat missing veg		□Wrack line	□Litte	r and d	ebris	□Abrupt plar change	nt community	y □Soil cha change	racteristic
Dominant Substrate: (check all that apply)	☐ Bedrock	☐ Bou	lder □ Co	bble	□ Gı	ravel	☑ Sand	☑ Silt/ cl	ay □ C)rganic
Observations										
Riparian Zone Present:	□ Yes	 ✓ N	lo							
Vegetation Layers: (check all that apply)	☑ Trees	□S	aplings/Shrubs	1	Herbs					
Dominant Bank Vegetatio Abies balsamea, Pteridium										
Aquatic Habitats (ex: submer None.	rged or emerged	aquatic vegetation	on, overhanging ban	ks/roots, leaf p	oacks, lar	ge submerged w	ood, riffles, deep p	ools, etc.):		
Aquatic Organisms Obser None.	rved (list):									
Disturbances (ex: livestock The feature flows into a roa	access, manu adside ditch t	re in waterbod o the south.	y, waste discharg	e pipes):						
Observation Notes: The ephemeral stream beg eroded.	ins within a	woodland an	d flows south in	ito wetland	wbaa1	001. The ba	anks of surrour	nding the stre	eam are relativ	ely steep and



sbad1003e_E (across)



sbad1003e_S (downstream)



sbad1003e_N (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-05-18			sasa1001e		
State:		County/F	Parish:			USGS Water	body Name	• •			
Wisconsin		Ashland				None					
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:		
Enbridge		SBR/DG	iL			46.554932			-90.906428	3	
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		☐ Stream	n	V	Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	✓ No Wat	ter	□ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum	Algal Mats	□Other
Existing Condition ^a : (check one)	☐ Highly	Function	al Stream	☑ Mo	oderately	Functional S		☐ Functionally	Impaired Str	ream	
Feature Description: (check one)	☐ Natural		Artificia	al, man-ma	de 🗆 I	Manipulated					
Flow Regime: (check one)	☑ Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straigh	t	☐ Meand	dering							
Description Notes: Roadside ditch conne	cting two c	ulverts.									
Magguramanta											
Measurements Depth of Water: N/A	\ ft.	N/A 🗹	Unknov	_{vn} Wat	er Edge	to Water Ed	ge: N/A ft.	N/A 🗹	OHWM Wid	dth: 3 ft	i.
OHWM Indicator: (check all that apply)	□ CI	ear line c	n bank	□Shelvir	ng	□Wrested ve	egetation	□Scouring		□Waters	staining
, , , , , , , , , , , , , , , , , , , ,		nt, matte		□Wrack	line	□Litter and o	debris	✓ Abrupt plan change	t community	/ □Soil cha change	aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	le 🗆 G	iravel	☐ Sand	I Silt/ cla	ay 🗆 (Organic
Observations											
Riparian Zone Prese	nt: 🗆 Ye	es	I	No							
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/Sh	nrubs	✓ Herbs					
Dominant Bank Vege Carex lacustris, Phala	etation (list iris arundin): acea, Ta	nacetum	vulgare, Po	a praten	sis					
Aquatic Habitats (ex: None.	submerged or	emerged aq	luatic vegetat	tion, overhangi	ng banks/ro	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms (None.	Observed ((list):									
Disturbances (ex: live Road runoff.	stock acces	s, manure	in waterboo	dy, waste dis	charge pi	pes):					
Observation Notes: Ditch appears to be n	nowed.										



sasa1001e_E (across)



sasa1001e_S (downstream)



sasa1001e_N (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody	Survey ID:
Line 5 Relocation Project	ct					2020-05-18			sasa1003e	
State:		County/	Parish:			USGS Water	body Name			
Wisconsin		Ashland	I			None				
Company:		Crew Mo	ember Init	ials:		Latitude:			Longitude:	
Enbridge		SBR/DG	GL			46.554898			-90.901345	
(check one)	Centerl	ine	☐ Re-Rou	ute		Access Road	□Facility	□Other		
Waterbody Type: [check one)	River		☐ Stream	1	V	Ditch	☐ Swale	☐ Canal		Other
Water Appearance: [(check one)	☐ No Wat		☐ Clear		ØT	Turbid	☐Sheen on Surface	□Surfac	e Scum 🗆	Algal Mats Other
Existing Condition a: [check one]	☐ Highly	Function	al Stream	☑ Mod	derately	/ Functional S	tream [☐ Functionally	Impaired Str	eam
Feature Description: (check one)	Natural		✓ Artificia	ıl, man-mad	e 🗆 I	Manipulated				
(check one)	Ephem		☐ Intermi			Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	₫ Straigh	t	☐ Meand	ering						
Measurements										
Depth of Water: 0.1	ft.	N/A□	Unknow	vn□ Wate	er Edge	to Water Ed	je: <u>1</u> ft.	N/A□	OHWM Wid	lth: <u>3</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shelving	g	□Wrested ve	getation	□Scouring		✓ Water staining
(orosit all trial apply)		nt, matte		□Wrack li	ine	□Litter and o	ebris	☐ Abrupt plan change	t community	☐ Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	drock	☐ Bou	ulder [Cobb	le 🗹 G	ravel	☐ Sand	✓ Silt/ cla	ay 🗆 Organic
Observations										
Riparian Zone Present: (check one)	: □ Ye	s	M N	No						
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/Shi	rubs	✓ Herbs				
Dominant Bank Vegeta Phalaris arundinacea, J	ition (list uncus eff): usus, Po	oa pratensi	s, Equisetu	m arver	nse, Bromus ii	nermis			
Aquatic Habitats (ex: sul A small pool is present.	bmerged or	emerged a	quatic vegetati	ion, overhangin	g banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob No aquatic organisms w	served (vere obse	list): rved at t	ime of sur	vey.						
Disturbances (ex: livestor There is potential for po	ock access lluted fro	s, manure m nearby	in waterbod y gravel pa	ly, waste disc rking lots a	harge pi nd a pa	pes): ved road.				
Observation Notes: The feature is in a small providing potential for a						•			near the feat	ture with a small pool



sasa1003e_E (across)



sasa1003e_S (downstream)



sasa1003e_N (upstream)

Waterbody Date	Jileet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Proj	ect					2020-05-18			sasa1004e		
State:		County/F	Parish:			USGS Water	body Name	•			
Wisconsin		Ashland				None					
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:		
Enbridge		SBR/DG	iL			46.554853			-90.900932		
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute	V	Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		☐ Stream	1	V	Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	☐ No Wa	ter	☐ Clear		V	Turbid	☐Sheen on Surface	□Surfac	e Scum	Algal Mats □Oth	er
Existing Condition a: (check one)	□ Highly	Function	al Stream	☑ Mod	derately	y Functional S		☐ Functionally	Impaired Stre	eam	
Feature Description: (check one)	□ Natural		Artificia	al, man-mad	е 🗆	Manipulated					
Flow Regime: (check one)	E phem	eral	☐ Intermi	ittent		Perennial	☐ Connection Connection	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straigh	t	☐ Meand	lering							
Feature is a roadside	ancii ied b	y two curv	veits and	potentiai run	ion noi	п ир зюре ра	veu roau and	graver parking	iot.		
Magauramanta											
Measurements Depth of Water: 0.1	ft	N/A□	Unknov	vn	r Edae	e to Water Ed	ge: 1 ft.	N/A□	OHWM Wid	th: 3 ft.	
OHWM Indicator: (check all that apply)	□ CI	ear line o	n bank	□Shelving)	□Wrested ve	egetation	□Scouring		✓ Water staining	
, , , , , , , , , , , , , , , , , , , ,		nt, matte		□Wrack li	ne	□Litter and o	lebris		t community	☐Soil characteris change	itic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	Cobb	ole 🗹 G	ravel	☐ Sand	I Silt/ cla	y 🗆 Organic	
Observations											
Riparian Zone Presen	it: 🗆 Ye	es	1	No							
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/Shr	ubs	☑ Herbs					
Dominant Bank Vege Tanacetum vulgare, P	tation (list oa pratens	<u>):</u> iis, Phala	ris arundir	nacea							
Aquatic Habitats (ex: s One small pool preser	submerged or at at time o	emerged aq f Survey.	uatic vegetat	ion, overhanging	g banks/r	roots, leaf packs, la	rge submerged v	ood, riffles, deep po	ools, etc.):		
Aquatic Organisms C None observed.	bserved ((list):									
Disturbances (ex: lives Potential polluted rund	stock access off from nea	s, manure arby park	in waterboo ing lot and	dy, waste discl d road.	harge p	ipes):					
Observation Notes: Only one small pool pr	resent with	in ditch b	out otherwi	ise no water	observ	ved at time of	survey.				



sasa1004e_N (across)



sasa1004e_E (downstream)



sasa1004e_W (upstream)

Waterbody Data	Officet											
Description												
Project Name:						Date:			Waterbody Survey ID:			
Line 5 Relocation Project					2020-05-18			sasa1002e				
State: County/Parish:					USGS Waterbody Name:							
Wisconsin Ashland						None						
Company:	Crew Me	ember Init	ials:		Latitude:			Longitude:				
Enbridge SBR/D			iL			46.554876	46.554876					
Survey Type: [check one)	☐ Centerl	Centerline				ccess Road □Facility □Othe						
Waterbody Type: [/ Type : ☐ River			☐ Stream			Ditch ☐ Swale ☐ Cana			Other		
Water Appearance: [/ater Appearance: ☑ No Water					urbid □Sheen on □Surface			e Scum □A	lgal Mats □Other		
Existing Condition ^a : (check one)	ndition a:			nal Stream Moderately			Functional Stream ☐ Functionally			am		
Feature Description: [(check one)	☐ Natural		Artificia	al, man-mad	de 🗆	Manipulated						
Flow Regime: (check one)	E phem	☐ Intermi	ittent		Perennial	☐ Connect	ting					
Sinuosity within Straight												
The feature is a roadsid	de ditch tr	at also g	ets runoff	from a neal	rby grav	vel parking lot.						
Measurements												
Depth of Water: N/A	_ft.	N/A 🗹	Unknov	vn□ Wate	er Edge	e to Water Ed	ge : <u>N/A</u> ft.	N/A 🗹	OHWM Widtl	n: <u>3</u> ft.		
OHWM Indicator: Clear lir (check all that apply)			ine on bank □Shelving			□Wrested vegetation □Scouring				☑ Water staining		
(oneon all that apply)		☑Bent, matted, or missing vegetation ☐Wrack line					□Litter and debris			☐Soil characteristic change		
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder [☐ Cobb	ole 🗹 G	ravel	☐ Sand	✓ Silt/ clay	□ Organic		
Observations												
Riparian Zone Present	t: 🗆 Ye	es	1	No								
Vegetation Layers: (check all that apply)	□ Tr	ees	v 9	Saplings/Sh	rubs	✓ Herbs						
Dominant Bank Veget Taraxacum officinale, E												
Aquatic Habitats (ex: su None.	ubmerged or	emerged aq	uatic vegetat	ion, overhangin	ig banks/r	oots, leaf packs, la	rge submerged w	vood, riffles, deep po	ools, etc.):			
Aquatic Organisms Ol None.	bserved ((list):										
Disturbances (ex: livest Potential for polluted ru	tock access inoff from	s, manure gravel ro	in waterboo ad and gr	dy, waste disc avel parkinç	charge pi g lot.	ipes):						
Observation Notes: No water present within	n the ditch	at the tir	me of surv	ey, and not	likely to	o hold enough	water to pro	vide aquatic ha	ibitat.			



sasa1002e_N (across)



sasa1002e_E (downstream)



sasa1002e_W (upstream)

Waterbody Data 3	nicci											
Description												
Project Name:						Date:			Waterbody Survey ID:			
Line 5 Relocation Project					2020-05-20			sasa1008e				
State: County/Parish:					USGS Wate	rbody Name	•					
Wisconsin Ashland						UNT to Bay	City Creek					
Company:	Crew Me	ember Ini	tials:		Latitude:	Latitude:			Longitude:			
Enbridge SBR/D			SL			46.551240			-90.895927			
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other				
Waterbody Type:	River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other		
Water Appearance: No Water (check one)			☑ Clear			urbid □Sheen on □Surface			e Scum 🗆 🛭	Algal Mats □Other		
Existing Condition ^a :	sting Condition a:				Moderatel	Functional Stream Functionally			Impaired Stre	am		
Feature Description:	Natural		☐ Artificia	al, man-r	made \square	Manipulated						
Flow Regime: (check one)	☑ Ephemeral □ Intermittent □ □						Perennial					
Sinuosity within Survey Corridor: (check one)	nuosity within Straight Meandering rvey Corridor:											
Measurements												
Depth of Water: 0.1 ft		N/A□	Unknov	wn□ V	Vater Edge	e to Water Ed	ge: 1 ft.	N/A□	OHWM Widt	h: <u>4</u> ft.		
OHWM Indicator: (check all that apply)	lear line on bank Shelving			□Wrested v	□Wrested vegetation □Scouring			☐Water staining				
1		nt, matte		□Wra	ick line	□Litter and o	□Litter and debris □Abrupt plan change			☐Soil characteristic change		
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	☐ Cobb	le ⊻ G	Gravel	☐ Sand	坚 Silt/ clay	/ □ Organic		
Observations												
Riparian Zone Present: (check one)	☑ Ye	es		No								
Vegetation Layers: (check all that apply)	☑ Tr	ees		Saplings	/Shrubs	☑ Herbs						
Dominant Bank Vegetati Juncus effusus, Poa prate	on <i>(list</i> ensis, F) : Rhamnus	cathartica	a								
Aquatic Habitats (ex: subm Small pools are present in	nerged or n the st	emerged ac ream.	quatic vegeta	tion, overha	anging banks/r	oots, leaf packs, la	arge submerged v	wood, riffles, deep po	ools, etc.):			
Aquatic Organisms Obso No aquatic organisms we	erved (re obse	<i>(list)</i> : erved at t	he time of	survey.								
Disturbances (ex: livestoc There is potential for eros	k accession from	s, manure n the ste	in waterboo ep banks	dy, waste and fron	discharge p n the mowe	ipes): ed utility corrid	or. There is a	an old garbage	dump site ne	ar the head of the stream.		
Observation Notes: There is a possibility of a	wetland	d near th	e head of	the strea	am, outside	e the survey a	rea.					



sasa1008e_S (across)



sasa1008e_E (downstream)



sasa1008e_W (upstream)

Traterious Butt	. 0000											
Description												
Project Name:						Date:	Date:			Waterbody Survey ID:		
Line 5 Relocation Project						2020-05-2	2020-05-20					
State: County/Parish:					USGS Wa	USGS Waterbody Name:						
Wisconsin Ashland						Bay City Creek						
Company:	Crew Mo	ember Init	tials:		Latitude:			Longitude:				
Enbridge SBR/			3L			46.55047	46.550472					
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Roa	d □Facility	□Other	l			
'	☐ River		✓ Stream			Ditch	Ditch ☐ Swale ☐ Car			al Other		
Vater Appearance: No Water			☑ Clear			Turbid	9					
Existing Condition ^a : (check one)	check one) Existing Condition a:					ely Functiona	Surface I Stream	☐ Functionally	Impaired Strea	ım		
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-		Manipulate	b					
(check one)	☐ Ephem	eral	☐ Intermittent ☑			Perennial	Perennial Connecting Swale					
Sinuosity within Survey Corridor: (check one)	osity within Straight Meandering Ey Corridor:											
Measurements												
Depth of Water: 0.3	_ft.	N/A□	Unknov	wn□ \	Water Edç	ge to Water	Edge : <u>8</u> f	t. N/A□	OHWM Width	ı: <u>12</u> ft.		
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	☑She	elving	□Wrested	l vegetation	Scouring		☐Water staining		
(oneon an anatappy)		ent, matte ing veget		□Wra	ack line	□Litter ar	d debris	✓ Abrupt plar change	t community	☐Soil characteristic change		
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	☐ Cob	ble	Gravel	☑ Sand	☐ Silt/ clay	□ Organic		
Observations												
Riparian Zone Presen (check one)	t: 🗹 Ye	es	1	No								
Vegetation Layers: (check all that apply)	☑ Tr	ees	Ø (Saplings	s/Shrubs	 Her	bs					
Dominant Bank Vege Abies balsamea, Popu	tation (list llus tremul	oides, Ed	quisetum a	arvense	, Matteuco	cia struthiopt	eris					
Aquatic Habitats (ex: s Shallow pools and dov	submerged or VNed WOOO	emerged ac ly debris	quatic vegetat are likely	tion, overh habitats	nanging banks of aquat	s/roots, leaf pack ic organisms	s, large submerged	wood, riffles, deep p	ools, etc.):			
Aquatic Organisms O Minnows were observe	bserved (ed in the s	<i>list)</i> : tream.										
Disturbances (ex: lives Erosion from the steep	stock access banks is	s, manure possible.	in waterboo	dy, waste	discharge	pipes):						
Observation Notes: The stream flows from	a forested	d area int	to an open	ı area.								



sase006p_x (across)



sase006p_x (downstream)



sase006p_x (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody S	Survey ID:	
Line 5 Relocation Pro	ject					2020-05-20			sasa1009i		
State:		County/	Parish:			USGS Wate	rbody Name):			
Wisconsin		Ashland	l			UNT to Bay	City Creek				
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		SBR/DG	SL.			46.550360			-90.896193		
Survey Type: (check one)	✓ Center	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Stream	n		Ditch	☐ Swale	☐ Cana		Other	
Water Appearance: (check one)	✓ No War	ter	☐ Clear			Turbid	☐Sheen or Surface	n □Surfac	e Scum	Algal Mats □Ot	her
Existing Condition ^a : (check one)	☐ Highly	Function	al Stream	V	Moderate	ly Functional S		☐ Functionally	Impaired Stre	am	
Feature Description: (check one)	☐ Natural		☐ Artificia	al, man-	-made 🗹	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	☑ Interm	ittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straigh	nt	☐ Meano	dering							
The feature is an inter						•		,			
Measurements											
Depth of Water: N/A	<u>\</u> ft.	N/A 🗹	Unknov	wn□	Water Edg	e to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Widt	h: <u>4</u> ft.	
OHWM Indicator: (check all that apply)	□ Cl	ear line o	on bank	☑Sh	elving	□Wrested v	egetation	☑ Scouring		□Water staining	
(check all that apply)		ent, matte ing veget		□Wr	ack line	□Litter and	debris	✓ Abrupt plan change	t community	□Soil character	istic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	☑ Cobl	ble 🗆 (Gravel	☐ Sand	✓ Silt/ clay	<i>r</i> □ Organio	С
Observations											
Riparian Zone Prese	nt: 🗹 Ye	es		No							
Vegetation Layers:	☑ Tr	ees	Z :	Sapling	s/Shrubs	✓ Herbs					
Dominant Bank Vege Populus tremuloides,	etation (list Taraxacum	r): n officinal	le, Matteu	ccia str	uthiopteris,	Prunus pensy	Ivanica				
Aquatic Habitats (ex: No water present.	submerged or	emerged ad	quatic vegeta	tion, overh	nanging banks/	roots, leaf packs, l	arge submerged v	wood, riffles, deep p	pols, etc.):		
Aquatic Organisms (None observed.	Observed ((list):									
Disturbances (ex: live The feature is potential	stock acces ally disturb	s, manure ed by rur	in waterboo noff from a	dy, waste n upslo	e discharge p pe mowed	oipes): utility corridor					
Observation Notes: The presence of debr	is and litter	indicate	s heavy w	ater flov	wed throug	h the area at s	ome point in	time.			



sasa1009i_S (across)



sasa1009i_E (downstream)



sasa1009i_W (upstream)

Waterbody Data	JIICCL									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project	t					2020-05-30			sasa1021e	
State:		County/	Parish:			USGS Water	body Name			
Wisconsin		Ashland	I			None				
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		SBR/DG	GL			46.530378			-90.895987	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	River		☐ Strean	n	V	Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wa	ter	☐ Clear		□⊺	urbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition ^a :	Highly	Function	al Stream	V N	Moderately	/ Functional S		☐ Functionally	Impaired Strea	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-m	ade 🗹	Manipulated				
Flow Regime:	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	☐ Meano	dering						
The feature is an ephemore	oral allo		0490 01 a			ng to a mory .	iair mado pe	, id.		
Measurements										
Depth of Water: N/A f	t.	N/A 🗹	Unknov	wn 🗆 🛮 Wa	ater Edge	to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Width	n: <u>2</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	☑Shelv	/ing	□Wrested ve	getation	□Scouring		□Water staining
(спеск ан шагарру)		nt, matte		□Wrac	k line	□Litter and o	lebris	☑Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	☐ Cobb	le □ G	ravel	☐ Sand	✓ Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	☑ Ye	es		No						
Vegetation Layers: (check all that apply)	☑ Tr	ees		Saplings/S	Shrubs	☑ Herbs				
Dominant Bank Vegetat Phalaris arundinacea, Fr	i on (list axinus p): bennsylva	anica, Cra	taegus ch	nrysocarpa	a, Rhamnus c	athartica, Phl	eum pratense		
Aquatic Habitats (ex: subi No standing water presen	merged or nt.	emerged ac	quatic vegeta	tion, overhan	ging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs None.	served ((list):								
Disturbances (ex: livestor Nearby field is potentially	ck access used fo	s, manure or cattle (in waterboograzing or	dy, waste d growing h	lischarge pi nay.	pes):				
Observation Notes: The feature is an ephemi	eral ditc	h alongs	ide an old	field and	flows into	a stock pond				



sasa1021e_N (across)



sasa1021e_SE (downstream)



sasa1021e_NW (upstream)

Open Waterboo	ly Data	Sneet							
Description									
Project Name:					Date:			Waterbody Su	irvey ID:
Line 5 Relocation Pro	ject				2020-05-30			oasa1001	
State:		County/P	arish:		USGS Wate	rbody Name) :		
Wisconsin		Ashland			None				
Company:		Crew Mer	mber Initials:		Latitude:			Longitude:	
Enbridge		SBR/DGL	L		46.530261			-90.895832	
Survey Type: (check one)	✓ Center	line [☐ Re-Route		Access Road	□Facility	□Other		
Waterbody Type: (check one)	▼ Stock F	ond [☐ Natural Pond		Fishing Pond	☐ Lake	☐ Other		
Water Appearance: (check one)	□ No Wa	ter	□ Clear	7	Turbid	☑Sheen on Surface	n □Surfac	e Scum 🗆 Al	gal Mats □Other
Feature Quality: (check one)	□ High	•	✓ Moderate		Low				
Feature Description: (check one)	☐ Natura	1	▼ Artificial, man	ı-made 🗆	Manipulated				
Description Notes:									
Measurements									
Depth of Water:	ft.	N/A□	Unknown ✓						
OHWM Indicator: (check all that apply)	□ C	lear line or	n bank □Sh	nelving	□Wrested ve	egetation	Scouring		□Water staining
(brook an area ep		ent, matted sing vegeta		rack line	□Litter and o	debris	☑Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)		edrock	☐ Boulder	□ Cobb	ole 🗆 G	Gravel	□ Sand	☑ Silt/ clay	☐ Organic
Observations									
Riparian Zone Preser	nt: ☑ Ye	es	□ No						
Vegetation Layers: (check all that apply)	□ Tr	ees	 Sapling	js/Shrubs	✓ Herbs				
Dominant Bank Vege	etation (lis	<i>t)</i> :							
Salix discolor, Typha	sp.								
Aquatic Habitats (ex:				rhanging banks/r	roots, leaf packs, la	arge submerged v	wood, riffles, deep pr	ools, etc.):	
Open water at a depth			y support fish.						
Aquatic Organisms (Observed	(list):							
Frogs.									
Disturbances (ex: live				te discharge pi	ipes):				
Disturbances from a n	learby grav	el road an	id cattle use.						
Observation Notes:									
A car dump site is uph	nill from the	pond and	l could allow tra	sh to be swe	ept into the po	nd by wind o	r heavy water e	events.	



oasa1001_N



oasa1001_SE



oasa1001_SW

Trater Body Bat	4 011000									
Description										
Project Name:						Date:			Waterbody Sเ	ırvey ID:
Line 5 Relocation Pro	ject					2020-06-19			sasw023p	
State:		County/	Parish:			USGS Wate	rbody Name	:		
Wisconsin		Ashland	I			White River				
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		KDF/AG	G .			46.502378			-90.895043	
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	√ River		☐ Stream	n		Ditch	☐ Swale	☐ Canal	□С	Other
Water Appearance: (check one)	□ No Wa	ter	☐ Clear		4	Turbid	☐Sheen on	□Surfac	e Scum □Al	gal Mats □Other
Existing Condition ^a : (check one)	☑ Highly	Function	al Stream	ı 🗆	Moderatel	y Functional S	Surface Stream	☐ Functionally	Impaired Strea	m
Feature Description: (check one)			☐ Artifici			Manipulated				
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	ittent	$\overline{\checkmark}$	Perennial	☐ Connection Connection	ting		
Sinuosity within Survey Corridor: (check one)	☐ Straigh	it	☑ Meand	dering			0.114.10			
Measurements										
Depth of Water: 5	ft.	N/A□	Unknov	wn 🗆 🛛 V	Vater Edge	e to Water Ed	ge: <u>60</u> ft.	N/A□	OHWM Width	: <u>60</u> ft.
OHWM Indicator: (check all that apply)	▼ CI	ear line	on bank	□She	lving	□Wrested v	egetation	 ✓ Scouring		□Water staining
(споск ан так арруу)		nt, matte		□Wra	ick line	☑ Litter and	debris	□Abrupt plan	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	ole 🗆 (Gravel	✓ Sand	☑ Silt/ clay	□ Organic
Observations										
Riparian Zone Preser	nt: ☑ Ye	es		No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	✓ :	Saplings	/Shrubs	✓ Herbs				
Dominant Bank Vege Abies balsamea, Tilia	etation (list americana	;): , Acer ne	egundo							
Aquatic Habitats (ex: Sand/gravel bars, dov	submerged or vned wood	emerged ad y debris.	quatic vegeta	tion, overha	anging banks/r	oots, leaf packs, l	arge submerged w	wood, riffles, deep po	pols, etc.):	
Aquatic Organisms (None.	Observed ((list):								
Disturbances (ex: live Moderate bank erosion		s, manure	in waterbo	dy, waste	discharge p	ipes):				
Observation Notes: Feature is associated	with sever	al wetlan	nds.							



sasw023p_S (across)



sasw023p_E (downstream)



sasw023p_SW (upstream)

valerbody bala	JIICCL									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Project	t					2020-06-04			sasa1023i	
State:		County/	Parish:			USGS Wate	body Name	-		
Wisconsin		Ashland				UNT to Whit	e River			
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		SBR/DG	SL			46.500511			-90.894053	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Stream	า		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wa	ter	☑ Clear			Turbid	☐Sheen on Surface	□Surfac	e Scum 🗆 🛭	Algal Mats □Other
Existing Condition ^a :	Highly	Function	al Stream	V	Moderatel	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description:	Natural		☐ Artificia	al, man-n	nade \square	Manipulated				
Flow Regime: (check one)	Ephem	eral	✓ Interm	ittent		Perennial	☐ Connec	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meano	dering						
Measurements										
Depth of Water: 0.2 f	t.	N/A□	Unknov	wn 🗆 🛮 🕨	Vater Edge	e to Water Ed	ge: <u>1.5</u> ft.	N/A□	OHWM Widt	h: <u>5</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shel	lving	□Wrested v	egetation	□Scouring		☐Water staining
(oneon an and approx		nt, matte ing veget		□Wra	ck line	☑ Litter and o	debris	☐ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	ole 🗆 G	iravel	☐ Sand	坚 Silt/ clay	/ □ Organic
Observations										
Riparian Zone Present: (check one)	☑ Ye	es	<u> </u>	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	v (Saplings	/Shrubs	☑ Herbs				
Dominant Bank Vegetat Caltha palustris, Carex b	i on (list): es, Fraxir	nus penns	ylvanica,	Fraxinus	nigra, Ribes c	americanum	1		
Aquatic Habitats (ex: subs Small pools.	merged or	emerged ac	quatic vegetat	tion, overha	anging banks/r	roots, leaf packs, la	rge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs Aquatic invertebrates. W	served (ood frog	(list): J.								
Disturbances (ex: livestor Downed woody debris.	ck acces	s, manure	in waterboo	dy, waste	discharge p	ipes):				
Observation Notes: The stream seems to floor	w from a	a seep do	own and e	mpties in	nto the Wh	ite River. The	feature also a	associated with	wetland was	a1054f.



sasa1023i_E (across)



sasa1023i_N (downstream)



sasa1023i_S (upstream)

Waterbody Date	JIICEL										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ect					2020-06-04			sasa1022i		
State:		County/F	Parish:			USGS Wate	body Name	:			
Wisconsin		Ashland				UNT to Whit	e River				
Company:		Crew Me	mber Init	ials:		Latitude:			Longitude:		
Enbridge		SBR/DG	L			46.498789			-90.896781		
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	☐ No Wa	ter	☑ Clear			Γurbid	☐Sheen on Surface	□Surfac	e Scum	Algal Mats	□Other
Existing Condition ^a : (check one)	☐ Highly	Function	al Stream	V	Moderately	y Functional S		☐ Functionally	Impaired Stre	eam	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-n	nade 🗆	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	✓ Intermi	ittent		Perennial	☐ Connection Connecti	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straigh	t	□ Meand	lering							
Description Notes: The feature is an inter the stream channel.	mittent stre	eam that i	is relativel	y straigh	nt with som	e water prese	nt at the time	e of survey. The	ere is a lot of	downed woo	dy debris in
Measurements											
Depth of Water: 0.1	ft.	N/A□	Unknov	vn 🗆 🛚 🕦	Vater Edge	to Water Ed	ge: <u>0.5</u> ft.	N/A□	OHWM Wid	th: <u>5</u> ft	
OHWM Indicator:	□ CI	ear line o	n bank	☑ Shel	lving	□Wrested v	egetation	 Scouring		□Water s	taining
(check all that apply)		nt, matted		□Wra	ck line	□Litter and	debris	□ Abrupt plan change	t community	□Soil cha change	racteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	le 🗹 🤇	iravel	☐ Sand	I Silt/ cla	ıy 🗆 C	Organic
Observations											
Riparian Zone Preser	nt: 🗹 Ye	es	<u> </u>	No							
Vegetation Layers:	□ Tr	ees	v (Saplings/	/Shrubs	✓ Herbs					
Dominant Bank Vege Corylus cornuta, Alnu	etation (list s incana, E): :urybia ma	acrophylla	a							
Aquatic Habitats (ex: Some small pools.	submerged or	emerged aq	uatic vegetat	ion, overha	nging banks/r	oots, leaf packs, la	rge submerged w	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms (None observed.	Observed ((list):									
Disturbances (ex: live Downed woody debris	stock access throughou	s, manure i ut most of	in waterboo stream c	dy, waste d hannel.	discharge p	ipes):					
Observation Notes: Steep banks with exp	osed soil.										



sasa1022i_W (across)



sasa1022i_N (downstream)



sasa1022i_S (upstream)

Waterbody Data	a Silect												
Description													
Project Name:						Date:				Waterboo	dy Surv	vey ID:	
Line 5 Relocation Pro	ect					2020-06-0)5			sasa1010	Ое		
State:		County/	Parish:			USGS Wa	terbody Na	ame:					
Wisconsin		Ashland	I			UNT to W	hite River						
Company:		Crew Mo	ember Init	tials:		Latitude:				Longitud	e:		
Enbridge		SBR/DG	SL			46.49771	4			-90.89569	90		
Survey Type: (check one)	☑ Centerle	ine	☐ Re-Ro	ute		☐Access Roa	ıd □Facili	ity	□Other				
Waterbody Type: (check one)	☐ River		✓ Stream	า		Ditch	□ Swa	ale	☐ Cana		□ Oth	ner	
Water Appearance: (check one)	□ No Wa	ter	☐ Clear			Turbid	☐ Shee		□Surfac	e Scum	□Alga	al Mats	□Other
Existing Condition a: (check one)	□ Highly	Function	al Stream	V	Moderate	ely Functiona			unctionally	Impaired S	Stream		
Feature Description:	✓ Natural		☐ Artificia	al, man-ı	made [Manipulate	d						
Flow Regime: (check one)	E Ephem	eral	☐ Interm	ittent		Perennial	☐ Cor Swale	necting					
Sinuosity within Survey Corridor: (check one)	Straigh	nt	☐ Meand	dering			Owale						
Measurements													
Depth of Water: 0.1	ft.	N/A□	Unknov	wn□ V	Nater Ed	ge to Water	Edge: 0.5	ft.	N/A□	OHWM W	/idth:	<u>2</u> ft.	
OHWM Indicator:	□ CI	lear line o	on bank	 She	elving	□Wrested	d vegetation	n 🗆 S	Scouring			✓ Water sta	aining
(check all that apply)		ent, matte ing veget		□Wra	ack line	□Litter ar	nd debris		Abrupt plan ange	t commun		∃Soil chara hange	acteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cot	oble [Gravel		Sand	✓ Silt/	clay	□О	rganic
Observations													
Riparian Zone Preser	nt: 🗹 Ye	 es		No									
Vegetation Layers: (check all that apply)	☑ Tr	ees	Ø (Saplings	s/Shrubs	☑ Her	bs						
Dominant Bank Vege Acer rubrum, Populus	tation (list tremuloide	'): ∋s, Rubu	s pubesce	ns, Abie	es balsam	nea, Toxicode	endron rydb	ergii					
Aquatic Habitats (ex: Small pools.	submerged or	emerged ac	quatic vegetat	tion, overha	anging bank	s/roots, leaf pack	s, large submer	rged wood,	riffles, deep p	ools, etc.):			
Aquatic Organisms (None.	Observed ((list):											
Disturbances (ex: live ATV trail cuts through	stock acces the upper	s, manure portion o	in waterboo of the strea	dy, waste am.	discharge	pipes):							
Observation Notes: The stream carries wa	ater into we	etland wa	asa1057f.										





sasa1010e_SE (downstream)



sasa1010e_SE (upstream)

Tratersea, Bata	Ciloct									
Description										
Project Name:						Date:			Waterbody Su	ırvey ID:
Line 5 Relocation Proje	ct					2020-06-06			sasa1011e	
State:		County/	Parish:			USGS Wate	rbody Name	:		
Wisconsin		Ashland	i			UNT to Whit	e River			
Company:		Crew Mo	ember Init	ials:		Latitude:			Longitude:	
Enbridge		SBR/DG	3L			46.495001			-90.897990	
Survey Type: [☐ Centerl	ine	☐ Re-Ro	ute	ØA	Access Road	□Facility	□Other		
,	□ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal	□С	Other
Water Appearance: [✓ No Wa	ter	☐ Clear		□T	urbid	☐Sheen on	□Surfac	e Scum □Al	gal Mats □Other
	☐ Highly	Function	nal Stream	ØM	oderately	/ Functional S	Surface Stream	☐ Functionally	Impaired Strea	m
Feature Description: [(check one)				al, man-ma		Manipulated				
Flow Regime: [Industrial content of the content of	☑ Ephem	eral	☐ Intermi	ittent	□ F	Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	☑ Straigh	ıt	☐ Meand	lering						
Measurements										
Depth of Water: N/A	ft.	N/A 🗹	Unknov	_{vn□} Wa	iter Edge	to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Width	: <u>2</u> ft.
OLIMAN In dia at a m				EZ Chalui		□\\/				
OHWM Indicator: (check all that apply)		ear line o	on bank	☑ Shelvi	ing	□Wrested v	egetation	□Scouring		☐Water staining
		ent, matte ing veget		□Wrack		□Litter and o		✓ Abrupt plan change		☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Be	edrock	□ Во	ulder	☐ Cobbl	le 🗆 G	Gravel	□ Sand	☑ Silt/ clay	□ Organic
Observations										
Riparian Zone Present (check one)	: ☑ Y∈	es	1	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	V (Saplings/S	hrubs	☑ Herbs				
Dominant Bank Veget Pinus resinosa, Populu					•					
Aquatic Habitats (ex: su None.	ubmerged or	emerged ac	quatic vegetat	ion, overhang	ging banks/ro	oots, leaf packs, la	arge submerged w	rood, riffles, deep po	pols, etc.):	
Aquatic Organisms Ol None.	oserved (Tist):								
Disturbances (ex: livest Potential disturbance b	tock access y mowing	s, manure at the st	in waterboot tream head	ly, waste dis dwater.	scharge pi	pes):				
Observation Notes: Steep banks are presen	nt.									



sasa1011e_N (across)



sasa1011e_E (downstream)



sasa1011e_w (upstream)

Trate. Body Bat	4 011000											
Description												
Project Name:							Date:			Waterbody S	Survey ID:	
Line 5 Relocation Pro	ject						2020-06-06			sasa1013e		
State:		County	/Parish:				USGS Wate	rbody Name):			
Wisconsin		Ashland	t				UNT to Whit	e River				
Company:		Crew M	ember Ini	tials:			Latitude:			Longitude:		
Enbridge		SBR/D0	GL				46.495777			-90.898417		
Survey Type: (check one)	☐ Center	line	☐ Re-Ro	oute		V A	Access Road	□Facility	□Othe	r		
Waterbody Type:	☐ River		✓ Stream	n			Ditch	☐ Swale	☐ Can	al 🗆	Other	
Water Appearance: (check one)	✓ No Wa	ter	☐ Clear			ΠТ	urbid	☐Sheen or	n □Surfa	ace Scum	Algal Mats	□Other
Existing Condition a: (check one)	☐ Highly	Function	nal Stream	n E	Modera	tely	Functional S	Surface Stream	☐ Functionally	y Impaired Stre	am	
Feature Description: (check one)	☐ Natura	1	☐ Artifici	al, man	-made	V 1	Manipulated					
Flow Regime:	E Ephem	eral	☐ Interm	nittent		□ F	Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straight	nt	☐ Meand	dering				Owaro				
M easurements												
Depth of Water: N/A	\ ft.	N/A 🗹	Unknov	wn□	Water Ed	dge	to Water Ed	ge: N/A ft.	N/A 🗹	OHWM Widt	h: <u>2</u> ft.	
OHWM Indicator: (check all that apply)	□С	lear line	on bank	□Sh	elving		□Wrested v	egetation	□Scouring		□Water st	aining
		ent, matte ing vege		□Wr	ack line		□Litter and	debris	☑Abrupt pla change	ant community	□Soil chai change	racteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	oulder	□ Со	bbl	le 🗆 C	Gravel	☐ Sand	✓ Silt/ clay	, □ 0	rganic
Observations												
Riparian Zone Prese	nt: 🗹 Ye	es		No								
Vegetation Layers: (check all that apply)	☑ Tı	ees		Sapling	s/Shrubs		✓ Herbs					
Dominant Bank Vege Populus tremuloides,	etation (lisa Fraxinus a	t): mericana	a, Phalaris	s arundi	nacea, C	are	x gracillima					
Aquatic Habitats (ex: None.	submerged or	emerged a	quatic vegeta	ation, overh	hanging ban	ks/rc	oots, leaf packs, la	arge submerged v	wood, riffles, deep	pools, etc.):		
Aquatic Organisms (None.	Observed	(list):										
Disturbances (ex: live Potential disturbance	stock acces from the n	s, manure earby ag	in waterbo ricultural f	dy, waste ield.	e discharg	e pi	pes):					
Observation Notes: The stream becomes	more obvi	ous on it	s eastern s	side and	d extends	s be	eyond the sur	ey corridor.				



sasa1013e_N (across)



sasa1013e_E (downstream)



sasa1013e_W (upstream)

Tratorboay Bata	011000													
Description														
Project Name:						Date	<u> </u>				Waterboo	dy Su	vey ID:	
Line 5 Relocation Proje	ct					2020	-06-06				sasa1012	2e		
State:		County/	Parish:			USG	S Wate	rbody Nam	ne:					
Wisconsin		Ashland	I			UNT	to Whit	e River						
Company:		Crew Mo	ember Ini	tials:		Latit	ıde:				Longitud	e:		
Enbridge		SBR/DG	GL			46.4	95437				-90.8984 ⁻	14		
Survey Type: [☐ Centerli	ine	☐ Re-Ro	ute		Acces	Road	□Facility		□Other				
, ,	River		✓ Stream	n		☐ Ditch		☐ Swale		☐ Cana	I	□ Ot	her	
	No Wat	er	☐ Clear			□Turbid		□ Sheen o	on	□Surfac	ce Scum	□Alg	al Mats	□Other
	☐ Highly	Function	nal Stream	ı V	Modera	tely Fund	tional S	Surface Stream	☐ Fun	ctionally	Impaired S	Strean	n	
Feature Description: [□ Natural		☐ Artificia	al, man-	made	Manip	ulated							
	Z Ephem	eral	☐ Interm	ittent		□ Peren	nial	☐ Conne	ecting					
	Straigh	t	☐ Meano	dering				Swale						
Measurements														
Depth of Water: N/A	ft.	N/A Ľ	Unknov	wn 🗆 💍	Water Ed	lge to W	ater Ed	ge: <u>N/A</u> 1	ft.	N/A 🗹	OHWM W	/idth:	<u>2</u> f	t.
OHWM Indicator: (check all that apply)	□ Cl	ear line o	on bank	⊠ She	elving	□Wr	ested v	egetation	□Sc	ouring			□Waters	staining
(oncon all that apply)		nt, matte		□Wra	ack line	□Litt	er and	debris	□Ab chan		nt commun		□Soil cha	aracteristic
Dominant Substrate: (check all that apply)	□ Ве	drock	□ Во	ulder	□ Co	bble		Gravel	□ Sa	and	☑ Silt/	clay		Organic
Observations														
Riparian Zone Present (check one)	: 🗹 Ye	:S		No										
Vegetation Layers: (check all that apply)	☑ Tre	ees		Sapling	s/Shrubs	U	Herbs							
Dominant Bank Vegeta Phalaris arundinacea, E	ation (list urybia m): acrophyl	lla, Equise	etum pra	itense, F	raxinus a	merica	na, Populus	s tremul	oides				
Aquatic Habitats (ex: su None.	bmerged or	emerged a	quatic vegeta	tion, overh	nanging ban	ks/roots, lea	f packs, la	arge submerged	d wood, rif	fles, deep p	ools, etc.):			
Aquatic Organisms Ob None.	oserved (list):												
Disturbances (ex: livest The stream receives rui	ock access noff from	s, manure the surro	in waterboo ounding fie	dy, waste eld.	e discharge	e pipes):								
Observation Notes: The feature is a manipu	ulated eph	emeral s	stream wit	h steep	banks.									



sasa1012e_N (across)



sasa1012e_E (downstream)



sasa1012e_W (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Proje	ect					2020-06-08			sasa1019e	
State:		County/	Parish:			USGS Wate	body Name	•		
Wisconsin		Ashland				UNT to Whit	e River			
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		SBR/DG	SL			46.496472			-90.900244	
Survey Type: [check one)	☐ Centerl	ine	☐ Re-Ro	ute	V	Access Road	□Facility	□Other		
Waterbody Type: [check one)	□ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	✓ No Wa	ter	☐ Clear			Turbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
Existing Condition ^a : [☐ Highly	Function	al Stream	☑ Mode	erately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description: [☐ Natural		☐ Artificia	al, man-made	V	Manipulated				
Flow Regime: (check one)	E phem	eral	☐ Interm	ittent		Perennial	☐ Connection Connecti	ting		
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Meand	lering						
Measurements										
Depth of Water: N/A	ft.	N/A 🗹	Unknov	vn□ Water	Edge	e to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Widt	h: 2 ft.
OHWM Indicator:	□ CI	ear line o	on bank	☑Shelving		□Wrested ve	getation	✓ Scouring		□Water staining
(check all that apply)		nt, matte		□Wrack line	е	☑ Litter and o	lebris	☐ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	☑ Bo	ulder 🗆	Cobb	le □ G	ravel	☐ Sand	☑ Silt/ clay	/ □ Organic
Observations										
Riparian Zone Present	: □ Ye	es	I	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	V (Saplings/Shru	bs	✓ Herbs				
Dominant Bank Vegeta Viburnum lentago, Popi	ulus trem	úloides, (•	•		, ,				
Aquatic Habitats (ex: su None.	ıbmerged or	emerged ac	quatic vegetat	ion, overhanging b	oanks/r	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	oserved ((list):								
Disturbances (ex: livest Potential for polluted ru	tock access noff from	s, manure the surro	in waterboo ounding ag	dy, waste discha gricultural field	arge pi	ipes):				
Observation Notes: The stream head starts	in an agı	icultural	field plante	ed with corn a	ind dr	rains downhill	nto a hardwo	ood forest.		



sasa1019e_E (across)



sasa1019e_N (downstream)



sasa1019e_S (upstream)

vvaterbody bata	Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project	ct					2020-06-08			sasa1018e	
State:		County/l	Parish:			USGS Water	body Name	•		
Wisconsin		Ashland				UNT to White	e River			
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		SBR/DG	BL .			46.496231			-90.901199	
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute	V/	Access Road	□Facility	□Other		
Waterbody Type: (check one)	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wa	ter	☐ Clear			Turbid	☐Sheen on Surface	Surfac	e Scum □A	lgal Mats □Other
Existing Condition a: [check one]	Highly	Function	al Stream	☑ Mode	rately	/ Functional S		☐ Functionally	Impaired Strea	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-made	V	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Intermi	ittent		Perennial	☐ Connection Connecti	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	☐ Meand	lering						
The feature is an ephem	iciai siic	am with	no water p	resent at the		or survey.				
Measurements										
Depth of Water: N/A	ft.	N/A Ľ	Unknov	vn□ Water	Edge	to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Width	n: <u>2</u> ft.
OHWM Indicator:	□ CI	ear line o	on bank	☑ Shelving		□Wrested ve	egetation	Scouring		□Water staining
(check all that apply)		nt, matte		□Wrack line	e	□Litter and o	lebris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder 🗆 (Cobb	le 🗆 G	ravel	☐ Sand	✓ Silt/ clay	□ Organic
Observations										
Riparian Zone Present:	□Ye	es	1	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	Ø S	Saplings/Shrul	os	☑ Herbs				
Dominant Bank Vegeta Pteridium aquilinum, To	tion (list): Iron rydb	ergii, Eury	bia macrophy	lla, P	opulus tremul	oides, Acer s	accharum, Vib	urnum lentago	, Abies balsamea
Aquatic Habitats (ex: sub None.	omerged or	emerged ac	quatic vegetat	ion, overhanging b	anks/r	oots, leaf packs, la	rge submerged w	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	served ((list):								
Disturbances (ex: livestor Runoff from the agricultor	ock access ural field.	s, manure	in waterboo	dy, waste discha	rge pi	ipes):				
Observation Notes: The feature starts in an	agricultu	ral field a	and leads v	water away ar	nd do	wnhill through	a hardwood	forest.		



sasa1018e_N (across)



sasa1018e_NE (downstream)



sasa1018e_SW (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project	ct					2020-06-08			sasa1017e	
State:		County/	Parish:			USGS Wate	body Name	•		
Wisconsin		Ashland	I			UNT to Whit	e River			
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		SBR/DG	SL			46.495713			-90.902327	
Survey Type: [Centerl	ine	☐ Re-Ro	ute	V	Access Road	□Facility	□Other		
Waterbody Type: [River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wa	ter	☐ Clear			Γurbid	☐Sheen on Surface	□Surfac	e Scum 🗆 🛭	lgal Mats □Other
Existing Condition ^a : [Highly	Function	al Stream	☑ Mod	derately	y Functional S		☐ Functionally	Impaired Stream	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-mad	e 🗹	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meano	lering						
Measurements										
Depth of Water: N/A	ft.	N/A 🗹	Unknov	vn□ Wate	r Edge	e to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Widtl	n: <u>2</u> ft.
OHWM Indicator:	□ CI	ear line o	on bank	✓ Shelving	g	□Wrested ve	egetation	Scouring		□Water staining
(check all that apply)		nt, matte		□Wrack li	ne	☑ Litter and o	lebris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□В€	edrock	□ Во	ulder [Cobb	ole □ G	ravel	☐ Sand	 Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	□Y€	es	U 1	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	V (Saplings/Shr	rubs	✓ Herbs				
Dominant Bank Vegeta Acer saccharum, Populi	tion (list us tremu): oides, Eı	urybia ma	crophylla						
Aquatic Habitats (ex: suit None.			quatic vegetat	tion, overhangin	g banks/r	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	served ((list):								
Disturbances (ex: livesto Runoff and manipulation	ock access a associa	s, manure ited with	in waterboot the agricu	dy, waste disc Itural field.	harge pi	ipes):				
Observation Notes: Stream head starts on the	ne edge	of an agr	riculture fie	eld planted w	vith cor	n.				



sasa1017e_E (across)



sasa1017e_N (downstream)



sasa1017e_S (upstream)

waterbody bat	a Sileet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-06-08			sasa1016e		
State:		County/	Parish:			USGS Water	body Name	:			
Wisconsin		Ashland				UNT to Whit	e River				
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:		
Enbridge		SBR/DG	SL.			46.495680			-90.903464		
Survey Type: (check one)	☐ Center	line	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Stream	า		Ditch	☐ Swale	☐ Cana		Other	
Water Appearance: (check one)	✓ No Wa	ter	☐ Clear		□Т	Turbid	☐Sheen on Surface	n □Surfac	e Scum	Algal Mats	□Other
Existing Condition a: (check one)	☐ Highly	Function	al Stream	☑ Mc	oderately	/ Functional S		☐ Functionally	Impaired Str	eam	
Feature Description: (check one)	☐ Natura	l	☐ Artificia	al, man-ma	de 🗹 l	Manipulated					
Flow Regime: (check one)	☑ Ephem	eral	☐ Interm	ittent		Perennial	☐ Connection Connection	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Meand	dering							
Measurements		N.I/A 192 4	Halman	Wat	or Edgo	a to Water Ed	no: N/A ft	N/A IØ	OLIWM Wid	14h. 2 ft	
Depth of Water: N/A	<u>\ </u>	N/A 🗹	Unknov	wn∐ wvat	er Eage	to Water Ed	ge: <u>N/A</u> π.	N/A 🗹	OHWM Wid	Ith: 2 ft.	
OHWM Indicator: (check all that apply)	□С	lear line o	on bank	Shelvin	ng	□Wrested ve	egetation	□Scouring		□Water sta	nining
(ent, matte ing veget		□Wrack	line	□Litter and o	lebris	✓ Abrupt plan change	t community	□Soil chara	acteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder [□ Cobbl	le 🗆 G	ravel	☐ Sand	 Silt/ cla	ay 🗆 Or	ganic
Observations											
Riparian Zone Prese	nt: 🗆 Ye	es	<u> </u>	No							
Vegetation Layers: (check all that apply)	☑ Tr	ees	V S	Saplings/Sh	nrubs	✓ Herbs					
Dominant Bank Vege Bromus inermis, Rub	etation (list us idaeus,	<u>t):</u> Populus t	tremuloide	es, Abies ba	alsamea						
Aquatic Habitats (ex: None.	submerged or	emerged ac	quatic vegetat	tion, overhangi	ng banks/ro	oots, leaf packs, la	rge submerged v	vood, riffles, deep p	pols, etc.):		
Aquatic Organisms (None.	Observed	(list):									
Disturbances (ex: live Runoff from the agrice	stock acces ultural field	s, manure	in waterboo	dy, waste dis	charge pi	pes):					
Observation Notes: The agricultural field i	near the str	ream hea	id has bee	n planted w	vith corn						



sasa1016e_W (across)



sasa1016e_N (downstream)



sasa1016e_S (upstream)

Waterbody Data	Once									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Proje	ct					2020-06-08			sasa1014e	
State:		County/	Parish:			USGS Wate	body Name	•		
Wisconsin		Ashland				UNT to Whit	e River			
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		SBR/DG	SL			46.496051			-90.905262	
Survey Type: [check one)	Centerl	ine	☐ Re-Ro	ute	V	Access Road	□Facility	□Other		
Waterbody Type: [check one)	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wat	ter	☐ Clear			Γurbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
Existing Condition ^a : [Highly	Function	al Stream	☑ Mod	erately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description: [Natural		☐ Artificia	al, man-made		Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ttent		Perennial	☐ Connection Connection	ting		
Sinuosity within Survey Corridor: (check one)	₫ Straigh	t	☐ Meand	lering						
The feature is an epher	nerai stre	am that (cames wa	ter away iror	n an a	gnoultural nei	1.			
Measurements										
Depth of Water: N/A	ft.	N/A🗹	Unknov	vn□ Wate	r Edge	to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Widtl	h: <u>2</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	✓ Shelving		□Wrested ve	getation	Scouring		☐Water staining
(онных ан ины арруу)		nt, matte		□Wrack lin	ne	☑ Litter and o	lebris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder 🗆	Cobb	le 🗆 G	ravel	☐ Sand	 Silt/ clay	organic □ Organic
Observations										
Riparian Zone Present	:	es	I	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	V (Saplings/Shr	ubs	✓ Herbs				
Dominant Bank Vegeta Abies balsamea, Populi	ition (list us tremul): oides, To	oxicodendi	on rydbergii,	, Equis	setum pratens	9			
Aquatic Habitats (ex: su None.	bmerged or	emerged ac	quatic vegetat	ion, overhanging	banks/r	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	served ((list):								
Disturbances (ex: livest Potential runoff from the	ock access e nearby	s, manure agricultui	in waterboo ral field.	ly, waste disch	narge p	ipes):				
Observation Notes: The stream channel has	s been us	sed as a	place to di	ump househo	old gar	bage.				



sasa1014e_S (across)



sasa1014e_E (downstream)



sasa1014e_W (upstream)

Waterbody Date	a Sileet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-06-08			sasa1015e		
State:		County/l	Parish:			USGS Wate	body Name	:			
Wisconsin		Ashland				UNT to Whit	e River				
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:		
Enbridge		SBR/DG	SL			46.495627			-90.904632		
Survey Type:	☐ Center	ine	☐ Re-Ro	ute	V	Access Road	□Facility	□Other			
(check one) Waterbody Type:	☐ River		✓ Stream	n		Ditch	☐ Swale	☐ Canal		Other	
(check one) Water Appearance:	✓ No Wa	ter	☐ Clear			Turbid	☐Sheen or	n □Surfac	e Scum 🗆	Algal Mats □Othe	er
(check one) Existing Condition a: (check one)	☐ Highly	Function	al Stream		Moderately	y Functional S	Surface tream	☐ Functionally	Impaired Stre	eam	
Feature Description:	☐ Natura		☐ Artificia	al, man-m	ade 🗹	Manipulated					
Flow Regime: (check one)	☑ Ephem	eral	☐ Interm	ittent		Perennial	☐ Connection Connection	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Meano	dering							
Measurements Depth of Water: N/A OHWM Indicator: (check all that apply)		N/A 🗹 lear line c		☑ Shel\	ving	e to Water Ed	egetation	Scouring	OHWM Widt	□Water staining	
	miss	ent, matte ing veget	tation	□Wrac		□Litter and o		☐ Abrupt plan change		☐Soil characterist change	tiC
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Bo	ulder	☐ Cobb	ole □ G	ravel	□ Sand	坚 Silt/ cla	y □ Organic	
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es	1	No							
Vegetation Layers: (check all that apply)	☑ Tr	ees	V (Saplings/S	Shrubs	☑ Herbs					
Dominant Bank Vege Bromus inermis, Rhus	etation <i>(list</i> s typhina, F): opulus g	grandident	ata, Rubu	ıs idaeus						
Aquatic Habitats (ex: None.	submerged or	emerged ac	quatic vegetat	tion, overhan	nging banks/r	oots, leaf packs, la	rge submerged v	vood, riffles, deep p	ools, etc.):		
Aquatic Organisms (None.	Observed	(list):									
Disturbances (ex: live Potential runoff from t	stock acces he agricult	s, manure ural field	in waterboo by the ste	dy, waste d am head.	lischarge p	ipes):					
Observation Notes: There is garbage dun	nped in the	stream c	channel.								



sasa1015e_E (across)



sasa1015e_NE (downstream)



sasa1015e_SW (upstream)

Waterbody Dat	a Silect										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-06-13			sasd013i_x	(
State:		County/	Parish:			USGS Wate	rbody Name):			
Wisconsin		Ashland	I			UNT to Whit	e River				
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		SBR/DG	S L			46.493207			-90.899669)	
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute	V,	Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		☐ Stream	n	V	Ditch	☐ Swale	☐ Cana		Other	
Water Appearance: (check one)	✓ No Wa	ter	☐ Clear			Turbid	☐ Sheen or Surface	n □Surfac	e Scum	Algal Mats	□Other
Existing Condition a: (check one)	□ Highly	Function	al Stream		Moderatel	y Functional S		☐ Functionally	Impaired Str	ream	
Feature Description:	☐ Natural		☐ Artificia	al, man-n	nade 🗹	Manipulated					
Flow Regime:	□ Ephem	eral	✓ Interm	ittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Mean	dering			Owalo				
Measurements Depth of Water: N//	<u>\</u> ft.	N/A 🗹	Unknov	wn□ \	Vater Edge	e to Water Ed	ge : <u>N/A</u> ft.	N/A 🗹	OHWM Wid	Jth: <u>3</u> f	t.
OHWM Indicator:		ear line o		□Shel	lvina	□Wrested v	agatation	Scouring		□Wotor	otoining
(check all that apply)	 ✓Be	ent, matte	ed, or	□Wra	· ·	□ Litter and		✓ Abrupt plan	t community	□Water s / □Soil change	aracteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	ole 🗆 C	Gravel	☐ Sand	✓ Silt/ cla	ay 🗆 🗀	Organic
Observations											
Riparian Zone Prese	nt: 🗹 Ye	es		No							
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/	/Shrubs	✓ Herbs					
Dominant Bank Vege Poa pratensis, Phalar	etation (list is arundina	[:]): icea, Scii	rpus micro	ocarpus,	Persicaria	hydropiper, P	hleum prater	nse			
Aquatic Habitats (ex: None.	submerged or	emerged ad	quatic vegeta	tion, overha	inging banks/r	roots, leaf packs, la	arge submerged v	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms (None.	Observed ((list):									
Disturbances (ex: live Feature receives rund	stock acces off from the	s, manure road and	in waterbood d nearby a	dy, waste agricultura	discharge p al field.	pipes):					
Observation Notes: No water was observe	ed at the tir	me of sur	vey. The o	ditch is fe	ed by a cul	lvert outside o	f the survey a	area.			



sasd013i_x (across)



sasd013i_x (downstream)



sasd013i_x (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ect					2020-06-08			sasa1020e		
State:		County/	Parish:			USGS Water	body Name	:			
Wisconsin		Ashland	l			None					
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:		
Enbridge		SBR/DG	}L			46.492422			-90.900619		
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		☐ Stream	n	V	Ditch	☐ Swale	☐ Canal		Other	
Water Appearance:	☑ No Wa	ter	☐ Clear		□Т	urbid	☐Sheen on Surface	Surfac	e Scum	Algal Mats	□Other
Existing Condition ^a :	☐ Highly	Function	al Stream	⊻ Mo	oderately	Functional S		☐ Functionally	Impaired Str	eam	
Feature Description: (check one)	☐ Natural		☐ Artificia	al, man-ma	de 🗹 I	Manipulated					
Flow Regime: (check one)	E Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meand	dering							
Measurements Depth of Water: N/A	ft	N/A 🗹	Unknov	wn⊟ Wa t	ter Edge	to Water Ed	ge: N/A ft.	N/A 🗹	OHWM Wid	lth: 2 ft.	
-									OTIVINI WIG		
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shelvir	ng	✓ Wrested very limit to the limit to th	egetation	□Scouring		□Water sta	ining
		nt, matte		□Wrack	line	□Litter and o	lebris	□Abrupt plan change	t community	⊓Soil chara change	cteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	le 🗆 G	iravel	☐ Sand	✓ Silt/ cla	ay 🗆 Orç	ganic
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es	I	No							
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/Sh	nrubs	✓ Herbs					
Dominant Bank Vege Bromus inermis, Poa	etation (list pratensis,) <u>:</u> Phleum p	oratense, F	Phalaris aru	undinace	a					
Aquatic Habitats (ex: None.	submerged or	emerged ac	quatic vegetat	tion, overhangi	ng banks/ro	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms (None.	Observed ((list):									
Disturbances (ex: live Potential disturbance	stock acces from nearb	s, manure y agricul	in waterboot tural pract	dy, waste dis tices.	charge pi	pes):					
Observation Notes: There is no water pres	sent at the	time of th	ne survey.								



sasa1020e_N (across)



sasa1020e_W (downstream)



sasa1020e_S (upstream)

Trator Body Batt	4 011000												
Description													
Project Name:						-	Date:			Wa	terbody S	urvey ID:	
Line 5 Relocation Pro	ect					:	2020-06-09			sas	c041p_x		
State:		County	/Parish:			ι	JSGS Water	body Name:	:				
Wisconsin		Ashland	b			ı	Rock Creek						
Company:		Crew M	ember Ini	tials:		L	_atitude:			Lor	gitude:		
Enbridge		KDF/AG	3G				46.489878			-90	.902330		
Survey Type:	✓ Centerl	ine	□ Re-Ro	ute	[cess Road	□Facility	□Oth	ner			
(check one) Waterbody Type: (check one)	□ River		✓ Stream	n	[□ D	itch	☐ Swale	□ Са	anal		Other	
Water Appearance:	☐ No Wat	er	☐ Clear		[□Tu	ırbid	☐Sheen on	ı 🗹 Su	rface S	cum \square A	lgal Mats	□Other
(check one) Existing Condition a: (check one)	☐ Highly	Function	nal Stream	V	Moderat	tely	Functional S	Surface tream	☐ Functiona	ally Imp	aired Strea	am	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-			lanipulated						
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	ittent	[Ø P	erennial	☐ Connect	ting				
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meano	dering				Owaic					
Measurements Depth of Water: 1	ft.	N/A□	Unknov	wn 🗆 📑	Water Ed	ige t	to Water Ed	ge: 6 ft.	N/A	□ OH	WM Width	n: <u>6</u> f	t.
OHWM Indicator:			on bank	□She			□Wrested ve	_	 ✓Scouring			□Water	
(check all that apply)	 ⊠Be	nt, matte	ed, or		ack line		☑vriested ve		□ Abrupt p		mmunity		aracteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Co	bble	: □ G	ravel	☑ Sand		∃ Silt/ clay		Organic
Observations													
Riparian Zone Preser (check one)	nt: 🗆 Ye	es	V	No									
Vegetation Layers: (check all that apply)	☑ Tr	ees		Sapling	s/Shrubs		✓ Herbs						
Dominant Bank Vege Prunus virginiana, Fra	tation (list ixinus nigra): a, Acer s	accharum										
Aquatic Habitats (ex Pools, downed woody	submerged or debris, ex	emerged a posed sa	equatic vegeta and bars.	tion, overh	nanging bank	ks/roc	ots, leaf packs, la	rge submerged w	vood, riffles, de	ep pools,	etc.):		
Aquatic Organisms (Frogs, aquatic inverte	Dbserved (brates.	list):											
Disturbances (ex: live Moderate bank erosio	stock access n, garbage	s, manure debris.	in waterbo	dy, waste	e discharge	e pip	es):						
Observation Notes: None.													



sasc041p_x (across)



sasc041p_x (downstream)



sasc041p_x (upstream)

Open Waterbody Data Sheet

Open waterbod	y Data	Snee	ί						
Description									
Project Name:					Date:			Waterbody Sเ	ırvey ID:
Line 5 Relocation Proje	ect				2020-06-09			oasd1003	
State:		County	/Parish:		USGS Water	rbody Name		l	
Wisconsin		Ashland	b		None				
Company:		Crew M	lember Initials:		Latitude:			Longitude:	
Enbridge		KDF/A	3G		46.490247			-90.907124	
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Route	□A	Access Road	□Facility	□Other		
Waterbody Type: (check one)	✓ Stock F	Pond	☐ Natural Pond	_ I	Fishing Pond	☐ Lake	☐ Other		
Water Appearance: (check one)	□ No Wa	ter	☐ Clear	₫ T	urbid	☐Sheen on Surface	□Surfac	e Scum □Al	lgal Mats □Other
Feature Quality: (check one)	□ High		✓ Moderate		Low				
Feature Description: (check one)	□ Natural		✓ Artificial, man-n	made 🗆 I	Manipulated				
Description Notes:									
Measurements									
Depth of Water: 3	_ ft.	N/A 🗆	Unknown□						
OHWM Indicator: (check all that apply)	□ Cl	ear line	on bank □Shel	lving	□Wrested ve	egetation	Scouring		□Water staining
		nt, matte		ck line	□Litter and o	debris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	☐ Boulder	☐ Cobbl	le 🗆 G	Gravel	□ Sand	☑ Silt/ clay	□ Organic
Observations									
Riparian Zone Present (check one)	t: ☑ Ye	es	□ No						
Vegetation Layers: (check all that apply)	□ Tr		☐ Saplings/	/Shrubs	✓ Herbs				
Dominant Bank Veget Phalaris arundinacea, I	•	•							
Aquatic Habitats (ex: s	ubmerged or	emerged a	aquatic vegetation, overha	anging banks/ro	oots, leaf packs, la	arge submerged w	ood, riffles, deep p	ools, etc.):	
Open water, submerge	d vegetati	on near	the shoreline.						
Aquatic Organisms O	bserved ((list):							
Frogs, aquatic inverteb	rates.								
Disturbances (ex: lives				discharge pi	pes):				
Runoff from the adjace	nt roadwa	y. Lives	tock access.						
Observation Notes:						<u> </u>			
None.									



oasd1003_S



oasd1003_SE



oasd1003_SW

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Proje	ect					2020-07-02			sasd1021e	
State:		County/I	Parish:			USGS Wate	rbody Name			
Wisconsin		Ashland				None				
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		DMP/AG	3G			46.473834			-90.898191	
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	☐ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	✓ No Wat	ter	☐ Clear		_1	Γurbid	☐Sheen on Surface	□Surfac	e Scum \Box A	Algal Mats □Other
Existing Condition ^a : (check one)	✓ Highly	Function	al Stream	□ Мо	derately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-mad	е 🗆	Manipulated				
Flow Regime: (check one)	☑ Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Meand	lering						
There was no water wi		iodiii ddi	and the ne	ia survey.						
Measurements										
Depth of Water: 0	_ ft.	N/A□	Unknov	vn□ Wate	er Edge	to Water Ed	ge: 0 ft.	N/A□	OHWM Widt	h : <u>2</u> ft.
OHWM Indicator: (check all that apply)	☑ CI	ear line c	on bank	Shelving	g	□Wrested v	egetation	□Scouring		□Water staining
		nt, matte ing veget		□Wrack l	ine	□Litter and o	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder [Cobb	le □ G	Gravel	☑ Sand	☐ Silt/ clay	/ □ Organic
Observations										
Riparian Zone Presen (check one)	t: 🗆 Ye	es	I	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	v (Saplings/Sh	rubs	☐ Herbs				
Dominant Bank Veget Athyrium filix-femina, C	t ation (list Osmunda (·) : claytoniai	na, Ostrya	virginiana,	Abies b	palsamea				
Aquatic Habitats (ex: s None.	ubmerged or	emerged aq	quatic vegetat	ion, overhangin	g banks/re	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms O None.	bserved ((list):								
Disturbances (ex: lives None.	tock access	s, manure	in waterboo	dy, waste disc	harge pi	ipes):				
Observation Notes: The ephemeral stream	begins in	a mesic	forest and	I flows east	outside	of the survey	corridor.			



sasd1021e_N (across)



sasd1021e_E (downstream)



sasd1021e_W (upstream)

Open Waterbody Data Sheet

Open waterbody	Data	Snee	ι						
Description									
Project Name:					Date:			Waterbody St	urvey ID:
Line 5 Relocation Project	:t				2020-05-18			oase1001	
State:		County	/Parish:		USGS Wate	body Name	:	l	
Wisconsin		Ashlan	b		None				
Company:		Crew M	lember Initials:		Latitude:			Longitude:	
Enbridge		DMP/A	RK		46.453093			-90.899201	
(check one)	Centerl		☐ Re-Route	\Box \digamma	Access Road	□Facility	□Other		
Waterbody Type: (check one)	Stock F	ond	☐ Natural Pond		Fishing Pond	□ Lake	☐ Other		
Water Appearance: (check one)	No Wa	ter	☐ Clear	√ī	urbid	☐Sheen or Surface	n □Surfac	e Scum	lgal Mats □Other
Feature Quality:	High		☐ Moderate	✓	Low				
Feature Description:	Natural		✓ Artificial, man	-made \square	Manipulated				
Description Notes:									
Measurements									
Depth of Water: 3	ft.	N/A□	Unknown□						
OHWM Indicator: (check all that apply)	☑ CI	ear line	on bank □Sh	elving	□Wrested ve	egetation	□Scouring		□Water staining
		nt, matti ing vege		rack line	□Litter and o	lebris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	☐ Boulder	☐ Cobb	le □ G	iravel	□ Sand	☑ Silt/ clay	□ Organic
Observations									
Riparian Zone Present: (check one)	□Y€	es	☑ No						
Vegetation Layers: (check all that apply)	□ Tr	ees	☐ Sapling	s/Shrubs	✓ Herbs				
Dominant Bank Vegetat Juncus effusus, Scirpus									
Aquatic Habitats (ex: sub Some emergent/overhan			-			rge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs									
None.	`	,							
Disturbances (ex: livesto	ck acces	s manure	 e in waterbody wast	e discharge ni	nes):				
The feature is an artificia			7 III Waterbouy, Waet	o diconargo pr	p00).				
Observation Notes:			-						
The stock pond is within	a large v	wetland	complex. The wat	terbody cont	inues outside	of the survey	y corridor.		



oase1001_S



oase1001_SW



oase1001_W

Waterbody Data	Silect									
Description										
Project Name:						Date:			Waterbody	Survey ID:
Line 5 Relocation Proje	ect					2020-07-01			sasc012e_	х
State:		County/	Parish:			USGS Wate	body Name			
Wisconsin		Ashland	t			None				
Company:		Crew M	ember Init	ials:		Latitude:			Longitude:	
Enbridge		DMP/A	ЭG			46.450146			-90.900655	5
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Rou	ute	□A	Access Road	□Facility	□Other		
Waterbody Type: (check one)	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	☑ No Wa		☐ Clear			urbid	☐Sheen on Surface			□Algal Mats □Other
Existing Condition ^a : (check one)	☑ Highly	Function	nal Stream	□ Мо	derately	Functional S	tream [Y Functionally	Impaired Str	ream
Feature Description: (check one)	□ Natural		✓ Artificia	al, man-mad	de 🗆 l	Manipulated				
(check one)	☑ Ephem		☐ Intermi			Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	⊻ Straigh	t	☐ Meand	lering						
Measurements										
Depth of Water: 0	_ft.	N/A□	Unknov	vn□ Wat	er Edge	to Water Ed	ge: <u>0</u> ft.	N/A□	OHWM Wid	dth: <u>1</u> ft.
OHWM Indicator: (check all that apply)	☑ CI	ear line	on bank	□Shelvin	ıg	□Wrested ve	egetation	□Scouring		☐Water staining
(Grook all trial apply)		nt, matte		□Wrack	line	□Litter and o	debris	□ Abrupt plan change	t community	y □Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Воι	ulder [□ Cobbl	le 🗆 G	iravel	☐ Sand	I Silt/ cla	ay 🗆 Organic
Observations										
Riparian Zone Present (check one)	t: 🗆 Ye	es	M 1	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees		Saplings/Sh	rubs	✓ Herbs				
Dominant Bank Veget Poa pratensis, Ribes a	ation (list mericanu): n, Viburi	num lentag	go, Prunus v	virginian	a, Pinus resir	osa, Betula p	oapyrifera		
Aquatic Habitats (ex: si None.	ubmerged or	emerged a	quatic vegetat	ion, overhangir	ng banks/ro	oots, leaf packs, la	rge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms O None.	bserved ((list):								
Disturbances (ex: lives The feature occurs bet	tock access ween a ro	s, manure ad and a	in waterboo corn field	dy, waste disc . The strear	charge pi m flows	pes): into a culvert	at the wester	n end.		
	ire to the	west just	t outside of	the survey						am. The feature flows into a ation that hides the bed and



sasc012e_x (across)



sasc012e_x (downstream)



sasc012e_x (upstream)

Trater body bat	4 011000												
Description													
Project Name:							Date:			Waterbod	y Surv	ey ID:	
Line 5 Relocation Pro	ject						2020-05-19			sase1001	е		
State:		County	/Parish:				USGS Water	body Name	:				
Wisconsin		Ashland	d				UNT to Mare	ngo River					
Company:		Crew M	lember Ini	itials:			Latitude:			Longitude	:		
Enbridge		DMP/AI	RK				46.437269			-90.88438	6		
Survey Type: (check one)	☐ Center	ine	□ Re-Ro	oute	[□A	ccess Road	□Facility	□Othe	er			
Waterbody Type:	☐ River		☐ Strear	m	[Ditch	✓ Swale	☐ Car	nal	□ Oth	er	
Water Appearance:	✓ No Wa	ter	☐ Clear		[□Т	urbid	☐Sheen or	n □Surf	ace Scum	□Alga	ll Mats □O	ther
(check one) Existing Condition a: (check one)	☑ Highly	Function	nal Stream	n 🕒	Moderat	tely	Functional S	Surface tream	☐ Functional	ly Impaired S	tream		
Feature Description: (check one)	☐ Natura		Artifici	ial, man	-made [Manipulated						
Flow Regime: (check one)	☑ Ephem	eral	☐ Interm	nittent	[□ F	Perennial	☐ Connec Swale	ting				
Sinuosity within Survey Corridor: (check one)	☐ Straigh	it	✓ Mean	dering									
water.													
Measurements													
Depth of Water: 0	ft.	N/A□	Unkno	wn□	Water Ed	lge	to Water Ed	ge: <u>0</u> ft.	N/A	OHWM W	idth:	<u>5</u> ft.	
OHWM Indicator: (check all that apply)	┏ C	ear line	on bank	□Sh	elving		□Wrested ve	egetation	□Scouring			Water stainin	g
(опоск ан тас арруу)		nt, matte		□Wr	rack line		□Litter and o	debris	□ Abrupt pl	ant communi		Soil characte	ristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□Вс	oulder	□ Co	bbl	e □G	iravel	☐ Sand	I Silt/ o	lay	☐ Organi	ic
Observations													
Riparian Zone Preser (check one)	nt: 🗆 Ye	es	V	No									
Vegetation Layers: (check all that apply)	□ Tr	ees		Sapling	s/Shrubs		✓ Herbs						
Dominant Bank Vege Lolium perenne	etation (list):											
Aquatic Habitats (ex: Pools of standing wat	submerged or er were ob	emerged a served.	aquatic vegeta	ation, overl	hanging bank	ks/ro	oots, leaf packs, la	rge submerged v	vood, riffles, deep	pools, etc.):			
Aquatic Organisms (There were minnows	Observed observed i	(list): n the poo	ols of strea	am.									
Disturbances (ex: live The stream is artificia	stock acces l and occui	s, manure s within	e in waterbo an agricul	ody, wasto Itural fie	e discharge ld.	e pip	pes):						
Observation Notes: The ephemeral strear	n is artificia	al and oc	ccurs within	n an agı	ricultural f	ielo	i.						



sase1001e_E (across)



sase1001e_N (downstream)



sase1001e_S (upstream)

Waterbody Data 3	HICCL									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-05-20			sase1002e	
State:		County/	Parish:			USGS Wate	body Name	:		
Wisconsin		Ashland	I			None				
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		DMP/AF	RK			46.437060			-90.881213	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	River		☐ Stream	า		Ditch	✓ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wat	er	☐ Clear		□T	Turbid	☐Sheen or Surface	n □Surfac	e Scum □A	lgal Mats □Other
Existing Condition ^a :	Highly	Function	al Stream	□Мо	oderately	/ Functional S		Functionally	Impaired Strea	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-ma	de 🗹	Manipulated				
Flow Regime: 🗹 [Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec Swale	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	☐ Meano	dering						
Description Notes: There was no water obser	rved wi	thin the f	feature du	ring the fiel	d survey	<i>i</i> .				
Measurements										
Depth of Water: N/A ft.		N/A 🗹	Unknov	wn□ Wat	er Edge	to Water Ed	ge: <u>N/A</u> ft.	N/A 🗹	OHWM Widtl	n: <u>1</u> ft.
OHWM Indicator: (check all that apply)	☑ CI	ear line o	on bank	□Shelvir	ng	☑ Wrested ve	egetation	Scouring		□Water staining
(onook an arat apply)		nt, matte		□Wrack	line	□Litter and o	lebris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	le □ G	ravel	☐ Sand	坚 Silt/ clay	□ Organic
Observations										
Riparian Zone Present:	□ Ye	s	V 1	No						
Vegetation Layers: (check all that apply)	□ Tr	ees	Ø :	Saplings/Sh	nrubs	✓ Herbs				
Dominant Bank Vegetation Salix petiolaris, Phleum pro	on (list ratensé): , Scirpus	s cyperinu	s						
Aquatic Habitats (ex: subm No aquatic habitat was ob	erged or served	emerged a	quatic vegeta	tion, overhangi	ng banks/ro	oots, leaf packs, la	rge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse No aquatic organisms wer	erved (re obse	(list): erved.								
Disturbances (ex: livestock The feature occurs at the	k access edge o	s, manure f a tilled	in waterboo crop field.	dy, waste dis	charge pi	ipes):				
Observation Notes: The ephemeral swale flow	vs sout	h to nortl	h and begi	ins at the e	dge of a	tilled crop fiel	d.			



sase1002e_N (across)



sase1002e_W (downstream)



sase1002e_S (upstream)

Trate. Sour Bat	4 011000													_
Description														
Project Name:						I	Date:			٧	/aterbody S	urvey ID:		_
Line 5 Relocation Pro	ject						2020-05-23			s	ase1003e			
State:		County	/Parish:			ı	USGS Wate	body Name	:					
Wisconsin		Ashland	d				None							
Company:		Crew M	lember Ini	itials:			Latitude:			L	ongitude:			
Enbridge		ARK/DI	MP				46.430508			-!	90.861430			
Survey Type: (check one)	✓ Centerl	ine	□ Re-Ro			□Ad	ccess Road	□Facility	□Ot	her				
Waterbody Type: (check one)	☐ River		☐ Strear	m		y d	itch	☐ Swale	□ C:	anal		Other		
Water Appearance:	✓ No Wat	er	☐ Clear			□Tι	urbid	☐Sheen on	ı □Su	ırface	Scum □A	Igal Mats	□Other	_
(check one) Existing Condition ^a : (check one)	□ Highly	Functio	nal Stream	ո 🗓	Moderat	tely	Functional S	Surface tream	☐ Function	ally In	npaired Strea	am		
Feature Description: (check one)	☐ Natural		Artifici	al, man	-made	□N	Manipulated (_
Flow Regime: (check one)	E Ephem	eral	☐ Interm	nittent		□ P	erennial	☐ Connect	ting					
Sinuosity within Survey Corridor: (check one)	☑ Straigh	t	☐ Mean	dering										
Measurements					lar - =			2 "	N/A					
Depth of Water: 0	ft.	N/A□	Unkno	wn□	Water Ed	dge	to Water Ed	ge: <u>0</u> ft.	N/A	' □ o	HWM Width	n: <u>1</u>	ft.	
OHWM Indicator: (check all that apply)	☑ CI	ear line	on bank	□Sh	elving		□Wrested ve	egetation	☑Scourin	g		□Water	staining	
(chican an arat appriy)		nt, matte		□W⊓	rack line	I	☑ Litter and o	lebris	✓ Abrupt change	plant (community	 Soil ch	naracteristic	
Dominant Substrate: (check all that apply)	□В€	edrock	□ Во	oulder	□ Co	bble	e 🗆 G	ravel	☐ Sand		✓ Silt/ clay		Organic	
Observations														
Riparian Zone Preser (check one)	nt: 🗹 Ye	es		No										
Vegetation Layers: (check all that apply)	□ Tr	ees		Sapling	js/Shrubs		✓ Herbs							
Dominant Bank Vege Mosses, Hieracium cf	etation (list . aurantiac) : um, Poa	annua											
Aquatic Habitats (ex: None.	submerged or	emerged a	aquatic vegeta	ation, over	hanging banl	ks/roo	ots, leaf packs, la	rge submerged w	vood, riffles, de	ep pool	s, etc.):			
Aquatic Organisms (None.	Observed ((list):												
Disturbances (ex: live Mowing.	stock acces	s, manure	e in waterbo	ody, wast	e discharge	e pip	es):							
Observation Notes: No water present at ti	me of surv	∋у.												



sase1003e_E (across)



sase1003e_S (downstream)



sase1003e_N (upstream)

Waterbody Data	JIICCL										
Description											
Project Name:						Date:			Waterbod	y Survey ID:	
Line 5 Relocation Proje	ct					2020-05-27			sase1004	е	
State:		County/	Parish:			USGS Water	body Name	•			
Wisconsin		Ashland	I			None					
Company:		Crew Me	ember Ini	itials:		Latitude:			Longitude):	
Enbridge		DMP/AF	RK			46.432600			-90.84215	0	
Survey Type: [☐ Centerl	ine	□ Re-Ro	oute		Access Road	□Facility	□Other			
	River		☐ Stream	m		Ditch	✓ Swale	☐ Canal		☐ Other	
Water Appearance: [☐ No Wat	ter	☐ Clear		ØT	urbid	☐Sheen on Surface	□Surfac	e Scum	□ Algal Mats	G □ Other
	☐ Highly	Function	nal Stream	n 🗆 N	loderately	/ Functional S		Functionally	Impaired S	tream	
Feature Description: [□ Natural		☐ Artifici	al, man-ma	ade 🗹 I	Manipulated					
Flow Regime: (check one)	Z Ephem	eral	☐ Interm	nittent		Perennial	☐ Connect	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Mean	dering							
Measurements											
Depth of Water: 0.25	ft.	N/A□	Unkno	wn□ Wa	ater Edge	to Water Ed	ge: 2 ft.	N/A□	OHWM W	idth: <u>2</u>	_ ft.
OHWM Indicator:	☑ CI	ear line o	on bank	□Shelv	ring	□Wrested ve	egetation	□Scouring		□Wate	er staining
(check all that apply)		nt, matte		□Wracl	k line	□Litter and o	lebris	☐ Abrupt plan change	t communi	ty □Soil o change	characteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	oulder	□ Cobb	le □ G	ravel	☐ Sand	I Silt/ c	clay [☐ Organic
Observations											
Riparian Zone Present (check one)	: □ Ye	es	V	No							
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/S	Shrubs	✓ Herbs					
Dominant Bank Vegeta Zea mays	ation (list):									
Aquatic Habitats (ex: su No aquatic habitat was	bmerged or observed	emerged ad	quatic vegeta	ation, overhan	ging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):		
Aquatic Organisms Ob No aquatic organisms v	served (vere obse	(list): erved.									
Disturbances (ex: livest The feature occurs with	ock access in a recei	s, manure ntly plant	in waterbo ted corn fi	dy, waste di eld. A field	ischarge pi I road cuts	pes): s through the	feature.				
Observation Notes: The ephemeral stream	flows thro	ough an a	agricultura	al field. A fi	ield road (cuts through t	ne feature an	d there are rub	ober mats p	olaced on it.	



sase1004e_W (across)



sase1004e_S (downstream)



sase1004e_N (upstream)

Waterbody Data	Once									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Proje	ct					2020-06-05			sase1019i	
State:		County/	Parish:			USGS Water	body Name			
Wisconsin		Ashland	l			UNT to Mare	ngo River			
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		DMP/AF	RK			46.429293			-90.849109	
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute	□A	ccess Road	□Facility	□Other		
Waterbody Type: [River		✓ Stream	า		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: [☐ No Wa	ter	☑ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition ^a : (check one)	Highly	Function	al Stream	□ M	/loderately	Functional S		☐ Functionally	Impaired Strea	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-m	ade 🗆 N	Manipulated				
Flow Regime: [check one)	Ephem	eral	✓ Interm	ittent	□ F	Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	∃ Straigh	t	✓ Meano	dering						
Measurements										
Depth of Water: 0.25	ft.	N/A□	Unknov	wn 🗆 🛮 Wa	ater Edge	to Water Ed	je: <u>1</u> ft.	N/A□	OHWM Widtl	n: <u>1</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shelv	/ing	☑ Wrested ve	getation	□Scouring		□Water staining
(онных ан ины арруу)		nt, matte		□Wrac	k line	☑ Litter and o	ebris	☐ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	☐ Cobbl	le 🗆 G	ravel	☐ Sand	✓ Silt/ clay	☐ Organic
Observations										
Riparian Zone Present	: 🗹 Ye	es		No						
Vegetation Layers:	☑ Tr	ees	Z :	Saplings/S	Shrubs	✓ Herbs				
Dominant Bank Vegeta Acer negundo, Carex co Stachys palustris, Lapo	rinita, Ma	tteuccia	struthiopte	eris, Onoc	lea sensib	oilis, Sambucu	s nigra, Alnu	s incana, Ribe	s americanum	, Impatiens capensis,
Aquatic Habitats (ex: su Litter and debris, small	bmerged or pools.	emerged ad	quatic vegeta	tion, overhan	ging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob Minnows and aquatic in	sects.	(list):								
Disturbances (ex: livest No anthropogenic distu	ock access rbances v	s, manure were obs	in waterboo erved with	dy, waste d nin the fea	lischarge pi lture. Altho	pes): ough, there is	a corn field l	ocated to be no	orth outside of	the forest.
Observation Notes: The intermittent stream	flows thr	ough the	forested t	floodplain	of the Ma	rengo River. ⁻	here was gr	oundwater see	page observe	d within the channel.



sase1019i_NW (across)



sase1019i_NE (downstream)



sase1019i_SW (upstream)

valerbody Data 3	HICCL									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Project						2020-06-05			sase1018i	
State:		County/I	Parish:			USGS Water	body Name			
Wisconsin		Ashland				UNT to Mare	ngo River			
Company:	(Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		DMP/AR	RK			46.430197			-90.848799	
Survey Type:	Centerli	ne	☐ Re-Ro	ute	□A	Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Stream	า		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wat	er	✓ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
	Highly	Function	al Stream	Y M	oderately	Functional S		☐ Functionally	Impaired Stre	am
Feature Description:	Natural		☐ Artificia	al, man-ma	ade 🗹 l	Manipulated				
Flow Regime: (check one)	Ephem	eral	✓ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor:	Straigh	t	✓ Meand	dering						
Measurements										
Depth of Water: 1 ft	. 1	N/A□	Unknov	_{wn□} Wa	iter Edge	to Water Ed	ge: <u>4</u> ft.	N/A□	OHWM Widt	h: 7ft.
OHWM Indicator: (check all that apply)	☑ Cle	ear line c	on bank	□Shelvi	ing	☑ Wrested ve	getation	□Scouring		☐Water staining
(опоок ил ана арруу)		nt, matte ng veget		□Wrack	(line	☑ Litter and o	lebris		t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Be	drock	□ Во	ulder	☐ Cobbl	le □ G	ravel	☐ Sand	✓ Silt/ clay	v □ Organic
Observations										
Riparian Zone Present: (check one)	☑ Ye	S	<u> </u>	No						
Vegetation Layers: (check all that apply)	□ Tre	ees	V (Saplings/S	hrubs	✓ Herbs				
Dominant Bank Vegetati Salix petiolaris, Phalaris a	on (list) Irundina	icea, Typ	oha sp.							
Aquatic Habitats (ex: subm Small pools and runs. Em	erged or o	emerged aq and over	quatic vegetat rhanging v	tion, overhang regetation.	ging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse Aquatic insects, minnows	erved (and to	<i>list)</i> : ads.								
Disturbances (ex: livestod The feature is surrounded	k access I by a c	, manure orn field.	in waterboo There is a	dy, waste dis also a field	scharge pi I road tha	pes): t runs over th	e stream/wet	land towards th	ne north end.	
Observation Notes: The intermittent stream flowetland wase1055.	ows nor	th to sou	ith through	n a corn fie	eld and in	to a wooded a	area, where it	t becomes muc	h wider. The	stream is associated with



sase1018i_E (across)



sase1018i_S (downstream)



sase1018i_N (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Proje	ect					2020-06-05			sase1020p	
State:		County/	Parish:			USGS Wate	rbody Name	•		
Wisconsin		Ashland				Marengo Riv	ver .			
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		DMP/AF	RK			46.427114			-90.847481	
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	✓ River		☐ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	□ No Wa	ter	☑ Clear			Turbid	☐Sheen on Surface	□Surfac	e Scum 🗆 🗸	lgal Mats □Other
Existing Condition ^a : (check one)	✓ Highly	Function	al Stream	□ Mod	lerately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-made	e 🗆	Manipulated				
Flow Regime: (check one)	□ Ephem	eral	☐ Intermi	ittent	V	Perennial	☐ Connection Connection	ting		
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Meand	lering						
The river had clear flow	3	3		,						
Measurements										
Depth of Water: 2	_ft.	N/A□	Unknov	_{vn}	r Edge	e to Water Ed	ge: 44 ft.	N/A□	OHWM Widt	n: <u>50</u> ft.
OHWM Indicator: (check all that apply)	☑ CI	ear line o	on bank	□Shelving	J	☑ Wrested v	egetation	□Scouring		☐Water staining
		nt, matte ing veget		☑ Wrack li	ne	Litter and	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder _	Cobb	ole □ C	Gravel	☑ Sand	☐ Silt/ clay	□ Organic
Observations										
Riparian Zone Present	t: 🗹 Ye	es		No						
Vegetation Layers:	☑ Tr	ees	Ø 9	Saplings/Shr	ubs	✓ Herbs				
Dominant Bank Veget Ulmus americana, Ace Equisetum pratense	ation (list r sacchari	num, Tsı	uga canad	ensis, Thuja	occide	entalis, Fraxin	us pennsylva	ınica, Taxus ca	nadensis, Bet	ula alleghaniensis,
Aquatic Habitats (ex: si Large woody debris an	ubmerged or id overhar	emerged ac nging veg	quatic vegetat jetation.	ion, overhanging	j banks/r	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms O Minnows and a wood for	bserved (rog.	(list):								
Disturbances (ex: lives There is a road bridge	tock acces: over the s	s, manure stream to	in waterboot the north	dy, waste disch outside of th	narge pi e surv	ipes): ey corridor.				
Observation Notes: The Marengo River ma	akes a dee	ep bend s	south to no	orth within th	e surve	ey corridor. Th	nere are not n	nany herbaceo	us plants alor	g the sandy banks.



sase1020p_E (across)



sase1020p_N (downstream)



sase1020p_S (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody	Survey ID:
Line 5 Relocation Proje	ct					2020-06-05			sase1021e	
State:		County/F	Parish:			USGS Wate	body Name	:		
Wisconsin		Ashland				UNT to Mare	engo River			
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		DMP/AR	RK			46.426124			-90.847376	
Survey Type: [check one]	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: [check one)	River		✓ Stream	ו		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wa	ter	☐ Clear		□Т	Γurbid	☐Sheen on Surface	n □Surfac	e Scum 🔲	Algal Mats □Other
Existing Condition ^a : [check one)	Highly	Function	al Stream	□ Мо	derately	y Functional S		Functionally	Impaired Stre	eam
Feature Description: (check one)	Natural		☐ Artificia	al, man-mad	de 🗆 l	Manipulated				
Flow Regime: (check one)	Z Ephem	eral	☐ Interm	ittent		Perennial	☐ Connection Connecti	ting		
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Meand	lering						
There was no flowing w	ater with	n the fea	ture durin	g the field s	urvey.					
Measurements										
Depth of Water: 0	ft.	N/A□	Unknov	vn□ Wat	er Edge	to Water Ed	ge: 0 ft.	N/A□	OHWM Widt	t h: 1 ft.
OHWM Indicator: (check all that apply)	☑ CI	ear line c	n bank	□Shelvin	g	□Wrested ve	egetation	 Scouring		☑ Water staining
(onesit diri dide dippi))		nt, matte		□Wrack	line	□Litter and o	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder [Cobb	le □ G	iravel	☑ Sand	✓ Silt/ clay	y 🗆 Organic
Observations										
Riparian Zone Present	: □ Y€	es	1	No						
Vegetation Layers:	☑ Tr	ees		Saplings/Sh	rubs	✓ Herbs				
Dominant Bank Vegeta Thuja occidentalis, Tsu	ation (list ga canad): ensis, Ac	er saccha	ırum, Anem	one qui	nquefolia, Equ	isetum hyen	nale, Maianther	mum canadei	nse, Aralia nudicaulis
Aquatic Habitats (ex: su No aquatic habitat was	bmerged or observed	emerged aq	uatic vegetat	tion, overhangir	ng banks/ro	oots, leaf packs, la	rge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob No aquatic organisms v	oserved (vere obse	(list): erved.								
Disturbances (ex: livest An agricultural swale le	ock access ads to the	s, manure e feature.	in waterboo	dy, waste disc	charge pi	ipes):				
Observation Notes: The ephemeral stream within the channel.	is a wash	out featu	re that is	derived fron	n an agı	ricultural swal	e to the south	h. The banks a	re eroded and	d there is a downed tree



sase1021e_E (across)



sase1021e_N (downstream)



sase1021e_S (upstream)

Waterbody Date	a Silect									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Pro	ject					2020-05-30			sase1008e	
State:		County/l	Parish:			USGS Wate	body Name	• •		
Wisconsin		Ashland				None				
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		DMP/AR	RK			46.421293			-90.840533	
Survey Type: (check one)	☐ Center	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	☐ River		☐ Stream	n	V I	Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	✓ No War	ter	☐ Clear		□Т	urbid	☐Sheen on Surface	Surfac	e Scum 🗆	Algal Mats □Other
Existing Condition ^a : (check one)	☑ Highly	Function	al Stream	n 🗆 l	Moderately	/ Functional S		Functionally	Impaired Stre	eam
Feature Description: (check one)	☐ Natural		✓ Artificia	al, man-m	nade 🗆 I	Manipulated				
Flow Regime: (check one)	☑ Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	✓ Straigh	t	☐ Meand	dering						
Description Notes: There was no flowing	water durii	ng the fie	ld survey,	but wate	er was obse	erved in the s	mall depressi	ons within the	feature.	
Measurements										
Depth of Water: 0	ft.	N/A□	Unknov	wn 🗆 W	ater Edge	to Water Ed	ge: <u>0</u> ft.	N/A 🗆	OHWM Widt	h: 1 ft.
	T									
OHWM Indicator: (check all that apply)	Ľ CI	ear line o	on bank	□Shel	ving	□Wrested v	egetation	□Scouring		□Water staining
		nt, matte ing veget		□Wrad	ck line	□Litter and o	lebris	☐ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	le 🗹 🤆	iravel	☐ Sand	☑ Silt/ clay	y 🗆 Organic
Observations										
Riparian Zone Prese	nt: 🗆 Ye	es	<u> </u>	No						
Vegetation Layers:	□ Tr	ees		Saplings/	Shrubs	☑ Herbs				
Dominant Bank Vege Phalaris arundinacea	etation (list Scirpus cy): /perinus,	Ranuncu	lus acris,	Viburnum	lentago, Anei	mone canade	ensis		
Aquatic Habitats (ex: Small pools of standing	submerged or ng water we	emerged ac ere obser	quatic vegeta ved durin	tion, overhai g the field	nging banks/ro	oots, leaf packs, la	rge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms (No aquatic organisms	Observed were obse	(list): erved.								
Disturbances (ex: live The feature occurs wi	stock acces thin a road	s, manure side ditch	in waterboon and rece	dy, waste d eives rund	discharge pi off from the	pes): e road and su	rounding field	ds.		
Observation Notes: The ephemeral strear	n flows nor	th throug	h a roads	ide ditch.	The featu	re flows throu	gh a culvert u	underneath a fi	eld approach.	



sase1008e_W (across)



sase1008e_N (downstream)



sase1008e_S (upstream)

Tratorboay Bat	4 011000													
Description														
Project Name:						Dat	e:				Vaterbody :	Survey ID):	
Line 5 Relocation Pro	ect					202	20-06-02			:	sase1009e			
State:		County	/Parish:			US	GS Wate	rbody Name	e :	1				
Wisconsin		Ashland	b			UN	T to Mar	engo River						
Company:		Crew M	ember Ini	tials:		Lat	tude:			L	ongitude:			
Enbridge		DMP/AI	RK			46.	421019			-	90.830934			
Survey Type:	□ Center	ine	☐ Re-Ro	ute		Acce	ss Road	□Facility		Other				
(check one) Waterbody Type: (check one)	☐ River		✓ Stream	n		☐ Ditch	1	☐ Swale		Canal		Other		
Water Appearance:	□ No Wa	ter	☐ Clear		[Turbi	d	☐ Sheen o	n 🗆 S	Surface	Scum 🗆	Algal Mat	s 🗆 Othe	er
(check one) Existing Condition a: (check one)	☑ Highly	Function	nal Stream	V	Moderat	ely Fur	nctional	<u>Surface</u> Stream	☐ Function	onally Ir	mpaired Stre	eam		
Feature Description: (check one)	✓ Natura		☐ Artificia	al, man-	-made [□ Man	pulated							
Flow Regime: (check one)	E Ephem	eral	☐ Interm	ittent		□ Pere	nnial	☐ Connection Connection	cting					
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Mean	dering				- Circuit						
Measurements														
Depth of Water: 0.29	5_ ft.	N/A□	Unknov	wn□	Water Ed	ge to \	Vater Ed	lge: <u>0.5</u> ft	i. N	/A 🗆 🛭	OHWM Wid	th: <u>1</u>	ft.	
OHWM Indicator:	Ľ C	ear line	on bank	☑ She	elving	□V	rested v	egetation	 ✓Scoul	ring		□Wat	er staining	
(check all that apply)		ent, matte ing vege		□Wr	ack line	Y L	tter and	debris	□ Abrup change	ot plant	community	□Soil change	characterist e	tic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Col	bble		Gravel	☑ Sand		☑ Silt/ cla	у	□ Organic	
Observations														
Riparian Zone Preser	nt: 🗆 Ye	es		No										
Vegetation Layers: (check all that apply)	☑ Tr	ees	v :	Sapling	s/Shrubs		✓ Herbs	;						
Dominant Bank Vege Abies balsamea, Micr	etation (list anthes per	t): nsylvanio	ca, Asarum	canade	ense, Athy	yrium f	lix-femin	a						
Aquatic Habitats (ex: Pools and large wood	submerged or y debris.	emerged a	aquatic vegeta	tion, overh	nanging bank	s/roots, I	eaf packs, I	arge submerged	wood, riffles,	deep poo	ols, etc.):			
Aquatic Organisms (No aquatic organisms	Observed were obse	(list): erved.												
Disturbances (ex: live The banks of the stream	stock acces am are ero	s, manure ded.	in waterbo	dy, waste	e discharge	pipes):								
Observation Notes: Th ephemeral stream	begins at	wetland	wase1043	f and flo	ows east t	hrough	a wood	and until it re	eaches an	interm	ittent stream	n.		



sase1009e_S (across)



sase1009e_E (downstream)



sase1009e_W (upstream)

Waterbody Data Si	ileet								
Description									
Project Name:					Date:			Waterbody S	Survey ID:
Line 5 Relocation Project					2020-06-02			sase1012e	
State:	Co	ounty/Parish:			USGS Water	body Name	•		
Wisconsin	As	shland			UNT to Mare	ngo River			
Company:	Cr	ew Member Ir	nitials:		Latitude:			Longitude:	
Enbridge	DI	MP/ARK			46.421104			-90.831099	
Survey Type:	Centerline	e □ Re-R	oute		Access Road	□Facility	□Other		
Waterbody Type: ☐ F	River	✓ Strea	ım		Ditch	☐ Swale	☐ Canal		Other
' '	lo Water	☐ Clear	•	ØT	urbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
Existing Condition a:	Highly Fu	nctional Stream	m 🗆 Moder	ately	/ Functional S		Functionally	Impaired Stre	am
Feature Description: ☐ N (check one)	latural	☐ Artific	cial, man-made	V 1	Manipulated				
(check one)	phemera	al 🗆 Interi	mittent		Perennial	☐ Connection Connecti	ting		
Sinuosity within Survey Corridor:	Straight	☑ Mear	ndering						
Measurements									
Depth of Water: 0.25 ft.	N/A	A□ Unkno	own Water E	Edge	to Water Ed	ge: <u>1</u> ft.	N/A□	OHWM Widtl	h: 1 ft.
OHWM Indicator:	☑ Clea	r line on bank	Shelving		□Wrested ve	egetation	□Scouring		□Water staining
(check all that apply)		matted, or vegetation	□Wrack line	•	□Litter and o	lebris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Bedr	ock 🗆 B	oulder 🗆 C	Cobb	le 🗆 G	ravel	☐ Sand	✓ Silt/ clay	√ □ Organic
Observations									
Riparian Zone Present:	☐ Yes	V	No						
Vegetation Layers: (check all that apply)	✓ Tree	s 🔽	Saplings/Shrub	S	☑ Herbs				
Dominant Bank Vegetation Fraxinus nigra, Viburnum I	on (list): _ entago, ⁻	Taraxacum offi	cinale, Rubus id	aeus	s, Cornus alba				
Aquatic Habitats (ex: subme Small pools and large woo	erged or emo	erged aquatic vege S were observe	tation, overhanging bard within the feat	anks/ro	oots, leaf packs, la	rge submerged w	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse None.	rved (lis	t):							
Disturbances (ex: livestock The feature occurs along t	access, n he edge	nanure in waterb of an agricultu	ody, waste dischar ral field. The fea	rge pi ture	pes): has been filled	d with sticks,	stones, and a	tire.	
Observation Notes: The ephemeral stream occ	curs alon	g the edge of a	a woodland and	crop	field. The hea	dwater begir	ns at wase1041	e and it flows	into sase1009e.



sase1012e_N (across)



sase1012e_SE (downstream)



sase1012e_W (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody	Survey ID:
Line 5 Relocation Projec	t					2020-06-02			sase1010i	
State:		County/l	Parish:			USGS Wate	body Name			
Wisconsin		Ashland				UNT to Mare	engo River			
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		DMP/AR	RK			46.420914			-90.830760	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Stream	า		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wa	ter	☐ Clear		V	Turbid	☐Sheen on Surface	□Surfac	e Scum 🗆	Algal Mats □Other
Existing Condition ^a : (check one)	Highly	Function	al Stream	☑ Mc	derately	y Functional S		☐ Functionally	Impaired Stre	eam
Feature Description:	Natural		☐ Artificia	al, man-ma	de 🗆	Manipulated				
Flow Regime: (check one)	Ephem	eral	✓ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meano	dering						
The intermittent stream h		a	,			,				
Measurements										
Depth of Water: 1	ft.	N/A□	Unknov	wn□ Wat	er Edge	e to Water Ed	ge: 4 ft.	N/A□	OHWM Wid	th: <u>4</u> ft.
OHWM Indicator: (check all that apply)	☑ CI	ear line o	on bank	Shelvir	ıg	□Wrested v	egetation	☑ Scouring		□Water staining
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		nt, matte ng veget		□Wrack	line	Litter and	debris	☐ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder [☐ Cobb	ole □ G	iravel	☐ Sand	坚 Silt/ cla	y □ Organic
Observations										
Riparian Zone Present:	□Ye	es	V 1	No						
Vegetation Layers: (check all that apply)	☑ Tr	ees	Ø ;	Saplings/Sh	rubs	☑ Herbs				
Dominant Bank Vegeta Abies balsamea, Tilia an	t ion (list nericana): , Viola pu	ubescens,	Asarum ca	ınadens	e, Solidago fle	exicaulis			
Aquatic Habitats (ex: sub Large woody debris and	merged or pools.	emerged ac	quatic vegeta	tion, overhangii	ng banks/r	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs Aquatic insects were obs	served.	<i>(list)</i> : Potential	for amphi	bians and r	eptiles.					
Disturbances (ex: livesto The banks are eroded.	ck acces	s, manure	in waterboo	dy, waste dis	charge p	ipes):				
Observation Notes: The feature is contiguou	s with sa	ase1011i.	. The feat	ure meande	ers throu	ugh a woodlan	d. Sase1009	e empties into	this reach of	the stream.



sase1010i_E (across)



sase1010i_N (downstream)



sase1010i_S (upstream)

valerbody bala	JIICCL									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Project	t					2020-06-02			sase1011i	
State:		County/	Parish:			USGS Wate	body Name			
Wisconsin		Ashland	I			UNT to Mare	engo River			
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		DMP/AF	RK			46.420995			-90.830433	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wa	ter	☐ Clear		Ø	Turbid	☐Sheen on Surface	□Surfac	e Scum 🗆	Algal Mats □Other
Existing Condition ^a : (check one)	Highly	Function	nal Stream	☑ Mo	oderately	/ Functional S		☐ Functionally	Impaired Stre	eam
Feature Description:	Natural		☐ Artificia	al, man-ma	de 🗆 I	Manipulated				
Flow Regime: (check one)	Ephem	eral	✓ Interm	ittent		Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Mean	dering						
There is turbid, flowing w	ator wit		sature dur	ing the hold	a sui vey.					
Measurements										
Depth of Water: 1 f	t.	N/A□	Unknov	wn□ W a	ter Edge	to Water Ed	ge: <u>5</u> ft.	N/A□	OHWM Widt	:h: <u>5</u> ft.
OHWM Indicator: (check all that apply)	☑ CI	ear line o	on bank	Shelvi	ng	□Wrested v	egetation	☑ Scouring		☐Water staining
(nt, matte		□Wrack	line	☑ Litter and o	debris	☐ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	le □ G	iravel	☐ Sand	✓ Silt/ clay	y 🗆 Organic
Observations										
Riparian Zone Present:	□Y€	es		No						
Vegetation Layers: (check all that apply)	☑ Tr	ees		Saplings/S	hrubs	✓ Herbs				
Dominant Bank Vegetat Tilia americana, Abies ba Calamagrostis canadens	i on (list alsamea is, Bron): , Prunus nus inern	virginiana	a, Carex gra	acillima,	Equisetum ar	vense, Caltha	a palustris, Sali	x petiolaris, A	Adiantum pedatum,
Aquatic Habitats (ex: subs Small riffles, runs, and po	merged or Ools. La	emerged ac rge wood	quatic vegeta dy debris.	tion, overhang	ing banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs Aquatic insects were obs							or amphibians	s and reptiles to	o utilize the fe	eature.
Disturbances (ex: livestor The banks of the feature	ck access are ero	s, manure ded.	in waterbo	dy, waste dis	scharge pi	ipes):				
Observation Notes: The feature is an intermit eroded, and the water is										



sase1011i_S (across)



sase1011i_NW (downstream)



sase1011i_SW (upstream)

Trater Body Batt	4 011000												
Description													
Project Name:						Date:			Waterbody Survey ID:				
Line 5 Relocation Pro	ject					2020-06-03			sase1015i				
State:		County/l	Parish:			USGS Waterbody Name:							
Wisconsin		Ashland				UNT to Mar							
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:				
Enbridge		DMP/AR	RK			46.419167			-90.824596				
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Route ☐ A			ccess Road □Facility □Other							
Waterbody Type:	☐ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal	al Other				
Water Appearance: (check one)	□ No Wa	er	☑ Clear			☐ Sheen on	Surfac	e Scum □Al	gal Mats □Other				
Existing Condition ^a : (check one)	☑ Highly	Function	al Stream	V	Moderately	y Functional S	Surface Stream	☐ Functionally	Impaired Strea	m			
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-ı	made \square	Manipulated							
Flow Regime: (check one)	☐ Ephem	eral	✓ Interm	ittent		Perennial	☐ Connection Connection	ting					
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meand	lering									
Measurements													
Depth of Water: 1	ft.	N/A□	Unknov	vn 🗆 🛛 V	Water Edge	e to Water Ed	ge: 2 ft.	N/A□	OHWM Width	: <u>2</u> ft.			
OHWM Indicator: (check all that apply)	☑ CI	ear line c	on bank	□She	elving	□Wrested v	egetation	☑ Scouring		☐Water staining			
(спеск ан тасарру)		ent, matte		Ľ Wra	ack line	☑ Litter and	debris	☐ Abrupt plan change	t community	☐Soil characteristic change			
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	ole 🗆 🤇	Gravel	☐ Sand	✓ Silt/ clay	□ Organic			
Observations													
Riparian Zone Preser	nt: 🗆 Ye	es S	I	No									
Vegetation Layers: (check all that apply)	□ Tr	ees	v (Saplings	s/Shrubs	✓ Herbs							
Dominant Bank Vege Salix petiolaris, Ribes	etation (list americant) : im, Corni	us alba, S	olidago	gigantea, E	Bromus inermi	s						
Aquatic Habitats (ex. Small riffles and pools	submerged or s, overhang	emerged aq Jing vege	quatic vegetat tation.	tion, overha	anging banks/r	roots, leaf packs, l	arge submerged w	vood, riffles, deep po	ools, etc.):				
Aquatic Organisms O Aquatic insects were	Observed (observed.)	<i>Tist)</i> : Amphibia	ıns and rep	ptiles ar	e assumed	to use the fea	ature.						
Disturbances (ex: live The feature flows thro	stock acces ugh a culv	s, manure ert under	in waterboo a lightly u	dy, waste ised field	discharge p d road on th	ipes): he north end.							
Observation Notes: The intermittent streat small, lightly used field							located betw	een a small wo	odland and an	alfalfa field. There is a			



sase1015i_W (across)



sase1015i_NW (downstream)



sase1015i_SW (upstream)

Tratorboay Bat	4 011000													
Description														
Project Name:					Date:			Waterbody Survey ID:						
Line 5 Relocation Pro	ject						2020-06-04				sase1016e			
State:		County	/Parish:				USGS Waterbody Name:							
Wisconsin		Ashlan	d				UNT to Marengo River							
Company:		Crew Member Initials:					Latitude:			Longitude:				
Enbridge	ARK/DMP					46.419857				-90.819312				
Survey Type: (check one)	☐ Center	line	□ Re-Ro	oute		V	Access Road	□Facility		Other				
Waterbody Type:	□ River		☐ Stream	m		7	Ditch	☐ Swale		☐ Canal		Other		
Water Appearance:	✓ No Wa	ter	☐ Clear	Clear			urbid	□Sheen c	on	Surfac	e Scum	Algal Ma	ats □Ot	her
(check one) Existing Condition a: (check one)	☐ Highly	Functio	nal Stream	n [□ Moder	ately	/ Functional S	Impaired Str	eam					
Feature Description:	☐ Natura	I	✓ Artifici	ial, mar	n-made		Manipulated							
Flow Regime: (check one)	☑ Ephem	neral	□ Interm	nittent			Perennial	☐ Conne Swale	ecting					
Sinuosity within Survey Corridor: (check one)	✓ Straigh	nt	☐ Mean	dering										
Measurements														
Depth of Water: 0	ft.	N/A□	Unkno	wn□	Water E	Edge	to Water Ed	l ge: 0 f	ft.	N/A□	OHWM Wid	th: <u>1</u>	ft.	
OHWM Indicator: (check all that apply)	┏ C	lear line	on bank	□SI	nelving		□Wrested v	egetation	□Sco	ouring		□Wa	ater staining	g
(ent, matt ing vege		□W	rack line		□Litter and	debris	⊈ Abi chanç		t community	⊠ Soi chan	il character ge	istic
Dominant Substrate: (check all that apply)	□Ве	edrock	□Во	oulder	□ C	obb	le 🗆 (Gravel	□ Sa	nd	✓ Silt/ cla	ay	☐ Organi	С
Observations														
Riparian Zone Prese	nt: 🗆 Ye	es	ď	No										
Vegetation Layers: (check all that apply)	□ Tr	rees		Saplin	gs/Shrub	s	✓ Herbs							
Dominant Bank Vege Phalaris arundinacea	etation <i>(lis:</i> Equisetur	t): n arvens	se, Ranunc	culus a	cris, Care	ex st	ipata							
Aquatic Habitats (ex: None.	submerged or	emerged a	aquatic vegeta	ation, ove	rhanging ba	anks/ro	oots, leaf packs, l	arge submerged	d wood, riffl	es, deep po	ools, etc.):			
Aquatic Organisms (None.	Observed	(list):												
Disturbances (ex: live Stormwater runoff fro	stock acces n adjacent	s, manure t road ar	e in waterbo nd hay field	ody, was d.	te dischar	ge pi	pes):							
Observation Notes: None.														



sase1016e_W (across)



sase1016e_S (downstream)



sase1016e_N (upstream)

Waterbody Data S	iicci												
Description													
Project Name:						Date:			Waterbody Survey ID:				
Line 5 Relocation Project						2020-06-03			sase1013e				
State:	C	County/P	arish:			USGS Waterbody Name:							
Wisconsin	/	Ashland				UNT to Mare	ngo River						
Company:	C	rew Me	mber Init	ials:		Latitude:			Longitude:				
Enbridge	I	OMP/ARI	K			46.418837			-90.821168				
Survey Type:	Centerlin	ne [☐ Re-Ro	ute	V	Access Road	□Facility	□Other					
Waterbody Type: (check one)	River	[✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other			
Water Appearance: (check one)	one)							urbid □Sheen on □Surface Scum □Algal Mats □Oth Surface					
Existing Condition a:	Highly F	unctiona	al Stream	☑ Mo	derately	y Functional S		☐ Functionally	Impaired Stre	am			
Feature Description: V N (check one)	latural	[☐ Artificia	al, man-mad	de 🗆	Manipulated							
Flow Regime:	pheme	ral [☐ Intermi	ittent		Perennial	☐ Connect	ting					
Sinuosity within Survey Corridor:	Straight	[✓ Meand	lering									
There was turbid water wit	illii üle	reature C	during the	riieiu surve	y.								
Measurements													
Depth of Water: 1 ft.	١	I/A□	Unknov	vn□ Wate	er Edge	to Water Ed	ge: <u>4</u> ft.	N/A□	OHWM Widt	h : <u>4</u> ft.			
OHWM Indicator: (check all that apply)	☑ Cle	ar line o	n bank	□Shelvin	g	□Wrested ve	getation	□Scouring		☐Water staining			
(oneon all distribution)		t, matted		□Wrack I	ine	☑ Litter and o	lebris	☐ Abrupt plan change	t community	☐Soil characteristic change			
Dominant Substrate: (check all that apply)	□ Bed	drock	□ Во	ulder [☐ Cobb	le □ G	ravel	☐ Sand	✓ Silt/ clay	/ □ Organic			
Observations													
Riparian Zone Present:	☑ Yes	5	<u> </u>	No									
Vegetation Layers: (check all that apply)	☑ Tre	es	Ø 9	Saplings/Sh	rubs	✓ Herbs							
Dominant Bank Vegetation (list): Bromus inermis, Glyceria cf striata, Fraxinus pennsylvanica, Populus tremuloides, Ribes americanum													
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools, overhanging vegetation, and large woody debris.													
Aquatic Organisms Observed (list): We only observed aquatic insects, but reptiles and amphibians could utilize the feature.													
Disturbances (ex: livestock The feature is surrounded	Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature is surrounded by alfalfa fields.												
Observation Notes: The feature flows west to e	east thro	ough agr	ricultural I	and. The fe	ature te	erminates into	wetland was	e1048e.					



sase1013e_N (across)



sase1013e_E (downstream)



sase1013e_SW (upstream)

Tratorbody Data	<u> </u>											
Description												
Project Name:					Date:			Waterbody Survey ID:				
Line 5 Relocation Project	t				2020-06-03			sase1014e				
State:	Coi	unty/Parish:			USGS Waterbody Name:							
Wisconsin	Asl	nland			UNT to Mar	UNT to Marengo River						
Company:	Cre	w Member Ini	tials:		Latitude:			Longitude:				
Enbridge	DM	IP/ARK			46.418461			-90.822181				
Survey Type:	Centerline	ne ☐ Re-Route 🗹			Access Road	□Facility	□Other					
, ,	River	✓ Stream			Ditch	☐ Swale	☐ Cana	I □ Other				
	No Water	☐ Clear			Γurbid	□Sheen o	on □Surfac	rface Scum □Algal Mats □Other				
,	Highly Fur	nctional Stream	□ Mode	erately	y Functional S	Surface Stream	Functionally	Impaired Stream				
Feature Description:	Natural	☐ Artifici	al, man-made	V	Manipulated							
	Ephemera	I ☐ Interm	ittent		Perennial	☐ Conne Swale	ecting					
, ,	Straight	✓ Mean	dering			Owalo						
Measurements												
Depth of Water: 0	ft. N/A	.□ Unknov	wn□ Water	Edge	to Water Ed	lge : <u>0</u> f	t. N/A□	OHWM Width	n: <u>1</u> f	t.		
OHWM Indicator: (check all that apply)	✓ Clear	line on bank	□Shelving		□Wrested v	egetation	□Scouring		□Water	staining		
(спеск ан шасарруу)		matted, or vegetation	□Wrack line	е	☑ Litter and	debris	□ Abrupt plar change	t community	□Soil change	aracteristic		
Dominant Substrate: (check all that apply)	☐ Bedro	ck 🗆 Bo	ulder 🗆	Cobb	le 🗆 (Gravel	☐ Sand	✓ Silt/ clay		Organic		
Observations												
Riparian Zone Present: (check one)	☐ Yes		No									
Vegetation Layers: (check all that apply)	✓ Trees		Saplings/Shru	bs	✓ Herbs	;						
Dominant Bank Vegeta Fraxinus nigra, Crataegi	tion (list): us sp., Malu	s pumila, Brom	us inermis, So	irpus	microcarpus	, Lysimachia	a ciliata					
Aquatic Habitats (ex. sub Pools and overhanging	merged or emer egetation.	rged aquatic vegeta	tion, overhanging b	oanks/r	oots, leaf packs, l	arge submerged	I wood, riffles, deep p	ools, etc.):				
Aquatic Organisms Ob None.	served (list)	:										
Disturbances (ex: livesto The stream is surrounde	ck access, med by alfalfa	anure in waterbo field.	dy, waste discha	arge p	ipes):							
Observation Notes: The ephemeral stream f wase1048e to the east.	lows west to	east through a	agricultural lan	d. Th	is feature is o	contiguous w	vith stream sase	1013e and eve	entually lea	ds to wetland		



sase1014e_N (across)



sase1014e_E (downstream)



sase1014e_W (upstream)

waterbody bata	Officet												
Description													
Project Name:						Date:			Waterbody Survey ID:				
Line 5 Relocation Project	t					2020-06-04			sase1017e				
State:		County/	Parish:			USGS Waterbody Name:							
Wisconsin		Ashland	I			UNT to Marengo River							
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:				
Enbridge		DMP/AF	RK			46.414109			-90.822288				
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute	□A	ccess Road	□Facility	□Other					
Waterbody Type: (check one)	River		✓ Stream	n		Ditch	☐ Swale	☐ Canal		Other			
Water Appearance: (check one)							☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other			
Existing Condition a: (check one)	Highly	Function	nal Stream		Moderately	/ Functional S		Functionally	Impaired Stre	am			
Feature Description: (check one)	Natural		☐ Artificia	al, man-m	nade 🗹 l	Manipulated							
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connection Connectica Connection Connectica Connection Connection Connection Connection Connection Connectica Connection Connection Connectica Connecti	ting					
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meano	dering									
There was no flowing wa	ater with	n the str	eam dunn	g the surv	vey. nowe	ver, a turbio p	ooi oi water	was observed	lear the curve	ert.			
Measurements													
Depth of Water: 0	ft.	N/A□	Unknov	wn□ W	ater Edge	to Water Ed	ge: <u>0</u> ft.	N/A□	OHWM Widt	h : <u>2</u> ft.			
OHWM Indicator: (check all that apply)	☑ CI	ear line o	on bank	□Shelv	ving	☑ Wrested ve	egetation	□Scouring		□Water staining			
(oresit all that apply)		nt, matte		□Wrac	ck line	□Litter and o	lebris	□ Abrupt plan change	t community	☐Soil characteristic change			
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	☐ Cobbl	le 🗆 G	ravel	☐ Sand	✓ Silt/ clay	/ □ Organic			
Observations													
Riparian Zone Present:	□Y€	es	V 1	No									
Vegetation Layers:	□ Tr	ees		Saplings/	Shrubs	✓ Herbs							
Dominant Bank Vegeta Barbarea vulgaris, Brom	tion (list us inerm): nis											
Aquatic Habitats (ex: sub Small pool.	merged or	emerged a	quatic vegeta	tion, overhar	nging banks/ro	oots, leaf packs, la	rge submerged w	wood, riffles, deep po	ools, etc.):				
Aquatic Organisms Obs Aquatic insects.	served ((list):											
Disturbances (ex: livesto The feature flows under	ck access a road tl	s, manure nrough a	in waterboo culvert. T	dy, waste d he feature	discharge pi e also flow	pes): /s into a plant	ed corn field.						
Observation Notes: The ephemeral stream fi under the road through a			-			-	on the south s	side of the roac	l within a swa	le in a corn field. It flows			



sase1017e_SW (across)



sase1017e_NE (downstream)



sase1017e_SW (upstream)