

<b>LEGEND</b> Proposed Service Point, Type I Proposed Light Pole and Luminaire Proposed Lighting Handhole		<b>STAGE 2 PLANS</b> <b>NOT FOR CONSTRUCTION</b>		RECOMMENDED FOR APPROVAL: _____ DATE: _____ DESIGN ENGINEER: _____ DRAWN: _____ AT: _____ CHECKED: _____ JAD		<b>INDIANA DEPARTMENT OF TRANSPORTATION</b> <b>LIGHTING PLAN</b> STA. 60+50 TO STA. 66+00		BRIDGE FILE: _____ N/A DESIGNATION: 34021251, 2201253 SURVEY BOOK: _____ SHEETS: 52 of 142 ELECTRONIC: _____ CONDUCT: _____ PROJECT: 8292241	
Proposed Bollard Light RRFB Control Cabinet on Controller Cabinet, Type G Pedestal and Type A Foundation		Proposed Lighting Circuit Number WD-1		Proposed Service Point, Type I Proposed Light Pole and Luminaire Proposed Lighting Handhole		Proposed Bollard Light RRFB Control Cabinet on Controller Cabinet, Type G Pedestal and Type A Foundation		Proposed Lighting Handhole	



MATCH LINE LINE "PR-A" STA. 66+00

66+00 67+00 68+00 69+00 70+00 71+00

Hartman Court

Soldiers Home Rd.

Overlook Dr

Hamilton St

Sta. 66+55 "PR-A" 22.6 LL Street Light

Sta. 67+02 "PR-A" 35.6 LL Bollard Light

Sta. 67+76 "PR-A" 35.6 LL Bollard Light

Sta. 68+35 "PR-A" 35.6 LL Bollard Light

Sta. 68+95 "PR-A" 35.6 LL Bollard Light

Sta. 69+55 "PR-A" 35.6 LL Bollard Light

Sta. 70+05 "PR-A" 22.6 LL Street Light

Sta. 71+05 "PR-A" 22.6 LL Street Light

Line "PR-A"

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: AT	
CHECKED: JAD	CHECKED: JAD	

**STAGE 2 PLANS**  
**NOT FOR CONSTRUCTION**

INDIANA  
DEPARTMENT OF TRANSPORTATION  
LIGHTING PLAN  
STA. 66+00 TO STA. 71+50

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	400251, 200253
SURVEY BOOK	SHEETS
ELECTRONIC	53
CONTRACT	1 of 142
829241	400251, 200253

Proposed Bollard Light  
RRFB Control Cabinet on Controller  
Cabinet, Type G Pedestal and Type A Foundation

Proposed Lighting Circuit Number

Proposed Light Pole and Luminaire

Proposed Lighting Handhole

4-1C No. 4 CU Conductor in Plastic Duct in Trench

4-1C No. 4 CU Conductor in Plastic Duct in 2" PVC conduit

Stave for drives, roadway, and alleys.

WD-1

Aug 16, 2024 4:35pm

PLOTTED BY Andytran

DATE: Aug 16, 2024 4:35pm

DIRECTORY: F:\2021\12\10\43 Soldiers Home Road\30 SheetDrawings\15 Lighting\10 Lighting Plans

FILE: 2104843 (R-37911) Lighting.dwg

SCALE: 1" = 20'

DATE: Aug 16, 2024 4:35pm

PLOTTED BY Andytran

DATE: Aug 16, 2024 4:35pm

DIRECTORY: F:\2021\12\10\43 Soldiers Home Road\30 SheetDrawings\15 Lighting\10 Lighting Plans

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DATE: Aug 16, 2024 4:35pm

PLOTTED BY Andytran

DATE: Aug 16, 2024 4:35pm

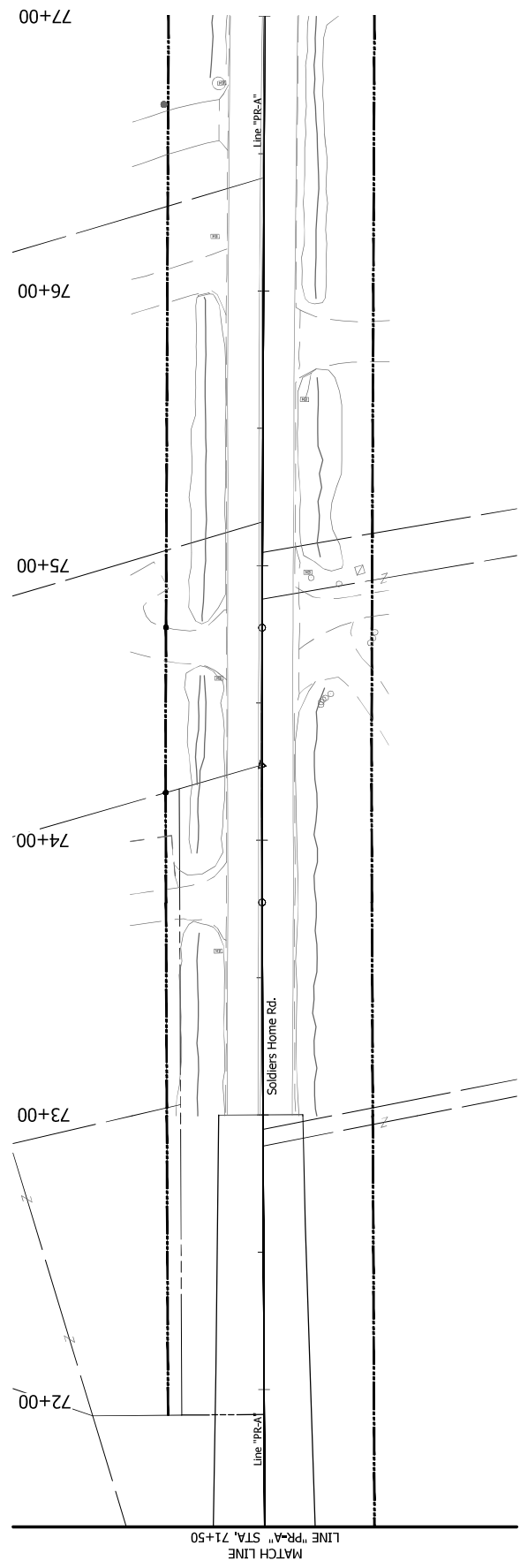
DIRECTORY: F:\2021\12\10\43 Soldiers Home Road\30 SheetDrawings\15 Lighting\10 Lighting Plans

FILE: 2104843 (R-37911) Lighting.dwg

SCALE: 1" = 20'

DATE: Aug 16, 2024 4:35pm

PLOTTED BY Andytran

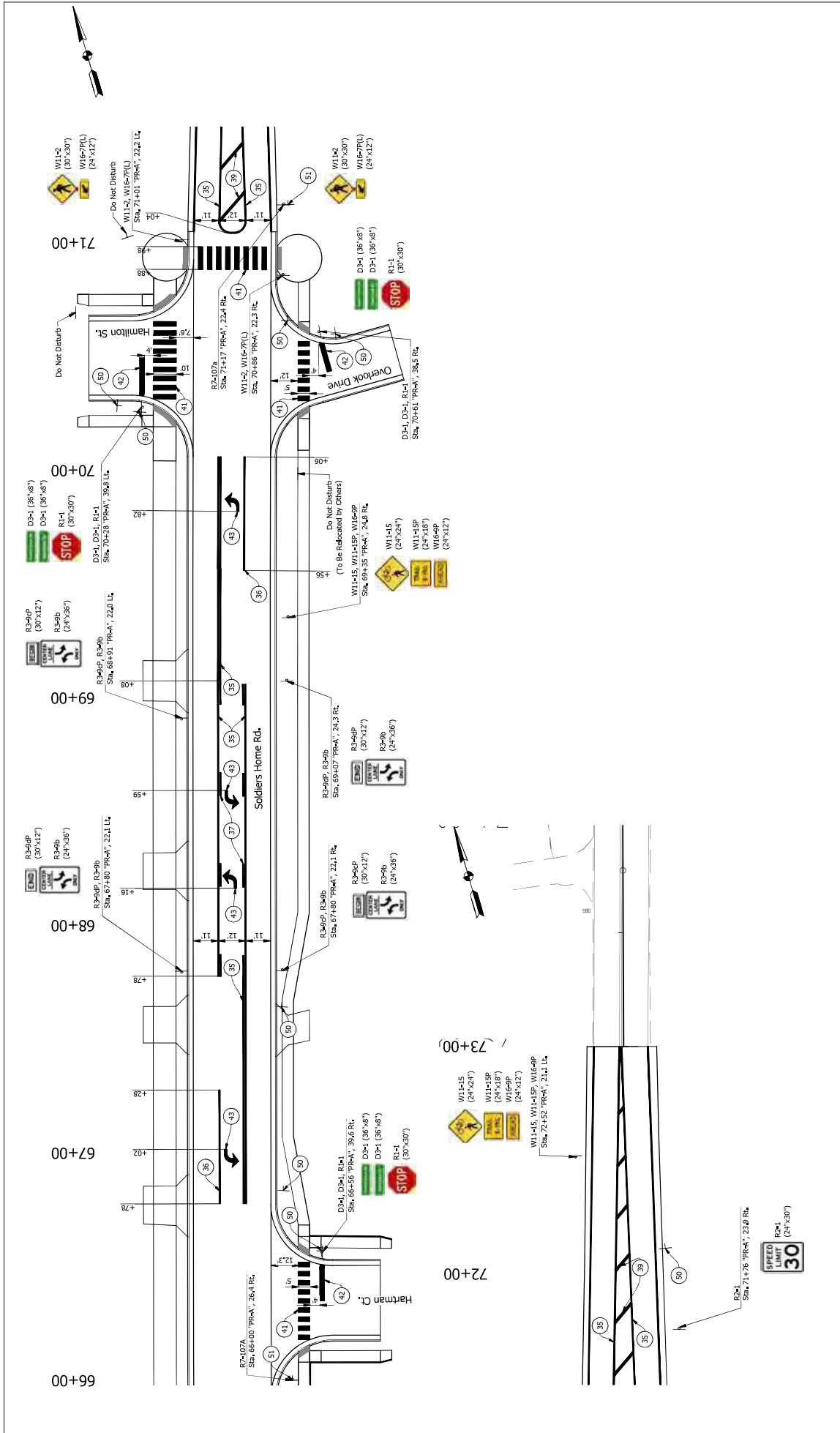


<b>LEGEND</b> Proposed Service Point, Type I Proposed Light Pole and Luminaire Proposed Lighting Handhole Proposed Bollard Light RFB Control Cabinet on Controller Foundation Type G Pedestal and Type A Foundation		Proposed Lighting Circuit Number 4-1C No. 4 CU Conductor in Plastic Duct in Trench 4-1C No. 4 CU Conductor in Plastic Duct in 2" PVC conduit sleeve for drives, roadway, and alleys.	<b>STAGE 2 PLANS</b> <b>NOT FOR CONSTRUCTION</b>	RECOMMENDED FOR APPROVAL: _____ DATE: _____ DESIGN ENGINEER: _____ DRAWN: _____ AT: _____ DESIGNED: _____ CAC: _____ CHECKED: _____ JAD: _____	HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 5' SURVEY BOOK: _____ ELECTRONIC: _____ SHEETS: 54 of 142 PROJECT: _____ BRIDGE FILE: _____
MATCH LINE LINE "PR-A" STA. 71+50		Soldiers Home Rd.	INDIANA DEPARTMENT OF TRANSPORTATION LIGHTING PLAN STA. 71+50 TO STA. 77+00	BRIDGE FILE: _____ DESIGNATION: 402251, 201253 SHEETS: 54 of 142 PROJECT: _____ BRIDGE FILE: 402251, 201253	INDIANA DEPARTMENT OF TRANSPORTATION LIGHTING PLAN STA. 71+50 TO STA. 77+00







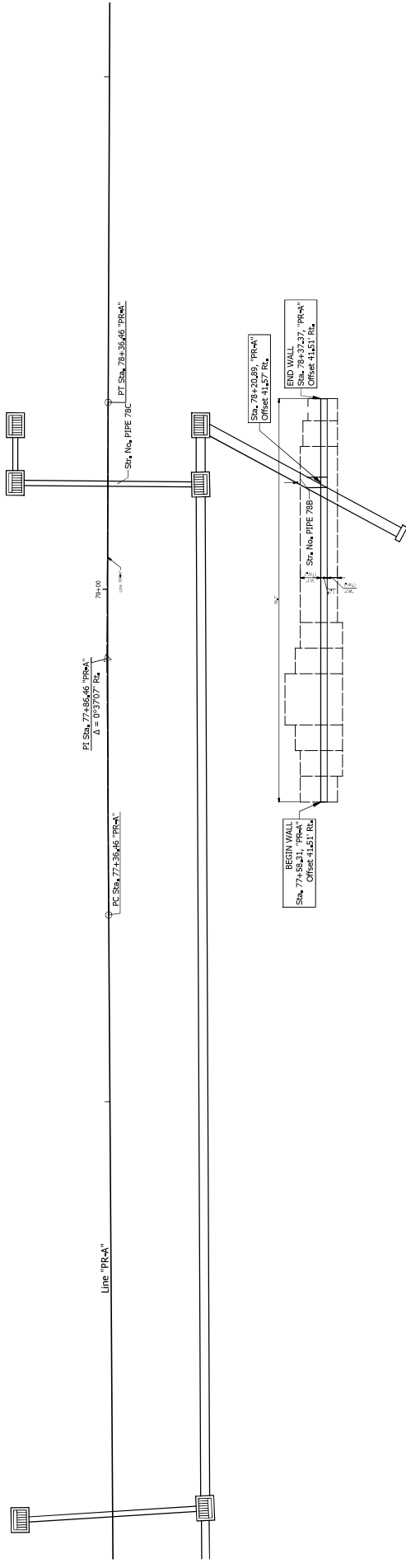


<b>RECOMMENDED FOR APPROVAL</b> <b>DESIGNED:</b> CAC <b>CHECKED:</b> JAD		<b>DESIGN ENGINEER</b> <b>DATE:</b>		<b>BRIDGE FILE</b> N/A <b>DESIGNATION</b> HD1291, 201253 <b>SURVEY BOOK</b> ELECTRONIC <b>SHEETS</b> 58 of 142 <b>PROJECT</b> R29291	
<b>INDIANA</b> <b>DEPARTMENT OF TRANSPORTATION</b>				<b>LINE "PR-A"</b> <b>PAVEMENT MARKINGS &amp; SIGNS</b>	
<b>STAGE 2 PLANS</b> <b>NOT FOR CONSTRUCTION</b>		<b>DESIGNED:</b> CAC <b>CHECKED:</b> JAD		<b>DESIGN ENGINEER</b> <b>DATE:</b>	
<b>LEGEND:</b>		(39) Transverse Marking, Thermoplastic, Crosshatch Line, Yellow, 12 in. (40) Transverse Marking, Thermoplastic, Yield Line, White, 27 in. (41) Transverse Marking, Multi-Component, Crosswalk Line, White, 24 in. (42) Transverse Marking, Multi-Component, Stop Line, White, 24" (43) Pavement Message Marking, Thermoplastic, Line Indication Arrow		(44) Line, Multi-Component, Solid, White, 12 in. (50) Sign, Sheet, and Supports, Remove (51) Sign, Sheet, Reduce Existing Sign(s) and Post(s) Proposed Sign(s) and Post(s)	

DIRECTOR: 2104843 (R-37911) pmt markings and signs.rdw  
 FILE: 2104843 (R-37911) 30 SheetDrawings\55 Signing and Pavement Markings\



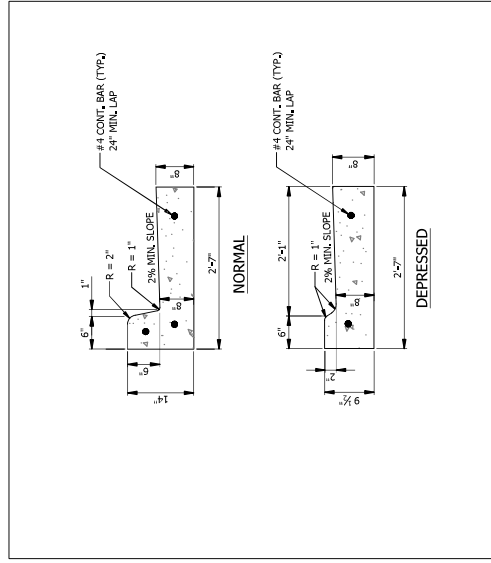
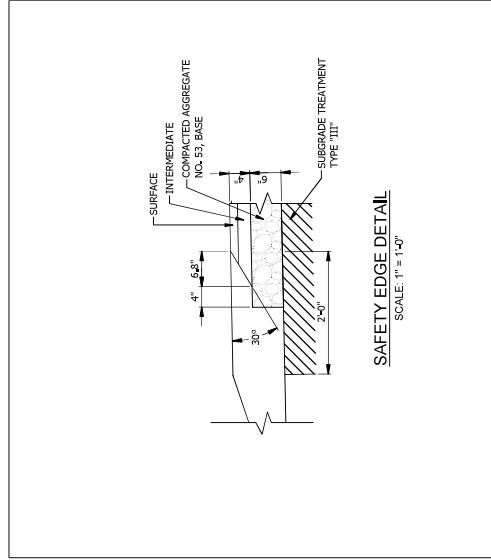
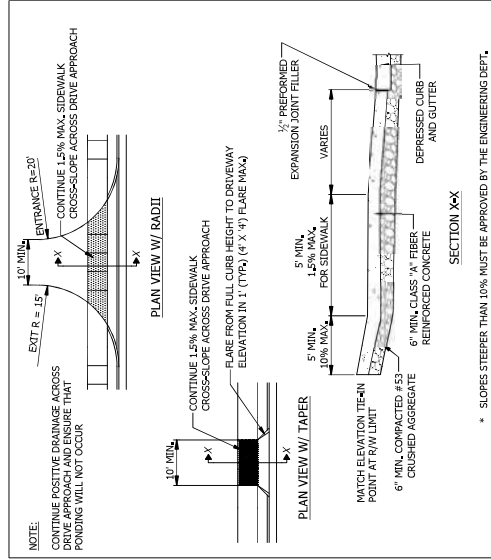
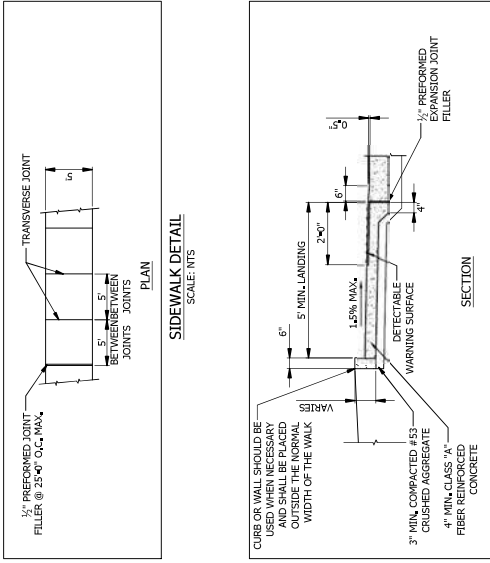
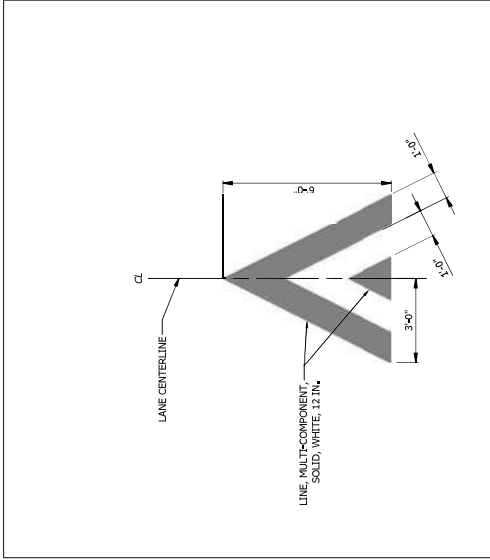
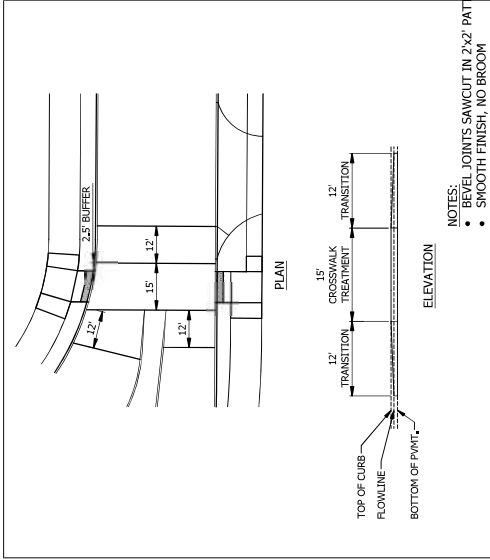




WALL PLAN  
SCALE: 1" = 5'

<b>STAGE 2 PLANS</b> <b>NOT FOR CONSTRUCTION</b>	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER: _____ DATE: _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: N/A VERTICAL SCALE: N/A	BRIDGE FILE: N/A DESIGNATION: 1401251, 201253
	DESIGNED: CAC CHECKED: JAD	DRAWN: AT CHECKED: JAD	RETAINING WALL DETAILS	SURVEY BOOK: 61 ELECTRONIC: 142 CONTRACT: R292241 SHEETS: 142 of 142 PROJECT: 1401251, 201253





BRIDGE FILE	N/A
DESIGNATION	HO1291_2001253
SHEETS	65 of 142
SURVEY BOOK	ELECTRONIC
CONTRACT	PC29211
DATE	1/4/2024, 2:02:53

RECOMMENDED FOR APPROVAL	DATE
DESIGNED: CAC	DRAWN: AT
CHECKED: JAD	CHECKED: JAD

INDIANA
DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAILS NO. 2

STAGE 2 PLANS NOT FOR CONSTRUCTION
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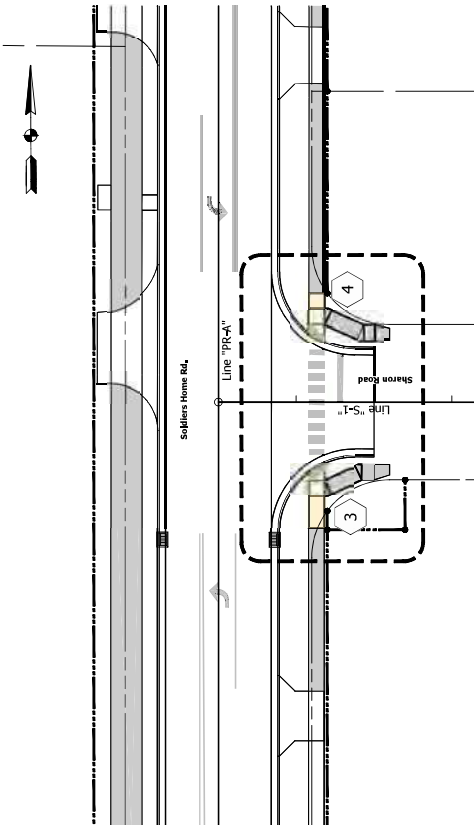


**LEGEND**

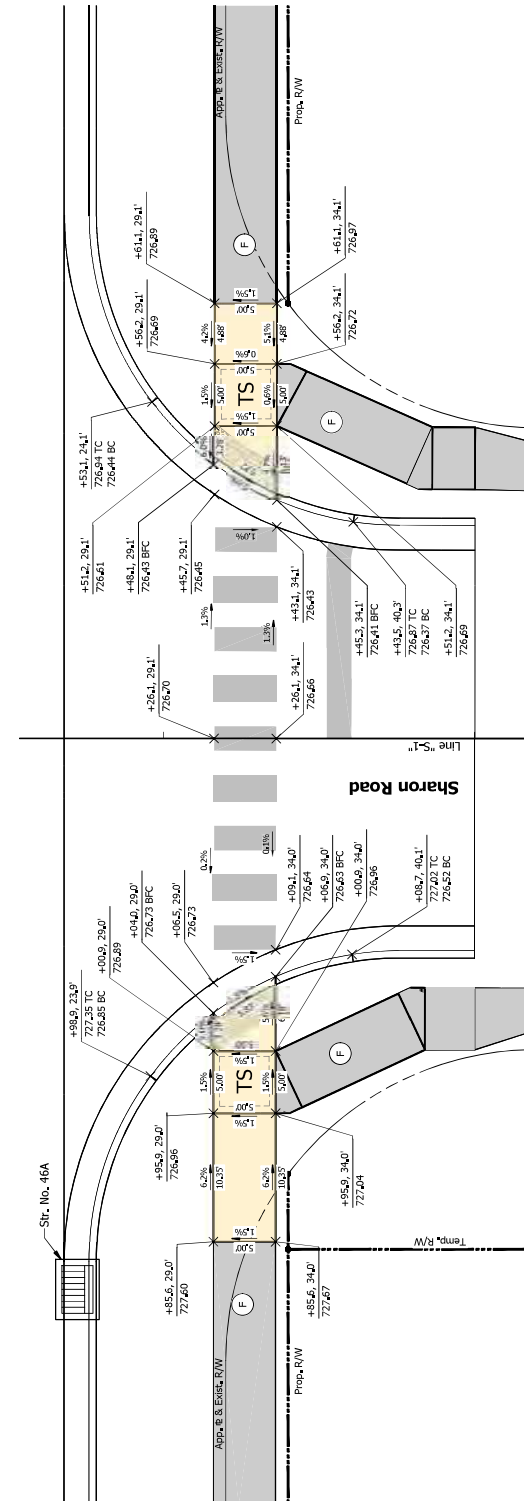
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- XXXX BC Exist./Prop. Bottom of Curb
- XXXX TC Exist./Prop. Top of Curb
- XXXX ME Match Exist. Elevation
- XXXX FL Exist./Prop. Flash Condition Elevation
- XXXX BW Bottom of Wall
- TS Turning Space (4' x 4')
- CS Clear Space (4' x 4')
- Detectable Warning Surface
- Slope and Direction
- Concrete Sidewalk
- HMA Sidewalk
- ADA Concrete

**ADA NOTES:**

1. Material callouts shown for areas outside roadway and existing ADA curb ramp materials for clarity purposes. For additional material callout information, see construction details.
2. Ramp locations for clarity purposes only.
3. Sheet stationing and offset reference line "Prop. R/W" unless otherwise noted.



**SHARON ROAD INTERSECTION - ADA KEY MAP**  
SCALE: 1" = 20'



**3 ADA CURB RAMP DETAIL**  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

**4 ADA CURB RAMP DETAIL**  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

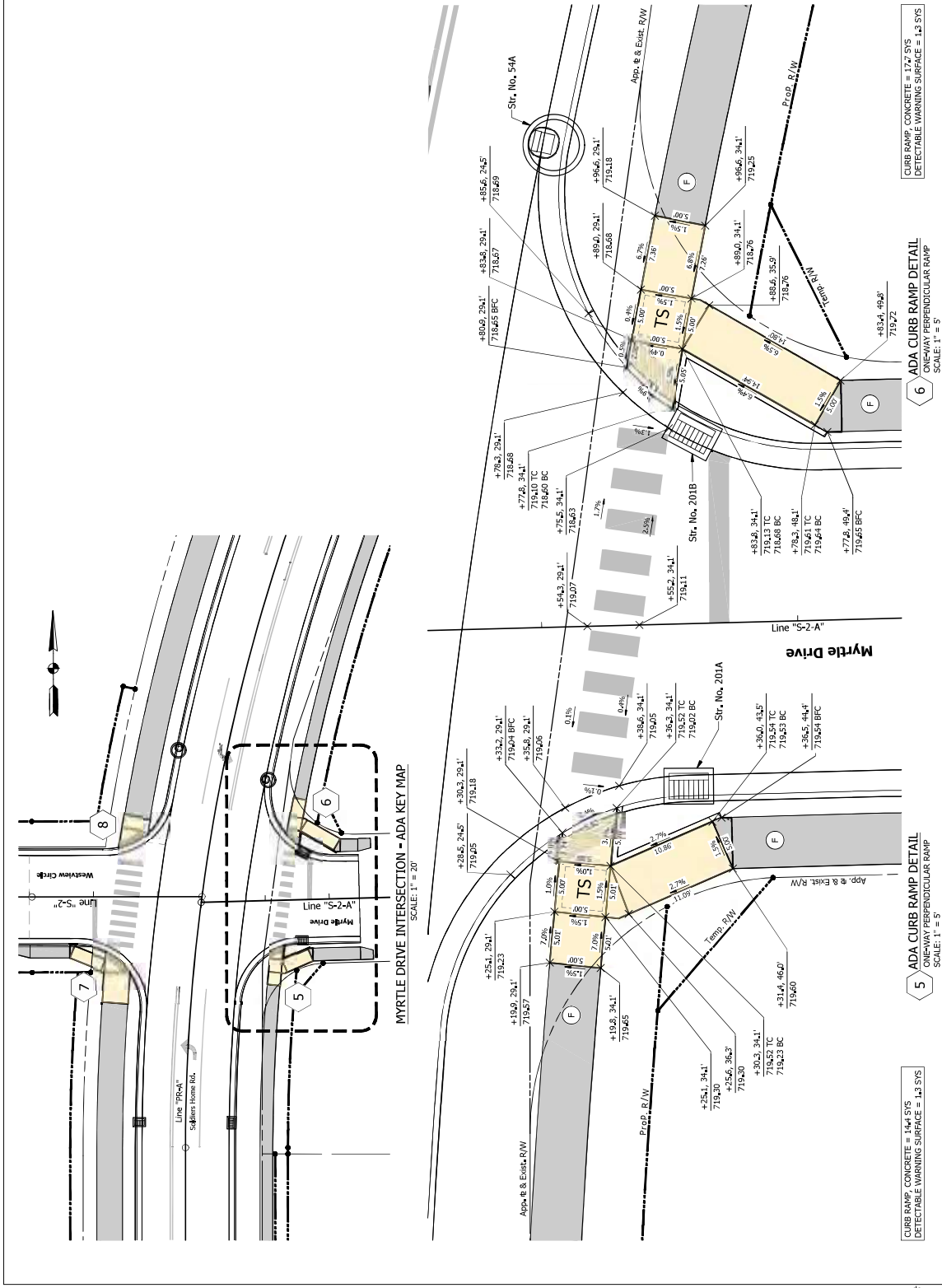
<b>STAGE 2 PLANS</b>		<b>INDIANA</b>		<b>BRIDGE FILE</b>	
<b>NOT FOR CONSTRUCTION</b>		<b>DEPARTMENT OF TRANSPORTATION</b>		AS SHOWN	
DESIGNED: JAD	CAC	DESIGN ENGINEER	DATE	VERTICAL SCALE	N/A
CHECKED: JAD	JAD	DRAWN: AT		HORIZONTAL SCALE	N/A
		CHECKER: JAD		DESIGNATION	1401251, 2201253
				SURVEY BOOK	72
				ELECTRONIC	Sheet 1 of 142
				CONTRACT	1401251, 2201253
				PROJECT NO.	1401251, 2201253

**LEGEND**

- XXXX BFC Exist/Prop. Bottom of Flash Curb
- XXXX BC Exist/Prop. Bottom of Curb
- XXXX TC Exist/Prop. Top of Curb
- XXXX ME Match Exist Elevation
- XXXX FL Exist/Prop. Flash Condition Elevation
- XXXX BW Exist/Prop. Bottom of Wall
- TS Turning Space (4' x 4')
- CS Clear Space (4' x 4')
- Detachable Warning Surface
- Slope and Direction
- Concrete Sidewalk
- HMA Sidewalk
- ADA Concrete

**ADA NOTES:**

1. Material callouts shown for areas outside roadway and excluding ADA curb ramp materials for clarity purposes. For additional material callout information, see construction details.
2. ADA ramp locations for clarity purposes only.
3. Sheet stationing and offset reference line "Prop." unless otherwise noted.



6 ADA CURB RAMP DETAIL  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

5 ADA CURB RAMP DETAIL  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

**STAGE 2 PLANS**  
**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: JAD	DRAWN: AT	
CHECKED: JAD	CHECKER: JAD	

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

ADA CURB RAMPS

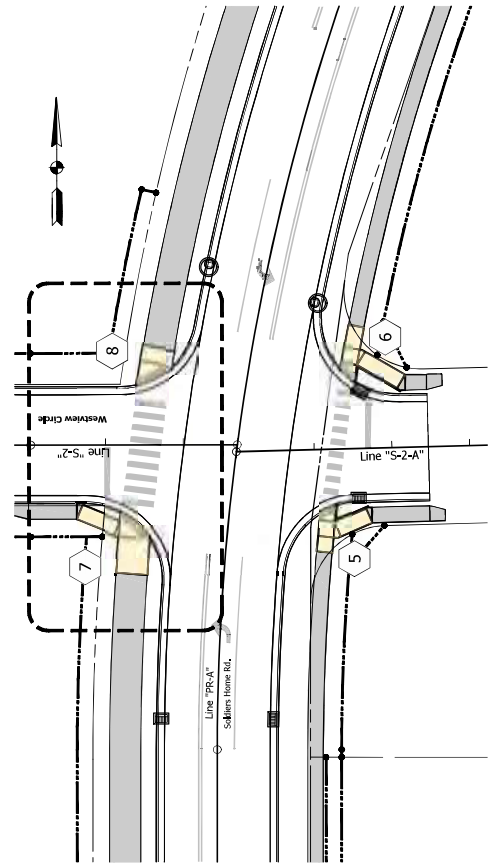
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AS SHOWN	N/A
VERTICAL SCALE	DESIGNATION
N/A	4402501, 2201253
SURVEY BOOK	SHEETS
ELECTRONIC	73
DATE	NO. OF SHEETS
8/29/21	142
	PROJECT NO.
	14012501, 2201253

**LEGEND**

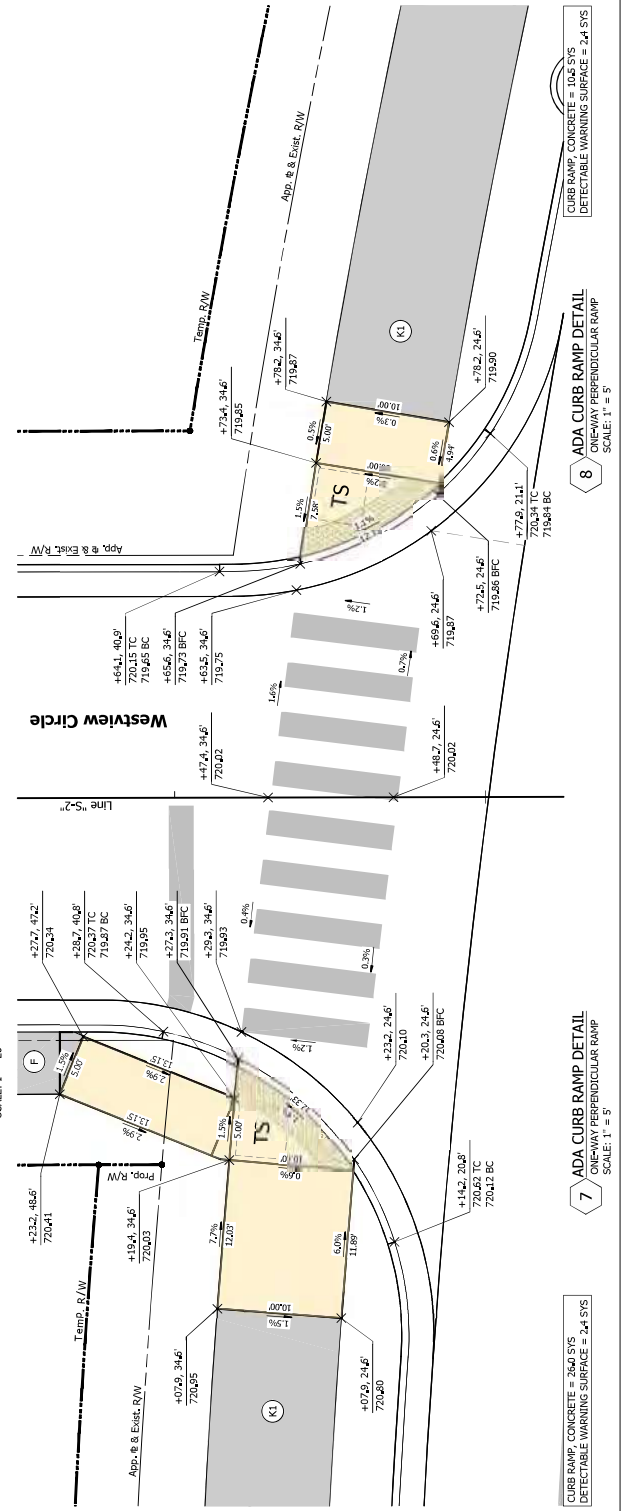
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- XXXXX BC Exist./Prop. Bottom of Curb
- XXXXX TC Exist./Prop. Top of Curb
- XXXXX ME Match Exist. Elevation
- XXXXX FL Exist./Prop. Flash Condition Elevation
- XXXXX BW Bottom of Wall
- TS Turning Space (4' x 4')
- CS Clear Space (4' x 4')
- CS Detectable Warning Surface
- CS Slope and Direction
- Concrete Sidewalk
- HMA Sidewalk
- ADA Concrete

**ADA NOTES:**

1. Material callouts shown for areas outside roadway and excluding ADA curb ramp materials for clarity purposes. For additional material callout information, see construction details.
2. Ramp locations for clarity purposes only.
3. Sheet stationing and offset reference line "Prop." unless otherwise noted.



**WESTVILLE CIRCLE INTERSECTION - ADA KEY MAP**  
SCALE: 1" = 20'



**7 ADA CURB RAMP DETAIL**  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

**8 ADA CURB RAMP DETAIL**  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

**STAGE 2 PLANS**  
**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED:	CAC	DRAWN: AT
CHECKED:	JAD	CHECKED: JAD

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**ADA CURB RAMPS**

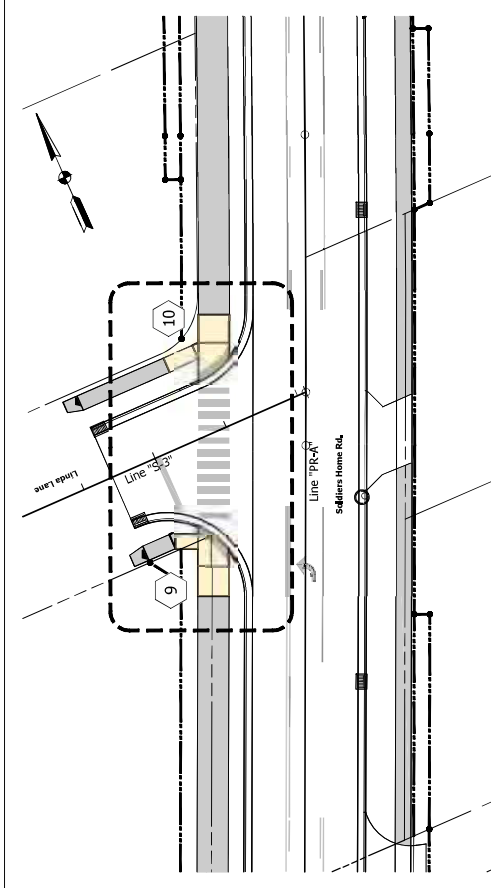
HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	N/A
VERTICAL SCALE	DESIGNATION
N/A	440251, 220253
SURVEY BOOK	SHEETS
ELECTRONIC	74
CONTRACT	NO. OF SHEETS
829241	142
	PROJECT NO.
	140251, 220253

**LEGEND**

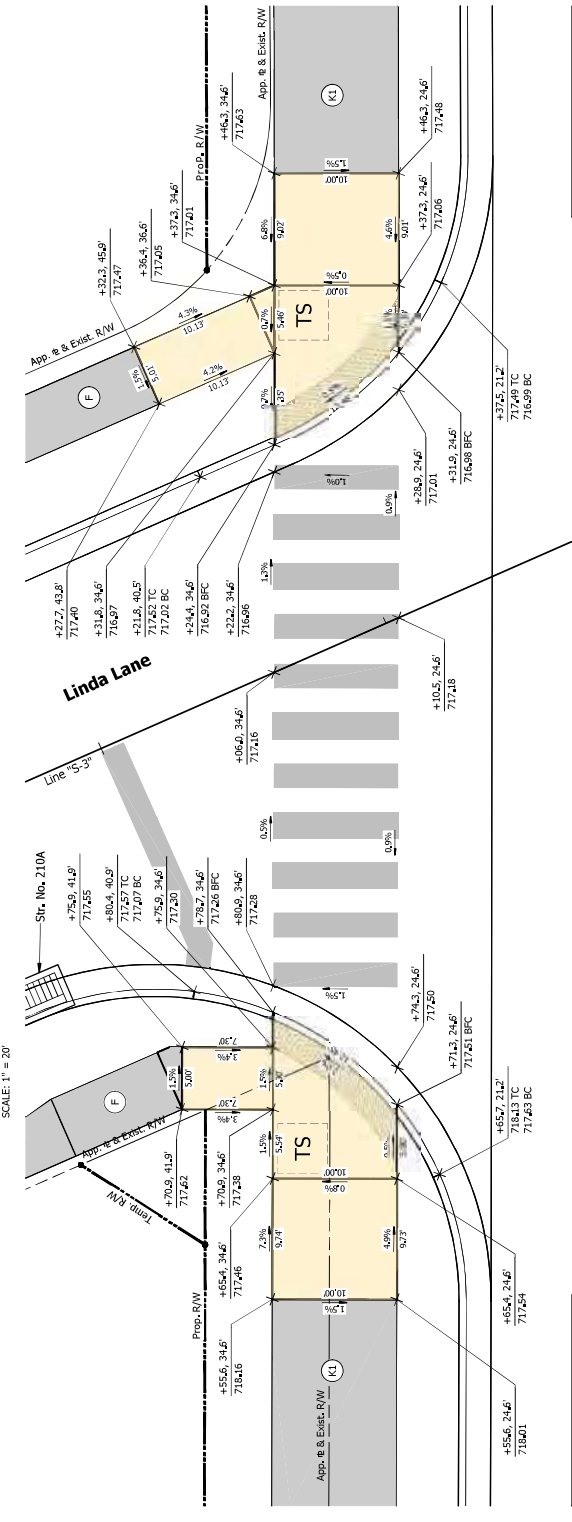
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- XXXXX BC Exist./Prop. Bottom of Curb
- XXXXX TC Exist./Prop. Top of Curb
- XXXXX ME Match Exist. Elevation
- XXXXX FL Exist./Prop. Flash Condition Elevation
- XXXXX BW Bottom of Wall
- TS Turning Space (4' x 4')
- CS Clear Space (4' x 4')
- Warning Surface
- Detectable Warning Surface
- Slope and Direction
- Concrete Sidewalk
- HMA Sidewalk
- ADA Concrete

**ADA NOTES:**

1. Material callouts shown for areas outside roadway and excluding ADA curb ramp materials for clarity purposes. For additional material callout information, see construction details.
2. Ramp locations for clarity purposes only.
3. Sheet stationing and offset reference line "Prop." unless otherwise noted.



LINDA LANE INTERSECTION - ADA KEY MAP  
SCALE: 1" = 20'



9 ADA CURB RAMP DETAIL  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

10 ADA CURB RAMP DETAIL  
ONE-WAY PERPENDICULAR RAMP  
SCALE: 1" = 5'

CURB RAMP CONCRETE = 35.5 S/S  
DETECTABLE WARNING SURFACE = 2.0 S/S

CURB RAMP CONCRETE = 35.3 S/S  
DETECTABLE WARNING SURFACE = 2.0 S/S

**STAGE 2 PLANS  
NOT FOR  
CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: AT	
CHECKED: JAD	CHECKER: JAD	

**INDIANA  
DEPARTMENT OF TRANSPORTATION**

ADA CURB RAMPS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	N/A
VERTICAL SCALE	DESIGNATION
N/A	4402501, 2201253
SURVEY BOOK	SHEETS
ELECTRONIC	75
CONTRACT	NO. OF SHEETS
829241	142
	DATE
	1401251, 2201253





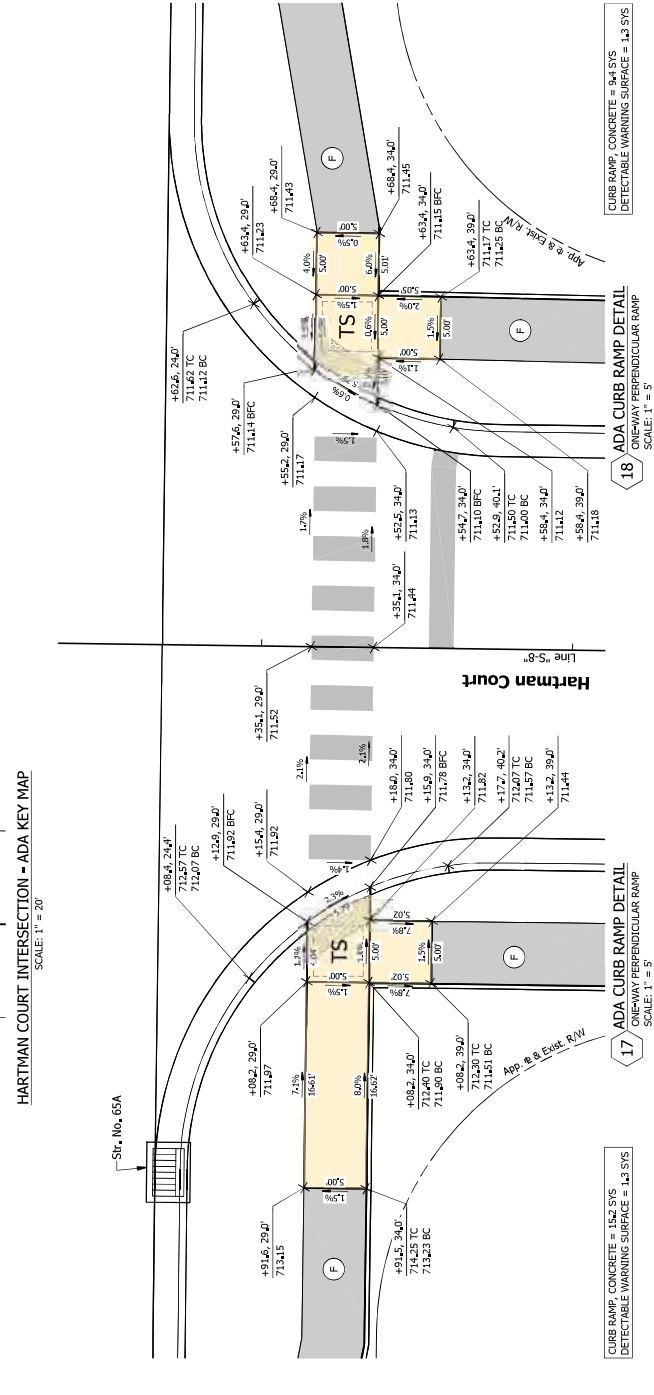
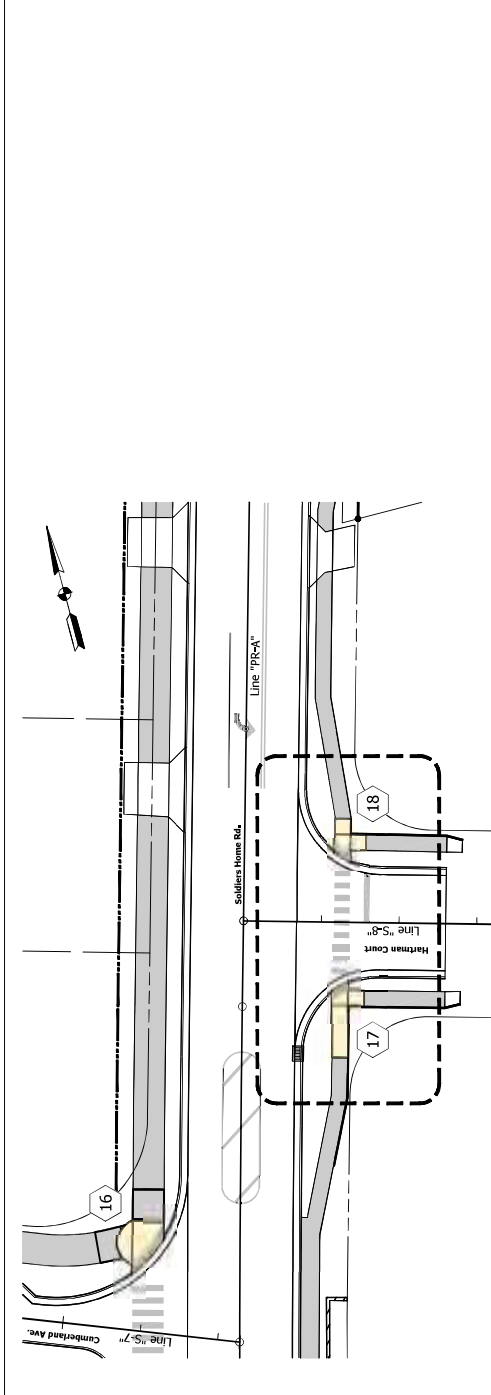


**LEGEND**

- XXXX BFC Exist/Prop. Bottom of Flash Curb
- XXXX BC Exist/Prop. Bottom of Curb
- XXXX TC Exist/Prop. Top of Curb
- XXXX ME Match Exist Elevation
- XXXX FL Exist/Prop. Flash Condition Elevation
- XXXX BW Exist/Prop. Bottom of Wall
- TS Turning Space (4' x 4')
- CS Clear Space (4' x 4')
- W/W/W/W Detectable Warning Surface
- W/W/W/W Slope and Direction
- Concrete Sidewalk
- HMA Sidewalk
- ADA Concrete

**ADA NOTES:**

1. Material callouts shown for areas outside roadway and existing ADA curb ramp materials for clarity purposes. For additional material callout information, see construction details.
2. Ramp locations for clarity purposes only.
3. Sheet stationing and offset reference line "PR-A" unless otherwise noted.



<b>STAGE 2 PLANS</b> <b>NOT FOR CONSTRUCTION</b>		RECOMMENDED FOR APPROVAL DESIGN ENGINEER: _____ DATE: _____ DRAWN: _____ AT: _____ CHECKED: _____	HORIZONTAL SCALE: _____ AS SHOWN: _____ VERTICAL SCALE: _____ DESIGNATION: 440251, 2201253	SURVEY BOOK: _____ SHEETS: 79 of 142 JOB NO.: _____ PROJECT: 440251, 2201253
INDIANA DEPARTMENT OF TRANSPORTATION		ADA CURB RAMPS		





# CITY OF WEST LAFAYETTE, INDIANA

## SOLDIERS HOME ROAD RECONSTRUCTION

ATTACHMENT A  
INAW WORKPLAN  
02/05/2025

Legend

- existing main per survey
- existing main corrected per GIS or other attributes
- proposed main relocated to avoid conflict
- callout
- callout

**UTILITIES:**  
See Construction Detail Sheets starting on p.42  
Place Verification and Conflict Lines and Notations on CD sheets

**PROJECT NO.** 1401291 P.E.  
1401291 R/W  
1401291 CONST.

**Note:**  
North Limit has shortened to approximately 900' north of Hamilton St  
At the north end suggest utilities prepare terminal points knowing a distant future phase City plans north of there.

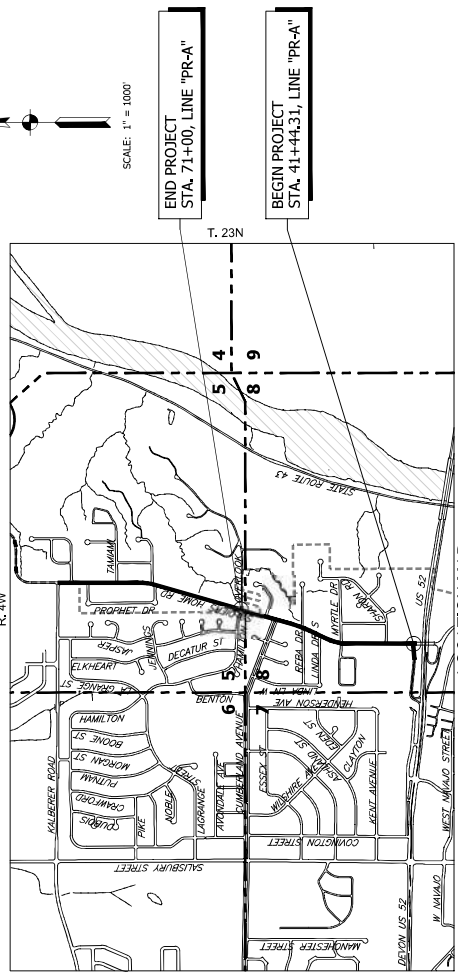
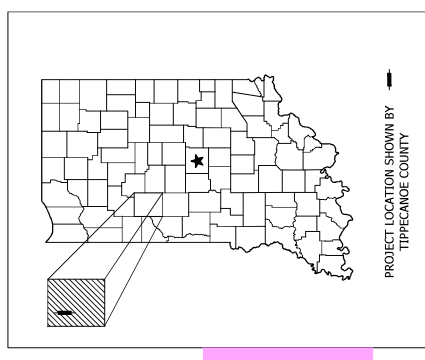
ROADWAY LENGTH: 1.68 MI.  
TOTAL LENGTH: 1.68 MI.  
MAX. GRADE: 1.97 %

SCALES:  
PLAN { LONG: 1" = 20' PROFILE { HORIZ: 1" = 100'  
TRANS: 1" = 20' VERT: 1" = 100'

Change under review

BEN ANDERSON (ERC) PUBLIC WORKS DIRECTOR	DATE
SANA G. BOOKER PRESIDENT	DATE
M. MICHELLE DEARING MEMBER	DATE
JASON D. HUBER MEMBER	DATE
THOMAS J. KENT MEMBER	DATE
JEFFREY W. LOVE MEMBER	DATE
ATTESTED BY:	
NICHOLE FOSTER FIRST DEPUTY CLERK	DATE

TRAFFIC DATA	
A.A.D.T. (702)	5691 V.P.D.
D.A.D.T. (109)	288 V.P.H.
D.A.D.T. (109)	288 V.P.H.
DIRECTIONAL DISTRIBUTION	47.6 % N.R.
TRUCKS	8.66 % A.A.D.T. 7.69 % D.P.V.
DESIGN DATA	
DESIGN SPEED	30 M.P.H.
PROJECT DESIGN CRITERIA	48 (AS) V.P.H.
PROJECT CLASSIFICATION	URBAN INTERMEDIATE
RURAL/URBAN	URBAN (INTERMEDIATE)
TERRAIN	LEVEL
ACCESS CONTROL	NONE



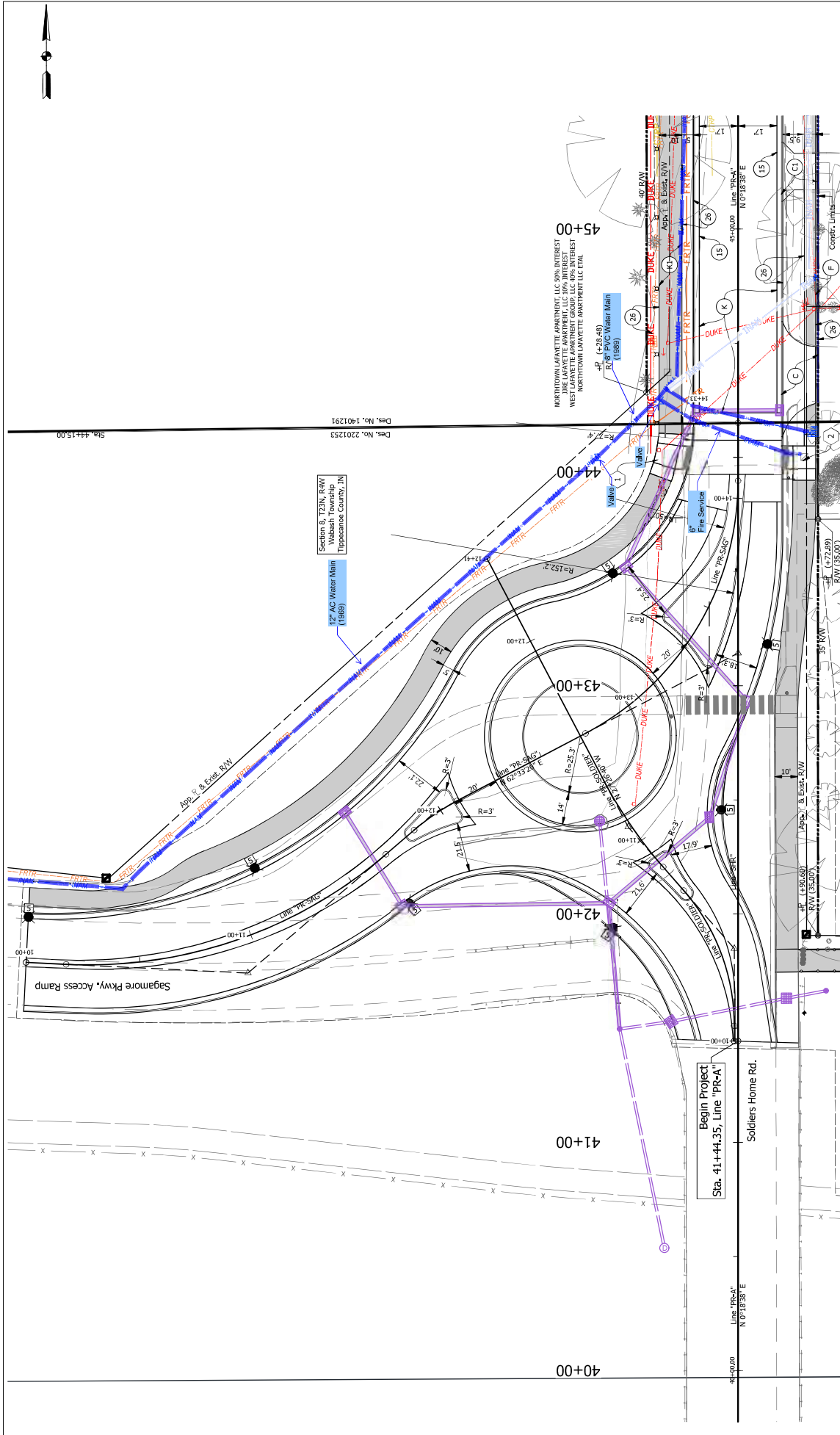
INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 2024 TO  
BE USED WITH THESE PLANS

STAGE 2 PLANS	
NOT FOR CONSTRUCTION	
DESIGNATION	1401291.200153
SHEETS	1 of 141
CONTRACT	PC27511
PROJECT	1401291.200153

DATE	ISSUED BY	V5 ENGINEERING, INC.	TEL: (260) 894-6535
CERTIFIED BY	PHONE NUMBER		
APPROVED FOR LETTING	INDIANA REG. NO. XXXXXXX		
	DATE		

8 North 3rd Street, Suite 302  
Lafayette, IN 47901  
P: 765.742.0295  
F: 317.293.4737  
vse@v5engineering.com  
www.v5engineering.com





<b>LEGEND</b> (K) 10\"/>		<b>NOT FOR CONSTRUCTION</b> (1) 10\"/>	
(L) 12\"/>		(2) 12\"/>	
(M) 12\"/>		(3) 12\"/>	
(N) 12\"/>		(4) 12\"/>	
(O) 12\"/>		(5) 12\"/>	
(P) 12\"/>		(6) 12\"/>	
(Q) 12\"/>		(7) 12\"/>	
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(CI) 12\"/>		(77) 12\"/>	
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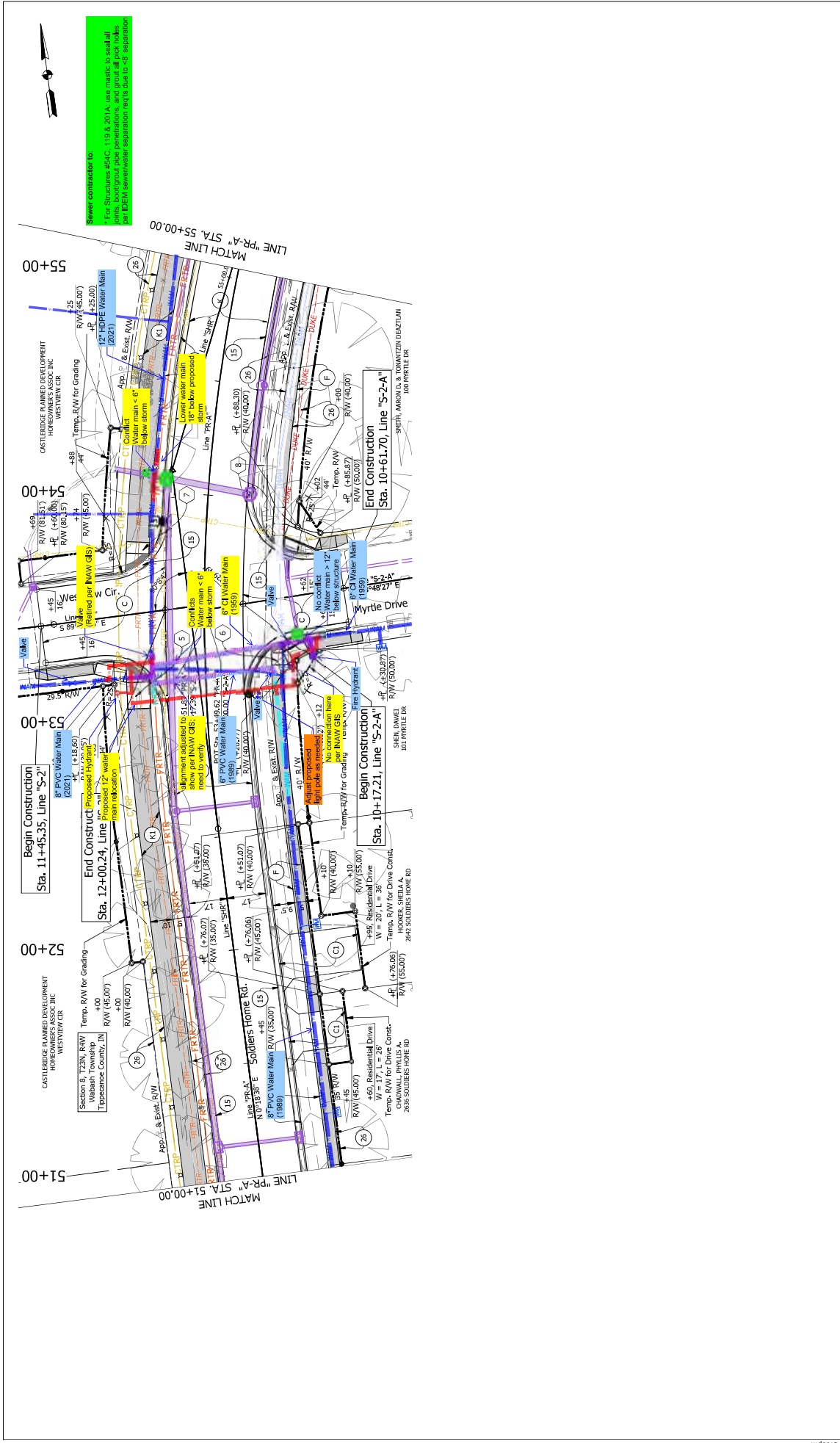
<b>INDIANA</b> DEPARTMENT OF TRANSPORTATION	
PROJECT: SOLDIERS HOME RD & SAGAMORE PKWY RAMP RAB CONSTRUCTION DETAILS	SHEETS: 42 of 141
SURVEY BOOK: 501080CT	DATE: 08/29/21
DESIGNER: CAC	CHECKER: JAD
DATE:	AT: JAD

RECOMMENDED FOR APPROVAL:	DESIGN ENGINEER:	DATE:
DESIGNED:	DRAWN:	AT:
CHECKED:	CHECKED:	JAD

**STAGE 2 PLANS**  
**NOT FOR CONSTRUCTION**

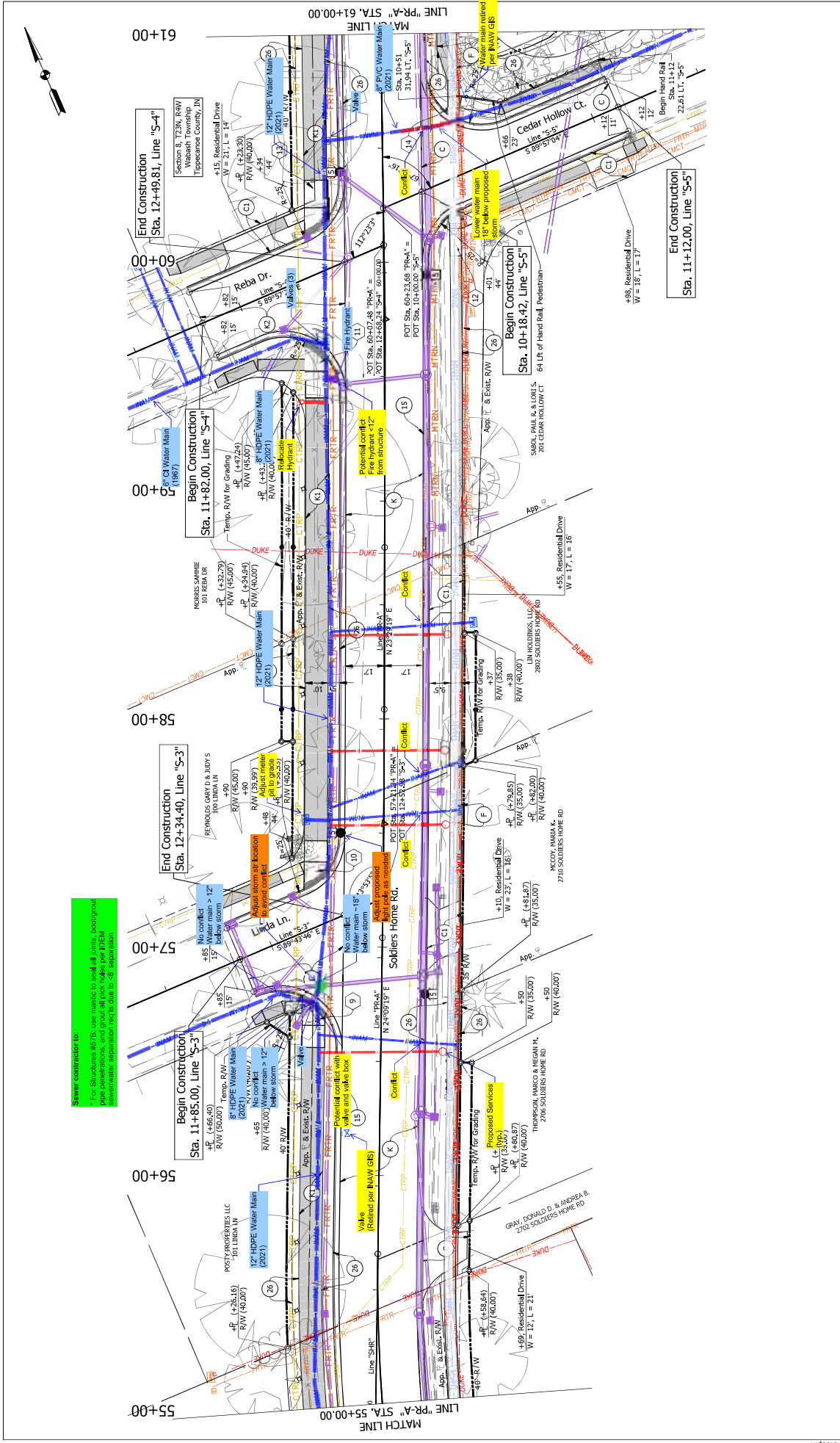
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Sewer contractor to:  
 For Structures #54C, #19 & #20A, use manhole to install all  
 per IFCM sewer/water separation results (date to be determined)

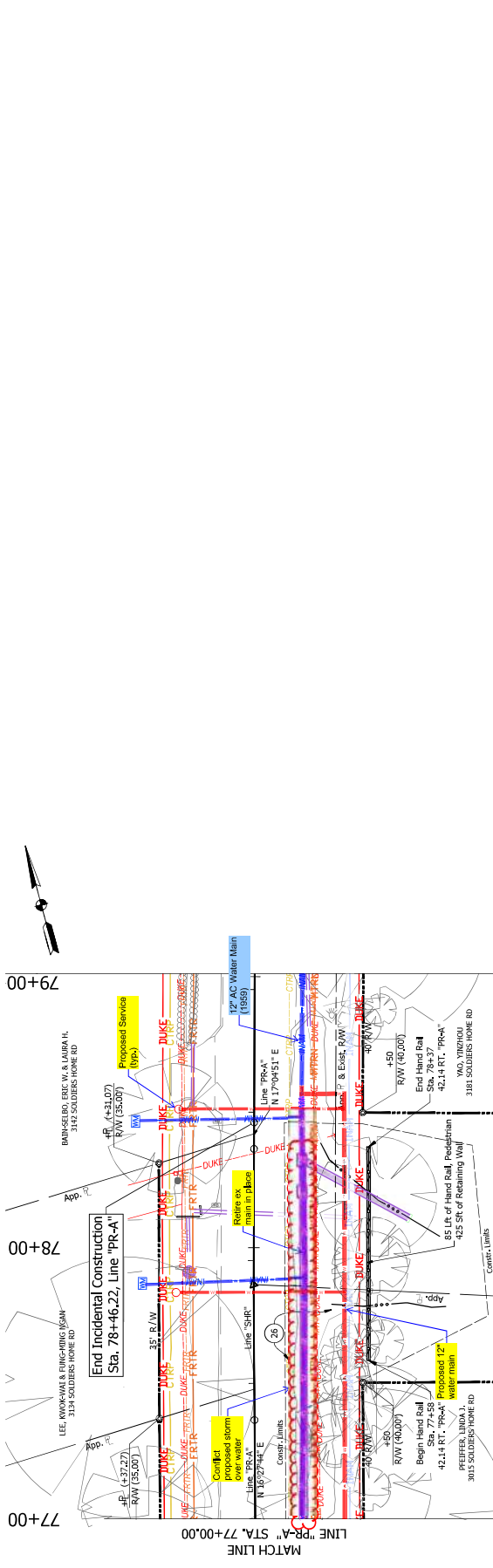
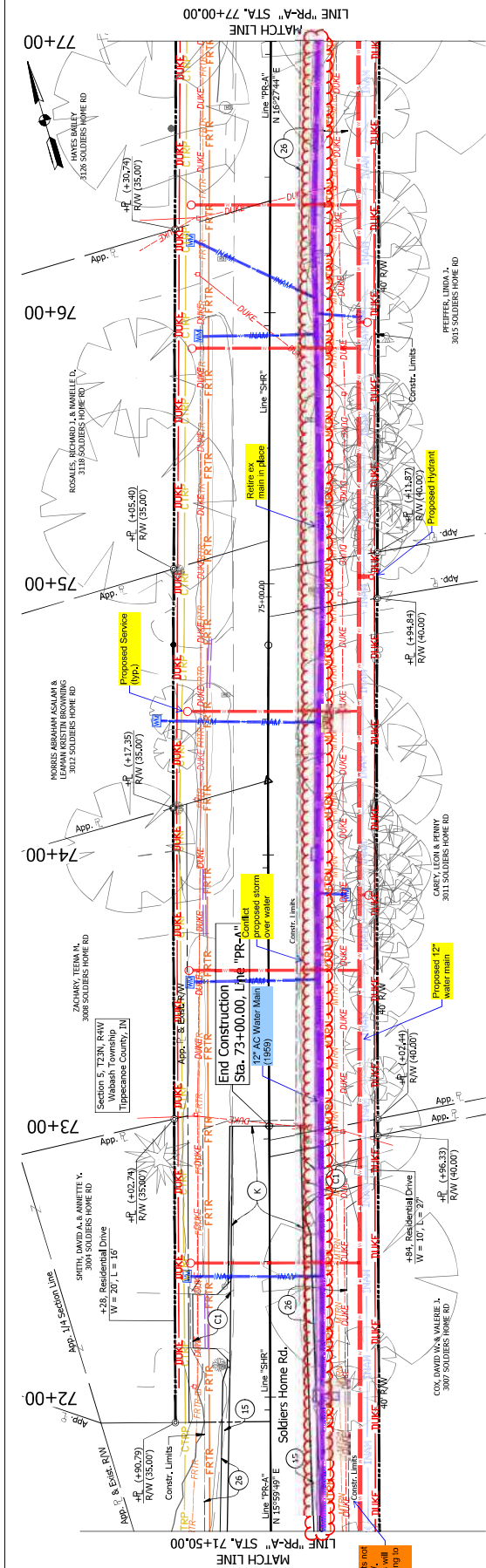
<b>LEGEND</b> (K) 100% R/W PAVERLINE 12\"/>	(C) Site Streets, Alley & Connected Drains 6 in. Compacted Aggregate Base, No. 53 on 12\"/>	<b>STAGE 2 PLANS                  NOT FOR                  CONSTRUCTION</b> (1) Cut and install (2) Curb and Gutter (3) Curb and Sill (4) 6\"/>	<b>INDIANA                  DEPARTMENT OF TRANSPORTATION</b> LINE "PR-A" CONSTRUCTION DETAILS STA. 51+00.00 TO STA. 55+00.00	HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
				VERTICAL SCALE N/A	DESIGNATION 401251, 201253
(L) 12\"/>	(H) 6 in. Compacted Aggregate Base, No. 53 on 6\"/>	(14) curb, Concrete (15) curb, Concrete (16) curb, Concrete (17) curb, Concrete (18) curb, Concrete (19) curb, Concrete (20) curb, Concrete	RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE	SURVEY BOOK ELECTRONIC SHEETS 44 of 141 SHEET NO. 401251, 201253	SURVEY BOOK ELECTRONIC SHEETS 44 of 141 SHEET NO. 401251, 201253



Sewer contractor to  
 call Electric Utility and install all cables, conduits,  
 other accessories, and ground all back before over EBM  
 sewer/water separation (see blue to 2\"/>

<p><b>LEGEND</b></p> <p>(K) 100% FOR MAINLINE                  12 in. HDPE Water Main, 3, 505, Sulfon, 8.6 mm, on                  2706 SOLDIERS HOME RD                  2706 SOLDIERS HOME RD                  2706 SOLDIERS HOME RD                  Subgrade Treatment, Type III</p> <p>(L) 100% FOR SIDEWALK                  100% FOR SIDEWALK                  100% FOR SIDEWALK                  6 in. Compacted Aggregate Base, No. 53 on                  Subgrade Treatment, Type III</p> <p>(M) 100% FOR SIDEWALK                  100% FOR SIDEWALK                  100% FOR SIDEWALK                  6 in. Compacted Aggregate Base, No. 53 on                  Subgrade Treatment, Type III</p>	<p>(1) 12\"/&gt;                 (2) 12\"/&gt;                 (3) 12\"/&gt;                 (4) 12\"/&gt;                 (5) 12\"/&gt;                 (6) 12\"/&gt;                 (7) 12\"/&gt;                 (8) 12\"/&gt;                 (9) 12\"/&gt;                 (10) 12\"/&gt;                 (11) 12\"/&gt;                 (12) 12\"/&gt;                 (13) 12\"/&gt;                 (14) 12\"/&gt;                 (15) 12\"/&gt;                 (16) 12\"/&gt;                 (17) 12\"/&gt;                 (18) 12\"/&gt;                 (19) 12\"/&gt;                 (20) 12\"/&gt;                 (21) 12\"/&gt;                 (22) 12\"/&gt;                 (23) 12\"/&gt;                 (24) 12\"/&gt;                 (25) 12\"/&gt;                 (26) 12\"/&gt;                 (27) 12\"/&gt;                 (28) 12\"/&gt;                 (29) 12\"/&gt;                 (30) 12\"/&gt;                 (31) 12\"/&gt;                 (32) 12\"/&gt;                 (33) 12\"/&gt;                 (34) 12\"/&gt;                 (35) 12\"/&gt;                 (36) 12\"/&gt;                 (37) 12\"/&gt;                 (38) 12\"/&gt;                 (39) 12\"/&gt;                 (40) 12\"/&gt;                 (41) 12\"/&gt;                 (42) 12\"/&gt;                 (43) 12\"/&gt;                 (44) 12\"/&gt;                 (45) 12\"/&gt;                 (46) 12\"/&gt;                 (47) 12\"/&gt;                 (48) 12\"/&gt;                 (49) 12\"/&gt;                 (50) 12\"/&gt;                 (51) 12\"/&gt;                 (52) 12\"/&gt;                 (53) 12\"/&gt;                 (54) 12\"/&gt;                 (55) 12\"/&gt;                 (56) 12\"/&gt;                 (57) 12\"/&gt;                 (58) 12\"/&gt;                 (59) 12\"/&gt;                 (60) 12\"/&gt;                 (61) 12\"/&gt;                 (62) 12\"/&gt;                 (63) 12\"/&gt;                 (64) 12\"/&gt;                 (65) 12\"/&gt;                 (66) 12\"/&gt;                 (67) 12\"/&gt;                 (68) 12\"/&gt;                 (69) 12\"/&gt;                 (70) 12\"/&gt;                 (71) 12\"/&gt;                 (72) 12\"/&gt;                 (73) 12\"/&gt;                 (74) 12\"/&gt;                 (75) 12\"/&gt;                 (76) 12\"/&gt;                 (77) 12\"/&gt;                 (78) 12\"/&gt;                 (79) 12\"/&gt;                 (80) 12\"/&gt;                 (81) 12\"/&gt;                 (82) 12\"/&gt;                 (83) 12\"/&gt;                 (84) 12\"/&gt;                 (85) 12\"/&gt;                 (86) 12\"/&gt;                 (87) 12\"/&gt;                 (88) 12\"/&gt;                 (89) 12\"/&gt;                 (90) 12\"/&gt;                 (91) 12\"/&gt;                 (92) 12\"/&gt;                 (93) 12\"/&gt;                 (94) 12\"/&gt;                 (95) 12\"/&gt;                 (96) 12\"/&gt;                 (97) 12\"/&gt;                 (98) 12\"/&gt;                 (99) 12\"/&gt;                 (100) 12\"/&gt; </p>	<p><b>STAGE 2 PLANS</b>                  NOT FOR                  CONSTRUCTION</p>	<p>RECOMMENDED FOR APPROVAL</p> <p>DESIGN ENGINEER: DATE</p> <p>DESIGNED: CAC</p> <p>CHECKED: JAD</p> <p>DRAWN: AT</p> <p>CHECKED: JAD</p>	<p>HORIZONTAL SCALE                  1" = 20'</p> <p>VERTICAL SCALE                  N/A</p> <p>DESIGNATION                  402251, 2201253</p> <p>SHEET BOOK                  45</p> <p>SHEETS                  1 of 141</p> <p>CONTRACT                  402251, 2201253</p> <p>PROJECT                  402251, 2201253</p>
	<p>INDIANA                  DEPARTMENT OF TRANSPORTATION</p> <p>LINE "PR-A" CONSTRUCTION DETAILS                  STA. 55+00.00 TO STA. 61+00.00</p>			





RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE	
DESIGNED:	JAD	CAC	JAD	AT	JAD
CHECKED:	JAD	CAC	JAD	AT	JAD

INDIANA DEPARTMENT OF TRANSPORTATION	
BRIDGE FILE	N/A
DESIGNATION	H02251, 2021253
HORIZONTAL SCALE	1" = 20'
VERTICAL SCALE	N/A
SURVEY BOOK	47
ELECTRONIC SHEETS	1 of 141
CONTRACT NO.	4901251, 2021253
PROJECT NO.	8292211

STAGE 2 PLANS	
NOT FOR CONSTRUCTION	

LEGEND

- (K) 1/4" = 1" Scale, Type B
- (L) 1/4" = 1" Scale, Type B
- (M) 1/4" = 1" Scale, Type B
- (N) 1/4" = 1" Scale, Type B
- (O) 1/4" = 1" Scale, Type B
- (P) 1/4" = 1" Scale, Type B
- (Q) 1/4" = 1" Scale, Type B
- (R) 1/4" = 1" Scale, Type B
- (S) 1/4" = 1" Scale, Type B
- (T) 1/4" = 1" Scale, Type B
- (U) 1/4" = 1" Scale, Type B
- (V) 1/4" = 1" Scale, Type B
- (W) 1/4" = 1" Scale, Type B
- (X) 1/4" = 1" Scale, Type B
- (Y) 1/4" = 1" Scale, Type B
- (Z) 1/4" = 1" Scale, Type B

**EXISTING STRUCTURE DATA**

STRUCTURE NUMBER	LOCATION				SIZE		DESCRIPTION MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE	LENGTH LFT	PIPE, REMOVE LFT	PIPE END SECTION		REMARKS	
	STATION	LEFT	RIGHT	CROSS	OFFSET FT	IN.				PIPE TYPE	EA.		CONNECT TO STR.
<b>DES 2201253</b>													
101-240264	40+53.73	x			32.24	12	48" Storm Mh				102-240117	Do Not Disturb	
102-240117	41+49.69	x			51.84	0	48" Catch Basin				101-240264	Do Not Disturb	
103-240118	41+52.86	x			29.33	12	Square Inlet				102-240117	Do Not Disturb	
1820	41+62.71		x		16.51	12	2'x3' Curb Inlet	8	8		103-240118	Remove Inlet	
104-240116	41+63.13		x		21.25	12	Square Inlet				103-240118	Do Not Disturb	
105-1000	41+66.41		x		38.55	12	48" Catch Basin				1820	Do Not Disturb	
1811	41+70.41		x		16.51	12	2'x3' Curb Inlet	8	8		1820	Remove Inlet	
100-240119	42+18.57	x			290.70	0	48" Sanitary Mh				107-240087	Adjust Casting to Grade	
106-240115	42+40.70	x			60.62	12	2'x2' Inlet	23	23		102-240117	Remove Inlet	
108	42+89.90	x			43.99	18	Existing 18" RCP	38	38			Remove	
1789	43+11.55		x		21.41	12	2'x3' Curb Inlet	138	138		1811	Remove Inlet	
1785	43+20.59		x		21.01	12	2'x3' Curb Inlet	6	6		1789	Remove Inlet	
<b>DES 1401291</b>													
107-240087	45+03.87		x		21.93	12.6	48" Sanitary Mh				107-240087	Adjust Casting to Grade	
108-240086	46+18.36		x		20.27	12.10	48" Sanitary Mh				114-240075	Adjust Casting to Grade	
109	46+68.51	x			21.68	12	Existing 12" CMP	49	49			Remove	
110	46+87.74	x			22.40	12	Existing 12" CPP	6	6			Remove	
111-240085	47+70.13	x			20.78	12	Round Inlet				113-240076	Adjust Casting to Grade	
112-240077	49+69.27	x			50.37	6	Round Inlet				113-240076	Do Not Disturb	
113-240076	49+69.26	x			38.79	12	Round Inlet				111-240085	Adjust Casting to Grade	
114-240075	49+84.08		x		20.47	12	48" Sanitary Mh				108-240086	Adjust Casting to Grade	
115-240007	53+29.17		x		23.95	12	Curb Inlet	32	32		115-240007	Remove Inlet	
116-240008	53+45.70		x		13.03	12	48" Sanitary Mh				114-240075	Adjust Casting to Grade	
117-240006	53+64.19		x		36.21	15	48" Storm Mh				240011	Adjust Casting to Grade	
	53+64.19a		x		36.21	12					115-240007	Adjust Casting to Grade	
118-240059	53+77.57		x		34.61	12	2'x3' Curb Inlet	9	9		117-240006	Remove Inlet	
119-240062	54+07.65	x			27.28	15	48" Storm Mh	133	133		121-240057	Remove Structure	
	54+07.65x	x			27.28	15		13	13		119-240062		

**EXISTING STRUCTURE DATA**

STRUCTURE NUMBER	LOCATION				SIZE		DESCRIPTION		LENGTH	PIPE REMOVE	PIPE END SECTION	CONNECT TO STR.	REMARKS
	STATION	LEFT	RIGHT	CROSS	OFFSET	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE							
						FT	IN.	LFT	EA.				
120-240058	55+35.91		X		23.12	12	2'x3' Curb Inlet	86	86		122-240055	Remove Inlet	
121-240057	55+39.79	X			23.77	15	2'x2' Curb Inlet	84	84		121-240057	Remove Inlet	
122-240055	56+26.27		X		15.66	15	48" Storm Mh	255	255		130-250411	Remove Structure	
123-240054	56+25.96		X		24.12	4	2'x3' Curb Inlet	27	27		123-240054	Remove Inlet	
	56+25.96		X		24.12	15		5	5		122-240055		
124-240050	56+82.40	X			45.63	12	2'x2' Curb Inlet	33	33		124-240050	Remove Inlet	
125-240051	56+96.27	X			38.63	8	48" Sanitary Mh				240233	Adjust Casting to Grade	
126-240049	56+97.58		X		23.88	12	2'x3' Curb Inlet	6	6		126-240049	Remove Inlet	
127-240052	57+10.17	X			22.33	18	48" Storm Mh	288	288		127-240052	Remove Structure	
128-240053	57+22.26	X			39.88	15	2'x3' Curb Inlet	18	18		128-240053	Remove Inlet	
129-240048	57+68.32		X		25.26	2	2'x3' Curb Inlet	9	9		129-240048	Remove Inlet	
	57+68.32		X		25.26	12		5	5		129-240048		
130-250411	58+84.48		X		20.50	15	48" Storm Mh	293	293		138-250418	Remove Structure	
131-250410	58+83.85		X		25.59	12	2'x3' Curb Inlet	2	2		130-250411	Remove Inlet	
132-250414	59+70.39	X			43.85	2,12	2'x3' Curb Inlet	21, 39	60		133-250413	Remove Inlet	
133-250413	60+02.16	X			15.40	6	48" Storm Mh	19	19		136-220872	Remove Structure	
134-220871	60+11.75	X			33.58	12	2'x3' Curb Inlet	17	17		133-250413	Remove Inlet	
135-250412	60+11.44		X		25.59	12	2'x3' Curb Inlet	6	6			Remove Inlet	
136-220872	61+77.05	X			22.65	18	48" Storm Mh	170	170		133-250413	Remove Structure	
137-250419	61+79.41	X			18.20	30	30" Round Inlet with 2'x2' Curb Inlet	2	2		136-220872	Remove Inlet	
138-250418	61+80.01		X		15.53	30	48" Storm Mh	30	30		137-250419	Remove Structure	
139-250416	61+90.83		X		23.59	12	2'x3' Curb Inlet	10	10		138-250418	Remove Inlet	
140-250417	61+98.67		X		23.59	15	2'x3' Curb Inlet	5	5		139-250416	Remove Inlet	
141-250420	62+75.70		X		14.35	15	48" Storm Mh	93	93		138-250418	Remove Structure	
142-250421	62+76.44		X		24.11	12	2'x3' Curb Inlet	6	6		141-250420	Remove Inlet	
143-5102	64+24.81	X			33.91	15	Round Manhole	5	5		144-5099	Remove Structure	
144-5099	64+26.58	X			25.68	24	48" Storm Mh	244	244		136-220872	Adjust Casting to Grade	
145-220869	64+47.17	X			24.51	15,15,15,12	48" Sanitary Mh	307,313, 17,23			147-210365	Abandon In Place	
213-224128	64+52.99	X			93.86	24	2'x3' Curb Inlet	74			144-5099	Do Not Disturb	
214-224135	65+20.95	X			79.58	12	2'x3' Curb Inlet	71			213-224128	Do Not Disturb	

### EXISTING STRUCTURE DATA

STRUCTURE NUMBER	LOCATION				STATION	SIZE		PIPE TYPE	DESCRIPTION		LENGTH LFT	PIPE REMOVE LFT	PIPE END SECTION EA.	CONNECT TO STR.	REMARKS
	LEFT	RIGHT	CROSS	OFFSET FT		IN.	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE								
									FT						
146-250409					23.48	12		48" Sanitary Mh		102			148-210364	Abandon In Place	
147-210365					26.15	12, 10		48" Sanitary Mh		224,23			146-250409	Abandon In Place	
148-210364					23.03	8		48" Sanitary Mh		61			147-210365	Abandon In Place	
149					23.53	12		Existing 12" CMP		21				Do Not Disturb	
150					23.62	12		Existing 12" CPP		25				Do Not Disturb	
151					21.40	12		Existing 12" CMP		19				Do Not Disturb	
152-ST-19E80					23.84	0		Round Inlet						Do Not Disturb	
153					24.35	12		Existing 12" CMP		13				Do Not Disturb	
154					37.84	15		Existing 15" CMP		60				Do Not Disturb	

# PROPOSED STRUCTURE DATA

STRUCTURE NUMBER	LOCATION				DESCRIPTION				PIPE END SECTION		REMARKS
	STATION NOTE: ALL STA. OFFSETS, & ELEVATIONS ARE FROM EOP @ CENTER OF STR	LEFT	RIGHT	CROSS OFFSET	SIZE IN.	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE	LENGTH		CONNECT TO STR.	
								LFT	EA.		
<b>Des 2201253</b>											
41A	41+62	X		12.90	12	2	INL C-15	8.0		STR 103-240118	
42A	42+42	X		13.R2	12	2	INL C-15	58.0		42C	
42B	42+04	X		147.50	12	2	INLC-15	90.0		42C	
42C	42+05	X		55.60	12	2	INLC-15MOD.	55.0		STR 102-240117	
43A	42+93	X		2.95	12	2	INLC-15	53.0		42A	
43B	43+51	X		48.50	12	2	INLC-15	80.0		43A	
43C	42+44	X		171.70	12	2	INLB-15	49.0		42B	
<b>Des 1401291</b>											
44A	44+21	X		17.00	12	2	INLB-15	37.0		44B	
44B	44+20	X		17.00	12	2	INLC-15	75.0		43B	
46A	45+82	X		17.00	12	2	INLB-15	36.0		46B	
46B	45+82	X		17.00	12	2	INLC-15	317.0		49B	
49A	49+00	X		17.00	12	2	INLB-15	36.0		49B	
49B	49+00	X		17.00	15	2	INLC-15	216.0		51B	
51A	51 + 15	X		17.00	12	2	INLB-15	36.0		51B	
51B	51 + 15	X		17.00	21	2	INLC-15	148.0		53B	
53A	52+63	X		17.00	12	2	INLB-15	36.0		53B	
53B	52+63	X		17.00	21	2	MHC-8	146.0		54C	
201A	53+39	X		40.70	12	2	INLB-15	24.0		Str 117-240006	
201B	53+78	X		35.90	12	2	INLB-15	11.0		Str 117-240006	
210A	56+79	X		54.00	12	2	INLC-15	27.0		57B	
210B	57+08	X		65.85	12	2	INLB-15	31.0		210A	
54A	54+02	X		17.00	24	2	MHH-8	48.0		54B	

## PROPOSED STRUCTURE DATA

STRUCTURE NUMBER	LOCATION				SIZE			DESCRIPTION		LENGTH	PIPE END SECTION		REMARKS
	STATION NOTE: ALL STA. OFFSETS, & ELEVATIONS ARE FROM EOP @ CENTER OF STR	LEFT	RIGHT	CROSS	OFFSET	IN.	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE	LFT		EA.	CONNECT TO STR.	
					FT								
54B		X			17.00	24	2	MHC-8	86.0		SSA		
54C		X			17.00	24	2	MHH-8	37.0		54A		
54D		X			41.50	18	2	Pipe EndSection	23.0	1	54C	18" Pipe End Section	
55A		X			17.00	24	2	MHC-8	88.0		56A		
56A		X			17.00	24	2	MHC-8	59.0		57A		
56B		X			2R.00	12	2	INLA-2	7.0		56A		
57A		X			17.00	24	2	MH C-8	92.0		58A		
57B		X			26.90	12	2	PIH C-4	45.0		57A		
57C		X			37.00	12	2	INLA-2	19.0		57B		
57D		X			25.00	12	2	PIH B-2	7.0		57A		
57E		X			23.40	12	2	INLA-2	37.0		57D		
58A		X			17.00	24	2	PIH C-8	171.0		59A		
59A		X			17.00	24	2	MH C-8	59.0		60A		
59B		X			17.30	12	2	INL B-15	37.0		59A		
60A		X			18.90	24	2	MH C-8	172.0		62A		
60B		X			17.00	12	2	INL B-15	47.0		60A		
61A		X			79.69	36	2	MH J-2	60.0		62E		
61B		X			90.10	18	2	MH B-2	48.0		61A		
62A		X			17.00	36	2	MH D-8	67.0		61A		
62B		X			17.00	30	2	MH C-8	36.0		62A		
62C		X			17.00	12	2	INL B-15	9.0		62B		
62D		X			17.00	24	2	MH C-8	81.0		62B		
62E		X			108.24	36		Pipe End Section		1		36" Pipe End Section	
63A		X			17.00	24	2	MH C-8	73.0		62D		

## PROPOSED STRUCTURE DATA

STRUCTURE NUMBER	LOCATION				SIZE			DESCRIPTION		PIPE END SECTION		REMARKS
	STATION NOTE: ALL STA. OFFSETS, & ELEVS ARE FROM EOP @ CENTER OF STR	LEFT	RIGHT	CROSS OFFSET	IN.	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE	LENGTH	CONNECT TO STR.			
									LFT	EA.		
63B	63+38	X		17.00	12	2	INL B-15	36.0		63A		
Str 144-5099	64+27	X		25.70	24		Existing	91.0		63A		
65A	65+93	X		17.00	12	2	INL B-15	245.0		68A	Connect 4" Underdrain	
					4	2		81.0		65A		
68A	68+38	X		17.00	15	2	INL C-15	168.0		70A		
68B	68+38	X		17.00	12	2	INL B-15	36.0		68A		
Lateral #1	68+62	X		42.78	6	2	SAN. LATERAL	149.0			Proposed Sanitary	
70A	70+06	X		17.00	18	2	INL C-15 MOD.	194.0		72B		
70B	70+06	X		17.00	12	2	INL B-15	37.0		70A		
72A	72+00	X		2R.50	12	2	INLA-2	5.0		72B		
72B	72+00	X		17.00	18	2	INLC-15MOD.	200.0		74A		
74A	74+00	X		17.00	18	2	INLC-15MOD.	220.0		76A		
76A	76+19	X		17.00	21	2	INLC-15MOD.	200.0		78A		
78A	78+20	X		18.11	21	2	MHC-8	12.0		78B		
78B	78+32	X		18.11	24	2	DROPMHC-8	47.0		78E		
78E	78+11	X		57.27	24	2	ConcreteAnchor			1	2R" Concrete Anchor	

# **APPENDIX C: Early Coordination**

## Sample Early Coordination Letter

November 12, 2024

Re: Early Coordination  
Des. Nos. 1401291 and 2201253  
Roadway Reconstruction Project  
Soldiers Home Road  
Wabash Township, City of West Lafayette, Tippecanoe County, Indiana

Dear Agency:

The City of West Lafayette, with partial funding from the Federal Highway Administration (FHWA) and oversight from the Indiana Department of Transportation (INDOT), propose to proceed with a roadway reconstruction project in the City of West Lafayette, Tippecanoe County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into the environmental report for this project in accordance with the National Environmental Policy Act. Your cooperation in this endeavor is appreciated.

The project is located on Soldiers Home Road, in Tippecanoe County. Specifically, the project is located in Sections 5 and 8; Township 23 North; Range 4 West as illustrated on the *Lafayette West*, Indiana 7.5-minute United States Geological Survey (USGS) topographic quadrangle.

The project was originally divided into two construction phases: Phase 1 (Des. Nos. 1401291 and 2201253) and Phase 2 (Des. No. 2201256). The City of West Lafayette has suspended development of Phase 2. The project will now only include Phase 1 of the project.

Phase 1 (Des. No. 2201253) will include the construction of a single-lane roundabout at the westbound Sagamore Parkway access ramps at Soldiers Road. A 10 ft. multi-use path will be built along the west side of the roundabout that will continue along the west side of Soldiers Home Road to adjoin the improvements under Des No. 1401291

Phase 1 (Des. Nos. 1401291) improvements will extend from the westbound Sagamore Parkway access ramps to Hamilton Street and will include the following:

- Reconstruction of Soldiers Home Road to provide one 11 ft. travel lane in each direction and a 12 ft. TWLTL (two-way left turn lane)
- Construction of a 10 ft. pedestrian multi-use path on the west side of Soldiers Home Road
- Construction of a stairway to connect the southern end of the multi-use path to the Sagamore Parkway Trail
- Construction of a 5 ft. sidewalk on the east side of Soldiers Home Road
- Incidental construction extending from Hamilton Street to approximately 800 ft. north of Hamilton Street, to connect to existing storm drainage and tie the improvements into the existing roadway.

The project will also include the installation of new bollard style lighting along the pedestrian path and there will be new lighting installed at the roundabout per design standards.

The need for the project is to address the high crash rate and mobility conditions of Soldiers Home Road. Crash data collected between 2019 and 2021 showed a total of 21 reported crashes on Soldiers Home Road within the proposed project limits. In addition, the roadway has a less than desirable Level of Service (LOS) indicating the existing roadway cross-section is not adequately serving the current volume of traffic and will likely deteriorate in the future as traffic volumes increase.

Furthermore, there are no contiguous pedestrian amenities along Soldiers Home Road that provide connectivity to other pedestrian routes located in the immediate project area. The purpose of the project is to reduce the high crash rate, improve traffic mobility and provide safe passage for pedestrians. The project is approximately 0.56 mile in length.

Approximately 2.23 acres of permanent right-of-way and 0.28 acre of temporary right-of-way will be required to construct the project and provide access for construction and re-grading. Land use in the project area consists of single-family residential dwellings and subdivisions.

Metric Environmental (Metric) will conduct a field investigation and develop a *Waters of the U.S. Determination Report* that identifies any waterways or wetlands that require the appropriate Section 401/404 Clean Water Act permit applications for permanent or temporary impacts to Waters of the US.

Coordination with the US Fish and Wildlife Service (USFWS) will be conducted for potential impacts upon the Federally threatened Indiana bat and northern long-eared bat and project information will be submitted through the USFWS's Information for Planning and Consultation (IPaC). Coordination with the Indiana Department of Natural Resources will also be conducted to evaluate any impact upon State threatened or endangered species under the jurisdiction of the IDNR.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic and archaeological properties. The Section 106 process involves efforts to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. The results of cultural resource identification and evaluation efforts, both above-ground and archaeological will be prepared and coordination with the INDOT Cultural Resources Office (INDOT CRO) and the Indiana State Historic Preservation Office (SHPO) will be ongoing as the Section 106 process advances.

Should we not receive your response within thirty (30) calendar days from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions, please contact Elayna Stoner, Project Manager, Metric Environmental, at [elaynas@MetricEnv.com](mailto:elaynas@MetricEnv.com), by telephone 317.315.3322 or write to her at 6958 Hillside Court, Indianapolis, Indiana 46250. You may also contact Mr. Mike Peterson, Project Manager, VS Engineering at [mpeterson@vsengineering.com](mailto:mpeterson@vsengineering.com) or by telephone 765.742.0295 ext. 235.

Thank you in advance for your input.

Sincerely,  
Elayna Stoner

*Elayna Stoner*  
Metric Environmental, LLC

**Graphics Attached to this Letter are Provided in Appendix B of this CE Document**

**Early Coordination Recipients:**

Federal Highway Administration  
[k.carmanygeorge@dot.gov](mailto:k.carmanygeorge@dot.gov)

Wellhead Proximity Determinator  
<https://www.in.gov/idem/cleanwater/pages/wellhead/>

National Park Service  
Midwest Regional Office  
[Mwro\\_Compliance@nps.gov](mailto:Mwro_Compliance@nps.gov)

Indiana Geological and Water Survey  
<https://igwas.indiana.edu/eAssessment>

Indiana Department of Natural Resources  
Division of Fish and Wildlife  
[environmentalreview@dnr.in.gov](mailto:environmentalreview@dnr.in.gov)

US Department of Housing & Urban Development  
[erik.r.sandsedt@hud.gov](mailto:erik.r.sandsedt@hud.gov)

INDOT Crawfordsville District Project Manager  
[DGolladay@indot.IN.gov](mailto:DGolladay@indot.IN.gov)

INDOT Crawfordsville District Environmental Division  
[BErvin@indot.IN.gov](mailto:BErvin@indot.IN.gov)

US Fish & Wildlife Service  
[robin\\_mcwilliams@fws.gov](mailto:robin_mcwilliams@fws.gov)

INDOT Office of Aviation  
[TLewandowski@indot.IN.gov](mailto:TLewandowski@indot.IN.gov)

Natural Resources Conservation Service  
[john.allen@usda.gov](mailto:john.allen@usda.gov)

Area Plan Commission of Tippecanoe County  
[dpoad@tippecanoe.in.gov](mailto:dpoad@tippecanoe.in.gov)

West Lafayette Streets Commissioner  
[Streets@westlafayette.in.gov](mailto:Streets@westlafayette.in.gov)

West Lafayette Engineering  
[engineering@westlafayette.in.gov](mailto:engineering@westlafayette.in.gov)

West Lafayette City Council, District 5  
[kparker@westlafayette.in.gov](mailto:kparker@westlafayette.in.gov)

West Lafayette City Council, District 4  
[lleverenz@westlafayette.in.gov](mailto:lleverenz@westlafayette.in.gov)

City of West Lafayette Mayor  
[chouston@westlafayette.in.gov](mailto:chouston@westlafayette.in.gov)

West Lafayette Parks and Recreation Board  
[wlpboard@westlafayette.in.gov](mailto:wlpboard@westlafayette.in.gov)

West Lafayette Community School Corporation  
[caldwelld@wl.k12.in.us](mailto:caldwelld@wl.k12.in.us)

Montessori School of Greater Lafayette  
2552 Soldiers Home Road  
West Lafayette, IN 47906

West Lafayette City Engineer  
MS4 Stormwater  
[nbartos@westlafayette.in.gov](mailto:nbartos@westlafayette.in.gov)

**THIS IS NOT A PERMIT**

**State of Indiana**  
**DEPARTMENT OF NATURAL RESOURCES**  
**Division of Fish and Wildlife**  
Early Coordination/Environmental Assessment

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**DNR#:** ER-26992

**Request Received:** November 12, 2024

**Requestor:**

Elayna Stoner  
Metric Environmental, LLC  
6958 Hillsdale Court  
Indianapolis, IN 46250

**Project:**

Soldiers Home Road reconstruction and improvements, including construction of a single-lane roundabout at the westbound Sagamore Parkway access ramps and installation of a pedestrian multi-use path along the west side of the road, City of West Lafayette; Des #1401291 & 2201253

**County/Site Info:** Tippecanoe County

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

**Regulatory Assessment:**

Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

**Natural Heritage Database:**

The Natural Heritage Program's data have been checked. A Raptor Migratory Concentration Area has been documented within .5 mile of the project area, in addition to the State endangered Rabbitsfoot (*Theliderma cylindrica*) and the State special concern Common Nighthawk (*Chordeiles minor*) and Mississippi Kite (*Ictinia mississippiensis*).

**Fish and Wildlife Comments:**

Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

A) Heritage Species

The Division of Fish and Wildlife does not anticipate any significant impacts to the Common Nighthawk due to this project. However, the project area provides suitable nesting habitat for the Mississippi Kite and suitable migratory stopover for raptors. To minimize impacts to these species, we recommend removing trees and other woody vegetation outside of the spring migratory season and the breeding season. The spring migratory and breeding season occurs between early April and late August.

## B) Expanding Existing Roadways

The proposed project design should be revisited to reduce impacts to fish, wildlife, and botanical resources where possible. The new roadway will consist of one 11' travel lane in each direction and a 12' two-way left turn lane. The project also proposes a 10' pedestrian multi-use path on the west side of Soldiers Home Road and a 5' sidewalk on the east side of Soldiers Home Road. This amounts to a significantly wider transportation corridor in an area that supports a lot of mature trees. When designing a roadway, the goal should be to disturb as narrow an area as possible to help minimize negative impacts. Where significant impacts to fish, wildlife, or botanical resources are likely due to the roadway's width, the roadway width should be reduced to help avoid those impacts whenever possible. For example, eliminating buffers between the roadway and pedestrian facilities and reducing the width of the multi-use path could reduce the overall width and impact of the proposed transportation corridor.

Wildlife movement across the landscape should be a consideration for all transportation corridor projects. Maintaining wildlife habitat along transportation corridors is a major directive of the current Division of Fish and Wildlife Strategic Plan. Additionally, any proposed landscaping along the corridor should consider the use of native trees, shrubs, grasses, and wildflowers to offset impacts to these resources as a result of the proposed project.

It is also important to note that there are many studies which indicate that building new roadways or widening existing roadways actually creates or induces more traffic and congestion. It is understood that the proposed project is also intended to improve motorist safety in addition to adding capacity. The Division of Fish and Wildlife recommends at a minimum considering the potential negative impacts of increasing capacity into the planning process. The following is a link to a Federal Highway Administration Office of Planning webpage that discusses the basics of induced travel - <https://www.fhwa.dot.gov/planning/itfaq.cfm>.

## C) Tree Removal

It is understood that approximately 7.88 acres of trees will be removed. This is a significant amount of tree clearing that will negatively affect the surrounding area. The Division of Fish and Wildlife recommends avoiding removing urban trees to the greatest extent possible and replacing trees that must be removed. Reducing the width of the proposed transportation corridor as outlined above should help reduce the amount of clearing required. Street trees are important to fish and wildlife resources in urban areas. Indiana's street trees also provide millions of dollars of tangible benefits to Indiana communities by their presence in the urban environment. Their shade and beauty contribute to the quality of life. They provide significant increases in real estate values, create attractive settings for commercial businesses, and improve community neighborhood appeal. Trees decrease energy consumption by providing shade and acting as windbreaks. They reduce water treatment costs and impede soil erosion by slowing the runoff of stormwater. Trees also cool the air temperature, cleanse pollutants from the air, and produce oxygen while absorbing carbon dioxide. Trees are an integral component of the urban environment. Proactively managing and maintaining a street tree population will ultimately maximize the benefits afforded by their aesthetic and ecological functions. The following links give a good overview of the benefits of a street tree program and how to select the right species to avoid the negative impacts of non-native invasive species such as the common and popular Bradford pear: <https://www.in.gov/dnr/forestry/forestry-publications-and-presentations/> (scroll down to the Community & Urban Forestry section).

## D) Pavement Rehabilitation

Pavement rehabilitation projects typically do not have a significant impact on fish, wildlife, and botanical resources as long as best management practices (BMPs) are in place to limit the migration of polycyclic aromatic hydrocarbons (PAHs) into local waterways. PAHs are a byproduct of asphalt and coal tar-based sealants and negatively impact aquatic systems. The use of sealants that are free of petroleum and coal tar-based products is encouraged whenever possible. Contaminated road runoff can significantly impact the aquatic environment through increased turbidity and release of sediment into the stream which can be harmful to fish and other aquatic organisms, their eggs, and their food supply. Where possible, road runoff should be directed to riprap turnouts and sediment filtration prior to entering a stream to reduce impacts to aquatic species. We recommend the use of pollutant trapping technology such as storm drain inserts to reduce the runoff of roadside pollutants where appropriate.

## E) Drainage and Stormwater Management

The Division of Fish and Wildlife recommends considering a more sustainable approach to stormwater management. The traditional model of stormwater management aims to drain runoff as quickly as possible with the help of channels and pipes, which increases peak flows and costs of stormwater management. This type of solution only transfers drainage problems from one section of a basin to another. A more sustainable approach should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, etc.) and recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.). The following links give a good overview of traditional and sustainable stormwater management systems and their pros and cons for consideration during the design of the proposed project: <https://www.epa.gov/greeningepa/epa-facility-stormwater-management>; <https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities>

## F) LED Lighting

Most transportation corridor designers and municipalities are trending toward LED lighting. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. Scientific evidence suggests that artificial light at night has negative and deadly effects on many organisms including amphibians, birds, mammals, insects and plants (<https://www.darksky.org/light-pollution/wildlife/>). A June 2016 American Medical Association (AMA) report, "Human and Environmental Effects of Light Emitting Diode Community Lighting," concluded that "white LED street lighting patterns may contribute to the risk of chronic disease in the populations of cities in which they have been installed."

The International Dark-Sky Association has developed recommendations (<https://www.darksky.org/our-work/lighting/lighting-for-citizens/led-guide/>) for communities choosing LED lighting systems that will aid in the selection of lighting that is energy and cost efficient, yet ensures safety and security, protects wildlife, and promotes the goal of reducing light pollution:

- Always choose fully shielded fixtures that emit no light upward.
- Use "warm-white" or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) to minimize harmful blue light emission.
- Look for products with adaptive controls like dimmers, timers, and motion sensors.
- Consider dimming or turning off lights during non-peak overnight hours.
- Avoid the temptation to over-light because of the higher luminous efficiency of LEDs.
- Only light the exact space and in the amount required for particular tasks.

The Division of Fish and Wildlife strongly encourages visiting the following link to learn more about the potential negative impacts of improperly selected LED lighting systems: <http://darksky.org/light-pollution/light-pollution-solutions/>.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Central Indiana as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits all tree and brush clearing.
3. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
4. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
5. If erosion control blankets are used, they shall be heavy-duty, biodegradable, and net free or use loose-woven/Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

6. Plant two trees of 3-gallon stock or larger for each tree which is removed that is 10 inches or greater in diameter-at-breast height.

**Contact Staff:**

Our agency appreciates this opportunity to be of service. Please contact me at [RVanVoorhis@dnr.IN.gov](mailto:RVanVoorhis@dnr.IN.gov) or (317) 232-8163 if we can be of further assistance.

*Rachel Van Voorhis*

Rachel Van Voorhis  
Environmental Coordinator  
Division of Fish and Wildlife

**Date:** December 12, 2024

## Susan Castle

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**Subject:** FW: Request USFWS confidential database check, Des. No. 1401291, Soldiers Home Road, Tippecanoe County, Indiana

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**From:** Kurtz, Randy <RKurtz@indot.IN.gov>

**Sent:** Wednesday, March 29, 2023 10:50 AM

**To:** Jason Damm <jasond@metricenv.com>; Neild, Benjamin <BNeild@indot.IN.gov>

**Cc:** Susan Castle <susanc@metricenv.com>; Colin Keith <colink@metricenv.com>

**Subject:** RE: Request USFWS confidential database check, Des. No. 1401291, Soldiers Home Road, Tippecanoe County, Indiana

Good morning,

A review of the USFWS GIS database for Indiana bat and Northern long-eared bat roosting, hibernacula and capture sites were conducted for [Des No. 1401291 on 3/29/2023](#). There are no documented sites within a half mile the project area.

The USFWS Information for Planning and Conservation (IPaC) website must be consulted, and a new project created to obtain an official species list and complete the questionnaire for the project to determine the applicability of the programmatic consultation. If needed, the IPaC generated documents must be forwarded to the USFWS for verification. Thank you,

**Randy "Zane" Kurtz**

*Environmental Section Manager*

*Capital Program Management Division*

41 West 300 North

Crawfordsville, IN 47933

**Office:** (765)361-5232

**Email:** [rkurtz@indot.in.gov](mailto:rkurtz@indot.in.gov)



## Susan Castle

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**Subject:** FW: Updated Half-Mile Protected Species Check (1401291 & 2201253)

**From:** Ervin, Brock <BErvin@indot.IN.gov>

**Sent:** Tuesday, June 17, 2025 12:20 PM

**To:** Jason Damm <jasond@metricenv.com>

**Cc:** Susan Castle <susanc@metricenv.com>; Asadpour, Robabeh <RAsadpour@indot.IN.gov>; Lawson, Michael J <MiLawson@indot.IN.gov>

**Subject:** RE: Updated Half-Mile Protected Species Check (1401291 & 2201253)

Jason,

Thank you for preparing the IPaC submission for Des. Nos. 1401291 and 2201253. I have reviewed the project description and determination key. Please note that the date of the half-mile protected species check was not updated in the concurrence letter, but the official species list does show the correct update of today, 6/17/2025.

**NLAA for Indiana, northern long eared, and/or tricolored bats:**

The project is eligible for the Programmatic Biological Opinion/Conference Opinion for Transportation Projects in the Range of the Indiana Bat, Northern-Eared Bat, and the Tricolored Bat. A determination of **May Affect - Not Likely to Adversely Affect** (MA-NLAA) was reached for the Indiana bat and the northern long eared bat. Programmatic consultation through IPaC satisfies the consultation requirements for these species. The concurrence verification letter was submitted to the US Fish and Wildlife Service for their review. You can find the submitted concurrence verification letter in IPaC. Per the concurrence verification letter, please allow 14 days before considering this determination to be valid.

**NE for other species:**

As was indicated in the IPaC project description, The USFWS species list identified one or more other federally endangered or threatened species (the fanshell and rabbitsfoot mussels), besides those covered by the Programmatic BO/CO. We concur that, based on the scope of work and lack of impacts to suitable habitat for the species, a No Effect (NE) determination is appropriate for these species. This information has been appropriately indicated in the IPaC submission, and no further coordination is needed for “other species”. Pending the 14-day review for species covered by the Programmatic BO/CO, this concludes the coordination requirements under Section 7 of the Endangered Species Act. If the scope of work changes, this information may need to be reevaluated.

**Other Species – Not Endangered or Threatened**

The USFWS official species list also identified other species that are not currently listed as endangered or threatened as potentially occurring in the project area:

- The project is in the range of the monarch butterfly (*Danaus plexippus*), which is a proposed threatened species; however, the USFWS has not identified any critical habitat within Indiana. Therefore, as this project will not impact critical habitat of the monarch butterfly, and as it does not jeopardize its continued existence, no further coordination is required under Section 7 of the Endangered Species Act.
- The project is in the range of the salamander mussel (*Simpsonaias ambigua*), which is a proposed endangered species. USFWS has proposed eight segments of Indiana streams as containing critical habitat for the salamander mussel per the Federal Register, Vol. 88, No. 161. No proposed critical habitat is within at least one mile of the project area, and the project will not jeopardize its continued existence.
- The project is in the range of a “non-essential experimental population” of the whooping crane (*Grus americana*), but this population is not covered by protections provided for the natural endangered population of whooping crane.

**Concluding Remarks**

If the scope of work changes, if tree clearing amounts change substantially or beyond existing thresholds, if a follow-up inspection identifies the presence of bats, or if new endangered or threatened species are listed by USFWS, a revision to this determination may be necessary and recoordination will be needed with the district.

Regards,

**Brock Ervin (He/Him/His)**

*Environmental Section Manager  
Capital Program Management Division  
Crawfordsville District, INDOT*

41 West 300 North  
Crawfordsville, IN 47933

**Office/Cell:** (765) 230-8392

**Email:** [bervin@indot.in.gov](mailto:bervin@indot.in.gov)

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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Indiana Ecological Services Field Office  
620 South Walker Street  
Bloomington, IN 47403-2121  
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:

06/17/2025 16:05:43 UTC

Project Code: 2024-0120916

Project Name: Lead Des. 1401291 and Des. 2201253, Roadway Reconstruction Project, Soldiers Home Road

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

To Whom It May Concern:

The purpose of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Act.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. You can complete this verification formally or informally or request an updated list by visiting the IPaC website at regular intervals during project planning and implementation.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at [Midwest Section 7 Technical Assistance | U.S. Fish & Wildlife Service](#). This website contains step-by-step instructions to help you determine if your project will have an adverse effect on listed species and to lead you through the Section 7

process.

We appreciate your concern for threatened and endangered species. Federal agencies should include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

### **Other Trust Resources and Activities**

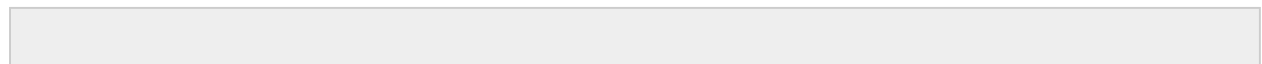
*Bald and Golden Eagles* - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a [permit](#). A [nest take permit](#) is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

*Migratory Birds* - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

*Communication Towers* - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

*Transmission Lines* - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

*Wind Energy* - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.



Attachment(s):

- Official Species List

## **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Indiana Ecological Services Field Office**

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

## PROJECT SUMMARY

Project Code: 2024-0120916  
Project Name: Lead Des. 1401291 and Des. 2201253, Roadway Reconstruction Project, Soldiers Home Road  
Project Type: Railroad - Maintenance/Modification  
Project Description: The City of West Lafayette and Indiana Department of Transportation, with funding from Federal Highway Administration, intend to proceed with a roadway reconstruction project along Soldiers Home Road in the City of West Lafayette, Tippecanoe County, Indiana (Des. 1401291 [Lead] & 2201253).

The proposed project is located along Soldiers Home Road in the City of West Lafayette, extending northward from the Sagamore Parkway westbound ramps to Hamilton Street, with an additional 750 feet of incidental construction at the northern terminus. The project scope includes the reconstruction of Soldiers Home Road under Lead Des. 1401291 and the conversion of the Soldiers Home Road/Sagamore Parkway westbound ramps intersection from a T-junction to a dual-lane roundabout under Des. 2201253. Des. 1401291 includes the construction of a 10-foot-wide multi-use path on the west side and a five-foot-wide sidewalk on the east side of the road, construction of Americans with Disabilities Act-compliant curb ramps at intersecting streets, construction of a stairway connecting the southern end of the multi-use path to the Sagamore Parkway Trail located immediately southeast of the roundabout, widening of the roadway to accommodate a single travel lane in each direction with a center two-way left turn lane, regrading of existing ditches and installation of new curb, gutter, and storm drainage structures, and installation of new lighting and signage. The roundabout included under Des. 2201253 includes the construction of a 120-foot diameter roundabout with two, 18-foot-wide circulating lanes and a 14-foot-wide concrete truck apron, construction of a 10-foot-wide multi-use path along the north and east sides of the roundabout, and installation of new lighting and signage.

The proposed maintenance of traffic plan includes the full closure to through traffic along Soldiers Home Road during construction. A posted detour route will likely include the use of Navajo Street, Salisbury Street, and Kalberer Road. Access to all properties will be maintained. A total of 2.23 acres of new, permanent right-of-way (ROW) is anticipated to be required to complete the project. Additionally, 0.28 acre of temporary ROW is also anticipated. New, permanent lighting is planned for the roundabout and the pedestrian pathway. Temporary lighting may also be required during construction.

Based on consultation with INDOT Crawfordsville District, a June 17, 2025, review of the U.S. Fish and Wildlife Service database did not indicate the presence of endangered bat species within 0.5 mile of the project area. There is suitable summer habitat located within the project area, and a total of 7.88 acres of trees are expected to be removed as part of this project. These trees are dominated by sugar maple (*Acer saccharum*), white oak (*Quercus alba*), American basswood (*Tilia americana*), and hackberry (*Celtis occidentalis*). No mitigation is anticipated.

Regarding the fanshell and rabbitsfoot mussel species, INDOT, on behalf of FHWA, has concluded that the project will have no effect on these species.

The project is anticipated to begin in spring 2029 and be completed by summer 2030.

**Project Location:**

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.46166445,-86.90076849500257,14z>



Counties: Tippecanoe County, Indiana

## ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered

## BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Experimental Population, Non- Essential

## CLAMS

NAME	STATUS
Fanshell <i>Cyprogenia stegaria</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4822">https://ecos.fws.gov/ecp/species/4822</a>	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5165">https://ecos.fws.gov/ecp/species/5165</a>	Threatened
Salamander Mussel <i>Simpsonaias ambigua</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6208">https://ecos.fws.gov/ecp/species/6208</a>	Proposed Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## **IPAC USER CONTACT INFORMATION**

Agency: Indiana Department of Transportation  
Name: Brock Ervin  
Address: 41 W 300 N  
Address Line 2: INDOT Crawfordsville District  
City: Crawfordsville  
State: IN  
Zip: 47933  
Email: [bervin@indot.in.gov](mailto:bervin@indot.in.gov)  
Phone: 7653615669

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Indiana Department of Transportation

Email: [bervin@indot.in.gov](mailto:bervin@indot.in.gov)

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---

**From:** Jason Damm <[jasond@metricenv.com](mailto:jasond@metricenv.com)>

**Sent:** Friday, June 13, 2025 11:02 AM

**To:** Ervin, Brock <[BErvin@indot.IN.gov](mailto:BErvin@indot.IN.gov)>; Asadpour, Robabeh <[RASadpour@indot.IN.gov](mailto:RASadpour@indot.IN.gov)>

**Cc:** Susan Castle <[susanc@metricenv.com](mailto:susanc@metricenv.com)>; Lawson, Michael J <[MiLawson@indot.IN.gov](mailto:MiLawson@indot.IN.gov)>

**Subject:** RE: Lead Des. 1401291 (and Des. 2201253), Roadway Reconstruction Project, Soldiers Home Road, Tippecanoe County, Indiana

**EXTERNAL EMAIL:** This email was sent from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Brock,

I generated a new species list for this project, and for ease I have also attached it to this email. The Dkey will need redone, but I am unable to delete the existing one. When you get a moment, can you or one of your staff please delete the existing DKey and let me know. I can go in and re-do it with no trouble.

In the present, updated species list, the fanshell and rabbitsfoot are the only two listed (aside from the lbat and nleb).

**Fanshell:** This species is typically in (relatively) deeper waters of larger, perennial rivers. Given the project location at approximately 0.5 mile northwest of the Wabash River, and the shallowness of the creek in this area, we still feel a No Effect determination is most appropriate for this species.

**Rabbitsfoot Clam:** This species is typically in small to medium rivers/streams rivers. Given the project location at approximately 0.5 mile northwest of the Wabash River, as well as the very small nature of the creek at the project area, we still feel a No Effect determination is most appropriate for this species.

In Sum: we still feel a No Effect is appropriate for both of these species. Please let me and/or Susan know if you agree or disagree, as well as what next steps you would like 😊

Have a great weekend!

--Jason

**Jason P. Damm MS, CWB, CSP, ASHM**

Senior Project Manager

Health & Safety Coordinator

**Metric Environmental, LLC**

*Certified DBE/MBE/SBE Company*

Phone: 317.400.1633

Mobile: 317.605.2392

Email: [jasond@metricenv.com](mailto:jasond@metricenv.com)

## Susan Castle

---

**Subject:** FW: Lead Des. 1401291 (and Des. 2201253), Roadway Reconstruction Project, Soldiers Home Road, Tippecanoe County, Indiana

---

**From:** Ervin, Brock <BErvin@indot.IN.gov>

**Sent:** Monday, June 16, 2025 4:46 PM

**To:** Jason Damm <jasond@metricenv.com>

**Cc:** Susan Castle <susanc@metricenv.com>; Lawson, Michael J <MiLawson@indot.IN.gov>; Asadpour, Robabeh <RASadpour@indot.IN.gov>

**Subject:** RE: Lead Des. 1401291 (and Des. 2201253), Roadway Reconstruction Project, Soldiers Home Road, Tippecanoe County, Indiana

Hi, Jason.

Susan asked me to call her last Friday, and I just got off the phone. We discussed this determination.

With mussel species where a project has the potential to directly, or indirectly, impact individuals in a protected species population, we need to be careful. As USFWS has explained to me, to say that a project probably won't have an impact is also saying that there's a chance that it will, which would warrant an NLAA and not an NE determination.

As mentioned before, I was concerned about the stormwater drain work and ditch work. Susan also mentioned culvert work at Cedar Hollow. So while I agree that habitat isn't directly in the project area, the type of work and impacts to whatever water feature exists along the hollow (stream, swale, or erosional feature) make off-site movement of sediment, with the potential for reaching the Wabash River, a concern in making the effect determination.

However, the standard construction requirements and particularly the need for a Construction Stormwater General Permit will enforce appropriate erosion and sediment control. As such, indirect impacts to the mussel species have been addressed. As you indicated, there is no mussel habitat in the immediate vicinity of the project area, so there will not be any direct impacts.

Therefore, on behalf of FWHA, INDOT has concluded that the project's impacts to the rabbitsfoot and fanshell mussels warrant a No Effect determination.

Please include this email response in the CE as supporting documentation.

In future submittals, please incorporate such information into your rationale for species determination so we can process them more quickly.

Best regards,

**Brock Ervin (He/Him/His)**

*Environmental Section Manager*

*Capital Program Management Division*

*Crawfordsville District, INDOT*

41 West 300 North

Crawfordsville, IN 47933

**Office/Cell:** (765) 230-8392



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Indiana Ecological Services Field Office  
620 South Walker Street  
Bloomington, IN 47403-2121  
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:

06/17/2025 16:04:00 UTC

Project code: 2024-0120916

Project Name: Lead Des. 1401291 and Des. 2201253, Roadway Reconstruction Project, Soldiers Home Road

Subject: Not Likely to Adversely Affect Concurrence verification letter for the 'Lead Des. 1401291 and Des. 2201253, Roadway Reconstruction Project, Soldiers Home Road' project under the December 13, 2024, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat, Northern Long-eared Bat, and Tricolored Bat.

To whom it may concern:

This letter records the determination of effects to federally listed (or proposed) bat species anticipated to result from the Lead Des. 1401291 and Des. 2201253, Roadway Reconstruction Project, Soldiers Home Road (the Project). This determination is based upon information you entered into the assisted determination key (Dkey) associated with the above referenced Programmatic Biological Opinion/Conference Opinion (PBO/PCO) in the U.S. Fish and Wildlife Service's (Service) Information for Planning and Consultation (IPaC) system on the date listed above to verify that the Project may rely on the concurrence provided in the PBO/PCO to satisfy requirements under section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (16 USC 1536), as amended.

### **Ensuring Accurate Determinations When Using IPaC:**

The Service developed the IPaC system and this Dkey in accordance with the ESA and based on the PBO/PCO. All information submitted by the project proponent into IPaC must accurately represent the full scope and details of the Project.

**Failure to accurately represent or implement the Project as detailed in the Dkey invalidates this letter. Answers to certain questions in the Dkey commit the project proponent to implementation of conservation measures that must be followed for the ESA determinations to remain valid. Carefully review this letter, your ESA requirements are NOT yet complete.**

**Determinations:**

Based on the information you provided (Project Description shown below), you have determined that the Project is within the scope and adheres to the criteria of the PBO/PCO, including the adoption of applicable avoidance and minimization measures. Based on your IPaC submission and the PBO/PCO, the Project is consistent with the following effect determinations:

<b>Species</b>	<b>Listing Status</b>	<b>Determination</b>
Indiana Bat ( <i>Myotis sodalis</i> )	Endangered	NLAA
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	Endangered	NLAA

The tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can confer under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a no effect or not likely to adversely affect (NLAA) determination from the key to confirm that the determination is still accurate.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Project does not meet the criteria for a NLAA determination under the PBO/PCO. **If the Service does not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Project under the terms of the NLAA concurrence provided in the PBO/PCO.** This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO/PCO.

If the Project is modified, or new information reveals that it may affect the Indiana bat, northern long-eared bat, or tricolored bat in a manner or to an extent not considered in the PBO/PCO, further review to conclude the requirements of ESA section 7(a)(2) may be required.

**For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:**

If your initial bridge, culvert, or structure assessment failed to detect Indiana bat, northern long-eared bat, or tricolored bat use or occupancy, yet bats are later detected prior to, or during construction, promptly notify the local Service Field Office within 2 working days of the discovery. In addition, please document whether incidental take occurred, and if so, the type (i.e. kill or harm) and amount (i.e. number of individuals) and submit documentation to the local Service Field Office within 5 working days from the completion of the bridge, culvert, or structure construction (use Appendix E - Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form in the [User's Guide](#)). In these instances, potential incidental take of Indiana bats, northern long-eared bats, or tricolored bats may be exempted provided that the take is reported to the Service. In these instances, potential incidental take of Indiana bats, northern long-eared bats, or tricolored bats may be exempted provided that the take is reported to the Service.

If the Project may affect any other federally listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Field Office is required for those species/designated critical habitat. If the Project has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency to contact this Service Field Office

The following species may occur in your project area and **are not** covered by this determination:

- Fanshell *Cyprogenia stegaria* Endangered
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Rabbitsfoot *Quadrula cylindrica cylindrica* Threatened
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

## **PROJECT DESCRIPTION**

The following project name and description was collected in IPaC as part of the endangered species review process.

### **NAME**

Lead Des. 1401291 and Des. 2201253, Roadway Reconstruction Project, Soldiers Home Road

### **DESCRIPTION**

The City of West Lafayette and Indiana Department of Transportation, with funding from Federal Highway Administration, intend to proceed with a roadway reconstruction project along Soldiers Home Road in the City of West Lafayette, Tippecanoe County, Indiana (Des. 1401291 [Lead] & 2201253).

The proposed project is located along Soldiers Home Road in the City of West Lafayette, extending northward from the Sagamore Parkway westbound ramps to Hamilton Street, with an additional 750 feet of incidental construction at the northern terminus. The project scope includes the reconstruction of Soldiers Home Road under Lead Des. 1401291 and the conversion of the Soldiers Home Road/Sagamore Parkway westbound ramps intersection from a T-junction to a dual-lane roundabout under Des. 2201253. Des. 1401291 includes the construction of a 10-foot-wide multi-use path on the west side and a five-foot-wide sidewalk on the east side of the road, construction of Americans with Disabilities Act-compliant curb ramps at intersecting streets, construction of a stairway connecting the southern end of the multi-use path to the Sagamore Parkway Trail located immediately southeast of the roundabout, widening of the roadway to accommodate a single travel lane in each direction with a center two-way left turn lane, regrading of existing ditches and installation of new curb, gutter, and storm drainage structures, and installation of new lighting and signage. The roundabout included under Des. 2201253 includes the construction of a 120-foot diameter roundabout with two, 18-foot-wide circulating lanes and a 14-foot-wide concrete truck apron, construction of a 10-foot-wide multi-use path along the north and east sides of the roundabout, and installation of new lighting and signage.

The proposed maintenance of traffic plan includes the full closure to through traffic along Soldiers Home Road during construction. A posted detour route will likely include the use of Navajo Street, Salisbury Street, and Kalberer Road. Access to all properties will be maintained. A total of 2.23 acres of new, permanent right-of-way (ROW) is anticipated to be required to complete the project. Additionally, 0.28 acre of temporary ROW is also anticipated. New, permanent lighting is planned for the roundabout and the pedestrian pathway. Temporary lighting may also be required during construction.

Based on consultation with INDOT Crawfordsville District, a March 29, 2023, review of the U.S. Fish and Wildlife Service database did not indicate the presence of endangered bat species within 0.5 mile of the project area. There is suitable summer habitat located within the project area, and a total of 7.88 acres of trees are expected to be removed as part of this project. These trees are dominated by sugar maple (*Acer saccharum*), white oak (*Quercus alba*), American basswood (*Tilia americana*), and hackberry (*Celtis occidentalis*). No mitigation is anticipated.

Regarding the fanshell and rabbitsfoot mussel species, INDOT, on behalf of FHWA, has concluded that the project will have no effect on these species.

The project is anticipated to begin in spring 2029 and be completed by summer 2030.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.46166445,-86.90076849500257,14z>



## DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the Indiana bat, northern long-eared bat or tricolored bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the Programmatic Biological Opinion/Conference Opinion for Transportation Projects in the Range of the Indiana bat, northern long-eared bat, and tricolored bat, dated December 13, 2024.

## QUALIFICATION INTERVIEW

1. Which Federal Agency is the lead federal agency the action?

*A) Federal Highway Administration (FHWA)*

2. Does the Action Area intersect the species list area of the Northern long-eared bat?

**Automatically answered**

*Yes*

3. Does the Action Area intersect the species list area of the Indiana bat?

**Automatically answered**

*Yes*

4. Is the project within 0.5 miles radius of an entrance/opening to any known Indiana bat hibernaculum?

*No*

5. Does your project's activities include raising the road profile above the tree canopy in documented habitat for the Indiana bat, NLEB, or TCB?

Note: For the definition of documented habitat, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>

*No*

6. Is your project located within a karst area?

*No*

7. Will the project include bridge, culvert, or structure removal, replacement, and/or alteration activities?

**Note:** For definitions of bridge, culvert, and structure, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>.

*No*

8. Do your project's activities involve tree removal/trimming, temporary lighting, new/additional permanent lighting, ground disturbance, percussives that involves noise/vibration above existing background levels, vibrations, or slash pile burning?

*Yes*

9. Is there suitable summer habitat for the Indiana bat, NLEB, or TCB within the project action area?

Note: See the Service's summer survey guidance for current definitions of suitable habitat [<https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>].

*Yes*

10. Have P/A surveys for the Indiana bat, NLEB, or TCB been conducted within the suitable summer habitat located within your project action area? This refers to mist-netting or acoustic surveys, not bridge assessments.

Note: See the Service's survey guidance <https://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>

*No*

11. Will the project involve the removal or trimming of trees within suitable habitat for the Indiana bat, NLEB, or TCB?

*Yes*

12. Will any tree removal or trimming occur during the bat pup season?

Note: For more information about bat pup seasons please visit [https://www.fws.gov/sites/default/files/documents/2024-10/2024\\_usfws\\_rangewide\\_ibat-nleb\\_survey\\_guidelines.pdf](https://www.fws.gov/sites/default/files/documents/2024-10/2024_usfws_rangewide_ibat-nleb_survey_guidelines.pdf)

*No*

13. Will the removal or trimming of trees occur **within documented habitat** for the Indiana bat, NLEB, or TCB?

Note: For the definition of documented habitat, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>

*No*

14. Will all tree removal or trimming occur within 100 feet of the road or rail surface?

*Yes*

15. Does your project include activities involving the temporary or permanent exclusion of Indiana bats, NLEBs, or TCBs from a bridge/culvert or structure?

**Note:** exclusion is conducted to deny bats' entry or reentry into a bridge/culvert or structure. To be effective and to avoid harming bats, it should be done according to established standards.

*No*

16. Does your project involve the use of temporary lighting within Indiana bat, NLEB, or TCB suitable habitat?

Note: For the definition of lighting, refer to Appendix A: <https://www.fws.gov/media/users-guide-range-wide-programmatic-consultation-indiana-bat-and-northern-long-eared-bat>

*Yes*

17. Will the use of temporary lighting be conducted during the Indiana bat, NLEB, or TCB active season?

*Yes*

18. Will temporary lighting be directed away from Indiana bat, NLEB, or TCB suitable habitat)?

*Yes*

19. Will the project substantially increase baseline light conditions via the use of permanent lighting (replacement or new/additional) in suitable habitat.

*Yes*

20. When installing new/additional permanent lighting, can downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting) be used?

*Yes*

21. Will your project include percussive activities?

Note: Refer to Stressor #2 Noise/Vibration on page 109 of the PBO/PCO.

*No*

22. Will the project involve the removal or trimming of more than 20 acres of Indiana bat, NLEB, or TCB suitable habitat per 5-mile section of road/rail?

*No*

23. Will the removal or trimming of trees occur within 0.5 miles of a known Indiana bat, NLEB, or TCB hibernaculum?

*No*

24. Will the removal or trimming of these trees occur during the active season?

*No*

25. Will the removal or trimming of trees occur **beyond 100 feet** of the existing road/rail surfaces?

*No*

26. Does the Action Area intersect the species list area of the Indiana bat?

**Automatically answered**

*Yes*

27. Does the Action Area intersect the species list area of the tricolored Bat (TCB)?

**Automatically answered**

*No*

28. Does the Action Area intersect the species list area of the northern long-eared bat (NLEB)?

**Automatically answered**

*Yes*

## PROJECT QUESTIONNAIRE

1. Have you made a No Effect determinations for all other species included on the FWS IPaC generated species list?

*Yes*

2. Have you made a May Affect determination for any other species on the FWS IPaC generated list?

*No*

3. How many acres of trees are proposed for removal/trimming **outside of documented habitat** for the Indiana bat, NLEB, or TCB within 100 feet of the existing road/rail surfaces during the inactive season (NLAA)?

Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

*7.88*

4. How many acres of trees are proposed for removal/trimming **outside of documented habitat** for the Indiana bat, NLEB, or TCB within 100 feet of the existing road/rail surfaces during the active season (**outside the pup season and not between Dec 15th-Feb 15th in Zone 1 of the NLEB and TCB YR active areas**) (LAA)?

Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

*0*

5. How many acres of trees are proposed for removal/trimming **outside of documented habitat** for the Indiana bat, NLEB, or TCB within 100 feet of the existing road/rail surfaces during the pup season (**trees must be <9 in DBH, and not between Dec 15th-Feb 15th in Zone 1 of the NLEB and TCB YR active areas**) (LAA)?

Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

*0*

6. How many acres of trees are proposed for removal/trimming **either outside or within documented habitat** for the Indiana bat, NLEB, or TCB between 100-300 feet of the existing road/rail surface during the inactive season (LAA)? Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

*0*

7. How many acres of trees are proposed for removal/trimming **either outside or within documented habitat** for the Indiana bat, NLEB, or TCB between 100-300 feet of the existing road/rail surfaces during the active season (**outside the pup season, and not between Dec 15-Feb 15 in Zone 1 of the NLEB and TCB YR active areas**) (LAA)?

Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

*0*

8. How many acres of trees are proposed for removal/trimming **either outside or within documented habitat** for the Indiana bat, NLEB, or TCB beyond 300 feet of the existing road/rail surfaces during the inactive season (LAA)?

Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0

9. How many acres of trees are proposed for removal/trimming **either outside or within documented habitat** for the Indiana bat, NLEB, or TCB beyond 300 feet of the existing road/rail surfaces during the active season (**outside the pup season, and not between Dec 15th-Feb 15th in Zone 1 of the NLEB and TCB YR active areas**) (LAA)?

Note: If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0

## **AVOIDANCE AND MINIMIZATION MEASURES (AMMS)**

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

### **GAMM1**

Ensure all operators, employees, and contractors working in areas of Indiana bat, NLEB, or TCB suitable habitat are aware of all Transportation Agency environmental commitments, including all applicable AMMs.

### **LAMM1**

Direct temporary lighting away from suitable habitat during the active season

### **LAMM2**

When installing new/additional permanent lighting or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those Transportation Agencies using the Backlight Uplight and Glare (BUG) system developed by the Illuminating Engineering Society, the project should be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. [http://www.escolighting.com/PDFfiles/BUG\\_rating.pdf](http://www.escolighting.com/PDFfiles/BUG_rating.pdf)

### **TRTAMM1**

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal/trimming in excess of what is required to implement the project safely.

### **TRTAMM2**

Ensure tree removal/trimming is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree removal/trimming to ensure contractors stay within clearing limits

### **TRTAMM3**

Ensure tree removal/trimming is limited to the inactive season, occurs within 100 ft of the road/rail surface, and is outside of documented habitat for the Indiana bat, NLEB, and TCB

## **DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING IBAT, NLEB, OR TCB**

This key was last updated in IPaC on May 30, 2025. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) and may affect the federally listed endangered Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), and/or federally proposed endangered tricolored bat (*Perimyotis subflavus*).

This decision key should only be used to verify project applicability with the Service's Programmatic Biological Opinion/Conference Opinion for Transportation Projects in the Range of the Indiana bat, northern long-eared bat, and tricolored bat, dated December 13, 2024. The programmatic consultation limited transportation activities that may affect the covered bat species and addresses situations that are both likely and not likely to adversely affect the covered bat species. This decision key will assist in identifying the effect of a specific project/activity and the applicability of the programmatic consultation. The programmatic consultation is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic consultation, or that may affect ESA-listed species other than the Indiana bat, northern long-eared bat, or tricolored bat, or their designated critical habitat, may require additional ESA Section 7 consultation.

## **IPAC USER CONTACT INFORMATION**

Agency: Indiana Department of Transportation  
Name: Brock Ervin  
Address: 41 W 300 N  
Address Line 2: INDOT Crawfordsville District  
City: Crawfordsville  
State: IN  
Zip: 47933  
Email: [bervin@indot.in.gov](mailto:bervin@indot.in.gov)  
Phone: 7653615669

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Indiana Department of Transportation

**From:** [McWilliams, Robin](#)  
**To:** [Elayna Stoner](#)  
**Subject:** Re: [EXTERNAL] Des. Nos. 1401291 and 2201253 \_ Roadway Reconstruction Project \_ Soldiers Home Road; City of West Lafayette \_ Early Coordination Letter  
**Date:** Wednesday, November 13, 2024 12:41:30 PM

---

Dear Elayna,

This responds to your recent letter requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and should follow the Indiana bat/northern long-eared bat programmatic consultation process, if applicable (*i.e.* a federal transportation nexus is established). The Service has 14 days after a “Not Likely to Adversely Affect” (NLAA) determination letter is generated to review the project and provide additional comments or request additional information; if you do not receive a response from us within 14 days, we have no additional comments.

Please refer to your species list generated via the Information for Planning and Conservation web site (<https://ipacb.ecosphere.fws.gov/>) for additional species and information. A determination should be made for each listed species or critical habitat on your list, and if necessary (a NLAA or Likely to Adversely Affect determination is made) a request for concurrence sent to our office; we do not provide concurrence for No Effect determinations. If you need assistance for this process, please feel free to contact me for additional information.

Tricolored Bat

On September 14, 2022, the Service published a proposal in the Federal Register to list the tricolored bat (*Perimyotis subflavus*; TCB) as endangered under the ESA. The Service determined the bat faces extinction primarily due to the range-wide impacts of White Nose Syndrome (WNS). Because TCB populations have been greatly reduced due to WNS, surviving bat populations are now more vulnerable to other stressors such as human disturbance and habitat loss. Species proposed for listing are not afforded protection under the ESA; however, as soon as a listing becomes effective (typically 30

days after publication of the final rule in the Federal Register), the prohibitions against jeopardizing its continued existence and “take” will apply. Therefore, if this project or other future or existing projects have the potential to adversely affect the TCB after the potential new listing goes into effect, we recommend that the effects of the project on TCBs and their habitat be analyzed to determine whether authorization under ESA section 7 or 10 is necessary. Projects or programs with an existing section 7 biological opinion may require reinitiation of consultation, and projects with an existing section 10 incidental take permit may require an amendment to provide uninterrupted authorization for covered activities.

The TCB is a small insectivorous bat that typically overwinters in caves, abandoned mines and tunnels, and road-associated culverts (southern portion of the range) and spends the rest of the year in forested habitats, typically roosting among live and dead leaf clusters in tree branches. For more information on TCB and the proposed rule, please see: <https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus> and for more information on WNS, please see: <https://www.whitenosesyndrome.org/>.

Wetland and stream impacts may require permits from the U.S. Army Corps of Engineers, the Indiana Department of Environmental Management’s Water Quality Certification program, and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with agency mitigation guidelines.

This email is provided for technical assistance. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation. Standard recommendations are provided below.

We appreciate the opportunity to comment at this early stage of project planning. If you have any questions, please contact me at [robin\\_mcwilliams@fws.gov](mailto:robin_mcwilliams@fws.gov) or you may call 812-902-1752.

Sincerely,  
Robin McWilliams Munson

**Standard Recommendations:**

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the “tree clearing” restriction for**

**potential Indiana Bat habitat.)**

2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.

Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.

3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.

4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.

5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.

6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High-Water Mark during this time unless the machinery is within the caissons or on the cofferdams.

7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing

Robin McWilliams Munson  
Fish and Wildlife Biologist/Transportation Liaison  
U.S. Fish and Wildlife Service  
Indiana Ecological Services Field Office  
620 South Walker Street  
Bloomington, IN 47403  
Robin\_McWilliams@fws.gov

**\*NEW\* 812-902-1752**



## Organization and Project Information

Organization Name: Metric Environmental , LLC

First Name: Elayna

Last Name: Stoner

Phone: (317) 315-3322

Email: elaynas@metricenv.com

Address Line 1: 6958 Hillsdale Court

City: Indianapolis

State: IN

Zip: 46250

Project Title: Roadway Reconstruction Project

Destination ID: Des. Nos. 1401291 and  
2201253

Project Description: Reconstruction of Soldiers  
Home Road

## Environmental Assessment Report

### Geological Hazards:

1. Moderate liquefaction potential

### Mineral Resources:

1. Bedrock Resource: Low Potential
2. Sand and Gravel Resource: Low Potential

### Disclaimer:

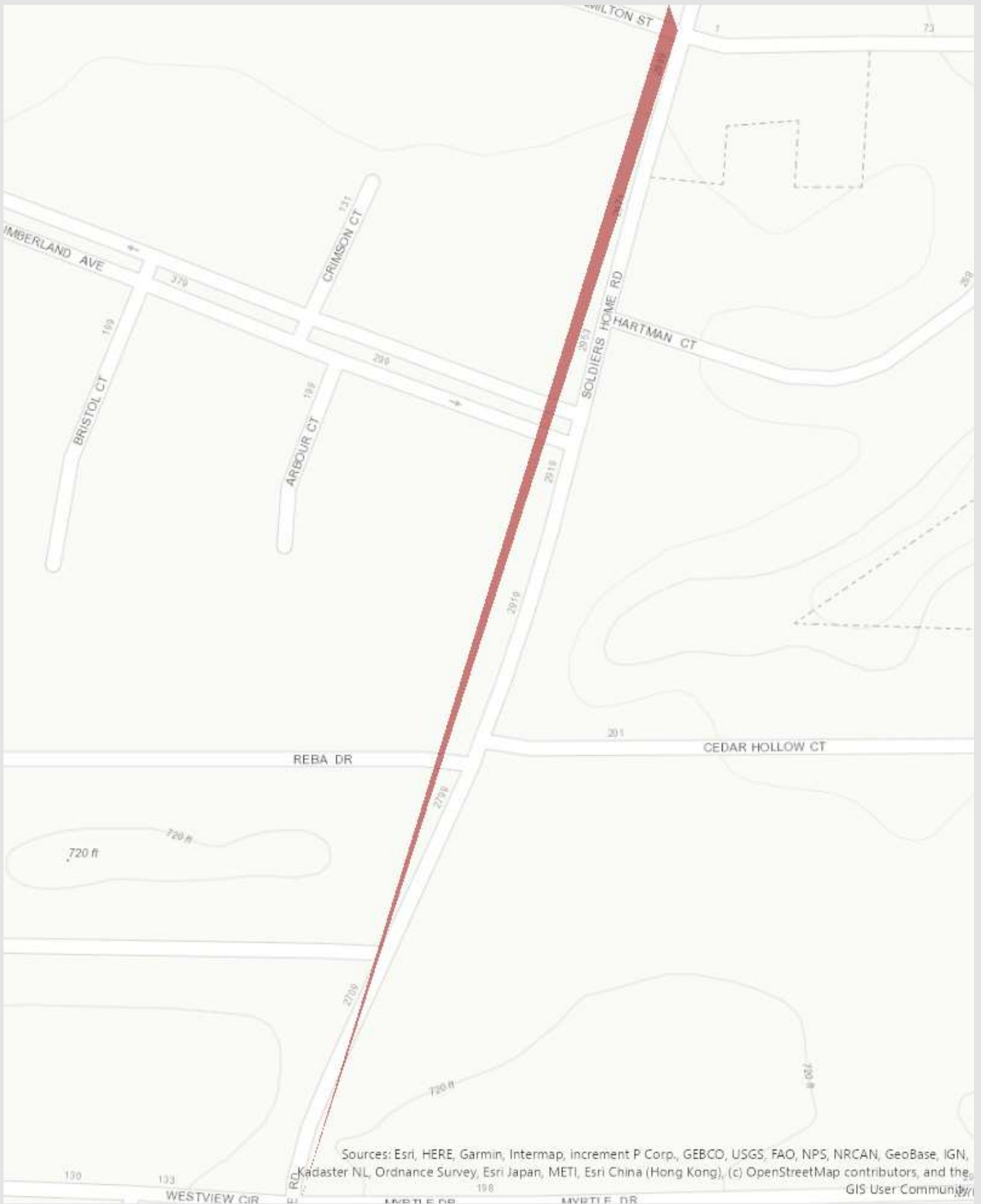
This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

This information was furnished by Indiana Geological Survey

Address: 1001 E. 10th St., Bloomington, IN 47405

Email: IGSEnvir@indiana.edu

Phone: (812) 855-7428



November 25, 2024

Elayna Stoner  
Metric Environmental  
6958 Hillsdale Court  
Indianapolis, Indiana 46250  
[elaynas@metricenv.com](mailto:elaynas@metricenv.com)

Dear Elayna Stoner:

The proposed Roadway Reconstruction Project on Soldiers Home Road in Wabash Township, City of West Lafayette, in Tippecanoe County Indiana. (Des No 1401291 and 2201253) as referred to in your letter received on November 12, 2024, will not cause a conversion of prime farmland.

If you need additional information, please contact John Allen at 317-295-5859 or [john.allen@usda.gov](mailto:john.allen@usda.gov).

Sincerely,

**JOHN ALLEN**

Digitally signed by JOHN ALLEN  
Date: 2024.11.25 08:33:55 -05'00'

JOHN ALLEN  
State Soil Scientist

**From:** [Lewandowski, Tyler](#)  
**To:** [Elayna Stoner](#)  
**Subject:** RE: Des. Nos. 1401291 and 2201253 \_ Roadway Reconstruction Project \_ Soldiers Home Road; City of West Lafayette \_ Early Coordination Letter  
**Date:** Monday, November 18, 2024 9:38:18 AM  
**Attachments:** [image002.png](#)

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Good morning,

After review, no tall structure permit is required for the project if all equipment being used is under 30 feet in height. Please let our office know if you have any further questions.

Thank you,

Tyler Lewandowski  
Project Manager  
INDOT Office of Aviation  
(317) 495-4875  
[tlewandowski@indot.in.gov](mailto:tlewandowski@indot.in.gov)  
[www.aviation.indot.in.gov](http://www.aviation.indot.in.gov)



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**From:** Elayna Stoner <elaynas@metricenv.com>  
**Sent:** Tuesday, November 12, 2024 10:56 AM  
**To:** DNR Environmental Review <environmentalreview@dnr.IN.gov>; McWilliams, Robin <robin\_mcwilliams@fws.gov>; Allen, John - NRCS, Indianapolis, IN <john.allen@usda.gov>; Carmany-George, Karstin (FHWA) <k.carmanygeorge@dot.gov>; MWRO Compliance, NPS <Mwro\_compliance@nps.gov>; Erik.r.sandstedt@hud.gov; Golladay, Destiny <DGolladay@indot.IN.gov>; Lewandowski, Tyler <TLewandowski@indot.IN.gov>; Streets@westlafayette.in.gov; engineering@westlafayette.in.gov; kparker@westlafayette.in.gov; lleverenz@westlafayette.in.gov; chouston@westlafayette.in.gov; wlprboard@westlafayette.in.gov; Ervin, Brock <BErvin@indot.IN.gov>  
**Subject:** Des. Nos. 1401291 and 2201253 \_ Roadway Reconstruction Project \_ Soldiers Home Road; City of West Lafayette \_ Early Coordination Letter

**EXTERNAL EMAIL:** This email was sent from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Attached is an early coordination letter for a proposed roadway reconstruction project, sponsored by the City of West Lafayette.

Please feel free to reach with any questions or if you require additional information.



153 N Emerson Avenue  
Greenwood, IN 46143

P 317-885-2400  
F 317-885-2431

## MEMORANDUM

To: **Tanny G. Triplitt, NCE**

From: Mike Seals, P.E.

Date: December 5, 2022

Re: **Initial Notice - WLF Soldiers Home Road Des. 1401291**

Indiana-American Water has reviewed the preliminary information for the above referenced project.

Attached is an image from our infrastructure maps for reference. INAW has 6 through 12-inch watermains, valves, hydrants, services within the project limits.

I will be your primary contract for this project. Please feel free to contact me with any questions.

Thank You,

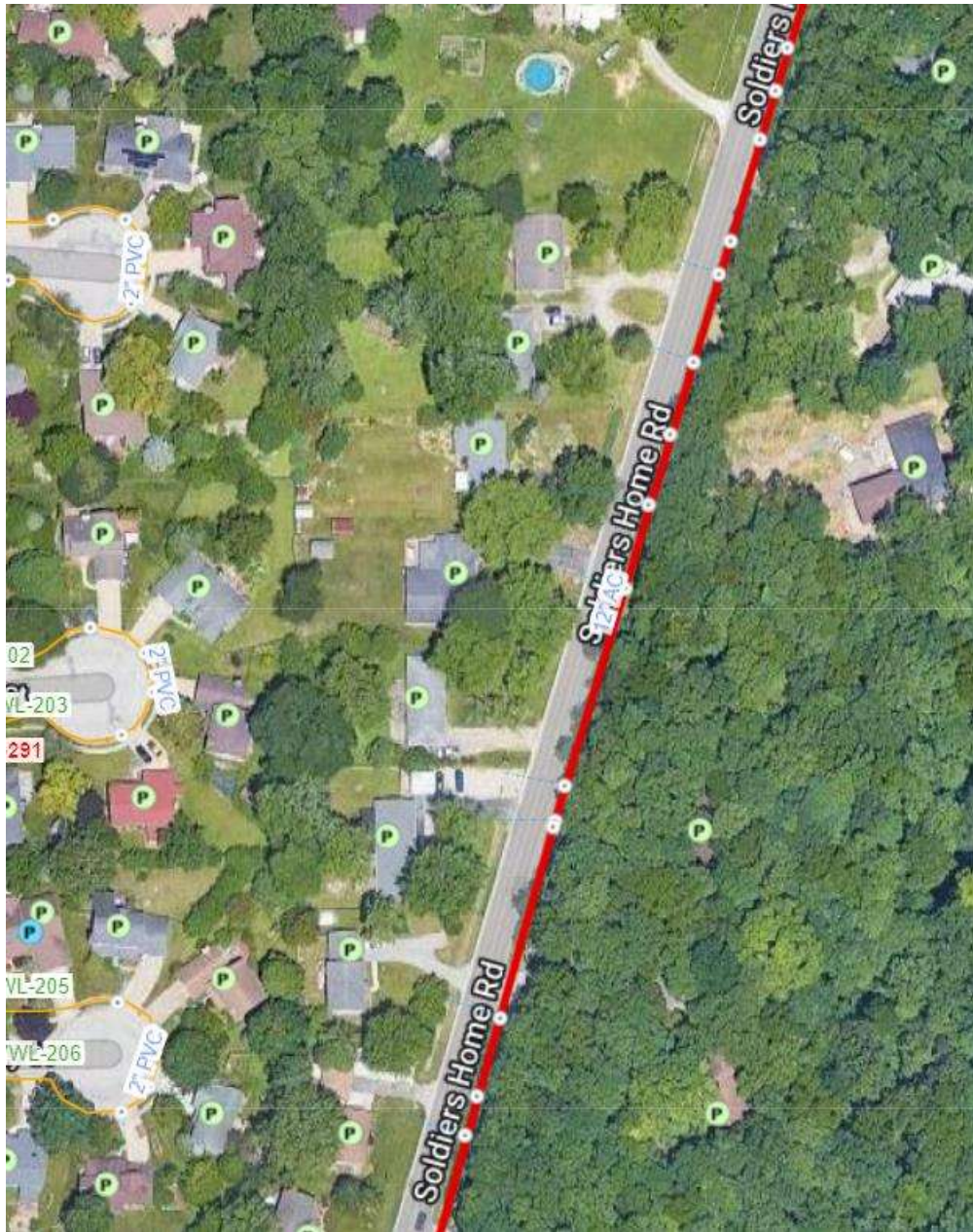
Mike Seals, P.E.  
Indiana-American Water Company, Inc.  
153 North Emerson Avenue  
Greenwood, IN 46143  
O: 317-885-2444  
C: 317-696-0143  
[Mike.seals@amwater.com](mailto:Mike.seals@amwater.com)











## Susan Castle

---

**From:** Jeffrey Kuhn <jkuhn@westlafayette.in.gov>  
**Sent:** Monday, April 28, 2025 11:58 AM  
**To:** Natalia Bartos; Susan Castle  
**Cc:** Mike Peterson; David Henderson; Jon Munson; Mark Hassett  
**Subject:** RE: Lead Des. #1401291 and 2201253 Soldiers Home Road, West Lafayette, Tippecanoe County, IN

Natalia,

Thanks for the update.

Susan,

Hydrodynamic Separators are the post-construction BMPs that the City would request be included in this phase of the Soldiers Home Road project.

Let me know if you have any questions, and thank you for your work.

### Jeffrey Kuhn

*Stormwater Specialist*

Margerum City Hall  
222 N Chauncey Ave  
West Lafayette, IN 47906

[765-775-5135](tel:765-775-5135)

TTY 711

<https://www.westlafayette.in.gov/>



---

**From:** Natalia Bartos <nbartos@westlafayette.in.gov>  
**Sent:** Wednesday, April 23, 2025 17:23  
**To:** Jeffrey Kuhn <jkuhn@westlafayette.in.gov>  
**Cc:** susanc@metricenv.com; Mike Peterson <MPeterson@vsengineering.com>  
**Subject:** Fw: Lead Des. #1401291 and 2201253 Soldiers Home Road, West Lafayette, Tippecanoe County, IN  
**Importance:** High

Jeff,

See request in the email below, and respond with the BMPs by EOD Thursday.

Thank you,

**Natalia Bartos, PE**

*City Engineer*

Margerum City Hall  
222 N Chauncey Ave  
West Lafayette, IN 47906

[765-807-8980](tel:765-807-8980)

TTY 711

<https://www.westlafayette.in.gov/>



---

**From:** Susan Castle <[susanc@metricenv.com](mailto:susanc@metricenv.com)>  
**Sent:** Wednesday, April 23, 2025 4:49 PM  
**To:** Natalia Bartos <[nbartos@westlafayette.in.gov](mailto:nbartos@westlafayette.in.gov)>  
**Cc:** Mike Peterson <[MPeterson@vsengineering.com](mailto:MPeterson@vsengineering.com)>  
**Subject:** FW: Lead Des. #1401291 and 2201253 Soldiers Home Road, West Lafayette, Tippecanoe County, IN

**External**

Hi Natalia,

I sent you the below email yesterday and was just notified a bit ago that my e-mail was undeliverable.

Please see my e-mail below, the attachment, and respond at your earliest convenience if you have any best management practices that should be followed during this project, in relation to MS4.

Thank you very much



## Susan Castle

Senior Project Manager

NEPA Compliance

O 317.608.2730

M 317.379.3649

6958 Hillsdale Court

Indianapolis, IN 46250

[[www.metricenv.com](http://www.metricenv.com)][www.metricenv.com](http://www.metricenv.com)

Certified DBE/MBE/SBE Company

Indiana | Kentucky | Ohio | West Virginia | Pennsylvania

---

**From:** Susan Castle

**Sent:** Tuesday, April 22, 2025 3:47 PM

**To:** [nbartos@wl.in.gov](mailto:nbartos@wl.in.gov); [msmith@wl.in.gov](mailto:msmith@wl.in.gov)

**Cc:** Mike Peterson <[MPeterson@vsengineering.com](mailto:MPeterson@vsengineering.com)>

**Subject:** Lead Des. #1401291 and 2201253 Soldiers Home Road, West Lafayette, Tippecanoe County, IN

**Importance:** High

Hi Natalia,

Shortly after the Soldier Home Road meeting today, I realized our previous environmental document preparer did not contact you regarding the project being within an Urbanized Area Boundary, Municipal Separate Storm Sewer System (MS4).

Please see the attached letter.

Will you please let me know this week if you have any best management practices that should be followed during this project?

Thank you very much and I apologize for the late e-mail.



## **Susan Castle**

*Senior Project Manager*

*NEPA Compliance*

○ 317.608.2730

M 317.379.3649

6958 Hillside Court

Indianapolis, IN 46250

[[www.metricenv.com](http://www.metricenv.com)][www.metricenv.com](http://www.metricenv.com)

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**APPENDIX D:**  
**Section 106 of the National Historic  
Preservation Act**

**FEDERAL HIGHWAY ADMINISTRATION'S  
SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties) AND  
SECTION 106 FINDINGS AND DETERMINATIONS  
AREA OF POTENTIAL EFFECT  
ELIGIBILITY DETERMINATIONS  
EFFECT FINDING  
SOLDIERS HOME ROAD IMPROVEMENT PROJECT  
DES. NOS.: 1401291 (LEAD) AND 2201253; DHPA NO. 31942**

**AREA OF POTENTIAL EFFECTS  
(Pursuant to 36 CFR Section 800.4(a)(1))**

The Area of Potential Effects (APE) for this project extends at least 500 feet beyond the project end points, and at least one property deep on each side of Soldiers Home Road. The APE was determined based upon the anticipated amount of ground disturbance, as well as the scale of the project, which will include constructing a pedestrian shared path along the west side of Soldiers Home Road, constructing a sidewalk along the east side of Soldiers Home Road, reconstructing the typical section of Soldiers Home Road, replacing ditches and curbs along Soldiers Home Road, installing a roundabout at Sagamore Parkway, as well as installing lighting, curb ramps, and pedestrian signage throughout the corridor. The APE for archaeology is the original project footprint of the project between Sagamore Parkway and about 500 feet north of Kalberer Road, including all proposed right-of-way, which was defined as encompassing 9.67 hectares, or 23.89 acres. Refer to Appendix A: Figures 1 and 2 for maps of the APE and Appendix A: Figures 3 and 4 for maps of the APE for archaeology.

**ELIGIBILITY DETERMINATIONS  
(Pursuant to 36 CFR 800.4(c)(2))**

The APE contains no properties listed in the National Register of Historic Places (NRHP). As a result of this investigation, two resources were determined to be eligible for listing in the NRHP.

Wabash Shores Historic District (bound by Sagamore Parkway on the north, Happy Hollow Road on the east, property lines/trees on the south, and Huron Road and Salisbury Street on the west) – The district includes approximately 343 residential houses and three churches. The subdivision was constructed between 1955 and 1973. An addition was added to Pawnee Drive to include a total of 12 homes along Pawnee Court, Pawnee Circle, and Pawnee Park during the 1980s and 1990s. The Wabash Shores Historic District contains residential buildings in a variety of styles, including Contemporary, Modern, and New Traditional with Colonial, Tudor, French, Greek Classical, and Italian Renaissance influences. The homes include a combination of builder custom homes, as well as architect-designed homes with heavy influences from the Modern and Contemporary architectural movements. The Wabash Shores Historic District is significant under Criterion A for its association with the theme of postwar community planning and development as a Custom Development as outlined in the “Residential Planning and Development in Indiana, 1940-1973” Multiple Property Documentation Form (MPDF) and under Criterion C for its Architecture and Community Planning and Development.

House at 3211 Soldiers Home Road – This flat-roof Contemporary Style house, constructed ca. 1961, is located five parcels north of Overlook Drive on the east side of Soldiers Home Road. The house has an L-shaped footprint. The house has a flat roof with a row of broad, shallow clerestory windows just below the roofline set between the roof beams. The roof has a wide eave overhang supported by exposed

rafters. A wide central chimney with a stone veneer punctuates the flat roofline, contrasting with the horizontal appearance of the house. The house has board and batten siding with wood dividers that protrude from the wall underneath the exposed rafters to create panelized sections. A recessed front entryway is located on the north side of the façade. The front door has been replaced and is flanked by two narrow sidelights. A screen-enclosed porch is located on the south side of the house and a wood ramp has been added to access the detached garage. The house is built on a concrete slab. The two-bay detached garage was constructed in 1994. The house retains a high degree of original materials and integrity, and it is recommended eligible under Criterion C for its architectural significance.

## **EFFECT FINDING**

Wabash Shores Historic District: No Adverse Effect.

House at 3211 Soldiers Home Road: No Adverse Effect.

Indiana Department of Transportation (INDOT), acting on Federal Highway Administration's (FHWA's) behalf, has determined a "No Adverse Effect" finding is appropriate for this undertaking.

INDOT respectfully requests the Indiana State Historic Preservation Officer (SHPO) provide written concurrence with the Section 106 determination of effect.

## **SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties)**

Wabash Shores Historic District – This undertaking will not convert property from the Wabash Shores Historic District, a Section 4(f) historic property, to a transportation use; the INDOT, acting on FHWA's behalf, has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for the Wabash Shores Historic District.

House at 3211 Soldiers Home Road – This undertaking will not convert property from the house at 3211 Soldiers Home Road, a Section 4(f) historic property, to a transportation use; the INDOT, acting on FHWA's behalf, has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for the house at 3211 Soldiers Home Road.



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Matthew S. Coon, for FHWA  
Manager  
INDOT Cultural Resources

January 7, 2025

Approved Date

**FEDERAL HIGHWAY ADMINISTRATION  
DOCUMENTATION OF SECTION 106 FINDING OF  
NO ADVERSE EFFECT  
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER  
PURSUANT TO 36 CFR Section 800.5(c)  
SOLDIERS HOME ROAD IMPROVEMENT PROJECT  
DES. NOS.: 1401291 (LEAD) AND 2201253; DHPA NO. 31942**

**1. DESCRIPTION OF THE UNDERTAKING**

The City of West Lafayette, with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT), proposes to proceed with the Soldiers Home Road Improvement Project, Des. Nos. 1401291 (lead) and 2201253. The proposed undertaking is located along Soldiers Home Road between the on-ramp to Sagamore Parkway and approximately 300 feet north of Hamilton Street, with an additional 550 feet for incidental construction, on the east side of the City of West Lafayette, in Tippecanoe County, Indiana. It is within Wabash Township, on the Lafayette West, Indiana, USGS Topographic Quadrangle, in Sections 5 and 8, Township 23 North, Range 4 West. Refer to Appendix A for maps of the project location.

Soldiers Home Road through the project area is classified as an Urban Arterial Roadway and consists of two, 12-foot travel lanes with bike and turn lanes. Soldiers Home Road within the project area has six horizontal curves. The roadway's typical section from Sagamore Parkway's access ramp to Hamilton Street varies with two travel lanes averaging in width of 12 feet with curb and gutter, along with sidewalk and bike lanes varying on both sides. Turn lanes exist periodically for street intersections. Storm drainage infrastructure exists along the roadway from the Sagamore Parkway Access Ramp to just north of Hamilton Street. These inlets connect to the storm network which outfalls directly to the Wabash River. Land use in the area primarily consists of single-family houses and apartments, as well as a Montessori school.

The need for the project is to address the safety, traffic flow, drainage, and roadway conditions of Soldiers Home Road. Crash data collected between 2019 and 2021 showed a total of 21 reported crashes on Soldiers Home Road and Sagamore Parkway North Access Ramps within the proposed project limits. Of those crashes, three crashes were caused by left-turn collisions, 10 crashes were rear end collisions, one crash was a sideswipe, two crashes were caused by drivers backing up, two crashes resulted in running off the road, two crashes were caused by a right angle, and one was unclassified. Additionally, the project area has a Level of Service (LOS) of E out of a rating system of A - F. A rating of E indicates unstable traffic flow with a volume less than the roadway's capacity, low operating speeds, and momentary traffic stoppages. Traffic forecast data projects the growth of traffic to increase 0.51% per year. Based upon criteria from the Indiana Design Manual, the LOS for Urban Arterial roadways should meet a C rating. Lastly, the area experiences ponding along Soldiers Home Road due to poor drainage and roadway conditions. Ponding along the roadway and erosion at the drainage outfalls will be reduced or eliminated as the project scope addresses new curb and gutter. The purpose of the project is to reduce crash frequencies, raise the LOS to a rating of C which is the desirable design standard set out in the Indiana Design Manual, and improve traffic flow, drainage, and roadway conditions along the existing alignment for the segment of Soldiers Home Road between the Sagamore Parkway Access Ramp and Hamilton Street.

The proposed preferred alternative is to construct a single-lane roundabout at the intersection of the Sagamore Parkway Access Ramp and Soldiers Home Road, construct a two-way left turn lane (TWLTL) throughout the entire project corridor, replace the ditches along the road with curb and gutter throughout the entire corridor to improve drainage, and construct a ten-foot-wide pedestrian shared-use path to connect to the Nighthawk Trail to the west, the Happy Hollow Road Trail to the south, the Sagamore Parkway Trail to the east, and the Northwest Greenway Trail along Cumberland Avenue.

Des. No. 1401291's project limits are between the Sagamore Parkway Access Ramp to Hamilton Street, and the preferred alternative includes the following scope of work:

- Construction of a 10-foot-wide pedestrian shared use path along the west side of Soldiers Home Road with a five-foot median separating the pedestrian path from the roadway
- Construction of five-foot-wide sidewalks on the east side of Soldiers Home Road
- Reconstruction of the roadway involving 11-foot-wide travel lanes and 12-foot-wide TWLTL
- Replacement of existing ditches and construction of new curb and gutter and storm drainage structures to improve drainage along the roadway and at the intersections of Soldiers Home Road and the following roads: Sharon Road, Westview Circle, Linda Lane, Reba Drive, Cedar Hollow Court, Cumberland Avenue, and Hamilton Street.
- Installation of lighting along the pedestrian path and at all the intersections
- Installation of signage along the roadway and the pedestrian path
- American for Disabilities Act compliant (ADA-compliant) ramps
- Incidental construction on the north end of the project area, which includes pavement tie-in, minor grading on both sides of the roadway, installation of storm drain structures and a concrete retaining wall with a metal safety hand railing at the existing ravine east of the roadway, and clearing trees along the east side of the roadway.

The preferred alternative for Des. No. 2201253 includes the following scope of work:

- Construction of a 120-foot diameter roundabout with 18-foot-wide circulating lanes and a 14-foot-wide concrete truck apron
- Construction a 10-foot-wide pedestrian shared use path along the north and east sides of the roundabout with a five-foot-wide median separating the pedestrian path from the roundabout
- Installation of lighting along the pedestrian path at the roundabout
- Installation of signage for the roundabout

No relocations are anticipated to occur as a result of this undertaking. The project will require approximately 2.23 acres of permanent right-of-way and 0.28 acre of temporary right-of-way. Additionally, construction and maintenance of traffic for the project will occur in one phase. During construction, Soldiers Home Road will be closed and a detour will be posted utilizing Navajo Street, Salisbury Street, and Kalberer Road.

The APE is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking" (36 CFR 800.16(d)). The APE includes all locations where the project may result in disturbance of the ground; all locations from which elements of the project may be visible or audible; all locations where activity may result in changes in traffic patterns, land use, or public access; and all areas where there may be direct or indirect effects due to elements of the project. For above-

ground structures, the APE was defined as extending at least 500 feet beyond the project end points, and at least one property deep on each side of Soldiers Home Road. The APE for archaeology is the original project footprint between Sagamore Parkway and approximately 500 feet north of Kalberer Road, including all proposed right-of-way, which was defined as encompassing 9.67 hectares, or 23.89 acres.

Please refer to Appendix A for maps of the project area and the APE, Appendix B for project site photographs, and Appendix F for project plans.

## **2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES**

Per the National Historic Act of 1966, the State Historic Preservation Officer (SHPO) is automatically invited to participate in the Section 106 process as a consulting party (see Appendix E for a full list of the invited consulting parties). An early coordination letter was sent to the following other individuals and organizations by letter or email dated February 23, 2024 (Appendix E: 60-68).

Tippecanoe County Historian  
Tippecanoe County Area Genealogical Society  
Tippecanoe County Historical Association  
Indiana Landmarks, Western Regional Office  
New Chauncy Housing, Inc.  
West Lafayette Historic Preservation Committee  
Area Plan Commission of Tippecanoe County  
Tippecanoe County Commissioners  
Tippecanoe County Highway Department  
City of West Lafayette Mayor  
Greater Lafayette Commerce  
Public Works Director of West Lafayette  
Eastern Shawnee Tribe of Oklahoma  
Miami Tribe of Oklahoma  
Peoria Tribe of Indians of Oklahoma  
Pokagon Band of Potawatomi Indians  
Shawnee Tribe  
Forest County Potawatomi Community  
Turtle Mountain Band of Chippewa Indians

Stewart Kline of the Tippecanoe County Highway Department responded by email dated February 26, 2024, accepting the invitation to participate as a consulting party (Appendix E: 69). Kline offered no objections to the project. Kline also provided updated contact information for the executive director of the Tippecanoe County Highway Department and for the Tippecanoe County Area Plan Commission. At the time the Historic Properties Report was distributed, Ryan O’Gara was inadvertently not invited to participate as a consulting party.

The Turtle Mountain Band of Chippewa Indians responded by email dated February 26, 2024, concurring that “no affect will occur during or within the project” (Appendix E: 70).

The Miami Tribe of Oklahoma responded by letter dated February 28, 2024, accepting the invitation to participate as a consulting party (Appendix E: 71). The Miami Tribe of Oklahoma accepted consulting party

status and offered “no objections” to the project and stated that they were “not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site.” The Miami Tribe of Oklahoma requested immediate consultation if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of the project.

The Shawnee Tribe responded by email dated February 29, 2024, accepting the invitation to participate as a consulting party (Appendix E: 72). The Shawnee Tribe concurred that “no known cultural historic properties will be negatively impacted by the project” and that they “have no issues or concerns at the time.”

The SHPO responded by letter dated March 6, 2024 and stated their office is not aware of any other parties who should be invited to participate in the Section 106 consultation for this project and that they are looking forward to reviewing the proposed APE and the above-ground and archaeological survey reports (Appendix E: 73).

The Pokagon Band of Potawatomi Indians responded by letter dated March 22, 2024, accepting the invitation to participate as a consulting party (Appendix E: 74). The Pokagon Band of Potawatomi Indians stated that the project will have “No Adverse Effect on any historic, religious, or culturally significant resources to the Pokagon Band of Potawatomi Indians.”

The Eastern Shawnee Tribe of Oklahoma responded by letter dated April 18, 2024, accepting the invitation to participate as a consulting party (Appendix E: 75). The Eastern Shawnee Tribe of Oklahoma stated the “project proposes No Adverse Effect or endangerment to known sites of interest to the Eastern Shawnee Tribe” and to “continue the project as planned.”

No other consulting party responses to the early coordination letter were received.

Efforts to identify historic properties in the APE included communication with consulting parties and a literature review of:

- the 1990 *Tippecanoe County Interim Report: Indiana Historic Sites and Structures Inventory* (IHSSI; Historic Landmarks Foundation of Indiana);
- the 2009 INDOT-sponsored Indiana Historic Bridge Inventory (IHBI; Mead & Hunt);
- the NRHP Database;
- the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), which includes resources listed in the Indiana Register of Historic Sites and Structures (State Register);
- the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM);
- the Indiana Department of Transportation Cultural Resources Office’s Public Web Map App;<sup>1</sup>

<sup>1</sup> These databases are accessible at the following:

for the NRHP database, <https://www.nps.gov/subjects/nationalregister/database-research.htm>;

for SHAARD, <https://secure.in.gov/apps/dnr/shaard/welcome.html>;

for the IHBBCM, <https://www.arcgis.com/home/item.html?id=1593429c17c34942a0d1d3fac03c4a80>;

for the INDOT-CRO Public Web Map App,

<https://www.arcgis.com/apps/webappviewer/index.html?id=77a6d13b2a9f4785ab3139daf287ddac&extent=-9897967.2983%2C4665077.6793%2C-9338448.2513%2C4998343.1226%2C102100>.

- “Residential Planning and Development in Indiana, 1940-1973” Multiple Property Documentation Form;
- historical maps and aerial photographs;
- archaeological site maps; and
- cultural resources management reports.

The literature review determined there are no NRHP listed above-ground properties within the APE. There are also no previously recorded archaeological sites within the project area.

Metric Qualified Professional (QP) historian Zoe Vorndran and QP architectural historian Danielle Bachant-Bell performed a field survey on February 13, 2024 and February 21, 2024. Metric archaeologists, Megan Copenhaver, Christopher Stevenson, and Sam Snell, performed a field survey on November 9, 2021, November 12, 2021, November 18, 2021, and October 19, 2023. The results of field surveys were reported in a Historic Property Report (HPR) (Vorndran and Bachant-Bell, 10/21/2024) and a Phase Ia Archaeological Short Report (ASR) (Snell, 9/16/2024). The principal investigators for these reports meet the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61. The HPR recommended two properties within the APE as eligible for listing in the NRHP:

- Wabash Shores Historic District (AL-002), roughly bound by Sagamore Parkway on the north, Happy Hollow Road on the east, property lines/tree line on the south, and Huron Road and Salisbury Street on the west
- House at 3211 Soldiers Home Road (AL-020)

A map of the proposed NRHP boundary for the Wabash Shores Historic District can be found in Appendix A: Figure 5, and photos of the historic district are located in Appendix B: Photos 3-4. The proposed NRHP boundary for the house at 3211 Soldiers Home Road can be found in Appendix A: Figure 6, and photos of the house are located in Appendix B: Photo 48.

The ASR reported no new archaeological sites were identified and recommended no additional investigation. It should be noted that the ASR’s survey area includes the project’s original project limits that began at the on-ramp to Sagamore Parkway and terminated about 500 feet north of Kalberer Road for a total distance of approximately 1.2 miles. In the course of the Section 106 investigation, the project limits were reduced in size to their current limits, which terminate approximately 300 feet north of Hamilton Street. The HPR’s APE reflects the current project limits.

A copy of the management summary and conclusion for the HPR and the results and recommendations for the ASR are included in Appendices C and D, respectively.

A letter distributed on October 21, 2024, notified consulting parties that an HPR and an ASR were available for review and comment via INDOT’s Section 106 document posting website IN SCOPE at <http://erms12c.indot.in.gov/Section106Documents/> (Appendix E: 76-84). The full HPR document may also be downloaded from IN SCOPE (the Des. No. is the most efficient search term, once in IN SCOPE).

In a letter dated October 22, 2024, the Miami Tribe of Oklahoma offered “no objection to the above-referenced project at this time,” and requested immediate consultation “if any human remains or Native American cultural items falling under the Native American Graves Protection of Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project” (Appendix E: 85)

In an email dated November 12, 2024, the Forest County Potawatomi Community offered “a finding of No Historic Properties affected or significance to the FCPC,” and requested immediate consultation “in the event an Inadvertent Discovery (ID) occurs at any phase of a project or undertaking as defined, and human remains or archaeological materials are exposed as a result of project activities” (Appendix E: 86).

In a letter dated November 19, 2024, the State Historic Preservation Officer (SHPO) concurred with the HPR that there are no previously recorded NRHP listed or eligible resources within the APE (Appendix E: 87-88). The SHPO also concurred with the HPR that the Wabash Shores Historic District (AL-002) is eligible for listing in the NRHP under Criterion A as an example of a Custom Development and Criterion C for Architecture and Community Planning and Development, and that the house at 3211 Soldiers Home Road (AL-020) is eligible for listing in the NRHP under Criterion C for Architecture. In the letter, the SHPO acknowledged receipt of the archaeological short report and concurred “that the project area does not have the potential to contain archaeological resources, and no further work appears to be necessary.”

In a letter dated November 19, 2024, the Eastern Shawnee stated that the “project proposes NO Adverse Effect or endangerment to known sites of interest to the Eastern Shawnee Tribe,” and requested consultation “should this project inadvertently discover an archaeological site or object(s)” (Appendix E: 89).

No other consulting party responses to the HPR and ASR were received.

### **3. DESCRIBE AFFECTED PROPERTIES**

#### Wabash Shores Historic District

The Wabash Shores Historic District is located south of Sagamore Parkway, intersecting the southwestern portion of the APE. The area in which Wabash Shores Historic District currently sits was annexed into West Lafayette in the fall of 1955. At its conception, the Wabash Shores Addition (now Historic District) was originally divided into five total sections platted between 1955 and 1957. There are approximately 355 houses and three churches within the district. The Wabash Shores Historic District is composed mostly of single-family homes with large lots. The streets are curvilinear with sidewalks, and they are named after Native American tribes, such as Navajo Street, Chippewa Street, Pawnee Drive, Seminole Drive, Mohawk Lane, Blackhawk Lane, and Mohican Place. Buildings on many of the streets are constructed against natural ravines and a section of the Happy Hollow Park Indian Trail Drive, called the Wabash Heritage Trail, runs through the neighborhood. Large mature trees can be found throughout most of the neighborhood, especially surrounding the cul-de-sacs within the south and central regions of the addition. Ranch variants and split-level types are common, as are Contemporary, Modern, and New Traditional styles with Colonial, Tudor, French, Greek Classical, and Italian Renaissance influences. The homes include a combination of builder custom homes, as well as architect-designed homes with heavy influences from the Modern and Contemporary architectural movements. Many of the houses feature a variety of siding materials like brick, faux timbering, clapboard, limestone, and reverse board and batten; complex rooflines; oversized chimneys; and unique façade decorations. The Wabash Shores Historic District is significant under Criterion A for its association with the theme of postwar community planning and development as a Custom Development as outlined in the “Residential Planning and Development in Indiana, 1940-1973” Multiple Property Documentation Form (MPDF) and under Criterion C for its Architecture and Community Planning and Development.

### House at 3211 Soldiers Home Road

The house at 3211 Soldiers Home Road is a one-story, Contemporary Style house constructed ca. 1961. The house has an L-shaped footprint. The house has a flat roof with a row of broad, shallow clerestory windows just below the roofline set between the roof beams. The roof has a wide eave overhang supported by exposed rafters. A wide central chimney with a stone veneer punctuates the flat roofline, contrasting with the horizontal appearance of the house. The house has board and batten siding with wood dividers that protrude from the wall underneath the exposed rafters to create panelized sections. A recessed front entryway is located on the north side of the façade. The front door has been replaced and is flanked by two narrow sidelights. A screen-enclosed porch is located on the south side of the house and a wood ramp has been added to access the detached garage. The house is built on a concrete slab. The two-bay detached garage was constructed in 1994 that mimics the style of the house. The house at 3211 Soldiers Home Road is eligible for listing in the NRHP under Criterion C for its architectural significance.

#### **4. DESCRIBE THE UNDERTAKING'S EFFECTS ON THE HISTORIC PROPERTIES**

##### Wabash Shores Historic District

The undertaking will cause no physical impacts to this historic district, and no contributing features such as residential houses, outbuildings, landscaping, trees, or other freestanding elements will be altered or removed as a result of the project. The undertaking will not introduce new elements within the historic district's boundary, and the project will not take any temporary or permanent right-of-way from the property. During construction there may be temporary visual and auditory effects to the historic district; however, no permanent auditory, atmospheric, or visual effects are anticipated to occur. Visual impacts will also be limited due to the presence of Sagamore Parkway, which is located between the project area and the resource.

##### House at 3211 Soldiers Home Road

The undertaking will cause no physical impacts to this property, and no contributing features such as outbuildings, landscaping, trees, or other freestanding elements will be altered or removed as a result of the project. The undertaking will not introduce new elements within the property's boundary, and the project will not take any temporary or permanent right-of-way from the property. In addition, the property's access point on Lowell Road will not change as a result of this project. During construction there may be temporary visual and auditory effects to the property as incidental construction will end just south of the property's boundary; however, no permanent auditory, atmospheric, or visual effects are anticipated to occur. Visual impacts will also be limited due to the dense trees along the south side of the property.

#### **5. EXPLAIN APPLICATION OF CRITERIA OF ADVERSE EFFECT – INCLUDE CONDITIONS OR FUTURE ACTIONS TO AVOID, MINIMIZE OR MITIGATE ADVERSE EFFECTS**

Section 106 requires federal agencies to determine whether an undertaking has the potential to have an effect, either directly or indirectly, upon historic properties. An "effect" is defined by Section 106 regulations as "an alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register." The degree to which a historic property is diminished by an undertaking is used to measure its effect, which can be "No Historic Properties Affected," "No Adverse

Effect,” or “Adverse Effect.” The regulation’s criteria of “Adverse Effect” are defined in 36 CFR 800.5(a)(1), and states:

*Criteria of adverse effect.* An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Below are examples of adverse effects given in 36 CFR 800.5(a)(2):

- (i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including the restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (<https://www.nps.gov/tps/standards/four-treatments.htm>) (36 CFR Part 68) and applicable guidelines;
- (iii) Removal of the property from its historic location;
- (iv) Change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance;
- (v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property’s significant historic features;
- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance...”
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.

The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (vii), will now be evaluated for the two NRHP eligible properties within the APE.

#### **Wabash Shores Historic District**

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” All proposed work will be completed north of the historic district’s boundary.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), the project will not change the “the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance.” The project will

not change the way the historic district is currently used, nor will it change any physical features within its setting that are contributing features to its historic significance.

Per 36 CFR 800.5(a)(2)(v), there will not be an “introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features.” This historic district may experience a change in visual, atmospheric, and auditory elements during construction, but those changes will be temporary in nature. Work near the historic district includes the construction of the roundabout, construction of the southern terminus of the shared use path, and installation of lighting and signage; however, none of the work will be done within the boundary of the historic district as all work will occur north of Sagamore Parkway. Sagamore Parkway creates a buffer between the historic district and the southernmost project limits, which reduces the project’s visual impacts upon the historic resource. The undertaking is not anticipated to create any permanent visual, atmospheric, or auditory impacts to this historic district.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

#### **House at 3211 Soldiers Home Road**

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” All proposed work will be completed south of the property’s boundary.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), the project will not change the “the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance.” The project will not change the way the property is currently used, nor will it change any physical features within its setting that are contributing features – outbuildings, landscaping, or trees – to its historic significance.

Per 36 CFR 800.5(a)(2)(v), there will not be an “introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features.” This property may experience a change in visual, atmospheric, and auditory elements during construction, but those changes will be temporary in nature. The construction of the shared use path, sidewalks, curb and gutter, lighting, and signage will end at Hamilton Street and will not be visible from the house due to distance and existing properties and trees. Incidental work near the house includes pavement tie-in, installation of storm drain structures and a concrete retaining wall with a handrailing, and tree clearing; however, none of the work will be done within the property boundary of the house at 3211 Soldiers Home Road. Tree clearing will occur approximately 100 feet south of the southern edge of the property’s boundary. All potential visual impacts caused by the incidental construction will be limited due to the existing trees that will not be impacted by the project and the existing property between the northern end of incidental construction and the house at 3211 Soldiers Home Road. The undertaking is not anticipated to create any permanent visual, atmospheric, or auditory impacts to this property.