

# AREA PLAN COMMISSION

OF TIPPECANOE COUNTY

20 NORTH 3RD STREET  
LAFAYETTE, INDIANA 47901-1209

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www.tippecanoe.in.gov/apc

SALLIE DELL FAHEY  
EXECUTIVE DIRECTOR

Date: January 17, 2014

Re: RED FLAG INVESTIGATION  
DES #TBD  
Kingston Drive  
Kingston Trail  
West Lafayette, Tippecanoe County, Indiana

## NARRATIVE

Construction of the Kingston Trail project may include some small retaining walls. Utility impacts should be minor. All land is publically owned except a section of easement or right of way may need to be acquired from one parcel owner.

## SUMMARY

INFRASTRUCTURE			
As identified below the following items of concern were found within ½ mile:			
Religious Facilities	N/A	Recreational Facilities	1
Airports	N/A	Pipelines	N/A
Cemeteries	1	Railroads	N/A
Hospitals	N/A	Trails	4
Schools	2 (see notes)	Managed Lands	5

Grandview Cemetery is the only cemetery within ½ mile of the project. It is not in the immediate project area and is unlikely to be affected by construction.

Happy Hollow Elementary and West Lafayette High School are both within the ½ mile radius. WLCS's administrative offices are also within ½ mile of the project. Data provided by INDOT identified the administrative offices as a school and provided no information for Happy Hollow Elementary. Happy Hollow Elementary is within 500 feet of the project and is the only school to be affected by construction.

Mascouten Park is the only listed recreation facility. Four additional parks, Happy Hollow, Lyboubt, Riverfront and McAllister are all within ½ mile of the project area. The five parks are identified as managed lands. Happy Hollow Park is less than 200 feet from the project's eastern terminus and is the only park likely to be affected. The rest are more than 1,000 feet away.

<b>WATER RESOURCES</b>			
As identified below the following items of concern were found within ½ mile:			
NWI - Points	<b>N/A</b>	NWI - Wetlands	<b>6</b>
Karst Springs	<b>N/A</b>	IDEM 303d Listed Lakes	<b>N/A</b>
Canal Structures – Historic	<b>N/A</b>	Lakes	<b>2</b>
NWI - Lines	<b>N/A</b>	Floodplain - DFIRM	<b>11</b>
IDEM 303d Listed Rivers and Streams (Impaired)	<b>1</b>	Cave Entrance Density	<b>N/A</b>
Rivers and Streams	<b>13</b>	Sinkhole Areas	<b>N/A</b>
Canal Routes - Historic	<b>N/A</b>	Sinking-Stream Basins	<b>N/A</b>

All water resources within ½ mile of the project are associated with the Wabash River. The Wabash is listed as an impaired stream. Any tributaries are included as rivers or streams. Wetlands border the river. All water resources in INDOT-provided data are more than 500 feet from the project area and unlikely to be affected by construction.

<b>MINING/MINERAL EXPLORATION</b>			
As identified below the following items of concern were found within ½ mile:			
Petroleum Wells	<b>N/A</b>	Petroleum Fields	<b>N/A</b>
Mines – Surface	<b>N/A</b>	Mines – Underground	<b>N/A</b>

No mining or mineral exploration occurs within ½ mile of the project.

<b>HAZMAT CONCERNS</b>			
As identified below the following items of concern were found within ½ mile:			
Brownfield Sites	<b>N/A</b>	Restricted Waste Sites	<b>N/A</b>
Corrective Action Sites (RCRA)	<b>N/A</b>	Septage Waste Sites	<b>N/A</b>
Confined Feeding Operations	<b>N/A</b>	Solid Waste Landfills	<b>N/A</b>
Construction Demolition Waste	<b>N/A</b>	State Cleanup Sites	<b>N/A</b>
Industrial Waste Sites (RCRA Generators)	<b>N/A</b>	Tire Waste Sites	<b>N/A</b>
Infectious/Medical Waste Sites	<b>N/A</b>	Waste Transfer Stations	<b>N/A</b>
Lagoon/Surface Impoundments	<b>N/A</b>	RCRA Waste Treatment, Storage, and Disposal Sites (TSDs)	<b>N/A</b>
Leaking Underground Storage Tanks (LUSTs)	<b>1</b>	Underground Storage Tanks	<b>1</b>
Manufactured Gas Plant Sites	<b>N/A</b>	Voluntary Remediation Program	<b>N/A</b>
NPDES Facilities	<b>N/A</b>	Superfund	<b>N/A</b>
NPDES Pipe Locations	<b>4</b>	Institutional Control Sites	<b>N/A</b>
Open Dump Sites	<b>N/A</b>	Other (see notes)	<b>1</b>

One underground storage tank is indicated within ½ mile of the property. The listed owner is Lifesmiles Dentistry.

One LUST was identified with a location at Goodnight's Auto Care. The listed location is roughly 250 feet from the project's western terminus. This is the only hazmat concern likely to be affected by construction.

Four NPDES pipe locations appear within ½ mile buffer area, with one for West Lafayette's wastewater treatment plant and three for TRW's Ross Gear Division. The three pipes at TRW carry different materials.

One point, identified only as a "spill", has a location matching West Lafayette High School.

### **Ecological Information**

The Tippecanoe County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached. The ETR species on the state or federal registers are highlighted.

### **Cultural Resources**

The Hills and Dales and New Chauncey historic districts are both within ½ mile of the project. New Chauncey is closer at about 700 feet away.

### **RECOMMENDATIONS**

**INFRASTRUCTURE:** Prior coordination with West Lafayette's Happy Hollow School and the Department of Parks and Recreation will be needed to minimize possible effects on the school and park.

**WATER RESOURCES:** N/A

**MINING/MINERAL EXPLORATION:** N/A

**HAZMAT CONCERNS:** The LUST's location should be verified with a site visit. Coordination with the property owner will likely be necessary.

**ECOLOGICAL INFORMATION:** N/A

**CULTURAL RESOURCES:** The historic district neighborhood associations should be involved as their neighborhoods may be affected. Other relevant historic preservation agencies should be contacted as situations indicate.

Prepared by:

Anna Burman

Transportation GIS Specialist

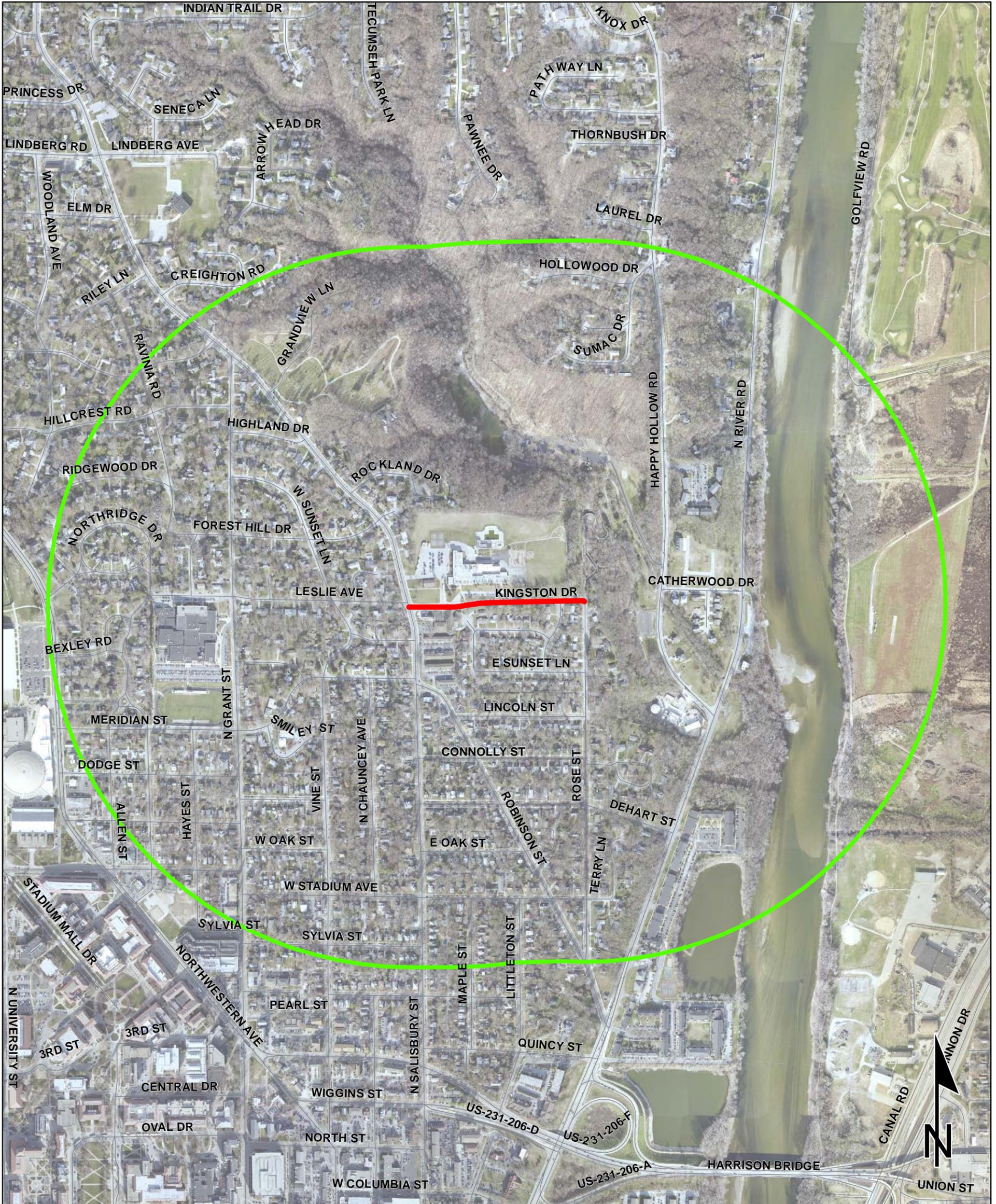
Area Plan Commission of Tippecanoe County

# PROJECT AREA

## Kingston Trail

### Des. No. TBD, Trail Construction

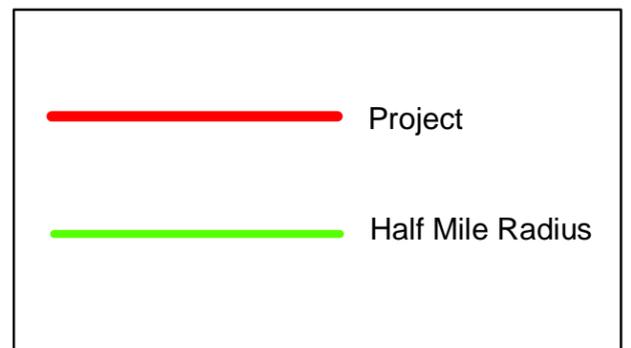
### Tippecanoe County, Indiana



**Sources:**  
**Non Orthophotography Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83



## Project Area Map



This map is intended to serve as an aid in graphic representation only and was provided by INDOT. This information is not warranted for accuracy or other purposes.

# INFRASTRUCTURE

## Kingston Trail

### Des. No. TBD, Trail Construction

### Tippecanoe County, Indiana



Sources: 0.1 0.05 0 0.1 Miles

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### Infrastructure Legend

Religious Bldg	Recreation	Project Area
Religious Bldg	Pipeline	Half Mile Radius
Airport	Railroad	Interstate
Cemeteries	Trails	State Route
Hospital	Managed Lands	US Route
School	County Boundary	Local Road

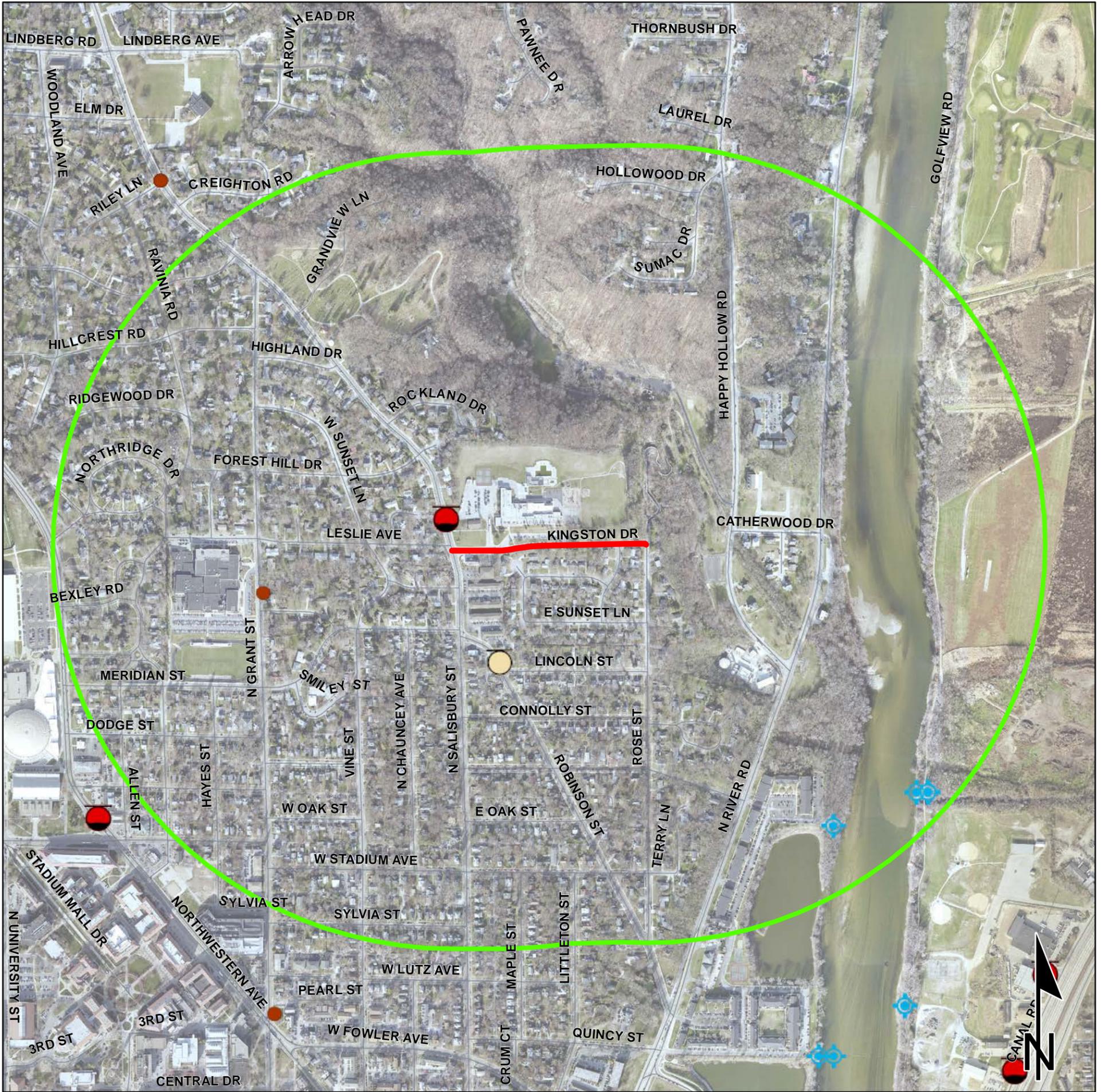


# HAZMAT CONCERNS

## Kingston Trail

### Des. No. TBD, Trail Construction

### Tippecanoe County, Indiana



### HazMat Concerns Legend

	Brownfield		Restricted Waste Site		Institutional Controls
	RCRA Corrective Action Sites		Septage Waste Site		County Boundary
	Confined Feeding Operation		Solid Waste Landfill		Project Area
	Construction/Demolition Site		State Cleanup Site		Half Mile Radius
	Leaking Underground Storage Tank		Superfund		Interstate
	Manufactured Gas Plant		Tire Waste Site		State Route
	NPDES Facilities		Underground Storage Tank		US Route
	NPDES Pipe Locations		Unspecified Spill		Local Road
	Open Dump Waste Site		Voluntary Remediation Program		
	RCRA Generator/TSD		Waste Transfer Station		

0.1 0.05 0 0.1  
Miles

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Indiana County Endangered, Threatened and Rare Species List

County: Tippecanoe

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Mollusk: Bivalvia (Mussels)</b>					
Cyprogenia stegaria	Eastern Fanshell Pearlymussel	LE	SE	G1Q	S1
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Epioblasma torulosa torulosa	Tubercled Blossom	LE	SE	G2TX	SX
Epioblasma triquetra	Snuffbox	LE	SE	G3	S1
Fusconaia subrotunda	Longsolid		SE	G3	SX
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Lampsilis ovata	Pocketbook			G5	S2
Leptodea leptodon	Scaleshell	LE	SX	G1G2	SX
Ligumia recta	Black Sandshell			G5	S2
Obovaria retusa	Ring Pink	LE	SX	G1	SX
Obovaria subrotunda	Round Hickorynut		SSC	G4	S1
Plethobasus cicatricosus	White Wartyback	LE	SE	G1	SX
Plethobasus cyphus	Sheepnose	LE	SE	G3	S1
Pleurobema clava	Clubshell	LE	SE	G2	S1
Pleurobema cordatum	Ohio Pigtoe		SSC	G4	S2
Pleurobema plenum	Rough Pigtoe	LE	SE	G1	S1
Pleurobema rubrum	Pyramid Pigtoe		SE	G2G3	SX
Potamilus capax	Fat Pocketbook	LE	SE	G1G2	S1
Ptychobranchnus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Simpsonaias ambigua	Salamander Mussel		SSC	G3	S2
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Villosa fabalis	Rayed Bean	LE	SSC	G2	S1
<b>Insect: Coleoptera (Beetles)</b>					
Lissobiops serpentinus	A Rove Beetle		SE	GNR	S1
<b>Insect: Ephemeroptera (Mayflies)</b>					
Paracloeodes minutus	A Small Minnow Mayfly		SR	G5	S2
<b>Insect: Lepidoptera (Butterflies &amp; Moths)</b>					
Speyeria idalia	Regal Fritillary		SE	G3	S1
<b>Insect: Mecoptera</b>					
Merope tuber	Earwig Scorpionfly		SE	G3G5	S1
<b>Insect: Odonata (Dragonflies &amp; Damselflies)</b>					
Erpetogomphus designatus	Eastern Ringtail		ST	G5	S2
Somatochlora tenebrosa	Clamp-tipped Emerald		SR	G5	S2S3
<b>Fish</b>					
Etheostoma tippecanoe	Tippecanoe Darter		SSC	G3G4	S3
<b>Amphibian</b>					
Hemidactylum scutatum	Four-toed Salamander		SSC	G5	S2

Indiana Natural Heritage Data Center  
Division of Nature Preserves  
Indiana Department of Natural Resources  
This data is not the result of comprehensive county surveys.

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting  
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list  
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank  
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County: Tippecanoe

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<b>Reptile</b>					
Clemmys guttata	Spotted Turtle		SE	G5	S2
Emydoidea blandingii	Blanding's Turtle		SE	G4	S2
Liochlorophis vernalis	Smooth Green Snake		SE	G5	S2
Terrapene carolina carolina	Eastern Box Turtle		SSC	G5T5	S3
Terrapene ornata ornata	Ornate Box Turtle		SE	G5T5	S1
<b>Bird</b>					
Aimophila aestivalis	Bachman's Sparrow			G3	SXB
Ammodramus henslowii	Henslow's Sparrow		SE	G4	S3B
Ardea herodias	Great Blue Heron			G5	S4B
Asio flammeus	Short-eared Owl		SE	G5	S2
Asio otus	Long-eared Owl			G5	S2
Aythya collaris	Ring-necked Duck			G5	SHB
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Botaurus lentiginosus	American Bittern		SE	G4	S2B
Buteo platypterus	Broad-winged Hawk	No Status	SSC	G5	S3B
Carduelis pinus	Pine Siskin			G5	S3N
Cistothorus platensis	Sedge Wren		SE	G5	S3B
Dendroica cerulea	Cerulean Warbler		SE	G4	S3B
Falco peregrinus	Peregrine Falcon	No Status	SE	G4	S2B
Grus canadensis	Sandhill Crane	No Status	SSC	G5	S2B,S1N
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SSC	G5	S2
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike	No Status	SE	G4	S3B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Rallus elegans	King Rail		SE	G4	S1B
Sturnella neglecta	Western Meadowlark		SSC	G5	S2B
Tyto alba	Barn Owl		SE	G5	S2
<b>Mammal</b>					
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat		SSC	G3G4	SH
Geomys bursarius	Plains Pocket Gopher		SSC	G5	S2
Lasiurus borealis	Eastern Red Bat		SSC	G5	S4
Mustela nivalis	Least Weasel		SSC	G5	S2?
Myotis septentrionalis	Northern Myotis		SSC	G4	S3
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Nycticeius humeralis	Evening Bat		SE	G5	S1
Reithrodontomys megalotis	Western Harvest Mouse			G5	S2
Spermophilus franklinii	Franklin's Ground Squirrel		SE	G5	S2
Taxidea taxus	American Badger		SSC	G5	S2

**Vascular Plant**

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Indiana County Endangered, Threatened and Rare Species List

County: Tippecanoe

Species Name	Common Name	FED	STATE	GRANK	SRANK
Androsace occidentalis	Western Rockjasmine		ST	G5	S2
Arenaria patula	Pitcher's Stitchwort		SE	G4	S1
Aster oblongifolius	Aromatic Aster		SR	G5	S2
Astragalus tennesseensis	Tennessee Milk-vetch		SRE	G3	SX
Bacopa rotundifolia	Roundleaf Water-hyssop		ST	G5	S1
Besseyia bullii	Kitten Tails		SE	G3	S1
Botrychium matricariifolium	Chamomile Grape-fern		SR	G5	S2
Botrychium simplex	Least Grape-fern		SE	G5	S1
Camassia angusta	Wild Hyacinth		SE	G5?Q	S1
Carex flava	Yellow Sedge		ST	G5	S2
Carex gravida	Heavy Sedge		SE	G5	S1
Chelone obliqua var. speciosa	Rose Turtlehead		WL	G4T3	S3
Chrysopsis villosa	Hairy Golden-aster		ST	G5	S2
Circaea alpina	Small Enchanter's Nightshade		SX	G5	SX
Cirsium hillii	Hill's Thistle		SE	G3	S1
Coeloglossum viride var. virescens	Long-bract Green Orchis		ST	G5T5	S2
Crataegus pedicellata	Scarlet Hawthorn		ST	G5	S2
Cypripedium candidum	Small White Lady's-slipper		WL	G4	S2
Eriophorum angustifolium	Narrow-leaved Cotton-grass		SR	G5	S2
Erysimum capitatum	Prairie-rocket Wallflower		ST	G5	S2
Euphorbia obtusata	Bluntleaf Spurge		SE	G5	S1
Gentiana alba	Yellow Gentian		SR	G4	S2
Houstonia nigricans	Narrowleaf Summer Bluets		SR	G5	S2
Linum sulcatum	Grooved Yellow Flax		SR	G5	S2
Lithospermum incisum	Narrow-leaved Puccoon		SE	G5	S1
Melampyrum lineare	American Cow-wheat		SR	G5	S2
Muhlenbergia cuspidata	Plains Muhlenbergia		SE	G4	S1
Napaea dioica	Glade Mallow		SR	G4	S2
Onosmodium hispidissimum	Shaggy False-gromwell		SE	G4	S1
Orobanche riparia	Bottomland Broomrape		SE	G5	S2
Oryzopsis racemosa	Black-fruit Mountain-ricegrass		SR	G5	S2
Panicum rigidulum var. pubescens	Long-leaved Panic-grass		SX	G5T5?	SX
Plantago cordata	Heart-leaved Plantain		SE	G4	S1
Poa paludigena	Bog Bluegrass		WL	G3	S3
Psoralea tenuiflora	Few-flowered Scurf-pea		SX	G5	SX
Sanguisorba canadensis	Canada Burnet		SE	G5	S1
Selaginella apoda	Meadow Spike-moss		WL	G5	S1
Silene regia	Royal Catchfly		ST	G3	S2
Trichostema dichotomum	Forked Bluecurl		SR	G5	S2
Viola pedatifida	Prairie Violet		ST	G5	S2

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**Indiana County Endangered, Threatened and Rare Species List**

**County: Tippecanoe**

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>High Quality Natural Community</b>					
Barrens - gravel	Gravel Slope Barrens		SG	G3	S1
Barrens - sand	Sand Barrens		SG	G3	S2
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3
Lake - lake	Lake		SG	GNR	S2
Prairie - dry-mesic	Dry-mesic Prairie		SG	G3	S2
Wetland - fen	Fen		SG	G3	S3
Wetland - marsh	Marsh		SG	GU	S4
Wetland - seep circumneutral	Circumneutral Seep		SG	GU	S1
<b>Other Significant Feature</b>					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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